## ASX ANNOUNCEMENT 31 JULY 2020

## NEW HIGH QUALITY MINERAL ASSEMBLAGE RESULTS RETURNED FROM THE CORRIDOR HEAVY MINERAL SAND PROJECT PORTFOLIO

**Key Highlights** 

• Bulk sampling returns high quality mineral assemblage from multiple targets in The Corridor Heavy Minerals Sand Projects, Mozambique, key results including:

Target	Combined Ilmenite / leucoxene	Rutile	Zircon
Nhacutse	Up to 68.29%	2.17%	2.91%
Koko Massava East	50.45%	0.84%	1.93%
Poiombo	46.50%	0.75%	1.78%

- Given the significance of the Nhacutse result, MRG Metals has retested the sample, with a further retest on a new split of the sample to be analysed shortly.
- These results indicate a higher unit value assemblage occurs in heavy mineral sand on the eastern side of MRG's Corridor tenements.
- MRG Metals currently analysing data to prioritise targets for upcoming aircore drill program.
- Mineral assemblage analyses in progress for Saia, Zulene and Viaria targets.

**Commenting on these latest results MRG Metals Chairman, Mr Andrew Van Der Zwan, said** "We continue to rapidly expand our knowledge and understanding of our massively endowed Corridor Sands Projects portfolio, which contains multiple highly prospective heavy minerals targets.

Having returned our Maiden Mineral Resource Estimate of over 1.4 billion tonnes @ 5.2% total heavy metal (THM) at Koko Massava back in April, we have turned our exploration efforts to assessing the exploration portfolio of surrounding targets with the aim of discovering even higher value per ton resources for optimization of a potential mine start-up.

"The significance of these latest results is staggering as the in-ground value of the best quality assemblage results reported is approaching double that of the Koko Massava combined sample at similar THM grade. Whilst we had previously stated that we are looking for grades of 7-8% THM as early mine life feedstock, if sand of the quality reported here from Nhacutse is found in quantity, the potential exists for this percentage to be lowered significantly."

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### Introduction

MRG Metals Limited ("The **Company**" or "**MRQ**") (ASX code: MRQ) is pleased to announce important results for mineral assemblage characterisation by Qemscan analysis of 16 selected composite samples from the Corridor South (6621L) and Corridor Central (6620L) tenements. The composite samples were prepared from heavy mineral concentrates derived from auger drilling at selected targets contained within the Corridor Heavy Minerals Sand Projects. The data received provides reconnaissance phase information on the valuable heavy mineral ("VHM") assemblage contained within the total heavy mineral ("THM") concentrate and will be used to prioritise targets for ongoing work programmes.

These new results demonstrate the robust and high quality nature of the VHM assemblage contained within the Corridor tenements, with the best VHM result of 73.37% (sample CSNH03; Table 1) being returned from the east side of the Nhacutse target.

This highly significant VHM result at Nhacutse comprises 68.29% ilmenite+leucoxene, 2.91% zircon and 2.17% rutile and is significantly higher than all previous assemblage data reported for the Company's Corridor Projects to date.



# Figure 1 showing locations of MRG's Corridor Central and Corridor South Projects in Mozambique; Targets Koko Massava, Nhacutse and Poiombo; and competitor HMS deposits.

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## **Mineral Assemblage Details**

The composite samples were prepared from a micro-split fraction of each primary heavy mineral concentrate from each individual sample interval in selected auger holes, with each composite sample relating to a single auger hole. Samples were submitted to CSIRO Minerals Research Centre, Perth, for Qemscan (Quantitative Evaluation of Minerals by Scanning Electron Microscopy) particle analysis. Each sample was previously screened at -45µm to remove any slime material and +1mm to remove oversize sand. The composite sample was systematically analysed for mineral identification of a statistically meaningful particle population providing bulk modal mineralogy, particle maps, particle liberation and particle size.

Qemscan is an integrated system comprising a scanning electron microscope and energy dispersing spectrometer plus proprietary software for data collection. Qemscan analysis is now routinely used for determination of bulk mineral assemblage for heavy mineral sand samples.

Auger drillholes used for the creation of composite samples were selected on the basis of a range of average THM grade from 3-5% and >5%, as well as geographic distribution across the Bungane, Nhacutse, Poiombo, Koko East and Rio Chegua targets.

Bulk mineral assemblage data for the 16 samples is presented in Table 1 and locations of the relevant auger holes is shown on Figure 1. The combined ilmenite+leucoxene in the samples reported here ranges from 33.55%–68.29%, with an average of 41.44%. The rutile content ranges 0.66%–2.17%, with an average 0.86% and zircon content ranges 1.12–2.91%, with an average 1.57%.

The titanomagnetite content overall ranges 0.08%–23.32%, with an average of 17.21% and based on the recent metallurgical test work (refer ASX Announcement 13 July 2020) for the Koko Massava mineral resource, this titanomagnetite has been shown to be a saleable product.

#### **Nhacutse Target Results**

The most significant mineral assemblage data was returned for the eastern side of Nhacutse target (hole 19CSHA067; sample CSNH03) which has a combined ilmenite plus leucoxene result of 68.29%, associated with 2.17% rutile, and 2.91% zircon. This is the best result of all mineral assemblage data to date for the Corridor projects and represents a significant priority for additional follow-up exploration.

Sample CSNH02 at Nhacutse, related to auger hole 19CSHA064 with average 3.6% THM, contains 38.95% ilmenite plus leucoxene, together with 0.87% rutile and 1.26% zircon. This is another good result and this sample is also located on the east side of the Nhacutse target.

Sample CSNH01 (hole 19CSHA048) at Nhacutse also represents a significant result, with 41.30% ilmenite plus leucoxene, associated with 0.84% rutile and 1.44% zircon. The auger hole (19CSHA048)

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which this sample is related to is located on the far western side of the Nhacutse target, adjacent to the Limpopo River valley and has an average THM grade of 6.33%.

The good ilmenite content, particularly for sample CSNH03, across a broad area at Nhacutse target is very encouraging and supports Nhacutse being a priority target for aircore drilling.

#### **Poiombo Target Results**

The mineral assemblage data for Poiombo target are also very good, with half of the samples yielding >41% ilmenite plus leucoxene. Sample CSPM06, which correlates with auger hole 20CSHA251, is from the centre of the target at the eastern side and contains 46.50% ilmenite plus leucoxene, together with 0.75% rutile and 1.78% zircon.

Sample CSPM07 at Poiombo relates to auger hole 20CSHA254 (average 5.48% THM) contains 42.85% ilmenite plus leucoxene and is located just south of the defined limit of the target on the eastern side. This sample CSPM07 has corresponding rutile and zircon of 0.80% and 1.62%, respectively.

With good mineral assemblage and strandline style high grades in several areas of the Poiombo target, Poiombo also represents an important high priority target for additional aircore drilling.

#### **Koko East Target Results**

The second best mineral assemblage result overall for this Qemscan batch is from the area defined as Koko East, immediately east of the Koko Massava Mineral Resource (1.423Bt @ 5.2% THM; refer ASX Announcement 22 April, 2020), from sample CCKE02 and related to auger hole 20CCHA195 (average 4.24% THM). This sample CCKE02 contains 50.45% ilmenite plus leucoxene, 1.93% zircon and 0.84% rutile. This Koko East sample is significantly better than the average Koko Massava Mineral Resource mineral assemblage data.

#### In Conclusion

Overall, the new mineral assemblage results demonstrate a better value assemblage occuring to the eastern side of the tenements, further from the Limpopo River valley and significantly better than that reported for the Koko Massava Mineral Resource. This important observation will be used as another prioritisation parameter in exploration targeting going forward and will be used to drive the selection of additional mineral assemblage samples. A further hypothesis, yet to be tested, is that assemblage testing on identified strandline drill hole assays may reflect better grade mineralogy.

Given the significant results returned for the sample CSNH03, the Company has already required that the laboratory repeat the test, which was completed successfully. In addition, the Company has prepared a duplicate sample for validation testing with the next batch of Qemscan samples described below.



A further batch of 16 composite samples for mineral assemblage characterisation obtained from the reconnaissance auger drilling, has been prepared and will also be analysed by Qemscan at CSIRO in the first half of August. These samples are related to Zulene, Saia and Viaria targets on the Corridor South (6621L) tenement.

Samples will also be selected from very high grade intersections in aircore drillholes completed at Poiombo target in March 2020 to determine relative assemblage value there.

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570000 575000 580000 565000 7260000 7260000 HA192 Koko East HA195 4 24 7255000 7255000 19CCHA040 66201 8 Chegua 0 6621L Bungane 7250000 7250000 A046 3 Nhacutse A286 6.33 7245000 7245000 3.78 66211 HA24 HA241 4.16 HA254 5.48 Paiombo Village boundary Radiometric geophysical anomaly Magnetic geophysical anomaly 580000 565000 570000 575000 Corridor projects auger drillhole location map showing holes used for mineral assembalge composite samples reported end July, 2020. Hand Auger Drillholes Avg of downhole LAB THM% 5\_Zulene = Target Name <1.00% Poiombo airstrip 1.00 - 3.00 Tenement Boundary 3.00 - 5.00 2 Main Roads >5.00% • Kilometers Creeks / Rivers Avg Lab THM% Hole\_ID Coloured base layer is Digital Terrain Model Datum WGS84 Z36S

**Figure 2:** Location map of auger holes used for the composite samples related to mineral assemblage results reported herein.

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**Table 1A:** Summary results for bulk mineral assemblage of composite samples created from heavy mineral concentrates derived from reconnaissance auger drillholes on the Corridor projects (6620L & 6621L).

BULK MINERALOGY ANALYSIS – SIMPLIFIED MINERAL LIST								
Sample	CCKE01	CCKE02	CSBN01	CSBN02	CSNH01	CSNH02	CSNH03	CSNH04
Related auger hole	20CCHA192	20CCHA195	19CSHA044	19CSHA046	19CSHA048	19CSHA064	19CSHA067	20CSHA286
MINERAL OR PHASE	Mass %							
Rutile	0.72	0.84	0.89	0.66	0.84	0.87	2.17	0.92
Ilmenite/Leucoxene	33.85	50.45	40.59	33.55	41.30	38.95	68.29	35.67
Low Ti Ilmenite/Titanomagnetite Intermediate	9.82	5.27	8.28	8.83	10.21	9.42	0.14	10.03
Titanomagnetite	18.06	7.36	14.71	20.93	20.65	19.68	0.08	22.49
Chromite	4.83	5.66	5.03	4.43	4.44	4.49	8.07	4.33
Zircon	1.12	1.93	1.51	1.4	1.44	1.26	2.91	1.56
Others	31.60	28.49	28.99	30.20	21.12	25.33	18.34	25.00

Note: ilemenite = altered ilmenite+ilmenite+lowTi ilmenite; altered ilmenite =  $55 \le Mass \%(TiO2) < 70$ ; ilmenite =  $43 \le Mass \%(TiO2) < 55$ ; lowTi ilmenite =  $30 \le Mass \%(TiO2) < 43$ ; owTi Ilmenite/titamagnetite ntermediate =  $20 \le Mass \%(TiO2) < 30$ ; leucoxene =  $70 \le Mass \%(TiO2) < 90$ ; rutile =  $Mass \%(TiO2) \ge 90$ .

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BULK MINERALOGY ANALYSIS – SIMPLIFIED MINERAL LIST								
Sample	CSPM02	CSPM03	CSPM04	CSPM05	CSPM06	CSPM07	CSRC01	CSRC02
Related auger hole	20CSHA228	20CSHA230	20CSHA241	20CSHA245	20CSHA251	20CSHA254	19CCHA040	20CSHA215
MINERAL OR PHASE	Mass %							
Rutile	0.73	0.74	0.68	0.72	0.75	0.8	0.87	0.7
Ilmenite/Leucoxene	38.55	35.96	37.52	41.29	46.50	42.85	43.61	34.15
Low Ti Ilmenite/Titanomagnetite Intermediate	9.32	9.83	8.13	9.26	9.05	8.64	8.13	9.34
Titanomagnetite	19.21	23.32	20.57	18.93	18.42	17.39	14.68	18.86
Chromite	3.75	3.83	4.24	4.15	5.34	4.49	5.05	3.79
Zircon	1.36	1.18	1.54	1.37	1.78	1.62	1.70	1.56
Others	27.08	25.14	27.32	24.28	18.16	24.21	25.96	31.60

Note: ilemenite = altered ilmenite+ilmenite+lowTi ilmenite; altered ilmenite =  $55 \le Mass \%(TiO2) < 70$ ; ilmenite =  $43 \le Mass \%(TiO2) < 55$ ; lowTi ilmenite =  $30 \le Mass \%(TiO2) < 43$ ; owTi Ilmenite/titamagnetite ntermediate =  $20 \le Mass \%(TiO2) < 30$ ; leucoxene =  $70 \le Mass \%(TiO2) < 90$ ; rutile =  $Mass \%(TiO2) \ge 90$ .

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#### **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.

-ENDS-

Authorised by the Board of MRG Metals Ltd

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# **Appendix 1**

# JORC Code, 2012 Edition – Table 1

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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 has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>A sample of sand, approximately 20g, was scooped from the sample bag of each sample interval for wet panning and visual estimation.</li> <li>The same sample mass is used for every pan sample visual estimation.</li> <li>The consistent sized pan sample is to ensure visual calibration is maintained for consistency in percentage visual estimation of total heavy mineral (THM).</li> <li>Geotagged photographs are taken of each panned sample with the corresponding sample bag to enable easy reference at a later date</li> <li>The larger 1.5m interval auger drill samples were homogenized prior to being grab sampled for panning.</li> <li>The large 1.5m drill samples have an average of about 4kg and were split down in Mozambique to approximately 300-600g by riffle splitter for export to the Primary processing laboratory.</li> <li>At the laboratory the 300-600g laboratory sample was dried and split to 100g, de-slimed (removal of -45µm fraction) and oversize (+1mm fraction) removed, then subjected to heavy liquid separation using TBE to determine total heavy mineral (THM) content.</li> <li>Composite samples for Qemscan mineral assemblage analysis were created from the heavy mineral concentrates (HMC) from each of the sample intervals in selected auger holes. Each composite relates to a single auger hole.</li> <li>Each HMC was split with a Jones micro-riffle splitter and combined with the other splits from a single hole and combined to create the composite sample.</li> <li>Composite samples have an average of 15g and were prepared by Diamantina Laboratories.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Hand Auger drilling is a manual hand operated system produced by Dormer Engineering in Australia.</li> <li>Drill rods and drill bits are 1m long.</li> <li>The auger is a 62mm open hole drilling technique.</li> <li>All holes have been drilled vertically.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>The drilling onsite is governed by a Hand Auger Drilling Guideline to ensure consistency in application of the method.</li> <li>A wooden surface collar is placed on the ground at the beginning of each hole to prevent widening of the collar and material falling into the hole.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Auger drilling is considered to be an early stage relatively unsophisticated technique of drilling.</li> <li>The auger drill used is an open hole method and recovery of sample extracted from the holes is measured by spring balance at the drill site.</li> <li>Samples are consistently collected at 1.5m intervals.</li> <li>No significant losses of auger sample were observed due to the shallow depths of drilling (&lt;12m).</li> <li>The initial 0–1.5m interval in each auger hole is drilled with care to maximize sample recovery.</li> <li>There is potential for contamination in open hole drilling techniques but sample bias is not likely due to the shallow drill hole depths.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The 1.5m auger drill intervals were logged onto paper field log sheets prior to transcribing into a Microsoft Excel spreadsheet.</li> <li>The auger samples were logged for lithology, colour, grainsize, rounding, sorting, estimated %THM, estimated %slimes and any relevant comments, such as slope and vegetation.</li> <li>Geological logging is governed by a Hand Auger Drilling Guideline with predefined log codes and guidance of what to include in log fields to ensure consistency between individuals logging data.</li> <li>Data is backed-up each day at the field base to a cloud storage site.</li> <li>Data from the Microsoft Excel spreadsheets is imported into a Microsoft Access database and the data is subjected to numerous validation queries to ensure data quality.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in</li> </ul>	<ul> <li>The 1.5m drill sample composites were homogenized at the drill site and then cone-and-quarter split onsite and inserted into clean calico sample bags with metal sample tag according to the Hand Auger Drilling Guideline.</li> <li>At the field base, the samples were homogenized within the calico bag by rotating it and then fed through a single tier riffle splitter that is placed on a hard surface and leveled, to reduce samples to 300-600g sub-samples for export to the Primary processing laboratory.</li> <li>The 300-600g sub-sample is deposited into a new labeled calico</li> </ul>

Criteria	JORC Code explanation	Commentary
	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.	<ul> <li>sample bag with metal sample tag and prepared to be sent to the Primary laboratory for analysis.</li> <li>Where samples were wet when sampled, they were dried in clean plastic basins prior to riffle splitting.</li> <li>All of the samples collected have been sand or silty-sand and the preparation techniques are considered appropriate for this sample type.</li> <li>The sample sizes were deemed suitable based on industry experience of the geologists involved and consultation with laboratory staff.</li> <li>Field duplicates of the samples were completed at a rate of 5%, or at a frequency of approximately 1 per 25 primary samples.</li> <li>Standard Reference Material (SRM) samples are inserted into the sample stream in the field at a frequency of 1 per 50 samples.</li> <li>Employees undertaking the primary sampling and splitting are closely monitored by a geologist to ensure sampling quality is maintained.</li> <li>For preparation of Qemscan composite samples each HMC for each sample interval was split with a Jones micro-riffle splitter and combined with the other splits from a single hole and combined to create the composite sample.</li> <li>Composite samples have an average of 15g and range 10-21g and were prepared by Diamantina Laboratories.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The wet panning of samples provides an estimate of the %THM content within the sample which was sufficient for the purpose of determining approximate concentrations of THM.</li> <li>The field derived visual panned THM estimates are compared to a range of laboratory derived THM images of pan concentrates. This allows the field geologists to calibrate the field panned visual estimated THM with known laboratory measured THM grades.</li> <li>Sink-Float Laboratory Analysis Methodology</li> <li>The individual 300-600g auger sub-samples were sent to Western GeoLabs in Perth, Western Australia, which is considered the Primary laboratory.</li> <li>The 300-600g auger samples were first oven dried, disaggregated to break up any clay balls, and riffle split to 100g sub-samples. They were then wetted and attritioned and screened for removal and determination of Slimes (-45µm) and Oversize (+11mm) contents.</li> </ul>

Critoria	IOPC Code explanation	Commontary
Criteria	JURC Code explanation	<ul> <li>contretienty content by heavy liquid separation (HLS).</li> <li>The laboratory used TBE as the heavy liquid medium for HLS – with density 2.95 g/ml, measured daily.</li> <li>This is an industry standard technique for HLS to determine THM in HMS exploration.</li> <li>Field duplicates of the auger samples were collected at a frequency of 1 per 25 primary samples and submitted 'blind' to the Primary laboratory with the field sample batch.</li> <li>Western GeoLabs completed its own internal QA/QC checks that included laboratory repeats every 10th sample prior to the results being released.</li> <li>Analysis of the Company and laboratory QA/QC samples show the laboratory data to be of acceptable accuracy and precision.</li> <li>The adopted QA/QC protocols are acceptable for this stage test work.</li> </ul>
		QEMSCAN Laboratory Analysis Methodology
		<ul> <li>The Qemscan analyses were conducted at the CSIRO Mineral Research Centre, Waterford, Perth, Western Australia.</li> <li>Qemscan is the Quantitative Evaluation of Minerals by Scanning Electron Microscopy. It is an integrated system comprising scanning electron microscope and energy dispersing spectrometer and software for data collection.</li> <li>Qemscan is now routinely used for determination of bulk mineral assemblage for heavy mineral sand samples.</li> <li>Polished sections were prepared for each of the composite samples.</li> <li>Particle type definition is shown in the table below:</li> </ul>
		Particle Type Definitions
		Particle Type Definition
		Rutile Area%(FeTiO phases)> 80 & Mass %(TiO <sub>2</sub> ) ≥ 90
		Leucoxene Area%(FeTiO phases)> 80 & 70 ≤ Mass %(TiO <sub>2</sub> ) < 90
		Altered Ilmenite         Area%(FeTiO phases)>80 & 55 ≤ Mass %(TiO2) < 70
		Ilmenite         Area%(FeTiO phases)> 80 & 43 ≤ Mass %(TiO <sub>2</sub> ) < 55
		Low I i Imenite Area% (FeTiO phases)> 80 & 30 ≤ Mass % (TiO <sub>2</sub> ) < 43
		Lowii iimenite/ iiamagnetite intermediate Area%(re iiu) pnases)> 80 & 20 ≤ Mass %(ii0 <sub>2</sub> ) < 30
		Ti Silica Area%(TiO_2 Silicate Intergrowth)>80
		Garnet Area%(Garnet)>80

Criteria	JORC Code explanation	Commentary	
ontonia		Zircon	Area%/Zircon)>80
		Kvanite/Sillimanite	Area%(Kvanite)>80
		Chromite	Area%(Chromite)>80
		FeOxide	Area%(FeOxide)>80
		Monazite	Area%(Monazite)>80
		Quartz	Area%(Quartz)>80
		Staurolite	Area%(Staurolite)>80
		Tourmaline	Area%(Tourmaline)>80
		Other Silicates	Area%(Clavs) +Area%(Ee Silicates + Area%(Other Silicates)) >80
		Others	All other particles
		The CSIRO laboratory internal systems and p	uses QAQC standards based on their processes and industry standards.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Selected visual estimate Geologist.</li> <li>Significant visual estimate Geologist. This is done of the pan sample.</li> <li>The Chief Geologist male check on process and pressort auger drilling technique.</li> <li>The field data has been Excel spreadsheet which exploration program. Date database where it is sub</li> <li>Test work has not yet be check the veracity of the planned as part of the Car A process of laboratory of undertaken to identify er</li> <li>Field and laboratory dup each batch are plotted to correctness before provisities (Company internally for the Company internally for the company internal for the company internal for the company internal for the company inter</li></ul>	d THM field data are checked by the Chief ted THM >5% are verified by the Chief either in the field or via field photographs of tess regular visits to the field drill sites to cocedure. been completed due to the early nature of the manually transcribed into a master Microsoft is appropriate for this early stage in the ta is then imported into a Microsoft Access jected to various validation queries. Then undertaken at a Secondary laboratory to Primary laboratory data. This work is company's standard QA/QC procedure. data validation using mass balance is try errors or questionable data. licate data pairs (THM/oversize/slime) of o identify potential quality control issues. checked by the CSIRO laboratory for sion to the Company, and then checked by or obvious issues and outlier results.
Location of data points	<ul> <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>Downhole surveys for sh very shallow nature.</li> <li>A handheld 16 channel ( of the auger holes in the</li> <li>The handheld Garmin G</li> <li>The datum used for coordination of the super statement of the super statemen</li></ul>	allow auger holes are not required due to the Garmin GPS was used to record the positions field. PS has an accuracy of +/- 5m.

Criteria	JORC Code explanation	Commentary
		<ul> <li>The accuracy of the drillhole locations is sufficient for this early stage exploration.</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 Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Auger holes were typically drilled at 250m, 500m and 1000m between hole stations and 500m between station lines for reconnaissance drilling.</li> <li>The reconnaissance auger hole spacing was systematic and hole locations were designed to test for heavy mineral sand mineralisation related to geophysical anomalism.</li> <li>The data has not been used for resource estimation.</li> <li>Auger holes used for Qemscan composite sample preparation were selected on the basis of variation in average downhole THM% grade 3-5% and &gt;5%, as well as a broad geographic distribution across the respective targets.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The auger drilling was placed as perpendicular as possible on lines cutting the geophysical anomalies obtained from an airborne survey undertaken by the Company during April 2019.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Auger samples remain in the custody of Company representatives until they are transported to Maputo for final packaging and securing.</li> <li>The Company uses a commercial shipping company, Deugro or DHL, to ship samples from Mozambique to Perth.</li> <li>The Company dispatched these hand auger samples to Western GeoLabs in Perth for heavy liquid separation analysis.</li> <li>Western GeoLabs is a dedicated and specialist heavy sand analysis laboratory.</li> <li>A Company representative delivered the HMC samples to Diamantina Laboratories for preparation of composites.</li> <li>Composite samples were transported from Diamantina Laboratories to CSIRO laboratory by commercial courier.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul><li>Internal data and procedure reviews are undertaken.</li><li>No external audits or reviews have been undertaken.</li></ul>

# Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The exploration work was completed on the Corridor South tenement (6621L) which is 100% owned by the Company through its 100% ownership of its subsidiary, Sofala Mining &amp; Exploration Limitada, in Mozambique.</li> <li>All granted tenements have initial 5 year terms, renewable for 3 years. An application for renewal of tenement 6621L was submitted in 23 September 2019 and is under review. Additional supporting information was requested by the Ministry of Mineral Resources on 14 April 2020 and this was submitted by the Company on 29 April, 2020.</li> <li>Traditional landowners and village Chiefs within the areas of influence were consulted prior to the auger programme and were supportive of the programme.</li> <li>An Environment Management Plan was prepared by an independent consultant and submitted to the Provincial Directorate of Lands, Environment and Rural Development in accordance with Mining Law and Regulations.</li> <li>An Environmental License has been obtained by the Company.</li> <li>Representatives from the Provincial Directorate of Mineral Resources and Directorate of Lands, Environment and Rural Development and Rural Development, and District Planning and Infrastructure Departments are also part of the consent and consultation process.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historic exploration work was completed by Corridor Sands Limitada, a subsidiary of Southern Mining Corporation and subsequently Western Mining Corporation, in 1999. BHP-Billiton acquired Western Mining Corporation and undertook a Bankable Feasibility Study of the Corridor Deposit 1 about 15km north of the Company's tenements.</li> <li>The Company has obtained digital data in relation to this historic information.</li> <li>The historic data comprises limited Aircore/Reverse Circulation drilling.</li> <li>The historic results are not reportable under JORC 2012.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Two types of heavy mineral sand mineralisation styles are possible along coastal Mozambique:</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ol> <li>Thin but high grade strandlines which may be related to marine or fluvial influences, and</li> <li>Large but lower grade deposits related to windblown sands.</li> <li>The coastline of Mozambique is well known for massive dunal systems such as those developed near Inhambane (Rio Tinto's Mutamba deposit), near Xai Xai (Rio Tinto's Chilubane deposit) and in Nampula Province (Kenmare's Moma deposit). Buried strandlines are likely in areas where palaeoshorelines can be defined along coastal zones.</li> </ol>
Drill hole Information	<ul> <li>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: <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>Summary bulk mineral assemblage information is presented within Table 1 of the main body of text of this announcement.</li> </ul>
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.	<ul> <li>No cut-offs were used in the downhole averaging of THM results.</li> <li>The visual estimated THM% averaging is grade-weighted.</li> <li>An example of the THM data averaging is shown below.</li> </ul>
Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used	HOLE_ID FROM TO PCT VIS Average Average THM visTHM visTHM	
	for such aggregation should be stated and some typical examples of	19CCAC104 0.0 3.0 6.0
	such aggregations should be shown in detail.	19CCAC104 3.0 6.0 6.0
	<ul> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	19CCAC104 6.0 9.0 6.0
<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated</li> </ul>	19CCAC104 9.0 12.0 8.0	
	Should be clearly stated.	19CCAC104 15.0 18.0 6.6 4 E
		19CCAC104 18.0 21.0 5.5 C
		19CCAC104 21.0 24.0 8.0
		19CCAC104 24.0 27.0 4.0 0
		19CAC104 27.0 30.0 2.5
		19CCAC104 33.0 36.0 1.7
		19CCAC104 36.0 37.5 1.5

Criteria	JORC Code explanation	Commentary
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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Auger holes are thought to represent close to true thicknesses of the mineralisation.</li> <li>Downhole widths are reported.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Figures are displayed in the main text.</li> </ul>
Balanced reporting	<ul> <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>A summary of the Qemscan laboratory data is presented in Table 1 of the main part of the announcement.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>No other material exploration information has been gathered by the Company.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg 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>Further work will include additional auger drilling and sampling, infill auger sampling and heavy liquid separation analysis.</li> <li>High quality targets generated from reconnaissance work are planned to be drilled with aircore techniques.</li> <li>Further mineral assemblage analyses by Qemscan will be undertaken on suitable composite HMC samples to determine valuable heavy mineral components.</li> <li>Metallurgical test work is underway on a bulk sample from the Koko Massava deposit on tenement 6620L. This work will determine product suite, product quality and product yields.</li> </ul>