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14 October 2022

ASX RELEASE

Important results from Onedin metallurgy testwork program - Updated

See attached an updated version of the ASX Release dated 13 October 2022 which now includes a JORC Table 1.

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

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Important results from Onedin metallurgy testwork program - Updated

AuKing Mining Limited (ASX:AKN) has reported outstanding copper recoveries up to 90% from its metallurgical testwork at the Onedin deposit at its Koongie Park Project in Western Australia's Halls Creek region.

Further to initial results reported in May[1], these latest results follow the completion of a further stage of testwork at Onedin. Important findings about recoveries on the near-surface oxide ores include the following:

- **Excellent copper (Cu) recoveries (> 90%) from certain ores utilising ammonia leaching;**
- **Cu and zinc (Zn) recoveries are not generally affected by particle size;**
- **In zones of greater iron (Fe) concentration, Cu recoveries improve over time;**
- **Higher-grade Zn zones are amenable to ammonia leaching, whereas in the lower-grade Zn zones the mineral is observed to be locked in the weathered Fe lattice and more difficult to recover; and**
- **Heap leaching appears to be the most likely metallurgical recovery process for these Onedin materials.**

AuKing Chief Executive Officer, Mr Paul Williams, described the latest results as "very significant and highly encouraging".

"Earlier in the year, when we identified this heavy level of iron concentration especially in the mineralised oxide zone at Onedin, the ability to achieve economic-scale recoveries appeared challenging," Mr Williams said.

"However, this latest program appears to provide AuKing with a sound basis to move into the more substantial testwork activities with a pretty clear processing pathway in mind. Of course, there still needs to be more detailed assessment of the treatment solutions across the entire Onedin deposit, but we are now well-placed to proceed with that work. As noted previously, the ability to establish a processing solution for Onedin can be an important contributor to the overall Koongie Park development strategy."

[1] *Refer ASX release dated 10 May 2022 Onedin Metallurgical Testwork Program Update*

Introduction

On 10 May 2022, AuKing reported its most recent update as to progress with the metallurgical testwork program at Onedin[1]. In that update it was observed that in the heavily weathered near-surface material (from depths of approx. 0 to 85m) a significant amount of the Cu, Zn and other mineralisation appeared to be dominated by the existence of Fe oxide/hydroxide material and that traditional leaching techniques showed low recovery rates on these materials.

As a result, AuKing developed a further set of initial tests designed to achieve better recoveries from these weathered oxide areas of the Onedin deposit. The tests were conducted on seven different samples taken from the Onedin diamond drilling core samples and a series of different processes were applied to those samples including:

- Both acid and ammonia leaching
- Different processing reagents;
- A range of sample grain sizes; and
- 24 and 48 hour testing periods.

The overall purpose of these further tests was to narrow the scope of AuKing's proposed major testwork program to be implemented shortly. Due to laboratory availability, the conduct of the program has taken several additional weeks to be completed but preliminary results have now been received and analysed. The key initial findings from this latest program are summarised below.

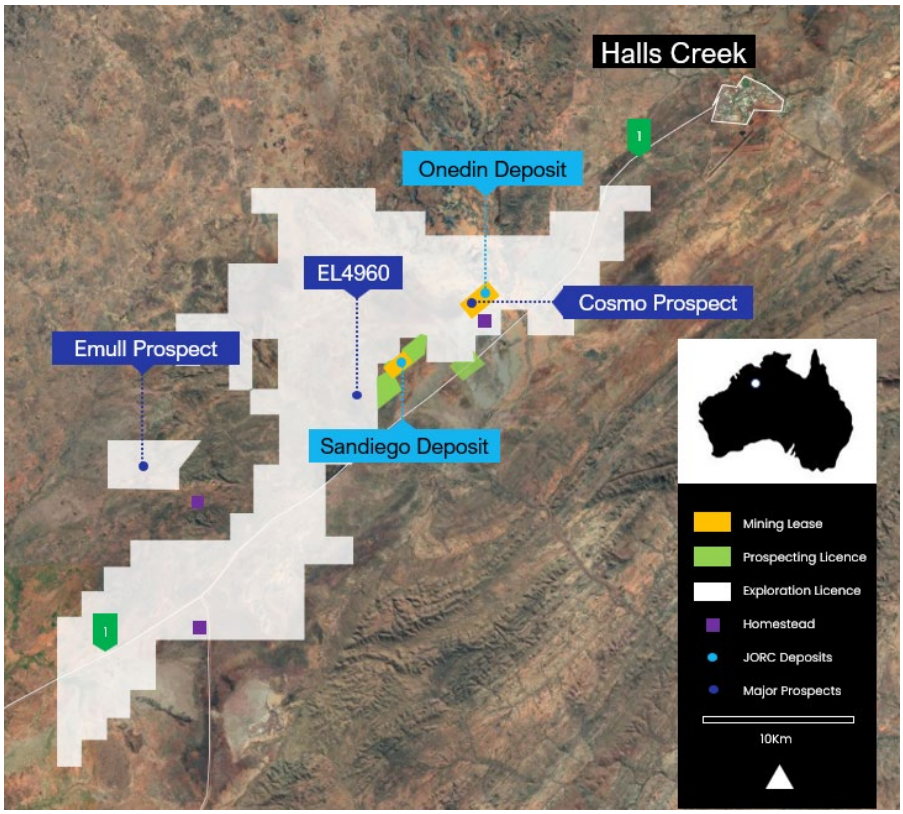

Figure 1. *Koongie Park project location featuring key deposits and prospects.*

Near-surface oxides test results

As noted, a focus of the latest round of testing has been on the near-surface oxide materials at Onedin that appear to be dominated by the existence of Fe oxide/hydroxide material due to the heavy weathering profile of this mineralized zone. A summary of the key results that AuKing has identified from the latest testwork (utilizing the ammonia leaching process) are as follows:

- Excellent Cu recoveries (>90%) have been seen in some of the oxide samples;
- Cu and Zn recoveries have not been affected in some samples by the size fraction of the material tested – in other words, the coarser grain sized material generally saw a similar Cu and Zn rate of recovery compared to the finer, ground material;
- In some of the lower grade Cu samples, there appears to be a more optimal size fraction from a recovery perspective;
- The Cu recoveries appear to increase significantly over time – comparing 24 vs 48 hour testing. This leaves open the possibility that optimal Cu recoveries are possible over longer processing times; and
- Zn recoveries are generally not as high as the observed Cu recoveries, due mainly to the likelihood that the Zn is mostly trapped within the weathered Fe oxide/hydroxide material. However, in terms of the observations around size fractions and processing times, it appears possible that higher Zn recoveries can still be achieved.

The current testing program has also identified heap leaching as the most likely form of metallurgical processing at least for the Onedin oxide material. In that context, as the testwork observed significant silica gel formation after treatment by acid leaching agents, the prospect of utilizing acid in a final processing solution has now almost been entirely discounted.

Other Program Findings

In the course of conducting this latest testwork program, AuKing identified certain other findings including the following:

- The test results were not consistent across the mineralized oxide and transition zones at Onedin. A key intended outcome of the future detailed testwork program will be to create a metallurgical solution that has more consistent results; and
- In the transition ore zone at Onedin there appears to be very high carbonate content – while the occurrence of carbonates was always predicted, some attention will be required with future testwork that addresses the optimal recovery processes for material that is heavily dominated by carbonates.

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

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Competent Person's Statement

The information in this report that relates to exploration results and the preliminary metallurgy testwork program on the Onedin deposit at the Koongie Park Project is based on information compiled and reviewed 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.

About AuKing Mining

AuKing Mining's (ASX:AKN) flagship Koongie Park Copper Zinc Project in Western Australia's Halls Creek Region hosts a JORC resource and is neighbored by several significant mining and development operations including Nicholson's Gold Mine, Panton PGM Project, and Savannah Nickel Mine. AuKing has secured an 80% ownership of the Koongie Park Project, acquiring this interest under the terms of the Joint Venture with Astral Resources (ASX:AAR). Prior to that, Astral held full ownership of the project since 2003. The tenure holding comprises an area of more than 500km^2 covering over 40km of the base metals prospective Koongie Park Formation. Koongie Park has already been the subject of significant exploration drilling and analysis since the 1970's, often in line with movements in commodity prices. Since its discovery Koongie Park has been the subject of 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 and Onedin deposits, the latter of which offers the potential to establish an open-pit mine.

For further information
www.aukingmining.com

Appendix 1 - JORC Code, 2012 Edition – Onedin Diamond Drilling and Preliminary Metallurgical Testwork Results

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• 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. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • 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 (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.	• The Onedin deposit has been previously drilled and sampled by several previous exploration groups using both reverse circulation (RC) and diamond drilling techniques. • 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. • Samples were ticketed prior to dispatch to the analytical laboratory and pulverised to produce a pulp sample for base and precious metal analyses. • 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 quarter-core samples to the analytical laboratory, sample weights varying between 0.4 and 3.8 kg.
Drilling techniques	• 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).	• The diamond drilling reported herein for Sandiego utilised a triple-tube PQ coring arrangement. • The Competent Person considers the reported drilling technique to be appropriate for the mineralisation style.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples.	• The current programme has generated continuous core samples and core recovery has generally been excellent.

	• 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.	• The triple-tube drilling was adopted specifically to maximise core recovery. • Where core loss has been incurred due to friable or poor ground, this is recorded during the logging process. • Excellent core recovery levels approaching 100% are noted for the core intersection reported herein. • With high reported recovery levels, the relationship between recovery and grade is not an issue.
Logging	• 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. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• 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. • The Competent Person considers the geological logging procedures in use for diamond drilling to be appropriate for the style of mineralisation and to a level of details sufficient for preparation of subsequent mineral resource estimates.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • 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.	• 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.	• Analytical work on the samples from diamond drilling programmes reviewed in this release has been undertaken by Jinning Testing and Inspection, Canning Vale, Perth, and Kalgoorlie, WA.

	• 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.	• 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 data entry validation routines. • AKN is proposing to undertake check analytical work on a number of key mineralised intersections at a second commercial laboratory in due course. • No adjustments have been made to any of the received analytical data.
Location of data points	• 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. • Specification of the grid system used. • Quality and adequacy of topographic control.	• 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. • Anglo Australian Resources NL (“AAR”) previously obtained photogrammetric coverage of the tenement areas which gives good control in respect of elevation data. • Drill hole collars at Onedin have been surveyed by DGPS survey undertaken by a reputable contract surveying group using the latest GDA2020 datum. • Set-up collar azimuths and inclinations were originally established using a compass and clinometer.

		• Downhole survey details have been obtained using a north-seeking gyroscopic survey tool approximately every 30m down the hole.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• The previous drillhole section spacing at Onedin was approximately 40m along strike. Recent diamond drilling at Onedin has endeavoured to reduce the section spacing to 20m to increase confidence in future Mineral Resource estimation and metallurgical work. • 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. • The reported Onedin result represents an infill hole purposely drilled to obtain metallurgical sample and to improve confidence in mineralisation continuity. • All intervals reported are length weighted composites.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• The orientation of 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. • 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.
Sample security	• The measures taken to ensure sample security.	• 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. • All samples were placed in large poly-weave bags for road transportation to the analytical laboratory in Perth by a local transportation service. • 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.

Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• 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. • No audits or reviews are understood to have been carried out for any of the previous sampling programmes. • The results being reported represent ongoing sampling from the Onedin diamond drilling programme. • 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
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• 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. • The tenements are in good standing. • 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. • 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.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• 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.

- 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.
- 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 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 volcaniclastic 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 volcaniclastic 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:	• All requisite drill hole information and reported intersections are included in the ASX Releases by AKN on 21 and 24 February and 2 March 2022 respectively.

	○ 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 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.	• 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

	• 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').	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 views.	• In the ASX Releases by AKN on 21 and 24 February and 2 March 2022 respectively the following have been included: (a) A plan showing the location and orientation of the diamond holes; (b) A cross section diagram showing the reported diamond drill hole; and (c) A tabulation of the results.
Balanced reporting	• 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.	• All results received and compiled since the previous release are reported in this release. Drilling and analysis is ongoing with further results expected. • All results reported on by AKN are considered to be accurate and reflective of the mineralised system being drill tested.
Other substantive exploration data	• 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.	• Preliminary sighter metallurgical testing performed on different geochemical and mineralogical domains to establish metallurgical responses to different leaching regimes. • Sampling used quarter diamond drill core selected from the specific Onedin drill core assay database (between 1m and 3m selected intervals - in total 16m) from holes AORD001, AORD002, AORD003, AORD005 and AORD006. • Sample selection and leaching regimes prepared by AKN. Sampling, preparation and testing done by Simulus Laboratories, Perth. • Seven samples selected based upon the following criteria o Head grade assays; o Oxidation state; o Mineralogy; o Iron levels; and o Silver content. • All samples crushed to minus 3mm milled to 0.08mm except samples for particle size effects which were crushed/milled to minus 5mm, 1mm, 0.5mm, 0.25mm and 0.08mm. • ICP assays were completed on all solids/residues and leach solutions. Solids digested using four acid digest

		• Head grades of selected samples varied from 0.46-3.6% for copper and 1.3-33.2% for zinc. • Based upon the achieved results it is now possible to select composite ore type samples over mineralised intervals for further detailed testing in the main metallurgical program.
Further work	• The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• 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. • 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.