

10 October 2024

ASX ANNOUNCEMENT

New geophysical targets identified at Bibliando Diapir, Barattta Project

Highlights

- New geophysical targets prospective for copper identified in the Bibliando Diapir in the southern portion of the Baratta Copper Project in South Australia.
- Bibliando Diapir extends for 7.5-kilometre along the Bibliando Thrust.
- Historic copper and silver mineral occurrences and gossans within diapir.
- Geophysical anomalies coincident with IP chargeable zones in highly resistive rocks associated with strong potassium and uranium radiometric anomalies.
- Surface sampling and geological mapping are currently in progress.
- Baratta's geological setting displays characteristics Stelar considers similar to those seen in the Central African Copper Belt, the world's second-largest copper-producing province.

Stelar Metals Limited (ASX:SLB) ("**Stelar Metals**" or "**the Company**") is pleased to announce the results of its advanced geophysical reprocessing that has generated discrete targets for follow-up in the Bibliando Diapir in the south of its Baratta Copper Project in South Australia (*Figure 1*).

Extending for 7.5 kilometres in the structurally complex Bibliando Thrust, the Bibliando Diapir has been interpreted by previous explorers as a crushed carbonatite with potential for rare earth minerals as well as being a contributor to the Baratta sediment-hosted copper mineralising system.

Surface sampling and detailed geological mapping has commenced over the Bibliando Diapir.

The Baratta Project is considered highly prospective for Sediment-hosted Stratabound Copper (**SSC**) mineralisation and is analogous to the Central African Copper Belt (**CACB**). Salt diapirs and structural complexity are considered important for focusing fluid flow during mineralising processes. The Bibliando Diapir and associated thrust faulting is potentially tapping into basement mineralisation deeper in the Bibliando Dome.

SSC deposits are the world's second most important source of copper and account for ~20% of the world's copper production. In 2024, the CACB, which spans the Democratic Republic of Congo and Zambia, is positioned to be the second-largest global copper producer behind Chile's large porphyry deposits.

In Australia, only the Adelaide Rift Complex (Baratta) and the Sturt Shelf, both in South Australia, are considered prospective for this highly prized style of copper mineralisation. South Australia contains 69% of Australia's economic demonstrated copper resources and produces approximately one-third of Australia's mined copper.

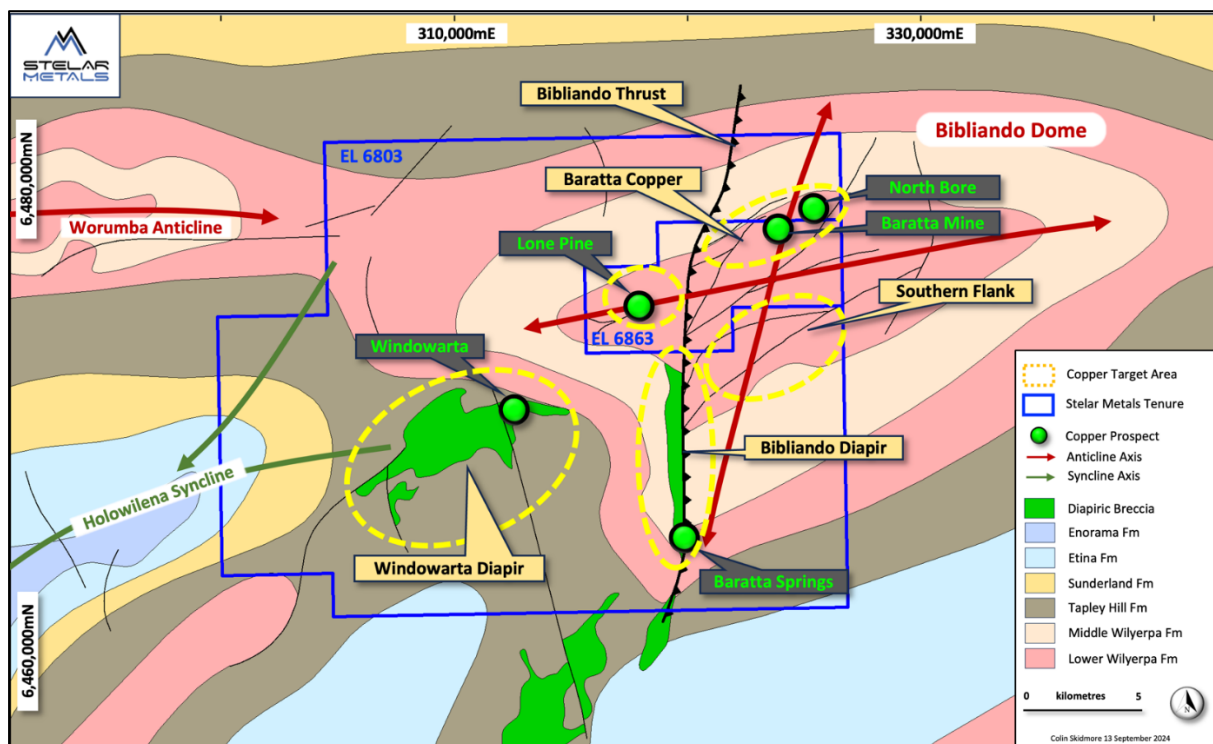


Figure 1: Baratta Copper Project showing the Bibliando Dome and priority target areas on simplified geology.

Geophysical Reprocessing and Targets

Stellar's consultant geophysicist has recently applied advanced processing and 3D modelling techniques to generate a number of ranked targets for follow-up (*Table 1 and Figure 2 Insert*) based on Panda Mining's historic datasets.

High-resolution airborne magnetic and 256-channel radiometric datasets over the Bibliando Dome were previously acquired in 2010. Gradient Array Induced Polarisation (GAIP) was acquired over the central section of the Bibliando Diapir in 2015.

Table 1: Bibliando Diapir geophysical targets (refer Figure 2).

Target	Description
DRC1	Strong chargeable resistor in NW structural zone
DC1	Intense chargeable anomaly on the main Bibliando Thrust Fault and NE trending structures. Coincident with contact with upper cycles of the Lower Wilyerpa Formation (same stratigraphic position as the Baratta Copper Mines).
DCRU1	Overlapping moderate chargeable anomaly with highly resistive rocks, within potassium-uranium radiometric anomaly. Panda mapped intensely brecciated silicified cores with kaolinized rims on surface at this anomaly with anomalous copper in random grab rock chips.
DRC2	Discrete coincident strong chargeable anomaly within a highly resistive rock associated with main Bibliando Thrust
DCRU2	Small resistive zone in chargeable trend and within the potassium-uranium radiometric anomaly. Flanked by magnetic highs to the west. Flow banding in brecciated carbonates mapped by Panda
DC2	Large strong to intense chargeable anomaly adjacent to southern end of magnetic linear (demagnetised?) with a small northern resistive zone. Peak chargeable anomaly coincident with embayment within the potassium radiometric anomaly but northern associated with large uranium anomaly. Coincident with pronounced WNW structure
DC3	Discrete intensely chargeable anomaly within the radiometric anomaly at contact with Bibliando Thrust and a pronounced WNW structure

Bibliando Diapir Geology

The elongate Bibliando Diapir extends north-south for ~7.5 kilometres but is only ~500-700 metres wide in a structurally complex zone associated with the regional-scale Bibliando Thrust (Figure 2).

Historical mineral occurrences are located at Baratta Springs Silver mine at the southern extent of the diapir and the Old Perseverance copper occurrence at the northern extent.

Reconnaissance mapping and rock-chip sampling by previous explorers recognised at least three phases of intrusion with a central core of massive silicification surrounded by kaolinised polymictic brecciation interpreted as an evolved carbonatite intrusive.

Several large *in situ* gossans after sulphides were identified in the diapir, which were anomalous in copper and phosphorous, leading to the conclusion that this diapir was prospective for copper and REE mineralisation.

Stellar has recently collected orthoimagery and a digital terrain model and has commenced systematic surface sampling over the entire diapiric system.

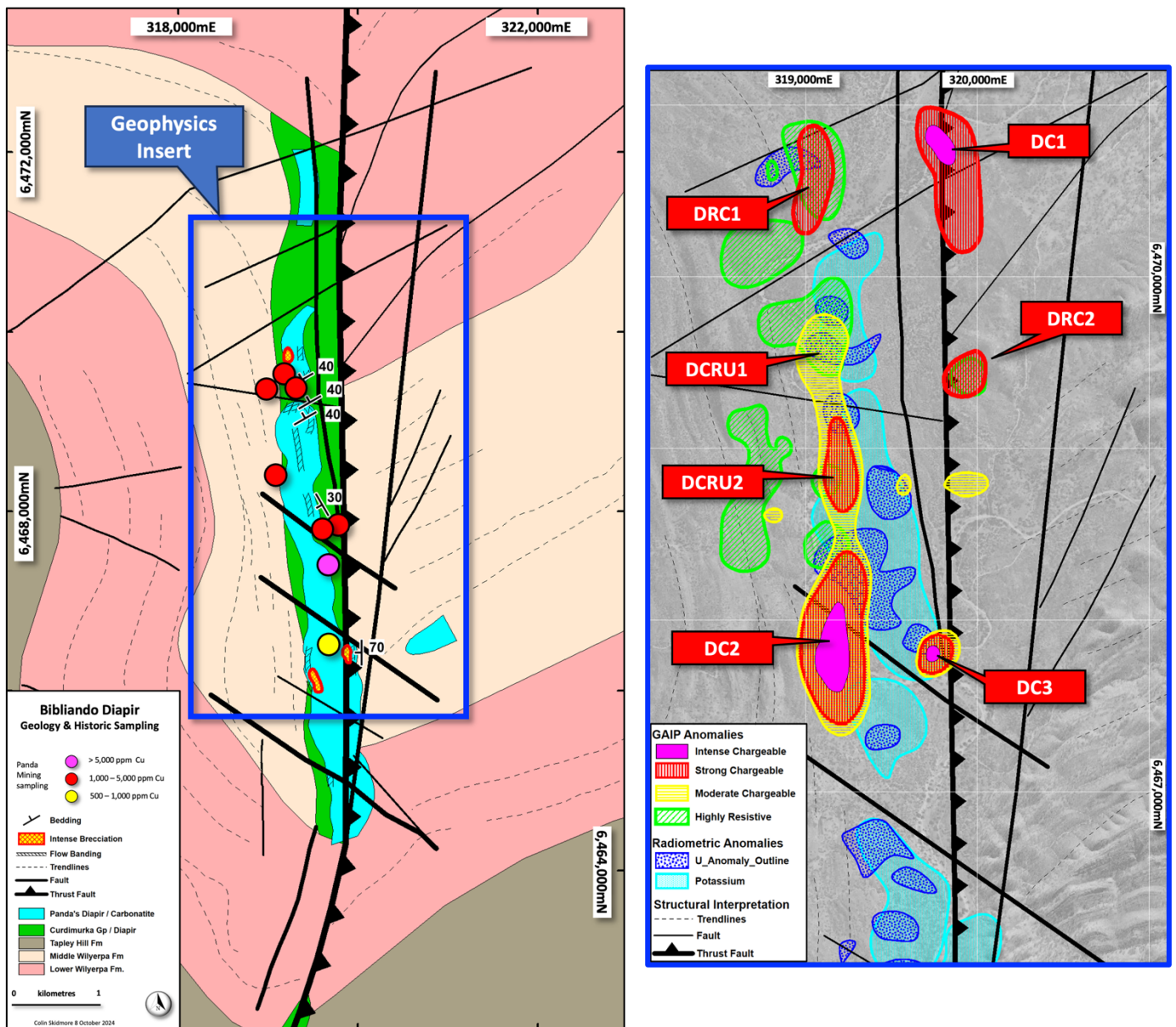


Figure 2: Bibliando Diapir geology and geophysical anomalies.

Left image: shows simplified geology and Panda Mining's rock chip sampling.

Right image: shows geophysical anomalies within the insert box from recently reprocessed historical datasets.

Baratta Project Next Steps

Bibliando Diapir

Reconnaissance of the elongated Bibliando Diapiric breccia will continue through October and November with systematic surface sampling and geological mapping.

South Flank and Windowarta Diapir

Staged exploration of the broader Baratta Project, including the southern flank of the Bibliando Dome and the Windowarta Diapir, will be undertaken later in Q4-2024 and Q1-2025.

Baratta Mine Area

Geological mapping and rock chip sampling will continue at the main Baratta Mine area to discover additional parallel gossans and map their strike potential. Where the strike-extensive gossans are terminated by modern drainage and cover, soil geochemistry and geophysics will be used to map offsets and continue the mapping.

“Type” samples from Baratta Mine area have been sent for petrophysical characterisation such that new optimised geophysical surveys can be designed to identify thicker portions of the mineralisation within the dipping stratigraphy at depth.

**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 exploration and development team is targeting the discovery and production of critical minerals, with increasing 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.

Stelar's Baratta Copper Project, located in South Australia, is hosted within the Adelaidean rocks of the Flinders Ranges. The Project is considered highly prospective for sediment-hosted copper mineralisation, akin to the Central African Copper Belt. The historic Baratta Copper Mine produced copper ore between 1896 and 1904 from a 1.5 km-long zone of strata-bound workings in a structure splaying off the Bibliando Thrust. Stelar is conducting exploration activities in a 7-kilometre corridor of copper mineralisation and geophysical targets that previous explorers have overlooked.

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

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Stelar Metals has collected soil and rock chip samples on the Baratta Project since 2022. The Company applies standard in-sequence QAQC protocols for all sampling (Soil and Rock chip) including Field Duplicates 1:15 samples, Certified Reference Standards 1:20 samples, Certified Blanks 1:50 samples Stelar's Soil Sampling: 100-250 grams of soil were collected from 10-20cm depth into labelled paper bags for later analysis. Samples were not sieved but coarser fractions were discarded. Metadata was recorded for each site. Stelar's rock chip sampling: random grab specimen samples were selected by the geologist for analysis. Typically, samples were 500-1000 grams with metadata recorded for each sample. Panda Mining Pty Ltd undertook several soils and rockchip sampling programs on the Baratta Project between 2008 and 2012 which are reported in Open File ENV11760. Panda collected soil samples from 5-10cm depth which was sieved to -2mm fraction. Panda collected rockchip samples over the Bibliando Diapir by Panda in 2012. Panda commissioned GPX Surveys Pty Ltd to fly 100m spaced aeromagnetics and 256-channel radiometrics at a nominal height of 45 metres over the Bibliando Dome in April 2010 (SA GPX Survey 2010SA002) 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	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> No drilling reported
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling reported
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling reported
Sub-sampling techniques and	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. 	<ul style="list-style-type: none"> Soil and rock chip sampling only The sample size and medium are considered

Criteria	JORC Code explanation	Commentary
sample preparation	<ul style="list-style-type: none"> 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. 	appropriate for the purpose of outlining surface geochemical anomalies
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> Stelar's soil samples were analysed in-house using a Niton XL5-plus portable XRF (SN: X502346). Stelar regularly recalibrates its pXRF in accordance with the manufacturer's recommendations using the manufacture's authorised Australian agent (Portable Analytical Solutions – Sydney). System Checks are routinely run daily. pXRF measurements are made in Mining Mode with a runtime duration of 180 seconds. A single reading only is measured for each sample which is randomly selected. The analysis is undertaken in a controlled indoor environment with measurements taken directly on each physical sample medium. Rock chip samples were sent to Intertek (Adelaide) for analysis using a 4-acid digest and 48-element analysis using ICP OES/MS (Method 4A/MS48). Stelar monitors the routine analysis of Blanks, Field Duplicates and CRM's. Panda's soil samples were analysed using an Olympus Innov-X portable XRF. Open file reports do not detail any additional information. Panda's Rock chip samples were submitted to the ALS Laboratory in Adelaide for multi-element assay: <ul style="list-style-type: none"> 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 Panda did not record any QAQC sampling such as duplicates or CRMs.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No independent or alternative verifications are available No adjustments have been made to any assay data.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Stelar's sampling used a handheld Garmin GPSMAP 66i GPS with <2m horizontal accuracy. No information is given in the Open File reports regarding location for historic sampling 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Historic geophysical, soil and rock-chip sampling only being reported.

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No sampling bias of this kind is suspected.
<i>Sample security</i>	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Stelar Metals retained possession of all samples until they are hand-delivered to an external laboratory by a member of Stelar's staff.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Stelar has not yet undertaken any external reviews. There is no evidence of audits in the open file reports for historic sampling.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. The historical project comprised EL 3946 which was replaced by EL 5187 which were held by Panda Metals Pty Ltd between 2007 and 2016. 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 in administration and cannot negotiate a NMTA.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> An overview of historical exploration is included in the ITAR included in Stelar Metal's prospectus. Previous exploration was conducted by: <ul style="list-style-type: none"> Petrocarb Exploration (1971-1972), Samin Ltd (1973-1975), WMC Ltd (1977-1978) BHP Minerals (1982-1983) Minotaur Gold (1996-2001) Panda Mining (2007/2017)
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Stelar's exploration models include: <ul style="list-style-type: none"> Sediment-hosted Stratabound Copper Beltana-Kipushi style copper / base metals Ionic Absorption Clay REE
<i>Drill hole Information</i>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling reported

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> Geophysical, Soil and Rockchip sampling only reported
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to figures in the text of the ASX announcement
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All known relevant soil rockchip sample sites are illustrated on the attached figures
Other substantive exploration data	<ul style="list-style-type: none"> 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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> 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
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Stelar Metals is undertaking additional surface sampling and mapping at Baratta and will design drill programs based on prioritized targets. Stelar is keen to execute an ILUA or NTMA with the Adnyamathanha People who are currently in Administration and to seek drilling approvals.