

**ADDRESS**

Level 2, 22 Mount Street
Perth WA 6000

PHONE

+61 (08) 6188 8181

ABN

80 647 829 749

WEBSITE

www.lycaonresources.com

19 April 2023

Quarterly Activities Report 31 March 2023

Highlights

- Preparations for drilling at Bow River in Q2 well underway
- Drilling at Bow River to test compelling high density gravity anomaly below depth of EM investigation
- Review of helicopter electromagnetic survey (HEM) over Gnewing Bore Au-Ag/Ni-Cu Project completed.
- Gnewing Bore heritage surveys anticipated for Q2, with drilling to follow mid-year
- Approvals proceeding for access to drill at the Stansmore Nb-REE Project

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

Projects Summary

Bow River Prospect (*Ni/Cu/Co±PGE*)

The Bow River Project is located within the Halls Creek Mobile Zone in the East Kimberley region of Western Australia (Figure 1).

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 quadrupling the Ni-Cu-Co resource) has highlighted 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 2, 3.

The Company is currently working through access and approvals with a view to be drilling shortly after the end of the wet season in May.

Two deep drillholes are planned to intersect the greatest density anomaly at Bow River intrusion, which may have the greatest likelihood of hosting nickel-copper sulphide mineralisation analogous to Panoramic Resources Savannah mine 60km to the south. Review of the Bow River ground EM survey has now been completed by Southern Geoscience. Whilst the recent EM survey did not highlight any shallow conductors, it is important to note that the Savannah North discovery which was ~4 times bigger than the original Savannah mine, also did not show up on EM surveys, due to being located greater than 250m depth and beyond the detection limit of the EM survey, Figure 4. In light of the Savannah North discovery, the Company sees significant potential to delineate nickel-copper sulphide mineralisation at Bow River, which is supported by the high-grade nickel-copper mineralisation discovered to date and the identification of a high density target at depth which may represent a fertile Peridotite host rock as seen at Savannah North.

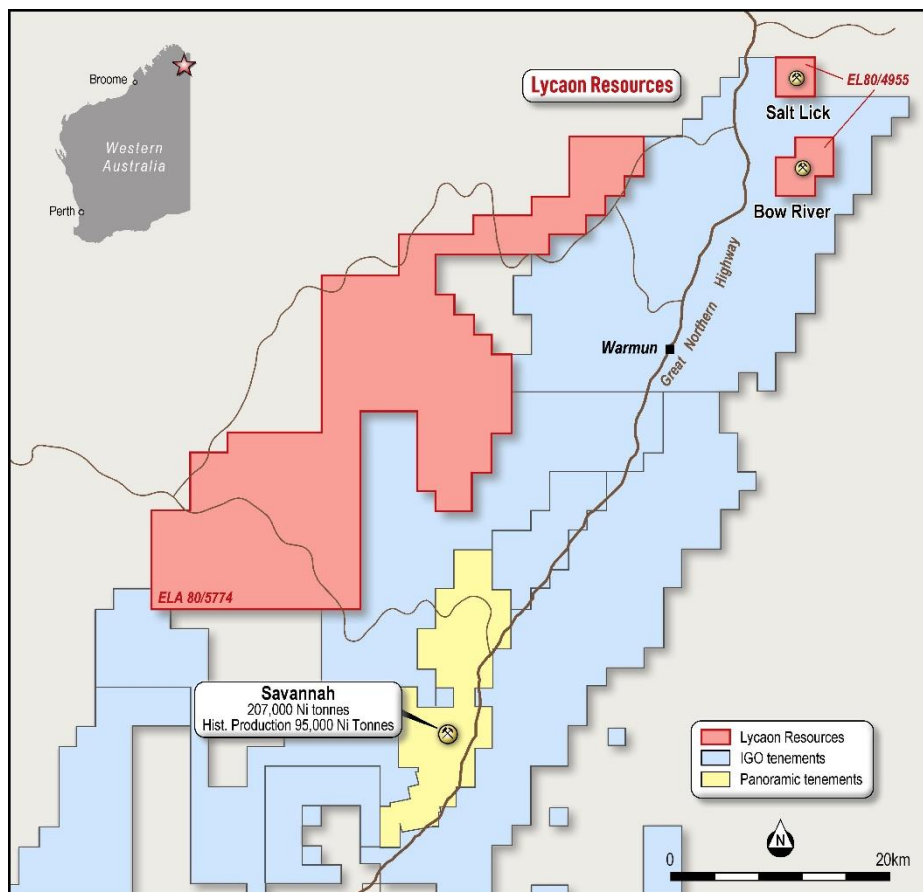


Figure 1. Location of Bow River and Salt Lick nickel copper sulphide projects and withdrawn tenement application ELA80/5774

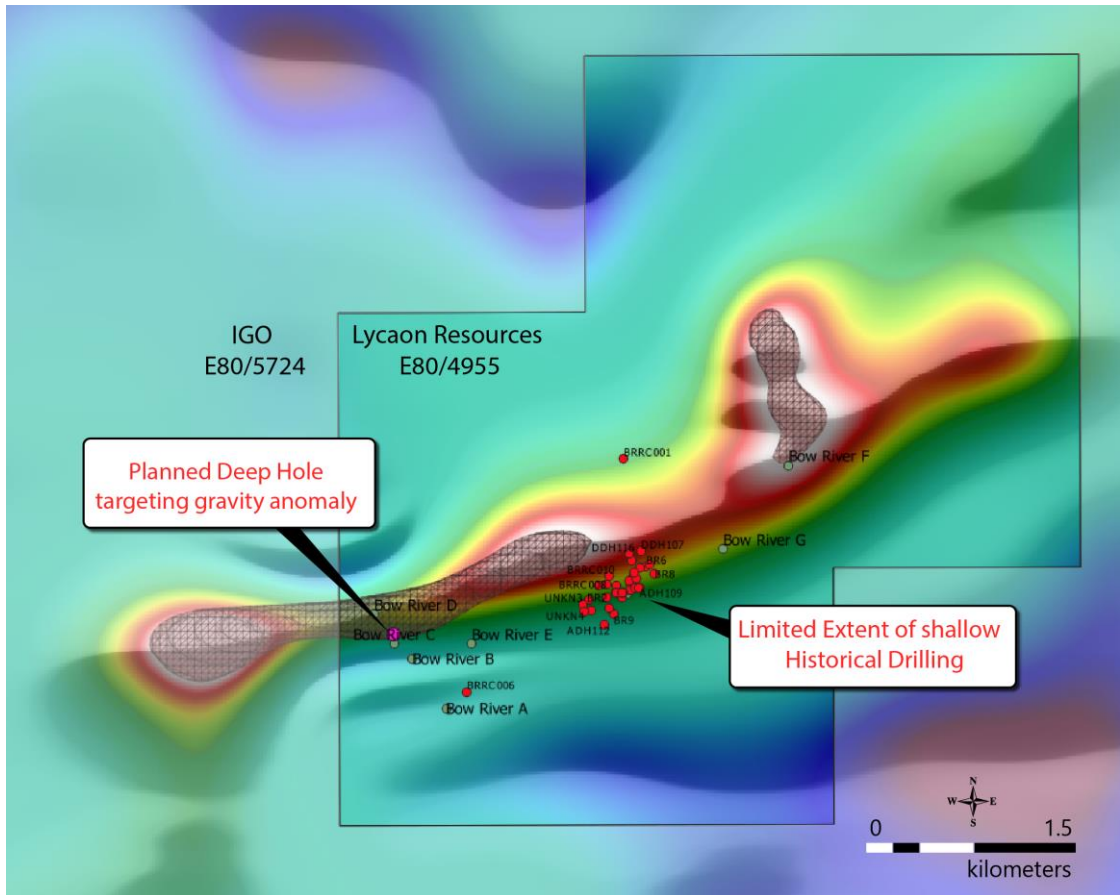


Figure 2. Location of historical drilling at Bow River nickel copper sulphide project, in relation to the large underlying Gravity anomaly inferred to be the Bow River Intrusive

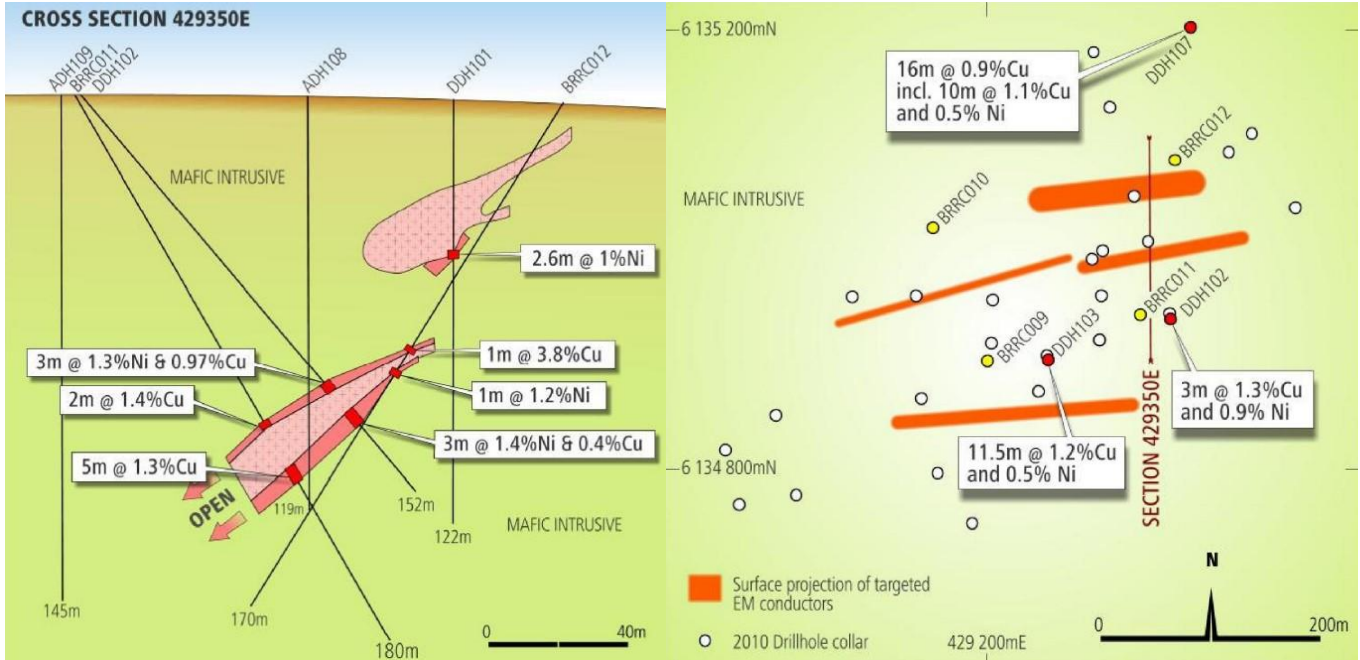


Figure 3. Location of historical drilling at Bow River nickel copper sulphide project.

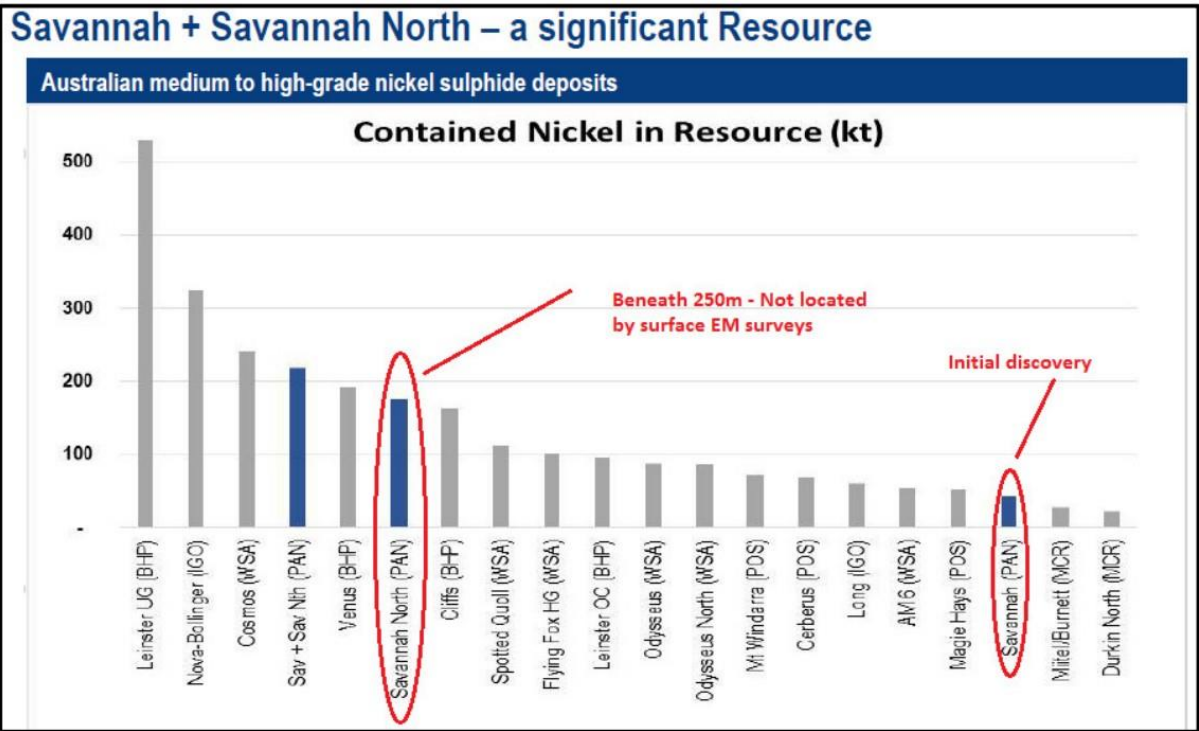


Figure 4. Graph highlighting significant addition of contained nickel resource due to the discovery of Savannah North, a much larger deposit than Savannah.

During the quarter the tenement application ELA 80/5774 was withdrawn following desktop review.

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.

During the quarter, Southern Geoscience Consultants completed a review of the high-resolution electromagnetic survey (HEM) geophysical survey completed by New Resolution Geophysics (NRG). The HEM Xcite™ survey was flown at a minimum 200m line spacing over the central portion of the Gnewing Bore Project area, Figure 5. The primary objective of the survey was to explore for conductive, well developed sulphide bodies that may represent high grade, copper-gold mineralisation or Ni-Cu±PGE mineralisation. The XCITE system was selected in order to provide higher resolution survey information to a depth of ~250-300m. A total of 216 line kilometres of XCITE AEM survey data have been acquired over one contiguous block area within tenement E80/5508. The review highlighted five primary XCITE target anomalies - GB1, GB2, GB3, GB4 and GB5, Figure 5.

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.

The Company is currently working through the approvals processes required to enable the drilling of this prospect, likely to occur in mid-2023.

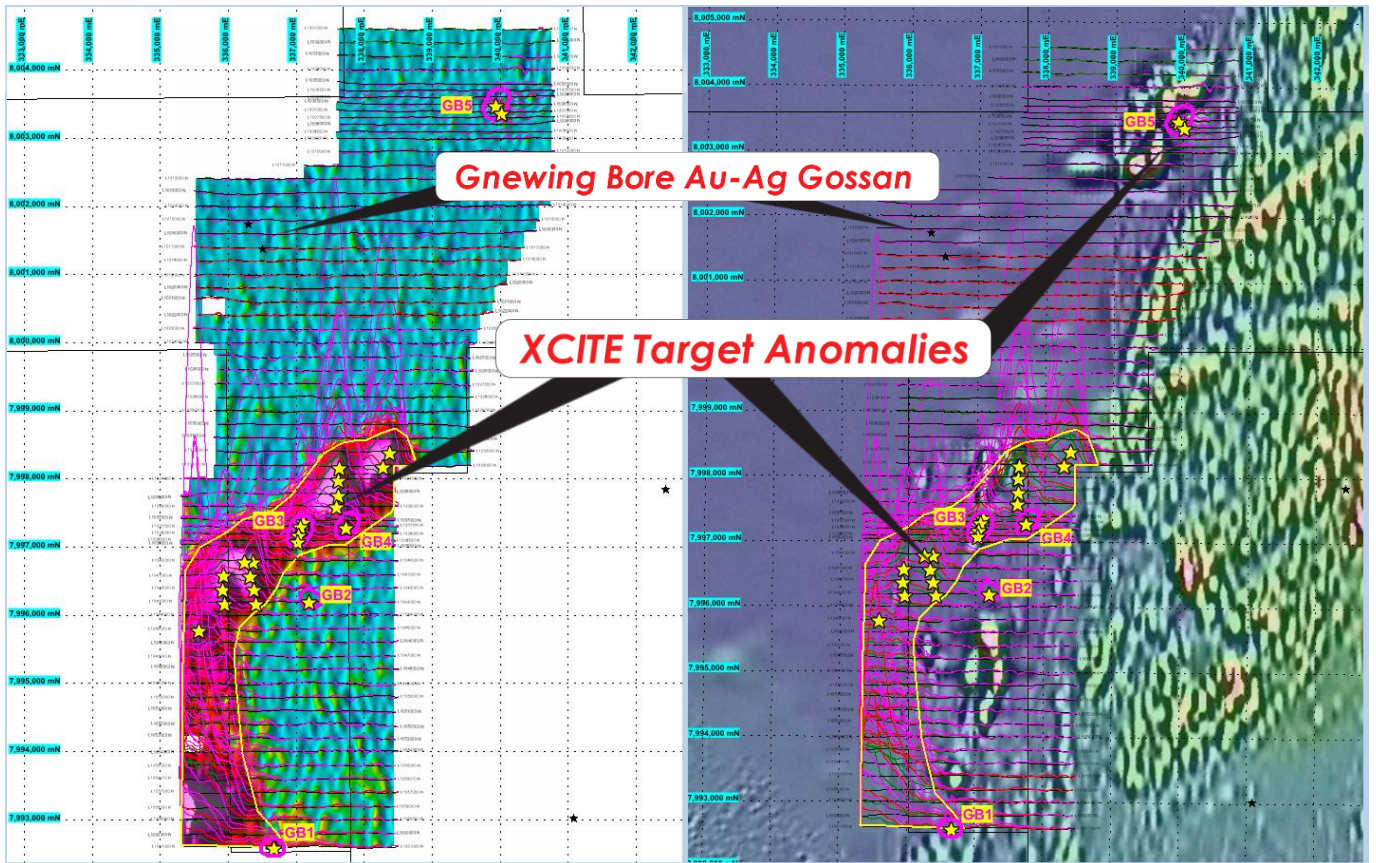


Figure 5. Lycaon Resources - Gnewing Bore Project - XCITE CH15BZ AEM Imagery (left) and Regional TMI 2VD Aeromagnetics (right)

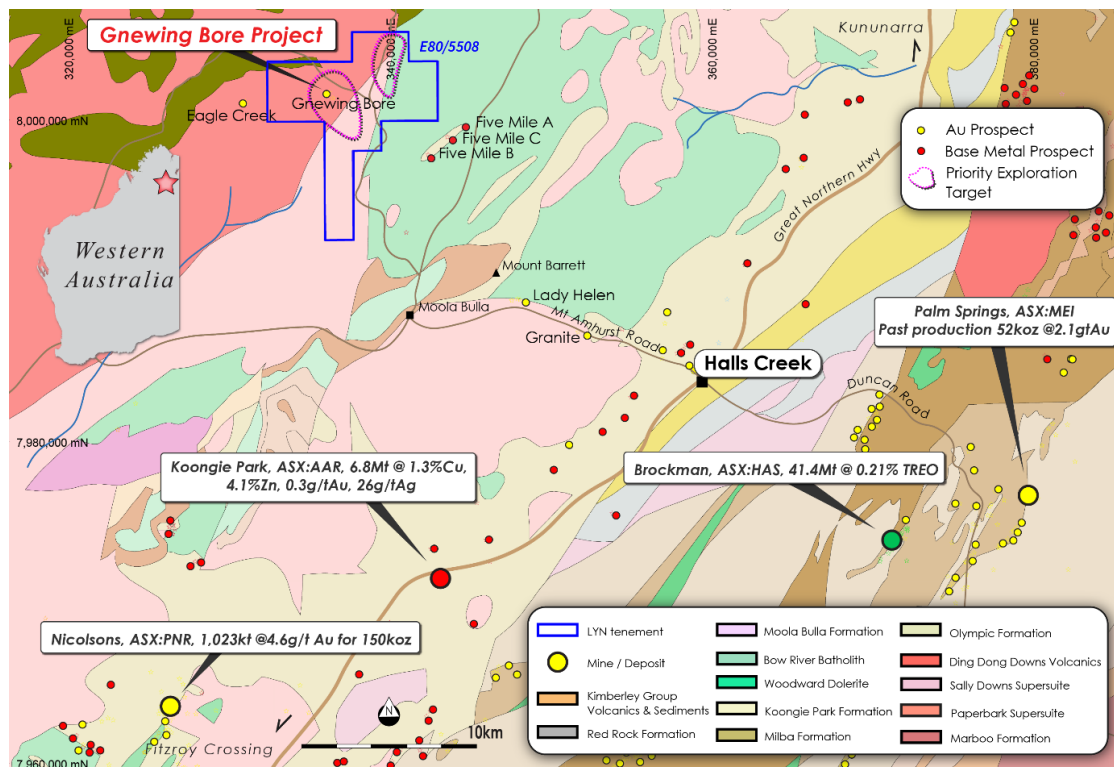


Figure 6. Gnewing Bore Project Location and Geology

Stansmore Project (Nb/ REE ±PGE)

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. 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.

The Company is currently working through the approvals processes required to enable the drilling of this prospect.

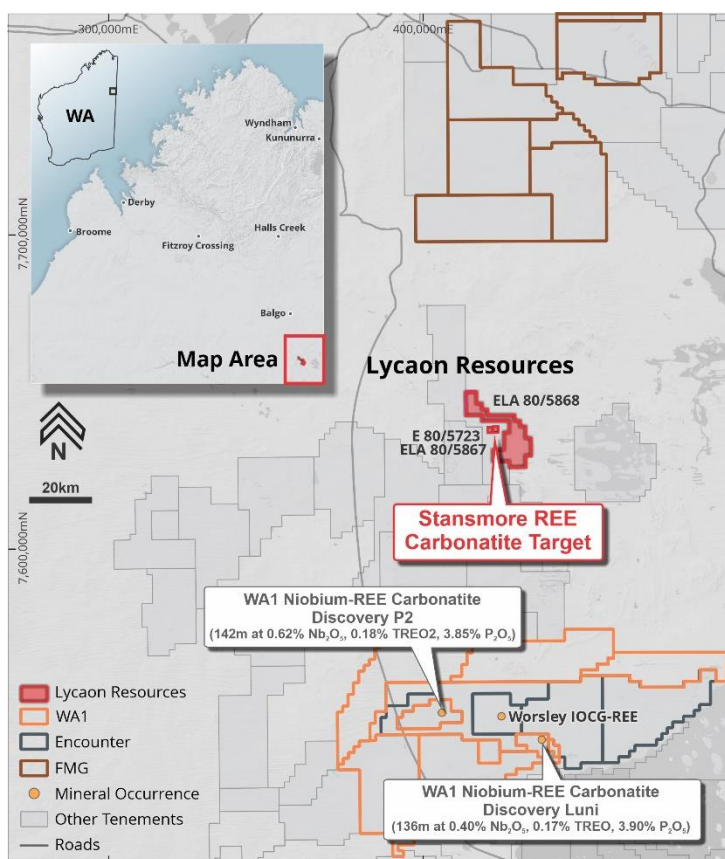


Figure 7. Stansmore Nb-REE Carbonatite ± IOCG Project Location Map

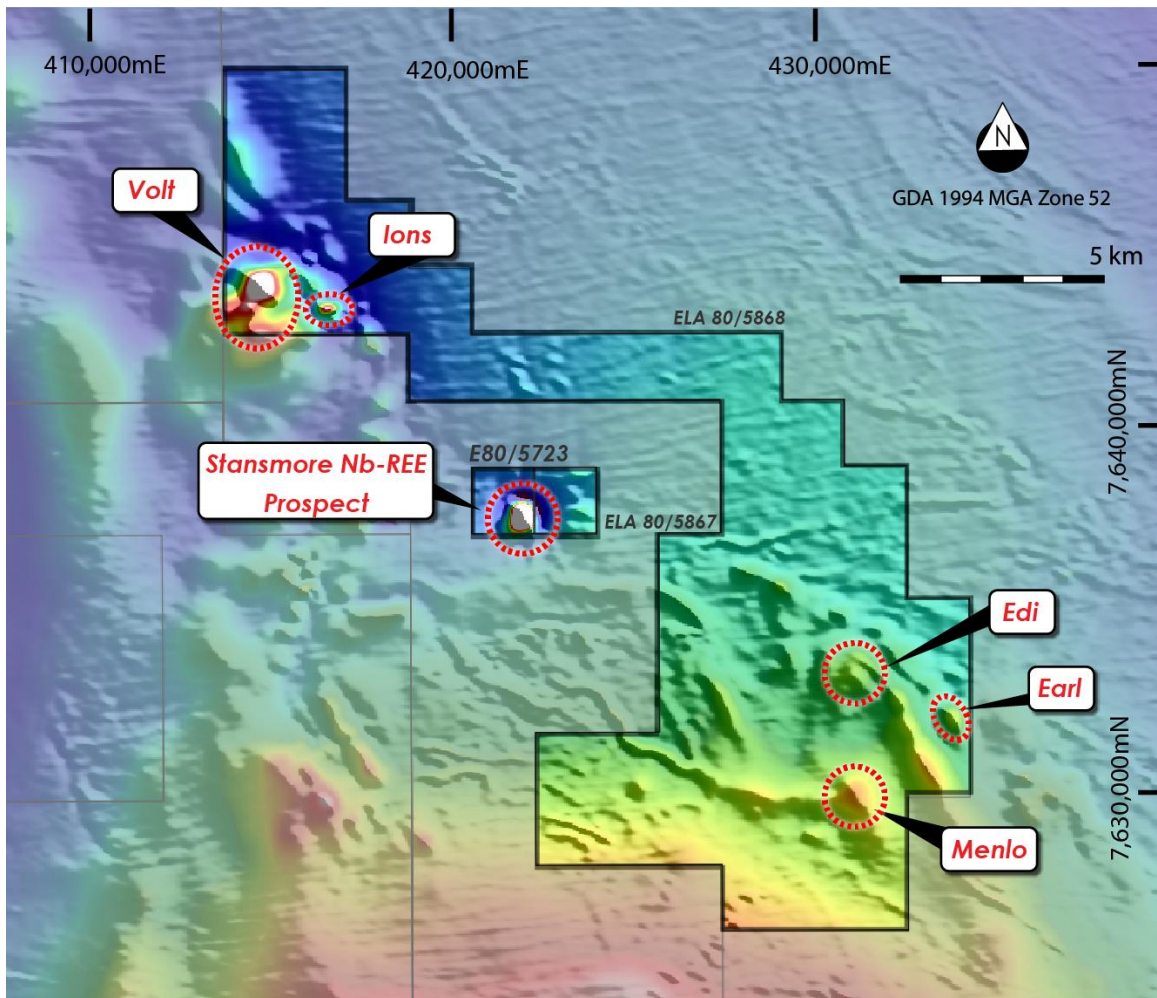


Figure 8. Reduced to Pole Magnetics (TMI grid) highlighting the prominent magnetic anomaly at Stansmore Prospect and other magnetic targets.

Rocky Dam Project (Gold)

Gyro drilling completed an auger geochemical sampling program December 2022, on an east-west 50m grid and north-south 200m grid spacing, for a total of 587 samples. The auger program designed as a first pass geochemical survey to define anomalies that may be related to primary gold mineralisation at depth across tenements E28/3000.

The soil results at E28/3000 show limited potential for gold or base metals, Figures 9, 10. Review of auger geochemical sampling across other tenements within the Rocky Dam project already completed at E27/612, E27/611 and E28/2988 also 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 to date, the Company does not consider it in the best interests of shareholders to expend further funds on this prospect at the current time.

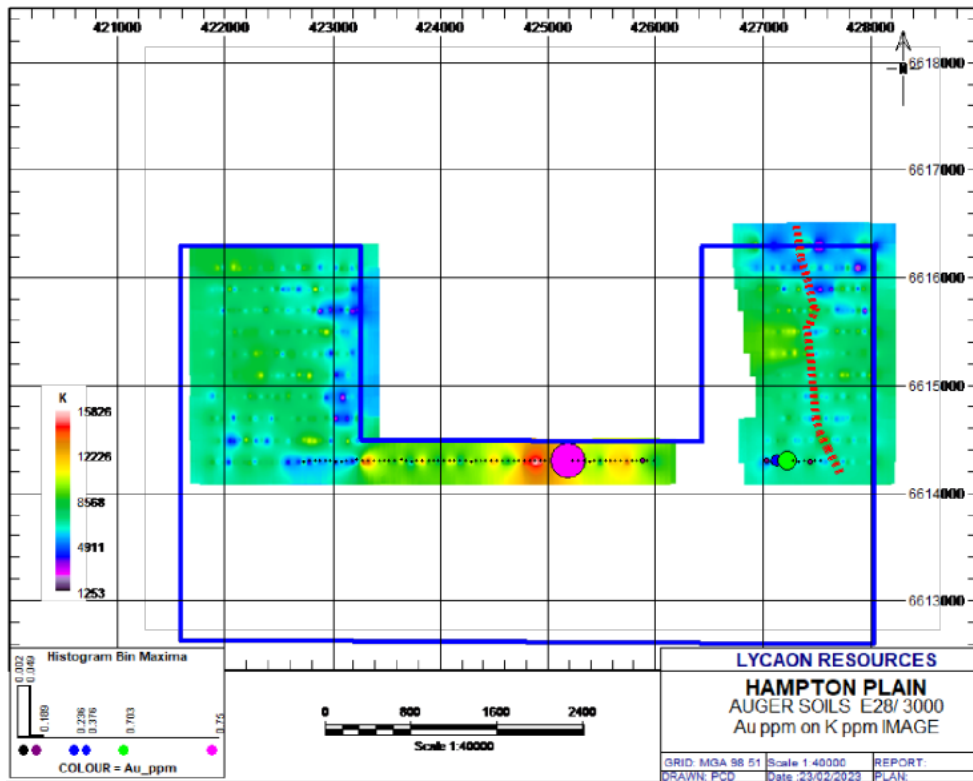


Figure 9. E28/3000 auger soils – Au ppm on K ppm image.

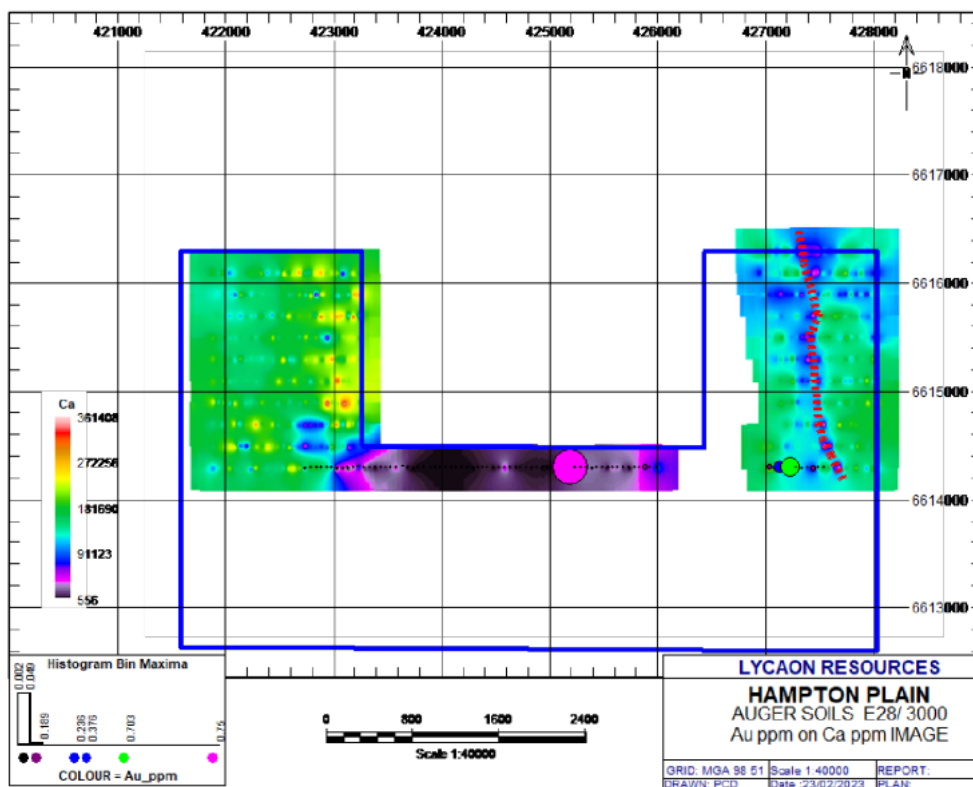


Figure 10. E28/3000 auger soils – Au ppm on Ca ppm image.

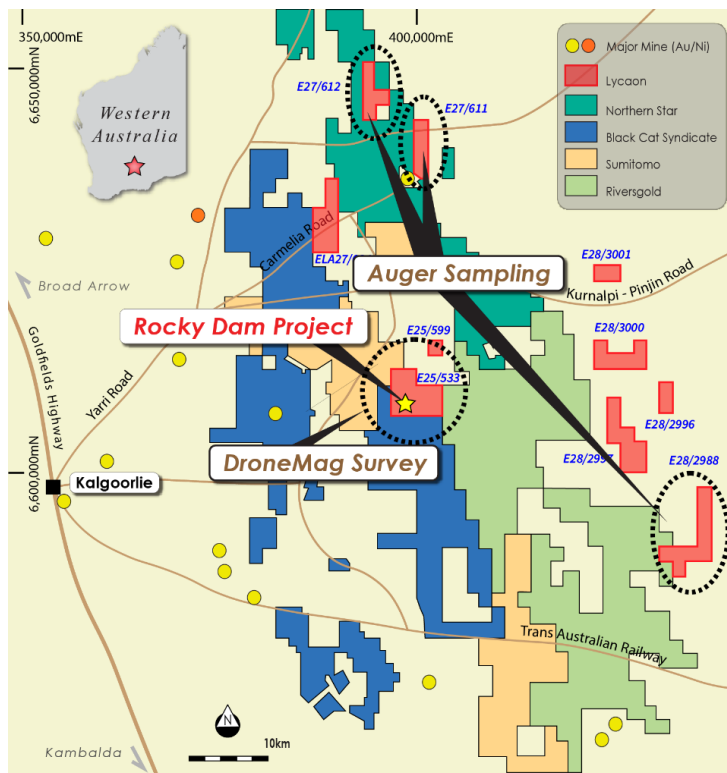


Figure 11. Rocky Dam Project Location and work program areas

Julimar Project (Nickel-Copper-PGE)

The road-side auger sampling program completed in Q4, 2021 was designed as a first pass geochemical survey to cover public roads within the project area comprising two granted exploration licences E70/5415 and E70/5416, Figure 9.

An airborne electromagnetic and magnetic survey was conducted by NRG in February 2022 using the Xcite™ system over E70/5415 and E70/5416. The survey and data quality was monitored by Southern Geoscience Consultants (SGC). The low level anomalies identified by SGC have since been downgraded as they relate to surficial drainage and cultural features.

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 to date, the Company does not consider it in the best interests of shareholders to expend further funds on this prospect at the current time.

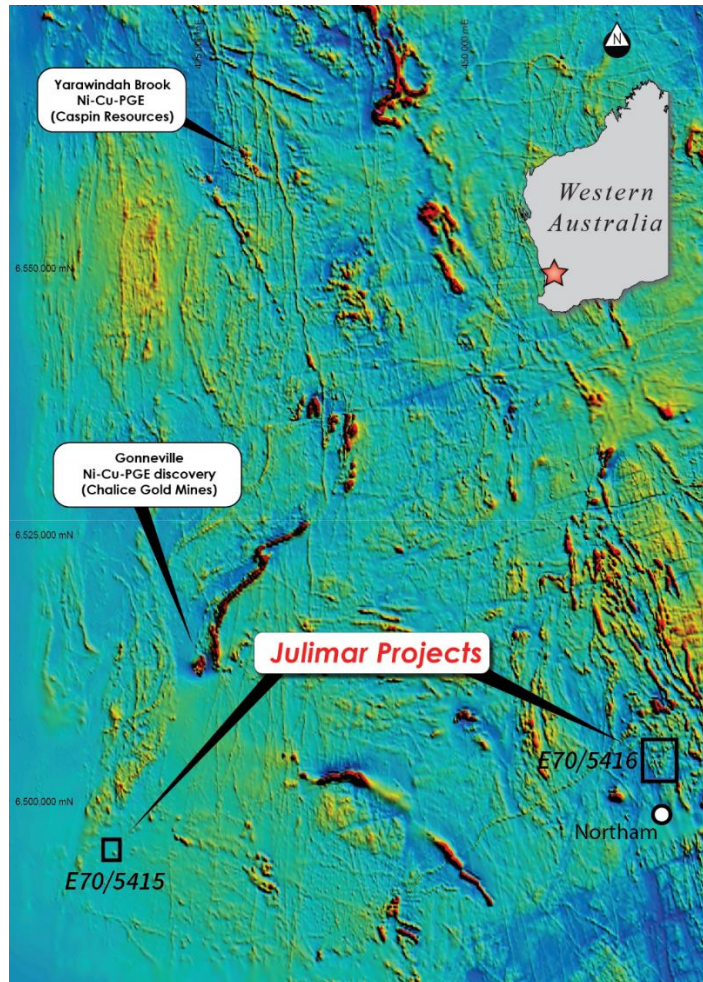


Figure 12. Regional magnetics - Julimar Project

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.

ASX Additional Information

As per ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the Quarter was \$51,939. 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 \$76,688. 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* (\$)
Exploration – Rocky Dam	31k	548k	1.07m
Exploration – Gnewing Bore	1k	140k	1.21m
Exploration – Julimar	4k	152k	540k
Exploration – Bow River / Salt Lick	-	341k	-
Exploration - Other	15k	23k	-
Expenses of the offer	-	733k	500k
Corporate and administration costs	75k	688k	500k
Working capital	-	4k	1.5m

* 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:

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.

This announcement has been approved for release by the Board of Lycaon.

ENDS

For further information:

Mr. Thomas Langley

Technical Director

Lycaon Resources Limited

Ph: +61 8 6188 8181

E: admin@lycaonresources.com W: www.lycaonresources.com

Tenement Register

Project	Tenement	Location	Interest at 1/01/2023	Acquired/Disposed	Interest at 31/03/2023
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%
Castlereagh	ELA 80/5774	WA	100%	Disposed	0%
Stansmore*	E 80/5723	WA	-	-	-
Stansmore*	ELA 80/5867	WA	-	-	-
Stansmore*	ELA 80/5868	WA	-	-	-

*Refer to Page 2 and 11 within this report, 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

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.