

Exploration commences at Trident Lithium Project, NSW

HIGHLIGHTS

- Initial field work commences on the Trident Lithium Project in NSW near Broken Hill.
- The acquisition of high-resolution airborne magnetics and radiometrics has commenced over the Euriowie Pegmatite Field.
- Initial survey results expected in June.

Critical minerals explorer Stelar Metals Limited (ASX:SLB) (“**Stelar Metals**” or the “**Company**”) is pleased to announce the start of exploration activity on its new Trident Lithium Project near Broken Hill mining centre in western NSW. The acquisition of high-resolution airborne geophysics has commenced over the Trident Lithium Project in NSW in collaboration with SensOre Ltd (ASX:S3N) (**SenseOre**).

The Trident Lithium Project extends over the 15km long Euriowie Tin Pegmatite Field that is prospective for hard-rock lithium mineralisation (Figure 1). Mapped pegmatites vary in size but have been reported to be up to 100 metres wide and over 1 kilometre in length. Historic lithium and tin mining at Trident and previous exploration has identified lithium minerals in pegmatite outcrops with high-grade lithium assays from rock-chip samples confirming lithium-rich LCT-Type pegmatite classification.

Stelar Metals and SensOre recently agreed use the Trident Lithium Project as a test area due to the known presence of lithium mineralisation. NSW Government funding was awarded to SensOre as part of the NSW Critical Minerals and High-Tech Metals Activation Fund, which involves testing new geochemical and geophysical techniques to discriminate between lithium bearing pegmatites.

High resolution airborne magnetics and 256-channel radiometrics are being collected by Thompson Aviation on 40 metre spaced east-west flight lines at a nominal flight height of 40m. North-south tie lines will be flown on 400 metre spaced lines. The total survey acquisition will be approximately 2,000-line kilometres.

SensOre initially proposed collection over the known lithium bearing pegmatite mines at Trident, Sceptre, Lady Dom and Triumph as illustrated in Figure 1, however Stelar Metals has elected to extend the survey to cover the lithium prospectivity of a much larger area encompassing the entire Euriowie Tin Pegmatite Field resulting in the acquisition of an additional 1,573-line kilometres.

Stelar Metals CEO Colin Skidmore said: “I am excited to commence exploration activity on Stelar’s new Trident Lithium Project in NSW, and the decision to extend coverage of high-resolution geophysics over the lithium-rich Euriowie Pegmatite field will no doubt provide a strong foundation for expanding our lithium exploration programs over this prospective area.”

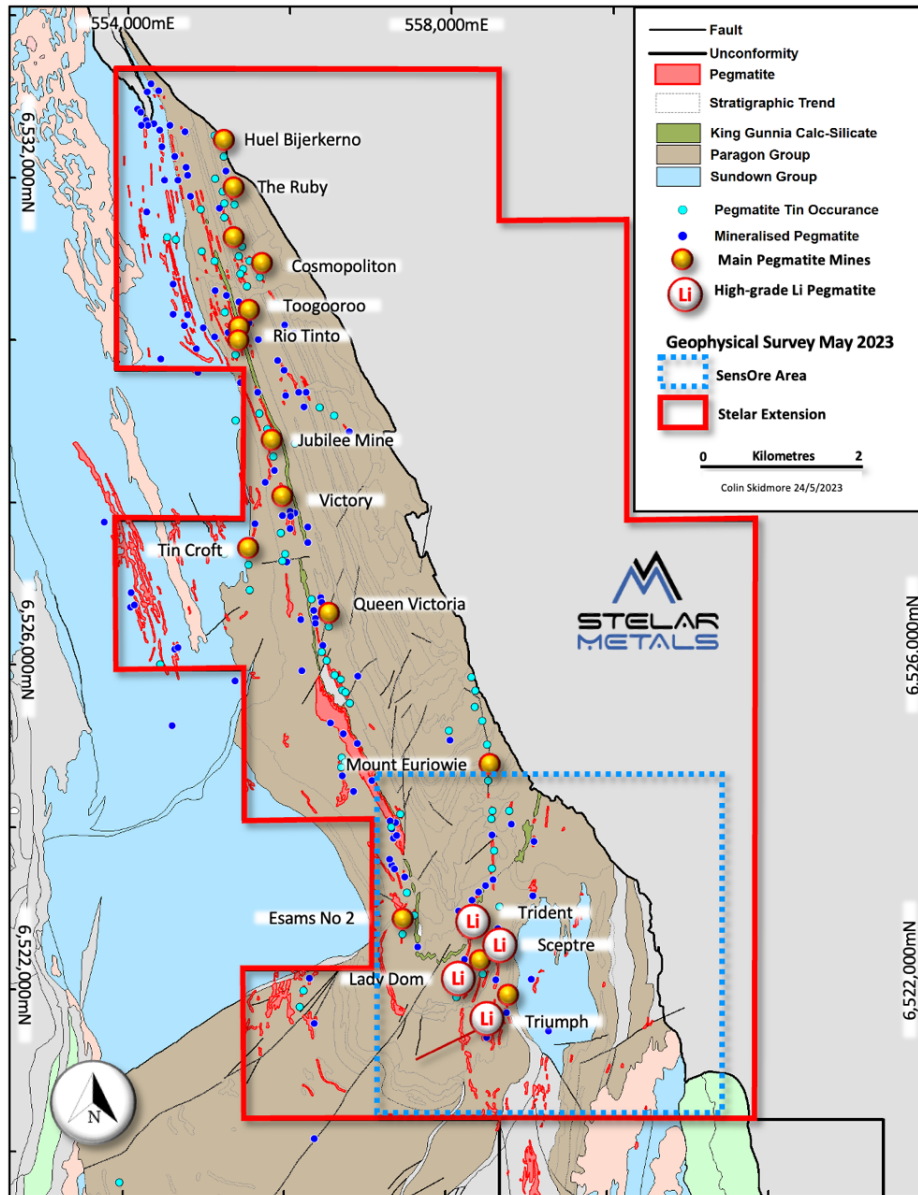


Figure 1: Trident Lithium Project showing airborne magnetics and radiometric survey areas.

SensOre Methodology

The SensOre project looks at new approaches to remote sensing and targeting spodumene mineral bearing lithium, caesium, tantalum (LCT) pegmatites in NSW. The project design leverages significant advances that have been made in remote sensing and combined application of large geochemical datasets to explore for spodumene occurrences in pegmatites.

The collaboration with Stellar Metals involves collecting airborne geophysical data, including radiometrics which can potentially directly detect Caesium 137 to identify LCT Pegmatites. The data will also be used to assist mapping the distribution, morphology, and orientation of the pegmatites.

SensOre also plans to use the comprehensive whole-rock geochemistry of granitic rocks to predict and then identify high-lithium bearing pegmatites. The research will use fused results from both geochemistry and geophysics, using advanced AI and machine learning technology approaches. A result of SensOre’s full work programme, of which the Trident test is but a part, will be litho-geochemical and mineral prospectivity maps over NSW for LCT pegmatites and other critical minerals.

Critical Minerals and High-Tech Metals Activation Fund Background

The NSW Critical Minerals and High-Tech Metals Strategy outlines the NSW Government’s commitment to drive investment into the critical minerals and high-tech metals sector across the entire supply chain in NSW. The Strategy outlines the market opportunities for critical minerals and high-tech metals in NSW, including the specific investment and job-creating opportunities and competitive advantages for NSW to establish a viable, valuable and sustainable sector.

\$130 million Critical Minerals and High-Tech Metals Activation Fund has been established by the NSW Government to drive investment and support the development of the sector. The Fund aims to position regional NSW as a major global supplier and processor of critical minerals and high-tech metals.

The Next Steps

Thompson Aviation expect to deliver final geophysical data in mid-June to SensOre who will further process the data to potentially map the distribution of lithium using isotopes if caesium. SensOre is also compiling the historic geochemical and geological datasets for integration and AI Machine Learning.

Stelar continues positive engagement with stakeholders and is planning to commence the process of seeking drilling approvals with the NSW regulators this quarter with an aim to commence an initial drilling program in Q3-2023 to confirm pegmatite orientation and lithium fertility before embarking on a deeper more comprehensive drill program to evaluate lithium resource potential.

APPROVED BY THE BOARD OF STELAR METALS LIMITED

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ABOUT STELAR METALS

Stelar Metals is ready to discover highly prized critical minerals of lithium, copper, zinc and cobalt needed to drive the move to decarbonise the world and experiencing unprecedented demand. Stelar has five projects are 100% owned by Stelar Metals and are located in South Australia's premier world class exploration and mining district. In February 2023, Stelar acquired 90% interest in three New South Wales projects located in the Broken Hill Block which are in joint venture with Everest Metals Corporation Limited. The Company has an experienced exploration team with a track record of discovery success exploring for commodities that are in increasing demand.

EXPLORATION RESULTS

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Colin Skidmore, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Skidmore is a full-time employee of Stelar Metals Ltd. Mr Skidmore has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken 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 (the JORC Code (2012)). Mr Skidmore consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

This announcement includes information that relates to Exploration Results prepared and first disclosed under the JORC Code (2012) and extracted from the Company's initial public offering prospectus which was released on the ASX on 16 March 2022. A copy of this prospectus is available from the ASX Announcements page of the Company's website: <https://stelarmetals.com.au/>.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement. Where the information relates to Exploration Results, 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.

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