

MORE PRIMARY HIGH-GRADE RARE EARTHS MINERALISATION INTERSECTED AT CUMMINS RANGE

Diamond drilling to be extended to Christmas given significant increase in the scale of the Project

HIGHLIGHTS

- All recent diamond holes intersect primary REE-Nb mineralisation
- Hole CDX0011 intersects a 24m wide, strongly rare earth mineralised fault zone with common visible coarse-grained monazite
- Diamond drill program extended to Christmas with contractor DDH1 Drilling
- Presence of abundant sulphide opens up geophysical targeting opportunities

Further to its announcement of 2 September 2021, RareX Limited (ASX: REE; “RareX” or “the Company”) is pleased to advise that it has intersected further significant primary rare earths-niobium mineralisation at its 100%-owned Cummins Range Rare Earths Project in the Kimberley region of Western Australia.

Since the last diamond drilling update on 2 September, RareX has completed a further four diamond drill-holes (CDX0008 to CDX0011) designed to test for primary mineralisation. The new holes are shown on the collar location plan in Figure 2.

Importantly, all four holes intersected primary mineralisation in shear or breccia zones over various widths as described below, providing further strong evidence of the potential to significantly expand the potential scope and scale of the Project.

Of greatest significance, hole CDX0011 intersected a 24m wide, strongly rare earth mineralised fault zone with common visible coarse grained monazite, as shown in Figures 4, 5 and 6.

CDX0011 was drilled to test down-dip of the recently announced intersection in hole CRX0063 of **41m at 2.4% TREO and 0.51% Nb₂O₅ including 10m at 4.1% TREO and 0.75% Nb₂O₅**.

This is the westernmost diamond drill-hole completed to date and extends the primary Main Fault mineralisation to 120 vertical metres, which is amenable for extraction via open pit. Further drilling is planned both along strike and down-dip.

The continued success of the diamond drilling program further reinforces RareX’s view that there is considerable potential to expand the Cummins Range deposit, with significant zones of high-grade primary mineralisation present over mineable widths.

RareX has agreed with DDH1 drilling to expand the current drill program through to December 2021.

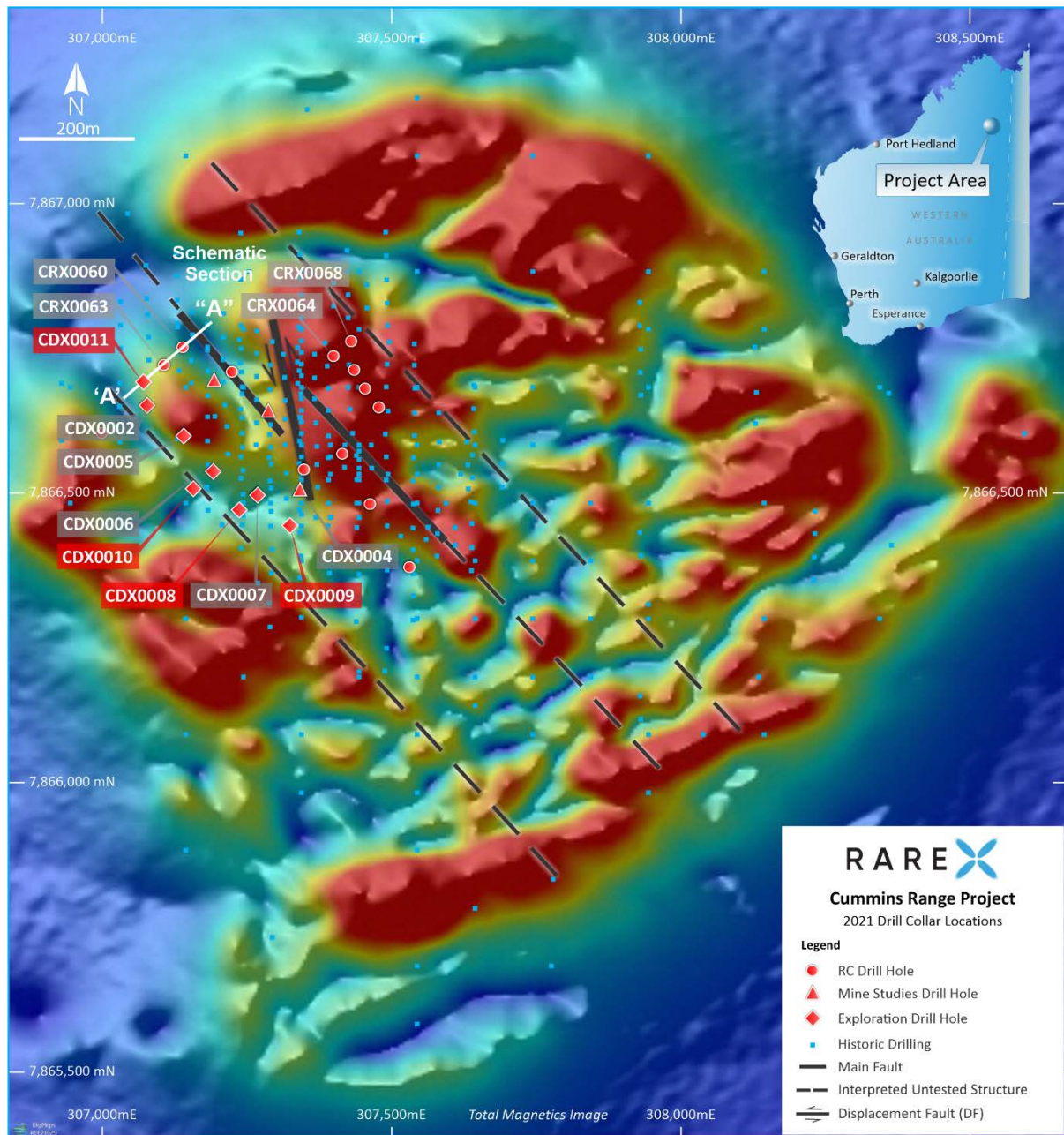


Figure 2: 2021 Drill Collar Location Plan, red boxes indicate the recent drill holes

Hole CDX0008, which was drilled to test an area 40m south-west of hole CDX0007 (reported in ASX announcement 2 September 2021) intersected a 20m silicified fault breccia zone from 70m down-hole. Routine XRF analysis suggests that the breccia is anomalous in rare earths. The zone is weathered and likely correlates with the 77m wide zone seen in CDX0007.

Further down-hole common foliated and sheared areas were seen in carbonatite with localised visual monazite. The geometry of the mineralised structures around the interpreted displacement fault is currently unclear and requires further drilling.

Hole CDX0009 is the easternmost diamond drill-hole completed to date and was designed to test the fresh rock Main Fault position. A 10m silicified sulphidic carbonatite breccia was encountered from 30m down-hole with confirmed rare earths mineralisation observed from XRF analysis.

In the Main Fault position, broad breccia and fault zones were seen with patchy fresh monazite mineralisation occurring at up to 15% monazite over 1m intervals.

CDX0010 was drilled to target the area down-dip of the 10m mineralised fault breccia intersected in hole CDX0006 (ASX announcement, 2 September, 2021). The hole drilled through two intervals of fresh rare earth mineralisation, as confirmed by pXRF. The first is 4.9m of 10% coarse monazite from 115.1m, shown in Figure X. The second was a 20m mineralised sulphidic fault zone from 139m.



Figure 3: Zones of massive coarse monazite at Cummins Range

CDX0010 encountered massive patches of coarse green brown monazite.

CDX0011 was drilled to test down-dip of the recently announced intersection in hole CRX0063 of **41m at 2.4% TREO and 0.51% Nb₂O₅ including 10m at 4.1% TREO and 0.75% Nb₂O₅**. The 24m strongly mineralised fault breccia was intersected and has common disseminated to massive patches of monazite. The fault breccia also contains a milled matrix component (Figure 5) which has highly anomalous rare earths from the pXRF analysis and fine monazite banding as shown in Figure 4. This position has not been tested along strike to the north west and drilling is planned in this area.



Figure 4: CDX0011 131m, Monazite Growth Bands in Fault Breccia Matrix



Figure 5: CDX0011 130m, Fault Breccia with Dark Sulphidic High Grade Rare Earths Matrix (confirmed with XRF)



Figure 6: CDX0011 118.5m, Disseminated Pink Monazite in Silicified Breccia

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 mineralization, the RareX geologist can assess whether an interval is mineralised.

Table 1: Drill collar table

Hole ID	East MGA	North MGA	End Depth	Azimuth	Dip	Type	Assays
CDX0008	307237	7866469	218.4	50	-60	Diamond	Awaiting
CDX0009	307325	7866442	213.4	50	-60	Diamond	Awaiting
CDX0010	307158	7866507	231.3	50	-60	Diamond	Awaiting
CDX0011	307072	7866691	227.3	50	-60	Diamond	Awaiting

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

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Competent Person's Statements

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 and confirms there have been no material changes since the information was first reported.

Appendix 1: JORC Table

JORC Code, 2012 Edition – Table 1

Cummins Range Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	
Sampling techniques	<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. 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.</i>	- The Cummins Range Rare Earth deposit is being drill tested with RC drilling and diamond drilling. - No assay results have been released in this announcement. - Preliminary analysis of all metres drilled is completed using a portable Niton XRF XL5. On diamond drilling core an analysis is done on every metre of the drill core, as close to the metre mark as possible to avoid any bias. - The mention drill holes in this announcement are diamond drill holes and have been sampled to geological intervals and kept close to 1m samples. - Core is cut in half or quarters with a brick saw to send to the laboratory - This technique is industry standard
Drilling Techniques	<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>	Reverse circulation (RC) drilling and diamond drilling. Diamond drilling was done using PQ3, HQ3 and NQ2 size.
Drill Sample Recovery	<i>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.</i>	Drill sample recovery was logged and sample recovery for drill holes referenced in this announcement are CDX0008 99%, CDX0009 99.5%, CDX0010 100%, CDX0011 94%
Logging	<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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	- All metres drilled had a geology log completed. Geology logs were aided using geochemical analysis from a portable XRF. - The detail of logging is appropriated for Mineral Resource estimation.

	<i>The total length and percentage of the relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	• Drill core was cut in half and sent for assay • This technique is the industry standard
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total</i> <i>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.</i> <i>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.</i>	• No assays have been released in this announcement • Preliminary analysis of all metres drilled is completed using a portable Niton XRF XL5. The XRF has been calibrated using dozens of pulps from the 2020 drilling program. The XRF does not provide an accurate grade of REE, but it will detect any anomalous Ce, La, Nd, Pr, Y and Nb. • Standards and blanks are analysed prior to and after batch analysis.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>Discuss any adjustment to assay data.</i>	• No assays have been released in this announcement. • No verification has been done by independent personnel.
Location of data points	<i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	• Drill hole collars were located by handheld GPS • All coordinates are in MGA Zone 52H 1994 • Topographic control is maintained by the use of previously surveyed drill holes. The Cummins Range deposit is located in flat terrain with all the drill holes collared on 392mRL. • Down hole surveys were taken every 30m, using a digital Reflex multi shot camera.
Data spacing and distribution	<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>	• The purposed of the drill program is to test the new geological model, including new mineralised structures.

	<i>Whether sample compositing has been applied.</i>	This drill spacing will be sufficient to demonstrate grade continuity to support the definition of a Mineral Resource as per the JORC 2012 code
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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>	The angled drill holes were directed as best possible across the known geology. The new geological interpretation is mineralised structures are striking at 320 degrees and dipping towards the south west at 50-60 degrees. Drill holes testing these structures are being drilled at 50 degrees azimuth.
Sample security	<i>The measures taken to ensure sample security</i>	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.

Cummins Range Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	
Mineral tenement and land tenure status	<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.</i> <i>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>	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. Cummins Range Pty Ltd has purchased the tenement from Element 25 with a potential capped royalty payment of \$1m should a positive PFS be completed within 36 months of purchase finalisation.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	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.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	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 back ground levels of 1000-2000ppm TREO and high grade zones up to 8% TREO. The current resource sits primarily within the oxidised/weathered zone which reaches to 120m below the surface. Metallurgical studies by previous explorers show the rare earth

		elements are hosted by Monazite which is a common and favourable host for rare earth elements.
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: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole 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.	Drill hole locations are shown on the collar plan Figure 1 and in the collar table.
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.	- No assay results have been released in this announcement. - No significant intercepts were calculated
Relationship between mineralisation widths and	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.	Assay results have not been received. When assays are available the RareX geological team will evaluate the geometry of the mineralisation.

intercept lengths	<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>	
Diagrams	<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>	• Drill collar locations are shown in Figure 1
Balanced reporting	<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>	• Reporting is considered balanced
Other substantive exploration data	<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>	• This announcement describes the initial geological interpretations of the first diamond drill holes at Cummins Range since the early 1980s. RareX have recently completed a JORC compliant resource upgrade of 18.8Mt at 1.15% TREO + 0.14% Nb₂O₃, announced on 19th July 2021. Metallurgical studies are currently being conducted. Mining study drill holes have been drilled in recent weeks, and water monitoring bores will be drilled next month.
Further work	<i>The nature and scale of planned further work (eg tests for lateral 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>	• Diamond and RC drilling will continue into December. • Water monitoring bores will be drilled next month. • Metallurgical tests are being conducted