

# ASX:ALM

## ANNOUNCEMENT

### EXCELLENT METALLURGICAL CHARACTERISTICS CONFIRMED AT BRIGGS COPPER DEPOSIT, QLD

#### Highlights:

- Test work results have confirmed potential for excellent metallurgical recoveries from copper mineralisation within the mineral resource at Briggs in Central Queensland (Inferred Mineral Resource 143Mt @ 0.29% Cu).
- Metallurgical test work on three representative types of mineralisation delivered broadly similar flotation results across all three with copper recoveries from 92% to 95% and concentrate grades of 17-20% copper:

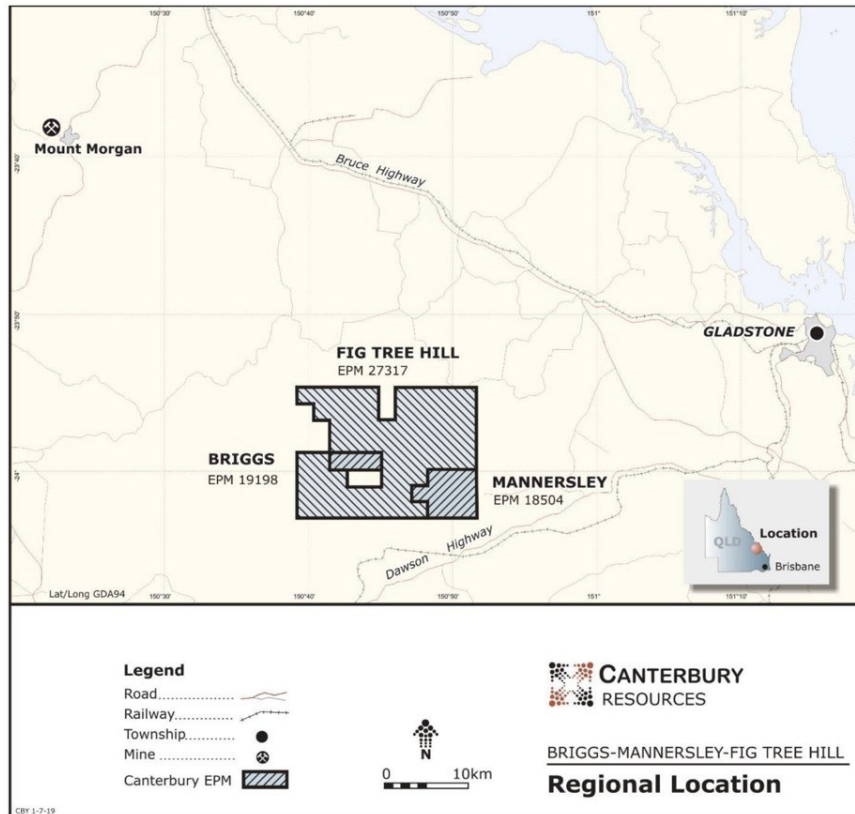
	MET-1 (Granodiorite, 0.2% Cu)		MET-2 (Quartz-rich, 0.9% Cu)		MET-3 (Min Sed 0.4% Cu)	
	Grade Cu %	Recovery %	Grade Cu %	Recovery %	Grade Cu %	Recovery %
Cleaner Concentrate	17.6	95.1	19.7	91.9	17.4	93.5
Rougher Concentrate	9.7	95.7	14.0	97.9	13.3	95.4

- These results are scoping level in that conditions are not optimized. Consequently, there is upside potential to improve concentrate grades through subsequent optimization studies, including evaluation of grind size, selective collector use and pyrite suppression.
- Analysis of concentrates indicates no trace metals of concern, with particularly low levels of arsenic, cadmium, and uranium.
- Alma has an exclusive option to enter into an Earn-in JV Agreement over the project and can earn up to a 70% interest.
- A major drilling campaign to increase the footprint of the mineralised envelope and provide additional material for further metallurgical studies is being planned.
- Drilling is expected to commence later this quarter.

## Introduction

**Alma Metals Limited** (ASX:ALM, “the Company” or “Alma”) is pleased to announce excellent scoping level metallurgical test work results from coarse crush residue of drill core used in the mineral resource estimate at the Briggs copper deposit within the Briggs, Mannersley and Fig Tree Hill project area in Queensland (“Project”, see Figure 1 for location).

Alma has an exclusive Option to enter an Earn-In Joint Venture with Canterbury Resources Limited (“Canterbury”), through which Alma can ultimately reach 70% ownership of the project (refer ASX release dated 18 August 2021).



**Figure 1** Location map showing proximity of the Briggs, Mannersley and Fig Tree Hill copper project area to major infrastructure including ports, rail and power.

## Initial Metallurgical Test Work Results

Composite samples, representing the three dominant mineralisation types, were created from coarse crush residue from drill core from BD019-003 used for the mineral resource estimate (drill hole location shown on Figure 2, and see Alma’s ASX release dated 18 August 2021 and Canterbury’s ASX release dated 10 June 2020). The samples being:

MET-1 = 20.4kg Mineralised granodiorite calculated head grade of 0.2% Cu

MET-2 = 18.2kg Mineralised quartz rich zone within the granodiorite with calculated head grade of 0.9% Cu

MET-3 = 18.2kg Mineralised volcanic sediments adjacent to the granodiorite with calculated head grade of 0.4% Cu

Benchtop flotation tests to evaluate copper recoveries were undertaken by ALS Metallurgy in Perth using the following parameters:

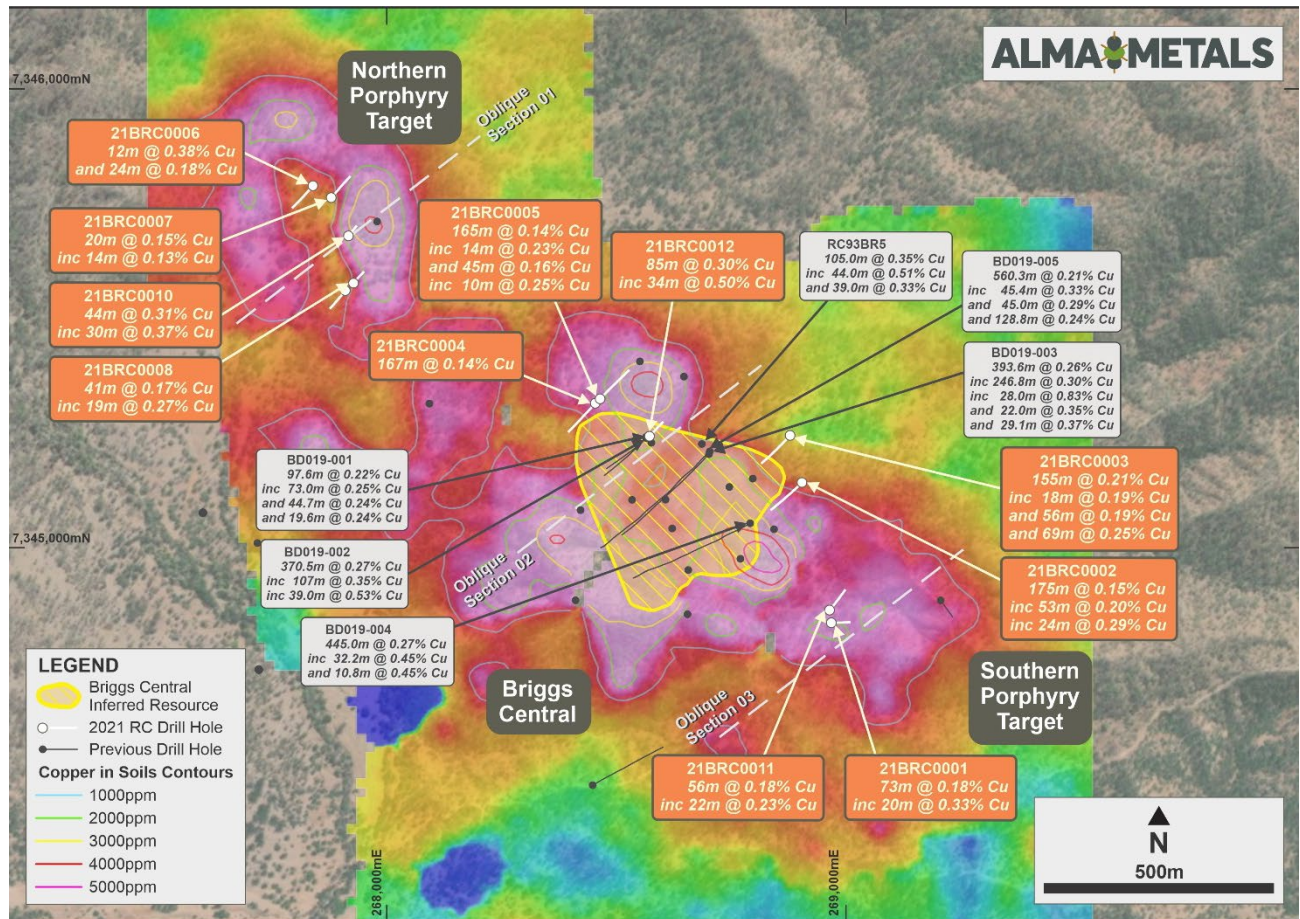
- Each sample was control-crushed to -3.35mm and homogenised in a rotary sample splitter
- Representative 2kg charges were split out and ground to 75µm prior to rougher flotation
- Perth tap water was conditioned and maintained at pH 9.50 for the duration of the tests
- SIBX was added as a 1% (w/v) solution
- No re-grind prior to cleaner flotation
- No optimisation to suppress pyrite flotation

The results to date are very promising (see Table 1 below):

- Excellent recoveries between 92% and 95% into cleaner concentrates.
- Excellent first pass concentrate grades between 17.4% and 19.7% copper.
- Little difference in results across the three types of mineralisation other than slightly higher concentrate grades in the higher-grade quartz-rich sample.
- No regrinding between rougher and cleaner stages, use of copper selective collector or pyrite suppression indicate upside potential in metallurgical recovery through optimisation studies.
- Trace metal analysis of the concentrates indicated very low levels of arsenic (<0.01%), cadmium (<5ppm) and uranium (<0.002%).
- The results above combine to indicate good potential to produce commercially attractive copper concentrates from the project.
- Further metallurgical studies and optimisation studies will be undertaken after the next phase of drilling which is planned to commence later this quarter.

**Table 1; Initial metallurgical test work results**

	MET-1 (GDP, 0.2% Cu)				MET-2 (QTZ, 0.9% Cu)				MET-3 (Min-Sed, 0.4% Cu)			
	Mass		Copper		Mass		Copper		Mass		Copper	
	g	Dist. (%)	Grade Cu %	Rec (%)	g	Dist. (%)	Grade Cu %	Rec (%)	g	Dist. (%)	Grade Cu %	Rec (%)
Cleaner Concentrate	24.3	1.21	17.6	95.1	41.1	4.09	19.7	91.9	45.0	2.26	17.4	93.5
Rougher Concentrate	44.4	2.2	9.7	95.7	61.4	6.12	14.0	97.9	60.1	3.02	13.3	95.4



**Figure 2** The Briggs porphyry copper system showing extensive copper anomalism in historical soil samples extending over at least 2000m x 750m at >1,000ppm Cu, and showing location of drill hole BD019-003 through centre of mineral resource estimate. Recent RC drilling results and historical drilling results used to estimate the initial Inferred Mineral Resource are shown. For full details of significant drill intersections for the 2021 RC drilling refer to ASX release dated 18 February 2022. For full details of the historical drill results used to estimate the initial Inferred Mineral Resource refer to the JORC Table 1 in ASX Release dated 18 August 2021.

This announcement is authorised for release by Executive Director, Frazer Tabearnt.

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## COMPETENT PERSONS STATEMENT – Exploration Results, Mineral Resources and Ore Reserves

*The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The information contained in this announcement has been presented in accordance with the JORC Code (2012 edition) and references to "Measured, Indicated and Inferred Resources" are to those terms as defined in the JORC Code (2012 edition).*

*The information in this report relating to exploration activities and results is based on information reviewed by Dr Frazer Tabeart (Executive Director of Alma Metals Limited). Dr Tabeart is a member of the Australian Institute of Geoscientists. Dr Tabeart is a qualified geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking, to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Tabeart consents to the inclusion in the ASX release of the matters based on their information in the form and context in which it appears.*

## COMPETENT PERSONS STATEMENT – Metallurgy

*The information in this report relating to metallurgical test work results is based on and fairly reflects information reviewed by Mr Stuart Smith (consultant to Alma Metals Limited). Mr Smith is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Smith is a qualified metallurgist and has sufficient experience which is relevant to the management and interpretation of test work activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Smith consents to the inclusion in the ASX release of the matters based on their information in the form and context in which it appears.*

## FORWARD LOOKING STATEMENTS:

*Any forward-looking information contained in this news release is made as of the date of this news release. Except as required under applicable securities legislation, Alma Metals does not intend, and does not assume any obligation, to update this forward-looking information. Any forward-looking information contained in this news release is based on numerous assumptions and is subject to all the risks and uncertainties inherent in the Company's business, including risks inherent in resource exploration and development. As a result, actual results may vary materially from those described in the forward-looking information. Readers are cautioned not to place undue reliance on forward-looking information due to the inherent uncertainty thereof.*

## Appendix 1 - JORC Table 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Three composites for metallurgical test work were taken from laboratory coarse crush residue of diamond drill hole BD019003 drilled in the Central Porphyry.</li> <li>The three composites were chosen to represent the three recognized mineralisation types in the mineral resource envelope of the Central Porphyry viz., <ul style="list-style-type: none"> <li>MET1 granodiorite porphyry ("GDP")</li> <li>MET2 massive quartz ("QTZ")</li> <li>MET3 mineralised sediment ("MINSED")</li> </ul> </li> <li>Composite were collected from approximately 20m intervals of each mineralisation type: <ul style="list-style-type: none"> <li>Met#1 GDP BD019003 from 115 to 135m.</li> <li>Met#2 QTZ BD019003 from 230.5 to 250m.</li> <li>Met#3 MINSED BD019003 from 378 to 398m.</li> </ul> </li> <li>Drill hole BD019003 was drilled in 2019, HQ triple tube and sampled nominally on 1m intervals. The core was cut longitudinally using a core saw and half core sent for multi-element assay at ALS Laboratories.</li> <li>The three metallurgical composites were prepared from coarse crush residue retained from the assaying process. The coarse crush residue had been stored in sealed plastic bags and was not affected by oxidation. The composites were prepared by: <ul style="list-style-type: none"> <li>Roll mixing coarse crush residue to homogenise sample.</li> <li>Scooping approximately 1kg (actual weight measured on Adam CKT8H electronic balance and recorded).</li> <li>Collecting composite in labelled 20 litre plastic pales with lids for transport to ALS Metallurgical Laboratories in Perth.</li> <li>Weighted average grade of composites calculated from individual core assays.</li> </ul> </li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>representative nature of the samples.</p> <ul style="list-style-type: none"> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-s material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Assays of the metallurgical test work were undertaken by ALS Metallurgical Laboratories in Perth.</li> </ul>
<b>Verification of sampling</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>

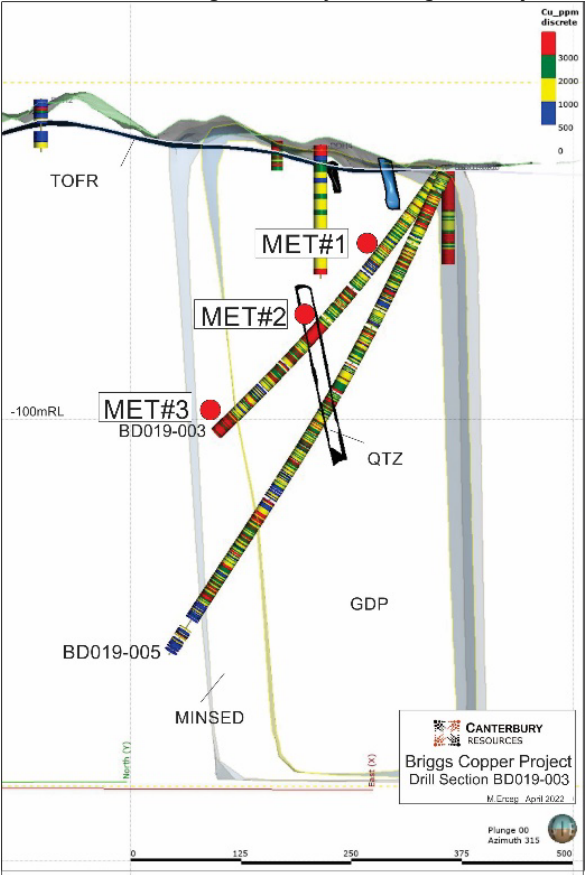
Criteria	JORC Code Explanation	Commentary
<b>and assaying</b>	<ul style="list-style-type: none"> <li>or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Composites were collected under the supervision of the Exploration Manager.</li> <li>Composites were collected in 20 litre plastic pales with sealable lids and transported to ALS Metallurgical Laboratories by commercial carrier.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>

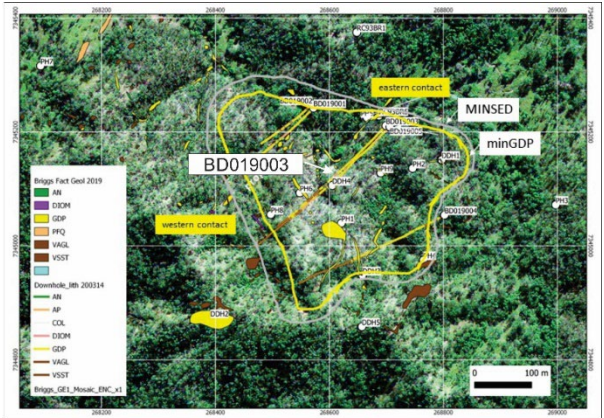


## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> <li>Alma Metals has an exclusive Option to enter an Earn-in Joint Venture Agreement to earn up to 70% of the Briggs Project.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<p><i>SW-NE drill section through BD019003 viewed NW showing location of metallurgical samples:</i></p> 

Criteria	JORC Code Explanation	Commentary																																																																	
		<p>Plan view of Central Porphyry indicating location of mineralisation types and BD019003:</p> 																																																																	
Balanced reporting	<ul style="list-style-type: none"><li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li></ul>	Refer ALM ASX release 18 August 2021																																																																	
Other substantive exploration data	<ul style="list-style-type: none"><li>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.</li></ul>	<ul style="list-style-type: none"><li>Benchtop flotation tests to evaluate copper recoveries were undertaken by ALS Metallurgy in Perth using the following parameters:<ul style="list-style-type: none"><li>Each sample was control-crushed to - 3.35mm and homogenised in a rotary sample splitter.</li><li>Representative 2kg charges were split out and ground to 75µm prior to rougher flotation</li><li>Perth tap water was conditioned and maintained at pH 9.50 for the duration of the tests</li><li>SIBX was added as a 1% (w/v) solution</li><li>No re-grind prior to cleaner flotation</li><li>No optimisation to suppress pyrite flotation</li></ul></li></ul> <p>Initial metallurgical test results:</p> <table><tr><th></th><th colspan="4">MET-1 (GDP, 0.2% Cu)</th><th colspan="4">MET-2 (QTZ, 0.9% Cu)</th><th colspan="4">MET-3 (Min-Sed, 0.4% Cu)</th></tr><tr><th></th><th colspan="2">Mass</th><th colspan="2">Copper</th><th colspan="2">Mass</th><th colspan="2">Copper</th><th colspan="2">Mass</th><th colspan="2">Copper</th></tr><tr><th></th><th>g</th><th>Dist. (%)</th><th>Grade Cu %</th><th>Rec (%)</th><th>g</th><th>Dist. (%)</th><th>Grade Cu %</th><th>Rec (%)</th><th>g</th><th>Dist. (%)</th><th>Grade Cu %</th><th>Rec (%)</th></tr><tr><td>Cleaner Concentrate</td><td>24.3</td><td>1.21</td><td>17.6</td><td>95.1</td><td>41.1</td><td>4.09</td><td>19.7</td><td>91.9</td><td>45.0</td><td>2.26</td><td>17.4</td><td>93.5</td></tr><tr><td>Rougher Concentrate</td><td>44.4</td><td>2.2</td><td>9.7</td><td>95.7</td><td>61.4</td><td>6.12</td><td>14.0</td><td>97.9</td><td>60.1</td><td>3.02</td><td>13.3</td><td>95.4</td></tr></table>		MET-1 (GDP, 0.2% Cu)				MET-2 (QTZ, 0.9% Cu)				MET-3 (Min-Sed, 0.4% Cu)					Mass		Copper		Mass		Copper		Mass		Copper			g	Dist. (%)	Grade Cu %	Rec (%)	g	Dist. (%)	Grade Cu %	Rec (%)	g	Dist. (%)	Grade Cu %	Rec (%)	Cleaner Concentrate	24.3	1.21	17.6	95.1	41.1	4.09	19.7	91.9	45.0	2.26	17.4	93.5	Rougher Concentrate	44.4	2.2	9.7	95.7	61.4	6.12	14.0	97.9	60.1	3.02	13.3	95.4
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<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>ALM/CBY are planning further drilling at Briggs copper project commencing in the June quarter 2022.</li> </ul>

## 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
<b>Database integrity</b>	<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>Refer ALM ASX release 18 August 2021 for details of Mineral Resource estimates at Briggs copper porphyry.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by Competent Persons 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>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Geological interpretation</b>	<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 of both grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Estimation and modelling techniques</b>	<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 chosen include a description of computer software and parameters used.</li> <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> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <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 drill hole data, and use of reconciliation data if available.</li> </ul>	
<b>Moisture</b>	<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>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grades or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Mining factors or assumptions</b>	<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 of eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating 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>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Metallurgical factors or assumptions</b>	<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 treatment process and parameters made when reporting Mineral Resources, but the assumptions made 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>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Environmental factors or assumptions</b>	<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 greenfield 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>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for assumptions. If determined, the method used, whether wet or dry, the frequency of measurements, the nature, size and</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>representativeness of the samples.</p> <ul style="list-style-type: none"> <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 different materials.</li> </ul>	
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of 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 data appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Audits or reviews</b>	<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>Refer ALM ASX release 18 August 2021</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<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 relative tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <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>Refer ALM ASX release 18 August 2021</li> </ul>