

7 September 2021

The Manager ASX Market Announcements Australian Securities Exchange Limited

Dear Sir/Madam,

# JORC CODE TABLE 1

The Company refers to its announcement lodged 31 August 2021 titled "Drilling Underway at Redbank Copper Project", which did not include JORC Code Table 1.

The JORC Code Table 1 is now attached to this letter in reference to the announcement as it relates to geophysical survey data.

Yours faithfully,

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Melanie Ross Company Secretary



Redbank Copper: Ground Geophysics & Soil Sampling

JORC Code Table 1

# SECTION 1 GROUND GEOPHYSICS AND SOIL SAMPLING

Michael Hannington, Executive Director at Redbank Copper Ltd and a Consulting Geoscientist compiled the information in Section 1 and Section 2 of the following JORC Table 1 and is the Competent Person for those sections. The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) requirements for the reporting of Exploration Results. For further detail, please refer to the announcements made to the ASX by Redbank Copper Ltd relating to the Redbank Project.

Criteria	JORC Code explanation	Commentary		
Sampling techniques	Nature and quality of sampling (e.g. 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.	<b>Gradient Array Induced Polarisation Survey (GAIP)</b> 1kmx1km square grid surveyed along 100m internal spaced lines wit potential electrode pots at 50m spacing. A reading of (i) chargeabilit and (ii) resistivity is taken between two pots spaced 50m apart along the 100m spaced lines. The sample point for chargeability and resistivity is the mid-point between the potential electrode pots. Therefore, eac 1km <sup>2</sup> of GAIP area surveyed has 200 readings taken at 50m interval along 100m spaced lines. Readings are recorded using an EMI SmarTEM24 receiver. Data stored in the SmarTEM24 are downloaded and transferred via secure FTP to Redbank's server at the end of even day.		
		The current electrodes are placed 500m outside and either side of the 1km <sup>2</sup> measured array. The current electrodes are therefore spaced 2kn apart.		
		A 2 second square wave current is transmitted to the current electrodes using a Honda EU70i 32A/7kVA GenSet and a GDD Inc model Tx- transmitter.		
		Soil Sampling		
		Soil sampling is progressing with samples collected at 500m x 500n centres. The sampling program is an extension of the 2020 so sampling program reported in an ASX announcement on 29 April 2021		
		The current soil sampling program commenced on 7 June 2021 Samples obtained from this soil sampling campaign will be delivered for assay to Intertek assay laboratory in Townville for sample preparation and then to the Perth laboratory for assaying. The sampling program		

Criteria	JORC Code explanation
	Include reference to measure
	appropriate calibration of any
	Criteria

### **Commentary**

will continue throughout the 2021 dry season.

#### Magnetotelluric (MT) survey

Zonge Engineering were contracted to record MT soundings at 1 to 2 km station spacing for the southern regional line and 200m station spacing for the northern line. Phoenix MTU receivers and Phoenix broadband MTC150L coils collected the electric and magnetic field components. These receivers collect over 10000-0.001 Hz frequency ranges. Stations were deployed for a minimum of 4 hours and usually overnight. Data was recorded using a MTU-5A. Images of MT inversions are from field data and are preliminary although the final inversion results are no expected to be materially different to the preliminary images presenting in this announcement.

#### Airborne EM Survey - VTEM-Max

UTS Geophysics were contracted to fly 3,512 line kms of a helicopter borne electromagnetic survey. VTEM Max is a time domain EM system. The EM sensor is flown at a nominal 35m above ground surface. Magnetics is also collected from a sensor at a nominal 73m above ground surface. Based on an airspeed of 80-100km/h readings are taken at 2 to 4m along survey lines. This survey uses a base frequency of 25Hz, recording both Z and X coil components, with a peak dipole moment of 700,000 nAI transmitter pulse width of 7ms.

measures taken to ensure sample representivity and the on of any measurement tools or systems used.

## GAIP survey

The chargeability is a dimensionless ratio of mV/V. The resistivity is measured in Ohm.m (kg.m<sup>3</sup>.s<sup>-3</sup>.A<sup>-2</sup>). Due to the varying position of current electrodes from one 1km<sup>2</sup> array to the next some normalisation or levelling of the data is required to ensure that imaging of the values between arrays provides interpretable imagery.

#### Soil Sampling

Soil samples are collected and logged via a ToughBook using GPS location, a photograph of the soil sample location and using OCRIS

#### JORC Code explanation

Criteria

#### Commentary

#### software to record meta-data.

#### Magnetotelluric (MT) survey

The long recording period for passive electric and magnetic field sensors ensures that signal to noise ratio is maximised. Zonge Engineering are industry leaders in MT acquisition and use bespoke sensors and recording equipment to ensure quality MT soundings.

#### Airborne EM Survey - VTEM-Max

Daily HAC (high altitude calibration) data is reviewed to ensure the noise envelope is not compromised by either external EM fields (radio frequency transmitters) and internal system + helicopter noise. Daily survey data is delivered to Geotech in Toronto for QA/QC checks before being accepted. Redbank has retained Core Geophysics Pty Ltd to manage UTS Geophysics in its performance of the VTEM survey.

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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.

The Induced Polarisation (IP) technique is considered appropriate for detection of disseminated sulphides. Previous IP surveys at the Redbank Project in the mid-1970s has located disseminated chalcopyrite (CuFeS<sub>2</sub>). Thin section petrography descriptions highlight the lack of pyrite (FeS<sub>2</sub>) associated with mineralisation. Both chalcopyrite and pyrite are polarisable and give chargeability responses. With the lack of pyrite, the reasons for a chargeability anomaly from sulphides is reduced to copper sulphides. In undeformed/unmetamorphosed rock, fine grained magnetite (Fe<sub>3</sub>O<sub>4</sub>) can also be chargeable.

The IP survey is operated by a qualified geophysicist employed by Core Geophysics Pty Ltd. Current electrodes are formed from metal sheets and star pickets placed in 60cm deep electrode pits; receiving potential electrode pots are Tinker&Raser model 3A half-cell electrodes. Electrical wire is Elcon Cable SDI1.5-3.3kV & SDI2.5-3.3kV.

Soil Sampling/ MT Survey/VTEM Survey - explanation Not applicable

Criteria	JORC Code explanation	Commentary
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	N/A -no drilling results are being announced.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	N/A -no drilling results are being announced.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	N/A -no drilling results are being announced.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	N/A -no drilling results are being announced.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non- core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	N/A -no drilling results are being announced.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the	Current Electrodes are formed from metal sheets and star pickets placed in 60cm deep electrode pits. As described, the array configuration necessitates current electrodes 2km apart. Electrical wire connecting these current electrodes to the genset/transmitter is Elcon

Criteria	JORC Code explanation	Commentary		
	parameters used in determining the analysis including instrument make and	Cable SDI1.5-3.3kV & SDI2.5-3.3kV.		
	model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of	A 2 second square wave current is transmitted to the current electrodes using a Honda EU70i 32A/7kVA GenSet and a GDD Inc. model Tx4 transmitter.		
	el Si ar	Potential electrode pots are Tinker&Raser model 3A half-cell electrodes. Readings from the pots are recorded using an EMIT SmarTEM24 receiver. Data stored in the SmarTEM24 are downloaded and transferred via secure FTP to Redbank's server at the end of every day.		
		The IP survey is operated by a qualified geophysicist employed by Core Geophysics Pty Ltd.		
		Soil Sampling/ MT Survey/VTEM Survey - explanation Not applicable		
Verification of	The verification of significant intersections by either independent or alternative	GAIP Survey		
sampling and assaying	company personnel. The use of twinned holes.	Tests to determine the most appropriate potential electrode pot spacin were undertaken. Chargeability and resistivity readings were taken wi pot spacings of 50m, 100m and 200m. The readings over the same are		
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	were independent of the pot spacing and for the first two GAIP arrays reported in this announcement, a high spatial density of potential electrode pot readings was considered appropriate to validate IP survey		
	Discuss any adjustment to assay data.	results from mid-1970s surveys and also provide an appropriate signature of chargeability and resistivity over the know disseminated copper sulphide (chalcopyrite) mineralisation forming the Bluff deposit.		
		Soil Sampling		
		The 500m x 500m sample spacing is considered appropriate for reconnaissance soil sampling. Any anomalous soil samples with elevated base metal values or lanthanides (REEs) will have infill soil samples collected at a closer sample spacing to enable any discrete soil anomaly to be resolved across a number of soil samples.		
Location of	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	All data is recorded using the MGA2020 co-ordinate system.		
data points	surveys), trenches, mine workings and other locations used in Mineral Resource	All data points are located in GDA2020 Zone 53.		

Criteria	JORC Code explanation	Commentary
	estimation. Specification of the grid system used.	Hand held GPS was used to locate the current electrodes and outside area of the 1km <sup>2</sup> array. Pot spacing along 100m lines were located using a 50m length measuring tape and wire (exactly 50m in length).
	Quality and adequacy of topographic control.	All electrode and potential pot locations are located using the MGA2020 coordinate system and are in GDA2020 Zone 53 coordinates.
		For soil sampling, the GPS within the mobile ToughBooks is used Cross-checks against 50cm resolution satellite imagery and 15cm resolution airborne photogrammetry provides a good match. Samples are considered accurate to within 1 metre.
Data spacing	Data spacing for reporting of Exploration Results.	GAIP potential electrode pots spacing 50m x 100m.
and distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore	MT stations are spaced at 1 to 2km intervals for the southern line and 200m spacing for the shorter northern line.
	Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	AEM – VTEM Max flight lines are spaced 100m in the central portio and 150m line spacing on the western and eastern ends of the surve area. All lines are flown north-south.
		Soil Samples are spaced at 500m x 500m grid spacing.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	GAIP survey: Where practical current electrodes are oriented perpendicular to the general strike of the geology to inhibit current channelling and ensure the current flux pathway from 2km spaced current electrodes completes the circuit over as large a volume of rock as possible between the current electrodes. Testing of potential electrode pots spacing where chargeability and resistivity are generally independent of this spacing provides some confidence that a good distribution of current flux pathways has been achieved.
Sample security	The measures taken to ensure sample security.	Data is transferred from the SmarTEM24 receiver at the Redban Project to the Company's server via secure FTP (file transfer protocol)
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All data is reviewed by the Principal Geophysicist of Core Geophysic Pty Ltd prior to further processing, imaging and interpretation.

# SECTION 2 7 BRECCIA PIPE DEPOSITS GLOBAL ESTIMATION AND REPORTING OF MINERAL RESOURCES-COMPILED BY REDBANK COPPER LTD

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Comment	tary			
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.					
			oank Opera ements	tions Pty	Ltd	
		No.	EL_ML	Area km²	Grant date	Expiry date
		1	MLN634	0.1618	12-Mar-73	31-Dec-28
		2	MLN635	0.1618	12-Mar-73	31-Dec-28
		3	ELR94	38.8	10-Aug-89	9-Aug-24
		4	EL31316	6.3	6-Feb-17	5-Feb-23
		5	EL32715	715.79	15-Aug-02	26-Apr-27
		6	EL24654	1576.63	5-Dec-05	4-Dec-22
		7	EL32323	788.31	10-Sep-20	9-Sep-26
		8	EL32324	690.56	10-Sep-20	9-Sep-26
		9	EL32325	778.85	10-Sep-20	9-Sep-26
		10	EL31236	788.31	In Application	
		11	EL31237	595.97	In Application	

	ntary			
12	EL32460	788.31	In Application	
13	EL32461	788.31	In Application	
14		788.31	In Application	
15		318.48	In Application	
16		690.56	30-Mar-21	29-Mar-27
17	EL32465	778.85	30-Mar-21	29-Mar-27
18		788.31	30-Mar-21	29-Mar-27
19		788.31	30-Mar-21	29-Mar-27
20		788.31 788.31	24-May-21 30-Mar-21	23-May-27 29-Mar-27
22		577.05	30-Mar-21	29-Mar-27 29-Mar-27
23		220.73	30-Mar-21	29-Mar-27
	Total granted	10016		
	Total in application	4068		
	Total	14084		

Criteria	JORC Code explanation	Commentary
		contributed to the pollution. To facilitate the Northern Territory Australia access to the Site to carry out works to enable improve environmental outcomes for the mining site and its surrounds, Redba entered into an agreement with the Northern Territory of Australia the 29 June 2016, to surrender the mining leases. The mining leas were replaced by EL31316 granted on the 6 February 2017.
Exploration Ione by other parties	Acknowledgment and appraisal of exploration by other parties.	Copper mineralisation was first discovered at Redbank in 1916. The Redbank area has been subject to an almost continuous history discovery and mining.
		The Redbank area has been systematically explored by numero companies since 1969. Prominent amongst these were Newnor NEWAIM JV (1971-1972), Triako Mines NL (1972-1983) with various a partners (Amax Iron, Aquitane Australia Minerals) and Alameda w CRA Exploration.
		Previous work included, geologic mapping, soil geochemistry, airbor and ground geophysics, extensive drilling campaigns and early no JORC resource calculations (1970s to 1980s) and rudimentary 20 JORC calculations (1989-2004). SRK Consulting completed MR (JORC 2004) between 2005-2011. A JORC2012 MRE was reported 24 June 2021
Geology	Deposit type, geological setting, and style of mineralisation.	The known Redbank mineralisation is consistent with breccia pi deposits.
		The Redbank mineralisation consists of at least 7 discrete mineralis pipe-shaped deposits, although more than 50 pipe-like intrusions ha been identified in the district.
		Copper bearing breccia pipes of the Redbank district intrude interbedded sequence of Paleo-Proterozoic aged igneous and dolomi sedimentary rocks which have undergone regional scale potase alteration or metasomatism.
		Breccia pipes are steeply inclined and near cylindrical.
		The core of these pipes contains both autochthonous and allochthono

Criteria	JORC Code explanation	Commentary
		breccias, with copper mineralisation confined to the breccia matrix.
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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres)</li> </ul>	N/A. Only GAIP geophysical results, MT transect images and VTEM inversions reported.
	<ul> <li>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> </ul>	
	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	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	N/A -no drilling results are being announced.
	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.	
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	N/A -no drilling results are being announced.
mineralisation widths and	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
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.	Numerous diagrams are presented to provide as much context as possible to the location of the GAIP surveys, MT transects and VTEN survey to known deposits.

Criteria	JORC Code explanation	Commentary		
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.	N/A -no drilling results are being announced.		
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.	Since the discovery of copper at Redbank, considerable geological information concerning the mineralisation and its host has been compiled. Similarly, numerous geochemical soil surveys and geophysical surveys have been conducted across the tenement package. This information is well documented in company annual reports.		
		Metallurgical test work on drill core samples from the Redbank Project was carried out principally in the 1970s and 1980s prior to AMALG constructing the plant from 1993 to 1995. More recently metallurgical testing was conducted by AMMTEC from 2006-10, with samples from the various deposits tested for various leach and comminution tests.		
		Additional geotechnical data was added post 2005. SRK was contracted in late 2008 to provide geotechnical studies on the available core and outcrop, to refine slope angles in optimisation work being undertaken on block models generated from the resource. Geotechnical samples were submitted to SGS Rock Mechanics Laboratory in Welshpool in 2009.		
		In 2020 a number of samples of mineralised breccia pipe were selected for physical property measurements, and in particular, chargeability determinations. The average of these chargeability determinations was 16.2 mV/V with the highest value of 80 mV/V. The copper mineralised breccia deposit provide a good chargeability response compared to background chargeability of non-mineralised samples of ~4mV/V		
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or	GAIP surveying is ongoing.		
	depth extensions or large-scale step-out drilling).	VTEM surveying is ongoing.		
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not	Soil sampling is ongoing		
	commercially sensitive.	MT surveying is complete.		
		Diagrams showing GAIP, MT sectional images, VTEM inversion images		

## JORC Code explanation

# Commentary

and soil sampling locations is provided in this announcement.

# COMPETENT PERSON'S STATEMENT

Criteria

The information that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Michael Hannington, a Competent Person, who is a Member of the Australian Institute of Geoscientists. Mr Hannington is the Executive Director at Redbank Copper Ltd and is employed as a consulting geoscientist by the Company. Mr Hannington has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, 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 Hannington consents to the inclusion of the matters based on his information in the form and context in which it appears.