

**ADDRESS**

Level 2, 22 Mount Street  
Perth WA 6000

**PHONE**

+61 (08) 6188 8181

**ABN**

80 647 829 749

**WEBSITE**

[www.lycaonresources.com](http://www.lycaonresources.com)

27 October 2023

## Quarterly Activities Report 30 September 2023

### Highlights

- Bow River high impact drilling program completed targeting a magmatic sulphide 'Savannah North' discovery
- Significant 45.2m interval of blebby to disseminated nickel-copper sulphides intersected from 330.1m in BRDD002, and 12.8m interval from 364m in BRDD001 at Bow River Project, Figure 1
- Nickel-copper sulphides appear to be consistent between drillholes, both recording sulphide intervals associated with the upper limit of the gravity anomaly, comprised of pentlandite, chalcopyrite and pyrrhotite
- Downhole electromagnetic (DHEM) surveys to be completed shortly to define if conductors are present that may be related to massive sulphide nickel-copper mineralisation
- West Arunta Land Access Agreement signed with Parna Ngururrpa traditional owners to allow for exploration work programs to commence
- 100% owned West Arunta Stansmore Niobium-REE Project granted tenure extends over 173km<sup>2</sup> following grant of tenements during the quarter
- Southern Geoscience Consultants (SGC) re-processed magnetic data over the Stansmore Carbonatite Project highlights multiple new targets identified prospective for Niobium-REE mineralisation, Figure 1
- Southern Geoscience Consultants (SGC) to evaluate geophysical targets at West Arunta ahead of drilling program at the Stansmore Niobium-REE Project in H1, 2023

**Lycaon Resources Limited** (ASX: LYN) ("the **Company** or **Lycaon**") is pleased to report on the September 2023 quarterly activities.

## Projects Summary

### Bow River Prospect (Ni/Cu/Co±PGE)

During the quarter a diamond drilling program was completed at the Bow River Project in the East Kimberley region of Western Australia. The drill program consisted of two diamond drillholes to a depth of 800m and 786m each, with both drillholes intersecting visual Ni-Cu sulphides, Table 1, 2.

Sulphide mineralisation intersected in both drillholes shows a strong correlation to the upper limit of the modelled gravity anomaly between approximately 330-360m depth, with the remainder of the gravity anomaly untested over the >1km strike extent. DHEM surveys will now be completed to investigate potential off-hole conductors, and together with the assay data these results will assist in building greater geological confidence in the mineralisation model ahead of further drilling. In addition to the observed sulphide mineralisation, the presence of Ni and Cu was confirmed by handheld XRF.



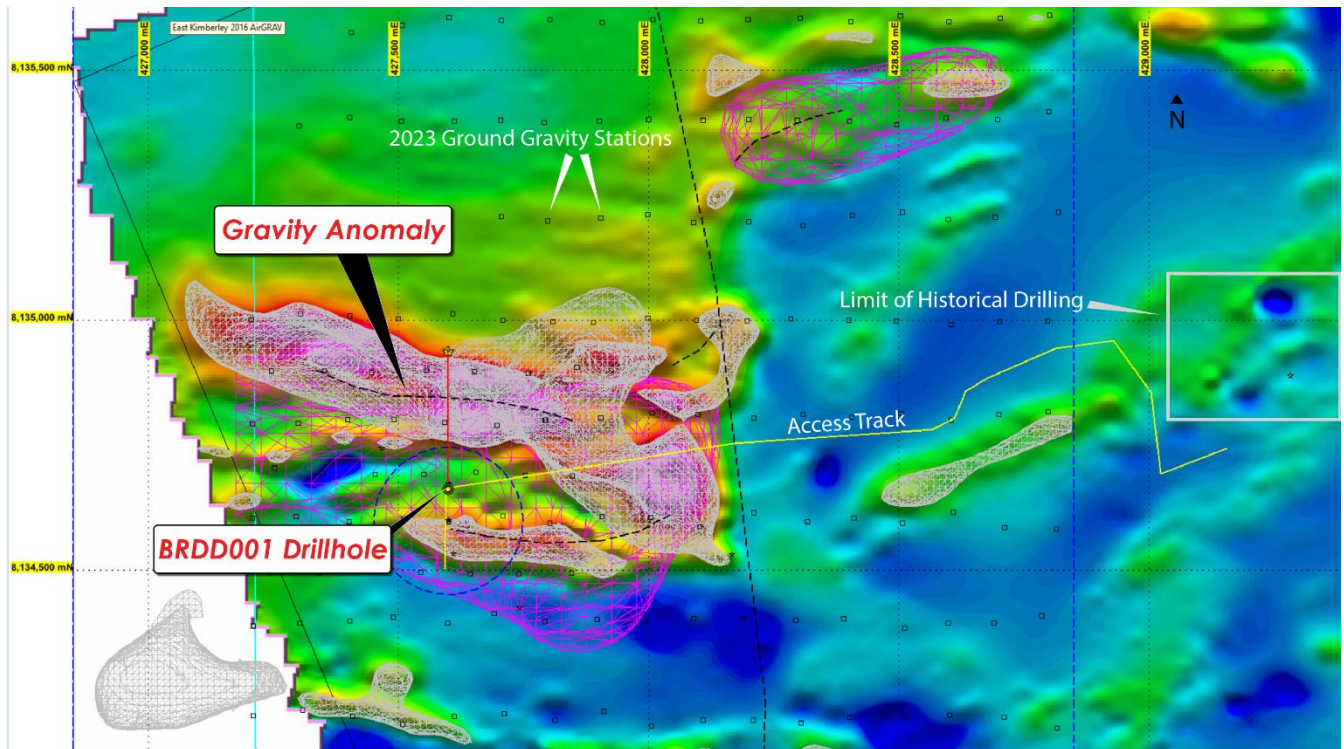
**Figure 1. Photos showing examples disseminated and blebby sulphides in hole BRDD002.**  
(Left) Nickel-Copper sulphides at 348m, (Right) Disseminated sulphides 338 – 342m  
Note core is NQ2 being 2 inches or 50mm in diameter

**Table 1: Significant Sulphide Intervals – Visual Estimates**

Hole ID	From (m)	To (m)	Interval (m)	Mineralisation Style	Sulphide Type	Sulphide %	Prospect
BRDD001	364.7	377.5	12.8	Disseminated/Blebby	Pyrrhotite, Pentlandite, Chalcopyrite	1 -5	Bow River
BRDD001	394.1	402.2	8.1	Disseminated/Blebby	Pyrrhotite, Pentlandite, Chalcopyrite	1 -5	Bow River
BRDD002	330.1	375.3	45.2	Disseminated/Blebby	Pyrrhotite, Pentlandite, Chalcopyrite	1 -5	Bow River

**Table 2: Drillhole Collar Data (GDA94 MGAz52)**

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
BRDD001	427597	8134664	170	-70	0	800	Diamond	Bow River
BRDD002	427839	8134722	170	-75	120	786.3	Diamond	Bow River



**Figure 2. Drillhole BRDD001 (Azimuth 0 degrees) planned to intersect the gravity anomaly, between upper contact at 350m and 750m basal contact.**

The Project area covers two known nickel-copper-cobalt sulphide prospects mapped as the Salt Lick Creek intrusion and the Bow River intrusion. Both intrusives are sulphide-bearing and similar in style and setting to Panoramic Resources' Savannah mine, located approximately 60 kilometres further south. The relatively recent discovery (2014) of the Savannah North resource at depth adjoining the existing mine effectively quadrupled the Ni-Cu-Co resource, highlighting the prospectivity of E80/4955 given its analogous geological setting. Previous drilling is limited to a very small area of the Bow River mafic intrusive, Figure 3.

Outcropping gossans and anomalous soil geochemistry has been mapped at surface over an area of 900m x 300m. The surface expression of the intrusion has received most of the focus of historical exploration however, the broader intrusive undercover and at depth has received little attention. In addition, exploration using more powerful modern day geophysical techniques such as ground gravity surveys to detect density anomalies deeper below surface has only recently been completed for the first time by Lycaon.

The drill program assay and DHEM results will continue to build geological confidence in the mineral system that is present at Bow River. Drilling targeted the deeper more primitive part of the intrusion, with nickel-copper sulphides recorded consistently between drillholes associated with the upper limit of the gravity anomaly, comprised of pentlandite, chalcopyrite and pyrrhotite. Downhole electromagnetic (DHEM) surveys will be completed shortly to define if conductors are present that may be related to massive sulphide nickel-copper mineralisation. The results of the DHEM surveys and assay data will be reviewed in conjunction to plan for additional drilling programs.



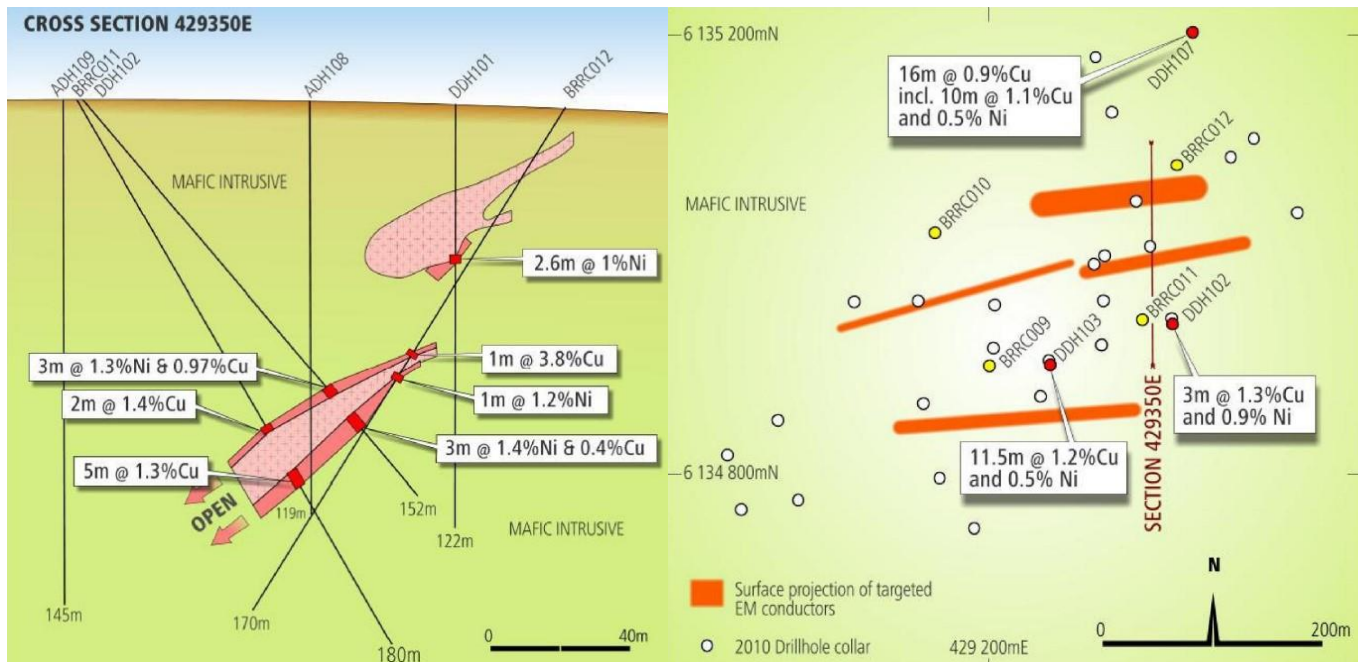


Figure 3. Location of historical drilling at Bow River nickel copper sulphide project.

### Stansmore Project (Nb/ REE ±PGE)

During the quarter the Company executed the land access agreement with the Parna Ngururpa traditional owners at our West Arunta Stansmore Niobium-REE Project. The Stansmore carbonatite target consists of a regionally prominent 700m long magnetic feature analogous to WA1's discoveries and Encounter's Worsley prospect. Recent discoveries by WA1 Resources and Encounter Resources have demonstrated the potential for the West Arunta region to host significant REE and IOCG type mineralisation systems, Figure 4.

The Company is currently working through the approvals processes required to enable the drilling of this prospect. Previous shallow aircore drilling by BHP Minerals in 1982 recorded shallow cover of approximately ~5-10m depth<sup>a</sup>. Southern Geoscience Consultants (SGC) re-processed magnetic data over the Stansmore Carbonatite Project which highlighted multiple new targets identified prospective for Niobium-REE mineralisation, Figure 5. Southern Geoscience will now complete a geophysical inversion of the gravity and magnetic data to assist with targeting of drillholes ahead of a maiden drill program.

Alkaline systems are key drivers in the formation of IOCG and carbonatite-hosted REE deposits, with the region seeing a renewed exploration focus these deposit types. Carbonatite deposits are an important source of REE and niobium production. This includes the world's largest REE mine, Bayan Obo in Inner Mongolia, Lynas Rare Earths' Mt Weld deposit and the world's three major operating niobium mines. Niobium is one of a suite of commodities identified by the Australian Government as critical minerals, i.e., minerals (or elements) considered vital for the well-being of the world's economies, yet whose supply may be at risk of disruption.

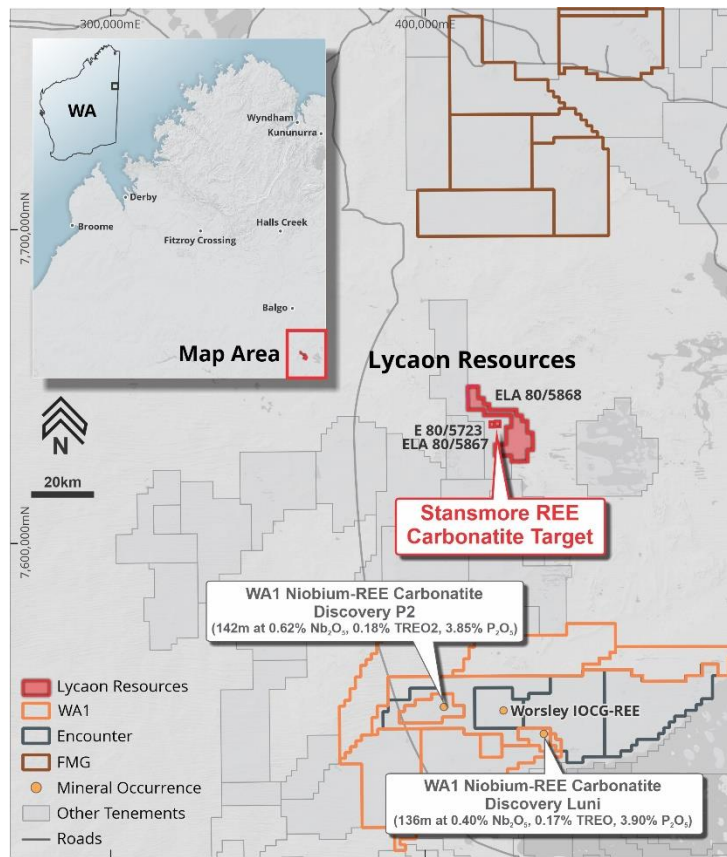


Figure 4. Stansmore Nb-REE Carbonatite ± IOCG Project Location Map.

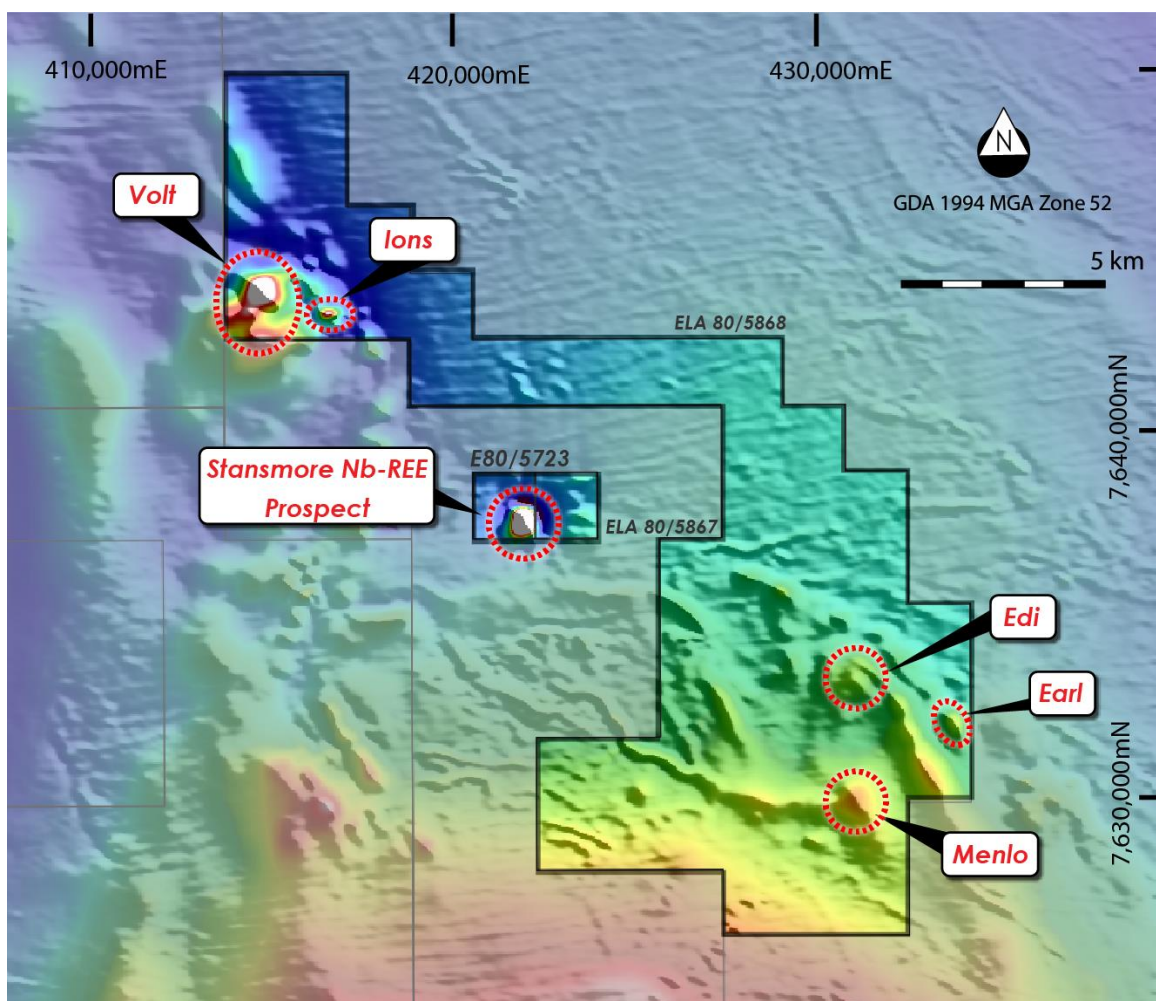


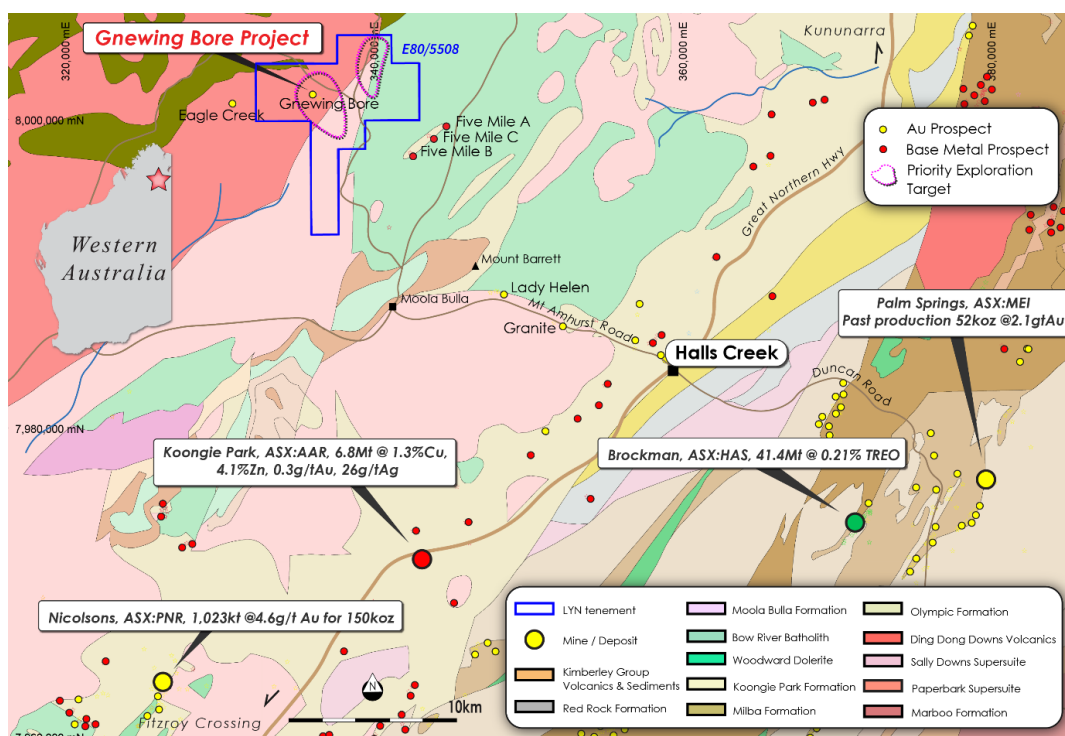
Figure 5. Reduced to Pole Magnetics (TMI grid) highlighting the prominent magnetic anomaly at Stansmore Prospect and other agnetic targets.

## Gnewing Bore Project (Gold, Silver, Copper)

The Gnewing Bore Project is approximately 28km to the northwest of the Halls Creek townsite, within the Kimberley Region of Western Australia. Figure 6. Halls Creek is situated 350km south of Kununurra and is readily accessible via the sealed Great Northern Highway. The Project has generally good outcrop and easy access via stations tracks on the Moola Bulla pastoral lease.

An RC drilling program has been designed to test the 50m long, gossanous outcrop consisting of brecciated quartz material and iron oxides after sulphides. The Gnewing Bore Project represents a hydrothermal/epithermal gold-silver target, containing some low-level copper anomalism which appears primarily shear controlled. Historic work highlights high-tenor gold grades plus supporting silver and copper grades in the rock chip samples, with a lack of decent exploration work to sufficiently test the target's potential.

To date, notwithstanding its best and continuing efforts, the Company has unfortunately not been able to obtain the necessary Heritage approvals to allow it to carry out its proposed drilling program.



## Rocky Dam Project (Gold)

Review of auger geochemical sampling across all the tenements within the Rocky Dam Project did not record any significant anomalies to warrant further exploration. Overall geochemical results have been disappointing with no significant targets identified to warrant follow up drilling.

Given the results the Company did not consider it is in the best interests of its shareholders to expend further funds on this prospect and during the quarter the Company surrendered the Project tenements.

## **Julimar Project (Nickel-Copper-PGE)**

Recent desktop review of this fieldwork has downgraded the potential for the Julimar Project to host Ni-Cu-PGE mineralisation associated with mafic and ultramafic intrusions. The auger sampling program and helicopter EM survey results have not highlighted any priority targets for follow up exploration work.

Given the results the Company did not consider it is in the best interests of its shareholders to expend further funds on this prospect and during the quarter the Company surrendered the Project tenements.

## **Corporate**

### **Assessment of Additional Project Opportunities**

As part of its ongoing business development model, Lycaon continues to assess project opportunities across a broad range of commodities and geographies with a view to identifying attractive, suitably priced assets that will add shareholder value.

## **Placement**

The Company completed a single tranche Placement of up to 6,000,000 new ordinary fully paid shares ("Placement Shares") to raise A\$1,500,000 at A\$0.25 per share. The Placement Shares were issued under the Company's existing placement capacity in accordance with ASX Listing Rule 7.1/ 7.1A.

The issue price of \$0.25 represented a 13.7% discount to the last traded price and a 2% premium to the 30 day VWAP.

Inyati Capital Pty Ltd acted as Lead Manager (LM) to the Placement and were paid a 6% fee on funds raised. The LM also received 600,000 options with a strike price of A\$0.375 and expiry 3 years from the date of issue.

Proceeds from the Placement will be used towards drilling at the Bow River nickel Project, finalise permitting and commence drilling at the Stansmore Niobium-REE Project, and general working capital.

## **Shareholder Meeting**

During the quarter the Company held a shareholder meeting at which shareholders ratified securities issued pursuant to the Placement and approved the issue of shares related to the acquisition of the Stansmore Niobium-REE Project.

## **ASX Additional Information**

As per ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the Quarter was \$427,959. Full details of exploration activity during the Quarter are set out in this report.

As per ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the Quarter.

As per ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter was \$65,021.



The Company advises that this relates to director's fees and accounting and company secretarial related services.

As per ASX Listing Rule 5.3.4 the following expenditures have occurred:

Item	Current Quarter (\$)	Since Listing (\$)	As per IPO Prospectus dated 29 September 2021* (\$)	Variances (\$)
Exploration – Rocky Dam	2k	553k	1.07m	(517k)
Exploration – Gnewing Bore	8k	179k	1.21m	(1.031m)
Exploration – Julimar	1k	157k	540k	(383k)
Exploration – Bow River / Salt Lick	367k	851k	-	851k
Exploration – Stansmore	50k	54k	-	54k
Expenses of the offer	-	733k	500k	233k
Corporate and administration costs	143k	903k	500k	403k
Working capital	-	34k	1.5m	(1.466m)

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

The differences in the above are as follows:

#### Exploration – Rocky Dam

During the quarter, the tenements associated with the Rocky Dam project were relinquished. The reason for the difference in spend of approximately \$517,000 on the project compared to what was disclosed in the prospectus is because of disappointing geochemical results and no significant targets identified to warrant follow up drilling. The Company does not consider it is in the best interests of its shareholders to expend further funds on this prospect.

#### Exploration - Julimar

During the quarter, the tenements associated with the Julimar project were relinquished. The reason for the difference in spend of approximately \$383,000 on the project compared to what was disclosed in the prospectus is because of the auger sampling program and helicopter EM survey results which have not highlighted any priority targets for follow up exploration work. The geophysics spend were under budget by \$69k because no further ground geophysical surveys were completed subsequent to the initial airborne survey due to poor results. Therefore, no drilling occurred and no expenditure on other associated costs of field support and land access were deemed necessary. The Company does not consider it is in the best interest of its shareholders to expend further funds on this prospect.

#### Exploration – Gnewing Bore

The reason for the difference in spend of approximately \$1,031,000 on the project compared to what was disclosed in the prospectus is due to unfavourable land access issues. The Company initially flew an airborne geophysical survey which delineated multiple targets for follow up with geochemical surveys and potential further ground geophysical surveys and drill programs which were additional to the planned drilling at the main Gnewing Bore Project. The Company has unfortunately not been able to obtain the necessary Heritage approvals to allow it to carry out ground disturbing activities. Pending further heritage surveys being successfully completed, all exploration programs will remain on hold until land access is resolved.



### Exploration – Bow River / Salt Lick

Since listing, the Company acquired East Kimberly Resources Pty Ltd which holds the tenement licence E80/4955 in June 2022. The costs associated to acquire the project and further develop this prospect of approximately \$851,000 were allocated as a separate line item in the table above as it is not considered 'working capital' in nature given the Company acquired the project.

### Expenses of the offer

These costs include legal costs, accounting and tax advice costs, and other support services. Delays in the anticipated listing of the Company increased costs of the offer, predominately legal costs.

### Working capital

The Company's working capital is to be utilised to fund further exploration activities and/or acquisitions or investment costs (including due diligence investigations and experts fee in relation to such acquisitions or investments), as applicable. Any amounts not expended will be applied towards corporate and administration costs for the period subsequent to the initial two-year period following admission of the Company.

## ENDS

### **For further information:**

Mr. Thomas Langley

Technical Director

Lycaon Resources Limited

Ph: +61 8 6188 8181

E: [admin@lycaonresources.com](mailto:admin@lycaonresources.com) W: [www.lycaonresources.com](http://www.lycaonresources.com)

### **Tenement Register**

Project	Tenement	Location	Interest at 1/07/2023	Acquired/Disposed	Interest at 30/09/2023
Gnewing Bore (MatMetals Pty Ltd)	E 80/5508	WA	100%	-	100%
Julimar	E 70/5415	WA	100%	100%	-
Julimar	E 70/5416	WA	100%	100%	-
Rocky Dam	E 25/533	WA	100%	100%	-
Rocky Dam	E 27/611	WA	100%	100%	-
Rocky Dam	E 27/612	WA	100%	100%	-
Rocky Dam	E 25/599	WA	100%	100%	-
Rocky Dam	E 27/634	WA	100%	100%	-
Rocky Dam	E 28/2988	WA	100%	100%	-
Rocky Dam	E 28/2996	WA	100%	100%	-
Rocky Dam	E 28/2997	WA	100%	100%	-
Rocky Dam	E 28/3000	WA	100%	100%	-
Rocky Dam	E 28/3001	WA	100%	100%	-
Bow River and Salt Lick (East Kimberley Resources Pty Ltd)	E80/4955	WA	100%	-	100%
Stansmore <sup>1</sup>	E 80/5723	WA	-	100%	100%
Stansmore <sup>1</sup>	E 80/5867	WA	-	100%	100%
Stansmore <sup>1</sup>	E 80/5868	WA	-	100%	100%

<sup>1</sup>Refer to Acquisition Announcement on 15 November 2022, outlining the terms of the acquisition.

There are no Farm-in or Farm-out Arrangements held by Lycaon Resources Limited

For additional information please visit our website at [www.lycaonresources.com](http://www.lycaonresources.com)

### **Forward-Looking Statements**

This announcement contains “forward-looking statements.” All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and based upon information currently available to the company and believed to have a reasonable basis. Although the company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements.

Forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper, gold, and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. The forward-looking statements contain in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not undertake any obligation to release publicly any revisions to any “forward-looking statement”.

### **Competent Persons Statement**

The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Thomas Langley who is a member of the Australian Institute of Geoscientists (MAIG) and a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr. Thomas Langley is a full-time employee of Lycaon Resources Limited, and is a shareholder, however Mr. Thomas Langley believes this shareholding does not create a conflict of interest, and Mr. Langley 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”. Mr. Langley consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.