

Stelar applies to expand Baratta Copper Project, SA

HIGHLIGHTS

- Stelar applies for a new exploration licence over the Baratta Copper Mine area, adjacent to its recently granted EL 6803
- Stelar will commence fieldwork on Baratta EL 6803 this week
- Baratta is prospective for Zambian-style sediment-hosted copper deposits and REE mineralisation
- Baratta is one of five highly prospective copper and zinc projects held by Stelar
- Initial work programs will include geological mapping, soil and rock-chip sampling.

Critical minerals explorer Stelar Metals Limited (**ASX:SLB**) ("**Stelar Metals**" or the "**Company**") has lodged a 47km² Exploration Licence Application (ELA 2022/00074) with the South Australian Government covering the historic Baratta Copper Mine area, immediately adjacent to its recently granted Baratta Project EL 6803 (Figure 1).

Baratta, located in northern South Australia, is considered prospective for both Zambian-style Sediment-hosted copper and Rare Earth Element (REE) mineralisation.

The historic Baratta Copper Mine, produced copper ore between 1896 and 1904 from a zone of workings 1.5km long on the northern limb of the Bibliando Dome. The same structure that is interpreted to control copper mineralisation at the Baratta mine is exposed over a significant strike length in the eastern part of Stelar's granted Baratta tenement EL 6803 and is considered prospective for copper, lead and zinc.

The Baratta Copper Project is underlain by rocks of the Adelaide Fold Belt that share important geological characteristics with the Central African Copperbelt. Stelar recognises the potential for Zambian-style copper mineralisation (sediment-hosted copper deposit – SHCD) as well as REE, which is also supported by the recent copper and REE discoveries made by Taruga Minerals at Wyacca and other prospects, directly west along strike from Stelar's tenure (Figure 1).

Baratta is one of five highly prospective battery metal projects the Company intends to explore, committing to an aggressive exploration program in this world-class mining district (Figure 2).

Stelar Metals Chief Executive Officer Colin Skidmore said: "Our new application over the Baratta Mine area has potential to be a significant addition to Stelar's Baratta Project.

"In its day, the Baratta Mine was a major project that reportedly produced ~1,000 tons of 30% copper ore. Modern exploration has been limited, yet there are some great datasets available for re-processing and interpretation that we expect will generate fresh targets for future drill testing. Stelar looks forward to starting field work on the Baratta Project this week."

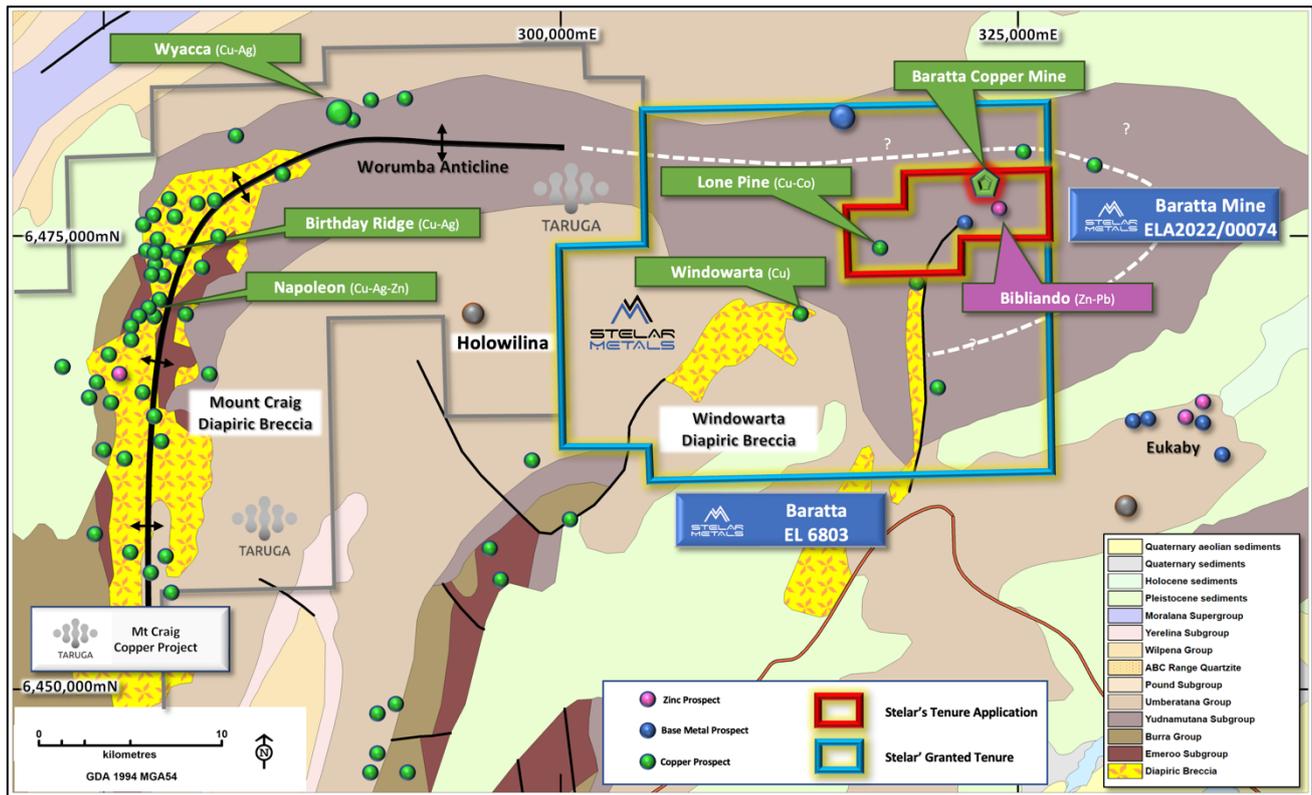


Figure 1: Regional geological setting of the Baratta Project showing major prospects.

Baratta Geological Setting

The Baratta tenement is located within the northern part of the Nackara Arc within the Adelaide Rift Complex. It incorporates diapiric Callanna Group sediments intruding Tapley Hill Formation between a large elongate domal anticline to the west and the Bibliando Dome to the east. The base of the Tapley Hill Formation includes the Tindelpina Shale Member which hosts significant copper mineralisation at Wyacca which is about 15km west of the Baratta tenement. The outcropping segment of folded low metamorphic-grade sedimentary strata spans the Yudnamutana to Upalina Subgroups.

Based on nearby drillholes, Adelaidean strata is >1km thickness in the tenement. The total thickness of Adelaidean sediments in the Adelaide Rift Complex is estimated to be >10km (GA, Australian Stratigraphic Units Database).

The Baratta Mine area is also underlain by a large gravity anomaly which relates to the underlying basement geology beneath the Adelaidean Cover.

Previous Exploration

The historic Baratta Mine area was explored by various companies during the 1960's and 1970s including Cominco, PetroCarb, North Broken Hill and Western Mining, who undertook various geophysical surveys and limited drill testing. More recently Minotaur Resources, which adopted a IOCG target model between 1996 to 2001, collected high-resolution geophysics and completed a single deep diamond hole to 753.3m depth, and eight reverse circulation (RC) holes into the Bibliando prospect on ELA 2022/00074. Evidently this drilling failed to test

Minotaur's basement IOCG target beneath the Adelaidean sequences, but interestingly returned significant intersections of zinc anomalism at shallower depths.

Panda Mining Pty Ltd (Panda) explored the broader Baratta area from 2007 to 2016. Soil sampling using handheld XRF over several grids detected copper-cobalt anomalism northeast along strike of the historic Baratta Copper Mine. Mapping over the Baratta Copper Prospect area indicated copper was hosted by a 1m-wide flat-dipping quartz-haematite gossan that was semi-continuous over 1.5km of strike length. 200m spaced rock-chip sampling over the Bibliando Diapir located diapiric gossans with copper mineralisation and highly sulphidic quartz veining. In May 2010, a detailed airborne magnetic and radiometric survey was flown on 100m-spaced flight lines and in 2014, an intermediate gradient IP survey was undertaken over a 64km² grid with a station spacing of 40m by 200m spaced traverses which also extended over parts of the new tenement application.

Exploration Models

Stelar considers that several exploration models are valid for the project area. The Adelaidean sequence is prospective for Zambian-style SHCDs (sediment-hosted copper deposit), Rare Earth Element (REE) mineralisation as well as zinc-lead mineralisation such as Beltana in South Australia. Beltana is a very high-grade willemite deposit associated with a halokenetic structure (salt diapir) and shares key features with the large and high-grade Kipushi deposit in the Central African Copperbelt.

The prospectivity for SHCD mineralisation is supported at a large scale by comparison of the geological and geodynamic setting between the Adelaidean and the Copperbelt. At a smaller scale, Stelar has noted the adjacent discoveries by Taruga Minerals of significant REE as well as copper mineralisation directly along strike at Wyacca (ASX announcement, TAR, 30 August 2021), hosted in the Tindelpina Shale Member of the Tapley Hill Formation.

The prospectivity for Beltana-Kipushi type mineralisation is supported regionally by examples of this style of mineralisation in the Beltana-Aroona district in the northern Flinders Ranges. Locally, the Baratta mine is hosted close to a diapiric structure which extends into the Baratta tenement. This style of mineralisation represents an excellent target type for copper, zinc and lead, with potentially high grade and significant depth extent. Mineralised systems of this type are expected to have a small lateral footprint but can be recognised by distinctive alteration and geochemistry.

Large gravity and coincident magnetic anomalies under the Baratta Mine Application have historically been the focus of previous explorers such as Minotaur who considered them to be potentially related to Olympic Dam style IOCG targets.

The potential for Rare Earth Elements (REE) associated with ionic absorption clays and the diapiric systems is an additional exploration model that will routinely be evaluated by Stelar Metals.

Next Steps

Stelar will start initial work programs on the granted Baratta Exploration Licence this week, which will include geological mapping, soil sampling and rock-chip sampling focusing on the Tindelpina Shale Member and the diapiric structures to refine targets for future drill testing. Stelar will also evaluate the rare earth element mineral potential of this project.

The available existing geophysical datasets are also being compiled and reprocessed to assist in determining geology and the structural architecture as well as target generation for future drill programs.

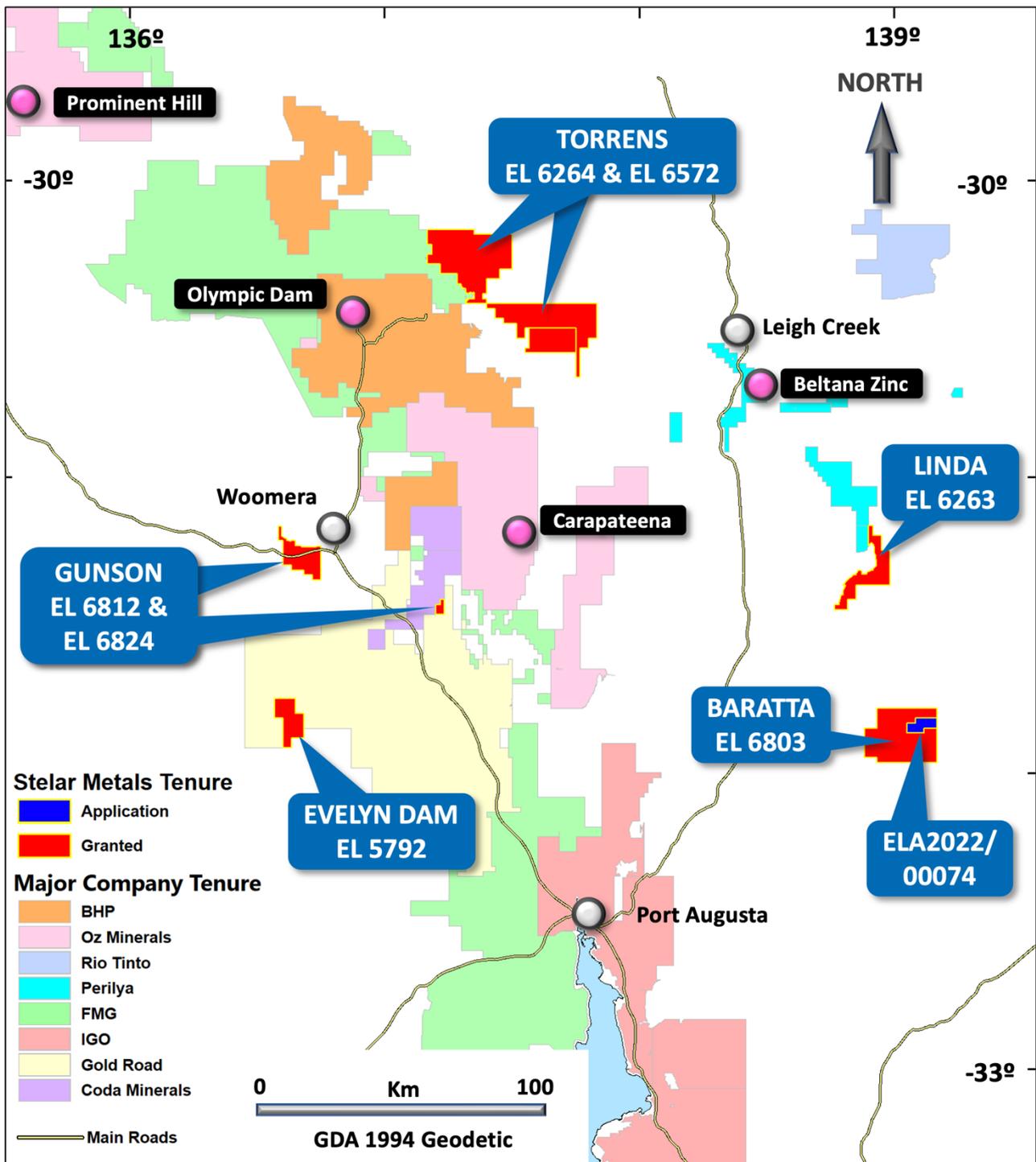


Figure 2: Stellar’s exploration projects in South Australia.

APPROVED BY THE BOARD OF STELAR METALS LIMITED

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ABOUT STELAR METALS

Stelar Metals is ready to discover highly prized minerals of copper and zinc needed to drive the move to decarbonise the world and experiencing unprecedented demand. All five projects are 100% owned by Stelar Metals and are located in South Australia's premier world class exploration and mining district. 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.