



**ASX Release**  
**March 16, 2023**

## More Broad +400m and +200m Rare Earth and Phosphate Intercepts Ahead of Pivotal Cummins Range Resource Upgrade

Rare earths present in monazite with high NdPr and HREO content, confirming the quality of the Cummins Range deposit

### Highlights

- Assay results received for a further 22 drill-holes, with 90% reporting significant rare earth and phosphate mineralisation
- Ten rare earth and phosphate drill intercepts over 200m wide and two over 400m wide, with key assay results including:
  - 426.9m at 0.4% TREO and 4% P<sub>2</sub>O<sub>5</sub> in hole CDX0038; and
  - 406m at 0.3% TREO and 4% P<sub>2</sub>O<sub>5</sub> in CDX0024
- High-grade rare earth intercepts of up to 11.5% TREO include:
  - 35m at 1.6% TREO including 16m at 2.4% TREO in hole CDX0037
  - 11m at 2.2% TREO and 18% P<sub>2</sub>O<sub>5</sub> in CDX0034
  - 9.6m at 1.6% TREO and 8% P<sub>2</sub>O<sub>5</sub> including 3.2m at 3.4% TREO in CDX0040
  - 9.8m at 3.3% TREO and 5% P<sub>2</sub>O<sub>5</sub> including 2.2m at 11.5% TREO in CDX0043
  - 10m at 3.6% TREO and 6% P<sub>2</sub>O<sub>5</sub> including 3m at 9.5% TREO in CDX0050
- Four northernmost drill holes all assaying 5% P<sub>2</sub>O<sub>5</sub> and 0.2% TREO over wide intercepts.
- **Monazite (not apatite) confirmed as the host of rare earths mineralisation in the Phos Dyke, containing highly valuable 44% NdPr and HREO (26% NdPr and 19% HREO)**

Australian sustainable rare earths company, RareX Limited (ASX: REE) (RareX or the Company), is pleased to report assay results from a further 22 drill holes completed as part of the 2022 drilling program at its 100%-owned Cummins Range Rare Earths-Phosphate Project in the Kimberley region of Western Australia.

Significantly, over 90% of the assays received for these holes and reported in this announcement contain significant rare earths and phosphate mineralisation.

Assays for several RC pre-collars for previously announced diamond holes have been received, with several new intercepts greater than 200m in width reported, including 426.9m at 0.4% TREO and 4% P<sub>2</sub>O<sub>5</sub> in hole CDX0038 and 406m at 0.3% TREO and 4% P<sub>2</sub>O<sub>5</sub> in CDX0024.

For more information,  
please contact:

**Investors:** Jeremy Robinson, Managing Director  
**Media:** Nicholas Read, Read Corporate

**P +61 (0) 8 6383 6593**  
**P +61 (0) 8 9388 1474**



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The new results continue to show very consistent rare earths and phosphate mineralisation in all holes and will be included in what is expected to be a significant upgrade to the current Mineral Resource of 18.8Mt at 1.15% TREO and 10% P<sub>2</sub>O<sub>5</sub> (Indicated: 11.1Mt at 1.35% TREO and 10.9% P<sub>2</sub>O<sub>5</sub>; Inferred: 7.7Mt at 0.88% TREO and 8.4% P<sub>2</sub>O<sub>5</sub>; 0.5% TREO cut-off).

The turnaround time for assay results has more than doubled in recent months. Due to the delay in receiving the final batches of assay results from the 2022 drilling program, RareX has decided to split the Mineral Resource update into a Rare Dyke Resource and a Phos Dyke Resource.

The Rare Dyke Mineral Resource is scheduled to be announced in late March, with the Phos Dyke Mineral Resource to be announced in conjunction with an updated global Mineral Resource in the second half of April.

RareX Managing Director, Jeremy Robinson, said *“The impending resource upgrade at Cummins Range is shaping up as a pivotal development in the Company’s strategy to develop a long-life mining and processing operation at Cummins Range.*

*“While the delays in receiving assays have been incredibly frustrating, we believe we are now on the cusp of a major resource upgrade to be delivered in the coming weeks that will provide investors with a much clearer picture of the true scale and significance of the Cummins Range Project.*

*“The significance of the rare earths mineralisation in monazite in the Phos Dyke with high concentrations of highly valuable NdPr and HREO is also an exciting economic proposition.”*

### CDX0037

Hole CDX0037 was drilled between holes CDX0016 (ASX announcement 14 February 2022) and CDX0038 (ASX announcement 23 January 2023) and targeted the Rare Dyke at 200m below surface (Figure 2). The hole contained two wide phosphate and rare earths intersections of 212m at 0.6% TREO and 4% P<sub>2</sub>O<sub>5</sub> from 18m, and 185m at 0.3% TREO and 4% P<sub>2</sub>O<sub>5</sub>.

Within the wider phosphate intercepts there is a cumulative total of 90m at 1.3% TREO. These intercepts are summarised in Table 2.

The rare earth mineralisation is composed of coarse massive patches of bastnaesite and monazite in carbonatite and includes intercepts of 35m at 1.6% TREO and 3% P<sub>2</sub>O<sub>5</sub>, including 16m at 2.4% TREO and 4% P<sub>2</sub>O<sub>5</sub>, and 6.6m at 2.2% TREO and 3% P<sub>2</sub>O<sub>5</sub>. The hole confirms the continuity of very strong rare earths mineralisation in the hanging wall.

CDX0050, which was drilled down-dip of hole CDX0016, also intersected strong mineralisation in this position, returning an intercept of 10m at 3.6% TREO and 6% P<sub>2</sub>O<sub>5</sub> including 3m at 9.5% TREO (see Table 1). This intersection is located 80m to the south-west of the CDX0037 hanging wall intersection.



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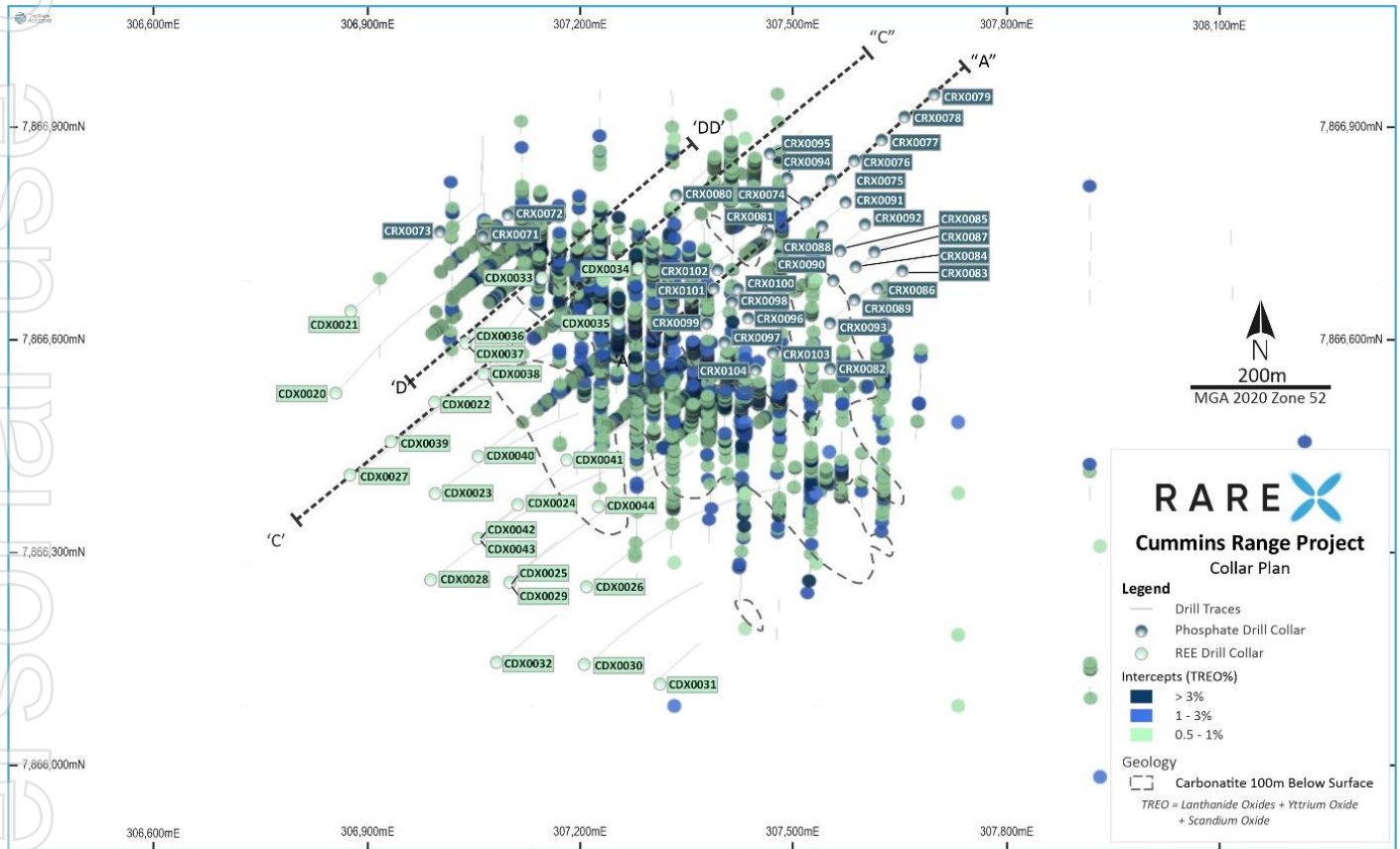


Figure 1. Drill collar plan showing TREO mineralisation and drill section locations.

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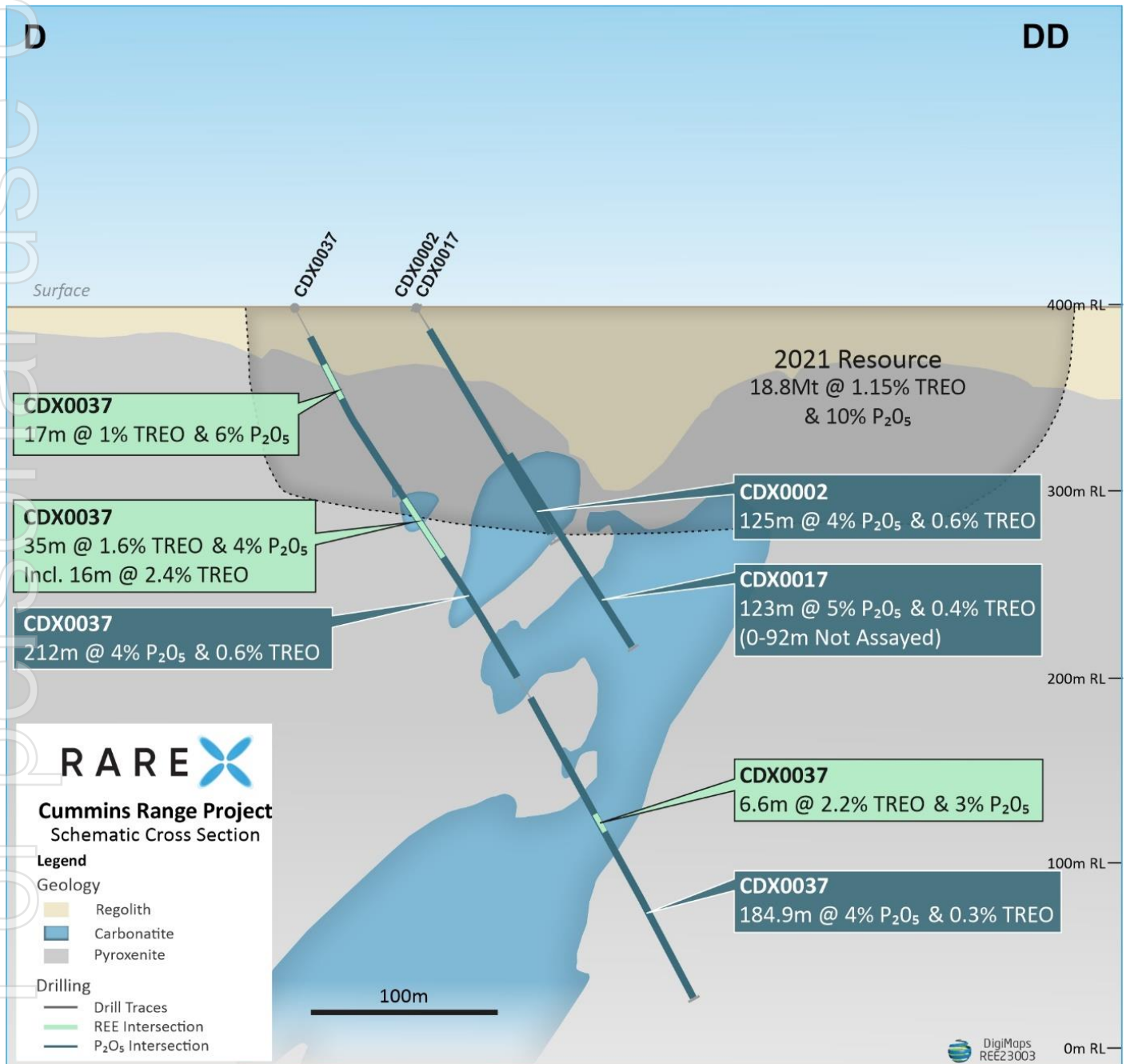


Figure 2. CDX0037 drill section showing phosphate and rare earth mineralised intercepts.



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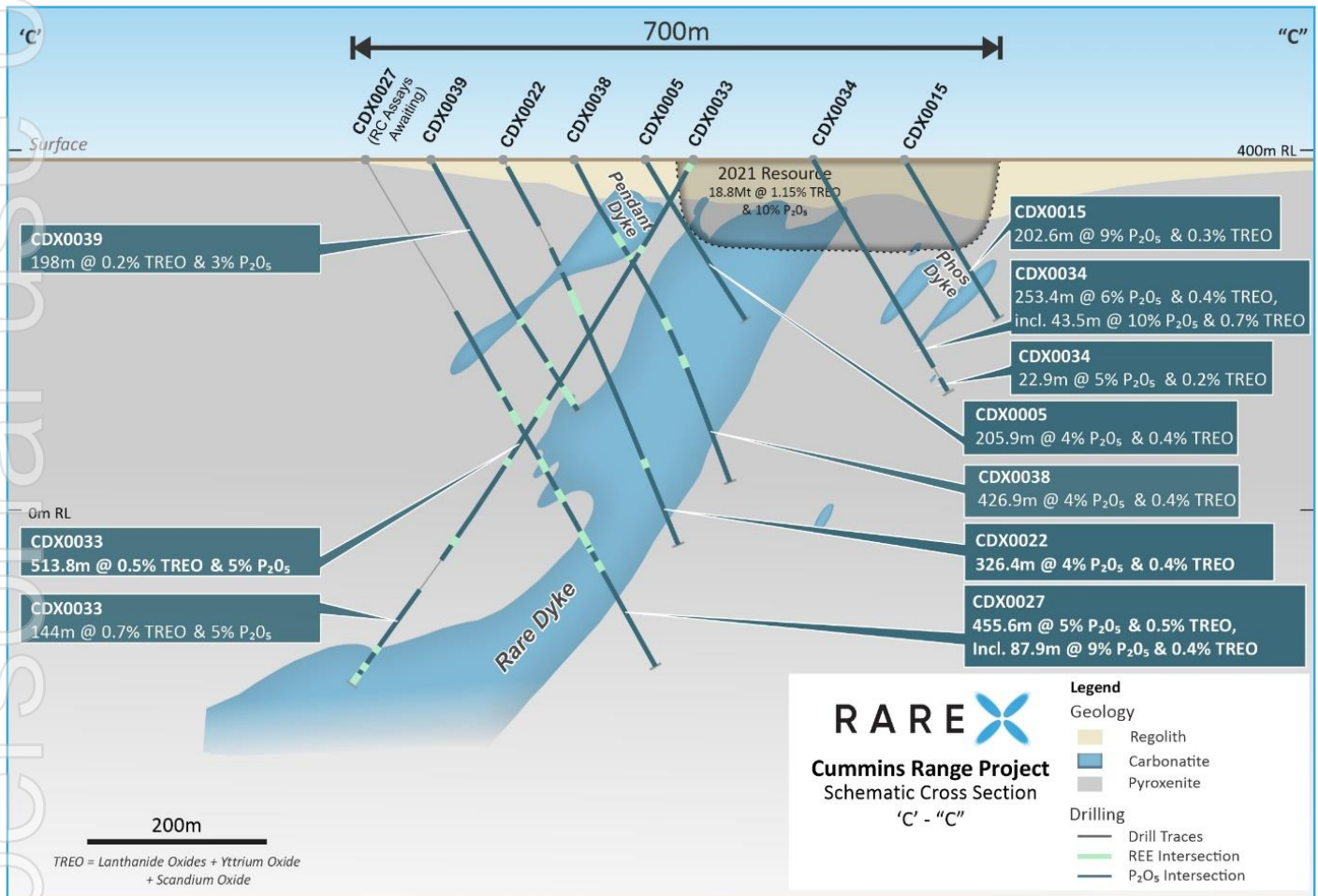


Figure 3. Cummins Range schematic cross section at Rare Dyke.

### CRX0076-79

RC results have also been received for the four northernmost drill holes, CDX0076 to CDX0079, that were drilled as a fence line to test for extensions to the Phos Dyke mineralisation. All of these holes were consistently mineralised to the end-of-hole with only the upper few metres having no grade as shown in Figure 4.

- CRX0076 111m at 0.2% TREO and 5% P<sub>2</sub>O<sub>5</sub>
- CRX0077 97m at 0.2% TREO and 5% P<sub>2</sub>O<sub>5</sub>
- CRX0078 94m at 0.2% TREO and 5% P<sub>2</sub>O<sub>5</sub>
- CRX0079 85m at 0.2% TREO and 5% P<sub>2</sub>O<sub>5</sub>

The consistently disseminated apatite occurs in unaltered pyroxenite and microXRF results have shown that the rare earths around the Phos Dyke are deporting to monazite within the igneous protolith.



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The igneous rare earth mineralisation has significantly higher proportions of NdPr and heavy rare earths (HRE) in comparison to the later high-grade rare earth mineralising event on the Rare Dyke.

The TREO mineralisation in CDX0076 to CDX0079 is composed of 26% NdPr and 19% HREO, with a combined value of 44% NdPr and HREO. The higher NdPr and HRE percentages are characteristic of the Phos Dyke igneous mineralisation. This style of mineralisation remains open in all directions and, in all likelihood, across the entire 3km by 3km intrusive complex that makes up the Cummins Range deposit.

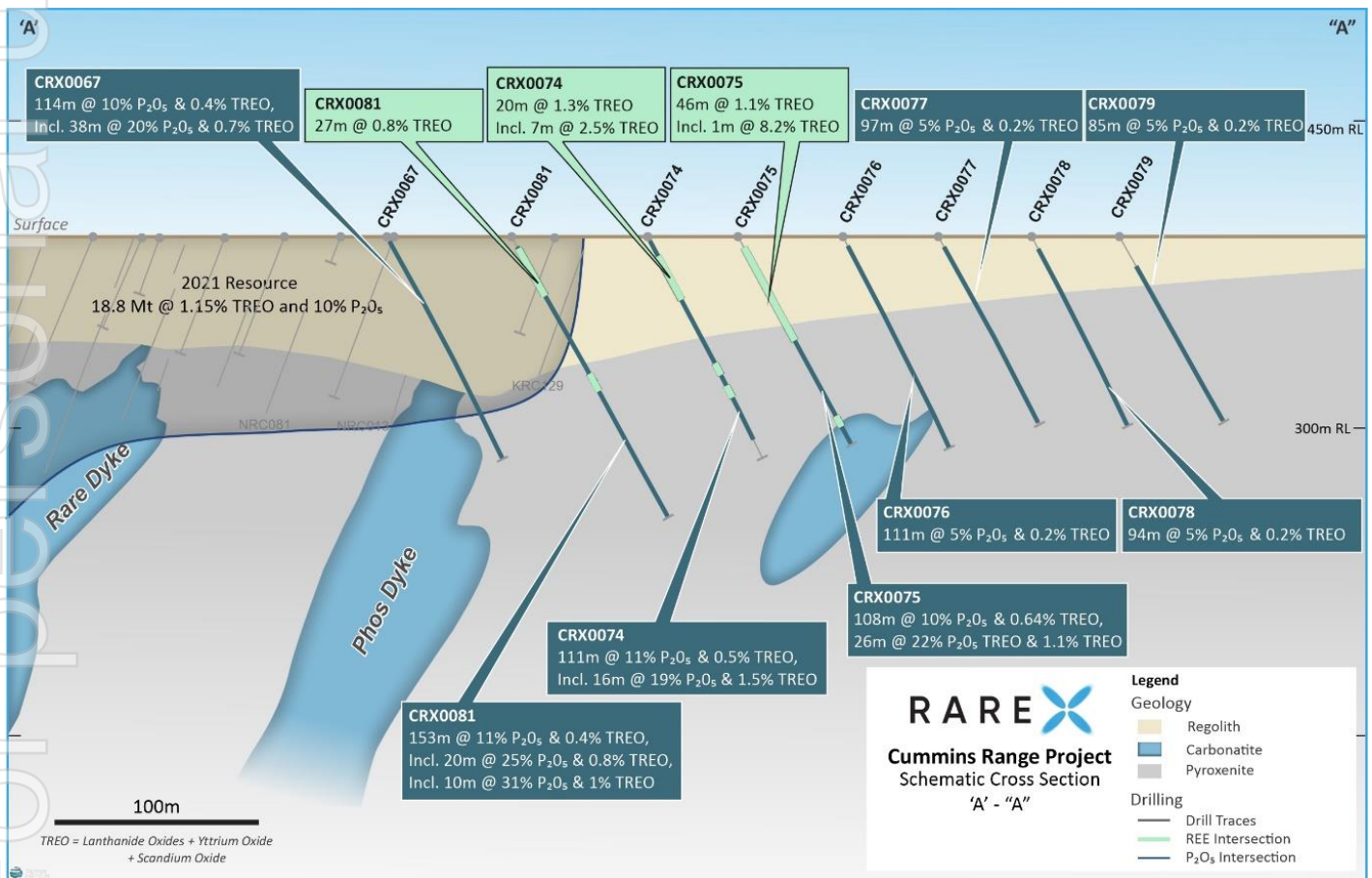


Figure 4. Section showing drill intercepts for CRX0076 to CRX0079.

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



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### Competent Person's Statements

The information in this announcement that relates to exploration results 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 was 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.

### About RareX Limited – ASX: REE

RareX Limited (ASX: REE) is a Perth-based rare earths company committed to becoming a near-term producer of neodymium and praseodymium (NdPr). RareX's focus is on developing rare earths deposits in Australia, including the flag-ship Cummins Range Rare Earths – Phosphate Project.

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 Phosphate Project in the East Kimberley region of Western Australia. RareX is committed to developing a sustainable, ethical, transparent and secure 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)**



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## APPENDIX A

Table 1: TREO Significant Intercepts

TREO SIGNIFICANT INTERCEPTS (0.5% Cut)										
Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	HREO %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Rare Dyke	CDX0034	14	17	3	3.01	0.52	17	4	0.54	17
Rare Dyke	CDX0034	21	21.8	0.8	0.93	0.18	19	7	0.16	12
Rare Dyke	CDX0034	32	32.5	0.5	0.74	0.14	18	8	0.09	5
Rare Dyke	CDX0034	33.8	35.4	1.6	0.81	0.15	19	8	0.4	10
Rare Dyke	CDX0034	47	58	11	2.15	0.43	20	6	0.44	18
Rare Dyke	CDX0034	60.75	61.2	0.45	0.59	0.12	20	9	0.05	5
Rare Dyke	CDX0034	64.2	64.8	0.6	0.91	0.19	20	9	0.04	9
Rare Dyke	CDX0034	66.2	66.6	0.4	0.77	0.13	17	5	0.08	3
Rare Dyke	CDX0034	84.55	86.25	1.7	1.89	0.32	17	2	0.08	2
Footwall	CDX0034	127.9	128.4	0.5	0.89	0.19	21	8	0.08	13
Footwall	CDX0034	179	179.6	0.6	0.57	0.12	22	8	0.06	10
Footwall	CDX0034	185	186	1	0.51	0.12	23	9	0.08	12
Footwall	CDX0034	190.8	191.1	0.3	2.59	0.42	16	1	0.01	0
Footwall	CDX0034	193	193.45	0.45	10.88	1.93	18	2	0.25	3
Hanging Wall	CDX0037	36	53	17	0.95	0.18	19	6	0.15	6
Hanging Wall	CDX0037	69	70	1	0.52	0.1	19	6	0.06	4
Hanging Wall	CDX0037	72	73	1	0.94	0.16	17	4	0.05	4
Hanging Wall	CDX0037	78	79	1	1.22	0.2	17	3	0.01	3
Hanging Wall	CDX0037	104	110	6	0.54	0.1	19	7	0.06	4
Hanging Wall	CDX0037	116	151	35	1.55	0.26	17	3	0.04	4
Hanging Wall	Incl.	117	133	16	2.43	0.4	17	3	0.03	4
Hanging Wall	Incl.	117	122	5	4.17	0.69	17	3	0.02	4
Rare Dyke	CDX0037	170	181	11	0.82	0.14	17	5	0.07	3
Rare Dyke	Incl.	171	174	3	1.64	0.26	16	2	0.04	1
Rare Dyke	CDX0037	186	187	1	0.84	0.15	18	5	0.04	2
Rare Dyke	CDX0037	225	233	8	1.53	0.24	16	3	0.14	5
Rare Dyke	CDX0037	315.8	322.4	6.6	2.21	0.35	16	2	0.04	3
Rare Dyke	Incl.	319.9	321.3	1.4	7.27	1.11	15	1	0.01	0
Rare Dyke	CDX0037	328.8	329.4	0.6	1.67	0.3	18	5	0	7
Rare Dyke	CDX0037	333.5	334.5	1	0.6	0.12	20	5	0.02	3





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## TREO SIGNIFICANT INTERCEPTS (0.5% Cut)

Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	HREO %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Footwall	CDX0037	337.35	338.5	1.15	0.8	0.12	15	3	0.03	1
Rare Dyke	CDX0038	310	311	1	0.96	0.17	18	4	0.1	5
Rare Dyke	CDX0038	313	314	1	0.79	0.14	17	4	0.11	4
Rare Dyke	CDX0038	327.95	328.95	1	1.24	0.2	16	3	0.06	4
Footwall	CDX0038	356	357	1	0.67	0.17	25	12	0.21	22
Footwall	CDX0038	367.55	368.55	1	1.68	0.27	16	3	0.06	7
Footwall	CDX0038	372.05	373	0.95	0.76	0.13	18	5	0.11	4
Footwall	CDX0038	376.45	377.35	0.9	3.1	0.5	16	2	0.13	5
Footwall	CDX0038	421.55	422.35	0.8	0.63	0.13	21	9	0.05	12
Hanging Wall	CDX0040	73	74	1	0.59	0.11	18	6	0.15	4
Hanging Wall	CDX0040	99	101	2	0.64	0.11	17	4	0.05	2
Pendant Dyke	CDX0040	139	140	1	0.51	0.1	19	6	0.05	3
Pendant Dyke	CDX0040	196	204	8	0.57	0.11	19	5	0.08	3
Hanging Wall	CDX0040	224	225	1	1.82	0.3	16	3	0.02	3
Rare Dyke	CDX0040	263	265	2	1	0.17	17	3	0.04	2
Rare Dyke	CDX0040	269	288.08	19.08	0.67	0.13	19	6	0.04	4
Rare Dyke	Incl.	281	286	5	1.86	0.31	17	2	0.03	6
Rare Dyke	Incl.	281	284	3	2.61	0.43	16	2	0.02	6
Rare Dyke	CDX0040	291.9	293	1.1	1.14	0.18	16	2	0.07	2
Rare Dyke	CDX0040	322.5	323.3	0.8	1.12	0.18	16	2	0.08	3
Rare Dyke	CDX0040	334.1	335.2	1.1	0.91	0.14	15	2	0.03	1
Rare Dyke	CDX0040	361	370.57	9.57	1.56	0.27	17	3	0.22	8
Rare Dyke	Incl.	367.4	370.57	3.17	3.43	0.54	16	1	0.02	4
Rare Dyke	CDX0040	375.86	388	12.14	0.62	0.11	18	5	0.03	6
Footwall	CDX0040	411	411.33	0.33	2.16	0.36	17	2	0.02	2
Footwall	CDX0040	419.65	429.58	9.93	1.36	0.22	16	3	0.05	3
Hanging Wall	CDX0041	37	39	2	0.5	0.12	24	10	0.09	5
Hanging Wall	CDX0041	54	56	2	1.37	0.29	21	6	0.11	12
Hanging Wall	CDX0041	72	75	3	1.42	0.23	16	2	0.04	1
Hanging Wall	CDX0041	83	84	1	1.49	0.25	17	3	0.22	11
Hanging Wall	CDX0041	92	93	1	0.69	0.12	17	3	0.04	1
Hanging Wall	CDX0041	95	96	1	1.79	0.34	19	3	0.09	7
Hanging Wall	CDX0041	104	106	2	0.57	0.1	18	5	0.06	2



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## TREO SIGNIFICANT INTERCEPTS (0.5% Cut)

Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	HREO %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Hanging Wall	CDX0041	123	125	2	0.78	0.14	18	3	0.02	3
Hanging Wall	CDX0041	179	180	1	0.52	0.09	18	7	0.04	4
Rare Dyke	CDX0041	186	188	2	0.74	0.14	18	3	0.01	3
Footwall	CDX0041	290	292.22	2.22	1.28	0.21	16	2	0.19	1
Footwall	CDX0041	309.25	309.5	0.25	1.37	0.21	16	2	0.03	1
Footwall	CDX0041	399	400	1	2.33	0.4	17	3	0.08	3
Pendant Dyke	CDX0042	189	191	2	4.11	0.07	18	6	0.05	2
Hanging Wall	CDX0043	217	220	3	2.4	0.45	19	2	0.08	4
Hanging Wall	CDX0043	246	248	2	0.64	0.06	20	5	0.03	2
Hanging Wall	CDX0043	252	253	1	0.72	0.13	18	3	0.09	3
Hanging Wall	CDX0043	290.2	292.45	2.25	0.77	0.08	17	3	0.02	1
Rare Dyke	CDX0043	337	338.1	1.1	1.28	0.23	18	3	0.02	6
Rare Dyke	CDX0043	345.62	346.8	1.18	0.73	0.13	18	4	0.01	6
Rare Dyke	CDX0043	348.9	350	1.1	1.36	0.22	16	3	0.04	3
Rare Dyke	CDX0043	369.75	374.7	4.95	2.77	0.46	16	2	0.03	4
Rare Dyke	Incl.	369.75	370.75	1	10.28	1.64	16	1	0	8
Rare Dyke	CDX0043	411	412	1	0.92	0.16	17	3	0.07	4
Rare Dyke	CDX0043	418	418.7	0.7	0.54	0.09	17	3	0.04	4
Rare Dyke	CDX0043	468.9	469.25	0.35	3.52	0.54	15	2	0.04	4
Rare Dyke	CDX0043	474	475	1	1.09	0.18	16	2	0.02	2
Rare Dyke	CDX0043	478	481.22	3.22	0.88	0.15	17	2	0.03	4
Rare Dyke	CDX0043	494.7	495.1	0.4	1.82	0.32	17	2	0.01	3
Rare Dyke	CDX0043	500.7	501.2	0.5	6.83	1.08	16	1	0.01	7
Rare Dyke	CDX0043	507.73	517.52	9.79	3.31	0.55	16	2	0.04	5
Rare Dyke	Incl.	515.3	517.52	2.22	11.52	1.87	16	1	0.01	9
Rare Dyke	CDX0044	91	94	3	0.75	0.14	18	5	0.11	6
Rare Dyke	CDX0044	107	108	1	0.52	0.09	18	6	0.06	3
Rare Dyke	CDX0044	144	146	2	2.61	0.44	17	2	0.01	3
Rare Dyke	CDX0044	193	199	6	1.15	0.2	18	3	0.07	6
Rare Dyke	CDX0044	234	235	1	0.84	0.14	17	3	0.05	2
Rare Dyke	CDX0044	250	252	2	0.88	0.14	16	2	0	1
Rare Dyke	CDX0044	259	261	2	0.89	0.15	17	2	0.02	0
Hanging Wall	CDX0050	162	166	4	0.79	0.15	19	6	0.07	4



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TREO SIGNIFICANT INTERCEPTS (0.5% Cut)

Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	% NdPr of TREO	NdPr %	HREO %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Hanging Wall	CDX0050	170	172	2	0.56	0.11	19	6	0.01	3
Hanging Wall	CDX0050	185	195	10	3.57	0.57	16	2	0.05	6
Hanging Wall	Incl.	188	191	3	9.51	1.49	16	2	0.02	11
Hanging Wall	CDX0050	200	201	1	0.76	0.12	15	3	0.07	2
Hanging Wall	CDX0050	204	205	1	0.51	0.1	19	7	0.06	4
Hanging Wall	CDX0050	210	211	1	6.46	1.07	17	2	0.06	9
Hanging Wall	CDX0050	232	233	1	0.62	0.1	17	4	0.08	3
Hanging Wall	CDX0050	235	236	1	0.5	0.09	18	5	0.06	3
Hanging Wall	CDX0050	247	248	1	1.46	0.23	15	4	0.22	4
Rare Dyke	CDX0050	293.1	294	0.9	1.28	0.19	15	2	0.09	1
Phos Dyke	CRX0082	17	60	43	0.93	0.19	20	8	0.1	10
Phos Dyke	CRX0082	17	26	9	2.22	0.37	17	3	0.18	9
Phos Dyke	CRX0083	3	4	1	3.74	0.67	18	3	0.07	20
Phos Dyke	CRX0083	61	63	2	0.51	0.13	25	13	0.13	11
Phos Dyke	CRX0083	83	85	2	1.04	0.21	20	5	0.05	7

TREO = Lanthanide Oxides + Yttrium Oxide + Scandium Oxide



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APPENDIX B

Table 2: Phosphate Significant Intercepts

PHOSPHATE SIGNIFICANT INTERCEPTS (3% Cut)										
Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	NdPr %	HREO % of TREO	NdPr % of TREO	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Rare Dyke	CDX0024	8	414.3	406.3	0.33	0.07	21	10	0.07	4
Hanging Wall	CDX0026	20	172.7	152.7	0.23	0.05	21	13	0.07	4
Hanging Wall	CDX0029	8	303.3	295.3	0.23	0.05	21	13	0.06	4
Hanging Wall	CDX0030	10	288.9	278.9	0.23	0.05	22	13	0.07	4
Hanging Wall	CDX0031	11	150	139	0.15	0.04	23	18	0.05	4
Hanging Wall	CDX0032	20	186	166	0.11	0.02	22	24	0.03	3
Rare Dyke, Footwall	CDX0034	5.7	259.1	253.4	0.35	0.08	22	11	0.08	6
Rare Dyke	Incl.	7.5	51	43.5	0.69	0.14	20	8	0.18	10
Phos Dyke	CDX0034	270.8	293.7	22.9	0.2	0.05	27	18	0.04	5
Hanging Wall	CDX0036	24	80	56	0.29	0.06	21	12	0.07	3
Hanging Wall	CDX0037	18	230	212	0.56	0.1	19	7	0.07	4
Rare Dyke	CDX0037	244	428.9	184.9	0.27	0.06	22	12	0.06	4
Hanging Wall	CDX0038	8	434.9	426.9	0.38	0.08	20	9	0.06	4
Hanging Wall	CDX0040	35	248	213	0.23	0.05	23	12	0.06	4
Rare Dyke	CDX0040	311	476.9	165.9	0.39	0.08	20	8	0.06	4
Hanging Wall	CDX0041	7	216	209	0.29	0.06	22	12	0.07	5
Footwall	CDX0041	278.5	445	166.5	0.23	0.05	24	15	0.04	4
Hanging Wall	CDX0042	10	204	194	0.19	0.04	21	15	0.05	4
Hanging Wall	CDX0043	10	357	347	0.2	0.04	22	16	0.06	4
Rare Dyke	CDX0043	478	555	77	0.69	0.13	19	5	0.04	4
Hanging Wall	CDX0044	4	199	195	0.27	0.06	22	11	0.08	5
Hanging Wall	CDX0050	12	307.55	295.55	0.34	0.07	20	9	0.06	3
Phos Dyke	CRX0076	3	114	111	0.18	0.05	25	19	0.05	5
Phos Dyke	CRX0077	5	102	97	0.19	0.05	25	17	0.06	5
Phos Dyke	CRX0078	8	102	94	0.16	0.04	26	20	0.06	5
Phos Dyke	CRX0079	17	102	85	0.19	0.05	26	18	0.05	5
Phos Dyke	CRX0082	1	96	95	0.52	0.11	21	10	0.07	6
Phos Dyke	CRX0083	0	96	96	0.34	0.09	25	14	0.06	8

TREO = Lanthanide Oxides + Yttrium Oxide + Scandium Oxide



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### APPENDIX C Drill Collar Information

Hole ID	East MGA	North MGA	RLUTM	End Depth	Azimuth	Dip	Type	Status
CDX0020	306871	7866529	392	666	50	60	Diamond	Assays Received
CDX0021	306890	7866641	392	345.2	50	60	Diamond	Assays Received
CDX0022	307007	7866511	391	470.6	50	60	Diamond	Assays Received
CDX0023	307009	7866383	392	569.9	50	60	Diamond	Assays Received
CDX0024	307123	7866367	391	545.8	50	60	Diamond	Assays Received
CDX0025	307113	7866260	391	198	50	60	RC	Not Assayed
CDX0026	307222	7866252	391	578.8	50	60	Diamond	Assays Received
CDX0027	306891	7866411	392	653.8	50	60	Diamond	Partly Received
CDX0028	307005	7866263	392	695.8	50	60	Diamond	Awaiting Assays
CDX0029	307115	7866262	391	578.8	50	60	Diamond	Assays Received
CDX0030	307220	7866139	391	515.9	50	60	Diamond	Assays Received
CDX0031	307324	7866122	391	150	50	60	RC	Assays Received
CDX0032	307101	7866148	391	198	50	60	RC	Assays Received
CDX0033	307154	7866673	391	701	217	60	Diamond	Assays Received
CDX0034	307296	7866700	392	293.8	50	60	Diamond	Assays Received
CDX0035	307267	7866608	390	476.7	50	60	Diamond	Awaiting Assays
CDX0036	307046	7866596	392	84	50	60	RC	Assays Received
CDX0037	307040	7866590	392	428.9	50	60	Diamond	Assays Received
CDX0038	307076	7866551	392	464.9	50	60	Diamond	Assays Received
CDX0039	306946	7866457	392	324	50	60	RC	Assays Received
CDX0040	307071	7866436	392	476.9	50	60	Diamond	Assays Received
CDX0041	307202	7866431	391	446.9	50	60	Diamond	Assays Received
CDX0042	307067	7866320	392	204	50	60	RC	Assays Received
CDX0043	307063	7866317	392	560.5	50	60	Diamond	Assays Received
CDX0044	307246	7866367	392	447.36	50	60	Diamond	Assays Received
CDX0045	307608	7866594	391	78.9	50	60	Diamond	Awaiting Assays
CDX0046	307446	7866456	391	6.9	180	60	Diamond	Not assayed
CDX0050	306949	7866595	392	533.8	50	60	Diamond	Partly Received
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



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Hole ID	East MGA	North MGA	RLUTM	End Depth	Azimuth	Dip	Type	Status
CRX0075	307561	7866824	391	114	50	60	RC	Assays Received
CRX0076	307602	7866854	391	114	50	60	RC	Assays Received
CRX0077	307638	7866884	391	102	50	60	RC	Assays Received
CRX0078	307672	7866914	391	102	50	60	RC	Assays Received
CRX0079	307708	7866938	391	102	50	60	RC	Assays Received
CRX0080	307349	7866802	392	126	50	60	RC	Awaiting Assays
CRX0081	307479	7866747	391	156	50	60	RC	Assays Received
CRX0082	307564	7866558	392	96	50	60	RC	Assays Received
CRX0083	307666	7866694	391	96	50	60	RC	Assays Received
CRX0084	307601	7866701	391	157	50	60	RC	Awaiting Assays
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	Awaiting Assays
CRX0089	307593	7866649	391	114	50	60	RC	Awaiting Assays
CRX0090	307568	7866676	391	114	50	60	RC	Awaiting Assays
CRX0091	307586	7866791	391	96	50	60	RC	Awaiting Assays
CRX0092	307613	7866762	391	96	50	60	RC	Awaiting Assays
CRX0093	307565	7866624	391	150	50	60	RC	Awaiting Assays
CRX0094	307502	7866829	391	120	50	60	RC	Awaiting Assays
CRX0095	307479	7866857	391	120	50	60	RC	Awaiting Assays
CRX0096	307445	7866625	391	132	50	60	RC	Awaiting Assays
CRX0097	307415	7866591	391	150	50	60	RC	Awaiting Assays
CRX0098	307421	7866647	391	132	50	60	RC	Awaiting Assays
CRX0099	307389	7866622	391	174	50	60	RC	Awaiting Assays
CRX0100	307424	7866682	391	150	50	60	RC	Awaiting Assays
CRX0101	307391	7866680	391	144	50	60	RC	Awaiting Assays
CRX0102	307399	7866707	391	138	50	60	RC	Awaiting Assays
CRX0103	307472	7866589	391	156	50	60	RC	Awaiting Assays
CRX0104	307442	7866564	391	168	50	60	RC	Awaiting Assays



**APPENDIX D**  
**JORC Code, 2012 Edition – Table 1**

**Cummins Range Section 1 Sampling Techniques and Data**

Criteria	JORC Code Explanation	
<b>Sampling techniques</b>	<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>	<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 an ICP-OES and ICP-MS finish.</li> </ul>
<b>Drilling Techniques</b>	<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>	<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>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<ul style="list-style-type: none"> <li>Recoveries for all drill holes were recorded for each metre.</li> <li>Recoveries for the Diamond drilling in this announcement are &gt;99%</li> </ul>



	<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 the RC drilling in this announcement are &gt;95%.</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> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>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>
<b>Sub-sampling techniques and sample preparation</b>	<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.</i></p> <p><i>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>
<b>Quality of assay data and laboratory tests</b>	<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>	<ul style="list-style-type: none"> <li>The reported assays were analysed by Nagrom. The following techniques were used:</li> <li>35 elements were assayed for using peroxide fusion with a ICP-OES and ICP-MS finish</li> </ul>





	<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>	<ul style="list-style-type: none"> <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>
<b>Verification of sampling and assaying</b>	<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. La2O3 1.1728, CeO2 1.2284, Pr6O11 1.2082, Nd2O3 1.1664, Sm2O3 1.1596, Eu2O3 1.1579, Gd2O3 1.1526, Dy2O3 1.1477, Ho2O3 1.1455, Er2O3 1.1435, Tm2O3 1.1421, Yb2O3 1.1387, Lu2O3 1.1371, Sc2O3 1.5338, Y2O3 1.2699, Nb2O5 1.4305, P2O5 2.2916</li> </ul>
<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 have been surveyed with a DGPS</li> <li>All coordinates are in MGA Zone 52H 2020</li> <li>Topographic control is within 5 cm from the surveyed collar locations. The Cummins Range deposit is located on flat terrain.</li> <li>Down hole surveys were taken every 10m using a Gyro survey 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>Drill hole spacing is considered appropriate to gain a robust understanding of the mineralisation. The exploration team are seeing the same geological positions mineralised along strike, suggesting RareX have a solid geological model. Drill spacing is considered appropriate to gain an inferred to indicated mineral resource.</li> <li>2m to 4m RC composites were completed in areas where higher grades were not expected</li> </ul>
<b>Orientation of data in</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.</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>relation to geological structure</b>	<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>	
<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. 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 1000-</li> </ul>



		<p>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>
<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.</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>	<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 10m 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> </ul>
	<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>• No metal equivalent values have been used</li> </ul>



		<ul style="list-style-type: none"> <li>Cumulated significant intercepts have been mentioned in the announcement and are composed of compiling the weighted averages of each significant intercept. The accumulated intercept does not take into account the dilution in between the individual intercepts and are there fore not a true representation of in situ minable ore.</li> </ul>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<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>
<p><b>Diagrams</b></p>	<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 and section are in the report.</li> </ul>
<p><b>Balanced reporting</b></p>	<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>
<p><b>Other substantive exploration data</b></p>	<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>
<p><b>Further work</b></p>	<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> </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.*

- Metallurgical tests are being conducted.

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