

ASX Release: 20 September 2022

## EXTENSIVE PHOSPHATE AND RARE EARTHS MINERAL SYSTEM EMERGING AT CUMMINS RANGE WITH 384 METRE INTERSECTION

*Record intercept in first diamond hole plus multiple 100m+ intercepts in RC drilling significantly expands the scale of the Project*

### HIGHLIGHTS

- Phosphate intercept of **384.4m at 4% P<sub>2</sub>O<sub>5</sub> and 0.3% TREO** in diamond hole CDX0020
- Multiple strong rare earths zones intersected including 11.6m at 1.9% TREO
- Outstanding results also received from six reverse circulation (RC) holes including:
  - **153m at 11% P<sub>2</sub>O<sub>5</sub> and 0.4% TREO** (CRX0081) including:
    - 20m at 25% P<sub>2</sub>O<sub>5</sub> and 10m at 31% P<sub>2</sub>O<sub>5</sub>
  - 46m at 1.1% TREO and 15% P<sub>2</sub>O<sub>5</sub> (CRX0074) within a wider phosphate intercept of:
    - **108m at 10% P<sub>2</sub>O<sub>5</sub>**
- Results show that Cummins Range is emerging as major phosphate and rare earths system
- Assays pending from multiple deep diamond holes

RareX Limited (**RareX**, the **Company**) (ASX: REE) is pleased to report significant new results received from diamond and reverse circulation (RC) drilling being undertaken as part of the 2022 growth drilling program at its 100%-owned **Cummins Range Rare Earths and Phosphate Project** in the Kimberley region of Western Australia.

The first assays for a complete diamond drill hole have been received for CDX0020, which returned an impressive intercept of **384.4m at 4% P<sub>2</sub>O<sub>5</sub> and 0.3% TREO** and a high-grade rare earths zone of **11.6m at 1.9% TREO**.

Assays have also been received for six RC drill holes which returned wide and high-grade phosphate and rare earths intercepts including **153m at 11% P<sub>2</sub>O<sub>5</sub> and 0.4% TREO** from hole CDX0081.

Multiple broad intercepts over one hundred metres have the potential to significantly expand both the rare earths and phosphate components of the Cummins Range deposit and add to the current JORC 2012 Indicated and Inferred Mineral Resource Estimate (at a 0.5% TREO cut-off) of 18.8 million tonnes at 1.15% TREO and 10% P<sub>2</sub>O<sub>5</sub> (ASX: 19 July 2021).

These outstanding results add further momentum to the Cummins Range Project following the delivery of the recent positive Scoping Study (ASX: 12 September 2022) and are expected to further enhance project economics.

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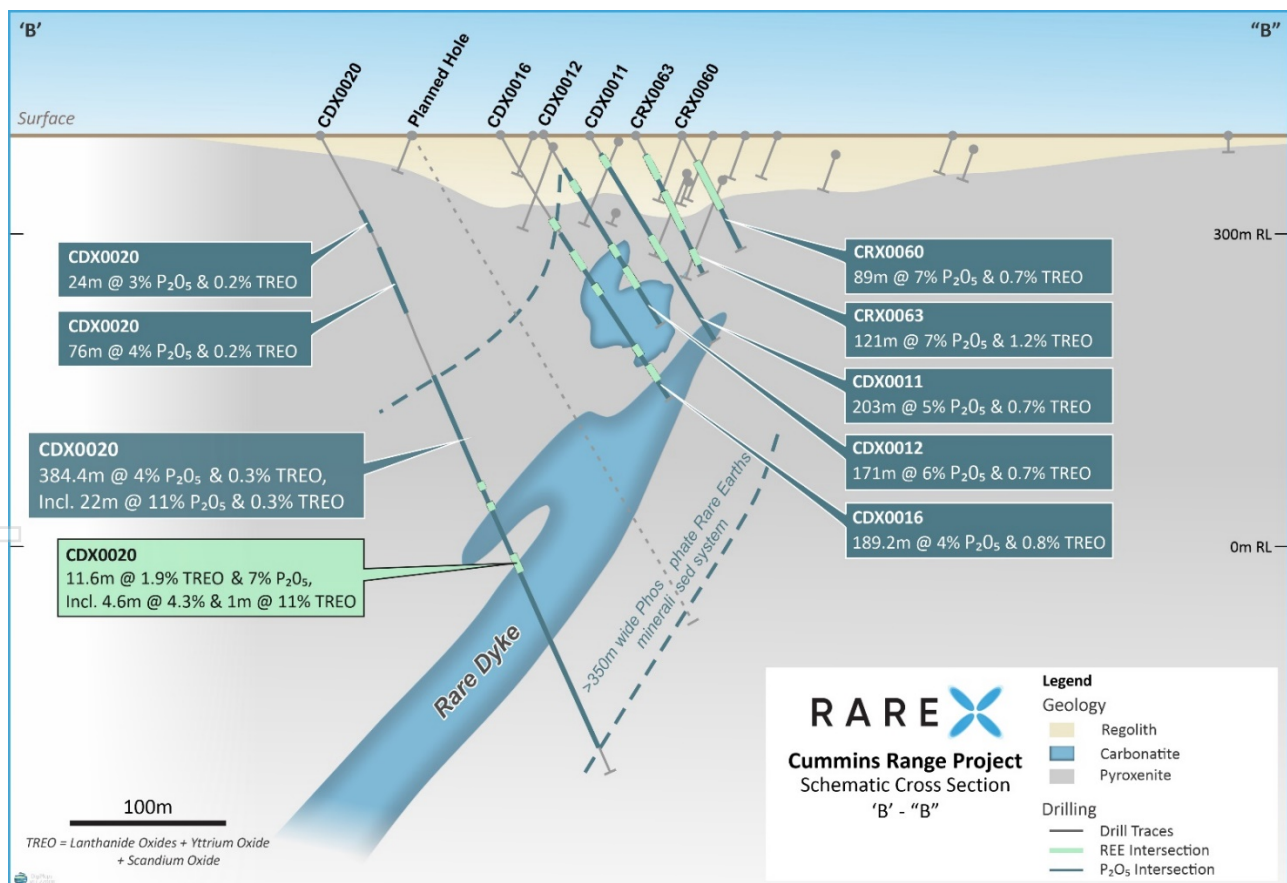
RareX Managing Director, Jeremy Robinson, said the initial assay results from deeper drilling had further increased the scale of the Cummins Range deposit and confirmed the presence of a very large mineral system:

*“Our deeper drilling has shown that carbonatite pipes are very large mineralising systems capable of hosting millions of tonnes of rare earth oxides and top-quality rock phosphate. We look forward to releasing further results from diamond holes to the south-east, closer to the centre of the system.”*

*“The phosphate mineralisation on the Phos Dyke is shaping up to be a very large body of phoscorite, with the rare earths-rich carbonatite veins reported in this release and in our last announcement proving to be an added bonus.”*

## Diamond Drill-Hole CDX0020

CDX0020 has intersected numerous phosphate and rare earths zones including 384.4m at 4%  $P_2O_5$  and 0.3% TREO. The wide zone is centred around the 80m wide Rare Dyke, as shown on Figure 1.



**Figure 1. Drill section showing phosphate and rare earths intercepts for CDX0020. Location of section is shown on Figure 6.**



The Rare Dyke and hanging wall/footwall positions have abundant coarse disseminations of apatite with 26 monazite/bastnasite mineralised zones ranging from 0.3m to 11.6m. These zones accumulate to a total of 43m at 1.7% TREO (significant intercepts shown in Table 1). The strongest mineralised zone of 11.6m at 1.9% TREO and 7% P<sub>2</sub>O<sub>5</sub> is located on the hanging wall contact of the Rare Dyke. Multiple rare earth zones above are hosted in carbonatite bands proximal to the Rare Dyke.



**Figure 2. CDX0020 447-456m: rare earths and phosphate mineralised intersection of 11.6m at 1.9% TREO and 7% P<sub>2</sub>O<sub>5</sub> including 1.2m at 11.4% TREO and 8% P<sub>2</sub>O<sub>5</sub>.**

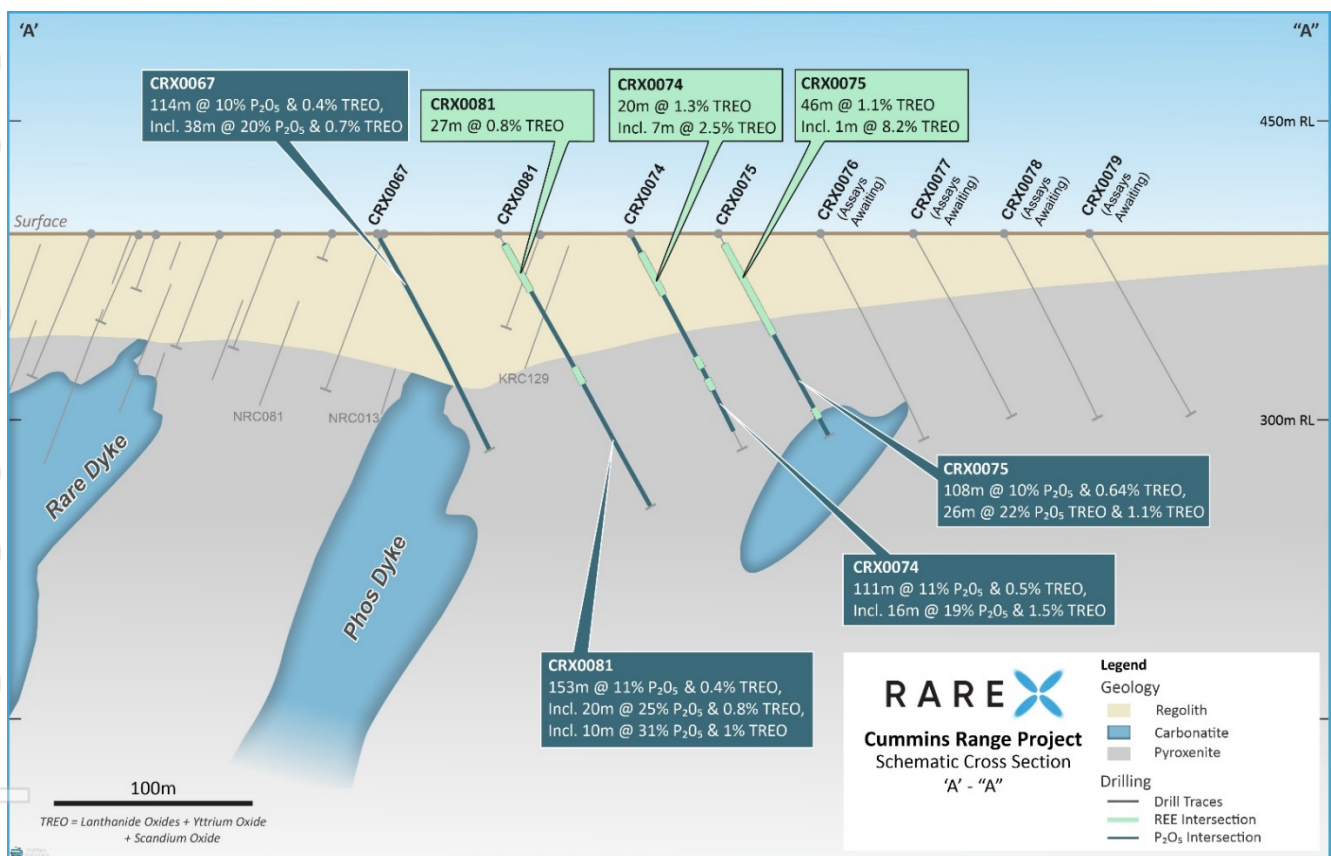
Figure 1 shows phosphate intercepts for the drill-holes completed up-dip of hole CDX0020. All of these drill holes have strong phosphate and rare earths mineralisation including CRX0063, which intersected 121m at 7% P<sub>2</sub>O<sub>5</sub> and 1.2% TREO.

All of the drill holes completed up-dip have been stopped in strong phosphate mineralisation, with the footwall position of the Rare Dyke remaining wide open.

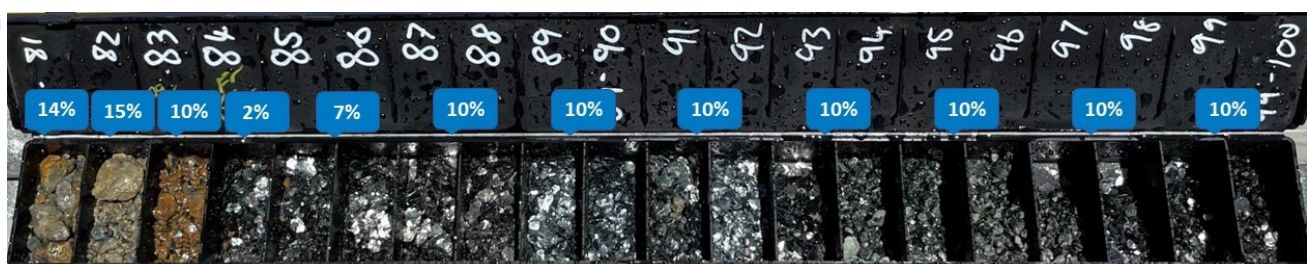
## Phos Dyke RC Results

Assays for the first three drill holes at the Phos Dyke (CRX0074, CRX0075 and CRX0081) have been received with all three generating intercepts of more than 100m of high-grade phosphate.

The most mineralised was CRX0081, which intersected **153m at 11% P<sub>2</sub>O<sub>5</sub> and 0.4% TREO**, including 20m at 25% P<sub>2</sub>O<sub>5</sub> and 0.82% TREO and 10m at 31% P<sub>2</sub>O<sub>5</sub> and 1% TREO. The drill intercepts are shown on Figure 3 and the Percent Metre Contour plan is shown in Figure 5. Significant phosphate intercepts are shown in Table 2.



**Figure 3. Section showing results from the first 3 RC holes into the Phos Dyke. Location of section is shown on Figure 6.**



**Figure 4. RC drill chips 80-100m. Showing phosphate percent in the phlogopite-apatite rich phoscorite.**

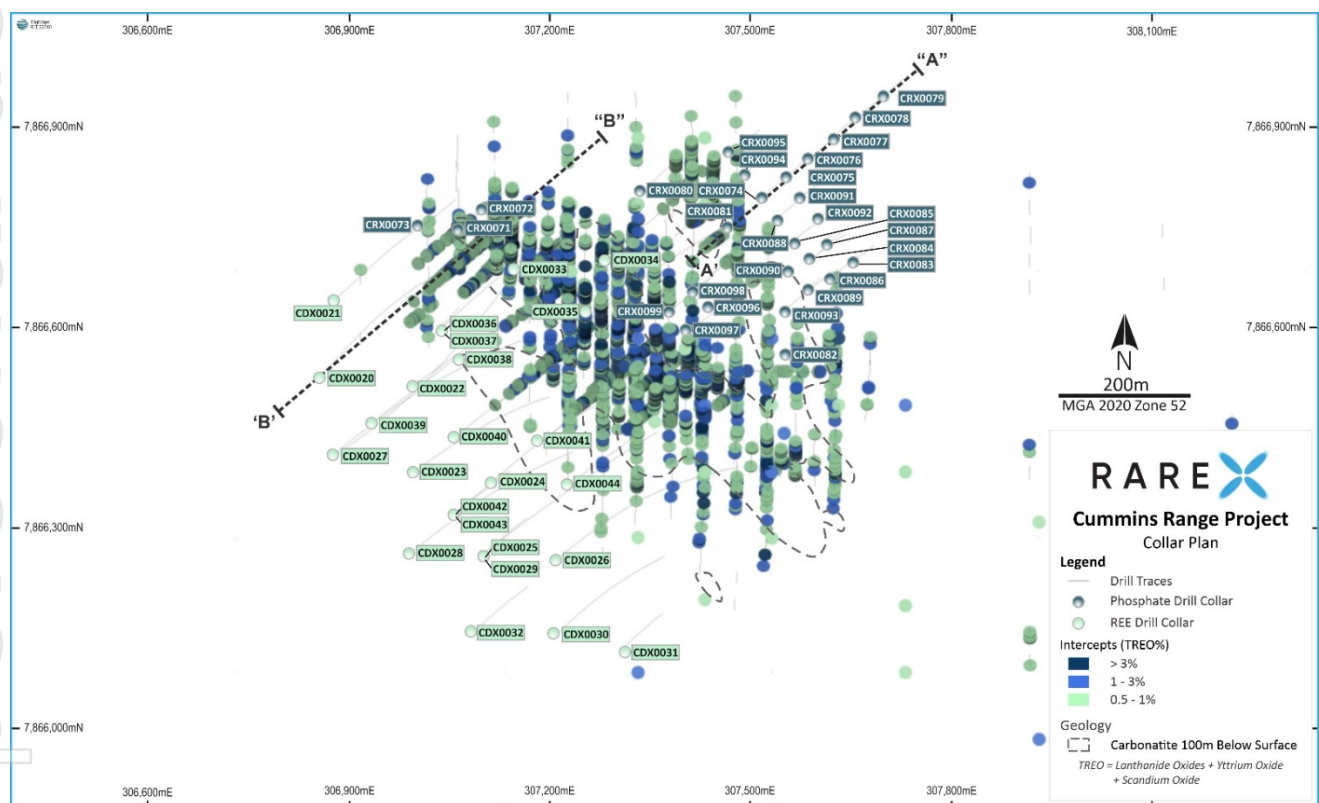




Numerous mineralised zones were intersected in hole CRX0071, including 7m at 1.9% TREO and 6% P<sub>2</sub>O<sub>5</sub>, 29m at 0.9% TREO including 5m at 2% and 4m at 2% TREO. All of these intersections are located within a larger phosphate intersection of 98m at 8% P<sub>2</sub>O<sub>5</sub> and 0.7% TREO.

CRX0072 was drilled in front of CRX0071 and intersected 76m at 5% P<sub>2</sub>O<sub>5</sub> and 0.5% TREO, with rare earth intercepts of 4m at 1.4% TREO and 14m at 0.9% TREO.

CRX0073 had narrower rare earths mineralisation and weaker phosphate. These intercepts can be found in the significant intercept Tables 1 and 2. The weaker mineralisation likely marks the north-western edge of the Rare Dyke.



**Figure 6. Drill collar location plan showing TREO mineralisation, 2022 drill holes and section locations**

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

## Competent Person's Statements

The information in this announcement that relates to the geological model is based on and fairly represents information compiled by Mr Guy Moulang, an experienced geologist who is an employee of RareX Limited. Mr Moulang 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 to which he is undertaking 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 announcement of the matters based on this information in the form and context in which it appears.

Prior exploration results were reported in accordance with Listing Rule 5.7 and the Company confirms there have been no material changes since the information was first reported.

The mineral resource estimate in this announcement were reported by the Company in accordance with Listing Rule 5.8 on 19 July 2021. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimates in the previous announcement continue to apply and have not materially changed.



## Appendix 1: Significant Intercepts and Drill Collar Tables

**Table 1. TREO Significant Intercepts, TREO = Lanthanide Oxides + Yttrium Oxide + Scandium Oxide**

TREO SIGNIFICANT INTERCEPTS (0.5% Cut Off)									
Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
	CDX0020	89	90	1	1.15	0.22	19	0.04	3
	CDX0020	146	148	2	0.66	0.13	20	0.07	3
Rare Dyke Hanging wall	CDX0020	210	211	1	0.83	0.16	19	0.01	3
Rare Dyke Hanging wall	CDX0020	215	216	1	0.73	0.14	19	0.02	3
Rare Dyke Hanging wall	CDX0020	233.2	240.1	6.9	0.49	0.09	19	0.03	3
Rare Dyke Hanging wall	CDX0020	255.4	255.9	0.5	0.76	0.14	18	0.02	4
Rare Dyke Hanging wall	CDX0020	257.8	258.2	0.4	0.53	0.1	20	0.02	3
Rare Dyke Hanging wall	CDX0020	271.5	271.8	0.3	0.55	0.09	16	1.33	0
Rare Dyke Hanging wall	CDX0020	274.8	275.5	0.7	0.68	0.12	18	0.09	3
Rare Dyke Hanging wall	CDX0020	280.1	285.2	5.1	0.59	0.18	30	0.21	10
Rare Dyke Hanging wall	CDX0020	313.5	315.6	2.1	1.48	0.25	17	0.04	2
Rare Dyke Hanging wall	CDX0020	319.25	319.75	0.5	1.2	0.18	15	0.05	2
Rare Dyke Hanging wall	CDX0020	329	329.85	0.85	0.52	0.1	20	0.08	4
Rare Dyke Hanging wall	CDX0020	345	346.4	1.4	5.74	0.87	15	0.06	2
Rare Dyke Hanging wall	CDX0020	354.9	355.6	0.7	0.74	0.13	18	0.09	5
Rare Dyke Hanging wall	CDX0020	375	376.5	1.5	3.85	0.54	14	0.15	4
Rare Dyke Hanging wall	CDX0020	392	393	1	5.41	0.81	15	0.26	1
Rare Dyke Hanging wall	CDX0020	408	409	1	0.76	0.12	16	0.43	2
Rare Dyke Hanging wall	CDX0020	413	413.5	0.5	0.59	0.09	16	0.06	0
Rare Dyke Hanging wall	CDX0020	415	416	1	0.71	0.11	15	0.14	0



## TREO SIGNIFICANT INTERCEPTS (0.5% Cut Off)

Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Rare Dyke Hanging wall	CDX0020	418.4	419.3	0.9	0.8	0.13	16	0.12	1
Rare Dyke Hanging wall	CDX0020	438	440.2	2.2	0.54	0.12	23	0.51	5
Rare Dyke Hanging wall	CDX0020	448.4	460	11.6	1.87	0.29	16	0.06	7
Rare Dyke Hanging wall	Incl.	448.4	453	4.6	4.28	0.64	15	0.06	6
Rare Dyke Hanging wall	Incl.	450.2	451.4	1.2	11.35	1.63	14	0	8
Rare Dyke	CDX0020	478.6	479	0.4	1.04	0.18	18	0.03	2
Rare Dyke	CDX0020	489.6	494	4.4	0.74	0.13	17	0.97	3
Rare Dyke	Incl.	493	494	1	2.27	0.36	16	0.57	2
Rare Dyke	CDX0020	528.85	529.95	1.1	0.56	0.11	20	0.12	4
Rare Dyke Footwall	CDX0020	541.5	543	1.5	2.12	0.32	15	0.2	0
Rare Dyke Footwall	CDX0020	547.2	549	1.8	0.63	0.11	18	0.24	4
Rare Dyke Footwall	CDX0020	571	571.4	0.4	0.79	0.14	17	0.07	4
Rare Dyke Footwall	CDX0020	626.4	627	0.6	0.51	0.1	20	0.1	4
Rare Dyke Footwall	CDX0020	663.5	664	0.5	1.76	0.39	22	0.04	11
Rare Dyke	CRX0071	4	8	4	0.58	0.1	18	0.07	2
Rare Dyke	CRX0071	34	38	4	1.02	0.21	20	0.07	3
Rare Dyke	CRX0071	46	47	1	1.99	0.38	19	0.25	5
Rare Dyke	CRX0071	63	70	7	1.91	0.39	20	0.5	6
Rare Dyke	Incl.	64	67	3	3.54	0.7	20	0.96	6
Rare Dyke	CRX0071	80	109	29	0.88	0.19	22	0.27	12
Rare Dyke	Incl.	81	86	5	2.01	0.38	19	0.79	10
Rare Dyke	Incl.	82	83	1	4.51	0.8	18	2.56	4
Rare Dyke	CRX0071	117	136	19	0.86	0.17	20	0.18	6
Rare Dyke	Incl.	123	127	4	2.03	0.4	19	0.12	7
Rare Dyke Footwall	CRX0072	20	24	4	1.35	0.27	20	0.12	9
Rare Dyke Footwall	CRX0072	34	48	14	0.92	0.19	21	0.25	5
Rare Dyke Footwall	Incl.	43	45	2	1.89	0.38	20	0.95	4

TREO SIGNIFICANT INTERCEPTS (0.5% Cut Off)									
Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Rare Dyke	CRX0073	43	45	2	1.99	0.4	20	0.03	3
Rare Dyke	CRX0073	79	82	3	0.62	0.13	21	0.05	3
Phos Dyke	CRX0074	13	33	20	1.3	0.27	21	0.06	17
Phos Dyke	Incl.	20	33	13	1.74	0.37	21	0.07	22
Phos Dyke	Incl.	26	33	7	2.54	0.5	20	0.04	24
Phos Dyke	CRX0074	68	72	4	0.82	0.17	21	0.04	9
Phos Dyke	CRX0074	82	86	4	0.97	0.2	20	0.11	17
Phos Dyke	CRX0075	6	52	46	1.12	0.27	24	0.06	15
Phos Dyke	Incl.	6	21	15	1.44	0.34	24	0.11	6
Phos Dyke	Incl.	9	10	1	3.06	0.6	20	0.08	5
Phos Dyke	Incl.	18	19	1	3.29	0.83	25	0.39	7
Phos Dyke	Incl.	33	34	1	8.23	1.41	17	0.03	23
Phos Dyke	CRX0075	99	103	4	1.17	0.21	18	0.08	3
Phos Dyke	CRX0081	3	30	27	0.78	0.19	24	0.05	21
Phos Dyke	Incl.	20	27	7	1.12	0.28	25	0.05	31
Phos Dyke	CRX0081	74	83	9	0.62	0.15	24	0.04	14

**Table 2. Phosphate Significant Intercepts, TREO = Lanthanide Oxides + Yttrium Oxide + Scandium Oxide**

PHOSPHATE SIGNIFICANT INTERCEPTS (3% Cut)									
Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
	CDX0020	80	104	24	0.15	0.03	22	0.05	3
	CDX0020	120	196	76	0.16	0.04	24	0.04	4
Rare Dyke	CDX0020	254	638.4	<b>384.4</b>	0.33	0.07	20	0.08	4
Rare Dyke Footwall	Incl.	586.3	608.75	22.45	0.29	0.08	28	0.04	11
Rare Dyke	CRX0071	46	144	98	0.7	0.15	21	0.19	8
Rare Dyke	Incl.	84	103	19	0.77	0.18	23	0.22	15
Rare Dyke	CRX0072	20	96	76	0.46	0.1	22	0.11	5
Rare Dyke	CRX0073	81	108	27	0.2	0.05	24	0.06	3
Phos Dyke	CRX0074	0	111	111	0.51	0.12	23	0.05	11
Phos Dyke	Incl.	18	34	16	1.5	0.31	20	0.06	19
Phos Dyke	CRX0075	6	114	108	0.64	0.15	24	0.05	10
Phos Dyke	Incl.	25	51	26	1.06	0.25	24	0.04	22
Phos Dyke	CRX0081	3	156	153	0.4	0.1	26	0.04	11
Phos Dyke	Incl.	10	30	20	0.82	0.2	24	0.06	25
Phos Dyke	Incl.	17	27	10	1.03	0.26	25	0.05	31

**Table 3. Collar Table**

Hole ID	East MGA	North MGA	RLUTM	End Depth (m)	Azimuth	Dip	Type	Status
CDX0020	306871	7866529	392	666	50	60	Diamond	Assays Received
CDX0021	306890	7866641	392	345.2	50	60	Diamond	Awaiting Assays
CDX0022	307007	7866511	391	470.6	50	60	Diamond	Awaiting Assays
CDX0023	307009	7866383	392	569.9	50	60	Diamond	Awaiting Assays
CDX0024	307123	7866367	391	545.8	50	60	Diamond	Awaiting Assays
CDX0025	307113	7866260	391	198	50	60	RC	Awaiting Assays
CDX0026	307222	7866252	391	578.8	50	60	Diamond	Awaiting Assays
CDX0027	306891	7866411	392	653.8	50	60	Diamond	Awaiting Assays
CDX0028	307005	7866263	392	695.8	50	60	Diamond	Awaiting Assays
CDX0029	307115	7866262	391	578.8	50	60	Diamond	Awaiting Assays
CDX0030	307220	7866139	391	515.9	50	60	Diamond	Awaiting Assays
CDX0031	307324	7866122	391	150	50	60	RC	Awaiting Assays
CDX0032	307101	7866148	391	198	50	60	RC	Awaiting Assays
CDX0033	307154	7866673	391	701	217	60	Diamond	Awaiting Assays
CDX0034	307296	7866700	392	293.8	50	60	Diamond	Being processed
CDX0035	307267	7866608	390	476.7	50	60	Diamond	Being processed
CDX0036	307046	7866596	392	84	50	60	RC	Being processed
CDX0037	307040	7866590	392	428.9	50	60	Diamond	Being processed
CDX0038	307076	7866551	392	464.9	50	60	Diamond	Being processed
CDX0039	306946	7866457	392	324	50	60	RC	Being processed
CDX0040	307071	7866436	392	476.9	50	60	Diamond	Being processed
CDX0041	307202	7866431	391	446.9	50	60	Diamond	Being processed
CRX0071	307080	7866743	393	144	50	60	RC	Assays Received
CRX0072	307113	7866776	393	96	50	60	RC	Assays Received
CRX0073	307023	7866747	393	138	50	60	RC	Assays Received
CRX0074	307528	7866794	391	120	50	60	RC	Assays Received
CRX0075	307561	7866824	391	114	50	60	RC	Assays Received
CRX0076	307602	7866854	391	114	50	60	RC	Awaiting Assays
CRX0077	307638	7866884	391	102	50	60	RC	Awaiting Assays
CRX0078	307672	7866914	391	102	50	60	RC	Awaiting Assays
CRX0079	307708	7866938	391	102	50	60	RC	Awaiting Assays
CRX0080	307349	7866802	392	126	50	60	Diamond	Being processed
CRX0081	307479	7866747	391	156	50	60	Diamond	Being processed
CRX0082	307564	7866558	392	96	50	60	RC	Awaiting Assays
CRX0083	307666	7866694	391	96	50	60	RC	Awaiting Assays
CRX0084	307601	7866701	391	157	50	60	RC	Awaiting Assays



Hole ID	East MGA	North MGA	RLUTM	End Depth (m)	Azimuth	Dip	Type	Status
CRX0085	307578	7866733	391	120	50	60	RC	Awaiting Assays
CRX0086	307624	7866671	391	126	50	60	RC	Awaiting Assays
CRX0087	307621	7866710	391	132	50	60	RC	Awaiting Assays
CRX0088	307549	7866763	391	126	50	60	RC	Being processed
CRX0089	307593	7866649	391	114	50	60	RC	Being processed
CRX0090	307568	7866676	391	114	50	60	RC	Being processed
CRX0091	307586	7866791	391	96	50	60	RC	Being processed
CRX0092	307613	7866762	391	96	50	60	RC	Being processed
CRX0093	307565	7866624	391	150	50	60	RC	Being processed
CRX0094	307502	7866829	391	120	50	60	RC	Being processed
CRX0095	307479	7866857	391	120	50	60	RC	Being processed
CRX0096	307445	7866625	391	132	50	60	RC	Being processed
CRX0097	307415	7866591	391	150	50	60	RC	Being processed
CRX0098	307421	7866647	391	132	50	60	RC	Being processed
CRX0099	307389	7866622	391	174	50	60	RC	Being processed

## Appendix 2: JORC Code, 2012 Edition – Table 1

Cummins Range Section 1 Sampling Techniques and Data		
Criteria	JORC Code Explanation	
<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 sample has a 4% cone split from the drill rig. Samples submitted to the laboratory vary in length from 1m to 4m.</li> <li>• Each core sample was cut in half with an automatic core saw. The half core sample was sent to the laboratory with intervals ranging from 0.3m to 1.3m.</li> <li>• Samples are assayed for 35 elements using peroxide fusion 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.</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 all drill holes were recorded for each metre.</li> <li>• Recoveries for the RC drilling in this announcement are &gt;95%</li> <li>• Recoveries for the Diamond drilling in this announcement are &gt;99%</li> </ul>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of</i></p>	

	<p><i>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.</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> <li>• The detail of logging is appropriated for Mineral Resource estimation.</li> </ul>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>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.</i></p> <p><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></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>• A 4% split from the cone splitter on the drill rig is used for the laboratory assay. Samples are often composited and samples can range from 1-4m.</li> <li>• This RC sampling technique meets the 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 half the core was sent to the laboratory. This is an appropriate method for this style of mineralization and for resource estimation.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total</i></p> <p><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></p> <p><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></p>	<p>The reported assays were analysed by Nagrom. The following techniques were used:</p> <ul style="list-style-type: none"> <li>• 35 elements were assayed for using peroxide fusion 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>
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <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,</li> </ul>



		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
<b>Location of data points</b>	<p><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></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>• Drill hole collars were located by handheld GPS and DGPS</li> <li>• All coordinates are in MGA Zone 52H 2020</li> <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 10m using an Axis Gyro tool</li> </ul>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><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></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>• CDX0020 was targeting closer to CDX0016 but the hole dropped significantly in the upper 300m, resulting in a 200m gap between hole CDX0020 and CDX0016. An infill hole is being drilled between the two to establish grade continuity. The exploration team are seeing the same geological positions mineralised along strike, suggesting RareX have a solid geological model, however this is not supported by assays as yet.</li> <li>• The purpose of the RC drilling on the Phos Dyke is to extend the phosphate and rare earths mineralization to the north east. Drill spacing of 40m x 40m grid 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>	<p><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></p> <p><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></p>	<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>
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## Cummins Range Section 2 Reporting of Exploration Results

<b>Criteria</b>	<b>JORC Code Explanation</b>	
<b>Mineral tenement and land tenure status</b>	<p><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></p> <p><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></p>	<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. 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>
<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. Kimberley Rare Earths drilled additional holes and upgraded the resource estimate in 2012.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<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 back ground levels of</li> </ul>

		<p>1000-2000ppm TREO and high grade zones up to 17% TREO. The current resource sits primarily within the oxidised/weathered zone which extends 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 are a common and favourable hosts for rare earth elements.</p>
<b>Drill hole information</b>	<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>
<b>Data aggregation methods</b>	<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.</i></p> <p><i>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> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> <li>Significant intercepts were calculated using weighted averaging</li> <li>A lower cut off grade of 0.5% TREO was used for the rare earths intercepts with a maximum of 4m dilution. The cut off grade and dilution are thought to be appropriate due to likely open cut mining methods that would be used on the outcropping ore body.</li> <li>A lower cut off grade of 3% P2O5 was used for the phosphate intercepts with a maximum of 6m dilution. The cut off grade and</li> </ul>



		<p>dilution are thought to be appropriate due to likely open cut mining methods that would be used on the outcropping ore body.</p> <ul style="list-style-type: none"> <li>No metal equivalent values have been used</li> </ul>
<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 widths of the phosphate and rare earths intercepts in this announcement are likely &gt;80% of the true width. The current geological model interprets the Phos Dyke and surrounding lithologies to be similar to the Rare Dyke dipping to the south west. Current drilling is aimed at 50 degrees and 60 degrees dip cutting the interpreted lithologies at a high angle.</li> </ul>
<b>Diagrams</b>	<p><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></p>	<ul style="list-style-type: none"> <li>A drill hole plan, sections and contoured plan view of the Phos Dyke are included.</li> </ul>
<b>Balanced reporting</b>	<p><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></p>	<ul style="list-style-type: none"> <li>Reporting is considered balanced</li> </ul>
<b>Other substantive exploration data</b>	<p><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></p>	<ul style="list-style-type: none"> <li>RareX have a JORC compliant resource of 18.8Mt at 1.15% TREO, 0.14% Nb<sub>2</sub>O<sub>3</sub> and 10% P<sub>2</sub>O<sub>5</sub>. Metallurgical studies are currently being conducted.</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>	<ul style="list-style-type: none"> <li>Awaiting assays for diamond and RC drilling</li> <li>Metallurgical tests are being conducted</li> </ul>

*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*

- PFS have commenced
- Drilling will continue at Cummins Range until November.