COOLABAH METALS

# INVESTOR UPDATE

**ASX RELEASE**
5 April 2023


**COOLABAH METALS LIMITED**
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David Ward

**TICKER**
ASX:CBH

**LOCATION:** Coolabah, NSW

## UPDATE: REVERSE CIRCULATION DRILLING COMMENCES AT THE COOLABAH PROJECT

**Coolabah Metals Limited is pleased to announce an update regarding our maiden RC drilling program commencing at the Coolabah Licence EL9287, located 65km north-west of Nyngan, NSW.**

Coolabah Metals Limited have commenced an RC program located at our Coolabah Licence, near Girilambone, NSW. The drillholes are designed to test subtle EM targets identified by the HeliTEM2 airborne electro-magnetic (EM) survey completed in July 2022 12km north-west of Girilambone, NSW.

Coolabah completed processing and interpreting EM data obtained from the HeliTEM[2] survey and eight anomalies have been delineated from the results and the anomalies have been prioritised.

The two highest priority EM targets have been modelled along with a 3D inversion model of the magnetics; one of the two subtle EM conductor plates (Manchester) displays a very close spatially relationship to the modelled magnetic anomaly[1] (figure 1). The modelled EM anomalies are spatially associated with the magnetic high and surface rockchip samples up to 5,500ppm copper[2].

The current RC program at Coolabah EL9287 is targeting the two modelled EM conductors associated with the magnetic high.

1. *CBH Announcement – 15 March 2023*
2. *Coolabah Metals Limited (ASX:CBH) Prospectus – 26 July 2022*

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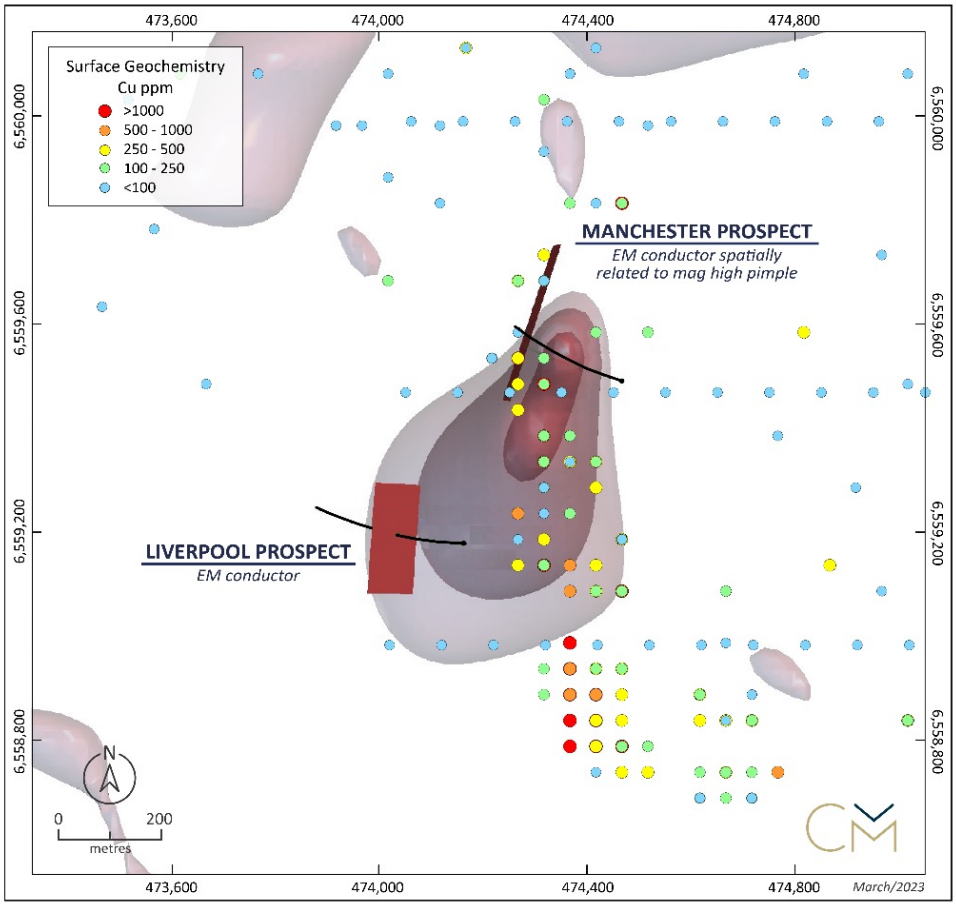


**Figure 1:** Coolabah Metals – Mersey Prospect EM Targets Plan View - EM Targets with planned drillholes closely located to modelled magnetic inversion with elevated Cu values in surface geochemistry.

**Cameron Provost, stated:**

*"Significant rainfall and flooding last year prevented drill rig access at the Coolabah Project, instead we bought the Gunpowder Creek Project drilling near Mt Isa forward in the schedule. The Gunpowder Creek drilling returned some excellent results (5m @ 5.70g/t Au from 108m)* [3] *in the first ever drilling program at the Golden Sunset Prospect.*

*Now we have access to the Coolabah Project we are pleased to be finally able to roll out the rig onto our name's sake project for another first ever drilling program within EL9287."*

Ground truthing and reconnaissance work is currently being conducted over additional anomalies identified by the recent HeliTEM[2] survey.

Coolabah commissioned Xcalibur Multiphysics to conduct the 996-line km HeliTEM survey, covering a total area of over 210 square kilometres (figure 2), well over half of the entire tenement (EL9287)[4]. Coolabah Metals aimed at utilising an airborne EM survey to determine basement conductors, potentially representing Besshi Style massive to semi-massive sulphide accumulations similar to the Girilambone District Deposits.

3. *CBH Announcement – 21st December 2022*
4. *CBH Announcement – 4 August 2022*

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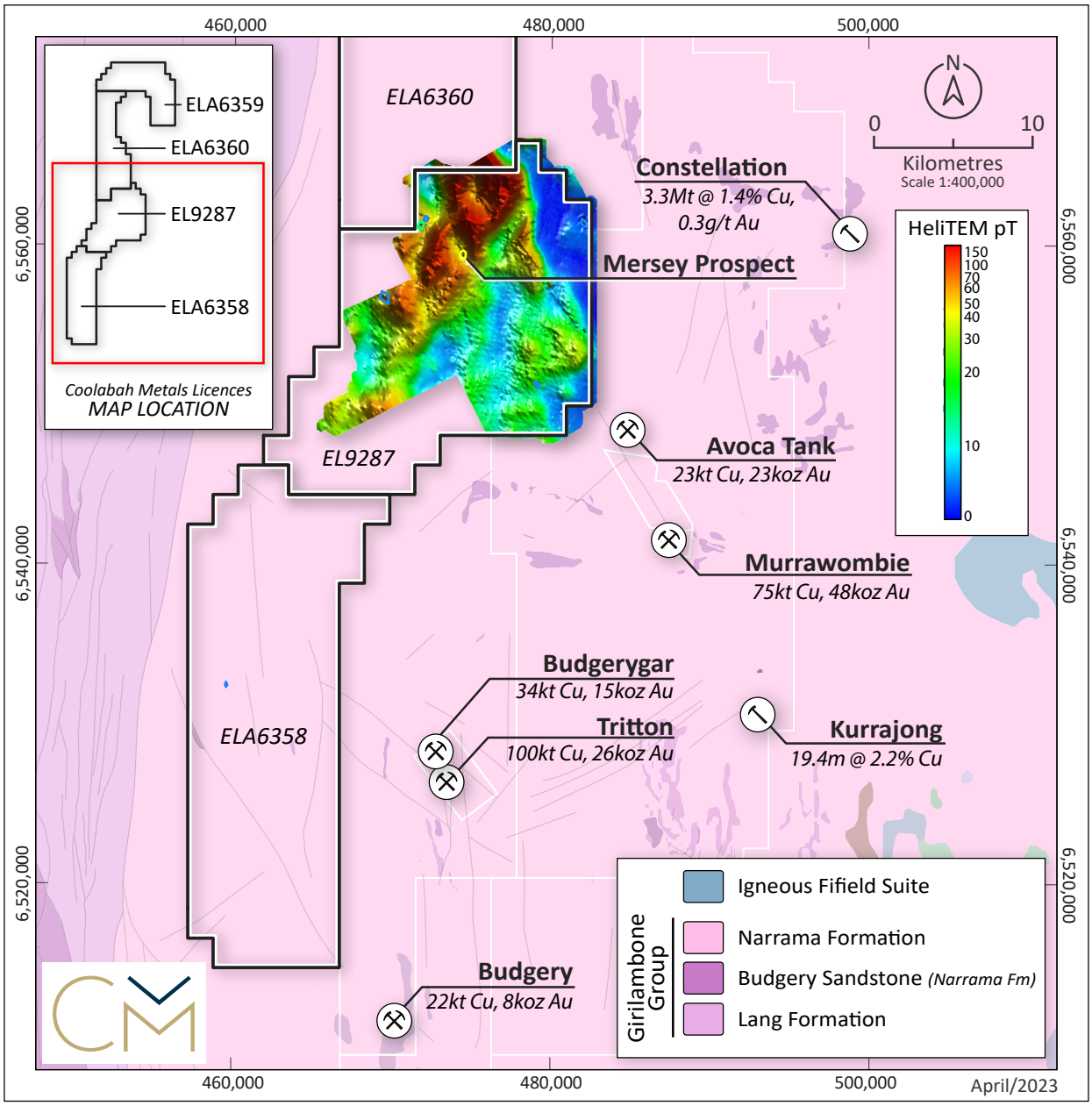


**Figure 2:** Coolabah Metals – HeliVTEM survey area located over EL9287 and EL9357
Background Image is Late time Z component EM response. (calculated b field channel 20, approximately 5msec after transmitter turn off)
Hot colours = more conductive ground

*The Board of Directors of Coolabah Metals Limited authorised the release of this announcement.*

## Further information:


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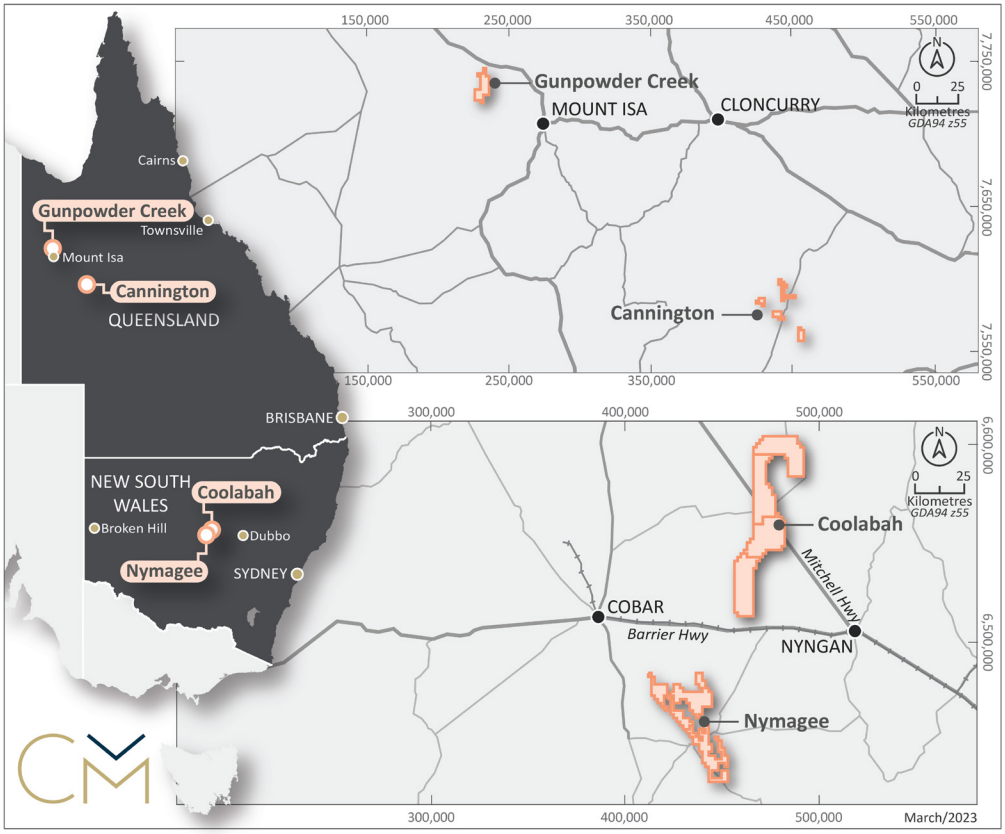
## About Coolabah Metals Limited

Coolabah Metals Limited (ASX:CBH) is an ASX-listed minerals explorer with a focus on copper, gold and base metal assets throughout Australia. CBH aims to build shareholder wealth through the discovery and development of mineral deposits across various projects being the Coolabah Project, the Nymagee Project and the Gunpowder Creek Project (together, the Projects).




## Coolabah Project

The Coolabah Project area comprised of 1,177km², lies adjacent to the Girilambone copper deposits including Avoca Tank, Tritton and the newly discovered Constellation Deposit. The Coolabah Project is highly prospective given that geology structures / regional settings are similar to known deposits.

## Nymagee Project

The Nymagee Project area totals 533.3km² and is located amongst significant discoveries at Federation, Hera and Nymagee and is highly attractive for Cobar Style Deposits. The Nymagee Project lies on a major north-easterly structure prospective for gold, copper, lead and zinc mineralisation.

## Gunpowder Creek Project

The Gunpowder Creek Project is located within the world class Mt Isa block, only 40km northwest of Mt Isa and is home to numerous historic workings over 5km and highlights high-grade rockchips up to 32g/t gold. The Gunpowder Creek Project is prospective for vein/fault hosted high grade gold and Mt Isa Copper-Lead-Zinc type mineralisation.

## Canington Project

The Canington Project is located 130km SSE of Cloncurry comprised of two exploration licences that covers a total area of 113.4km². The main prospect within the Project is Brumby, being a copper-gold project spatially related to a strong magnetic high and interpreted to be an Iron Oxide Copper Gold (IOCG) style target.

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## Competent Persons Statement

The information in this document that relates to exploration targets, exploration results, mineral resources or ore reserves is based on information compiled by David Ward BSc, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM), (Member 228604). David Ward is a Director and shareholder of Coolabah Metals Ltd. David Ward has over 25 years of experience in metallic minerals mining, exploration and development and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a 'Competent Person' as defined under the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ward consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## Forward-Looking Statement

This document may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. No representation is made that, in relation to the tenements the subject of this presentation, the Company has now or will at any time the future develop resources or reserves within the meaning of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves.

Any forward-looking statements in this presentation speak only at the date of issue of this document. Subject to any continuing obligations under applicable law, the Company does not undertake any obligation to update or revise any information or any of the forward-looking statements in this document or any changes in events, conditions, or circumstances on which any such forward looking statement is based.

## Previously Reported Information and Reference:

- ASX CBH – 26 July 2022 – Prospectus
- ASX CBH – 28 July 2022 – Coolabah Metals Completes Successful $6m IPO
- ASX CBH – 4 August 2022 – Update of exploration activities at the Coolabah Project
- ASX CBH – 19 October 2022 – RC Drilling commences at the Gunpowder Creek Project
- ASX CBH – 31 October 2022 – Quarterly Activities Report
- ASX CBH – 24 November 2022 – AGM Investor Presentation
- ASX CBH – 30 November 2022 - Solid Gold Intercepts from first drilling at Gunpowder Creek
- ASX CBH – 21 December 2022 – Update Re-assays from drilling at Gunpowder Creek
- ASX CBH – 30 January 2023 – Quarterly Activities Report and Appendix 5B
- ASX CBH – 21 February 2023 - December Quarterly Report, Appendix 5B and Tenement List
- ASX CBH - 16 March 2023 - Half Year Accounts

# JORC Code, 2012 Edition – Table 1 report template

## 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • NA |
| *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).* | • NA |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • NA |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or* | • NA |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • NA |
| *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.*<br>• *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.*<br>• *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.* | • The airborne HELITEM² survey was conducted using a HELITEM² 35m diameter loop with a vertical axis loop transmitter slung below helicopter with a multicoil system (X, Y and Z) receiver with a final recording rate of 10 samples per second, 25 channels of X, Y and Z component data.<br>• The HELITEM² electromagnetic receiver (dB/dt – X,Y & Z) data are in units of nanoteslas per second (nT/s) and are normalized by the effective receiver area (1 nV/m² = 1 nT/s). The data are not normalized by transmitter moment.<br>• Data were acquired using a HELITEM² electromagnetic system supplemented by a high-sensitivity cesium magnetometer. The information from these sensors was processed to produce products that display the magnetic and conductive properties of the survey area.<br>• The base station equipment uses a Scintrex cesium vapour sensor with Marconi GPS card and antenna for measurement synchronization to GPS.<br>• The GPS receiver is a JAVAD TRIUMPH-1M with a real-time accuracy of <0.5m with a sample rate of 1.0Hz.<br>• A GPS electronic navigation system ensured accurate positioning of the geophysical data with respect to the base map coordinates.<br>• Survey coverage consisted of 996.3 km traverse lines flown with spacing of 100/200/400/600 m and 0.0 km of tie-lines for a total of 996.3 km flown. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • During the HELITEM² survey. Digital data for each flight were transferred to the office in order to verify data quality and completeness. A database was created and updated using Geosoft Oasis Montaj and proprietary Xcalibur Atlas software. This allowed the processor to calculate, display and verify both the positional (flight path) and geophysical data. The initial database was examined as a preliminary assessment of the data acquired for each flight.<br>• Daily processing of survey data consists of differential corrections to the airborne GPS data, verification of EM calibrations, drift correction of the raw airborne EM data, spike rejection and filtering of all geophysical and ancillary data, verification of the digital video, calculation of preliminary resistivity data and diurnal correction of magnetic data.<br>• All data, including base station records, were checked on a daily basis to ensure compliance with the survey contract specifications. Re-flights were required if any of the following specifications were not met.<br>• The in-flight calibration consists of measuring the system characteristics out of ground effect and compensation of the electromagnetic data for these measured effects. The reference waveforms recorded during the pre-flight calibration form an important part of the delivered data and are critical to accurate inversion of the data. During the pre-flight calibration, a minimum of 30 seconds of data is collected out-of-ground-effect to monitor the effectiveness of the calibration and the accuracy of the base levels. During any post-flight calibration, a minimum of 30 seconds of data is collected out-of-ground-effect; these data are compared with the pre-flight calibration data of any quantify drift. Measurements of in-flight noise levels, out of ground effect, are made at the high-altitude portions of each flight. Static or hover noise levels are not directly related to those seen in flight due to geometry and compensation considerations that are only addressed in a dynamic situation. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • NA |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Coordinates of the corner points were displayed in in WGS84 UTM Zone 55s and GPS base stations were set up using WGS84 Latitude/Longitude (deg-min-sec) |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • NA |
| *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.*<br>• *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.* | • NA |
| *Sample security* | • *The measures taken to ensure sample security.* | • Geophysical data was acquired and stored on in house software systems. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • NA |

## 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.*<br>• *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 Coolabah Project is centred about 20 km west of the historic mining town of Girilambone in central-west New South Wales, approximately 520 km north-west of Sydney. Exploration Licence 9287 forms a project with EL 9357, EL 9358 and EL 9359 (The Coolabah Project), and together, the four 100% owned contiguous exploration licences cover 1,177km$^2$.<br>EL9287 is held 100% by Coolabah Metals Limited and expires on 14$^{th}$ September 2027. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | Gossan and ironstone samples were collected and analysed by North Broken Hill Limited during the 1970's. The samples were collected and analysed for base metals, but the original geochemistry was not officially reported at the time of tenure. The Department of Primary Industries (DPI) obtained access to the pulps collected by North Broken Hill Limited and re-analysed the geochemistry in 2005.<br>Previous surface geochemistry samples collected were highlighted in the CBH – Prospectus dated 26 July 2022. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | The main rock types of the Coolabah licence are deformed and metamorphosed quartz-rich turbidites of the Narrama Formation of the Girilambone Group (Figure 2). This is obscured by semi-flat lying to gently undulating plains of red and brown clayey sand, loam, and lateritic soils; and residual colluvial deposits of poorly sorted sands and gravel.<br>The Girilambone Group was originally deposited in a back arc, formed during the Ordovician convergent phase of the Benambran Orogeny. During the Early Silurian collision phase of the orogeny, the turbidites were regionally metamorphosed to quartz-chlorite-sericite-schist and subject to several deformation events.<br>Syn- and post- tectonic intrusions ranging from granitoid to ultramafic units, intruded through lower schist units of the group. The Coolabah licence has very sparse outcrop, with 1-3 metres of red soil cover. Scattered quartz and ironstone, some of which are susceptible to magnetism, makes up the surface expression. The thin soil profile overlies pale white creamy brown phyllite of the Narrama Formation (CBH Prospectus, 2022) |
| *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:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *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.* | • NA |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • NA |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • NA |
| *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.* | • See body of the 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.* | • NA |
| *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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • See body of the announcement. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • See body of the announcement. |