ANNUAL MINERAL RESOURCE AND ORE RESERVES STATEMENT

Heavy Mineral Sands Projects – South Africa

- **Significant increase in Heavy Mineral Sands Resource tonnes and in situ Heavy Minerals.**

  At 31 December 2020, total Group Mineral Resources of Heavy Mineral Sands contained a combined estimate of 456 million tonnes at 6.8% Total Heavy Minerals ("THM"), containing 31.5 million tonnes of in situ Heavy Mineral.

- **The Northern Beaches Mineral Resource increased to 3 million tonnes at 23.2% Total Heavy Minerals ("THM").**

- **Tormin Beaches Mineral Resource reported 1.13 million tonnes at 13.7% THM.**

Graphite Projects – Australia and Norway

- **Total Group Ore Reserve of graphite contained 4.24 million tonnes at 12.8% Total Graphitic Carbon ("TGC") and total Group Mineral Resources of graphite contained 9.75 million tonnes at 14% TGC, containing 1.36 million tonnes of graphite.**

- **During FY2020, MRC continued to expand its exploration portfolio with new near-mine prospects in Norway and South Africa.**

Mineral Commodities Ltd (ASX: MRC) ("the Company" or "MRC") is pleased to report its annual Mineral Resource and Ore Reserve estimates as of 31 December 2020 as well as material Exploration Results for the FY 2020. In addition, this statement includes an update of Mineral Resource estimates at the Tormin and Northern Beaches. Summary total Resource/Reserve estimates are set out below and full details of the Resource/Reserve estimates and results, including JORC Code Table 1, can be found in the attached.

Chief Executive Officer Mark Caruso said, *"The Company's 2020 Mineral Resource Statement demonstrates the quality of these world class assets in prime operating locations. We are confident that the stated resources and planned exploration will not only increase resources in 2021, but underpin MRC's long term operations into the future."*

Group Mineral Resources

As at 31 December 2020, Group Mineral Resources includes:

- **456 million tonnes at 6.8% THM including 31.2 million tonnes of in situ heavy mineral across its Tormin Mineral Sands Operation and Xolobeni Mineral Sands Project.**
- **9.75 million tonnes at 14% TGC and contained 1.36 million tonnes of graphite across its Munglinup Graphite Project and Skaland Graphite Operation.**

This represents an increase of approximately 108 million tonnes of heavy mineral ore and a decrease of 0.02 million tonnes of graphite ore compared with the estimate at the same time last year. Mineral Resources are reported inclusive of Ore Reserves. The Group Mineral Resources estimates for the FY 2020 are set out in Tables 1 and 2.

Table 1- Total Mineral Resources of Heavy Mineral Sand at 31 December 2020

Project	Category	Resource (Mt)	THM (%)	In Situ THM(Mt)	Zircon (%HM)	Garnet (%HM)	Ilmenite (%HM)	Rutile (%HM)	Anatase (%HM)	Magnetite (%HM)
Tormin Beaches	Measured	0.25	13.59	0.03	1.62	35.77	4.90	0.69	0.10	0.30
	Indicated	0.72	13.92	0.10	3.88	50.32	9.07	1.16	0.10	0.19
	Inferred	0.16	12.72	0.02	4.41	51.53	10.05	1.23	0.10	0.19
	Total	**1.1**	**13.67**	**0.1**	**3.46**	**47.33**	**8.30**	**1.07**	**0.10**	**0.22**
Northern Beaches	Measured	1.65	24.01	0.39	3.29	51.60	9.28	1.05	0.20	0.45
	Indicated	1.08	23.15	0.25	4.10	50.06	7.68	0.99	0.17	0.60
	Inferred	0.29	18.03	0.05	3.38	46.97	5.15	0.77	0.16	0.55
	Total	**3.0**	**23.24**	**0.7**	**3.57**	**50.77**	**8.43**	**1.03**	**0.17**	**0.51**
Western Strandline	Measured	9.7	19.13	1.8	2.45	14.90	15.02	1.15	0.23	0.66
	Indicated	33.1	16.20	5.3	1.08	12.62	4.90	0.68	0.12	0.27
	Inferred	62.6	9.29	5.8	1.25	15.57	5.84	0.84	0.18	0.29
	Stockpile	0.49	14.36	0.07	2.41	13.23	14.06	0.94	0.20	0.41
	Total	**105.9**	**12.40**	**13.1**	**1.35**	**14.26**	**6.80**	**0.82**	**0.16**	**0.34**
Xolobeni	Measured	224	5.7	12.76			54.5			
	Indicated	104	4.1	4.26			53.7			
	Inferred	18	2.3	0.41			69.4			
	Total	**346.0**	**5.0**	**17.3**			**54.0**			
Grand Total		**456**	**6.86**	**31.2**			**42.6**			

- Mineral assemblage reported as in situ percentage of THM content.
- Tonnes and grades numbers may not compute due to rounding.
- 2% THM cut-off grade used for Tormin Beaches, Northern Beaches and Western Strandline.
- 1% THM cut-off grade used for Xolobeni.

Table 2- Total Mineral Resources of Graphite at 31 December 2020

Project	Category	Resource (Mt)	Total Graphitic Carbon (%)	Contained Graphite (Mt)
Skaland	Indicated	0.38	26%	0.10
	Inferred	1.37	21%	0.29
	Total	**1.76**	**22%**	**0.39**
Munglinup	Indicated	4.49	13%	0.58
	Inferred	3.50	11%	0.38
	Total	**7.99**	**12%**	**0.97**
Grand Total		**9.75**	**14%**	**1.36**

- Tonnes and grade numbers may not compute due to rounding.
- 10% THM cut-off grade used for Skaland.
- 5% THM cut-off grade used for Munglinup.

Group Ore Reserve

As at 31 December 2020, Group Ore Reserves of graphite is estimated to contain 4.24 million tonnes of 12.8% TGC. This represents no change compared with the estimate as at 31 December 2019.

Table 3 - Total Ore Reserves of Graphite at 31 December 2020

Project	Category	Tonnes (Mt)	Total Graphitic Carbon (%)
Munglinup	Proven		
	Probable	4.24	12.8
	Total	**4.24**	**12.8**

- Ore Reserve uses a variable cash flow cut-off grade.
- Ore Reserve flake size distribution is for recovered graphite product.

Refer to the appendix of this release for the explanatory note for the annual updates of exploration results, mineral resource and ore reserves.

ENDS

Issued by Mineral Commodities Ltd ACN 008 478 653 www.mineralcommodities.com
Authorised by the Chief Executive Officer and Company Secretary, Mineral Commodities Ltd.

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About Mineral Commodities Ltd

Mineral Commodities Ltd (ASX: MRC) is a global mining and development company with a primary focus on the development of high-grade mineral deposits within the mineral sands and battery minerals sectors.

The Company is a leading producer of zircon, rutile, garnet and ilmenite concentrates through its Tormin Mineral Sands Operation, located on the Western Cape of South Africa. In October 2019, the Company completed the acquisition of Skaland Graphite AS, the owner of the world's highest-grade operating flake graphite mine and one of the only producers in Europe. The planned development of the Munglinup Graphite Project, located in Western Australia, builds on the Skaland acquisition and is a further step toward an integrated, downstream value-adding strategy which aims to capitalise on the fast-growing demand for sustainably manufactured Lithium-Ion Batteries.

Cautionary Statement

This report may contain forward-looking statements. Any forward-looking statements reflect management's current beliefs based on information currently available to management and are based on what management believes to be reasonable assumptions. It should be noted that several factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. These forward-looking statements are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are beyond MRC's control, which may cause actual results and developments to differ materially from those expressed or implied. These risks include but are not limited to, economic conditions, stock market fluctuations, commodity demand and price movements, access to infrastructure, timing of approvals, regulatory risks, operational risks, reliance on key personnel, Ore Reserve and Mineral Resource estimates, native title and title risks, foreign currency fluctuations, exploration risks, mining development, construction, and commissioning risk. Forward-looking statements in this report apply only at the date of issue. Subject to any continuing obligations under applicable law or regulations, MRC does not undertake to publicly update or revise any of the forward-looking statements in this report or to advise of any change in events, conditions or circumstances on which any such statement is based. Readers are cautioned not to place undue reliance on any forward-looking statements contained in this report.

Mineral Resource and Ore Reserve Governance

Mineral Resources and where applicable, Ore Reserves, are estimated by suitably qualified persons in accordance with the JORC Code and the ASX Listing Rules, using industry standard techniques. All Mineral Resource estimates and supporting documentation are reviewed by external Competent Persons. Any amendments to the Mineral Resource Statement to be included in the Annual Report are reviewed by suitably qualified Competent Persons.

Competent Person's Statement

The Annual Mineral Resources and Ore Reserve Statement and Explanatory Notes have been compiled by Mr Bahman Rashidi, who is a member of the Australian Institute of Mining and Metallurgy ("AusIMM") and the Australian Institute of Geoscientists ("AIG"). Mr Rashidi is the Group Exploration Manager and a full-time employee of the Company. He has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person in accordance with the JORC Code (2012). The information from Mr Bahman Rashidi was prepared under the JORC Code (2012). Mr Rashidi consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

The table below is a listing of the names of the Competent Persons (as defined by the JORC Code 2012) who are taking responsibility for reporting results and estimates. This Competent Person listing includes details of professional memberships, professional roles, and the reporting activities for which each person is accepting responsibility for the accuracy and veracity of MRC's FY2020 results and estimates.

Competent Persons' names for exploration results, mineral resource and ore reserve

Activity	Competent Person	Professional affiliation	MRC relationship	Activity responsible
Exploration Results	Daniel Ball	MAusIMM	Senior Geologist MRC	Bukken, Hesten & Vardfjellet graphite
Mineral Resource Estimates	Allen Maynard	MAIG/MAusIMM	Principal Al Maynard & Associates	Xolobeni HMS
	Bahman Rashidi	MAusIMM/MAIG	Group Exploration Manager MRC	Tormin Beaches, Northern Beaches & Inland Strand HMS
	Che Osmond	CGeol/FGC	Technical Director Wardell Armstrong	Skaland graphite
	Chris De Vitry	MAusIMM	Principal Manna Hill GeoConsulting	Munglinup graphite
Ore Reserve Estimates	Daniel Hastings	MAusIMM	Principal Hastings Bell	Munglinup graphite

- MAusIMM = Member of Australasian Institute of Mining and Metallurgy and MAIG = Member of Australian Institute of Geoscientists
- CGeol = Chartered Geologist of Geological Society of London and FGS = Fellow of the Geological Society. Both are Recognised Professional Organisations (RPO).
- Information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on the information compiled by the relevant Competent Persons listed.
- All MRC personnel are full-time employees of MRC.
- All mineral resource estimates and supporting documentation are reviewed by external competent persons.

The information in this report that relates to Exploration Results, Mineral Resource and Ore Reserves is based on information compiled by the Competent Persons named in the table above. All Competent Persons have sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity which they are is undertaking to qualify as a Competent Person in accordance with the JORC Code (2012). Each Competent Person consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

THE 2020 ANNUAL REPORT OF EXPLORATION RESULTS, MINERAL RESOURCE AND ORE RESERVES

Overview

Mineral Commodities Ltd (ASX: MRC) ("the Company" or "MRC") is a diversified mining group executing two complementary business strategies focused on the production of heavy mineral sands and natural flake graphite concentrates from two high grade mines and one shovel-ready development project. In addition, the Company intends to construct an Active Anode Material Plant ("AAMP") in Norway to become a vertically integrated producer of natural graphite battery anode material to capitalise on the fast-growing demand for sustainably manufactured lithium-ion batteries.

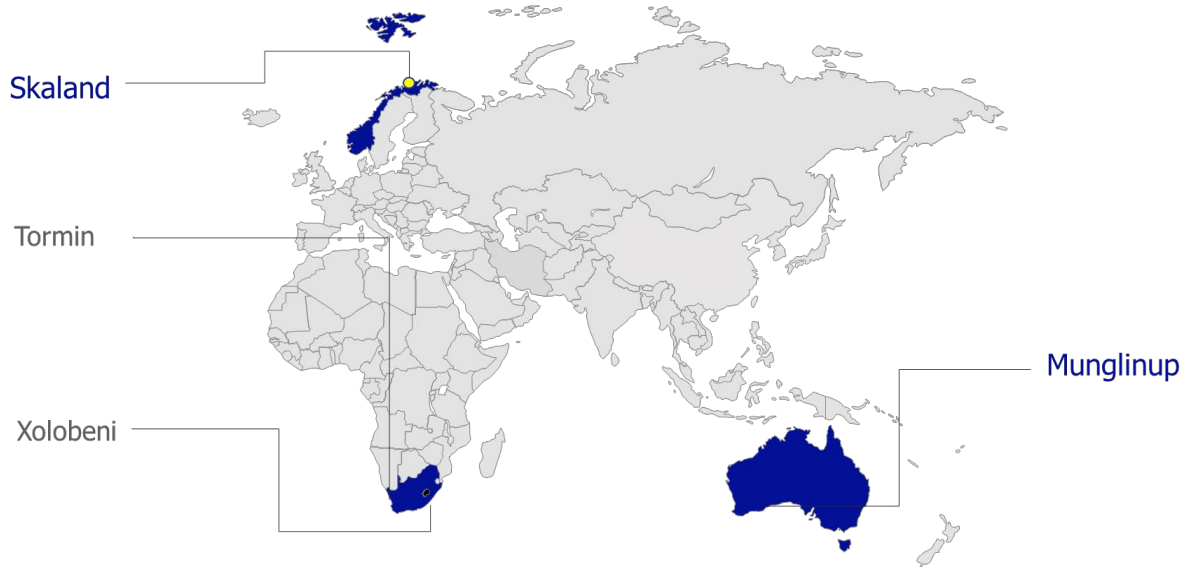

Figure 1 – MRC's global operations

1. Mineral Sands

MRC and its empowerment partner, Blue Bantry Investments 255 (Pty) Ltd, operate the Tormin Mineral Sands Operation in the Western Cape province of South Africa which is held by the Company's 50% owned South African subsidiary, Mineral Sands Resources (Pty) Ltd ("MSR"). Tormin supplies circa 25% of the world's demand for garnet sands and is one of the top ten independent zircon and titanium feedstock suppliers. MRC is expanding mining and processing operations at Tormin under a granted Section 102 Amended Mining Right ("Section 102 Mining Right"). The Company plans a phased development program with an initial increase in primary beach concentration capacity targeting mining of the Northern Beaches (the "Northern Beaches") and Inland Strand (the "Inland Strand") mining areas.

The Section 102 Mining Right also allows processing expansion developments including connection to grid power via the nearby Eskom renewable wind farm, relocation of an existing Primary Beach Concentrator ("PBC") unit to the Northern Beaches mining areas and the construction of a new Primary Concentration Unit which will enable processing of up to 1.25-2.5 million tonnes per annum from the Inland Strand with a new front end feed system and crushing circuit. This will support the construction of a Mineral Separation Plant ("MSP") to make finished Heavy Mineral Sands ("HMS"), ilmenite, garnet and rutile products.

The objective of MRC's mineral sands strategy is to adopt a phased development program with an initial increase to enable primary beach concentration capacity of up to 2.5-3.75 million tonnes per annum, followed by the construction of a MSP that will produce final products from the Company's concentrates.

Figure 2 – MRC's operations and tenures in South Africa

1.1 Tormin Mineral Sands Operation

Situated ~360 kilometres north of Cape Town on the west coast of South Africa and owned by the Company's 50% owned South African subsidiary, Mineral Sands Resources (Pty) Ltd ("MSR").

1.1.1 Tormin Beaches

Tormin is a high grade placer beach mineral sands deposit hosting naturally occurring zircon, ilmenite, rutile, magnetite and garnet.

As an active placer beach deposit, Tormin is unique due to the rate that mining areas are naturally replenished by storm and oceanic wave action and the speed that the mineralisation actively replenishes. The heavy minerals in the beach are regularly replaced by the deposition of new sediments from deeper waters, much of which has derived from the erosion of deposits accumulated in the elevated historic beach terraces onto the present beach. This replenishment occurs because of the natural highly dynamic nature of sediment transport

processes on beaches in this area. The resource is open towards the ocean and surf zone on its western side, as well as along the coastline towards the north and south.

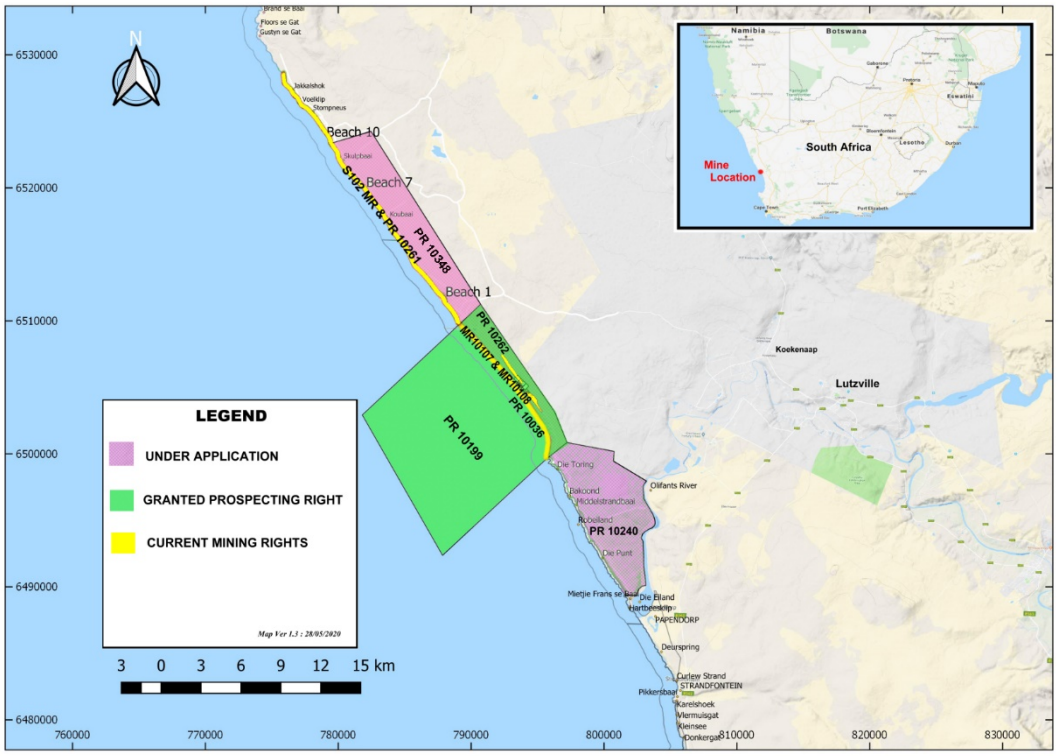

Figure 3 – Geographical location of the Company's tenements in the Western Cape province of South Africa

The Company first commenced commercial mining at Tormin in 2014 over a 12 kilometre zone of beach area ("Tormin Beaches") directly in front of the existing processing infrastructure. Mining rights to the Tormin Beaches were renewed in 2019, and the permits allow the Company to continue mining operations for a further 10 years, providing security of tenure until 2029.

Since operations commenced at Tormin, the Group has mined over five times the initial Indicated Resource of 2.7 million tonnes at an average head grade of 30% THM over the life of mining. Mining has now been ongoing for seven years and as at 31 December 2020, a total of 13.87 million tonnes of material has been processed. The tonnage processed is more than the declared resource tonnage which is indicative of the replenishing nature of the resource where resource blocks are mined more than once per year. As the mining rate is faster than the replenishment rate, the resource grade has been steadily diminishing over the past seven years. After three years of production, the mined THM grades declined significantly, suggesting that the current mined material is the replenishment function of the placer style beach deposit. (Figure 4).

Subsequently, the deposit has been classified in the inferred resource category every year due to continuous mining, the dynamic characteristics of the beach systems and variable grades and replenishment rates. Commencing early 2021, MRC will temporarily stop mining at the Tormin Beaches to assess and improve the replenishment process. The Company intends to manage mining at Tormin and the Northern Beaches year on, year off, to maximise replenishment characteristics during the alternating periods of non-mining.

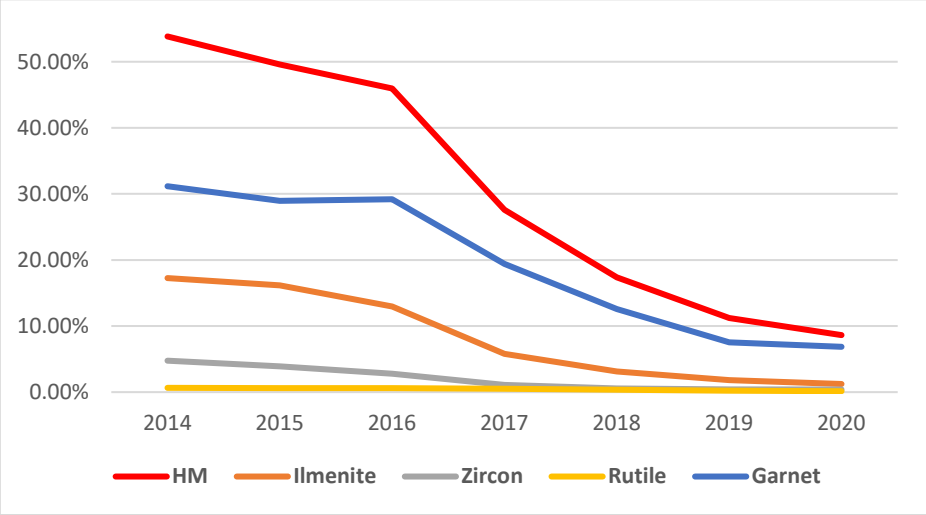

Figure 4 – Graph of Tormin Beaches resource grades mine over 7 years (2014-2020)

In December 2020, resource drilling was completed at the Tormin Beaches for the annual resource update. A total of 277 holes (558.5m) were drilled in all mining ramps on a regular 50m x 20m grid to audit the mineral resource. Total Mineral Resource for the Tormin Beaches is estimated at **1.13 million tonnes at 13.67% THM in the Measured, Indicated, and Inferred category using a 2% cut-off** (Table 1). A summary of the Tormin Beaches annual Mineral Resource audit is in appendix 1 per the JORC Code (2012).

Table 1 - Total mineral resources for the Tormin Beaches deposit (2% THM cut-off) at 31 December 2020

Category	Tonnes (Mt)	THM (%)	In Situ THM (Mt)	Zircon (%HM)	Garnet (%HM)	Ilmenite (%HM)	Rutile (%HM)	Anatase (%HM)	Magnetite (%HM)
Measured	0.25	13.59	0.03	1.62	35.77	4.90	0.69	0.10	0.30
Indicated	0.72	13.92	0.10	3.88	50.32	9.07	1.16	0.10	0.19
Inferred	0.16	12.72	0.02	4.41	51.53	10.05	1.23	0.10	0.19
Total	**1.13**	**13.67**	**0.15**	**3.46**	**47.33**	**8.30**	**1.07**	**0.10**	**0.22**

Mineral assemblage reported as in situ percentage of THM content

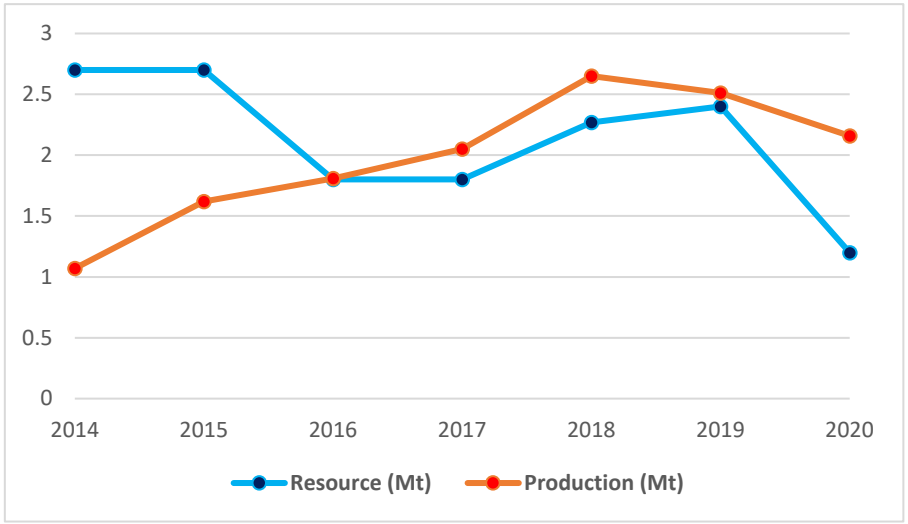

Figure 5 – Comparison between resource tonnage and tonnes mined at Tormin Beaches at the end of each year

Table 2 – Tormin Beaches Resource and Production Summary Data

Category	Resource (Mt)	HM (%)	Zircon (%)	Garnet (%)	Ilmenite (%)	Rutile (%)
Indicated Resource Dec 2013	2.70	49.40	3.40	25.30	10.60	0.70
Tonnes Mined FY2014	1.07	53.83	4.76	31.16	17.26	0.65
Inferred Resource Dec 2014	2.70	38.14	2.21	25.22	10.05	0.46
Tonnes Mined FY2015	1.62	49.57	3.88	28.94	16.15	0.60
Inferred Resource Dec 2015	2.70	28.01	1.56	18.54	6.97	0.55
Tonnes Mined FY2016	1.81	45.97	2.78	29.21	12.97	0.61
Inferred Resource Dec 2016	1.80	28.08	1.65	18.99	6.15	0.53
Tonnes Mined FY2017	2.05	27.57	1.10	19.40	5.81	0.50
Inferred Resource Dec 2017	1.80	15.92	0.79	11.45	2.72	0.43
Tonnes Mined Dec FY 2018	2.65	17.35	0.55	12.55	3.14	0.38
Inferred Resource Dec 2018	2.27	14.16	0.43	7.90	2.30	0.19
Tonnes Mined FY2019	2.51	11.21	0.42	7.53	1.81	0.21
Inferred Resource Dec 2019	2.40	8.68	0.25	6.7	1.03	0.10
Tonnes Mined FY2020	2.16	8.74	0.40	6.86	1.23	0.14
Resource Dec 2020	1.13	8.27	0.47	6.47	1.13	0.15

- HM includes other valuable heavy minerals e.g. leucoxene and magnetite.
- 5% THM cut-off grade used for 2017 and 2018.
- 2% THM cut-off grade used for 2019 and 2020.
- Mineral resource for December 2020 has been classified as Measured, Indicated and Inferred.

1.1.2. Northern Beaches

The Northern Beaches incorporate ten beaches directly north of and adjoining the Tormin Beaches. The areas unite semi-continuous tenements approximately 23.5 kilometres in length, covering an area of 398 hectares of beach sands prospective for zircon, rutile, ilmenite, garnet, leucoxene and magnetite. Like the Tormin Beaches, this deposit is located on an active placer beach strandline undergoing continuous erosion, deposition and replenishment from oceanic storm and wave activity. The heavy minerals in the beach are constantly replenished by the transport of new sediment from deeper waters, much of which has been derived from the erosion of deposits accumulated in the elevated historic beach terraces onto the present beach.

In May 2020, resource drilling was carried out on Beaches 5, 7 and 10 of the subsequently granted mining areas and a maiden high grade JORC Code (2012) compliant resource of 2.5 million tonnes at 23.5% THM in the category of Measured, Indicated and Inferred using a 2% cut-off was reported. In December quarter 2020, a further 70 drill holes for 169.5m were completed at Beaches 1, 2, 3, 4, 6, 8 and 9, as part of a follow-up programme outside of the Maiden Mineral Resource, Beaches which are included in the updated Mineral Resource estimate. A total of 155kt of ore was mined from the Northern Beaches in November and December 2020 and subtracted from the total resource.

Figure 6 – Northern Beaches area

Total Mineral Resource for the Northern Beaches is estimated at 3 million tonnes at 23.2% THM in the category of Measured, Indicated and Inferred using a 2% cut-off. The updated Mineral Resources represent an overall increase of 23% of the total material tonnes and 20% of the contained in situ heavy minerals at the Northern Beaches.

Table 3 - Total mineral resources for the Northern Beaches deposit (2% THM cut-off)

Category	Tonnes (Mt)	THM (%)	In Situ THM (Mt)	Zircon (%HM)	Garnet (%HM)	Ilmenite (%HM)	Rutile (%HM)	Anatase (%HM)	Magnetite (%HM)
Measured	1.65	24.01	0.39	3.29	51.60	9.28	1.05	0.20	0.45
Indicated	1.08	23.15	0.25	4.10	50.06	7.68	0.99	0.17	0.60
Inferred	0.29	18.03	0.05	3.38	46.97	5.15	0.77	0.16	0.55
Total	**3.02**	**23.24**	**0.7**	**3.57**	**50.77**	**8.43**	**1.03**	**0.17**	**0.51**

- Mineral assemblage reported as in situ percentage of THM content

A summary of updated Mineral Resources for the Northern Beaches is outlined in Appendix 2 per the JORC Code (2012).

With the grant of the Section 102 Mining Right, the Company has mining access to both the Tormin and the Northern Beaches, significantly increasing the mining footprint of active placer beach deposits. The nature of the resource replenishment is typical of modern-day beach placer deposits found along the West Coast of South Africa and India's Southeastern Tamil Nadu coast. Due to the beaches' constant replenishment profile and historical production from the Tormin Beaches, the Company expects that the Northern Beaches will sustain mining operations well beyond the initial resource of 3 million tonnes at 23.2% THM.
The Northern Beaches will be mined at ~1Mtpa, alternately with the Tormin Beaches. Irrespective of which beaches are mined in a Northern Beaches mining year, mining will not occur at the Northern Beaches the following year.

1.1.3. Inland Strand

The Inland Strand mining areas granted under the Section 102 Mining Right in mid-2020 include two areas approximately 5.6 kilometres in total length, covering 75 hectares of high-grade mineralisation adjacent to the existing mining operations on the Company owned farm, Geelwal Karoo 262. The Inland Strand S102 Mining Right areas are part of the Inland Strand Prospecting Right 10262, which incorporates an area approximately 12 kilometres in length, covering 1,741 hectares.

A maiden JORC Code (2012) compliant resource of 106 million tonnes at 12.4% THM in the category of Measured, Indicated and Inferred using a 2% cut-off was reported on August 2020 for the Inland Strand Prospecting Right 10262 area. A high-grade JORC Code (2012) compliant resource of 22.8 million tonnes at 20.9% THM in the category of Measured, Indicated and Inferred using a 2% cut-off was reported on August 2020 for the Inland Strand S102 Mining Right area.

The Inland Strand is a palaeo-marine strandline 35m above mean sea level in an area that has undergone historical exploration since the 1930s. Geophysics indicate that the Inland Strand runs contiguously along the coastline of the Group's entire granted mining and prospecting tenure as well as areas under application.

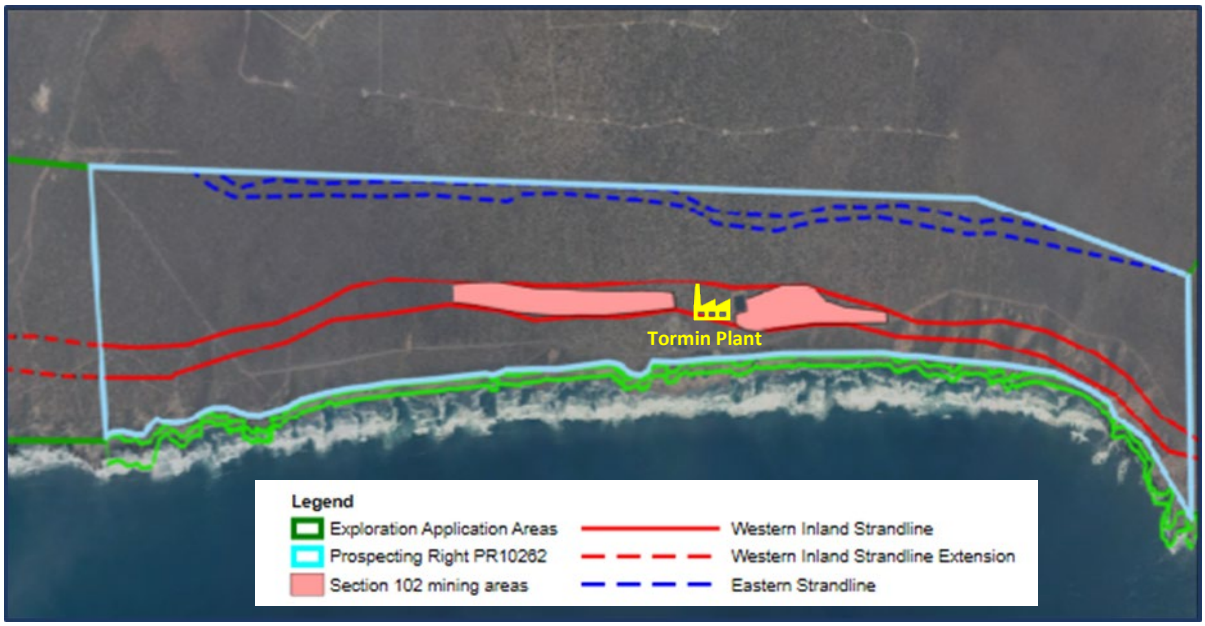

Figure 7 - Overview of Inland Strand at Tormin Mineral Sands Operation

Mining in the Western Strandline commenced in September 2020 from the first pit in the southern part of the Western Strandline and a total of 493kt of ore was mined and stockpiled by the end of 2020.

Table 4 - Total mineral resources for the Western Strandline deposit (2% THM cut-off)

Category	Tonnes (Mt)	THM (%)	In situ THM(Mt)	Zircon (% HM)	Garnet (% HM)	Ilmenite (% HM)	Rutile (% HM)	Anatase (% HM)	Magnetite (% HM)	Slimes (%)
Measured	9.7	19.13	1.8	2.45	14.90	15.02	1.15	0.23	0.66	13.40
Indicated	33.1	16.20	5.3	1.08	12.62	4.90	0.68	0.12	0.27	10.11
Inferred	62.6	9.29	5.8	1.25	15.57	5.84	0.84	0.18	0.29	10.30
Stockpile	0.49	14.36	0.07	2.41	13.23	14.06	0.94	0.20	0.41	12.6
Total	**105.9**	**12.40**	**13.1**	**1.35**	**14.26**	**6.80**	**0.82**	**0.16**	**0.34**	**10.53**

- Mineral assemblage reported as in situ percentage of THM content

The Inland Strand deposit presents a significant mineral sands asset for the Company which offers material extension of mine life. The opportunity to develop and mine the Western Strandline is an important turning point for the Company in realising the value of the world-class Tormin Mineral Sands Operation.

MRC targets delivery of Inland Strand Ore Reserve estimates in the March quarter 2021. The Company is continuing a 10,000m drilling program designed to infill the existing targeted resource areas and step out the resource along the extent of the known mineralised zones on the northern and southern extensions of the Western Strandline, as well as the Eastern Strandline, to complete fence line resource drilling as part of a strategy to unlock the full potential of the Prospecting Right by June quarter 2021.

Mining from the Inland Strand is currently forecast at 1.25 - 2.5 million tonnes per annum[1]. The Group intends to adopt a phased development program by initially targeting the high grade strandline horizons in the orebody before processing the lesser grade Red Aeolian and Orange Feldspathic sands.

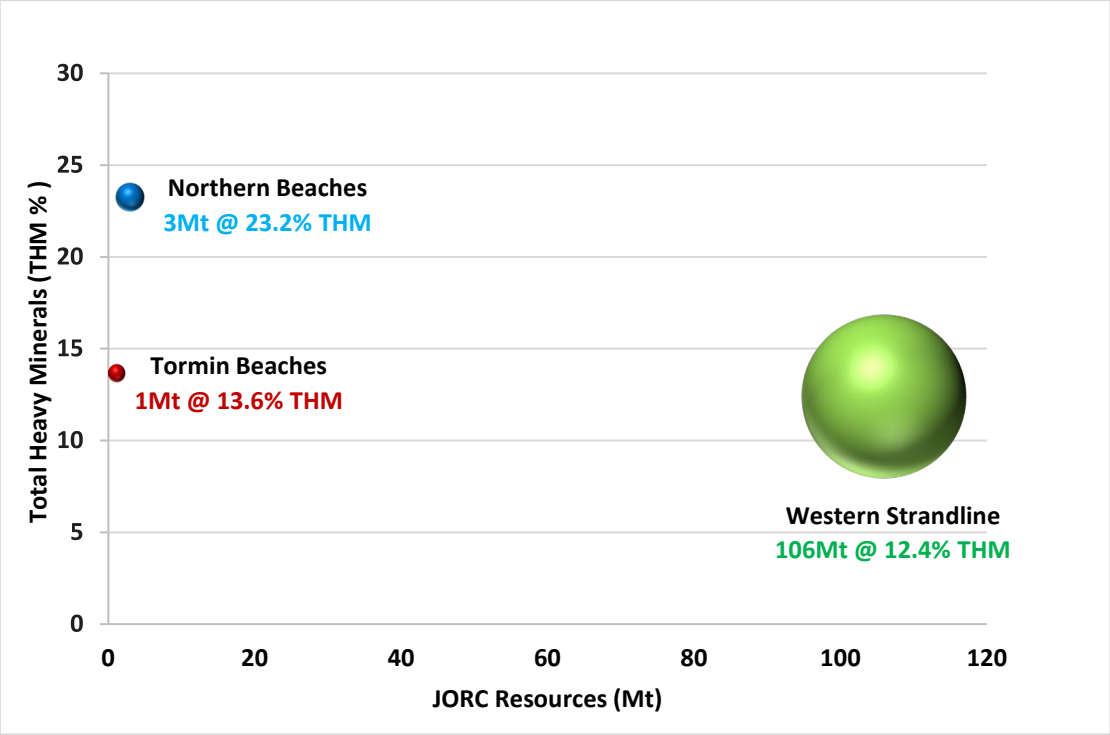

Figure 8 -Tormin deposits comparison by resource size and grade - December 2020

The Company has two Prospecting Rights under application, both adjoining PR10262 on the Company owned farm, Geelwal Karoo 262:

- PR10348 - Klipvley, immediately to the north, covers an area approximately 16km in length and 3,970 hectares and;
- PR10240 - De Punt, which adjoins immediately to the south, covering an area of approximately 13.4km in length and 4,495 hectares.

1- These present expected capacities only and do not represent actual annual production guidance. Specific annual production guidance will be provided on a quarterly and annual basis.

Both Prospecting Right application areas are highly prospective for the continuation of Western and Eastern Inland Strandlines due to the nature of constant mineralisation along the coastal zone. Drilling conducted to the northern and southern extremities of PR10262 intersected the Western Inland Strandline open in both directions and continuing north and south of the delineated ore body.

In December 2020, the Company completed a 564 line-km high resolution horizontal gradient fixed-wing airborne magnetic and radiometric survey over its Tormin exploration areas with 100m survey line spacing and 35m flying height above ground level. Significant anomalies and drilling targets were identified. Upon granting the prospecting rights, MRC intends to immediately commence exploration drilling to target increasing the size of its existing mineral resources.

1.2 Xolobeni

The Xolobeni Mineral Sands Project is located in the Eastern Cape province of South Africa, approximately 300km north of East London and 200km south of Durban. Mineral resource is estimated at 346 million tonnes at 5% THM, with 54% ilmenite in THM[2]. The Xolobeni project is currently subject to a Department of Mineral Resources ("DMR") mandated moratorium in South Africa. Any potential development timetable is unknown and subject to the outcome of this moratorium. Mining methods and mine optimisation studies need to be completed to determine the most effective mine life of Xolobeni. No exploration or production activity has been carried out at Xolobeni during the year.

2. Graphite

In 2017, as part of a diversification strategy, MRC started assessing the fast-growing demand for natural flake graphite as an anode material. In late 2017, the Company entered into a farm-in agreement to acquire the Munglinup Graphite Project. A Pre-Feasibility Study (“PFS”) was completed at Munglinup in May 2018, and the Company completed a Definitive Feasibility Study (“DFS”) in January 2020. In October 2019, MRC completed the acquisition of Skaland Graphite AS, the world’s highest grade flake graphite mining operation, located on the Island of Senja in northern Norway.

MRC is investing in a vertically integrated downstream value adding strategy targeting the production of low CO_2 emission, environmentally friendly anode material from both Skaland and Munglinup natural flake concentrates.

MRC’s anode strategy aims to produce natural anode material using low-cost renewable energy and an environmentally friendly purifying technology from a dedicated AAMP in Norway to capitalise on the fast-growing demand for sustainably manufactured lithium-ion batteries throughout Europe. Production at Skaland will ramp up from 10,000 tonnes per annum in 2020-2022 towards the 16,000 tonnes per annum limit in 2023.

2- This information was prepared and first disclosed under the JORC Code (2004). It has not been updated since to comply with the JORC Code (2012) on the basis that the information has not materially changed since it was last reported

2.1 Skaland Graphite Operation

MRC took operational control of the Skaland Graphite Operation in October 2019 and as part of the acquisition, MRC secured permitting tenure for a further 10 years. The operation is held by Skaland Graphite AS, in which the Company holds a 90% interest.

Skaland is the largest flake graphite producer in Europe and the fourth-largest producer globally outside of China. Skaland is presently one of the world's highest-grade operating flake graphite mines with mill feed grade averaging around 28% C. Skaland accounts for around 2% of global annual natural flake graphite production.

After completing the acquisition of Skaland, the Company has moved quickly to undertake a re-evaluation of the mineral resources in the Trælen Graphite Mine by re-logging, re-sampling and re-assaying of drilling core to build a 3D block model of the deposit. No previous JORC resource estimation has been undertaken for the Skaland or Trælen deposits.

A maiden JORC Code (2012) compliant resource of 1.78 million tonnes at 22% TGC in the categories of Indicated and Inferred for 397kt of contained graphite using a 10% cut-off was reported in March 2020 for the Trælen deposit. The Trælen mine delivered 19kt of ore to the processing plant in 2020, which was deducted from the total resource.

Table 5 - Total mineral resources for the Trælen graphite deposit (10% cut-off)

Category	Tonnes (Mt)	Total Graphitic Carbon (%)	Contained Graphite (Mt)
Indicated	0.38	26	0.101
Inferred	1.37	21	0.291
Total	**1.76**	**22**	**0.392**

The Company intends to commence a 3,000m drilling program in the March quarter 2021 to upgrade the current resource and subsequent Ore Reserve estimate after the drilling campaign.

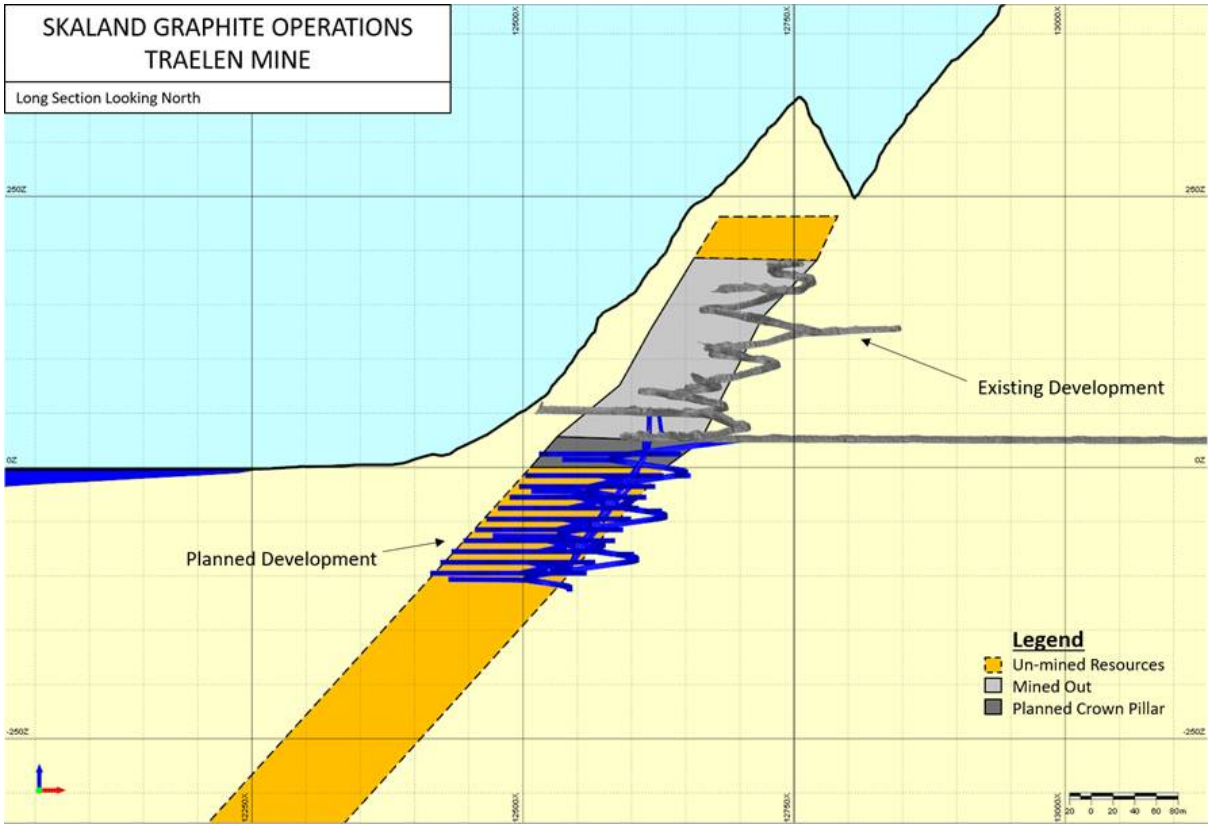

Figure 9 – Development plan at Trælen graphite mine

A down-dip development plan has been developed to access additional resources within Trælen at the bottom of the known deposit below sea level. Life of Mine ("LOM") planning has identified 622kt of stope ore down-dip between 1000mRL and 890mRL, with additional resources in and above the current workings, and below 890mRL. The down-dip development waste will be backfilled into the current mining void, which will allow safe access to further up-dip resources and eliminate mine waste disposal outside the Trælen mountain. The mining concept is essentially a mirror of the current up-dip mining, with decline development in "steps" increasing from 10 metres initially to 20 metres and ore extraction from the bottom of each level.

Skaland Graphite AS is producing around 10kt of graphite concentrate per annum but under the operation's current production permits, this can be increased to produce up to 16,000 tonnes per annum.

2.1.2 Bukken, Vardfjellet and Hesten Prospects

As a part of a broader strategy to secure new graphite ore deposits and expand future production on Senja in northern Norway, MRC, via its 90% owned subsidiary, Skaland Graphite AS, entered into a landowner's agreement in July 2020 for exclusive exploration rights at Bukken for 10 years, and Vardfjellet and Hesten in December 2020 for 6 years. Bukken, Vardfjellet and Hesten were identified by the Geological Survey of Norway through regional helicopter-borne geophysical surveys. Bukken is located approximately 20km to the east of Skaland. The Bukken Graphite Prospect is the largest known continuous graphite anomaly in Norway[3]. The Hesten and Vardfjellet graphite tenements are situated just 2.5km apart and complement the Bukken project, which is located only 4km to the west.

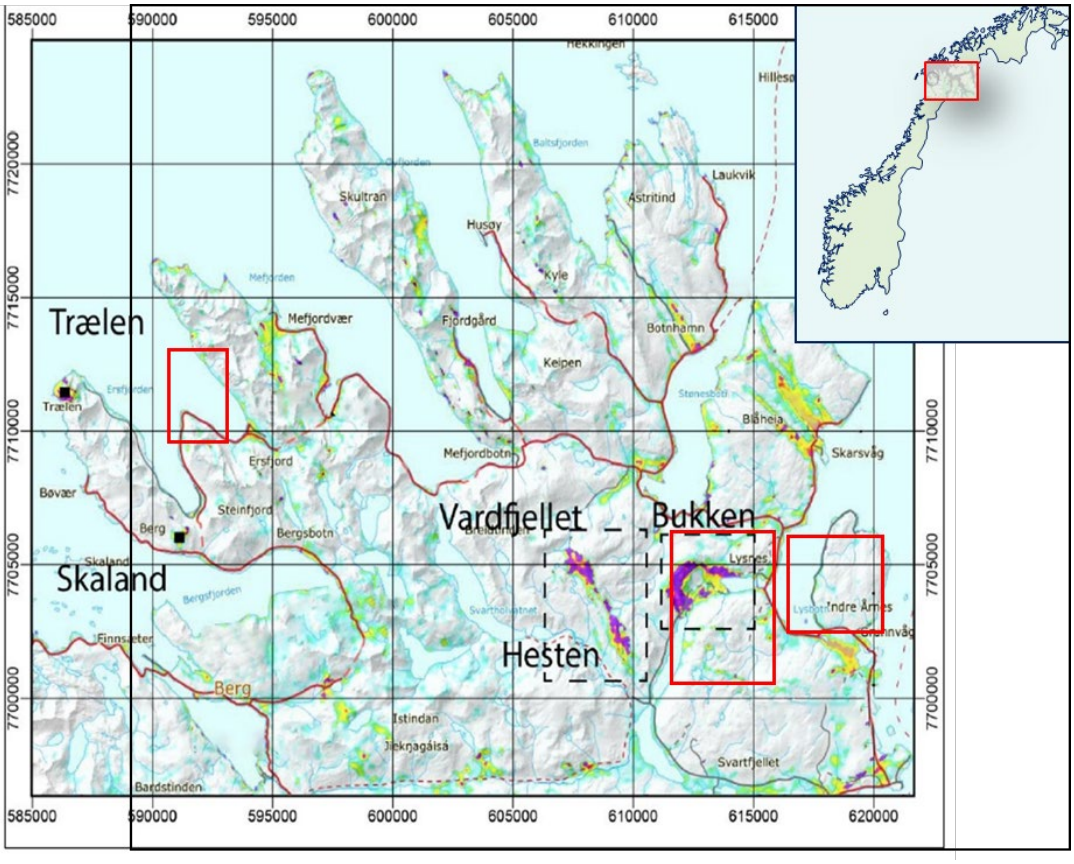

Figure 10 - MRC's operations and tenures in Senja, northern Norway

3 -Geological Survey of Norway, Natural Graphite In Norway December 2015

Figure 11 – Graphite zone in Bukken Mountain

Strong geophysical anomalies and surface mapping/sampling results confirm high prospectivity for these prospects. The Company intends to commence an exploration program in the June quarter 2021, comprising further ground-based geological mapping and sampling to determine higher grade locations to target drilling.

2.2 Munglinup Graphite

MRC's wholly-owned subsidiary, MRC Graphite Pty Ltd ("MRCG"), entered into a joint venture agreement with Gold Terrace Pty Ltd ("Gold Terrace"), to farm-in to the Munglinup Graphite Project. The first stage of the agreement gave MRC an initial 51% interest in the Project. The Munglinup Graphite Project lies along the border of the shires of Esperance and Ravensthorpe on Western Australia's Fitzgerald Coast, approximately 640km southeast by road from Perth. The Project is 4km north of the township of Munglinup on the South Coast Highway, 107km west of Esperance.

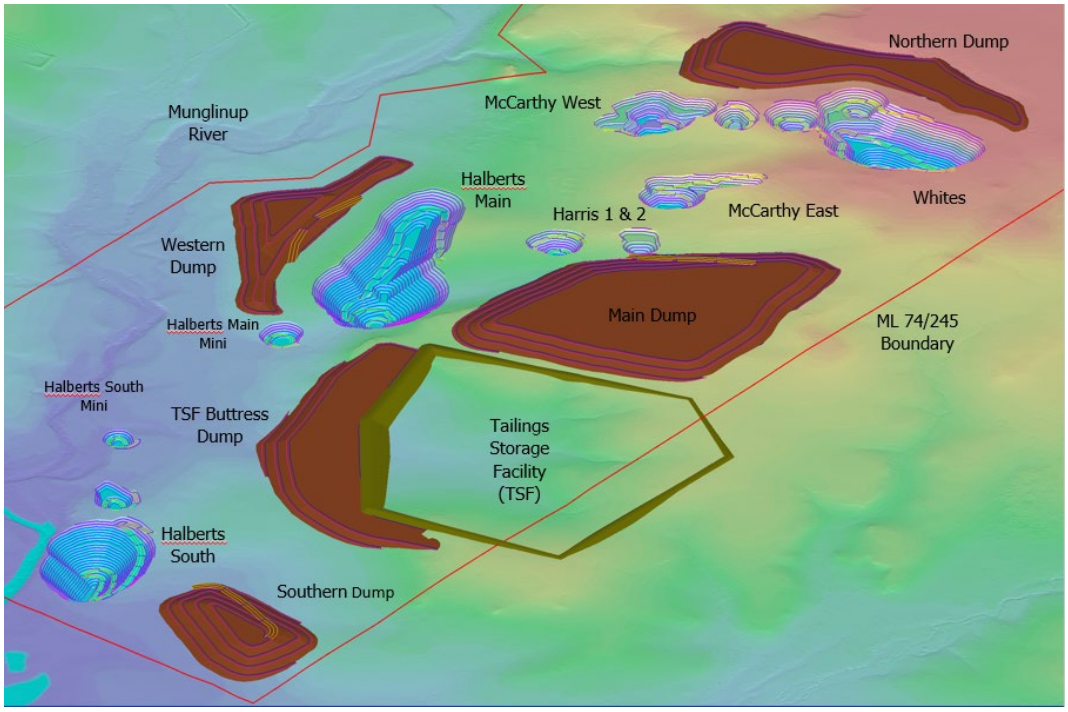

Figure 12 – Munglinup mining layout

Following the completion of the PFS in May 2018, MRC decided to proceed directly to a DFS which was completed in January 2020, outlining a robust and economically justifiable project. The Munglinup Graphite Mineral Resource and Reserves were announced to the ASX on January 2020, reported as part of the DFS. In January 2020, a JORC Code (2012) compliant Mineral Resource of 7.99 million tonnes at 12.2% TGC in the category of Indicated and Inferred using a 5% cut-off was reported and Ore Reserves were estimated at 4.24Mt @ 12.8% TGC.

Table 10 - Total Mineral Resource and Ore Reserve for the Munglinup Graphite project (5% cut-off)

Mineral Resource			Ore Reserve		
Category	**Tonnes (Mt)**	**Total Graphitic Carbon (%)**	**Category**	**Tonnes(Mt)**	**Total Graphitic Carbon (%)**
Measured			Proven		
Indicated	4.49	13.1	Probable	4.24	12.8
Inferred	3.50	11.0			
Total	**7.99**	**12.2**	**Total**	**4.24**	**12.8**

Ore Reserve			
Flake Size	**Sieve Size (µm)**	**Mass (%)**	**Total Graphitic Carbon (%)**
Jumbo	300 – 500	6.5%	95%
Large	180 - 300	16.9%	95%
Medium	150 - 180	8.0%	95%
Small	75 - 150	29.8%	95%
Fine	< 75	38.8%	95%

In Pit Resources		
Category	**Tonnes (Mt)**	**Total Graphitic Carbon (%)**
Inferred	2.75	11.1

- Ore Reserve uses a variable cash flow cut-off grade
- Ore Reserve flake size distribution is for recovered graphite product
- In-Pit Resources comprise Inferred material inside the designed pit designs using a variable cash flow cut-off grade and do not constitute part of the Ore Reserves.

The Mineral Resource and Ore Reserve of Munglinup remain unchanged since the release in January 2020.

The project is on a mining lease granted to 2031 and on a designated mining reserve. Final environmental permits are expected in the December quarter 2021. The Munglinup LOM is 14 years, based on LOM processing throughput in years 1-6 of 400kt per annum and years 7-14 of 500kt per annum, producing an average graphite concentrate production of 52kt per annum. The Munglinup resources are open along strike and at depth. Geophysics in the area indicate that the graphite resources extend to the MRC exploration lease to the east and south. Drilling has been planned for 2021 to expand the resource base and convert inferred resources into higher categories.

The Munglinup Graphite Project was recently recognised by the Australian Government as a Critical Mineral Project and included in the Australian Critical Minerals Prospectus 2020.

Figure 13 – MRC's projects in Australia

3. Australian Exploration Projects

The Company's exploration assets in Australia are located in Western Australia's midwest and southwest regions. All of the projects are early stage prospects.

3.1 Doolgunna Gold

Doolgunna is located in the midwest of Western Australia on a known metallogenic reef carrying gold. Modelling and interpreting the results from a drill campaign during 2018 indicate a complex stockwork of gold lodes hosted within a broad, at least 320m wide, greenschist facies alteration system (the Revere Reef System) that is at least 5-6 km long. Gold mineralisation has been intersected from surface to at least 130m below surface where RC drilling was abandoned due to high water inflows that compromised sampling integrity and recovery. Resource modelling results are positive and encouraging, indicating a well developed mesothermal alteration zone in which the fluids during one of the episodic alteration events carried substantial gold bearing fluids.

In mid 2020, a field visit to Doolgunna was carried out to collect bulk samples from free gold mineralisation in the Revere System for crush liberate and gravity recoverable gold test works and processing recoveries. In the December quarter 2020, the Company finalised a heritage agreement with the traditional owners to allow an application for Program of Work.

3.2 Harvey Vanadium

The project is historically known as the Tallanalla vanadium deposit. The vanadium is hosted in magnetite/martite and to some degree in ilmenite, with the source rock being mafic gabbro/anorthosite or even dolerite intrusions. Significant historical work has been undertaken

by the previous tenement holders since 1996. Bulk sampling head grades varied from a respectable 0.45% V2O5 to high grade feed of 1.29% V2O5.

MRC's goal for 2020 was to obtain a dieback management plan and environmental management approval and Disease Risk Area Permit issued by the Department of Biodiversity, Conservation and Attractions.

3.3 Glen Florrie Channel Iron

The Company was granted Exploration Licence E08/2963 on March 2020 and heritage agreement negotiations were commenced. Glen Florrie is a channel iron deposit ("CID") prospect south of Onslow, Western Australia. The target iron deposits are part of the Miocene Hamersley CID. Fieldwork commenced in December quarter 2020, including preliminary mapping and sampling of the channel iron deposits. A decision will be made on the continuing exploration of this tenement in the March quarter 2021 once results have been assessed.

3.4 Mount Edon Lithium-Cesium-Tantalum

The Company is exploring for lithium-cesium-tantalum ("LCT") in Mount Edon pegmatites to expand its strategy for battery minerals exploration. The Mount Edon pegmatite field hosts numerous LCT pegmatites and is strategically located close to existing infrastructure, making it an excellent exploration and mine development target. The mining lease area has proven lithium-rich zones associated with the pegmatites, as well as historical mining for tantalum. A Program of Work approval for tantalite exploration pits has been issued by authorities and is valid until 2023.

Previously Reported Information

This report includes information that relates to Exploration Results, Mineral Resources, Ore Reserves prepared and first disclosed under the JORC Code (2012) and Pre-Feasibility Study and Definitive Feasibility Study. The information was extracted from the Company's previous ASX releases as follow:

- ROBUST MUNGLINUP DFS RESULTS ALLOW MRC TO MOVE TO 90% OWNERSHIP OF MUNGLINUP GRAPHITE PROJECT, 08 January 2020
- ADDENDUM TO MUNGLINUP DFS RESULTS ANNOUNCEMENT, 17 January 2020
- MRC ANNUAL RESOURCE UPDATE TORMIN MINE MINERAL RESOURCE AUDIT, 28 February 2020
- MAIDEN JORC RESOURCE ESTIMATION FOR THE SKALAND GRAPHITE PROJECT, 12 March 2020
- HIGH-GRADE RESULTS AND NEW INLAND STRANDLINE DISCOVERY AT TORMIN, 07 April 2020
- TORMIN NORTHERN BEACH DELIVERS HIGH GRADE MAIDEN RESOURCE, 19 May 2020.
- MRC GRANTED APPROVALS TO EXPAND MINING AND PROCESSING AT TORMIN, 01 July 2020
- HIGH-GRADE MINERALISATION CONTINUES AT TORMIN INLAND STRAND, 07 July 2020
- HIGHLY PROSPECTIVE GRAPHITE EXPLORATION PROJECT SECURED 20KM FROM SKALAND, 15 July 2020

- MRC SECURES TWO ADDITIONAL GRAPHITE PROSPECTS NEAR SKALAND, 19 January 2021
- HALF YEAR FINANCIAL REPORT 30 JUNE 2020, 24 August 2020
- MASSIVE INCREASE IN MINERAL RESOURCES AT TORMIN WITH MAIDEN RESOURCE AT WESTERN STRANDLINE, 27 August 2020
- COMMENCEMENT OF MINING AT TORMIN WESTERN STRANDLINE, 11 September 2020
- MRC COMPLETES PRE-FEASIBILITY STUDY FOR ACTIVE ANODE MATERIAL PLANT IN NORWAY, ADDRESSING THE FAST GROWING BATTERY MARKET, 21 September 2020
- MRC SECURES TWO ADDITIONAL GRAPHITE PROSPECTS NEAR SKALAND, 19 January 2021
- QUARTERLY ACTIVITIES REPORT-DECEMBER 2020, 01 February 2021

Appendix 1

Tormin Beaches Mineral Resource

A summary of annual mineral resource audit and JORC Table 1 is provided below.

Geology and Geological Interpretation

The Tormin Beaches deposit is located on the western coastal plain of South Africa. It is a heavy mineral sand deposit located on an active placer beach strandline undergoing continuous erosion, deposition and replenishment from oceanic storm and wave activity. The western coastal plain of South Africa embraces a significant resource of detrital heavy minerals by world standards.

The heavy mineral sand deposits occur in an active beach environment as well as in older palaeo-beach raised strandlines. Being a placer beach sand deposit, there is no geological structure either relevant or applicable. The Neogene deposits are host to the commercially important diamondiferous and valuable heavy mineral sands ("HMS") including zircon, rutile, anatase, ilmenite, garnet, leucoxene and magnetite.

Drilling Techniques and Hole Spacing

The drilling program was designed on a 50m x 20m grid to delineate a JORC Code (2012) Mineral Resource Estimate annual audit for the Tormin Beaches. A total of 277 vertical drillholes (558.5m) spaced out on a regular 50m x 20m grid were drilled by a hydraulic auger in eight mining ramps (beaches). The auger drill rods were 110mm in diameter and 1m long. Areas with drilling spaced 50m x 20m apart are classified as Indicated and areas drilled with wider spacing classified as Inferred. Where the beach is over 60m wide, which allows for four drillholes to be drilled across the width of the beach, which gives much greater confidence in the geometry and continuity of mineralisation, coupled with a Kriging Slope of Regression of over 0.85, the area has been classified as Measured.

Sampling and Sub-sampling Techniques

1m auger drill samples were collected and delivered in a plastic sleeve at an average of ~3 kg per sample. Samples were submitted directly to the Tormin mine laboratory to be analysed for heavy minerals. Each sample was homogenised by rotating it within the bag and was riffled. 200g of samples were split to use for heavy liquid separation ("HLS") using tetrabromoethane ("TBE") to define Total Heavy Minerals ("THM") content. Lab duplicate samples were split for the Tormin mine laboratory for QA/QC checks.

Sample Analysis Method

A total of 602 samples were assayed. All samples were analysed at the Company's onsite HLS lab using TBE with Panalytical Aeris XRD machines (the Rietveld method after HLS) in an automated mode setup for mineral assays, and industrial laboratory XRF (Panalytical Epsilon 3 ED) for zircon content. The Company completes its own internal QA/QC using certified reference material and blank samples at the rate of approximately 1 in 50 samples

and sends every 20th sample to third party external laboratories. QEMSCAN test work by SGS was used for determination of the heavy mineral assemblage.

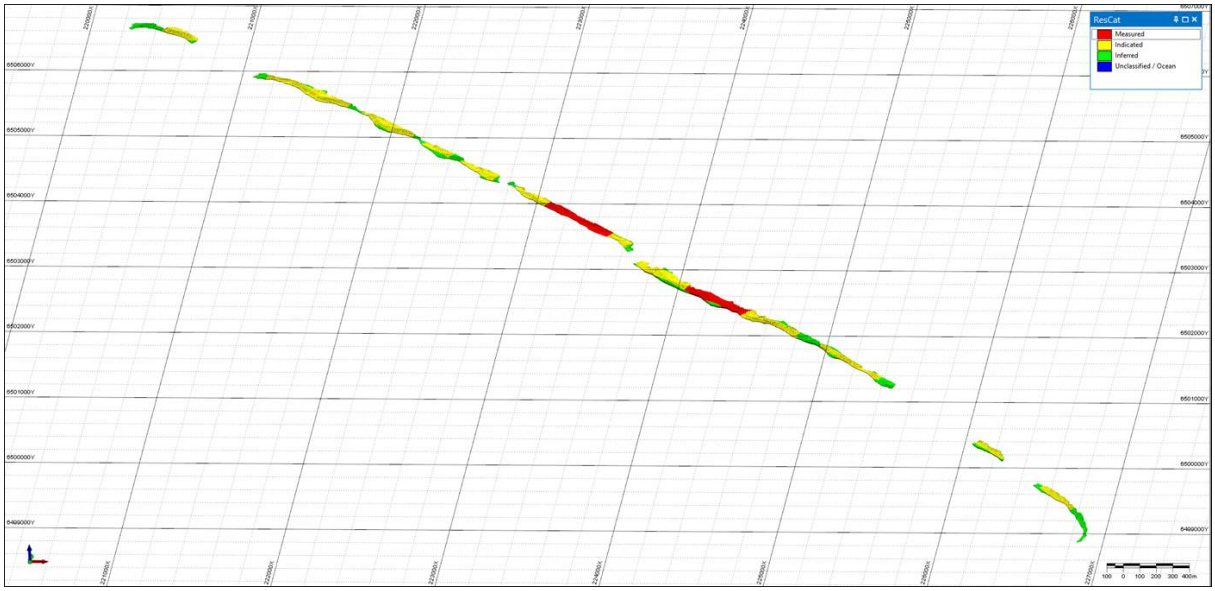

Figure 1 - Resource Classifications on Tormin Beaches mining

Estimation Methodology

Mineral Resource estimation involved the use of drillhole data and geology/topography to construct three-dimensional wireframes to define mineralised domains. Micromine software was used to domain and estimate each of the Valuable Heavy Minerals ("VHM"). Domains were snapped to the nearest true intersection from sampling and assays were composited to 0.5m, within domains, with composite lengths redistributed to avoid residuals. Data is extrapolated between data points and beyond approximately half of the drill spacing. Ordinary kriging was used as the primary estimator for THM and VHM values. A parent block size of 25m x 5m x 0.5m reflects the geometry of the mineralised domains, with up to 4 sub-blocks in each direction.

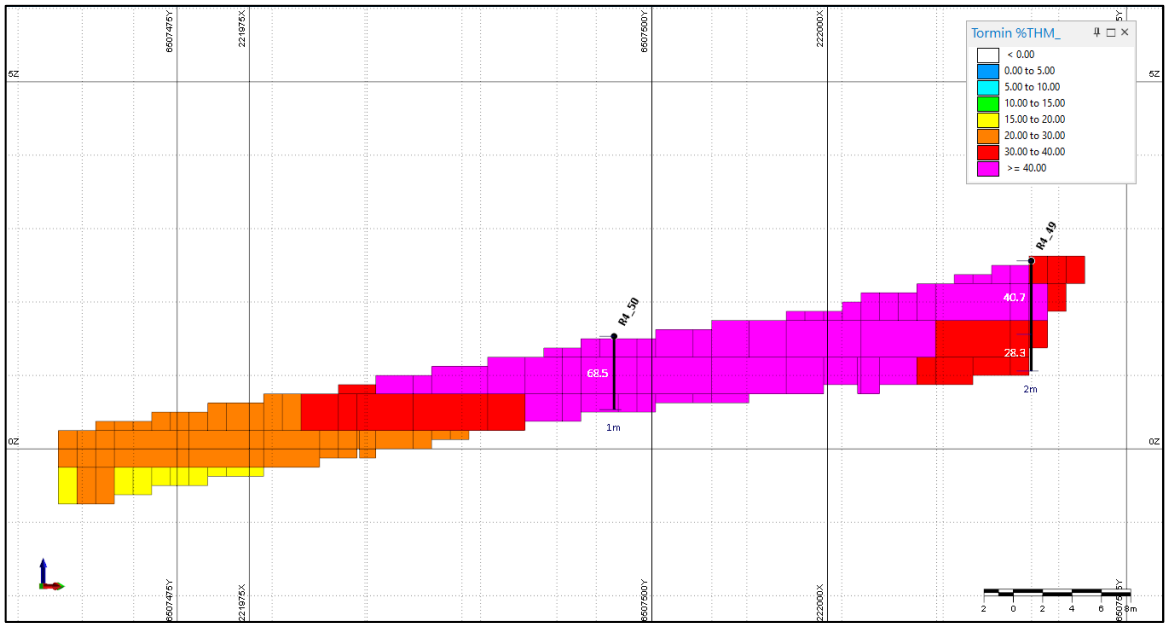

Figure 2 - Oblique cross-section at 6507475mN, looking northwest comparing raw drillhole sample and kriged block THM grades in ramp 4

Cut-off Grades

A 2% THM cut-off grade is based on the economic criteria established by the ongoing mining operations and it was applied to any mineralised exploration intersections and final resource reporting, as this is the current minimum grade where there is a reasonable expectation for eventual extraction. The 2% cut-off grade is based on grade-tonnage curves with respect to THM and VHM.

Mining and Metallurgical Methods and Parameters

Typical open-pit mining is undertaken utilising excavators and articulated dump trucks. The pits generally only remain open during low tide, except where beach conditions allow the construction of protective bunding. There is no stripping as mining starts at the surface and natural replenishment of the resource takes place as the open pits fill with HMS material generated from tidal action and wave energy dynamics. Metallurgical factors are derived from the processing data generated from seven years of profitable mining at Tormin Beaches. As the mine is an ongoing profitable concern, there are no doubts about the metallurgical suitability of the mined material.

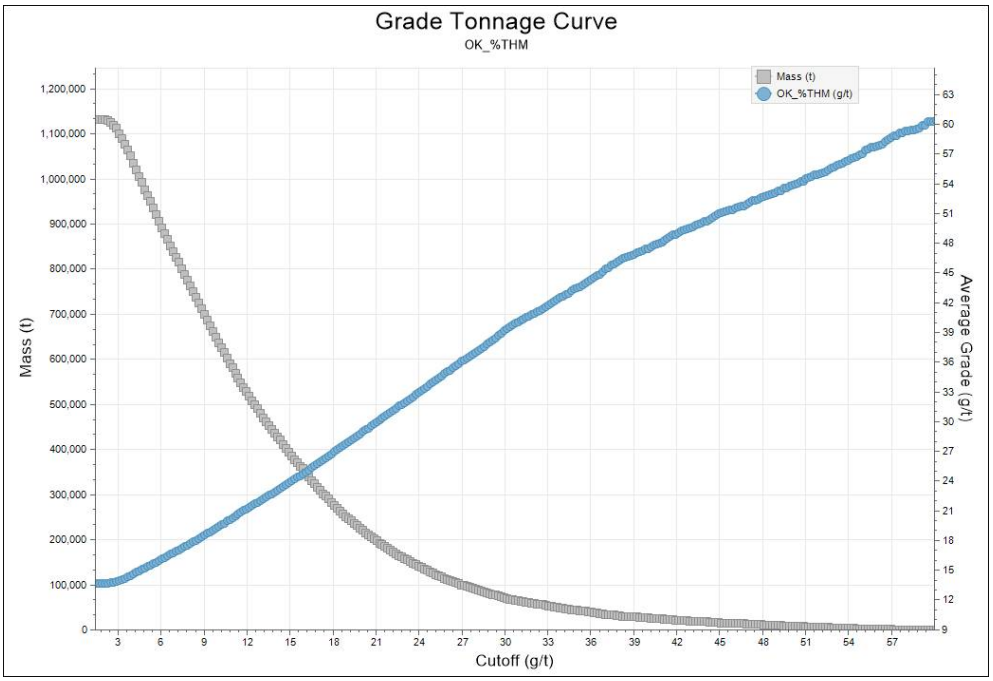

Figure 3- The Tormin Beaches Mineral Resource Grade -Tonnage Curve

JORC TABLE 1
The Tormin Beaches
Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
• ***Sampling techniques***	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The current resource audit is based on 277 auger holes, representing 558.5m of vertical drilling, and 602 analysed samples. • Sample taken from surface to bedrock. • Mineralisation and grade testwork done according to mine control standards within Tormin mine site laboratory. XRF, HLS and XRD. • 1m auger drill samples were collected in ~3kg plastic bags. • Samples were submitted directly to the Tormin mine laboratory to be analysed for heavy minerals. • The laboratory sample was dried and screened. • 200g of samples were split to use for HLS using TBE with density range between 2.92 and 2.96g/ml to define THM content. • Grade estimations are compared monthly with the grades encountered during mining with good correlation.
• ***Drilling techniques***	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Hydraulic augers, produced by Christie Engineering in Australia, were used to obtain samples. Auger drilling is considering an early stage drilling technique but it is an acceptable drilling method for shallow beach Heavy Mineral deposits like Tormin. • The auger is a 110mm open hole drilling technique. • Drill rods are 1m long. • The auger drilling utilised open hole method and drilling is governed by the auger drilling guideline to ensure consistency in the application of the method. • All holes were drilled vertically.

Criteria	JORC Code Explanation	Commentary
• ***Drill sample recovery***	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Metric samples from the auger were taken and riffled down to a representative sample for heavy liquid separation, XRF and XRD. • The auger sample recoveries are estimated from the volume of the sample recovered. • The interval 1m is carefully drilled to maximise sample recovery. No significant losses of samples were observed due to the very shallow holes. • There is potential for contamination in open hole drilling, but sample bias is not likely due to the shallow drillhole depths.
• ***Logging***	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Each hole was logged by a geologist on pre-printed log sheets. • Geological and lithological observations per depth were recorded together with field sections and hand drawn down-the-hole logs. • Special attention was given to visual heavy minerals as a guide to potential marine deposits. • Marine gravels and contact with basement bedrock recorded as maximum depth of mineralisation.
• ***Sub-sampling techniques and sample preparation***	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Each sample was homogenised and was riffled. • Samples were mostly wet from sea ingress/seepage. • Sampling over 1m down-the-hole intervals as determined by 1m marks. • Lab duplicate samples were split for the Tormin mine laboratory for QA/QC checks.

Criteria	JORC Code Explanation	Commentary
• ***Quality of assay data and laboratory tests***	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All sample analyses were undertaken by the Tormin mine laboratory. • No geophysical, portable XRF, etc instruments were used. • The mine owns and operates a HLS lab with Panalytical Aeris XRD machines (the Rietveld method after HLS) in an automated mode setup and industrial laboratory XRF (Panalytical Epsilon 3 ED) for zircon content. • The Tormin mine laboratory completes its own internal QA/QC using certified reference material ("CRM") at the rate of approximately 1 in 50 and sending every 20th sample to the external labs. • External sampling checks for XRD have been undertaken by XRD Analytical and Consulting (10 samples) and 5 samples for XRF by UIS Analytical Services (accredited laboratory), both in Pretoria. • The CRMs, blank and duplicate sample results are within accepted limits. • QEMSCAN test work by SGS was used for determination of the mineral assemblage.
• ***Verification of sampling and assaying***	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All samplings were undertaken by a consultant geologist, overseen by a qualified and experienced mine geologist. • All sample preparation was undertaken by qualified staff, supervised by chemists and the laboratory manager. • The lab results and logging have been reviewed by external consultant to MSR as well as internally by MRC's Exploration Manager. • 14 twinned holes drilled and represented good correlation. • The drillhole logs have been converted to electronically stored formats and stored in a database provided by Maxwell Geoservices (Webshed). This database is hosted on an offsite server supplied by Maxwell Geoservices and managed by their trained database staff. • No adjustment to assay data results was made outside the standard XRD and XRF calibration software being used.

Criteria	JORC Code Explanation	Commentary
• ***Location of data points***	• *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Hole collar locations were determined with DGPS, accurate to within centimetres. • Down hole surveys for very shallow vertical holes are not required. • WGS 84 datum and UTM/zone 34S coordinate system is used. • Topographical control is highly problematic due to constant changes in surface levels after daily high tides and monthly storm events, which average 10 events per month.
• ***Data spacing and distribution***	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Target sampling point is on a 50m x 20m average spacing, subject to beach access due to tides. • 50 x 20m drilling is sufficient to classify the beach HMS as Measured Resources due to the nature of mineralisation. • Data spacing is sufficient for an Inferred and Measured resource classification on a resource that has been mined over the past seven years.
• ***Orientation of data in relation to geological structure***	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Geological structure neither relevant nor applicable to an active placer beach sand deposit. • Vertical drilling to intersect sub-horizontal strata. • Orientation of the drillholes will not result in sampling bias.
• ***Sample security***	• *The measures taken to ensure sample security.*	• All sample bag numbers were logged against the drillhole by the site geologist. • Two samples per metre drilled were produced, one for external QA/QC use or back-up and one sent directly to the mine lab at the end of each day's drilling in a secure area. • The Tormin mine laboratory inspected the submitted samples and did not report any missing, nor any error of the samples against the sample lists.
• ***Audits or reviews***	• *The results of any audits or reviews of sampling techniques and data.*	• The lab results and logging have been reviewed by external consultants to MSR and

Criteria	JORC Code Explanation	Commentary
		internally as part of normal validation processes by MRC.

Section 2 Reporting of Exploration Results

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

Criteria	Explanation	Commentary
• ***Mineral tenement and land tenure status***	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The resource is owned by Mineral Sands Resources (Pty) Ltd, a subsidiary of ASX listed Mineral Commodities Ltd (ASX: MRC). • The resource is being mined under two active mining rights 30/5/2/2/2/10107 & 10108. • The mining rights were renewed in August 2019 for an additional 10 years, up to 22 August 2029.
• ***Exploration done by other parties***	• *Acknowledgment and appraisal of exploration by other parties.*	• The general area has been investigated and mined for heavy mineral deposits as far back as the 1930s (Haughton, 1931). Subsequent geological surveys and exploration programs investigated the distribution, mineralogy and economic potential of the HMS along the coastline of Geelwal Karoo (Toerien & Groeneveld 1957, Abele 1989, Swart 1990, Barnes 1998) and Trans Hex 1989-1991). • A definitive feasibility study on the deposit was done in 2006 by K'Enyuka and a BFS study review by HBH consultants.
• ***Geology***	• *Deposit type, geological setting and style of mineralisation.*	• Deposit is a HMS deposit located on an active placer beach strandline undergoing continuous erosion, deposition and replenishment from oceanic storm and wave activity. • The HMS deposits occur in an active beach environment as well as in older palaeo-beach raised strandlines found inland. • Apart from the mid-Jurassic, Cretaceous and Tertiary (Paleogene) sediments along the coast, numerous small fossiliferous, marine and terrestrial deposits of

Criteria	Explanation	Commentary
		Neogene age outcrop along the coastal zone. • The Neogene deposits are host to the commercially important diamondiferous and heavy mineral sands.
• ***Drillhole Information***	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *Easting and northing of the drillhole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• The minimum hole length is 0.5m, maximum 5.5m and average depth of drilling is 2 metres. • East collar ranges – 219,942mE to 226,549mE. • North collar ranges – 6,501,624mN to 6,509,401mN. • Azimuth ranges/dip ranges – vertical drilling.
• ***Data aggregation methods***	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not relevant. • No grade cutting of HM values was undertaken. • No metal equivalents were used for reporting of Mineral Resources.
• ***Relationship between mineralisation widths and intercept lengths***	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Grade over total depth sample was determined as the resource is mined and processed from surface to bedrock contact, where all grades were above the 2% aggregation cut-off. • Mineralisation is enriched sedimentary layers semi-parallel to the bedrock contact and beach slope angle. • Mineralisation is essentially flat laying, and as such, vertical drillholes represent true width.

Criteria	Explanation	Commentary
• ***Diagrams***	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	• Plan view of area sampled along the coastal cliff line is provided in this report.
• ***Balanced reporting***	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Statistics of drillhole grades used during the Mineral Resource estimate are contained in the main body of this report. • This report provides the total information available to date and is considered to represent a balanced report.
• ***Other substantive exploration data***	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Grade correlation indicates a resource progressively lowering in grade and volume as replenishment is slower than the current mining rate.
• ***Further work***	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned quarterly drilling for replenishment study. • Offshore sampling to determine the source of grade replenishment is planned.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The data was plotted and plots were as expected, with no misplots or extraneous data found. Maximum and minimum values and average values were all within the norm. Duplicate values were confirmed as such. The coordinates were confirmed as being WGS84 UTM zone 34S. • Data is stored in an offsite database hosted by Maxwell Geoservices.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person is currently a full-time employee of Mineral Commodities Ltd. • No site visits were undertaken for this annual resource estimate due to COVID-19 travel bans, although the Competent Person did visit the

Criteria	JORC Code explanation	Commentary
		project previously and is familiar with the site and resource conditions.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The deposit is a classic active mineral sands deposit with no doubt as to its genesis. • The geology/topography of the deposit has been used to constrain the resource envelope. The data was partitioned into areas (subsets) based on geology/topography. The base of the deposit is defined by the underlying bedrock, the landward side by a sea-facing cliff. The deposit is open seaward. • Grade continuity is influenced by wave action and hence is best parallel to the beachfront. Replenishment and re-working of resources limits continuity and reliability of localised mining blocks. • Targeting higher grade replenishment material throughout the year increases the overall mined grade. The average THM mined grade during 2020 was 17.47% and 8.74% VHM.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The deposit has a strike length along the coastline of approx. 10,000m and an average width from the cliff to within the surf zone of 80m. The mining width in 2020 varied from 20-80m and averaged about 45m. It is developed from surface to a maximum depth of 4m (originally 6.25m). The deposit occurs from the surface down.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	• Micromine software was used to domain and estimate each of the valuable heavy minerals. Domains were snapped to the nearest true intersection from sampling. • Assays were composited to 1m, within domains, with composite lengths redistributed to avoid residuals. All composites were 0.5m. • No outlier restriction has been applied. • Data is extrapolated between data points and approximately half of the drill spacing beyond. Data points are nominally 50m x 20m. There are between 2-4 drillholes per line. • Ordinary kriging was used as the primary estimator. • An anisotropic search was used, with the ratios of direction of greatest continuity (along the beach); across the continuity: depth of 10: 1: 0.01. The

Criteria	JORC Code explanation	Commentary
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	direction of greatest continuity is on an azimuth of 140 degrees. • A maximum search distance of 200m was used, based on the ranges of the variograms, and halved to account for potential local variation due to the low number of samples on each beach. Octant searching was used, with a maximum points per sector of 15. Minimum points to estimate a block were 3. • Previous resource statements and production records are included in the text of the report. The current 2020 Resource grade remains in the same order of magnitude from the previous (2019) Inferred Resource values while the bulk tonnage has significantly decreased. • All products mentioned in the text are being actively mined and separated in the plant. No deleterious minerals are known. • This is a resource estimate and mining parameters are not used beyond normal global parameters of grades, dimensions, and accessibility. • Geology/topography was used to constrain the model. On the landward side, the sand dunes and cliffs were used to limit the model to the beach area. The model was truncated by the seaward edge of dry beach between low and high tides. • The THM standard deviation of %THM in the block model is 9.49. • These values are acceptable as they indicate the modelling algorithm produces realistic values within the range of the dataset. In addition, an in-depth validation process was used to test robustness of the modelled data, including visual checks, check estimates (IDW and NN), swath plots and detailed statistical comparisons.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The resource tonnages are estimated on a dry basis. Mined material is wet and fully saturated when mined out, but it is free draining when stockpiled.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Final report was based on a 2% THM cut-off grade for blocks as this is the current minimum grade where there is a reasonable expectation for eventual extraction. • 2% cut-off grade was based on grade-tonnage curves with respect to THM and VHM

Criteria	JORC Code explanation	Commentary
		assemblage. Also taken into account were current and anticipated plant performance and other similarly sized deposits in the region.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The dynamic beach environment results in a cyclic process of deposition on and erosion of the beach surface. Historical studies by Trans Hex have found a weighted average change over 9 months of up to ~9% loss or up to ~7% increase. This variability is also evident in the replenishment rate and grade of material observed. • Opencast mining uses coffer type dams constructed with excavators. The pits generally only remain open during low tide, except where beach conditions allow larger, more stable protective bunding to be constructed. Construction and mining methods are similar to those being used for beach diamond mining along the west coast of South Africa. • There is no stripping as mining starts at the surface. • Natural replenishment of the resource is taking place as the open pits are filled with HMS material from the surf zone during the next high tide. • In general, it appears that replenishment is erratic and unpredictable. Replenishment appears to be mainly a function of time and the number of sea storm events. Given enough time between mining events, the resource is currently still replenishing, although the long-term trend is a significant lowering in grade. • The overall lowering of the beach surface (due to mining) has resulted in the faster movement of large volumes of material between the beach and the surf zone than before mining started. • Since commencement of the operation, 13.87 million tonnes have been mined. • Over the past 7 years, some mining blocks have been mined up to 30 times. • MRC intends to stop mining the Tormin Beaches for at least one year to maximise replenishment.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the*	• As the mine is an ongoing profitable concern, there are no doubts about the metallurgical suitability of the mined material. • The most recent studies are:

Criteria	JORC Code explanation	Commentary
	assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	- 2020 Tormin Expansion projects- implementation strategy by MinSol Engineering - 2015 Magnetic Mineral Separation plant study by MSP Engineering - 2015 Integrated Mineral Separation Plant by MSP Engineering • Any changes that MRC undertake have not been quantified or assumed to change the product specifications.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• There is a 10m stability buffer zone between the coastal cliffs and the beach where no mining is allowed. • All mining voids get naturally filled with beach sand material during high tide and there is therefore no rehabilitation liability in this regard. • Tailings get dumped onto the beach where they are distributed and settled along the coastline under natural wave and sea current action. There are no pollutants introduced with the tailings and the material is inert.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The bulk density is based on a calculation of the specific gravity of the silica and heavy mineral content fractions of each sample. It is therefore not fixed and fluctuates between 1.66 and 2.19 as per the formula: SG=1.65+(0.009 x HM). • Bulk density measurements (compacted and uncompacted) are conducted for approximately every 20th sample and moisture content analysed for all samples. Density measurements were taken on 27 samples and give an overall measured bulk density of 1.77t/m3.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the*	• The Mineral Resources have been classified as the Measured, Indicated, and Inferred Categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). • The original resource classification was an Indicated Resource (2013).

Criteria	JORC Code explanation	Commentary
	data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• A review of the resource during 2014-2017 by Mr du Toit of AEMCO resulted in the resource being downgraded into an Inferred category due to the impact from mining and replenishment. • Tormin mineral resource audit 2018 by Mr Brockman of Geoinfo (DBGEOINFO) and a 2019 audit by Mr Rashidi (MRC) have classified in Inferred category. The mineral resource audits 2018 and 2019 were based on vertical channel composite sampling within exploration pits (composite grade) and could not be assumed to a level higher than Inferred. In addition, due to the ongoing removal of heavy mineral material via mining in these years, the release of depleted tailings to the beachfront and the irregular and incomplete replacement of mined material during replenishment, there was a gradual decrease in the amount of the resource as well as in the grade of THM and each of the separate extracted heavy minerals. Because of these factors, only an Inferred Resource was reported. • MRC has planned to stop mining the Tormin Beaches for a year or two, commencing early 2021, to maximise replenishment characteristics during the alternating periods of non-mining. • An appropriate dense drilling in all mining ramps (beaches) was carried out in December 2020 for the resource audit. • A range of criteria has been considered in determining this classification including: - Geological continuity: o Areas where bedrock outcrops locally and breaks up the beach sands have been downgraded in classification. - Drillhole spacing: o Areas with drillhole spacing at the target spacing of 50m x 20m have been classified as Measured and Indicated. o All other areas classified as Inferred. o Slope of regression of the kriging estimate – this is a measure of the robustness of the estimate: ▪ Where there is a cluster of blocks with slope higher than 0.85, and drillhole spacing is appropriate, the resource has been classified as Measured. ▪ Where there is a cluster of blocks with slope higher than 0.7 and lower than 0.85, and drillhole spacing is appropriate, the

Criteria	JORC Code explanation	Commentary
		resource has been classified as Indicated. ▪ Where there is a cluster of blocks where slope is less than 0.7, even if other criteria have been met for higher classification, the resource has been classified as Inferred. • The results of the validation of the block model show acceptable correlation of the input data to the estimated grades. • The author is confident that all relevant factors have been considered and the results reflect his views.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource has been reviewed internally as part of normal validation processes by MRC.
Discussion of relative accuracy / confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The global resource is made of 8 local resources distributed along the beachfront. Each of the 8 local resources (mining ramps) can be mined separately. • By the end of 2020, over 13.87Mt of material has been mined. After three years of production, the mined THM grade starts to decline significantly. This suggests that the presently mined materials are largely replenishment materials. • An in-depth geostatistical study has been completed on this resource, which has allowed for robust estimation and high levels of confidence in the resource.

Appendix 2

Northern Beaches Mineral Resource

An updated summary of material assumption and JORC Table 1 is provided below.

Geology and Geological Interpretation

Located on the western coastal plain of South Africa, the Northern Beaches deposit is a heavy mineral sand deposit located on an active placer beach strandline undergoing continuous erosion, deposition and replenishment from oceanic storm and wave activity. The heavy mineral sand deposits occur in an active beach environment as well as in older palaeo-beach raised strandlines. The Neogene deposits are host to the commercially important diamondiferous and heavy mineral sands (zircon, rutile, anatase, ilmenite, garnet, leucoxene and magnetite).

Drilling Techniques and Hole Spacing

A total of 70 additional vertical aircore drillholes (169.5m) spaced out on a regular 50m x 25m grid were drilled at Beaches 1, 2, 3, 4, 6, 8 and 9, as part of a follow-up programme outside of the Maiden Mineral Resource Beaches which are included in the updated JORC Code (2012) Mineral Resource estimate. Areas with drilling spaced 50m x 25m apart are classified as Indicated and areas drilled with wider spacing classified as Inferred. No Measured resource added to the Maiden Mineral Resource.

Table1 – Drill summary supporting the updated Northern Beaches mineral resource estimate

Year	Holes	Metres	Pit holes	Samples
May 2019	314	1187	51	1201
December 2019	70	169.5	-	174
Total	**384**	**1356.5**	**51**	**1375**

Sampling and Sub-sampling Techniques

1m aircore drill samples were collected and samples delivered/extruded in a plastic sleeve at an average of 3kg per sample. Sample lengths were labelled with a permanent marker including the hole identification and depth recorded on the first and last metre samples. The sample lengths were measured with the ratio split over the total length of flight into 1m lengths.

Sample Analysis Method

A total of 174 samples were assayed. All samples were analysed at the Company's on-site heavy liquid separation lab ("HLS") using tetrabromoethane ("TBE") with Panalytical Aeris XRD machines (the Rietveld method after HLS) in an automated mode setup for mineral assays, and industrial laboratory XRF (Panalytical Epsilon 3 ED) for zircon content. The Company completes its own internal QA/QC using certified reference material at the rate of approximately 1 in 50 samples and sends every 20th sample to third party external laboratories.

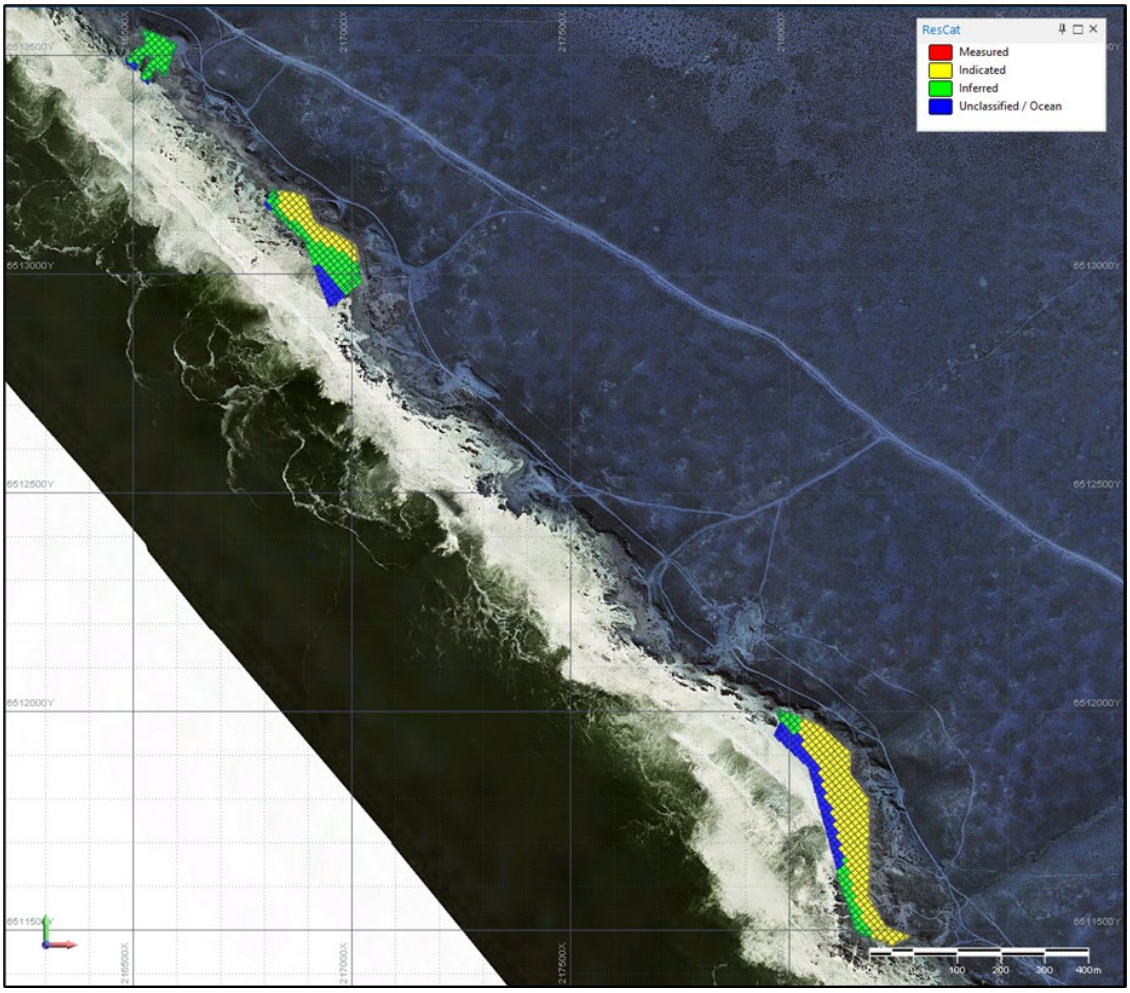

Figure 1 - Resource Classifications on Beaches 1, 2 and 3 (south to north)

Estimation Methodology

Mineral Resource estimation involved the use of drillhole, test pit data and geology/topography to construct three-dimensional wireframes to define mineralised domains. Micromine software was used to domain and estimate each of the Valuable Heavy Minerals ("VHM"). Domains were snapped to the nearest true intersection from sampling, and assays were composited to 1m, within domains, with composite lengths redistributed to avoid residuals. Data is extrapolated between data points and beyond approximately half of the drill spacing. Ordinary kriging was used as the primary estimator for THM and VHM values. Where slope of regression is greater than 0.9, and previous categories have been met, the final resource has been classified as Measured. In blocks with slope between 0.7 and 0.9, even if other criteria have been met for higher classification, the resource has been classified as Indicated. Where slope is less than 0.7, even if other criteria have been met for higher classification, the resource has been classified as Inferred. Three separate block models were created, all with the same attributes, one for each. A block size of 25m x 25m x 1m reflects the geometry of the mineralised domains.

Cut-off Grades

A 2% THM cut-off grade was applied for any mineralised exploration intersections and final resource reporting, as this is the current minimum grade where there is a reasonable

expectation for eventual extraction. The 2% cut off grade is based on grade-tonnage curves with respect to THM and VHM assemblage.

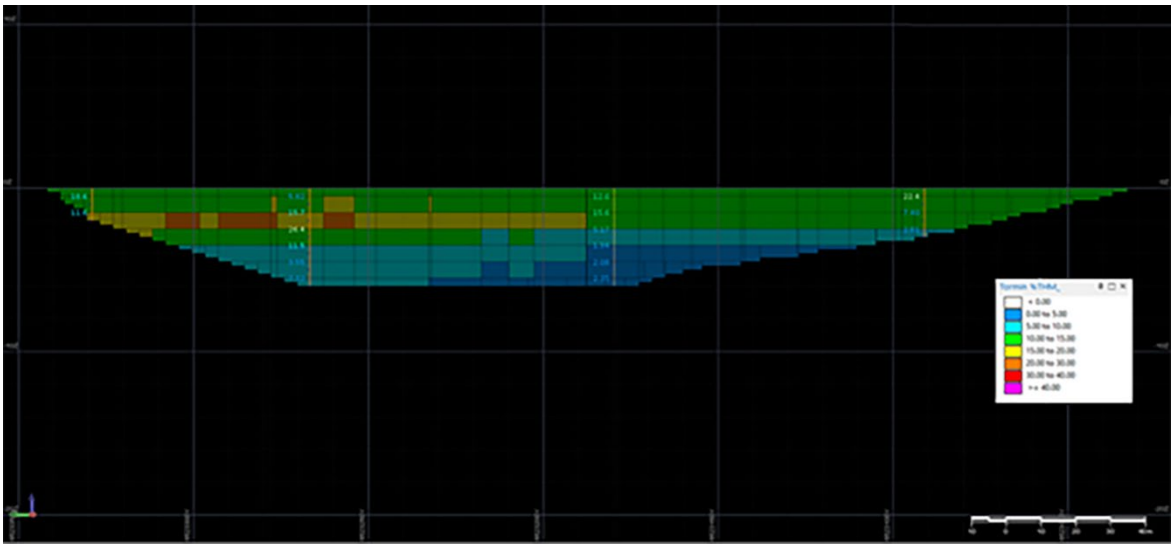

Figure 2 - N-S cross-section at 208880mE, looking west comparing composite sample and kriged block THM grades in Beach 9

Mining and Metallurgical Methods and Parameters

Typical open-pit mining is practised with excavators and articulated dump trucks. The pits generally only remain open during low tide, except where beach conditions allow the construction of protective bunding. Mining starts from surface and natural replenishment of the resource takes place as the open pits fill with HMS material generated from tidal action and wave energy dynamics. Metallurgical factors are derived from the current processing data generated from over seven years of mining at Tormin Beaches. The metallurgical processing characteristics of the Northern Beaches material are similar to the Tormin Beach deposits.

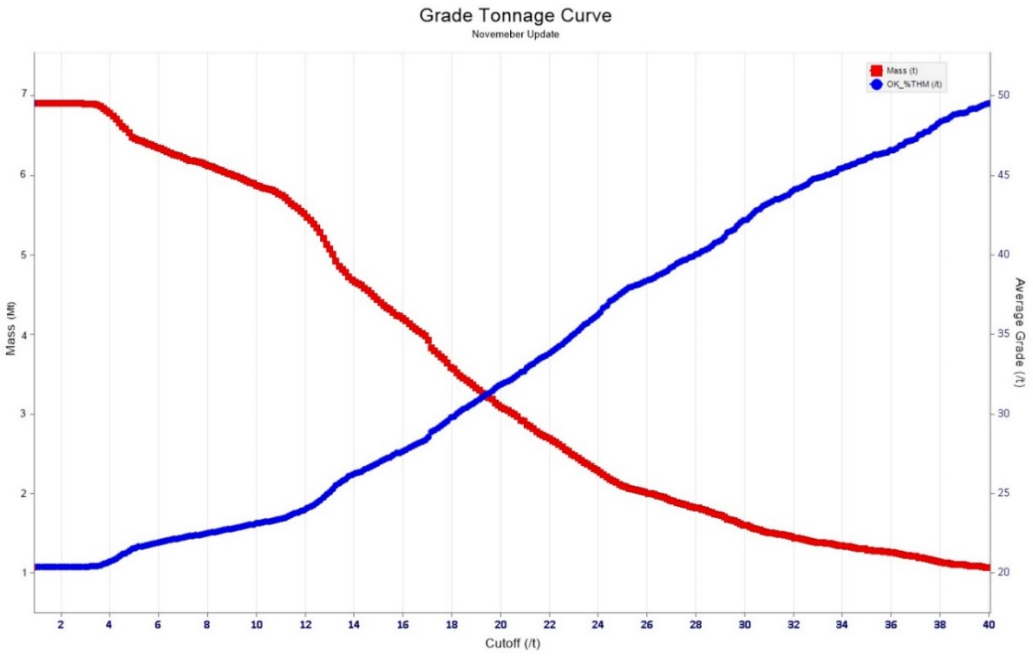

Figure 3 - The Northern Beaches Mineral Resource Grade -Tonnage Curve

JORC TABLE 1
The Northern Beaches

Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
• ***Sampling techniques***	• *Nature and quality of sampling (eg cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done, this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg were pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The current resource update is based on 70 aircore holes, representing 169.5m of vertical drilling, and 174 analysed samples. This data, added to database of maiden Mineral Resource Estimate reported on 19 May 2019, consists of 314 sonic holes, representing 1187m of vertical drilling and 51 pit holes and 1201 analysed samples. • Sample taken from surface to bedrock. • Mineralisation and grade testwork done according to mine control standards within Tormin mine site laboratory, XRF, heavy liquid separation and XRD. • Vertical channel composite sampling within exploration pits. • 1m aircore drill samples from were collected in 3kg plastic bags. • The sample length measured, and ratio split over total length of flight into 1m lengths, was riffle split into two bags of ~3kg each. • 3kg samples were submitted directly to the Tormin mine laboratory to be analysed for heavy minerals. • The laboratory sample was dried and screened. • 200g of samples were split to use for heavy liquid separation using TBE with density range between 2.92 and 2.96g/ml to define THM content.
• ***Drilling techniques***	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Banka, sonic) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method).*	• Aircore drilling is considered a standard industry drilling method for HMS beach mineralisation. • 85mm drill bits and rods were used. • All holes were drilled vertically.

Criteria	JORC Code Explanation	Commentary
• ***Drill sample recovery***	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Metric samples from aircores were taken and riffled down to a representative sample for XRF, heavy liquid separation and XRD. • No sample loss or cavitation was experienced. • Sample recovery was very good. • The aircore drilling provides high quality samples from the face of the drillhole.
• ***Logging***	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Each hole was logged by a geologist on pre-printed log sheets. • Geological and lithological observations per depth were recorded together with field sections and hand drawn down-the-hole logs. • Special attention was given to visual heavy minerals as a guide to potential marine deposits. • Marine gravels and contact with basement bedrock recorded as maximum depth of mineralisation.
• ***Sub-sampling techniques and sample preparation***	• *If core was either cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure the sampling is representative of the in-situ material collected, including for instance, results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Samples were riffled. • Samples were mostly wet from sea ingress/seepage. • Sampling over 1m down-the-hole intervals as determined by 1m marks on the rig mast. • Lab duplicate samples were split for the Tormin mine laboratory for external QA/QC checks.
• ***Quality of assay data and laboratory tests***	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the*	• All sample analyses were undertaken by the Tormin mine laboratory. • No geophysical, portable XRF etc instruments were used.

Criteria	JORC Code Explanation	Commentary
	parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc. • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The mine owns and operates a heavy liquid separation lab ("HLS") with Panalytical Aeris XRD machines (the Rietveld method after HLS) in an automated mode setup and industrial laboratory XRF (Panalytical Epsilon 3 ED) for zircon content. • The Tormin mine laboratory completes its own internal QA/QC using certified reference material ("CRM") at the rate of approximately 1 in 50 and sending every 20th sample to the external labs. • For the March-April 2020 drill program at the Northern Beaches, external sampling checks for XRD have been undertaken by XRD Analytical and Consulting (42 samples) and 10 samples for XRF by UIS Analytical Services (accredited laboratory), both in Pretoria. • The CRM, blank and duplicate sample results are within accepted limits. • QEMSCAN test work by SGS was used for determination of the mineral assemblage. The mineral assemblage was determined using a similar method to that developed for the current Tormin beach deposit.
• ***Verification of sampling and assaying***	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All sampling was undertaken by a consultant geologist, overseen by a qualified and experienced mine geologist. • All sample preparation was undertaken by qualified staff, supervised by chemists and the laboratory manager. • The lab results and logging have been reviewed by external consultants to MSR as well as internally by MRC's Exploration Manager. • 11 twinned holes were created for the commencement of the March-April 2020 drill program. • The drillhole logs have been converted to electronically stored formats and stored in a database provided by Maxwell Geoservices (Webshed). This database is hosted on an offsite server supplied by Maxwell Geoservices and managed by their trained database staff. • No adjustment to assay data results were made outside the standard XRD and XRF calibration software being used.
• ***Location of data points***	• *Accuracy and quality of surveys used to locate drillholes (collar and down hole surveys), trenches, mine workings and*	• Hole collar locations were determined with DGPS, accurate to within centimetres.

Criteria	JORC Code Explanation	Commentary
	other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Down hole surveys for shallow vertical holes are not required. • WGS 84 datum and UTM/zone 34S coordinate system is used. • Topographical control is highly problematic due to constant changes in surface levels after daily high tides and monthly storm events, which average 10 events per month.
• ***Data spacing and distribution***	• *Data spacing for reporting of exploration results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Target sampling point is on a 50m x 25m average spacing, subject to beach access due to tides. • 50 x 25m drilling is sufficient to classify the beach HMS as Measured Resources due to the nature of mineralisation.
• ***Orientation of data in relation to geological structure***	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Geological structure neither relevant nor applicable to an active placer beach sand deposit. • Vertical drilling to intersect sub-horizontal strata. • Orientation of the drillholes will not result in sampling bias.
• ***Sample security***	• *The measures taken to ensure sample security.*	• All sample bag numbers were logged against the drillhole by the site geologist. • Two samples per metre drilled were produced, one for external QA/QC use or back-up and one sent directly to the mine lab at the end of each day's drilling in a secure area. • The Tormin mine laboratory inspected the submitted samples and did not report any missing, nor error of the samples against the sample lists.
• ***Audits or reviews***	• *The results of any audits or reviews of sampling techniques and data.*	• The lab results and logging have been reviewed by external consultants to MSR and internally as part of normal validation processes by MRC.

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section)

Criteria	Explanation	Commentary
• ***Mineral tenement and land tenure status***	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national parks and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The area has a granted Prospecting Right (WC 30/5/1/1/2/10261PR) owned by Mineral Sands Resources (Pty) Ltd, a subsidiary of ASX listed Mineral Commodities Ltd (ASX: MRC). • This Prospecting Right incorporates a semi-continuous tenement approximately 23km in length, covering an area of 398 hectares of beach sands, between the high water mark and the low water mark of the coastal beaches areas adjacent to neighbouring farms (Graauwduinen 152, remainder of Waterbak and portions of farm Klipvley Karookop 153). • The Prospecting Right was granted, executed, and registered with the South African Department of Mineral Resources and Energy ("DMRE") in January 2020. • Section 102 Mining Right (WC 30/5/1/2/2/10108 MR) application encompassing the Northern Beaches and Inland Strand expansion project was approved by the Department of Mineral Resources - South Africa on 30 June 2020.
• ***Exploration done by other parties***	• *Acknowledgment and appraisal of exploration by other parties.*	• The general area has been investigated and mined for heavy mineral deposits as far back as the 1930s (Haughton, 1931). Subsequent geological surveys and exploration programs investigated the distribution, mineralogy, and economic potential of the heavy mineral sands along the coastline of Geelwal Karoo (Toerien & Groeneveld 1957, Abele 1989, Swart 1990, Barnes 1998) and Trans Hex 1989-1991). • The feasibility study produced by Trans Hex in June 1992 included a defined Inferred mineral resource (non JORC).
• ***Geology***	• *Deposit type, geological setting and style of mineralisation.*	• Deposit is a heavy mineral sand deposit located on an active placer beach strandline undergoing continues erosion, deposition and replenishment from oceanic storm and wave activity. • The heavy mineral sand deposits occur in an active beach environment (eg Tormin mine) as well as in older palaeo-beach raised strandlines found inland. • Apart from the mid-Jurassic, Cretaceous and Tertiary (Paleogene) sediments along the coast, numerous small fossiliferous, marine and

Criteria	Explanation	Commentary
		terrestrial deposits of Neogene age outcrop along the coastal zone. • The Neogene deposits are host to the commercially important diamondiferous and heavy mineral sands.
• ***Drillhole information***	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *Easting and northing of the drillhole collar;* • *Elevation or "RL" (Reduced Level – elevation above sea level in metres) of the drillhole collar;* • *Dip and azimuth of the hole;* • *Down hole length and interception depth; and* • *Hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• The minimum hole length is 1m, maximum 6m and average depth of drilling is 2.5 metres. • East collar ranges – 218,213mE to 218,232mE. • North collar ranges – 6,511,483mN to 6,511,956mN. • Azimuth ranges/dip ranges – vertical drilling.
• ***Data aggregation methods***	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not relevant. • No grade cutting of HM values was undertaken. • No metal equivalents were used for reporting of Mineral Resources.
• ***Relationship between mineralisation***	• *These relationships are particularly important in the reporting of Exploration Results.*	• Grade over total depth sample was determined as the resource is mined and processed from surface

Criteria	Explanation	Commentary
widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	to bedrock contact, where all grades were above the 2% aggregation cut-off. • Mineralisation is enriched sedimentary layers semi-parallel to the bedrock contact and beach slope angle. • Mineralisation is essentially flat laying, and as such, vertical drillholes represent true width.
• ***Diagrams***	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to, a plan view of drillhole collar locations and appropriate sectional views.*	• Maps, sections and plan view are provided in this report.
• ***Balanced reporting***	• *Where comprehensive reporting of all exploration results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of exploration results.*	• Statistics of drillhole grades used during the Mineral Resource estimate are contained in the main body of this report. • This report provides the total information available to date and is considered to represent a balanced report.
• ***Other substantive exploration data***	• *Other exploration data, if meaningful and material, should be reported, including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Historical drill data is not reported as it is classified as historical foreign estimates that are non-JORC compliant. • The reason for this Mineral Resource update is drilling in the 7 beaches from the 10 beaches that were outside of the March-April 2020 drilling campaign.
• ***Further work***	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Offshore sampling to determine the source of grade replenishment is planned. • Planned quarterly drilling for replenishment study.

3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The data was plotted and plots were expected with no misplots or extraneous data found. Maximum and minimum values and average values were all within the norm. Duplicate values were confirmed as such. The coordinates were confirmed as being WGS84 UTM zone 34S. • Data is stored in an offsite database hosted by Maxwell Geoservices.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken, indicate why this is the case.*	• The Competent Person is currently a full-time employee of Mineral Commodities Ltd. • No site visits were undertaken for this resource estimate due to COVID-19 travel bans, although the Competent Person did visit the project previously and is familiar with the site and resource conditions.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The deposit is a classic active mineral sands deposit with no doubt as to its genesis. • Samples were collected for resource calculation purposes. • The geology/topography of the deposit has been used to constrain the resource envelope. The data was partitioned into areas (subsets) based on geology/topography. The base of the deposit is defined by the underlying bedrock, the landward side by barren land and sand dunes. Seaward, the deposit is open. • Grade continuity is influenced by wave action and hence is best parallel to the beachfront. Replenishment and reworking of resource limits continuity and reliability of localised mining blocks.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The deposit has a strike length along the coastline of approximately 10,850m and an average width from the dunes to within the surf zone of 150m. It is developed from surface to a maximum depth of 6.3m and the average resource thickness is approximately 3m. The deposit occurs from the surface down.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method*	• Micromine software was used to domain and estimate each of the valuable heavy minerals. Domains were snapped to the nearest true intersection from sampling. • Assays were composited to 1m, within domains, with composite lengths

Criteria	JORC Code explanation	Commentary
	was chosen, include a description of computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	redistributed to avoid residuals. No composite was less than 0.6m or greater than 1.5m. • No outlier restriction has been applied. • Data is extrapolated between data points and approximately half of the drill spacing beyond. Data points are nominally 50m x 25m. There are between 2-6 drillholes per line. • Ordinary kriging was used as the primary estimator. Each variable was estimated separately, using variograms created for Beach 10 from the previous Northern Beaches Resource. No beaches in this update have enough data to make usable variography. • An anisotropic search was used, with the ratios of direction of greatest continuity (along the beach). Across the continuity: depth of 3: 0.4: 0.03. A maximum search distance of 200m was used, based on the ranges of the variograms, and halved to account for potential local variation due to the low number of samples on each beach. Quadrant searching was used, with a maximum points per sector of 15. Minimum points to estimate a block were 3. • All products mentioned in the text are being actively mined and separated in the plant. No deleterious minerals are known. • This is a resource estimate and mining parameters are not used beyond normal global parameters of grades, dimensions, and accessibility. • Geology/topography was used to constrain the model. On the landward side, the sand dunes, where present, were used to limit the model to the beach area. Otherwise, the limit was placed at approximately half of the drillhole spacing. The model was truncated by the seaward edge of dry beach between low and high tides. • The THM standard deviation of % THM in the block model is 12.58. • These values are acceptable as they indicate the modelling algorithm produces realistic values within the range of the dataset. In addition, an in-depth validation process was used to test robustness of the modelled data, including visual checks, check estimates (IDW

Criteria	JORC Code explanation	Commentary
		and NN), swath plots and detailed statistical comparisons.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The resource tonnages are estimated on a dry basis. Mined material is wet and fully saturated when mined out, but it is free draining when stockpiled.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Final report was based on a 2% THM cut-off grade for blocks as this is the current minimum grade where there is a reasonable expectation for eventual extraction. • 2% cut-off grade was based on grade-tonnage curves with respect to THM and VHM assemblage. Also taken into account was current and anticipated plant performance, and other similarly sized deposits in the region.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The dynamic beach environment results in a cyclic process of deposition on and erosion of the beach surface. Historical studies by Trans Hex have found a weighted average change over 9 months of up to ~9% loss or up to ~7% increase. This variability is also evident in the replenishment rate and grade of material observed. • Opencast mining uses coffer type dams constructed with excavators. The pits generally only remain open during low tide, except where beach conditions allow larger more stable protection bunding to be constructed. Construction and mining methods are similar to those being used for beach diamond mining along the west coast of South Africa. • There is no stripping as mining starts at the surface. • Natural replenishment of the resource is taking place as the open pits are filled with HMS material from the surf zone during the next high tide.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made*	• Metallurgical factors have been taken from the current processing plant. • After seven years of mining in the Tormin Beaches, the mine is an ongoing profitable concern. There are no doubts about the metallurgical suitability of the Northern Beaches material.

Criteria	JORC Code explanation	Commentary
	when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Any changes that MRC undertake have not been quantified or assumed to change the product specifications.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered, this should be reported with an explanation of the environmental assumptions made.*	• The environmental factors for the Tormin beaches is used for mining the Northern Beaches. • There are no environmental factors likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction. • All mining voids get naturally filled with beach sand material during high tide and therefore there is no rehabilitation liability in this regard. • Tailings get dumped onto the beach where they are distributed and settled along the coastline under natural wave and sea current action. There are no pollutants introduced with the tailings and the material is inert.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The bulk density is based on a calculation of the specific gravity of the silica and heavy mineral content fractions of each sample. It is therefore not fixed and fluctuates between 1.6 and 2.1 as per the formula: SG=1.544+(0.009 x THM). • In the March-April 2020 drilling program in the Northern Beaches, bulk density measurements (compacted and uncompacted) were conducted for 118 sample and moisture content analysed for all samples. Density measurements were taken on 118 samples and gave an overall measured bulk density of 1.752t/m^3.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resources have been classified as the Measured, Indicated, and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). • A range of criteria has been considered in determining this classification including: - Geological continuity: o Areas where bedrock outcrops locally and breaks up the beach sands have been downgraded in classification. - Drillhole spacing: o Areas with drillhole spacing at the target

Criteria	JORC Code explanation	Commentary
		spacing of 50m x 25m have been classified as Indicated. ○ All other areas classified as Inferred. - Slope of regression of the kriging estimate – this is a measure of the robustness of the estimate: ○ Where there is a cluster of blocks with slope higher than 0.75, and drillhole spacing is appropriate, the resource has been classified as Indicated. ○ Where there is a cluster of blocks where slope is less than 0.7, even if other criteria have been met for higher classification, the resource has been classified as Inferred. • The results of the validation of the block model shows acceptable correlation of the input data to the estimated grades. • The author is confident that all relevant factors have been considered and the results reflect his views.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource has been reviewed internally as part of normal validation processes by MRC.
Discussion of relative accuracy / confidence	• *Where appropriate, a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The global resource is made of 10 local resources distributed along the beach front (Beaches 1-10). Each of the 10 local resources can be mined separately. • The maiden mineral resource estimate of the Northern Beaches (Beaches 5, 7 and 10) was released on May 2020. • An in-depth geostatistical study has been completed on this resource, which has allowed for robust estimation and high levels of confidence in the resource.