

17 September 2024

ASX ANNOUNCEMENT

High-grade copper up to 12.7% from Lone Pine Prospect at Baratta




Highlights

- High-grade copper assays received from initial rock chip sampling at Lone Pine Prospect.
- Rock chip assays up to **12.7% copper**, with 7 of the 8 samples collected assaying over 5% copper.
- Lone Pine is located 7.5 kilometres west of the Baratta Copper Mine on the western flank of the doubly plunging Bibliando Dome.
- Reconnaissance mapping indicates the Lone Pine geology is identical to Baratta with stacked Fe-Cu gossans mapped to date over 400m strike.
- 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 the initial reconnaissance mapping and sampling at the Lone Pine Prospect located on the western limb of the Bibliando Dome some 7.5 kilometres west of the historic Baratta Mine workings (*Figure 1*).

Assay results from a small batch of rock chip samples returned copper assays up to 12.7% copper and 13 g/t silver. Seven of the eight samples collected along a 400m strike length of exposed gossans returned over 5% copper (*Figure 2 and Table 1*). There is little evidence of historic workings at Lone Pine aside from shallow cuts and scrapings associated with road-building machinery circa 1950's.

The Baratta Project is considered highly prospective for Sediment-hosted Stratabound Copper (SSC) mineralisation and is analogous to the Central African Copper Belt (CACB). The initial reconnaissance work at Lone Pine indicates an identical geological setting and copper mineralising processes.

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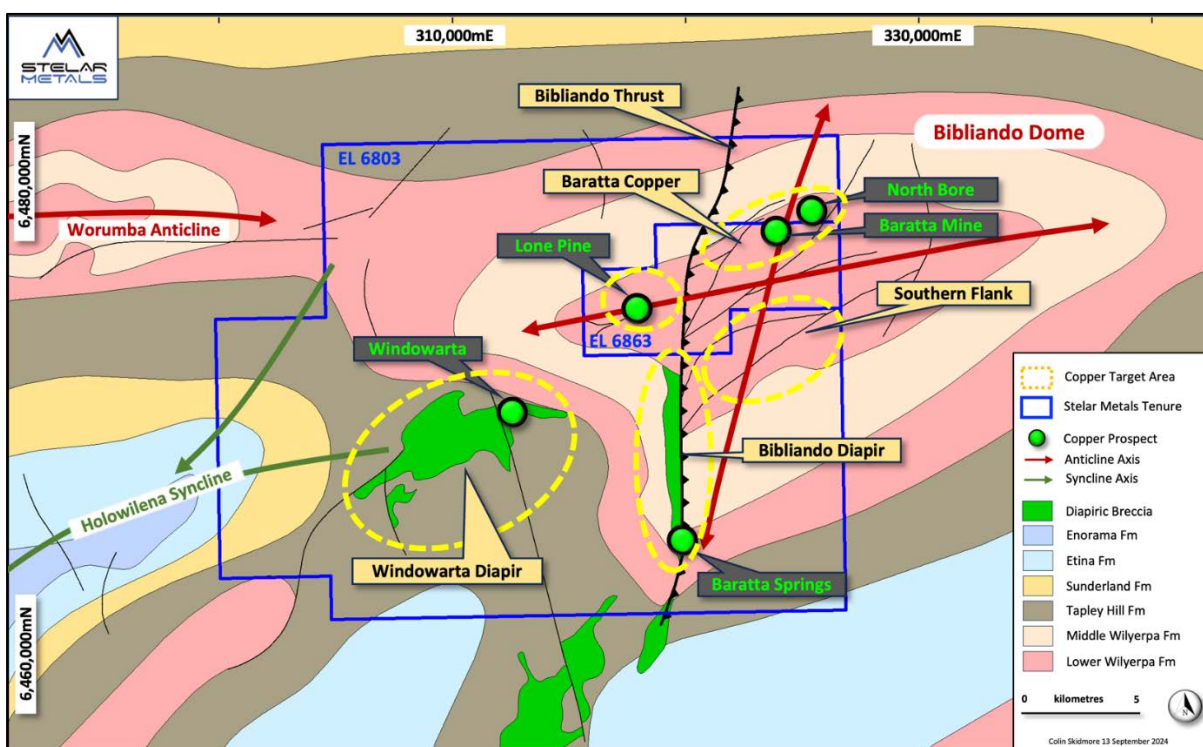


Figure 1: Baratta Copper Project showing the Bibliando Dome and priority target areas on simplified geology

Sediment-hosted Stratabound Copper (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 Central African Copper Belt (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.

Lone Pine Prospect Geology

Located within the Adelaide Rift Complex, Stelar’s Baratta Project is hosted by NeoProterozoic Lower Wilyerpa Formation sediments deposited in a shallow marine glacial environment. These sedimentary rocks have subsequently been folded, influenced by salt-diapirism and hydromorphic processes.

Lone Pine is located within the hinge-zone on the western flank of the Bibliando Dome. This elliptical east-west striking salt-cored, doubly-plunging anticline extends over 35 kilometres along its longitudinal axis (Figure 1). The western portion of the dome is cut by the Bibliando Thrust, a large regional north-south trending thrust fault. Lone Pine is located in the western down-thrust block, whereas the Baratta Mine area is in the eastern up-thrust block.

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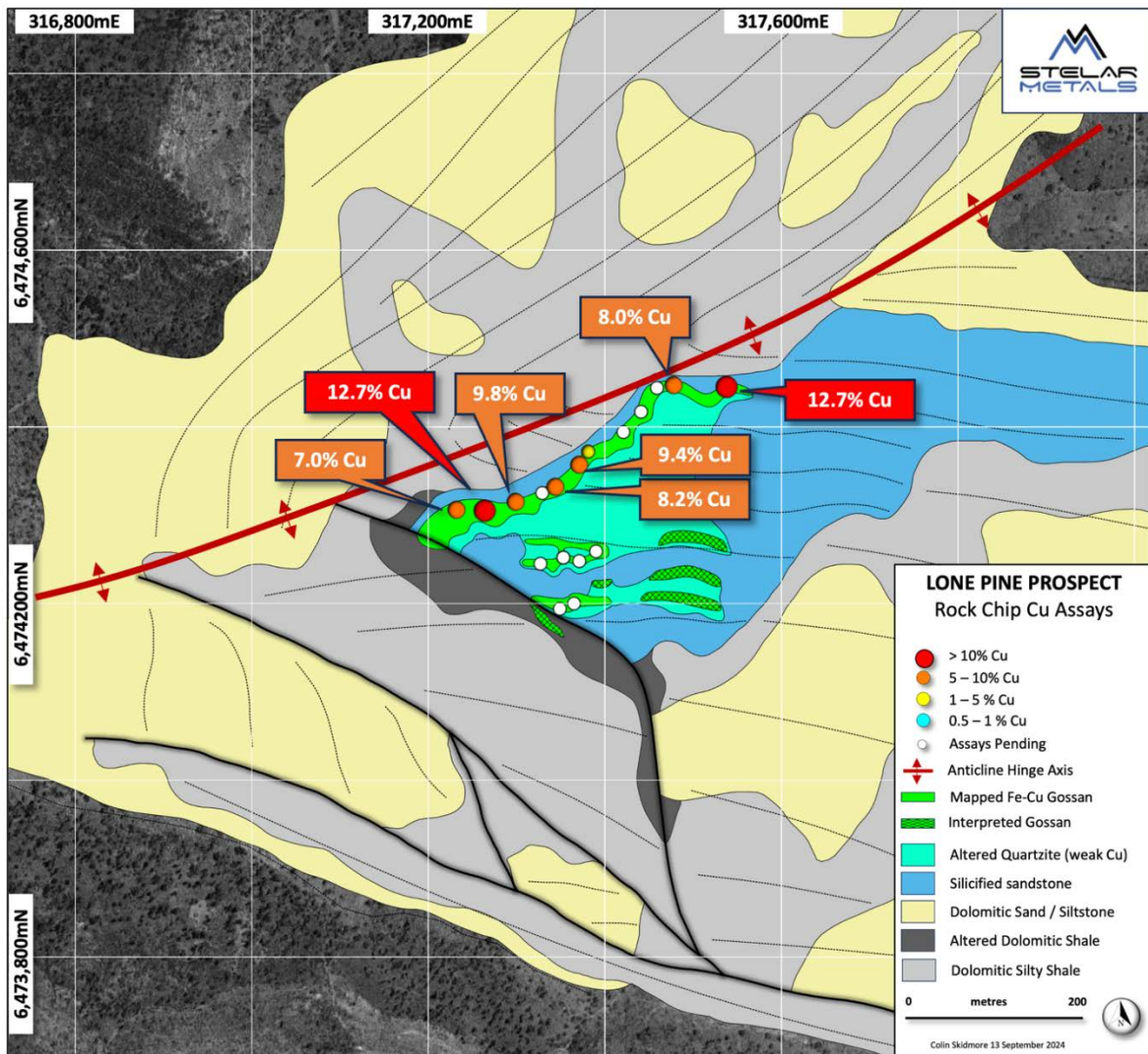


Figure 2: Lone Pine Prospect - Rock chip copper assays on reconnaissance geological mapping

Lone Pine and the Baratta Mine area share the same stratigraphy with highly repetitive, cyclical facies of upwardly fining sequences with lower dolomitic sandstones transitioning through dolomitic siltstones into upper beds of dolomitic pyrite-bearing shales. The structural framework of the Lone Pine Prospect is characterised by a shallowly dipping panel of drape folded strata that has been rotated on the western margin of the plunging anticline. Several radial faults and faults related to flexural shear near the axial ridge of the dome segment the panel further.

Stratabound copper mineralisation is observed in oxidised haematite-copper brecciated gossans at both localities (Figure 3). To date, three gossanous units measuring 1-3 metres thick have been identified within the same stratal panel and exhibit similar deformation fabrics and alteration styles as those at Baratta Mine. Currently, a 400 metres east-west strike extent has been mapped during the initial reconnaissance mapping, however the exposures are limited due to the topography that mirrors the dip of the stratigraphy.

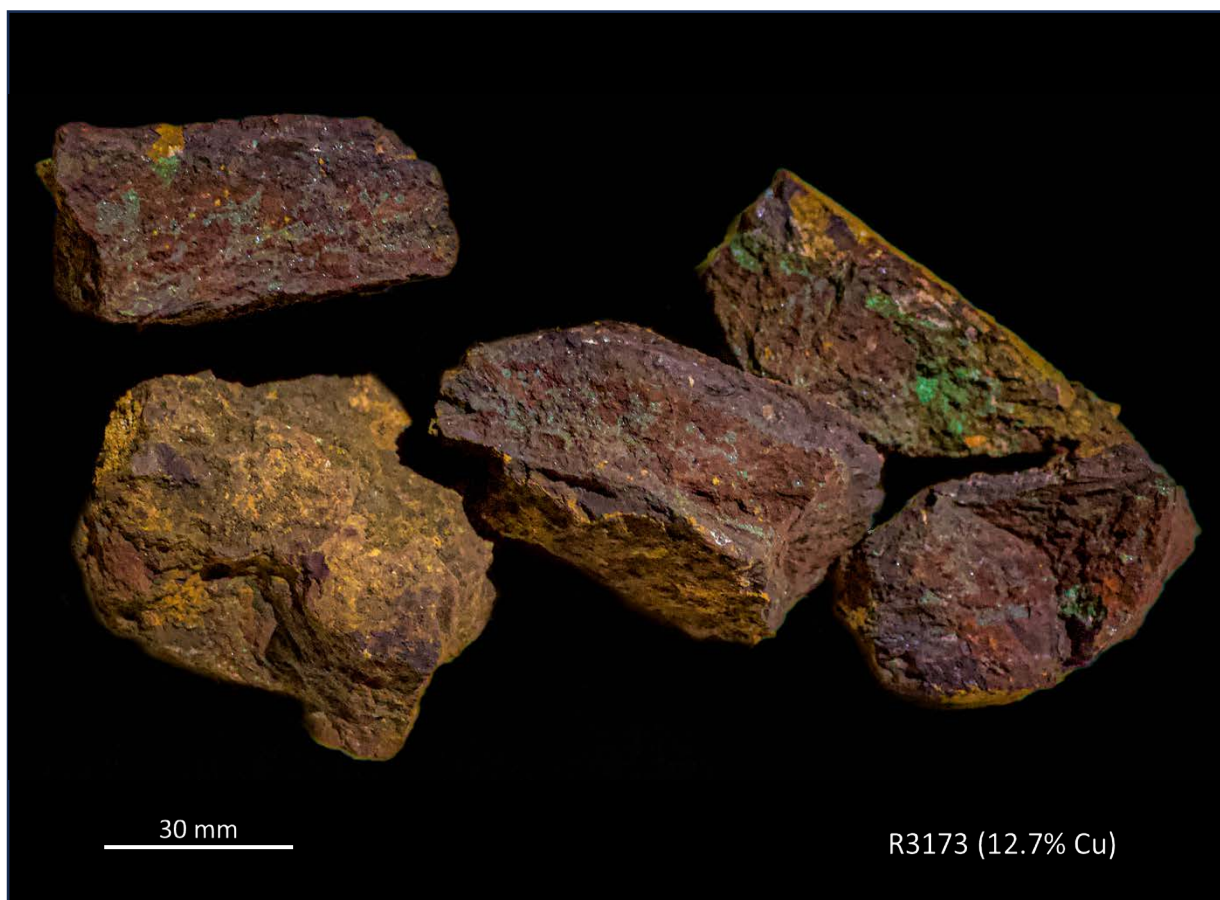


Figure 3: Lone Pine Fe-Cu gossan rock chip sample R3173 assaying 12.7% copper

Table 1: Initial Lone Pine copper and silver rock chip assay results

SNO	Easting	Northing	Copper (%)	Silver (g/t)
R3173	317538	6474445	12.7	4.68
R3174	317478	6474447	8.01	3.66
R3175	317371	6474357	9.39	5.32
R3176	317381	6474372	3.85	0.64
R3177	317344	6474332	8.16	3.87
R3178	317299	6474315	9.74	7.62
R3179	317264	6474305	12.68	13.27
R3180	317232	6474306	7.03	2.41

Next Steps

Additional, more detailed mapping and sampling will be undertaken at Lone Pine, as it was noted the exposure of prospective gossans was limited due to the topography, which parallels the dip of the stratigraphic units.

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.

Reprocessing of the available historic geophysical datasets is being finalised and interpreted and will be reported shortly.

Staged exploration of the broader Baratta Project, including the elongate Bibliando Diapir, the southern flank of the Bibliando Dome, and the Windowarta Diapir will continue over the coming months.

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 have been overlooked by previous explorers.

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.

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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 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 sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Soil and rock chip sampling only The sample size and medium are considered appropriate for the purpose of outlining surface geochemical anomalies

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	
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.
Orientation of data in relation to geological structure	<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 	<ul style="list-style-type: none"> No sampling bias of this kind is suspected.

Criteria	JORC Code explanation	Commentary
	<i>and reported if material.</i>	
Sample security	<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.
Audits or reviews	<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
Mineral tenement and land tenure status	<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.
Exploration done by other parties	<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)
Geology	<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
Drill hole Information	<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. 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. 	<ul style="list-style-type: none"> No drilling reported

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Criteria	JORC Code explanation	Commentary
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.

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