

## **Re-Lodgement - Market Announcement dated 8 March 2023**

On 8 March 2023, Eastern Metals Limited (ASX: EMS) (**Company**) made a market announcement titled “*Resource Grows at Home of Bullion Copper Project*”.

The Company is required to provide full disclosure under ASX Listing Rule 5.8.1, which requires a market announcement to include in the body of its announcement a summary of all information material to understanding the reported estimates of mineral resources.

While all the information required in Listing Rule 5.8.1 was included in JORC Table 1 attached to and forming part of the 8 March 2023 ASX announcement, cross referencing to the JORC Table 1 is not sufficient to satisfy this rule. The information must be included in the body of the announcement as well.

Following is the Company’s announcement dated 8 March 2023, amended to comply with ASX Listing Rule 5.8.1 and re-lodged.

### **Authorisation for this Announcement**

This announcement has been authorised for release by the Company’s Disclosure Officers in accordance with its Disclosure and Communications Policy which is available on the Company’s website, [www.easternmetals.com.au](http://www.easternmetals.com.au).

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## Resource Grows at Home of Bullion Copper Project

***Updated MRE of 3.1 mt at an average grade of 2.9% Cu equivalent***

### Highlights

- Updated Mineral Resource Estimate (**MRE**) for the Home of Bullion copper deposit in the Northern Territory has been completed, taking into account the results of recent diamond drill holes (2022) and changes in metal prices since the earlier MRE was completed in 2014.
- The previous MRE<sup>1</sup> was for a total of 2.5 million tonnes at an average grade of 1.8% copper, 2.0% zinc, 36 grams per tonne silver, 1.2% lead, 0.14 parts per million gold and 0.02% cobalt. Expressed as a copper equivalent<sup>2</sup>, this is 2.5 million tonnes at an average grade of 2.8% Cu<sub>eq</sub>.
- The updated MRE<sup>3</sup> is a total of **3.1 million tonnes at an average grade of 1.7% copper, 2.0% zinc, 35 grams per tonne silver, 1.1% lead, 0.17 parts per million gold and 0.02% cobalt**. Expressed as a copper equivalent, this is **3.1 million tonnes at an average grade of 2.9% Cu<sub>eq</sub>**.
- The tonnage has increased by 0.6 mt or 24% and the grade by 0.1% Cu<sub>eq</sub> or 4%. **Contained copper equivalent has increased from 70,000 tonnes to 89,900 tonnes of metal** – an increase of **19,900 tonnes or 28%**.

**Eastern Metals' Chairman Bob Duffin said;** "In our August 2021 IPO prospectus, we stated there was considerable potential to increase the size of the Home of Bullion deposit with additional drilling. We have done that. The 28% increase in contained copper equivalent – from 70,000 tonnes to 89,900 tonnes – is highly significant and vindicates the strategy outlined in the prospectus. There is still further potential to add to the size of the deposit – not only at depth but also in the poorly defined shallow lode targets near the mine, and along strike towards the Mulbangas copper deposit, 15 kilometres to the west. In addition, the full potential of the copper and nickel mineralisation at Prospect D has not been tested, and the lithium potential of our tenement package, which lies in the Barrow Creek pegmatite field, has been only partly explored by us so far. We are excited about what the future holds for this high-quality Project."

<sup>1</sup> See ASX announcement by Kidman Resources Limited (ASX: KDR) "Maiden Resource at Home of Bullion", 29 July 2014, and EMS's IPO prospectus dated 18 August 2021.

<sup>2</sup> See following pages and attached JORC Table 1 on the calculation of copper equivalent grades.

<sup>3</sup> The methodology used for the updated estimate follows closely to the methodology used for the earlier estimate. See following pages for details.

## Home of Bullion

The Home of Bullion mine lies on EL 23186, in the Arunta Province of the Northern Territory, 290 kilometres northeast of Alice Springs. EL 23186 is part of a package of tenements held by Eastern Metals Limited (**Eastern Metals**, or **the Company**) that is prospective for base and precious metals, in addition to lithium. The location of the tenements and the Home of Bullion mine are shown in Figure 1.

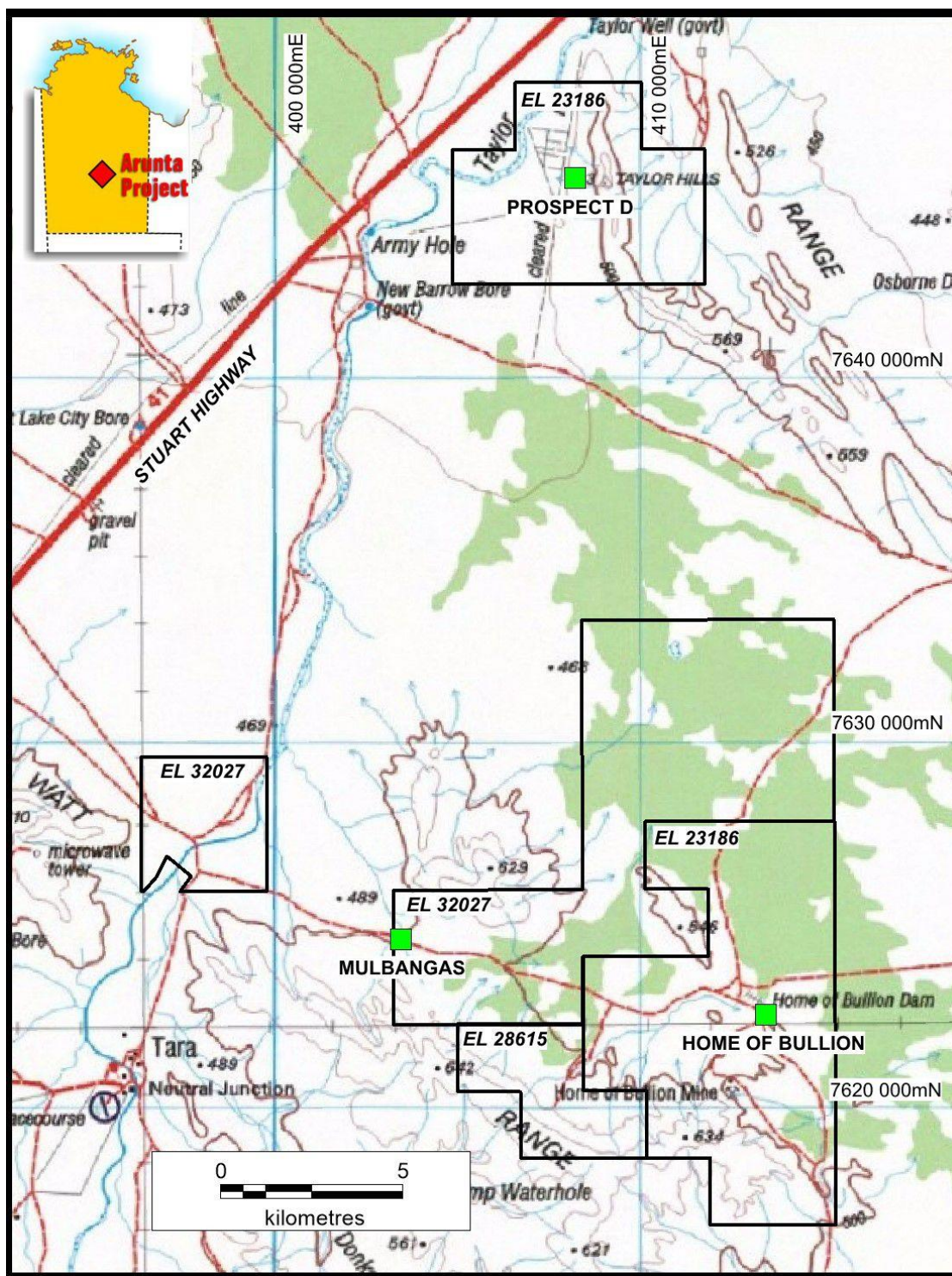


Figure 1. Location of the Home of Bullion Mine, Northern Territory



The deposit consists of two principal lodes: the Main Lode and the South Lode, with an additional low grade footwall unit (**LGFW**) directly abutting the South Lode. The deposit was mined intermittently between the 1930s and 1950s. It is generally thought to be a high-grade volcanogenic massive sulphide style deposit.

At least three shafts have been sunk to a maximum depth of 90 metres and the lodes have been traced for at least 170 metres underground, with an average width of 2.4 metres and a maximum width of 6 metres. A photo of the headframe on one of the shafts is illustrated in Figure 2.



**Figure 2.** Headframe at Home of Bullion

Historically, several companies have carried out exploration programs, including diamond drilling, at Home of Bullion. Prior to Eastern Metals' activities, the most recent drilling was carried out by Kidman Resources Limited (**ASX: KDR**). Kidman engaged SRK Consulting (Australasia) Pty Ltd (**SRK**) to complete a Mineral Resource Estimate<sup>4</sup> for the project. A summary of the July 2014 Mineral Resource Estimate is set out in Table 1.

**Table 1.** Home of Bullion Mineral Resource Estimate, July 2014

Lode	Weathering	Class	Tonnage (kt)	Density	CuEq6 (%)	Cu (%)	Zn (%)	Ag (ppm)	Pb (%)	Au (ppm)	Co (%)
All	Oxide		270	2.7	2.8	1.8	1.6	36	1.3	0.14	0.01
All	Fresh		2,200	3.8	2.8	1.8	2.0	36	1.1	0.14	0.02
<b>Total</b>			<b>2,500</b>	<b>3.7</b>	<b>2.8</b>	<b>1.8</b>	<b>2.0</b>	<b>36</b>	<b>1.2</b>	<b>0.14</b>	<b>0.02</b>
All		Indicated	470	3.6	4.5	2.8	3.4	56	1.6	0.30	0.03
All		Inferred	2,000	3.7	2.5	1.6	1.7	31	1.0	0.10	0.02
<b>Total</b>			<b>2,500</b>	<b>3.7</b>	<b>2.8</b>	<b>1.8</b>	<b>2.0</b>	<b>36</b>	<b>1.2</b>	<b>0.14</b>	<b>0.02</b>

As shown in Table 1, the July 2014 Total Mineral Resource Estimate is 2.5 million tonnes at an average grade of 1.8% copper, 2.0% zinc, 36 grams per tonne silver, 1.2% lead, 0.14 parts per million gold and 0.02% cobalt. Expressed as a copper equivalent this is 2.5 million tonnes at an average grade of 2.8% Cu equivalent.

Eastern Metals acquired Home of Bullion in 2021 and completed a four-hole diamond drilling program<sup>5</sup> in 2022. The Company then engaged SRK to update the 2014 Mineral Resource Estimate to incorporate the results of its 2022 drilling, and changes in metals prices since the 2014 estimate was prepared.

## Updated Mineral Resource Estimate – Overview

SRK has completed a Mineral Resource Estimate for Home of Bullion. This estimate is an update to the 2014 estimation completed by SRK and contains an additional four recently completed drill holes. The updated Mineral Resource Estimate is shown in Table 2, broken down by lode, weathering and classification. Subtotals for weathering state and classification are also shown.

<sup>4</sup> See ASX announcement by Kidman Resources Limited (ASX: KDR) "Maiden Resource at Home of Bullion", 29 July 2014, for details

<sup>5</sup> See the Company's ASX announcements "High Grade Copper Assays up to 9.6% Cu at Home of Bullion", 26 October 2022, and "Copper Rich Massive Sulphides Drilled at Home of Bullion", 31 August 2022

Metal price and recovery assumptions used in the modelling are shown in Table 3.

**Table 2.** Home of Bullion Mineral Resource Estimate, March 2023

Lode	Weathering	Class	Tonnage (kt)	Density	CuEq6 (%)	Cu (%)	Zn (%)	Ag (ppm)	Pb (%)	Au (ppm)	Co (%)
Main Upper	Oxide	Indicated	110	2.7	4.0	2.3	1.0	71	2.6	0.37	0.01
Main Upper	Fresh	Indicated	370	3.8	4.7	2.8	4.1	47	1.2	0.28	0.03
Main Lower	Fresh	Inferred	740	4.3	4.5	2.7	2.9	39	1.1	0.43	0.03
South	Oxide	Inferred	120	2.7	2.1	1.4	1.3	19	0.7	0.02	0.01
South	Fresh	Inferred	1,100	3.8	2.5	1.4	1.7	40	1.2	0.05	0.02
South LGFW	Oxide	Inferred	40	2.7	0.8	0.4	0.4	10	0.5	0.01	0.00
South LGFW	Fresh	Inferred	580	3.4	0.9	0.4	0.8	14	0.6	0.01	0.01
<b>Total</b>			<b>3,100</b>	<b>3.7</b>	<b>2.9</b>	<b>1.7</b>	<b>2.0</b>	<b>35</b>	<b>1.1</b>	<b>0.17</b>	<b>0.02</b>
All	Oxide		270	2.7	2.6	1.6	1.0	39	1.4	0.16	0.01
All	Fresh		2,790	3.9	2.9	1.7	2.2	35	1.1	0.17	0.02
<b>Total</b>			<b>3,100</b>	<b>3.7</b>	<b>2.9</b>	<b>1.7</b>	<b>2.0</b>	<b>35</b>	<b>1.1</b>	<b>0.17</b>	<b>0.02</b>
All		Indicated	480	3.6	4.6	2.7	3.4	53	1.5	0.3	0.03
All		Inferred	2,580	3.8	2.6	1.5	1.8	32	1.0	0.1	0.02
<b>Total</b>			<b>3,100</b>	<b>3.7</b>	<b>2.9</b>	<b>1.7</b>	<b>2.0</b>	<b>35</b>	<b>1.1</b>	<b>0.17</b>	<b>0.02</b>

**Notes:**

- 1 Tonnages and grades are rounded to two significant figures. Discrepancies in totals may exist due to rounding.
- 2 All lodes reported at a 0.5% CuEq6 cut-off. A cut-off grade of 0.5% CuEq6 is consistent with other comparable copper deposits and can be demonstrated to be break even for base processing costs at approximately US\$45/t ore. (Cut off (%) = processing cost / (recovery \* price [per % unit]).e.g. – 0.5 = 45 / (0.9 \* 100).
- 3  $CuEq6 = Cu + (Zn * 0.25) + (Ag * 83.49) + (Au * 5940) + (Pb * 0.19) + (Co * 4.29)$  – all elements in ppm. Assumed price and recoveries listed in Table 3. Metal prices and recoveries listed in Table 3 have been provided by EMS.

As set out in Table 2, the updated Total Mineral Resource Estimate is of 3.1 million tonnes at an average grade of 1.7% copper, 2.0% zinc, 35 grams per tonne silver, 1.1% lead, 0.17 parts per million gold and 0.02% cobalt. Expressed as a copper equivalent, this is 3.1 million tonnes at an average grade of 2.9% copper equivalent. When compared with the previous estimate, the tonnage has increased by 0.6 mt or 24% and the grade by 0.1% Cu<sub>eq</sub> or 4%. Contained copper equivalent has increased from 70,000 tonnes to 89,900 tonnes of metal – an increase of 19,900 tonnes or 28%.



**Table 3.** Metal Price and Recovery Assumptions

Metal	Prices	Units	Recoveries
Cu	8,900	US\$/t	0.9
Zn	3,300	US\$/t	0.6
Ag	26	US\$/troy oz	0.8
Au	1,850	US\$/troy oz	0.8
Pb	2,500	US\$/t	0.6
Co	57,300	US\$/t	0.6

The deposit consists of two lodes, the Main Lode and the South Lode. In addition, a low-grade footwall unit (LGFW) has been modelled that abuts the South Lode footwall contact.

## Summary of Estimation Details

### Sampling

2022: Sampling was completed under the supervision of EMS geologists. Diamond drilling using PQ, HQ and NOQ sizes. 1m intervals of drill core were cut in half along the long axis of the core. Half of the core was submitted for assay. Where core was incompetent due to being broken, representative samples have been collected along the axis of the core. Sample weights were recorded by the assay laboratory. No sub-sampling was completed by EMS, all sub-sampling of the prepared core was completed by the assay laboratory. The sample preparation and assaying methods used were selected by EMS and were appropriate for the style and grade of mineralisation. Analysis techniques for the 2022 assaying were crushing and drying the entire submitted sample followed by pulverising and riffle splitting to provide a sub-sample for analysis by the 35 element Aqua Regia ICP-AES method. High grade Cu, Pb and Zn samples were re-analysed following a further Aqua Regia leach.

Au analysis comprised a 30g Fire Assay with a low-level AA finish.

2014: sampling was by Diamond and RC. Diamond core is HQ, NQ2 and NQ3 size, sampled on geological intervals (0.2 m to 1.4 m), cut into half (NQ2) or half (HQ) core to give sample weights under 5 kg. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by four acid digest with an ICP/OES, ICP/MS or FA/AAS (Au, Pt, Pd) finish.

Reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised (total prep) to produce a sub sample for assaying as above.

## Geology and Lode modelling

Home of Bullion lies on the SW margin of the Late Proterozoic to Palaeozoic Georgina Basin. Block faulting during the tertiary has produced a number of small non-marine basins in central Australia. Also preserved are relics of a Tertiary silicified land surface. A thin Quaternary veneer of soil, sand and gravel covers most of the lowland area in the region. The sulphide mineralisation appears to be of VMS origin with a strong structural control on zones of high grade.

The geological interpretation follows the logic of the previous estimate completed in 2014 and is based primarily on examination of the copper grades with reference also to the zinc, silver, lead and gold grades. Lodes have been modelled in Leapfrog Geo using the vein modelling tools. The previous interpretation has been honoured. In most cases there is a sharp drop in copper grade around 0.5% Cu, that has been used to define the footwall and hanging wall boundaries used for volumetric modelling. In limited cases this modelling threshold has been lowered to preserve geological continuity.

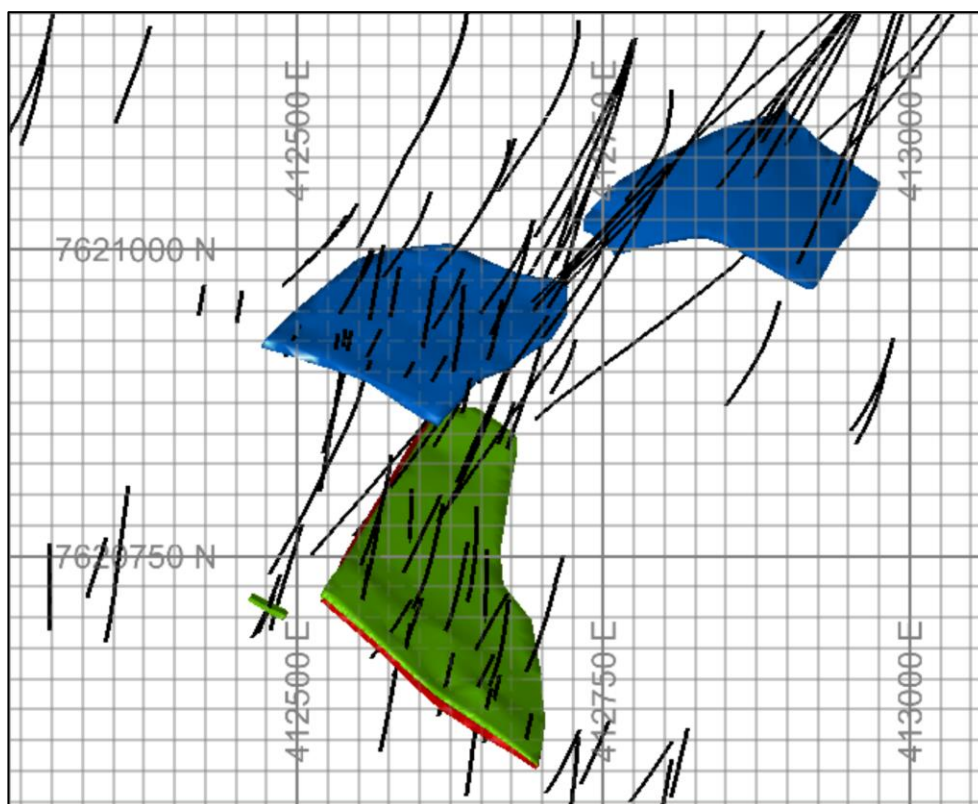
Most intercepts within the lodes form a single coherent interval. The lodes do show signs of breaking up at a depth of around 500 m below surface.

The South Lode footwall contains significant intervals of low-grade mineralisation, and this zone has also been defined volumetrically as a separate unit (South FWLG). The South low-grade hanging wall boundary is the same as the South Lode footwall boundary. The South low-grade footwall boundary was defined using copper grades >0.1% Cu in conjunction with elevated zinc, silver and lead grades.

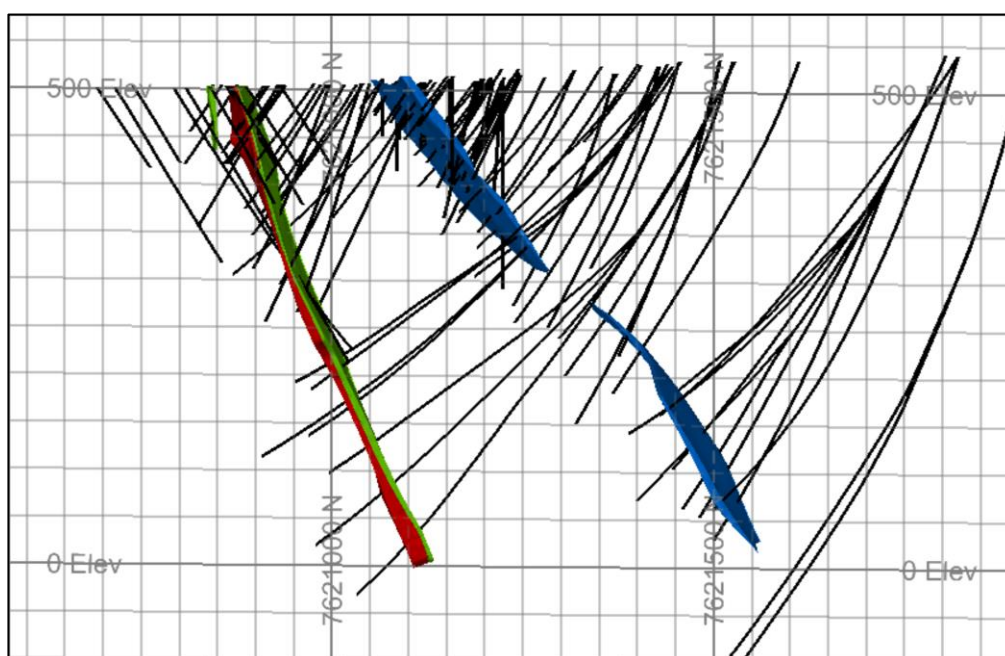
Confidence in the continuity of the geological formation is high, with all holes that intercept the modelled formation containing significant grade at varying thicknesses.

A minimum downhole thickness of 2 m was imposed on the modelling process; however, the mineralised intervals of all but a few holes exceeded this. The resultant modelled lodes are shown in Figures 3 and 4.





**Figure 3.** Plan view of the drill holes and modelled lodes. Main Lode Upper and Lower are shown in blue, South Lode in green, and LGFW in red



**Figure 4.** Oblique cross-sectional view of the drill holes and modelled lodes. Main Lode Upper and Lower are shown in blue, South Lode in green, and LGFW in red

## Drilling used

SRK has received the collar, assay and survey information for four recently completed drill holes (HDD049AA, HDD049AAA, HDD049B and HDD053). These holes were added to the 2014 database used in the previous estimation. Of the 113 holes, including wedges, in the Home of Bullion area, 63 holes were used for compositing and estimation. Ten holes have been excluded from the modelling process. Four of the original 1940s diamond holes (DDH No.1 to DDH No. 4) were not used due to collar and/or downhole survey discrepancies and the absence of assay quality assurance and quality control. All of these holes did contain significant mineralised intervals consistent with the modern diamond holes and consistent with the approximate position of the main lode.

Holes HRC034, HRC036, HRC040 and HDD041 were not used due to being drilled directly down-dip within the South Lode. Mineralisation in these drill holes is consistent with the South Lode, however, the geometry of the holes and the nature of the samples may have introduced anomalies and bias into the volume and grade estimates.

HDD038 and HDD040 were not used because, as they intercepted the lodes within 5 m of each other, the downhole position of the Lode was not consistent between them. They were both within 7 m of another hole (HRC002), that was retained. HDD042W1 was not used as it has not been sampled at the lode location. HDD042 is within 10 m of HDD042W1 and contains mineralisation.

## Estimation details

Copper, zinc, silver, gold, lead and cobalt have been estimated into blocks using ordinary kriging implemented in the Datamine RM software package. The variogram modelling was updated with the new holes and a different software package used. Three search passes have been used with the orientation of the ellipsoid taken from the variogram. Each successive pass uses a larger search ellipsoid with fewer minimum samples. A copper equivalent value ( $Cu_{eq}$ ) has been calculated from the block estimates post estimation using the details supplied above.

Co-kriging was not used, however where correlations exist between elements these are maintained by utilising the same search parameters for all elements.

## Validation

Model validation included visual inspection in 3D of wireframes and estimated block grades, comparison of sample and block statistics, examination of estimation quality parameters, and comparison of wireframe volumes with block volumes. In addition, representative sectional validation graphs or swath plots have been created to compare the estimated grades to the mean of the clustered and de-clustered input grades within block model slices (bins) on Easting, Northing and Reduced Level (RL).

## Classification

The classification of Mineral Resources for the Home of Bullion deposit has been completed in accordance with the *Australasian Code for Reporting of Mineral Resources and Ore Reserves* (the JORC Code as prepared by the Joint Ore Reserve Committee of the AusIMM, AIG and MCA and updated in December 2012 (JORC, 2012)). The major classifications and terminologies have been adhered to. All directions and recommendations have been followed, in keeping with the intent of the code. The categories of Mineral Resource as outlined by the JORC Code (2012) are as follows:

- Measured – tonnage, densities, shape, physical characteristics, grade, and mineral content can be estimated with a high level of confidence.
- Indicated – tonnage, densities, shape, physical characteristics, grade, and mineral content can be estimated with a reasonable level of confidence.
- Inferred – tonnage, grade, and mineral content can be estimated with a reduced level of confidence.

The resource classification has been applied to the Mineral Resource based on the confidence in the input data, the data spacing, estimation quality and the grade and geological continuity. The Upper Main Oxide and Fresh have been classified as Indicated due to the tighter drill spacing (between 20 and 40m on average) and the existence of drilling that minimises extrapolation along the strike and depth extents. The remainder of the Mineral Resource has been classified as Inferred with a drill spacing between 40-80m, as shown in Figure 5. The Indicated and Inferred portions of the model have an average slope of regression of 0.58 and 0.31 respectively.

## Reporting

A cut-off grade of 0.5% CuEq6 has been chosen as it is consistent with other comparable copper deposits and can be demonstrated to be break even for base processing costs at approximately US\$45/t ore. (Cut off (%) = processing cost / (recovery \* price [per % unit]).e.g. – 0.5 = 45 / (0.9 \* 100).

$\text{CuEq6} = \text{Cu} + (\text{Zn} \times 0.25) + (\text{Ag} \times 83.49) + (\text{Au} \times 5940) + (\text{Pb} \times 0.19) + (\text{Co} \times 4.29)$  – all elements in ppm.

The equivalence factors for metals other than copper are derived from the following metal prices and assumed recoveries as shown in Table 3. Recoveries used for Cueq calculations are assumed from SRK's experience with similar deposits. Preliminary metallurgical testing (2013) has been completed by ALS on two small composites each from two holes. This showed:

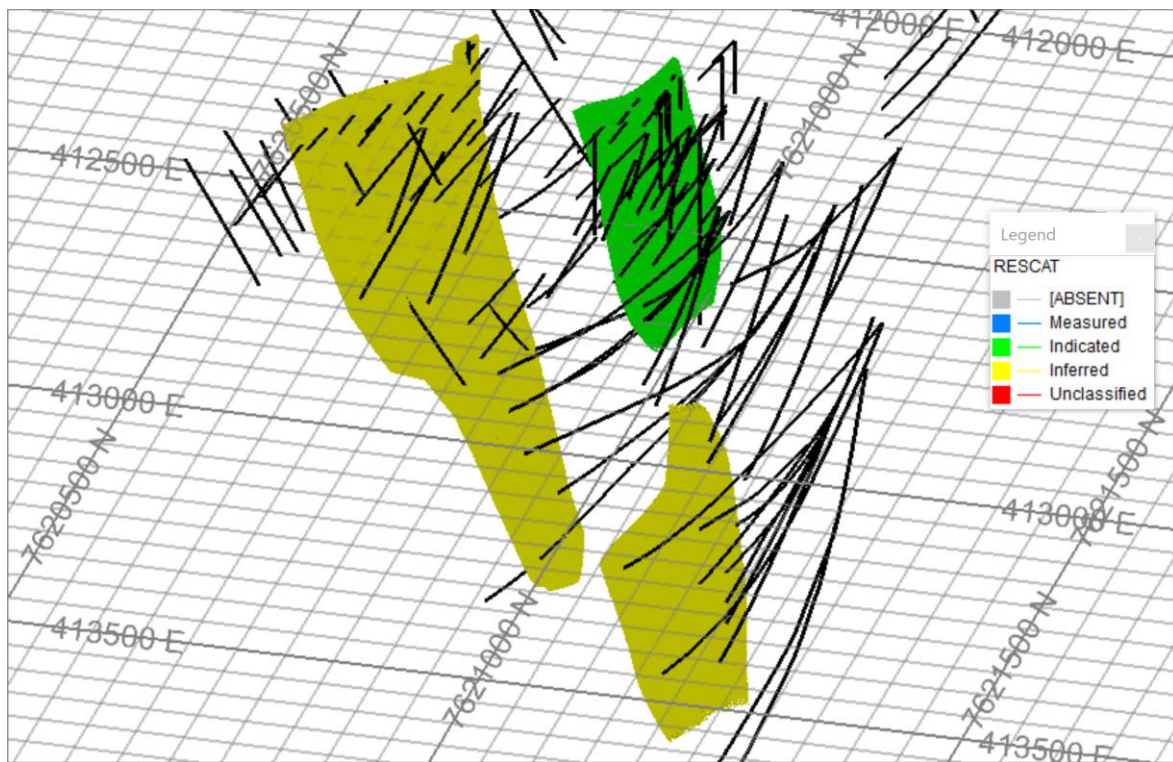
1. Good copper flotation yielding good grades and high recovery for both lodes.
2. Further testwork required to improve zinc and lead recoveries.
3. Significant differences in mineralogy between the Main and South lodes with the Main Lode containing abundant magnetite and only minor pyrite while the South Lode contains only minor magnetite but significant pyrite.

The model is not designed for detailed mine planning purposes but for global grade and tonnage scoping level studies. It is assumed that open cut methods may be appropriate for the portion of the deposit within 100 m of surface and that underground mining methods could be used for the remainder. Scoping level pit optimisation trials completed in 2014 were done on preliminary models using current cost and price parameters and these indicated operational cash flow positive pits (exclusive of capital costs) could be achieved within the top 100 m of the deposit. The results of the 2014 pit optimisations are considered appropriate for application to this Mineral Resource.

### **Additional details**

For more details of the resource estimation see the entries in JORC Code, 2012 edition Table 1, Section 3 in attached to this announcement.





**Figure 5.** Home of Bullion Mineral Resource classification

## Authorisation for this Announcement

This announcement has been authorised for release by the Company's Disclosure Officers in accordance with its Disclosure and Communications Policy which is available on the Company's website, [www.easternmetals.com.au](http://www.easternmetals.com.au).

## Previously Reported Information

The information in this announcement that references previously reported Exploration Results or Mineral Resources for the Home of Bullion mine is extracted from the ASX announcement by Kidman Resources Limited dated 29 July 2014 "Maiden Resource at Home of Bullion", the Company's Prospectus released on 18 August 2021, and the Company's ASX announcements "High Grade Copper Assays up to 9.6% Cu at Home of Bullion", 26 October 2022, and "Copper Rich Massive Sulphides Drilled at Home of Bullion", 31 August 2022. The Prospectus and the Company's ASX announcements are available to view on the Company's website ([www.easternmetals.com.au](http://www.easternmetals.com.au)) and on the ASX website ([www.asx.com.au](http://www.asx.com.au)). Kidman's ASX announcement of 29 July 2014 is also available to view on the ASX website. Other than the information in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus or the previous announcements and that all material assumptions and technical parameters underpinning the Exploration Results and Resource Estimates continue to apply and have not materially changed.

## Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned activities, including mining and exploration programs, and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. In addition, summaries of Exploration Results and estimates of Mineral Resources and Ore Reserves could also be forward looking statements. Although Eastern Metals believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

## Competent Persons Statements

The Exploration Results and Sections 1 and 2 of the attached JORC Table 1 in this announcement are based on information compiled by Mr Gary Jones who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Jones is a full-time employee of Geonz Associates, Consultant Geologists, a former director of Eastern Metals, and Principal Consultant – Geology to the Company. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Jones consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the Home of Bullion Mineral Resource Estimate and Section 3 of the attached JORC Table 1 are based on information compiled by Mr Danny Kentwell, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Kentwell is a full-time employee of SRK Consulting (Australasia) Pty Ltd. Mr Kentwell has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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 Kentwell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data: Home of Bullion Project

### Diamond Drilling and Resource Estimation

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	Diamond drill core provides a high-quality sample that is logged for lithological, structural, geotechnical, analytical and other attributes.  Sampling by previous companies was by both Reverse Circulation (RC) and diamond drilling techniques. Details of this work were contained in the Kidman Resources ASX release dated 29 July 2014. The four holes drilled by EMS were added to the project data base and used in the current resource estimation. Details pertaining to the drill holes used for the resource estimation are contained Kidman's ASX announcement of 29 July 2014 and EMS's ASX announcements of 31 August 2022 and 26 July 2022, and in the main body of this release.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Sampling of the mineralised core for assaying was carried out using a diamond saw as per industry best practice.
	<i>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.</i>	The tenor of the mineralisation was determined by laboratory analysis. The core from the holes was geologically logged in detail and visual estimates made of the quantities of the copper, lead and zinc sulphides.
Drilling techniques	<i>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).</i>	The Home of Bullion project holes were drilled with standard diamond drilling techniques. Diamond coring commenced from surface in PQ size core (diameter: 80mm) to 30m, proceeded in HQ (diameter: 63.5mm) to fresh rock and then NQ core (diameter: 47.6mm) through the lode sections to end of hole (EOH). Eastern Metals used a reputable drilling contractor; DDH1 Drilling with a truck mounted rig.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Diamond drill core recoveries were recorded during drilling and reconciled during the core processing and geological logging. Core was generally competent with some zones of broken core. There was no significant drill core lost during drilling.



Criteria	JORC Code explanation	Commentary
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Diamond drill core is measured and marked after each drill run using wooden blocks denoting the depth. Rig procedures are adjusted as necessary including drilling rate, run length, bit and fluid pressure to maintain sample integrity and to keep the profile of the hole as near as possible to the planned dip and azimuth.
	<i>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.</i>	Laboratory analyses have been received and core loss was minimal. Care was taken to avoid bias when sawing the mineralised zones.
Logging	<i>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.</i>	Systematic geological logging has been undertaken. Data collected includes: <ul style="list-style-type: none"> <li>• Nature and extent of lithologies and alteration</li> <li>• Intervals, amount and mode of occurrence of metallic minerals such as pyrite, chalcopyrite, galena and sphalerite.</li> <li>• Location, extent and nature of structures such as bedding, cleavage, veins, faults etc</li> <li>• Geotechnical logging has yet to be completed.</li> </ul>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography</i>	Depending on the lithology being logged, drill core is logged as both qualitative (discretionary) and quantitative (volume percent sulphide minerals, quartz veining). Core was photographed wet and dry with one tray per image.
	<i>The total length and percentage of the relevant intersections logged.</i>	The entire hole was geologically logged from top to bottom (100%). Intervals with no recovery were noted as such but were generally minor.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken</i>	Core was dispatched to a core processing facility where it was cut using an automatic Almonte Core saw. The 1m intervals of half-core samples were submitted for assay analysis. Where core was incompetent due to being broken rock, representative samples were collected along the axis of the core.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable – core drilling.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Drill core was cut in half along the length and the total half core was submitted as the sample. This procedure meets industry standards where 50% of the total sample taken from the diamond core is submitted. All intervals were submitted for assaying. Sample weights were recorded by the assay laboratory.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	No sub-sampling was completed by Eastern Metals. All sub-sampling of the prepared core was completed by the assay laboratory.

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	The retention of the remaining half-core is an important control as it allows assay values to be viewed against the actual geology; and, where required, further samples may be submitted for quality assurance or petrography. Half core or duplicated samples has been retained by Eastern Metals.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are appropriate to correctly represent the mineralisation based on style of mineralisation
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The sample preparation and assaying methods used were selected by Eastern Metals and were appropriate for the style and grade of mineralisation. The techniques used for the 2022 assaying were crushing and drying the entire submitted sample followed by pulverising and riffle splitting to provide a sub-sample for analysis by the 35 element Aqua Regia ICP-AES method. High grade Cu, Pb and Zn samples were re-analysed following a further Aqua Regia leach. Au analysis comprised a 30g Fire Assay with a low level AA finish.
	<i>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.</i>	Magnetic susceptibility measurements were performed using a hand-held susceptibility meter at three repetitions within one metre intervals on all core drilled.
	<i>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.</i>	Appropriate standards and blanks were inserted into the sample stream. Duplicate samples are scheduled to be forwarded to an independent laboratory for check assaying.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The presence of massive sulphides has been confirmed by visual inspection by the senior project geologist and the Principal Consulting Geologist via close-up core photographs.
	<i>The use of twinned holes.</i>	Nil.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All data and logging was recorded directly into field laptops. Visual and numerical validation was completed by the on-site geologists.
	<i>Discuss any adjustment to assay data.</i>	No adjustments to the assay data is required.
Location of data points	<i>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.</i>	A handheld Garmin GPSmap unit was used to site the hole collar positions with an averaged waypoint measurement accuracy of 1m. Completed hole collar positions have been accurately measured by a registered land surveyor. Alignment of the drill rig was carried out using offset fore and back site pegs and compass and confirmed with the down-hole survey tool. Down-hole surveys for dip and azimuth were carried out using an Axis gyroscopic survey instrument at down-hole intervals of 18m.
	<i>Specification of the grid system used</i>	Grid system used for the Home of Bullion project is Geodetic Datum of Australia (GDA)94 Zone 53S.

Criteria	JORC Code explanation	Commentary
	<i>Quality and adequacy of topographic control.</i>	Topographic control with hand-held GPS and government 1:50,000 scale topographic mapping is adequate for the project. DTM data has been obtained from previous exploration company surveys.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes in this program were designed to test for extensions to the zones of mineralisation outside of the previously reported (Kidman Resources ASX release dated 29 July 2014) resource estimate. Both holes HDD049AA and HDD049B were spaced approximately 206m and 98m respectively from the nearest previous drill hole and intersected mineralisation approximately 62m and 40m from the South Eastern margin of the Kidman resource outline for the Lower Main Lode. HDD053 was spaced approximately 130m from the nearest previous drillhole and approximately 55m from the South Eastern margin of the Kidman resource outline for the Southern Lode. Core blocks recording the depth are inserted at the end of each core run.
	<i>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.</i>	The spacing of drill holes HDD049AA and 049B was sufficient to enable the revised estimation of the mineral resource for this section of the Home of Bullion mineral deposit.
	<i>Whether sample compositing has been applied</i>	No sample compositing has been applied.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The inclined drill holes were designed to intersect the known lithological and interpreted mineralisation as near as possible to a perpendicular orientation. The orientation of the drill holes achieved relatively unbiased sampling.
	<i>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.</i>	The holes were designed to intercept perpendicular to geological units and mineralisation to best obtain near true widths.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Mineralised sections of core were held at an off-site location and when being processed were stored in secure storage. Unmineralised sections of core remain at the Home of Bullion core yard located at the Neutral Junction station where historic core is also stored. Core trays containing the mineralised sections of core were strapped and wrapped in plastic securely to prevent loss, damage or theft and transported by secure private road transport directly to Mining Industry and Mineral Exploration Field Services in Parkes for core cutting and assay sample preparation. 'MIME' Field Services specialise in assay cutting and sampling procedures as part of their services to the mineral exploration industry. Assay samples were delivered directly to the analytical laboratory by the EMS Senior Field Geologist via utility vehicle.

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or review are warranted at this stage.



## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	EL23816 Barrow Creek, which hosts the Home of Bullion deposit, is located 290 km north of Alice Springs in the Northern Territory. The tenement is held by Eastern Metals Limited. Ground activity and security of tenure are governed by the Northern Territory government. An exclusion zone exists to the southwest of the Home of Bullion mine. The tenement has recently been renewed by the NT government and is current to 14 April 2024.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>• Ward (1925): The earliest available record on the Home of Bullion prospect is by the South Australian Government Geologist (Ward, 1925) who examined the workings in July and September 1925.</li> <li>• Madigan (1934): The earliest detailed records of the mine geology, exploratory underground mine development, ore reserves and mineral potential of the Home of Bullion copper deposits are given by Madigan (1934). Commissioned by Central Australian Silver, Lead &amp; Copper Mining Company NL, he undertook a property examination on 21-24 August 1934.</li> <li>• Blanchard (1936): Blanchard (1936) inspected the property for the Mt Isa Mines Limited (owned by American Smelting and Refining Company). He provides interesting details on transportation, water supply and costs at that time, as well as valuable information on the general geology, exploratory underground development and mineral potential.</li> <li>• Hossfeld (1937): The next currently available record of the general geology, aerial photography, mine geology, underground workings, mineral potential, water supply and ore treatment of the Home of Bullion copper deposits is given by Hossfeld (1937), as part of the investigations carried out by the Geophysical Survey of Northern Australia.</li> <li>• Sullivan (1950): After a gap of 13 years the next available reports on the Home of Bullion mine were those by Sullivan, Brittingham and Thomson in 1950. Sullivan briefly summarised the main features of the general geology, mine geology, mine</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>workings and mineral potential of the Home of Bullion copper deposits.</p> <ul style="list-style-type: none"> <li>• Thomson (1950): Thomson (1950) undertook an eight day field examination, magnetometer survey and sampling assessment for Zinc Corporation Limited in May 1950. He summarised the main features of the general geology, mine geology, workings and production, mining operation and mineral potential of the Home of Bullion copper deposits.</li> <li>• Brittingham (1950): In a preliminary metallurgical report on flotation of the Home of Bullion mineralisation, Brittingham (1950) provides some interesting facts on previous exploratory underground mine development as well as on two completed diamond drill holes.</li> <li>• Bell (1953, 1954): The Bureau of Mineral Resources' Resident Geologist at Alice Springs (Bell, 1953) undertook an assessment of Home of Bullion mine.</li> <li>• Australian Geophysical (1965b): In 1965 a private company (Australian Geophysical Pty Ltd.) undertook geophysical surveys (mainly induced polarisation) and soil sampling by shallow drilling over the Home of Bullion mine.</li> <li>• Drown (1992): Aberfoyle Resources Limited examined the abandoned Home of Bullion in 1992 to assess the regional potential of EL 6910 which surrounded the MLC's covering the old mine workings.</li> <li>• Goldstake Exploration Inc. (2001-2012): Goldstake undertook an initial diamond drilling program in June-August 2006. It comprised 15 drill holes totaling 1,406m on both the northern and southern groups of lodes. Seven of the drill holes failed to intersect the targeted lodes.</li> <li>• Kidman Resources (2012-2019): Kidman Resources drilled a total of 116 holes at the Home of Bullion site on both the Main and Southern Lodes. SRK Consulting completed a Resource Estimate on Home of Bullion in 2014 of 2.5MT @ 1.8% Cu, 2% Zn, 36 g/t Ag, 1.2 % Pb, 0.14 g/t Au at 0.5% CuEq cutoff.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Details of this resource estimate are contained in the Kidman Resources ASX release dated 29 July 2014</p> <ul style="list-style-type: none"> <li>Wesfarmers (2019-2020): Wesfarmers did not complete any exploration activity during their ownership of the tenement associated with Home of Bullion.</li> </ul>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>The Barrow Creek Project lies on the SW margin of the Late Proterozoic to Palaeozoic Georgina Basin. Block faulting during the Tertiary has produced a number of small non-marine basins in central Australia. Also preserved are relics of a Tertiary silicified land surface. A thin Quaternary veneer of soil, sand and gravel covers most of the lowland area in the region. The sulphide mineralisation appears to be VMS in origin with a large structural control on zones of higher grade.</li> </ul>
Drill hole Information	<p><i>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:</i></p> <ul style="list-style-type: none"> <li><i>• easting and northing of the drill hole collar</i></li> <li><i>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>• dip and azimuth of the hole</i></li> <li><i>• down hole length and interception depth</i></li> <li><i>• hole length.</i></li> </ul>	This information was included in the EMS ASX Release dated 26 October 2022.
	<i>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.</i>	Not applicable as the information has been disclosed previously. See comment above.
Data aggregation methods	<p><i>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.</i></p>	Length weighting of individual samples was used to obtain the mean grades for Hole HDD049B. Only one individual sample result was reported for Hole HDD049AA. No cutting of high grades was done and all mineralised core was sampled. Details of these results are contained in the EMS ASX release dated 26 <sup>th</sup> October 2022.
	<i>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</i>	See above paragraph.

Criteria	JORC Code explanation	Commentary
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents were used in reporting of the results for Holes HDD049AA and HDD049B. Metal equivalents as described in the body of the announcement were used by SRK as part of the resource estimate.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Drill hole azimuths for the EMS holes were between 193 and 201 True North MGA 94 Z53 to the southwest. The targeted mineral zone is steeply dipping and plunges to the northeast. The holes were designed to intersect perpendicular to the mineralisation to best gain near true widths.
	<i>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').</i>	Intersections of sulphide mineralisation previously reported by EMS are down hole lengths. Based on the known geology and orientation of the drill hole true widths are estimated at 80% of these down hole lengths.
<i>Diagrams</i>	<i>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.</i>	See figures 1, 3, 4, and 5 in the body of the report.
<i>Other substantive exploration data</i>	<i>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.</i>	Other exploration data are discussed in the body of the report.
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further step-out inclined diamond holes are intended for this project.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Detailed planning of future drilling will be carried out incorporating the results of the EMS drilling program and the SRK resource estimate reported here.



### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Four new drill holes (HDD049AA, HDD049AAA, HDD049B and HDD053) have been appended to the 2014 database used in the previous estimation. These holes have been checked for missing intervals, overlapping intervals, duplicated intervals, out of range assays, and collar position.</li> <li>The 2014 database was managed by an external database management company that regularly updated and checked the data integrity. SRK checked for but found no database integrity errors upon import of the data into its software (missing intervals, overlapping intervals, duplicated intervals, out of range assays, etc.).</li> <li>Limited spot checks were carried out on 2014 data comparing original laboratory assay reports with the database and no errors were found.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>SRK has not completed a site visit. There is sufficient evidence from current publicly released exploration results, current core photography, historical reports, and discussions with staff from current and previous owners who have been on site for SRK to be satisfied with the physical existence of the deposit. A site visit would not have added any relevant knowledge that could not have been gained from review of existing data and reports and from discussion with staff.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The geological interpretation is based primarily on examination of the copper grades with reference also to the zinc, silver, lead and gold grades. Lithology logging was compared to grades and is also used where the choice of exact lode boundary position is not clear from the grades.</li> <li>In most cases there is a sharp drop in copper grade around 0.5% Cu, that has been used to define the footwall and hanging wall boundaries used for volumetric modelling. Limited exception has been made to retain geological continuity.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The deposit comprises two primary, discrete, steeply-dipping lodes named the Main Lode and the South Lode.</li> <li>Most intercepts within the lodes form a single coherent interval. The lodes do show signs of breaking up at a depth of around 500 m below surface.</li> <li>A clear discontinuity in the Main Lode grade and geometry occurs at around 200 m from surface. Main Lode is split into two lodes, named Upper and Lower.</li> <li>The South Lode footwall contains significant intervals of low-grade mineralisation and this zone has also been defined volumetrically as a separate unit (South FWLG). The South low-grade hanging wall being the same as the South Lode footwall. The South low-grade footwall was defined using copper grades &gt;0.1% Cu in conjunction with elevated zinc, silver and lead grades.</li> <li>Confidence in the continuity of the geological formation is high, with all holes intercepting the modelled formation containing significant grade at varying thicknesses.</li> <li>A minimum downhole thickness of 2 m was imposed on the modelling process, however, the mineralised intervals of all but a few holes exceeded this.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The Main Lode outcrops at surface and is approximately 160 m in length at surface along strike. Approximate average true thickness is 4 m. It is formed by two sections, upper and lower with the upper terminating approximately 200 m below surface. There is around a 20 m vertical gap before the Main lower unit starts and the Main lower unit terminates at approximately 500 m below surface.</li> <li>The South Lode outcrops at surface and has a surface strike length of around 220 m. Approximate average true thickness is 3 m. The strike length reduces with depth and the lode terminates at approximately 500 m below surface.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was</li> </ul>	<ul style="list-style-type: none"> <li>The estimation was calculated using ordinary kriging into three domains, Main, South and South FWLG.</li> <li>Copper, zinc, silver, lead, gold and cobalt were estimated.</li> <li>Oxide and Fresh material was estimated in the same pass utilising a soft boundary between the weathering state</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>chosen, include a description of computer software and parameters used.</p> <ul style="list-style-type: none"> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<p>volumes so that block grades were allowed to be influenced by sample grades in both weathered and fresh material.</p> <ul style="list-style-type: none"> <li>• Variography was completed on the copper only as this is the major economic element. Trial modelling of zinc and silver experimental variograms showed similar ranges and structure to copper. A Gaussian transform was used to enable variogram modelling, together with a subsequent back transform of the variogram model. All elements were then estimated with the same variogram model. The variogram model showed a relative nugget of 5% with an initial structure at around 35 m and a final range of around 80 m.</li> <li>• The two lodes have slightly different geochemistry, with a notable absence of gold in the South Lode.</li> <li>• Co-kriging was not used, however where correlations exist between elements these are maintained by utilising the same search parameters for all elements.</li> <li>• In the Main Lode copper is strongly correlated with silver, gold and cobalt, while zinc and lead are still positively correlated with copper but to a lesser extent.</li> <li>• In the South Lode, copper is strongly correlated with silver and lead and to a lesser extent with zinc and cobalt.</li> <li>• Block size was 20 m x 5 m x 20 m (X, Y, Z) using sub-celling down to 0.5 m to generate an accurate volume.</li> <li>• No top-cutting or grade capping has been used as there were no significant outliers for any of the elements estimated.</li> <li>• Model validation included visual inspection in 3D of wireframes and estimated block grades, comparison of sample and block statistics, examination of estimation quality parameters, and comparison of wireframe volumes with block volumes. In addition, representative sectional validation graphs or swath plots have been created to compare the estimated grades to the mean of the clustered and declustered input grades within block model slices (bins) on Easting, Northing and Reduced Level (RL).</li> </ul>

Criteria	JORC Code explanation	Commentary																												
Moisture	<ul style="list-style-type: none"><li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li></ul>	<ul style="list-style-type: none"><li>Dry tonnages are estimated.</li></ul>																												
Cut-off parameters	<ul style="list-style-type: none"><li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li></ul>	<div><ul style="list-style-type: none"><li>All lodes have been reported at 0.5% Cu equivalent (CuEq6)</li><li>CuEq6, as well as the six estimated elements, are reported. CuEq6 has been calculated from the block estimates on a block by block basis.</li><li>Copper equivalent is calculated as follows: CuEq6=Cu+(Zn*0.25)+(Ag*83.49)+(Au*5904)+(Pb*0.19)+(Co*4.29) (all elements in ppm)</li><li>This calculation is based on the following assumed metal prices and recoveries which have been provided by EMS</li></ul><table><tr><th>Metal</th><th>Prices</th><th>Units</th><th>Recoveries</th></tr><tr><td>Cu</td><td>8,900</td><td>US\$/t</td><td>0.9</td></tr><tr><td>Zn</td><td>3,300</td><td>US\$/t</td><td>0.6</td></tr><tr><td>Ag</td><td>26</td><td>US\$/troy oz</td><td>0.8</td></tr><tr><td>Au</td><td>1,850</td><td>US\$/troy oz</td><td>0.8</td></tr><tr><td>Pb</td><td>2,500</td><td>US\$/t</td><td>0.6</td></tr><tr><td>Co</td><td>57,300</td><td>US\$/t</td><td>0.6</td></tr></table><ul style="list-style-type: none"><li>A cut-off grade of 0.5% CuEq6 is consistent with other comparable copper deposits and can be demonstrated to be break even for base processing costs at approximately US\$45/t ore. (Cut off (%) = processing cost / (recovery * price [per % unit]).e.g. – 0.5 = 45 / (0.9 * 100)</li></ul></div>	Metal	Prices	Units	Recoveries	Cu	8,900	US\$/t	0.9	Zn	3,300	US\$/t	0.6	Ag	26	US\$/troy oz	0.8	Au	1,850	US\$/troy oz	0.8	Pb	2,500	US\$/t	0.6	Co	57,300	US\$/t	0.6
Metal	Prices	Units	Recoveries																											
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Co	57,300	US\$/t	0.6																											
Mining factors or assumptions	<ul style="list-style-type: none"><li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li></ul>	<ul style="list-style-type: none"><li>The model is not designed for detailed mine planning purposes but for global grade and tonnage scoping level studies.</li><li>It is assumed that open cut methods may be appropriate for the portion of the deposit within 100 m of surface and that underground mining methods could be used for the remainder.</li></ul>																												



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>A minimum downhole thickness of 2 m was imposed on the modelling process; however, the mineralised interval of all but a few holes exceeded this.</li> <li>Scoping level pit optimisation trials completed in 2014 were done on preliminary models using current cost and price parameters and these indicated operational cash flow positive pits (exclusive of capital costs) could be achieved within the top 100 m of the deposit. The results of the 2014 pit optimisations are considered appropriate for application to this Mineral Resource.</li> <li>Historical reports indicate small scale oxide mining during the 1940s where ore was hand selected. Shafts and drives were mined but exact tonnages are not known. No significant voids were encountered during the modern drilling campaigns. Any tonnages removed by past mining activities are assumed to be insignificant for the purpose of this Mineral Resource.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Recoveries used for <math>Cu_{eq}</math> calculations are assumed from SRK's experience with similar deposits.</li> <li>Preliminary metallurgical testing (2013) has been completed by ALS on two small composites each from two holes. This showed: <ol style="list-style-type: none"> <li>Good copper flotation yielding good grades and high recovery for both lodes.</li> <li>Further testwork required to improve zinc and lead recoveries.</li> <li>Significant differences in mineralogy between the Main and South lodes with the Main Lode containing abundant magnetite and only minor pyrite while the South Lode contains only minor magnetite but significant pyrite.</li> </ol> </li> </ul>

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<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No environmental studies on mining aspects have been completed to date.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density measurements were made on specifically targeted mineralised intercepts. These are considered to be representative of the majority of the modelled mineralisation.</li> <li>The weight in water/weight in air method was used, utilising a wire cradle to contain all fragments of measured intervals from half NQ core.</li> <li>A total of 247 individual measurements were made on intervals of an average 0.24 m length, totaling 59.4 m of resource material.</li> <li>Average dry bulk densities for six different density domains were applied with values ranging between 2.67 g/cm<sup>3</sup> in the oxide to 4.23 g/cm<sup>3</sup> for the lower main density domain.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Classification</i>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>No issues were identified with the recovery, drilling or sampling procedures or with the assay quality assurance and quality control checks (duplicates repeats, blanks etc.).</li> <li>Bulk density determinations are reasonably comprehensive and well spread across the lodes.</li> <li>Drill spacing of 20–40 m in the Main upper domain is generally less than half that of the variogram range.</li> <li>Drill spacing in the upper portion of the South is around 40–80 m with larger down-dip spacing compared to the Main.</li> <li>Drill spacing in the lower Main and the lower portion of the South is limited to one or two holes along strike.</li> <li>Continuity of the thickness of the South FWLG is poor.</li> <li>Both Main Lode and South Lode mineralisation show a tendency to disseminate and drop in grade at depths beyond 400 m from surface.</li> <li>The majority of the deposit has been classified as Inferred due to the lack of confidence in the grade and geological continuity and extrapolation at depth.</li> <li>The Upper Main Oxide and Fresh have been classified as Indicated due to the tighter drill spacing and the existence of drilling that minimises extrapolation along the strike and depth extents.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate has been internally peer reviewed by SRK and compared to the 2014 estimation.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>Where appropriate, a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and</li> </ul>	<ul style="list-style-type: none"> <li>The model is not designed for detailed mine planning purposes but for global grade and tonnage scoping level studies.</li> <li>Estimation quality parameters, such as the kriging slope of regression, are used to assess the relative accuracy of local block estimates. The closer the kriging slope of regression is to 1 the better the local block estimate. However, this does not mean that the global grade and tonnage curves are correct as local accuracy and global block distribution accuracy are conflicting aspirations.</li> </ul>

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	<p>economic evaluation. Documentation should include assumptions made and the procedures used.</p> <ul style="list-style-type: none"> <li>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>• The average kriging slope of regression for the Indicated material is 0.58. The average for the Inferred material is 0.31</li> <li>• There has been no modern mining of the deposit.</li> </ul>