

1 December 2022

## ASX RELEASE

### **AuKing significantly increases resources at Koongie Park Project.**

**Maiden mineral resource estimate reported for Emull Prospect.**

#### Highlights

- Independent maiden JORC 2012 Inferred and Indicated Mineral Resource Estimate (MRE) for the Emull deposit - 10.8Mt @ 0.28% Cu, 0.44% Zn, 0.1% Pb and 5.4g/t Ag (CuEq 0.51%)
- Combined with the existing Koongie Park resource estimate of 8.9Mt @ 1.01% Cu, 3.67% Zn, 0.16g/t Au, 32g/t Ag and 0.77% Pb<sup>1</sup>, total metal content now comprises:  
120,100 tonnes of copper; 373,400 tonnes of zinc; 46,000 ounces of gold; 11 million ounces of silver and 78,700 tonnes of lead.

**Auking Mining Limited (ASX:AKN) has significantly increased the overall mineral resources at its flagship Koongie Park Copper/Zinc Project in Western Australia's Halls Creek region, reporting a maiden mineral resource estimate for the Emull deposit.**

AuKing's total MRE now stands at 19.7 million tonnes (Mt) after a further 10.8Mt were added to the company's existing 8.9Mt resources at the Sandiego and Onedin deposits to the east. Total metal content now comprises 120,100 tonnes of copper; 373,400 tonnes of zinc; 46,000 ounces of gold; 11 million ounces of silver and 78,700 tonnes of lead.

AuKing chief executive officer, Mr Paul Williams, said the release of Emull's maiden MRE followed a successful drilling program conducted throughout the year and increases the potential of further significant additional copper resources from planned drilling in 2023.

"We knew that the copper mineralisation at Emull had the potential to offer significant additional tonnes to the Koongie Park resource base, Mr Williams said.

"Emull's resource tonnes are complementary to Sandiego and Onedin deposits which together provide strong mining development options for Koongie Park."

<sup>1</sup> See Annexure A for full details of existing Koongie Park resource estimate

## Emull Resource Estimate

Emull's MRE has been classified as an Indicated and Inferred resource and was based upon 99 drill holes totalling 11,051m, comprising 88 historic reverse circulation (RC) drill holes by Northern Star Resources (ASX:NST) between 2003 and 2012 for 9,141m, and 11 RC holes by AuKing during 2022 for 1,910m. Follow-up extensional resource drilling both to the north-west and the south-west will be a key feature of proposed drilling in early 2023 and support an upgrading of the resource classification.

The Emull deposit extends to a depth of 280 vertical metres and is currently modelled with a strike length of approximately 600m, with mineralisation still open at depth and along strike to the north-west. The Emull Mineral Resource is reported at a 0.25% copper equivalent grade and summarised below.

### Emull November 2022 Mineral Resource Estimate (0.25% CuEq Cut-off Grade)

Type	Indicated Mineral Resource										
	Tonnage Mt	CuEq* %	Cu %	Zn %	Pb %	Ag g/t	CuEq* t	Cu t	Zn t	Pb t	Ag koz
Oxide	0.27	0.62	0.27	0.72	0.15	5.4	1,700	700	2,000	400	50
Transitional	0.36	0.63	0.28	0.67	0.17	7.0	2,300	1,000	2,400	600	80
Fresh	1.8	0.61	0.31	0.58	0.14	6.7	11,200	5,600	10,600	2,500	390
<b>Total</b>	<b>2.5</b>	<b>0.61</b>	<b>0.30</b>	<b>0.61</b>	<b>0.14</b>	<b>6.6</b>	<b>15,100</b>	<b>7,400</b>	<b>15,000</b>	<b>3,500</b>	<b>520</b>

Type	Inferred Mineral Resource										
	Tonnage Mt	CuEq* %	Cu %	Zn %	Pb %	Ag g/t	CuEq* t	Cu t	Zn t	Pb t	Ag koz
Oxide	0.03	0.42	0.26	0.30	0.06	3.7	100	100	100		
Transitional	0.05	0.38	0.25	0.22	0.06	3.7	200	100	100		10
Fresh	8.2	0.48	0.27	0.39	0.09	5.1	39,700	22,600	32,300	7,100	1,340
<b>Total</b>	<b>8.3</b>	<b>0.48</b>	<b>0.27</b>	<b>0.39</b>	<b>0.09</b>	<b>5.0</b>	<b>40,000</b>	<b>22,700</b>	<b>32,500</b>	<b>7,100</b>	<b>1,340</b>

Type	Total Mineral Resource										
	Tonnage Mt	CuEq* %	Cu %	Zn %	Pb %	Ag g/t	CuEq* t	Cu t	Zn t	Pb t	Ag koz
Oxide	0.30	0.60	0.27	0.68	0.15	5.2	1,800	800	2,000	400	50
Transitional	0.41	0.60	0.28	0.62	0.15	6.6	2,400	1,100	2,500	600	90
Fresh	10.1	0.51	0.28	0.43	0.10	5.4	50,900	28,200	42,900	9,600	1,730
<b>Total</b>	<b>10.8</b>	<b>0.51</b>	<b>0.28</b>	<b>0.44</b>	<b>0.10</b>	<b>5.4</b>	<b>55,200</b>	<b>30,100</b>	<b>47,400</b>	<b>10,700</b>	<b>1,870</b>

Note: The Mineral Resource has been compiled under the supervision of Mr Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

All Mineral Resources figures reported in the table above represent estimates at November 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

Copper equivalent grades are estimated based on LME closing prices on 25th November 2022 and calculated with the formula:  $*CuEq = 100 \times [(Cu\% \times 8,005) + (Zn\% \times 2,906) + (Pb\% \times 2,107) + (Ag\ g/t \times (21.6/31.1035))] / (8,005)$ .

About the Emull Prospect Area

The Emull Exploration Licence (E80/4957) is located within the overall Koongie Park tenure package about 19.5km south-west of the Sandiego deposit, and 44kms south-west of the Halls Creek township, along the Great Northern Highway.

The licence forms part of the existing Koongie Park Joint Venture between AuKing and Astral Resources NL, of which AuKing owns an 80% interest.

Since the early 1970's, several companies have explored within the Emull tenement area, primarily focusing on the potential for a significant stratabound lead-zinc system with volcanogenic affinities. North Star Resources commenced exploration work in the area in E80/2612 in 2003-2004 for a number of target styles including polymetallic mineralisation as seen at Emull, Au mineralisation as identified at the nearby Nicholson's gold mine and possible PGM mineralisation. North Star undertook extensive drilling in the area with Emull being a strategic focus and concluded exploration activities in the area in 2012 following their Paulsens gold acquisition.

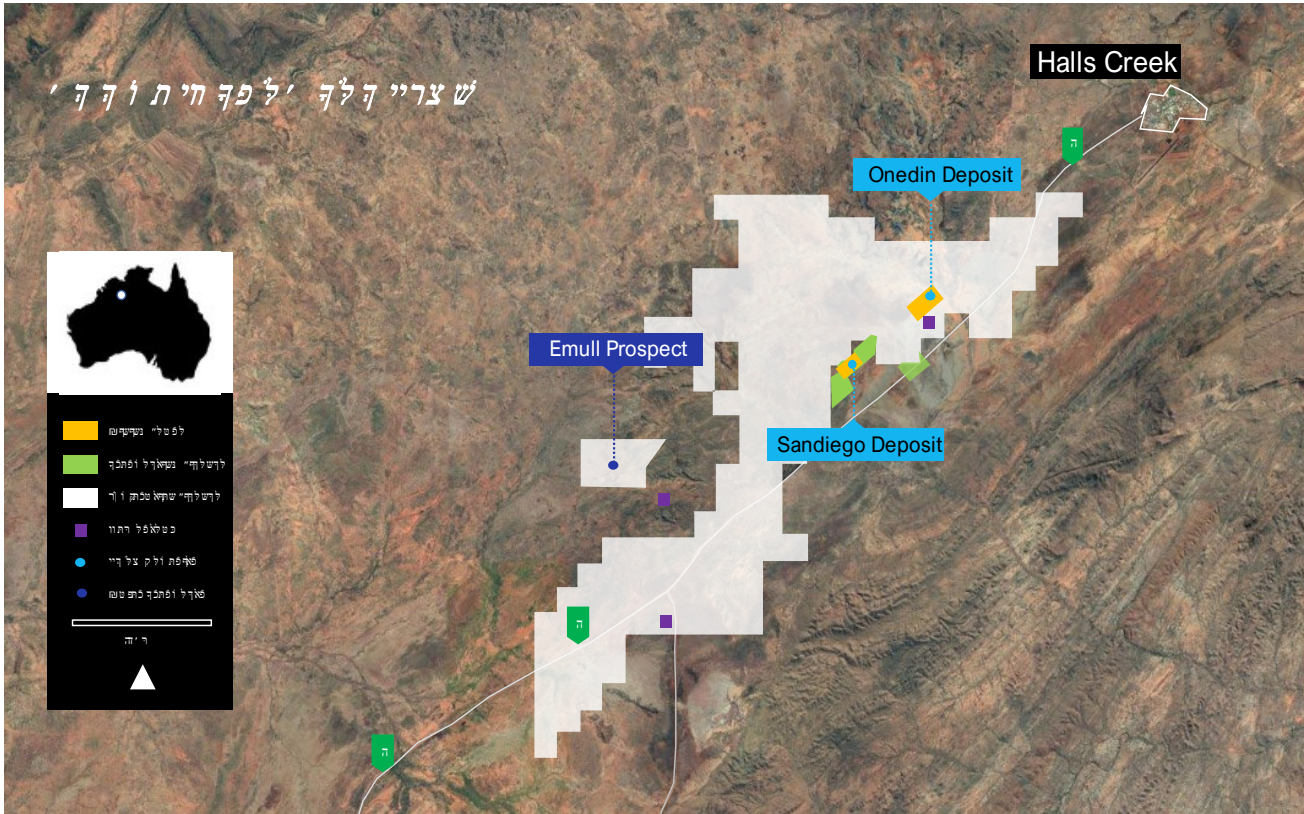
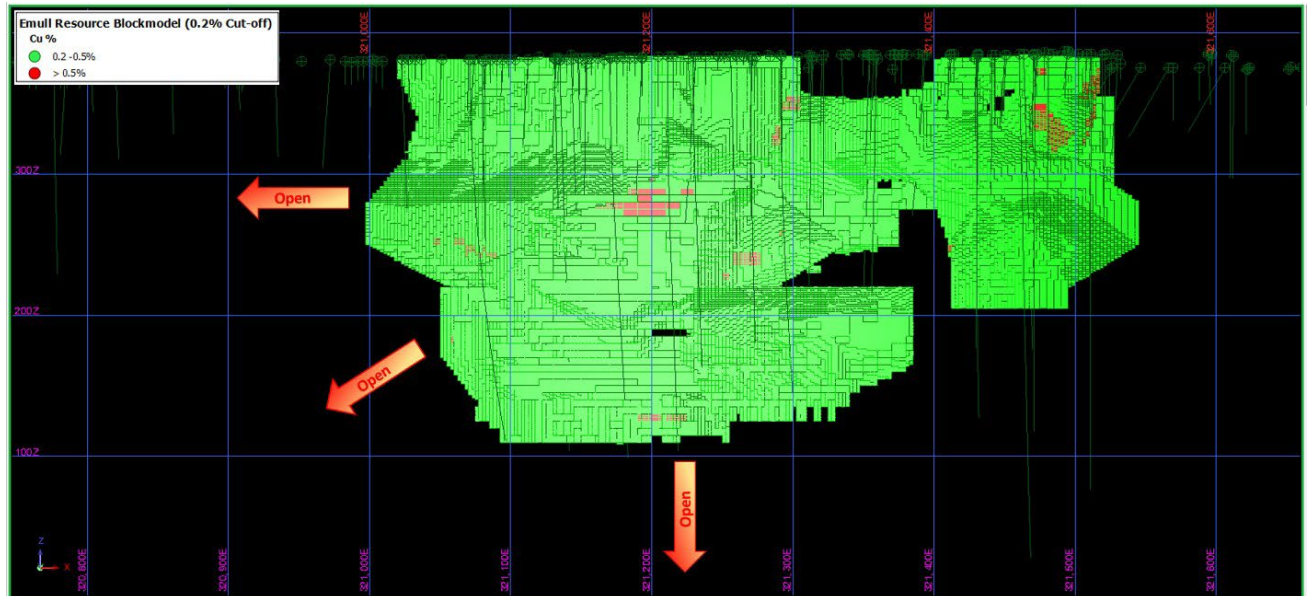


Figure 1. Emull Prospect Location



## Emull Resource Block Model

A new 3D block model for the Emull deposit was developed by AuKing as part of the resource estimation process. The block model highlights copper mineralisation above 0.2% with the clear potential to expand the deposit along strike and at depth.



**Figure 2.** Emull Prospect Block Model – looking North

## Future Emull Exploration

Having established the maiden MRE for Emull, the focus of future activities at the deposit will be to significantly increase the resource estimate by pursuing copper mineralisation along the magnetic features that exist to the north-west and south-west of the main deposit area. As indicated in Figure 4 below, these targets extend for more than 3kms and are highly prospective areas based on previous soil sampling and historic drilling.

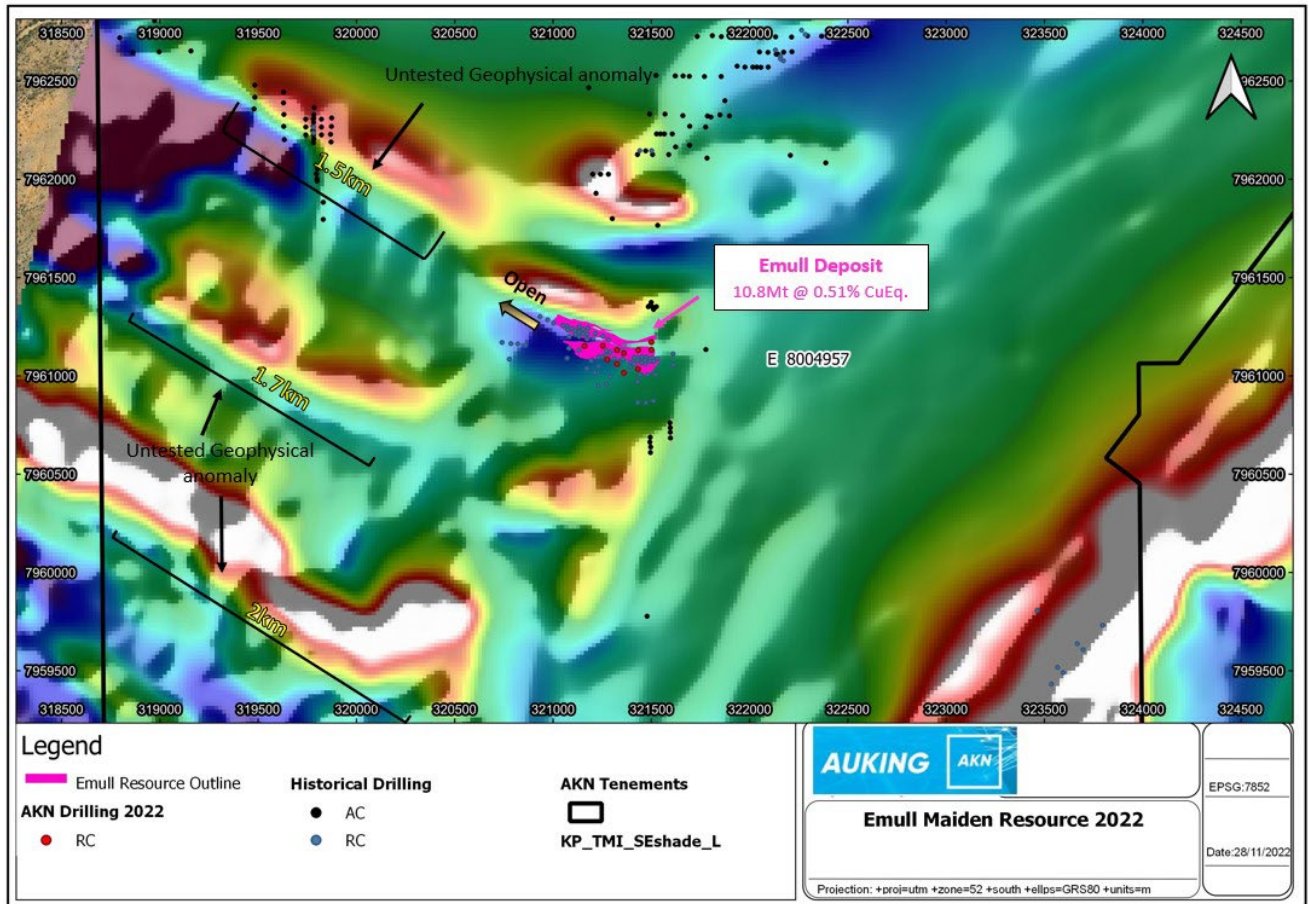
AuKing plans to commence this extensional drilling at Emull after completion of the northern wet season in late March/early April 2023.

## Mineral Resource Estimate – ASX Listing Rule 5.8.1

### Geology and Geological Interpretation

The Emull base metal deposit occurs in Koongie Park Formation, part of the Palaeoproterozoic Lamboo Province, within the northeast trending Halls Creek Orogen. The deposit is hosted by altered and contact metamorphosed calc-silicate rocks, which have been intruded by and partially assimilated by the Emull gabbro. Thin, semi-massive and disseminated mineralisation is confined to several discontinuous but apparently stratabound lenses, dominated by sphalerite, with subordinate chalcopyrite and galena. The largest lens has a strike length of 500m and a maximum plan width of 50m.

The genesis of mineralisation at Emull is not certain, although models based on an origin as a volcanic hosted massive sulphide (VHMS) deposit partially assimilated during intrusion of gabbro, or as a skarn developed during intrusion of gabbro into carbonate units within the Koongie Park Formation, have been proposed.



**Figure 3.** Emull Future Drilling Targets

### Drilling Techniques

Drilling conducted by North Star and AuKing included RC drilling with 5.5 inch hammer and diamond core of HQ and NQ diameter with standard and/or triple tube.

### Sampling Techniques

For both historic and recent drilling, mineralisation was sampled with the following techniques: RC drilling - 1m samples of pulverised chips, sampled by a rig mounted cone splitter, with approximately 3kg collected in individual calico bags.

Historical core was sampled at 0.3 to 1.2m intervals, cut in half using a core saw.

### Sample Analysis Method

For AuKing drilling, samples were sent to Jinning Testing and Inspection Laboratory in Canning Vale, WA for analysis. A multi-element analytical suite is assayed for using a mixed acid digest on a 20g charge that involves the use of nitric, perchloric and hydrofluoric acids in the attack. Dissolution is then achieved using hydrochloric acid. The use of hydrofluoric acid ensures the breakdown of silicate minerals. Although the digest approaches total dissolution of the sample there can be undissolved material encountered. Analyses are performed via ICP-OES to a range of detection limits.

The following elements were analysed for (detection limits in parentheses, as ppm unless otherwise indicated): Ag (1); Al (0.01%); As (2); Ba (1); Be (0.5); Bi (5); Ca (0.01%); Cd (1); Ce (5); Co (1); Cr (2); Cu (1); Fe (0.01%); Ga (10); K (0.01%); La (2); Li (1); Mg (0.01%); Mn (1); Mo (2); Na (0.005%); Ni (1); P (20); Pb (2); S (20); Sb (5); Sc (1); Sn (5); Sr (1); Ta (10); Te (10); Th (10); Ti (5); V (1); W (5); Y (1); Zn (1) and Zr (1).

### *Estimation Methodology*

The block model was created and estimated in Surpac using Ordinary Kriging (OK) grade interpolation. The mineralisation was constrained by mineralisation envelopes prepared using a nominal 0.1% copper cut-off grade for disseminated sulphide mineralisation. A minimum down-hole length of 3m was adopted for the interpretation.

Samples were composited to 1m based on an analysis of sample lengths inside the wireframes. Top cuts were applied to some of the zinc and silver composite data after review of the composite statistics.

The block dimensions used in the model were 10m EW by 5m NS by 5m vertical with sub-cells of 2.5m by 1.25m by 1.25m. This was selected as the optimal block size as a result of kriging neighbourhood analysis (KNA).

The block model was created and estimated in Surpac using OK grade interpolation using parameters derived from modelled variograms in up to three passes. Linear grade estimation was deemed suitable for the Emull Mineral Resource due to the geological control on mineralisation.

A bulk density of 2.7t/m<sup>3</sup> was assigned to the fresh material, a value of 2.4t/m<sup>3</sup> was assigned to transition and 2.0t/m<sup>3</sup> was assigned to oxide, based on known values from similar geological terrains.

### *Mineral Resource Classification*

The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 25m by 20m, and where the continuity and predictability of the mineralised units was reasonable. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 25m by 20m and less than 80m by 80m; where small, isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.

### *Cut-Off Grades*

A copper equivalent grade ("CuEq") was calculated based on London Metal Exchange ("LME") closing prices as at 25th November, 2022. The CuEq formula is shown below:  

$$\text{CuEq} = 100 \times [(\text{Cu}\% \times 8,005) + (\text{Zn}\% \times 2,906) + (\text{Pb}\% \times 2,107) + (\text{Ag g/t} \times (21.6/31.1035))] / (8,005).$$
 The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a copper equivalent cut-off grade of 0.25% under the assumption of an open pit mining method.

### *Mining and Metallurgical Methods*

It is assumed the Emull material can be extracted with open pit mining methods and either toll treating or could be processed as part of a multi deposit operation along with AKN's Onedin and Sandiego deposits. Metallurgical testwork has not yet been conducted at Emull, although it is anticipated that similar results could be obtained to the geologically similar Onedin and Sandiego



deposits at the project. It is anticipated separate concentrates for copper and zinc could be generated from Emull, however further studies are required.

**This announcement has been authorised by Paul Williams, CEO, AuKing Mining Limited. For more information, please contact:**

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**About AuKing Mining**

**AuKing Mining (ASX:AKN) is a mining exploration company focused on uranium, copper and zinc projects in both Tanzania and Australia.**

Our flagship Koongie Park Copper Zinc Project in Western Australia’s Halls Creek Region hosts an estimated JORC resource of 8.9 million tonnes at the Sandiego and Onedin deposits and now 10.8 million tonnes at Emull, and is neighboured by several significant mining and development operations including Nicholson’s Gold Mine, Panton PGM Project, and Savannah Nickel Mine. Koongie Park has already been the subject of significant exploration drilling and analysis since the 1970’s, hosting over 300 RC and diamond drill holes consisting of more than 60,000m of drilling in total. The predominant focus of drilling has been at the Sandiego, Onedin and Emull deposits, the latter of which offers the potential to establish an open pit mine.

In October 2022, AuKing acquired six uranium and copper licences in Tanzania including:

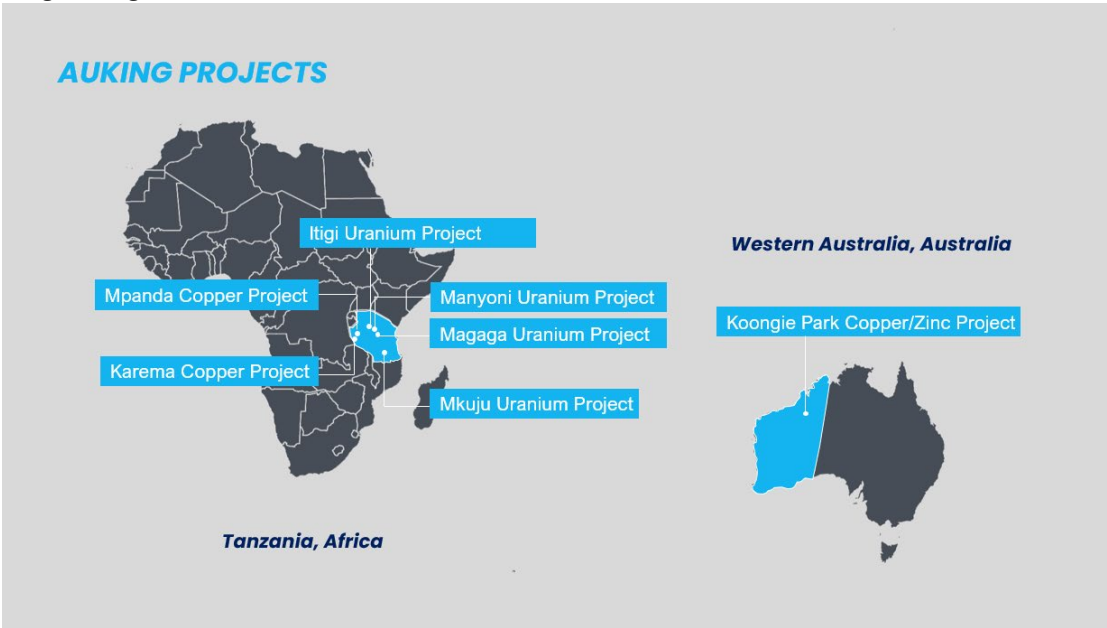
*Mkuju* – near to the world class Nyota uranium project in southern Tanzania; the subject of significant previous exploration

*Manyoni/Itigi* – the subject of significant exploration situated in central Tanzania, just west of Dodoma

*Mpanda/Karema* – prospective copper areas in western Tanzania that were the subject of historic mining operations but largely untouched by modern exploration methods.

Financial close of the Tanzanian acquisition is due by the end of December 2022.

For further information  
[www.aukingmining.com](http://www.aukingmining.com)





## Competent Persons' Statements

The information in this release that relates to Mineral Resources is based on information compiled by Mr Shaun Searle who is a Member of the Australasian Institute of Geoscientists. Mr Searle is an employee of Ashmore Advisory Pty Ltd and independent consultant to AuKing Mining Limited. Mr Searle has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Searle consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Mineral Resource Estimates at the Koongie Park Project is based on information compiled by Mr David Williams who is a member of the Australian Institute of Geoscientists. Mr Williams is a Principal Consultant Geologist (Brisbane) of CSA Global and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 Williams consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

The information relating to the Mineral Resource Estimates at the Koongie Park copper/zinc project is extracted from the Independent Mineral Resource Estimate of CSA Global (the Report) dated 4 April 2022, which is available to view on the AKN website [www.aukingmining.com](http://www.aukingmining.com). The Report was issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Report.



## APPENDIX A – Koongie Park Resource Estimate

### Onedin Mineral Resource Estimate and Metal Tonnes

Zone	Classification	Tonnes (Mt)	Copper (%)	Zinc (%)	Gold (g/t)	Silver (g/t)	Lead (%)
Cu Dominant	Indicated	1.5	1.1	0.6	0.2	47	1.2
	Inferred	-	-	-	-	-	-
Zn Dominant	Indicated	3.3	0.5	4.3	0.1	34	1.0
	Inferred	-	-	-	-	-	-
<b>Resource Total and Grades</b>		<b>4.8</b>	<b>0.7</b>	<b>3.2</b>	<b>0.1</b>	<b>38</b>	<b>1.1</b>
Zone	Classification	Tonnes (Mt)	Copper (tonnes)	Zinc (tonnes)	Gold (oz)	Silver (Moz)	Lead (tonnes)
Cu Dominant	Indicated	1.5	16,500	9,000	9,600	2.27	18,000
	Inferred	-	-	-	-	-	-
Zn Dominant	Indicated	3.3	16,500	141,900	10,600	3.61	33,000
	Inferred	-	-	-	-	-	-
<b>Total Metal Tonnes</b>			<b>33,000</b>	<b>150,900</b>	<b>20,200</b>	<b>5.88</b>	<b>51,000</b>

Note: (1) Reported tonnes and grade are rounded  
(2) Reporting cut-off grades of 0.4% Cu and 1% Zn have been applied to the Onedin deposit

### Sandiego Mineral Resource Estimate and Metal Tonnes

	Classification	Tonnes (Mt)	Copper (%)	Zinc (%)	Gold (g/t)	Silver (g/t)	Lead (%)
Cu Dominant	Indicated	1.7	2.3	0.8	0.3	18	0.2
	Inferred	0.3	1.6	3.0	0.2	5	0.0
	<b>Sub Total</b>	<b>2.0</b>	<b>2.2</b>	<b>1.1</b>	<b>0.3</b>	<b>16</b>	<b>0.1</b>
Zn Dominant	Indicated	2.0	0.6	7.3	0.1	35	0.7
	Inferred	0.1	0.2	6.1	0.1	10	0.1
	<b>Sub Total</b>	<b>2.1</b>	<b>0.6</b>	<b>7.3</b>	<b>0.1</b>	<b>34</b>	<b>0.7</b>
<b>Resource Total and Grades</b>		<b>4.1</b>	<b>1.4</b>	<b>4.3</b>	<b>0.2</b>	<b>25</b>	<b>0.4</b>
	Classification	Tonnes (Mt)	Copper (tonnes)	Zinc (tonnes)	Gold (oz)	Silver (Moz)	Lead (tonnes)
Cu Dominant	Indicated	1.7	39,100	13,600	16,400	0.98	3,400
	Inferred	0.3	4,800	9,000	1,900	0.05	0
	<b>Sub Total</b>	<b>2.0</b>	<b>43,900</b>	<b>22,600</b>	<b>18,300</b>	<b>1.03</b>	<b>3,400</b>
Zn Dominant	Indicated	2.0	12,000	146,000	6,400	2.25	14,000
	Inferred	0.1	200	6,100	300	0.03	100
	<b>Sub Total</b>	<b>2.1</b>	<b>12,200</b>	<b>152,100</b>	<b>6,700</b>	<b>2.28</b>	<b>14,100</b>
<b>Total Metal Tonnes</b>			<b>56,100</b>	<b>174,700</b>	<b>25,000</b>	<b>3.31</b>	<b>17,500</b>

Note: (1) Reported tonnes and grade are rounded  
(2) Reporting cut-off grades of 0.8% Cu and 3% Zn have been applied to the Sandiego deposit

# JORC Code, 2012 Edition – Emull Mineral Resource Estimate

## Section 1 Sampling Techniques and Data

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. 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>Historical drilling methods include aircore, RC and diamond cored drilling.</li> <li>Aircore, percussion and RC drilling returns a sample of broken rock collected in a bag at site at the time of drilling. Drill core from diamond drilling technique was later cut by a core saw.</li> <li>AKN utilised Reverse Circulation ("RC") drilling at Emull to obtain individual 1m samples, which were reduced in size to produce a sample of approximately 1 to 2kg in weight. The samples were ticketed prior to dispatch to the analytical laboratory, pulverised to produce a pulp sample for fire assay and base metal analyses.</li> <li>The RC drilling results reviewed in the accompanying release were obtained entirely by RC drilling with the sample return connected to a cyclone and cone splitter. Sampling has been done on a single metre by metre basis.</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>Historical drilling included RC drilling with 5.5 inch hammer and diamond core of HQ and NQ diameter with standard and/or triple tube.</li> <li>AKN drilling included RC drilling with 5.5 inch hammer.</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 representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>AKN RC recovery levels are high hence the relationship between recovery and grade is not an issue.</li> <li>No relationship between sample recovery and grade has been yet observed and no sample bias is believed to have occurred.</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>Geological logging of historic drill holes was reviewed by AKN using historic statutory reports and databases compiled by previous operators.</li> <li>Geological logging data collected to date is sufficiently detailed to support a Mineral Resource at Emull.</li> <li>For AKN drilling, RC chips were logged for quantitative and qualitative attributes with chips stored in chip trays for future reference. All drill holes were logged in full.</li> </ul>
<b>Sub-sampling</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>For historical and AKN drilling, mineralisation has been sampled with</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><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></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>the following techniques: RC drilling - 1m samples of pulverised chips, sampled by a rig mounted cone splitter, with approximately 1 to 2kg collected in individual calico bags.</p> <ul style="list-style-type: none"> <li>Historical core was sampled at 0.3 to 1.2m intervals, cut in half using a core sore.</li> <li>Based on the distribution of mineralisation the sample size is considered adequate for representative sampling.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>AKN samples were prepared and analysed by Jinning Testing and Inspection Laboratory, Canning Vale, Perth, WA.</li> <li>RC samples are pulverised to a nominal 85% passing 75µm.</li> <li>A multi-element analytical suite is assayed for using a mixed acid digest on a 0.2g charge that involves the use of nitric, perchloric and hydrofluoric acids in the attack. Dissolution is then achieved using hydrochloric acid. The use of hydrofluoric acid ensures the breakdown of silicate minerals. Although the digest approaches total dissolution of the sample there can be undissolved material encountered. Analyses are performed via ICP-OES to a range of detection limits.</li> <li>The following elements are currently being analysed for (detection limits in parentheses, as ppm unless otherwise indicated): Ag (1); Al (0.01%); As (2); Ba (1); Be (0.5); Bi (5); Ca (0.01%); Cd (1); Ce (5); Co (1); Cr (2); Cu (1); Fe (0.01%); Ga (10); K (0.01%); La (2); Li (1); Mg (0.01%); Mn (1); Mo (2); Na (0.005%); Ni (1); P (20); Pb (2); S (20); Sb (5); Sc (1); Sn (5); Sr (1); Ta (10); Te (10); Th (10); Ti (5); V (1); W (5); Y (1); Zn (1) and Zr (1).</li> <li>The balance of the pulp sample is stored pending additional analytical work being required.</li> <li>On receipt of the initial results and pending review, Au analyses by 30gm charge fire assay may be undertaken at Jinning's or another laboratory.</li> <li>The laboratory includes a number of blanks and internal CRMs on an approximately 1 in 25 basis as internal QAQC checks. These results are also reported.</li> <li>The results seen to date indicate that there are no concerns with the quality of analyses reported.</li> <li>For AKN drilling, QAQC included Certified Reference Material (CRM's) or</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>blank (Blanks) samples are inserted at a rate of 1:20 for RC drilling. Accuracy and performance of CRM's and Blanks are considered after results are received. Field duplicates collected from the Cyclone and cone splitter were inserted every 100 samples.</p>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The grade of significant intersections has been verified by other senior geological personnel associated with the project.</li> <li>• Twinned drilling has not yet been undertaken.</li> <li>• The drilling database is managed by Newexco Exploration, a Perth based exploration consultancy group. All drilling data resides on their NXDB database management system. Newexco is responsible for uploading all analytical and other drilling data and producing audited downloaded data for use in various mining software packages. The NXDB system has stringent data entry validation routines.</li> <li>• No adjustments to assay data were undertaken.</li> </ul>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All historical location data for the Mineral Resource were collected in AGD84 or MGA94 datum and transformed to GDA2020 datum, Zone 52.</li> <li>• Downhole survey methods in the older diamond drill holes are considered to have been undertaken at an industry standard level.</li> <li>• The current RC drillholes have been surveyed by north-seeking gyroscopic method.</li> <li>• For AKN collars, RC and DD holes were surveyed with DGPS equipment using the GDA2020, Zone 52 coordinate system. Mineral Resource estimation was carried out on this grid.</li> <li>• A topographic surface was provided by AKN and renamed by Ashmore to 'emull_topo_202211.dtm'. The topography was generated from drill hole collar surveys.</li> </ul>
<p><b>Data spacing and distribution</b></p>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill data spacing of all drill data is sufficient to establish the degree of geological and grade continuity appropriate for estimating a Mineral Resource.</li> <li>• Drill hole spacing is predominantly 25m by 20m in the well-drilled portions of the deposit and broadens to approximately 80m by 80m over the remaining areas. Spacing is adequate to establish the degree of geological and grade continuity for estimating a Mineral Resource.</li> <li>• Samples were composited to 1m lengths prior to Mineral Resource estimation.</li> </ul>
<p><b>Orientation of data in relation to</b></p>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Historical drill holes were oriented, as far as reasonably practical, to intersect the centre of the targeted mineralised zone perpendicular to the interpreted strike</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>geological structure</b>	<ul style="list-style-type: none"> <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>orientation of the mineralised zone.</li> <li>The geometry of drill holes relative to the mineralised zones achieves unbiased sampling of this deposit type.</li> <li>No orientation-based sampling bias has been identified.</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>It is assumed that due care was taken historically with security of samples during field collection, transport and laboratory analysis.</li> <li>All samples were placed in large poly-weave bags for road transportation to the analytical laboratory in Perth by a local transportation service.</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>No independent audit or review has been undertaken, apart from the site visit by the Mineral Resource Competent Person.</li> </ul>

## Section 2 Reporting of Exploration Results

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 license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Emull prospect is located within E80/4957. The Exploration Licence is located 44km southwest of Halls Creek, near the Great Northern Highway.</li> <li>The tenement is in good standing and part of AKN's Koongie Park joint venture with Astral Resources (ASX: AAR).</li> <li>AKN's joint venture with AAR in respect of the group of tenures called "Koongie Park" commenced in June 2021. The primary mineral assets, the Onedin and Sandiego copper-zinc-gold-silver deposits lie within the granted mining leases M80/277 and M80/276 respectively. These tenures expire in 2031.</li> <li>Both mining licences M80/277 and M80/276 were granted in 1989 and therefore prior to the Native Title Act 1993 ("NTA"). The Koongie-Elvire Native Title Claim WC 1999/040 was also registered after grant of the mining licences and they are not subject to the future act provisions under the NTA.</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>Several companies have explored within the Emull tenement area, primarily focusing on the potential for a significant stratabound lead-zinc system with volcanogenic affinities since the early 1970s.</li> <li>The gossan outcrop capping the mineralization was discovered in the late 1960s by the local pastoralist.</li> <li>From 1971 onwards a number of groups, including Pickands Mather International, North Broken Hill (NBH) were active in the area and undertook percussion and diamond drilling of the gossanous horizon at Emull.</li> <li>In 1977 Shell entered into a JV with North Broken Hill to explore the nearby</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Location 5 gossan system, now known as Emull West. Shell withdrew from the JV in 1978 and NBH allowed the claims to lapse.</p> <ul style="list-style-type: none"> <li>• During or prior to Shell's tenure over Emull, a resource estimate of 4.7Mt @ 4.5% Zn, 0.33% Cu, 0.2% Pb &amp; 19g/t Ag was reported in the Independent Geologists Report by RSA Global in the Prospectus of Northern Star Resources (NST) dated 6 November 2003.</li> <li>• West Coast Holdings applied for 12 mineral claims in early 1981 which were later surrendered and incorporated into E80/377. West Coast referred to the prospect as the Lamboo Prospect. M80/271 was subsequently applied for and approved in March 1989. West Coast undertook shallow RAB and percussion drilling, primarily in a search for supergene enriched zones but were unsuccessful and dropped the tenement in or around 1991.</li> <li>• S.A. Macdonald applied for E80/1459 across the Emull prospect area in 1991. Only limited work, including hand auger drilling, general prospecting and panning and loaming were carried out. Macdonald's tenure ceased in or around 1996.</li> <li>• NST commenced exploration work in the area in E80/2612 in 2003-2004 for several target styles including polymetallic mineralisation as seen at Emull, Au mineralisation as identified at nearby Nicholson's Prospect and possible PGM mineralisation. NST undertook extensive drilling in the area, comprising 228 drill holes (RC and air core) across the tenure area and, more specifically, 88 drill holes (RC and air core) across the Emull deposit area. NST concluded exploration activities in the area in 2012.</li> <li>• The Competent Person considers the historical work undertaken incrementally over time has built up a useful understanding of the geological characteristics of the deposit, and all historical work provides useful information.</li> <li>• AKN's Joint Venture Agreement with AAR commenced in June 2021 and AKN assumed management and control of the exploration activities on the property. Drilling commenced in June 2022. New results reported above and supported by this Table are based on work solely undertaken by AKN.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Emull base metal occurrence within the E80/4957 tenement area is hosted by altered and contact metamorphosed calc-silicate rocks, which have been intruded by and partially assimilated by the Emull gabbro.</li> <li>• Thin, semi-massive and disseminated mineralisation is confined to several</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>discontinuous but apparently stratabound lenses, dominated by sphalerite, with subordinate chalcopyrite and galena. The largest lens has a strike length of 500m and a maximum plan width of 50m.</p> <ul style="list-style-type: none"> <li>The genesis of mineralisation at Emull is not certain, although models based on an origin as a volcanic hosted massive sulphide ("VHMS") deposit partially assimilated during intrusion of gabbro, or as a skarn developed during intrusion of gabbro into carbonate units within the Koongie Park Formation, have been proposed.</li> <li>Rocks of the Koongie Park property are assigned to the Lamboo Province, of Palaeoproterozoic age (1,910–1,805 Ma), which formed within the northeast trending Halls Creek Orogen.</li> <li>The KPF hosts several other base metal occurrences and two significant base metal deposits, Onedin and Sandiego.</li> <li>The massive Cu-Zn dominated sulphide deposits of Koongie Park have been traditionally classified as volcanogenic massive sulphide (VMS) deposits. A PhD study concluded in 2002 proposed that the best model for the base metal occurrence is as a sub-horizontal basin floor replacement VMS. CSA Global concurs and considers the weight of evidence supports their interpretation as VMS deposits. Thus, the deposits are interpreted to have been formed around the time of deposition of the host volcanic and sedimentary strata in which they are bound and generally in bedding parallel lenses. Hydrothermal fluids associated with volcanic activity is interpreted to have been the source of the metals and other constituents of the mineralisation.</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>Exploration results are not being reported.</li> <li>All drill hole information relevant to this resource report/statement has been included in the appendices. No relevant drill hole information has been excluded.</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</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported.</li> <li>Not applicable as a Mineral Resource is</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <ul style="list-style-type: none"> <li>• <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></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>being reported.</p> <ul style="list-style-type: none"> <li>• Metal equivalent values have not been used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Most drill holes were angled to the north so that intersections are orthogonal to the orientation of mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Relevant diagrams have been included within the Mineral Resource report main body of text.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not being reported, refer to Section 3.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• No other substantive data exists.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Further work by AKN may include a Scoping Study for the Emull Mineral Resource estimate, as well as additional drilling to improve confidence.</li> <li>• Refer to diagrams in the body of text within the Mineral Resource report.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources



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>The drilling database is managed by Newexco Exploration, a Perth based exploration consultancy group. All drilling data resides on their NXDB database management system. Newexco is responsible for uploading all analytical and other drilling data and producing audited downloaded data for use in various mining software packages. The NXDB system has stringent data entry validation routines.</li> <li>It is assumed that due care was taken historically with the process of transcribing data from field notes into digital format for statutory annual reporting.</li> <li>All assays were reported by laboratories in digital format reducing the likelihood of transcription errors.</li> <li>Historic data has been verified by checking historical reports on the Emull deposit. Validation was carried out during data import and by onscreen visual validation.</li> </ul>
<b>Site visits</b>	<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>A site visit was conducted by Shaun Searle during November 2022. The site visit included inspection of the geology, drill chips, the site layout and the topographic conditions present at the site as well as infrastructure. During the site visit, Mr Searle had open discussions with AKN personnel on technical aspects relating to the relevant issues and in particular the geological data.</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 both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation is considered to be good and is based historical and AKN drilling, including diamond core.</li> <li>Geochemistry and geological logging has been used to assist identification of lithology and mineralisation.</li> <li>The Project consists of south dipping lodes. The current interpretation is considered robust.</li> <li>Recent drilling by AKN has confirmed the geological and grade continuity observed in the historical drilling.</li> </ul>
<b>Dimensions</b>	<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 Emull Mineral Resource area extends over an east-west strike length of 540m (from 321,000mE – 321,540mE) and includes the 270m vertical interval from 390mRL to 120mRL.</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</li> </ul>	<ul style="list-style-type: none"> <li>Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Emull Mineral Resource due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 50m down-dip beyond the last drill holes on section. This was equivalent to approximately one drill</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <ul style="list-style-type: none"> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>hole spacing in this portion of the deposit and classified as Inferred Mineral Resource. Extrapolation was generally half drill hole spacing between drill holes.</p> <ul style="list-style-type: none"> <li>• This is a maiden Mineral Resource estimate for the Emull deposit.</li> <li>• Copper, silver, lead and zinc are considered to be the economic or potentially economic metals. Additional studies are required to confirm this. Further metallurgical test work is required to assess potential deleterious elements.</li> <li>• The parent block dimensions used were 10m EW by 5m NS by 5m vertical with sub-cells of 2.5m by 1.25m by 1.25m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the Emull dataset.</li> <li>• An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography. Three passes were used. The first pass had a range of 50m, with a minimum of 8 samples. For the second pass, the range was 100m, with a minimum of 6 samples. For the third pass, the range was extended to 200m, with a minimum of 2 samples. A maximum of 20 samples was used for all three passes.</li> <li>• No assumptions were made on selective mining units.</li> <li>• Correlations exist between copper and the the remaining elements. Silver and lead had a strong positive correlation.</li> <li>• The deposit mineralisation was constrained by a cut-off grade of 0.1% copper for mineralisation. The wireframes were applied as hard boundaries in the estimate.</li> <li>• Statistical analysis was carried out on data from five lodes. Top cuts were applied to some of the zinc and silver composite data after review of the composite statistics.</li> <li>• Validation of the model included detailed comparison of composite grades and block grades by easting and elevation. Validation plots showed reasonable correlation between the composite grades and the block model grades.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages and grades were estimated on a dry in situ basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A copper equivalent grade ("CuEq") was calculated based on London Metal Exchange ("LME") closing prices as at 25th November, 2022. The CuEq</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>formula is shown below:</p> <ul style="list-style-type: none"> <li>• <math>CuEq = 100 \times [(Cu\% \times 8,005) + (Zn\% \times 2,906) + (Pb\% \times 2,107) + (Ag \text{ g/t} \times (21.6/31.1035))] / (8,005)</math></li> <li>• The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a copper equivalent cut-off grade of 0.25% under the assumption of an open pit mining method.</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 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>• Ashmore has assumed that the deposit could potentially be mined using open pit mining techniques with toll treatment of the ore at a third party concentrator, or as part of a larger operation. No assumptions have been made for mining dilution or mining widths.</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 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>• Metallurgical testwork has not yet been conducted at Emull, although it is anticipated that similar results could be obtained to the geologically similar Onedin and Sandiego deposits at the Project. It is anticipated separate concentrates for copper and zinc could be generated from Emull, however further studies are required.</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 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>• AKN will work to mitigate environmental impacts as a result of any future mining or mineral processing.</li> </ul>
<b>Bulk density</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>• No density measurements were available for the Emull deposit.</li> <li>• It is assumed there are minimal void spaces in the rocks within the Emull deposit. The weathering at Emull is relatively shallow, with the deposit hosted within competent mafic rocks.</li> <li>• Bulk densities were assigned in the block model based on assumed values</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>(vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>from similar geological terrains. Density values of 2.0t/m<sup>3</sup>, 2.4t/m<sup>3</sup> and 2.7t/m<sup>3</sup> were applied to the oxide, transitional and fresh material types.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie 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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 25m by 20m, and where the continuity and predictability of the mineralised units was reasonable. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 25m by 20m and less than 80m by 80m; where small, isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.</li> <li>• The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by recent infill drilling conducted by AKN, which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>• The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>• The lode geometry and continuity has been adequately interpreted to reflect the applied level of Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>• This is a maiden Mineral Resource estimate for the Emull deposit.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	