MEMORANDUM

CSA Global Pty Ltd
ABN 67 077 165 532

Level 4, 201 Leichhardt Street
Spring Hill QLD 4000
AUSTRALIA

T +61 7 3106 1200
E info@csaglobal.com

www.csaglobal.com

To: Paul Williams

Cc: Ian Hodkinson, Chris Bittar

Date: April 4, 2022

From: David Williams

Report Nº: R191.2022

Re: **Mineral Resource estimates for Onedin and Sandiego**

SUMMARY

CSA Global Pty Ltd (CSA Global), a member of the ERM Group of Companies, was engaged by AuKing Mining Limited (AKN) to undertake a Mineral Resource estimate for the Onedin and Sandiego Cu-Zn-Au deposits, located near Halls Creek, Western Australia. Onedin comprises a zone of Cu-Zn mineralisation identified along a strike length of 300 m and depth extent of 400 m. Sandiego comprises a zone of Cu-Zn mineralisation identified along a strike length of 300 m and depth extent of 600 m.

The Mineral Resource estimate for Onedin is presented in Table 1 and is quoted above a cut-off grade of 0.4 % Cu and 1 % Zn. The Mineral Resource estimate for Sandiego is presented in Table 2 and is quoted above a cut-off grade of 0.8 % Cu and 3 % Zn. The two deposits are separated by a distance of 7 km.

The Mineral Resources are classified as a combination of Indicated and Inferred, and have been reported in accordance with the JORC Code (2012)[1], with geological and sampling evidence sufficient to assume geological and grade continuity within the volumes classified as Indicated. The classification levels are based upon an assessment of geological understanding of the deposit, geological and grade continuity, drillhole spacing, quality control results, search and interpolation parameters, and an analysis of available density information.

The Competent Person is of the opinion that the deposits are of sufficient grade, quantity, and coherence to have reasonable prospects for eventual economic extraction. The Project is located within the Kimberley region of Western Australia, which is a mature mining jurisdiction with a significant population of experienced mining personnel. The Great Northern Highway runs adjacent to the Project, and Halls Creek (population ~1,500) is located within 10 km of the Project.

Table 1 Onedin Mineral Resource estimate

Zone	Reporting Cut-off grade	Classification	Tonnes (Mt)	Copper (%)	Zinc (%)	Gold (g/t)	Silver (g/t)	Pb (%)
Cu Dominant	Cu > 0.4%	Indicated	1.5	1.1	0.6	0.2	47	1.2
		Inferred	-	-	-	-	-	-
Zn Dominant	Zn > 1%	Indicated	3.3	0.5	4.3	0.1	34	1.0
		Inferred	-	-	-	-	-	-

Note: Reported tonnes and grade are rounded, and totals may not represent the sum of all components

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Table 2 Sandiego Mineral Resource estimate

Zone	Reporting Cut-off grade	Classification	Tonnes (Mt)	Copper (%)	Zinc (%)	Gold (g/t)	Silver (g/t)	Pb (%)
Cu Dominant	Cu > 0.8%	Indicated	1.7	2.3	0.8	0.3	18	0.2
		Inferred	0.3	1.6	3.0	0.2	5	0.0
		Sub Total	2.0	2.2	1.1	0.3	16	0.1
Zn Dominant	Zn > 3%	Indicated	2.0	0.6	7.3	0.1	35	0.7
		Inferred	0.1	0.2	6.1	0.1	10	0.1
		Sub Total	2.1	0.6	7.3	0.1	34	0.7

Note: Reported tonnes and grade are rounded, and totals may not represent the sum of all components

Geology and Geological Interpretation

Massive sulphide deposits at Sandiego and Onedin are hosted by the Koongie Park Formation which is composed of mafic and felsic volcanics, associated sediments including sandstone, mudstone, carbonate, chert and ironstone, and is intruded by rhyolitic to rhyodacitic sills, dolerite bodies and basalt dykes. Massive sulphide mineralisation is strata-bound, with disseminated sulphides overlaying the massive sulphides. Both deposits are interpreted to occur within the limbs of intensely folded, higher order, double-plunging anticlinal structures.

The massive sulphide deposits of Koongie Park are classified as Volcanogenic Massive Sulphide (VMS) deposits. 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. At Onedin, sphalerite is the main sulphide in the primary mineralisation with subordinate pyrrhotite-pyrite-chalcopyrite-galena. Onedin comprises numerous stacked lenses of mineralisation with a folded and faulted geometry over a vertical zone of 400 m.

Both deposits have a deep weathering profile (up to 250 m below the surface), resulting in three weathering domains: an oxidised zone at the surface, a primary zone at depth, and a transition zone in between.

The geological interpretation supporting the Mineral Resource estimates was guided firstly by geology, and secondly by grade envelopes to constrain mineralisation. Zinc domains were based upon nominal lower cut-off grades of 1.5 % Zn (Onedin) and 1.0 % Zn (Sandiego); copper domains were based upon nominal lower cut-off grades of 0.4 % Cu (Onedin) and 0.5 % Cu (Sandiego). Internal dilution was permitted during the interpretation of the mineralisation domains, however it was limited to 3 m in most cases. Some overlap of the zinc and copper zones occurs. Weathering domains were interpreted for the Base of Complete Oxidation (BOCO) and Top of Fresh (TOFR) interfaces. The Onedin Mineral Resource extends along strike 300 m, across strike by 200 m and has a depth extent below surface of 400 m. The Sandiego Mineral Resource extends along strike 300 m, across strike by 200 m and has a depth extent below surface of 600 m.

Drilling Techniques

Both the Onedin and Sandiego deposits have been drilled and sampled using both reverse circulation (RC) and diamond drilling techniques. RC drilling used a 140 mm diameter face-sampling bit. Diamond drilling at Onedin has used PQ3 diameter bits, while at Sandiego, drilling has been undertaken by HQ and NQ sized diamond drilling tails after RC drilling of the upper parts of the drill holes. The Sandiego prospect has been drill tested by 70 diamond holes (19,946 m) and 63 RC holes (9,721 m), and the Onedin prospect has been drill tested by 51 diamond holes (14,148 m) and 40 RC holes (5,361 m).

Sampling Techniques

RC drilling at both sites was used to obtain individual 1 m samples, which were reduced in size to produce a sample of approximately 1–2 kg in weight after passing through a cyclone and cone splitter. Samples were ticketed prior to dispatch to the analytical laboratory pulverised to produce a pulp sample for fire assay and base metal analyses. Diamond core were typically cut in half prior to submission as half-core samples to the analytical laboratory.

Sample Analysis Method

Analytical work was carried out by an accredited assay laboratory. Samples were crushed to a nominal -10 mm size before being riffle split and pulverised in a ring grinder to 80 % passing 75 µm. A multi-element analytical suite is assayed for using a mixed acid digest on a 0.2 gram charge followed by a 4-acid digest. Analyses are performed via inductively coupled plasma optical emission spectrometry (ICP-OES).

Estimation Methodology

A block model with block sizes 5 m (X) x 10 m (Y) x 10 m (Z) was constructed for each deposit, with the individual blocks assigned to the local geological domains (mineralisation and weathering) and each interpolated with a Cu, Zn, Au and Ag grade. The block size adopted corresponds to approximately half the drill hole spacing. Drill samples were flagged by mineralisation and weathering domains, and the drill samples composited to 1 m length intervals. Composited sample data were statistically reviewed to determine appropriate top-cuts, with top-cuts applied for Zn, Cu, Ag and Au where required. Variograms were modelled for Cu and Zn from top cut and composited sample data within their respective mineralisation domains. Low to moderate relative nugget effects were modelled across all mineralisation domains, with short ranges of approximately 50 m observed for both Zn and Cu.

Grade interpolation was caried out via Ordinary Kriging (OK) for the Sandiego deposit, and via Inverse Distance Squared (IDS) for the Onedin deposit. All sub-blocks were assigned the grade of their parent block. Sample search ellipse radii varied according to deposit and grade variable, with a sample search ellipse of up to 60 m by 30 m by 20 m (perpendicular to strike) used for Cu and Zn interpolation at Sandiego, with a minimum of 8 samples and maximum of 24 samples used to interpolate grade into any one block. A maximum of 4 samples per drill hole was used for grade interpolation for each block. Search radii were increased, and the minimum number of minimum samples reduced in subsequent sample searches if cells were not interpolated in the first pass. Octant searches were not used. The interpolated grades were validated by way of review of cross sections (block model and drill samples presented with same colour legend); swath plots, and comparison of mean grades from drillhole data with block model grades.

Mineral Resource Classification

The Mineral Resource models were classified based upon drill hole spacing, quality of sampling and sample analyses, quantity of density measurements, and the relative confidence in the geological interpretation. The Mineral Resource estimates are supported by confidence in the geological interpretations, sufficient to assume geological and grade continuity to satisfy an Indicated classification. All blocks within the Onedin Mineral Resource are classified as Indicated in accordance with the JORC Code; the Sandiego Mineral Resource is classified as a combination of Indicated and Inferred.

Cut-Off Grades

The Mineral Resources have been reported above Cu and Zn cut-off grades of 0.8 % Cu and 3 % Zn (Sandiego), and 0.4 % Cu and 1 % Zn (Onedin). The choice of cut-off grades reflect the anticipated mining methods for both deposits, with underground operations (such as is anticipated for Sandiego) requiring higher reporting cut-off grades than would be used for an open pit Mineral Resource. The cut-off grades used to report the Sandiego Mineral Resource are the same as have been historically used for reporting earlier Mineral Resource estimates.

For both Mineral Resources, in the case of overlapping Zn and Cu zones, the Zn block grade has been preferentially reported over the Cu block grade.

Mining and Metallurgical Methods

It is anticipated that Onedin will be mined using open cut methods, and Sandiego will be mined largely as an underground operation. On that basis, the different cut-off grades for the Cu and Zn have been applied.

Significant metallurgical testwork has been undertaken for the deposits by various explorers since the 1970's. Several desktop mining studies were also undertaken by early explorers. Early work was effectively superseded by a major metallurgical testwork campaign and mining studies undertaken by Anglo Australian Resources from 2006. The testwork was conducted by AMMTEC Laboratories under the guidance of the METS Engineering Group. The metallurgical testwork has established that saleable copper and zinc concentrates could be produced from the sulphide mineralisation at Sandiego and Onedin but work on the transitional material (using conventional flotation techniques) was challenging. The 2007 testwork included 96 metallurgical sample tests on different ore types from Onedin and Sandiego to underpin a mineral processing flowsheet for economic study work.

No further mining studies have been carried out by AuKing to date. However, AuKing has commenced an initial metallurgical testwork program on the oxide/transitional material at Onedin, applying various techniques including ammonia-based processing. Work is ongoing with these tests with first results expected within the next 1-2 months.

Competent Persons Statement

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr David Williams, a Competent Person, who is an employee of CSA Global Pty Ltd and a Member of the Australian Institute of Geoscientists (#4176). Mr Williams has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Williams consents to the disclosure of information in this report in the form and context in which it appears.

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.	• Both the Onedin and Sandiego deposits have been previously drilled and sampled by several previous exploration groups using both reverse circulation (RC) and diamond drilling techniques. • RC drilling at both sites 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. • RC sampling intervals were previously commonly composited to reduce assay costing in areas of limited mineralisation potential prior to assaying. • 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. • In zones with limited potential for mineralisation the samples have again been composited into 4-metre intervals which, on receipt of elevated results, may lead to the composite interval being subsequently resampled by the spearing method on an individual 1-metre basis. • Diamond drilling at Onedin has been of PQ3 size. Quarter core samples from variable length mineralised intervals were cut by diamond saw prior to submission to the analytical laboratory, sample weights varying between 0.4 and 3.8 kg. • The deeper drilling at Sandiego has been undertaken by HQ and NQ diamond drilling and NQ core samples from mineralised intervals at Sandiego were cut by diamond saw prior to submission as half-core samples to the analytical laboratory.

Criteria	JORC Code explanation	Commentary
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 RC drilling reported herein for Onedin and Sandiego is RC drilling using a 140 mm diameter face-sampling bit. • Diamond drilling at Onedin has been of PQ3 size, reducing to HQ once the main mineralised zones had been cleared. • The deeper drilling at Sandiego has been undertaken by HQ and NQ sized diamond drilling tails after RC drilling (140 mm diameter) of the upper part of the drill hole. • Previously, HQ holes were used for metallurgical test-work and NQ holes were used to support the Mineral Resource estimates established by CSA Global for both Sandiego and Onedin. • Drilling conducted at Onedin and Sandiego was predominantly RC and diamond, with earlier programmes of RAB drilling. Only RC and diamond drilling were used to support the Mineral Resource estimates. • The Sandiego prospect has been drill tested by 70 diamond holes (19,946 m) and 63 RC holes (9,721 m). • The Onedin prospect has been drill tested by 51 diamond holes (14,148 m) and 40 RC holes (5,361 m). • The Competent Person considers the current drilling techniques 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. • 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.	• RC samples from previous drilling programmes were visually assessed, and an assessment made according to the sample recovery, usually 100 %. • Previous diamond core recovery was also generally very good. • With high reported recovery levels, the relationship between recovery and grade has not been an issue. • Where excessive water inflow causes sampling issues and poor recoveries, this is noted during the logging process.

Criteria	JORC Code explanation	Commentary
		• The current programme is generating cone-split samples collected by a cyclone and recoveries have generally been excellent. • The Competent Person considers the reported level of sample recovery on the current programme to be appropriate for the style of mineralisation.
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.	• Previous RC chip samples were routinely geologically logged to a level suitable for defining the general geological features including lithology, mineralisation, alteration etc. • 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. • The latest diamond drill core logging process 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 current RC drill holes are being logged to record the same suite of information as before with the entire length of the holes being logged. • 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.
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	• 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. • Composited samples (generally representing 4 m of drilling) and individual 1 m samples (averaging ~1.8 kg) are sent to a commercial laboratory for analysis.

Criteria	JORC Code explanation	Commentary
	duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• 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. • Diamond core was cut in half using a diamond saw, with one half of the 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, WA. • The received RC sample is riffle split (if >3.5 kg) and pulverised in a ring grinder to 80 % passing 75 µm. • Core samples are crushed to nominal -10 mm 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 0.2 gram 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); Mg (0.01 %); Mn (1); Mo (2); Na (0.005 %); Ni (1); P (20); Pb (2); S (20); Sb (5); Sc (1); Sr (1); Th (10); Ti (5); Tl (20); U (20); V (1); W (5); Y (1) and Zn (1).

Criteria	JORC Code explanation	Commentary
		• 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 30 gm charge fire assay will generally be undertaken at Jinning's or another laboratory. • 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.

Criteria	JORC Code explanation	Commentary
		• 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 Sandiego and remain in use for reporting purposes. Detailed survey work has previously cross-referenced the local grids to the Zone 52 MGA (GDA 2020) coordinate system. • Anglo Australian Resources NL ("AAR") previously obtained photogrammetric coverage of the tenement areas which gives good control in respect of elevation data. • Proposed drill hole locations were set out for the current programme using MGA 52 co-ordinates translated from local grid co-ordinates. • A DGPS survey was undertaken on completion of the recent drilling programme at both Onedin and Sandiego to obtain accurate hole collar location details. • Set-up collar azimuths and inclinations have been 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 is approximately 40 m. • On section spacing at Onedin is approximately between 40 m and 50 m. This spacing is considered generally adequate for a reasonable assessment of grade continuity between holes. • The current drilling programme at Onedin is primarily intended to infill drill the intervening undrilled 20 m section spacings. The planned 20 m section spacing will give considerable 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 40 m and 50 m. • The previous drillhole section spacing at Sandiego is approximately 25 to 50 m along strike.

Criteria	JORC Code explanation	Commentary
		• On section spacing at Onedin is approximately between 25 m. This spacing is considered generally adequate for a reasonable assessment of grade continuity between holes. • The current drilling programme at Sandiego 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 40 m and 50 m. • Limited sample compositing has been undertaken to 4m drill lengths in less obviously mineralised zones. Any significant mineralisation identified in these composites will prompt a resampling exercise on the individual contributing samples. • 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 both RC and diamond drillholes at both Onedin and Sandiego is orthogonal to the perceived strike of mineralisation and limits the amount of geological bias in drill sampling as much as possible. • The various water bores at Onedin and Sandiego are vertical drill holes and thus less suitably orientated with respect to the mineralisation but nevertheless provide valuable detail on the weathering profile and continuity of mineralisation in that dimension. • 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.	• Following the RC sampling procedures carried out at the drill site, the samples are transported by AKN personnel to the project sample yard in Halls Creek. • Diamond core samples are transported from the drill rig to the project sample yard at Halls Creek where they are cut and bagged for

Criteria	JORC Code explanation	Commentary
		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 for the RC and diamond drilling programmes. Duplicate sampling of RC samples is being undertaken during this programme and a suite of QAQC samples are being submitted with each analytical batch. • 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	• Onedin is located wholly within M80/277. Sandiego is located within M80/276. The Mining Leases are located 17 km and 25 km southwest of Halls Creek township respectively, near the Great Northern Highway and 312 km 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

Criteria	JORC Code explanation	Commentary
	of reporting along with any known impediments to obtaining a licence to operate in the area.	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 tenement area, primarily focusing on the discovery of a significant strata-bound lead-zinc system with volcanogenic affinities. • All 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 Koongie Park project area has been explored for base and precious metals on an intermittent basis since 1972. • 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

Criteria	JORC Code explanation	Commentary
		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 50,417 m, 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

Criteria	JORC Code explanation	Commentary
		exploration for base metals occurring on the property. AAR reported Mineral Resources for Onedin in 2006, 2008 and 2009. • The Competent Person considers the historical work undertaken incrementally over time has built up an 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

Criteria	JORC Code explanation	Commentary
		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.

Criteria	JORC Code explanation	Commentary
		• 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 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.	• Drillhole information is not included here because all RC and diamond core drillholes were used to support the Mineral Resource estimate. • The distribution of zinc, lead, copper, silver and gold grades through the Mineral Resource block model fairly reflects the downhole location and tenor of mineralisation in the drillholes.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of	• Exploration results are not reported here, with all RC and diamond core drillholes used to support the Mineral Resource estimate. • Compositing of sample data as carried out in support of the Mineral Resource

Criteria	JORC Code explanation	Commentary
	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.	estimate is discussed in Section 3 of this Table.
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 geometry of mineralisation was interpreted from drillhole results and incorporated into the Mineral Resource estimate. • The orientation of the drillholes is 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 was sufficient to support the reporting of the Mineral Resource.
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.	• Maps and cross sections of the Onedin and Sandiego deposits are presented in the body of this report.
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.	• Drillhole information is not included here because all RC and diamond core drillholes were used to support the Mineral Resource estimate. • The distribution of zinc, lead, copper, silver and gold grades through the Mineral Resource block model fairly reflects the downhole location and tenor of mineralisation in the drillholes.

Criteria	JORC Code explanation	Commentary
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.	• In 2006, AAR drilled one HQ diameter diamond drillhole for metallurgical testwork purposes. The exploration data drill core penetrated oxide, transitional and fresh rock zones, and the core half cored with the sample placed into a refrigerated container and subsequently transported to AMMTEC laboratories in Perth by refrigerated container for metallurgical testing. • Downhole electromagnetic (DHEM) surveys were carried out on three holes at Koongie Park by Outer Rim Exploration/Southern Geoscience Consultants Pty Ltd. Holes SRCD21 and SRCD24 (Sandiego) and ORCD45 (Onedin) were logged. • Density measurements were taken from 1,197 diamond core billets (Sandiego) and 459 billets (Onedin) over the life of the project. Samples were selected from every 1 m or 5 m downhole. Density measurements were carried out by field staff at the Halls Creek sample yard. During AAR's ownership, core billets were initially wrapped in cling film, and density was determined using a conventional sample weight in air and then water. Samples with measured density values of >4.7 were discarded from the density database as these were considered too high for the style of mineralisation.
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.	• AKN's future exploration will focus on upgrading and expanding upon the current Inferred and Indicated Resource Estimates at Onedin and Sandiego, through further drilling within and immediately outside the resource area.

Section 3 Estimation and Reporting of Mineral Resources - Onedin

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource*	• Drill data is captured in a relational database prepared and maintained by Newxco, which contains relevant information for drill hole collars, drill samples, assays, down hole surveys and density data. Other information also provided relates to soil sampling, termite mound sampling, structural geology and magnetic susceptibility. • All drilling data resides on Newexco's NXDB database management system. Newexco

Criteria	JORC Code explanation	Commentary
	estimation purposes. • *Data validation procedures used.*	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. • Drill hole data tables were imported into Datamine software by CSA Global during the preparation of the Mineral Resource estimates. Minor issues were resolved by AuKing and Newxco prior to CSA Global progressing with the Mineral Resource estimates. • The Competent Person considers the database integrity to be appropriate to support the reporting of a Mineral Resource.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case*	• The Competent Person (Mineral Resources) has not visited the Koongie Park project. Travel restrictions imposed by the W.A. government in response to the Covid-19 pandemic have prevented travel into the state. The Competent Person intends to visit the Project during 2022. • Alternate personnel from CSA Global visited site during 2006 as part of managing the drilling programme. The CSA geologists carried out daily inspections of the drilling rig and associated sampling equipment, supervised the sampling programmes, geologically logged all RC hips and diamond core, including relogging of historical drill samples, and geologically mapped the project area. • All work conducted was to industry standards and the Competent Person is satisfied all geological work carried out can be used to support the Mineral Resource.
Geological Interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of*	• The Competent Person regards the geological understanding of the Onedin deposit to be of a high standard, with regards to the quantity and quality of drill sampling and geophysics supporting the geological interpretations. • Surface geological mapping and geological logs of diamond drill core, and RC chips, along with sample assays were all used to assist with the geological interpretation. • Alternative interpretations were not considered, with the interpretation used considered to best represent the geological knowledge of the deposit. • The geological models control the interpolation of the grades into the resource model to prevent smearing of grades into the country rock.

Criteria	JORC Code explanation	Commentary
	grade and geology.	• Mineralisation is hosted within both the weathered and fresh rock profiles, and the continuity is determined by the proto-mineralogy within the supergene profile, and lithology and structural controls within the primary rock profile. • Supergene mineralisation at Onedin is well developed as the bulk of former primary mineralisation is located in the oxidised and transition zones. In particular, copper seems especially prone to supergene enrichment as reflected by the range of secondary copper minerals recorded at Onedin. Lead is also relatively enriched in gossans above the TOFR surface. • The bulk of primary mineralisation is associated with the carbonate zone. There is also a strong structural control on mineralisation, and it appears to be concentrated in the core and limbs of the fold structure with some degree of remobilization. • The geological interpretation was guided firstly by geology, and secondly by grade envelopes to constrain mineralisation. Zinc domains were based upon a lower cut-off grade of 1.5 % Zn, and below the TOFR interface; copper domains were based upon a lower cut-off of 0.4 % Cu. Internal dilution was permitted during the interpretation of the mineralisation domains. Some overlap of the zinc and copper zones occurs.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Onedin Mineral Resource extends along strike 300 m, across strike by 200 m and has a depth extent below surface of 400 m.
Estimation and Modelling Techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• Datamine Studio was used for the geological modelling, block model construction, grade interpolation and validation. GeoAccess Professional and Snowden Supervisor software were used for geostatistical analyses. • A block model with block sizes 5 m (X) x 10 m (Y) x 10 m (Z) was constructed. Sub-celling was used. The block sizes are approximately half the tightest drill spacing. Blocks were flagged according to the weathering and mineralisation envelopes. • Drill sample data were flagged by the mineralisation and weathering domain envelopes, with variables MZONE and WEATH used. Drillholes were sampled at 1 m

Criteria	JORC Code explanation	Commentary
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	intervals and the drill samples were accordingly composited to 1 m lengths. Composited sample data were statistically reviewed to determine appropriate top-cuts, with top-cuts applied for Zn, Cu, Pb, Ag and Au where required. Log probability plots were used to determine the top-cuts, and the very high-grade samples were reviewed in Datamine by the Competent Person to determine if they were clustered with other high-grade samples. • Grades interpolated were Cu, Zn, Au, Ag, Co, Mo, Sb, As, S and Fe. • Sample populations were split by the Cu and Zn mineralisation domains, as supported by a statistical analysis of assay data. • The composited drill samples were input into variogram modelling. Downhole and directional variograms were modelled for Zn and Cu within the combined mineralisation domains and by weathering profile. Moderate relative nugget effects were modelled, with short ranges approximately 50 m for Zn and Cu. • Grade interpolation used Inverse Distance squared (IDS) for the grade variables. All subblocks were assigned the grade of their parent block. Cell discretisation was used in each estimate. A sample search ellipse of 100 m by 100 m by 30 m (perpendicular to strike) was used, with a minimum of 8 samples and maximum of 24 samples used to interpolate grade into any one block. A maximum of 4 samples per drill hole was used for grade interpolation. Search radii were increased, and the minimum number of minimum samples reduced in subsequent sample searches if cells were not interpolated in the first pass. Octant searches were not used. • Grades were estimated into the waste domains using IDS. • The Mineral Resource was an update of the 2008 Mineral Resource estimate, with additional drill holes incorporated. • The interpolated grades were validated by way of review of cross sections (block model and drill samples presented with same colour legend); swath plots, and comparison of mean grades from drillhole data with block model grades.

Criteria	JORC Code explanation	Commentary
		• The Competent Person considers the procedures used to construct the block model and interpolate grades are appropriate for the style of mineralisation and reflect industry accepted practices.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Onedin Mineral Resource is reported above a cut-off grade of 1 % Zn for the Zn and Mixed Zn-Cu zones, and above a cut-off of 0.4 % Cu for the Cu zone. The cut-off grades are considered suitable by the Competent Person for the method of mining considered to be appropriate for Onedin.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Previous owners of the Project, Anglo Australian Resources (AAR) commissioned a preliminary mining assessment of the Sandiego and Onedin deposits. This study established 2 potential mining operations: Underground only at both Sandiego and Onedin; and an open pit operation at Onedin. No major mining problems were identified in this study, however, further work was subject to metallurgical recoveries. • In 2008 internal mining study work by AAR focussed on underground mining of the sulphide and transition zones at Sandiego, with construction of a 500 tpa processing plant (using flotation technologies) with a 4–5-year operating life with Onedin development having the capacity to extend project life to 8 years mining Sandiego transition and sulphide ore. A conceptual study was also completed on open pit mining of Onedin based on conceptual metallurgical recoveries. • No further mining studies for Onedin have been completed to date.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but*	• Significant metallurgical testwork has been undertaken on the Koongie Park deposits by various explorers since the 1970's. Early work was effectively superseded by a major metallurgical testwork campaign undertaken by AAR from 2006. The metallurgical testwork established that saleable copper and zinc concentrates could be produced from the sulphide mineralisation at Sandiego and Onedin but work on the transitional

Criteria	JORC Code explanation	Commentary
	the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	material (using conventional flotation techniques) was challenging. The 2007 testwork included 96 metallurgical sample tests on different ore types from Onedin and Sandiego to underpin a mineral processing flowsheet for economic study work. • In 2009, AAR commissioned a review of the more than 300 metallurgical tests that had then been completed over the various ore-types at Sandiego and Onedin, with a focus on the application of flotation recovery techniques. This study concluded: The metallurgy of the Sandiego transition and primary zones, whilst complex, is amenable to established flotation technology. The Onedin primary zone is amenable to the same flotation technology and can be processed through the same plant with minor modifications. The Onedin transition zone contains most of it's value in the form of zinc oxide minerals and is not amenable to conventional flotation recovery but extraction by hydrometallurgy is possible. The Onedin oxide zone contains copper in the form of malachite which may be amenable to hydrometallurgy. Conventional flotation flowsheets were designed for processing the Onedin and Sandiego sulphide mineralisation. Project economics are very sensitive to metal recoveries and the grade of concentrate achieved. The O'Brien study recommended: Further testwork focussed on being as near to actual plant operating conditions as possible. Further testwork should encompass a continuous pilot scale test facility. • AAR engaged several metallurgical/mineral processing specialists to review the possibilities of implementing novel treatment processes to treat the problematic transitional and oxide ores of Koongie Park during period 2009 to 2012. Meaningful trials recommended were not implemented. No further metallurgical test work was undertaken since 2012, before the recent commencement by AKN of its initial metallurgical testwork program on the Onedin oxide and transitional ores.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental*	• The project is not located in an environmentally sensitive area. Several scoping studies have been undertaken, with no major environmental or other factors identified which would prevent the project from proceeding. • It has been assumed that environmental factors can be effectively managed to allow the project to be bought into production.

Criteria	JORC Code explanation	Commentary
	impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• Anthropological, ethnographic surveys and environmental surveys have been undertaken prior to surface disturbance associated with exploration activities, with clearance being achieved over the majority of the deposit footprints. Identified sites have been placed in the public record.
Bulk Density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The method for density measurements is discussed in Section 2 "Reporting of Exploration Results'. • Diamond core billets from earlier drilling programmes were wrapped in cling film prior to immersion in water to prevent filling of cavities with water. • A drill hole file was generated in Datamine capturing the density data, and this drill file was flagged by weathering and mineralisation domain in the same manner as the drill hole assays. The flagged density population was statistically analysed, with average density values determined for each mineralisation zone within each weathering zone. The following density values were applied per combination of domain: • Oxide zone: Zn zone (Density = 2.31 t/m^3); Cu zone (2.25); Overlap zone (2.73) • Transitional zone: Zn zone (2.52); Cu zone (2.61); Overlap zone (2.82) • Fresh zone: Zn zone (3.15); Cu zone (2.98); Overlap zone (3.05) • The Competent Person considers the procedures used to measure sample bulk density, and the density values assigned to the Mineral Resource, are appropriate for the style of mineralisation.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has*	• The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1.

Criteria	JORC Code explanation	Commentary
	been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resources were classified based upon drill hole spacing, quality of sampling and sample analyses, quantity of density measurements, and the relative confidence in the geological interpretation. This Mineral Resource is supported by a high level of confidence in the geological interpretations, sufficient to assume geological and grade continuity to satisfy an Indicated classification. • All blocks within the Onedin Mineral Resource are classified as Indicated (RESCAT = 2). • Waste blocks are recorded as unclassified (RESCAT=4). • The final classification strategy and results appropriately reflect the Competent Person's view of the deposit.
Audits or Reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate was internally peer reviewed by CSA Global. CSA Global reviewed the data collection, QAQC, geological modelling, statistical analyses, grade interpolation, density measurements and resource classification strategies. The Competent Person relies upon the opinions of the peer reviewers when classifying the Mineral Resource, and is satisfied that the reviews were impartial and provided useful critique where necessary. • No other audits or reviews are known to have occurred.
Discussion of relative accuracy / confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify*	• Relevant tonnages and grade above nominated cut-off grades for Cu and Zn are provided in this report. Tonnages were calculated by filtering all blocks above the cut-off grade and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. • The Mineral Resource is a local estimate, whereby the drill hole data was geologically domained above nominated cut-off grades. • The Mineral Resource does not provide a calculated tonnage and grade, rather it provides the reader with estimated 'median' values about which can be inferred a range based upon the resource classification.

Criteria	JORC Code explanation	Commentary
	whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

Section 3 Estimation and Reporting of Mineral Resources - Sandiego

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Drill data is captured in a relational database prepared and maintained by Newxco Exploration, which contains relevant information for drill hole collars, drill samples, assays, down hole surveys and density data. Other information also provided relates to soil sampling, termite mound sampling, structural geology and magnetic susceptibility. • Drill hole data tables were imported into Datamine software by CSA Global during the preparation of the Mineral Resource estimates. Minor issues were resolved by AuKing and Newxco prior to CSA Global progressing with the Mineral Resource estimates. • The Competent Person considers the database integrity to be appropriate to support the reporting of a Mineral Resource.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• The Competent Person (Mineral Resources) has not visited the Koongie Park project. Travel restrictions imposed by the W.A. government in response to the Covid-19

Criteria	JORC Code explanation	Commentary
	• *If no site visits have been undertaken indicate why this is the case*	pandemic have prevented travel into the state. The Competent Person intends to visit the Project during 2022. • Alternate personnel from CSA Global visited site during 2006 as part of managing the drilling programme. The CSA geologists carried out daily inspections of the drilling rig and associated sampling equipment, supervised the sampling programmes, geologically logged all RC hips and diamond core, including relogging of historical drill samples, and geologically mapped the project area. • All work conducted was to industry standards and the Competent Person is satisfied all geological work carried out can be used to support the Mineral Resource.
Geological Interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The Competent Person regards the geological understanding of the Onedin deposit to be of a high standard, with regards to the quantity and quality of drill sampling and geophysics supporting the geological interpretations. • Surface geological mapping and geological logs of diamond drill core, and RC chips, along with sample assays were all used to assist with the geological interpretation. • Alternative interpretations were not considered, with the interpretation used considered to best represent the geological knowledge of the deposit. • The geological models control the interpolation of the grades into the resource model to prevent smearing of grades into the country rock. • Mineralisation is hosted within both the weathered and fresh rock profiles, and the continuity is determined by the proto-mineralogy within the supergene profile, and lithology and structural controls within the primary rock profile. • Supergene mineralisation at Sandiego is well developed as the bulk of former primary mineralisation is located in the oxidised and transition zones. In particular, copper seems especially prone to supergene enrichment as reflected by the range of secondary copper minerals recorded at Sandiego. • The bulk of primary mineralisation is associated with the carbonate zone. There is also a strong structural control on mineralisation, and it appears to be concentrated in the core and limbs of the fold structure with some degree of remobilization.

Criteria	JORC Code explanation	Commentary
		• The geological interpretation was guided firstly by geology, and secondly by grade envelopes to constrain mineralisation. Zinc domains were based upon a lower cut-off grade of 1 % Zn; copper domains were based upon a lower cut-off of 0.5 % Cu. Internal dilution was permitted during the interpretation of the mineralisation domains. Some overlap of the zinc and copper zones occurs. • Three zones of copper mineralisation were modelled, and two Zn domains were modelled. • Geological interpretations and 3D models were provided by AuKing prior to preparation of the Mineral Resource.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Sandiego Mineral Resource extends along strike 300 m, across strike by 200 m and has a depth extent below surface of 600 m.
Estimation and Modelling Techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or*	• Datamine Studio was used for the geological modelling, block model construction, grade interpolation and validation. GeoAccess Professional and Snowden Supervisor software were used for geostatistical analyses. • A block model with block sizes 5 m (X) x 10 m (Y) x 10 m (Z) was constructed. Sub-celling was used. The block sizes are approximately half the tightest drill spacing. Blocks were flagged according to the weathering and mineralisation envelopes. • Drill sample data were flagged by the mineralisation and weathering domain envelopes, with variables MZONE and WEATH used. Drillholes were sampled at 1 m intervals and the drill samples were accordingly composited to 1 m lengths. Composited sample data were statistically reviewed to determine appropriate top-cuts, with top-cuts applied for Zn, Cu, Pb, Ag and Au where required. Log probability plots were used to determine the top-cuts, and the very high-grade samples were reviewed in Datamine by the Competent Person to determine if they were clustered with other high-grade samples. • Grades interpolated were Cu, Zn, Au, Ag, Co, Mo, Sb, As, S and Fe.

Criteria	JORC Code explanation	Commentary
	other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Sample populations were split by the Cu and Zn mineralisation domains, as supported by a statistical analysis of assay data. • The composited drill samples were input into variogram modelling. Downhole and directional variograms were modelled for Zn and Cu within the combined mineralisation domains and by weathering profile. Moderate relative nugget effects were modelled, with short ranges approximately 50 m for Zn and Cu. • Grade interpolation used Ordinary Kriging (OK) for the grade variables. All subblocks were assigned the grade of their parent block. Cell discretisation was used in each estimate. Sample search ellipses used variable radii length, with the Cu and Zn search volumes using of 60 m by 30 m by 20 m (perpendicular to strike) was used, with a minimum of 8 samples and maximum of 24 samples used to interpolate grade into any one block. A maximum of 4 samples per drill hole was used for grade interpolation. Search radii were increased, and the minimum number of minimum samples reduced in subsequent sample searches if cells were not interpolated in the first pass. Octant searches were not used. • Grades were estimated into the waste domains using IDS. • The interpolated grades were validated by way of review of cross sections (block model and drill samples presented with same colour legend); swath plots, and comparison of mean grades from drillhole data with block model grades. • The Competent Person considers the procedures used to construct the block model and interpolate grades are appropriate for the style of mineralisation and reflect industry accepted practices.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Sandiego Mineral Resource is reported above a cut-off grade of 3 % Zn for the Zn and Mixed Zn-Cu zones, and above a cut-off of 0.8 % Cu for the Cu zone. The cut-off

Criteria	JORC Code explanation	Commentary
		grades are considered suitable by the Competent Person for the method of mining considered to be appropriate for Sandiego.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Previous owners of the Project, Anglo Australian Resources (AAR) commissioned a preliminary mining assessment of the Sandiego and Onedin deposits. This study established 2 potential mining operations: Underground only at both Sandiego and Onedin; and an open pit operation at Onedin. No major mining problems were identified in this study, however, further work was subject to metallurgical recoveries. • In 2008 internal mining study work by AAR focussed on underground mining of the sulphide and transition zones at Sandiego, with construction of a 500tpa processing plant (using flotation technologies) with a 4–5-year operating life with Onedin development having the capacity to extend project life to 8 years mining Sandiego transition and sulphide ore. A conceptual study was also completed on open pit mining of Onedin based on conceptual metallurgical recoveries. • In 2010 AAR commissioned a preliminary geotechnical model for Sandiego based on geotechnical diamond drilling results. The geotechnical assessment involved construction of a 3D Mining Rock Mass Model for the prospect and determination of preliminary geotechnical parameters for use in mine design studies. Raw data for the project comprised geotechnical and structural logging of 23 diamond holes. For the underground project, the rock mass has been classified into three geotechnical domains based on estimated Q' values. Preliminary inter ramp slope angles (excluding ramps) for the prospect were developed for use is pit design studies. • In 2011 AAR commissioned a scoping study on mining the Sandiego deposit. It concluded that: Exploitation of the Koongie Park Sandiego deposit by open pit and underground mining methods using an on-site concentrator and off-site smelting is potentially viable. Copper concentrates and zinc concentrated produced would be trucked to a suitable port facility such as Wyndham and stored until shipped to overseas smelters. A PFS level study was recommended. • No further mining studies for Sandiego have been completed to date, however, AKN has identified the greater likelihood for mining is on the basis of an open pit operation

Criteria	JORC Code explanation	Commentary
		at Onedin and an underground mine at Sandiego. For this reason, the different cut-off grades have been applied to the two deposits in the resource estimate.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Significant metallurgical testwork has been undertaken on the Koongie Park deposits by various explorers since the 1970s. Early work was effectively superseded by a major metallurgical testwork campaign undertaken by AAR from 2006. The metallurgical testwork established that saleable copper and zinc concentrates could be produced from the sulphide mineralisation at Sandiego and Onedin but work on the transitional material (using conventional flotation techniques) was challenging. The 2007 testwork included 96 metallurgical sample tests on different ore types from Onedin and Sandiego to underpin a mineral processing flowsheet for economic study work. • In 2009, AAR commissioned a review of the more than 300 metallurgical tests that had then been completed over the various ore-types at Sandiego and Onedin, with a focus on the application of flotation recovery techniques. This study concluded: The metallurgy of the Sandiego transition and primary zones, whilst complex, is amenable to established flotation technology. The Onedin primary zone is amenable to the same flotation technology and can be processed through the same plant with minor modifications. The Onedin transition zone contains most of it's value in the form of zinc oxide minerals and is not amenable to conventional flotation recovery but extraction by hydrometallurgy is possible. The Onedin oxide zone contains copper in the form of malachite which may be amenable to hydrometallurgy. Conventional flotation flowsheets were designed for processing the Onedin and Sandiego sulphide mineralisation. Project economics are very sensitive to metal recoveries and the grade of concentrate achieved. The O'Brien study recommended: Further testwork focussed on being as near to actual plant operating conditions as possible. Further testwork should encompass a continuous pilot scale test facility. • AAR engaged several metallurgical/mineral processing specialists to review the possibilities of implementing novel treatment processes to treat the problematic transitional and oxide ores of Koongie Park during period 2009 to 2012. Meaningful trials recommended were not implemented. No further metallurgical test work was

Criteria	JORC Code explanation	Commentary
		undertaken since 2012, before the recent commencement by AKN of its initial metallurgical testwork program on the Onedin oxide and transitional ores.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The project is not located in an environmentally sensitive area. Several scoping studies have been undertaken, with no major environmental or other factors identified which would prevent the project from proceeding. • It has been assumed that environmental factors can be effectively managed to allow the project to be bought into production. • Anthropological, ethnographic surveys and environmental surveys have been undertaken prior to surface disturbance associated with exploration activities, with clearance being achieved over the majority of the deposit footprints. Identified sites have been placed in the public record.
Bulk Density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*	• The method for density measurements is discussed in Section 2 "Reporting of Exploration Results'. • Diamond core billets from earlier drilling programmes were wrapped in cling film prior to immersion in water to prevent filling of cavities with water. • A drill hole file was generated in Datamine capturing the density data, and this drill file was flagged by weathering and mineralisation domain in the same manner as the drill hole assays. The flagged density population was statistically analysed, with average density values determined for each mineralisation zone within each weathering zone. The following density values were applied per combination of domain: • Oxide zone: Zn zone (Density = 3.1 t/m^3); Cu zone (3.1); Overlap zone (3.1). • Transitional zone: Zn zone (3.18); Cu zone (3.22); Overlap zone (3.24).

Criteria	JORC Code explanation	Commentary
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Fresh zone: Zn zone (3.33); Cu zone (3.24); Overlap zone (3.34). • The Competent Person considers the procedures used to measure sample bulk density, and the density values assigned to the Mineral Resource, are appropriate for the style of mineralisation.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. • The Mineral Resources were classified based upon drill hole spacing, quality of sampling and sample analyses, quantity of density measurements, and the relative confidence in the geological interpretation. This Mineral Resource is supported by a high level of confidence in the geological interpretations, sufficient to assume geological and grade continuity to satisfy an Indicated classification. • All blocks within the Onedin Mineral Resource are classified as a combination of Indicated (RESCAT = 2) and Inferred (RESCAT=3). • Polygons were digitised in the longitudinal section of the mineralisation to define the classification envelopes, and a cookie cutter approach was used to stamp the classification schema onto the block model. • Waste blocks are recorded as unclassified (RESCAT=4). • The final classification strategy and results appropriately reflect the Competent Person's view of the deposit.
Audits or Reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate was internally peer reviewed by CSA Global. CSA Global reviewed the data collection, QAQC, geological modelling, statistical analyses, grade interpolation, density measurements and resource classification strategies. The Competent Person relies upon the opinions of the peer reviewers when classifying the Mineral Resource, and is satisfied that the reviews were impartial and provided useful critique where necessary. • No other audits or reviews are known to have occurred.
Discussion of relative accuracy / confidence	• *Where appropriate a statement of the relative accuracy and confidence*	• Relevant tonnages and grade above nominated cut-off grades for Cu and Zn are provided in this report. Tonnages were calculated by filtering all blocks above the cut-

Criteria	JORC Code explanation	Commentary
	level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	off grade and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. • The Mineral Resource is a local estimate, whereby the drill hole data was geologically domained above nominated cut-off grades. • The Mineral Resource does not provide a calculated tonnage and grade, rather it provides the reader with estimated 'median' values about which can be inferred a range based upon the resource classification.