

#### **ASX ANNOUNCEMENT**

31 AUGUST 2020

LABORATORY CONFIRMATION OF THE EXCEPTIONAL NHACUTSE VHM ASSEMBLAGE RESULT; NEW HIGH VALUABLE HEAVY MINERAL (VHM) ASSEMBLAGE RESULTS AND NEW DRILL TARGETS IDENTIFIED

#### **Key Highlights**

- Duplicate sample results returned from the significant eastern Nhacutse sample, CSNH03, confirmed previously reported exceptional results of 68.82% VHM including 63.84% ilmenite+leucoxene, 2.92% zircon and 2.06% rutile.
- Zulene target returned high quality mineral assemblage with combined ilmenite+leucoxene content up to 49.16%, together with 2.18% zircon.
- New data from central Nhacutse area returned ilmenite+leucoxene up to 45.45% and 1.77% zircon.
- Nhacutse and Zulene continue to demonstrate that substantially higher value mineralogy than previously reported, exists within the Corridor Tenements, highlighting the importance of upcoming drilling programs.
- Ilmenite+leucoxene of 44.33% returned from Viaria target, including 2.35% zircon Viairia emerging as another high priority drill target.

MRG Chairman, Mr Andrew Van Der Zwan, said, "Firstly, we are pleased to confirm as correct, the exceptional VHM mineral assemblage result delivered recently at Nhacutse. The implications of this to unlocking enormous exploration potential in our Corridor tenements is significant.

From our recent metallurgy work at Koko Massava, we have developed confidence in producing a near 50% TiO2 concentrate, with a low cost capital requirement. However, with the mineralogy results recieved in this latest round of assemblage results, we now set ourselves a further goal to discover sands of high insitu value.

This can now be achieved through either higher overall THM grades of the average combined sand tested at Koko Massava, or finding sands of moderate THM grade that contain exceptional components similar to that found in Nhacutse, or obviously, a combination of both. Our upcoming drill program has been designed with the aim of achieving this goal and we look forward to reporting our results as the program progresses."



## Introduction

MRG Metals Limited ("the **Company**" or "**MRQ**") (ASX code: MRQ) is pleased to announce further important results for mineral assemblage characterisation by Qemscan analysis of 12 selected composite samples from the Corridor South (6621L) tenement. These new results extend the coverage of mineral assemblage data to the south covering the Zulene, Viaria, and Saia targets, plus additional data for Nhacutse.

Importantly, a duplicate sample (CSNH03C) of the important primary sample from the Nhacutse target, CSNH03 (refer announcement 31 July 2020), was processed and returned a very similar VHM result of 68.82% relative to the previous primary sample with VHM of 73.37%. Confirmation is therefore provided that was no field error, nor laboratory error and as such the result opens up significant exploration opportunity in the Corridor tenements.

The new results continue to demonstrate the robust and quality nature of the valuable heavy mineral (VHM) assemblage within the Corridor South project, with the best VHM result of 52.29% (sample CSZU01; Table 1) from the northwest end of the Zulene target. This best VHM result at Zulene comprises 49.16% ilmenite+leucoxene, 2.18% zircon and 0.94% rutile and is a significant result that supports the previous excellent VHM assemblage data of 73.37% for the Nhacutse target to the northeast of Zulene.

The composite samples used in mineral assemblage characterisation were prepared from heavy mineral concentrates derived from auger drilling and the data provide reconnaissance phase information on the VHM assemblage within the total heavy mineral (**THM**) concentrate. This data will be used to inform ranking and prioritisation of ongoing work programs.

#### **Zulene Target Results**

The most significant mineral assemblage data was returned for the northwest side of Zulene target (hole 20CSHA408; sample CSZU01), which has a combined ilmenite+leucoxene result of 49.16%, associated with 0.94% rutile, 2.18% zircon (Table 1) and 5.32% THM. The two other samples from Zulene were also significant, with VHM > 49%.

- Sample CSZU03 at Zulene, related to auger hole 20CSHA417 with average 4.91% THM, contains 46.92% ilmenite+leucoxene, together with 1.01% rutile and 2.09% zircon. This sample is located at the southeast end of the Zulene target (Figure 1).
- Sample CSZU02 (hole 20CSHA413) at Zulene also represents a significant result, with 46.50% ilmenite+leucoxene, associated with 1.21% rutile and 1.74% zircon. The auger



hole (20CSHA413) which this sample is related to is located in the centre of the Zulene target (Figure 1) and has an average THM grade of 6.30%.

The good ilmenite+leucoxene content >46%, particularly for sample CSZU01 (49.16%), across a broad area of at least 4.5km at Zulene target is very encouraging.

### **Viaria Target Results**

Mineral assemblage data for the Viaria target are also very positive, with all of the samples yielding >41% ilmenite+leucoxene.

- Sample CSVR01, which correlates with auger hole 20CSHA425 (4.52% THM), is from the southeast edge of the target and contains 44.33% ilmenite+leucoxene, together with 0.91% rutile and 2.35% zircon (Figure 1 and Table 1).
- Sample CSVR03 at Viaria relates to auger hole 20CSHA433 (average 3.59% THM) and contains 43.27% ilmenite+leucoxene and is located just outside and southeast of the interpreted limit of the target. This sample CSVR03 has corresponding rutile and zircon of 1.03% and 2.16%, respectively.

This good mineral assemblage at Viaria extends over a very broad area at least 3.8km from the northwest end to beyond the southeast end of the interpreted target limit.

#### **Nhacutse Target Results**

Additional new mineral assemblage results for the central portion of the Nhacutse target show the majority of samples have VHM >42%, with a peak of 48.05% in sample CSNH08 (Table 1).

The best mineral assemblage result for this new Nhacutse data is from sample CSNH08 and is related to auger hole 20CSHA363 (6.31% THM). This sample contains 45.45% ilmenite+leucoxene, 1.77% zircon and 0.83% rutile. Sample CSNH06 relates to auger hole 20CSHA288 with 5.98% THM, and is also important in terms of assemblage with 40.16% ilmenite+leucoxene plus 0.75% rutile and 1.62% zircon.

On the basis that the primary mineral assemblage sample CSNH03 previously reported (refer ASX announcement 31 July 2020) had a significant VHM of 73.37%, a duplicate sample (CSNH03C) was prepared with this new batch of samples and submitted for analysis. The results for this duplicate sample CSNH03C (Table 1) provided very similar results of 63.84% ilmenite+leucoxene (cf. 68.29% for CSNH03), 2.06% rutile (cf. 2.17% for CSNH03), 2.92% zircon (cf. 2.91% for CSNH03) and 0.07% titanomagnetite (cf. 0.08% for CSNH03).



Importantly for the Nhacutse target, half of the mineral assemblage samples show ilmenite+leucoxene of >40% within the THM, with a peak of 68.29% for the eastern sample CSNH03.

#### **Saia Target Results**

Only one sample (CSSA01; hole 20CSHA399) was analysed for the Saia target due to its relatively small surface footprint and it yielded a VHM result of 41.06%. The VHM for this sample can be broken down to 38.49% ilmenite+leucoxene, 0.90% rutile and 1.67% zircon (Table 1 and Figure 1).

## **Results Summary**

In general, the new mineral assemblage results continue to demonstrate a better value mineral assemblage occurs to the east side and also to the south end of the Corridor South tenement further from the Limpopo River valley. This important observation is being used as another prioritisation filter in exploration targeting and is being used to drive the selection of additional mineral assemblage samples for the third batch. It is also being used in the prioritisation of aircore drilling scheduled to commence in late August, 2020.

Samples have now been selected from the deep aircore drillholes completed at Poiombo target in March 2020 to determine relative mineral assemblage value of the very high grade THM intersections there.

## **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. Each composite sample relates to a single auger hole. Samples were submitted to CSIRO Minerals Research Centre, Perth, for Qemscan 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 mineralogy, particle maps, particle liberation and particle size.

Qemscan is the Quantitative Evaluation of Minerals by Scanning Electron Microscopy. It 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 Zulene, Nhacutse, Viaria, and Saia targets.

Bulk mineral assemblage data for the 12 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 from all of the targets ranges from 37.56%–63.84%, with an average of 44.74%. The rutile content ranges 0.75%–2.06%, with an average 1.01%; and zircon content ranges 1.42–2.92%, with an average 1.96%.

The titanomagnetite content overall ranges 0.07%–21.75%, with an average of 16.49%.



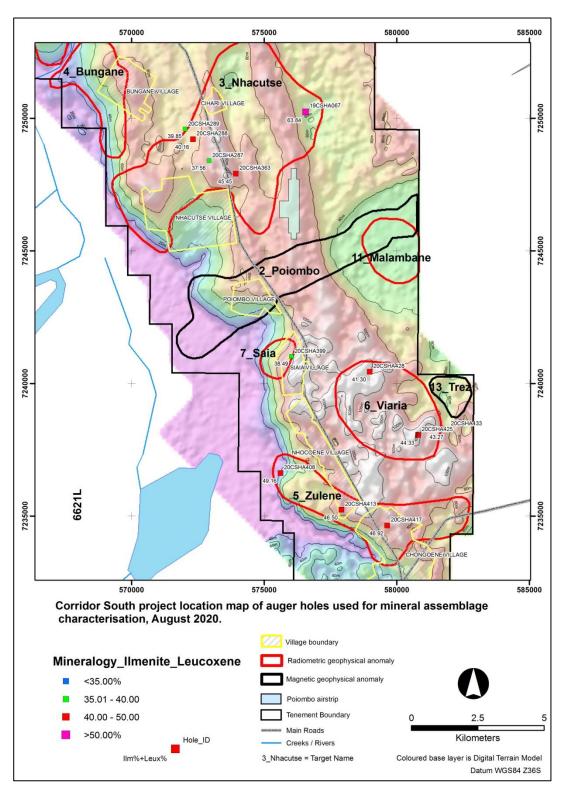


Figure 1: Location map of auger holes on the Corridor South project used for the composite samples related to mineral assemblage results reported herein, showing ilmenite (all species)+leucoxene as a portion of total heavy mineral.



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

	BULK MINERALOGY ANALYSIS – SIMPLIFIED MINERAL LIST							
Composite Sample ID	CSNH03C	CSNH05	CSNH06	CSNH07	CSNH08	CSSA01	CSZU01	CSZU02
Related auger hole ID	19CSHA067	20CSHA287	20CSHA288	20CSHA289	20CSHA363	20CSHA399	20CSHA408	20CSHA413
MINERAL OR PHASE	Mass %	Mass %	Mass %	Mass %	Mass %	Mass %	Mass %	Mass %
Rutile	2.06	0.76	0.75	0.94	0.83	0.90	0.94	1.21
Ilmenite/Leucoxene	63.84	37.56	40.16	39.85	45.45	38.49	49.16	46.50
Low Ti Ilmenite/Titanomagnetite Intermediate	0.12	10.49	10.93	10.68	9.43	7.92	6.76	7.40
Titanomagnetite	0.07	21.29	21.23	21.75	19.78	16.70	15.33	15.19
Chromite	8.07	4.28	4.43	3.74	4.90	4.41	4.95	4.73
Zircon	2.92	1.42	1.62	1.91	1.77	1.67	2.18	1.74
Others	22.92	24.20	20.87	21.13	17.83	29.91	20.67	23.22

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

Table 1B – continued from Table 1A.

BULK MINERALOGY ANALYSIS – SIMPLIFIED MINERAL LIST					
Composite Sample ID	CSZU03	CSVR01	CSVR02	CSVR03	
Related auger hole ID	20CSHA417	20CSHA425	20CSHA428	20CSHA433	
MINERAL OR PHASE	Mass %	Mass %	Mass %	Mass %	
Rutile	1.01	0.91	0.80	1.03	
Ilmenite/Leucoxene	46.92	44.33	41.30	43.27	
Low Ti Ilmenite/Titanomagnetite Intermediate	7.83	7.05	8.53	7.84	
Titanomagnetite	15.57	16.30	17.59	17.12	
Chromite	3.86	4.29	4.40	4.32	
Zircon	2.09	2.35	1.73	2.16	
Others	22.71	24.77	25.66	24.27	

Note: ilmenite = altered ilmenite+ilmenite+lowTi ilmenite; altered ilmenite =  $55 \le Mass \%(TiO2) < 70$ ; ilmenite =  $43 \le Mass \%(TiO2) < 55$ ; lowTi ilmenite =  $30 \le Mass \%(TiO2) < 43$ ; lowTi ilmenite/titamagnetite intermediate =  $20 \le Mass \%(TiO2) < 30$ ; leucoxene =  $70 \le Mass \%(TiO2) < 90$ ; rutile =  $43 \le Mass \%(TiO2) < 43$ ; lowTi ilmenite/titamagnetite intermediate =  $20 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene =  $43 \le Mass \%(TiO2) < 30$ ; leucoxene = 4



# **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 to create the composite sample.</li> <li>Composite samples have an average of 17g 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> </ul>

Crite	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</li> </ul>
		<ul> <li>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 to create the composite sample.</li> <li>The Field Duplicates, Lab Duplicates and SRM samples were excluded from the sample selection for composite samples to ensure representivity.</li> <li>Composite samples have an average of 17g and range 10-25g and</li> </ul>
assa and	make and model, reading times, calibrations factors applied and their derivation, etc.	<ul> <li>were prepared by Diamantina Laboratories.</li> <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> </ul>
	<ul> <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>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</li> </ul>

Criteria	JORC Code explanation	Commentary	
Officia	Corro code explanation	were then wetted and attritioned and screened for removal and	d
		determination of Slimes (-45µm) and Oversize (+1mm) contents.	
		` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
		The +45um-1mm sample fraction was then analysed for THM%	%
		content by heavy liquid separation (HLS).	
		<ul> <li>The laboratory used TBE as the heavy liquid medium for HLS – vidensity 2.95 g/ml, measured daily.</li> </ul>	– with
		<ul> <li>This is an industry standard technique for HLS to determine THN HMS exploration.</li> </ul>	HM in
		<ul> <li>Field duplicates of the auger samples were collected at a frequer of 1 per 25 primary samples and submitted 'blind' to the Primary laboratory with the field sample batch.</li> </ul>	•
		<ul> <li>Western GeoLabs completed its own internal QA/QC checks tha included laboratory repeats every 10th sample prior to the results being released.</li> </ul>	
		<ul> <li>Analysis of the Company and laboratory QA/QC samples show the company and laboratory quality quality quality and laboratory quality qual</li></ul>	w the
		laboratory data to be of acceptable accuracy and precision.	Wille
			باسمينية
		<ul> <li>The adopted QA/QC protocols are acceptable for this stage test</li> </ul>	est work.
		QEMSCAN Laboratory Analysis Methodology	
		The Qemscan analyses were conducted at the CSIRO Mineral	al
		Research Centre, Waterford, Perth, Western Australia.	
		<ul> <li>Qemscan is the Quantitative Evaluation of Minerals by Scanning</li> </ul>	ing
		Electron Microscopy. It is an integrated system comprising scan	anning
		electron microscope and energy dispersing spectrometer and	_
		· · · · · · · · · · · · · · · · · · ·	1
		software for data collection.	
		<ul> <li>Qemscan is now routinely used for determination of bulk mineral assemblage for heavy mineral sand samples.</li> </ul>	eral
		<ul> <li>Polished sections were prepared for each of the composite sam</li> </ul>	amnlae
			ampies.
		<ul> <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 %(TiO₂) < 90	
		Altered Ilmenite Area%(FeTiO phases)> 80 & 55 ≤ Mass %(TiO₂) < 70	
		Ilmenite	
		Low I limenite / Titamagnatite Intermediate Area/(Earlin phases) 9 0 & 30 S Mass 5/(1102) < 45	

LowTi Ilmenite/Titamagnetite Intermediate

Area%(FeTiO phases)> 80 & 20  $\leq$  Mass %(TiO<sub>2</sub>) < 30

Criteria	JORC Code explanation	Commentary	
		Ti Magnetite	Area%(Titanomagnetite)>80
		Ti Silica	Area%(TiO₂ Silicate Intergrowth)>80
		Garnet	Area%(Garnet)>80
		Zircon	Area%(Zircon)>80
		Kyanite/Sillimanite	Area%(Kyanite)>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%(Clays) +Area%(Fe Silicates + Area%(Other Silicates)) >80
		Others	All other particles
			atory uses QAQC standards based on their and 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 esting Geologist.</li> <li>Significant visual esting Geologist. This is do the pan sample.</li> <li>The Chief Geologist check on process at No twinned holes has auger drilling techniing.</li> <li>The field data has be</li> </ul>	mated THM field data are checked by the Chief timated THM >5% are verified by the Chief one either in the field or via field photographs of makes regular visits to the field drill sites to and procedure.  ave been completed due to the early nature of the que. een manually transcribed into a master Microsoft
		exploration program database where it is  Test work has not y check the veracity of planned as part of the second	which is appropriate for this early stage in the a. Data is then imported into a Microsoft Access subjected to various validation queries. Het been undertaken at a Secondary laboratory to afte the Primary laboratory data. This work is the Company's standard QA/QC procedure. Hory data validation using mass balance is a fy entry errors or questionable data. If duplicate data pairs (THM/oversize/slime) of the ded to identify potential quality control issues. He are checked by the CSIRO laboratory for provision to the Company, and then checked by ally for 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> </ul>	very shallow nature	nel Garmin GPS was used to record the position

Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	<ul> <li>The handheld Garmin GPS has an accuracy of +/- 5m.</li> <li>The datum used for coordinates is WGS84 zone 36S.</li> <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 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>	Summary bulk mineral assemblage information is presented within Table 1 of the main body of text of this announcement.
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No cut-offs were used in the downhole averaging of THM results.     The visual estimated THM% averaging is grade-weighted.     An example of the THM data averaging is shown below.    HOLE_ID

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>	Figures are displayed in the main text.
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 bulk mineralogy laboratory data is presented in Table 1A &amp; 1B 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>