Tuesday, 22<sup>th</sup> November 2022

# New copper targets at Copper Warrior, Utah, USA

- Several large targets identified interpreted to be consistent with copper mineralisation
   from the Induced Polarisation (IP) Survey at Copper Warrior
- Copper grades up to 3.3% Cu returned from geochemical sampling of outcrop over one of the IP anomalies (Anomaly 1 – 850m x 570m)
- Located 15km from Utah's second largest copper mine, the Lisbon Valley Copper Mine
- The largest of the IP anomalies which has a strike of more than 3.5km surrounds the historical Big Indian and Blue Jay copper mines, indicating potential for extensions to known sedimentary copper mineralisation



Figure 1: Coarsely disseminated copper oxides (in this case azurite – brilliant blue in colour) are widespread in outcrop throughout the Copper Warrior Project area.



American West Metals Limited (**American West** or **the Company**) (ASX: AW1 | OTCQB: AWMLF) is pleased to give an update on results from the Induced Polarisation (IP) survey completed at the Copper Warrior Project in Utah (**Copper Warrior** or the **Project**).

#### Dave O'Neill, Managing Director of American West Metals commented:

"Our Copper Warrior Project is located in Tier 1 copper country in the USA – only 15km from Utah's second largest copper mine, the Lisbon Valley Copper Mine."

"Field work to generate drill targets at Copper Warrior has progressed in the background while we completed our high-profile drilling campaigns at our West Desert and Storm Projects.

"With the existing Lisbon Valley Copper Mine nearby, and outcropping copper already identified throughout the Copper Warrior tenure, the potential of the project to host large volumes of copper mineralisation is compelling.

"A high-resolution IP survey was deployed by American West Metals to screen the entire Copper Warrior project area with the aim of identifying priority areas for drilling.

"Modelling of the IP survey data has successfully generated strong anomalies that show clear similarities with the geophysical signature of known copper deposits in the district. Significantly, a number of the IP anomalies at Copper Warrior are associated with high-grade outcropping copper.

"We are also excited by the location of some of these IP anomalies adjacent to historical producing copper mines, suggesting potential that we have identified a continuation of the known copper mineralisation in the area.

"A drilling program has been planned to test these high-priority targets with permitting underway.

"Work is also continuing on our West Dessert JORC compliant resource and development scenarios, and we look forward to providing further updates on this work – as well as the timing of the drilling program at Copper Warrior – in the coming weeks."

#### **TIER 1 COPPER DISTRICT**

The Copper Warrior Project covers an area of outcropping Dakota and Lower Burro Canyon sandstone with widespread occurrences of disseminated and fracture controlled copper mineralisation (Figure 1 & 4). Surface exposures in the project area look very similar to those at the Big Indian Copper Mine that abuts Copper Warrior and the Lisbon Valley Copper Mine located 15km to the south (Figure 3).

Copper mineralisation at the Lisbon Valley Mine is found in both the Dakota and Lower Burro Canyon sandstone beds, with mineralisation in the Lower Burro Canyon unit making up about 80% of the reserves and geological resource (>40Mt @ 0.46% Cu for over 180,000t of copper). All of the Big Indian resources were hosted within the Lower Burro Canyon unit.

The copper mineralisation at Copper Warrior is comprised of disseminated chalcocite within the sandstone units, and chalcocite, azurite and malachite where the mineralisation is outcropping (Figure 1). Vein-style and higher-grade mineralisation is common in the project area close to the Lisbon Valley Fault, which is the main source of copper bearing fluids.



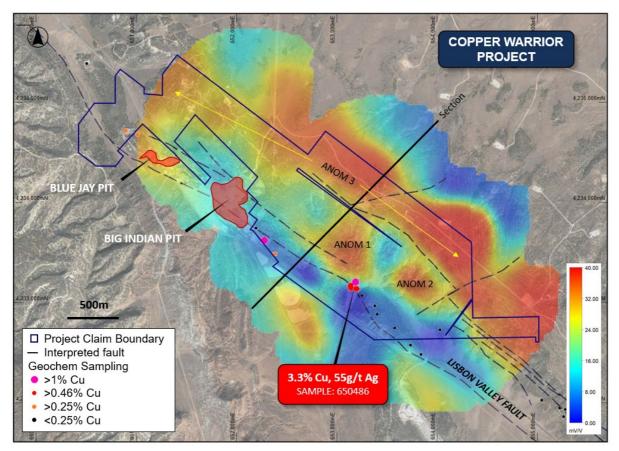


Figure 2: Project outline, faults and surface geochemistry points overlaying IP image (chargeability) at 1,900mRL Red colours indicate strong IP anomalism.

# IP SURVEY HIGHLIGHTS EXCEPTIONAL DRILL TARGETS

The IP survey completed by American West Metals was the first of its type at the Project. The survey was designed to test the response of the known mineralised units at the Big Indian Mine that extend into the Copper Warrior project area, and to screen the remainder of the project area for similar features.

A total of 11 dipole-dipole lines at 100m array spacings were completed over the prospective stratigraphy for a total of 251 stations. The results from the survey were recently reprocessed and interpreted in 3D to provide inversion data and better depth constraints for drill targeting.

The survey has identified a series of coincident chargeable and conductive anomalies that are located in compelling geological locations (Figure 2). The 3D inversion work has revealed two distinct chargeable layers that are interpreted to represent both the Dakota and Lower Burro Units (Figure 5).

Given the fairly resistive nature of the host sandstone units, the interpretations suggest that the chargeable features may be related to the presence of disseminated and vein-style copper sulphide mineralisation within these target horizons.



Importantly, a very large IP anomaly (Anom 3 - over 3.5km long) is located around the existing Big Inidian and Blue Jay pits, and could respresent extensions to the south and east of the known mining units. One of the new IP anomalies (Anom 1) with dimensions of approximately 850m x 570m is located in an area of outcropping copper mineralisation with assays up to 3.3% Cu (For details of the geochemical sampling program see our Quarterly Activities Report for the quarter ended 31 March 2022).

The size and distribution of the IP anomalies suggests that there is potential for a number of Lisbon Valley sized deposits within the Copper Warrior Project area.

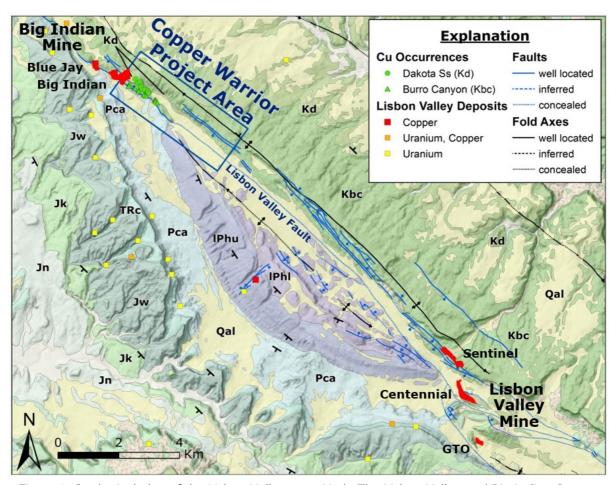


Figure 3: Geological plan of the Lisbon Valley area, Utah. The Lisbon Valley and Big Indian Copper Mines share similar geology on either end of the Lisbon Valley Anticline, and are cut by the Lisbon Valley Fault – the main mineralising structure in the region. The Copper Warrior Project is located immediately adjacent to the existing Big Indian Mine workings.

## **FORWARD PROGRAM**

A maiden drilling program has been designed to test the high-priority IP anomalies and other stratigraphic targets. Permitting is currently underway with an aim to have project access toward the end of the year.

The drilling program will consist of 15-20 reverse circulation (RC) drill holes for approximately 3,000m, with a maximum drill depth of approximately 150-200m.



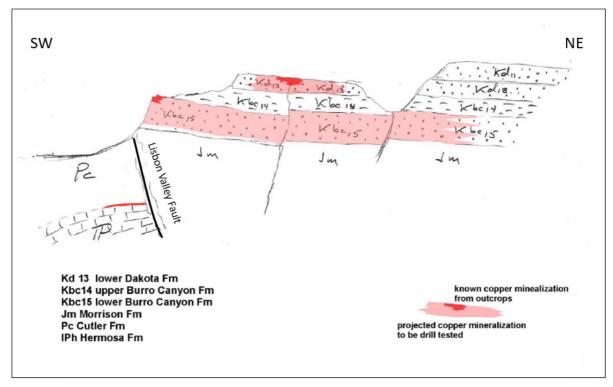


Figure 4: Schematic SW-NE geological section through the Copper Warrior Project (See Figure 3 for section location). The Dakota (Kd13) and Lower Burro Canyon (Kbc15) Formations are also found at the nearby Lisbon Valley Copper Mine and are the main hosts to economic copper mineralisation in the area.

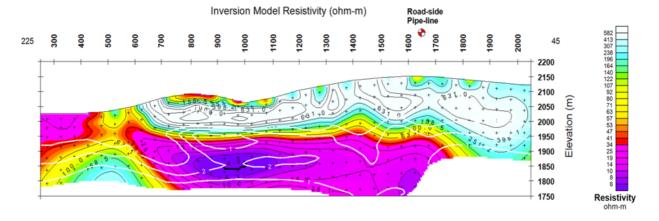


Figure 5: Pseudo section along IP Line 6 (same approximate section as the above geological section) showing resistivity data. Note the conductive features at surface (Interpreted to be outcropping Dakota Formation – Kd13) and broad, flat lying feature at depth (interpreted Lower Burro Canyon Formation – Kbc15).

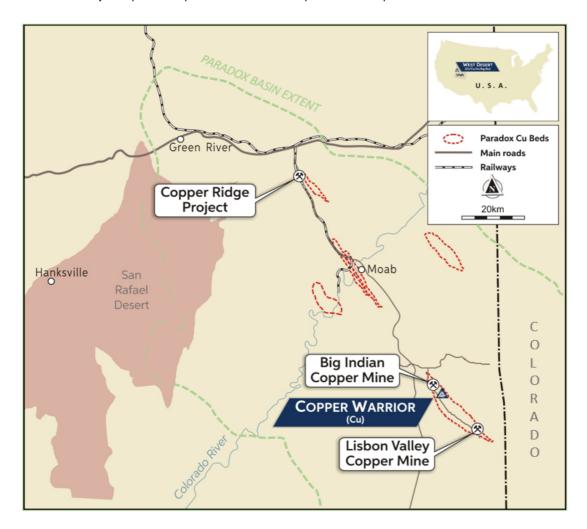


### ABOUT THE COPPER WARRIOR PROJECT, UTAH

The Copper Warrior Project is located is the Paradox Basin in south-east Utah. The Paradox Basin is known for its world class endowment of copper, uranium, vanadium and potash.

The Project is serviced wth direct road access and power, and lies only 15km north of Utah's second largest copper mine – Lisbon Valley Copper Mine. The Project comprises 61 unpatented lode mining claims for a total land holding of approximately 5km<sup>2</sup>.

The Copper Warrior Project is under option agreement to American West Metals who will earn a 100% interest in the Project upon completion of earn-in expenditure requirements.





This announcement has been approved for release by the Board of American West Metals Limited.

## For enquiries:

Dave O'Neill Dannika Warburton

Managing Director Principal

American West Metals Limited Investability

doneill@aw1group.com info@investability.com.au

+ 61 457 598 993 +61 401 094 261

## **ASX Listing Rule 5.12**

The Company has previously addressed the requirements of Listing Rule 5.12 in its Initial Public Offer prospectus dated 29 October 2021 (released to ASX on 9 December 2021) (**Prospectus**) in relation to the Copper Warrior Project. The Company is not in possession of any new information or data relating to the Copper Warrior Project that materially impacts on the reliability of the estimates or the Company's ability to verify the estimates as mineral resources or ore reserves in accordance with the JORC Code. The Company confirms that the supporting information provided in the Prospectus continues to apply and has not materially changed.

This ASX announcement contains information extracted from the following reports which are available on the Company's website at <a href="https://www.americanwestmetals.com/site/content/">https://www.americanwestmetals.com/site/content/</a>:

#### 29 October 2021 Prospectus

The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in the Prospectus. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Prospectus.

#### **Competent Person Statement**

The information in this report that relates to Exploration Targets and Exploration Results for the Copper Warrior Project is based on information compiled by Mr Dave O'Neill, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Neill is employed by American West Metals Limited as Managing Director, and is a substantial shareholder in the Company.

Mr O'Neill has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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'. Mr O'Neill consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



#### **ABOUT AMERICAN WEST METALS**

**AMERICAN WEST METALS LIMITED (ASX: AW1)** is an Australian clean energy mining company focused on growth through the discovery and development of major base metal mineral deposits in Tier 1 jurisdictions of North America. Our strategy is focused on developing mines that have a low-footprint and support the global energy transformation.

Our portfolio of copper and zinc projects in Utah and Canada include significant existing resource inventories and high-grade mineralisation that can generate robust mining proposals. Core to our approach is our commitment to the ethical extraction and processing of minerals and making a meaningful contribution to the communities where our projects are located.

Led by a highly experienced leadership team, our strategic initiatives lay the foundation for a sustainable business which aims to deliver high-multiplier returns on shareholder investment and economic benefits to all stakeholders.

# JORC Code, 2012 Edition – Table 1

# **Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>The Induced Polarisation (IP) surveys were completed by Zonge International Inc., USA.</li> <li>The surveys were completed using a Zonge GDP-3224 multi-channel receiver and Zonge GGT-30, 30 KVA transmitter.</li> <li>Data was collected in the phase domain (100% duty cycle) using a 9-electrode dipole-dipole array using a frequency of 0.125Hz.</li> <li>Station spacings along the lines was 100m.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>This information refers to results from geophysical surveys; this section is not relevant to this release.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	This information refers to results from geophysical surveys; this section is not relevant to this release.

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	This information refers to results from geophysical surveys; this section is not relevant to this release.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	This information refers to results from geophysical surveys; this section is not relevant to this release.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The surveys were completed using a Zonge GDP-3224 multi-channel receiver and Zonge GGT-30, 30 KVA transmitter.</li> <li>Data was collected in the phase domain (100% duty cycle) using a 9-electrode dipole-dipole array using a frequency of 0.125Hz.</li> <li>Station spacings along the lines was 100m.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data</li> </ul>	<ul> <li>This information refers to results from geophysical surveys; this section is not relevant to this release.</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>A handheld Garmin 64s global positioning system (GPS) was used to determine accurate positioning for the IP surveys (within 2-5m).</li> <li>The grid system used is NAD83 / UTM zone 11N</li> <li>The handheld GPS has an accuracy greater than +/-5m for topographic and spatial control.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The station spacing for the IP survey was 100m.</li> <li>The spacings are considered effective for the detection of mineralisation present at the Storm and Seal prospects.</li> <li>Geochemical sampling was taken at random locations, no set spacings.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Surface IP surveys are considered effective for detecting the both flat and steeply dipping mineralisation.
Sample security	The measures taken to ensure sample security.	<ul> <li>This information refers to results from geophysical surveys; this section is not relevant to this release.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>A review of the data was completed by Southern Geoscience Consultants (SGC) who considered to surveys to be effective for these styles of mineralisation.</li> </ul>

# 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> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The Copper Warrior property covers approximately 5km squared and is located in the Lisbon Valley, south-eastern Utah.</li> <li>American West Metals has an Exploration and Option Agreement with Bronco Creek Exploration Inc. over the property with the right to earn up to 100% interest.</li> <li>The property comprises 61 contiguous unpatented lode mining claims, named Big Indian 2-25 and Copper Warrior 1-37.</li> <li>All tenements are in good standing.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Copper was first discovered in the area during the 1890s, with mining beginning in 1903 at the Big Indian mine, located approximately 1 km northwest of the project.</li> <li>Very little prior exploration has been completed on the property claims except for mapping/sampling and initial staking work by Kimmerle Mining LLC (predecessor to EMX Royalty Corporation) on what was initially called the Big Indian project.</li> <li>Exploration on adjacent properties, which included drilling in the same geological units, supports the presence of copper sulphide mineralisation in the immediate area.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Copper Warrior project is located at the northern end of the Lisbon Valley Anticline, a regional-scale feature composed of Permian to Cretaceous sandstones and shales.</li> <li>Field observations note the immediate project area contains outcropping Cretaceous aged Dakota sandstone (Kd13) and Lower Burro Canyon Formation (Kbc15) with scattered exposures of copper mineralisation.</li> <li>Copper mineralisation in the Lisbon Valley area is classified as sandstone-hosted copper.</li> <li>The copper mineralisation occurs as stratabound disseminations (grains and films between quartz grains) following favourable zones in permeable sandstone units and as coatings and fillings on fractures</li> </ul>
Drill hole Information	<ul> <li>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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in</li> </ul> </li> </ul>	<ul> <li>This release refers to results from geophysical surveys</li> <li>No drilling has been completed at the project to date</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	The release refers to results from geophysical surveys; this section is not relevant to this release.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	The release refers to results from geophysical surveys; this section is not relevant to this release
Diagrams	<ul> <li>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.</li> </ul>	Relevant maps and sections are included as part of this release
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The release refers to results from geophysical surveys; this section is not relevant to this release</li> </ul>
Other substantive	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations;</li> </ul>	All material or meaningful data collected has been reported.

Criteria	JORC Code explanation	Commentary
exploration data	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.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Drilling of geophysical targets using Reverse Circulation (RC) drilling</li> <li>Further surface geophysics and geochemical sampling.</li> <li>Archaeological and palaeontological surveys</li> <li>Please see the ASX release for all maps and plans.</li> </ul>