ASX: **SLB**
stelarmetals.com.au

4 June 2024
ASX ANNOUNCEMENT

Baratta Copper Project: Mapping and surface sampling recommences

Highlights

- Geological mapping and surface sampling resumed this week at Stelar's Baratta Copper Project in South Australia.
- Historic Baratta Copper Mine produced copper ore between 1896 and 1904 from a 1.5km long zone of workings.
- No modern exploration has been conducted over the historic mine workings or over the large chargeable induced polarisation (**IP**) target identified along strike to the west of the workings.
- Historic broad-spaced soil sampling to the north identified multiple copper anomalies, indicating the potential for additional parallel repeats over an extensive strike length.
- Copper anomalism and mineralisation at surface are underlain by dense and magnetic bodies, increasing prospectivity at Baratta.

Stelar Metals Limited (ASX:SLB) ("**Stelar Metals**" or the "**Company**") is pleased to announce it has resumed exploration activities at the Baratta Copper Project in South Australia. The Baratta Project, comprising two licences, was granted to the Company in late 2022. It is considered highly prospective for sediment-hosted copper mineralisation, akin to the Central African Copperbelt. Stelar commenced exploration activities this week with systematic surface sampling and mapping along a 7-kilometre corridor of copper mineralisation and geophysical targets that have been overlooked by previous explorers.

Colin Skidmore, Stelar's CEO, commented:

"The Baratta Mine tenure (EL 6863) was granted just as the Company was refocusing its efforts on the newly acquired Trident Lithium Project in NSW. Subsequently, Stelar has not yet undertaken any work on this very prospective copper project.

"As we wait for the lithium market to improve before continuing our work at Trident, we finally have an opportunity to return to Baratta to evaluate the copper potential and explore this highly prospective area."

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The historic Baratta Copper Mine produced copper ore between 1896 and 1904 from a 1.5 km-long zone of stratabound workings in a structure splaying off the Bibliando Thrust. This mineralised horizon, recognised as a shallow-dipping quartz-haematite gossan, also extends for several kilometres into Stelar's adjacent EL 6803. A sample of discarded ore in one shallow more distal pit comprising brecciated quartz-siderite-haematite is illustrated in *Figure 1*.

Historic broad-spaced soil sampling at Baratta identified multiple copper anomalies to the north of the historic mines, indicating the potential for extensions and additional parallel repeats in this highly anomalous copper area. However, records show that no drilling has been undertaken to test the Baratta Mine, the along-strike extensions and the potential parallel repeats.

Figure 1: Left: View of the historical Line of Lode at Baratta Copper Mine, right: Example of discarded copper ore on old working within EL 6803.

The Baratta Copper Mine sits on the southern limb of the Worumba Anticline, a structure that can be traced to the west into neighbouring Taruga Resources' Wyacca Copper Project. The project area also includes the Bibliando Dome, a diapir structure believed to be important for the movement of copper mineralisation in solution.

This week, Stelar commenced geological and structural mapping, rock chip sampling and systematic soil sampling over the strike length of the Baratta Mine workings, including the large IP anomaly to the west of the historic workings (*Figure 4*).

Results are expected to be released from this program early in the September quarter, with next exploration steps dependent on results.

TECHNICAL DISCUSSION

Baratta Geological Setting

The Baratta Copper Project is underlain by rocks of the Adelaide Fold Belt, which share important geological characteristics with the Central African Copperbelt (**CACB**). Stelar recognises the potential for large-scale Zambian-style copper mineralisation (sediment-hosted copper deposit – SHCD), which is also supported by Taruga Minerals' (ASX:TAR) recent copper intersections at Wyacca, Morgan's Creek and other prospects directly west along strike from Stelar's tenure, which are part of the same regional structure (*Figure 2*).

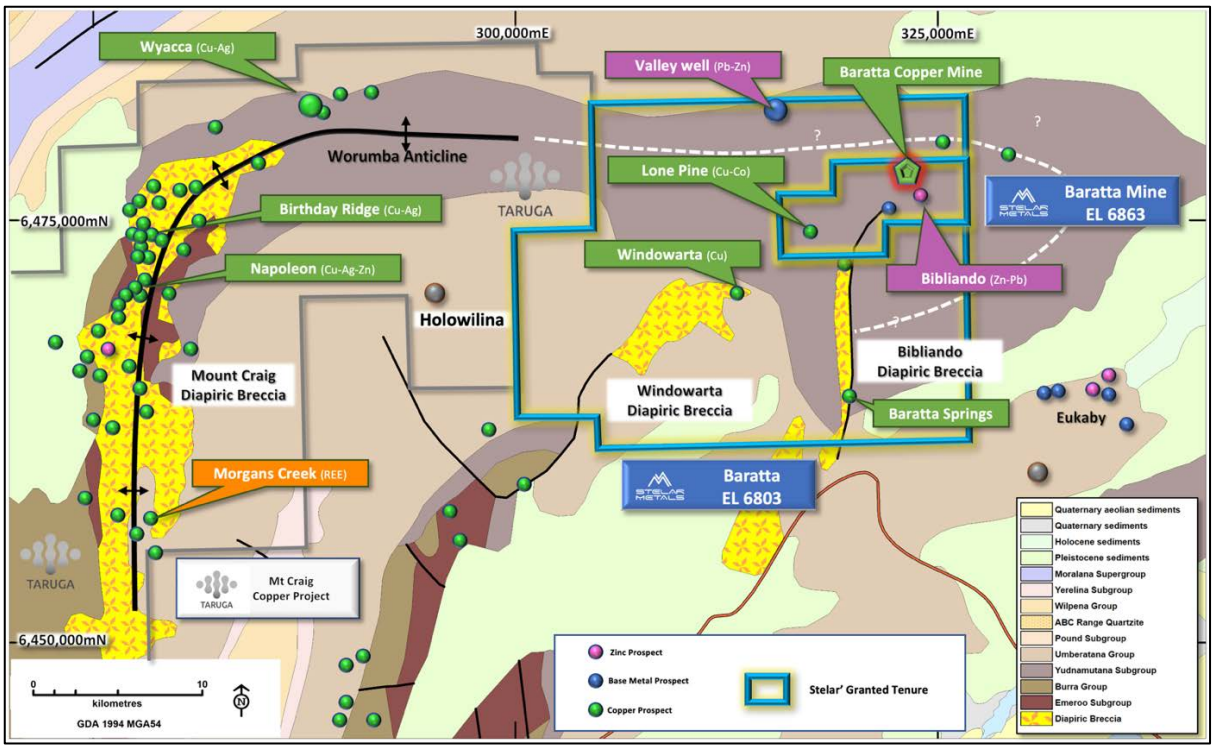

Figure 2: Regional geological setting of the Baratta Project showing major prospects

Stelar's 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, about 15km west of the Baratta tenement. The outcropping segment of folded low metamorphic-grade sedimentary strata spans the Yudnamutana to Upalinna Subgroups.

The Baratta Copper workings sit on the side of the Bibliando Dome, which is comprised of diapir-influenced multi-story assemblages of mixed carbonate-siliciclastic strata underpinned by strong geophysical anomalies indicative of elevated basement and doming. Salt-tectonic processes are considered a key component in the copper mineralising processes in the CACB, where salt mobilisation increases the salinity and transport capacity of metalliferous copper-bearing brines from the underlying basement along major thrusts and second-order splays into favourable stratigraphic horizons for deposition.

Exploration Models

Stelar considers several exploration models valid for the Baratta Project. The Adelaidean sequence is prospective for Zambian-style sediment-hosted copper deposits (**SHCD**), Rare Earth Element (**REE**) mineralisation, and 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 copper mineralisation as well as significant REE directly along strike at Wyacca (ASX: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 EL 6863 have historically been the focus of previous explorers such as Minotaur who considered them to be potentially related to Olympic Dam style IOCG targets. These have potential to be part of the mineralising system that contributed to SHCD deposition and other economic elements in the overlying permeable Adelaidean sediments.

Geophysical Reprocessing

David McInnes of Montana Geoscience completed the reprocessing of the historical geophysical datasets over the Baratta Project in late 2022. The reprocessed historic datasets define a strong magnetic complex that runs along an east-west axis through the newly granted tenement, with high-density gravity bodies projecting upwards out of the upper surfaces of the modelled magnetic anomaly (*Figure 3*).

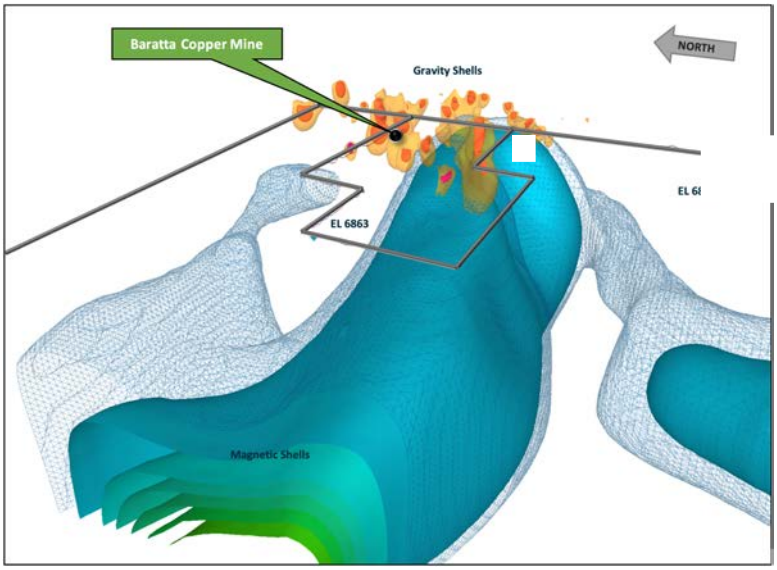

Figure 3: Baratta 3D visualisation looking NE of east-west magnetic anomaly (blue-green) and high-level gravity anomalies (orange-red)

Panda Mining collected two Gradient Array Induced Polarisation (**GAIP**) surveys in 2014, comprising 314-line kilometres shortly before relinquishing their tenure. Stelar has translated, recompiled, and extensively corrected this dataset. The northern survey, which extends over much of EL 6863, including the Baratta Copper Mine, displays strong chargeable zones that parallel the trend of stratigraphy and the trend of surface copper mineralisation (*Figure 4*). The historic mine workings correspond directly with a discrete chargeable zone and extend onto the mineralised extensions, which subcrop on EL 6803, as illustrated in Figure 1. The strongest chargeable zone is directly along strike to the west of the historic mine workings, which appears not to have been investigated by the previous workers. Stelar has determined that this warrants further investigation.

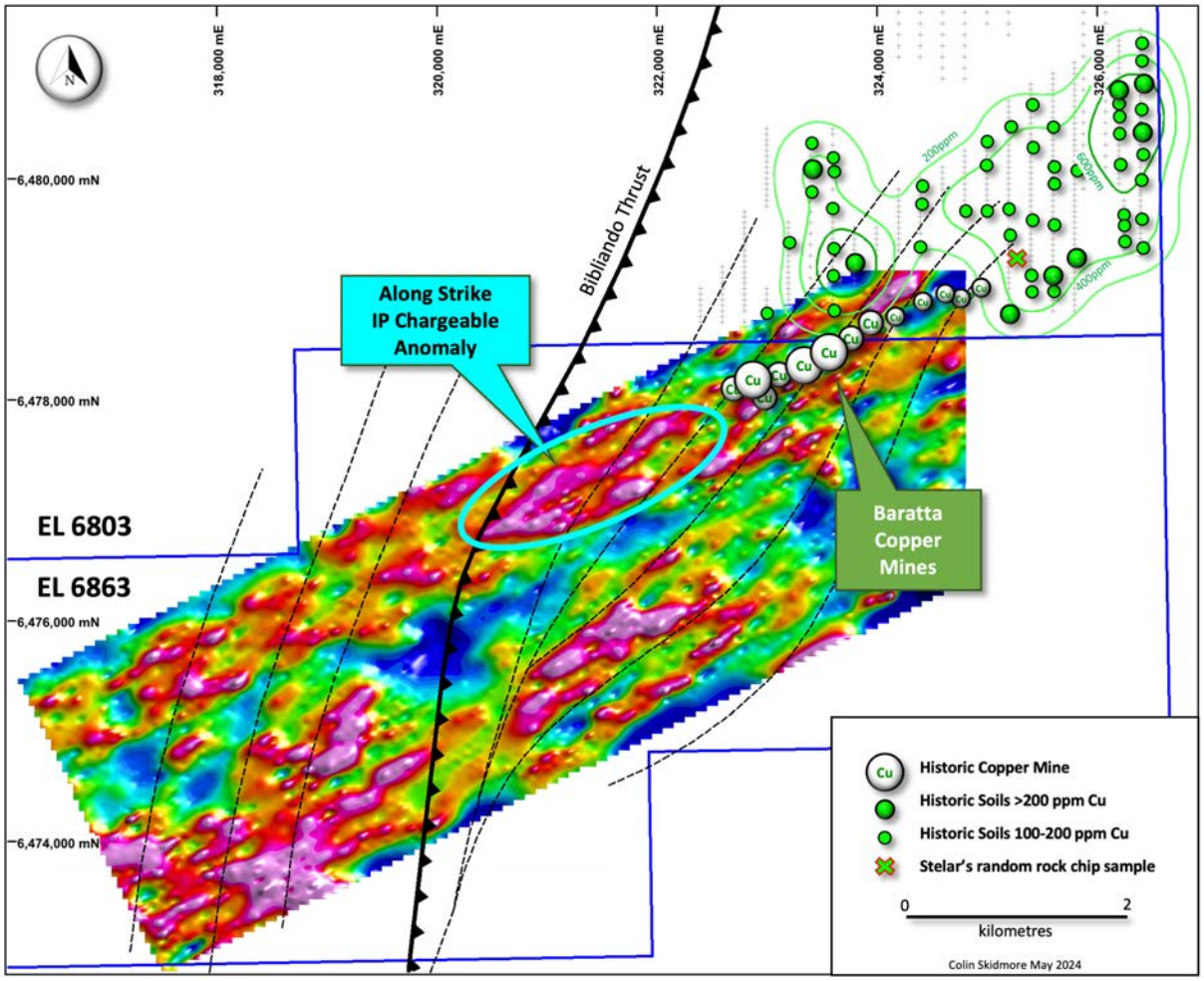

Figure 4: Historic GA-IP Chargeability Image on EL 6863 showing the historic copper mine workings and the historic copper soil anomalies on EL 6803

Next Steps

Panda Mining collected limited soil surveys on EL 6803 but did not extend the surveys over EL 6863, which covers the historic Baratta Copper Mine area. Panda Mining also relinquished its tenure immediately after collecting the GAIP survey, which was not fully processed.

This week, Stelar commenced geological and structural mapping, rock chip sampling and systematic soil sampling over the strike length of the Baratta Mine workings, including the large IP anomaly to the west of the historic workings.

Stelar is also working with experts in salt tectonics to better understand the potential for sediment-hosted copper deposits at the Baratta Project.

Given the subdued lithium commodity price, the Company will focus on its copper projects in the short term whilst it awaits improvements in investor sentiment for lithium before returning to the Trident Lithium Project in New South Wales.

THIS ANNOUNCEMENT HAS BEEN APPROVED FOR RELEASE BY THE BOARD OF STELAR METALS LIMITED

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ABOUT STELAR METALS

Stelar Metals' experienced and successful lithium exploration and development team is targeting the discovery and production of the critical mineral lithium that is rapidly increasing in global demand to enable the world to achieve net zero emissions.

Stelar's Trident Lithium Project is located near mining, industrial, transport and green power infrastructure at Broken Hill in NSW. The Trident Lithium Project extends over the 20km strike length of the Euriowie Tin Pegmatite Field and is highly prospective for hard rock lithium mineralisation. Mapped LCT-type pegmatites vary in size but can be up to 100 metres wide and extend in outcrop for over 1 kilometre in length. Trident was one of Australia's first lithium and tin mining provinces, highlighting both the fertility and large scale of Stelar's lithium-rich pegmatite system.

EXPLORATION RESULTS

The information in this announcement related 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 including matters in this announcement based on his information in the form and context in which it appears.

This announcement includes information related 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 unaware of any new information or data that materially affects the information 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.

JORC Code, 2012 Edition – Table: Baratta Copper Project – Historical Work

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Panda Mining Pty Ltd undertook several soil and rockchip sampling programs on the Baratta Project between 2008 and 2012 which are reported in Open File ENV11760 • Soil sampling by Panda between 2008 and 2009 collected a sample of soil from 5-10cm depth which was sieved to -2mm fraction. Samples were analysed in the field for a 20 element multi-element suite using a Innov-X portable XRF. • Random-grab rockchip samples collected over the Bibliando Diapir by Panda in 2012. • Panda Mining commissioned Anhui Fuxin Geology and Mining Pty Ltd to collect Intermediate Gradient Array Induced Polarisation (GIP) in April 2014. 314-line kilometres of IP data was collected on 200m line spacings with 40m station spacing using 3 receivers
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling reported
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No drilling reported
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No drilling reported
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Soil and rock chip sampling only • The sample size and medium is considered appropriate for the purpose of outlining surface geochemical anomalies
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF*	• Panda's soil samples were analysed using an Olympus Innov-X portable XRF. Open file reports do not detail any additional information.

Criteria	JORC Code explanation	Commentary
	instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Panda's Rock chip samples were submitted to the ALS Laboratory in Adelaide for multi-element assay: ○ Job No AD12176602: used methods ICP61 / AA25 ○ Job No AD12150104 (samples 10555, 10561, 10566, 10593 and 10598) used ME-ICP43 / ME-MS61R / ME-MS81 methods • There is no record of any QAQC sampling such as duplicates or CRMs.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No independent or alternative verifications are available • No adjustments have been made to any assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• No information is given in the Open File reports regarding location aside from they used a GDA1994 MGA 54 projection. It is assumed a handheld GPS was used with an accuracy of ~5m
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Historic geophysical, soil and rock-chip sampling only being reported.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No sampling bias of this kind is suspected.
Sample security	• *The measures taken to ensure sample security.*	• Historic soil and rock-chip sampling only being reported
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Historic soil and rock-chip sampling only being reported. There is no evidence of audits in the open file reports

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The historical project comprised EL 3946 which was replaced by EL 5187 which were held by Panda Metals Pty Ltd between 2007 and 2016. • Currently the Baratta Project is held as EL 6803 and EL 6863 by Resource Holdings No 1 Pty Ltd which is a wholly owned subsidiary of Stelar Metals limited. • There are no joint ventures • The tenure falls within the Adnyamathanha People No 1 determination (Stage 1 and Stage 2) SCD2009/003 and SCD2014/001. • Retention Status has been granted for the Baratta Project as currently the Adnyamathanha People are

Criteria	JORC Code explanation	Commentary
		in administration and cannot negotiate a NMTA.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• An overview of historical exploration is included in the ITAR included in Stelar Metal's prospectus. Previous exploration was conducted by: • Petrocarb Exploration (1971-1972), • Samin Ltd (1973-1975), • WMC Ltd (1977-1978) • BHP Minerals (1982-1983) • Minotaur Gold (1996-2001) • Panda Mining (2007/2017)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Stelar's exploration models include: • Zambian-style sediment hosted copper • Beltana-Kipushi style copper / base metals • Ionic Absorption Clay REE
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No drilling reported
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No data aggregation has been applied • No resource evaluation has been undertaken • Metal equivalent values are not reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Geophysical, Soil and Rockchip sampling only reported
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to figures in the text of the ASX announcement
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All known relevant soil rockchip sample sites are illustrated on the attached figures
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,*	• Description of the work completed, and the results is included in the historical reports, and an overview of this work is provided in this document

Criteria	JORC Code explanation	Commentary
	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Stelar Metals is planning surface sampling and mapping at Baratta and will design drill programs based on prioritized targets. Stelar is keen to execute a NTMA with the the Adnyamathanha People once they come out of administration to enable drilling.