

12 September 2024 ASX CODE: MTB

# Progress on Approval of an Environmental Impact Assessment (EIA) Nxuu Deposit Infill Drilling Programme

On 21 December 2023, after several months of review and amendments to an initial DRAFT EIA (Scoping Report) the Botswanan Department of Environmental Protection (DEP) confirmed it had approved that Scoping Report and requested a Final EIA be lodged following MTB's receipt of DEP's comments.

The final EIA was lodged with DEP early in February 2024.

On 4 September 2024, the DEP in Maun, Botswana, emailed the Company's Environmental Consultants advising that following its review of the Revised EIA for the Nxuu Project it can now proceed to the next step being a Public Review of the Environmental Impact Assessment (EIA) for the Nxuu Deposit Infill drilling programme.

DEP has requested the Company submit a draft public review notification to them for endorsement prior to placement in a Government Gazette and newspaper, inviting written comments and/or objections. The draft notification should state:

- a) The nature and magnitude of activity.

  The nature and magnitude of activity can only be described as being negligible, consisting of some 2,600m of infill HQ diamond core drilling.
- b) The location of the activity.

  The location of the activity is within Tribal Land used for cattle grazing.
- c) The anticipated environmental impacts of the activity.

  The anticipated environmental impacts of the drilling activity can only be described as being negligible as previous drilling in the area has all been approved by local communities.
- d) The proposed mitigation measures to respond to negative environmental impacts.

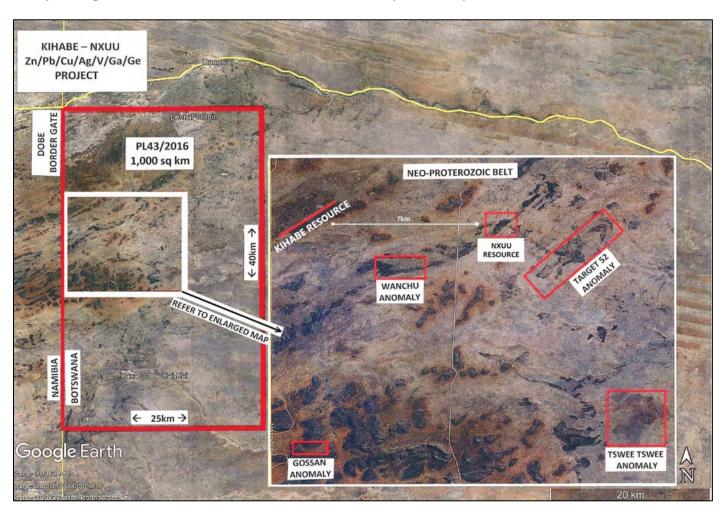
Mitigation measures to respond to negative environmental impacts have not been required when conducting previous drilling. The HQ diamond core is cased for extraction. Chemicals used during cased core extraction do not cause any environmental hazards. All onsite personnel are required to comply with the Company's Environmental Plan.

#### **Progress Summary**

The Company has now reached a stage where:

- A DRAFT of a proposed FINAL EIA was approved by DEP on 21 December 2023.
- After amendments requested by the DEP and applied to the DRAFT EIA, DEP advised on 4 September 2024 that the Final EIA, subject to their endorsement, is now ready to proceed to the Public Review stage.
- This allows for the publication of a FINAL EIA to be reviewed and responded-to within a two-week timeframe, by anyone involved in the area.
- Subject to there being no further issues raised through the publication of the EIA, the timeframe to the completion of the EIA review period is estimated to be in the region of four to six weeks.
- This will then allow the Company to schedule its 2,600m program of infill HQ diamond core drilling at the Nxuu Deposit, which will enable preparation of a Pre-feasibility Study to be followed by a Definitive Feasibility Study.

#### Prospecting Licence PL43/2016 - 100% Owned and Operated by MTB



#### **Forward Looking Statement**

This report contains forward looking statements in respect of the projects being reported on by the Company. Forward looking statements are based on beliefs, opinions, assessments and estimates based on facts and information available to management and/or professional consultants at the time they are formed or made and are, in the opinion of management and/or consultants, applied as reasonably and responsibly as possible as at the time that they are applied.

Any statements in respect of Ore Reserves, Mineral Resources and zones of mineralisation may also be deemed to be forward looking statements in that they contain estimates that the Company believes have been based on reasonable assumptions with respect to the mineralisation that has been found thus far. Exploration targets are conceptual in nature and are formed from projection of the known resource dimensions along strike. The quantity and grade of an exploration target is insufficient to define a Mineral Resource. Forward looking statements are not statements of historical fact, they are based on reasonable projections and calculations, the ultimate results or outcomes of which may differ materially from those described or incorporated in the forward-looking statements. Such differences or changes in circumstances to those described or incorporated in the forward-looking statements may arise as a consequence of the variety of risks, uncertainties and other factors relative to the exploration and mining industry and the particular properties in which the Company has an interest.

Such risks, uncertainties and other factors could include but would not necessarily be limited to fluctuations in metals and minerals prices, fluctuations in rates of exchange, changes in government policy and political instability in the countries in which the Company operates.

#### **Competent Person's Statement**

The information in this report that relates to drilling results at the Nxuu and Kihabe Deposits fairly represents information and supporting documentation approved for release by Giles Rodney Dale FRMIT who is a Fellow of the Australasian Institute of Mining & Metallurgy. Mr Dale is engaged as an independent Geological Consultant to the Company. Mr Dale has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)'. Mr Dale consents to the inclusion in this report of the drilling results and the supporting information in the form and context as it appears.

### JORC Table 1

### **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling	• Nature and quality of	HQ and PQ diamond Core was marked and collected in
techniques	sampling (eg cut channels,	sample trays, visually logged and cut in half. Samples were
	random chips, or specific	collected as nominal 1m intervals but based on visible
	specialised industry	geology with minimum samples of 0.3m and maximum
	standard measurement	samples of 1.3m. Half of each core was retained on site in
	tools appropriate to the	core trays and the other half was double bagged and sent
	minerals under	to Intertek Genalysis Randburg, South Africa where they
	investigation, such as down	were crushed. A portion of each intersection sample was
	hole gamma sondes, or	then pulverised to p80 75um and sent to Intertek Genalysis
	handheld XRF instruments,	in Perth for assaying via ICPMS/OES for Ag/Pb/Zn/V/Ge/Ga.
	etc). These examples	Individual meters of RC drill chips were bagged from the
	should not be taken as	cyclone. These were then riffle split for storage in smaller
	limiting the broad meaning	bags, with selected drill chips being stored in drill chip
	of sampling.	trays. A trowel was used to select drill chip samples from
	• Include reference to	sample bags to be packaged and sent to Intertek Genalysis,
	measures taken to ensure	Randburg, South Africa where they were crushed. A portion
	sample representivity and	of each intersection's sample was then pulverised to P80
	the appropriate calibration	75um and sent to Intertek Genalysis in Perth for assaying via ICP/OES for Ag/Co/Cu/Pb/Zn.
	of any measurement tools	The remainder of the crushed samples were then sent from
	or systems used.	Intertek Genalysis Randburg to Intertek Genalysis in Perth
	• Aspects of the	where they were then collected by the Company for
	determination of	storage. Samples from various intersections from drill
	mineralisation that are	holes were selected by the Company for submission for
	Material to the Public	metallurgical test work.
	Report. In cases where	Based on the distribution of mineralisation the core sample
	'industry standard' work	size is considered adequate for representative sampling.
	has been done this would	, , , , , , , , , , , , , , , , , , ,
	be relatively simple (eg	
	'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	
	explanation may be required, such as where	
	there is coarse gold that has	
	inherent sampling	
	problems. Unusual	
	commodities or	
	mineralisation types (eg	
	submarine nodules) may	
	warrant disclosure of	
	detailed information.	
Drilling	Drill type (eg core, reverse	HQ and PQ diameter triple tube was generally used for
techniques	circulation, open-hole	diamond core drilling at Nxuu and Kihabe.
	hammer, rotary air blast,	RC chips were collected over 1m intervals, and two-stage
	auger, Bangka, sonic, etc)	riffle split to produce a sample for dispatch to the assay
	and details (eg core	laboratory. The remainder of the sample was bagged and
	diameter, triple or standard	kept on site for access pending assay results; with washed
	tube, depth of diamond	chip samples for each metre also collected in chip trays for
	tails, face-sampling bit or	logging and later reference.
	other type, whether core is	
	oriented and if so, by what	
	method, etc).	

Criteria	IC	DRC Code explanation	Co	mmentary
Drill	•	Method of recording and	•	Sample recoveries have in general been good and no
sample	•	assessing core and chip		unusual measures were taken to maximise sample recovery
recovery		sample recoveries and		other than the use of triple tube for diamond core drilling. In
		results assessed.		the event of unacceptable core loss MTB drills twin holes.
		Measures taken to		MTB believes there is no evidence of sample bias due to
	•			preferential loss/gain of fine/coarse material for holes being
		maximise sample recovery and ensure representative		reported on.
		nature of the samples.		reported on.
	_	·		
	•	•		
		exists between sample		
		recovery and grade and		
		whether sample bias may		
		have occurred due to		
		preferential loss/gain of		
1		fine/coarse material.		
Logging	•	Whether core and chip	•	Holes were logged in the field by qualified geologists on
		samples have been		MTB's log sheet template and of sufficient detail to support
		geologically and		Mineral Resource estimation: qualitative observations
		geotechnically logged to a		covered lithology, grain size, colour, alteration,
		level of detail to support		mineralisation, structure. Quantitative logging included
		appropriate Mineral		vein percent. SG measurements were obtained at
		Resource estimation,		approximately 5m intervals on DD holes.
		mining studies and	•	All drill hologographed wet and dry.
		metallurgical studies.	•	All drill holes are logged in full.
	•	Whether logging is		
		qualitative or quantitative in		
		nature. Core (or costean,		
		channel, etc) photography.		
	•	The total length and		
		percentage of the relevant		
		intersections logged.		
Sub-	•	If core, whether cut or sawn	•	HQ and PQ Core was sawn in half on site. Half of each core
sampling		and whether quarter, half or		was retained on site in core trays and the other half was
techniques		all core taken.		double bagged and labelled noting hole number and
and sample		If non-core, whether riffled,		interval both within the bag and on the bag. Sample bags
preparation	ľ	tube sampled, rotary split,		were then placed in larger bags of ~40 individual samples
		etc and whether sampled		and the larger bag also labelled describing the contents.
		wet or dry.		Field duplicates were inserted at regular intervals.
		For all sample types, the	•	RC chips were collected over 1m intervals, and two-stage
	ľ	nature, quality and		riffle split to produce a sample for dispatch to the assay
		appropriateness of the		laboratory. The remainder of the sample was bagged and
		sample preparation		kept on site for access pending assay results; with washed
		technique.		chip samples for each metre also collected in chip trays for
	•	Quality control procedures	_	logging and later reference.
	•	adopted for all sub-	•	All samples currently being reported on were assayed for
		sampling stages to		Ag/Pb/Zn/V/Ge/Ga/Cu/Co.
		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		
Quality of	-	sampled.	_	Samples prior to 2009 were dispetated to the Ongerals
Quality of assay data	•	The nature, quality and appropriateness of the	•	Samples prior to 2008 were dispatched to the Ongopolo Laboratory situated in Tsumeb, Namibia. Check samples
assay uata and		'''		were also sent to Genalysis in Perth.
anu		assaying and laboratory	<u> </u>	word also selle to Genatysis in Fettil.

Criteria	JORC Code explanation	Commentary
laboratory tests  Verification	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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Samples since 2008, when originally assayed, were sent to Intertek Genalysis Perth, for assaying according to the following standard techniques.</li> <li>Diamond core samples were analysed for: (a) Ore grade digest followed by ICPMD – OES finish for Silver, Lead, Zinc, Copper, Cobalt, Vanadium/Germanium/Gallium; (b) Also 4 acid digest for silver, lead, zinc followed by AAS.</li> <li>RC samples were analysed with Ore grade digest followed by ICP-OES for Ag/Co/Cu/Pb/Zn/Cu/Co.</li> <li>MTB quality control procedures include following standard procedures when sampling, including sampling on geological intervals, and reviews of sampling techniques in the field.</li> <li>The current laboratory procedures applied to the MTB sample preparation include the use of cleaning lab equipment with compressed air between samples, quartz flushes between high grade samples, insertion of crusher duplicate QAQC samples, periodic pulverised sample particle size (QAQC) testing and insertion of laboratory pulp duplicates QAQC samples according to Intertek protocols.</li> <li>Intertek inserts QA/QC samples (duplicates, blanks and standards) into the sample series at a rate of approx. 1 in</li> <li>20. These are tracked and reported on by MTB for each batch. When issues are noted, the laboratory is informed and investigation conducted defining the nature of the discrepancy and whether further check assays are required. The laboratory completes its own QA/QC procedures, and these are also tracked and reported on by MTB. Acceptable overall levels of analytical precision and accuracy are evident from analyses of the routine QAQC data.</li> <li>A selection of the original digital assay files from MTB has</li> </ul>
of sampling and assaying	significant intersections by either independent or alternative company personnel.  The use of twinned holes.  Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to	<ul> <li>been checked and verified against the supplied database.</li> <li>Numerous twin, and close spaced holes have been drilled. Results show close spatial and grade correlation.</li> <li>All drilling logs were validated by the supervising geologist.</li> <li>Adjustments to assay data included converting assays recorded in ppm to percent for Zn, Pb, Cu and V; the conversion of V to V2O5 and the conversion of negative or below detection limit values to half detection limit.</li> </ul>
Location of data points	<ul> <li>assay data.</li> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill hole collars were surveyed using DGPS equipment in WGS84 UTM Zone 34S coordinates.</li> <li>Drill holes were routinely down hole surveyed using Eastman single shot magnetic survey instruments, with the dip and azimuth monitored by the driller and site geologist to ensure the hole remained on track within the stipulated guidelines. Readings were obtained at approximately 25m intervals down hole.</li> <li>Topographic control was derived from collar surveys. The Nxuu area is overlain by Kalahari Sand cover and is predominantly flat.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and</li> </ul>	<ul> <li>Data spacing (drill holes) is variable and appropriate to the geology. Sections are spaced at 30m intervals, with hole spacings predominantly 30m on section.</li> <li>The spacing is considered sufficient to establish geological and grade continuity appropriate for a Mineral Resource estimation.</li> <li>Samples were composited to 1m intervals prior to estimation.</li> </ul>

Criteria	JORC Code explanation	Commentary
Orientation	Ore Reserve estimation procedure(s) and classifications applied.  • Whether sample compositing has been applied.  • Whether the orientation of	Mineralisation at the Nxuu Deposit is sub-horizontal,
of data in relation to geological structure	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.	therefore holes were drilled vertically. Mineralisation at the Kihabe Deposit is sub vertical. Holes were drilled at minus 60°, at 150° or 330° Azimuth.  The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation.  Reported intersections are down-hole intervals and are generally representative of true widths.
Sample security	The measures taken to ensure sample security.	Samples were taken by vehicle on the day of collection to MTB's permanent field camp and stored there until transported by MTB personnel to Maun from where they were transported via regular courier service to laboratories in South Africa.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	MTB's exploration geologists continually reviewed sampling and logging methods on site throughout the drilling programs.

### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral	• Type, reference name/number,	The Kihabe-Nxuu Project is located
tenement and	location and ownership including	in north-western Botswana,
land tenure	agreements or material issues with	adjacent to the border with
status	third parties such as joint ventures,	Namibia. The Project is made up of
	partnerships, overriding royalties,	one granted prospecting licence PL
	native title interests, historical sites,	43/2016, which covers an area of
	wilderness or national park and	1000 sq km. This licence is 100%
	environmental settings.	owned and operated by MTB. The title is current to 31 December 2024
	The security of the tenure held at the	PL 43/2016 is in an area designated
	time of reporting along with any	as Tribal Land. The Tenement is
	known impediments to obtaining a	current and in good standing.
	license to operate in the area.	
Exploration	Acknowledgment and appraisal of	The Geological Survey of Botswana
done by other	exploration by other parties.	undertook a program of soil
parties		geochemical sampling in 1982. As a
		result of this program, Billiton was invited to undertake
		exploration and drilling activities in
		and around the project area. MTB
		first took ownership of the project in
		2003 and has undertaken
		exploration activities on a continual
		basis since then.
Geology	Deposit type, geological setting and	The Kihabe-Nxuu Project lies in the
	style of mineralisation.	north-western part of Botswana at
		the southern margin of the Congo
		craton. The Gossan Anomaly is
		centred on an exposed gossan
		within the project. To the north of the project are granitoids,
		ironstones, quartzites and mica
		schists of the Tsodilo Hills Group
		covered by extensive recent
		Cainozoic sediments of the Kalahari
		Group. Below the extensive Kalahari
		sediments are siliciclastic
		sediments and igneous rocks of the
		Karoo Supergroup in fault bounded
		blocks.
		The Nxuu deposit mineralisation occurs in a flat-lying quartz wacke
		unit situated on the contact of a
		barren dolomite basement unit. The
		deposit is weathered, with base
		metal and associated V/Ge/Ga
		mineralisation occurring as a series
		of sub-horizontal units overlying the
		barren dolomite unit.
		The Kihabe Deposit mineralisation
		occurs in a quartz wacke situated on
		the contact of a steeply dipping
		barren dolostone unit. The deposit
		is variably weathered with base metal and associated V/Ge/Ga
		mineralisation occurring as a series
		of steeply dipping to sub vertical
		or steepty dippling to sub vertical

Criteria	JORC Code explanation	Commentary
		units in the hanging wall of the
5 777		barren dolostone.
Drill hole information	<ul> <li>A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>Exploration results are not being reported.</li> <li>All information has been included in the appendices. No drill hole information has been excluded.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Exploration results are not being reported.</li> <li>Not applicable as a Mineral Resource is being reported.</li> <li>For the Nxuu Deposit ZnEq=Zinc equivalent grade, which is estimated based on Kitco prices as of 21st October 2022 and calculated with the formula:</li> <li>ZnEq = [(Zn% x 3,000) + (Pb% x 2,000) + (Ag g/t x (20.0/31.1035)) + (V2O5% x 16,000)] / (3,000).</li> <li>For the Kihabe Deposit ZnEq = zinc equivalent grade, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula: ZnEq = {(Zn% x 3,410) + (Pb% x 1,955) +Ag g/t x (20.7/31.1035)} + V<sub>2</sub>O<sub>5</sub>% x20,720)}/(3,410)</li> <li>MTB is of the opinion that all elements included in the metal equivalent calculation have reasonable potential to be recovered and sold.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Mineralisation at Nxuu is subhorizontal. Holes are drilled vertically.</li> <li>Reported hole intersections generally represent true width.</li> <li>Mineralisation at Kihabe is steeply dipping to sub vertical. Holes are drilled at approximately -60 deg towards azimuths 150 deg and 330 deg.</li> </ul>

Criteria	JORC Code explanation	Commentary
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.	Figures 1 & 2 being, being drill hole maps for Nxuu and Kihabe have been included to show areas covered in the Mineral Resource Estimates.
Balanced Reporting	<ul> <li>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.</li> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>Figures 1 &amp; 2 being, being drill hole maps for Nxuu and Kihabe have been included to show areas covered in the Mineral Resource Estimates.</li> <li>Exploration results are not being reported.</li> </ul>
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.	<ul> <li>Results were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised contact positions.</li> <li>Geological observations are included in the report.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Follow up drilling will be undertaken to improve confidence.</li> <li>Drill spacing is currently considered adequate for the current level of interrogation of the Project.</li> </ul>

### **Section 3 Estimation and Reporting of Mineral Resources**

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The database has been systematically audited by MTB geologists.</li> <li>The database used for estimation was cross checked with original records where available.</li> <li>Ashmore performed initial data audits in Surpac. Ashmore checked collar coordinates, hole depths, hole dips, assay data overlaps and duplicate records.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Ashmore has not undertaken a site visit to the Relevant Assets by the CP as at the date of this report. Ashmore notes that it

Criteria	JORC Code explanation	Commentary
	If no site visits have been undertaken indicate why this is the case.	plans to conduct a site visit as part of the future works and upgrade of the Mineral Resource to higher categories.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The confidence in the geological interpretation is considered to be good and is based on visual confirmation within drill hole intersections.</li> <li>Geochemistry and geological logging have been used to assist identification of lithology and mineralisation.</li> <li>The Nxuu deposit consists of subhorizontal units. Alternative interpretations are highly unlikely.</li> <li>The Kihabe Deposit consists of steeply dipping to sub vertical units. Alternative interpretations are highly unlikely.</li> <li>Infill and extensional drilling has supported and refined the model and the current interpretation is considered robust.</li> <li>Observations from the host rocks; as well as infill drilling, confirm the geometry of the mineralisation.</li> <li>Infill drilling has confirmed geological and grade continuity.</li> </ul>
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.	<ul> <li>The Nxuu Mineral Resource area extends over an northeast strike length of 730m, has a maximum width in plan view of 265m and includes the 80m vertical interval from 1,155mRL to 1,075mRL.</li> <li>The Kihabe mineral resource area extends over an east-southeast strike length of 2,440m. It has a maximum width in plan view of 80m and includes the 220m vertical interval from 1,190m RL to 970mRL. Overall the mineral resource extends from 500,500mE to 502,600mE</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation</li> </ul>	<ul> <li>Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Nxuu and Kihabe Mineral Resources due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 30m along strike and down-dip for Nxuu and 100m along strike and down dip for Kihabe. This was equal to the drill hole spacing in these regions of the Project. Maximum extrapolation was generally half to one drill hole spacing.</li> <li>Zn (%), Pb (%), Ag (ppm), Cu (%), V<sub>2</sub>O<sub>5</sub> (%), Ga (ppm) and Ge (ppm) were all interpolated.</li> <li>Reconciliation could not be conducted as no mining has occurred.</li> <li>It is assumed that Zn, Pb and Ag can be recovered in a Zn concentrate and V<sub>2</sub>O<sub>5</sub> can be recovered in a V<sub>2</sub>O<sub>5</sub> concentrate. In addition, Ga and Ge may be recovered as by-products.</li> <li>It is assumed that there are no deleterious elements when considering</li> </ul>

Criteria	JORC Code explanation	Commentary
Citteria	between variables.	the proposed processing methodology
	<ul> <li>Description of how the geological</li> </ul>	for the Nxuu and Kihabe mineralisation.
	interpretation was used to control the	At Nxuu he parent block dimensions
	resource estimates.	used were 15m EW by 15m NS by 5m
	Discussion of basis for using or not using	vertical with sub-cells of 3.75 by 3.75m
	grade cutting or capping.	by 1.25m. The model was rotated to align
	• The process of validation, the checking	with the strike of the deposit of 045°. At
	process used, the comparison of model	Kihabe the parent block dimensions used
	data to drill hole data, and use of	12.5m EW by 5m NS, by 5m vertical with sub cells of 3.125 x 1.25m x 1.25m was
	reconciliation data if available.	selected on the results obtained from
		Kriging Neighbourhood Analysis that
		suggested this was the optimal block size
		for the dataset.
		An orientated 'ellipsoid' search was used
		to select data and adjusted to account
		for the variations in lode orientations,
		however all other parameters were taken
		from the variography. Up to three passes were used for each domain. The first pass
		had a range of 50m for Nxuu and 80m for
		Kihabe, with a minimum of 8 samples for
		Nxuu and 10 samples for Kihabe. For the
		second pass, the range was extended to
		100m for Nxuu and 150m for Kihabe with
		a minimum of 4 samples for Nxuu and 6
		samples for Kihabe. For the final pass,
		the range was extended to 150m for Nxuu and 250m for Kihabe with a minimum of 2
		samples. A maximum of 20 samples was
		used for all three passes for Nxuu with a
		maximum of 24 samples being used for
		all three passes at Kihabe.
		No assumptions were made on selective
		mining units.
		Zn and Pb, as well as Pb and Ag had
		moderate positive correlations. Zn and
		Ag had a moderate positive correlation.  The mineralisation was constrained by
		Mineral Resource outlines created in
		Surpac software, based on logged
		geology and mineralisation envelopes
		prepared using a nominal 0.5%
		combined Zn and Pb cut-off grade with a
		minimum down-hole length of 2m for
		Nxuu and 3m for Kihabe. The wireframes
		were applied as hard boundaries in the estimate.
		<ul> <li>After review of the project statistics, it</li> </ul>
		was determined that high grade cuts
		were required for Ag and $V_2O_5$ within
		some domains of Nxuu together with
		copper domains for Kihabe.
		Validation of the model included detailed
		comparison of composite grades and
		block grades by strike panel and
		elevation. Validation plots showed good correlation between the composite
		grades and the block model grades.
Moisture	Whether the tonnages are estimated on a	Tonnages and grades were estimated on
	dry basis or with natural moisture, and the	a dry in situ basis.
	method of determination of the moisture	
		1
	content.	
Cut-off	<ul> <li>content.</li> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	ZnEq cut-off grades of 0.5%, 1.0% and 1.5% for Nxuu and Kihabe were utilised

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions  Metallurgical 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.  The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of	for reporting purposes, assuming an open pit mining method. The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above Zn equivalent ("ZnEq") cut-off grades of 0.5%, 1.0% and 1.5%. For Nxuu Zinc equivalent cut-off grades are estimated based on LME Zn/Pb prices, Kitco Silver Price for Ag, Live Vanadium Price for V2O5, Kitco Strategic Metals Prices for Ge/Ga, as at 21 October 2022. The ZnEq formula is shown below:  • ZnEq = 100 x [(Zn% x 3,000) + (Pb% x 2,000) + (Ag g/t x (20.0/31.1035)) + (V2O5% x 16,000)]/(3,000).  • For the Kihabe Deposit ZnEq = zinc equivalent grade, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula: ZnEq = {(Zn% x 3,410) + (Pb% x 1,955) +Ag g/t x (20.7/31.1035)} + V <sub>2</sub> O <sub>5</sub> % x2O,720)}/(3,410)  • Ashmore has assumed that the Nxuu deposit could potentially be mined using open pit techniques. No assumptions have been made for mining dilution or mining widths. It is assumed that mining dilution and ore loss will be incorporated into any Ore Reserve estimated from a future Mineral Resource with higher levels of confidence.
assumptions	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.	work involved the recovery of the zinc / lead by flotation. Initial results gave low zinc recoveries (67.5%), with low sulphur in the tails.  • Mineralogical evaluation of the tailings determined that the zinc was in an oxide form of smithsonite at Nxuu and baileychlore at the Kihabe Oxide zone and the lead as a carbonate (cerussite) at Nxuu and in Galena at Kihabe. Further flotation tests were conducted, and the tailings subjected to leaching with sulphuric acid at 40 deg C for a zinc extraction rate of 89.5%.  • Recovery of zinc concentrate by floatation and leaching of the zinc oxides (baileychlore) in the tailings resulted in a zinc extraction of 89.5% giving an overall access availability to 94% of zinc within the ore. Additional testwork is recommended.
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	No assumptions have been made regarding environmental factors. MTB will work to mitigate environmental impacts as a result of any future mining

Criteria	JORC Code explanation	Commentary
	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.	or mineral processing.
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.	Atotal of 513 bulk density measurements were taken on core samples collected from diamond holes drilled at the Nxuu deposit using the water immersion technique. A total of 4258 Bulk density measurements were taken on core samples from the Kihabe Deposit. Bulk densities for the transitional mineralisation at both Nxuu and Kihabe were assigned in the block model based on a density and Zn regression equation. Average densities for weathered mineralisation were applied (2.40t/m³ for oxide) at Nxuu and 2.46t/m³ for oxide and 2.58t/m³ for transitional at Kihabe. Average waste densities were assigned based on lithology and weathering.  It is assumed that the bulk density will have some variation within the mineralised material types due to the host rock lithology and sulphide minerals present. Therefore, a regression equation for Zn and density was used to calculate density in the Nxuu transitional material.
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Mineral Resource estimates are reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resources were classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resources were defined within areas of close spaced drilling of less than 30m by 30m for the Nxuu Deposit and 50m x 50m for Kihabe and where the continuity and predictability of the mineralised units was reasonable. The Inferred Mineral Resources were assigned to areas where drill hole spacing was greater than 30m by 30m for Nxuu and greater than 50m x 30m for Kihabe and less than 60m by 60m for Nxuu and 200m x 40m for Kihabe or where small, isolated pods of mineralisation occur outside the main mineralised zones.</li> <li>The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ</li> </ul>

Criteria	JORC Code explanation	Commentary
		mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.  • The Mineral Resource estimates appropriately reflect the view of the Competent Person.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	The geometry and continuity have been adequately interpreted to reflect the applied level of Indicated and Inferred Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses.  The Mineral Resource statement relates to global estimates of tonnes and grade.  No historical mining has occurred; therefore, reconciliation could not be conducted.

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