

### **RED MOUNTAIN MINING LTD**

4<sup>th</sup> February 2021

## **32 HEAVY RARE EARTH TARGETS IDENTIFIED AT MT MANSBRIDGE**

- Assessment of recent Airborne Radiometric survey data identifies 32 priority Heavy Rare Earth Element/Dysprosium (HREE) targets along 33km prospective unconformity
- Exploration technique validated with known Xenotime mineralized prospects highlighted
- Planning underway for field investigation in Q2 once approvals are granted and access is open after rainy season -- drilling anticipated June 2021.

Red Mountain Mining Limited (**RMX**, the Company) (ASX:**RMX**) is pleased to announce the results of the recently completed assessment of the Radiometric data that was acquired in December 2020 at the company's 100% owned Mt Mansbridge HREE Project.

The review highlighted 32 radiometric targets within the ~800km line survey. The targets are analogous to Northern Minerals Ltd.'s (ASX: NTU) unconformity related HREE deposits Dazzler and Iceman. Furthermore, the survey highlighted 'Mt Mainsbridge South', a prospect with known xenotime mineralization. This is considered particularly encouraging as it validates the exploration technique as an effective method of identifying areas prospective for HREE mineralization. The company has already begun planning access with relevant native title claimant groups, with an anticipated initial reconnaissance trip to review prioritized targets in Q2 2021 once the project is accessible with drilling anticipated to commence in June 2021.

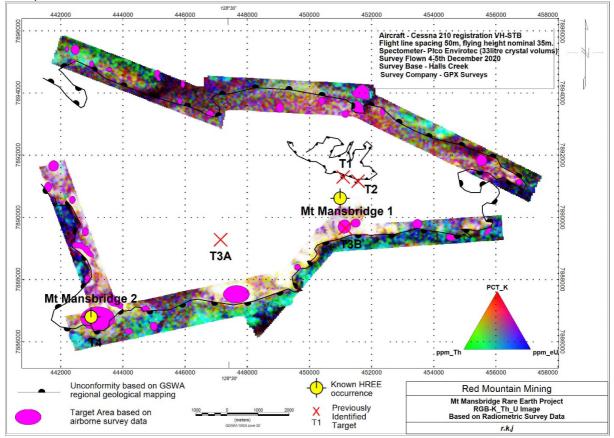


Figure 1 – Mt. Mansbridge HREE Targets over Radiometrics



In HREE/Xenotime deposits, radiometric data has proven to be valuable in vectoring in on HREE targets. At Mt Mansbridge, rim flying of the unconformity has resulted in a relatively constant and lower flying height compared to historical surveys flown perpendicular to the unconformity where a significant variation in topography can occur at the contact between the sandstone and underlying metamorphic rocks. Processing and ratioing of the newly acquired ~800 line km airborne radiometric data set has identified and delineated 32 additional basement and unconformity related HREE/Xenotime targets for further exploration.

These newly identified targets are in addition to the previously reported known areas of known Xenotime mineralization at Mt' Mainsbridge' and 'Mt Mansbridge South', the Killi Killi HREE geochemical anomaly and previously reported Radiometric anomalies (see ASX Announcement: Mt Mansbridge Rare Earths Project Update –  $25^{th}$  November 2020). All of these targets are summarized below and will be the focus of the next phase exploration in Q2.

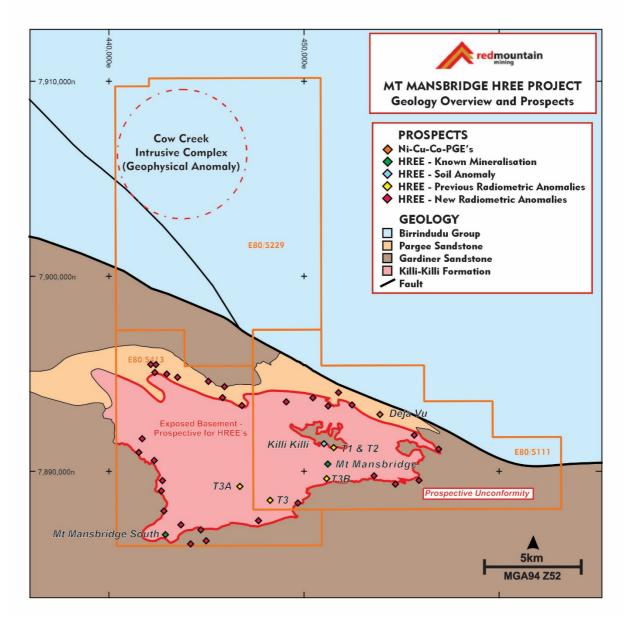


Figure 2 - Mt. Mansbridge Geology and Previously Identified Prospects



#### Mt Mansbridge South HREE/Xenotime Prospect

The Mt. Mansbridge South Prospect is one of the two prospects within the project area with observed xenotime mineralization. Processing of the radiometric data highlighted the area as prospective for HREE/Xenotime. The company views this as a validation of the radiometric data set as a targeting method for HREE/Xenotime mineralization. Due to the positive radiometric response over the Mt Mansbridge South Prospect, similar radiometric anomalies in the vicinity have been identified and prioritized as exploration targets.

The prospect was originally identified by Sigma Resources Group in 1982 and later validated by Northern Minerals Ltd. in 2011 (Wamex Report# A92909). Assaying returned elevated Yttrium (1551ppm) and Dysprosium (222ppm) values from a 'siliceous cherty' unit proximal to the unconformity. Selected assay values and a photograph of the outcrop are shown below.

Element	Dy	Er	Gd	Р	Th	U	Y	Yb
ppm	222.32	138.29	61.09	576	6.12	9.7	1551.8	92.47

Table 1 - Selected Assay Values for rock chip GTRK000002 (MGA94Z52 443275e, 7886581n) (From Northern MineralsLtd. Combined Annual Technical Report 2011 – WAMEX Report# A92909)



Figure 3 – Photograph of GTRK000002 HREE Mineralized 'siliceous cherty' Outcrop (From Northern Minerals Ltd. Combined Annual Technical Report 2011 – WAMEX Report# A92909)



Mineralization at Northern Minerals Ltd (ASX: NTU) Brown's Range HREE Project occurs generally in two styles (these are depicted below in Figure 4):

- Basement style Structurally related Breccias and Veins within the Killi Killi Formation Metamorphic Basement e.g. Gambit and Wolverine
- Unconformity Style Associated with the contact between the Killi Killi Formation and the overlying younger sediments e.g. Dazzler and Iceman

Unconformity related mineralization was discovered relatively recently in late 2018 by NTU, since then the company has committed to numerous multi-million dollar exploration program's with success as highlighted with the recent announcement of the unconformity related 'Toad' greenfields exploration discovery (NTU ASX Announcement 18<sup>th</sup> January 2021).

With the exploration success of NTU by targeting the unconformity utilizing radiometric surveying among other techniques, the unconformity at the Mt. Mansbridge HREE Project has become a priority for exploration in addition to the multiple basement style targets as previously identified, reported (ASX Announcement: Mt Mansbridge Rare Earths Project Update –  $25^{\text{th}}$  November 2020) and summarized in figure 2.

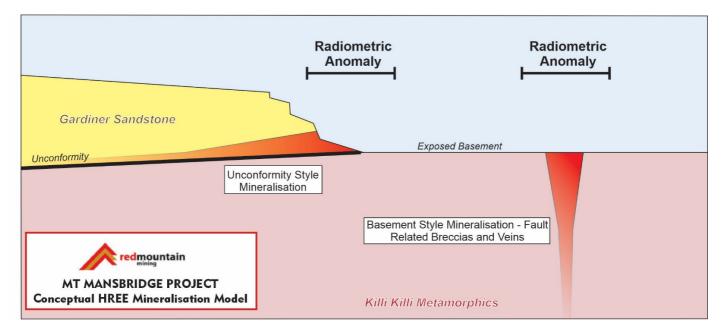


Figure 4 – Mt. Mansbridge Conceptual HREE Mineralization Model



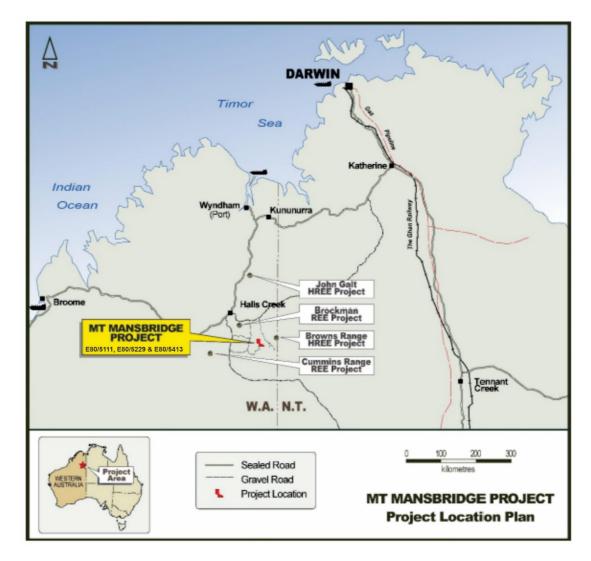


Figure 5 – Mt Mansbridge HREE Project Location

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.



# 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	Rockchip Historically taken RockChip from Report A92909 – 2-3kg sample was collected using a rock hammer from an outcrop. The sample can be biased in nature. Assaying undertaken by Intertek Genalysis with multiple methods utilised for digestion and analysis including: lithium Borate Fusion, 4 acid digestion, ICPMS and OES analysis. The location of the rock chip was recorded by handheld GPS.
	<ul> <li>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.</li> </ul>	Radiometric Survey 3-5 <sup>th</sup> December 2020 Contractor GPX Surveys – Aircraft VH-STB Total line km flown – 794.1 km. Line spacing 50m, flying height nominal 35m Spectrometer- Nal crystal volume 33 litre Magnetometer – Geometrics G-822A Cesium Vapour
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).	NA
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential</li> </ul>	NA



Criteria	JORC Code explanation	Commentary
	loss/gain of fine/coarse material.	
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	NA
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	NA
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Historical rock chip listed in A92909 - Assaying undertaken by Intertek Genalysis with multiple methods utilised for digestion and analysis including: lithium Borate Fusion, 4 acid digestion, ICPMS and OES analysis.</li> <li>Elements analysed include: Ag, Al, Asm Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, TI, Tm, U, V, W, Y, Yb, Zn, Zr.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	NA



Criteria	JORC Code explanation	Commentary
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	NA
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	NA
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	NA
Sample security	• The measures taken to ensure sample security.	NA
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	NA



#### 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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint</li> </ul>	The Mt Mansbridge Project consists of 3 greanted tenements: E80/5111, E80/5229 and E80/5413.
	<ul> <li>ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>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.</li> </ul>	The tenure is within land where native title has been determined. The traditional owners of the land are the Tjurabalan People.
		A heritage survey will need to be completed prior to commencing exploration activities.
		The Project does not interest 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	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	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.
		This work has led to a number of radiometric and geochemical anomalies that warrant further investigation.
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.
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	NA



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	NA
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	NA
Diagrams	<ul> <li>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.</li> </ul>	Included within body of text.
Balanced reporting	<ul> <li>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.</li> </ul>	NA
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.	NA
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas,</li> </ul>	A field program is currently being planned to investigate the target identified within this report once necessary access agreements have been approved and the current rainy season concludes.



Criteria

### JORC Code explanation

Commentary

provided this information is not commercially sensitive.