

14 November 2022

## ASX RELEASE

# More copper intersected at Emull deposit, Koongie Park. Initial resource estimate due before end of the year.

### Highlights

- Further reverse circulation (RC) drilling has identified additional copper mineralisation at the Emull deposit, part of the Koongie Park Project.
- Drilling designed to expand known mineralisation identified in historic and recent drilling programs<sup>1</sup>.
- Highlighted results from the latest drilling at Emull include:
  - EMRC22\_003 11m @ 0.32% Cu, 1.07% Zn and 5g/t Ag from 134m including 2m @ 0.71% Cu, 5.29% Zn and 13g/t Ag from 137m
  - EMRC22\_006 5m @ 0.40% Cu, 2.83% Zn and 8g/t Ag from 32m including 2m @ 0.58% Cu, 5.95% Zn and 11g/t Ag from 33m and 15m @ 0.30% Cu, 0.03% Zn and 6g/t Ag from 185m
  - EMRC22\_007 41m @ 0.34% Cu, 0.52% Zn and 6g/t Ag from 122m and 2m @ 1.23% Cu, 0.02% Zn and 9g/t Ag from 237m
- Emull initial resource estimate due by the end of 2022.

**AuKing Mining Limited (ASX:AKN)** has confirmed the intersection of further copper mineralisation at the Emull deposit, at its flagship Koongie Park Copper/Zinc Project in Western Australia's Halls Creek region.

Three RC drill holes over 818m, one of which re-entered the base of hole EMRC22\_007, all encountered copper mineralisation. Drill holes EMRC22\_010 and 011 were completed for 210m, but assays have only recently been received. Importantly, the assay results from this latest drilling sets the stage for the release of an initial resource estimate for Emull before the end of 2022.

<sup>1</sup> Refer ASX Release dated 12 August 2022 *Pivotal copper/zinc system confirmed at Emull prospect*

AuKing chief executive officer, Mr Paul Williams, said the new drilling at Emull confirmed a continuity of mineralisation across the known deposit area, and intersected more copper, zinc and silver at depth, and in areas that were previously not believed to be mineralised at all.

“Emull is a significant near-surface, low-grade primary sulphide copper resource which offers strong potential for a shallow, bulk tonnage, open pit operation at Koongie Park,” Mr Williams said.

“The new drilling program has effectively closed the ‘gaps’ in mineralisation in certain zones of the main deposit area and extended the known mineralisation at greater depth.

“The combined assay results since August have increased our confidence in the prospect and will serve the planned delivery of an initial resource estimate by the end of this year,” he said.

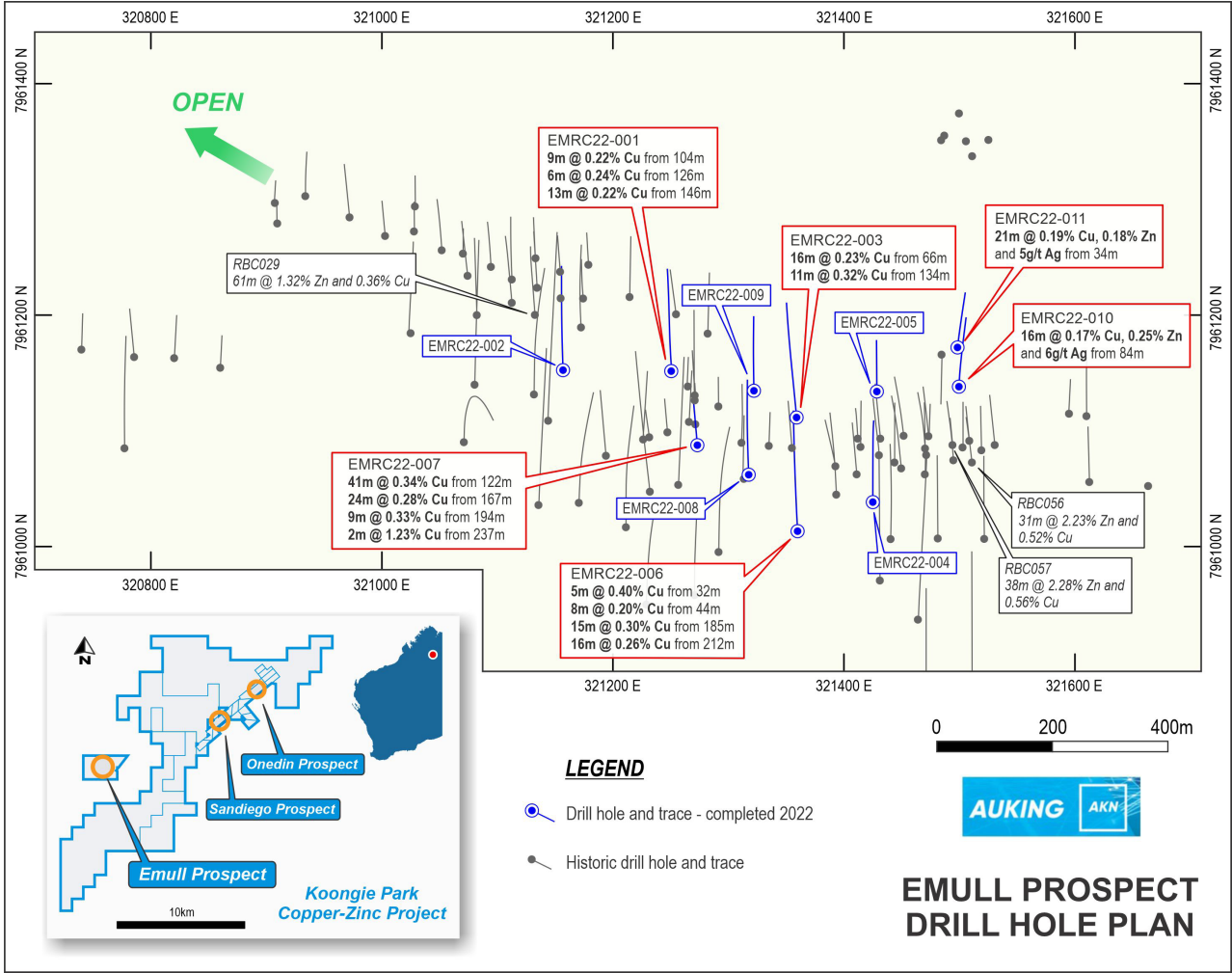


Figure 1. Plan view diagram (looking from above) of the Emull deposit highlighting the latest drill holes that have been completed.

### Emull Drilling Cross-Section

As shown by the cross-section diagram below (Figure 2), drilling at Emull this year has:

- confirmed historic drilling results, and
- identified a broad, near-surface copper and zinc resource, and notably, confirmed the continuity of the mineralisation both along strike and at depth.

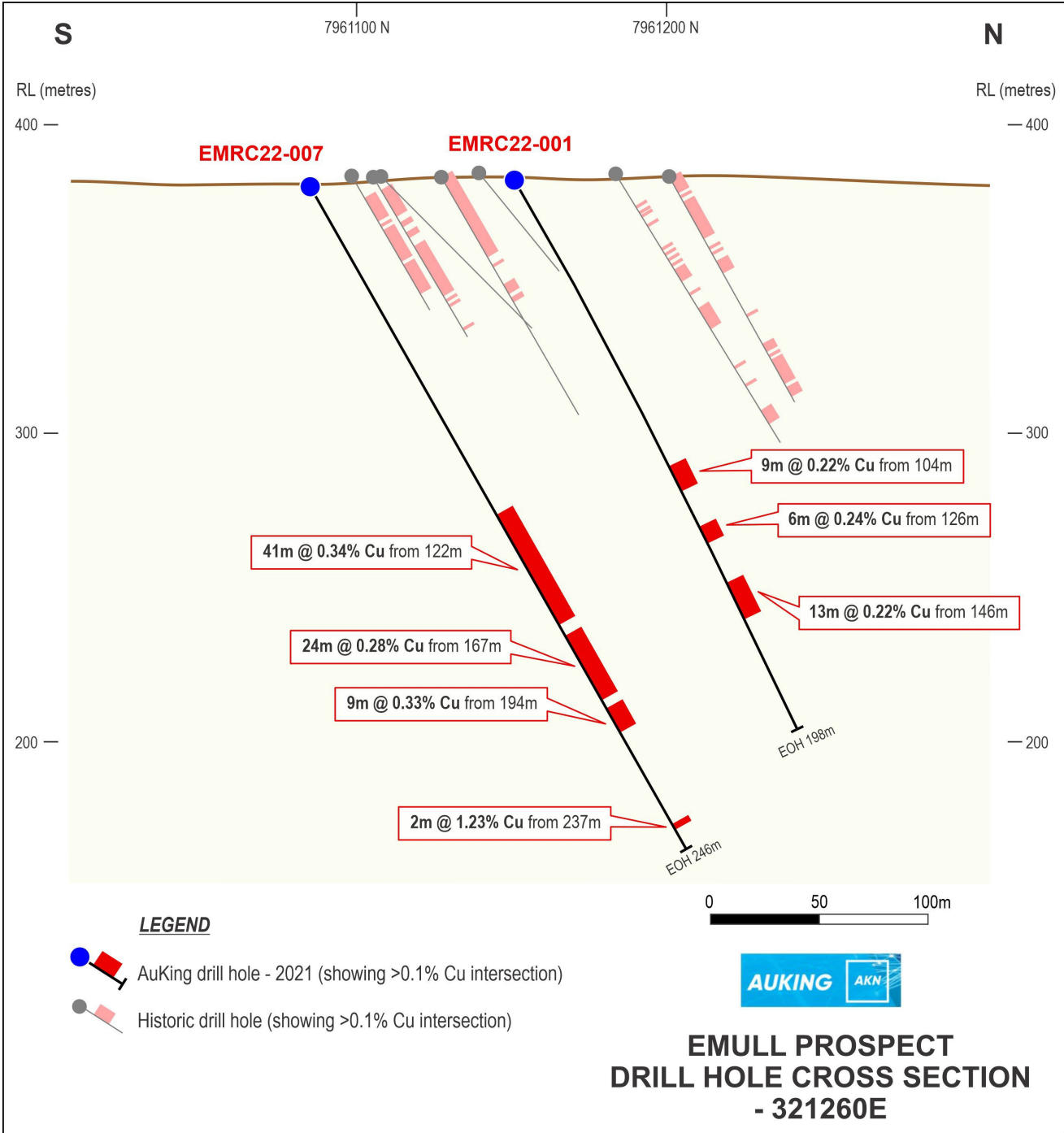


Figure 2. Emull drillhole cross-section plan (holes EMRC22\_001 and 007)

## Significant drill intersections

Based on the latest assay results received, the following major drilling intersections have been identified at Emull:

- EMRC22\_001** 13m @ 0.22% Cu, 0.03% Zn and 2g/t Ag from 146m
- EMRC22\_003** 16m @ 0.23% Cu, 0.16% Zn and 9g/t Ag from 66m  
11m @ 0.32% Cu, 1.07% Zn and 5g/t Ag from 134m including:  
2m @ 0.71% Cu, 5.29% Zn and 13g/t Ag from 137m and  
1m @ 0.55% Cu, 9.83% Zn and 9g/t Ag from 138m
- EMRC22\_006** 5m @ 0.40% Cu, 2.83% Zn and 8g/t Ag from 32m including:  
2m @ 0.58% Cu, 5.95% Zn and 11g/t Ag from 33m  
15m @ 0.30% Cu, 0.03% Zn and 6g/t Ag from 185m and  
16m @ 0.26% Cu, 0.46% Zn and 6g/t Ag from 212m
- EMRC22\_007** 41m @ 0.34% Cu, 0.52% Zn and 6g/t Ag from 122m including:  
2m @ 1.23% Cu, 0.02% Zn and 9g/t Ag from 126m  
24m @ 0.28% Cu, 0.04% Zn and 2g/t Ag from 167m  
  
9m @ 0.33% Cu, 0.06% Zn and 3g/t Ag from 194m including:  
2m @ 0.54% Cu, 0.05% Zn and 6g/t Ag from 200m and  
2m @ 1.23% Cu, 0.02% Zn and 9g/t Ag from 237m
- EMRC22\_010** 16m @ 0.17% Cu, 0.25% Zn and 6g/t Ag from 84m
- EMRC22\_011** 21m @ 0.19% Cu, 0.18% Zn and 5g/t Ag from 34m

## Emull Geology

The Emull deposit falls within the Central zone of the Lamboo Complex. This Complex lies at the core of the Halls Creek Orogen as a Palaeoproterozoic (1920-1780Ma) composite, linear belt consisting of variably deformed and metamorphosed sedimentary, volcanic and intrusive rocks. The Lamboo Complex and onlapping Palaeoproterozoic sedimentary basins were deformed in the course of the 1835-1805 Ma Halls Creek Orogeny.

The genesis of mineralisation at Emull is still to be confirmed, although previous models recognise the prospect as a volcanogenic massive sulphide (VMS) deposit partially assimilated during intrusion of the Emull gabbro.

VMS mineralisation is well established within the Koongie Park Formation sediments and volcanics nearby to Emull – including the Sandiego and Onedin deposits which are less than 15kms away.

**This announcement has been authorised by Paul Williams, CEO, AuKing Mining Limited.**

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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 a JORC resource 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:

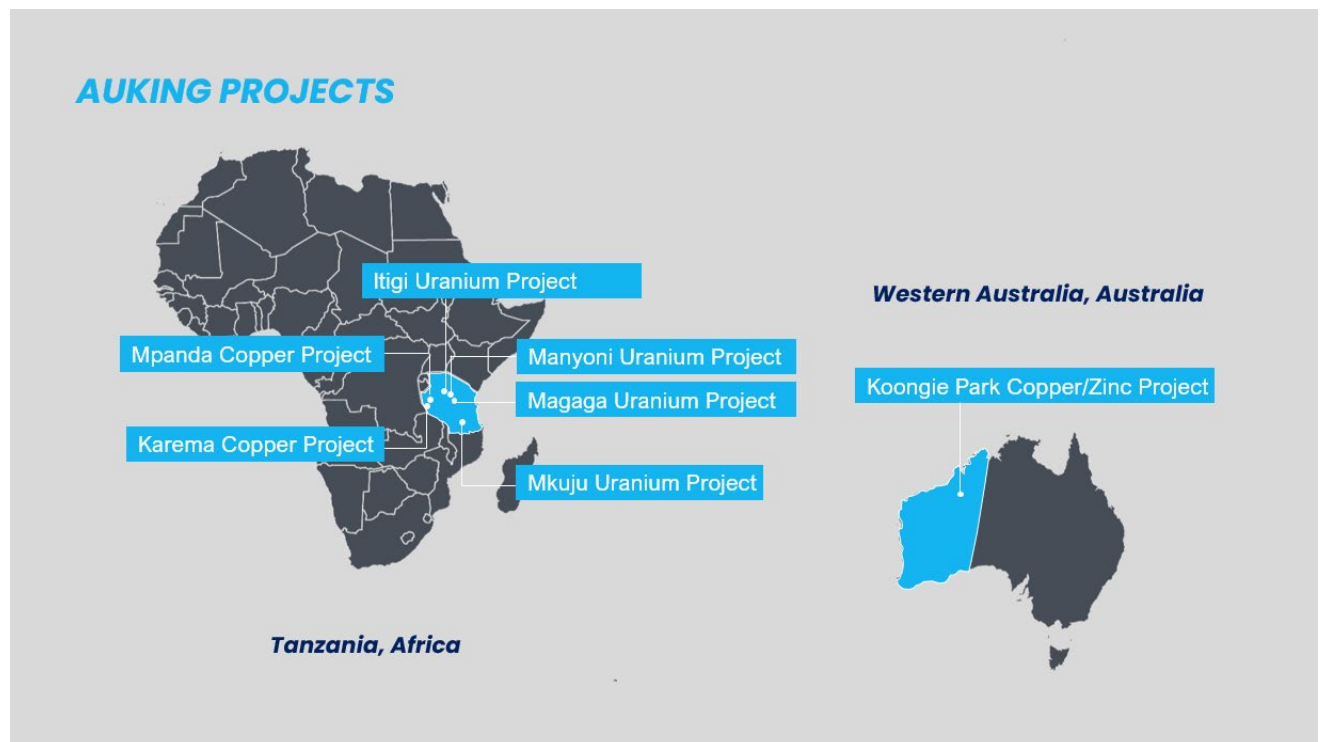
*Mkuju* – near to the world class Nyota uranium project in southern Tanzania; the subject of significant previous exploration

*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.

For further information

[www.aukingmining.com](http://www.aukingmining.com)



## Competent Persons' Statements

The information in this report that relates to exploration results at the Koongie Park Project (both current and historic) is based on information compiled by Mr Ian Hodkinson who is a member of the Australian Institute of Geoscientists and the Society for Geology Applied to Mineral Deposits. Mr Hodkinson is a non-executive director of AuKing Mining Limited 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 Hodkinson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## APPENDIX A – Drill Collar Details

Hole No.	MGA52 Easting	MGA52 Northing	RL (m)	Hole Depth (m)	Hole Dip (°)	Azimuth MGA (°)	Drill Type
EMRC22_001	321251	7961152	381	198	-60.0	0	RC
EMRC22_003	321357	7961112	381	214	-60.0	0	RC
EMRC22_006	321360	7961013	381	256	-60.0	0	RC
EMRC22_007	321271	7961084	380	246	-60.0	0	RC
EMRC22_010	321498	7961135	381	120	-60.0	0	RC
EMRC22_011	321496	7961169	381	90	-60.0	0	RC

## APPENDIX B – Drillhole Intersections

(Significant intersection summary at greater than 0.10% Cu cut-off grade. Selected higher grade intervals shown at a 0.5% Cu cut-off grade (predominant Cu zones) and 2% Zn cut-off grade (predominant Zn zones)

Hole No.	From (m)	To (m)	Width (m)	Cu %	Zn %	Ag g/t
<b>EMRC22_001</b>	104	113	9	0.22	-	2.0
And	126	132	6	0.24	-	1.6
And	<b>146</b>	<b>159</b>	<b>13</b>	<b>0.22</b>	-	2.1
<b>EMRC22_003</b>	<b>66</b>	<b>82</b>	<b>16</b>	<b>0.23</b>	-	9.3
And	134	145	11	0.32	-	5.3
<i>Incl.</i>	<b>137</b>	<b>139</b>	<b>2</b>	<b>0.71</b>	<b>5.3</b>	<b>12.7</b>
<i>Incl.</i>	138	139	1	0.55	<b>9.83</b>	9.1
<b>EMRC22_006</b>	32	37	5	0.40	2.8	7.7
<i>Incl.</i>	33	35	2	0.58	6	10.9
<i>Incl.</i>	<b>34</b>	<b>35</b>	<b>1</b>	<b>0.66</b>	<b>8.5</b>	<b>15</b>
And	44	52	8	0.20	-	7.1
And	185	200	15	0.30	-	6.1
And	212	228	16	0.26	-	6.1
<b>EMRC22_007</b>	<b>122</b>	<b>163</b>	<b>41</b>	<b>0.34</b>	-	<b>6.3</b>
And	<b>167</b>	<b>191</b>	<b>24</b>	<b>0.28</b>	-	<b>1.7</b>
And	194	203	9	0.33	-	2.7
<i>Incl.</i>	200	202	2	0.54	-	6
And	237	239	2	1.23	-	9.2
<b>EMRC22_010</b>	84	100	16	0.17	-	5.7
<b>EMRC22_011</b>	34	55	21	0.2	-	4.6

## Appendix 4 - JORC Code, 2012 Edition – Emull Drill Intersections, Koongie Park

### 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 (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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 (e.g., ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation (RC) drilling at Emull was used to obtain individual 1 m samples, which were reduced in size to produce a sample of approximately 1–2 kg in weight, which 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 reporting 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 (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>A significant amount of drilling has been previously undertaken at Emull by a range of methods, auger, rotary air-blast and RC. Much of the earlier work is poorly located and requires further review.</li> <li>Previous RC drilling conducted at Emull comprises a total of 9,141m undertaken by Northern Star during the period 2003 to 2012 and in 2022 AKN completed 11 RC holes for 1,910m.</li> </ul>

		<ul style="list-style-type: none"> <li>• The Competent Person considers the RC drilling technique to be appropriate for the mineralisation style.</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>• RC recovery levels are reportedly high hence the relationship between recovery and grade is not an issue.</li> <li>• The Competent Person considers the reported level of sample recovery to be appropriate for the style of mineralisation.</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>• The latest RC chip logging process uses an approach based largely on a series of data recording procedures developed by Newexco Exploration consultants and considered to be an industry standard approach. This is the same as has been used at AuKing Mining's nearby Sandiego and Onedin projects.</li> <li>• The Competent Person considers the geological logging procedures in use for the RC drilling to be appropriate for the style of mineralisation and to a level of detail sufficient for preparation of future Mineral Resource Estimates.</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-situ 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>• The sample size submitted for analysis is considered to be appropriate for the mineralisation grain size, texture and style.</li> </ul>



**Quality of assay data and laboratory tests**

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.
- Analytical work on the samples from the RC sampling programme reviewed in this release has been undertaken by Jinning Testing and Inspection, Canning Vale, Perth, WA.
- RC samples are pulverised to a nominal 85% passing 75µm.
- A multi-element analytical suite is assayed for using a mixed acid digest on a 0.2gm 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 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).
- The balance of the pulp sample is stored pending additional analytical work being required.
- 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.
- 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.
- The results seen to date indicate that there are no concerns with the quality of analyses reported.

	<ul style="list-style-type: none"> <li>• The Competent Person considers that the level of QAQC being applied gives confidence in the accuracy and precision of the results being received from Jinning.</li> </ul>
<b>Verification of sampling and assaying</b> <ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent 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>	<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 currently 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>• AKN is proposing to undertake check analytical work on a number of key mineralised intersections at a second commercial laboratory in due course.</li> <li>• No adjustments have been made to any of the received analytical 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>• A local exploration grid was previously established at Emull and detailed survey work has previously cross-referenced the local grids to the Zone 52 MGA and GDA 2020 coordinate systems.</li> <li>• A digital elevation model gives adequate control in respect of elevation data.</li> <li>• Proposed drill hole locations have been set out for the current programme using GDA 2020 co-ordinates.</li> <li>• A DGPS survey will be completed at the conclusion of the latest drill programme with a number of older hole collars checked surveyed.</li> <li>• Set-up collar azimuths and inclinations have been established using a compass and clinometer.</li> </ul>

		<ul style="list-style-type: none"> <li>Downhole survey methods in the older RC 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> </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>Drillhole section spacing at Emull is approximately 20 to 50m along strike.</li> <li>The current drilling programme at Emull is primarily intended to infill drill the deposit in depth thereby improving confidence in the grade continuity with a view to increasing confidence in any subsequent mineral resource estimate. On section spacing for this programme will be of the order of 30 to 50m.</li> <li>The spacing of the older holes referred to in this release for the most part conforms with the previous comment but locally is down to 20m.</li> <li>All intervals reported are length weighted composites.</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>The orientation of the current (and previous) drillholes at Emull is orthogonal to the perceived strike of mineralisation and limits the amount of geological bias in drill sampling as much as possible.</li> <li>The orientation of drillholes with respect to the attitude of the lithologies and/or structures hosting mineralisation will be sufficient to support possible future Mineral Resource Estimates.</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>All samples were placed in large poly-weave bags for road transportation to the analytical laboratory in Perth by a local transportation service.</li> <li>The Competent Person considers the security of sample data through the sampling and analytical processes to be adequate to support the public release of drill results and, in due course, the reporting of the Mineral Resource Estimate.</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</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews appear to have been carried out for any of</li> </ul>

data.

the previous drill sampling programmes.

- The Competent Person considers that an adequate level of QAQC is currently being undertaken.

## 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>• The Emull prospect is located within E80/4957. The Exploration Licence is located 44km southwest of Halls Creek township respectively, near the Great Northern Highway and 19.5km southwest of AKN's Sandiego Project.</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></ul>

- In 1977 Shell entered into a JV with North Broken Hill to explore the nearby Location 5 gossan system, now known as Emull West. Shell withdrew from the JV in 1978 and NBH allowed the claims to lapse.
- During or prior to Shell's tenure over Emull, a resource estimate of 4.7Mt @ 4.5% Zn, 0.33% Cu, 0.2% Pb & 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.
- 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.
- 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.
- NST 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 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.
- 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.
- 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.

**Geology**

- Deposit type, geological setting, and style of mineralisation.
- 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.
- 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 lense 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. A second prospect of similar character, Location 5, is located approximately 800m northwest of Emull.
- Rocks of the Koongie Park property are assigned to the Lamboo Province, of Palaeoproterozoic age (1910–1805 Ma), which formed within the northeast trending Halls Creek Orogen.
- The KPF hosts several other base metal occurrences and two significant base metal deposits, Onedin and Sandiego.
- 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.

**Drill hole Information**

- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
- All requisite drill hole information is included in Appendix 2 of this report.
- The reported intersections are listed in the body of this report.

- easting and northing of the drill hole collar
- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
- dip and azimuth of the hole
- down hole length and interception depth
- hole length.
- If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.

**Data aggregation methods**

- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.
- Where aggregate intercepts incorporate short lengths of high- grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.
- The assumptions used for any reporting of metal equivalent values should be clearly stated.
- Intersection calculations are weighted by sample length.
- The Emull samples are RC chips with a constant sample length of 1m.
- Reported intersections are primarily based on a cut-off grade of 0.10% Cu with selected higher-grade intervals shown at a 0.2% Cu cut-off grade. Selected intervals at a 2% Zn cut-off grade are also reported.
- A maximum of 2m of sub-grade (below cut-off) material is incorporated into the reported composited intersections
- No top cutting of data or grades was undertaken in the reporting of these results.
- Appropriate rounding of results has been applied.

**Relationship between mineralisation widths and intercept lengths**

- These relationships are particularly important in the reporting of Exploration Results.
- If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.
- The orientation of the drillholes is generally orthogonal to the strike of mineralisation and limits the amount of bias in drill sampling as much as possible.
- The Competent Person considers the orientation of drillholes with respect to the attitude of the lithologies and/or structures hosting mineralisation will be

	<ul style="list-style-type: none"> <li>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').</li> </ul>	<p>sufficient to support the reporting of a Mineral Resource estimate in due course.</p>
<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>	<ul style="list-style-type: none"> <li>Plans and sections showing the location and orientation of the RC holes mentioned in this release has been included in the body or the report.</li> <li>A listing of the results is included in the body of the text.</li> </ul>
<b>Balanced reporting</b>	<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>	<ul style="list-style-type: none"> <li>All significant results received to date are reported in this release.</li> <li>All results reported by AKN are considered to be accurate and reflective of the mineralised system being drilled.</li> </ul>
<b>Other substantive exploration data</b>	<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>This report relates to the results of RC drilling undertaken at the Emull Prospect in June-July 2022.</li> <li>AKN believes that the results and data provided herein add further meaning and understanding to the geological lithologies and structure being tested at Emull.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., 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>AKN's future exploration at Emull will focus on producing a maiden Mineral Resource Estimate of the mineralisation. Further exploratory drilling of several adjacent targets with similar magnetic and structural character to Emull is planned for early 2023.</li> </ul>



