

Stelar Metals and NSW Government funded SensOre reach agreement on Lithium Exploration Research in NSW

HIGHLIGHTS

- **Stelar Metals and SensOre have agreed to collaborate on testing new lithium exploration techniques at Stelar’s new Trident Lithium Project in NSW**
- **NSW Government grant funding has been awarded to SensOre to fund lithium exploration research in NSW**
- **\$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**
- **SensOre’s promising research to identify sources of economic lithium in NSW will focus on Stelar’s Trident Lithium Project as part of a larger Research Program**

Critical minerals explorer Stelar Metals Limited (ASX:SLB) (“**Stelar Metals**” or the “**Company**”) and SensOre Ltd (ASX:S3N) (“**SenseOre**”) have reached agreement to test exciting new lithium exploration research at Stelar Metal’s Trident Lithium Project that has been mined historically for lithium.

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.

In February 2023, Stelar Metals acquired the Trident Lithium Project near Broken Hill in New South Wales from Everest Metals Corporation Limited (ASX:EMC) (“**Everest**”).

The Trident Lithium Project extends over the 15km long Euriowie Pegmatite Field that is prospective for hard-rock lithium mineralisation (Figures 1 and 2). Mapped pegmatites vary in size but have been reported to be up to 100 metres wide and over 1 kilometre in length.

Historic lithium 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 Chair Stephen Biggins said: *“Stelar Metals is excited to be part of this collaborative Lithium Exploration Research with NSW Government funded SensOre, and concur that Trident is arguably the most advanced known lithium occurrences in NSW.”*

Stelar Metals CEO Colin Skidmore said: *“Stelar’s Trident Lithium Project will be a very suitable test area for this important NSW critical mineral research. We look forward to working with SensOre now and potentially in the future to uncover the lithium potential of NSW.”*

SensOre CEO Richard Taylor said: "We are glad to be working with a company like Stelar Metals to be able to test our lithium targeting methods. Stelar Metals has some of the most advanced lithium potential in NSW and we aim to be able to expand this potential."

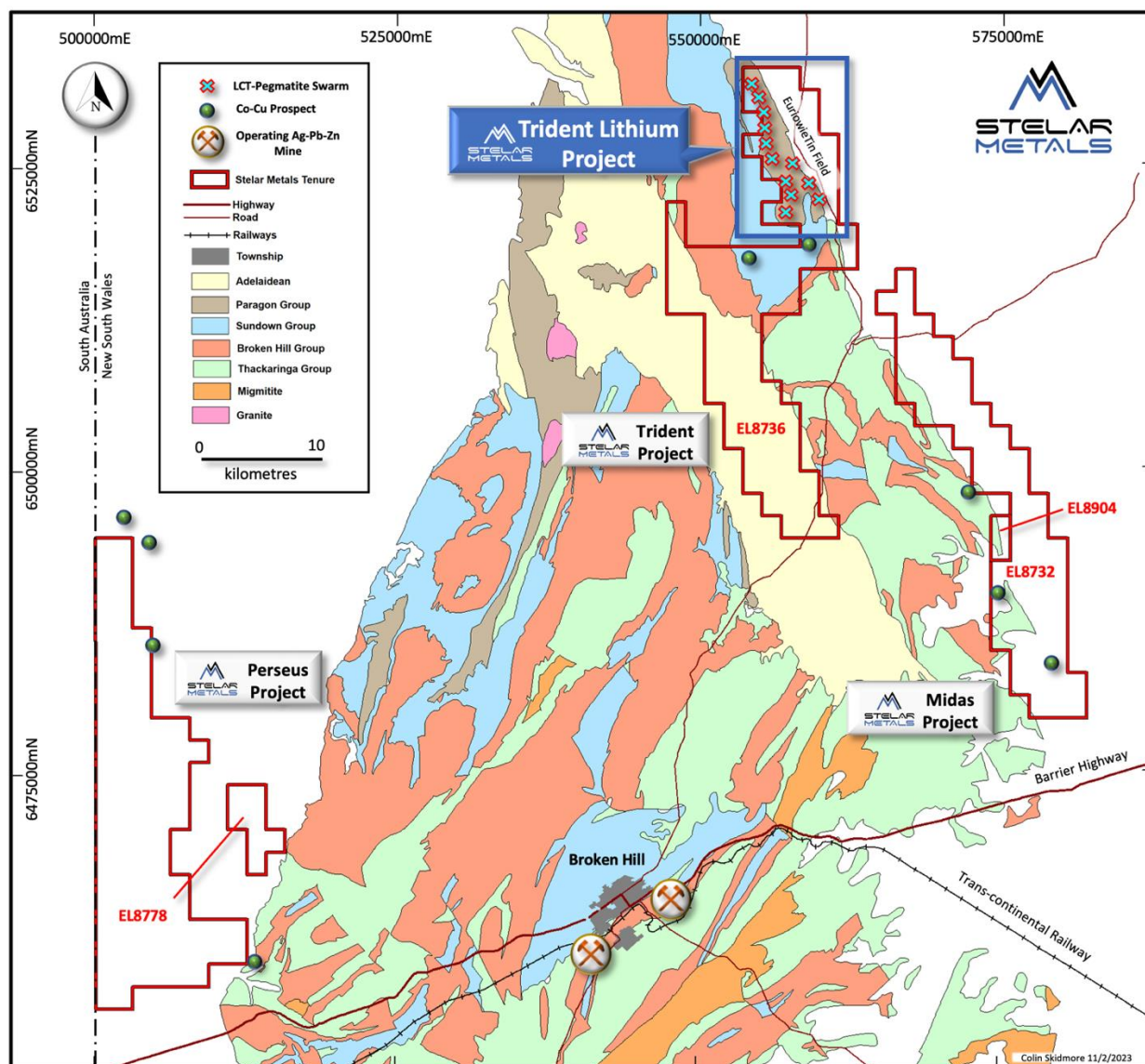


Figure 1: Location of Stelar’s tenements and Trident Lithium Project near Broken Hill in NSW geology.

Abundant pegmatite veins, dykes, sills, veins and plugs dominated by quartz-albite-muscovite, intrude the rocks of the folded Paragon and Sundown Groups within the Trident Project (Figure 2). Trident pegmatites can be tabular to podiform to highly irregular in shape and often show zonation, pinch-and-swell structure, boudinage and folding and vary in size but have been reported to be up to 100 metres wide and over 1 kilometre in length.

Stelar’s experienced lithium industry interpretation is consistent with previous explorers (Lepidoco and Carpentaria) that the Euriowie pegmatites are LCT-Type due to the presence of lithium-bearing minerals and anomalous caesium and tantalum along with other accessory minerals that are commonly found in LCT pegmatites. The quantity and scale of the Euriowie pegmatites indicate the Trident Project has potential to host economic quantities of lithium.

Historic mining in the 1950’s recovered amblygonite ore (as lithium phosphate mineral) from Trident and exploration in 2016 mapped visible amblygonite and lepidolite in pegmatite outcrops and returned high-grade lithium assays from rock-chip samples confirming previous explorers’ earlier LCT-Type pegmatite classification with highly anomalous Li-Cs-Ta-Sn-Rb assay results. The soil sampling provided some indication to scale of the surface footprint anomaly where at Trident, the lithium anomaly was 160m wide (>100ppm Li) with a 80m wide core (>200ppm Li).

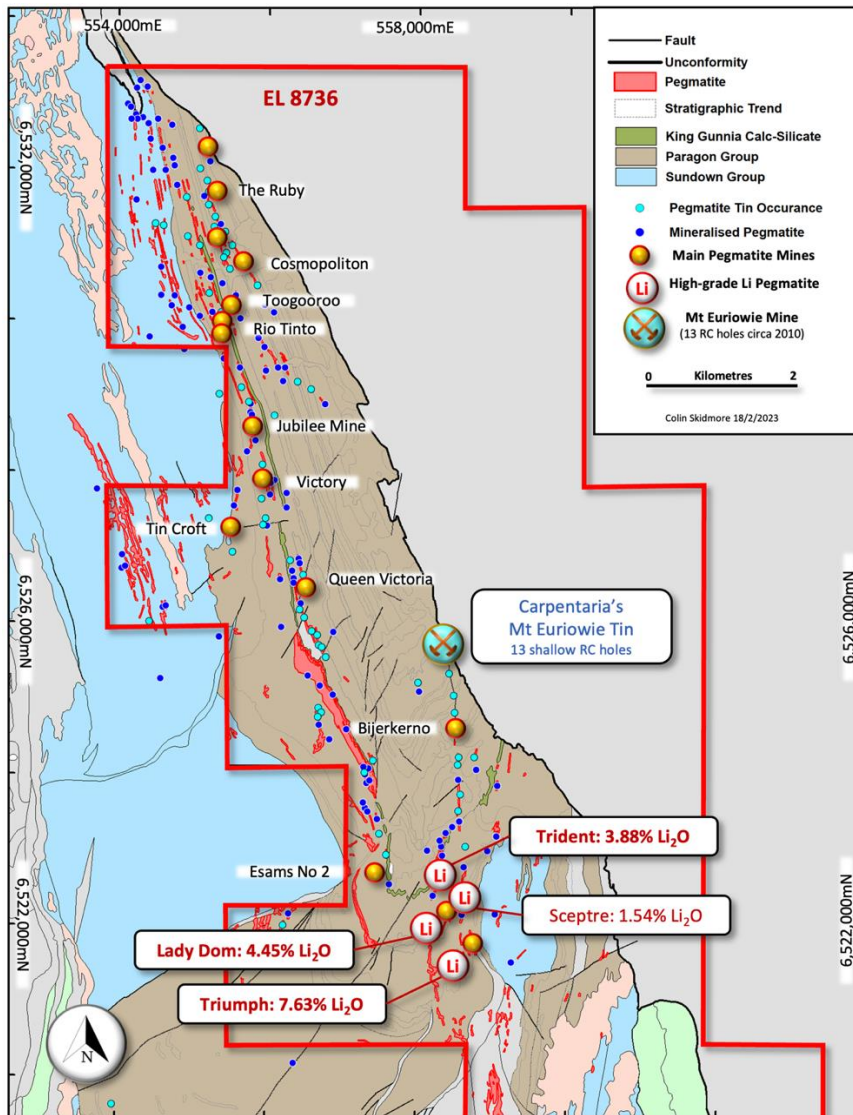


Figure 2: Trident Lithium Project showing distribution of pegmatites and known mineral occurrences.

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 will involve collecting airborne geophysical data, including radiometrics, in May 2023. The data will be used to map geometry, contacts and faults; establish architecture for granite emplacement; understand distance from causative granitic intrusion; and type granitic intrusions. The thesis tested will be whether it is possible to exploit the direct detection of Caesium 137 to identify LCT pegmatites in Australia.

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 the 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.

A \$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

SensOre plans to collect airborne geophysical data, including high-resolution 256-channel radiometrics, over the Trident Area in Q2-2023. 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 that are 100% owned and 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.