ASX ANNOUNCEMENT

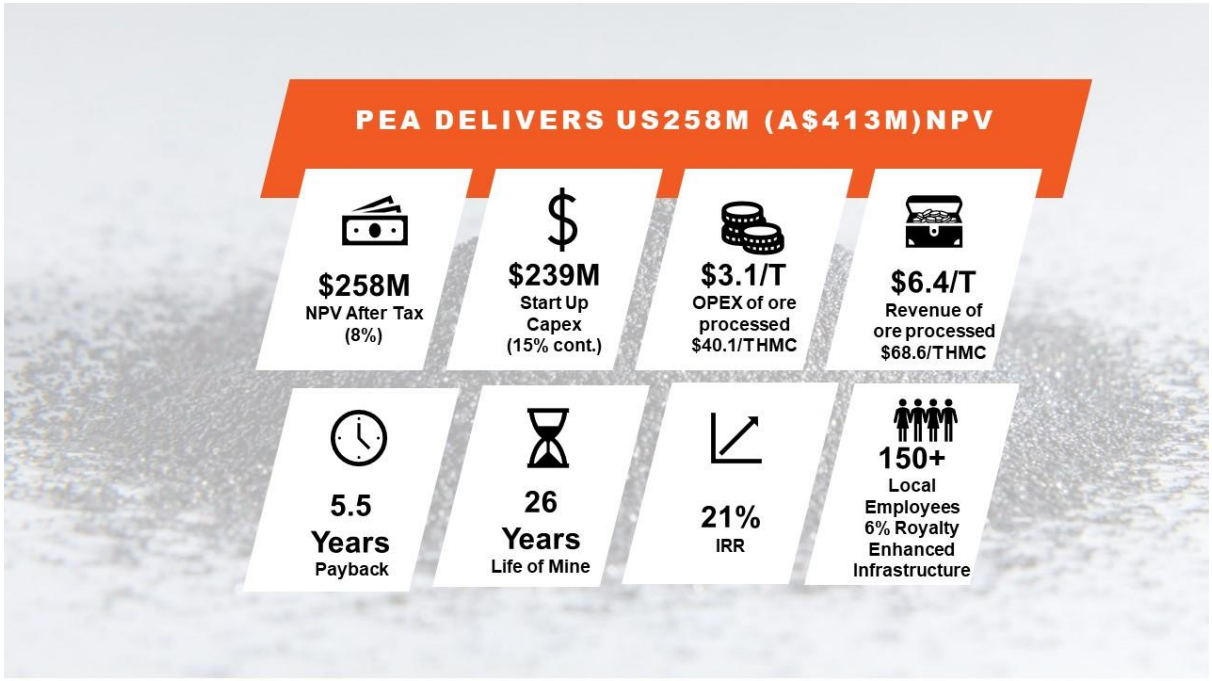
31 January 2023

MRG METALS DECEMBER 2022 QUARTERLY ACTIVITY REPORT

Key Highlights

Corridor Projects

- Scoping Study and Preliminary Economic Assessment (PEA) delivers significant net present value (NPV) at Corridor Sands Project



  - Significant NPV - A$413M relative to MRQ market capitalisation - A$8M (**refer ASX Announcement 3 November 2022**);
  - Significant potential to increase NPV in next stage(s);
  - Significant mine life of 26 years with excellent potential to expand;
  - Plant relocation in Year 14 to be reviewed in PFS stage, in light of likely resource growth and pit optimisation over next 12 months;
  - PFS stage to commence with focus on optimising metallurgical process to increase NPV;
  - Mining licence applications (MLAs) submitted for Corridor Central and Corridor South, licence numbers now 11142C and 11137C respectively, application in progress (**refer ASX Announcement 21 October 2022**).

- MRG follows up PEA with excellent aircore drilling results, including new discoveries with significantly better mineral assemblage at similar grade compared to the existing PEA material (45% VHM) identified at Azaria (72.4% VHM), Malambane (61.6% VHM), Cihari (58.1% VHM), Viaria (63.5% VHM) and Zulene (62.6% VHM) targets.
- Aircore drilling at Viaria and Zulene Targets in Corridor South (11137C) delivers very high VHM (Valuable Heavy Mineral) results with high THM (Total Heavy Mineral) results.
- 15 New aircore infill holes drilled in the Malambane Target in Corridor South (11137C) delivered excellent laboratory results showing 3 holes with >6% THM, 2 holes with 5-6% THM, 4 holes with 4-5% THM and 6 holes with 3-4% THM, all mineralised from surface.
- New aircore drilling delivers high mineralogy and high-grade assay results, confirming the new target "Cihari", located within the north-east of the Nhacutse deposit within Mining Licence Application (MLA) Corridor South (11137C).
- New aircore drilling delivers exceptional mineralogy and high-grade assay results confirming the new target, "Azaria", located just 3km east of Koko Massava deposit.
- MRG has submitted Mining Licence Applications (MLA's) over the Corridor Projects. Submissions for MLA's over MRG's Corridor Central (6620L) and Corridor South (6621L) HMS projects have been accepted by INAMI. MRG is working with INAMI to progress the 2 MLA's, which INAMI has re-numbered 11142C and 11137C respectively.

Marao Project

- Two of the first three aircore holes drilled into the Magonde target at the Marao Project have delivered very high Valuable Heavy Mineral (VHM) results in red sand from surface, averaging 60% VHM, corresponding to very high Total Heavy Mineral (THM) assays averaging 4.5% THM.
- One of these two holes, (22 MUAC003), previously assayed 27 metres @ 6.04% THM from surface (**refer ASX Announcement 21 July 2022**). This hole has now delivered corresponding VHM of 58.2% within the red sand portion of the hole, comprised of Ilmenite 47.6%, Altered Ilmenite 6%, Zircon 2.5%; Rutile 2%; Leucoxene 0.2%, as well as Titanomagnetite 15.1%.

Uranium & Rare Earth Element

- Successful submission of Exploration Licence Application (ELA) over a high potential Uranium (U) and Rare Earth Element (REE) project in Mozambique (**refer ASX Announcement 15 November 2022**).
- The Olinga ELA 11005 L is 19,148.72 Ha in size, situated approximately 890 km North-East of MRG's existing Heavy Mineral Sands (HMS) projects at Corridor Sands (Mining Licence Applications 11142 C and 11137 C) and 270 km Northeast of the port city of Beira. It is also 115 km East-Northeast of MRG's 3 new REE and U ELAs (**refer ASX Announcement 11 May 2022**).
- The project will explore a number of hard-rock U and REE targets associated with primary granitic sources and the contact between different age granites in high-grade metamorphic gneiss within the Mozambique Metamorphic Province.

Corporate

- Equity raising announced to raise approximately $2 million before costs through a:
    - Placement of fully paid ordinary shares, with 2 for 3 free attaching options, raised $0.84 million, and
    - 3 for 5 pro-rata non-renounceable entitlement offer of options to existing Shareholders to raise approximately $1.17 million, closed on 13 January 2023 raising $0.31 million. Shortfall of $0.86 million can be placed within three months.
    - Funds raised will largely be used to test the Company's high VHM Azaria and Cihari Targets and progress it Rare Earth Elements Project
- Placement of $840,000 resulted in the issue of 210,000,000 fully paid ordinary shares at $0.004 per share, together with 140,000,000 free attaching MRQO options, exercisable at $0.008 and expiring 31 December 2025, to sophisticated and professional investors.
- Entitlement Offer resulted in the issue of 312,682,557 MRQO options, exercisable at $0.008 and expiring 31 December 2025.
- Directors placed $60,000, after Shareholder approval on 13 January 2023. This resulted in the issue of 15,000,000 fully paid ordinary shares at $0.004 per share, together with 10,000,001 free attaching MRQO options, exercisable at $0.008 and expiring 31 December 2025.

MRG Metals Limited ("**MRG**" or "**the Company**") (ASX Code: MRQ) is pleased to provide a summary of the Company's activities for the December 2022 quarter.

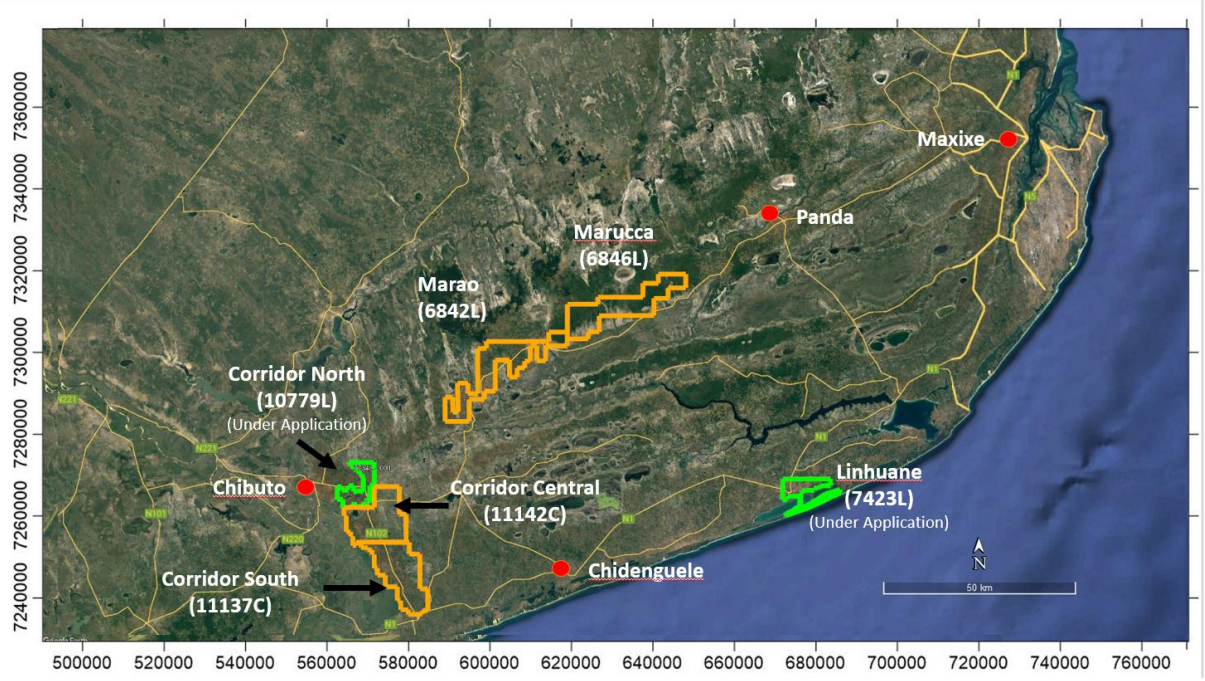


Figure 1: *Map of the location of the Corridor Central (11142C), Corridor South (11137C) and Marao (6842L) projects in relation to other MRG HMS licences.*

SCOPING STUDY AND PRELIMINARY ECONOMIC ASSESSMENT DELIVERS SIGNIFICANT NPV

During the quarter, the Company announced the results of the Scoping Study and Preliminary Economic Assessment by IHC Mining for the Corridor Central (11142C) and Corridor South (11137C) Projects (Figures 1 and 2), specifically the Koko Massava, Nhacutse and Poiombo deposits.

Cautionary Statement

The Scoping Study and Preliminary Economic Assessment referred to in this announcement has been undertaken to determine the potential viability of an open pit mine and ilmenite processing plant constructed onsite at the Corridor Sands project in Mozambique and to reach a decision to proceed with more definitive studies. The Scoping Study and Preliminary Economic Assessment has been prepared to an accuracy level of +30-35%. The results should not be considered a profit forecast or production forecast.

The Scoping Study and Preliminary Economic Assessment is a preliminary technical and economic study of the potential viability of the Corridor Sands project. In accordance with the ASX Listing Rules, the Company advises it is based on low-level technical and economic assessments that are not sufficient to support the estimation of Ore Reserves. Further evaluation work including infill drilling and appropriate studies are required before MRG Metals Ltd (MRG) will be able to estimate any Ore Reserves or to provide any assurance of an economic development case.

82% of the scheduled throughput over the first 11 years of production, at Nhacutse and Poiombo deposits, is in the Indicated Mineral Resource category, with 18% in the Inferred Mineral Resource category. 50% of the scheduled throughput over years 12 to 25 of production, at Koko Massava deposit, is in the Indicated Mineral Resource category, with 50% in the Inferred Mineral Resource category. The Company has concluded that it has reasonable grounds for disclosing a production target which includes a modest amount of Inferred material. However, MRG, in consultation with IHC Mining, intends to conduct infill drilling to increase the confidence of the Inferred Mineral Resources to Indicated Mineral Resources and to increase the confidence of the Indicated Mineral Resources to Measured Mineral Resources. There is a low level of geological confidence associated with Inferred Mineral Resources, and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The Scoping Study and Preliminary Economic Assessment is based on the material assumptions outlined elsewhere in the announcement. These include assumptions about the availability of funding. While MRG considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study and Preliminary Economic Assessment will be achieved.

To achieve the range of outcomes indicated in the Scoping Study Preliminary Economic Assessment, initial funding in the order of USD$239 million will likely be required. Investors should note that such funding may only be available on terms that dilute or otherwise affect the value of MRG's existing shares. Debt funding via offtake pre-funding will be investigated.

It is also possible that the Company could pursue other value realisation strategies such as a sole, partial sale or joint venture of the project. If it does, this could materially reduce the Company's proportionate ownership of the project.

The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a reasonable basis to expect it will be able to fund the development of the Project. Given the uncertainties involved, Investors should not make any investment decisions based solely on the results of the Scoping Study Preliminary Economic Assessment.

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC Modifying Factors, on which the production target and forecast financial information are based have been included in this ASX release.

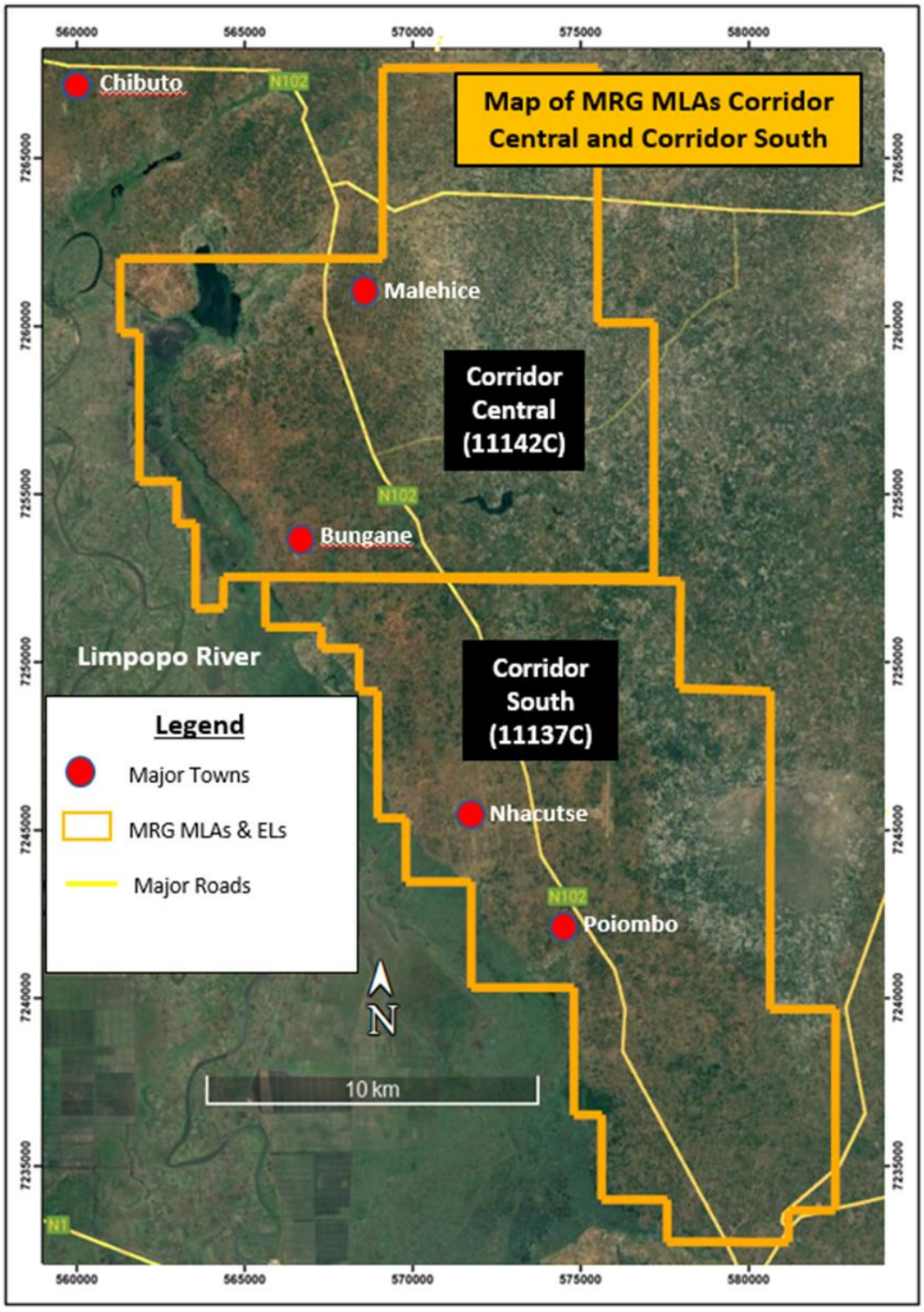


Figure 2: *Map of the MRG HMS Projects MLA's Corridor Central (11142C) and Corridor South (11137C), showing major roads and towns.*

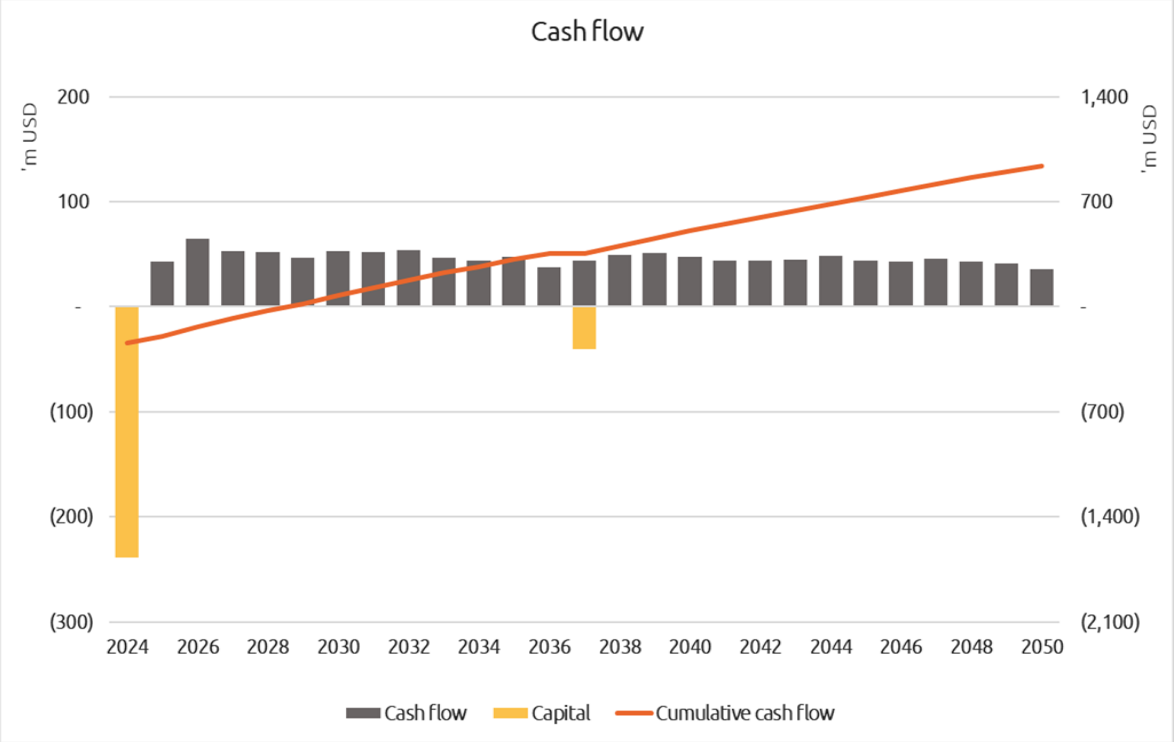


Figure 3: *Cash flow over the life of the project.*

Table 1: Scoping Study and PEA key economics summary

Corridor Sands Scoping Study Project Summary		
Mining Physics		
Total Mining Inventory	Mt	513
Contained THM	Mt	27.8
Average Grade	%	5.4
Mining Rate	Mtpa	19.7
Mine Life	Years	26
Pricing (Average life of mine)		
Titano-Magnetite	USD/t	90
Ilmenite	USD/t	256
Non mag	USD/t	320

Production		
Titano-Magnetite	ktpa	262
Ilmenite	ktpa	369
Non-mag	ktpa	48
Capital Expenditure		
CAPEX (start up capital)	USD M	239
Key Financial Metrics		
Revenue	$M	3262
	$/t Ore	6.4
	$/t HMC	139.6
Free cash flow (After tax)	$M	938
	$/t Ore	1.8
	$/t HMC	40.1
Cash costs	$M	-1603.3
	$/t Ore	-3.1
	$/t HMC	-68.6
CAPEX (including deferred)	$M	279
NPV (after-tax)	$M	258
IRR (after-tax)	%	21%
Payback (discounted, after-tax)	Year	5.5
Life of Mine	Years	26

Background

The Scoping Study and Preliminary Economic Assessment Report (Report) has been prepared for MRG Metals Limited (MRG) by IHC Mining (IHC), based on assumptions as identified throughout the text and upon information and data supplied by others.

IHC has, in preparing the Report exercised due care consistent with the intended level of accuracy, using its professional judgment and reasonable care. However, no warranty should be implied as to the

accuracy of estimates or other values and all estimates and other values are only valid as at the date of the Report and will vary thereafter. Parts of the Report have been prepared or arranged by third party contributors, as detailed in the document. While the contents of those parts have been generally reviewed by IHC for inclusion into the Report, they have not been fully audited or sought to be verified by IHC.

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IHC disclaims any liability, damage and loss to MRG and to third parties in respect of the publication, reference, quoting or distribution of the Report or any of its contents to and reliance thereon by any third party.

Scoping Study and PEA Summary

1. Introduction

MRG Metals Limited (MRG) is looking at developing a mining and processing operation in Mozambique. The Corridor Sands project (CSP) incorporates the Corridor Central (6620L) and Corridor South (6621L) licences. These two licences are now under mining licence application (MLA) (**refer ASX Announcement 21 October 2022**), with INAMI having accepted the MLAs and changing the licence numbers accordingly, Corridor Central to 11142C (17.31956 Ha) and Corridor South to 11137C (18.23168 Ha). The MLAs were accepted by INAMI on the 6th of October 2022 and 3rd of October 2022 respectively for Corridor Central and Corridor South. The two licences are currently 100% owned by MRG Metals Limited (MRG) through its ownership of its subsidiaries, Sofala Mining & Exploration Limitada and Sofala Mining & Exploration I Limitada, in Mozambique. MRG is committed to working with INAMI to further the application process to the approval of Mining Licences, with Environmental Management Plan (EMP) and Social and Labour Plan (SLP) studies and reports, as well as the land-use licence / licences (DUAT) to take place after MLAs have been granted. All land in Mozambique is owned by the Mozambican government and land-use administered through rental and DUAT's. Studies on existing DUAT's will take place in the process, but no heritage sites within the mining areas or native title is applicable. The project comprises the Koko Massava, Nhacutse and Poiombo deposits.

The envisioned strategy for the initial operation has been developed with the aim of enabling MRG to identify a clear path towards project execution. MRG plans to mine and process Run of Mine (ROM) material by establishing Mining Unit Plant (s) (MUP) and a Wet Concentrator Plant (WCP) initially capable of processing 20.1mtpa.

The WCP will produce two streams, namely a Heavy Mineral Concentrate (HMC) that will be transported to a proposed Mineral Separation Plant (MSP) and a Titano-Magnetite final product that will be also transported to the MSP for offsite storage prior to loading on bulk carriers – sea freight. The MSP will be sized to handle 536Ktpa.

Within the bounds of this Study, products will be stored on the MSP site for onward transport by others by road and sea on an FOB basis.

2. Basis of Study

The purpose of this section is to set out the Scoping Study inputs, methods, key activities, deliverables, results and recommendations clearly for MRG Metals and its intended parties. The Study report generally brings together the technical scoping outcomes, capital and operating costs and financial modelling.

IHC Mining provided a proposal outlining the scope of the study to be performed. The scope of work outlined in the proposal broadly included the following:

- In-house assessment of IHC Mining historical works of similar projects;
- Desktop metallurgy (in addition to existing test work);
- Desktop investigative engineering;
- Preliminary calculations;
- Concept sketch layouts; and
- Study management.

This was to comprise two packages of work, specifically, a Scoping Study and associated financial modelling for:

- Mining Unit Plant (MUP);
- Wet Concentrator Plant (WCP);
- Mineral Separation Plant (MSP);
- General Process Infrastructure.

In undertaking the study, the following items were excluded:

- Detailed building layouts (to support local authority applications);
- 3D Modelling for buildings, designs and any other equipment;
- Permitting and approvals; and
- Investigations as described in section 14 Capital Cost Estimate.

Deliverables and activities undertaken during this scoping study include:

- General review, registration and management of client data and key input information;

- Convene internal and external kick-off meetings;
- Development of a basis of study guiding document;
- Prepare preliminary requests for information (RFI's) and develop a register;
- Scoping of mining strategy and mining unit(s);
- Development of a basic mining inventory and schedule;
- Scoping of process plants;
- Undertaking of mining options investigation;
- Drafting of concept sketch site layouts of mining, wet processing, dry processing and port facilities;
- Development of a Block Flow Diagram outlining high level plant Interaction;
- Compiling mass and water balances
- Assessing stockpile strategies and volumes, water consumption, reticulation and management, plant consumables (power, diesel, gas etc) and man power requirements;
- Undertaking preliminary engineering calculations sufficient to compile a Class 5 estimate;
- Completing preliminary equipment selections;
- Preparing mechanical equipment list with power draws;
- Compiling a Class 5 Capital Budget Estimate (+/-35% accuracy);
- Compiling a Class 5 Operating Cost Estimate (+/-35% accuracy);
- Development of preliminary project execution schedule;
- Development of a preliminary financial model; and
- Preparation of final scoping study report.

3. Geology and Resources

The deposits are hosted by the palaeodunes in the Chongoene-Chibuto area. The palaeodunes are known to host significant heavy mineral sand mineralisation. Recent drilling has intersected high total heavy mineral (THM) grades, from surface extending to a depth of up to 55m over a strike of 8km. The mineralisation is hosted within the red to brownish, medium grained sand units. The mineralisation zone is geologically continuous along strike, with grades varying along and across strike.

In December 2021, MRG released a Mineral Resource Estimate (MRE) for their Koko Massava orebody which delivered a High-Grade Zone of 103Mt @ 6.6% THM at a 5.5% cut-off grade (**Table 2.1 and 2.2; refer ASX Announcement 16 December 2021**). The updated MRE comprised a total Mineral Resource of 1,534Mt @ 5.1% THM, with 17% slimes, containing 78Mt of THM with an assemblage of 38% ilmenite, 32% titano-magnetite, 1% rutile and 1% zircon. The JORC categories are specifically stated as:

- an Indicated Mineral Resource of 557Mt @ 5.1% THM and 17% slimes containing 28Mt of THM with an assemblage of 38% ilmenite, 32% titano-magnetite, 1% rutile and 1% zircon.
- an Inferred Mineral Resource of 977Mt @ 5.0% THM and 16% slimes containing 49 Mt of THM with an assemblage of 38% ilmenite, 32% titano-magnetite, 1% rutile and 1% zircon.

In April 2022, MRG then announced the results of the updated JORC Mineral Resource estimates for its Nhacutse and Poiombo deposits at Corridor Sands with a combined Inferred Resource of 860Mt @ 4.9% THM (Table 2.3 and 2.4; refer ASX Announcement 8 April 2022). The MRE included high-grade zones totalling 256Mt @ 6.0% THM.

Table 2-1: Mineral Resource estimate for Nhacutse and Poiombo at 4% THM cut-off grade

Summary of Mineral Resources(1)						Mineral Assemblage (2)										
Deposit	Mineral Resource Category	Material	In Situ THM	BD	THM	SLIMES	OS	ILM	RUT	ZIR	TIMAG	CHRM	MOTH	ANDA	NMOTH
		(Mt)	(Mt)	(gcm3)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Global	Indicated	524	26	1.74	5.0	22	1	44	1	1	27	3	2	8	4
	Inferred	337	16	1.74	4.7	17	1	41	1	1	27	4	5	10	3
Grand Total		**860**	**42**	**1.74**	**4.9**	**20**	**1**	**43**	**1**	**1**	**27**	**3**	**3**	**9**	**3**
Notes:															
(1) Mineral resources reported at a cut-off grade of 4% THM															
(2) Mineral assemblage is reported as a percentage of in-situTHM															

Table 2-2: Mineral Resource estimate for Nhacutse and Poiombo at 5.5% THM cut-off grade

Summary of Mineral Resources(1)						Mineral Assemblage (2)										
Deposit	Mineral Resource Category	Material	In Situ THM	BD	THM	SLIMES	OS	ILM	RUT	ZIR	TIMAG	CHRM	MOTH	ANDA	NMOTH
		(Mt)	(Mt)	(gcm3)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Global	Indicated	186	11	1.75	5.9	22	1	43	1	1	27	3	2	8	4
	Inferred	71	4	1.75	6.2	18	1	41	1	1	27	4	5	10	3
Grand Total		**257**	**15**	**1.75**	**6.0**	**21**	**1**	**43**	**1**	**1**	**27**	**4**	**3**	**9**	**4**

Notes:

(1) Mineral resources reported at a cut-off grade of 5% THM

(2) Mineral assemblage is reported as a percentage of in-situTHM

Table 2-3: Mineral Resource estimate for Koko Massava at 4% THM cut-off grade

Summary of Mineral Resources(1)					Mineral Assemblage (2)										
Deposit	Mineral Resource Category	Material	In Situ THM	BD	THM	SLIMES	OS	ILM	RUT	ZIR	TIMAG	CHRM	MOTH	ANDA	NMOTH
		(Mt)	(Mt)	(gcm3)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Global	Indicated	557	28	1.74	5.1	17	1	38	1	1	32	4	4	8	3
	Inferred	977	49	1.74	5.1	16	1	38	1	1	32	4	4	8	3
Grand Total		**1,531**	**77**	**1.74**	**5.1**	**17**	**1**	**38**	**1**	**1**	**32**	**4**	**4**	**8**	**3**

Notes:

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

(2) Mineral assemblage is reported as a percentage of in-situTHM

Table 2-4: Mineral Resource estimate for Koko Massava at 5.5% THM cut-off grade

Summary of Mineral Resources(1)					Mineral Assemblage (2)										
Deposit	Mineral Resource Category	Material	In Situ THM	BD	THM	SLIMES	OS	ILM	RUT	ZIR	TIMAG	CHRM	MOTH	ANDA	NMOTH
		(Mt)	(Mt)	(gcm3)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Global	Indicated	58	4	1.8	6.4	15	1	39	1	1	33	4	3	7	3
	Inferred	45	3	1.8	6.8	12	1	37	1	1	34	4	4	5	2
Grand Total		**103**	**7**	**1.8**	**5.1**	**17**	**1**	**39**	**1**	**1**	**33**	**4**	**3**	**6**	**3**

Notes:

(1) Mineral resources reported at a cut-off grade of 5.5% THM

(2) Mineral assemblage is reported as a percentage of in-situTHM

4. Mining Strategy

Review and selection of the appropriate mining methodology was based upon a conventional open pit unconsolidated free-dig, free flowing dry sand mining operation. Wet Mining operations were ruled out due to the mining pits relationship to the water table. At this stage of project development, conventional truck and shovel and dozer trap were considered.

Apart from the superior economics, the broad acre deposit, little to no overburden combined with a pit depth of nominally up to 50 metres are well suited to dozer trap mining. This mining methodology is well understood and is currently being employed by a variety of Tier 1 mineral sands producers.

Mining would be conducted by large bulldozers pushing ore to in pit screening and slurrying units known as mining unit plant (MUP). The MUP receives ROM ore mined by bulldozers. The MUP is designed to be relocatable and is placed adjacent to the lower ore level of the mine face. Process water from the plant reservoir is piped to the MUP and used to slurry and transport the screened ore back to the processing plant. Oversize material is rejected and disposed of in the mine void.

Processing of ore will be conducted in two distinct stages. The WCP receives ore as slurry from the mine and after removal of clay, silt and oversize, the sands will be processed by spiral gravity separators to yield a HMC and low intensity magnets (LIMs) to yield a titano-magnetite product. The HMC and titano-magnetite product will be trucked to the MSP, the titano-magnetite will not undergo further processing and be stored as final product.

At the MSP, the HMC feed stock will undergo various stages of magnetic, electrostatic separation and pyrometallurgy to isolate and upgrade the TiO_2 products. Non-mag containing zircon, rutile and lighter minerals will be removed in wet gravity separation processes and a non-mag concentrate produced.

The products will be conveyed to storage shed facilities on the MSP site and then reloaded on a ship loading conveyor as bulk sea freight.

Coarse and fine tails will be trucked back to the WCP site and dumped into a tails reclaim hopper, mixed with WCP tailings and pumped back to the mine void.

The mining inventory for the Nhacutse-Poiombo & Koko-Massava is included in **Table 3**. Tonnages and grades are rounded as appropriate and mineral assemblage is reported as a percentage of in situ HM. The reference point for the Mining Inventory is the point of feed to the MUP, i.e., the tonnes and grade reported are in-situ. The production profile over the life of mine (LOM) is shown in Figure 4.

Table 3: *Mining Inventory for PEA (showing valuable mineral component)*

Deposit	Ore	HM	HM	SLIMES	OS	BD	ILM	ILMA	LX	RUT	TIMAG	ZIR
	Mt	Mt	%	%	%	g/cm3	%HM	%HM	%HM	%HM	%HM	%HM
hacutse & Poiombo	248	13.5	5.5	20	0.6	1.75	39.9	4.0	0.3	1.1	26.7	1.3
oko Massava	265	14.3	5.4	16	0.9	1.75	37.1	2.2	0.3	1.2	32.1	1.2
Total	513	27.8	5.4	18	0.8	1.75	38.5	3.1	0.3	1.1	29.5	1.3

Resource Breakdown :Nhacutse and Poiombo: 82% Indicated,18% Inferred : Koko Massava 50% Indicated, 50% Inferred.

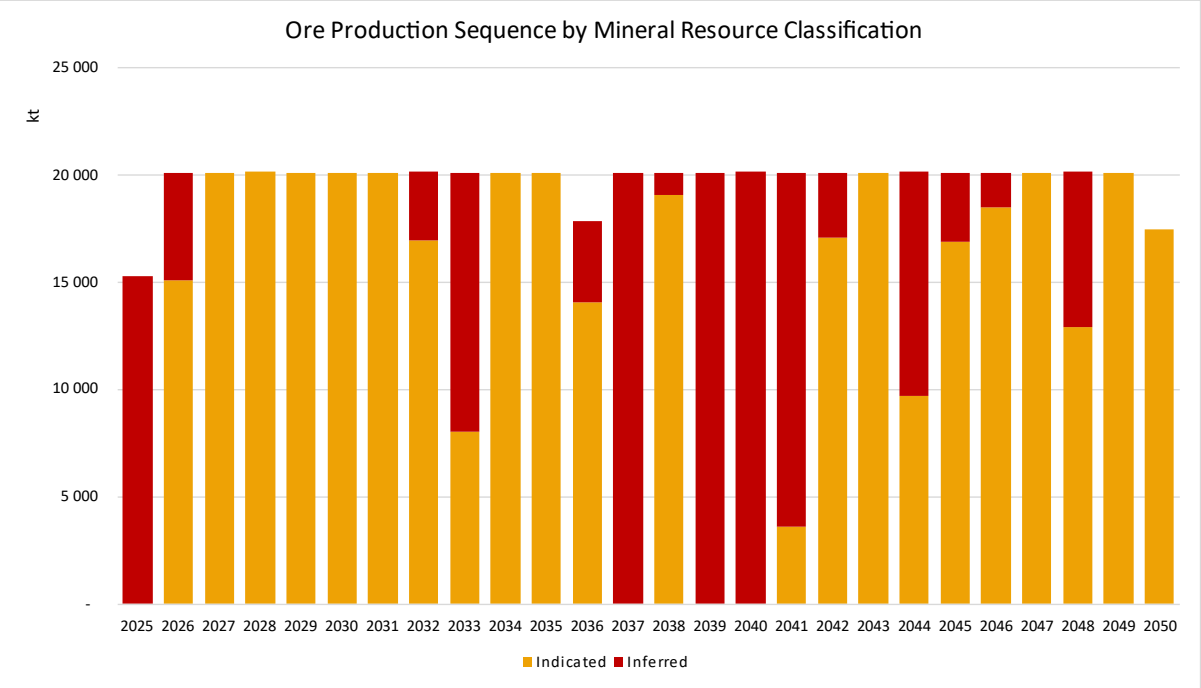


Figure 4: *Production Profile for Life of Mine (LOM)*

5. Metallurgical Testwork

IHC Mining completed scoping study level metallurgical test work in August 2020 for the Corridor Sands Project. The test work was conducted on a ~100kg sample of composited drill sample material derived from MRG's Ko o Massava deposit.

The sample was characterised as per MRG's standard methodology developed for the geological modelling, metallurgical evaluation and production forecasting of the CSP. The feed material contained minimal +2.0mm oversize particles/organics, 15.6% fines (-45µm) and 5% heavy mineral (2.85s.g.) content. XRF analysis indicated the HM to contain 24.6% TiO_2 and 0.96% ZrO_2. QEMSCAN analysis calculated the HM mineralogy to contain 0.2% rutile, 2.0% altered ilmenite, 28.8% ilmenite, 16.6% titano-magnetite and 1.2% zircon.

The material was processed through a simulated feed preparation process to remove fines and oversize particles. The screened sand fraction represented a mass yield of 87.3% with respect to ROM material.

A sample of generated fines was used to complete fines handling test work, which confirmed the fines to settle readily and consolidate well when using conventional flocculent.

The screened sand fraction was then processed through a two-stage (rougher-cleaner) wet table circuit to simulate a wet concentration process. The material was amenable to upgrading by gravity separation. The circuit produced a HMC containing 83.0% HM, and recovered 93.5% of the TiO_2 units and 93.7% of the ZrO_2 units. The HMC represented a mass yield of 4.35% with respect to ROM material.

The resultant HMC was then processed through a typical mineral sands concentrate upgrade process (CUP), utilising a two-stage LIMS (non-mag scavenger), two-stage WHIMS (non-mag scavenger) and two-stage wet table (rougher-scavenger) to further upgrade the WHIMS non-mags. This circuit produced a titano-magnetite product, a low-Ti concentrate, a magnetic concentrate and a non-magnetic concentrate.

The CUP magnetic concentrate was then processed through the ilmenite upgrade process, consisting of electrostatic and dry magnetic separation. The produced magnetic fraction represented a mass yield of 1.60% with respect to ROM material, contained 43.5% TiO_2 and was elevated in chrome (1.4% Cr2O3). Further magnetic fractionation test work concluded that the chrome could not be adequately removed by magnetic separation alone and that chemical alteration by ultra-low temperature roasting (ULTR) plant would be required.

The roasting process successfully enhanced the magnetic susceptibility of the ilmenite species, allowing for more effective rejection of chrome-bearing minerals by the proceeding dry magnetic separation circuit. The produced ULTR Ilmenite contained 47.1% TiO_2, 0.10% Cr_2O_3, 0.92% SiO_2 and negligible U+Th. This product represents 1.42% of the ROM mass and meets typical primary ilmenite specification.

Despite the low mass yield, the CUP's non-magnetic concentrate was further processed by electrostatic, magnetic and gravity separation methods to produce a Ti concentrate and a Zr concentrate.

The developed flow sheet is a relatively simple process which uses typical mineral sands separation methodologies. The production of the titano-magnetite product has proven particularly robust and consistent throughout the scoping study and pre-feasibility study metallurgical test work completed to date. The non-magnetic concentrate, while representing a low mass yield, is a potential value adding stream for future consideration. The production of a primary ilmenite product has proven to be somewhat more demanding, with multiple stages of magnetic separation required in conjunction with ULTR treatment. Each progressive stage of mineral separation introduces ilmenite mineral losses. With ilmenite proving to be a major driver for the project, there is opportunity to optimise ilmenite recovery through alternate process flow sheet options.

Two major process routes have been investigated to date – the WHIMS-oriented scoping study test work flow sheet and the current design as presented herein (and as currently being developed during pre-feasibility study test work). The latter's main advantage is reducing opportunity for ilmenite mineral losses in the WHIMS circuit. It is possible that this may cause a net increase in operating costs due to the increased drying requirements. To identify the optimum choice, a high-level cost-benefit analysis is recommended to be conducted for these two process options once metallurgical test work results are finalised for this processing option.

Pending the results of this investigation, further options for reducing ilmenite losses may also be available, such as the removal of the mineral separation steps prior to roasting. While this would increase the energy intensive roasting requirement, it would eliminate the ilmenite mineral losses associated with the pre-ULTR MSP circuit. The ilmenite upgrade (to final product) would then occur entirely through the magnetic separation post-ULTR, wherein the ilmenite magnetic susceptibility has been enhanced and normalised by the roasting process. It is recommended that these option assessments are completed prior to commencement of a bankable feasibility study, such that the bankable feasibility metallurgical test work can confirm and optimise the selected circuit and assess its response to ore variability.

6. Modifying Parameters

Mining recovery and dilution have been considered in design and given the bulk, non-selective mining method used, it is not considered that application of further modifying factors is appropriate. No cutting or factoring of grades were made. The same modifying factors were used on both deposits.

Exchange Rates:

All dollar values referred to in this report are in United States Dollars (USD) unless explicitly stated otherwise. Therefore, no exchange rate has been assumed.

Commodity Prices:

Product prices are a function of supply and demand, and product quality. Those used for optimisation value modelling purposes are included in Table 4. Prices were based on those supplied by MRG and have subsequently been updated. These updated prices were confirmed by TZMI. TZMI conducted a detailed Market Study for MRG, the study loo ed particularly at incorporating TZMI's latest supply/demand projections on global sulfate ilmenite, rutile and zircon markets. The study had the following focus:

Phase 1

- Introduction to the mineral sands value chain and industry structure.
- Overview of existing major producers and likely new projects that are currently under investigation.
- Review of supply of sulfate ilmenite, rutile and zircon, outlining the key producers/regions and a supply outlook to 2030.
- Demand analysis segmented by end-use markets and key customers by individual feedback type and zircon. An overview of the global TiO_2 pigment sector (supply and demand) and forecasts to 2030 will be included, as this TiO_2 pigment is the dominant driver for consumption of titanium feedstocks.
- Review of sulfate ilmenite requirement for the beneficiation sector.
- Detailed analysis of global supply/demand balances and indicative outlook to 2030 for sulfate ilmenite, rutile and zircon.

- Price forecasts of individual feedstock products – sulfate ilmenite, rutile as well as zircon through to 2025 and provision of long-term inducement prices for each of the aforementioned product for the period post 2025. For context, historical prices from 2010 to 2020 will be provided.

Phase 2

- Product quality assessment of planned sulfate ilmenite and non-magnetic concentrate from the company's HM project in Mozambique based on indicative quality obtained from bul metallurgical testwork undertaken at IHC Mining.
- Primary research on the titanomagnetite market in China, covering market dynamics and pricing trends, market segmentation and relative size.
- Commentary on market placement, key target markets and achievable pricing of the planned products (Sulfate ilmenite, titanomagnetite and non- magnetic concentrate) from the Corridor project. A co-product credit will also be provided for the monazite/xenotime contained in the non-magnetic concentrate.
- Overview of the global concentrate market, with particular focus on cross-border volumes and pricing, as well as introduction to the concentrate pricing methodology.

The new prices confirmed by TZMI are higher than these, however that will simply drive a higher valuation for the financial modelling and result in a more robust operation and economics.

Table 4: *Product Prices*

Product	US$/t product
Ilmenite Product	195.02
Non Magnetic Product	525.00
Titano-Magnetic Product	84.00

Royalties:

Royalties include provision for government royalties and are assigned based on a percentage of sales price. An ad valorem royalty of 6% is used in this study (Table 5).

Operating Costs:

The operating cost and revenue assumptions used for pit optimisation are summarised in Table 5. These are derived from the scoping study and industry standards for similar sized and style of operation. No contingency has been applied to operating cost because the pit limit selection process always selects a pit shell that assumed a reduced revenue (which is the same as increased cost, effectively).

Table 5: *Operating Cost Assumptions*

Description	Unit	Value
Surface costs		
Clearing & topsoil removal cost	US$/ha	4,200
Rehabilitation cost	US$/ha	23,333
Mining costs		
Overburden removal cost (if applicable)	US$/BCM	1.21
Mining unit	US$/t mined	0.81
Oversized handling cost	US$/t o/s generated	0.70
Pumping cost to WCP	US$/t moved	0.52
WCP costs		
Fine tails handling cost	US$/t fine generated	0.77
WCP cost	US$/t feed in	0.22
Tailings cost	US$/t moved	0.46
CUP cost	US$/t feed in	3.56
Miscellaneous costs		
Royalty - percentage of sales price	%	6
Overhead cost	US$/t HMC	16.13
MSP costs		
IUP cost	US$/t feed in	30.34
Shipping and Storage		
Transport cost to port facilities	US$/t moved	5.54
Bagging cost	US$/t moved	0.43
Wharf cost	US$/t moved	6.30

Process Recoveries:

Process recoveries and yields used in this study are included below in Table 6.

Table 6: *Product Recoveries*

HM Assemblage	WCP %	CUP Titano Magnetic %	CUP Ilmenite product %	CUP Non Magnetic %	IUP %	ULTR %
RUT	90.79	0	8.64	86.30	3.05	15.00
LX	86.53	0	58.73	34.37	33.55	15.00
ILMA	83.61	0.67	86.96	6.47	58.73	96.70
ILM	84.46	1.01	91.12	0.54	98.43	96.70
TIMAG	74.55	80.10	14.04	0.13	91.05	5.00
ZIR	87.58	0	15.22	81.16	0	0

ANDA	80.75	0	14.52	24.61	0	0
CHROM	85.31	5.45	79.52	7.97	35.37	6.50
HEMA	80.99	33.27	47.04	4.51	32.42	68.10
NMOTH	80.75	0	14.52	24.61	0	0
MOTH	80.99	33.27	47.04	4.51	32.42	68.10

Other recoveries:

- Mining recovery used for the optimisation process: 98%;
- Sand in HMC: 9%.

7. Block Flow Diagram

An overview of the processing stages and associated throughputs and products are summarised the Table 7 and Figure 5:

Table 7: *Process Overview*

	20.1 Mtpa Mined Ore	Note	Qty	Feed (T/h)	Availability	Annual (Mtpa)
PLANTS	MUP 1	Pit 1	1	1350	85%	10.05
	MUP 2	Pit 2	1	1350	85%	10.05
	WCP	ROM	1	2700	85%	20.1
	-	Rougher HF	1	2272	85%	16.92
	MSP	HF	1	72.3	85%	0.538
	ULTR	ULTR HF	1	60.2	85%	0.448
	Post Mag Sep	Hybrid	1	58.4	85%	0.435
PRODUCTS	Titano-Magnetite	Ex WCP -tph - damp	1	58.6	85%	0.436
	Ilmentite	Ex post mag sep – dry	1	52.6	85%	0.392
	Non Mag Concentrate	Ex MSP - damp	1	9.7	85%	0.072

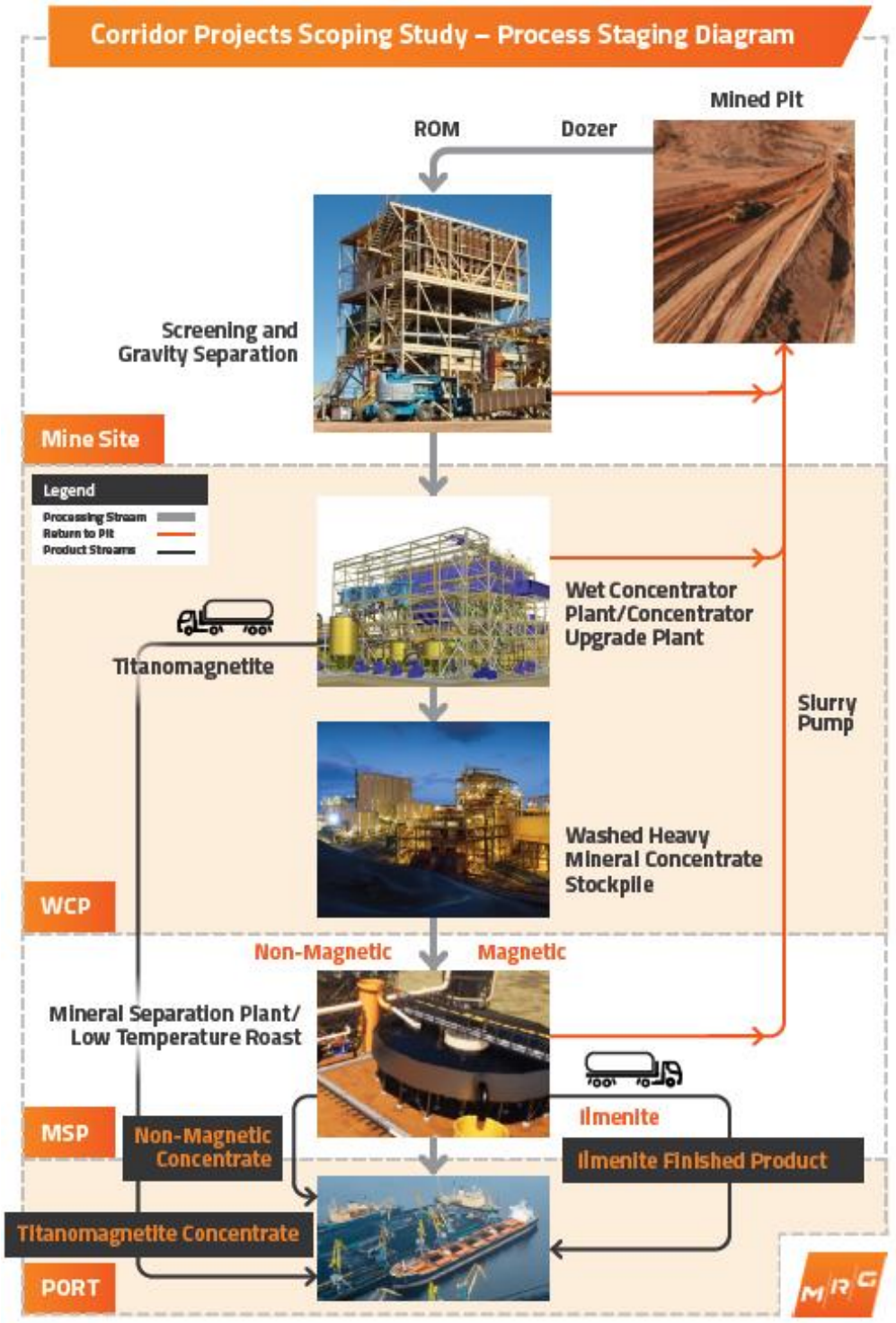


Figure 5: *Scoping Study Process Staging Flowsheet – Corridor Sands Project (Koko Massava, Nhacutse and Poiombo Deposits).*

8. Process Areas

The proposed mining equipment would consist of two identical MUP's. Each of the MUP's will be capable of processing up to 1,500t/h solids with an average of 1,350 tph, which equates to the total operating feed rate of 2,700tph (20.1mtpa).

Each MUP would operate in a separate mining pit, the pumping metrics adopted for the study start up case were a 2,500m pumping distance for each MUP to the centrally located WCP. As the mine progresses further away from WCP, deferred capital will be applied.

The ore will be mined using dozers, the ore pushed down from the mining face to a receival hopper, the ROM then slurried, wet screened with a vibrating screen (2.0mm) and then pumped via overland slurry pipe to the WCP for de-sliming and further processing. The sand tails will be returned to the pit along with slimes as a co-disposal operation.

The WCP receives ROM material as a slurry via an overland pipeline from the two (2) MUP's located in separate mining pits. The WCP receives, de-slimes and processes the ROM producing three streams; a titano-magnetite product (deemed a final product). A HMC suitable for further processing at the MSP and two (2) tailings stream that are returned to the mining voids.

The MSP receives HMC by truck from the WCP site where it is dumped in windrows ready for feeding into the plant. The HMC is then fed by Front End Loader (FEL) into a hopper and then dried prior to being processed using conventional electrostatic separators and rare earth drum magnets. A non-conductor stream is fed to a wet circuit using wet shaking tables.

This initial stage produces a hi-mag suitable for presentation to the ULTR and a non-mag concentrate product along with a tailing stream.

The titano-magnetite product is also unloaded and stored at the MSP site where it is loaded on the ship loading facility for export. This material is not treated further at the MSP, but merely stored on site for additional draining to meet the 5% total moisture limit (TML) requirement.

The ULTR process conditions lower ilmenite and iron bearing minerals by partial reduction to homogenise the magnetic susceptibility, while keeping the ilmenite in a temperature range that avoids the solubility of TiO_2 being affected by rutilisation. Central to this process is a fluid bed reactor (referred to as the roasting stage) fluidised with reducing gases, within a temperature range of 575 °C to 625 °C.

The result is an upgraded ilmenite with a higher TiO_2 content (47.1% increased from 43.5%) and lower Cr_2O_3 content, while the total iron oxide is decreased, the remaining iron is predominately FeO, which is favourable for feed stocks presented to the sulphate process.

The product load-out facility consists of the storage and materials handling equipment required to load the final products on to the wharf facility and then on to ocean going vessels.

With the selected option being the Chongoene MRG built facility, provision includes the loadout conveyors for both Titano-magnetite, Ilmenite and non-mag products.

The final products are reloaded from their respective storage sheds and compounds on to transverse loading conveyors and on to a main ship loading conveyor for export.

9. Schedule

A total project execution duration of 157 weeks has been estimated, including project feasibility and approvals through to detailed design, construction and commissioning. An arbitrary plant signoff and handover, scheduled in this study to take place at the end of third quarter 2025, will be affected by numerous factors, including the timing of grant of Mining Licence applications.

10. Cost Estimate

The cost estimate has been developing in accordance with the AusIMM requirements for a class 5 scoping study, with engineering development to between 1 – 2% and a cost accuracy of +/- 30 – 35%.

The scoping study has considered the following 4 scenarios, each scenario assumes a fixed mine site based W P, x mobile MUP's and port based M P:

1. MRG owned port and loading facility at Chongoene, with WCP relocation from Nhacutse / Poiombo to Koko Massava (Base case; Figure 6);
2. Use of shared port facility at Chongoene, with WCP relocation from Nhacutse / Poiombo to Koko Massava;
3. Use of shared port at Maputo, with WCP relocation from Nhacutse / Poiombo to Koko Massava; and
4. MRG owned port and loading facility at Chongoene, with single WCP location at Nhacutse / Poiombo, and additional booster pumps and field pipework for mining at Koko Massava.

The tables below outline the CAPEX estimates for the Scenario 1 (Base case), 2, 3 and 4:

***Table 8**: CAPEX Cost Distribution Inclusive of Direct cost, Indirect cost & Contingency*

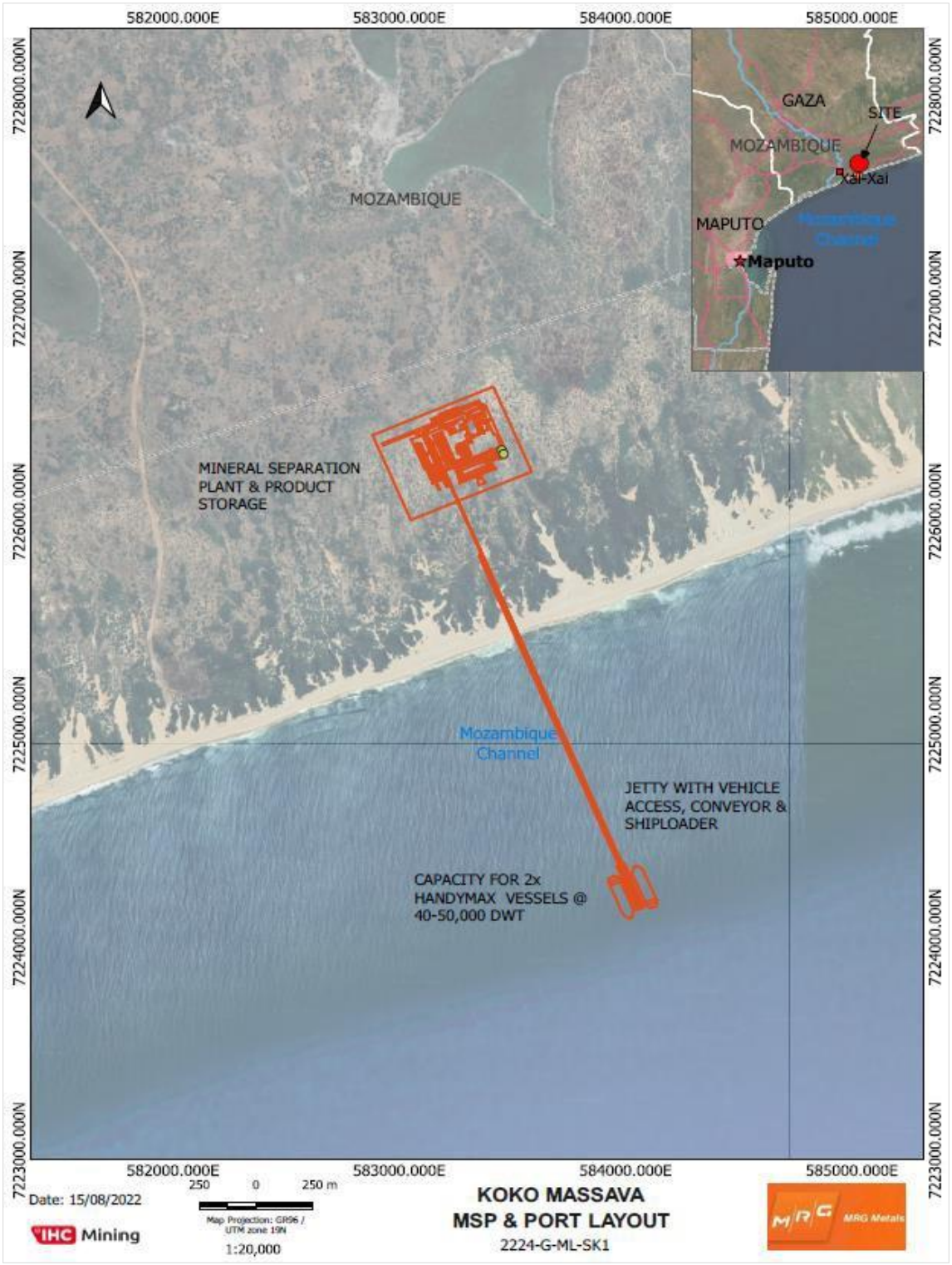
Cost Centre	Cost (M's) by Scenario (USD)			
	1 (Base Case)	2	3	4
Area 0000 – Operational Establishment	34.25	17.25	17.25	34.25
Area 1000 – Mobile MUP	36.53	36.53	36.53	36.53
Area 2000 – Wet Concentrator Plant	97.52	97.52	97.52	97.52
Area 3100 – Ilmenite Drying Plant	30.93	30.93	30.78	30.93
Area 3200 – Ultra Low Temperature Roast	32.10	32.10	32.10	32.10
Area 3300 – Final Magnetic Separation	2.00	2.00	1.99	2.00
Area 4000 – Load Out and Storage	5.72	5.72	5.68	5.72
Total Project Costs	**239.04**	**222.04**	**221.84**	**239.04**

***Table 9**: CAPEX Cost Breakdown of Direct cost, Indirect cost & Contingency*

Cost Centre	Cost (M's) by Scenario (USD)			
	1 (Base Case)	2	3	4
Direct Cost	167.38	155.72	155.56	167.38
Indirect Cost	40.48	37.36	37.34	40.48
Total Project Costs (Excluding Contingency)	**207.86**	**193.08**	192.90	**207.86**
Contingency	31.18	28.97	28.94	31.18
Total Project Costs	**239.04**	**222.04**	**221.84**	**239.04**

As noted, the initial capex for scenarios 1 and 4 is the same, however scenario 4 incurs an additional $40m in deferred capital to coincide with the WCP move to Koko Massava.

Figure 6: *Corridor Sands Project MSP & Port Layout*



11. Operational Estimate

The OPEX is based on a 2,700 tph operation, assuming a plant availability of 85%. The tables below outline the OPEX estimates for the Scenario 1 (Base case), Scenario 2 and 3, noting that the start-up OPEX of scenario is the same as scenario. Costs shown in millions of USD.

***Table 10**: Operating Cost Scenario 1 (Base Case) and Scenario 4*

	0000	1000	2000	3100	3200	4000		
Area Description	**Admin**	**MUP**	**WCP**	**MSP**	**ULTR**	**Load Out**	**Site Wide**	**Annual Cost**
Mining	0.00	14.07	0.00	0.00	0.00	0.00	0.00	14.07
Labour	0.54	0.93	1.48	1.42	0.43	0.34	0.36	5.49
Mobile Equipment	0.00	0.00	0.29	0.18	0.00	0.02	0.18	0.67
Other Consumables	0.00	0.00	1.77	2.53	4.64	0.00	0.00	8.94
Electrical Power	0.12	6.45	12.76	0.47	2.43	0.06	0.10	22.39
Maintenance	0.35	0.00	2.07	0.71	0.71	0.12	0.00	3.61
Operating Spare Parts	0.00	0.00	1.04	0.35	0.36	0.06	0.00	1.81
Rehabilitation	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48
Transport - Cartage	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20
Loading - Wharfage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual Operating Cost	**1.01**	**21.45**	**19.41**	**5.66**	**8.56**	**0.60**	**4.33**	**61.02**

***Table 11**: Operating Cost Scenario 2*

	0000	1000	2000	3100	3200	4000		
Area Description	**Admin**	**MUP**	**WCP**	**MSP**	**ULTR**	**Load Out**	**Site Wide**	**Annual Cost**
Mining	0.00	14.07	0.00	0.00	0.00	0.00	0.00	14.07
Labour	0.54	0.93	1.48	1.42	0.43	0.34	0.36	5.49
Mobile Equipment	0.00	0.00	0.29	0.18	0.00	0.02	0.18	0.67
Other Consumables	0.00	0.00	1.77	2.53	4.64	0.00	0.00	8.94
Electrical Power	0.12	6.45	12.76	0.47	2.43	0.06	0.10	22.39
Maintenance	0.18	0.00	2.07	0.71	0.71	0.12	0.00	3.61
Operating Spare Parts	0.00	0.00	1.04	0.35	0.36	0.06	0.00	1.81
Rehabilitation	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48

Transport - Cartage	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20
Loading - Wharfage	0.00	0.00	0.00	0.00	0.00	0.00	9.24	9.24
Annual Operating Cost	**0.84**	**21.45**	**19.41**	**5.66**	**8.56**	**0.60**	**13.57**	**70.08**

***Table 12**: Operating Cost Scenario 3*

	0000	1000	2000	3100	3200	4000		
Area Description	**Admin**	**MUP**	**WCP**	**MSP**	**ULTR**	**Load Out**	**Site Wide**	**Annual Cost**
Mining	0.00	14.07	0.00	0.00	0.00	0.00	0.00	14.07
Labour	0.54	0.93	1.48	1.42	0.43	0.34	0.36	5.49
Mobile Equipment	0.00	0.00	0.29	0.18	0.00	0.02	0.18	0.67
Other Consumables	0.00	0.00	1.77	2.53	4.64	0.00	0.00	8.94
Electrical Power	0.12	6.45	12.76	0.47	2.43	0.06	0.10	22.39
Maintenance	0.18	0.00	2.07	0.71	0.71	0.12	0.00	3.61
Operating Spare Parts	0.00	0.00	1.04	0.35	0.36	0.06	0.00	1.81
Rehabilitation	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48
Transport - Cartage	0.00	0.00	0.00	0.00	0.00	0.00	22.20	22.20
Loading - Wharfage	0.00	0.00	0.00	0.00	0.00	0.00	9.91	9.91
Annual Operating Cost	**0.84**	**21.45**	**19.41**	**5.66**	**8.56**	**0.60**	**33.24**	**89.75**

12. Financial Modelling

The Corridor Sands Project Scoping Study included financial modelling as a part of the evaluation and pathway valuation outcomes (the development of a PEA). The development of the Financial Model was based on a historical model supplied by IHC and subsequently modified by Duncan Freeman of Freeman Financial Modelling (FFM).

An initial audit and review of the as-supplied Financial Model was carried out by FFM under the direction of and in collaboration with IHC.

The financial modelling of 4 scenarios or cases was carried out. These are first detailed in Table 13 and are described as:

- Base Case or Scenario 1: Client owned and managed port facility at Chongoene;

- Scenario 2: Client leased port facility at Chongoene;
- Scenario 3: Client leased port facility at Maputo; and
- Scenario 4: a variation on the Base Case where a WCP plant move from the Nhacutse and Poiombo to Koko Massava minesite is executed rather than incorporating the extra pumping. This case was selected as a comparator and the order of magnitude differential (if any) could be extrapolated to the other Scenarios.

The financial modelling used the following assumptions:

- CAPEX/OPEX as prepared by the IHC engineering team with assumptions on power and transport and owners costs provided by the Client;
- Pricing as supplied by the Client, derived from open source data and TZMI studies;
- Assumed cost of capital of 8% as specified by the Client;
- Operational metrics developed by IHC;
- CAPEX spend commencing Jan-2024;
- Final commissioning Jan-2025; and
- An assumed 6 month ramp up to full production (reflected in the model by an end of Q1 start mining date - i.e. 3 full months of production but spread over 6 months).

Of the 4 Scenarios, the one that generates the most favourable metrics, is Scenario 4, which utilises the WCP move in Year 13 of the project (operational Year 12, as the project includes just over 12 months of build time). A summary of the various scenario metrics are presented in Table 13, but the NPV value of US$258M is the most favourable outcome taking all of the inputs into consideration.

A payback period of 6 whole years (5.5 years) on a CAPEX spend of US$279M including deferred capital is a favourable outcome. The project is not overly sensitive to CAPEX, but is quire sensitive to Product Pricing. A range of ± 35% was used for the sensitivity analysis (Figure 7) which is in line with the order of accuracy for the overall Scoping Study.

The project is assisted with elevated pricing and the future of mineral sands markets will be in part, dictate the development pathway for the Corridor Sands Project. Were MRG to secure fair market off-take agreements for ilmenite and titano-magnetite, then the future of the project would have a definitive pathway to development.

***Table 13**: Summary of Key Financial Metrics from Modelling Scenarios*

SCENARIO SELECTED MINING INVENTORY SELECTED PRICING MODEL		Base Case Reserve 1 Base	Scenario 2 Reserve 1 Base	Scenario 3 Reserve 1 Base	Scenario 4 Reserve 1 Base
Cash flows					
Revenue	$M	3,262	3,262	3,262	3,262
	$/t Ore	6.4	6.4	6.4	6.4
	$/t HMC	139.6	139.6	139.6	139.6
Free cash flow (After tax)	$M	882	771	449	938
	$/t Ore	1.7	1.5	0.9	1.8
	$/t HMC	37.7	33.0	19.2	40.1
Cash costs	$M	(1,715.6)	(1,894.8)	(2,369.6)	(1,603.3)
	$/t Ore	(3.3)	(3.7)	(4.6)	(3.1)
	$/t HMC	(73.4)	(81.1)	(101.4)	(68.6)
	RCCR	1.9	1.7	1.4	2.0
CAPEX (including deferred)	$M	250	233	232	279
NPV (after-tax)	$M	255	220	91	258
IRR (after-tax)	%	21%	20%	13%	21%
Payback (discounted, after-tax)	Year	6	6	8	6
Life of Mine	Years	26	26	26	26

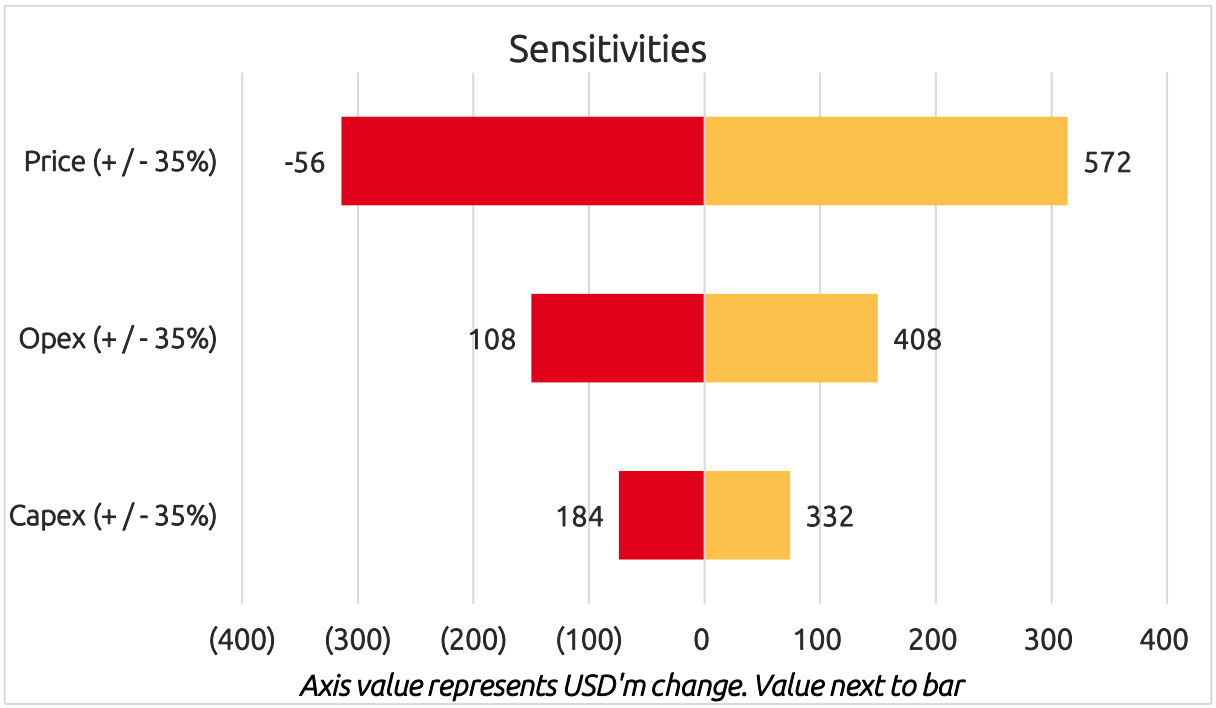


Figure 7: *Sensitivity analysis*

Funding To achieve the range of outcomes indicated in the Scoping Study, initial funding in the order of US$239m will likely be required, which includes all pre-production costs of which the preproduction capital. The Company has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Project will be available when required. The grounds on which this reasonable basis is established include:

- The Project has strong technical and economic fundamentals which provides an attractive return on capital investment and generates robust cashflows at conservative ilmenite, non-magnetic product and titano-magnetic product prices. This provides a strong platform to source debt and equity funding.
- The Board has a strong track record of equity raisings, having raised in excess of $27 million over the last 11 years.
- The Company has received significant interest from various potential Offtakers/Partners regarding financing for the project, with preliminary discussions occurring.
- The Company has appointed TZMI to assist in marketing during the PFS STAGE. TZMI has extensive expertise and has identified potential buyers for the products identified in the Scoping Study, but has yet to make approaches on the Company's behalf as both MRG and TZMI believe further product upgrade is possible in the PFS stage.

- MRG will consider a range of funding sources, with the objective of securing the most cost competitive and value maximising option for the Company.
- Given the scale of the operation, the Project is expected to generate substantial free cash flow per year to service debt, which will enhance the debt capacity of the Project. As a result, a greater percentage of debt funding may be achievable when compared to smaller scale, lower margin projects.
- MRG will preferentially engage with offtake counterparties that may contribute funding to the Project which may include: conventional equity at the corporate and/or project level; convertible notes or bond; debt financing in the form of either conventional project debt financing, prepayment for product or royalties; or a combination of the above.
- MRG's current mar et capitalisation is approximately $9M (as at 1 November 2022). The Company remains confident that its market capitalisation will increase as it continues to de-risk, secure offtake, debt financing and execute the development of the Corridor Sands HMS Project. Sources of equity funding may include private equity funds specialising in resource project investment; institutional funds; strategic investors; and high net worth, sophisticated and retail investors. Depending on market conditions, the equity component may be structured with a combination of ordinary and hybrid equity. Given the above, the Company has concluded that it has a reasonable basis to expect that the upfront project capital cost could be funded following the completion of a positive bankable feasibility study and obtaining the necessary project approvals.
- There is, however, no certainty that the Company will be able to source funding as and when required. Typical project development financing would involve a combination of debt and equity. It is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.

13. Conclusions and Recommendations

The pit optimisation and preliminary mine planning exercise carried out on the CSP deposits, Koko Massava, Nhacutse and Poiombo demonstrates that there are substantive, economically exploitable pits to potentially support a mining operation of approximately 25 years duration.

The global Mining Inventory developed for the Scoping Study and PEA totalled 513Mt at an average THM grade of 5.4% for a total contained THM of 27.8Mt.

The following recommendations flow from this work package and are in no particular order of importance, but should be taken for consideration:

- The next phase of work should establish a firm basis for mineral pricing based on off-take agreements so as to firm up the revenue drivers for the project;

- Consideration of other mining methodologies should be considered such as hydraulic mining as a cost competitive and practical alternative to dozer trap;
- Detailed work needs to be undertaken on the nature of the slimes and the direct impact this has on flocculent / coagulant usage as well as handling with respect to water recovery, solar drying requirements and potential for co-disposal;
- If the project is deemed to be overall positive in economics from the financial modelling (most likely), then planning for the next phase of detailed pit optimisation and mine planning needs to be considered;
- As per a Framework Environmental & Social Management Program developped by Coastal Environmental Services (CES) for MRG as part of the MLAs for Corridor Central and Corridor South, a significant amount of studies will take place to develop the Environmental Management Plan (EMP) and Social and Labour Plan (SLP). These studies will feed into future economic studies on the project and includes:
    - Water Quality Monitoring, including hydrogeology study, development of piezometers, bores, baseline data, etc;
    - Meteorology;
    - Air Quality Monitoring;
    - Noise and Vibration Monitoring;
    - Waste Disposal Facilities and Practices;
    - Floral and Faunal Monitoring;
    - Soil and Rehabilitation Monitoring;
    - Occupational Health and Safety Monitoring; and
    - Socio-Economic Monitoring.
- The most likely next step is a PFS phase and one of the key deliverables from that level of study will be a Probable Ore Reserve. In order to undertake that work, there is a considerable amount of background study work that needs to be completed, including but not restricted to:
    - Transport study;
    - Power study;
    - Port development study; and
    - Investigation of alternative mining methodologies.

Forward Looking Statement(s)

Statements relating to the estimated or expected future production, operating results, cash flows and costs and financial condition of MRG's planned work at the Company's project and the expected results of such work are forward-looking statements. Forward-looking statements that are not historical facts and are generally, but not always, identified by words such as the following: expects, plans, anticipates, forecasts, believes, intends, estimates, projects, assumes, potential and similar expressions. Forward-looking statements also include reference to events or conditions that will, would, may, could or should occur. Information concerning exploration results, metallurgical results and Mineral Resource Estimates

may also be deemed to be forward-looking statements, as it constitutes a prediction of what might be found to be present when and if a project is developed.

These forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable at the time they are made, are inherently subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation: uncertainties related to raising sufficient financing to fund the planned work in a timely manner and on acceptable terms; changes in the planned work resulting from logistical, technical or other factors; the possibility that results of work will not fulfil projections/expectations and realise the perceived potential of the Company's projects; uncertainties involved in the interpretation of drilling results and other tests and the estimation of Heavy Mineral Sands resources; risk of accidents, equipment breakdowns and labour disputes or other unanticipated difficulties or interruptions; the possibility of environmental issues at the Company's projects; the possibility of cost overruns or unanticipated expenses in work programs; the need to obtain permits and comply with environmental laws and regulations and other government requirements; fluctuations in the price of heavy mineral sands and other risks and uncertainties.

NEW VERY HIGH VALUABLE MINERALS IDENTIFIED AT AZARIA TARGET

MRG announced the laboratory and excellent mineralogical results of the new Azaria Very High VHM Target, located east of the Company's Koko Massava deposit within the Corridor Central (11142C) HMS projects (**refer ASX Announcement 10 November 2022; Tables 14 and 15; Figures 1 and 8**).

Laboratory results from 3 aircore drillhole (22CCAC776 – 22CCAC778) drilled within the Azaria Target confirmed the laboratory THM grades from reconnaissance auger holes, indicating large areas of >3%THM, while hole 22CCAC777 with 4.38 % THM over 19.5m also confirms areas with >4% THM (also shown by auger holes 20CCHA505 @ 4.01% THM over 12.0m and 20CCHA195 @ 4.21% THM over 13.0m; both from surface, **refer Figure 8**).

Importantly, excellent mineralogical results from 5 lithologically composited HMC samples from the 3 aircore holes (**refer Table 15**) confirmed Azaria as an exciting new large target for very high value HMC situated in the White Sand lithology. With average VHM (Zircon, Rutile, Leucoxene, Altered Ilmenite and Ilmenite) results from the 5 samples at 72.4%, the VHM is significantly higher than the average of 41% VHM found within the Koko Massava MRE area (**refer ASX Announcement 16 December 2021**) or the average 43% VHM from the Global Nhacutse and Poiombo MRE area (**refer ASX Announcement 8 April 2022**). The additional 9.1% of Titanomagnetite then also results in an economic product of >80% of the HMC within the Azaria Target. Additionally, the high value Zircon and Rutile Heavy Minerals are also higher than found in Koko Massava, Nhacutse and Poiombo deposits (Zircon at 2.8% vs the 1.2% in Koko Massava and the 1.3% in Nhacutse and Poiombo; Rutile at 1.9% vs the 1.2% in Koko Massava and the 1.1% in Nhacutse and Poiombo) (**refer ASX Announcements 16 December 2021 and 8 April 2022**).

Corridor South (11142C) Drilling Program and Mineralogy

Ongoing mineralogical studies have identified a very strong lithological boundary in the eastern side of the Corridor licences (yellow line, **Figure 8**), with red/red-brown coloured sand to the west of the boundary (Type 1 sand) and white/grey coloured sand to the east of the boundary (Type 2 sand**; refer ASX Announcements 11 August 2021 and 1 April 2022**). The VHM% in the Type 2 sand is as high as 73.37% from previous studies (**refer ASX Announcement 31 July 2020**). 3 Aircore holes (22CCAC776 - 22CCAC778) were drilled in a large area of Type 2 White Sand lithology east of the Koko Massava deposit (**refer Figure 8**). A total of 67 samples (inclusive of QAQC samples) were collected at 1.5m intervals and analyses at Western Geolabs in Perth, Australia (**refer Table 14**). Aircore drillhole 22CCAC777 returned 4.38% THM over 19.5m; 22CCAC778 returned 3.50% THM over 19.5m and 22CCAC776 returned 3.20% THM over 16.5m, all with mineralisation from surface. Individual 1.5m intervals showed THM results as high as 8.15% THM.

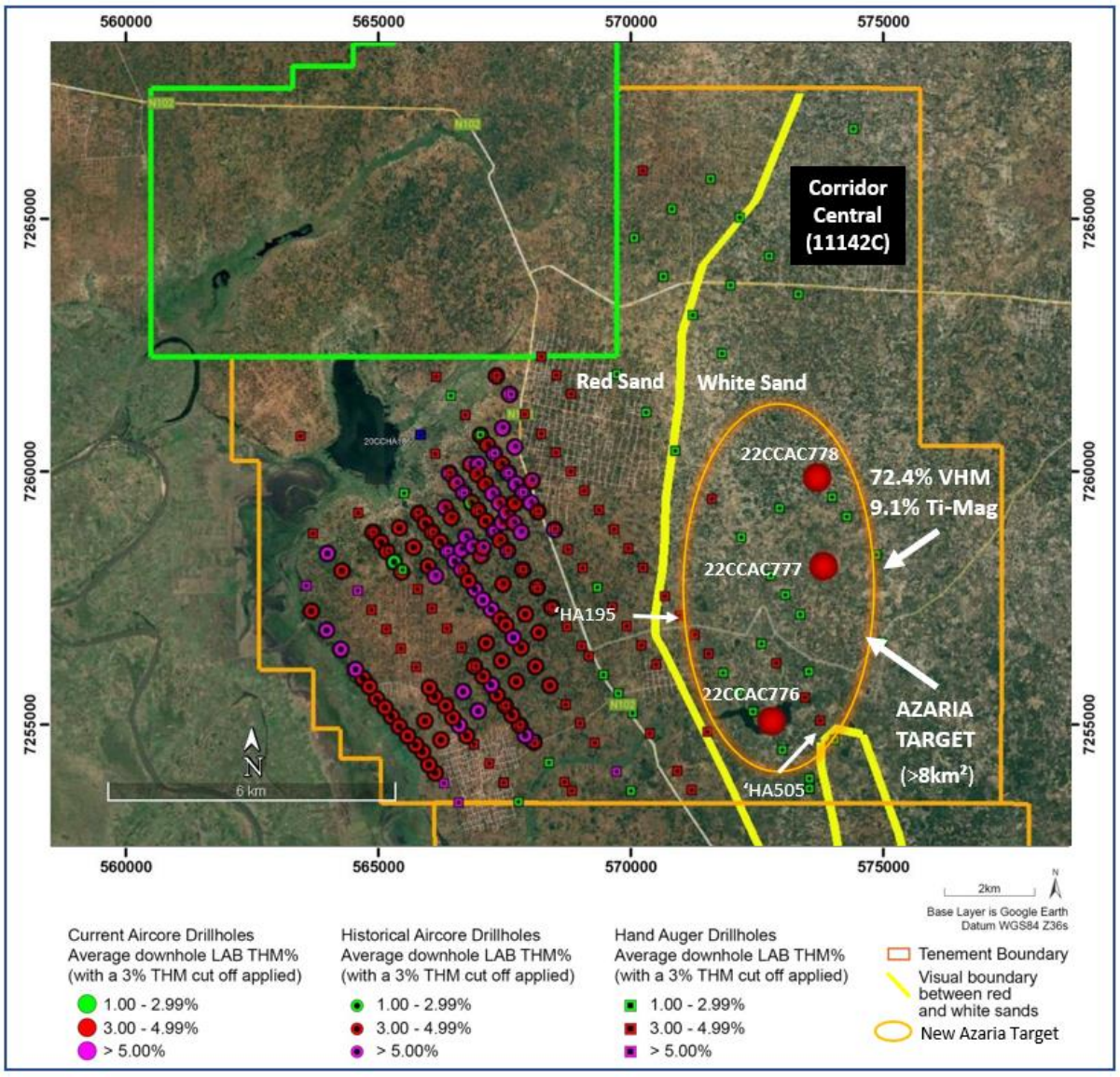


Figure 8: *Map showing the location of the 3 new Aircore holes, all laboratory obtained aircore and auger THM % drilling grades, the Red/White Sand lithological boundary (yellow line) and the position of the new Azaria Target within the Corridor Central (11142C) licence.*

5 Heavy Mineral Concentrate (HMC) composites, derived from all observed lithologies and from all 3 holes drilled, were also sent for mineralogical investigations. Mineralogical investigation and analyses were done by SJMetMin Laboratories. The average total VHM of 72.4%, as well as the high individual valuable minerals, clearly illustrates the samples are from the Type 2 White Sand.

Table 14: *Summary collar and Assay THM% results for 3 Reconnaissance Aircore Holes within new Azaria Target within Corridor Central (11142C).*

DRILLHOLE INFORMATION						MINERALISATION LAB RESULTS			
HOLE ID	UTM EAST WGS84	UTM NORTH WGS84	ELEV'N (M)	EOH (M)	DRILL TYPE	FROM	TO	INTERSECTION (M)	% LAB THM
22CCAC776	7255396	572859	68	33.0	AIRCORE	0.0	16.5	16.5	3.20
22CCAC777	7258587	573950	79	33.0	AIRCORE	0.0	19.5	19.5	4.38
22CCAC778	7260418	573827	84	31.5	AIRCORE	0.0	19.5	19.5	3.50

Table 15: *Quantitative QEMSCAN mineralogy results from 3 Aircore drillholes within New Azaria Target at Corridor Central (11142C).*

Sample	CCMIN 07	CCMIN 08	CCMIN 09	CCMIN 10	CCMIN 11						
BH ID	AC776		AC777		AC778						
Mineral						Min	Max	Ave	StDev	Average	
Zircon	3.0	3.0	2.8	2.8	2.6	2.6	3.0	2.8	0.2	72.4	Total VHM in HMC
Rutile	2.1	2.0	1.7	1.8	1.8	1.7	2.1	1.9	0.2		
Alt-Ilmenite II (TiO_2 74%)	0.5	0.3	0.3	0.4	0.3	0.3	0.5	0.3	0.1		
Alt-Ilmenite I (TiO_2 62%)	6.4	6.7	5.5	6.0	5.9	5.5	6.7	6.1	0.5		
Ilmenite (TiO_2 52%)	60.4	62.4	59.7	63.5	60.5	59.7	63.5	61.3	1.6		
Titanomagnetite	8.6	7.9	12.4	6.1	10.6	6.1	12.4	9.1	2.4	9.1	Titanomagnetite
Hematite	3.2	3.1	4.6	1.9	4.6	1.9	4.6	3.5	1.1	18.5	Total Non-VHM in HMC
Chromite	5.4	4.8	4.5	4.4	4.8	4.4	5.4	4.8	0.4		
Magnetic Others	0.9	0.7	0.8	0.8	1.1	0.7	1.1	0.9	0.1		
Andalusite	6.3	6.0	3.3	7.1	4.9	3.3	7.1	5.5	1.5		
Non-magnetic Others	3.3	3.1	4.6	5.2	3.1	3.1	5.2	3.9	1.0		
TOTALS:	100.00	100.00	100.00	100.00	100.00						

NEW VERY HIGH VALUABLE MINERALS IDENTIFIED AT CIHARI TARGET

MRG announced the laboratory and mineralogical results of the new Cihari High VHM Target, located within the north-east of the Company's Nhacutse deposit in the Corridor South (11137 C) HMS projects (**refer ASX Announcement 16 November 2022; Tables 16 and 17; Figures 1, 9 and 10**).

Laboratory results from 5 aircore drillhole (22CCAC790 – 22CCAC794) within the north-east of the Nhacutse deposit confirmed the high-grade laboratory THM grades from 2 historic reconnaissance

aircore and 1 auger drillholes. The new approximately 1.3km² Cihari Target has therefore been confirmed (**refer Figure 9**) as a significant VHM target.

The 2 historic aircore drillholes returned >4% THM laboratory results (20CSAC540 @ 4.21% THM over 24.0m from surface and 20CSAC587@ 4.22% THM over 30.0m from surface; **refer ASX Announcements 24 November 2020 and 7 January 2021**), combined by the new results of 22CCAC790 (4.20 % THM over 36.0m from surface) and 22CCAC794 (4.26 % THM over 36.0m from surface) (**refer Table 16**) indicates an approximate 1km² area of >4%THM within the Cihari Target (**refer Figure 10**). Drill spacing in the Cihari target is at <500m inter-hole spacing.

Importantly, mineralogical results from 4 lithologically composited HMC samples from the 5 aircore drillholes **(refer Table 17)** has confirmed Cihari as an exciting new large target for high value HMC situated in the Red Sand lithology. With average VHM (Zircon, Rutile, Leucoxene, Altered Ilmenite and Ilmenite) results from the 4 samples at 58.1%, plus 21.6% Titanomagnetite, the valuable product of the HMC at Cihari Target is 79.7%. The VHM is significantly higher than the average of 41% VHM found within the Koko Massava MRE area **(refer ASX Announcement 16 December 2021)** or the average 43% VHM from the Global Nhacutse and Poiombo MRE area **(refer ASX Announcement 8 April 2022**).

Corridor South (11137 C) Drilling Program and Mineralogy

Ongoing mineralogical studies have identified a very strong lithological boundary in the eastern side of the Corridor licences (yellow line, **Figures 9 and 10**), with red/red-brown coloured sand to the west of the boundary (Type 1 sand) and white/grey coloured sand to the east of the boundary (Type 2 sand). The mineralogical studies have identified very high VHM sand in the white Type 2 sand east of the boundary, but also found a significant increase in VHM content of the HMC from west to east within the Type 1 red sand, with significantly higher VHM content of the HMC close to the boundary in the red sand (**refer ASX Announcements 11 August 2021 and 1 April 2022**). The VHM% in the 5 aircore drillholes reported here are situated in the Type 1 red sand, but very close to the lithological boundary (**refer Figures 9 and 10**). A total of 119 samples (inclusive of QAQC samples) were collected at 1.5m intervals and analyses at Western Geolabs in Perth, Australia (**refer Table 16**). Aircore drillhole 22CCAC790 returned 4.20% THM over 36.0m; 22CCAC794 returned 4.26% THM over 36.0m, 22CCAC791 returned 3.37% THM over 36.0m, 22CCAC792 returned 3.72% THM over 16.5m and 22CCAC793 returned 3.37% THM over 18.0m, all with mineralisation from surface. Drillholes 22CCAC790, '791 and '794 were still in >3% THM sand at end of hole.

Mineral Concentrate (HMC) composites, derived from all observed lithologies and from all 5 drillholes drilled, were also sent for mineralogical investigations. Mineralogical investigation and analyses were done by SJMetMin Laboratories, with results as per Table 17.

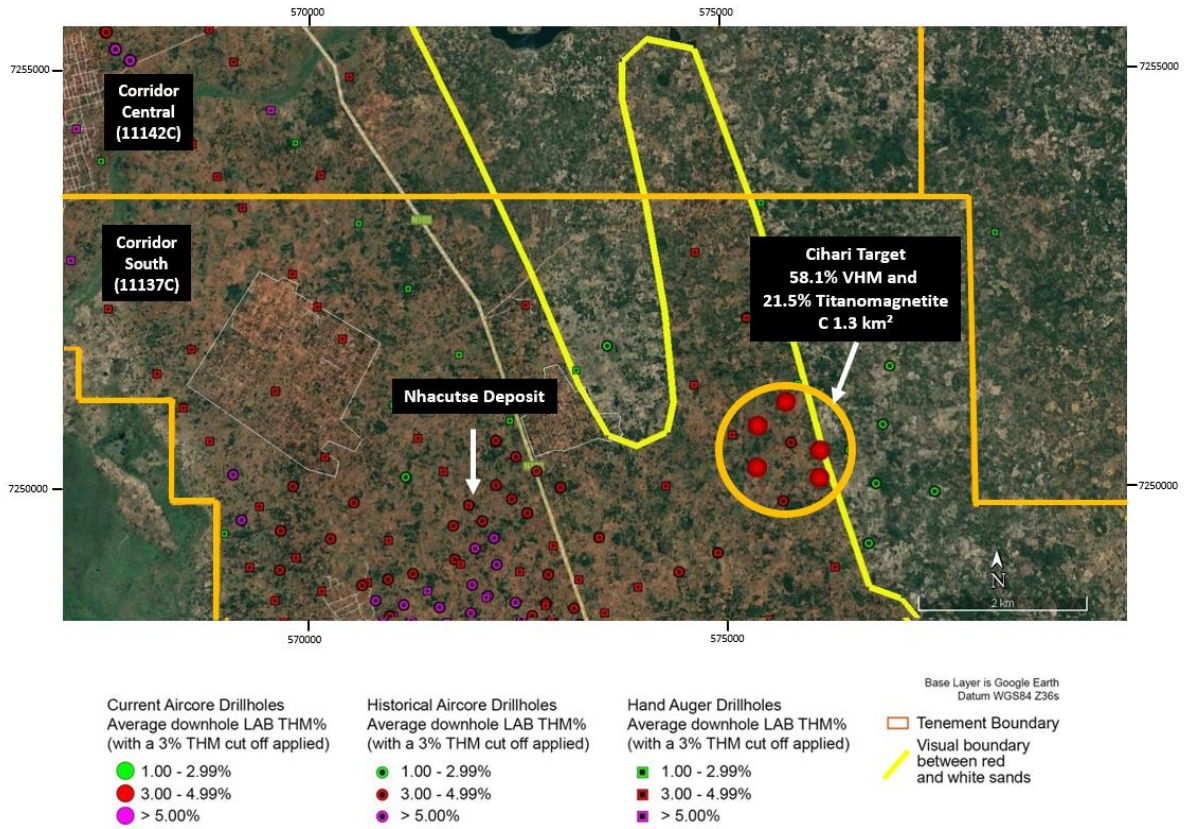


Figure 9: *Map showing the location of the 5 new Aircore drillholes, all laboratory obtained aircore and auger THM % drilling grades, the Red/White Sand lithological boundary (yellow line) and the position of the new Cihari Target within the Corridor South (11137 C) licence.*

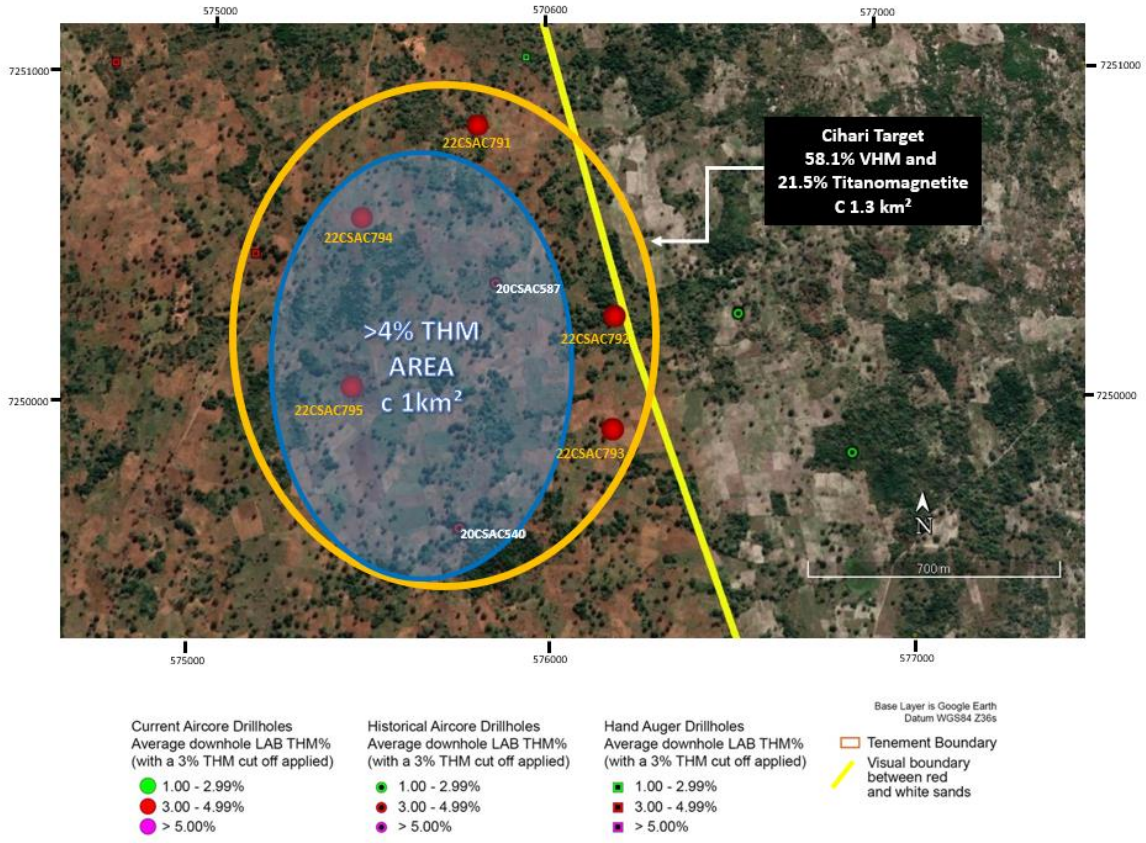


Figure 10: *Map showing the location of the 5 new aircore drillholes and historic aircore and auger drillholes within the new Cihari Target within the Corridor South (11137 C) licence, as well as Red/White Sand lithological boundary (yellow line) and the >4% THM area (in blue).*

Table 16: *Summary collar and Assay THM% results for 3 Reconnaissance aircore drilloles within new Cihari Target within Corridor South (11137C).*

DRILLHOLE INFORMATION						MINERALISATION			
						LAB RESULTS			
HOLE ID	UTM EAST WGS84	UTM NORTH WGS84	ELEV'N (M)	EOH (M)	DRILL TYPE	FROM	TO	INTERSECTION (M)	% LAB THM
22CCAC790	7250017	575442	81	36.0	AIRCORE	0.0	36.0	36.0	4.20
22CCAC791	7250802	575795	78	36.0	AIRCORE	0.0	36.0	36.0	3.37
22CCAC792	7250219	576195	79	33.0	AIRCORE	0.0	16.5	16.5	3.72
22CCAC793	7249893	576184	78	30.0	AIRCORE	0.0	18.0	18.0	3.37
22CCAC794	7250517	575457	82	36.0	AIRCORE	0.0	36.0	36.0	4.26

Table 17: *Quantitative QEMSCAN mineralogy results from 5 aircore drillholes within New Cihari Target at Corridor South (11137C).*

Sample	CCMIN 26	CCMIN 27	CCMIN 28	CCMIN 29						
BH ID	22CCAC790 & 22CAAC794	22CCAC790 & 22CAAC794	22CCAC791 & 22CAAC792 & 22CSAC793	22CCAC791 & 22CAAC792 & 22CSAC793						
Mineral					Min	Max	Ave	StDev	Average	
Zircon	1.9	1.7	1.6	1.7	1.6	1.9	1.7	0.1	58.1	Total VHM in HMC
Rutile	1.1	1.0	1.1	1.2	1.0	1.2	1.1	0.1		
Alt-Ilmenite II (TiO_2 74%)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0		
Alt-Ilmenite I (TiO_2 62%)	3.9	3.7	4.1	5.6	3.7	5.6	4.3	0.9		
Ilmenite (TiO_2 52%)	52.2	50.8	51.2	49.1	49.1	52.2	50.8	1.3		
Titanomagnetite	22.9	23.5	20.8	19.4	19.4	23.5	21.6	1.9	21.6	Titanomagnetite
Hematite	8.5	9.6	9.0	8.0	8.0	9.6	8.8	0.7	20.2	Total Non-VHM in HMC
Chromite	3.2	3.5	4.0	4.8	3.2	4.8	3.9	0.7		
Magnetic Others	0.8	0.9	1.0	1.6	0.8	1.6	1.1	0.3		
Andalusite	3.4	3.2	4.3	4.9	3.2	4.9	3.9	0.8		
Non-magnetic Others	2.0	2.0	2.7	3.4	2.0	3.4	2.5	0.7		
TOTALS:	100.00	100.00	100.00	100.00						

NEW VHM DATA HIGHLIGHTS MALAMBANE TARGET AS A SIGNIFICANT DISCOVERY

MRG announced excellent laboratory and mineralogical results of the Malambane High VHM Target, located within the east of the Poiombo Mineral Resource Estimate (MRE) area of the Company's Corridor South (11137 C) HMS projects (**refer ASX Announcement 15 December 2022; Tables 18 and 19; Figures 1, 11, 12 and 13**).

Malambane infill aircore drilling was undertaken as part of a drilling program to define the high VHM content of the Heavy Mineral Concentrate (HMC) close to the well-established red sand/white sand lithological boundary (**refer ASX Announcements 11 August 2021 and 1 April 2022**). The drilling took place in the red sand, close to the lithological boundary (**refer Figures 11, 12 and 13**). Drilling in the Malambane target area previously was very widely spaced (1,000m by 500m), with the drilling of these latest 15 infill aircore holes bringing spacing to approximately 500m by 500m.

Laboratory results from the 15 infill aircore drillhole (22CCAC800 – 22CCAC813 and 22CCAC821) returned excellent results (**refer Table 18; Figures 12 and 13**), with:

- 3 holes (22CCAC802, 22CCAC804 and 22CCAC821) with >6% THM,

- 2 holes (22CCAC805 and 22CCAC810) with 5-6% THM,
- 4 holes (22CCAC801, 22CCAC806, 22CCAC809 and 22CCAC813) with 4-5% THM, and
- The remaining 6 holes with 3-4% THM, all mineralised from surface (**refer Table 18, Figures 11 and 12**).

The Silt content for the 15 holes is on average 14.3%.

During the completed Corridor Project Scoping Study (**refer ASX Announcement 2 November 2021**), 2 high grade pit areas were identified, one west of the town of Poiombo, the other east of Poiombo on the red/white sand boundary. The western pit has a surface area of approximately 0.9km², while the eastern has a surface area of approximately 0.3km². The eastern pit was based on the laboratory results of the historical aircore hole 20CSAC352 (**refer Figure 4 and ASX Announcement 25 March 2020**), this hole drilled in early 2020 was twinned during the report period by hole 22CCAC821 (**refer Figure 13**), with very good correlation in the results thus clearly proving the very high grade in this area.

The >5% THM grades from new aircore holes 22CCAC802, 22CCAC804, 22CCAC805, 22CCAC810 (**refer Table 18**), as well as the 5.93% THM over 36.0m from surface in the historical aircore drillhole 20CSAC349 (**refer ASX Announcement 25 March 2020**) shows the large approximately 1.3km² high-grade Malambane Target (**refer Figure 13**, blue area) situated outside the current Scoping Study pit area in the east of the Poiombo MRE area (**refer Figure 13**). This target area is larger than the combined area of the 2 current Poiombo pit areas in the Scoping Study, thus clearly showing the potential for additional very high grade sand in the Malambane Target.

Very importantly, the mineralogical results from 14 composite samples of Heavy Mineral Concentrate (**HMC**) from the aircore holes returned high Valuable Heavy Mineral (VHM) results (refer **Table 19 and Figure 13**), averaging 61.6% VHM (53.9 % Ilmenite, 4.7 % Altered Ilmenite, 0.2 % Leucoxene, 1.9 % Zircon and 1.0 % Rutile) plus 21.0% Titanomagnetite. This clearly confirmed Malambane as not just a very high grade target, but also as a high value HMC Target. The VHM is significantly higher than the average of 41% VHM found within the Koko Massava MRE area (refer ASX Announcement 16 December 2021) or the average 43% VHM from the Global Nhacutse and Poiombo MRE area (**refer ASX Announcement 8 April 2022**).

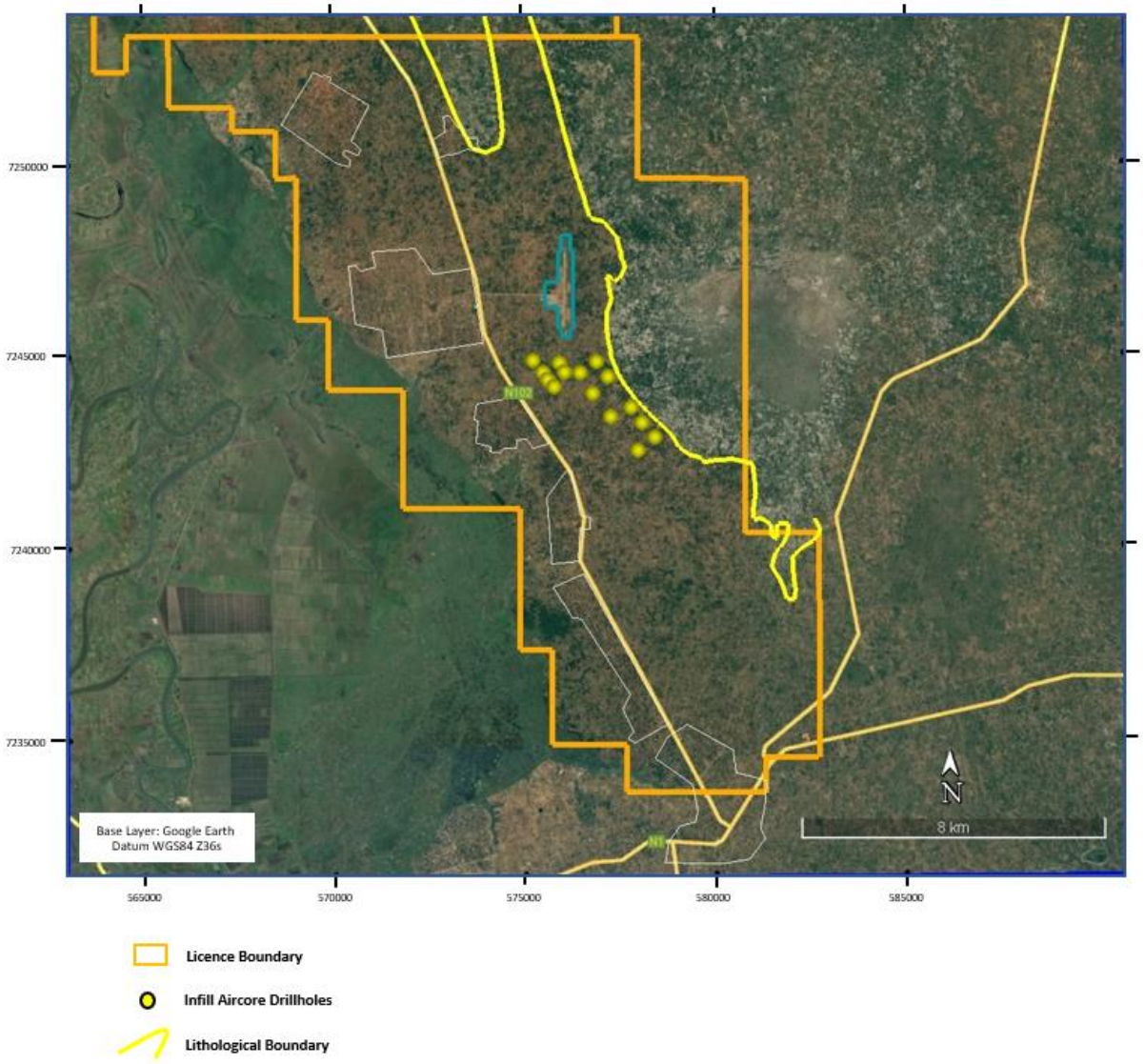


Figure 11: *Map showing the locality of the 15 infill aircore drillholes in yellow within Corridor South (11137 C) licence.*

Corridor South (11137 C) Drilling Program and Mineralogy

The laboratory THM% and mineralogy results in the 15 aircore drillholes reported here are situated in the Type 1 red sand (**refer ASX Announcements 11 August 2021 and 1 April 2022**), but close to the lithological boundary (**refer Figures 11, 12 and 13**). A total of 366 samples (inclusive of QAQC samples) were collected at 1.5m intervals and analyses at Western Geolabs in Perth, Australia (**refer Table 18**). Several of the aircore holes were still in high THM% grade at the end of drilling, with 22CSAC801 at 5.55% THM and 22CSAC809 at 6.88% THM in the final 1.5m intervals; while holes 22CSAC804 and 22CSAC805 were in >4% THM in the final drilling intersection.

The eastern high-grade pit in the recently completed Corridor Project Scoping Study (**refer ASX Announcement 2 November 2021**) was based on the laboratory results of the historical aircore hole 20CSAC352 (**refer Figure 4 and ASX Announcement 25 March 2020**). This hole was twinned during the drilling program reported here by hole 22CCAC821 (**refer Table 18 and Figure 13**). Aircore hole 20CSAC352 was sampled at 3m intervals and had an end of hole depth of 36m, still in 5.02% THM grade; while 22CCAC821 was sampled at 1.5m intervals and had an end of hole depth of 39m. The two holes have the following laboratory THM results:

- 20CSAC352 – 36.0m 36.0m @ 5.12 % THM, including
  – 21.0m 21.0m @ 6.06 % THM.
- 22CCAC804 – 37.5m 37.5m @ 5.43 % THM, including
  – 21.0m 21.0m @ 6.41 % THM.

The results from the twin hole 22CCAC821 clearly confirms the presence of the very high THM grade sand in the Malambane Target.

14 Mineral Concentrate (HMC) composites, derived from all observed lithologies within the drillholes, were also sent for mineralogical investigations. Mineralogical investigation and analyses were done by SJMetMin Laboratories (refer Table 2) via XRF, XRD and QEMSCAN analyses.

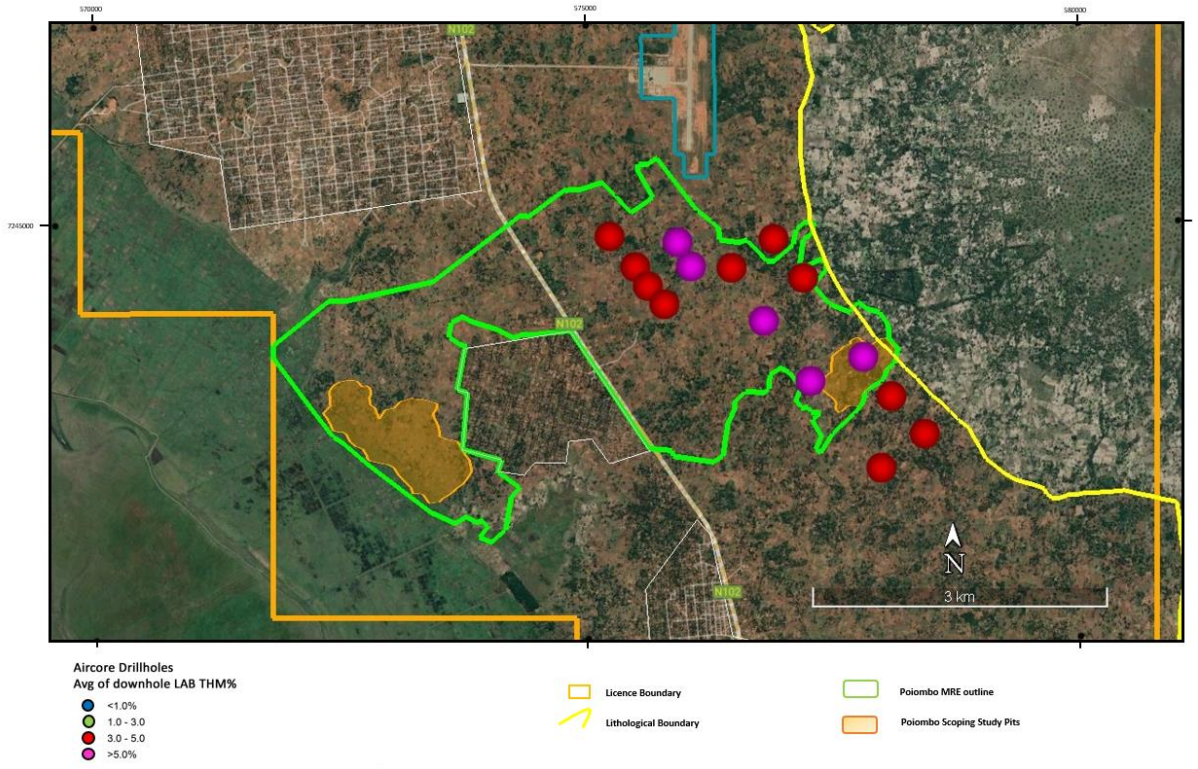


Figure 12: *Map showing 15 new Aircore drillholes only with laboratory obtained Total Heavy Mineral (THM) % grades. Aircore holes are close to the Red/White Sand lithological boundary (yellow line), with position of the Poiombo MRE Area outlined in green, the Scoping Study 2 pit areas are shown in orange.*

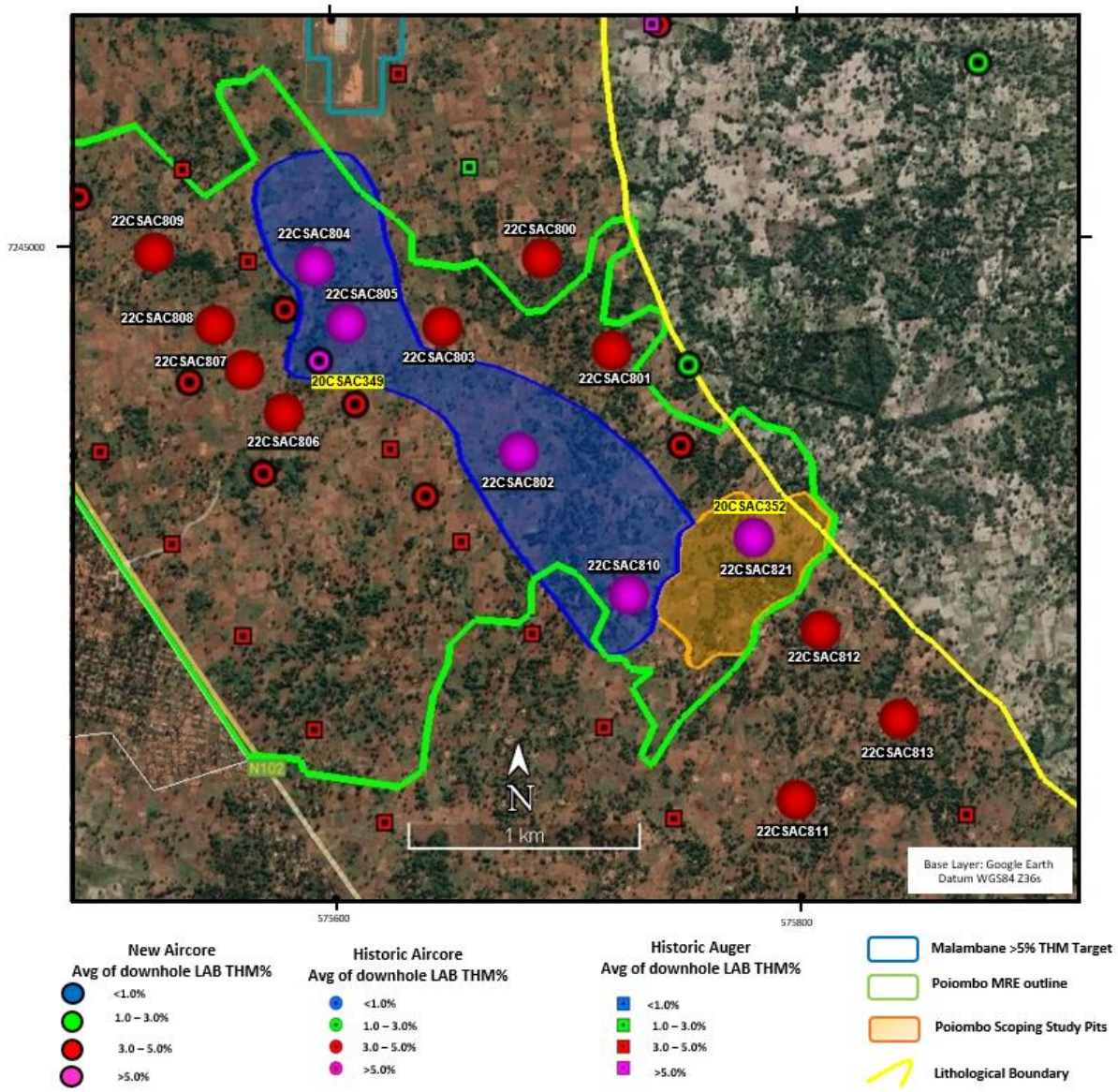


Figure 13: *Map showing 15 new Aircore drillholes, as well as historic MRG aircore and hand auger holes with laboratory obtained Total Heavy Mineral (THM) % grades, the Red/White Sand lithological boundary (yellow line), the Poiombo MRE outline (green), 2 pit optimization areas (orange) as well as the new >5% THM Malambane target area (in blue).*

Table 18: *Summary collar and Assay THM% results for 15 Infill aircore drilloles within Malambane Target within Corridor South (11137C).*

DRILLHOLE INFORMATION						MINERALISATION LAB RESULTS			
HOLE ID	UTM EAST WGS84	UTM NORTH WGS84	ELEV'N (M)	EOH (M)	DRILL TYPE	FROM	TO	INTERSECTION (M)	% LAB THM
22CSAC800	7244833	576902	81	33.0	AIRCORE	0.0	31.5	31.5	3.67
22CSAC801	7244438	577201	84	36.0	AIRCORE	0.0	36.0	36.0	4.57
22CSAC802	7244004	576798	79	34.5	AIRCORE	0.0	33.0	33.0	5.72
						0.0	21.0	21.0	6.03
22CSAC803	7244561	576478	75	34.5	AIRCORE	0.0	30.0	30.0	3.83
22CSAC804	7244805	575925	87	36.0	AIRCORE	0.0	22.5	22.5	5.54
						0.0	16.5	16.5	6.09
22CSAC805	7244559	576061	88	34.5	AIRCORE	0.0	19.5	19.5	5.05
22CSAC806	7244178	575789	76	34.5	AIRCORE	0.0	33.0	33.0	4.47
22CSAC807	7244363	575621	79	34.5	AIRCORE	0.0	30.0	30.0	3.66
22CSAC808	7244556	575495	78	34.5	AIRCORE	0.0	34.5	34.5	3.95
22CSAC809	7244867	575235	85	37.5	AIRCORE	0.0	37.5	37.5	4.91
						30.0	37.5	7.5	7.42
22CSAC810	7243394	577269	86	34.5	AIRCORE	0.0	27.0	27.0	5.23
22CSAC811	7242513	577984	116	34.5	AIRCORE	0.0	21.0	21.0	3.01
22CSAC812	7243237	578091	75	34.5	AIRCORE	0.0	31.5	31.5	3.22
22CSAC813	7242856	578427	76	34.5	AIRCORE	0.0	21.0	21.0	4.67
22CSAC821	7243635	577806	72	39.0	AIRCORE	0.0	19.5	19.5	6.41

Table 19: *Quantitative QEMSCAN mineralogy results from aircore drillholes within Malambane Target at Corridor South (11137C).*

Sample	CCMIN 35	CCMIN 36	CCMIN 37	CCMIN 38	CCMIN 39	CCMIN 40	CCMIN 41	CCMIN 42	CCMIN 43	CCMIN 44
BH ID	22CSAC800, 22CSAC801	22CSAC800, 22CSAC801	22CSAC802, 22CSAC803	22CSAC802, 22CSAC803	22CSAC804, 22CSAC805	22CSAC804, 22CSAC805	22CSAC806, 22CSAC807, 22CSAC808, 22CSAC809	22CSAC806, 22CSAC807, 22CSAC808, 22CSAC809	22CSAC810	22CSAC810
Mineral										
Zircon	2.1	1.5	1.9	1.8	1.7	1.8	1.8	1.6	2.1	1.7
Rutile	1.3	1.0	0.9	1.0	1.1	1.1	0.8	0.9	1.0	1.0
Alt-Ilmenite II (TiO_2 74%)	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Alt-Ilmenite I (TiO_2 62%)	5.5	4.7	3.8	4.0	5.0	4.6	4.6	4.9	5.7	4.4
Ilmenite (TiO_2 52%)	54.5	53.2	57.0	52.8	56.5	53.0	55.6	53.8	55.8	49.8
Titanomagnetite	20.2	22.5	20.0	23.0	19.1	21.7	21.1	22.2	18.3	23.9
Hematite	7.8	8.7	7.9	8.2	7.5	7.9	8.6	9.2	7.0	8.2
Chromite	3.7	4.3	4.4	4.0	3.9	3.1	3.6	3.3	4.2	2.7
Magnetic Others	0.7	0.8	0.7	0.8	0.7	0.8	0.7	0.7	1.1	1.0
Andalusite	2.2	1.4	1.8	2.1	2.5	3.4	1.1	1.5	2.4	4.3
Non-magnetic Others	1.8	1.5	1.5	2.2	1.7	2.4	1.9	1.8	2.1	2.8
VHM in HMC	**63.6**	**60.7**	**63.8**	**59.7**	**64.5**	**60.7**	**63.0**	**61.3**	**64.8**	**57.1**
Titanomagnetite in HMC	**20.2**	**22.5**	**20.0**	**23.0**	**19.1**	**21.7**	**21.1**	**22.2**	**18.3**	**23.9**
Non-VHM in HMC	**16.2**	**16.7**	**16.2**	**17.3**	**16.4**	**17.6**	**15.9**	**16.4**	**16.9**	**19.0**
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sample	CCMIN 45	CCMIN 46	CCMIN 47	CCMIN 48
BH ID	22CSAC811	22CSAC811	22CSAC812, 22CSAC813	22CSAC812, 22CSAC813
Mineral				
Zircon	2.2	1.5	2.1	2.0
Rutile	1.3	1.0	1.1	0.9
Alt-Ilmenite II (TiO_2 74%)	0.2	0.2	0.2	0.1
Alt-Ilmenite I (TiO_2 62%)	4.7	4.2	5.8	4.3
Ilmenite (TiO_2 52%)	53.7	50.4	55.8	52.0
Titanomagnetite	19.5	21.9	18.6	21.7
Hematite	8.0	7.4	7.1	8.5
Chromite	3.7	3.4	3.6	3.6
Magnetic Others	0.8	1.3	0.8	1.1
Andalusite	3.7	4.5	2.5	3.3
Non-magnetic Others	2.2	4.2	2.3	2.5
VHM in HMC	**62.1**	**57.3**	**65.0**	**59.3**
Titanomagnetite in HMC	**19.5**	**21.9**	**18.6**	**21.7**
Non-VHM in HMC	**18.4**	**20.8**	**16.4**	**19.0**
Total	100.0	100.0	100.0	100.0

Min	Max	Ave	StDev	Average	
1.5	2.2	1.9	0.2		
0.8	1.3	1.0	0.1		
0.1	0.2	0.2	0.0	**61.6**	**Total VHM in HMC**
3.8	5.8	4.7	0.6		
49.8	57.0	53.9	2.2		
18.3	23.9	21.0	1.7	**21.0**	**Total Titanomagnetite in HMC**
7.0	9.2	8.0	0.6		
2.7	4.4	3.7	0.5		
0.7	1.3	0.9	0.2	**38.4**	**Total Non-VHM in HMC**
1.1	4.5	2.6	1.1		
1.5	4.2	2.2	0.7		

VERY HIGH MINERAL ASSEMBLAGE INTERSECTED IN AIRCORE DRILLING AT VIARIA AND ZULENE TARGETS

MRG announced the laboratory Total Heavy Mineral (THM) and mineralogical results of infill aircore drilling within the Viaria and Zulene Targets, located within the south of the Company's Corridor South (11137 C) HMS Project (**refer ASX Announcement 19 November 2022; Tables 20, 21 and 22; Figures 1, 14 and 15**).

Laboratory results from 7 infill aircore holes (comprising 4 holes at Zulene Target and 3 holes at Viaria Target) within Mining Licence Application (MLA) Corridor South (11137 C) have delivered some high THM results (**refer Table 20, Figure 15**). The results from hole 22CCAC815 in Viaria in particular is very encouraging. To date the Viaria target only had 1 aircore drilled. Even with the inclusion of these latest 3 holes, the area still remains totally under-drilled, however it now contains a significant >4%THM target of approximately 1.4 km² (**refer Figure 15**).

Importantly, mineralogical results from 6 composite HMC samples for Viaria and 5 composite HMC samples Zulene have confirmed the high VHM content of the HMC (**refer Tables 21 and 22**) in the south and close to the red sand/white sand lithological boundary. The high VHM content of the HMC for Viaria and the large >4% THM target area has confirmed Viaria as an exciting large target for high value HMC situated in the Red Sand lithology (**refer Figure 15**). The Viaria Target is also >1.5km from any town. With average VHM (Zircon, Rutile, Leucoxene, Altered Ilmenite and Ilmenite) results at Viaria at 63.5%, plus 19.1% Titanomagnetite, the valuable product of the HMC at Viaria Target is 82.6%. The VHM is significantly higher than the average of 41% VHM found within the Koko Massava MRE area (**refer ASX Announcement 16 December 2021**) or the average 43% VHM from the Global Nhacutse and Poiombo MRE area (**refer ASX Announcement 8 April 2022**).

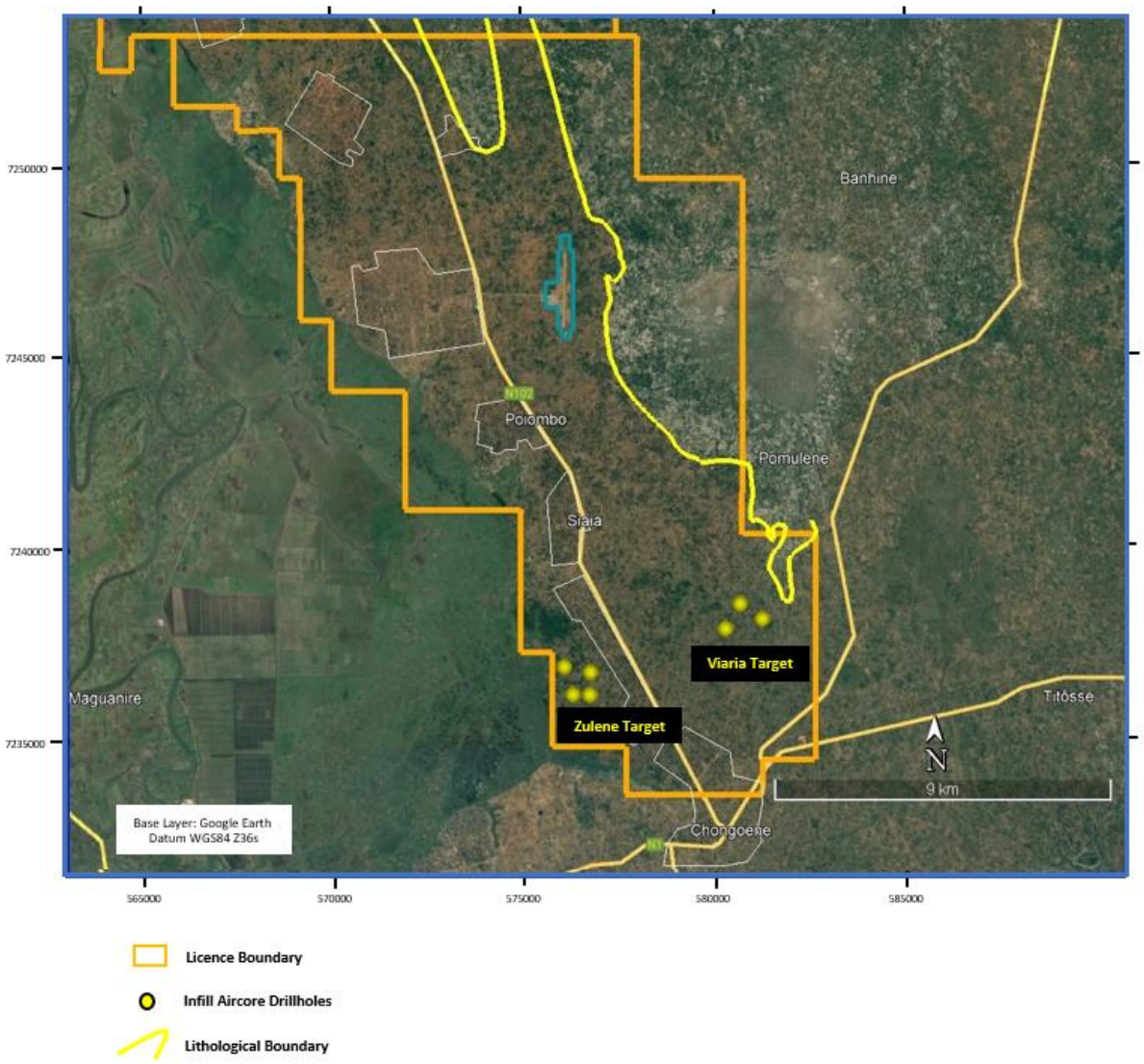


Figure 14: *Map showing the locality of the 3 Viaria and 4 Zulene infill aircore drillholes in yellow within Corridor South (11137 C) licence.*

Viaria and Zulene Infill Aircore Drilling Program and Mineralogy

The Viaria and Zulene infill aircore drilling followed on from other targets generated – Azaria and Chihari - and excellent results from the Malambane Target from ongoing aircore drilling and mineralogical studies in and around the very strong lithological boundary in the eastern side of the Corridor licences (yellow line, **Figures 14 and 15**), as well in the south of within Corridor South (11137 C) where the Viaria and Zulene targets are situated.

Viaria is close to the red sand/white sand boundary, while Zulene Target is in the southwestern corner of the licence (**refer Figure 14**). The laboratory THM% and mineralogy results in the 7 aircore drillholes (total 240.0m drilled), 3 in Viaria and 4 in Zulene, reported here are situated in the Type 1 red sand (**refer ASX Announcements 11 August 2021 and 1 April 2022**), but close to the lithological boundary (**refer Figures 14 and 15**). A total of 167 samples (inclusive of QAQC samples) were collected at 1.5m intervals and analyses at Western Geolabs in Perth, Australia (**refer Table 20**).

6 Heavy Mineral Concentrate (**HMC**) composites samples from Varia (**refer Table 21**) and 5 HMC composites samples from Zulene (**refer Table 22**), derived from all observed lithologies within the drillholes, were sent for mineralogical investigations. Mineralogical investigation and analyses were done by SJMetMin Laboratories via XRF, XRD and QEMSCAN analyses.

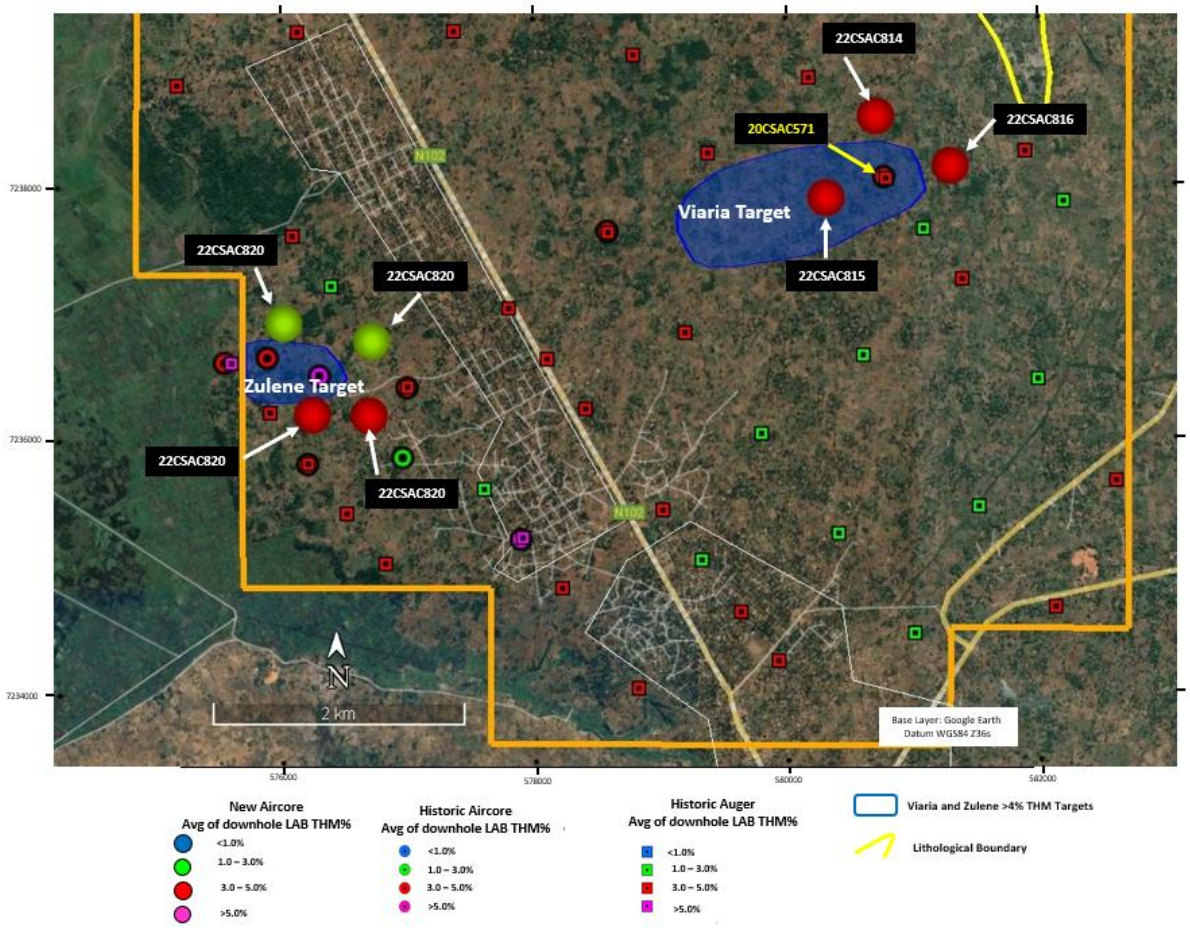


Figure 15: *Map showing the location and lab obtained grades of the 7 new Aircore drillholes, all laboratory obtained aircore and auger THM % drilling grades, the Red/White Sand lithological boundary (yellow line) and the position of the Viaria and Zulene >4% THM Targets within the Corridor South (11137 C) licence.*

Table 20: *Summary collar and Assay THM% results for 7 Infill aircore drilloles within the Viaria and Zulene Targets within Corridor South (11137C).*

DRILLHOLE INFORMATION						MINERALISATION LAB RESULTS			
HOLE ID	UTM EAST WGS84	UTM NORTH WGS84	ELEV'N (M)	EOH (M)	DRILL TYPE	FROM	TO	INTERSECTION (M)	% LAB THM
22CSAC814	7238544	580718	83	36.0	AIRCORE	0.0	34.5	34.5	3.15
22CSAC815	7237901	580323	89	33.0	AIRCORE	0.0	19.5	19.5	3.96
						0.0	15.0	15.0	4.05
22CSAC816	7238151	581308	97	33.0	AIRCORE	0.0	22.5	22.5	3.54
22CSAC817	7236791	576708	62	34.5	AIRCORE	0.0	34.5	34.5	2.38
22CSAC818	7236929	576024	51	34.5	AIRCORE	0.0	34.5	34.5	2.46
22CSAC819	7236204	576704	66	34.5	AIRCORE	0.0	28.5	28.5	3.15
22CSAC820	7236208	576248	73	34.5	AIRCORE	0.0	24.0	24.0	3.82

Table 21: *Quantitative QEMSCAN mineralogy results from 3 aircore drillholes within the Viaria Target.*

Sample	CCMIN 49	CCMIN 50	CCMIN 51	CCMIN 52	CCMIN 53	CCMIN 54						
Target	Viaria		Viaria		Viaria							
BH ID	AC814	AC814	AC815	AC815	AC816	AC816						
Mineral							Min	Max	Ave	StDev	Average	
Zircon	2.1	2.2	2.0	2.1	1.7	2.4	1.7	2.4	2.1	0.3	63.5	Total VHM in HMC
Rutile	1.2	1.2	1.3	1.4	1.3	1.4	1.2	1.4	1.3	0.1		
Alt-Ilmenite II (TiO_2 74%)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0		
Alt-Ilmenite I (TiO_2 62%)	5.2	5.4	5.6	5.2	4.7	4.7	4.7	5.6	5.1	0.4		
Ilmenite (TiO_2 52%)	55.3	55.5	55.0	54.3	56.1	52.6	52.6	56.1	54.8	1.2		
Titanomagnetite	18.9	19.1	18.4	19.6	18.9	19.8	18.4	19.8	19.1	0.5	19.1	Total Titanomagnetite in HMC
Hematite	7.1	6.7	7.4	7.5	7.4	7.5	6.7	7.5	7.3	0.3	36.5	Total Non-VHM in HMC
Chromite	3.3	3.5	3.9	3.5	3.4	4.0	3.3	4.0	3.6	0.3		
Magnetic Others	0.9	1.1	0.9	0.8	0.9	1.0	0.8	1.1	0.9	0.1		
Andalusite	3.9	3.2	3.6	3.4	3.3	3.9	3.2	3.9	3.6	0.3		
Non-magnetic Others	1.9	2.0	1.8	1.9	2.0	2.4	1.8	2.4	2.0	0.2		
VHM in HMC	**64.1**	**64.5**	**64.0**	**63.2**	**64.0**	**61.3**						
Titanomagnetite in HMC	**18.9**	**19.1**	**18.4**	**19.6**	**18.9**	**19.8**						
Non-VHM in HMC	**17.1**	**16.5**	**17.6**	**17.2**	**17.1**	**18.9**						

Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 22: *Quantitative QEMSCAN mineralogy results from 3 aircore drillholes within the Zulene Target at Corridor South (11137C).*

Sample	CCMIN 55	CCMIN 56	CCMIN 57	CCMIN 58						
Target	Zulene		Zulene							
BH ID	AC817, AC819	AC817, AC819	AC818, AC820	AC818, AC820						
Mineral					Min	Max	Ave	StDev	Average	
Zircon	1.8	2.2	2.2	1.9	1.8	2.2	2.0	0.2		
Rutile	1.3	1.3	1.2	1.2	1.2	1.3	1.2	0.1		
Alt-Ilmenite II (TiO_2 74%)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	**62.6**	**Total VHM in HMC**
Alt-Ilmenite I (TiO_2 62%)	5.2	5.4	5.4	5.3	5.2	5.4	5.3	0.1		
Ilmenite (TiO_2 52%)	53.9	55.4	55.5	50.6	50.6	55.5	53.8	2.3		
Titanomagnetite	19.5	19.4	19.0	20.3	19.0	20.3	19.6	0.5	**19.6**	**Total Titanomagnetite in HMC**
Hematite	7.4	7.2	8.1	6.9	6.9	8.1	7.4	0.5		
Chromite	3.6	3.5	3.7	4.3	3.5	4.3	3.8	0.4		
Magnetic Others	1.0	1.1	0.9	1.7	0.9	1.7	1.1	0.4	**37.4**	**Total Non-VHM in HMC**
Andalusite	3.9	2.6	2.2	4.5	2.2	4.5	3.3	1.1		
Non-magnetic Others	2.3	1.8	1.7	3.2	1.7	3.2	2.2	0.7		
VHM in HMC	**62.3**	**64.5**	**64.4**	**59.1**						
Titanomagnetite in HMC	**19.5**	**19.4**	**19.0**	**20.3**						
Non-VHM in HMC	**18.2**	**16.0**	**16.6**	**20.6**						
Total	100.0	100.0	100.0	100.0						

MAGONDE AIRCORE DRILLING DELIVERS VERY HIGH VHM MINERALOGY RESULTS

MRG announced excellent mineralogy results from heavy mineral concentrate (**HMC**) samples sourced from three target testing aircore drillholes within MRG's Magonde Target in the Marao (6842L) Heavy Mineral Sands licence (**refer ASX Announcement 12 December 2022; Figures 1, 16 and 17**; **refer ASX Announcements 16 March 2022 and 21 July 2022**). MRG also announced the laboratory results for hand auger drillholes in the Magonde Target area (**refer Table 24**).

The Magonde Target was generated via visual estimated THM grade of reconnaissance hand auger grid drilling (**Figure 17; refer ASX Announcement 18 March 2021**). Three very widely spaced target testing aircore drillholes were then drilled during March 2022 within the Magonde Target (**Figures 16 and 17;**

refer ASX Announcement 16 March 2022), with the highest laboratory derived grade of 6.04% THM over 27.0m from surface returned from 22MUAC003 within the Target (**refer Figures 16 and 17; refer ASX Announcement 21 July 2022**).

Laboratory grade from selected hand auger drillholes (**refer Table 24**) delivered five drillholes with >3% THM, which very clearly defines the Magonde Target as a >3% THM Target, with the target area 2.6 km² (**refer Figure 17,** red area). With two of the auger drillholes returning >4% THM results from surface (21MUHA014 and 21MUHA015, **refer Table 24**), a higher >4% THM grade target including the very high grade aircore drillhole 22MUAC003 has an area of 1.1km² (**refer Figure 17**, yellow area).

Five Composite samples were generated from HMC of all three aircore drillholes, covering all interpreted lithologies (red sand at surface, grey sand at depth, **refer Table 23**). The mineralogical results follow the very encouraging results from initial grab sample from within the Magonde target (sample 20MR03; **refer Figure 17 and ASX Announcement 27 April 2021**) that showed 50.05% VHM content results (Ilmenite, Altered Ilmenite, Rutile and Zircon) from Scanning Electron Microscopy (SEM).

The mineralogical results from the aircore HMC composites show even higher VHM results from the red sand lithology than the grab samples, with between 58.2% and 61.8% VHM in the Magonde Target. Additionally, Titanomagnetite content of the HMC in these samples are between 14.2% and 15.1%. The VHM + Titanomagnetite product is therefore in the 73.4% to 76.5% of the HMC range. The red sand portion of 22MUAC003 with the very high VHM has 5.25% THM from surface to 19.5m. This clearly shows the potential for high grade and high value HMC within the Magonde Target in Marao, with follow-up closer spaced aircore drilling and additional mineralogical work to follow in 2023.

The VHM % for the Magonde red sand lithology is significantly higher than results reported in MRG's updated Koko Massava JORC Mineral Resource estimate of average 41% VHM of the HMC for the high-grade area (**refer ASX Announcement 16 December 2021**) and from the updated Nhacutse and Poiombo JORC Mineral Resource Estimate at average 45% and 46 % VHM respectively of the HMC within the >4% THM areas (**refer ASX Announcement 8 April 2022**).

The low VHM grey sand lithology intersected at depth in Magonde (samples Mumin 02 and Mumin 05; **Table 23**) has not been seen in any other MRG Project to date. This low VHM lithology, that still has high VHM grade, will be studied further during infill aircore drilling.

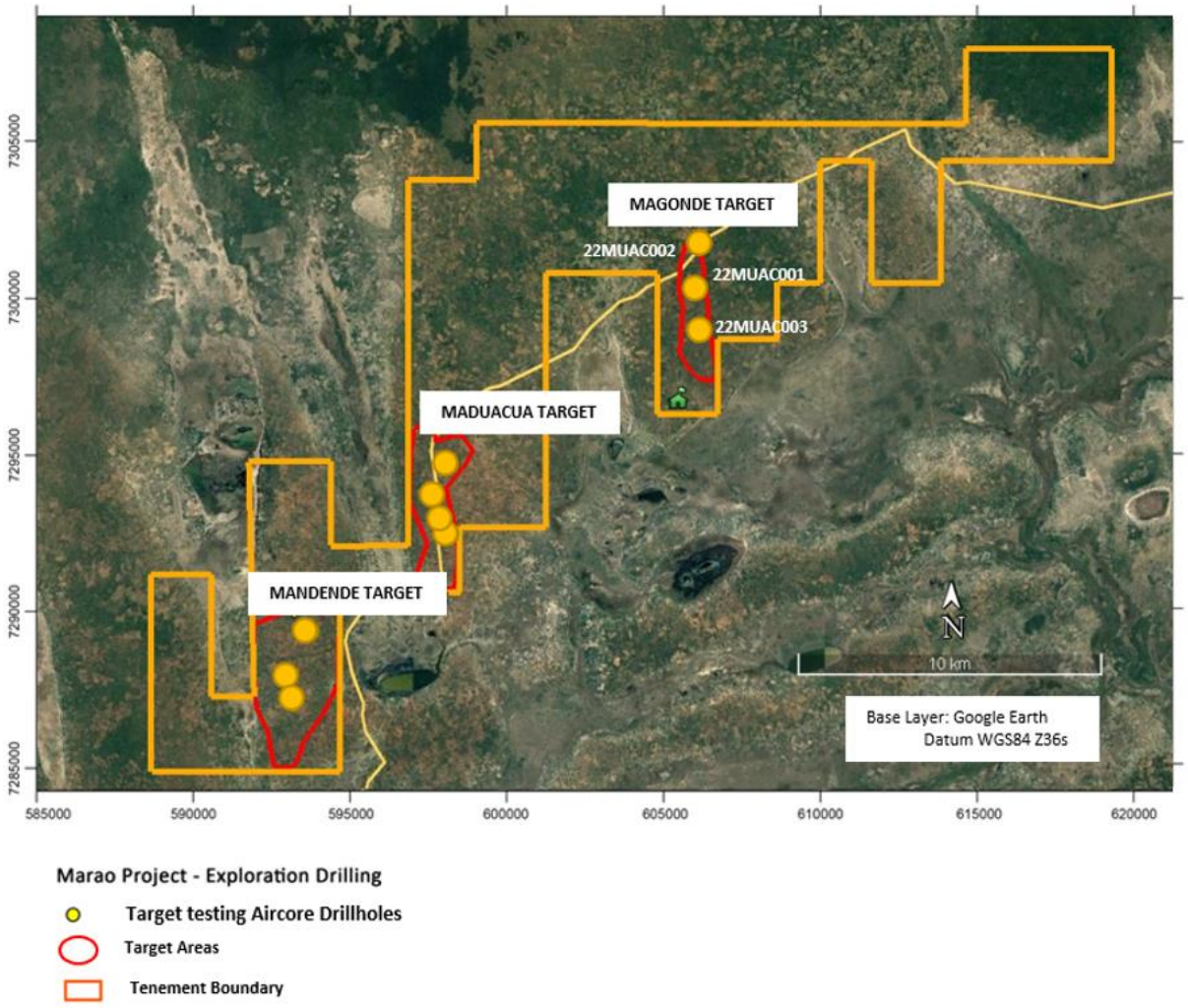


Figure 16: *Target testing aircore drillholes at Marao 6842L, with the 3 holes within Magonde Target clearly shown (22MUAC001 to 22MUAC003).*

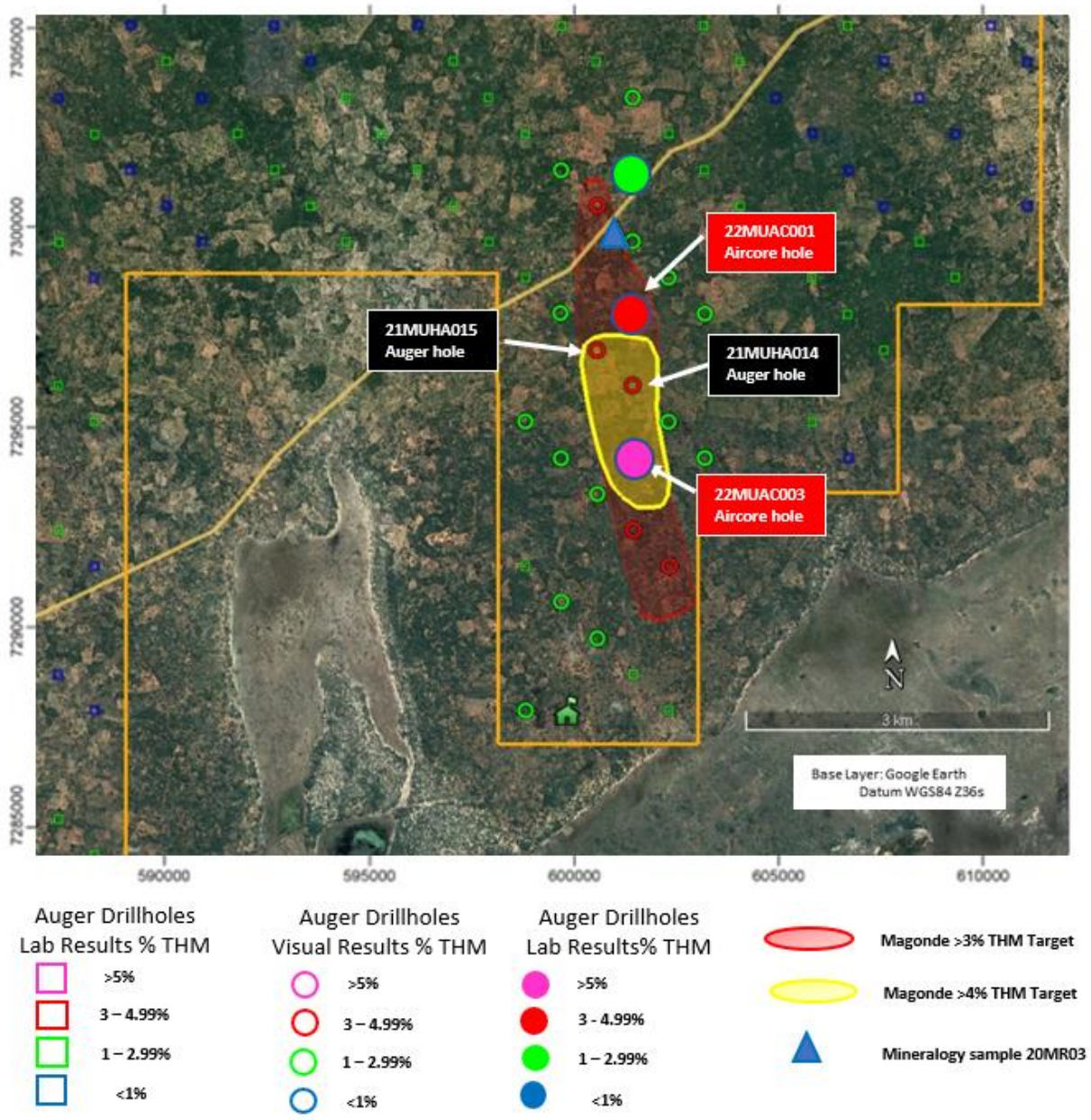


Figure 17: *Laboratory results for aircore holes and Visually Estimated (VIS EST) results for auger holes drilled at Marao (6842L) (**refer ASX Announcement 21 July 2022**).*

Table 23: *Summary mineralogy data of 5 composite samples derived from QEMSCAN, XRF and XRD analyses for 3 target testing aircore drillholes at Magonde Target, Marao (6842L).*

Sample	Mumin 01	Mumin 02	Mumin 03	Mumin 04	Mumin 05						
Locality	Marao		Marao	Marao							
Target	Magonde		Magonde	Magonde							
BH ID	22MUAC001		22MUAC002	22MUAC003							
Interval (m)	0.0 - 27.0	27.0 - 34.5	0.0 - 12.0	0.0 - 19.5	19.5 - 25.5						
Lithology	Red Sand	Gray Sand	Red Sand	Red Sand	Gray Sand						
Mineral						**Min**	**Max**	**Ave**	**StDev**	**Average**	
Zircon	2.6	1.2	2.8	2.5	1.4	1.2	2.8	2.1	0.7		
Rutile	2.0	1.2	2.4	2.0	1.2	1.2	2.4	1.8	0.5		
Leucoxene	0.3	0.1	0.4	0.2	0.2	0.1	0.4	0.3	0.1	**48.16**	**Total VHM in HMC**
Altered Ilmenite	6.9	2.8	7.4	6.0	4.7	2.8	7.4	5.5	1.8		
Ilmenite	50.0	22.0	48.9	47.6	24.2	22.0	50.0	38.5	14.1		
Titanomagnetite	14.6	9.2	14.2	15.1	8.6	8.6	15.1	12.4	3.2	**12.35**	**Total Titanomagnetite in HMC**
Hematite	4.2	2.1	4.7	3.4	1.7	1.7	4.7	3.2	1.3		
Chromite	3.4	2.5	3.2	3.6	2.5	2.5	3.6	3.0	0.5		
Magnetic Others	2.1	27.1	1.6	5.7	30.1	1.6	30.1	13.3	14.1	**39.49**	**Total Non-VHM in HMC**
Andalusite	9.1	9.4	10.4	6.4	4.5	4.5	10.4	8.0	2.4		
Non-magnetic Others	4.8	22.6	4.1	7.5	20.9	4.1	22.6	12.0	9.0		
VHM in HMC	**61.8**	**27.2**	**61.8**	**58.2**	**31.7**						
Titanomagnetite in HMC	**14.6**	**9.2**	**14.2**	**15.1**	**8.6**						
Non-VHM in HMC	**23.5**	**63.6**	**24.0**	**26.6**	**59.7**						
Total	100.0	100.0	100.0	100.0	100.0						

APPLICATION FOR MINING LICENCES FOR CORRIDOR PROJECTS

MRG announced the successful submittal of Mining Licence Applications (MLA's) for the Company's Corridor Central (6620L) and Corridor South (6621L) Heavy Mineral Sands (HMS) licences. The submission was accepted by INAMI, with subsequent renumbered by INAMI of Corridor Central to 11142C and Corridor South to 11137C. The MLA's follow initial results from the Scoping and Preliminary Economic Analysis (PEA) (**refer ASX Announcements 23 August 2022 and 31 August 2022**).

The MLA's also follows the recent 4 ELA's for REE and U, namely Patricio (10999L; 19,763.06 Ha), Fotinho (11000L; 19,865.18 Ha), Adriano (11002L; 19,777.14 Ha) and Olinga (11005L; 19.148,72 Ha). MRG will now work with INAMI to progress all MLAs and ELAs.

MRG will focus future exploration activities within Corridor Central (6620L) and Corridor South (6621L) on the very high Valuable Heavy Mineral (VHM) area discovered east of a very strong lithological boundary. Results from a recent reconnaissance aircore drilling program, as well as mineralogical studies, are expected soon. Further exploration will then aim to deliver these deposits for MRE, with the possibility of significantly improving the economics of the projects.

URANIUM & RARE EARTH ELEMENT LICENCE APPLICATION

MRG announced a new exploration licence application (ELA) has been made in the Zambezia Province of Mozambique for Uranium (U) and Rare Earth Elements (REEs) (**refer ASX Announcement 15 November 2022)**.

The new U and REE Olinga ELA (11005 L, 19,148.72 Ha) is situated 890 km North-East of MRG's existing Heavy Mineral Sands (HMS) projects at Corridor Sands (MLAs 11142 C and 11137 C) and 270 km Northeast of the port city of Beira. It is also 115 km East-Northeast of the 3 new MRG REE and U ELAs (**refer ASX Announcement 11 May 2022; refer Figures 18 and 19**).

The ELA application, in combination with the 3 recent ELAs Patricio (10999 L; 19,763.06 Ha), Fotinho (11000 L; 19,865.18 Ha) and Adriano (11002 L; 19,777.14 Ha), will further expand on MRG's exploration licence portfolio (combined 78,554.10 Ha for the 4 ELAs), while also diversifying the Company's portfolio from HMS projects to now include a fourth licence with REE and U as targets.

A Report supplied to MRG by Dr Luc Antoine on historic reconnaissance exploration that took place in 2014 showing highly anomalous results from the 3 new REE and U ELAs (**refer ASX Announcement 11 May 2022**), but with a walkover of the U and REE area of this new ELA. No analysis was done on samples collected from the U and REE target area.

MRG considers the U and REE ELA as prospective for 2 reasons:

1. The airborne radiometric spectrometer data of a regional national airborne geophysical survey shows some very highly anomalous radiometric areas over the target area of the Olinga 11005 L ELA, with the anomalous data characterised by a higher U:Th ratio compared to the 3 REE and U ELAs (**refer Figure 19**).
2. The ELA area includes granites of different ages (**refer Figure 20**), with the contact between the granites as a main target for exploration.

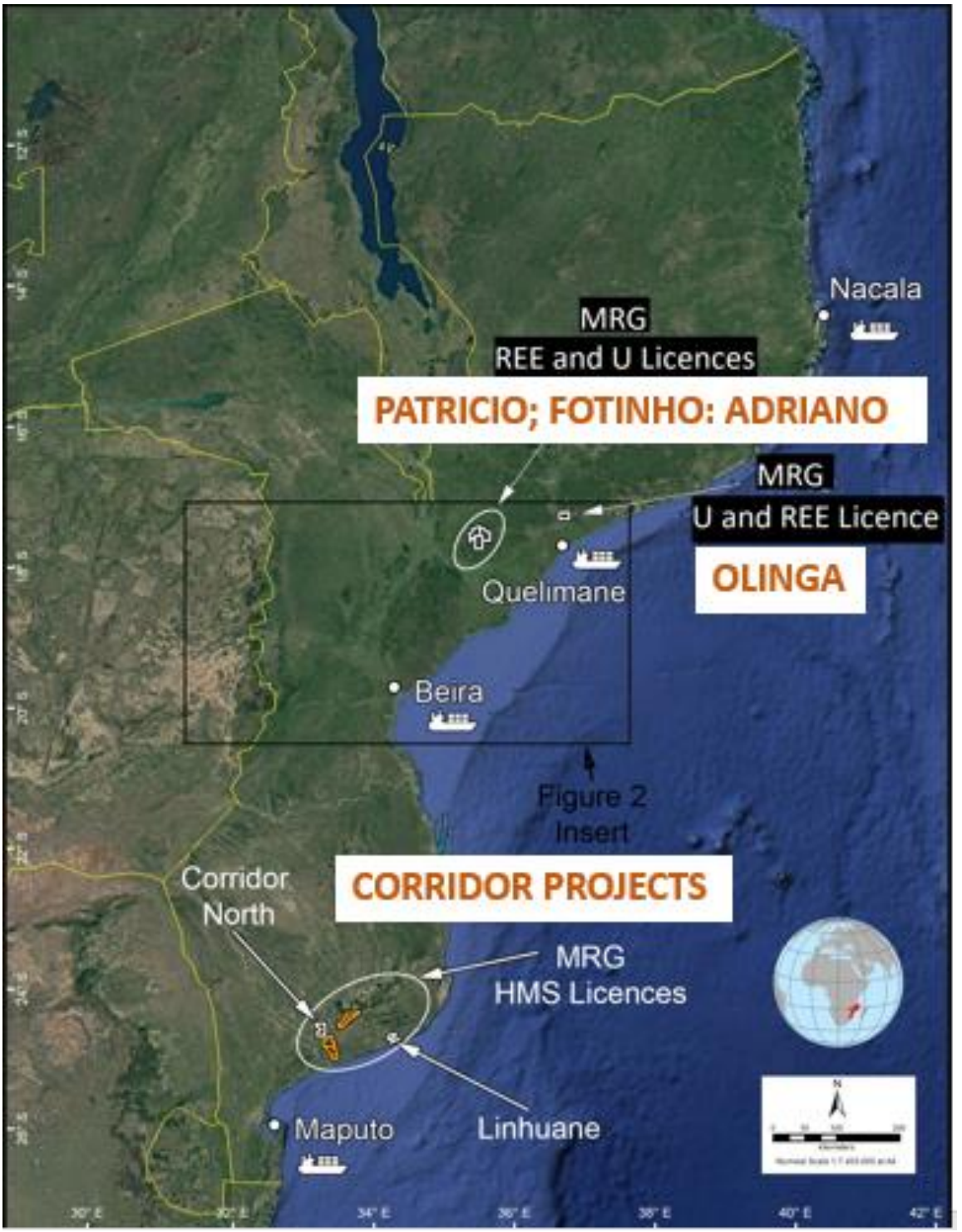


Figure 18: *Map of the location of MRG's new Uranium and Rare Earth ELA (Olinga, 11005 L) in relation to the 3 Rare Earth and Uranium ELAs (Patricio, 10999 L, Adriano, 11000 L and, Fotinho, 11002 L); the MRG Corridor Projects (HMS) and the local port city of Beira.*

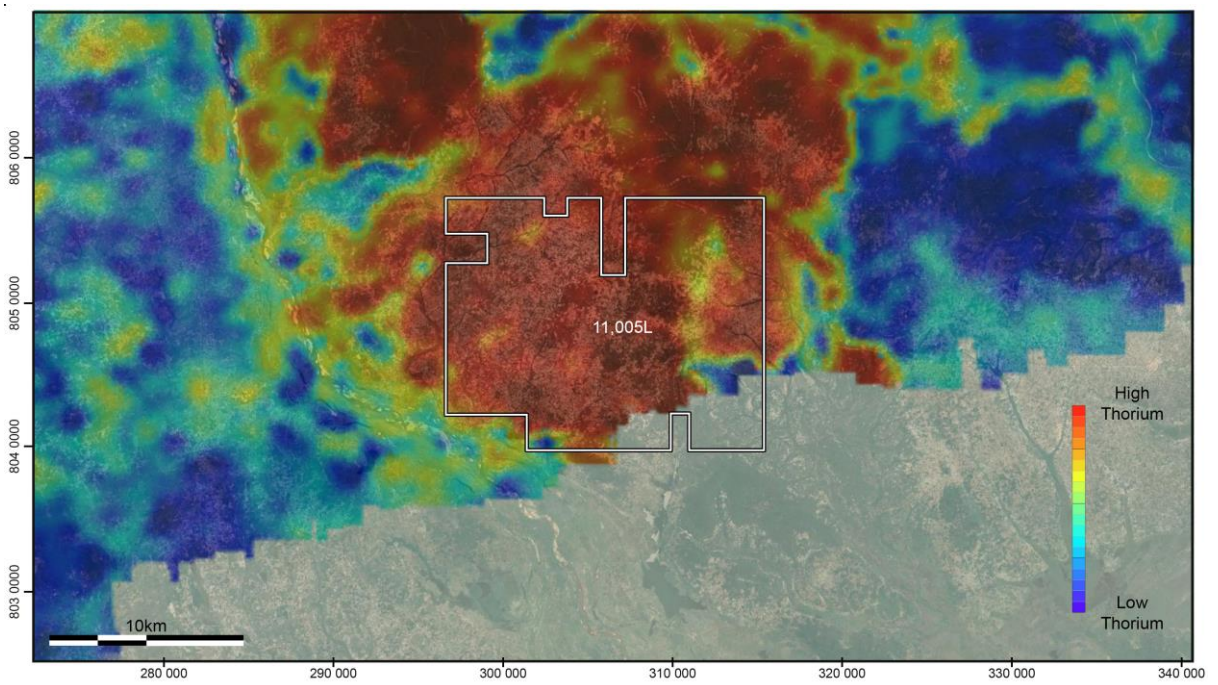


Figure 19: *Map showing MRG's Uranium and Rare Earth ELA (Olinga 11005 L) plotted on airborne radiometric spectrometer data of a regional national airborne geophysical survey.*

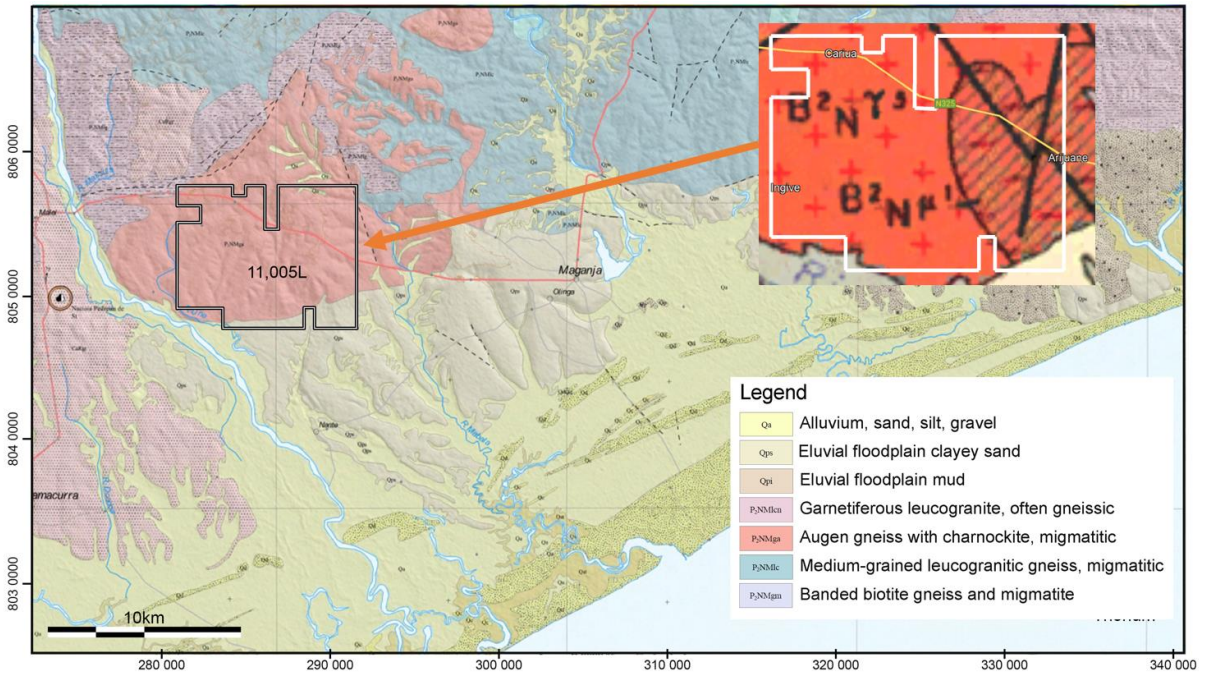


Figure 20: *Map showing MRG's Uranium and Rare Earth Exploration Licence Application (ELA; 11005 L) plotted on the regional geology map.*

Field based exploration activities will commence on the applied for REE + U projects immediately upon grant of their Exploration Licences.

CORPORATE

PLACEMENT AND OPTIONS ENTITLEMENT OFFER

In November, the Company announced an equity raising of approximately $2 million (before costs) through a:

- Placement of fully paid ordinary shares, with 2 for 3 free attaching options, to raise $0.84 million, and
- 3 for 5 pro-rata non-renounceable entitlement offer of options to existing Shareholders to raise approximately $1.17 million.
- Funds raised will largely be used to test the Company's high VHM Azaria and Cihari Targets and progress its Rare Earth Elements Project.
- Melbourne boutique, Peak Asset Management led the raise

The $840,000 Placement resulted in the issue of 210,000,000 fully paid ordinary shares at $0.004 per share, together with 140,000,000 free attaching MRQO listed options, exercisable at $0.008 and expiring 31 December 2025, to sophisticated and professional investors.

The Board sought Shareholder approval at a General Meeting of the Company, held on 13 January 2023, to take up $60,000 under the same terms as the Placement. This resulted in the issue of 15,000,000 fully paid ordinary shares at $0.004 per share, together with 10,000,001 free attaching MRQO listed options, exercisable at $0.008 and expiring 31 December 2025.

The 3 for 5 pro-rata non-renounceable entitlement offer of Options to existing Shareholders raised $312,682.80 on closing on 13 January 2023. This resulted in the issue of 312,682,557 listed MRQO Options, exercisable at $0.008 and expiring 31 December 2025. The Company has three months from 13 January 2023 during which it can pace the shortfall of $861,552 or 861,552,620 MRQO listed Options.

Proposed Use of Funds:

- Corridor Sands HMS Project - improvement programs to increase project economics towards Feasibility. Follow up drilling, mineralogy and metallurgy to test high VHM Azaria and Cihari targets.
- Jangamo HMS Project – exercise option if Due Diligence confirms and develop pathway to production.
- Exploration at HMS, Rare Earth Elements and Uranium Projects should these Exploration Licences be granted.
- Working Capital, costs of the Placement and expenses of the Offers.

TENEMENTS

The Tenements held by the Company at 31 December 2022 are as follows:

Project	Tenement	% Owned	Note
Norrliden	K nr 1	10	
Malanaset	nr 100	10	
Malanaset	nr 101	10	
Corridor Central	11142C	100	
Corridor South	11137C	100	
Corridor North	10779L	100	Application
Linhuane	7423L	100	Application
Marao	6842L	100	
Marruca	6846L	100	
Patricio	10999L	100	Application
Adriano	11000L	100	Application
Fotinho	11002L	100	Application
Olinga	11005L	100	Application

Competent Persons' Statement

The information in this report, as it relates to Mozambique Exploration Results is based on information compiled and/or reviewed by Mr JN Badenhorst, who is a member of the South African Council for Natural Scientific Professions (SACNASP) and the Geological Society of South Africa (GSSA). Mr Badenhorst is a contracted consultant 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". Mr Badenhorst consents to the inclusion in this report of the matters based on the information in the form and context in which they appear.

Authorised by the Board of MRG Metals Ltd.

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Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

MRG METALS LIMITED

ABN	Quarter ended ("current quarter")
83 148 938 532	31 December 2022

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation		
	(b) development		
	(c) production		
	(d) staff costs	(58)	(116)
	(e) administration and corporate costs	(127)	(289)
1.3	Dividends received (see note 3)		
1.4	Interest received		
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (provide details if material)		
1.9	**Net cash from / (used in) operating activities**	**(185)**	**(405)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment	-	(5)
	(d) exploration & evaluation	(265)	(621)
	(e) investments		
	(f) other non-current assets		

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	**Net cash from / (used in) investing activities**	**(265)**	**(626)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	840	840
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities		
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	**Net cash from / (used in) financing activities**	**840**	**840**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	437	1,018
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(185)	(405)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(265)	(626)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	840	840

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6months) $A'000
4.5	Effect of movement in exchange rates on cash held		
4.6	**Cash and cash equivalents at end of period**	**827**	**827**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	3	18
5.2	Call deposits	824	419
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**827**	**437**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	59
6.2	Aggregate amount of payments to related parties and their associates included in item 2	2

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Director Fees, Secretarial Fees, Consulting Fees, & Accounting Fees.

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	**Total financing facilities**	NIL	NIL

7.5	**Unused financing facilities available at quarter end**	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	185
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	265
8.3	Total relevant outgoings (item 8.1 + item 8.2)	450
8.4	Cash and cash equivalents at quarter end (item 4.6)	827
8.5	Unused finance facilities available at quarter end (item 7.5)	0
8.6	Total available funding (item 8.4 + item 8.5)	827
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	1.84

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Yes.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Yes. Entitlement Offer closed 13/1/23 raised $312,683. Shortfall can be placed within 3 months of $861,552. Directors placed $60,000 on 19/1/23.

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer: Yes. Based on funds on hand at end of quarter and funds raised since.	
Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.	

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: 31 JANUARY 2023

Authorised by: THE BOARD OF MRG METALS LTD
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.