

## On-ground exploration commences at Trident Lithium Project in NSW

### HIGHLIGHTS

- Multiple exploration activities are being coordinated by Stelar to build a series of strong lithium hard-rock pegmatite targets for drilling at Trident.
- First geochemical soil sampling surveys underway on the Trident Lithium Project
- New airborne geophysical data processed and interpreted to assist drill targeting
- Environmental Assessment studies underway
- Application for drilling approvals to be lodged this Quarter

Critical minerals explorer Stelar Metals Limited (ASX:SLB) ("**Stelar Metals**" or the "**Company**") is pleased to announce that it has commenced on-ground field activities on its newly acquired Trident Lithium Project in Broken Hill (Figure 1).

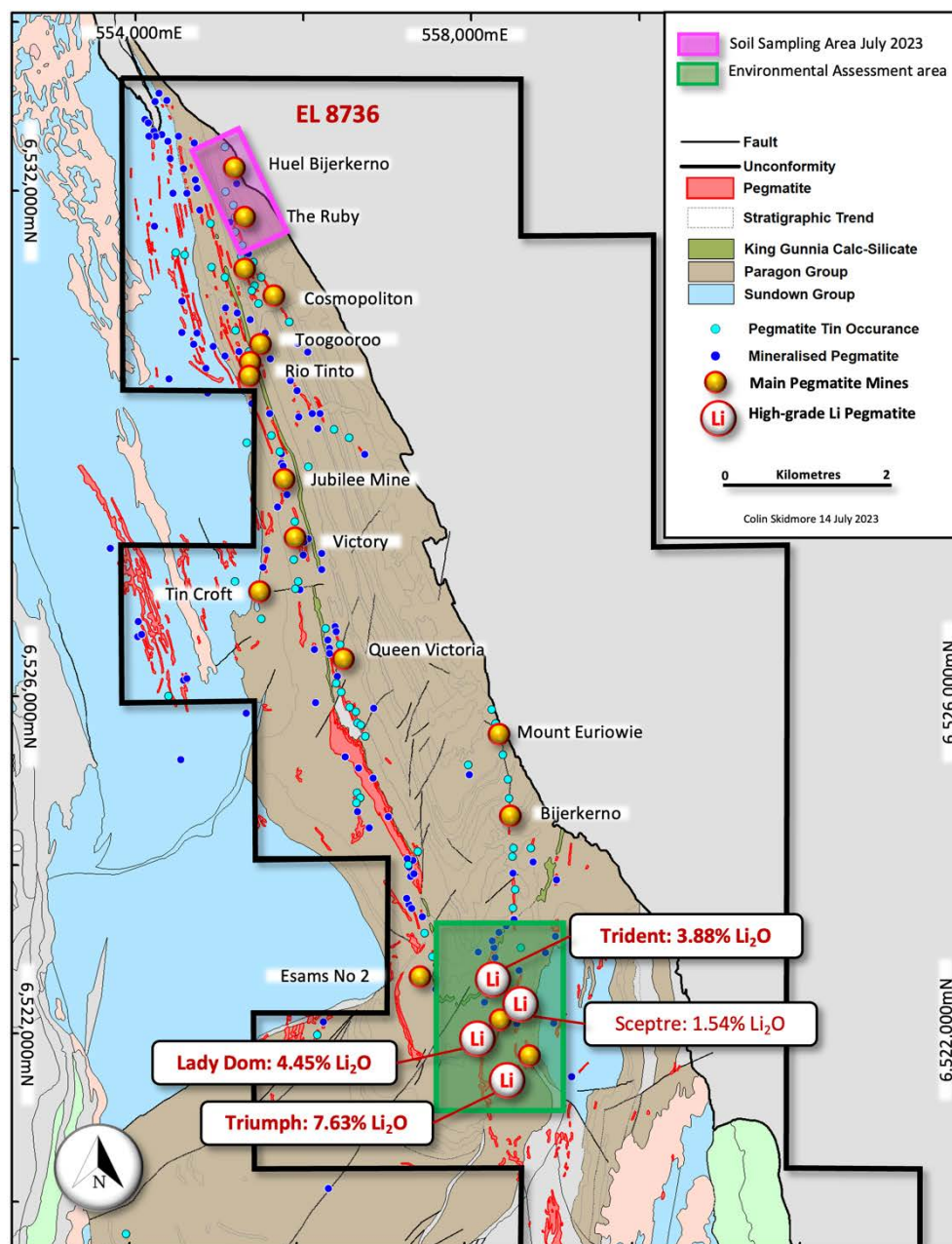
A number of exploration programs are being coordinated by Stelar to build a series of strong hard-rock lithium pegmatite targets for drilling at Trident.

In early July, the Company commenced soil surveys over the northern area of the Euriowie Pegmatite Field which extends over *Huel Bijerkerno*, *The Ruby* and a number of smaller historic tin workings. *Huel Bijerkerno* is one of the largest historic tin pegmatite mines in the Euriowie Tin Field.

In addition, the recently acquired high-resolution magnetic and radiometric datasets over the Trident Project have been processed by David McInnes of Montana Geoscience with initial interpretation in progress. These advanced processed images will significantly contribute to the understanding of the structural architecture and potential controls on pegmatite emplacement and morphology which will assist drill target identification.

SensOre, who commissioned the high-resolution geophysical survey in May 2023 as part of their NSW Critical Minerals and High-Tech Metals Activation Fund grant are also processing the new datasets which are being integrated with surface geochemistry with the aim of remotely detecting caesium isotopes from the airborne platform.

In preparation for drilling, independent Environmental, Cultural and Heritage Assessment are underway over the Trident-Triumph-Lady Don area where the inaugural drill program is planned later this year subject to regulatory approval. Stelar is preparing to submit its drilling application to the NSW regulators in the coming weeks.



**Figure 1: Trident Lithium Project showing location of soils collected in July 2023 and area designated for the initial environmental assessment and inaugural drilling.**

### Soil Sampling

Soil sampling has commenced within the northern portion of the Trident Pegmatite Field and extended over *Huel Bijerkerno* and *The Ruby* historic tin mines. This area was selected as very little historical work has been done in this area, yet *Huel Bijerkerno* was one of the largest and productive tin mines in the Euriowie Tin Field.

Approximately 1,500 to 2,000 soil samples are planned to be collected on 40-80m spaced east-west lines over the numerous small tin mines and workings in this area.

### Geophysical Processing and Interpretation

High-resolution magnetics and 256 channel radiometrics datasets were collected over the entire Euriowie Pegmatite Field in May 2023 by Thomson Aviation. The 2,160-line kilometre airborne survey was flown on 40m spaced east-west flight lines with a nominal 40m terrain clearance and included 400m north-south tie-lines.

David McInnes of Montana Geoscience has completed advanced processing of the new raw datasets to generate an extensive suite of high-level derivatives and has completed an initial regional structural interpretation as illustrated in Figures 2 and 3. These derivatives of the high-resolution geophysics will underpin a comprehensive analysis of the regional structural framework to identify and prioritise the large number of structural pegmatite targets and assess its influence on the morphology and orientation of the prospective lithium pegmatites.

SensOre are processing the 256 channel radiometrics with the aim to integrate the radiometric datasets with surface geochemistry for machine AI learning to identify caesium isotopes in the airborne dataset and potentially recognise additional LCT pegmatites remotely.

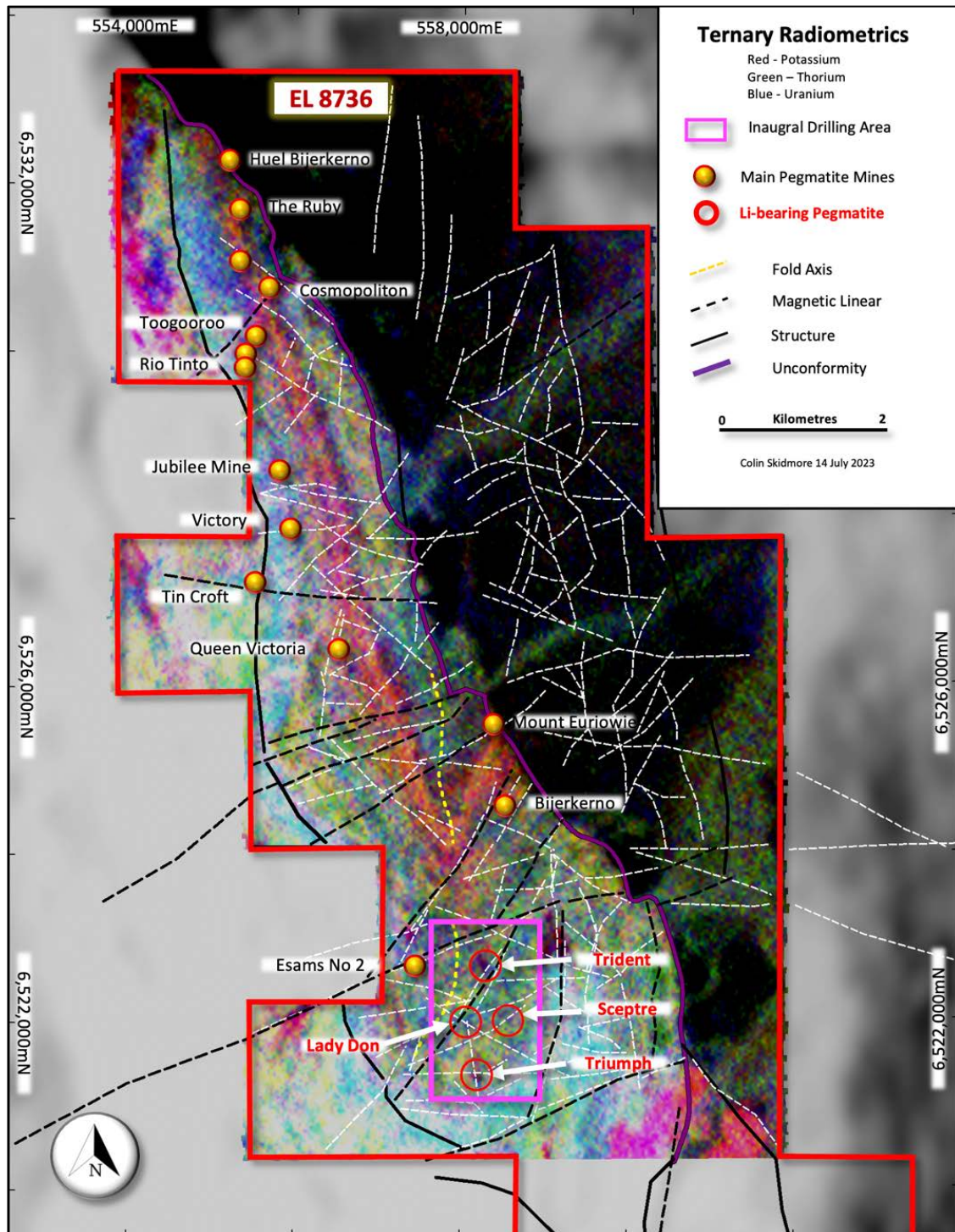


Figure 2: Ternary K-Th-U radiometric imagery with preliminary regional structural interpretation.



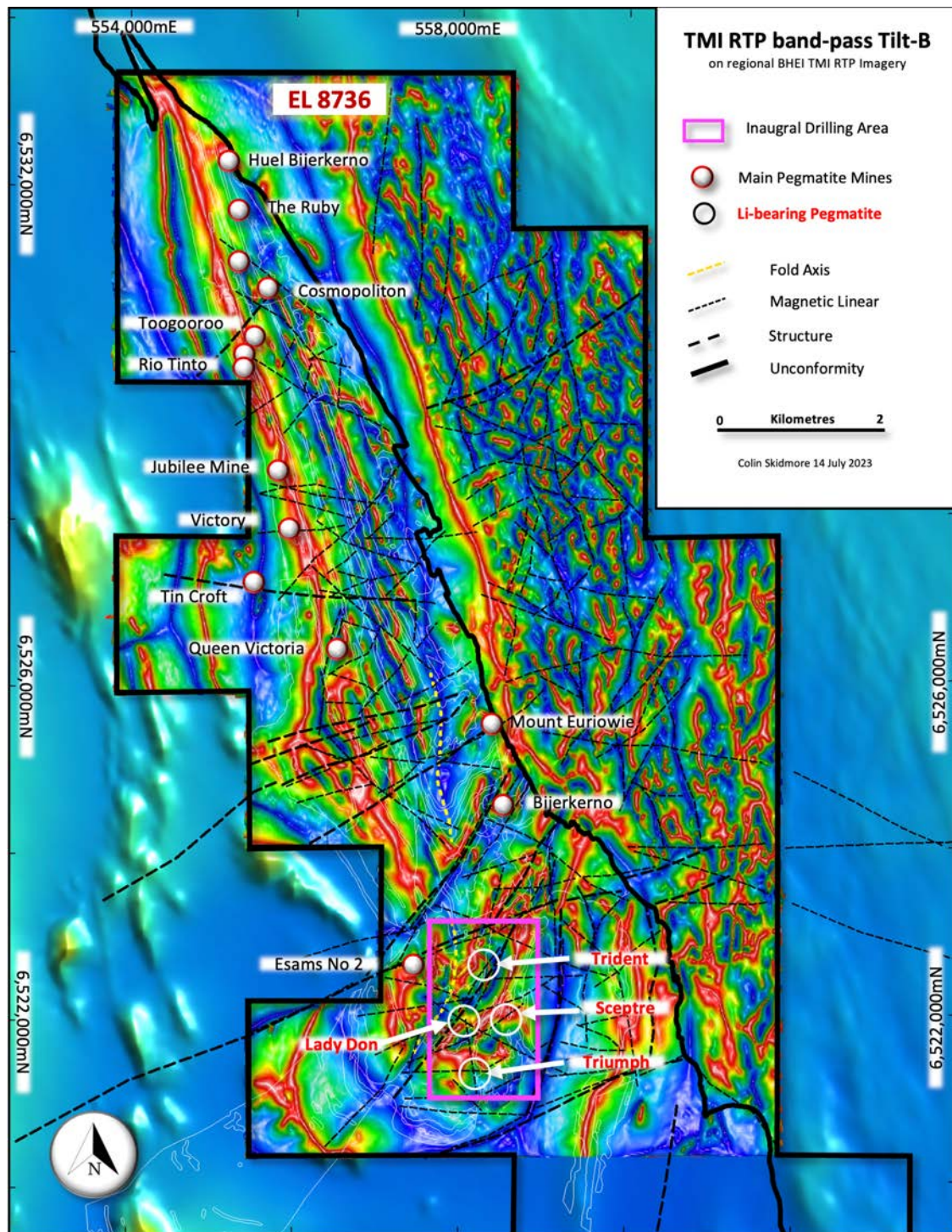


Figure 3: Processed magnetic derivative imagery with preliminary regional structural interpretation.

### Drilling Approval Application

The Company is preparing to lodge a drilling approval under the NSW assessment process.

As part of this process, Stelar has completed an Environmental Assessment study, which was conducted in early July by a Broken Hill based, BAM accredited ecologist and botanist.

Environmental and Heritage Consultants from Dubbo are assisting the company with cultural and heritage. Cultural heritage clearances are planned to be undertaken with the traditional custodians and Pastoral Lease holders once drill sites and access tracks are finalised.

## The Next Steps

A number of exploration programs are being coordinated by Stelar to build a series of strong lithium hard-rock pegmatite targets for drilling at Trident.

Initial soil sampling programs on the Trident Project in the Huel Bijerkerno area are expected to be completed in July.

Further soil sampling, geological mapping and sampling programs on the Trident Project are planned to commence in coming weeks.

In addition to Stelar's expert geophysical consultants identifying numerous structural pegmatite targets, SensOre are currently processing the recently acquired high-resolution 256-channel radiometrics, over the Trident Area and integrating with the available geochemical datasets for Artificial Intelligence (AI) Machine Learning.

Stelar is preparing its drilling applications and will be seeking to undertake cultural heritage clearance surveys in preparation for the inaugural drill program which is designed to confirm pegmatite orientation and lithium fertility before embarking on a deeper more comprehensive drill program in the future to evaluate lithium resource potential.

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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.