Sandfire

ASX:SFR

30 April 2024

MAIDEN MINERAL RESOURCE FOR A1 COPPER-SILVER DEPOSIT

HIGHLIGHTS

- Maiden Inferred Mineral Resource estimate, reported in accordance with the JORC 2012 code, completed for the A1 Copper-Silver Deposit, located 20km northeast of the Motheo Copper Mine in Botswana:
  - 5.6Mt at 1.3% Cu and 10g/t Ag, for 73kt contained copper and 2Moz of contained silver.
- Maiden Mineral Resource highlights the potential for the A1 Deposit to become an additional source of satellite ore feed for the Motheo Production Hub, complementing the A4 Deposit located just 8km west of the processing facility.

Sandfire Resources Ltd (**Sandfire** or **the Company**) is pleased to announce a maiden Inferred Mineral Resource for the A1 Copper-Silver Deposit, located 20km northeast of the Company's Motheo Copper Mine in the Kalahari Copper Belt (KCB), Botswana (Figure 1).

Sandfire Chief Executive Officer and Managing Director, Brendan Harris, said:

"*We continue to prioritise exploration activity in the Iberian Pyrite and Kalahari Copper Belts to increase the life of our well capitalised and strategically positioned metal processing hubs, Motheo and MATSA. Today, we have confirmed an initial 5.6Mt resource for the A1 deposit, located 20km to the northeast of our Motheo processing facility. We see real potential for this resource to grow as we increase drillhole density and test the open extent of the orebody.*"

- ENDS -

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This announcement is authorised for release by Sandfire's Chief Executive Officer and Managing Director, Brendan Harris.

A1 COPPER-SILVER DEPOSIT, BOTSWANA

The A1 Copper-Silver Deposit is located 20km northeast of the Company's Motheo Copper Mine in the Kalahari Copper Belt (KCB), Botswana (Figure 1).

The Inferred Mineral Resource estimate totals 5.6 million tonnes at 1.3% Cu and 10g/t Ag for 73,000 tonnes of copper metal and 2 million ounces of silver and is located near-surface at the centre of the A1 Dome.

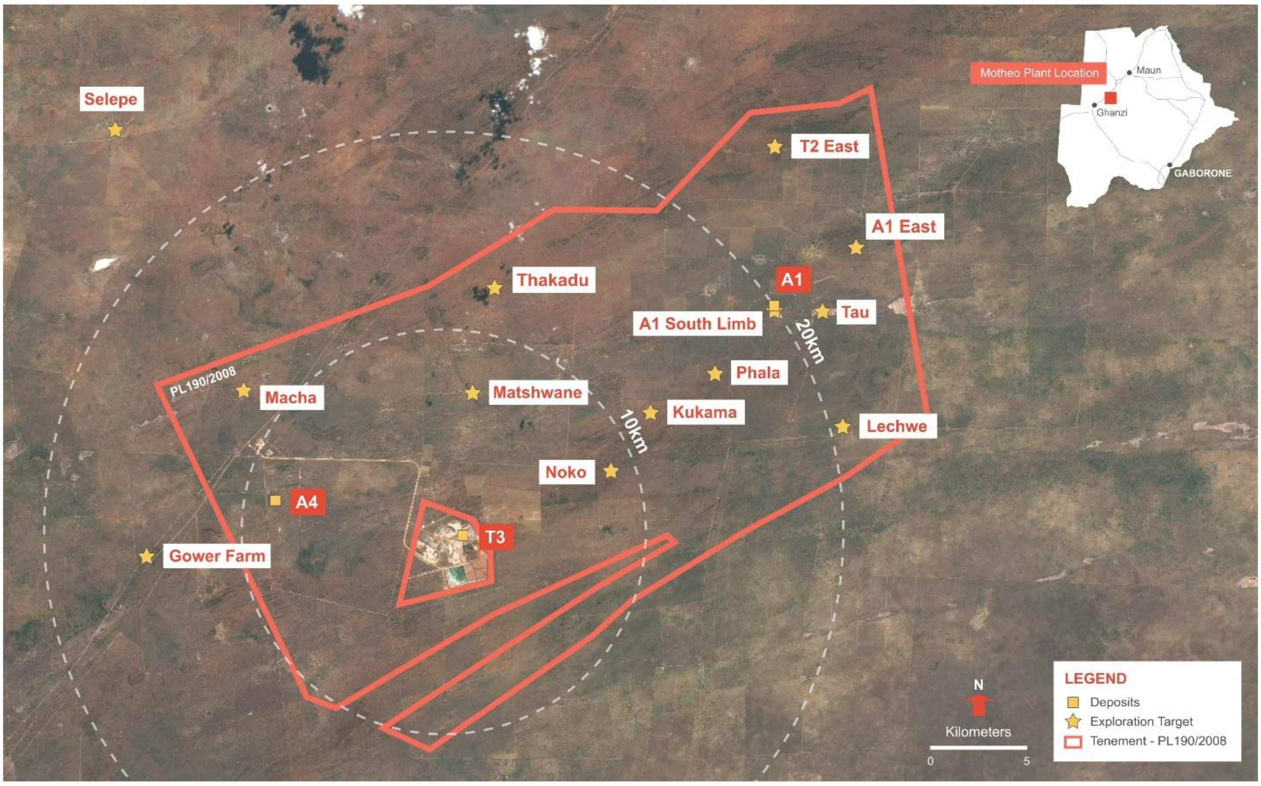

Figure 1: Regional Location Plan showing the A1 Resource within the Motheo Expansion Project Area.

A1 Drilling Update

Following the successful delineation of Cu-Ag mineralisation at A1 in 2022 (refer to ASX release 'Motheo A1 Satellite Exploration Update', 20 October 2022) a 37-hole drill program commenced in July 2023 to infill a 1.8km strike-length to a nominal 100mE x 100mN drill hole spacing, with 100mE x 50mN drill spacing reached in the central portions. The 7,000m program was completed using both reverse circulation (RC) and diamond drill (DD) methods; 19 holes were designed with RC pre-collars and DD tails (RC-DDT), 14 holes were DD from surface and four were RC **(Figure 2)**.

Drilling was completed in February 2024 and successfully demonstrated continuity of the structurally controlled Cu-Ag mineralisation at A1. Mineralisation remains open down-dip and along strike.

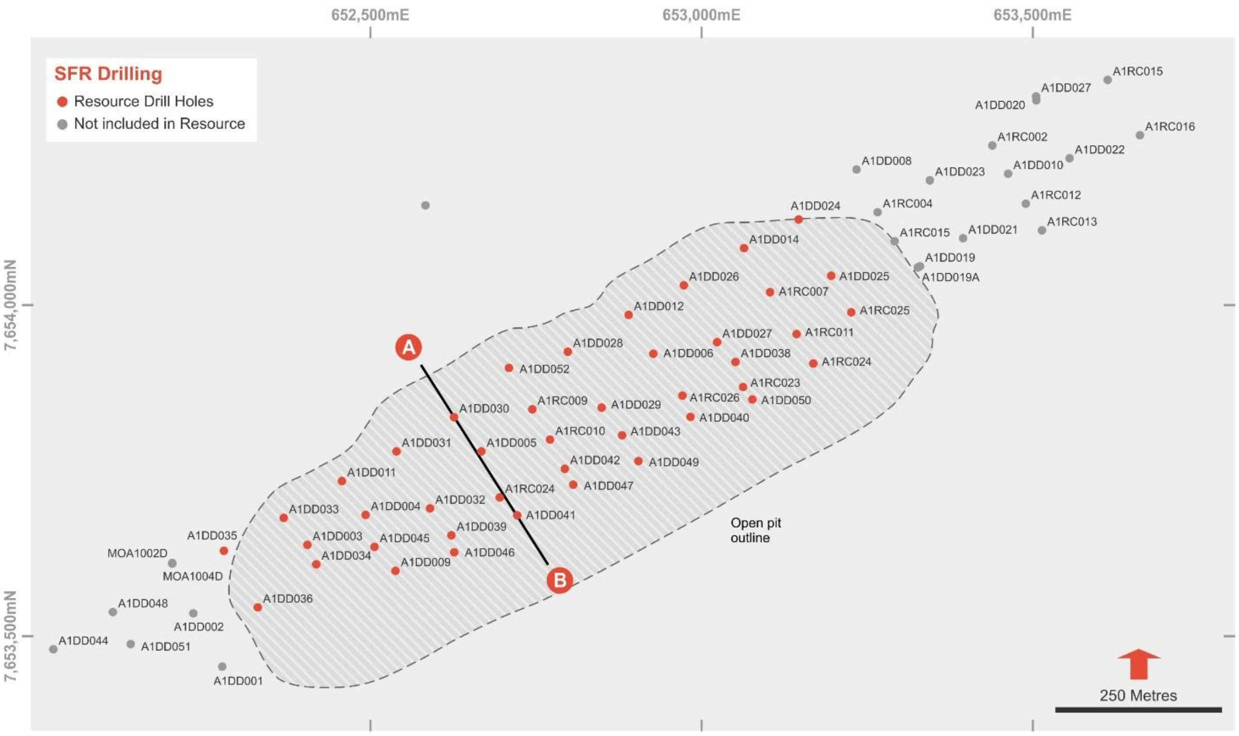

Figure 2: A1 Drill Collars included in the Mineral Resource. See Figure 3 for Section A-B.

A1 Deposit Geology and Mineralisation

The A1 deposit is located within the Ghanzi-Chobe belt in western Botswana. The stratigraphy in this belt comprises the basal Kgwebe volcanics which are unconformably overlain by Ghanzi Group sediments. The Ghanzi Group is a late Mesoproterozoic-early Neoproterozoic meta-sedimentary group comprising (in successively higher stratigraphic order) the Kuke, Ngwako Pan, D'Kar and Mamuno Formations.

A1 occupies a similar structural and stratigraphic position to that of the T3 and A4 deposits in that it occurs within a NE-SW trending periclinal anticline ("dome") with a core of Ngwako Pan Formation sandstone, overlain by a succession of shallow marine D'Kar Formation sediments.

Mineralisation is hosted within a moderately inclined, overturned fold in the lower D'Kar Formation **(Figure 3)**, with a NE-SW trending axial plane. The northern limb has a shallow dip of 11º to the NW, while the southern limb dips steeply to the NW at 55º. The folded host sequence is comprised of sandstone, siltstone, shale and carbonate units.

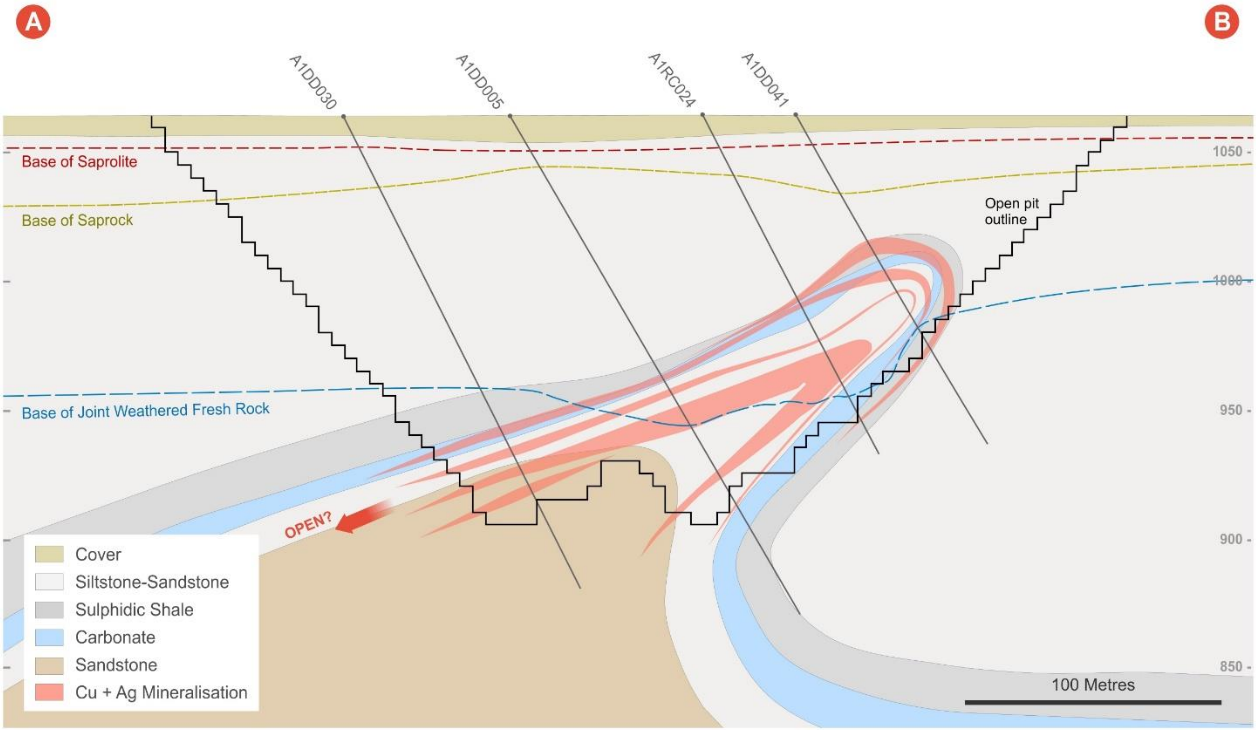

Figure 3: Schematic cross-section showing interpreted lithostratigraphy and mineralised ore domains across the A1 Deposit.

The structurally controlled Cu-Ag mineralisation at A1 occurs as coarse to semi-massive chalcopyrite, bornite and chalcocite within quartz-carbonate veins, with additional copper sulphides disseminated along bedding planes and foliation. These structures are typically sub-parallel to bedding and are preferentially developed in the hanging wall limb of the overturned fold. High-grade mineralisation is often focused within the fold hinge, where breccia and saddle-reef vein geometries are developed and infilled with Cu-sulphides.

Mineralisation extends over a strike length of approximately 1.8km and between 120m - 200m down-dip, where it remains open at depth. Mineralisation reaches within 45m of surface at the fold hinge and extends to 200m vertical depth on the overturned footwall limb.

The A1 resource area is overlain by a thin layer of soil and sand cover (~2.5m), under which is a ~5m thick layer of calcrete. Saprock (>20% oxidation) is typically 20m thick and Joint Weathered Fresh Rock (<20% oxidation) is on average 50m thick. Mineralisation at A1 is hosted within the Joint Weathered Fresh Rock and Fresh Rock domains and is almost entirely comprised of fresh sulphide with few, spatially and vertically discrete zones of copper oxides.

Mineralised wireframes were constructed using all available structural data and guided by a lithostratigraphic model developed from multi-element geochemistry, which was collected for all drill samples. A nominal 0.3% Cu cut-off grade was used to determine the external boundaries of the mineralised domains.

A1 Maiden Mineral Resource

The maiden A1 Mineral Resource was based on the results of 75 holes drilled by Sandfire between 2022 and 2024. These holes were completed on a nominal 100mE x 50mN spacing which provides sufficient confidence for an Inferred Mineral Resource classification.

The maiden Inferred Mineral Resource for A1, at a 0.3% Cu cut-off, constrained within a US $9,780/ton Cu price optimised pit shell is 5.6Mt at 1.30% Cu and 10g/t Ag for 73,000t of contained copper and 2Moz of contained silver. The maiden A1 Mineral Resource is summarised in Table 1 below.

Cu% Cut-off	Mineral Resource Category	Weathering	Tonnes (Mt)	Grade Cu (%)	Contained Cu (kt)	Grade Ag (g/t)	Contained Ag (Moz)
0.3	Inferred	Fresh	5.6	1.3	73	10	2.0
		Total	**5.6**	**1.3**	**73**	**10**	**2.0**

Notes:

Calculations have been rounded to the nearest: 100kt, 0.1% Cu grade, 1kt Cu metal, 1g/t Ag grade, and 100koz Ag metal.

A1 Mineral Resource – Material Information Summary

Geology and Geological Interpretation: The A1 deposit is located within the Ghanzi-Chobe belt in western Botswana. The stratigraphy in this belt comprises the basal Kgwebe volcanics which are unconformably overlain by Ghanzi Group sediments. The Ghanzi Group is a late Mesoproterozoic-early Neoproterozoic meta-sedimentary group comprising (in successively higher stratigraphic order) the Kuke, Ngwako Pan, D'Kar and Mamuno Formations.

A1 occupies a similar structural and stratigraphic position to that of the T3 and A4 deposits in that it occurs within a NE-SW trending periclinal anticline ("dome") with a core of Ngwako Pan Formation sandstone, overlain by a succession of shallow marine D'Kar Formation sediments.

Mineralisation is hosted within a moderately inclined, overturned fold in the lower D'Kar Formation, with a NE-SW trending axial plane. The northern limb has a shallow dip of 11º to the NW, while the southern limb dips steeply to the NW at 55º. The folded host sequence is comprised of sandstone, siltstone, shale and carbonate units.

Drilling Techniques: 75 holes were completed on the A1 deposits and included in the resource. These holes consisted of diamond drill holes (DD), reverse circulation drill holes (RC) and reverse circulation with diamond tails (RCDDT). DD drillholes used HQ3 (63.5mm) and NQ (47.6mm) core size (standard tubes). Core orientation is completed whenever possible, using the Boart Longyear TrueCore Tool. RC holes are drilled using a 5 ½ inch bit and face sampling hammer.

Sampling and sub-sampling techniques: Sampling boundaries of diamond drill core (DD) are geologically defined and commonly one metre in length unless a significant geological feature warrants a change from this standard unit. The minimum sample length of drill core is 0.3m and the maximum length is 1.2m. Reverse circulation (RC) samples are taken on a 1m basis. Sampling of DD core and RC chips is completed using Sandfire sampling protocols and QAQC procedures as per industry standard. RC chips are sampled using a riffle or cone splitter with samples typically weighing

2 – 3.5kg. The determination of mineralisation is based on observed sulphides and lithological differences. DD core samples were taken from HQ and NQ core and cut longitudinally in half using a diamond drill core saw. RC chips are sampled using a riffle or cone splitter. Longitudinally cut half core samples are produced using a core saw. RC samples are taken using a riffle or cone splitter. Any wet sample is allowed to dry prior to riffle splitting. Samples were submitted to the Botswana on-site preparation facility managed by ALS. Samples are first crushed in their entirety to 70% <2 mm using a jaw crusher. The entire samples are then milled to 85% passing 75 µm. The procedure is considered to represent industry standard practices and are considered appropriate for the style of mineralisation.

Sample Analysis Method: Samples analysed by ALS Laboratories Johannesburg, using ALS method ME-ICP61 for total Cu and 33 other elements, with an over-range trigger to ME-OG62 for high-grade ore elements, including Cu, Pb, and Zn. Pulp charges of 0.25g are prepared using a four-acid digest and an ICP-AAS finish. Samples returning Total Cu >0.1% are analysed using the Cu-AA05 method for Acid Soluble Copper.

Estimation Methodology: Three-dimensional mineralisation wireframes were completed within Seequent™ Leapfrog software and these were then imported into Datamine for Mineral Resource estimation. The grade estimation technique applied for estimation within Cu mineralisation domains is ordinary kriging (OK) for variables including Cu, Ag, As, Bi, Mo, Pb, Zn, and AsCu.

Correlation analysis was completed for all variables with Cu showing a strong correlation with Ag, a moderate correlation with Bi and AsCu, and no correlation with As, Mo, Pb and Zn. However, variables are treated in the univariate sense for estimation.

Top cuts were applied to isolated high-grade composites prior to estimation where applicable based on review of histograms, disintegration analysis and statistical analysis of composites.

The search ellipsoid corresponds to the range of the variogram structures and is constrained by the optimum number of samples to ensure data used to estimate blocks is within the constraints of the variograms. Blocks that were not estimated within the first search were estimated in a second or third pass.

Silver has been estimated as a by-product within the A1 Deposit. It is assumed that silver will be recovered only where copper is being mined. Estimates include deleterious or penalty elements As, Bi, Mo, Pb and Zn. Estimates also include the estimation of AsCu.

Data spacing was the primary consideration taken into account when selecting an appropriate estimation block size and the parent cell sizes of 50mE x 25mN x 2.5mRL were based on half of the average drill spacing.

Classification Criteria: Drill holes at A1 are located on a nominal 100mE x 100mN grid, with the central portion of the deposit drilled on a nominal 100mE and 50mN grid spacing. This drill spacing has been sufficient to establish continuity of both lithostratigraphy and Cu+Ag mineralisation and is considered appropriate for an Inferred Mineral Resource Estimate.

Cut-off Grades: The Mineral Resource has been reported above a cut-off of 0.3% Cu within an optimised open pit shell run at a US $9,780/ton Cu price. It is the opinion of the Competent Person that the cut-off grade represents a suitable assessment of a potential lower economic cut-off, when likely mining methods for the current A1 Mineral Resource are considered.

Mining and Metallurgical Methods and Parameters and Other Material Factors: Based on the companies experience in the Kalahari Copperbelt it is assumed that the deposit could be mined as an open cut operation. Preliminary metallurgical test work is underway on material from the A1 Deposit. Composites were produced to test 3 variability samples for metallurgical recovery. The variability samples used the same laboratory flowsheet that was used to assess T3 which represents the existing Motheo processing plant. Preliminary results show the A1 material responded well to the T3 flowsheet, producing metallurgical recoveries in line with T3. A larger, more comprehensive test work program will be conducted as part of the next project stage.

Competent Person's Statement

Mineral Resources

The information in this report that relates to Mineral Resources is based on information compiled under the supervision of Mr Richard Holmes and by Mr Lindsay Farley. Mr Richard Holmes is a full-time employee of Sandfire Resources Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Lindsay Farley is a full-time employee of ERM, is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Richard Holmes and Mr Lindsay Farley have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Richard Holmes and Mr Lindsay Farley consent to the disclosure of the information in this report in the form and context in which it appears. Mr Richard Holmes assumes responsibility for matters related to Sections 1 and 2 of JORC Table 1, while Mr Lindsay Farley assumes responsibility for matters related to Section 3 of JORC Table 1.

Forward-Looking Statements

Certain statements made during or in connection with this release contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and Ore Reserves, exploration and project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Sandfire believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements and no assurance can be given that such expectations will prove to have been correct.

Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management.

Except for statutory liability which cannot be excluded, each of Sandfire, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in these forward-looking statements and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in forward-looking statements or any error or omission. Sandfire undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.

ASX releases referred to in this announcement:
The information in this announcement that relates to the A1 Copper-Silver Deposit is extracted from the ASX release 'Motheo A1 Satellite Exploration Update', 20 October 2022. The information was prepared by Richard Holmes, Competent Person in accordance with the requirements of the JORC Code. Sandfire confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements. Sandfire confirms that the form and context in which the Competent Person's findings are presented have not been materially changed from the original market announcement.

APPENDIX 1: JORC CODE, 2012 EDITION – TABLE 1

A1 DEPOSIT

JORC Code Assessment Criteria	Comment
Section 1 Sampling Techniques and Data	
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 downhole 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.*	• Sampling boundaries of diamond drill core (DD) are geologically defined and commonly one metre in length unless a significant geological feature warrants a change from this standard unit. The minimum sample length of drill core is 0.3m and the maximum length is 1.2m. • Reverse Circulation (RC) samples are taken on a 1m basis. • Sampling of DD core and RC chips is completed using Sandfire sampling protocols and QAQC procedures as per industry standard. RC chips are sampled using a riffle or cone splitter with samples typically weighing between 2 – 3.5kg. • The determination of mineralisation is based on observed sulphides and lithological differences. DD core samples were taken from HQ and NQ core and cut longitudinally in half using a diamond drill core saw. RC chips are sampled using a riffle or cone splitter. • All samples are pulverised via LM2 to nominal 85% passing -75µm. Pulp charges of 0.25g are prepared using a four-acid digest and an ICP-AAS finish.
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.).*	• DD drillholes used HQ3 (63.5mm) and NQ (47.6mm) core size (standard tubes). Core orientation is completed whenever possible, using the Boart Longyear TrueCore Tool. • RC holes are drilled using a 5 ½ inch bit and face sampling hammer.

JORC Code Assessment Criteria	Comment
	• Where holes were drilled with RC pre-collars and DD tails (RCDDT), the pre-collar depth was designed to end approximately 10m above known or inferred mineralisation, determined from preliminary mineralisation wireframes.
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.*	• DD recoveries were quantitatively recorded using length measurements of core recoveries per-run. Core recoveries routinely exceeded 95% below transported cover. • RC samples were visually assessed for recoveries and were generally good. Where recoveries were poor, no sample was collected. • Core is meter marked and checked against the driller’s blocks, ensuring that all core loss is considered. • No sample recovery issues are believed to have impacted on potential sample bias.

JORC Code Assessment Criteria	Comment
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.*	● Geological logging is completed for all holes. The major rock unit (lithology, colour, grain size, texture), weathering, alteration (style and intensity), mineralisation (type), structural (type & orientation), interpreted origin of mineralisation, estimation of % sulphides/oxides, and veining (type, style, origin, intensity) are logged following Sandfire standard procedures. ● Data is recorded and validated using geological logging software and imported to the central database. ● Logging is both qualitative and quantitative depending on the data being logged. ● All DD core and RC chips are photographed. ● All drill holes are fully logged.
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.*	● Longitudinally cut half core samples are produced using a core saw. ● RC samples are taken using a riffle or cone splitter. Any wet sample is allowed to dry prior to riffle splitting. ● Samples were submitted to the Botswana on-site preparation facility managed by ALS. Samples are first crushed in their entirety to 70% <2 mm using a jaw crusher. The entire samples are then milled to 85% passing 75 µm. ● The procedure is considered to represent industry standard practices and are considered appropriate for the style of mineralisation. ● For sample preparation, every 20th sample prepared at both the coarse crush, and milling stages is screened for consistency. Any failure triggers the re-crush/mill of the previous three samples. If any one of those samples should also fail, then the entire submitted batch is re-crushed/milled. Between each

JORC Code Assessment Criteria	Comment
	batch the coarse crushing equipment is cleaned using blank quartz material. LM2 ring mills are cleaned with acetone and compressed air between each sample. ● Duplicate analysis of RC Field Duplicates, Coarse Reject and Pulp Reject samples has been completed and identified no issues with sampling representativity with assays showing a high level of correlation. ● The sample size is considered appropriate for the mineralisation style.
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.*	● Samples analysed by ALS Laboratories Johannesburg, using ALS method ME-ICP61 for total Cu and 33 other elements, with an over-range trigger to ME-OG62 for high-grade ore elements, including Cu, Pb, and Zn. Pulp charges of 0.25g are prepared using a four-acid digest and an ICP-AAS finish. Samples returning Total Cu >0.1% are analysed using the Cu-AA05 method for Acid Soluble Copper. ● No geophysical tools were used to analyse the drilling products. ● Precision and accuracy were monitored using duplicate samples, and the insertion of certified reference materials (CRMs) and blanks into the sample stream. ● CRMs are sourced from Ore Research Laboratories in Australia, and except for the blank material sourced from AMIS, span a range of Cu grades appropriate to the A1 project mineralisation. ● Analysis of duplicate samples (RC Field Duplicates, Coarse Rejects, Pulp Rejects and Pulp Duplicates) shows a high degree of precision and repeatability, with no indications of analytical or sample bias.
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*	● Significant intersections have been verified by suitably qualified company personnel. ● No twinned holes have been drilled.

JORC Code Assessment Criteria	Comment
verification, data storage (physical and electronic) protocols. *Discuss any adjustment to assay data.*	• Logging data (including geotechnical parameters) are captured into geological logging software before being imported into the Sandfire Resources SQL database. The SQL server database is configured for optimal validation through constraints, library tables, triggers and stored procedures. Data that fails these rules on import is rejected or quarantined until corrected. • No adjustments have been made to the primary assay data. Where duplicate samples have been analysed, the primary sample retains priority in the database.

JORC Code Assessment Criteria	Comment
Location of data points *Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	● Drillholes are initially set-out prior to drilling using a handheld global positioning system (GPS). Subsequent to completion, holes are capped and marked with a marker peg. ● Periodically, collar locations are surveyed by Sandfire surveyors or third-party contractors using an DGPS system, which provides sub-decimetre accuracy. ● Downhole surveying is completed on all drillholes via north-seeking gyroscopic survey tools. ● Collars are marked out and picked up in the Botswanan National Grid in UTM format (WGS84_34S). ● Topographic control is provided by the DGPS survey system used for collar pickup. The topography of the A1 project area is very flat, and variations in topography within the project are not significant. The topographic control is considered fit for purpose.
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.*	● Drill holes at A1 are spaced on a nominal 100mE x 50mN grid spacing. ● Drill hole spacing at A1 has been sufficient to establish continuity of both lithostratigraphy and Cu+Ag mineralisation and is considered appropriate for an Inferred Mineral Resource Estimate. ● No sample compositing is applied during the sampling process.
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.*	● Stereonet analysis of structural data shows two primary orientations for logged veins and structures that are broadly aligned with the fold limbs of the A1 dome, as defined by bedding measurements. ● All drill holes at A1 are orientated at an azimuth of 150. Due to the tight and overturned folding of the A1 host stratigraphy, intersections in the hanging wall limb are at slightly different orientations to those in the footwall limb, however, both limbs dip to the NW at 11 degrees and 55 degrees respectively.

JORC Code Assessment Criteria	Comment
	• As a result, the consistently orientated drillholes are not believed to have induced any sample bias and the drill hole orientations are considered appropriate.
Sample security *The measures taken to ensure sample security.*	• Samples are collected at the end of each shift by Sandfire's Exploration staff and driven directly from the drill rig to the storage and logging facility in Ghanzi, located within a secure and private compound. • Samples are prepared to pulp stage on-site within a purpose built, commercially operated facility (ALS Laboratories). Samples are dispatched to ALS Johannesburg for analysis. Sample security is not considered to be a significant risk to the A1 project.
Audits and reviews *The results of any audits or reviews of sampling techniques and data.*	• The sampling techniques and data collection processes are of industry standard and have been subjected to internal reviews by Sandfire personal.
Section 2 Reporting of Exploration Results	
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.*	• Sandfire, through their 100% ownership of Botswanan company Tshukudu Metals Botswana (Pty) Ltd, hold prospecting license PL190/2008 as part of a larger tenement package. This license, on which A1 occurs, was renewed on 1st October 2022 and is valid till 30th September 2024. • UK-listed company Metal Tiger Plc. holds a US$2.0 million capped Net Smelter Royalty over the Company's T3 Copper Project in Botswana. Metal Tiger Plc also holds an uncapped 2% Net Smelter Royalty over 8,000km^2 of the Company's Botswana exploration license holding in the Kalahari Copper Belt. This uncapped royalty covers the area subject to the historical Tshukudu joint venture with MOD Resources Ltd and includes PL190/2008, which hosts the A1 Resource. • There are no known impediments to obtaining a license to operate in the area.

JORC Code Assessment Criteria	Comment
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	● Limited previous exploration has occurred in the A1 project area, apart from widely spaced soil sampling conducted by Discovery Mining, and seven Diamond Drill holes completed by Tshukudu Exploration on behalf of MOD Resources Ltd during 2018 and 2019.
Geology *Deposit type, geological setting and style of mineralisation.*	● The A1 deposit is located within the Ghanzi-Chobe belt in western Botswana. The stratigraphy in this belt comprises the basal Kgwebe volcanics which are unconformably overlain by Ghanzi Group sediments. The Ghanzi Group is a late Mesoproterozoic-early Neoproterozoic meta-sedimentary group comprising (in successively higher stratigraphic order) the Kuke, Ngwako Pan, D'Kar and Mamuno Formations. ● A1 occupies a similar structural and stratigraphic position to that of the T3 and A4 deposits in that it occurs within a NE-SW trending periclinal anticline ("dome") with a core of Ngwako Pan Formation sandstone, overlain by a succession of shallow marine D'Kar Formation sediments. ● Mineralisation is hosted within a moderately inclined, overturned fold in the lower D'Kar Formation, with a NE-SW trending axial plane. The northern limb has a shallow dip of 11º to the NW, while the southern limb dips steeply to the NW at 55º. The folded host sequence is comprised of sandstone, siltstone, shale and carbonate units. ● The structurally controlled Cu-Ag mineralisation at A1 occurs as coarse to semi-massive chalcopyrite, bornite and chalcocite within quartz-carbonate veins, with additional copper sulphides disseminated along bedding planes and foliation. These structures are typically sub-parallel to bedding and are preferentially developed in the hanging wall limb of the overturned fold. High-grade mineralisation is often focused within the fold hinge, where breccia and saddle-reef vein geometries are developed and infilled with Cu-sulphides.
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*	● No Exploration results are reported in this release.

JORC Code Assessment Criteria	Comment
• *Elevation or rl (reduced level – elevation above sea level in metres) of the drill hole collar* • *Dip and azimuth of the hole* • *Downhole 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.*	

JORC Code Assessment Criteria	Comment
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.*	• No Exploration results are reported in this release.
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 downhole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known').*	• No Exploration results are reported in this release.
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.*	• No Exploration results are reported in this release.
Balance 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.*	• No Exploration results are reported in this release.

JORC Code Assessment Criteria	Comment
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.*	• No Exploration results are reported in this release.

JORC Code Assessment Criteria	Comment
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.*	• No Exploration results are reported in this release.
Section 3 Estimation and Reporting of Mineral Resources	
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.*	• Sandfire uses SQL as the central data storage system. User access to the database is regulated by specific user permissions. Only the Database Management team can overwrite data. • Existing protocols maximise data functionality and quality whilst minimising the likelihood of error introduction at primary data collection points and subsequent database upload, storage and retrieval points. • An IT contracting company is responsible for the daily Server backups of both the source file data on the file server and the Azure SQL Server databases. The SQL databases are backed up each day to allow for a full recovery. • The SQL server database is configured for optimal validation through constraints, foreign key relationships with library tables, triggers and stored procedures. Data that fails these rules on import is rejected or quarantined until it is corrected. • Database is centrally managed by the Database Administrator who is responsible for all aspects of data entry, validation, development, quality control and specialist queries. There are a standard suite of vigorous validation checks for all data. • ERM completed numerous checks on the data before commencing the MRE. Examples are, absent collar data, multiple collar entries, suspect downhole survey results, absent survey data, overlapping

JORC Code Assessment Criteria	Comment
	intervals, negative sample lengths and sample intervals which extended beyond the hole depth defined in the collar table were reviewed. No validation errors were detected.
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.*	● Numerous site visits have been undertaken by Sandfire personnel. No material concerns were identified during those visits. ● ERM personnel did not completed a site visit. Sandfire personnel have expert knowledge of the deposit and little would be gained from a site visit by ERM personnel.
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.*	● All available geological logging, geochemical and structural data were used in the interpretation and modelling. Drill hole data was supplemented by a range of geophysical datasets including Airborne Magnetics, AEM and IP. ● A robust lithostratigraphic model, developed using multi-element geochemistry, provides the framework and confidence in the geological interpretation for the A1 deposit. The lithostratigraphic model is supported by detailed geological logging and structural measurements that confirms the folded stratigraphic architecture at A1. ● The controls on Cu-Ag mineralisation are well understood in that mineralisation is structurally controlled and hosted within veins and foliation that are predominantly sub-parallel to bedding. Several high-angle veins have been measured that are orthogonal to the primary orientation of mineralisation, however, these do not host significant amounts of copper sulphide. ● The geological interpretation of mineralised boundaries is considered robust and is unlikely to change significantly at the deposit scale though local scale adjustments may be required as infill drilling is completed.

JORC Code Assessment Criteria	Comment
	• The interpreted mineralisation boundaries were used as hard boundaries during the Mineral Resource Estimate. • Geological and grade continuity are affected by structure, and host rock chemistry and rheology. Some mineralised domains cut across lithology units at low angles, which results in changes in mineralised widths, style, or grade. Pinching and swelling of some mineralised domains are believed to be the result of boudins developed within the variably competent host rock package of sandstones, siltstones, carbonates, and shales.
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 A1 deposit mineralised domain extents are approximately: ▪ Along strike 1,800m (west to east on local grid) ▪ Width varies from 225m to 75m ▪ The top of the mineralised domains are 45m below the surface and extend for another 150m below that.

JORC Code Assessment Criteria	Comment
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 other non-grade variables of economic significance (e.g., 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.*	● Grade estimation technique applied for estimation within Cu mineralisation domains is ordinary kriging (OK) for variables including Cu, Ag, As, Bi, Mo, Pb, Zn, and AsCu. Analysis suggests that a stationarity assumption is reasonable for the style of deposit and linear estimation of grades. Density has been assigned based lithology and oxidation state. ● Top cuts were applied to isolated high-grade composites prior to estimation where applicable based on review of histograms, disintegration analysis and statistical analysis of composites. ● The structurally controlled Cu-Ag mineralisation at A1 occurs as coarse to semi-massive chalcopyrite, bornite and chalcocite within quartz-carbonate veins, with additional copper sulphides disseminated along bedding planes and foliation. These structures are typically sub-parallel to bedding and are preferentially developed in the hanging wall limb of the overturned fold. High-grade mineralisation is often focused within the fold hinge, where breccia and saddle-reef vein geometries are developed and infilled with Cu-sulphides. A nominal 0.3% Cu cut-off grade was used to determine the external boundary of the mineralised zones. ● The search ellipsoid corresponds to the range of the variogram structures and is constrained by the optimum number of samples to ensure data used to estimate blocks is within the constraints of the variograms. Blocks that were not estimated within the first search were estimated in a second or third pass. ▪ First pass search 100m major axis, 50m semi-major axis and 5m minor axis. Minimum samples 8 and maximum samples 20 with a maximum of 4 samples per drillhole. ▪ Second pass search 200m major axis, 100m semi-major axis and 10m minor axis. Minimum samples 5 and maximum samples 20 with a maximum of 4 samples per drillhole.

JORC Code Assessment Criteria	Comment
	▪ Second pass search 400m major axis, 200m semi-major axis and 20m minor axis. Minimum samples 1 and maximum samples 12 with a maximum of 4 samples per drillhole. ● Mineral Resource estimation is completed within Datamine software. Three-dimensional mineralisation wireframes were completed within Seequent™ Leapfrog software and these are then imported into Datamine. ● This is a maiden Mineral Resource Estimate. ● Silver has been estimated as a by-product within the A1 Deposit. It is assumed that silver will be recovered only where copper is being mined. ● Estimates include deleterious or penalty elements As, Bi, Mo, Pb and Zn. Estimates also include the estimation of AsCu. ● Data spacing was the primary consideration taken into account when selecting an appropriate estimation block size. The A1 project is drilled on an approximate 100mE x 50mN support. The parent cell sizes of 50mE x 25mN x 2.5mRL were based on half of the average drill spacing. ● No selective mining units are assumed in this estimate. ● Correlation analysis was completed for all variables with Cu showing a strong correlation with Ag, a moderate correlation with Bi and AsCu, and no correlation with As, Mo, Pb and Zn. However, variables are treated in the univariate sense for estimation. ● Correlation between the estimated block values for all constituents are checked after interpolation to ensure that they are similar to the correlation of the input composites.

JORC Code Assessment Criteria	Comment
	• The block model is assigned unique domain codes that corresponds with the domain codes as defined by mineralisation wireframes. Wireframes are then used as hard boundaries during interpolation where blocks are estimated only with composites having the corresponding domain code. • The process of validation includes standard model validation using visual and numerical methods: ▪ The block model estimates are checked visually against the input composite/drillhole data. ▪ Swath plots of the estimated block grades and composite mean grades are generated by eastings, northings and elevations and reviewed to ensure acceptable correlation. ▪ Global statistical comparisons of mean estimated block grades to mean composite grades. No reconciliation data is available as no mining has taken place. ▪ Comparison of correlation of constituents between the composite grades and the block model grades to ensure correlations are maintained.
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.

JORC Code Assessment Criteria	Comment
Cut-off parameters *The basis of the adopted cut-off grade(s) or quality parameters applied.*	● The Mineral Resource has been reported above a cut-off of 0.3% Cu within an optimised open pit shell run at a US $9,780/ton Cu price. It is the opinion of the Competent Person that the cut-off grade represents a suitable assessment of a potential lower economic cut-off, when likely mining methods for the current A1 Mineral Resource are considered.
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.*	● It is assumed that mining the currently defined Mineral Resource could potentially be economically mined using open-cut methods at the currently reported average Cu grade.
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.*	● Preliminary metallurgical test work is underway on material from the A1 Deposit. Composites were produced to test 3 variability samples for metallurgical recovery. The variability samples used the same laboratory flowsheet that was used to assess T3 which represents the existing Motheo processing plant. Preliminary results show the A1 material responded well to the T3 flowsheet, producing metallurgical recoveries in line with T3. A larger, more comprehensive test work program will be conducted as part of the next project stage.
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*	● It has been assumed that the waste material produced as a result of open-cut mining will be stored in dry stacked waste dumps on site, adjacent to the mining operation. The sulphide content of the mineralisation poses the risk for potentially acid generating waste to be produced.

JORC Code Assessment Criteria	Comment
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.	• It has been assumed that the treatment and appropriate storage of this waste will not pose any significant impediment to the sustainable mining of the deposit and would be correctly managed in accordance with regulatory conditions imposed by the Botswanan government.

JORC Code Assessment Criteria	Comment
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.*	● Sample mass was determined by weighing the core in air and sample volume was determined by the Archimedes principle. ● Five samples, where available, were selected from each of the regolith domains, for both mineralised and unmineralised material, from each drill hole for measurement to ensure representative coverage of data across the various lithological, regolith and mineralisation domains. ● An average density was assigned to the mineralised domains based on oxidation state. Density was also assigned to waste material based on lithology and oxidation state. ● The procedure used is suitable for non-porous or very low porosity samples, which can be quickly weighed in water before saturation occurs. More friable and porous material was vacuum sealed in plastic prior to weighing in water. ● No assumptions for bulk density made during the evaluation process.
Classification *The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors, i.e., 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 is classified as a function of drillhole spacing, geological and grade continuity, database integrity and QAQC. Areas where drilling has been completed on a nominal 100m x 100m or better pattern are classified as Inferred. All other material is unclassified. There is no Measured or Indicated in this MRE. ● The MRE was also spatially constrained within a Whittle optimized open pit shell generated using optimistic input parameters based on a Cu price of US $9,780/ton. ● The Mineral Resource classification has appropriately taken into account data spacing, distribution, reliability, quality and quantity of input data as well as the confidence in predicting grade and geological continuity. ● The Mineral Resource estimation appropriately reflects the Competent Person's view of the deposit.

JORC Code Assessment Criteria	Comment
Audits or reviews *The results of any audits or reviews of Mineral Resource estimates.*	• No audits or reviews have been completed.

JORC Code Assessment Criteria	Comment
Discussion of relative accuracy/confidence	• The Mineral Resources has been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resources estimates. • The A1 Mineral Resource Estimate is a global estimate. • The deposit has not been mined.
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 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.*	