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).

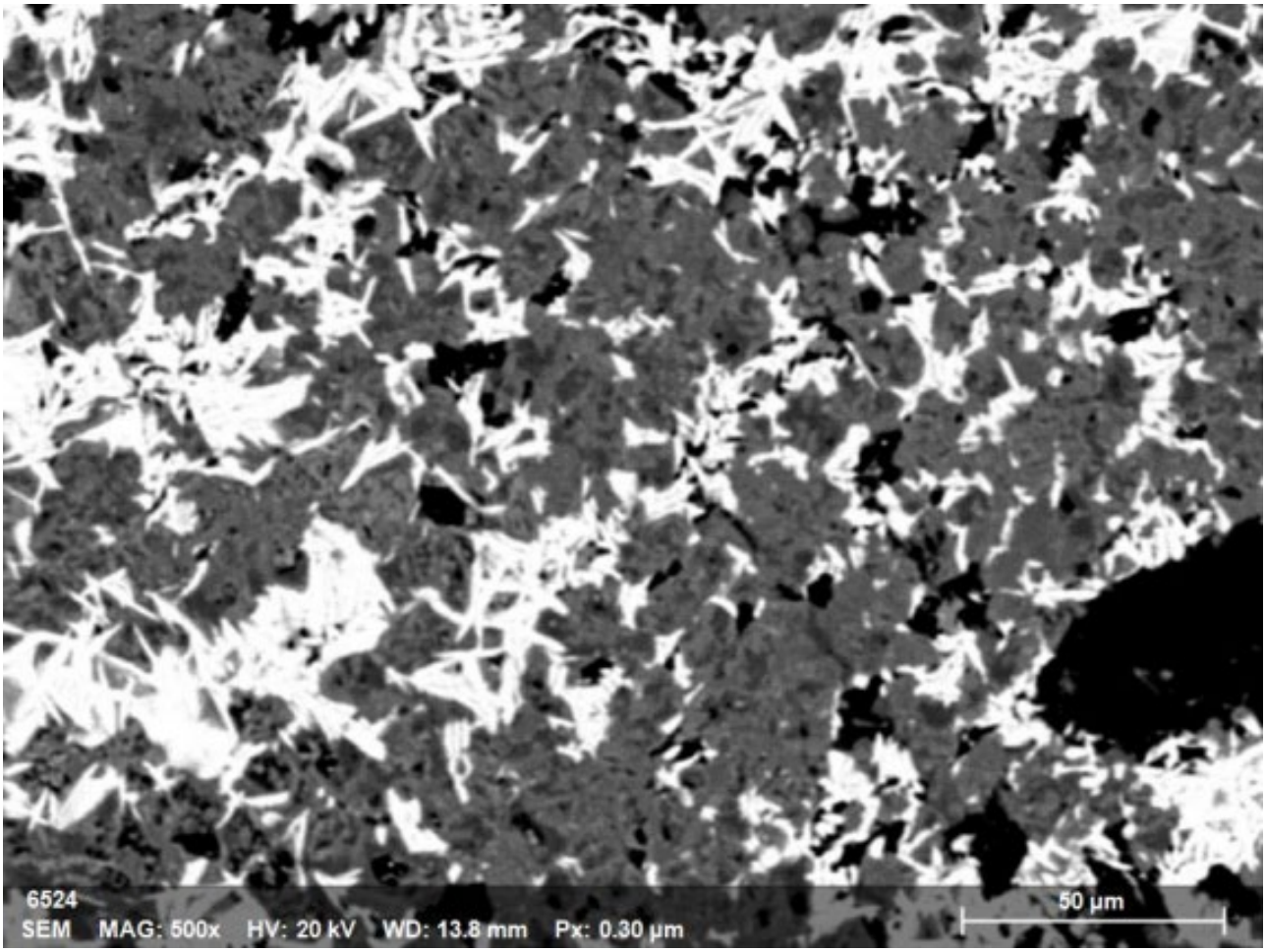

Figure 1 - Polished Thin Section (SEM) - Xenotime (white) and Florencite (grey) Minerals (sample MMRC02)

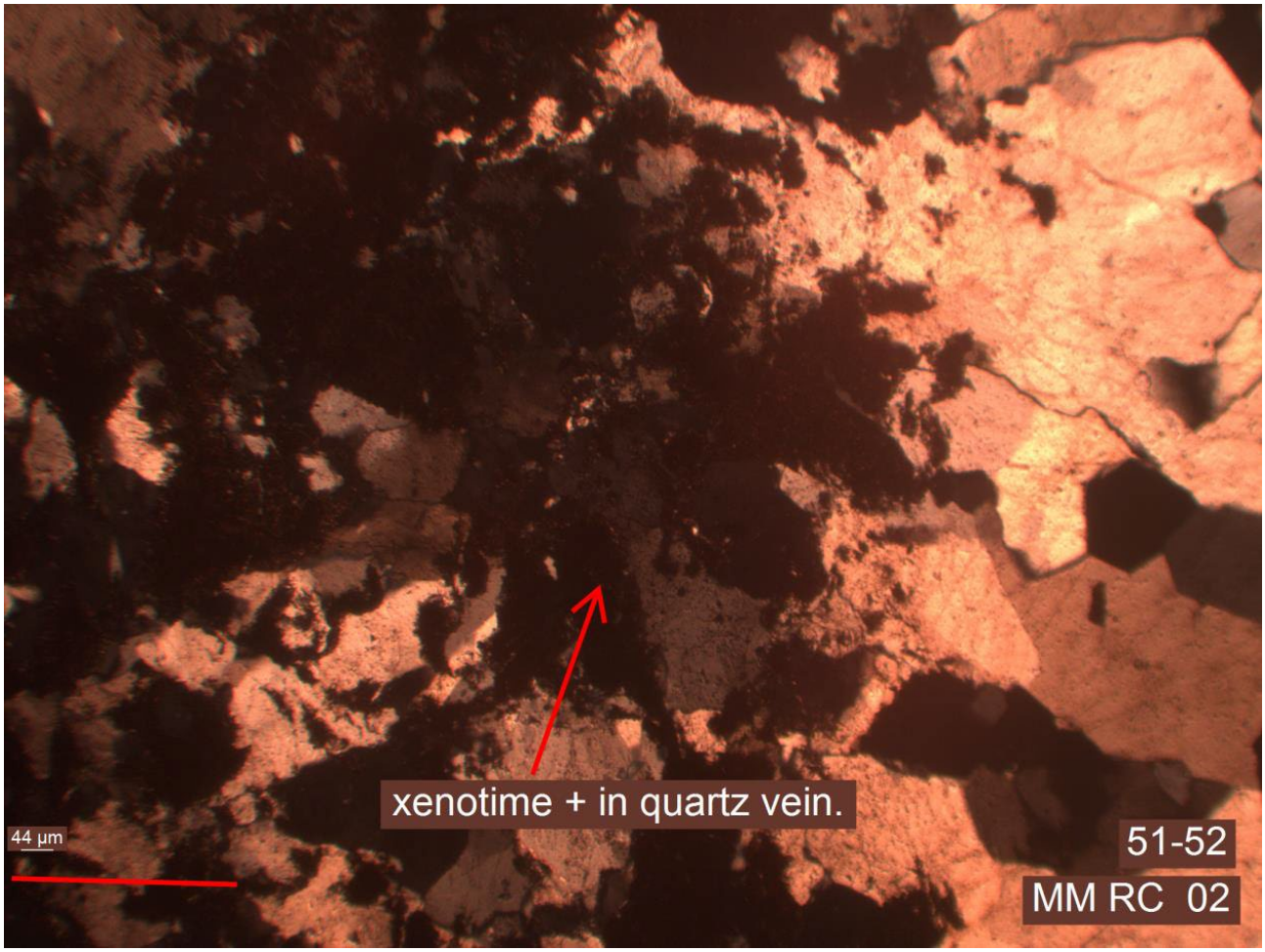

Figure 2 – Polished thin section showing xenotime in quartz vein (sample MMRC02)

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.

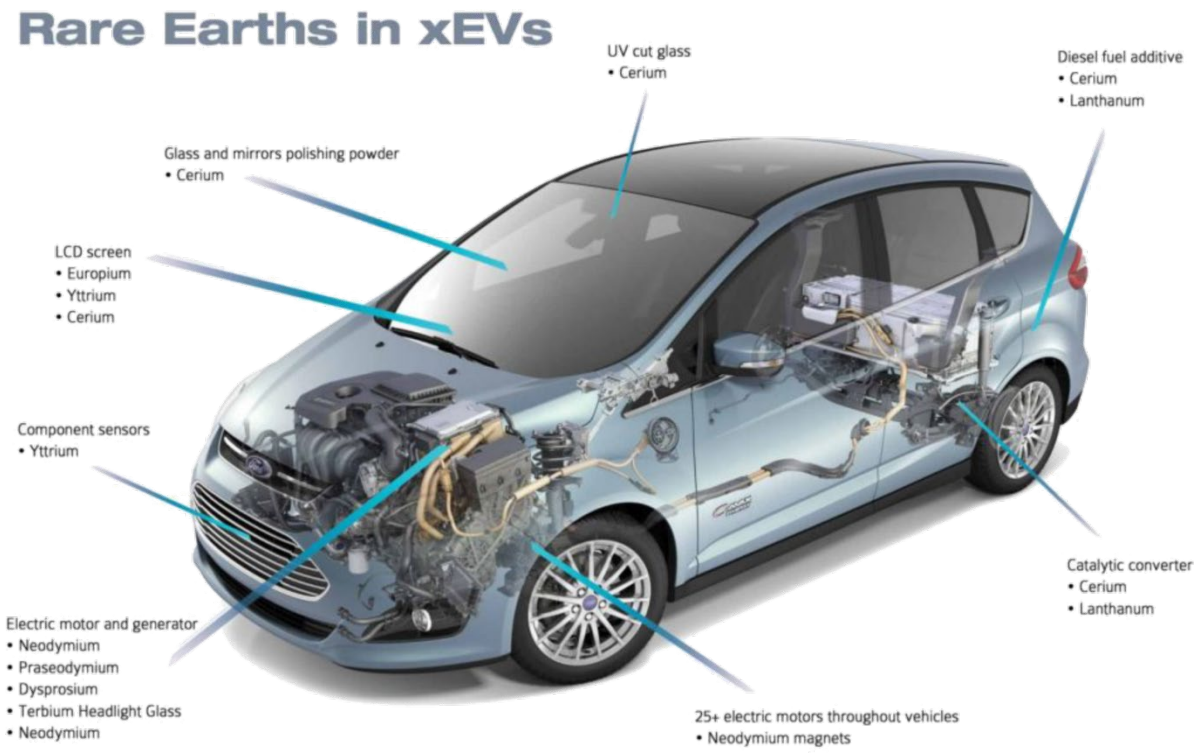

Figure 3 – Rare Earth Elements in electric vehicles

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%).

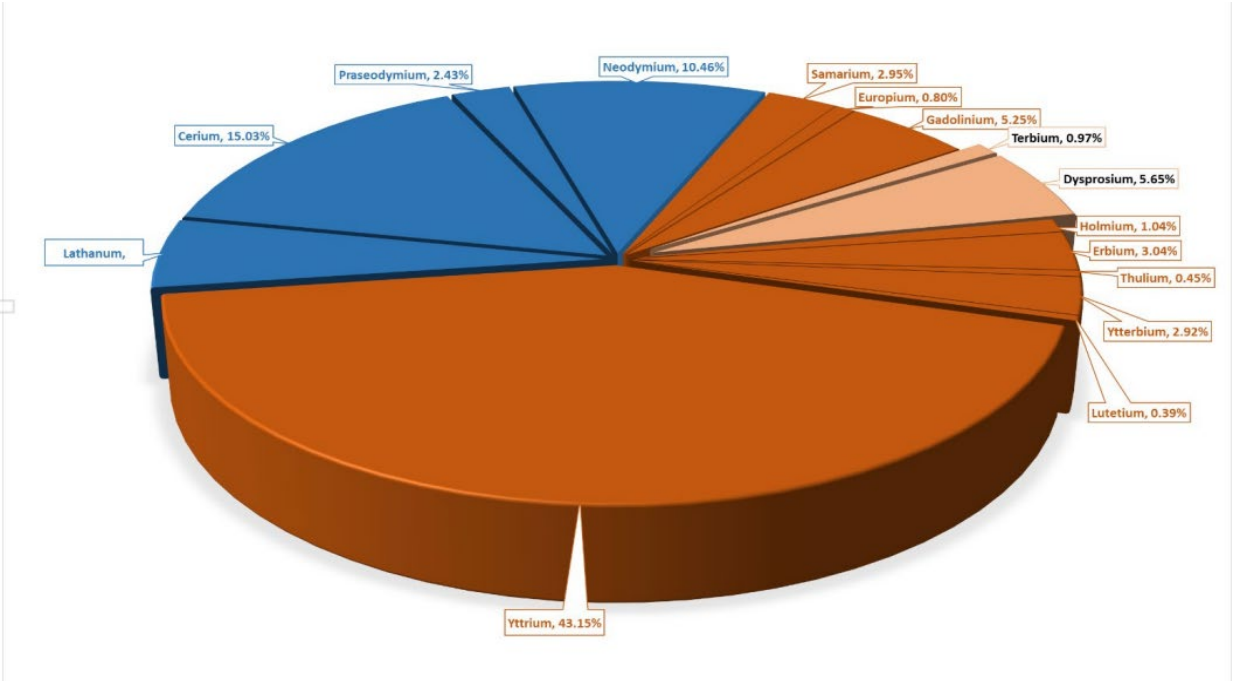

Figure 4 – Pie chart showing average distribution of REO for drill samples from the Solo Prospect

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.

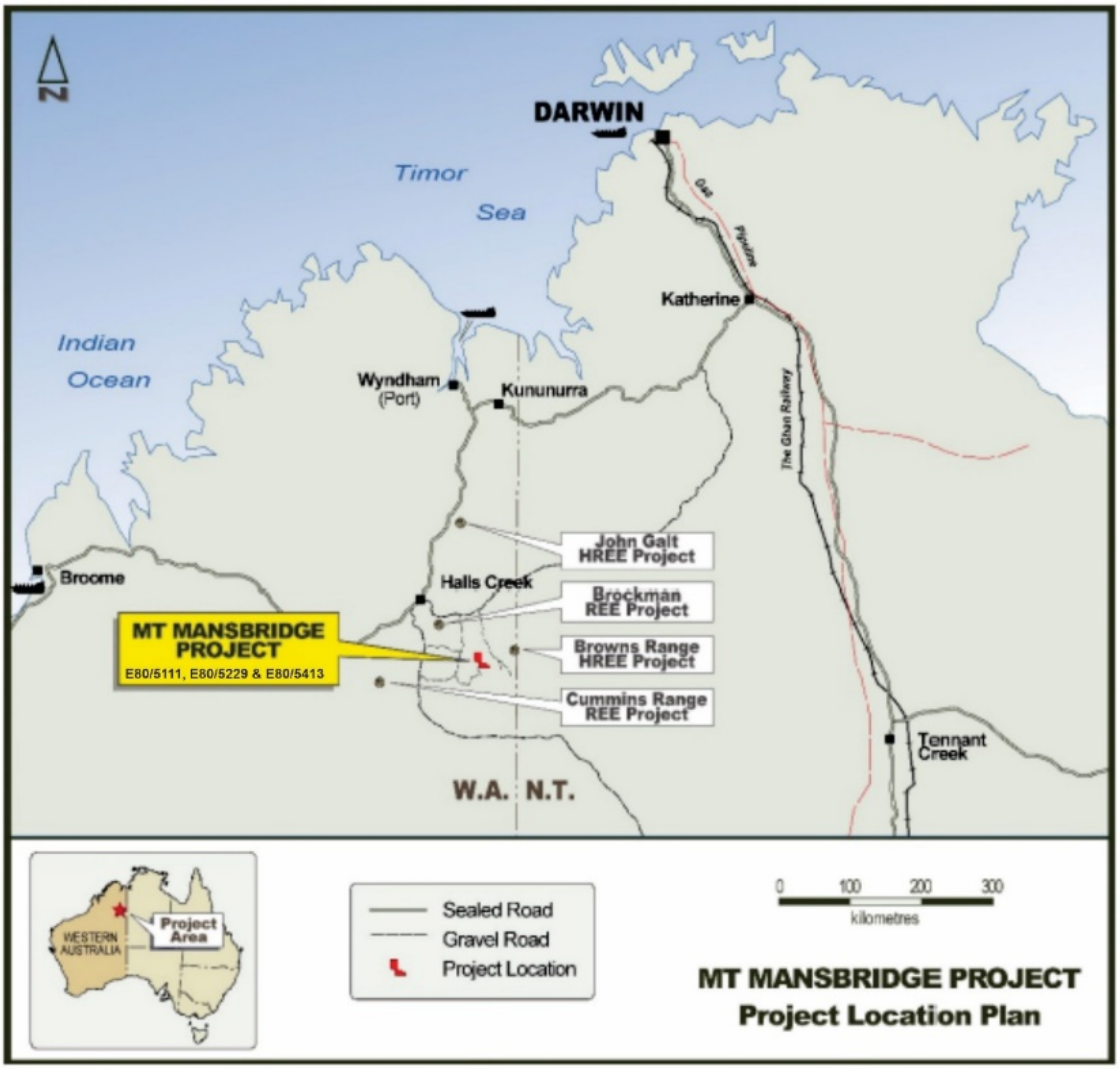

Figure 5 - Mt Mansbridge Project Location within the East Kimberly region

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.

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.