ASX ANNOUNCEMENT

RED MOUNTAIN MINING LTD **17th January 2022**

Xenotime and Florencite confirmed at Mt Mansbridge

- **Diamantina Laboratories petrology study confirms Heavy Rare Earth mineral xenotime**
- **Xenotime and HREE critical for green energy transition**
- **Completion of RC drilling scheduled for Q2 2022**

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.

Recently received petrological descriptions have confirmed the presence of key rare earth element minerals Xenotime and Florencite. The minerals are found within quartz veining and the associated wall rock alteration. Three samples were sent for description by Roger Townend at Diamantina Laboratories (Perth) and reviewed using optical and Scanning Electron Microscope (SEM) techniques. The samples were taken from the recently announced mineralized zone from drill hole MMRC002 at the Solo Prospect (ASX: 6/1/22 – HREE intercept at Mt Mansbridge - Solo Prospect).

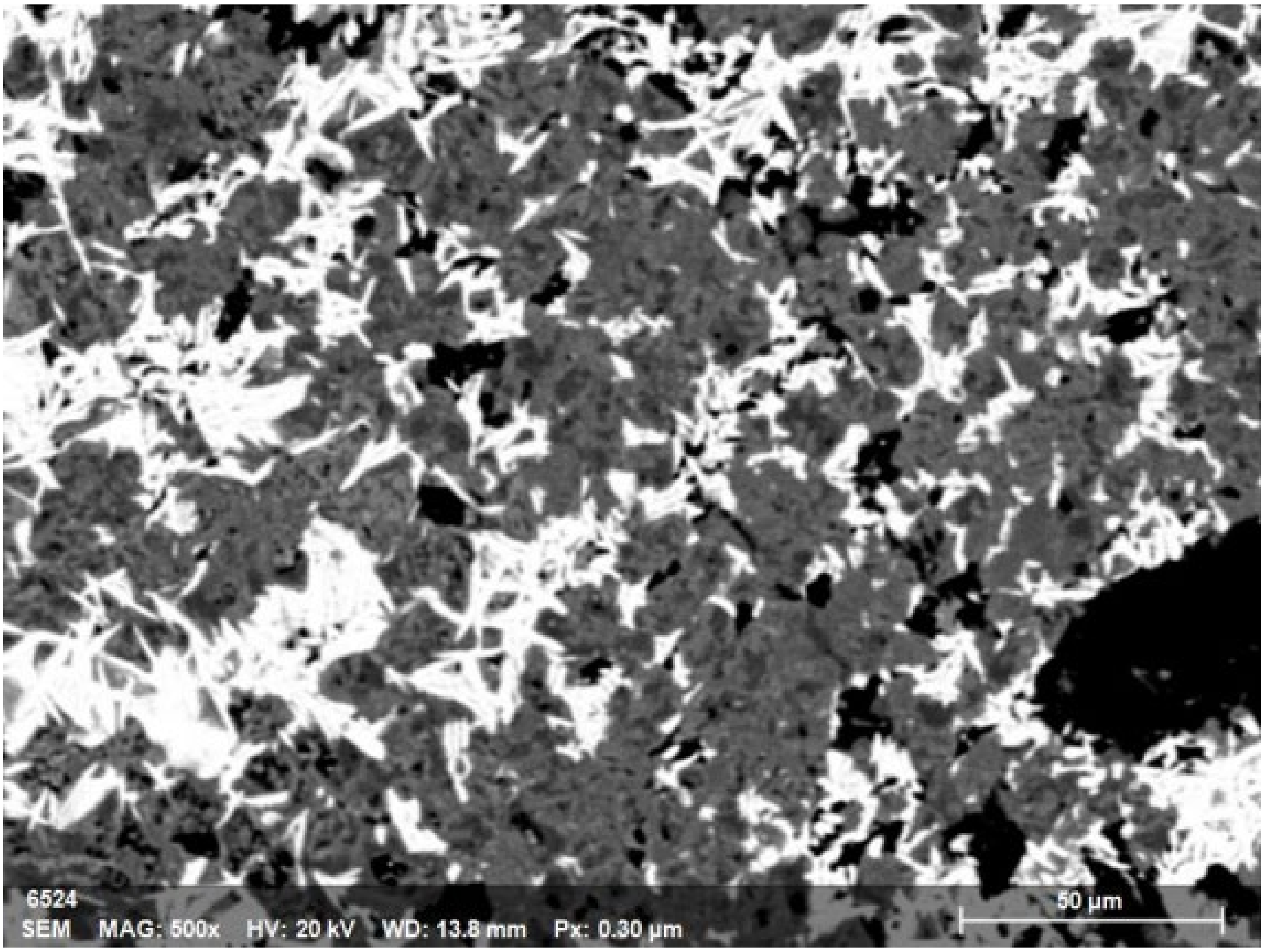

Figure 1 - Polished Thin Section (SEM) - Xenotime (white) and Florencite (grey) Minerals (sample MMRC02)

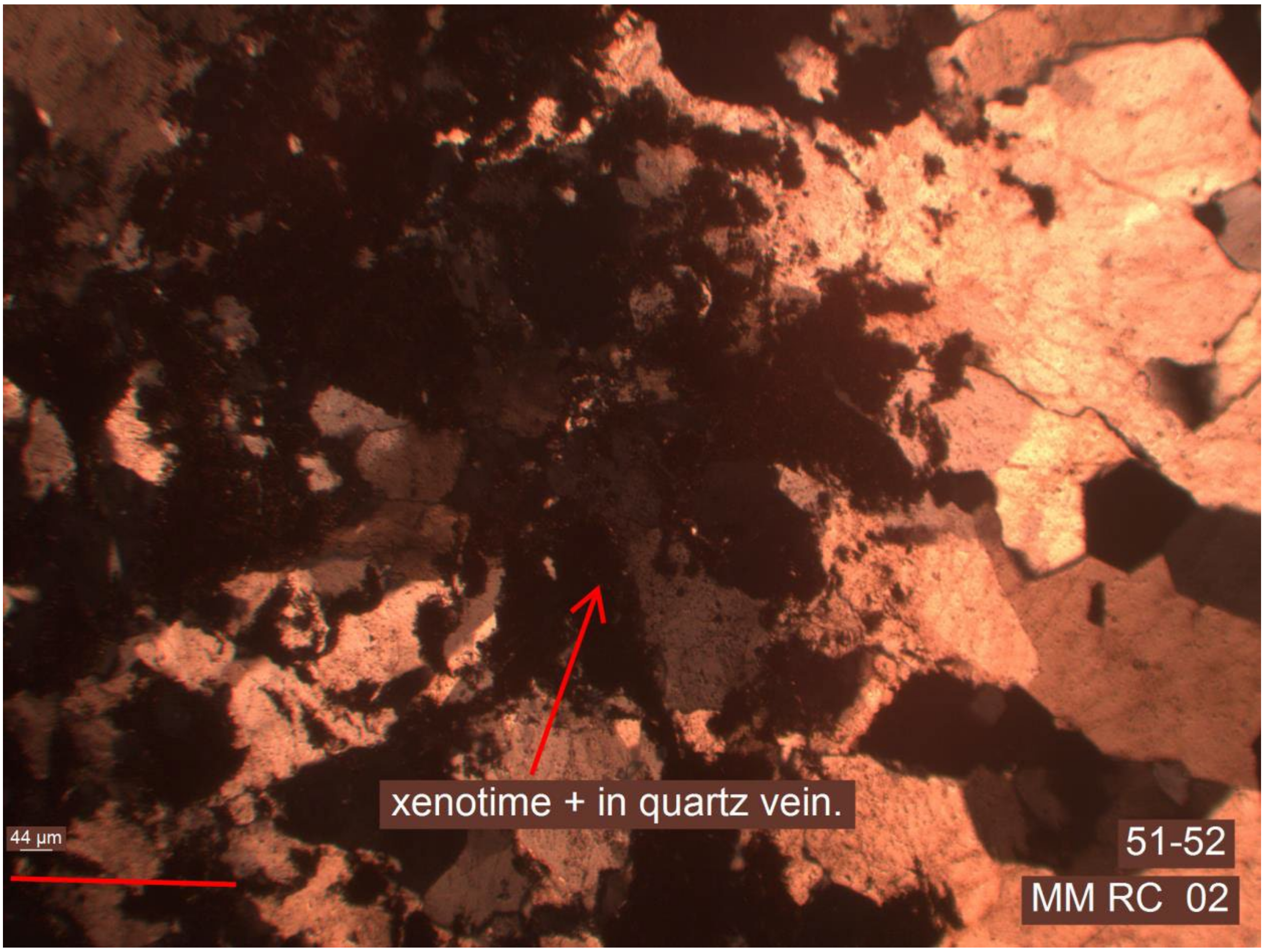

Figure 2 – Polished thin section showing xenotime in quartz vein (sample MMRC02)

Significance of Xenotime Mineralisation

Xenotime is a REE phosphate mineral, whose major component is yttrium orthophosphate (YPO_4). The rare earths dysprosium, erbium, terbium and ytterbium (all replacing yttrium) are the expressive secondary components of xenotime. The significance of xenotime is the mix of REE in the mineral. The lanthanide content runs about two-thirds yttrium and largely a source of heavy lanthanide metals (dysprosium, ytterbium, erbium and gadolinium).

Secondly, the processing of rare earths involves the separation of each REE in sequence and can be a costly process. As xenotime is relatively low in light REEs (Lanthanum and Cerium) whilst having high concentrations of valuable Dysprosium and Terbium thus making it likely to be higher in basket price value and anticipated to be lower in processing cost per tonne of rock.

HREE Critical for Green Energy Transition

Heavy rare earths are considered rarer than light rare earths and subsequently attract higher prices and are critical for energy transformation. Permanent magnets are critical components for electric motors and power generators (Figure 3). They are widely used in traction motors in electric vehicles and for the power generator in wind turbines that contain heavy rare earth elements to provide greater efficiency and range.

HREE are required to complement LREE in a high-performance magnet. Dysprosium is used to improve a magnet's resistance to demagnetisation and allows for magnets to retain their magnetic properties, even at high temperatures. This property is extremely desirable for use in Electric Vehicles which can have operating temperatures between 180 degrees Celsius to 240 degrees Celsius. Other high value heavy rare earths include Terbium, which is often used as a substitute for Dysprosium, and Lutetium, which is the rarest and most valuable rare earth. All these valuable rare earths contribute economically to typical xenotime deposits.

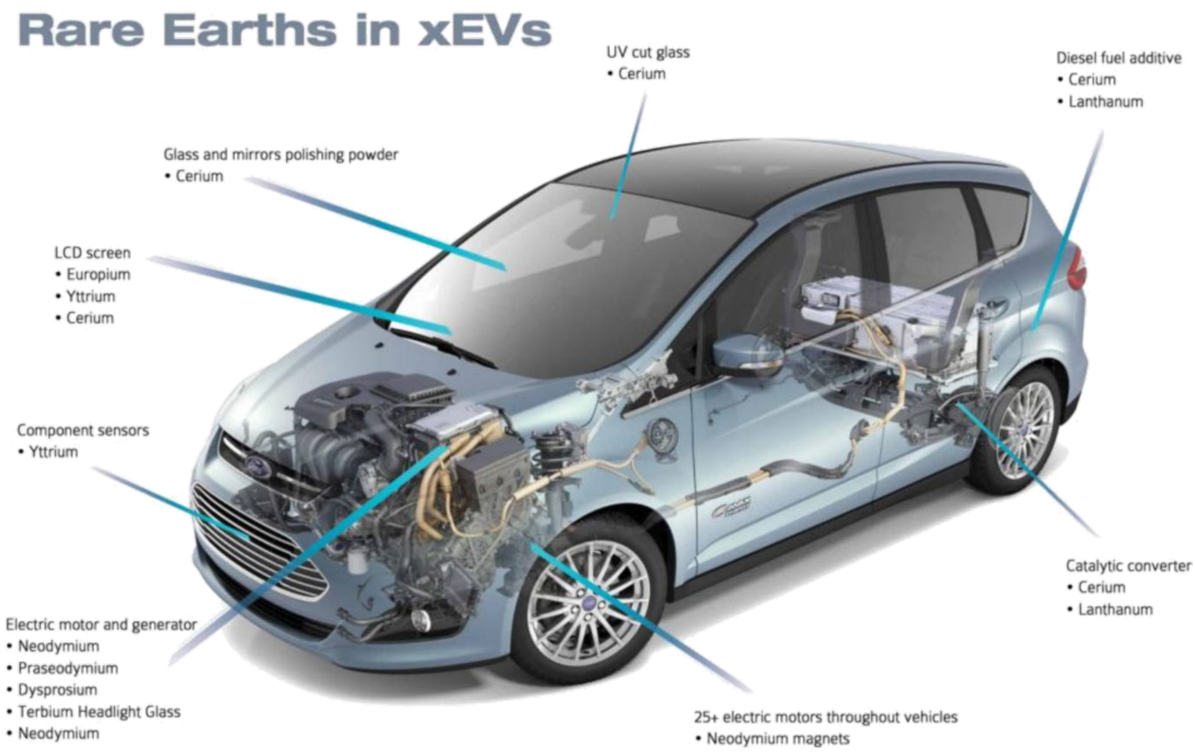

Figure 3 – Rare Earth Elements in electric vehicles

The importance of Dysprosium in Electric Vehicle manufacturing as well as its use in wind turbines, nuclear reactors and other military applications makes dysprosium a highly strategic mineral. Due to the high supply risk of rare earth elements (REE) such as Dy and Nd, these elements are listed as critical materials by the U.S. Department of Energy and other international institutes.

The average ratio of HREO to TREO for the drilling at the Solo Prospect is 66.62% (Figure 4). Petrological studies have confirmed the presence of heavy rare earth mineralisation xenotime, which is dominated by a large distribution of Yttrium (43.15%) and the dominance of heavy rare earth elements dysprosium (5.65%) and terbium (0.97%).

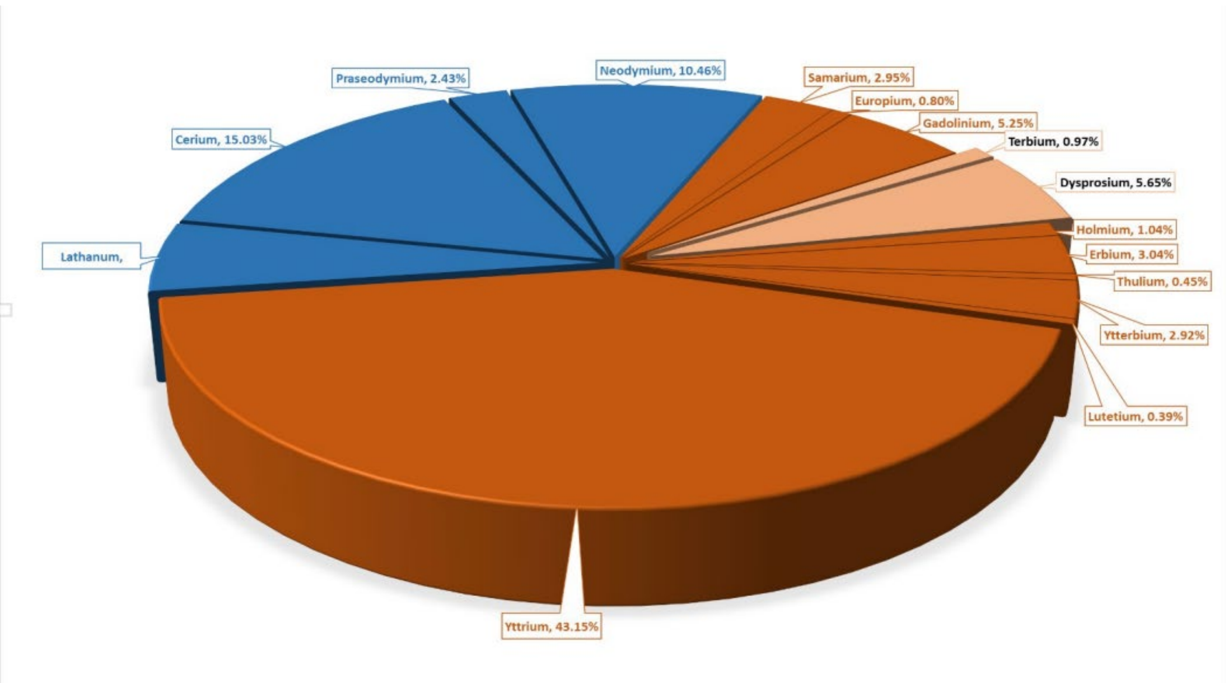

Figure 4 – Pie chart showing average distribution of REO for drill samples from the Solo Prospect

Non-Executive Chairman Mr. Flannery commented "The petrological confirmation of Heavy Rare Earth mineral xenotime is a significant technical step in the exploration for heavy rare earths at Mt Mansbridge. With a similar xenotime mineralisation to the Browns Range Project along with its close proximity to Northern Minerals (ASX:NTU) processing facility makes the Mt Mansbridge project highly prospective."

Until recently, the East Kimberly region of Western Australia has long been overlooked for heavy rare earths. With already a significant number of REE deposits located in the East Kimberly region of Northern Western Australia (including Browns Range, John Galt, Brockman, and Cummins Range), Australia's Northwest is an emerging rare earths province, highly prospective for critical and high value heavy rare earth elements.

The confirmation of xenotime mineralisation at the Mt Mansbridge Project, presents RMX with an opportunity to capitalise on this and determine whether there is an economically viable concentration of REE's. With substantial access tracks now established at the Mt Mansbridge project and heritage clearance achieved, the Company is planning on resuming the drill program at the end of the Kimberly wet season in early 2022.

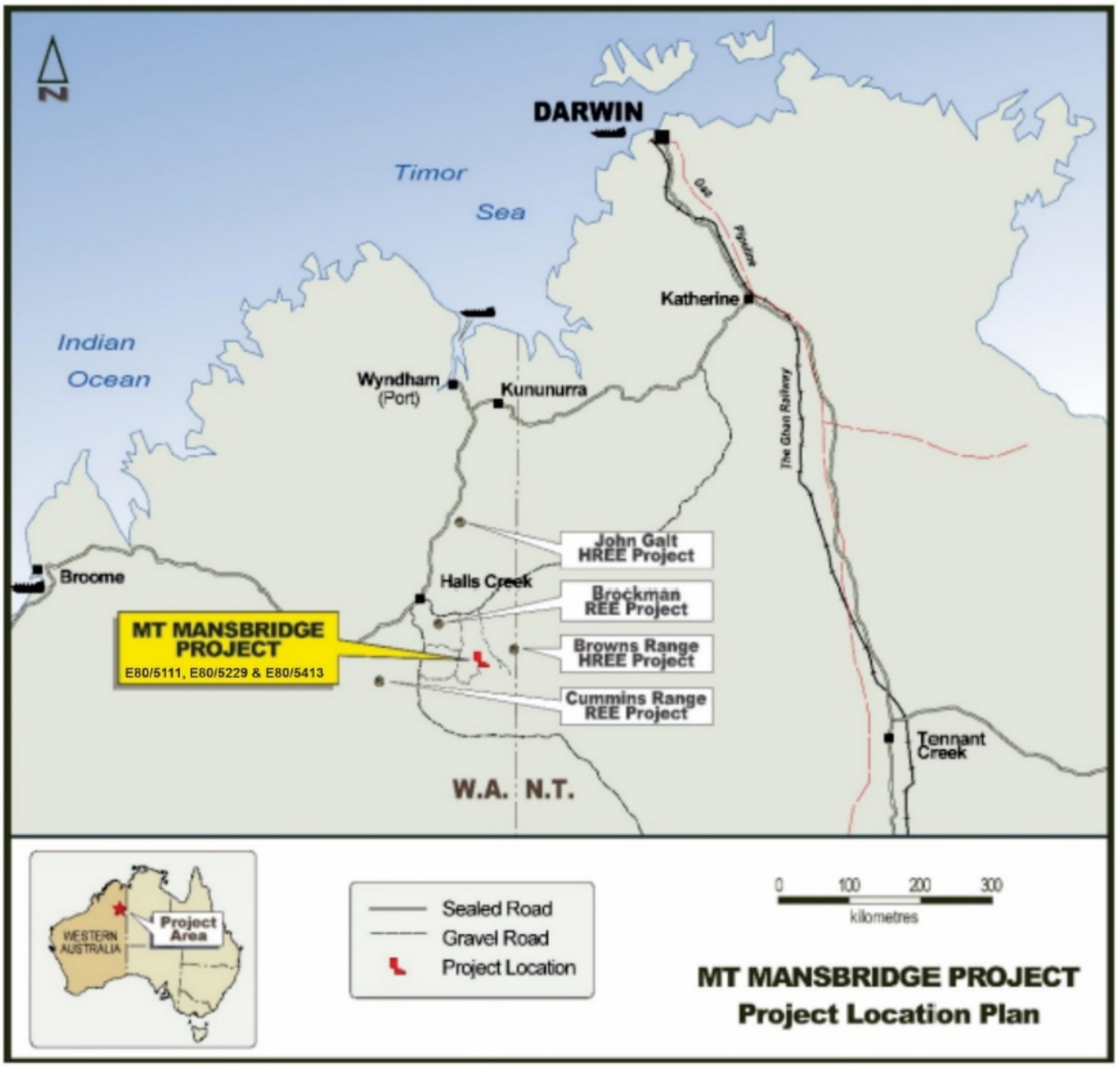

Figure 5 - Mt Mansbridge Project Location within the East Kimberly region

Authorised 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.

JORC Code, 2012 Edition – Table 1 report template

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.*	Three samples for petrographic description were taken from RC drilling samples. Thin section preparation and descriptions were undertaken by Diamantina Laboratories (Perth). Standard thin sections were prepared and examined microscopically in transmitted and oblique reflected light and also using Scanned Electron Microscopic (SEM) technique with photomicrographs also taken and presented.
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).*	N/A
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.*	N/A
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*	N/A

Criteria	JORC Code explanation	Commentary
	costean, channel, etc) photography. • *The total length and percentage of the relevant intersections logged.*	
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.*	N/A
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.*	N/A
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.*	N/A
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.*	N/A

Criteria	JORC Code explanation	Commentary
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.*	N/A
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.*	N/A
Sample security	• *The measures taken to ensure sample security.*	N/A
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	N/A

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.

Criteria	JORC Code explanation	Commentary
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	Drill hole details previously announced.
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.*	N/A
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 drill hole 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').*	N/A
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 drill hole collar locations and appropriate sectional views.*	N/A

Criteria	JORC Code explanation	Commentary
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.*	The results and text provided within this report are considered comprehensive and representative.
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.*	All relevant exploration results and observations have been reported that are pertinent to this stage of exploration.
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.*	Reporting of remaining drill assay results from remaining holes.