

ASX Release
12 March 2025

Tenements Granted and New Tenement Acquired at the Mt Mansbridge Heavy Rare Earths Project

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Highlights

- High priority tenements now granted allowing 2025 exploration to begin
- New tenement acquired with high grade yttrium boulders up to 2.7%
 - Yttrium is a proxy element for heavy rare earths
- Heritage clearances have been scheduled for high priority areas
- Mt Mansbridge is the priority exploration project for the 2025 season closely followed by Cummins Range near-mine anomaly exploration

RareX Limited (ASX: REE – **RareX**, or the **Company**) is pleased to announce that the Department of Energy, Mines, Industry Regulation and Safety (**DEMIRS**) has granted the tenements E80/5942 and E80/5973, which are part of the Mt Mansbridge Heavy Rare Earths project in the Kimberley region of Western Australia.

The project is located 40km from the Northern Minerals (ASX: NTU) Browns Range HRE project, which is one of the most significant HRE districts in the world, with 7 xenotime deposits hosting 11.7Mt at 0.77% TREO (with DyTb contributing to 10% of the TREO)¹. Iluka has recently pegged most of the ground between the Mt Mansbridge project and Browns Range project (see Figure 1) and are substantial shareholders of NTU, with a pathway to acquire 19.9% of the company.

The geology at Mt Mansbridge project is very similar to the Browns Range project, with 217km² of exposed fertile Paleoproterozoic basement rocks with the outer rim of the tenement area containing an unconformity contact with the overlying Birrindudu group. This is the same unconformity contact that hosts the high-grade Browns Range unconformity heavy rare earth (HRE) deposits.

The project is highly prospective for HRE xenotime mineralisation and the exploration upside is summarized below, with further details in RareX's announcement dated 18 September 2024:

- Historical pit samples at the Sigma prospect have shown up to 6.0% yttrium, a proxy element for heavy rare earths
- Drilling has confirmed hydrothermal xenotime mineralization in basement rocks, which is open in all directions. Drill hole MMRC007 intersected 16m at 0.28% TREO from 77m, including a higher-grade portion of 4m at 0.48% TREO from 87m, with 1m at 1.06% TREO. Mineralisation is 58% HRE and 10% DyTb. The DyTb percentage is the same as the Browns Range deposits
- There are several untested HRE soil anomalies in basement rocks and a 2km long untested soil anomaly along the Mt Mansbridge unconformity

¹ NTU ASX Announcement dated 16 January 2025: 2025 Wolverine Mineral Resource Estimate

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Heritage agreements have been established with the Tjurabalan native title holders, ensuring responsible exploration and development practices. Heritage clearance on high priority exploration areas will begin once the Northern Australian wet season has finished.

RareX Managing Director and CEO, James Durrant, commented *"The exploration land package at our Mt Mansbridge Heavy Rare Earths project is now substantial and ready for exploration. We know there's xenotime mineralization on the project, we know the region and the native title holders well, and we know the strategic nature of heavy rare earths to Australia. This project aligns with our focus on rare earths and niobium, supporting the global electrification megatrend. We look forward to progressing exploration activities and unlocking the full potential of this promising project."*

RareX is also pleased to announce a fourth tenement (E80/6118) has been pegged at the HRE Mt Mansbridge project. The tenement is 40 blocks in size and is located 8km to the south (Figure 1). The geology is very similar to the main project area and, in 1982, Sigma Resources located altered basement rocks and conglomerate samples from exploration pits. Samples were very strongly HRE mineralised with assays up to 2.7% Yttrium (Table 1). Yttrium in xenotime may be accompanied with high value dysprosium and terbium (DyTb). A sample at Browns Range project (50km to the north east) with 2.7% yttrium may hold up to 0.35% DyTb. Sigma Resources were exploring for uranium not HRE and a deep dive into the historical exploration results suggests these results have never been followed up.

This tenement is expected to be granted by the end of the year.

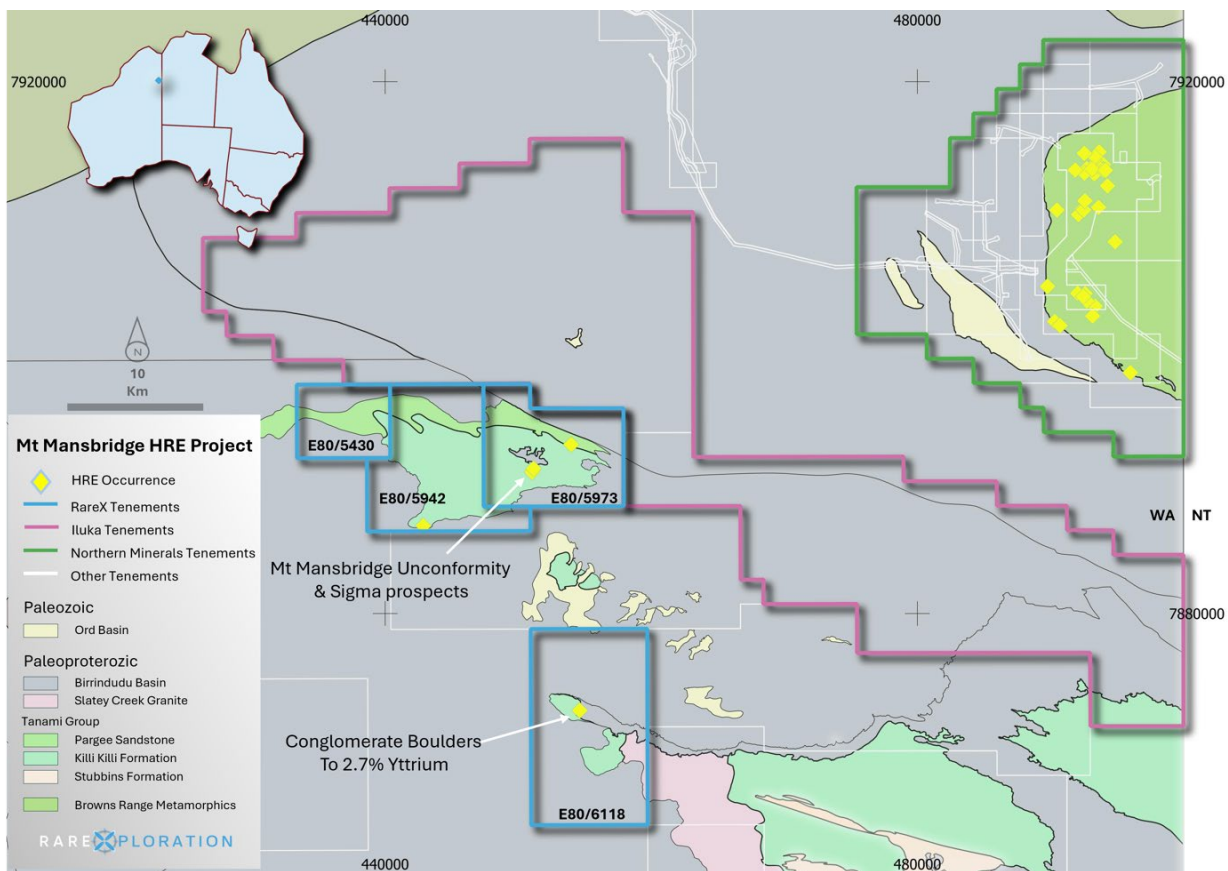


Figure 1. Mt Mansbridge geology and tenement map

Table 1. High grade Yttrium samples from tenement E80/6118. Samples were taken from two small pits at 454070E, 7872270N.

Sample	Yttrium (%)	Description
D75	2.0	Pit 1 0.4m depth, random fragments of altered grit
D76	2.7	Pit 1 0.4m depth, selected fragments of altered grit. 20% 1-2mm quartz grains in altered kaolinitic groundmass
D77	2.5	Pit 2 0.3m depth, 0.3m x 0.25 x 0.15m conglomerate boulder, highly altered with partly bleached and partly maroon coloured ground mass. 15% >2cm quartz pebbles
D78	2.4	Pit 2 0.3m depth, 0.3m x 0.25 x 0.15m conglomerate boulder, highly altered with partly bleached and partly maroon coloured ground mass. 15% >2cm quartz pebbles

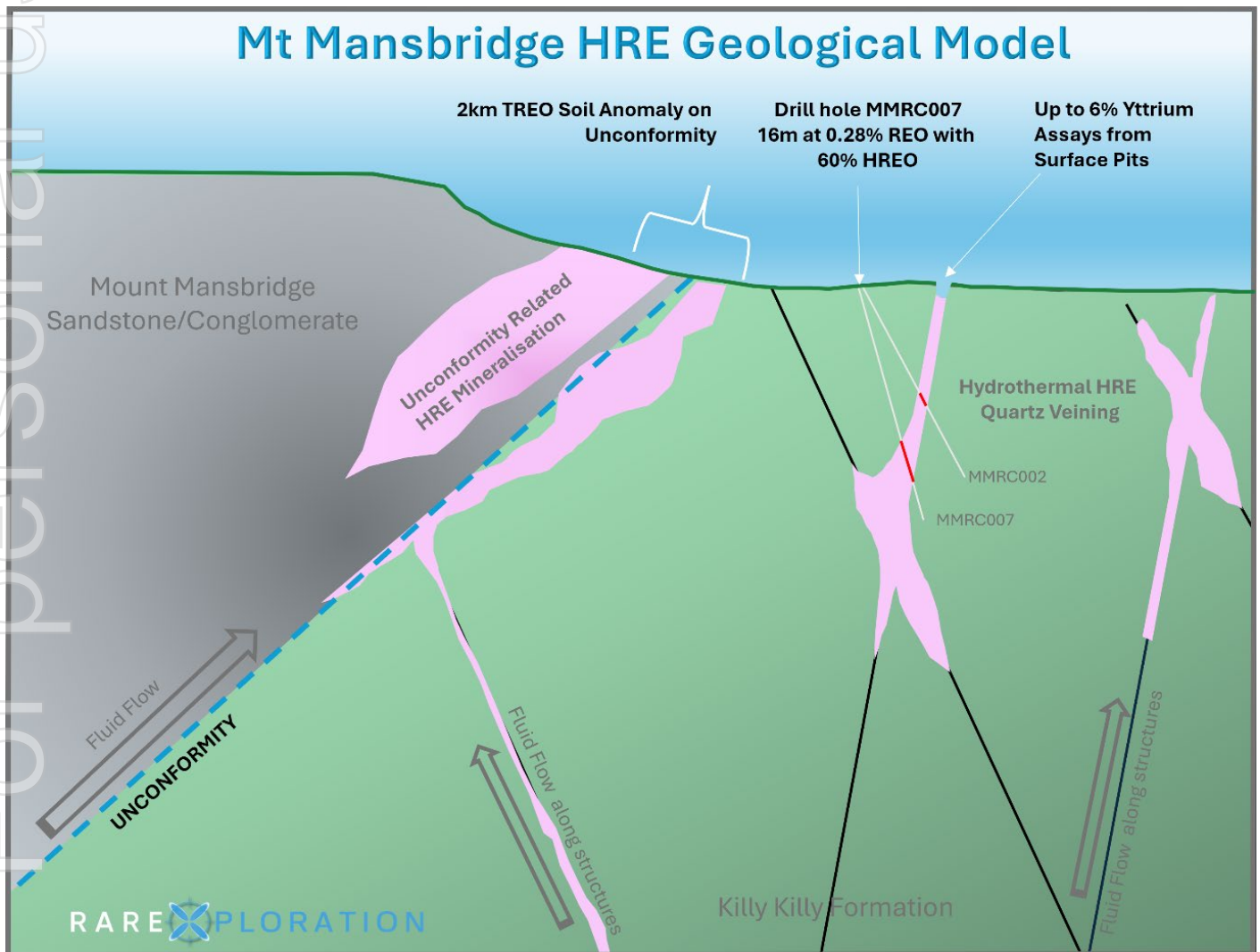


Figure 2 – Conceptual geological model for Mt Mansbridge project. Mineralisation styles are based on the Wolverine hydrothermal xenotime-quartz vein deposit and the Dazzler unconformity related HRE deposit at Browns Range.

This announcement has been authorised for release by the Board of the Company.

Competent Person's Statement

The information in this report that related to exploration results has been compiled and reviewed by Mr Guy Moulang. Mr Guy Moulang is a full-time employee of RareX Limited and is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Guy Moulang consents to the disclosure of the information in this report in the form and context in which it appears. Prior exploration results were reported by the Company in accordance with Listing Rule 5.7 on 18 September 2024. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement.

About RareX Limited – ASX: REE

RareX is a critical minerals company specialising in rare earths and niobium in hard rock carbonatites.

The **exploration** focus of the business is on the new Khaleesi Project in the East Yilgarn which is a district-scale, elevated-niobium, alkaline intrusive complex, the Mt Mansbridge xenotime heavy rare earths project near Browns Range and the Cummins Range near-mine anomalies.

The Company's **engineering** and commercial focus is on the mid-study-level, Cummins Range Project (+\$330M NPV₈ post-tax*) - a carbonatite hosted rare earths and phosphate project, containing magnet grade rare earths and battery grade phosphates and technically Australia's largest undeveloped rare earths project.

RareX have been curating a portfolio of carbonatite related projects including the newly acquired bulls-eye Piper Project along trend from both Nolans Bore and the Luni niobium deposit. RareX will continue to develop and optimise its portfolio.

RareX maintains material investments in Kincora Copper (ASX:KCC), Cosmos Exploration (ASX:C1X) and Canada Rare Earth Corporation (LL.V).

For further information on the Company and its projects visit www.rarex.com.au

* The forecast financial information was released on 22 August 2023. The Company confirms that the material assumptions underpinning the production target and forecast financial information continue to apply and have not materially changed

Appendix 1: JORC Tables

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The 5 RC drill holes were drilled in 2022 and 2023. Assays were for 1m intervals. There are no descriptions in the annual report for sampling techniques. It is assumed they were sampled to industry standards. The 2011 Quantum soil sampling program (A103084) was completed on a 100m x 20m grid. Samples were taken from 10-15cm depth below the humic horizon and sieved at -200um using a nylon screen. The 2011 Quantum rock chip samples comprised of a couple of pieces the size of a fist. Each sample was submitted to SGS and crushed to 75um and digested using an acid mix. The 2021 Red Mountain soil sampling program (A129270) was sampled on a 100m x 50m grid. Samples were collected 10-15cm beneath surface, 100g of -200um material was analysed by SGS. The 2021 Red Mountain rock chip sampling program were 3kg samples and were pulverised to 85% passing 75um. The 1982 Sigma Resources Pit samples were taken from man dug pits. Material from the pit were selectively sampled using a scintillometer. <p>No descriptions of reference measures taken to ensure sample representivity.</p>
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.). 	<ul style="list-style-type: none"> The 5 drill holes were drilled using an RC drill rig. No descriptions of the drill rig are in the historical report.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> There are no descriptions of assessing chip sample recoveries or results. No measures were described in the historical reports regarding maximising sample recovery There are no details in the historical reports regarding the relationship between sample recovery/grade and sample bias

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All RC samples have been geologically logged to a level of detail to support a mineral resource estimation. Soils and Rock chips have been geologically logged. Logging is qualitative 100% of the RC holes, soils and rock chips have been geologically logged
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> There are no subsampling techniques in the drilling or geochemical surveys. The 2011 Quantum rock chip samples comprised of a couple of pieces the size of a fist. The sample was submitted to SGS and crushed to 75um and digested using an acid mix. The 2011 Quantum soil sampling program (A103084) was completed on a 100m x 20m grid. Samples were taken from 10-15cm depth below the humic horizon and sieved at -200um using a nylon screen. The 2021 Red Mountain soil sampling program (A129270) was sampled on a 100m x 50m grid. Samples were collect 10-15cm beneath surface, 100g of -200um material was collected and analysed by SGS. The 2021 Red Mountain rock chip sampling program were 3kg samples and were pulverised to 85% passing 75um. The 1982 Sigma Resources Pit samples were taken from man dug pits. Material from the pit were selectively sampled using a scintillometer. Sample was then pulverised to -200 mesh and briquetted into a 32mm diameter disc with boric acid backing for strength. There are no descriptions on quality control procedures, sampling representation, or reference materials for any of the sampling in this announcement.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of 	<ul style="list-style-type: none"> The RC drilling assays were completed by Intertek. The samples were assayed for 63 elements using 4 acid digest with ICPMS finish, which is considered a near total dissolution. It is assumed Intertek have satisfactory laboratory procedures and quality controls. The Red Mountain 2021 rock chipping and soils were assayed by SGS, via 4 acid digest with a ICPMS finish, which is considered a near total dissolution. It is assumed SGS have satisfactory laboratory procedures and quality controls. The Quantum 2014 rock chipping and soils were assayed by SGS, via 4 acid digest with a ICPMS-OES finish, which is considered a near total dissolution. It is assumed SGS have satisfactory laboratory procedures and quality controls.

Criteria	JORC Code explanation	Commentary
	<i>bias) and precision have been established.</i>	<ul style="list-style-type: none"> 2021 rock chips were analysed by ALS via 4 acid digest with ICPMS finish. It is assumed ALS have appropriate laboratory procedures. The 1982 pit samples were pulverised to -200 mesh and briquetted into a 32mm diameter disc with boric acid backing for strength, with X-ray fluorescence (XRF) finish. The author does not know if this technique is considered partial or total digestion. Nature of quality control procedures have not been described in annual reports.
Verification of sampling and assaying	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Reported results have not been verified by either an independent or alternative company personnel. Twinned holes have not been drilled Data in the announcement has been captured from historical reports from Sigma Resources, Quantum Resources, and Red Mountain Mining. Geological data appears to be of high quality, and it is assumed these companies followed industry standard procedures and protocols when collecting and storing data. The RC drilling results have been converted into oxides using the below stoichiometric conversion factors: La₂O₃ 1.1728, CeO₂ 1.2284, Pr₆O₁₁ 1.2082, Nd₂O₃ 1.1664, Sm₂O₃ 1.1596, Eu₂O₃ 1.1579, Gd₂O₃ 1.1526, Dy₂O₃ 1.1477, Ho₂O₃ 1.1455, Er₂O₃ 1.1435, Tm₂O₃ 1.1421, Yb₂O₃ 1.1387, Lu₂O₃ 1.1371, Sc₂O₃ 1.5338, Y₂O₃ 1.2699, Nb₂O₅ 1.4305, P₂O₅ 2.2916
Location of data points	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The surveying techniques for drill hole collars have not been described in the annual report. All the soils and rock chips in the announcement have been located by a hand held GPS. Locations in this announcement for drill holes, pits, soils and rock chips are in MGA94, Zone 52.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Drill hole spacing is considered appropriate for first pass exploration drilling. Soils and rock chipping are considered appropriate for mineral HRE mineral exploration. No composite sampling has been applied. DyTb content was implied in the text of the announcement for a 2.7% Y assay at Browns Range Project. This was done by calculating the DyTb/Y ratio from the Browns Range 2025 resource (ASX release on 16th January 2025, Wolverine Mineral Resource Update), using the below formula. Browns Range global Resource:- 760ppm DyTb / 4490ppm Y = 0.169265 ratio Assay:- 20700ppm Y x 0.169265 = 3503ppm DyTb

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Orientation of the mineralised horizon intersected in the drilling has not been well defined. Further drilling is required to establish whether the drill holes are unbiased or biased. The soils grid is considered unbiased It is assumed the rock chips are selected in areas of most likely mineralisation. The pit samples are considered biased with samples selected based on elevated radiation response
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> No sampling by RareX has been completed
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews have been commissioned by RareX. It is unknown whether historical explorers conducted audits or reviews.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The project is composed of 4 tenements, E80/5430, E80/5942 and E80/5973 are granted and tenement E80/6118 is pending. Heritage agreements have been established on all granted tenements and an agreement for E80/6118 is being negotiated. There are no known impediments on the tenements.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Numerous companies have conducted work on the Mt Mansbridge project area including Sigma Resources, BHP, Quantum Resources, Northern Minerals and Red Mountain Mining. The main commodity of interest was uranium and gold with a particular focus on unconformity related U mineralisation. The most significant work related to HRE exploration was completed by Sigma Resources, Quantum Resources and Red Mountain Mining.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The tenements are centered around an exposed dome of Killi Killi Formation and Pargee Sandstone, part of the Paleoproterozoic Granites-Tanami Complex. The northern, southern, and western edges of the dome have an unconformity contact with the surrounding Paleoproterozoic Birrindudu Basin. In contrast, the eastern contact is interpreted as a faulted boundary rather than an unconformity contact. Most of the Killi Killi Formation is covered by shallow (<10 m) Quaternary deposits, with patchy exposures primarily

Criteria	JORC Code explanation	Commentary
		<p>located near unconformity contacts with the Birrindudu Basin. Mt Mansbridge, situated on the eastern side of the project area, is a mesa composed of the basal unit Gardiner Sandstone from the Birrindudu Basin and is surrounded by the Killi Killi Formation.</p> <p>There are four known xenotime mineralization occurrences in the Kimberley-Tanami region: Browns Range, John Galt, Killi Killi, and Mt Mansbridge. These occurrences are distributed over a 300 km area and are all associated with hydrothermal silica vein-hosted and/or unconformity-related deposits.</p> <p>The most significant occurrence in the region is the Wolverine deposit at Browns Range, with a resource of 6.44 Mt at 0.96% TREO, 89% of which is HREO (30 June 2022 MRE). Deeper drilling conducted in 2022 extended the mineralization to depths exceeding 500 m below the surface, with notable intercepts of up to 28.6 m at 4% TREO.</p>
<p>Drillhole information</p>	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> ○ easting and northing of the drillhole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ downhole 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. 	<ul style="list-style-type: none"> • Drill hole details are in summarised in 18th September 2024 ASX announcement – RareX review of Mt Mansbridge shows promising HRE potential.
<p>Data aggregation methods</p>	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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 	<ul style="list-style-type: none"> • Drill intercepts have been calculated using a weighted average. • There are no metal equivalents

Criteria	JORC Code explanation	Commentary
	<i>stated.</i>	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <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 (e.g. 'downhole length, true width not known').</i> 	<ul style="list-style-type: none"> • Orientation of the mineralised horizon intersected in the drilling has not been well defined. Further drilling is required to establish whether the drill holes are true width or not. • The true width of the drill intercepts are unknown.
Diagrams	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Relevant diagrams are presented in the body of this report. • For further detail on exploration results see 18th September 2024 ASX announcement – <i>RareX review of Mt Mansbridge shows promising HRE potential.</i>
Balanced reporting	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Reported exploration results are considered balanced.
Other substantive exploration data	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • The project is at early exploration phase. As more information becomes available, RareX will report these results.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. 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> 	<ul style="list-style-type: none"> • Compile extensive data sets from historical reports • Further exploration activities will be announced in coming months.