



## AuKing intersects 105m of 1.94% Cu and 55g/t Ag, including 16.6m at 10.2% Cu and 316g/t Ag at Koongie Park

21 February 2022

**AuKing Mining Limited**

ABN 29 070 859 522

(ASX Code: AKN, AKNO)

**Issued Capital:**

75,289,651  
Ordinary shares  
17,500,000  
Options (30 June 2023 @ 25c each)

**Directors:**

Dr Mark Elliott  
*Chairman*  
Peter Tighe  
*Non-Executive Director*  
Ian Hodgkinson  
*Non-Executive Director*  
Shizhou Yin  
*Non-Executive Director*

**Chief Executive Officer:**

Paul Williams

**Company Secretary:**

Paul Marshall

Suite 27, Level 7,  
320 Adelaide Street  
BRISBANE Q 4000  
Ph: +61 7 3535 1208  
Email:  
admin@aukingmining.com

**Contact:**

Paul Williams  
Chief Executive Officer  
Email:  
[p.williams@aukingmining.com](mailto:p.williams@aukingmining.com)  
Mob: +61 419 762 487

### Highlights:

- First assay results obtained from AKN's drilling program at Onedin conducted in November/December 2021.
- High-grade, near surface copper and silver, and other mineral intersections identified at drill hole AORD004 including:  
**105.3m @ 1.94% Cu, 0.76% Zn, 0.70% Pb, 55g/t Ag and 106ppm Mo from 46m including**  
**16.6m @ 10.20% Cu, 1.03% Zn, 0.46% Pb & 316g/t Ag from 130m**
- AORD004 is one of seven (7) diamond drill holes drilled at Onedin as part of the proposed metallurgical testwork program.
- Assay results for AORD004 provide strong confirmation of high-grade mineralisation to the north of drill hole AOWB003 which reported 124m @ 1.03% Cu, 1.08% Zn, 1.54% Pb & 50g/t Ag from 8m. (See AKN release to ASX 4 October 2021).
- More anomalous zones of molybdenum in AORD004 – consistent with the strong Mo intervals previously reported at drill holes AOWB003 and AORC004.
- Remaining assays from the Onedin drilling program are expected to be received and reported within the next week.

**AKN Chief Executive Officer, Paul Williams said** "We are excited to report these outstanding intersections from the drilling undertaken at Onedin late last year. The results from drill hole AORD004 are phenomenal – especially the very high-grade zone of more than 10% Cu from 130m depth.

"Following the excellent results from AKN's first drilling program reported last year, the Company has now clearly identified a significant copper deposit at its Koongie Park project which we now have a 75% interest in.

"Results such as these from AORD004 set the scene for the commencement of AKN's metallurgical testwork program on the near-surface Onedin ores. In addition, these results should be highly complementary to AKN's Koongie Park resource upgrade work that has already commenced and with a report likely to be available later this quarter."

**Outstanding copper, silver and other mineral intersections from Onedin:**

AuKing Mining Limited (“AKN” or “the Company”) is pleased to announce significant high-grade assay results from drill hole AORD004, one of seven (7) drill holes from the Onedin drilling program at Koongie Park that was conducted between November and December 2021. These holes were all diamond drillholes at the Onedin deposit. A total of 1433m of drilling was completed with these holes, with a maximum depth of 243m at hole AORD006. (See Figure 1 below for these drill hole locations – highlighted in red).

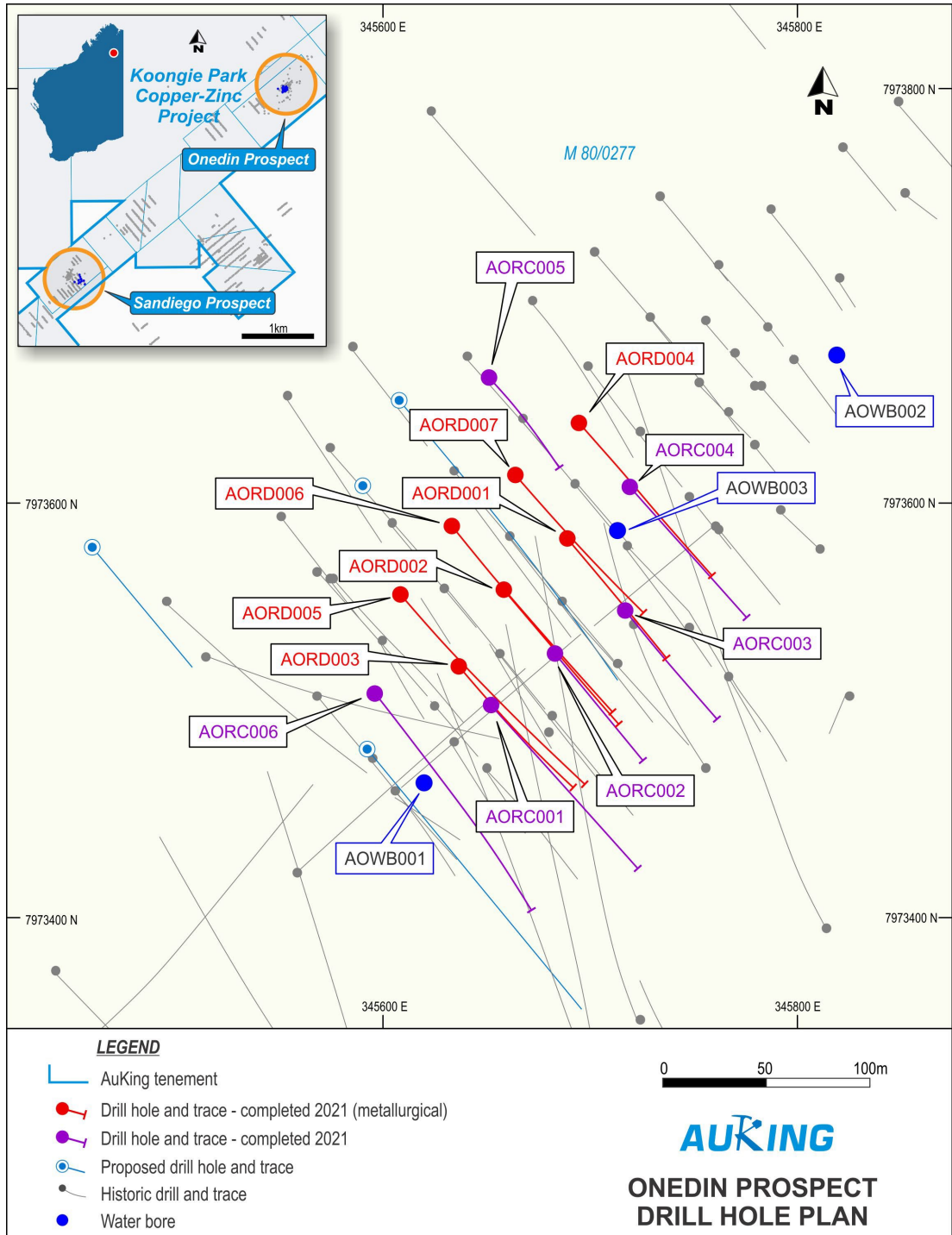


Figure 1 – Onedin drillhole locations

A full summary of the significant intervals from drill hole AORD004 is as follows:

**105.3m @ 1.94% Cu, 0.76% Zn, 0.70% Pb, 50g/t Ag and 106ppm Mo** from 46m including:

**11m @ 1.19% Cu, 1.28% Zn, 2.69% Pb, 4g/t Ag and 269ppm Mo** from 99.6m

**18.3m @ 9.32% Cu, 0.96% Zn, 0.48% Pb, 288g/t Ag and 89ppm Mo** from 128.3m

**16.6m @ 10.20% Cu, 1.03% Zn, 0.46% Pb, 316g/t Ag and 76ppm Mo** from 130m and

**2m @ 0.25% Cu, 2.55% Zn, 0.05% Pb, 2g/t Ag & 7ppm Mo** from 76m

Drill hole AORD004 is situated about 40-50m north of previous AKN drill holes AOWB003 and AORC004 which reported the following intersections:

#### **AOWB003**

**124m @ 1.03% Cu, 1.08% Zn, 1.54% Pb & 50g/t Ag** from 8m including

**23m @ 0.72% Cu, 1.24% Zn, 0.96% Pb & 1g/t Ag** from 25m

**28m @ 1.12% Cu, 1.17% Zn, 1.50% Pb & 1g/t Ag** from 56m

**22m @ 2.02% Cu, 0.44% Zn, 0.27% Pb & 63g/t Ag** from 92m and

**12m @ 1.87% Cu, 3.54% Zn, 8.58% Pb 387g/t Ag & 0.27% Mo** from 120m.

#### **AORC004**

**123m @ 0.39% Cu, 0.59% Zn, 0.96% Pb & 11g/t Ag** from 16m including:

**5m @ 0.85% Cu, 0.99% Zn, 0.81% Pb & 21g/t Ag** from 73m

**5m @ 0.82% Cu, 0.38% Zn, 0.90% Pb & 17g/t Ag** from 83m

**15m @ 0.72% Cu, 0.51% Zn, 3.21% Pb, 8g/t Ag & 0.17% Mo** from 118m

**12m @ 0.75% Cu, 0.53% Zn, 3.43% Pb, 9g/t Ag & 0.19% Mo** from 119m and

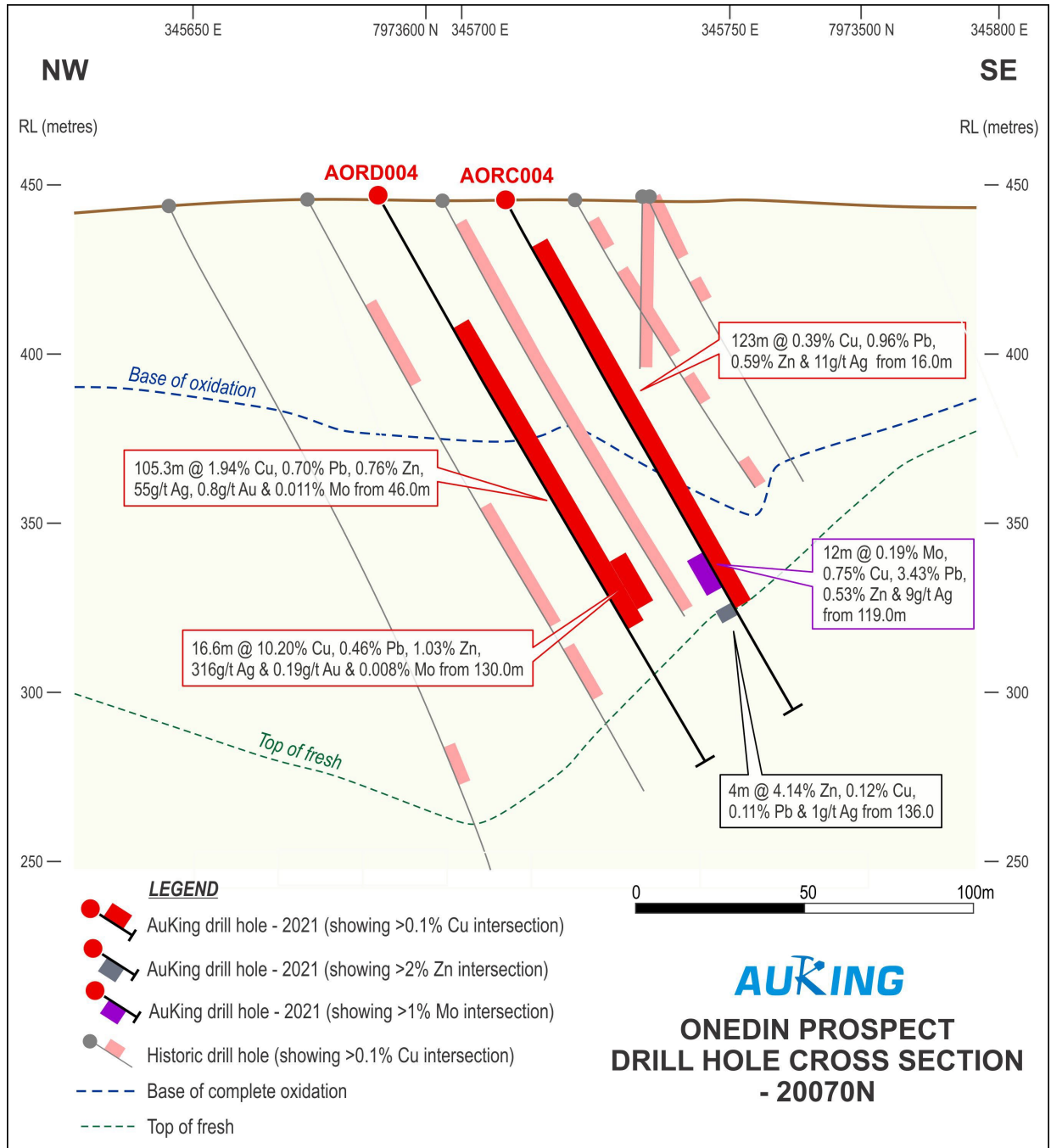
**4m @ 0.12% Cu, 4.14% Zn, 0.11% Pb & 1g/t Ag** from 136m.

*(See AKN announcement to ASX on 4 October 2021 for more details about drill holes AOWB003 and AORC004).*

The significant features of the assay results from drill hole AORD004 include the following:

- A high-grade zone of >100m of 1.96% Cu from 46m below surface including a very high-grade zone of Cu and Ag from 130m;
- Promising confirmation of mineralisation to the north of drill holes AOWB003 and AORC004 which previously reported substantial intersections; and
- Further evidence of a zone of Mo mineralisation, extending the significant results in AOWB003 and AORC004.

Figure 2 below highlights the extent of the mineralised intersections at AORD004 and AORC004 along cross-section 20070N and previous historic drilling in the same area:



*Figure 2 – Onedin Cross-section includes AORD004 (20070N)*

The remaining assays for the seven Onedin drill holes are expected shortly and full details will be released to market as soon as possible.

### Onedin Metallurgical Testwork

Once all assays from the seven Onedin drill holes are received, the drill core samples will be formed into composite samples for the purposes of the proposed Onedin metallurgical testwork program, scheduled to commence in February 2022.

Stage 1 of the testwork program will be conducted in conjunction with Perth-based Simulus Laboratories and involves the following:

- demonstration of economic metal recoveries;
- comparison with conventional process treatments;
- optimisation of reagent usage and doses;
- initial processing kinetics; and
- likely product options.

The program will take approximately 6-8 weeks to complete, allowing AKN to report results from the Stage 1 program in late March/ early April 2022.

### **Koongie Park Resource Update**

CSA Global has been engaged to prepare an update of the Koongie Park resource estimate based on greater information and resource definition from the 2021 drilling program and further information identified by AKN from existing historic data. Resource update work is expected to be completed in late March 2022.

### **Koongie Park copper/zinc project overview**

Koongie Park is situated in north-eastern Western Australia in the highly mineralised Halls Creek region. The Koongie Park project comprises 15 licences (two mining, eight exploration and five prospecting) covering an area of over 500km<sup>2</sup>. The asset has existing JORC 2012 resources of **6.8Mt at 1.3% Cu, 4.1% Zn, 0.3g/t Au and 26g/t Ag\***.

*[\*See full resources table at the end of this Release and CSA Global Independent Report, AKN Prospectus dated 9 March 2021]*

Koongie Park remains significantly under explored at depth and along strike and highly prospective for further VMS base metal mineralisation discoveries in the tenement package. The Company has identified multiple drill targets to expand on the existing known resources at both the Sandiego and Onedin deposits. Both deposits remain open at depth and to the south.

### **Koongie Park Earn-in**

In February 2021, AKN entered into an earn-in and joint venture agreement with Anglo Australian Resources NL providing AKN with the right to earn up to a 75% interest in the Koongie Park project by completing exploration expenditure of \$3m over a 3-year period. AKN has since completed these earn-in expenditure commitments and currently holds a 75% interest in the Koongie Park JV.

### **This announcement is authorised by:**

Paul Williams

Chief Executive Officer

[p.williams@aukingmining.com](mailto:p.williams@aukingmining.com)

+61 419 762 487

**Released through:** Henry Jordan, Six Degrees Investor Relations, +61 431 271 538



## Competent Persons' Statement

*The information in this report that relates to exploration results at the Koongie Park Project 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.*

*The information in this report that relates to Mineral Resources 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 the report of the matters based on his information in the form and context in which it appears.*

*The information relating to the Mineral Resources at the Koongie Park copper/zinc project is extracted from the Independent Technical Report of CSA Global (the CSA Global Report), which is included in the Company's Prospectus dated 9 March 2021 and which was lodged with ASX on 10 March 2021.*

*The report 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 original market announcement.*

## APPENDIX 1 – Koongie Park Resource Estimate

In the CSA Global Independent Technical Report, a full combined Mineral resource estimate for the Koongie Park project deposits is as follows:

Koongie Park	Zone	Cut-off grade	Classification	Tonnes (Mt)	Copper (%)	Zinc (%)	Gold (g/t)	Silver (g/t)
Onedin + Sandiego	Supergene	Cu >0.8%	Indicated	0.9	2.5	1.7	0.3	39
			Inferred	0.0	1.0	0.1	0.1	3
	Transitional and Primary	Cu >0.8%	Indicated	1.9	2.3	1.3	0.4	21
			Inferred	0.4	1.8	2.0	0.3	5
	Zn Dominant Primary	Zn >3%	Indicated	3.2	0.4	6.6	0.2	30
			Inferred	0.4	0.1	6.2	0.1	9
	All zones	Various	Indicated	6.0	1.3	4.2	0.3	28
			Inferred	0.8	1.0	3.8	0.2	7
	<b>TOTAL</b>	<b>Various</b>	<b>Total</b>	<b>6.8</b>	<b>1.3</b>	<b>4.1</b>	<b>0.3</b>	<b>26</b>

*[Note: CSA Global cautions that the two deposits and three oxidation zones have different metallurgical properties and/or cut-off grades, and this needs to be considered when assessing the combined totals]*

### APPENDIX 2 – Drill Collar Details

Hole No.	MGA52 Easting	MGA52 Northing	RL (m)	Hole Depth (m)	Hole Dip (°)	Azimuth MGA (°)	Drill Type
AORD004	345696.9	7973601.847	445.707	196.2	-60.0	140	Diamond

### APPENDIX 3 – 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 %	Pb %	Ag g/t	Mo ppm
AORD004	46	151.3	105.3	1.94	0.76	0.70	55	106
including	99.6	110.6	11	1.19	1.28	2.69	4	269
	128.3	146.6	18.3	9.32	0.96	0.48	288	89
(2% Cu cutoff)	130	146.6	16.6	10.20	1.03	0.46	316	76
(2% Zn cutoff)	76	78	2	0.25	2.55	0.05	2	NSR

*“NSR” denotes no significant results*

## Appendix 4 - JORC Code, 2012 Edition – Onedin Diamond Drilling Results

### 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>The Onedin deposit has been previously drilled and sampled by several previous exploration groups using both reverse circulation (RC) and diamond drilling techniques.</li> <li>The drilling results reviewed in the accompanying release were obtained entirely by PQ3 sized diamond drilling. Sampling has been done according to lithological and mineralisation boundaries.</li> <li>Samples were ticketed prior to dispatch to the analytical laboratory and pulverised to produce a pulp sample for base and precious metal analyses.</li> <li>The reported drilling at Onedin has been of PQ3 size. Quarter core samples from variable length mineralised intervals were cut by diamond saw prior to submission as half-core samples to the analytical laboratory, sample weights varying between 0.4 and 3.8 kg.</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>The diamond drilling reported herein for Sandiego utilised a triple-tube PQ coring arrangement.</li> <li>The Competent Person considers the reported 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> </ul>	<ul style="list-style-type: none"> <li>The current programme has generated continuous core samples and core recovery has generally been excellent.</li> </ul>



	<ul style="list-style-type: none"> <li>• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>• The triple-tube drilling was adopted specifically to maximise core recovery.</li> <li>• Where core loss has been incurred due to friable or poor ground, this is recorded during the logging process.</li> <li>• Excellent core recovery levels approaching 100% are noted for the core intersection reported herein.</li> <li>• With high reported recovery levels, the relationship between recovery and grade is not an issue.</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>• Previous RC chip samples were routinely geologically logged to a level suitable for defining the general geological features including lithology, mineralisation, alteration etc.</li> <li>• All diamond drill core sampled up to 2006 was relogged by a single, experienced geologist to ensure consistency in the geological logging. The same geological logging template was used for subsequent diamond drilling up to 2010.</li> <li>• The latest diamond drill core logging procedure uses a revised approach, based largely on a series of data recording procedures developed by Newexco Exploration consultants, and considered to be an industry standard approach.</li> <li>• Recent RC drill holes have been logged to record the same suite of information as before with the entire length of the holes being logged.</li> <li>• The Competent Person considers the geological logging procedures in use for both RC and diamond drilling to be appropriate for the style of mineralisation and to a level of details sufficient for preparation of subsequent 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> </ul>	<ul style="list-style-type: none"> <li>• RC samples are cone split. An analytical portion is collected in a calico bag while the bulk of the sample reports to a large plastic bag for retention and possible later re-sampling. Any wet samples are speared.</li> </ul>

- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

- Compositing samples (generally representing 4m of drilling) and individual 1m samples (averaging ~1.8kg) are sent to a commercial laboratory for analysis.
- Duplicate samples are being collected for analysis on an approximately 1 in 50 basis.
- The sampling method utilised in the current RC drilling programme and the quality of the sub-sampling are considered to be equivalent to the current industry standard.
- The sample sizes submitted for analysis is considered to be appropriate for the mineralisation grain size, texture and style.
- PQ3 Diamond core was cut in half using a diamond saw and then one half was cut again to yield a quarter core sample bagged for transportation to the analytical laboratory.

**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 both the RC and diamond drilling programmes reviewed in this release has been undertaken by Jinning Testing and Inspection, Canning Vale, Perth, and Kalgoorlie, WA.
- RC samples are riffle split (if >3.5Kg) and pulverised in a ring grinder to 80% passing 75µm.
- Core samples are crushed to nominal -10mm size before being riffle split and pulverised as per the RC samples.
- 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.
- Gold is assayed for by means of a 30gm charge fire assay with AAS finish.

- The following elements are currently being analysed for (detection limits in parentheses, as ppm unless otherwise indicated): Ag (1); Al (0.01%); As (2); Au (0.01); 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); Mg (0.01%); Mn (1); Mo (2); Na (0.005%); Ni (1); P (20); Pb (2); S (20); Sb (5); Sc (1); Sn (1); Sr (1); Te (10); Th (10); Ti (5); Tl (20); U (20); 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.
- AuKing Mining Limited (“AKN”) inserts a range of QAQC samples into the sample sequence to assess laboratory prep and analytical practices and quality. A barren rock blank and a number of certified reference materials (CRMs or standards) are inserted into the sample sequence on an approximately 1 in 10 basis.
- The laboratory also 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.
- 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.

**Verification of sampling and assaying**

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.
- The grade of significant intersections has been verified by other senior geological personnel associated with the project.
- Twinned drilling has not yet been undertaken.
- 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

	<p>data entry validation routines.</p> <ul style="list-style-type: none"> <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>
<p><b>Location of data points</b></p> <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>• Local exploration grids were previously established at Onedin and remains in use for reporting purposes. Detailed survey work has previously cross-referenced the local grids to the Zone 52 MGA coordinate system. This data has now been transformed to the new GDA2020 datum and its metric grid equivalent.</li> <li>• Anglo Australian Resources NL (“AAR”) previously obtained photogrammetric coverage of the tenement areas which gives good control in respect of elevation data.</li> <li>• Drill hole collars at Onedin have been surveyed by DGPS survey undertaken by a reputable contract surveying group using the latest GDA2020 datum.</li> <li>• Set-up collar azimuths and inclinations were originally established using a compass and clinometer.</li> <li>• Downhole survey details have been obtained using a north-seeking gyroscopic survey tool approximately every 30m down the hole.</li> </ul>
<p><b>Data spacing and distribution</b></p> <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>• The previous drillhole section spacing at Onedin was approximately 40m along strike. Recent infill RC and diamond drilling at Onedin has endeavoured to reduce the section spacing to 20m to increase confidence in future Mineral Resource estimation work.</li> <li>• On section spacing at Onedin is generally of the order of 25-30m. This spacing is considered adequate for the assumption of grade continuity between holes.</li> <li>• The reported Onedin result represents an infill hole purposely drilled to obtain metallurgical sample and to improve confidence in</li> </ul>

		<p>mineralisation continuity.</p> <ul style="list-style-type: none"> <li>All intervals reported are length weighted composites.</li> </ul>
<p><b>Orientation of data in relation to geological structure</b></p>	<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 both RC and diamond drillholes at Onedin 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 is deemed sufficient to support the reporting of future Mineral Resource Estimates.</li> </ul>
<p><b>Sample security</b></p>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core samples are transported from the drill rig to the project sample yard at Halls Creek where they are cut and bagged for despatch.</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> <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 Resources.</li> </ul>
<p><b>Audits or reviews</b></p>	<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>All historical drill samples were geologically relogged in 2006 by CSA Global personnel, to remove the inconsistencies in logging which had been noted by AAR personnel.</li> <li>No audits or reviews are understood to have been carried out for any of the previous sampling programmes.</li> <li>The results being reported represent ongoing sampling from the Onedin diamond drilling programme.</li> <li>The Competent Person considers that an adequate level of QAQC is currently being undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Onedin is located within M80/277. The Mining Lease is 18km southwest of Halls Creek township, near the Great Northern Highway and 305km south-southwest of Kununurra, WA.</li> <li>The tenements are in good standing.</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>Numerous companies have explored within the Koongie Park tenement area since 1972, primarily focusing on the discovery of a significant stratabound lead-zinc system with volcanogenic affinities.</li> <li>1972–1977 - Kennecott pegged tenements over known copper-lead-zinc-silver gossans as part of its Gordon Downs 3 project. Work included geological and structural mapping, rock chip and soil sampling, diamond and percussion drilling. This work outlined significant base metal mineralisation hosted by chert, banded iron formations and carbonate-rich assemblages at Onedin, Sandiego, Hanging Tree and Gosford.</li> <li>1972–1977 - Kennecott pegged tenements over known copper-lead-zinc-silver gossans as part of its Gordon Downs 3 project. Work included geological and structural mapping, rock chip and soil sampling, diamond and percussion drilling. This work outlined significant base metal mineralisation hosted by chert, banded iron formations and carbonate-rich assemblages at Onedin, Sandiego, Hanging Tree and Gosford. Drilling immediately followed at these four prospects, with 29 RC</li> </ul>



holes with diamond tails, with the most significant deposit defined from this work at Sandiego.

- 1978–1979 - Newmont continued testing the known mineralisation, using extensive trenching, percussion and diamond drilling, detailed geophysics including ground magnetic surveys and low-level aeromagnetic surveys, which failed to locate significant extensions of the mineralisation in the known prospects.
- 1980 - North Broken Hill concentrated on testing the supergene enriched zone at the base at Sandiego.
- 1983–1988 - Asarco Australia Ltd carried out RAB drilling in the Mimosa sub-member, along strike of the known mineralisation, locating several significant geochemical anomalies, although not of sufficient grade to support a Mineral Resource estimate. The drilling was to fixed depth and only the bottom of the hole was sampled.
- Asarco also completed limited work on the supergene gold and base metal potential at Sandiego. This work indicated a resource at Sandiego of 0.33 Mt of supergene ore at 6.7% Cu and 288 g/t Ag and 4.3 Mt of primary ore grading 0.5% Cu, 0.8% Pb, 7.9% Zn and 31 g/t Ag.
- Limited testing was undertaken for gold in the sulphide deposits.
- 1988–1989 - BP Minerals and RTZ Mining went into a joint venture (JV) with Asarco and continued testing the gold potential by re-assaying split core samples for gold, which did not identify any significant base metal mineralisation. RTZ Mining sold the property to AAR in 1989.
- 1989–1994 - Billiton Australia and AAR identified extensions of known mineralisation at Onedin. Billiton carried out a broad-based exploration programme including limited RC and diamond drilling. A grade-tonnage estimate for the Onedin was prepared, for 1 Mt @ 11% Zn, 1% Cu and 1% Pb.
- 1995–2002 - Lachlan Resources and AAR concentrated on identifying shallow resources at Sandiego and Onedin with percussion and diamond drilling programmes. Two polygonal Mineral Resources were estimated for Sandiego in 1996 and 1997.

- AAR was sole tenure holder of the properties between 2002 and 2020. AAR drilled 245 RC and diamond drillholes encompassing 50,417m, focusing on Mineral Resource, metallurgical and geotechnical drilling at the Sandiego and Onedin base metal deposits. Since 2011, AAR has focused on gold exploration, with little exploration for base metals occurring on the property. AAR reported Mineral Resources for Onedin in 2006, 2008 and 2009.
- All previous exploration is considered to have been completed to a reasonable standard by experienced companies in a professional manner. Most exploration work has been appropriate but there are minor issues with inadequate historic documentation.
- The Competent Person considers the historical work undertaken incrementally over time has built up a good understanding of the geological characteristics of the deposit, and all historical work provides useful information.
- 2021 – 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 August 2021. 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.

- 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 Central Zone of the Lamboo Province comprises turbiditic metasedimentary and mafic volcanic and volcanoclastic rocks of the Tickalara Metamorphics, deposited by 1865 Ma. These rocks were intruded by tonalitic sheets and deformed and metamorphosed between 1865–1856 Ma and 1850–1845 Ma.
- A younger succession of rocks comprising the sedimentary rocks and mafic and felsic volcanic rocks of the Koongie Park Formation (KPF) were deposited in a possible rifted arc setting at around 1843 Ma. Layered mafic-ultramafic bodies were intruded into the Central Zone at 1856 Ma, 1845 Ma and 1830 Ma. Large volumes of granite and gabbro of the Sally Downs Supersuite intruded the Central Zone during the Halls Creek Orogeny at 1835–1805 Ma. Researchers interpret the Central Zone to be an arc-like domain developed on a continental fragment.

- The KPF within the Koongie Park property is broadly characterised as a low metamorphic-grade sequence composed of mafic and felsic volcanics and associated sedimentary facies including sandstone, mudstone, carbonate, chert and ironstone intruded by rhyolitic to rhyodacitic sills, dolerite bodies and basalt dykes.
- The KPF hosts numerous base metal occurrences and two significant base metal deposits, Onedin and Sandiego.
- The upper unit of the KPF composes felsic volcanic units, carbonate, ironstone, chert, mudstone, quartz-bearing volcanoclastic beds and lithic sandstone. Currently known base metal prospects are concentrated in the upper KPF at Koongie Park (i.e., the trend which includes Sandiego and Onedin deposits).
- Both, the Sandiego and Onedin deposits are situated within the limbs of intensely folded, higher order, double-plunging anticlinal structures that have been interpreted from magnetic images. The axial planes of the fold structures appear to be upright to south-southeast dipping. They trend northeast, sub-parallel to the regional transcurrent and anastomosing fault systems that dominate the Halls Creek Orogen.
- The massive 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.
- Sphalerite is the main sulphide in the primary mineralisation at Onedin with subordinate pyrrhotite-pyrite-chalcopyrite-galena. Sphalerite chiefly occurs as fine-grained masses. In general, the sulphides exhibit replacement textures and show evidence of mobilisation, which is a result of deformation and metamorphism subsequent to initial formation.
- The mineralogy of the primary mineralisation at Sandiego is pyrite-sphalerite-pyrrhotite-chalcopyrite ± galena which is largely hosted in the magnetite-rich

exhalative suite of rocks where it occurs as a massive conformable wedge-shaped lens 200 m in length with a maximum thickness of 75 m. Weak to moderate sulphide vein and stringer mineralisation occur at the base of the exhalite package in the underlying tuffs. Mineralisation is relatively rare in the carbonate zone but may extend into the talc-chlorite schists. Overall, there is poor spatial correlation between copper and zinc mineralisation at Sandiego. However, discrete zinc-rich and copper-rich zones have been identified from core logging and assay results in the vertical dimension.

- The KPF exhibits a deep weathered profile at Sandiego and particularly Onedin, resulting in three weathering domains – oxidised zone at surface, primary zone at depth, and the transition zone in between. Each zone has very different mineral assemblages and consequently very different metallurgical properties.
- The oxidised zone consists of completely oxidised material, above the base of complete oxidation (BOCO) surface. This surface is on average about 100 m below ground level. It is undulating and deepens significantly in the vicinity of steeply dipping faults. Gossans are developed at surface above the mineral deposits.
- The transition zone consists of partially oxidised material and is located between BOCO and the top of fresh rock (TOFR). Supergene mineralisation is comprised of secondary mineralisation hosted in the oxidised and transition zones.

#### **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:
  - 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
- All requisite drill hole information is included in Appendix 2 of this report.
- The reported intersections are listed in Appendix 3 of this report.

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 Onedin diamond drilling samples are quartered PQ3core with varying sample lengths based on lithological boundaries, with a maximum of 3.3m and a minimum of 0.25m, averaging ca. 0.95m.
- Reported intersections are primarily based on a cut-off grade of 0.1% Cu with selected intervals based on higher grade 0.5% and 2% Cu cut-offs. Selected zinc-rich intervals are shown at a 2.0% Zn cut-off grade.
- A maximum of 3.3m of sub-grade (below cut-off) material is incorporated into the reported composited intersections above 0.1% Cu.
- 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.
- 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').
- 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 sufficient to support the reporting of a Mineral Resource estimate in due course.

**Diagrams**

- Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional
- A plan showing the location and orientation of the RC and diamond holes mentioned in this release has been included in the body or the report.
- A cross section diagram showing the reported diamond drill hole has also been provided in the body of the report.

	views.	<ul style="list-style-type: none"> <li>• A tabulation of the results is included as Appendix 3.</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 results received and compiled since the previous release are reported in this release. Drilling and analysis is ongoing with further results expected.</li> <li>• All results reported on by AKN are considered to be accurate and reflective of the mineralised system being drill tested.</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 drill data reported from the recently completed drill programme.</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 Onedin.</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>• This report relates to a drill programme that was primarily designed to infill the existing drill pattern at Onedin and to supply sample material for proposed metallurgical test-work.</li> <li>• AKN's future exploration will focus on upgrading and expanding upon the current Inferred and Indicated Resource Estimate at Onedin, through further drilling within and immediately outside the existing resource area.</li> </ul>