

# STRONG INITIAL RESULTS FROM RC DRILLING EXPAND SIZE OF MAIN FAULT AND DISCOVER NEW NORTHERN MINERALISED FAULT

First batch of assays confirm true width of the Main Fault to be >40m and identify new mineralised position, highlighting the deposit's exceptional growth potential

# HIGHLIGHTS

- CRX0063 intersects multiple mineralised zones including:
  - Main Fault 41m at 2.4% TREO and 0.51%  $Nb_2O_5$  from 57m, including:
    - <u>10m 4.1% TREO and 0.75% Nb<sub>2</sub>O<sub>5</sub></u>
  - Secondary Zone 28m at 0.8% TREO and 0.24% Nb<sub>2</sub>O<sub>5</sub> (open at depth and down-dip)
- Northern Fault discovered parallel to the Main Fault
- Follow-up diamond drilling targeting depth extensions continuing

RareX Limited (ASX: REE; **RareX** or **the Company**) is pleased to advise that it has received highly encouraging initial results from the recently completed initial phase of 1500m of reverse circulation (**RC**) drilling at its flagship Cummins Range Rare Earths Project in the Kimberley region of Western Australia.

The RC drilling was designed to test both the Company's geological interpretation prior to the commencement of the diamond drilling and to test areas for new mineralised trends.

The program has proven to be successful on both counts, highlighting the exceptional scope to grow the Cummins Range Mineral Resource.

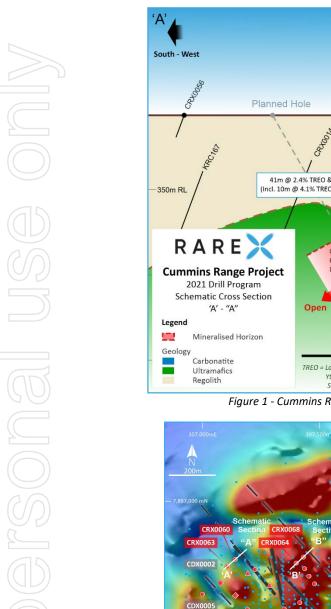
Drilling on the north-western end of the Main Fault Zone exceeded expectations and has intersected wide zones of high-grade rare earths for a cumulative down-hole width of 88m in CRX0063 including a higher-grade zone of **41m at 2.4% TREO and 0.51% Nb<sub>2</sub>O<sub>5</sub> including 10m @ 4.1% TREO and 0.74% Nb<sub>2</sub>O<sub>5</sub>** in the interpreted Main Fault position.

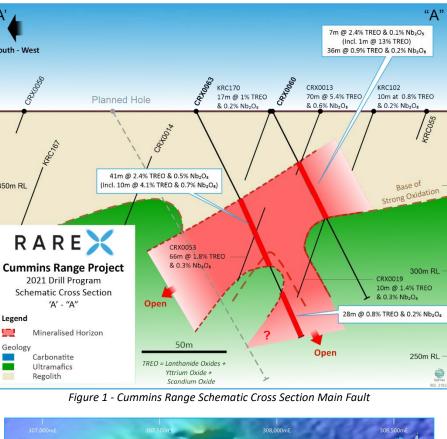
A secondary zone below this also intersected 28m at 0.8% TREO and 0.24% Nb<sub>2</sub>O<sub>5</sub> in fresh rock to the end-of-hole. The holes were drilled perpendicular to the Main Fault at 50 degrees azimuth and, from geological interpretations, the drilled intersections are true width.

A follow-up diamond drill hole is being planned to test for mineralisation down-dip of this intercept.

Diamond drilling down-dip of these high-grade intercepts will assist the Company's geological team to better understand the geological controls on the Main Fault Zone and to target further diamond drill holes.







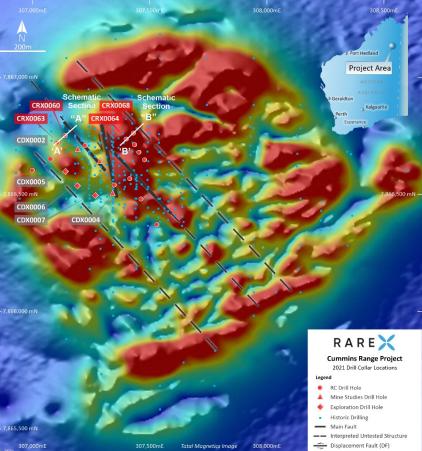


Figure 2 - Cummins Range Plan



These RC drill results have also confirmed the **discovery of a second parallel mineralised structure called the Northern Fault** with intercepts including 15m at 1.1% TREO and 12m at 1.1% TREO.

Further drilling is planned to test for extensions of this structure both along strike and at depth.

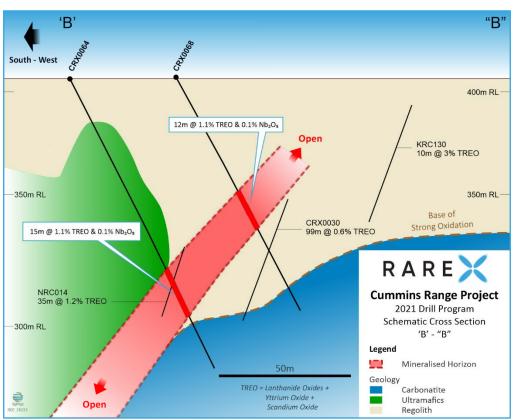


Figure 3 - Cummins Range Schematic Section Northern Fault

Diamond drilling is continuing with results to be provided to the market when available. This announcement has been authorised for release by the Board of RareX Limited.

# For further information, please contact:

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.



# Appendix 1: Drill Collar Details

	Hole ID	East MGA	North MGA	End Depth	Azimuth	Dip	Туре	Assays
1	CRX0059	307462	7866481	96	50	60	RC	Received
1	CRX0060	307139	7866751	120	50	60	RC	Received
1	CRX0061	306998	7866604	120	50	60	RC	Received
	CRX0062	307223	7866709	108	50	60	RC	Awaiting
)	CRX0063	307106	7866720	144	50	60	RC	Received
	CRX0064	307399	7866736	120	50	60	RC	Received
	CRX0065	307530	7866370	120	50	60	RC	Awaiting
)	CRX0066	307348	7866540	132	90	0	RC	Awaiting
	CRX0067	307435	7866712	120	50	60	RC	Awaiting
)	CRX0068	307430	7866762	96	50	60	RC	Received
1	CRX0069	307454	7866679	120	50	60	RC	Awaiting
)	CRX0070	307477	7866648	144	50	60	RC	Awaiting



### **Appendix 2: Significant Results**

HoleID	From	То	Interval	TREO %	Nb₂0₅ %	P <sub>2</sub> O <sub>5</sub> %
CRX0059	1	6	5	0.65	0.15	13.53
CRX0059	19	32	13	1.23	0.15	8.75
Incl.	21	22	1	7.58	0.31	11.94
CRX0059	64	66	2	0.59	0.05	3.64
CRX0059	90	95	5	0.69	0.04	2.28
CRX0060	12	14	2	0.63	0.07	1.11
CRX0060	28	35	7	2.4	0.14	3.79
CRX0060	42	78	36	0.94	0.24	8.93
Incl.	56	59	3	2.08	0.3	3.83
CRX0061	10	12	2	1.34	0.05	2.91
CRX0061	21	25	4	1.14	0.06	4.21
CRX0061	30	32	2	0.66	0.05	3.68
CRX0061	90	95	5	0.56	0.1	4.22
CRX0063	18	34	16	0.77	0.12	3.04
CRX0063	46	49	3	0.64	0.08	2.54
CRX0063	57	98	41	2.37	0.51	7.61
Incl.	72	82	10	4.07	0.74	7.35
CRX0063	116	144	28	0.81	0.24	12.39
Incl.	129	131	2	2.34	0.18	16.13
CRX0064	81	96	15	1.09	0.12	23.37
Incl.	81	83	2	2.75	0.13	29.11
CRX0068	43	55	12	1.07	0.07	27.38
CRX0068	58	60	2	0.67	0.05	20.76
CRX0068	64	66	2	0.69	0.05	21.77

TREO % = Lanthanide Oxides + Yttrium Oxide + Scandium Oxide



Appendix 3: JORC Table

Cummins Range Section 1 Sampling Techniques and Data				
Criteria	JORC Code Explanation			
Sampling techniques	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. Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka,	<ul> <li>The Cummins Range Rare Earth deposit was drilled tested with RC drilling.</li> <li>The RC drill rig used a 5 ½ inch diameter hammer. Each 1m bulk sample was collecte in a plastic bag.</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 bulk sample was split with a riffle splitter to the appropriate size. Samples varied in length from 1m to 4m.</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> <li>Reverse circulation (RC) drilling was used for the entire drill program</li> </ul>		
Techniques	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).			
Drill Sample Recovery	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> <li>Drill sample recovery was logged</li> <li>Sample recovery for drill holes are CRX0059 97%, CRX0060 97%, CRX0061 98%, CRX0063 95%, CRX0064 96%, CRX0068 95%. These recoveries exclude the top 3m where sample recovery is poor due to fine unconsolidated sands.</li> </ul>		
	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> <li>All metres drilled had a geology log completed. Geology logs were aided using geochemical analysis from a portable XRF.</li> <li>The detail of logging is appropriated for Mineral Resource estimation.</li> </ul>		
Sub- sampling	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.	• 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.		



techniques and sample preparation	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.	This sampling technique is better than industry standards and is appropriate for this style of mineralisation and for resource estimation.
Quality of assay data and laboratory tests	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.	<ul> <li>The reported assays were analysed by Nagrom. The following techniques were used:</li> <li>28 elements were assayed for using peroxide fusion with a ICP-OES and ICP-MS finish</li> <li>14 elements were assayed for using four acid digest with a ICP-OES and ICP-MS finish</li> <li>In addition to internal checks by Nagrom, RareX incorporates a QA/QC sample protocol utilizing prepared standards, blanks and duplicates for 8% of all assayed samples.</li> </ul>
Verification of sampling and assaying	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.	<ul> <li>Significant intercepts were calculated by RareX geological staff.</li> <li>The intercepts have not been verified by independent persons</li> <li>There are numerous drill holes with in the Cummins Range resource of comparable tenure</li> <li>All 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>
Location of data points	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. Quality and adequacy of topographic control.	<ul> <li>Drill hole collars were located by handheld GPS</li> <li>All coordinates are in MGA Zone 52H 1994</li> <li>Topographic control is maintained by the use of previously surveyed drill holes. The Cummins Range deposit is located in flat terrain.</li> <li>Down hole surveys were taken every 30m, using a digital Reflex multi shot camera.</li> </ul>
Data spacing and distribution	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.	<ul> <li>The purposed of the drill program is to test the new geological model, including new mineralised structures.</li> <li>This drill spacing will be sufficient to demonstrate grade continuity to support the definition of a Mineral Resource as per the JORC 2012 code</li> <li>2m to 4m composites were completed in areas where higher grades were not expected</li> </ul>



	Orientation of data in relation to geological structure	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	<ul> <li>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.</li> </ul>
		structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
9	Sample security	The measures taken to ensure sample security	<ul> <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>

Criteria	JORC Code Explanation	
Mineral tenement and land tenure status	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> <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. 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.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <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>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <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 or fresh 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.</li> </ul>
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	• Drill collar details are in the collar table. Cummins Range is located on very flat terrain and the RL is at 391m to 392m. All drill holes are drilled from this RL.



	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	
7	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.	
Data	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum	<ul> <li>Significant intercepts were calculated using weighted averaging</li> </ul>
aggregation	grade truncations (eg cutting of high grades) and cut-off grades are usually Material and	<ul> <li>A lower cut off of 0.5% Lanthanide Oxides + Y2O3 + Sc2O3 was used with a maximum</li> </ul>
methods	should be stated.	of 5m dilution. This cut off grade and dilution is thought to be appropriate due to
	Where aggregate intercepts incorporate short lengths of high grade results and longer	likely open cut mining methods that would be used on the outcropping ore body.
	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.	
Relationship	These relationships are particularly important in the reporting of Exploration Results	RareX are currently testing a geological model that the primary source of the REE are
between	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature	concentrated in structures and as the structures are weathered the monazite is being
mineralisation	should be reported.	dispersed and concentrated in the regolith. RareX are drilling these structures at 50
widths and	If it is not known and only the down hole lengths are reported, there should be a clear	degrees azimuth to confirm the structures true width. This first phase of drilling has
intercept	statement to this effect (eg 'down hole length, true width not known').	confirmed the model in the areas that have been drilled. Mineralised intervals appear
lengths		to be very close to truth width. However further drilling will be needed to firm up the
		geological model. Diamond drilling has commenced and will be testing the
		mineralisation in fresh rock.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included	Maps and diagrams are included in the body of the announcement
	for any significant discovery being reported These should include, but not be limited to a plan	in the source of the ansate included in the body of the announcement
Balanced		Reporting is considered balanced
reporting		
	reporting of Exploration Results.	
Other	Other exploration data, if meaningful and material, should be reported including (but not	This announcement describes the first batch of assays and further assays are
substantive	limited to): geological observations; geophysical survey results; geochemical survey results;	expected to be delivered on a regular basis to the end of the year.
exploration	bulk samples – size and method of treatment; metallurgical test results; bulk density,	
data	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating	
	substances.	
reporting Other substantive exploration	view of drill hole collar locations and appropriate sectional views. 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. 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	



F	urther work	The nature and scale of planned further work (eg tests for lateral extensions or large scale	Drilling will continue for the next few months
		step out drilling.	Geological model continues to be developed
		Diagrams clearly highlighting the areas of possible extensions, including the main geological	Water monitoring bores for mining studies will be drilled next month
$\geq$		interpretations and future drilling areas, provided this information is not commercially	Metallurgical studies are on going
		sensitive.	