

West Arunta Heritage Approval Received

HIGHLIGHTS

- **Heritage clearance survey over high-priority Stansmore Nb-REE/IOCG target received, paving the way for our first ever drill campaign in the West Arunta**
- **The survey encompassed the Stansmore, Volt and Ions target areas**
- **EIS exploration incentive providing up to \$180,000 funding towards drilling costs**
- **Stansmore is a significant magnetic high potentially representing a carbonatite Nb-REE or IOCG target**

Mr Thomas Langley, Technical Director commented, "We are extremely eager for the upcoming maiden drill program as we become the first ever explorer to drill the Stansmore magnetic anomaly below the thin cover of sand. We aim to emulate the success of WA1 in making a major discovery in the West Arunta region, and are highly encouraged by the recent further geophysical modelling completed by industry expert Terry Hoschke. The geophysical modelling shows the Stansmore magnetic anomaly as a pipelike body 500m in diameter. This is not dissimilar to the other niobium discoveries in the region made by WA1 and Encounter, and other significant discoveries such as the 8Moz Havieron gold-copper deposit and Australia's major Ernst Henry copper gold mine."

"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."

"We would like to thank Central Desert Native Title Services and the Parna Ngururpa traditional owners for their efforts and cooperation in completing the recent heritage survey, and we look forward to working with them as we carry out our future exploration work programs."

Lycaon Resources Ltd (ASX: LYN) (**Lycaon** or the **Company**) is pleased to advise it has received heritage clearance to commence drilling at the high priority **Stansmore** Project in the West Arunta region of Western Australia, Figure 1.

The heritage clearance survey (Survey), which encompassed 3 high priority drill targets of Stansmore, Volt and Ions, follows the Company's success under Round 29 of the Western Australian Exploration Incentive Scheme (EIS) to receive a co-funding grant of up to a maximum of \$180,000 for drilling at Stansmore (refer to Lycaon's ASX Announcement dated 1 May 2024).

Further geophysical modelling was recently completed to assist drill targeting, with the aim to commence drilling in late October 2024 and to take 2-4 weeks to complete.

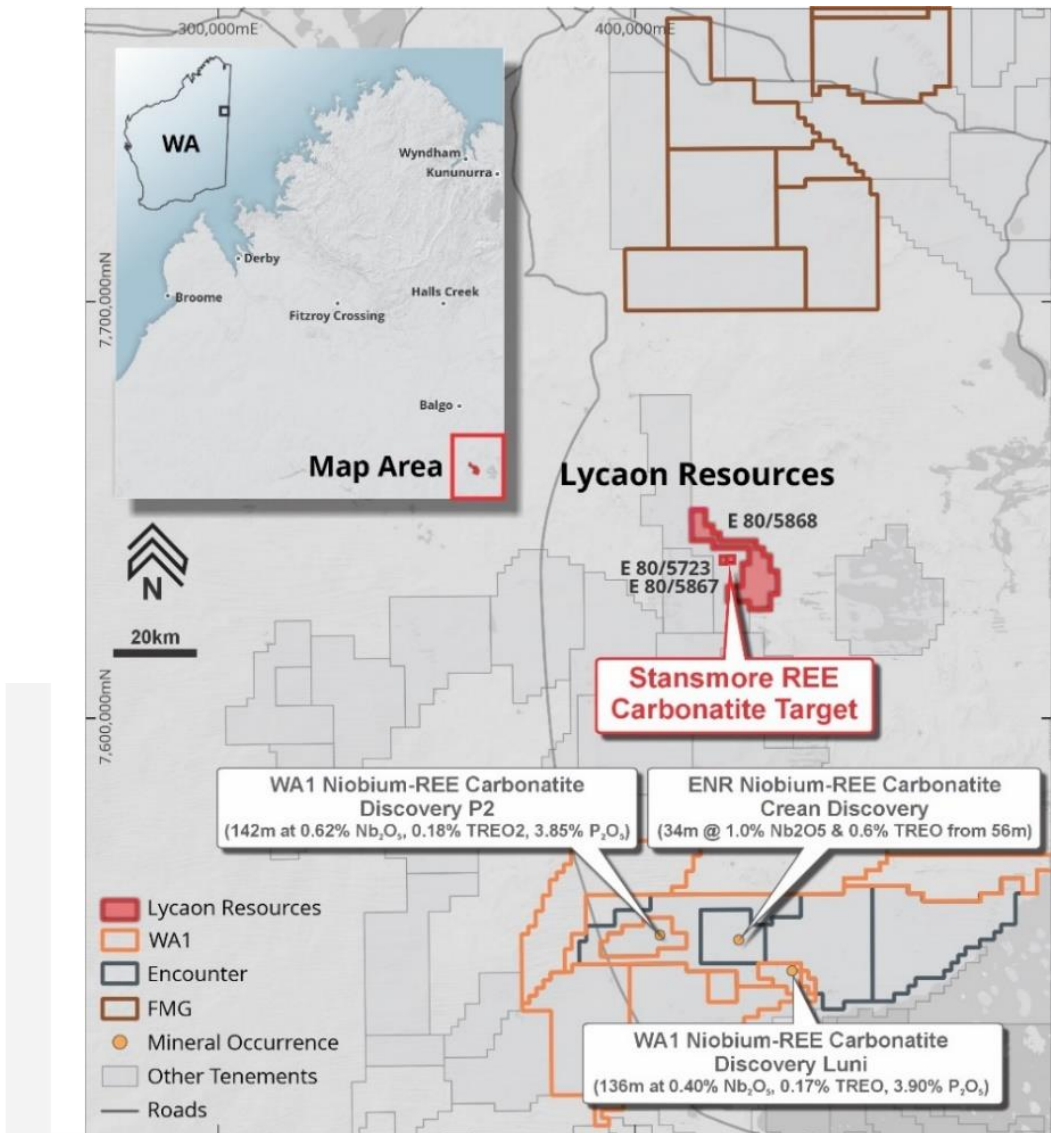


Figure 1. Stansmore Nb-REE Carbonatite ± IOCG Project Location Map

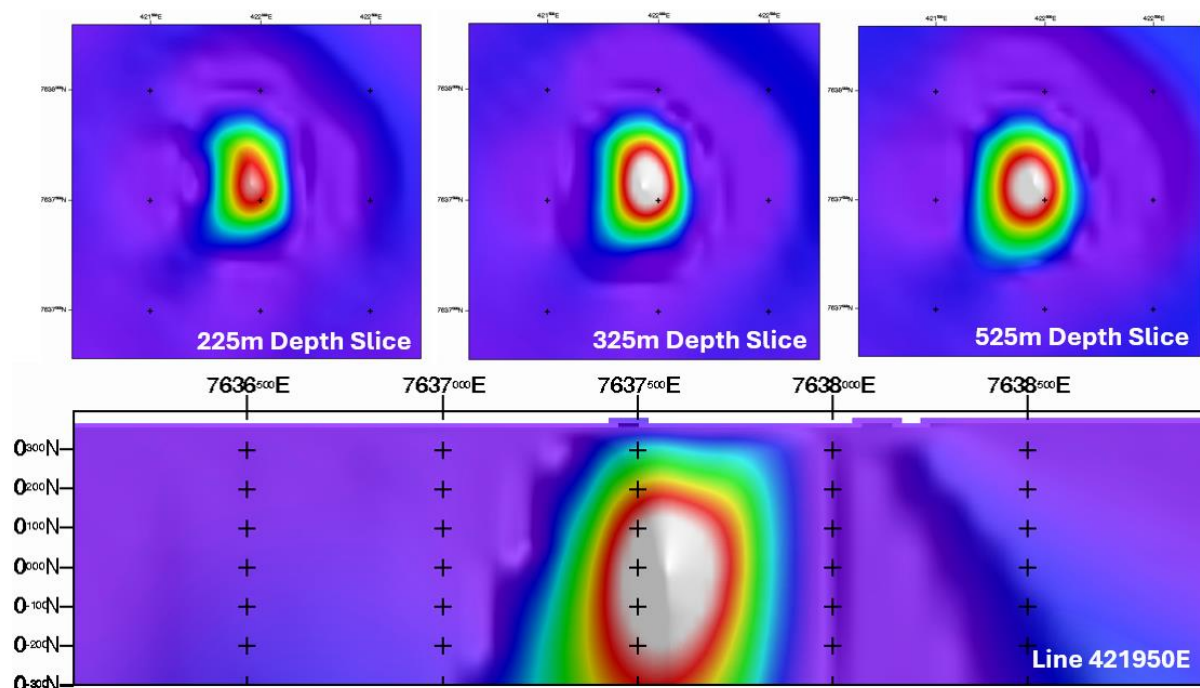


Figure 2. Stansmore Prospect – Magnetic Inversion

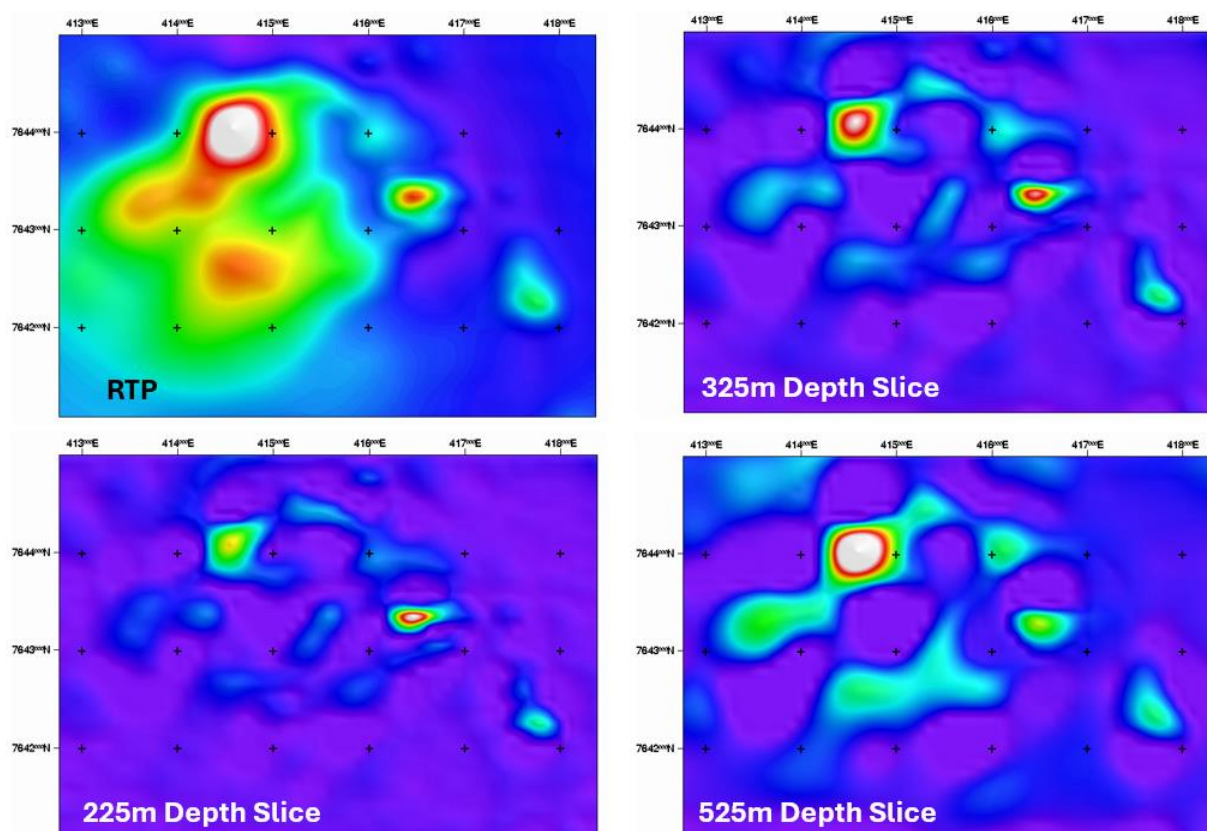


Figure 3. Volt/Ions Area – Magnetic Inversion

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 1. 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, or Iron-Oxide Copper Gold (IOCG), Figure 2, 3 and 4.

The Stansmore Project drilling will target a regionally prominent 500m diameter magnetic feature (Stansmore) and a larger ~3km wide magnetic anomaly (Volt and Ions)². Recent discoveries by WA1 Resources and Encounter Resources have demonstrated the potential for the West Arunta region to host significant Nb-REE mineral systems.

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.

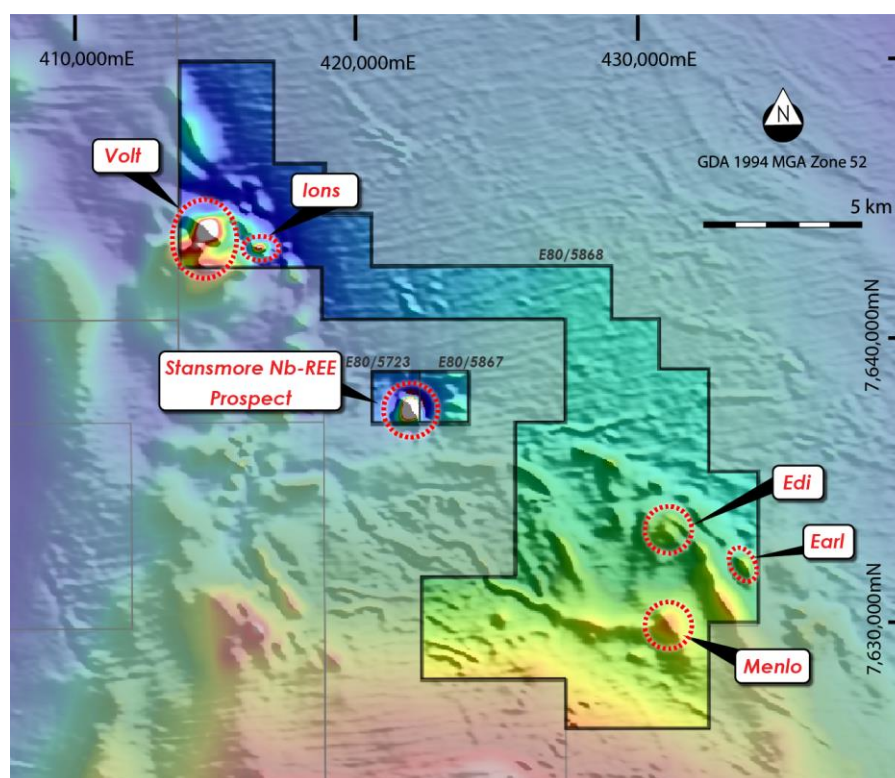


Figure 4. Reduced to Pole Magnetics (TMI grid) highlighting the prominent magnetic anomaly at Stansmore Prospect and other magnetic targets

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 niobium mineralisation discovered to date at WA1 Resources' Luni Project are unique to Niobium deposits globally due to the high tenor of niobium with results >2% niobium. 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.

Table 1. Proposed drillhole locations at Stansmore Project

Drillhole ID	Easting (MGA Z52)	Northing (MGA Z52)	Depth	Dip	Azimuth
ST001	421875	7637525	400	-75	90
ST002	421900	7637525	325	-60	90
ST003	421875	7637625	400	-75	90
ST004	421900	7637625	325	-60	90
V001	414610	7643950	350	-75	350
V002	414610	7643950	450	-75	350
I001	416480	7643240	350	-60	0
Total Metres			2600		

- ENDS-

For further information please refer to previous ASX announcements:

¹ ASX: ENR, New West Arunta high-grade niobium intercepts – Crean & Emily, 8 July 2024

² ASX: LYN, West Arunta Refined Geophysical Modelling, 5 September 2024

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

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

For enquiries:

Thomas Langley – Technical Director

Lycaon Resources Limited

T: +61 8 6188 8181

E: admin@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.