ASX ANNOUNCEMENT & MEDIA RELEASE

22 APRIL 2020

MAIDEN MINERAL RESOURCE ESTIMATE CONFIRMS MASSIVE HIGH GRADE DISCOVERY AT KOKO MASSAVA, CORRIDOR CENTRAL PROJECT IN MOZAMBIQUE

KEY HIGHLIGHTS

Maiden Mineral Resource Estimate (MRE) for Koko Massava prospect completed and hereby announced. A total JORC Mineral Resource of 1,423 Million Tonnes @ 5.2% total heavy mineral (THM) using a cut-off grade of 4% THM (refer Table 1, page 3), comprising:

- **an Indicated Mineral Resource of 289 Mt @ 4.9% THM**
- **an Inferred Mineral Resource of 1,133 Mt @ 5.3% THM**

A significant Exploration Target at Koko Massava was also identified (refer Table 2, page 4).

The entire MRE lies outside of local townships and villages (refer Figure 1). It is inclusive of 32 composite mineralogy samples processed by CSIRO.

Significant tonnages at grades well above cut-off (refer Figure 4 - Grade Tonnage Curve):

- **593Mt @ 6.2% THM (5.0% cut-off)**
- **252Mt @ 7.3% THM (6.0% cut-off)**
- **113Mt @ 8.3% THM (7.0% cut-off)**

A valuable heavy mineral (VHM) assemblage comprising Ilmenite 42%, low Ti Ilmenite/titanomagnetite 7%, Zircon 2%, Rutile 1%, Leucoxene 1% and Monazite 0.2%. Several zones show sub-sets of higher VHM assemblage indicating further potential for optimisation. Significant proportions of titanomagnetite is not included within the valuable heavy mineral assemblage.

Next steps include bulk sample geometallurgical test work to characterise processing performance of the heavy mineral sand (HMS), including process flowsheet development and the preparation, recovery and quality of potential ilmenite and zircon products. Further assaying of titanomagnetite for vanadium

content will also be undertaken.

The Company has commenced engagement with Mocambique STT Sociedade Anónima, the organization promoting the Chongoene Development Corridor, which has reached Bankable Feasibility phase and comprises a 150Mt per annum capacity deep water port approximately 40 km south of Koko Massava, linked by a Cape gauge railway to the existing Maputo-Zimbabwe line. This proposed railway is adjacent to the Corridor Central and Corridor South projects (refer Figure 7).

The Company will now engage with potential Offtakers as the size, grade and mineralogy of the resource has been defined by this MRE.

Refer to MRG Metals' website for the MRE Executive Summary (www.mrgmetals.com.au)

Chairman's comment "MRG's discovery of the Koko Massava deposit represents the most significant HMS discovery in at least the last decade. This is a major achievement for MRG and not only underpins the value of the Company but also its potential place in the global titanium feedstock industry going forward.

At Koko Massava we drilled 82 aircore holes (refer ASX announcement 29 November 2019) supported by 77 auger holes (refer ASX announcements 19 August 2019 and 21 November 2019), to identify our significant Maiden JORC Mineral Resource and will underpin our future exploration and development plans. As previously announced, our strategy is to aggressively seek additional high grade/high value per ton resource, rather than to simply add tonnage. The potential to achieve this appears to be very high across the Corridor tenements and could result in a multi decade asset with built-in potential to optimise operations in the early years to enhance project returns.

While MRG is focused on the next steps towards a mineral development at Koko Massava, our auger and aircore drilling exploration programs are also succeeding strongly at Poiombo and Nhacutse targets. We still have a number of high calibre airborne radiometric and magnetic targets to move on to in the Corridor Central and Corridor South tenements. We also have tenement applications pending. Koko Massava is now our foundation asset on which to build and with early success at Poiombo and Nhacutse we see the possibility of expanding Koko Massava into a regional resource of massive scale and significant grade THM. We are excited about our future and thank our Shareholders for their support."

Koko Massava Mineral Resource Details

MRG Metals Limited (ASX:MRQ) is pleased to announce the results of a Mineral Resource Estimation (MRE) undertaken by IHC Robbins in Perth on the Koko Massava prospect in Mozambique.

The Koko Massava deposit comprises a total Mineral Resource of 1,423 Mt @ 5.2% THM (refer Figure 1, Figure 2 and Figure 3), with 17% Slimes, containing 74 Mt of THM with an assemblage of 42% ilmenite, 7% low Ti ilmenite/titanomagnetite, 2% zircon, 1% rutile, 1% leucoxene, and 0.2% monazite (refer Table 1). The JORC categories are specifically stated as:

- an Indicated Mineral Resource of 289 Mt @ 4.9% THM and 20% Slimes containing 14 Mt of THM with an assemblage of 41% ilmenite, 8% low Ti ilmenite/titanomagnetite, 1% zircon, 1% rutile, 1% leucoxene, and 0.2% monazite.

- an Inferred Mineral Resource of 1,133 Mt @ 5.3% THM and 16% Slimes containing 60 Mt of THM with an assemblage of 42% ilmenite, 7% low Ti ilmenite/titanomagnetite, 2% zircon, 1% rutile, 1% leucoxene and 0.2% monazite.

Table 1: Summary of JORC (2012) Mineral Resource Estimate for Koko Massava.

Summary of Mineral Resources[1]								THM Assemblage[2]											
Area	Mineral Resource	Material (Mt)	In Situ THM (Mt)	BD (gcm3)	THM (%)	SLIMES (%)	OS (%)	ILMA (%)	ILM (%)	LTILM (%)	LTILMTM (%)	RUT (%)	LX (%)	ZIR (%)	TIMAG (%)	KYASIL (%)	CHRM (%)	MOTH (%)	NMOTH (%)
Koko Massava	Indicated	289	14	1.74	4.9	20	1	11	27	3	8	1	1	1	27	3	4	11	4
Koko Massava	Inferred	1,133	60	1.75	5.3	16	1	11	28	3	7	1	1	2	27	3	4	11	3
	Total	**1,423**	**74**	**1.74**	**5.2**	**17**	**1**	**11**	**28**	**3**	**7**	**1**	**1**	**2**	**27**	**3**	**4**	**11**	**3**

Notes:

(1) Mineral resources reported at a cut-off grade of 4% THM

(2) Mineral assemblage is reported as a percentage of in situ THM content.

JORC Table 1 information pertaining to the Mineral Resource estimate is presented in Attachment 1.

The low Ti ilmenite/titanomagnetite fraction within the assemblage is a transitional particle phase with 20-30% TiO_2, resolved by QEMSCAN analysis to typically be an ilmenite/titanomagnetite intergrowth. This material may report to either an ilmenite or titanomagnetite product. Detailed testwork is required to determine the outcome.

Importantly, for ongoing exploration, the detailed mineral assemblage data show ilmenite grades are above average (up to 47%) in a number of areas, particularly in the northern portion of the resource which coincides with high THM grade resource blocks and some of the thickest zones of mineralisation. In terms of zircon and rutile, the highest grades occur near surface in the central-eastern portion of the resource. Going forward, increasing the density of mineral assemblage analyses will allow a clearer picture of the distribution of valuable minerals over the extremely large resource footprint.

The resource estimation exercise for the Koko Massava deposit also identified an Exploration Target in the range of 234 - 967 Mt @ 4.5 – 5.9% THM at cut-off grades of 3% and 5% THM (refer Table 2; Figure 2 and Figure 3). It should be noted that the potential quantity and grade is conceptual in nature and that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target has been defined based on the results of aircore and auger drill hole assay results. It has been estimated using the same methodology as that used for the Mineral Resource estimate. However,

the depth, spacing and extent of drilling and sampling is not considered to be at a level that supports classification into JORC Mineral Resource categories. Additionally it is planned to follow up these areas of Exploration Target with drilling, sampling and assaying to further define the Mineral Resource classification to a JORC category.

Aircore and auger drill programs similar to those used for the Mineral Resource estimate are being planned for the second half of 2020 to obtain the requisite additional samples and data required to test the validity of the Exploration Target and potentially convert part or all of that Exploration Target into a Mineral Resource.

The Exploration Target estimates have been prepared by reporting the block model at a range of cut-off grades that are consistent with grade ranges used for assessing the Mineral Resource estimate for the Koko Massava prospect. This grade range has been made on the basis of a 4% cut-off grade (as used for the Mineral Resource estimate) +/- 1%, so a lower range of 3% THM and an upper range of 5% THM.

Table 2: Summary of Exploration Target for Koko Massava.

Summary of Exploration Target [1]								THM Assemblage[2]											
Area	Category	Material (Mt)	In Situ THM (Mt)	BD (gcm3)	THM (%)	SLIMES (%)	OS (%)	ILMA (%)	ILM (%)	LTILM (%)	LTILMTM (%)	RUT (%)	LX (%)	ZIR (%)	TIMAG (%)	KYASIL (%)	CHRM (%)	MOTH (%)	NMOTH (%)
Koko Massava	Exploration Target	234 - 967	14 - 44	1.74	4.5 - 5.9	14	1	11	27 - 28	3	7	1	1	2	27	2 - 3	4	11	4
Total	**Exploration Target**	**234 - 967**	**14 - 44**	**1.74**	**4.5 - 5.9**	**14**	**1**	**11**	**27 - 28**	**3**	**7**	**1**	**1**	**2**	**27**	**2 - 3**	**4**	**11**	**4**

Notes:

(1) Exploration Target reported at a cut-off grades of 3% - 5% THM

(2) Mineral assemblage is reported as a percentage of in situ THM content.

Significant tonnage exists at average grades well above the stated resource cut-off grade, as demonstrated in the associated GradeTonnage Curve (refer Figure 4). It should be noted that the grade tonnage curve is unconstrained with the exception of grade cut-offs and does not imply grade continuity:

- 593Mt @ 6.2% THM (5.0% cut-off)
- 252Mt @ 7.3% THM (6.0% cut-off)
- 113Mt @ 8.3% THM (7.0% cut-off)

The Koko Massava deposit is mineralised from surface and two broad geological domains have been defined based on material colour and slime characteristics. Zone 1 is an upper zone of red-brown sand with lower slime, whereas Zone 2 is a lower zone with yellow-brown sand and higher slime content. Both of the zones are on average 15 m to 25 m thick. Zones 1 and 2 are also high grade ilmenite domains with potential for further extension north and east as the extents of mineralisation have yet to be closed out.

The variography has demonstrated there is good grade continuity in the east-west direction. Though the 500m spaced drilling in the north-south direction has established good geological continuity, further infill drilling in the north-south direction will allow for further investigation of grade continuity and potentially improve the resource classifications of the Koko Massava deposit.

Most of the drill holes did not intercept the basement and the current basement position defined in the resource model was determined by either snapping to the end of hole depth or extrapolated from the few deep holes that were drilled into the basement. Given many resource blocks at the base of the current model are above cut-off grade, this provides for significant upside to potential additional tonnage in Zone 2.

Titanomagnetite, which is used in steel manufacture, forms up to 27% of the THM content of the Koko Massava deposit. The Company will investigate the opportunity to create a product from the titanomagnetite fraction in order to develop a potential additional revenue stream for economic modeling. In addition to this,

we will assay titanomagnetite for vanadium content. Some of the best vanadium-bearing magnetite comes from the Bushveld Complex in South Africa which forms part of the catchment area for the Limpopo River, which is the key transport source of heavy mineral sands into the Corridor Central and Corridor South tenements.

On the basis of this impressive maiden mineral resource estimate the next steps include metallurgical testing of bulk samples, to investigate the treatment of the potential ore and determine product quality, additional infill drilling to increase grade confidence in certain areas and extend other areas, plus various geotechnical tests.

Summary of Resource Estimate and Reporting Criteria

A summary of the material information used to compile this mineral resource estimate is outlined in the sections below. More detailed information in presented in the JORC Table attached.

Geology and geological interpretation

The coastal region of southern Mozambique forms part of the Mozambique basin, which is comprised of a complex succession of Cretaceous to Quaternary age sedimentary rocks and unconsolidated sand deposits which rest unconformably on Karoo Supergroup sediments and volcanics.

The Cenozoic deposits of the Mozambique basin are distinguished by shallow-marine facies typical of a passive continental margin with two main sedimentary cycles; a Palaeocene-Eocene cycle and Oligocene–Neogene cycle, separated by an unconformity.

The coastline of Mozambique is well known for massive dunal systems such as those developed near Inhambane, Xai Xai and in Nampula Province. Buried strandlines are likely in areas where palaeoshorelines can be defined along coastal zones. The larger lower grade deposits are related to windblown strands while the thin high grade strandlines could be related to marine or fluvial influences.

The heavy mineral sands at the Corridor Sands deposit are hosted by the palaeodunes in the Chongoene-Chibuto area. The palaeodunes are known to host significant HMS mineralisation. Recent drilling at Koko Massava has intersected high THM grades from surface extending to a depth of up to 55 m over a strike of 8 km. The mineralisation is hosted within red to brownish medium grained sand units. The mineralisation is geologically continuous along strike, with grades varying along and across strike. The Koko Massava deposit is predominantly ilmenite enriched.

Drilling techniques and holes spacing

Hand auger drilling was carried out by MRG field crews using a manually operated system produced by Dormer Engineering in Australia. The auger drill rods were 62 mm in diameter (BQ) and 1m long. Hand auger was used as a first pass drilling method to test targets identified by airborne magnetic and radiometric geophysical survey.

Aircore drilling was completed by Bamboo Rock Drilling Limitada utilising a purpose built Thor Reverse Circulation aircore drill rig with 76 mm diameter rods and 80 mm diameter (NQ) Harlsan aircore bits. Aircore is considered a standard mineral sands industry technique for evaluating HM mineralisation where the sample is collected at the drill bit face and returned inside an inner tube. All holes were drilled vertically.

The auger holes were drilled at 500 m between hole stations and 1000 m between drill lines. Aircore drilling

was then used to explore the mineralisation at depth and reduce the drill spacing in the some parts of the deposit to a grid spacing of ~250 m between hole stations and ~500 m between drill lines.

Sampling and Sub-sampling methodology

Auger drill samples were obtained at 1.5 metre intervals, generating approximately 3 kg of drill spoil that was cone-and-quarter split onsite. The samples were then taken to a sample preparation facility were each sample was homogenised by rotating it within the calico bag and then fed though a single-tier riffle splitter to reduce the sample to 300 g to 600 g for export to the primary laboratory.

Aircore drill samples were collected at 3 metre intervals and generated approximately 20 kg of drill spoil. The entire 3 m samples were collected at the rig and dispatched to the sample preparation facility. Each sample was air dried and then split down to 300 g to 600 g using a three-tier riffle splitter for export to the primary laboratory.

All auger and aircore samples were labeled and bagged for transport to the primary laboratory in Perth, Australia, for processing. All sample intervals and the correlating sample mass were recorded onto log sheets and later transcribed to a master Excel spreadsheet.

The sampling method and sample size dispatched for processing is considered appropriate and reliable based on accepted industry practices and experience.

Sample analysis methodology

All auger and aircore samples were dispatched to Western Geolabs laboratory in Perth, Australia, which followed the general assay process flow described as follows:

- 300 g to 600 g samples were received into the Western Geolabs check-in process then oven dried for 2 hours at 110 degrees Celsius until samples were completely dry.
- Samples were initially sieved to remove the +3.3 mm fraction and the weight recorded.
- Samples were reduced on a Jones splitter by 20%, then riffle split to 100 g sub-splits and left to soak overnight.
- Screening is undertaken on a static screen stack with a 1 mm top screen and a 45 µm bottom screen. Water is added to the washing process and manual scrubbing of the sample is undertaken as the agitation process.
- Every 10th sample was submitted to the same process as a laboratory repeat.
- All samples were screened utilising a 1 mm top screen and a 45 µm bottom screen.
- Material captured by the 1 mm (OS) and 45 µm (SAND) screens was individually captured, dried and weighed, whilst material passing through the 45 µm (SLIMES) screen was lost to waste water streams.
- This passing 45 µm material (SLIMES) weight was then calculated by difference (SLIMES weight = sample split weight - OS - SAND).
- The SAND fraction (1 mm to 45 µm) was submitted to heavy liquid separation (‘HLS’) using tetrabromomethane (‘TBE’) as the liquid heavy media.
- The settling time for HLS was 45 minutes with several stirs of the liquid to ensure adequate heavy mineral ‘drop’.

Mineral assemblage composites were prepared for the Koko Massava deposit from THM sink concentrates and QEMSCAN analysis was used to determine mineralogy for the deposit as a proportion of the THM. The QEMSCAN analyses were undertaken by the CSIRO Mineral Resources laboratory in Perth, Western Australia.

All mineral assemblage composites were prepared IHC Robbins in conjunction with MRG and are based on geological and stratigraphic interpretation of the primary drill holes, down hole geological logging and assaying constrained by identified geological domains. A total of 32 mineral assemblage composites were prepared across the Koko Massava deposit.

Resource estimation methodology

The geological grade model for Koko Massava was based on coding model cells below open wireframes surfaces, including topography, mineralisation and basement. The drill hole file was also flagged with the domains and used for grade estimation.

The dominant drill grid spacing for the Koko Massava deposit was 500 m north-south and 250 m east-west direction. However, some areas were drilled at 1000 m spacing in the north-south and 500 m spacing in the east-west direction. A parent cell dimension of 125 m x 250 m x 3 m in XYZ was selected as this represents half the distance between drill hole spacing in the easting and northing directions for most of the model area.

Sub-cell splits of 5 x 5 in the X and Y and to the nearest 20 cm in the Z direction were used to control sub-cell splitting of parent cells (as dictated by the modeling routine used in Studio RM). The smaller parent cell sizes were selected to give a better estimation of the volume of the deposit. It is not anticipated that this will have an adverse effect on the overall grade estimation. The smaller parent cell sizes are also not anticipated to result in an adverse effect on the overall grade estimation.

Inverse distance cubed was used along with nearest neighbour to interpolate grades and values into the block model. Part of the rationale for using ID3 is centred on the good continuity of the mineralisation, low nugget effect displayed by the experimental variograms, the regular drill hole and assay spacing and the nature of the sampling process. Examples of THM grade distribution are presented in Figures 5 and 6.

Effectively there is an averaging over the length of the sample interval down hole (in this case being 3 m). There is already a dilution effect on any potential high grade mineralisation leading to inverse distance being a less complex and more straight forward methodology.

A bulk density (BD) was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application by this author using the following first principles calculations. This regression formula was then used to determine the conversion of tonnes from each cell volume and from there the estimation of material, THM and SLIMES tonnes.

The bulk density formula is described as: Bulk Density = (0.009 * HM) + 1.698

Cut-off grades

The selection of the THM cut-off grade used for reporting was based on the experience of the Competent Person and by considering the continuity of mineralisation at that cut-off grade as well as the inflection points on the grade tonnage curves (refer Figure 4) This cut-off grade is in line with other mineral sands operations in Africa and the overall ratio of VHM to trash.

The Koko Massava Mineral Resource is reported at a cut-off grade of 4% THM for the resource model.

Classification criteria

The JORC classification for the Koko Massava deposit has taken into consideration the drill hole spacing in plan view, as well the sample support within domains, the size, weighting and distribution of the mineral assemblage composites and the variography results.

The deposit has been assigned JORC Mineral Resource classifications of Indicated and Inferred and is supported by the following criteria:

- regular drill hole spacing that defines the geology and THM mineralisation distribution and trends;
- variography for THM that supports the drill spacing for the classifications; and
- the distribution of mineral assemblage composites having adequately identified the various mineralogical domains as well as the variability within those domains.

The variography shows reasonable grade continuity in the across strike and downhole directions but limited sample relationship along strike, which warrants infill drilling between section lines to confidently determine the grade continuity in the north-south direction.

There has been industry standard QA/QC data supporting the assaying process, the use of a specialised and reputable mineral sands laboratory and the drilling, sampling and assaying procedures overall have fully supported the development of a Mineral Resource estimate. The use of commercially prepared standards has supported the QA/QC for the laboratory assaying and ongoing duplicates in both the field and laboratory.

The sample support and distribution of mineral assemblage composites is to an adequate level of density for the JORC Classification. Consideration of the operational mining rate and production of THM has been undertaken in order to assess whether the mineral assemblage composites are providing enough detailed coverage of potential variability in the mineral assemblage along the length of the deposit.

Mining and metallurgical methods and parameters

Additional mineral species chemistry and processing analysis is required from a representative bulk sample to understand product recoveries and specification of products required for marketing purposes. No mining studies have yet been undertaken on the Koko Massava deposit.

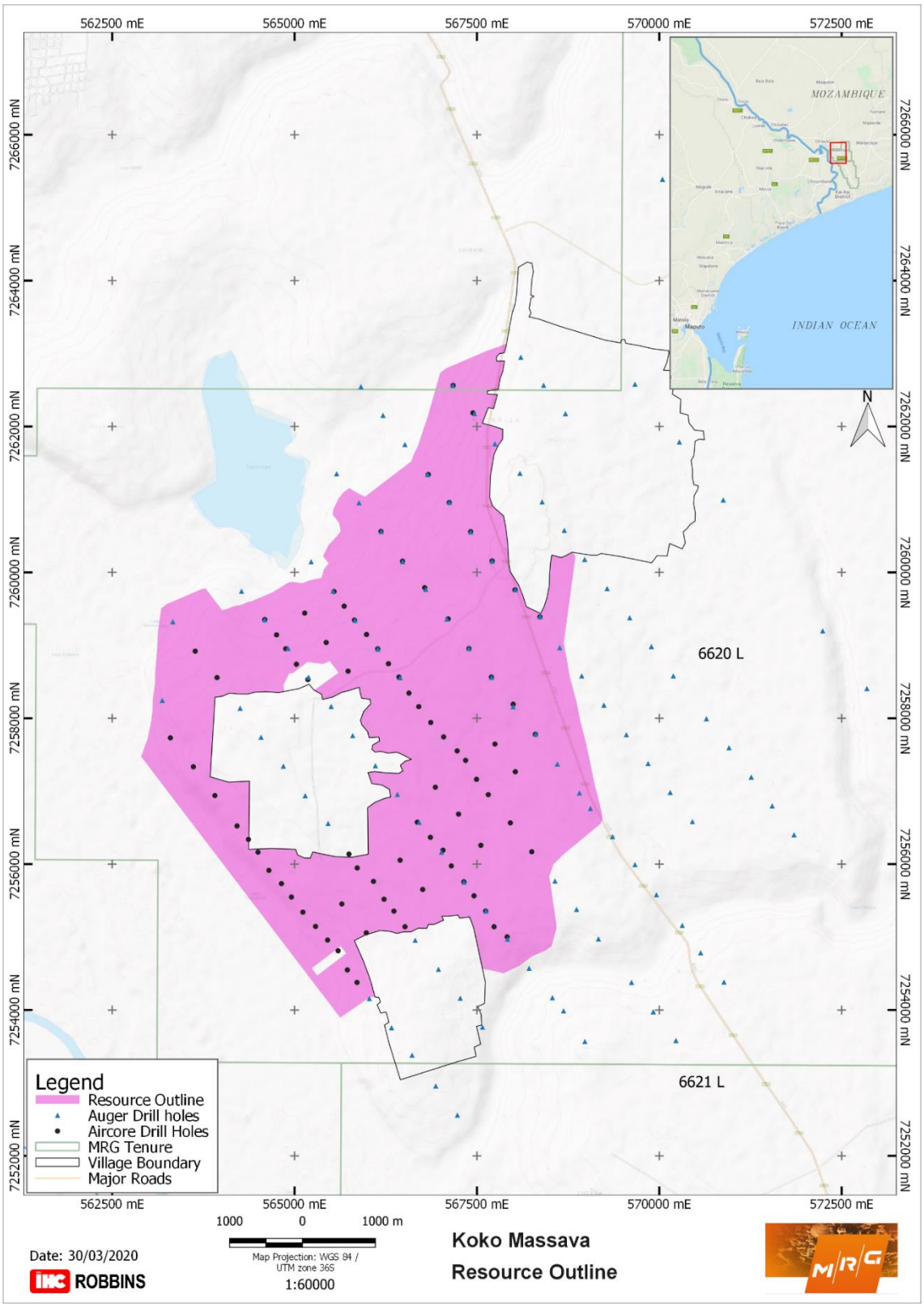


Figure 1: Map of the footprint of the Koko Massava global mineral resource at 4% THM cut-off grade.

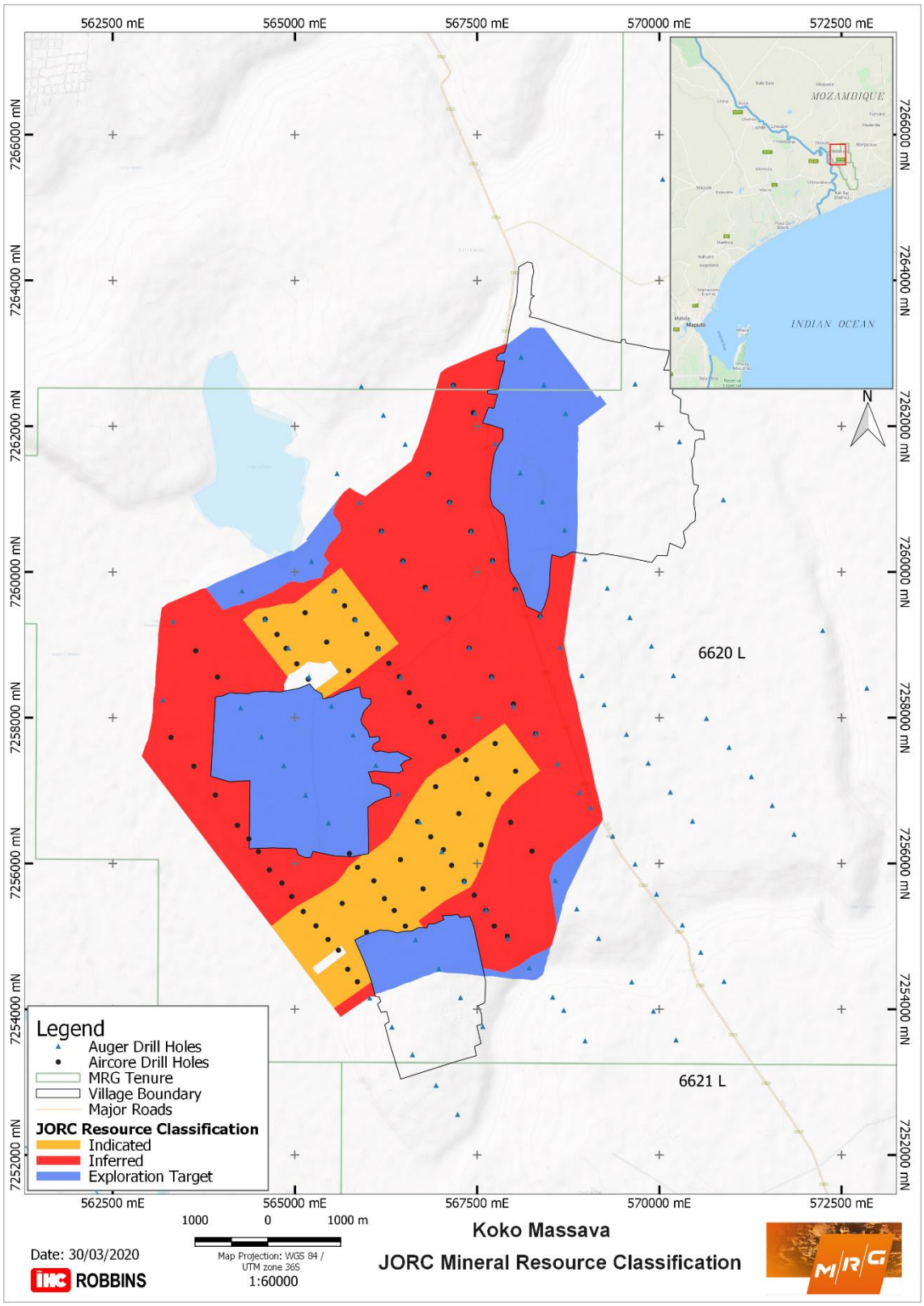


Figure 2: JORC Mineral Resources Classification for the Koko Massava MRE at 4% THM cut-off grade

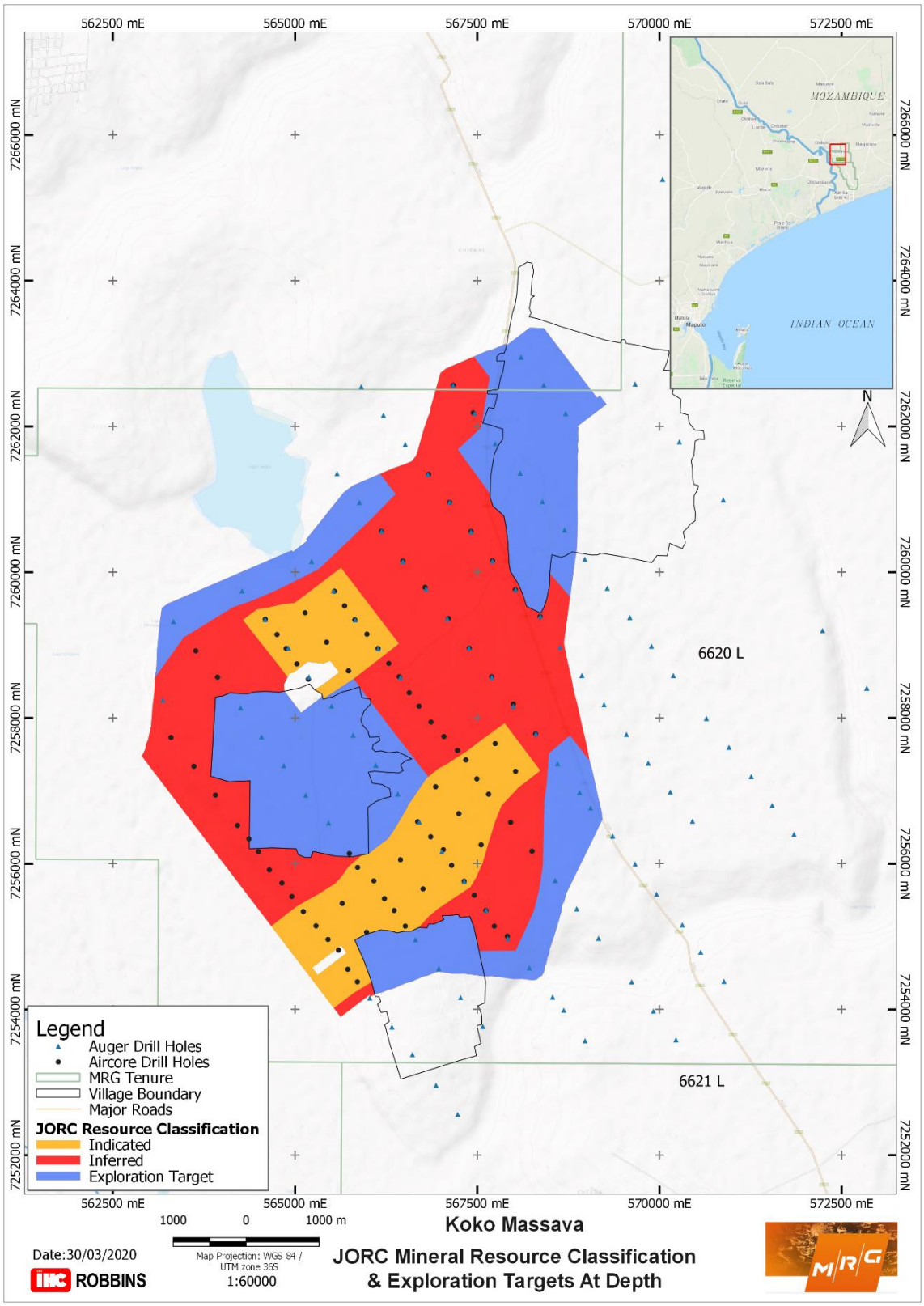


Figure 3: JORC Mineral Resources Classification for the Koko Massava MRE >4% THM at depth

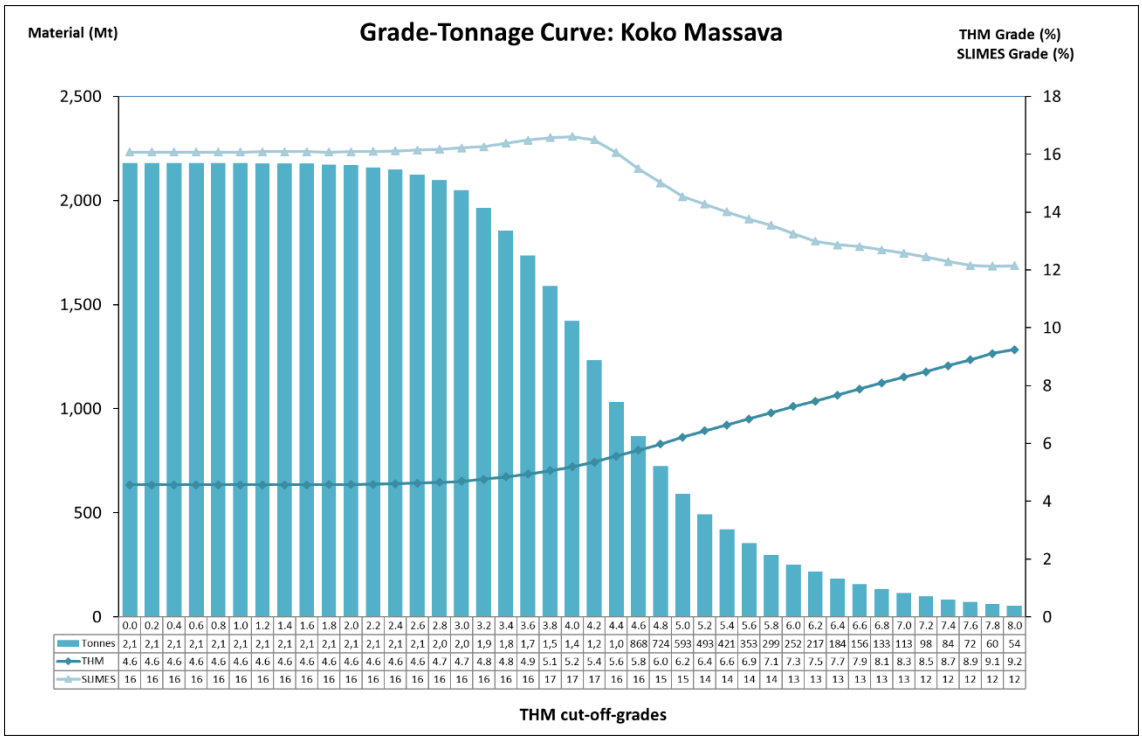


Figure 4: Grade-tonnage curve showing material tonnes versus THM grade (and Slime) at various cut-off grades for the global mineral resource at Koko Massava. Cut-off grade is shown in the top row of the table, with corresponding tonnage, average THM% grade and Slime % grade in the column below it.

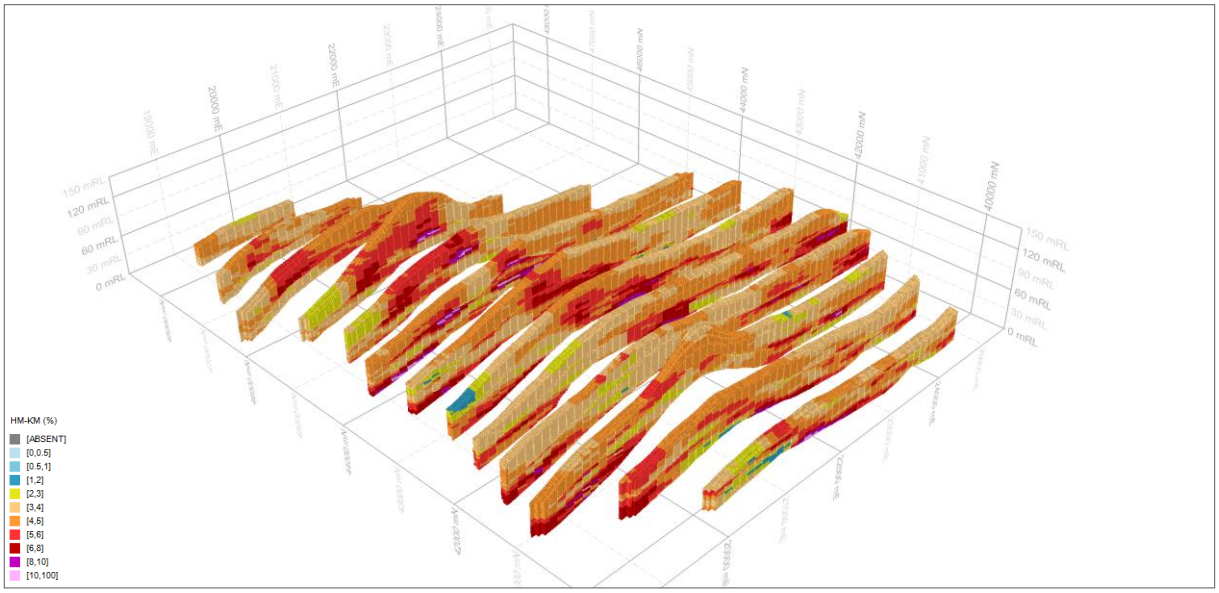


Figure 5: Oblique view looking southeast of the Koko Massava block model showing THM grade (x10 vertical exaggeration).

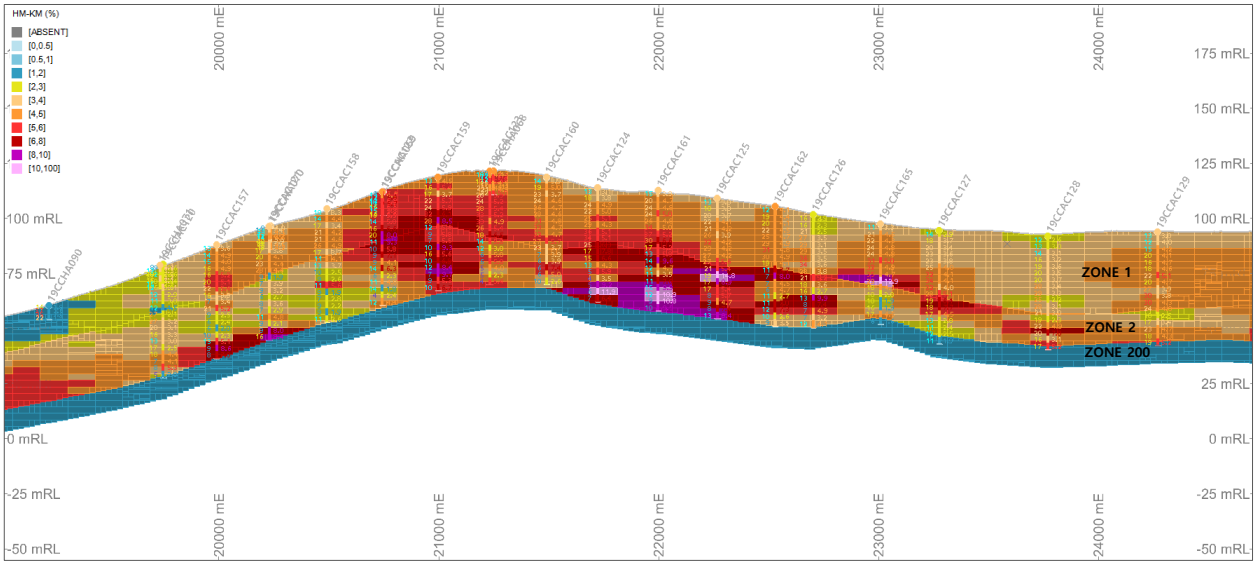


Figure 6: Cross section along 43000 mN (local grid, x10 vertical exaggeration) through the Koko Massava block model showing high grade blocks beginning at surface and continuing to depth and across strike.

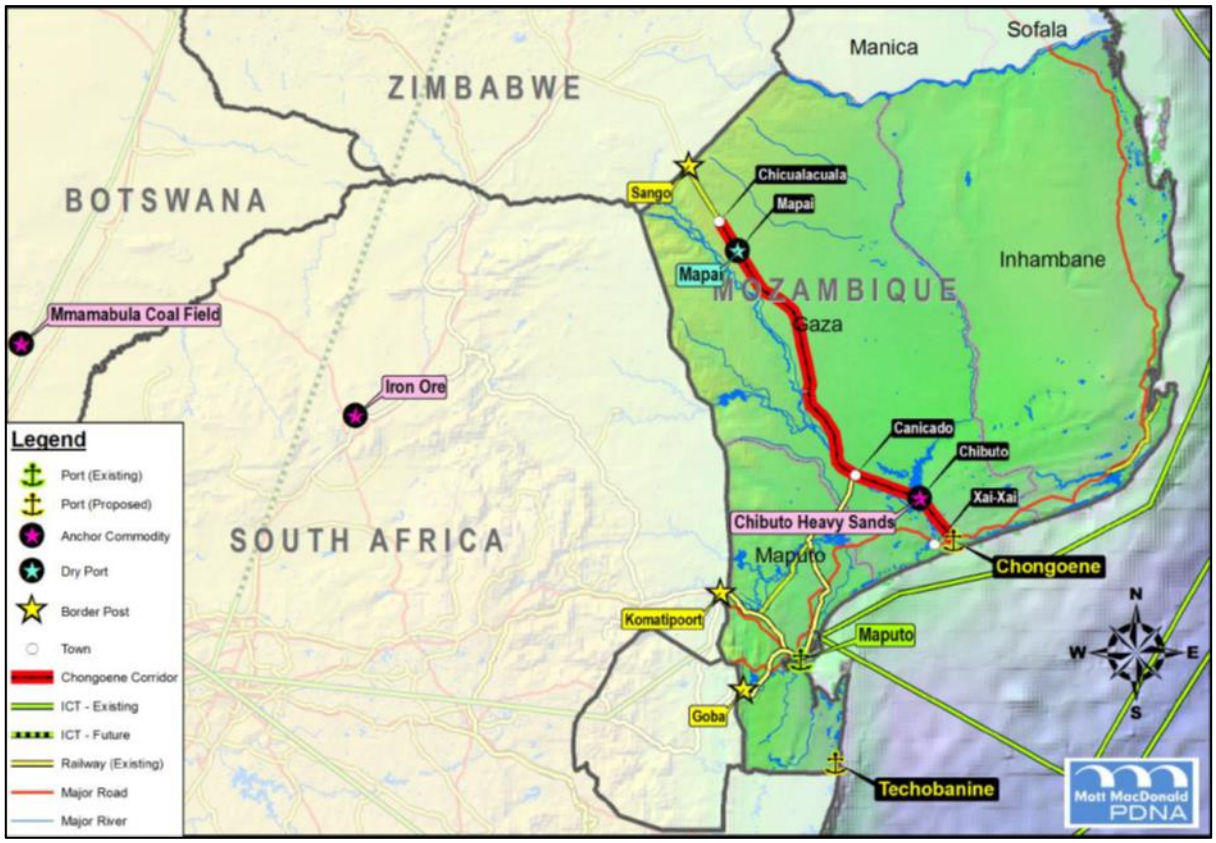


Figure 7: Map highlighting the proposed Chongoene Development Corridor

Competent Persons' Statement

The information in this report, as it relates to Mozambique Exploration Results is based on information compiled and/or reviewed by Dr Mark Alvin, who is a member of The Australasian Institute of Mining and Metallurgy. Dr Alvin is an employee of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Alvin consents to the inclusion in this report of the matters based on the information in the form and context in which they appear.

The information in this report that relates to Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr Greg Jones who is employed by independent consultant IHC Robbins. Mr Jones is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jones is the Competent Person for the resource estimation. Mr Jones consents to the inclusion in this report of the matters based on their information in the form and context in which they appear.

Trading Halt

The trading halt in the Company's securities can now be removed.

Authorised by the Board of MRG Metals Ltd

Attachment 1

Section 1 Sampling Techniques and Data		
Criteria	**Explanation**	**Comment**
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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 required, such as where there is coarse gold that*	*Hand Auger and Aircore drilling were used to obtain samples at 1.5 m and 3 m intervals for the 2019 drilling programmes.* *The following information covers the sampling process:* • *a sample of sand, approx. 20 g, is scooped from the sample bag for visual THM% and SLIMES% estimation and logging. The same sample mass is used for every pan sample for visual THM% and SLIMES% estimation;* • *the standard sized sample is to ensure calibration is maintained for consistency in visual estimation;* • *geotagged photographs are taken for each panned sample with the corresponding sample bag to enable easy reference at a later date* • *a sample ledger is kept at the drill rig for recording sample intervals;* • *the large 3 m Aircore drill samples have an average mass of about 20 kg while the 1.5m auger samples average 3 kg.* • *all samples were split down to approximately ~300 to ~600 g by a 3-tier rifle splitter for export to the primary processing laboratory;* • *the laboratory sample was oven dried at 110 degrees for a minimum of 2 hours (and then redried for up to 12 hours if required), hand crushed and screened to remove +3 mm fraction. Sample is split down to 100 g sub samples via a Jones splitter. A laboratory repeat was taken at ~ 1 in 10 samples;* • *all drill hole sub-samples were screened using vibrating screens with a top screen of 1 mm and a bottom screen of 45 µm. Oversize (+1 mm fraction) was removed and -45 µm fraction (SLIMES) discarded. The sand fraction (1 mm to +45 µm) was then submitted for heavy liquid*

Criteria	Explanation	Comment
	has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	*separation using TBE to determine total heavy mineral content.* • *field duplicates were taken at a rate of ~1 in 25 and are inserted blindly into the sample batches.* • *commercially obtained standards were inserted by company at a rate of ~ 1 in 50 into the sample.*
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• *Bamboo rock drilling Limitada was the contractor used for the aircore drilling program while hand auger was completed by MRG field crews using a manually operated system produced by Dormer Engineering in Australia.* • *Auger drilling is considered an early stage unsophisticated drilling technique. .* • *The auger drilling utilises open hole method and drilling is governed by the Auger Drilling Guideline to ensure consistency in the application of the method* • *1 m long rods of BQ diameter (62 mm) were used. The hole diameter is controlled by placing a wooden surface collar at the beginning of each hole. Auger holes were stopped when drill string began to get stuck or if rods were unavailable for further advance* • *Aircore drilling with inner tubes for sample return was used for deeper holes.* • *Aircore drilling is considered a standard industry technique for HMS mineralisation. Aircore drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube.* • *Aircore drill rods used were 3 m long.* • *NQ diameter (76 mm) drill bits and rods were used.* • *All drill holes were vertical.* • *The drilling is governed by the Aircore Drilling Guideline procedure to ensure consistency in the application of the method.*

Criteria	Explanation	Comment
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• *Drill sample recovery is monitored by measuring and recording sample mass for each interval at the rig using a standard spring balance.* • *No significant loses of samples were observed due to the shallow drilling depths (≤13 m).* • *The auger sample recoveries are estimated from the volume of the sample recovered. The initial interval (0-1.5 m) is carefully drilled to maximise sample recovery.* • *While initially collaring the aircore hole, limited sample recovery can occur in the initial 0 m to 3 m sample interval owing to sample and air loss into the surrounding loose soil.* • *The initial 0 m to 3 m sample interval is drilled very slowly in order to achieve optimum sample recovery.* • *The entire 3 m sample is collected at the drill rig in large numbered plastic bags for dispatch to the onsite split preparation facility.* • *At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample pipes and cyclone.* • *The twin-tube aircore drilling technique is known to provide high quality samples from the face of the drill hole (in ideal conditions).* • *All wet and moist sample are placed into large plastic basins to sun-dry prior to riffle splitting the sub-sample.*
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative*	• *The 1 5m auger drill intervals and the 3 m aircore samples were each qualitatively logged onto paper field log sheets prior to transcribing into Microsoft Excel spreadsheet. The data was uploaded to the Microsoft Access database and subjected to numerous validation queries.* • *The auger and aircore samples were logged for lithology, colour, grainsize, sorting, hardness, estimated THM%, estimated SLIMES% and any relevant comments such as slope, vegetation, or cultural activity.* • *Every drill hole was logged in full.* • *Logging is undertaken with reference to a Drilling Guideline (Hand Auger Drilling*

Criteria	Explanation	Comment
	in nature. Core (or costean, channel, etc) photography. *The total length and percentage of the relevant intersections logged.*	*Guideline and Aircore Drilling Guideline) with codes prescribed and guidance on description to ensure consistent and systematic data collection.*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• *The 1.5 m sample interval were homogenised at the drill site and then cone-and-quarter split onsite.* • *Any wet samples were dried in clean plastic basins prior to splitting and the water table depth was noted in all geological logs if intersected.* • *At the sample preparation facility, each auger sample was homogenised by rotating it within the calico bag and then fed though a single-tire splitter to reduce the sample to 300 g to 600g for export to the primary laboratory.* • *The entire 3 m aircore sample collected at the rig was dispatched to the sample preparation facility where each sample was split down to 300 to 600 g using a three-tier riffle splitter. The split samples were labelled and bagged for export to the primary laboratory for processing.* • *The remaining portion of both the 1.5 m auger interval and the 3 m aircore samples were returned to their original bags and stored at the onsite warehouse for future reference.* • *A total of ~300 g to ~600 g of each sample was placed into calico sample bags and exported to Western Geolabs in Perth, Australia for THM analysis.* • *All the samples are sand or sandy in nature and this sample preparation method is considered appropriate.* • *The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff.* • *Field duplicates of all the samples were completed at a frequency of 1 per 25 primary samples. Standard reference Material (SRM)*

Criteria	Explanation	Comment
		samples were inserted into the aircore sample batches at a frequency rate of 1 per 50 samples • *A geologist supervises the sample splitting process.*
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• *The wet panning of samples provides an estimate of the THM% which is sufficient for the purpose of determining approximate concentrations of THM in the first instance.* • *The field visual THM estimates are compared to actual THM assays and this allows the geologist to calibrate the visual estimates with known grades.* • *The 300 g-600 g auger and aircore sub-samples were assayed by Western Geolabs in Perth, Western Australia, which is considered the Primary laboratory.* • *The aircore samples were initially oven dried at 110 degrees Celsius for 2 hours. Samples were primarily sieved to remove the +3 mm fraction and the weight recorded. The sample was reduced on a Jones splitter by 20%, then rifle split to 100 g sub-splits and left to soak overnight.* • *All samples were then wet washed and sieved on vibrating screens using a top screen of +1 mm to remove the very coarse sand, pebbles or grits. The bottom screen used 45 µm mesh for removal and determination of the -45 µm fraction (SLIMES). The remaining sand fraction (-1 mm +45 µm) was then submitted to heavy liquid separation ('HLS').* • *The laboratory used TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml. This is an industry standard technique for HLS.* • *Field duplicates of the samples were collected and submitted at a frequency of 1 per 25 primary samples;* • *Western Geolabs completed its own internal QA/QC checks that included a Laboratory repeat every 10th sample prior to the results being released;*

Criteria	Explanation	Comment
		• *Analysis of QA/QC samples show the laboratory data to be of acceptable accuracy and precision;* • *The density of the heavy liquid was checked every day.* • *The adopted QA/QC protocols are acceptable for this stage of test work.*
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• *All results are checked by the company's Chief Geologist* • *Significant visual estimated THM values > 6% are verified by the Chief geologist in the field or via field photographs of the pan sample.* • *The company's General Manager and independent Resource geologist (Greg Jones) have visited Western Geolabs to observe sample processing and procedure.* • *A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data.* • *Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues.* • *Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias.* • *Field data was manually transcribed from paper logs into a master Microsoft Excel spread sheet. Data is then imported into Microsoft Access Database where it is subject to validation.* • *The field and laboratory data was exported from the MRG Microsoft Access database and imported into Datamine by IHC Robbins which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between 'Lithology', 'Sample', 'Survey' files and other common errors.* • *No twin holes were drilled in the programmes.* • *No adjustments have been made to the primary assay data.*

Criteria	Explanation	Comment
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	• *Down hole surveys for shallow vertical aircore and auger holes are not required.* • *A handheld Garmin GPS was used to identify the positions of the drill holes in the field. The handheld GPS has an accuracy of +/-5m in the horizontal.* • *The datum used is WGS84 zone 36 and coordinates are projected as UTM zone 36S.* • *Topographic surface generated using the contours from the differential GPS navigation system of the airborne magnetic and radiometric geophysical survey carried out by Geotech Ltd in April 2019.* • *To account for the disparity between collars and the topographic DTM all drill hole collars were pinned to the supplied topography wireframe surface.* • *The accuracy of the locations is sufficient for this stage of exploration.*
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	• *The auger holes were drilled at 500 m between hole stations and 1000 m between drill lines. Aircore drilling was then used to confirm the mineralisation and reduce the drill spacing in the southern part of the deposit to a grid spacing of ~250 m between hole stations and ~500 m between drill lines. The rest of the area is largely on a drill spacing of 500 m between hole stations and 1000 m between drill lines.* • *The drilling program for 77 auger holes was conducted between March and September 2019 while the 82 aircore holes were drilled between July and November 2019 to determine the mineralisation extent of the deposit.* • *The 500 m x 1000 m spaced auger holes and regular grid on the northern portion of the deposit confirm the mineralisation continuity along strike.* • *Each auger sample is a 1.5 m single sample of sand intersected down the hole while each aircore samples is a 3 m sample of sand.* • *No down hole compositing has been applied to models for values of THM, slime and oversize.* • *Compositing of samples was undertaken on THM concentrates for mineral assemblage*

Criteria	Explanation	Comment
		determination. The mineral assemblage composite samples were determined by geological domains.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• *The aircore drilling was oriented perpendicular to the strike of mineralisation defined by reconnaissance auger drill data and geophysical data interpretation.* • *The strike of the mineralisation is northeast-southwest.* • *All drill holes were vertical and the orientation of the mineralisation is relatively horizontal.* • *The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralisation without any bias.*
Sample security	*The measures taken to ensure sample security.*	• *All samples remain in the custody of Company representatives until they are transported to Maputo for final packaging and securing.* • *The samples were then dispatched to Perth using Deugro commercial shipping company and delivered directly to Western Geolabs.* • *The laboratory inspected the packages and did not report tampering of the samples.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• *Internal reviews were undertaken during the geological interpretation and throughout the modelling process.*

Section 2 Reporting of Exploration Results		
Criteria	**Explanation**	**Comment**
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• *The exploration work was completed on the Corridor Central tenement (6620 L) which is 100% owned by the company through its subsidiary, Sofala Mining and Exploration Limitada, in Mozambique.* • *The drill samples for this Mineral Resource estimate were taken from tenement 6620 L.* • *The Exploration License original date of grant was 14/01/2016 with an expiry date of 14/01/2021 and comprises an area of 17 881.59 hectares (178.8 km2).*
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• *Historic exploration work was completed by Corridor Sands Limitada, a subsidiary of Southern Mining Corporation and subsequently Western Mining Corporation, in 1989. BHP-Billiton acquired western Mining Corporation and undertook a Bankable Feasibility study of the Corridor Deposit 1 about 15 km north of the Company's tenements.* • *The Company has obtained digital data in relation to historic information as part of its historical review in preparation for their current work program.* • *The historic data comprises limited Aircore/Reverse Circulation drilling.* • *The historic results are not reportable under JORC 2012.*
Geology	*Deposit type, geological setting and style of mineralisation.*	• *Two types of heavy mineral sand mineralisation styles are possible along coastal Mozambique:* *1. Thin but high grade strandlines which may be related to marine or fluvial influences.*

Criteria	Explanation	Comment
		2. Large but lower grade deposits related to windblown sands. • *The coastline of Mozambique is well known for massive dunal systems such as those developed near Inhamabane, near Xai, Xai and in Nampula Province. Buried strandlines are likely in areas where palaeoshorelines can be defined along coastal zone.*
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	*All relevant drill hole data is reported regarding the 2019 drilling programs.* *All relevant drill hole data is reported associated with the model build.*

Criteria	Explanation	Comment
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 data aggregation methods were utilised, no top cuts were employed and all cut-off grades have been reported.* *Total Heavy Mineral (THM>4%) was used to provide cut-off grade.*
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this*	*The nature of the mineralisation is broadly horizontal, thus vertical aircore holes are thought to represent close to true thicknesses of the mineralisation.* *Downhole widths are reported.*

Criteria	Explanation	Comment
	effect (eg 'down hole length, true width not known').	
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.*	*Refer to Figures 1 to 6 in the main body of the report.*
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	*Exploration Target results have been reported at THM>3% and 5% to indicate a range of potential tonnes and grade (refer to Table 2.)*
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.*	*Detailed mineral assemblage work was undertaken on composite samples for the Project by CSIRO Mineral Resources Services, Western Australia. Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN) was used to analyse the mineralogy for the deposit. This was to gain a quantitative understanding of the elemental composition and mineralogical assemblage (refer to Section 4, Tables 4.3, 4.4, and 4.5 and Appendix 7).* *The QEMScan method of analysis required the samples to be screened into +300 µm and -300 µm screen fraction prior to sample preparation and QEMScan analysis.*

Criteria	Explanation	Comment
		Sample preparation required each sup-sample was mixed with size-graded, high purity graphite to ensure particle separation and discourage density segregation. These sample-graphite mixtures were then set into moulds using a two-part epoxy resin, producing a representative sub-sample of randomly orientated particles. Once cured, the resin blocks were then cut to expose a fresh surface which is then gradually ground and polished. Once QA/QC checks are completed the sections are then carbon coated for electron beam conductivity and presented to QEMScan for analysis. *The samples were analysed using QEMScan technology in Field Scan Mode (FS) and Particle Mineralogical Analysis (PMA) mode.* • *Detailed logging of heavy mineral sinks from the drill assay process was carried out to determine regions of gross mineralogy as well as an overall consideration of valuable heavy mineral (VHM) content. Other considerations undertaken during the detailed logging were the sorting and grain size and any moisture content in relation to ground water table.* • *Geological logging then had partial input into the geological/mineralogical/THM grade interpretation which then assisted with domain control for modelling, as well as providing guidance for the allocation of mineral assemblage composites.* • *Various individual domains were identified for the Koko Massava deposit for the purpose of guiding the allocation of composites.* • *A total of 32 mineral assemblage composites were used to characterise the mineralogy and chemistry for the deposit.* • *All the mineral assemblage composites were completed by the IHC in conjunction with MRG.* • *Individual drill hole samples were selected based on whether they fell within a particular domain, and were then proportioned against*

Criteria	Explanation	Comment
		contained THM grade in order to specify the weight of THM that each sample would contribute to the entire composite. • *Once all of the sample compositing was completed, the sample identification and mineral assemblage composite number was submitted to CSIRO in Perth, Australia for sample collation and processing.* • *Preparing the mineral assemblage composites in this manner allows for composite results to be applied to the resource block model and for those results to then be reported and weighted on THM in the final Mineral Resource estimate.* *Details of summary drill hole composites are presented in Appendix 13, mineral assemblage composite IDs and associated results are presented in Appendix 7.*
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *Additional aircore drilling and sampling, infill drilling and sampling and HLS analysis is planned to further grow the resource.* • *High quality targets generated from reconnaissance work are planned to be drilled with aircore techniques.* • *Mineral Assemblage composites analysis to determine the valuable heavy mineral component of the deposit* • *TIO2 and contaminant test work analyses are planned for the future.*

Section 3 Estimation and Reporting of Mineral Resources		
Criteria	**Explanation**	**Comment**
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	*Exploration data provided by the company to IHC Robbins in the form a Microsoft Access database.* *Checks of data by visually inspecting on screen (to identify translation of samples), duplicate assays was visually examined to check the reproducibility of assays.* *Database assay values have been subjected to random reconciliation with laboratory certified value is to ensure agreement.* *Visual and statistical comparison was undertaken to check the validity of results.*
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	*Regular site trips before and during the resource drilling programme were undertaken by was undertaken by Dr Mark Alvin to observe the drilling data collection, and sampling activities.*
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	*The geological interpretation was undertaken by IHC Robbins in collaboration with the company's General Manager and then validated using all logging and sampling data and observations.* *Current data spacing and quality is sufficient to indicate grade continuity.* *Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM, SLIMES, oversize, mineralogy and geological logging. The interpretation of domains was also aided by the utilisation lithological colour logging which assisted with distinguishing domain boundaries.* *The Mineral Resource estimate was controlled by the geological surfaces, and basement surfaces.*

Criteria	Explanation	Comment
		There are two main sheet-like horizons of mineralisation within the Project area which are predominantly ilmenite enriched. The two zones are geologically continuous with variable THM grades along and across strike. Zone 1 is immediately below the topography and is reddish in colour while Zone 2 is brownish in colour and sits between Zone 1 and the basement. *The contact between the two mineralised zones is gradational. There are elevated SLIMES values around the contact and mostly confined to Zone 1.*
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	*The Mineral Resource field for the Project is approximately 8 km in length (at the longest point) and 7 km wide (at the widest point).*
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate*	*The mineral resource estimate was conducted using CAE mining software (also known as Datamine Studio). Inverse distance weighting techniques were used to interpolate assay grades from drill hole samples into the block model and nearest neighbour techniques were used to interpolate index values and nonnumeric sample identification into the block model. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting power of 3 was used so as not to over smooth the grade interpolations. Hard domain*

Criteria	Explanation	Comment
	takes appropriate account of such data. *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	*boundaries were used and these were defined by the geological wireframes that were interpreted.* *No assumptions were made during the resource estimation as to the recovery of by-products.* *SLIMES and oversize contents are estimated at the same time as estimating the THM grade.* *Further detailed geochemistry is required to ascertain deleterious elements that may affect the marketability of the heavy mineral products.* *The average parent cell size used for the interpolation was half the standard drill hole width and half the standard drill hole section line spacing.* *No assumptions were made regarding the modelling of selective mining units however it is assumed that a form of dry mining will be undertaken and the cell size and the sub cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise.* *No assumptions were made about correlation between variables.* *The Mineral Resource estimates were controlled to an extent by the geological / mineralisation and basement surfaces.* *Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation.* *Sample distributions were reviewed and no extreme outliers were identified either high or*

Criteria	Explanation	Comment
		low that necessitated any grade cutting or capping. *The sample length of 1.5 m and 3 m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping.* *Validation of grade interpolations were done visually In CAE Studio (Datamine) software by loading model and drill hole files and annotating and colouring and using filtering to check for the appropriateness of interpolations.* *Statistical distributions were prepared for model zones from drill hole and model files to compare the effectiveness of the interpolation. Along strike distributions of section line averages (swath plots) for drill holes and models were also prepared for comparison purposes.*
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	*Tonnages were estimated an assumed dry basis.*
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	*Cut-off grades for THM were used to prepare the reported resource estimates. These cut-off grades were defined by the Competent Person by considering the continuity of mineralisation at that cut-off-grade as well as the inflection points on the grade tonnage curves of the Koko Massava deposit. This was used to report the block model on material >4% THM.* *Consideration was taken into account for a modest stripping ratio to ensure that deeply buried material with a very low likelihood of eventual economic extraction was not selected for reporting in the Mineral Resource estimate.* *The selected cut-off grade is also in line with other deposits of similar size.*

Criteria	Explanation	Comment
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.*	*No specific mining method is assumed other than potentially the use of dry mining methods.*
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.*	*Metallurgical assumptions were used based on mineral assemblage composites which at this stage only allow for preliminary commentary with no final products being defined from the reported mineral species.*

Criteria	Explanation	Comment
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.*	*No assumptions have been made regarding possible waste and process residue however disposal of by products such as SLIMES, sand and oversize are normally part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.*
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*	*A bulk density algorithm was prepared using first principles techniques coupled with industry experience that is exclusive to IHC Robbins. We believe the bulk density formula to be conservative and fit for purpose at this level of confidence for the Mineral Resource estimates and based on our experience and we would also recommend that bulk density test work be undertaken going forward.* *A bulk density (BD) was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application by this author using the following first principles calculations to develop a regression formula. This regression*

Criteria	Explanation	Comment
	between rock and alteration zones within the deposit. *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	*formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes.* *The bulk density formula is described as:* *Bulk Density = (0.009 * HM) + 1.698*
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	*The resource classification for the Koko Massava deposits was based on the following criteria: drill hole spacing, geological and grade continuity, variography of primary assay grades and the distribution of bulk samples.* *The classification of the Indicated and Inferred Mineral Resources was supported by all of the supporting criteria as noted above.* *As a Competent Person, Greg Jones considers that the result appropriately reflects a reasonable view of the deposit categorisation.*
Audits or reviews.	*The results of any audits or reviews of Mineral Resource estimates.*	*No audits or reviews of the mineral resource estimate have been undertaken at this point in time.*
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*	*Local (nearest neighbour) estimates were undertaken as a preliminary evaluation process. The overall grade interpolation for this method was a fair comparison with inverse distance weighting methodology.* *Validation of the model vs drill hole grades by observation, swathe plot and population distribution analysis was favourable* *The statement refers to global estimates for the entire known extent of the Koko Massava deposit.*

Criteria	Explanation	Comment
	confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	*No production data is available for comparison with the Koko Massava deposit.*