



**ASX Release**  
**January 23, 2023**

## Outstanding New +500m and +280m Intercepts Highlight Step-Change in Scale at Cummins Range

Record intercepts of 513.8m @ 0.5% TREO and 5% P<sub>2</sub>O<sub>5</sub> and 288m @ 0.4% TREO and 4% P<sub>2</sub>O<sub>5</sub> delineate large-scale bulk rare earths-phosphate deposit ahead of imminent resource upgrade

### Highlights

- Outstanding new results from a further eight holes from the 2022 drilling campaign at the Cummins Range Rare Earths and Phosphate Project, Western Australia
- Exceptional intersection of:
  - 513.8m at 0.5% TREO and 5% P<sub>2</sub>O<sub>5</sub> from 3m and 144m at 5% P<sub>2</sub>O<sub>5</sub> and 0.7% TREO from 557m from scissor hole CDX0033
  - Including very high-grade zones of 12.65m at 2.3% TREO and 5% P<sub>2</sub>O<sub>5</sub> and 7.8m at 5.3% TREO and 6% P<sub>2</sub>O<sub>5</sub>
- Another outstanding wide intercept of:
  - 288m at 0.4% TREO and 4% P<sub>2</sub>O<sub>5</sub> including 12m at 1.4% TREO and 4% P<sub>2</sub>O<sub>5</sub> and 14m at 1.4% TREO and 5% P<sub>2</sub>O<sub>5</sub> from CDX0038
- Rare earths and phosphate mineralisation now confirmed over a strike extent of 600m with results received from the outermost holes
- 2022 drilling has demonstrated the potential for a very large, bulk tonnage REE-phosphate project, with a significant step-up in scale from last year's Scoping Study
- Resource upgrade on track for this quarter following expected receipt of remaining assays in February
- No direct impact on operations from recent flooding in the Central and West Kimberley

Australian sustainable rare earths company, RareX Limited (ASX: REE) (RareX or the Company), is pleased to report assay results from a further eight 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.

The exceptional new results, building on significant assays reported towards the end of last year, demonstrate the potential for a step-change in the scale of the Project, with broad zones of significant rare earths (REE) and phosphate mineralisation now defined over a 600m strike extent.

RareX is still awaiting assay results from 48 holes drilled as part of the significant 2022 drilling program that was completed in December 2022. Following expected receipt of the final assays in February, the Company expects to be in a position to publish a significant mineral resource upgrade later this quarter.

For more information,  
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### Drill hole CDX0033

CDX0033 was drilled as a scissor hole to support structural, geological and mineralisation modelling. The hole was collared in the hanging wall and remained in the hanging wall to 667m where it passed into the Rare Dyke as shown in Figure 2. Lithologies, structural fabrics, contacts and mineralisation encountered in the hole all support the current geological model and have provided geological confidence for the upcoming Resource update.

The hole returned 35 rare earth intersections with a cumulative total of 95m at 2.9% TREO. Several high-grade zones were intersected including 5.9m at 2.2% TREO from 3m, 12.65m at 2.3% TREO, 7.77m at 5.3% TREO and 16.65m at 1.3% TREO. Intersections are detailed in Appendix A.

The hole was also consistently mineralised with phosphate and contained two wide zones of 513m at 5% P<sub>2</sub>O<sub>5</sub> and 0.5% TREO from 3m and 144m at 5% P<sub>2</sub>O<sub>5</sub> and 0.7% TREO from 557m to end-of-hole (Appendix B). These phosphate intersections have confirmed the large scale of the rare earths- phosphate system with Figure 2 showing mineralisation over a 700m width, and down to 700m depth.

### Drill Holes CDX0038 and CDX0039

Assays for the RC portions of holes CDX0038 and CDX0039 have been received. These holes were drilled on the same section as CDX0033 and are shown on Figure 2.

CDX0038 intersected 12 rare earth zones with a cumulative total of 55m at 1.6% TREO. Three wide zones were encountered including 15m at 1.1% TREO, 12m at 1.4% TREO and 14m at 1.4% TREO. These high-grade zones are located within a larger phosphate alteration halo of 288m at 4% P<sub>2</sub>O<sub>5</sub> and 0.4% TREO from 8m. Assays for the the diamond portion of the hole down to 434.9m are expected in February.

CDX0039 was drilled down to 324m and was stopped at the upper contact of the Rare Dyke. Several rare earths zones were intersected with 13m at 1.9% TREO drilled at the upper contact of the Rare Dyke, including 6m at 3.1% TREO. A majority of the drill hole has phosphate alteration with 316m at 4% P<sub>2</sub>O<sub>5</sub> and 0.3% TREO from 8m.

### Drill Hole CDX0021

Hole CDX0021 was collared on the north-western edge of the pipe and the hole was lost at a depth of 345.2m. The upper 290m of the drill hole is fenitized country rock with localised stringer rare earth mineralisation with a cumulative intersection total of 15.65m at 1.1% TREO.

CDX0021 was lost before it passed through the Rare Dyke and contained phosphate mineralisation to end-of-hole with 81.2m at 4% P<sub>2</sub>O<sub>5</sub> and 0.3% TREO.



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### Drill Holes CDX0026, CDX0029 and CDX0030

Holes CDX0026, CDX0029 and CDX0030 are the three most south-eastern diamond drill holes and are characterised by a thickening of the Rare Dyke to 300m. Strong mineralisation was encountered in each of the drill holes including 6.5m at 1.68% TREO in hole CDX0026, 4.1m at 1.15% TREO in hole CDX0029, and 4.8m at 1.66% TREO from CDX0030. A summary of the TREO intercepts are detailed in Appendix A.

All three of the holes contained coarse apatite mineralisation with multiple wide zones in each of the holes including 242m at 4% P<sub>2</sub>O<sub>5</sub> and 0.2% TREO in hole CDX0026 and 196m at 4% P<sub>2</sub>O<sub>5</sub> and 0.3% TREO in hole CDX0029, and 91m at 5% P<sub>2</sub>O<sub>5</sub> and 0.4% TREO in hole CDX0030. A summary of the TREO intercepts is detailed in Appendix B.

CDX0030 marks the easternmost diamond drill hole and is mineralised in rare earths and phosphate. Pre-collars for holes CDX0031 and CDX0032 (Figure 1) were drilled with no diamond tails added to test the Rare Dyke due to time constraints.

Assay results for numerous in-fill holes are still awaited. However, results for drill holes on all sections completed have now been received confirming the continuity of rare earths-phosphate mineralisation over 600m of strike, 700m of width and up to 700m down-dip. This is a significant increase in size compared to the 2021 resource.

RareX would also like to take the opportunity to acknowledge the significant impact to communities in the Central and West Kimberley as a result of the recent flooding.

No direct damage has been caused to any of RareX's operations in the East Kimberley due to our location and standdown for the wet season.

### Management Comment

RareX Managing Director, Jeremy Robinson, said: *"We are now closing-in on what is expected to be a highly significant resource upgrade for Cummins Range, with the latest drilling results clearly highlighting the enormous scale of the rare earths-phosphate mineralisation.*

*"The very wide intercepts seen in these holes show that Cummins Range is a very large bulk tonnage REE-phosphate deposit, capable of supporting a much larger project than what we scoped out initially last year. We are looking forward to a very busy start to the New Year, with more results to come, the impending resource upgrade and then providing further information on the expanded scope of the Project and our commercialisation pathway."*



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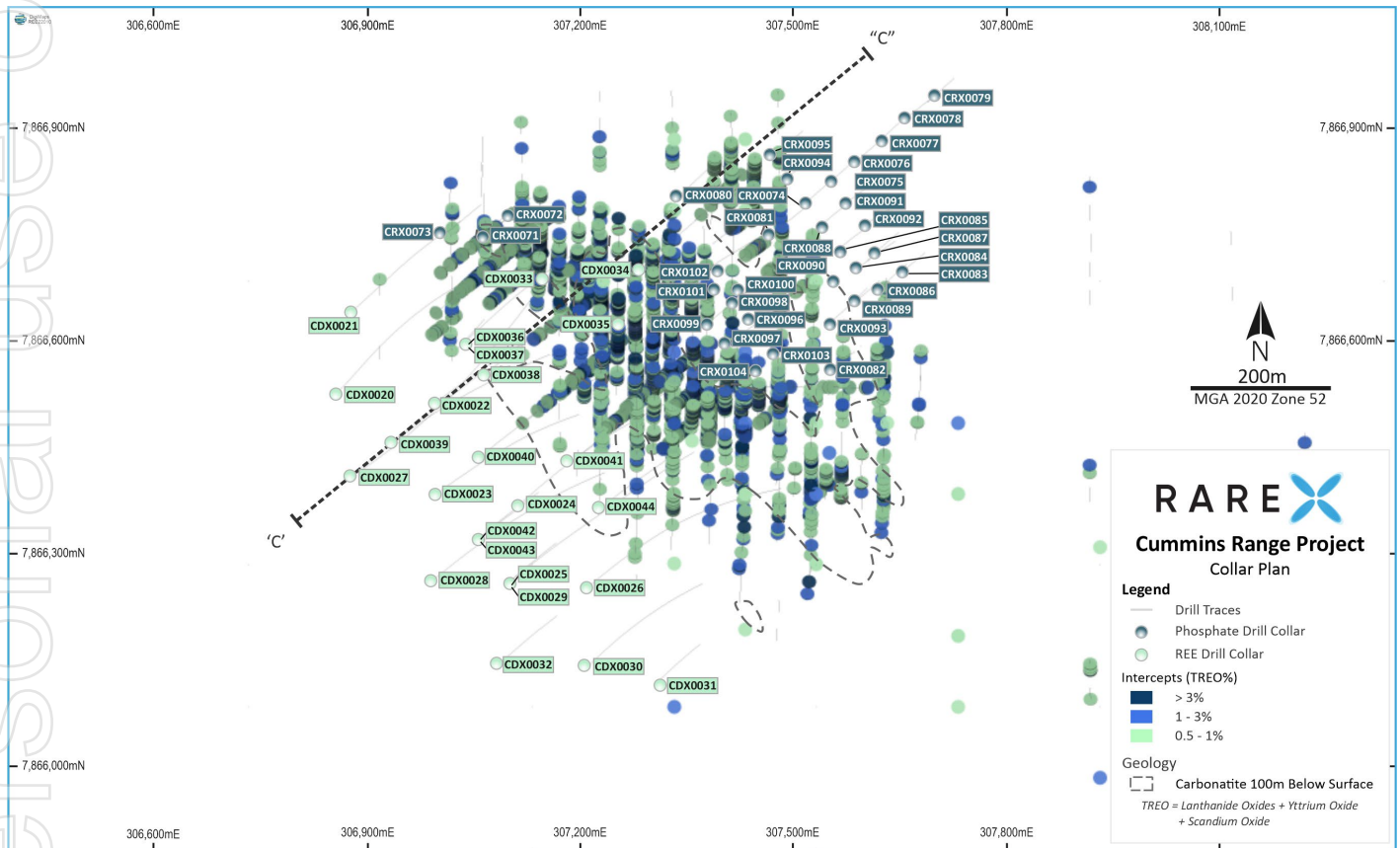


Figure 1. Cummins Range drill collar plan, showing drill traces, TREO% mineralisation and location of drill section.



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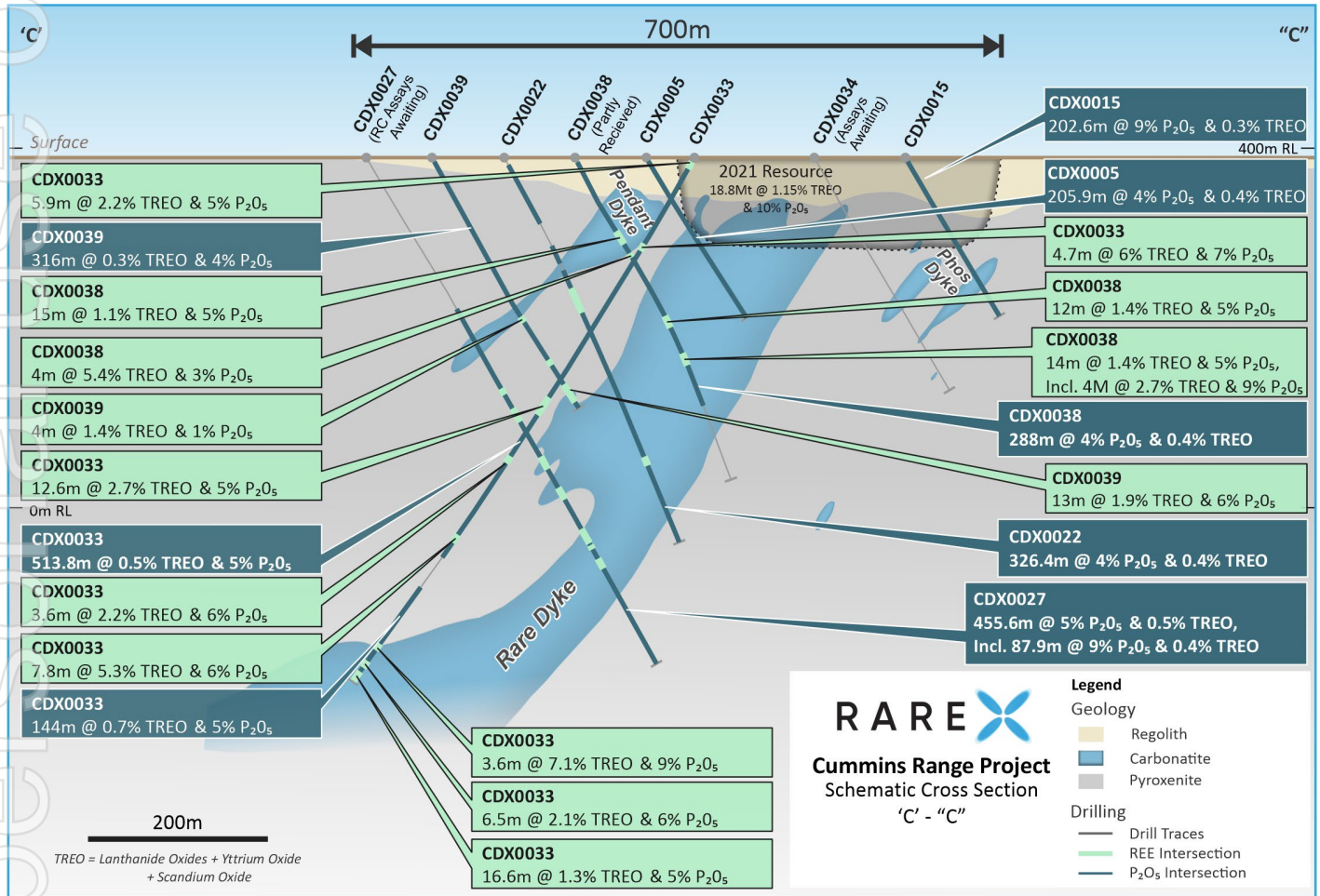


Figure 2. Drill Section showing drill results for CDX0033, CDX0038 and CDX0039.

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.

### 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 TREO Significant Intercepts

TREO SIGNIFICANT INTERCEPTS (0.5% 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> %
Hanging Wall	CDX0021	129	130	1	0.59	0.12	20	0.03	1
Hanging Wall	CDX0021	150	150.8	0.8	0.91	0.15	17	0.04	2
Hanging Wall	CDX0021	184	187.3	3.3	1.34	0.22	16	0.04	2
Hanging Wall	CDX0021	204.6	207.2	2.6	1.02	0.2	19	0.05	4
Hanging Wall	CDX0021	240.4	242.8	2.4	1.09	0.19	17	0.03	4
Hanging Wall	CDX0021	265.3	266.4	1.1	0.6	0.14	23	0.06	8
Hanging Wall	CDX0021	270.4	271.4	1	1.91	0.31	16	0.21	2
Hanging Wall	CDX0021	279.8	281	1.2	0.58	0.11	18	0.05	2
Footwall	CDX0021	324.3	325.35	1.05	1.1	0.2	18	0.75	4
Footwall	CDX0021	328.8	330	1.2	1.37	0.23	17	0.06	4
Rare Dyke	CDX0026	166.15	172.7	6.55	1.68	0.3	18	0.2	5
Rare Dyke	CDX0026	182	183	1	0.6	0.1	17	0.01	0
Rare Dyke	CDX0026	186.8	187.6	0.8	6.4	1.09	17	0.07	6
Rare Dyke	CDX0026	196	197	1	1.37	0.2	15	0.15	5
Rare Dyke	CDX0026	221	222	1	0.77	0.12	16	0.05	2
Rare Dyke	CDX0026	243.95	245.5	1.55	0.95	0.18	18	0.07	7
Rare Dyke	CDX0026	288	288.5	0.5	0.56	0.09	17	0.01	1
Rare Dyke	CDX0026	292.25	293	0.75	1.73	0.29	17	0	14
Rare Dyke	CDX0026	324.95	326	1.05	0.62	0.11	17	0	3
Rare Dyke	CDX0026	339	339.8	0.8	3.49	0.58	16	0.01	3
Rare Dyke	CDX0026	412	416.2	4.2	1.05	0.18	17	0.02	4
Rare Dyke	CDX0026	433.45	434	0.55	0.53	0.09	18	0.02	1
Rare Dyke	CDX0026	440	440.3	0.3	2.39	0.39	16	0.01	14
Footwall	CDX0026	478.5	479.45	0.95	1.19	0.21	17	0.03	4
Footwall	CDX0026	542.7	543.05	0.35	1.8	0.3	17	0	1
Rare Dyke	CDX0029	206.7	207.65	0.95	0.71	0.14	19	0.03	3
Rare Dyke	CDX0029	210.45	210.9	0.45	2.58	0.47	18	0.04	1
Rare Dyke	CDX0029	240.4	241.4	1	0.88	0.17	19	0.1	3
Rare Dyke	CDX0029	250.25	251.1	0.85	3.26	0.6	18	0.01	5
Rare Dyke	CDX0029	302.3	303.3	1	2.74	0.46	17	0.02	13
Rare Dyke	CDX0029	328.1	329	0.9	0.99	0.19	19	0.02	6



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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 %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Rare Dyke	CDX0029	340.22	341.1	0.88	1.11	0.18	16	0.03	2
Rare Dyke	CDX0029	391.24	395.35	4.11	1.1	0.19	18	0.04	5
Rare Dyke	CDX0029	435.85	438.4	2.55	2.96	0.53	18	0.03	2
Rare Dyke	CDX0029	444.1	445.6	1.5	4.35	0.74	17	0.03	4
Rare Dyke	CDX0029	465.6	466.8	1.2	0.68	0.12	18	0.03	3
Rare Dyke	CDX0029	494.76	495.23	0.47	7.64	1.29	17	0.01	1
Rare Dyke	CDX0030	206.6	209	2.4	0.63	0.11	18	0.18	3
Rare Dyke	CDX0030	211	214	3	0.54	0.1	18	0.21	5
Rare Dyke	CDX0030	221.7	222.25	0.55	13.24	2.4	18	0.3	10
Rare Dyke	CDX0030	255.5	256	0.5	3.62	0.53	15	0.02	1
Rare Dyke	CDX0030	285.5	286.66	1.16	6.29	1.07	17	0.01	11
Rare Dyke	CDX0030	294	295	1	1.09	0.18	17	0.1	3
Rare Dyke	CDX0030	301.83	305	3.17	0.54	0.11	20	0.07	6
Rare Dyke	CDX0030	338.8	347	8.2	0.89	0.17	19	0.1	5
	Including	338.8	340.1	1.3	2.6	0.47	18	0.12	4
Rare Dyke	CDX0030	378	382.78	4.78	1.66	0.28	17	0.05	5
Rare Dyke	CDX0030	416.1	417.6	1.5	1.89	0.31	16	0.02	5
Rare Dyke	CDX0030	452	453	1	1.18	0.18	16	0.04	3
Rare Dyke	CDX0030	474.2	476	1.8	0.83	0.15	18	0.09	4
Rare Dyke	CDX0030	488.95	489.7	0.75	4.89	0.8	16	0.01	4
Hanging Wall	CDX0033	3	8.9	5.9	2.19	0.33	15	0.05	5
	Including	7.4	8.9	1.5	7.42	1.03	14	0.02	3
Hanging Wall	CDX0033	12.2	14.2	2	0.86	0.14	16	0.09	5
Hanging Wall	CDX0033	110.8	115.5	4.7	5.99	1	17	0.02	7
	Including	112.3	113.3	1	17.49	2.99	17	0	16
Hanging Wall	CDX0033	128.2	129.3	1.1	5.95	0.96	16	0	2
Hanging Wall	CDX0033	137.3	137.8	0.5	1.22	0.2	16	0.06	3
Hanging Wall	CDX0033	149.25	150.25	1	0.55	0.1	18	0.07	2
Hanging Wall	CDX0033	167.1	167.7	0.6	0.5	0.1	20	0.02	3
Hanging Wall	CDX0033	186.6	187.05	0.45	9.74	1.59	16	0	9
Hanging Wall	CDX0033	194.2	194.75	0.55	0.96	0.15	16	0.03	3
Hanging Wall	CDX0033	202.9	204.6	1.7	2.29	0.35	15	0.03	4
Hanging Wall	CDX0033	220.45	222.25	1.8	0.93	0.16	17	0.03	5
Hanging Wall	CDX0033	257.95	258.25	0.3	3.38	0.53	16	0.05	6





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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 %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Hanging Wall	CDX0033	288.6	292.35	3.75	0.84	0.14	17	0.04	4
	Including	291.3	292.35	1.05	2.27	0.36	16	0.02	6
Hanging Wall	CDX0033	303.6	304.05	0.45	1.15	0.2	17	0.06	3
Hanging Wall	CDX0033	311.8	324.45	12.65	2.72	0.42	16	0.08	5
	Including	314.45	316.2	1.75	6.48	1	15	0.05	9
Hanging Wall	CDX0033	393.5	397.1	3.6	2.19	0.36	16	0.08	6
Hanging Wall	CDX0033	457.9	458.4	0.5	3.89	0.66	17	0.02	1
Hanging Wall	CDX0033	473.87	476.23	2.36	7.13	1.11	16	0.04	15
Hanging Wall	CDX0033	484.63	492.4	7.77	5.26	0.79	15	0.06	6
Hanging Wall	CDX0033	542.3	543.14	0.84	2.66	0.43	16	0.12	3
Hanging Wall	CDX0033	549.2	550.3	1.1	0.55	0.1	18	0.04	1
Hanging Wall	CDX0033	565	566	1	0.73	0.13	17	0.05	4
Hanging Wall	CDX0033	575.74	576.67	0.93	0.53	0.09	18	0.02	2
Hanging Wall	CDX0033	599.7	603	3.3	0.58	0.1	18	0.14	4
Hanging Wall	CDX0033	628.4	629.4	1	0.5	0.1	20	0.02	4
Hanging Wall	CDX0033	639.4	643	3.6	7.06	1.08	15	0.02	9
	Including	640.4	642.25	1.85	10.81	1.65	15	0.01	14
Hanging Wall	CDX0033	649	650.6	1.6	6.69	1.01	15	0.02	7
Rare Dyke	CDX0033	655.2	656.4	1.2	0.59	0.13	23	0.05	11
Rare Dyke	CDX0033	659.3	660.2	0.9	0.62	0.1	17	0.01	0
Rare Dyke	CDX0033	666.8	673.3	6.5	2.1	0.34	16	0.04	6
Rare Dyke	CDX0033	666.8	668	1.2	6.47	1.03	16	0.03	4
Rare Dyke	CDX0033	680.35	697	16.65	1.27	0.2	16	0.07	5
Rare Dyke	CDX0033	681.4	682.4	1	4.29	0.67	16	0	9
Rare Dyke	CDX0033	687	688	1	6.99	1.01	14	0.01	3
Rare Dyke	CDX0033	689.4	690.72	1.32	3.38	0.5	15	0.11	2
Pendant Dyke	CDX0038	92	107	15	1.13	0.2	17	0.05	5
	Including	95	96	1	5.81	0.87	15	0.01	9
Pendant Dyke	CDX0038	119	123	4	5.43	0.84	16	0.01	3
	Including	120	121	1	15.19	2.36	16	0.01	4
Pendant Dyke	CDX0038	130	132	2	0.75	0.13	18	0.04	4
Pendant Dyke	CDX0038	136	137	1	0.57	0.11	20	0.04	5
Hanging Wall	CDX0038	172	173	1	0.55	0.11	20	0.11	4
Rare Dyke	CDX0038	197	209	12	1.38	0.23	17	0.03	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 %	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
	Including	197	199	2	3.47	0.56	16	0.02	6
Rare Dyke	CDX0038	221	223	2	0.51	0.1	19	0.04	4
Rare Dyke	CDX0038	244	258	14	1.41	0.23	17	0.06	5
Rare Dyke	CDX0038	247	251	4	2.65	0.43	16	0.03	9
Pendant Dyke	CDX0039	199	203	4	1.42	0.2	14	0.1	1
	Including	202	203	1	3.35	0.39	12	0	0
Hanging Wall	CDX0039	216	218	2	0.62	0.11	17	0.15	1
Hanging Wall	CDX0039	228	231	3	0.91	0.16	18	0.02	1
Hanging Wall	CDX0039	249	251	2	0.77	0.14	18	0.06	4
Hanging Wall	CDX0039	260	261	1	1.86	0.27	14	0.03	2
Hanging Wall	CDX0039	267	270	3	4.35	0.63	15	0.04	5
Hanging Wall	CDX0039	283	284	1	0.58	0.1	18	0.05	3
Rare Dyke	CDX0039	301	314	13	1.92	0.31	16	0.03	6
	Including	302	308	6	3.14	0.48	15	0.01	7

TREO = Lanthanide Oxides + Yttrium Oxide + Scandium Oxide



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### APPENDIX B Phosphate Significant Intercepts

PHOSPHATE SIGNIFICANT INTERCEPTS (3% Cut)									
Mineralised Zone	Hole ID	From (m)	To (m)	Interval (m)	TREO %	NdPr %	NdPr % of TREO	Nb <sub>2</sub> O <sub>5</sub> %	P <sub>2</sub> O <sub>5</sub> %
Hanging Wall / Rare Dyke	CDX0021	262	343.2	81.2	0.28	0.06	22	0.11	4
Rare Dyke	CDX0026	186.8	322	135.2	0.25	0.05	21	0.08	3
Rare Dyke / Footwall / Phos Dyke	CDX0026	336	578.85	242.85	0.23	0.05	23	0.04	4
Rare Dyke	CDX0029	197.8	303.3	105.5	0.25	0.05	22	0.06	4
Rare Dyke	CDX0029	343.35	372.55	29.2	0.18	0.04	21	0.08	3
Rare Dyke	CDX0029	382.6	578.74	196.14	0.33	0.07	22	0.04	4
Rare Dyke	CDX0030	197.5	288.9	91.4	0.4	0.08	20	0.11	5
Rare Dyke	CDX0030	301.83	356	54.17	0.33	0.07	21	0.08	5
Rare Dyke	CDX0030	378	515.9	137.9	0.29	0.06	22	0.05	4
Hanging Wall	CDX0033	3	516.8	<b>513.8</b>	0.49	0.09	19	0.06	5
Hanging Wall / Rare Dyke	CDX0033	557	701	144	0.7	0.12	17	0.06	5
Hanging Wall / Pendant / Rare Dyke	CDX0038	8	296	<b>288</b>	0.44	0.08	19	0.06	4
Hanging Wall / Pendant Dyke	CDX0039	8	324	<b>316</b>	0.32	0.06	18	0.06	4

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	Awaiting Assays
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	Partly 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	Partly Received
CDX0030	307220	7866139	391	515.9	50	60	Diamond	Partly Received
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	Assays Received
CDX0034	307296	7866700	392	293.8	50	60	Diamond	Awaiting Assays
CDX0035	307267	7866608	390	476.7	50	60	Diamond	Awaiting Assays
CDX0036	307046	7866596	392	84	50	60	RC	Awaiting Assays
CDX0037	307040	7866590	392	428.9	50	60	Diamond	Awaiting Assays
CDX0038	307076	7866551	392	464.9	50	60	Diamond	Partly Received
CDX0039	306946	7866457	392	324	50	60	RC	Assays Received
CDX0040	307071	7866436	392	476.9	50	60	Diamond	Awaiting Assays
CDX0041	307202	7866431	391	446.9	50	60	Diamond	Awaiting Assays
CDX0042	307067	7866320	392	204	50	60	RC	Awaiting Assays
CDX0043	307063	7866317	392	560.5	50	60	Diamond	Awaiting Assays
CDX0044	307246	7866367	392	447.36	50	60	Diamond	Awaiting Assays
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	Awaiting Assays
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	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	RC	Awaiting Assays
CRX0081	307479	7866747	391	156	50	60	RC	Assays Received
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
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**

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

<b>Criteria</b>	<b>JORC Code Explanation</b>	
<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 a 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>	<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 an 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. 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>
<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 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>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 relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	<ul style="list-style-type: none"> <li>The angled drill holes were directed as best as possible across the known geology.</li> </ul>
<b>Sample security</b>	<i>The measures taken to ensure sample security</i>	<ul style="list-style-type: none"> <li>Drill samples are delivered to Halls Creek by RareX staff. Then the samples are transported from Halls Creek to Perth via a reputable transport company.</li> </ul>

personal use



### 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 1000-2000ppm 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.</li> </ul>



<p><b>Drill hole information</b></p>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	<ul style="list-style-type: none"> <li>• All drill hole locations are shown on the drill plan and collar details are tabled within the announcement</li> </ul>
<p><b>Data aggregation methods</b></p>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</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> <li>• Accumulated 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</li> </ul>



		between the individual intercepts and are therefore not a true representation of in situ minable ore.
<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>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	<ul style="list-style-type: none"> <li>A drill hole plan and section are in the report.</li> </ul>
<b>Balanced reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<ul style="list-style-type: none"> <li>Reporting is considered balanced</li> </ul>
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<ul style="list-style-type: none"> <li>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>	<i>The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling).</i>	<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