

Mt Mansbridge Project - Heavy Rare Earth Market Update

- **Diversification of global critical mineral supply chain has become a priority for governments as Prime Minister, Scott Morrison unveils \$243.6M in support for critical minerals projects**
- **Heavy REE critical for permanent magnets and the new energy transition**
- **Remaining assay results received from Mt Mansbridge October 2021 drilling program, where 2 out of the 3 Solo Prospect drill holes intersected HREE**

Red Mountain Mining Limited (**RMX, the Company**) (ASX: **RMX**) is pleased to provide an update for its Mt Mansbridge Project located in the Eastern Kimberley region of Western Australia.

On Wednesday 16th March 2022, the Prime Minister announced a package of measures including an investment of \$243.6M under the Modern Manufacturing Initiative, which recognises the importance of developing Australia's abundant critical minerals projects. The measures, which are part of the 2022-23 Budget, also include a \$200 million Accelerator grants program, \$50 million to support research and development and an updated industry strategy.

Prime Minister Scott Morrison said "Australia's resources companies were leading the world in developing new critical minerals markets. The world is becoming a more uncertain place and we want to secure Australia as a reliable partner for local and global businesses that need the critical minerals we have right here. We'll dig them up right here. We'll refine them right here. We'll look to make the products that use them right here. As the global economy changes, there are exciting new growth opportunities emerging in areas such as rare earths and critical minerals that ultimately mean we can deliver a stronger economy for Australia and secure a stronger future."

Permanent Magnets Critical for Energy Transition

Increasing global efforts to decarbonise and with governments committing to net zero by 2050, rare earths are critical for green energy transition. Adamas Intelligence, Rare Earth Magnet Outlook to 2030, forecasts REE oxides for permanent magnet market to increase by five-fold from US \$2.98 billion in 2020 to US \$15.65 billion by 2030.

Permanent magnets are vital to the energy revolution, in particular Neodymium (NdFeB) magnets are the strongest type of magnets commercially available which have the maximum energy output per volume. These magnets have revolutionised many size and weight sensitive applications that have changed the world we live in.

Permanent magnets are critical for the new world and clean energy transition. They are essential for electric vehicle traction motors, providing greater efficiency and range by reducing energy consumption as electric motors with permanent magnets require less energy to create same magnetic field. Permanent magnets used in wind turbine generators to reduce weight, cost of components, maintenance costs and improves reliability and efficiency. Permanent magnets are used in fin actuators in missile guidance and control systems, satellite communications, radar and sonar technology (Figure 1).



Figure 1 – Permanent magnets required for clean energy and military applications

Heavy Rare Earths Critical for Permanent Magnets

Heavy Rare Earths Elements are required to complement Light Rare Earth Elements neodymium (Nd) and praseodymium (Pr) in NdFeB permanent magnets. The addition of dysprosium (Dy) and terbium (Tb) to NdFeB magnets allows the magnet's (coercive) strength to remain and improves the magnet's resistance to demagnetisation at higher temperatures. This allows for higher working temperatures for electric vehicle motors which vary from 180°C to 240°C, compared to 60°C for those magnets without the addition of Dy and Tb as illustrated in figure 2.

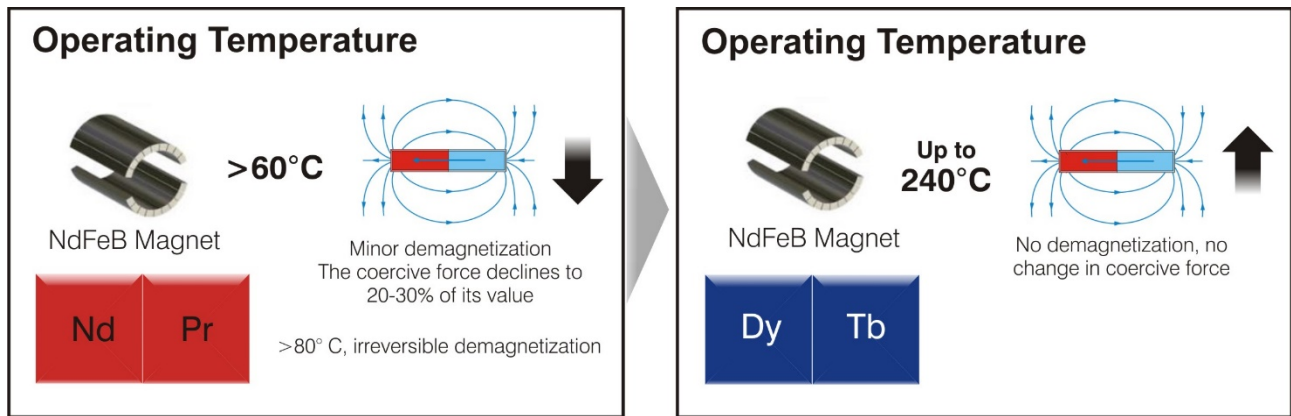


Figure 2 – Addition of HREEs improving the magnets resistance to demagnetisation

Dysprosium Production and Demand Scenario

Constrained by a lack of primary and secondary supply of Dysprosium oxide from 2022 onwards, Adamas Intelligence forecast a global shortages of Dysprosium oxide will rise to 1,850 tonnes by 2030, which is roughly equal to the current global annual mine production.

With Dysprosium making up 3%-5% of the rare earth mix in a typical heavy rare earth deposit, Adamas Intelligence estimates that industry will need to produce an additional 35,000 to 60,000 tons of annual total heavy rare earth oxides by 2030 to avoid shortages.

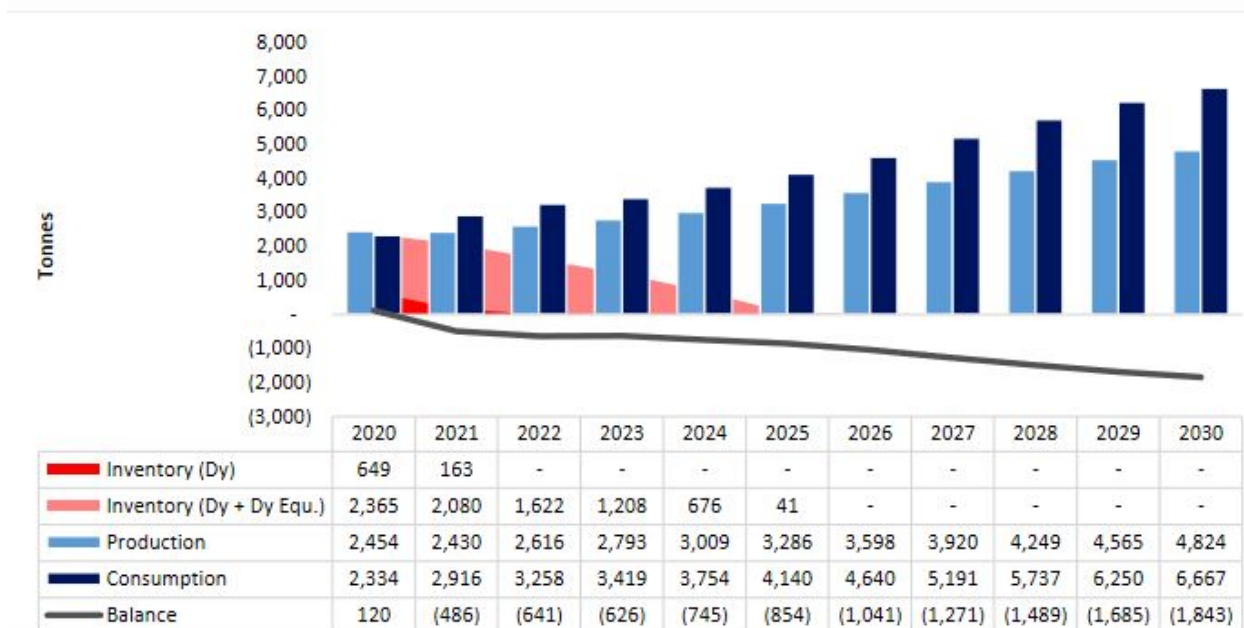


Figure 3 – Forecast global production and demand for dysprosium oxide (Adamas Intelligence Market Outlook 2030)

Global HREE Supply and Refining Capacity Dominated by China

From 2022 to 2023, China (which includes HREE from Myanmar) will continue to be the main producer of Dysprosium Oxide by a large margin. China's dominance is even more pronounced when it comes to refining capacity and with exception to small capacity in Vietnam, China is the only existing heavy rare earth separator in the World. There are other separation and refining plants under consideration, but with no commitment to construction timelines.

It is expected that China will continue to dominate every aspect of the HREE supply chain from 2022 to 2030 with exception to minor global diversification. China's outsized role in these critical raw materials and with very few alternative sources of heavy rare earth production, have forced OECD countries to seek alternative sources of supply.

With very few significant heavy rare earth resources outside China along with the global diversification away from Chinese has resulted in a favorable outlook for heavy rare earths and an excellent opportunity for Red Mountain to explore and develop new sources of heavy rare earths at its Mt Mansbridge Project.

Mt Mansbridge - High Value Strategic REE Basket

With about two-thirds yttrium and largely a source of heavy lanthanide metals, the Mt Mansbridge Project has high concentration of dysprosium and terbium, giving it a higher basket content of high value heavy rare earths (Table 1).

REE Oxide Prices	REE	Mt Mansbridge REO Basket %	US\$/kg	Application and Use
Terbium	HREE	0.97%	\$2,230	Permanent magnets for high temperature applications
Lutetium	HREE	0.39%	\$804	Medical and petroleum refining
Dysprosium	HREE	5.65%	\$463	Permanent magnets for high temperature applications
Thulium	HREE	0.45%	\$850	Medical and laser
Holmium	HREE	1.04%	\$298	Permanent magnets, nuclear energy, microwave applications
Gadolinium	HREE	5.25%	\$98.0	Nuclear energy, fiber optics, glass
Erbium	HREE	3.04%	\$60	Nuclear energy, medical, ceramics
Europium	HREE	0.80%	\$30	Optical fiber, display panels, phosphors
Ytterbium	HREE	2.92%	\$21	Medical, stainless steel
Yttrium	HREE	43.15%	\$21	Phosphors, metal alloys, polishing powders, catalytic converters, ceramics
Neodymium	LREE	10.46%	\$178	NdFeB magnets, metal alloys, polishing powders, auto catalysts, glass additives, ceramics
Praseodymium	LREE	2.43%	\$164	NdFeB magnets, metal alloys, polishing powders, auto catalysts, glass additives, ceramics
Samarium	LREE	2.95%	\$4.8	Magnets, medical, ceramics
Lanthanum	LREE	5.45%	\$1.3	Metal alloys, polishing powders, auto catalysts, glass additives, ceramics
Cerium	LREE	15.03%	\$1.3	Metal alloys, polishing powders, auto catalysts, glass additives, ceramics

Table 1 – March REO prices and REE uses (Shanghai Metals Market, Adamas Intelligence Market Outlook 2030)

Non-Executive Chairman Mr. Flannery commented "The March 16th 2022 announcement by Prime Minister, Scott Morrison for the Commonwealth funding of \$243M under the Modern Manufacturing Initiative is significant for the Australian rare earth sector and recognises the importance of developing Australia's critical minerals industry. With very few significant heavy rare earth resources outside China and the global diversification away from Chinese supply chain represent an excellent opportunity for RMX to explore and develop new sources of heavy rare earths outside of China."

Remining Mt Mansbridge RC Drilling Results

The final assay results from the October 2021 RC drilling program have recently been received from the laboratory. Significant results include hole MMRC003 from the Solo Prospect returning a zone of 2m (72-74m) @ 0.102% TREO.

The Solo Prospect consist of a structurally controlled 200m long zone of outcropping REE mineralisation within the Proterozoic aged prospective Killi-Killi Formation. Three holes were drilled by RMX into mineralized zone with hole MMRC002 returning the previously announced assay results (refer RMX ASX Announcement 6 January 2022).

Further RC drilling is planned for the upcoming field season to test the heavy rare earth mineralized zone at depth.

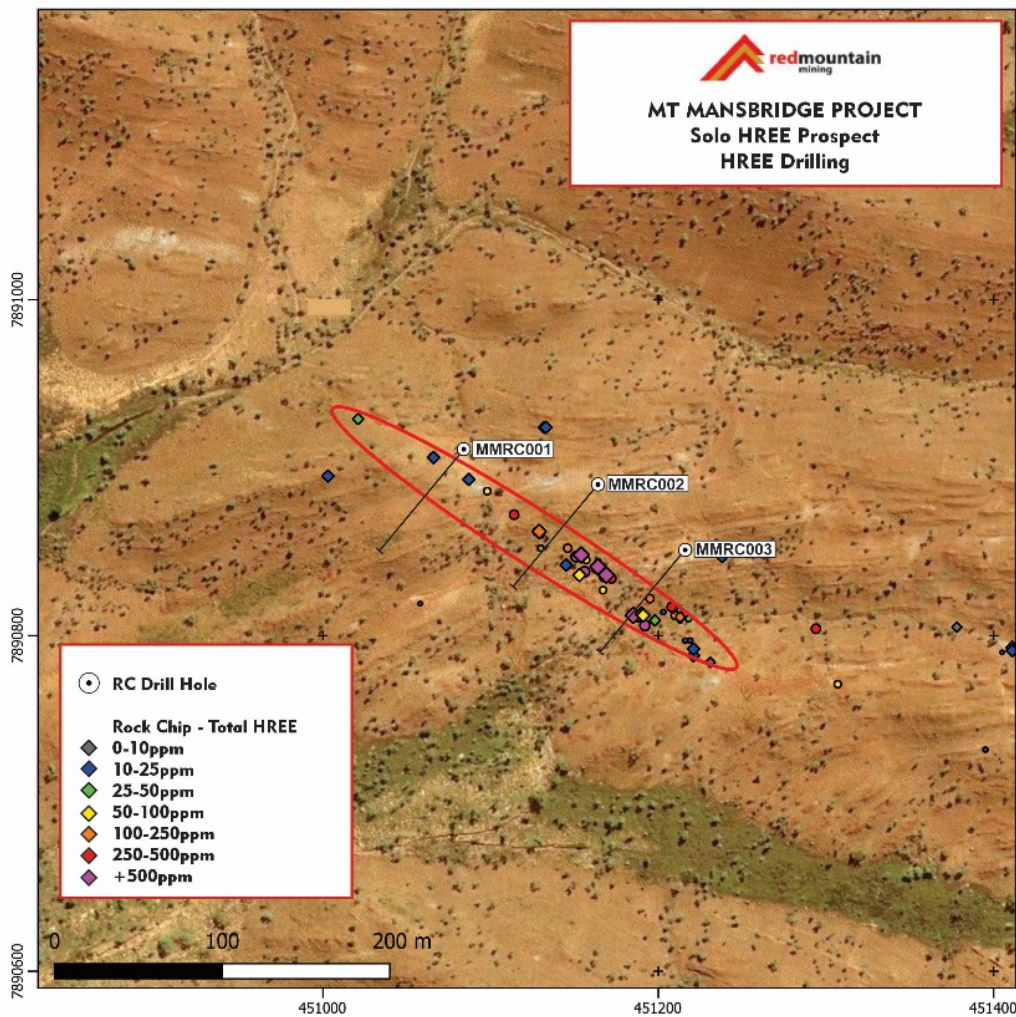


Figure 4 - Solo Prospect – October 2021 RC Drilling

Rare Earth Oxide	%
CeO ₂	0.034
La ₂ O ₃	0.011
Nd ₂ O ₃	0.022
Pr ₆ O ₁₁	0.005
LREO Total %	0.071

Dy₂O₃	0.003
Er ₂ O ₃	0.002
Eu ₂ O ₃	0.001
Gd ₂ O ₃	0.003
Ho ₂ O ₃	0.001
Lu ₂ O ₃	0.000
Sm ₂ O ₃	0.005
Tb ₄ O ₇	0.000
Tm ₂ O ₃	0.000
Y₂O₃	0.015
Yb ₂ O ₃	0.002
HREO Total %	0.031

TREO %	0.102
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Table 2 - MMRC003 – 72-74m – Rare Earth Oxide Summary

- LREO – Light Rare Earth Oxides = CeO₂, La₂O₃, Nd₂O₃, Pr₆O₁₁
- HREO – Heavy Rare Earth Oxides = Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Sm₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, Yb₂O₃
- TREO – Total Rare Earth Oxides = HREO + LREO

Hole_ID	Grid	MGA_E	MGA_N	RL	EoH	Azi	Dip
MMRC01	MGA94_Z52	451079	7890904	425	151	225	-60
MMRC02	MGA94_Z52	451148	7890891	425	150	225	-60
MMRC03	MGA94_Z52	451206	7890846	425	150	225	-60
MMRC04	MGA94_Z52	453980	7892700	404	75	0	-60

Table 3 – Drill collar table

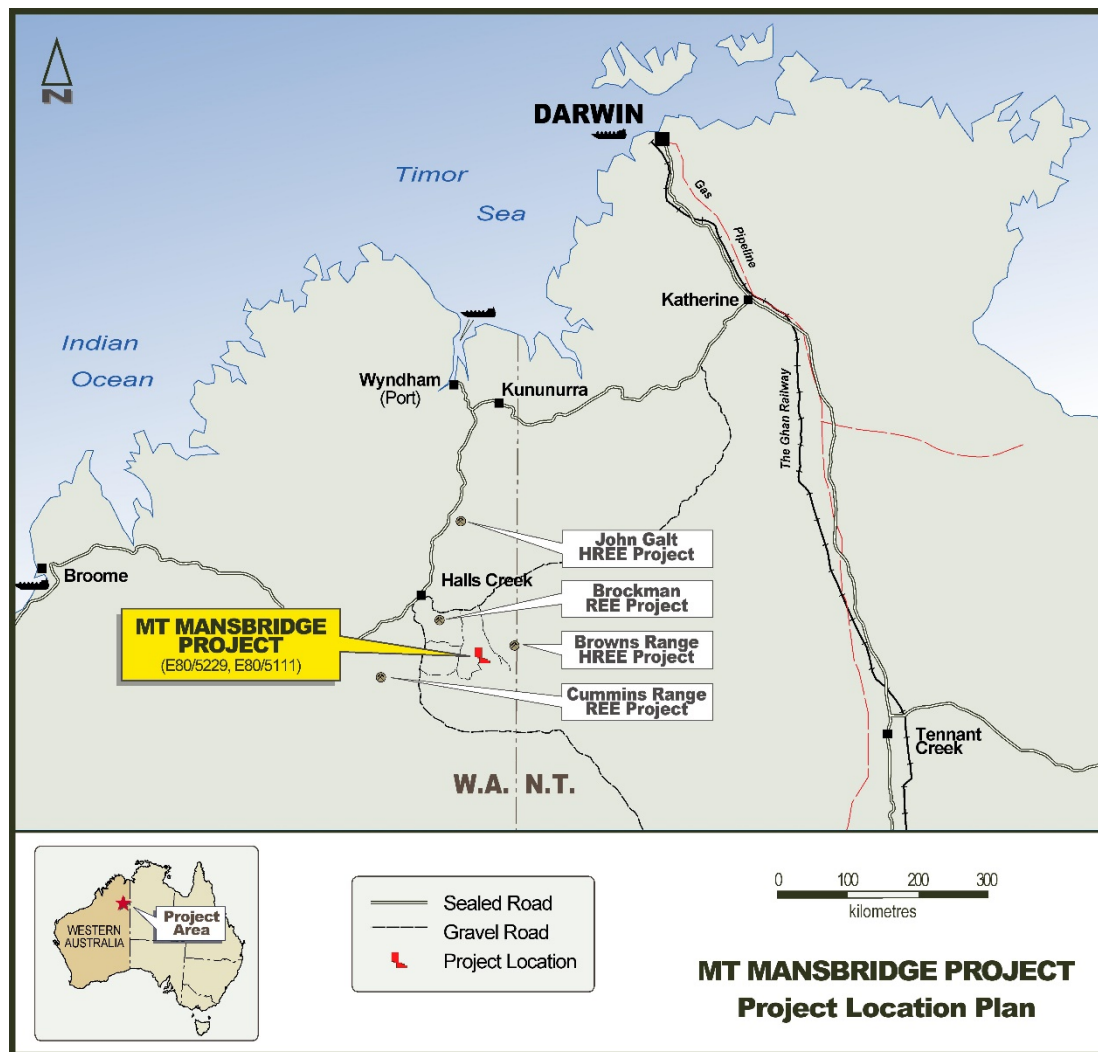


Figure 5 - Mt Mansbridge Project Location within the East Kimberly region

Authorized for and on behalf of the Board,



Mauro Piccini,
Company Secretary

Competent Persons Statement

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Mr Oliver Judd. Mr Judd is a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Judd consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Disclaimer

In relying on the above mentioned ASX announcement and pursuant to ASX Listing Rule 5.32.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above-mentioned announcement

Mt Mansbridge JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i>	RC drilling was used to create a ~3kg representative sample each metre for laboratory analysis. Samples were then submitted to ALS laboratories (Perth) where they were pulverised to 85% passing -75um to produce a 0.25g sample. REE's - 4 acid digestion and analysis via ICP MS and AES-MS (Lab code: ME-MS61r). 60 elements reported including REE's. Cobalt – 4 acid digestion and analysis via ICP MS (Lab Code: ME-MS61). PGE's by 30g charge for fire assay with ICP-MS finish (Lab code: PGM MS23)
Drilling techniques	<i>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).</i>	Reverse Circulation (RC) drilling was the method using a 5.5-inch standard RC bit. WDA drilling undertook the program using a Schramm T450.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i>	Sample recovery, representivity and suitability was observed visually during drilling and sampling. Standard RC procedures were followed to maintain sample quality and recovery such as the use of dust suppression, sample system cleaning at regular intervals, sample collections boxes with trap doors feeding a Metzke cone splitter. It is not known if a relationship between recovery and grade exists at this point.

Criteria	JORC Code explanation	Commentary
Logging	<i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i>	RC chips were logged by a qualified geologist with sufficient experience in this geological terrain and relevant styles of mineralisation using an industry standard logging system. It is not anticipated that the information and results gathered during the drill program would be used for a mineral resource estimation. Lithology, mineralisation, alteration, veining, weathering and structure were all recorded digitally. Logging is qualitative, quantitative or semi-quantitative in nature.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	A ~3Kg 1m samples was taken from a rig mounted cyclone splitter for each metre of drilling. The sample was collected in a calico bag and sent to the laboratory for testing. The sample size is industry standard and is considered suitable for this stage of exploration for the commodity in question. No duplicate samples were collected during the program.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i>	REE's - 4 acid digestion and analysis via ICP MS and AES-MS (Lab code: ME-MS61r) is considered a near total technique for the analysis of REE's. This technique is considered appropriate for this stage of exploration. Yttrium over-reporting values were re-assayed via lithium borate fusion with ICP-MS finish (lab code Y-MS85) Cobalt – 4 acid digestion and analysis via ICP MS (Lab Code: ME-MS61). PGE's by 30g charge for fire assay with

Criteria	JORC Code explanation	Commentary
		ICP-MS finish (Lab code: PGM MS23). Both considered total/near total and are considered appropriate for this stage of exploration. Laboratory QAQC was utilized in the form of blanks, standards and duplicates. This was deemed to have passed laboratory and internal standards for this phase of exploration.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	Logging and sampling was recorded directly into a digital logging system, verified, and will eventually be stored in an offsite database. No twinning has been undertaken. The assay data were converted from reported elemental assays to the equivalent oxide compound as applicable to rare earth oxides. The oxides were calculated from the element according to the following factors: <i>CeO₂, - 1.1526</i> <i>La₂O₃, - 1.1728</i> <i>Nd₂O₃, - 1.1664</i> <i>Pr₆O₁₁ - 1.2082</i> <i>Dy₂O₃, - 1.1477</i> <i>Er₂O₃, - 1.1435</i> <i>Eu₂O₃, - 1.1579</i> <i>Gd₂O₃, - 1.1526</i> <i>Ho₂O₃, - 1.1455</i> <i>Lu₂O₃, - 1.1371</i> <i>Sm₂O₃, - 1.1596</i> <i>Tb₄O₇, - 1.1421</i> <i>Tm₂O₃, - 1.1421</i> <i>Y₂O₃, - 1.2699</i> <i>Yb₂O₃ - 1.1387</i>

Criteria	JORC Code explanation	Commentary
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	Collar locations are recorded using a Garmin handheld GPS (+/- 3m accuracy). The drill rig was sighted using a handheld Suunto sighting compass. No DH data was collected.
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.	Data spacing and distribution would not be suitable for a MRE at this point in the exploration process.
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.	Drill hole orientation is approximately perpendicular to the strike of the mineralised REE bearing structure. The exact dip of the structure is interpreted at this point however the true width of the mineralised structure will likely be smaller than the reported width. Drilling has not been undertaken down the dip of the mineralised structure introducing a sample bias.
Sample security	• The measures taken to ensure sample security.	Samples were placed in poly weave bags on site before being placed in bulka bags by company personnel for transport to Perth by Toll Ipec where samples were delivered to ALS.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	Results have been reviewed by other personnel associated with the company.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- 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 Mt Mansbridge Project consists of 3 granted tenements: E80/5111, E80/5229 and E80/5413 and a further single tenement application E80/5669. The tenure is within land where native title has been determined. The traditional owners of the land are the Tjurabalan People. Necessary heritage surveys have been completed prior to commencing exploration activities. The Project does not intersect any underlying pastoral lease. The Project does not intersect an area identified as wilderness, national park or an area of environmental interest.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Relevant exploration for HREE's at Mt Mansbridge was undertaken by Sigma Resources Group in 1982 and later by BHP, Quantum Resources and Northern Minerals Ltd.
Geology	Deposit type, geological setting and style of mineralisation.	The deposit type and main target mineralisation model is of a basement and unconformity related HREE type. Secondly, Ultramafic intrusive related Ni-Cu-Co-PGE's.
Drill hole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. - If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from	Drill hole details are provided within the body of text.

Criteria	JORC Code explanation	Commentary
	<i>the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	<i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Standard weighted averaging techniques have been used to report drill results. No cut-off grades have been used during reporting. No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i>	Drill hole orientation is approximately perpendicular to the strike of the mineralised REE bearing structure. The exact dip of the structure is extrapolated at this point and therefore the true width of the mineralised structure will be smaller than the reported width. Drilling has not been undertaken down the dip of the mineralised structure introducing a sample bias.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Included within body of text.
Balanced reporting	<i>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.</i>	The results and text provided within this report are considered comprehensive and representative. All assay results have been disclosed within the text (Table B) with the significant intercept summarised (Tables C & D).
Other substantive exploration data	<i>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.</i>	All relevant exploration results and observations have been reported that are pertinent to this stage of exploration.

Criteria	JORC Code explanation	Commentary
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Phase 2 RC drilling of Solo, Déjà vu and Cow Creek Prospects planned for May 2022