ASX Announcement **1 December 2020**

MAIDEN MINERAL RESOURCE FOR A4 COPPER-SILVER DEPOSIT HIGHLIGHTS GROWTH POTENTIAL OF MOTHEO

- **Maiden JORC 2012 compliant Inferred Mineral Resource estimate completed for the A4 Copper-Silver deposit, located 8km west of the T3 Copper-Silver Project in Botswana:**
  - **6.5Mt at 1.5% Cu and 24g/t Ag, for 100,000t of contained copper and 4.9Moz of contained silver (using a 0.5% Cu cut-off)**
- **Maiden Mineral Resource highlights the potential for the A4 deposit to be rapidly advanced as a source of satellite ore feed as part of an expanded Motheo Production Hub (refer separate ASX announcement, released today, on the T3 Copper-Silver Project Definitive Feasibility Study: "Sandfire Approves Development of New Long-Life Copper Project in Botswana").**
- **The second phase of resource drilling at A4 is well advanced with six diamond core rigs conducting in-fill and extensional drilling on a 25m x 25m drilling pattern. The objective of the second phase of drilling is to elevate the Maiden Mineral Resource to an Indicated Mineral Resource category and test for potential extensions to the deposit.**
- **Early work programs underway at the A4 Project include metallurgical test work, drilling for geotechnical and geo-hydrological purposes, mining studies, environmental studies, regulatory approvals and infrastructure studies aimed at fast-tracking the evaluation of the A4 Project and potentially integrating it with the development plans at T3.**

Sandfire Resources Ltd (ASX: SFR; **Sandfire** or **the Company**) is pleased to report a maiden JORC 2012 compliant Inferred Mineral Resource of **6.5 million tonnes grading 1.5% copper and 24g/t Ag** for the A4 Copper-Silver deposit in Botswana, located at shallow depth on the large A4 Dome structure identified from Airborne Electro Magnetic Survey (AEM) data.

The maiden A4 Mineral Resource – which is estimated to contain **100,000 tonnes of copper metal** and **4.9 million ounces of silver** – is the first deposit to be delineated outside of the substantial T3 Copper-Silver Project within the highly prospective 1,000km^2 T3 Expansion Area.

The T3 Expansion Project is the first area of the Kalahari Copper Belt to receive systematic and focussed exploration within Sandfire's 26,645km^2 Southern African licence holdings which extend from Botswana into Namibia (see Figure 1).

Drilling is continuing at A4 with six diamond core rigs conducting infill drilling within the resource area on a nominal 25m by 25m pattern and testing for extensions both along strike and down-dip from the known mineralisation.

Given its location 8km from the planned processing plant and infrastructure at T3, the A4 deposit has potential to become an important source of satellite ore for the Motheo Production Hub supporting the expansion from the Base case of 3.2Mtpa to 5.2Mtpa.

The Expansion Case to 5.2Mtpa referred to in this and other associated releases, where it relates to the Inferred A4 Mineral Resource, is based on preliminary resource drilling, technical and economic assessments. Drilling and associated study work at A4 is currently insufficient to support estimation of Ore Reserves or to provide assurance of an economic Expansion Case for the Motheo Production Hub.

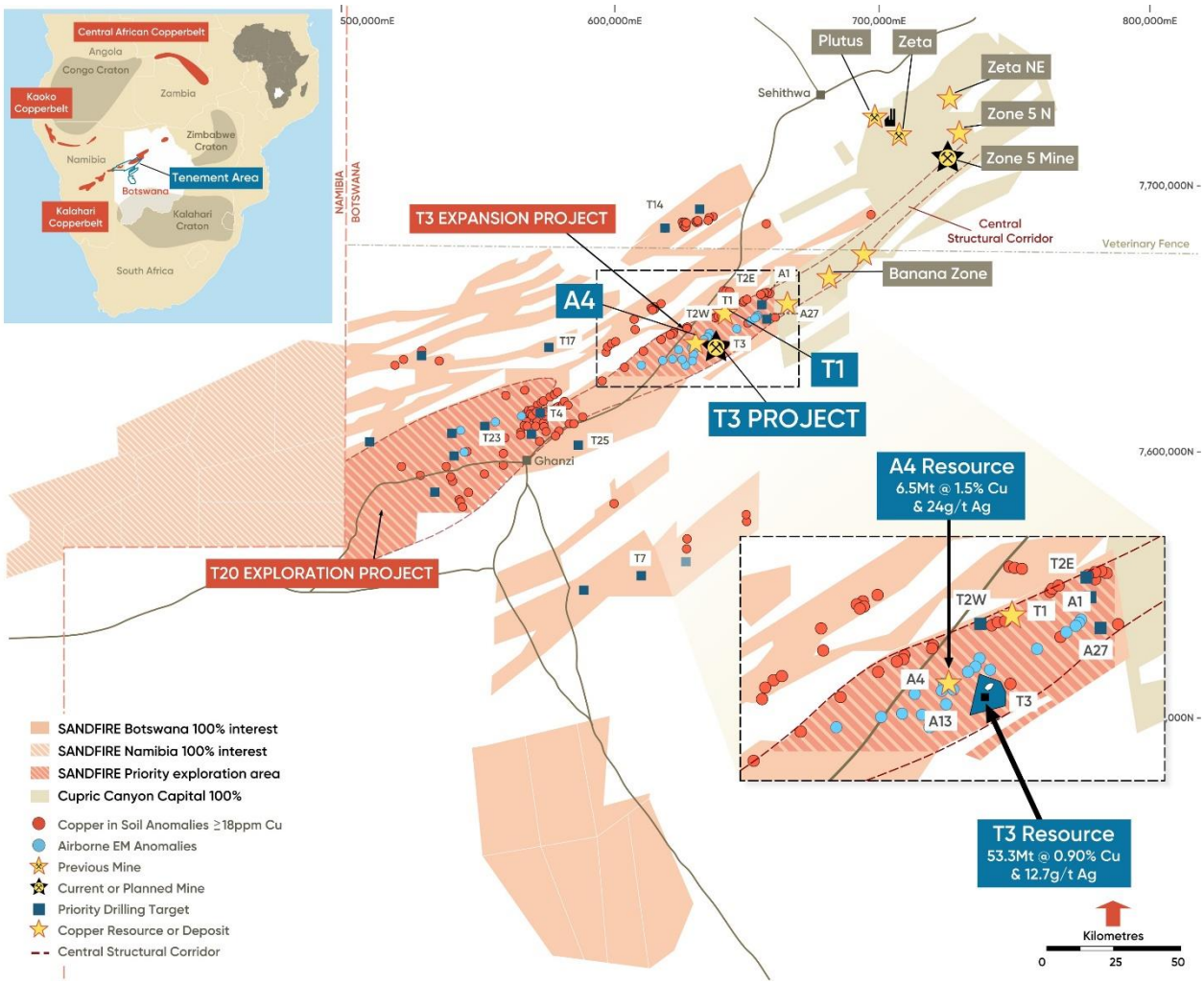

Figure 1: Regional Location Plan with Tshukudu licence holdings showing the T3 Project, A4 Project, multiple exploration targets, the neighbouring Cupric Canyon licences and deposits (source: Cupric Canyon Capital's website www.khoemacau.com) and the Company's 26,645km² ground-position in Botswana and Namibia.

A4 Deposit Geology

The A4 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 meta-sedimentary group comprising (in successively higher stratigraphic order) the Kuke, Ngwako Pan, D'Kar and Mamuno Formations.

There is no outcrop of the Ghanzi Group within the A4 project area and the host meta-sediments are locally covered with a shallow layer of surficial calcrete, sand and soil.

A4 occupies a similar structural and stratigraphic position to that of the T3 deposit 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 D'Kar Formation shale, sandstone, siltstone and carbonates. All mineralisation modelled and incorporated in the Mineral Resource estimate occurs within the D'Kar Formation.

Second order (parasitic) upright to overturned folds are developed within the axial region of the periclinal anticline (Figure 2). The second order folds are cross-cut and displaced by moderately north-west dipping brittle-ductile, thrust-sense shear zones. These shear zones are characterised by zones of heterogeneous foliation of variable width and intensity. High strain zones have been recognised along which different sedimentary units have been juxtaposed by brittle displacement.

Flat-lying to shallow-dipping zones of extensional fracture and veining are developed in the footwall of the main shear zone. These extensional zones are interpreted to have formed as shear related extensional structures during thrust movement.

The extensional structures are preferentially developed within a sandstone dominated package but also penetrate into the overlying carbonate and siltstone dominated units.

Copper-Silver mineralisation at A4 is developed along both the shear zones and the extensional zones. Within the shear zones copper sulphides (bornite, chalcocite and chalcopyrite) are associated with quartz-carbonate veins developed sub-parallel to the shear foliation. Within the extensional zones, copper sulphides are associated with either quartz-carbonate veins or as sulphide fill to in-situ fragmentation zones (breccias) within the host sediments.

Mineralisation extends over a strike length of approximately 900m and 270m down-dip and remains open at depth and along strike. Wireframes were developed using the high strain zones and extensional structures to guide interpretation of hosted mineralisation (Figure 2). A nominal 0.3% Cu cut-off grade was used to determine the external boundary of the mineralised zones.

The mineralisation does not reach the base of the cover (soil/sand and calcrete) as it pinches-out at depths of 15 – 45m below surface (Figure 3). Immediately above the mineralised zone, soil/sand and calcrete extends to a depth ranging from 3 – 8m below surface. Saprolite (>25% oxidation) extends from 25 – 60m below surface and saprock (1 – 25% oxidation) from 55 – 85m below surface. Where oxidised, primary copper sulphides are altered to malachite, chrysocolla or covellite.

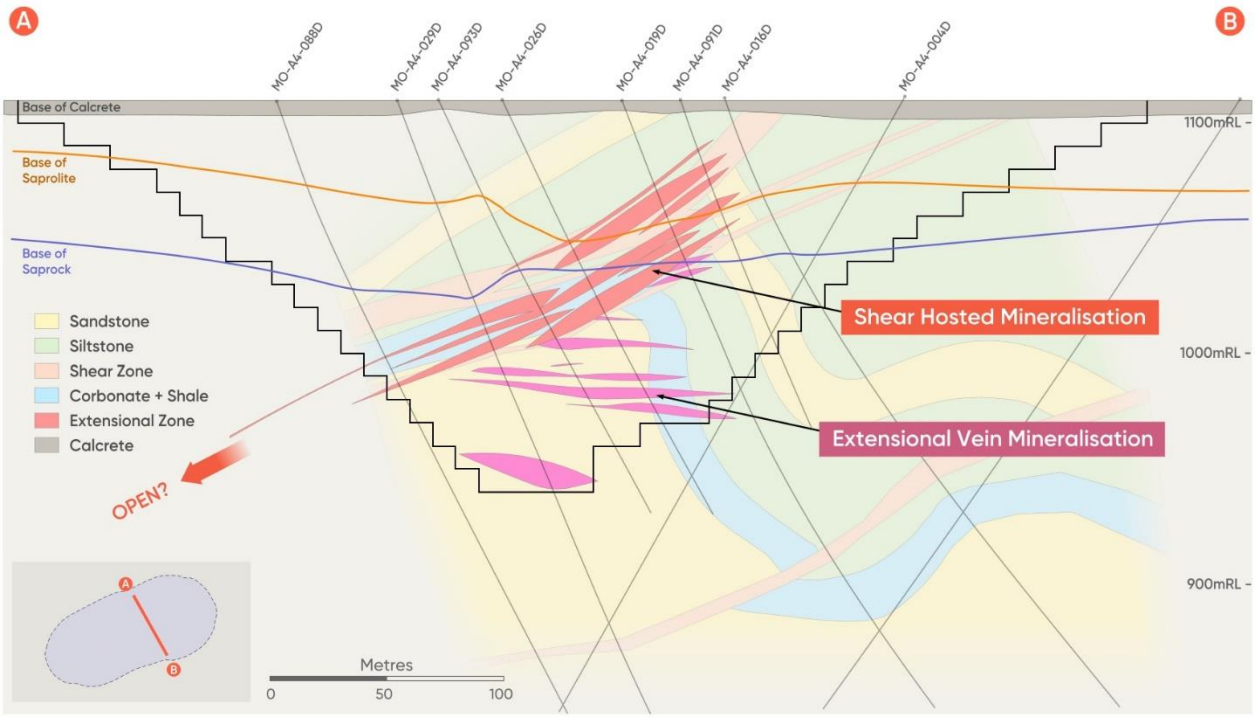

Figure 2: Schematic Cross-Section – showing interpreted geology and mineralisation styles across the A4 Deposit. US$4.50/lb Cu price optimised pit shell used to constrain the Mineral Resource shown in black outline.

A4 Mineral Resource Methodology

The grade estimation technique applied for estimation within Cu mineralisation domains is ordinary kriging. Variables estimated include Cu, Ag, Bi, Mo, S, acid soluble Cu and Density. Stationarity was assessed for the copper mineralisation domains with analysis suggesting that a stationarity assumption is reasonable for the style of deposit and linear estimation of grades.

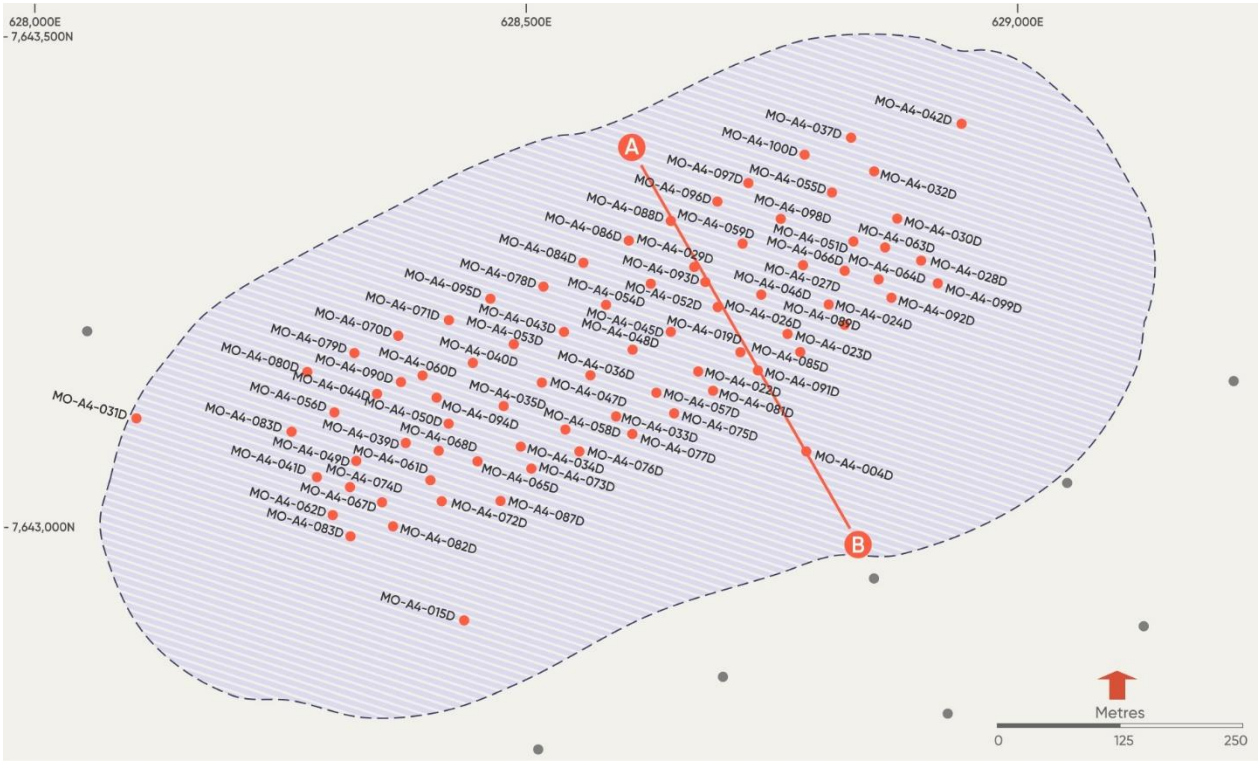

Figure 3: A4 Plan view – Collar location of drill holes used to inform the Mineral Resource. US$4.50/lb Cu price optimised pit shell shown in dashed black outline. The position of cross-section A-B (Figure 2) is indicated.

A4 Maiden Mineral Resource

The maiden Mineral Resource for the A4 Copper-Silver deposit was based on the results of the initial 99 diamond drill holes, of which 79 intersected the deposit and informed the Mineral Resource (Figure 3). This drilling was completed on a nominal 50mE x 50mN spacing, providing sufficient confidence to allow the Company to commence a scoping study.

The maiden Inferred Mineral Resource for A4, at a 0.5% Cu cut-off, constrained within a US$4.50/lb Cu price optimised pit shell, is 6.5Mt grading 1.5% Cu and 24g/t Ag for 100,000t of contained copper and 4.9Moz of contained silver. The Resource is reported on a block cut-off basis.

The maiden A4 Mineral Resource is summarised in Table 1 below.

Table 1 - Maiden A4 Mineral Resource

Cu% Cut-off	Mineral Resource Category	Weathering	Tonnes (Mt)	Grade Cu (%)	Contained Cu (kt)	Contained Ag (g/t)	Contained Ag (Moz)
0.50%	Inferred	Saprolite	0.4	1.2	5	9	0.1
		Saprock	0.9	1.4	12	14	0.4
		Fresh	5.2	1.6	83	26	4.4
		Total	**6.5**	**1.5**	**100**	**24**	**4.9**

Notes:

Calculations have been rounded to the nearest: 100kt; 0.1% Cu grade; 1kt Cu metal; 1g/t Ag grade; and 100koz Ag metal. Differences may occur due to rounding.

A4 Drilling Update

Following completion of the Phase 1 resource drilling program, which comprised 99 diamond drill holes, Sandfire's in-country subsidiary, Tshukudu Exploration, continued with a Phase 2 program of in-fill and extensional drilling. Phase 2 is intended to upgrade the maiden Inferred Mineral Resource Estimate to a higher confidence Indicated Mineral Resource category and to test for extensions to the Resource.

The Phase 2 drilling program is ongoing with up to six diamond core drill rigs having completed approximately 47 additional holes on a nominal 25m by 25m drill pattern within the Resource area and testing for potential extensions along strike and down dip from the current Mineral Resource.

A4 Project Development Studies

The A4 Project is an emerging discovery which has the potential to host additional zones of mineralisation and could prove to be an important source of satellite ore for the Motheo Production Hub. The potential for high grade mineralisation is supported by recent drilling which has returned outstanding broad intercepts (refer ASX announcement today "Outstanding Wide High-Grade Copper-Silver Intersections in Latest Drilling at A4").

Sandfire has commenced high-level scoping studies for the A4 Project. Ongoing in-fill drilling is expected to facilitate the conversion of Inferred Mineral Resources to Indicated status, which would enable the project to be rapidly progressed from Scoping Studies through to a Feasibility Study.

Work programs currently underway include:

- In-fill and extensional drilling to a nominal 25m x 25m spaced drilling pattern;
- Metallurgical test work to define ore characteristics including assessment of the suitability of processing when blended with ore from the T3 deposit;
- Drilling for geotechnical and geo-hydrological purposes;
- Environmental studies
- Mining studies;
- Regulatory approvals; and
- Infrastructure studies.

Management Comment

Sandfire Managing Director and CEO, Karl Simich, said the discovery and rapid delineation of a significant satellite resource at A4, 8km from the proposed processing infrastructure at the T3-Motheo mine, provided an early insight into the enormous growth potential within this under-explored copper province.

"One of the key takeaways for investors is that A4 is the first significant target outside of the T3 deposit to be systematically tested within our dominant 26,645km^2 holding in the region," he said. "In the 12 months since acquiring the Botswana Copper Project, we have been able to delineate a significant shallow Mineral Resource at A4 with 100,000 tonnes of contained copper at an average grade of 1.5% Cu.

"Given its strategic location 8km from T3 and its strong grade profile, we are confident that we will be able to rapidly expand and upgrade this Mineral Resource for inclusion as part of our Motheo Production Hub concept which is targeting an expansion case to 5.2Mtpa from the 3.2Mtpa base case outlined in the T3 DFS announced separately today.

"To that end, we currently have six diamond rigs working at A4 to in-fill the Resource and upgrade the classification from Inferred to Indicated, available for conversion to Ore Reserves. A host of other studies are also underway including metallurgical test work, geotechnical drilling, mining studies, environmental studies regulatory approvals and permitting and infrastructure studies.

"Drilling and development studies will continue in parallel at full pace, with a view to incorporating the A4 development within our 5.2Mtpa Motheo Production Hub concept as a source of satellite high-grade ore feed complementing the baseload production from the large-scale T3 deposit.

"We are looking forward to continuing strong news-flow from this exploration program in parallel with our development progress at T3 as we strive to unlock the potential of this vast copper province – which is one of the world's global copper frontiers."

ENDS

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This announcement is authorised for release by Sandfire's Managing Director and CEO.

Competent Person's Statement – Mineral Resources

The information in this report that relates to Mineral Resources is based on information compiled by Mr Callum Browne who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Browne is a permanent employee of Sandfire Resources and has sufficient experience that is 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Browne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

Certain statements made during or in connection with this announcement contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and 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. There is continuing uncertainty as to the full impact of COVID-19 on Sandfire's business, the Australian economy, share markets and the economies in which Sandfire conducts business. Given the high degree of uncertainty surrounding the extent and duration of the COVID-19 pandemic, it is not currently possible to assess the full impact of COVID-19 on Sandfire's business or the price of Sandfire securities.

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.

Previously released ASX material references

References to results relating to the Company's Tshukudu Exploration Project, which includes the A4 deposit, that have been previously released by Sandfire and by MOD Resources Ltd (MOD) and announced to the ASX include:

- Sandfire ASX Announcement, titled 'Tshukudu Exploration Update', released on 24 January 2020
- Sandfire ASX Announcement, titled 'Tshukudu Exploration Update', released on 17 April 2020
- Sandfire ASX Announcement titled 'Tshukudu Exploration Update', released on 25 May 2020
- MOD ASX Announcement titled 'Significant Copper in Second Hole into A4 Dome', released on 4 July 2018
- MOD ASX Announcement titled 'First Hole Confirms Copper at A4 Dome', released on 12 June 2018
- MOD ASX Announcement titled 'Assays Confirm Outstanding Intersection at A4 Dome', released on 6 August 2018
- MOD ASX Announcement titled 'A4 Dome Discovery Continues to Deliver Exciting Results', released on 4 September 2018
- MOD ASX Announcement titled 'A4 Assays Confirm Expansion Potential for T3 Copper Project', released on 20 December 2018

APPENDIX 1: JORC 2012 Code

JORC 2012 MINERAL RESOURCE PARAMETERS

A4 Copper Silver Project

Section 1: Sampling Techniques and Data

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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Sampling boundaries are geologically defined and commonly one metre in length unless a significant geological feature warrants a change from this standard unit.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Core is sawn along a cut line as defined by the logging geologist, which is marked to intersect the core orthogonal to the dominant foliation orientation. Core is then routinely sampled along the same side of the line as cut to ensure sampling consistency.
	Aspects of the determination of mineralisation that are Material to the Public Report.	The determination of mineralisation is based on observed amount of sulphides and lithological differences.
	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.	Diamond drill core sample is 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. Non-sulphide Cu is analysed, utilising a sulphuric acid leach with 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.).*	Surface diamond drillholes used HQ3 (63.5mm) and NQ (47.6mm) core size (standard tubes). Core orientation is completed when possible, using the Boart Longyear TrueCore Tool.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Diamond drillhole recoveries were quantitatively recorded using length measurements of core recoveries per-run. Core recoveries routinely exceeded 95%.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Core was cut along a cut-line marked by the supervising geologist, which was marked orthogonal to the dominant foliation. Core was consistently sampled along the same side of this cut line for all holes. Core is metre marked and orientated to check against the driller's blocks, ensuring that all core loss is considered.
	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.	No sample recovery issues have impacted on potential sample bias.

Criteria	JORC Code Explanation	Commentary
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.*	Geological logging is completed for all holes and is representative across the ore body. The major rock unit (colour, grain size, texture), weathering, alteration (style and intensity), mineralisation (type), interpreted origin of mineralisation, estimation of % sulphides/oxides, and veining (type, style, origin, intensity) are logged following Sandfire standard procedures. Data is originally recorded on paper (hard copies) and then transferred to Excel logging sheets. Once validated the data is imported to the central database.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is both qualitative and quantitative depending on the field being logged. All cores are photographed.
	The total length and percentage of the relevant intersections logged.	All drill holes are fully logged.
	If core, whether cut or sawn and whether quarter, half or all core taken.	Longitudinally cut half core samples are produced using a core saw.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	No non-core used in Mineral Resource Estimate
Sub-sampling techniques and sample preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	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.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	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 batch the coarse crushing equipment is cleaned using blank quartz material. LM2 ring mills are cleaned with acetone and compressed air between each sample.
	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.	Duplicate analysis has been completed and identified no issues with sampling representatively with assays showing a high level of correlation.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	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.*	Samples analysed by ALS Laboratories were also assayed for total and non-sulphide Cu, Ag, As, Bi, Mo, Pb, S and Zn. Prepared and analysed using ALS method ME-ICP61 for total Cu other elements, with an over-range trigger to ME-OG62 for high-grade Cu samples. Pulp charges of 0.25g are prepared using a four-acid digest and an ICP-AAS finish. Non-sulphide Cu is analysed via method AA05, utilising a sulphuric acid leach with an ICP-AAS finish. The non-sulphide method is considered partial and is conducted for the purposes of determining the acid-soluble Cu component of the sample.
	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.	No geophysical tools were used to analyse the drilling products

Criteria	JORC Code Explanation	Commentary
	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.	Precision and accuracy were monitored throughout their sample chain of custody through the use of coarse and pulp duplicates, and the insertion of certified reference materials (CRMs) and blanks into the sample stream. CRMs are sourced from Ore Research Laboratories in Australia, and with the exception of the blank, span a range of Cu grades appropriate to the A4 project mineralisation. Control samples are inserted alternately at a rate of 1 in 10. Analysis of duplicate samples shows acceptable repeatability and no significant bias
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have been verified by alternative company personnel.
	The use of twinned holes.	There are no twinned holes drilled
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Logging data (including geotechnical parameters) are first recorded on paper, then scanned to preserve a digital image. Original documents are filed in hardcopy. Data logged to paper is also entered into a Microsoft Excel spreadsheet template which has been specifically designed for the capture of A4 deposit logging data. The data is then imported into 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 it is corrected.
	Discuss any adjustment to assay data.	The primary data is always kept and is never replaced by adjusted or interpreted 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.*	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 Afrogeodata Surveys Pty Ltd, a commercial contract land surveyor using Leica VIVA GNSS GPS system instrumentation, which provides sub-decimetre accuracy. Downhole surveying is completed on all diamond drillholes via north-seeking gyroscopic survey.
	Specification of the grid system used.	Collars are marked out and picked up in the Botswanan National Grid in UTM format. Subsequent Mineral Resource modelling has been conducted in a local Mine grid, which is rotated 27° to the east to align the strike of the A4 deposit along local east-west.
	Quality and adequacy of topographic control	Topographic control is provided by the GPS survey system used for collar pickup. The topography of the A4 deposit area is very flat, and significant variations in topography within the project are not apparent. The topographic control is considered fit for purpose.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	No Exploration Results are included in this release.
	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.	Drillhole spacing's are approximately 50mE x 50mN. The spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for the classifications applied.
	Whether sample compositing has been applied.	No sample compositing is applied during the sampling process.

Criteria	JORC Code Explanation	Commentary
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.*	Drillholes have been oriented to intersect A4 mineralisation approximately orthogonal to the known dip of the deposit. No bias is considered to have been introduced to the sample dataset as a result of drilling orientation.
	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.	No significant sampling bias occurs in the data due to the orientation of drilling with regards to mineralisation.
Sample security	*The measures taken to ensure sample security.*	Samples are collected at the end of each shift by Tshukudu staff and driven directly from the rig to the storage and logging yard in Ghanzi, which is a secure compound. Samples are prepared to pulp stage on-site at the core logging and storage facility, within a purpose built commercially operated facility (ALS Laboratories). Sample security is not considered to be a significant risk to the A4 project.
Audits or 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

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.*	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 licence, on which A4 occurs, was renewed on 1st October 2020 and is valid till 30th September 2022. 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 A4 resource area.
	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.	There are no known impediments to obtaining a license to operate in the area.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Limited previous exploration in the area of the drilling reported in this announcement, apart from widely spaced soil sampling conducted by Discovery Mines, and 20 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 A4 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 meta-sedimentary group comprising (in successively higher stratigraphic order) the Kuke, Ngwako Pan, D'Kar and Mamuno Formations. A4 occupies a similar structural and stratigraphic position to that of the T3 deposit 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 D'Kar Formation shale, sandstone, siltstone and carbonates. All mineralisation modelled and incorporated in the Mineral Resource estimate occurs within the D'Kar Formation.

Criteria	JORC Code Explanation	Commentary
		Second order (parasitic) upright to overturned folds are developed within the axial region of the periclinal anticline (Figure 2). The second order folds are cross-cut and displaced by moderately north-west dipping brittle-ductile, thrust-sense shear zones. These shear zones are characterised by zones of heterogeneous foliation of variable width and intensity. High strain zones have been recognised along which different sedimentary units have been juxtaposed by brittle displacement. Flat lying to shallow dipping zones of extensional fracture and veining are developed in the footwall of the main shear zone. These extensional zones are interpreted to have formed as shear related extensional structures during thrust movement. The extensional structures are preferentially developed within a sandstone dominated package but also penetrate into the overlying carbonate and siltstone dominated units. Cu-Ag mineralisation that forms the focus of A4 is developed along both the shear zones and the extensional zones. Within the shear zones copper sulphides (bornite, chalcocite, chalcopyrite) are associated with quartz-carbonate veins developed sub-parallel to the shear foliation. Within the extensional zones copper sulphides are associated with either quartz-carbonate veins or as sulphide fill to in-situ fragmentation zones (breccias) within the host sediments.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *Easting and northing of the drillhole collar;* • *Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar;* • *Dip and azimuth of the hole;* • *Downhole length and interception depth; and* • *Hole length.*	No exploration results are reported in this release.
	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.	No exploration results are reported in this release.
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.
	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').*	No exploration results are reported in this release.

Criteria	JORC Code Explanation	Commentary
	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 drillhole collar locations and appropriate sectional views.	No exploration results are reported in this release.
Relationship between mineralisation widths and intercept lengths	*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.
	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.
	The nature and scale of planned further work (tests for lateral, 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.
Diagrams	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *Easting and northing of the drillhole collar* • *Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *Dip and azimuth of the hole* • *Downhole length and interception depth* • *Hole length.*	No exploration results are reported in this release.
Balanced reporting	*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.*	No exploration results are reported in this release.
Other substantive exploration data	*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.
Further work	*These relationships are particularly important in the reporting of Exploration Results.*	No exploration results are reported in this release.

Criteria	JORC Code Explanation	Commentary
	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').*	
	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 drillhole collar locations and appropriate sectional views.	No exploration results are reported in this release.

Section 3: Estimation and Reporting of Mineral Resources

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.*	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 SQL Server databases. The selected SQL databases are backed up each day to allow for a full recovery.
	Data validation procedures used.	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 it is corrected. Database is centrally managed by a Database Manager who is responsible for all aspects of data entry, validation, development, quality control and specialist queries. There is a standard suite of vigorous validation checks for all data.
Site Visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Site visits have been undertaken by Sandfire personnel. No material concerns were identified during those site visits.
	If no site visits have been undertaken indicate why this is the case.	The Competent Person for Mineral Resources has not been able to undertake a site visit due to travel restrictions imposed from COVID-19.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	A preliminary lithostratigraphic and structural model forms the basis for confidence in the geological interpretation and continuity of mineralisation.
	Nature of the data used and of any assumptions made.	All available geological logging data from diamond core are used for the interpretations. Interpreted master displacement planes have been used to constrain and guide wireframes.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geological interpretation of mineralised boundaries are considered robust and alternative interpretations do not have the potential to impact significantly on the Mineral Resources.
	The use of geology in guiding and controlling Mineral Resource estimation.	The interpreted mineralisation boundaries are used as hard boundaries during the Mineral Resource estimation.

Criteria	JORC Code Explanation	Commentary
	The factors affecting continuity both of grade and geology.	The Mineralisation is considered to be a structurally hosted, epigenetic deposit. The continuity of mineralisation is structurally controlled.
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.*	Cu-Ag mineralisation that forms the focus of the A4 study extends from approximately 20m – 230m below surface. Mineralisation extends for 900m along strike and the cumulative total true width of mineralisation ranges from 10m – 80m.
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.*	Grade estimation technique applied for estimation within Cu mineralisation domains is ordinary kriging (OK). Variables estimated include Cu, Ag, Bi, Mo, S, acid soluble Cu and Density. Analysis suggests that a stationarity assumption is reasonable for the style of deposit and linear estimation of grades. Grade estimation technique applied for estimation within high level PbZn mineralisation domains is Inverse Distance (ID2). Variables estimated include As, Pb and Zn. 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. Copper-Silver mineralisation at A4 is developed along both the thrust sense shear zones and the extensional zones. Within the thrust sense shear zones copper sulphides (bornite, chalcocite, chalcopyrite) are intimately associated with quartz-carbonate veins developed sub-parallel to the shear foliation. Within the extensional zones copper sulphides are associated with either quartz-carbonate veins or as sulphide fill to in-situ fragmentation zones (breccias) within the host sedimentary lithofacies. A nominal 0.3% Cu cut-off grade was used to determine the external boundary of the mineralised zones. The Pb-Zn mineralisation was modelled separately from the Cu mineralisation on the basis of a (Pb+Zn)/2 nominal 0.1% lower cut-off. The search ellipsoid corresponds to the range of the variogram structures and is constrained by the optimum number of samples and restriction of 4 samples per drill hole to ensure data used to estimate blocks is within the constraints of the variograms. Blocks that were not estimated within the first search (<5%) were estimated in a second pass where search ranges were tripled. Mineral Resource estimation is completed within Datamine™ StudioRM version 1.6.87.0 software. Three dimensional mineralisation wireframes are completed within Seequent™ Leapfrog software and these are then imported into StudioRM™.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Not applicable as this is the A4 maiden MRE.
	The assumptions made regarding recovery of by-products.	Silver has been estimated as a by-product within the A4 deposit. It is assumed that silver will be recovered only where copper is being mined.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	Estimates includes deleterious or penalty elements As, Bi, Pb, Mo and Zn. Estimates also include the ratio of acid soluble Cu to total Cu.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Data spacing was the primary consideration taken into account when selecting an appropriate estimation block size. The A4 project is drilled on an approximate 50mE x 50mN support. The parent cell sizes of 25mE x 25mN x 5mRL were based on approximately half of the average drill spacing.

Criteria	JORC Code Explanation	Commentary
	Any assumptions behind modelling of selective mining units.	No selective mining units are assumed in this estimate.
	Any assumptions about correlation between variables.	Correlation analysis was completed for all variables with Cu, Ag and Bi showing moderate to strong correlation, Cu, S and density showing weak to moderate correlation and Pb and Zn showing moderate to weak correlation. However all variables are treated in the univartiate sense for estimation
	Description of how the geological interpretation was used to control the resource estimates.	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.
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were applied to isolated composites prior to estimation where applicable based on review of histograms and statistical analysis.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The process of validation includes standard model validation using visual and numerical methods: • The block model estimates are checked 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; and • Block Kriging Efficiency (KE) and Slope of Regression (ZZ) are used to quantitatively check the estimation quality. No reconciliation data is available as no mining has taken place.
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 Mineral Resource has been reported above a cut-off of 0.5% Cu within an optimised open pit shell run at a US $4.50/lb 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 A4 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.*	Preliminary mining studies for the A4 deposit have shown that 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 testwork has been conducted on material from the A4 deposit. 4 composites were used for comminution testwork, along with 6 variability samples to test for metallurgical recovery. The variability samples used the same laboratory flowsheet that was used to asses T3. Initial results showed the A4 material to be similar in ore competency to T3, and responded well to the T3 flowsheet, producing metallurgical recoveries in line with T3. A larger, more comprehensive testwork program will be conducted as part of the next project stage.

Criteria	JORC Code Explanation	Commentary
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.*	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. 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.
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.*	Sample mass was determined by weighing the core in air and sample volume was determined by the Archimedes principle. Density is estimated using ordinary kriging within the Cu domains. Density is assigned to waste blocks outside of the Cu domains based on weathering profile averages.
	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 procedure used is suitable for non-porous or very low porosity samples, which can be quickly weighed in water before saturation occurs.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials	No assumptions for bulk density made.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource is classified as a function of drillhole spacing and geological continuity. Areas where drilling has been completed on a nominal 50m x 50m pattern and classified as Inferred. 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 $4.50/lb.
	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).	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.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimation appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	No audits or reviews have been completed

Criteria	JORC Code Explanation	Commentary
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 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 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.	The A4 Mineral Resource Estimate is a global estimate.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The deposit has not been mined.