

ASX Release: 25 May 2022

## MAJOR EXTENSION OF MINERALISATION AT DEPTH CONFIRMED IN INITIAL DRILLING AT CUMMINS RANGE

*2022 drilling program off to a strong start, demonstrating the substantial scale of the deposit*

### HIGHLIGHTS

- Significant visual mineralisation intersected in all three diamond holes drilled to date.
- CDX0020 has intersected mineralisation 250m down-dip of CDX0016 (which intersected a cumulative total of 51m at 2.5% TREO) in the main fault position.
- CDX0020 also finished in mineralisation, extending the known mineralisation to at least 500m below surface.
- Logging of CDX0020 has been completed, with assays awaited.
- Two drill rigs operating (one diamond and one RC rig) with further rig to arrive mid-June.

RareX Limited (ASX: REE; RareX or the Company) is pleased to advise that it has made an outstanding start to the 2022 resource drilling program at its 100%-owned **Cummins Range Rare Earths Project** in Western Australia, with initial drilling significantly extending the known mineralisation at depth.

Since commencing drilling in late April, the Company's drilling contractors have completed 985m of diamond drilling and 1,074m of reverse circulation (RC) drilling at Cummins Range.

The RC rig has been primarily tasked with drilling pre-collars and water monitoring bores for use as part of the hydrological studies feeding into the ongoing technical studies.

Significantly, the three diamond drill holes completed to date have been successful in extending the mineralisation at Cummins Range at depth, with all holes intersecting visual mineralisation. This is an outstanding result which confirms the substantial scale and quality of the Cummins Range REE deposit.

### CDX0020

CDX0020 was drilled down-dip from CDX0016, drilled in 2021, which intersected multiple mineralised zones comprising a cumulative total of 51m grading 2.5% TREO (see ASX announcement, 14 February 2022).

---

For more information, please contact:

**Investors:** Jeremy Robinson, Managing Director

Ph: +61 8 6383 6593

**Media:** Nicholas Read, Read Corporate

Ph: +61 8 9388 1474

CDX0020 has extended the Main Zone of rare earth mineralisation 250m down-dip, thereby doubling the extent of the Main Zone mineralisation.

The hole was pushed on past the interpreted main fault position and continued to intersect rare earths mineralisation and proximal high-grade phosphate “phoscorite” units as depicted in the cross section. Rare earths mineralisation was also intercepted in the last 2m before the hole was lost at 666m down-hole, indicating that there appears to be no depth constraint to the Cummins Range intrusive complex and rare earth mineralisation.

This hole has been processed and is on its way to the laboratory for assaying.

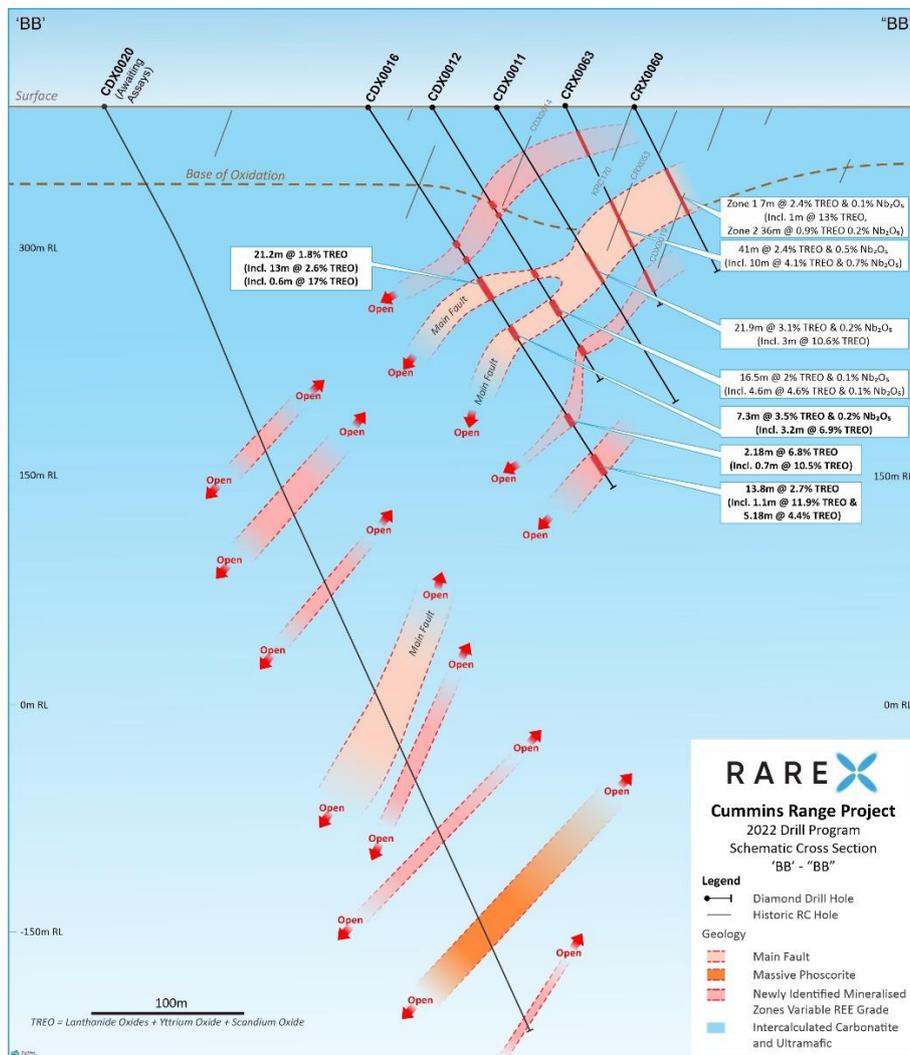


Figure 1 - CDX0020 Cross Section – Mineralisation extended down dip 250m

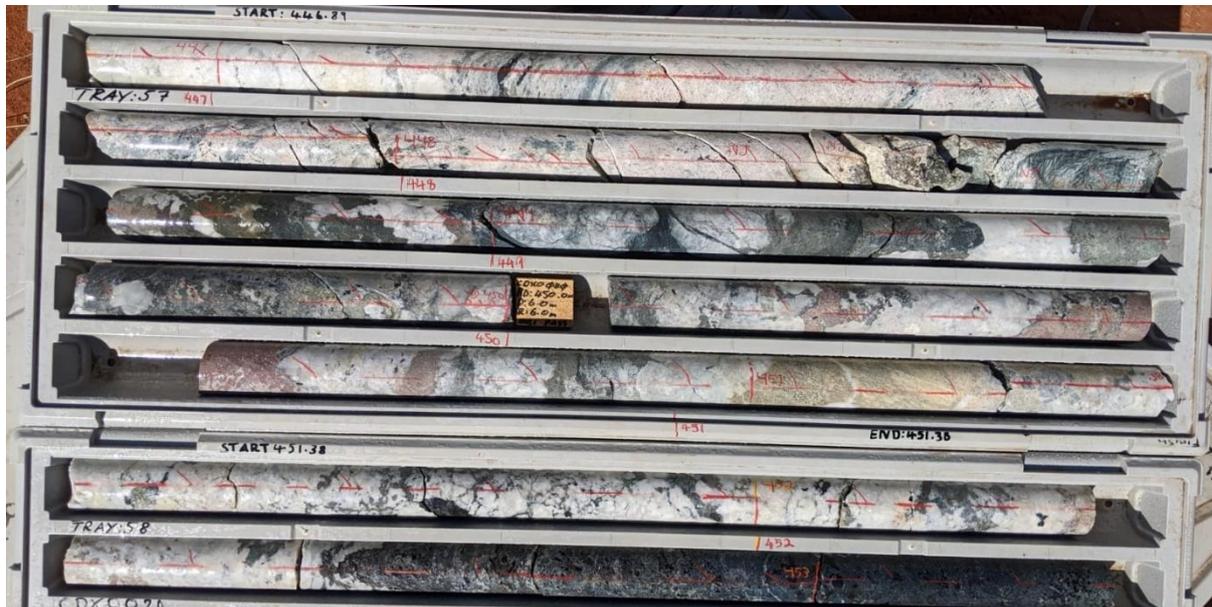


Figure 2 - Mineralised zone from 448.8m to 452.6m down-hole, with mineralised Monazite and Bastnasite in Carbonatite, confirmed with pXRF analysis

## CDX0021 and CDX0022

Holes CDX0021 and CDX0022 were drilled on 80m step-outs along strike to the north-west and south-east respectively, both testing extensions to mineralisation defined in the 2021 drill program.

While both holes are still currently being logged and processed, initial indications show variable mineralisation in both holes. Unfortunately, CDX0021 was lost before reaching the high-grade target area and will be re-entered later. CDX0022 intersected mineralisation towards the bottom of the hole.

Drilling is continuing with hole CDX0023 currently underway, water bore drilling ongoing and a second diamond drill rig scheduled to arrive on 10 June.

RareX Managing Director, Jeremy Robinson, said: *“We’ve made a great start to the 2022 program, building on our success in 2021. The drilling completed to date has exceeded our expectations and goes a long way to vindicating the Exploration Target we published earlier this year.*

*“Importantly, we have already demonstrated that the scale of the system at depth is enormous, with the known dip extent of the mineralisation having effectively been doubled to 500m with hole CDX0020. This hole also suggests that there is no depth constraint to the mineralisation, which means that it could continue to grow with deeper drilling.*

*“We are looking forward to receiving ongoing drilling results and assays from this pivotal drilling program, which we are confident will firmly establish Cummins Range as one of the largest new rare earth development projects in Australia.”*

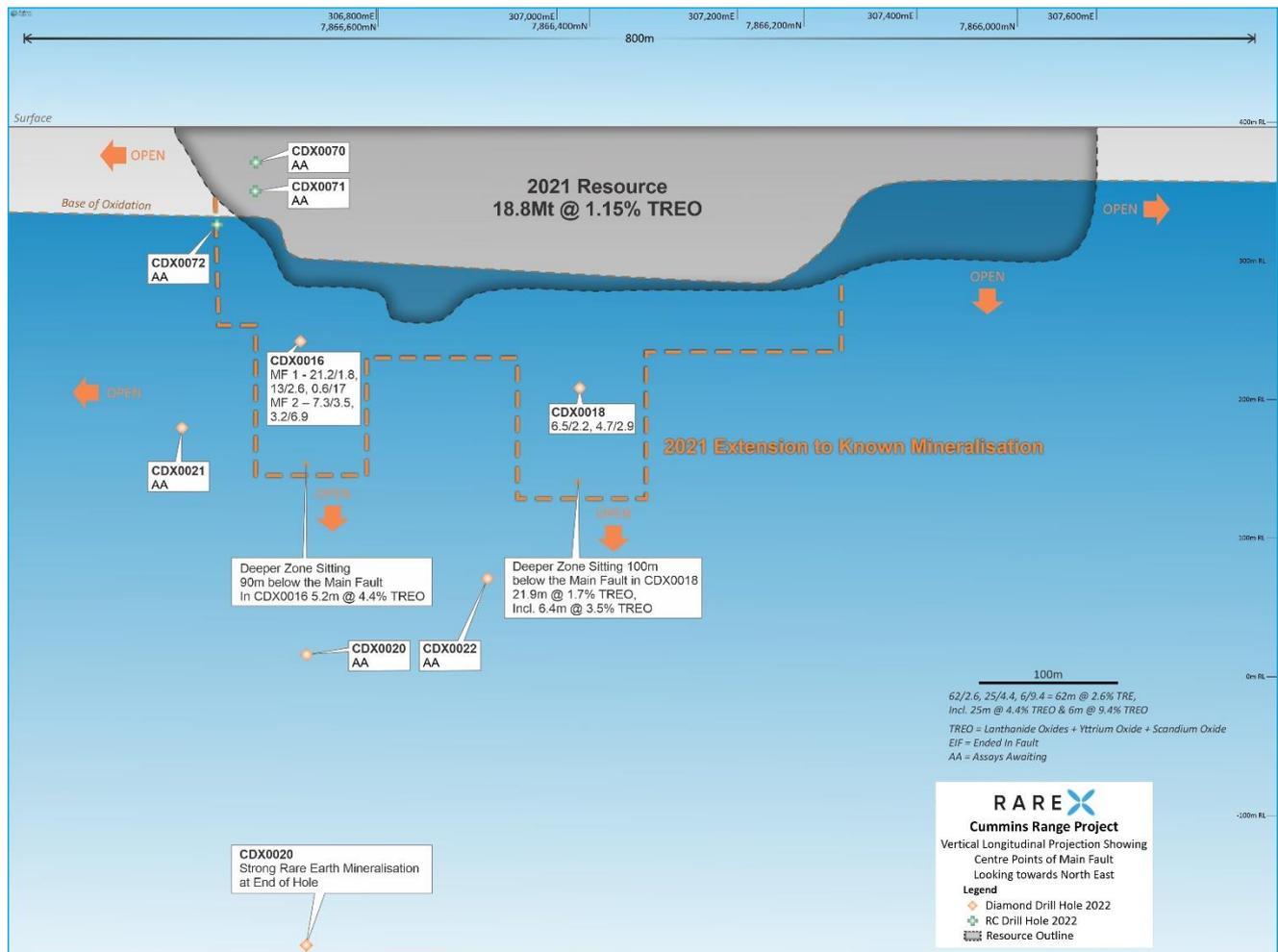


Figure 3 - Cummins Range Vertical Long Projection - Mineralisation extended 250m down dip and 500m below surface

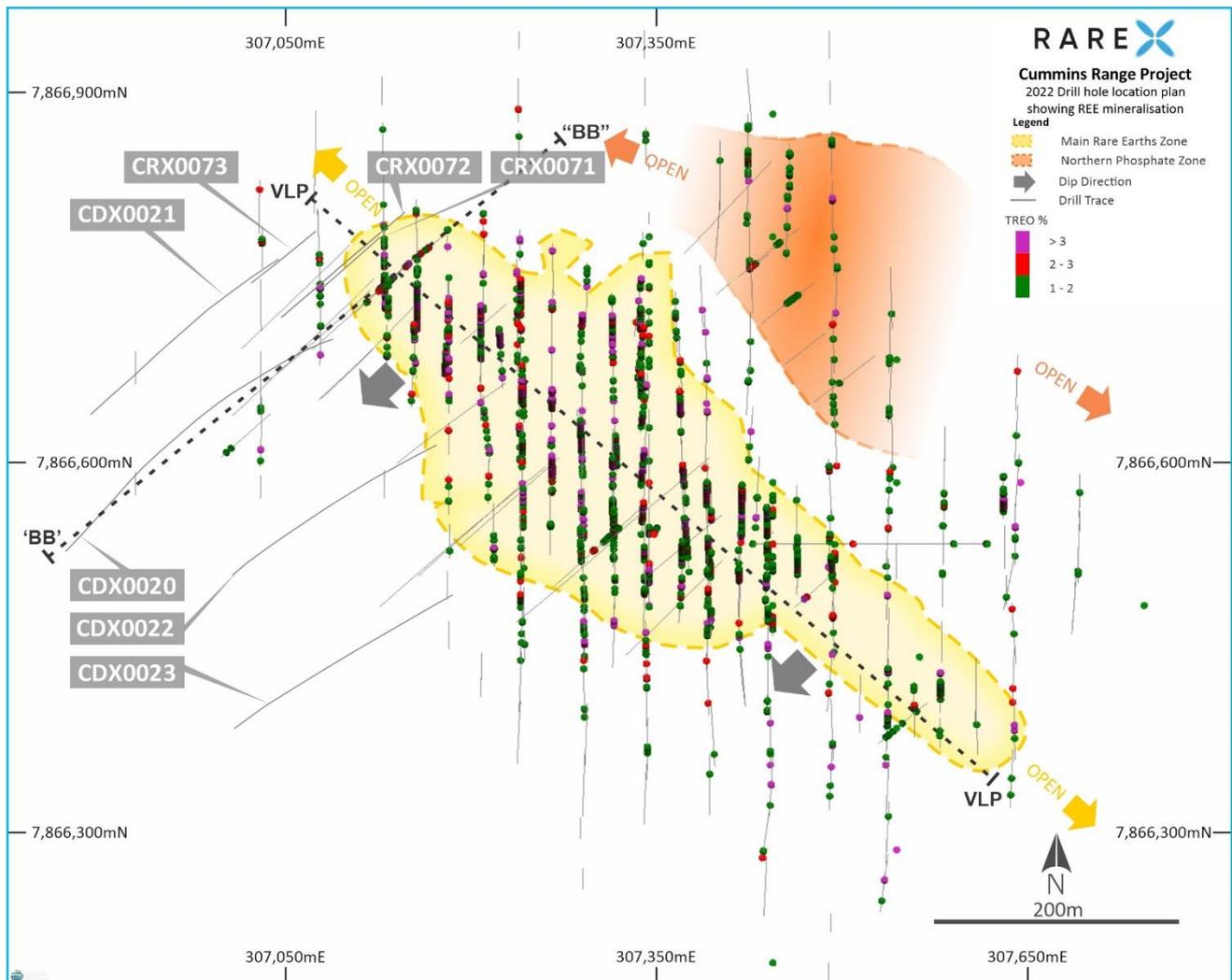


Figure 4 - Cummins Range Plan

Note: RareX has a Niton XRF on site that has been calibrated to Cummins Range mineralisation. The XRF analyses for 43 elements including Cerium, Lanthanum, Praseodymium, Neodymium, yttrium, Niobium and Phosphorus. The XRF is used as a tool to indicate whether a zone is mineralised, however it is not an accurate indicator of grade. With the XRF results, rock type and visual confirmation of mineralisation, the RareX geologist can assess whether an interval is mineralised.

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

ASX Release: 25 May 2022

## ABOUT RAREX LIMITED – ASX: REE

RareX Limited (ASX: REE) is a Perth-based rare earths company committed to become the world's next producer of neodymium and praseodymium (NdPr).

NdPr is a core enabler of decarbonisation of our society and enables low carbon technologies, especially in the electric mobility sector, robotics solutions and renewable energy, e.g. the wind energy sector. NdPr is the key raw material for manufacturing rare earth powered permanent magnet NdFeB electric motors, the heart of the next industrial revolution the *Electrification of our Society*.

RareX's focus is on developing rare earths deposits in Australia, including the Cummins Range Rare Earths Project in the East Kimberly region of Western Australia. RareX is committed to developing a sustainable, ethical, transparent, secure a low carbon rare earth supply chain solution for the global electric mobility market and NdFeB permanent motor downstream ecosystem.

For further information on the Company and its projects, visit [www.rarex.com.au](http://www.rarex.com.au)

### Competent Person's Statement

Information in this release that relates to Exploration Results is based on and fairly represents information and supporting documentation reviewed or compiled by Mr Guy Moulang, an experienced geologist engaged by RareX Limited. Mr Moulang is a Member of the Australian Institute of Geoscientist and has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Moulang consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

**Appendix 1: Drill Collar Table**

Hole ID	East MGA	North MGA	RLUTM	End Depth	Azimuth	Dip	Type	Status
CRX0071	307080	7866743	393	144	50	60	RC	Being Processed
CRX0072	307113	7866776	393	96	50	60	RC	Being Processed
CRX0073	307023	7866747	393	138	50	60	RC	Being Processed
CDX0020	306874	7866530	393	666	50	60	Diamond	Mostly Processed
CDX0021	306893	7866640	393	345.2	50	60	Diamond	Being Processed
CDX0022	307007	7866508	393	470.6	50	60	Diamond	Being Processed
CDX0023	307008	7866383	393	198	50	60	Diamond	Hole in progress

Appendix 2: JORC Table

JORC Code, 2012 Edition – Table 1		
Cummins Range Section 1 Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<p><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></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• The Cummins Range Rare Earth deposit is being drilled tested with RC drilling and diamond drilling.</li> <li>• The RC drill rig used a 5 ½ inch diameter hammer. Each 1m bulk sample was collected in a plastic bag.</li> <li>• Diamond drill sizes used are PQ, HQ and NQ2</li> <li>• Each metre was analysed with a portable XRF, and recovery and geology logs were completed.</li> <li>• Sample interval selection was based on geological controls and mineralisation</li> <li>• Each 1m RC bulk sample was split with a riffle splitter to the appropriate size. Samples varied in length from 1m to 4m.</li> <li>• Each core sample was cut in half with a brick saw. The half core sample was sent to the laboratory with intervals ranging from 0.3m to 1.3m.</li> <li>• Samples were assayed for 42 elements using either a peroxide fusion with a ICP-OES and ICP-MS finish, or a four acid digest with a ICP-OES and ICP-MS finish</li> </ul>
<b>Drilling Techniques</b>	<p><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></p>	<ul style="list-style-type: none"> <li>• Prefix CRX drill holes are reverse circulation (RC) drilling</li> <li>• Prefix CDX are diamond drilling. CDX0020 to CDX0023 have RC precollars ranging from 150-200m deep. Holes were then continued NQ2 diamond core</li> </ul>
<b>Drill Sample Recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>	<ul style="list-style-type: none"> <li>• Recoveries for diamond drill holes were recorded for each metre. Recoveries for diamond holes are CDX0020 99%, CDX0021 99%, CDX0022 99%,</li> <li>• Recoveries for the RC drill holes are characterized as good=&gt;70%, Moderate=40-70%, Poor=&lt;40%. CDX0071=good, CDX0072=good, CDX0073=good</li> </ul>
<b>Logging</b>	<p><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></p>	<ul style="list-style-type: none"> <li>• All metres drilled had a geology log completed. Geology logs were aided using geochemical analysis from a portable XRF.</li> </ul>

	<p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.</p>	<ul style="list-style-type: none"> <li>The detail of logging is appropriated for Mineral Resource estimation.</li> </ul>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>Splits from the drill rig were not used. The entire 1m bulk sample was split with a riffle splitter to the appropriate size. Samples varied in length from 1m to 4m.</li> <li>This RC sampling technique is better than industry standards and is appropriate for this style of mineralisation and for resource estimation.</li> <li>Diamond core was cut in half with an automatic core saw and sent to the laboratory. This is an appropriate method for this style of mineralization and for resource estimation.</li> <li></li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>No assay results have been released in this announcement.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<p>The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data.</p>	<ul style="list-style-type: none"> <li>No assay results have been released in this announcement.</li> <li>Historic assay results are reported to RareX in parts per million (ppm). RareX geological staff then convert the parts per million to ppm oxides using the below element to stoichiometric oxide conversion factors. La<sub>2</sub>O<sub>3</sub> 1.1728, CeO<sub>2</sub> 1.2284, Pr<sub>6</sub>O<sub>11</sub> 1.2082, Nd<sub>2</sub>O<sub>3</sub> 1.1664, Sm<sub>2</sub>O<sub>3</sub> 1.1596, Eu<sub>2</sub>O<sub>3</sub> 1.1579, Gd<sub>2</sub>O<sub>3</sub> 1.1526, Dy<sub>2</sub>O<sub>3</sub> 1.1477, Ho<sub>2</sub>O<sub>3</sub> 1.1455, Er<sub>2</sub>O<sub>3</sub> 1.1435, Tm<sub>2</sub>O<sub>3</sub> 1.1421, Yb<sub>2</sub>O<sub>3</sub> 1.1387, Lu<sub>2</sub>O<sub>3</sub> 1.1371, Sc<sub>2</sub>O<sub>3</sub> 1.5338, Y<sub>2</sub>O<sub>3</sub> 1.2699, Nb<sub>2</sub>O<sub>5</sub> 1.4305, P<sub>2</sub>O<sub>5</sub> 2.2916</li> </ul>
<p><b>Location of data points</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>Drill hole collars were located by handheld GPS</li> <li>All coordinates are in MGA Zone 52H 1994</li> </ul>

	<i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none"> <li>Topographic control is maintained by the use of previously surveyed drill holes. The Cummins Range deposit is located on flat terrain.</li> <li>Down hole surveys were taken every 30m, using a digital Reflex multi shot camera.</li> </ul>
<b>Data spacing and distribution</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>The purposed of the drill program is to test for primary mineralization. Drill lines are 80m apart with 160m spaced drill hole. This is appropriate to establish geological and grade continuity.</li> <li>2m to 4m RC composites were completed in areas where higher grades were not expected</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>The angled drill holes were directed as best as possible across the known geology.</li> </ul>
<b>Sample security</b>	<i>The measures taken to ensure sample security</i>	<ul style="list-style-type: none"> <li>Drill samples are delivered to Halls Creek by RareX staff. Then the samples are transported from Halls Creek to Perth via a reputable transport company.</li> </ul>

### Cummins Range Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>The Cummins Range REO deposit is located on tenement E80/5092 and is 100% owned by Cummins Range Pty Ltd which is a wholly owned subsidiary of RareX Ltd.</li> </ul>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>CRA Exploration defined REO mineralisation at Cummins Range in 1978 using predominantly aircore drilling. Navigator Resources progressed this discovery with additional drilling after purchasing the tenement in 2006. Navigator announced a resource estimate in 2008. Kimberly Rare Earths drilled additional holes and upgraded the resource estimate in 2012.</li> </ul>

<p><b>Geology</b></p>	<p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<ul style="list-style-type: none"> <li>The Cummins Range REO deposit occurs within the Cummins Range carbonatite complex which is a 2.0 km diameter near-vertical diatreme pipe that has been deeply weathered but essentially outcropping with only thin aeolian sand cover in places. The diatreme pipe consists of various mafic to ultramafic rocks with later carbonatite intrusions. The primary ultramafic and carbonatite rocks host low to high grade rare earth elements with background levels of 1000-2000ppm TREO and high grade zones up to 17% TREO. The current resource sits primarily within the oxidised/weathered zone which reaches to 120m below the surface. Metallurgical studies by previous explorers and by RareX show the rare earth elements are hosted by Monazite and bastnasite which is a common and favourable host for rare earth elements.</li> </ul>
<p><b>Drill hole information</b></p>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>All drill hole locations are shown on the drill plan and collar details are tabled within the announcement</li> </ul>
<p><b>Data aggregation methods</b></p>	<p><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. 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></p>	<ul style="list-style-type: none"> <li>No results were reported in this announcement</li> </ul>

	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><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></p>	<ul style="list-style-type: none"> <li>• The angled drill holes were directed as best as possible across the known geology.</li> <li>• The true width of the intercepts in this announcement are &gt;80% of the down hole lengths</li> </ul>
<b>Diagrams</b>	<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"> <li>• Sections, a drill hole plan and a vertical longitudinal projection are with in the announcement.</li> </ul>
<b>Balanced reporting</b>	<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"> <li>• Reporting is considered balanced</li> </ul>
<b>Other substantive exploration data</b>	<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"> <li>• This announcement describes the first diamond drill holes targeted at expanding the Cummins Range resource. Cummins Range deposit has a JORC compliant resource of 18.8Mt at 1.15% TREO + 0.14% Nb<sub>2</sub>O<sub>3</sub>. Metallurgical studies, water monitoring bores and flora studies are currently being conducted and a mining lease is under application.</li> </ul>
<b>Further work</b>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling.</i></p> <p><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></p>	<ul style="list-style-type: none"> <li>• A further 14 000m to be drilling in 2022</li> <li>• Metallurgical tests are being conducted</li> <li>• Scoping studies are being conducted</li> </ul>