

Drilling Commenced at West Arunta

HIGHLIGHTS

- Maiden drill program commenced at the high-priority Stansmore Nb-REE/IOCG target at West Arunta Project
- EIS exploration incentive providing up to \$180,000 funding towards drilling costs
- Stansmore is a significant magnetic high potentially representing a Nb-REE carbonatite, Iron Oxide Copper-Gold (IOCG) or Intrusion Related Gold (IRG) target

Mr Thomas Langley, Technical Director commented, "We are extremely pleased to commence drilling at our West Arunta project targeting a major discovery at the Stansmore magnetic target. We will become the first ever explorer to drill the Stansmore magnetic anomaly below the thin cover of sand, with the aim to emulate the success of WA1 in making a major discovery in the West Arunta region. Geophysical modelling has shown the Stansmore magnetic anomaly to be a pipelike body 500m in diameter and continuing at depth. This is not dissimilar to other significant discoveries such as the 8Moz Havieron gold-copper deposit and Australia's major Ernst Henry copper gold mine, also discovered in Proterozoic aged terrain."

"As we have seen with WA1's and Encounter's recent drill results in the region, this area has proven to have a very good strike rate of success in drilling regionally significant geophysical anomalies like our Stansmore target."

"I look forward to updating the market on drilling results in the coming weeks."



Figure 1. Stark Drilling RC rig at the first hole STRC001, Stansmore Project in West Arunta

Lycaon Resources Ltd (ASX: LYN) (**Lycaon** or the **Company**) is pleased to announce the commencement of drilling for the maiden drill program. The drilling is anticipated to take 5-8 days to complete, pending ground conditions. Samples will be sent to Perth immediately for analysis with results anticipated to have a turn-around-time of 15-25 days upon receival at the laboratory.

In May 2024, the Company was awarded a co-funding grant of up to a maximum of \$180,000 for drilling at Stansmore, under Round 29 of the Western Australian Exploration Incentive Scheme (refer to Lycaon's ASX Announcement dated 1 May 2024).



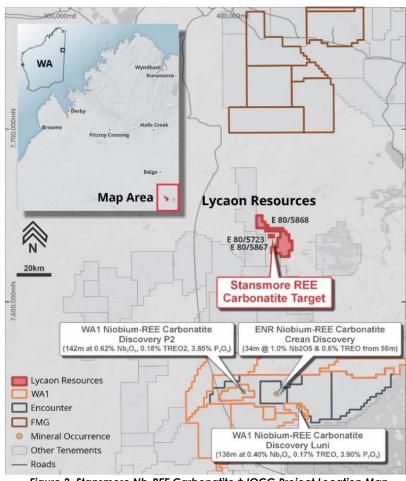


Figure 2. Stansmore Nb-REE Carbonatite ± IOCG Project Location Map

Stansmore – West Arunta Project (Nb-REE/IOCG ± Intrusion Related Gold Copper)

The 100% owned West Arunta Stansmore Niobium-REE Project granted tenure extends over 173km² and is approximately 90km north of WA1 Resources' Luni and P2 discoveries, Figure 2. The project consists of three high priority magnetic anomaly drill targets (Stansmore, Volt and Ions) and three secondary drill targets (Edi, Earl and Menlo) that may be prospective for Niobium-REE Carbonatite, Iron-Oxide Copper Gold (IOCG) or Intrusion Related Gold Copper, Figure 3, 4, 5.

The Stansmore Project drilling will target a regionally prominent 500m diameter magnetic feature. Recent discoveries by WA1 Resources and Encounter Resources have demonstrated the potential for the West Arunta region to host significant Nb-REE mineral systems.



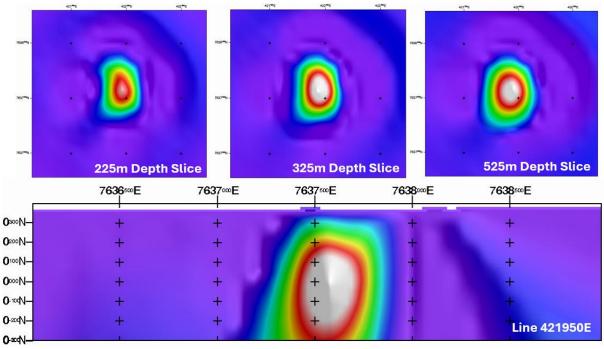


Figure 3. Stansmore Prospect – Magnetic Inversion

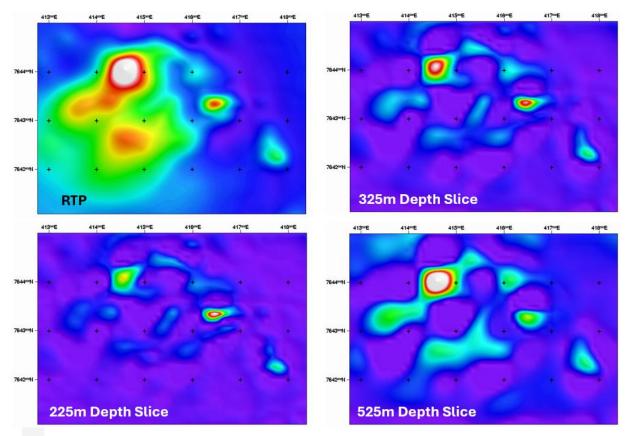


Figure 4. Volt/Ions Area – Magnetic Inversion



Recent geophysical modelling was completed by renowned geophysical expert Terry Hoschke. Mr Hoschke's work followed the initial review completed by Southern Geoscience Consultants (SGC) to further strengthen our understanding of drill targeting. The geophysical review included re-processing magnetic data and a 3D inversion of the magnetic data to assist with targeting of drillholes ahead of a maiden drill program. 3D inversion efforts utilised the best available public domain magnetic data (circa 2010) consisting of 200m line spacing survey data (north-south lines) with a nominal terrain clearance of ~50m.

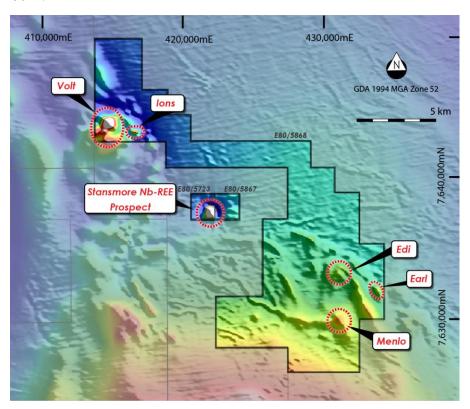


Figure 5. Reduced to Pole Magnetics (TMI grid) highlighting the prominent magnetic anomaly at Stansmore Prospect and other magnetic targets

The 3D inversion results defined the Stansmore magnetic anomaly as a pipelike body of approximately 500m diameter, starting from ~120m depth, and dipping to the south. Drilling will target 320m into the main area of the magnetic anomaly.

The Stansmore Project has had limited historic work completed within the project area with the broader area having limited exploration focussed on gold, copper and diamonds. BHP Minerals Limited completed 6 shallow RAB drillholes over the Stansmore magnetic anomaly in 1983 (WAMEX Report A12302) exploring for diamonds. Drilling at the main Stansmore magnetic anomaly (ST2) consisted of 5 drillholes with a maximum depth of 12m. Lithologies intersected by the drilling included ultrabasic rock, 'possibly pyroxenite', and sericitic altered claystone.



Overall, the results did not display kimberlitic affinities to potentially host diamonds and the tenement was surrendered in the following year. Encouragingly the RAB drilling has highlighted the shallow depth of cover and saprolite interface. The drilling did not adequately test the magnetic anomaly which starts at ~150m depth.

The WA1 discoveries at Luni and P2 have been large first order geophysical anomalies which had never been drilled. The identification of Niobium and Rare Earth mineralisation associated with carbonatite intrusions by WA1 Resources and Encounter Resources nearby in their first ever drill programs signifies the extremely prospective and underexplored nature of the West Arunta.

- ENDS-

This announcement has been authorised for release by the Directors of the Company.

For additional information please visit our website at www.lycaonresources.com

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Competent Person's 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.

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