

ASX Release  
24 June 2025

## High Grade Gallium Re-assay Results at Cummins Range

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### Highlights

- Assays for the first 15 drill holes have been received for the initial 58 drill hole re-assaying program - further assaying will be reported in due course.
- Historical drill holes contain values up to **6,826 g/t Ga<sub>2</sub>O<sub>3</sub>**
- Significant gallium intercepts from re-assaying of pulps include:
  - 60m at **99 g/t Ga<sub>2</sub>O<sub>3</sub>**, 3% TREO and 195 g/t Sc<sub>2</sub>O<sub>3</sub> from 29m, including 33m at **115 g/t Ga<sub>2</sub>O<sub>3</sub>**, 4.72% TREO and 258 g/t Sc<sub>2</sub>O<sub>3</sub>
  - 50m at **68 g/t Ga<sub>2</sub>O<sub>3</sub>**, 2% TREO and 227 g/t Sc<sub>2</sub>O<sub>3</sub> from 47m, including 5m at **113 g/t Ga<sub>2</sub>O<sub>3</sub>**, 10.2% TREO and 420 g/t Sc<sub>2</sub>O<sub>3</sub>
- These results confirm the unexpected discovery of gallium at Cummins Range in April made from re-analysis of historical data. This puts Cummins Range as potentially the highest grade and most advanced gallium deposit in Australia whilst remaining one of Australia's most significant undeveloped rare earth deposits.
- Gallium is on the critical mineral list for Europe, America and Australia and, with the growth of A.I. chips, electronics, semi-conductors and solar panels, it is anticipated the gallium market will grow significantly from US\$2.45B in 2024 to US\$21.53B by 2034<sup>1</sup>.

RareX Limited (ASX: REE – **RareX**, or the **Company**) is pleased to announce the first re-assay results of the high-grade gallium at the Cummins Range carbonatite pipe. The discovery of multiple wide, high-grade intercepts of gallium in the 2007 drilling results have been confirmed with re-assaying of the 2020 infill drilling. The outstanding results are occurring alongside high-grade rare earths, phosphate, and scandium mineralisation.

CEO and Managing Director, James Durrant, commented: *"This latest round of assays confirms what our early analysis suggested; the gallium at Cummins Range is not only real, but significant. With consistent grades now returned from infill drilling, we can probably say Cummins Range is one of Australia's most advanced and highest-grade gallium projects.*

*"What makes this particularly strategic is that the gallium sits within a broader rare earth-phosphate-scandium system, making Cummins Range one of the most geopolitically relevant critical mineral deposits in the country. With Chinese supply effectively off the table, and no meaningful Western production, we're now prioritising pathways to unlock gallium as a core value stream alongside rare earths and phosphate, including working in our strategic partnership with Gega Elements to assess novel refining technology that could enable low-cost gallium extraction."*

Most of the world's gallium is produced as a byproduct of aluminium and zinc refining. Gallium grades are generally classified as follows: low-grade (30–50 g/t), moderate-grade (50–100 g/t), and high-grade (>100 g/t). Initial assessments have identified a moderate-grade area of 500m x 500m, with significant higher grade zones occurring within and near high grade rare earth and scandium mineralisation. Notable intercepts from the re-assaying of pulps include:

<sup>1</sup> [https://www.factmr.com/report/gallium-market#:~:text=Gallium%20Market%20Outlook%20\(2024%20to%202034\)&text=The%20market%20has%20been%20forecasted,element%20with%20atomic%20number%2031](https://www.factmr.com/report/gallium-market#:~:text=Gallium%20Market%20Outlook%20(2024%20to%202034)&text=The%20market%20has%20been%20forecasted,element%20with%20atomic%20number%2031)

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- CRX0002 - 60m at **99 g/t Ga<sub>2</sub>O<sub>3</sub>**, 3% TREO and 195 g/t Sc<sub>2</sub>O<sub>3</sub> from 29m, including 33m at **115 g/t Ga<sub>2</sub>O<sub>3</sub>**, 4.72% TREO and 258 g/t Sc<sub>2</sub>O<sub>3</sub>
- CRX0025 - 50m at **68 g/t Ga<sub>2</sub>O<sub>3</sub>**, 2% TREO and 227 g/t Sc<sub>2</sub>O<sub>3</sub> from 47m, including 5m at **113 g/t Ga<sub>2</sub>O<sub>3</sub>**, 10.2% TREO and 420 g/t Sc<sub>2</sub>O<sub>3</sub>
- CRX0032 - 27m at **75 g/t Ga<sub>2</sub>O<sub>3</sub>**, 1.4% TREO and 166 g/t Sc<sub>2</sub>O<sub>3</sub> from 28m, including 3m at **108 g/t Ga<sub>2</sub>O<sub>3</sub>**, 2.3% TREO and 205 g/t Sc<sub>2</sub>O<sub>3</sub>

Notable high-grade intercepts from Cummins Range include<sup>2</sup>:

- NRC016 - 99m at **106 g/t Ga<sub>2</sub>O<sub>3</sub>**, 0.77% TREO and 160 g/t Sc<sub>2</sub>O<sub>3</sub> from 1m to EOH
- NRC058 - 74m at **123 g/t Ga<sub>2</sub>O<sub>3</sub>**, 2.4% TREO and 186 g/t Sc<sub>2</sub>O<sub>3</sub> from surface, including 30m at 206 g/t Ga<sub>2</sub>O<sub>3</sub>, 4.6% TREO and 310 g/t Sc<sub>2</sub>O<sub>3</sub>
- NRC037 - 56m at **114 g/t Ga<sub>2</sub>O<sub>3</sub>**, 1.5% TREO and 263 g/t Sc<sub>2</sub>O<sub>3</sub> from 44m, including 11m at 220 g/t Ga<sub>2</sub>O<sub>3</sub>, 3% TREO and 639 g/t Sc<sub>2</sub>O<sub>3</sub>
- NRC038 - 60m at **124 g/t Ga<sub>2</sub>O<sub>3</sub>**, 3% TREO and 372 g/t Sc<sub>2</sub>O<sub>3</sub> from 36m, including 12m at 242 g/t Ga<sub>2</sub>O<sub>3</sub>, 6.7% TREO and 638 g/t Sc<sub>2</sub>O<sub>3</sub>

#### Gallium at Cummins Range

Cummins Range carbonatite has a resource of 524Mt at 0.31% TREO, 4.6% P<sub>2</sub>O<sub>5</sub> and 70 g/t Sc<sub>2</sub>O<sub>3</sub>, including a higher grade resource of 44Mt at 1% TREO<sup>3</sup>. In March, RareX identified that historical regolith RC drilling, conducted between 2007 and 2012 by Navigator Resources and Kimberley Rare Earths were mostly assayed for gallium. A total of 11,487 assays for gallium were completed with 36% of the assays containing >40 g/t Ga<sub>2</sub>O<sub>3</sub> and values up to 6826 g/t (0.68%). Details on the 2007-2012 drilling, including numerous high-grade intercepts are described in the 25 March 2025 ASX release "RareX Discovers High grade Gallium at Cummins Range".

Since RareX acquired the Project in 2019, 30,000m of drilling has been completed with no gallium assays completed. RareX have begun to re-assay the pulps from recent drilling starting with the 2020 infill drilling. In 2020, RareX completed an infill drilling program designed to upgrade the inferred rare earths resource to an indicated resource. A total of 58 drill holes for 6,146m of RC drilling was completed.

Results from the first 15 drill holes have been received and have confirmed high grade gallium over wide intervals. The most elevated results are coincident with high grade rare earth and scandium content that have been upgraded due to a combination of residual, or eluvial and chemical weathering. The exceptional gallium, rare earths, and scandium results are continuing to elevate the critical metals significance of the Cummins Range deposit.

Figure 1 shows section 307315E with gallium grades across 250m of the Rare Carbonatite Dyke. The mineralisation is contained in the weathered saprolite zone. The location of the section and 2020 infill drill holes are shown on Figure 2.

<sup>2</sup> ASX Announcement: 25 March 2025 - RareX Discovers High Grade Gallium at Cummins Range

<sup>3</sup> ASX Announcement: 25 January 2024 - Cummins Range Mineral Resource Estimate Update: Indicated 77.4Mt at 0.46% TREO, 6.7% P<sub>2</sub>O<sub>5</sub> and 90g/t Sc<sub>2</sub>O<sub>3</sub>; Inferred 446.9Mt at 0.28% TREO, 4.2% P<sub>2</sub>O<sub>5</sub> and 70g/t Sc<sub>2</sub>O<sub>3</sub>

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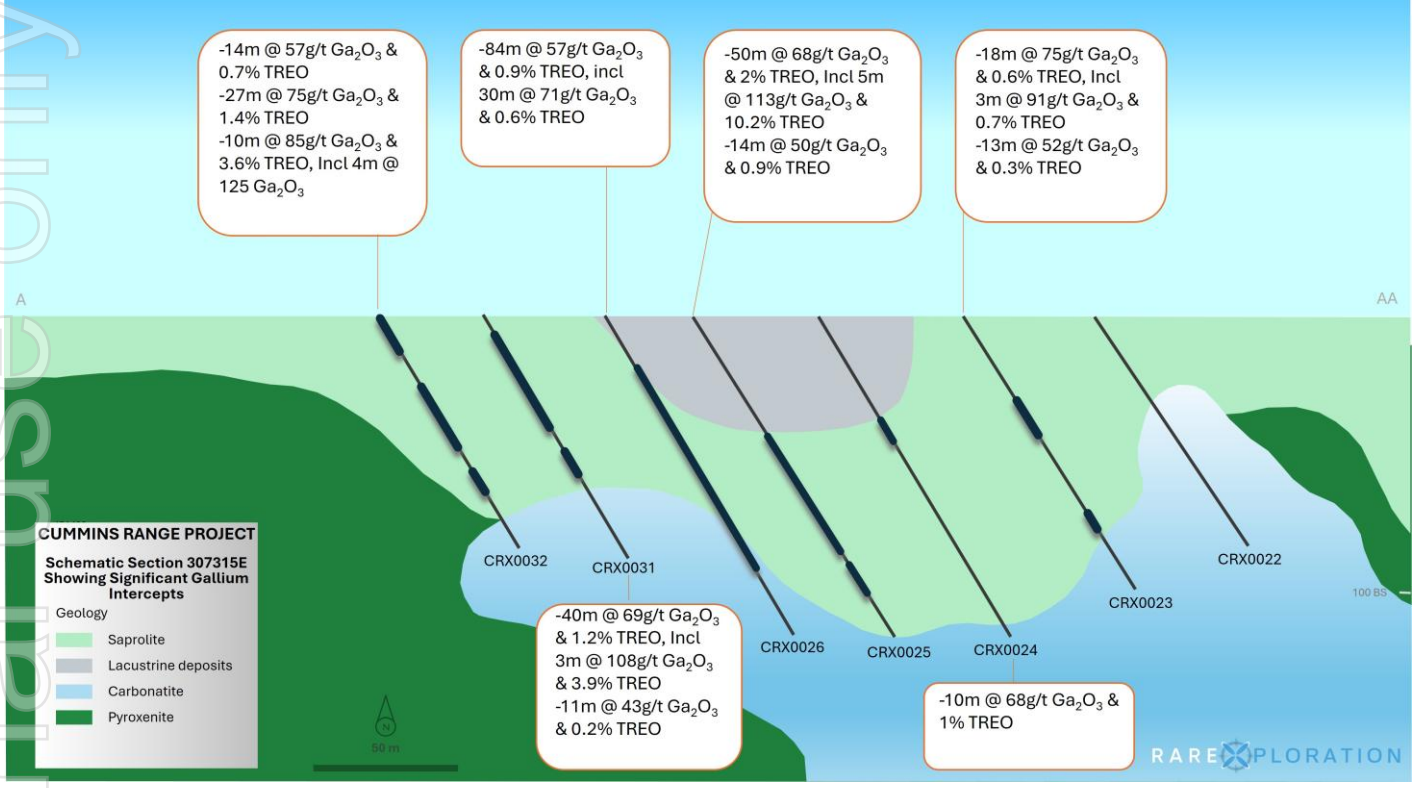


Figure 1. Section 307315E. Showing gallium intercepts at Cummins Range deposit. Section location is shown in Figure 2 and intersection specifics are in Appendix 1

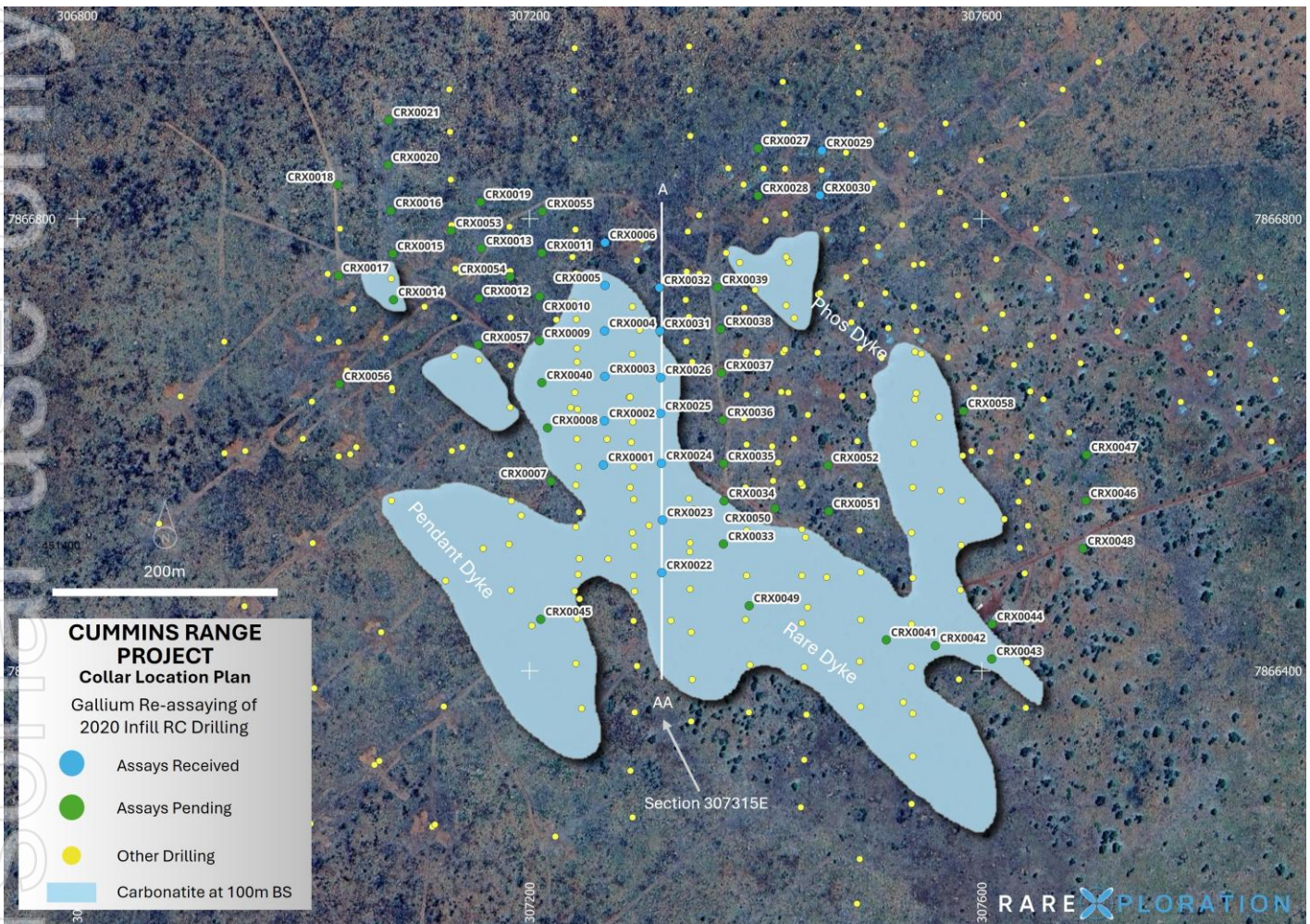


Figure 2. Collar location plan showing carbonatite dykes 100m below surface. Also showing Section (Figure 1) location.

### The Global Gallium Market

The global gallium market is dominated by China, which controls 98% of global gallium production<sup>4</sup>

With the growth of electronics, semi-conductors and solar panels is anticipated the gallium market will grow significantly from US\$2.45 billion in 2024 to US\$21.53 billion by 2034<sup>5</sup>.

Beyond China, production alternatives are limited. Russia ranks as the second-largest producer globally, but at a mere 5 metric tons in 2022—representing just 0.81% of global production—its output is negligible compared to China's dominance<sup>6</sup>. No other countries are significant producers of primary gallium, creating a near-monopoly situation that heightens supply risk for importing nations.

<sup>4</sup> <https://www.mining.com/web/gallium-price-rises-to-highest-since-2011-following-china-export-curbs/>; <https://www.statista.com/statistics/1441110/primary-production-of-gallium-worldwide-by-country/>

<sup>5</sup> [https://www.factmr.com/report/gallium-market#:~:text=Gallium%20Market%20Outlook%20\(2024%20to%202034\)&text=The%20market%20has%20been%20forecasted,element%20with%20atomic%20number%2031](https://www.factmr.com/report/gallium-market#:~:text=Gallium%20Market%20Outlook%20(2024%20to%202034)&text=The%20market%20has%20been%20forecasted,element%20with%20atomic%20number%2031)

<sup>6</sup> <https://www.mining.com/web/gallium-price-rises-to-highest-since-2011-following-china-export-curbs/>; <https://www.statista.com/statistics/1441110/primary-production-of-gallium-worldwide-by-country/>

## Expanding Demand Across Multiple Sectors

The demand for gallium has expanded dramatically across numerous high-tech sectors, contributing significantly to the upward pressure on prices. The global gallium market is projected to grow from \$2.32 billion in 2024 to \$2.91 billion in 2025, representing a compound annual growth rate CAGR of 25.4%<sup>7</sup>. More aggressive forecasts suggest the market could reach \$17.0 billion by 2032, expanding at a CAGR of 24.5%<sup>8</sup>. Upward price pressure is likely to persist as demand continues to expand across the semiconductor, telecommunications, defense, and renewable energy sectors.

## Price Increases and Market Dynamics

Gallium prices have experienced remarkable volatility and overall upward trajectory in recent years, influenced by a complex interplay of supply constraints and growing demand. In December 2024, gallium prices surged to \$575 per kilogram (delivered to Rotterdam), representing a 17% increase over previous levels and reaching the highest point since 2011.<sup>9</sup>

The most significant factor driving recent price increases has been China's strategic export restrictions. Beijing implemented initial controls on gallium exports in August 2023, which immediately disrupted global supply chains and pushed prices higher. By December 2024, China had escalated these measures, announcing a comprehensive ban on gallium exports to the United States, further intensifying market pressures. Since China accounts for approximately 98% of global gallium production, these export restrictions have had outsized impacts on global availability and pricing.

China's production advantage stems from its integration of gallium recovery with its massive aluminum industry, as gallium is typically extracted from the alumina processing stream<sup>10</sup>.

## Gallium Applications

### Semiconductor Applications and Integrated Circuits<sup>11</sup>

The semiconductor industry represents the largest demand driver for gallium, with approximately 74% of gallium imported into the United States during 2023 being used in integrated circuits. Gallium arsenide GaAs and gallium nitride GaN compounds have become critical semiconductor materials across multiple industries, including high-tech, automotive, aerospace, healthcare, and telecommunications sectors.

Gallium nitride semiconductors are particularly valuable due to their superior power density and heat resistance properties. Traditionally used primarily in military applications, GaN is now finding increased adoption in commercial applications including 5G networks, wireless infrastructure, power electronics, satellites, electric vehicles, and consumer electronics. As one manufacturer noted, "GaN offers higher power density, more reliable operation and improved efficiency over traditional silicon-only based solutions".

### Optoelectronic Devices<sup>12</sup>

Approximately 25% of gallium consumption goes toward optoelectronic devices such as laser diodes, light-emitting diodes LEDs, photodetectors, and solar cells. The rapid growth in popularity of electronic devices including mobile phones, laptops, televisions, and lighting applications continues to drive demand in this segment. These applications are particularly important for fiber optic communications and high-speed data transmission technologies, which represent growth areas for the future.

<sup>7</sup> <https://blog.tbrc.info/2025/02/gallium-market-drivers-2/>

<sup>8</sup> <https://www.persistencemarketresearch.com/market-research/gallium-market.asp>

<sup>9</sup> <https://www.mining.com/web/gallium-price-rises-to-highest-since-2011-following-china-export-curbs/>; <https://www.mining.com/web/gallium-price-has-more-than-doubled-since-china-export-curbs/>

<sup>10</sup> <https://www.fitechem.com/news/gallium-price-floor-set-to-rise-in-2021/>

<sup>11</sup> <https://www.metaltechnews.com/story/2024/09/16/critical-minerals-alliances-2024/us-looks-for-domestic-gallium-sources/1917.html>

<sup>12</sup> <https://www.grandviewresearch.com/industry-analysis/gallium-market-report>

**Renewable Energy Applications<sup>13</sup>**

The renewable energy sector represents an emerging but potentially massive source of gallium demand. Thin-film solar panels rely heavily on gallium for their high efficiency, and as renewable energy adoption accelerates globally, gallium requirements are expected to grow substantially. Europe alone is projected to consume up to 26 times more gallium by 2030 compared to current levels, according to the Fraunhofer Institute.

The scale of potential demand is staggering—Austria's planned renewable energy projects, despite serving a population of only 9 million, would require approximately 4.5 times the current global gallium production. This statistic underscores the looming supply-demand imbalance as gallium becomes increasingly integral to both energy independence and environmental commitments worldwide.

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

<sup>13</sup> <https://strategicmetalsinvest.com/gallium-prices/>

## Competent Person's Statement

The information in this report that related to exploration results has been compiled and reviewed by Mr Guy Moulang. Mr Guy Moulang is a full-time employee of RareX Limited and 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 which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Guy Moulang consents to the disclosure of the information in this report in the form and context in which it appears.

## Reference List

- [https://www.factmr.com/report/gallium-market#:~:text=Gallium%20Market%20Outlook%20\(2024%20to%202034\)&text=The%20market%20has%20been%20forecasted,element%20with%20atomic%20number%2031](https://www.factmr.com/report/gallium-market#:~:text=Gallium%20Market%20Outlook%20(2024%20to%202034)&text=The%20market%20has%20been%20forecasted,element%20with%20atomic%20number%2031)
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- <https://www.persistencemarketresearch.com/market-research/gallium-market.asp>
- <https://www.metaltechnews.com/story/2024/09/16/critical-minerals-alliances-2024/us-looks-for-domestic-gallium-sources/1917.html>
- <https://www.grandviewresearch.com/industry-analysis/gallium-market-report>
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- <https://www.csiro.au/en/news/all/articles/2024/june/critical-mineral-gallium-germanium#:~:text=Global%20demand%20for%20gallium%20is,is%20from%202015%20to%202030>
- <https://www.mordorintelligence.com/industry-reports/scandium-market>

## About RareX Limited – ASX: REE

RareX is a critical minerals company specialising in rare earths and gallium, niobium as well as scandium in hard rock carbonatites.

The **exploration** focus of the business is on the Mt Mansbridge xenotime heavy rare earths project near Browns Range, the Khaleesi Project in the East Yilgarn which is a district-scale, elevated gallium & niobium, alkaline intrusive complex, and the Cummins Range near-mine anomalies.

The Company's **engineering** and commercial focus is on the mid-study-level, Cummins Range Project (+\$330M NPV<sub>8</sub> post-tax\*) - a carbonatite hosted rare earths and phosphate project, containing magnet grade rare earths and battery grade phosphates, and substantial gallium and scandium. It is technically Australia's largest undeveloped rare earths project.

RareX have been curating a portfolio of carbonatite related projects including the newly acquired bulls-eye Piper Project along trend from both Nolans Bore and the Luni niobium deposit. RareX will continue to develop and optimise its portfolio.

RareX maintains material investments in Kincora Copper (ASX:KCC), Cosmos Exploration (ASX:C1X) and Canada Rare Earth Corporation (LL.V).

**For further information on the Company and its projects visit [www.rarex.com.au](http://www.rarex.com.au)**

\* The forecast financial information was released on 22 August 2023. The Company confirms that the material assumptions underpinning the production target and forecast financial information continue to apply and have not materially changed

## Appendix 1: Significant Intercepts and Drill Collar Details

### Significant Intercepts

| Hole    | From | To  | Interval | Ga <sub>2</sub> O <sub>3</sub><br>g/t | TREO % | Sc <sub>2</sub> O <sub>3</sub><br>g/t | Nb <sub>2</sub> O <sub>5</sub> % | P <sub>2</sub> O <sub>5</sub> % | Peak Ga <sub>2</sub> O <sub>3</sub><br>Value |
|---------|------|-----|----------|---------------------------------------|--------|---------------------------------------|----------------------------------|---------------------------------|--|
| CRX0001 | 30   | 37  | 7        | 57                                    | 0.33   | 104                                   | 0.1                              | 3                               | 59   |
| CRX0001 | 41   | 47  | 6        | 42                                    | 0.25   | 69                                    | 0.08                             | 3                               | 43   |
| CRX0001 | 67   | 69  | 2        | 60                                    | 0.4    | 85                                    | 0.1                              | 8                               | 64   |
| CRX0002 | 11   | 89  | 78       | 87                                    | 2.38   | 171                                   | 0.15                             | 12                              | 322  |
| Incl.   | 29   | 89  | 60       | 99                                    | 2.98   | 195                                   | 0.17                             | 13                              | 322  |
| Incl.   | 29   | 62  | 33       | 115                                   | 4.72   | 258                                   | 0.24                             | 14                              | 322  |
| CRX0003 | 10   | 14  | 4        | 68                                    | 0.49   | 171                                   | 0.18                             | 3                               | 80   |
| CRX0003 | 36   | 54  | 18       | 46                                    | 0.34   | 87                                    | 0.09                             | 12                              | 73   |
| CRX0004 | 12   | 51  | 39       | 53                                    | 0.41   | 56                                    | 0.06                             | 8                               | 134  |
| CRX0005 | 12   | 34  | 22       | 73                                    | 1.42   | 142                                   | 0.24                             | 8                               | 360  |
| CRX0005 | 18   | 21  | 3        | 218                                   | 5.48   | 301                                   | 0.28                             | 20                              | 360  |
| CRX0005 | 60   | 72  | 12       | 41                                    | 0.16   | 28                                    | 0.05                             | 6                               | 42   |
| CRX0006 | 0    | 17  | 17       | 48                                    | 0.61   | 74                                    | 0.07                             | 4                               | 118  |
| Incl.   | 11   | 13  | 2        | 89                                    | 3.91   | 38                                    | 0.07                             | 4                               | 118  |
| CRX0022 | NSI  |     |          |                                       |        |                                       |                                  |                                 |  |
| CRX0023 | 32   | 50  | 18       | 75                                    | 0.61   | 218                                   | 0.2                              | 14                              | 104  |
| Incl.   | 35   | 38  | 3        | 91                                    | 0.69   | 316                                   | 0.37                             | 13                              | 104  |
| CRX0023 | 76   | 89  | 13       | 52                                    | 0.3    | 71                                    | 0.07                             | 5                               | 68   |
| CRX0024 | 41   | 51  | 10       | 68                                    | 1.04   | 300                                   | 0.28                             | 12                              | 90   |
| CRX0025 | 47   | 97  | 50       | 68                                    | 2.05   | 227                                   | 0.15                             | 10                              | 113  |
| Incl.   | 53   | 58  | 5        | 113                                   | 10.16  | 420                                   | 0.37                             | 7                               | 113  |
| CRX0025 | 101  | 115 | 14       | 50                                    | 0.89   | 178                                   | 0.11                             | 12                              | 66   |
| CRX0026 | 21   | 105 | 84       | 57                                    | 0.94   | 148                                   | 0.1                              | 14                              | 93   |
| Incl.   | 31   | 61  | 30       | 71                                    | 0.55   | 145                                   | 0.06                             | 10                              | 93   |
| CRX0029 | 7    | 39  | 32       | 59                                    | 0.78   | 100                                   | 0.03                             | 21                              | 85   |
| Incl.   | 17   | 30  | 13       | 73                                    | 0.83   | 115                                   | 0.04                             | 23                              | 85   |
| CRX0029 | 48   | 76  | 28       | 57                                    | 0.88   | 108                                   | 0.04                             | 19                              | 78   |
| CRX0030 | 6    | 20  | 14       | 52                                    | 0.65   | 104                                   | 0.06                             | 13                              | 63   |
| CRX0030 | 27   | 38  | 11       | 51                                    | 0.51   | 71                                    | 0.04                             | 15                              | 83   |
| CRX0030 | 42   | 47  | 5        | 72                                    | 0.54   | 132                                   | 0.04                             | 14                              | 85   |
| CRX0030 | 56   | 69  | 13       | 62                                    | 0.71   | 118                                   | 0.05                             | 17                              | 102  |
| CRX0031 | 6    | 46  | 40       | 69                                    | 1.17   | 212                                   | 0.25                             | 13                              | 125  |
| Incl.   | 7    | 10  | 3        | 108                                   | 3.87   | 565                                   | 1.18                             | 10                              | 125  |

|         |    |    |    |     |      |     |      |    |     |
|---------|----|----|----|-----|------|-----|------|----|-----|
| CRX0031 | 54 | 65 | 11 | 43  | 0.21 | 72  | 0.09 | 7  | 53  |
| CRX0032 | 1  | 15 | 14 | 57  | 0.65 | 314 | 0.21 | 11 | 68  |
| CRX0032 | 28 | 55 | 27 | 75  | 1.39 | 166 | 0.11 | 18 | 104 |
| Incl.   | 39 | 42 | 3  | 108 | 2.25 | 205 | 0.19 | 17 | 104 |
| CRX0032 | 63 | 73 | 10 | 85  | 3.56 | 295 | 0.22 | 15 | 154 |
| Incl.   | 68 | 72 | 4  | 125 | 6.5  | 415 | 0.27 | 18 | 154 |

#### Drill Collar Details

| Hole ID | Grid       | Northing   | Easting   | mRL    | Depth | Azimuth | Dip |
|---------|------------|------------|-----------|--------|-------|---------|-----|
| CRX0001 | MGA2020_52 | 7866582.12 | 307265.31 | 391.54 | 114   | 180     | 60  |
| CRX0002 | MGA2020_52 | 7866621.14 | 307266.27 | 391.5  | 90    | 180     | 60  |
| CRX0003 | MGA2020_52 | 7866660.51 | 307266.55 | 391.76 | 97    | 180     | 60  |
| CRX0004 | MGA2020_52 | 7866700.79 | 307266.36 | 391.86 | 102   | 180     | 60  |
| CRX0005 | MGA2020_52 | 7866741    | 307266.75 | 391.9  | 97    | 180     | 60  |
| CRX0006 | MGA2020_52 | 7866778.94 | 307266.68 | 392.13 | 84    | 180     | 60  |
| CRX0022 | MGA2020_52 | 7866486.8  | 307316.91 | 391.26 | 96    | 180     | 60  |
| CRX0023 | MGA2020_52 | 7866533.33 | 307317.47 | 391.41 | 114   | 180     | 60  |
| CRX0024 | MGA2020_52 | 7866583.57 | 307316.64 | 391.53 | 132   | 180     | 60  |
| CRX0025 | MGA2020_52 | 7866627.67 | 307315.86 | 391.71 | 132   | 180     | 60  |
| CRX0026 | MGA2020_52 | 7866659.38 | 307315.94 | 391.68 | 132   | 180     | 60  |
| CRX0029 | MGA2020_52 | 7866860.33 | 307458.61 | 392    | 114   | 180     | 60  |
| CRX0030 | MGA2020_52 | 7866820.81 | 307456.82 | 391.83 | 114   | 180     | 60  |
| CRX0031 | MGA2020_52 | 7866700.62 | 307315.44 | 391.64 | 102   | 180     | 60  |
| CRX0032 | MGA2020_52 | 7866739.02 | 307314.87 | 391.68 | 96    | 180     | 60  |

## Appendix 2: JORC Tables

### Section 1: Sampling Techniques and Data

| Criteria                     | JORC Code explanation   | Commentary  |
|------------------------------|---|---|
| <b>Sampling techniques</b>   | <ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul style="list-style-type: none"> <li>Navigator Resources (2007), 148 AC holes (4,510 m), 93 reverse circulation holes (RC) (9,293 m). Holes drilled 60° towards south, 40 m spacing.</li> <li>Kimberley Rare Earths (2012), 77 RC holes (4,229 m).</li> <li>Navigator (NAV) Drilling NRC001-NRC0093 (drilled in 2007); 4 m composite spear samples were taken and assayed. Assay intervals that returned results &lt;1000 ppm Ce were then resampled. The 10% cone splits from the drill rig were then used for the 1m re-assays.</li> <li>Kimberly Rare Earths (KRE) Drilling KRC094-KRC0170 (2012) – All drill meters were assayed on 1 m intervals using a 10% cone split from the drill rig.</li> <li>RareX Limited (2020), 58 RC holes (6,146 m). 1m samples through mineralised zones and up to 4m composites in unmineralized areas</li> <li>All RareX, Kimberley Rare Earth and rare earth mineralised samples from Navigator were taken using the cone splitter on the drill rig or a riffle splitter.</li> <li>It is not documented how Navigator and Kimberly identified mineralisation. Kimberly Rare Earths blanket assayed 1m intervals and analysed for Gallium. Navigator blanket assayed with 4m composites and did not include gallium. Samples with &gt;1000ppm Ce were re-assayed at 1m intervals and did analyse for gallium.</li> </ul> |
| <b>Drilling techniques</b>   | <ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</li> </ul>   | <ul style="list-style-type: none"> <li>The drilling technique used was reverse circulation (RC) drilling</li> </ul>   |
| <b>Drill sample recovery</b> | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>  | <ul style="list-style-type: none"> <li>The 2007-2012 samples (Navigator Resources and Kimberley Rare Earths Ltd) were collected as both 4m composites for initial assaying and 1m samples for follow up assaying of anomalous zones. Most holes had good sample recovery although a limited number of holes encountered high ground water inflow and karst type weathering in void formations at depth exceeding 40m. Difficult drilling conditions including binding clays, voids and water flow in several holes.</li> <li>The 2020 infill drill program (RareX) involved drilling between historic drillholes to test continuity of grade. The program used a larger and more capable rig which resulted</li> </ul>  |

| Criteria   | JORC Code explanation   | Commentary   |
|--|---|--|
|  |   | <p>in good recoveries in most of the drilling with an averaged of greater than 90% sample recovery.</p> <ul style="list-style-type: none"> <li>No measures were described in the historical reports regarding maximising sample recovery.</li> <li>RareX ensured the cyclone was cleaned after every 3 m drill run and where sticky clays were intersected, the driller would lift the hammer off the bottom and clean the cyclone after each metre. Wet samples were left open for water to evaporate.</li> <li>There doesn't appear to be a relationship between sample recovery/grade and sample bias. Although you can't calculate this from the data captured by KRE and NAV</li> </ul>   |
| <p><b>Logging</b></p>  | <ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>   | <ul style="list-style-type: none"> <li>All but three drill holes (NRC090-NRC093 for a total of 300 m) have had a geological log completed.</li> <li>All of the above logs are quantitative with the exception of geological logs in the regolith which can be qualitative.</li> <li>The detail of logging is considered by the Competent Person to be appropriate for Mineral Resource estimation.</li> </ul>  |
| <p><b>Sub-sampling techniques and sample preparation</b></p> | <ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul style="list-style-type: none"> <li>Navigator Drilling NRC001-NRC0093 – 4m composite spear samples were taken using a PVC spear. Assay intervals that returned results &lt;1000 ppm Ce were then resampled. The 10% cone splits from the drill rig were then used for the 1 m re-assays. This sampling procedure and size is considered appropriate for the grain size of the material being sampled.</li> <li>Kimberly Rare Earths (KRE) Drilling KRC094-KRC0170 - Drill core were assayed on 1 m intervals using a 10% cone split from the drill rig. This sampling procedure and size is considered appropriate for the grain size of the material being sampled.</li> <li>Quality control procedures have not been documented by NAV or KRE, other than what is described above.</li> </ul> <p>RareX:</p> <ul style="list-style-type: none"> <li>CRX0001-CRX0058 – entire Bulk samples were split down into 1-4 m composites using a 50/50 or 75/25 riffle splitter. All samples were dry before splitting.</li> <li>This technique is industry standard practice.</li> <li>Field duplicates were taken at an average of 1 in 30 for the RC drilling.</li> <li>2020 Lab duplicates were also re-assayed.</li> </ul> |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   |  | <ul style="list-style-type: none"> <li>Sample sizes are regarded as being appropriate for this style of mineralization.</li> </ul>   |
| <b>Quality of assay data and laboratory tests</b> | <ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul> | <ul style="list-style-type: none"> <li>Navigator – 4 m composites were taken at the drill rig and sent to Intertek where a 4-acid digest, with ICP-OES and ICP-MS finish (detection limit for gallium was 0.1ppm). Where 4 m composites returned cerium assays &gt;1000 ppm, 1 m re-assays were conducted on each of the metres in the composites. The 1 m reassays were a peroxidised fusion digest with ICP-OES and ICP-MS finish. This technique is considered as a total analysis for elements in consideration for this resource. 40 elements were assayed for and detection limit for gallium was 10ppm. Laboratory QA/QC was completed with regular standards, blanks and repeats.</li> <li>Kimberly Rare Earths used Intertek for the 1m assays using peroxidised fusion digest with ICP-OES and ICP-MS finish. This technique is considered as a total analysis for elements in consideration for this resource. 30 elements were assayed for. Laboratory QA/QC was completed with regular standards, blanks and repeats.</li> <li>The results in this release were assayed using a 4 Acid Digest with a ICP-MS finish. Regular assaying of standards, duplicates and repeats were completed by the laboratory. An alternate assaying method of peroxide fusion with ICP finish was also completed on 26 check samples.</li> <li>The quality of control procedures adopted by the laboratories are in line with industry standards and acceptable levels of accuracy and precision have been established throughout the generations of assaying.</li> </ul> |
| <b>Verification of sampling and assaying</b>      | <ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>  | <ul style="list-style-type: none"> <li>Reported results have not been verified by either an independent or alternative company personnel.</li> <li>Twinned holes have been drilled</li> <li>Data in the announcement has been captured from historical database from NAV and KRE. Geological data is of high quality, and it is assumed these companies followed industry standard procedures and protocols when collecting and storing data.</li> <li>The assay results have been converted into oxides using the below stoichiometric conversion factors: Ga<sub>2</sub>O<sub>3</sub> 1.3442, 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>                    | <ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource</i></li> </ul>   | <ul style="list-style-type: none"> <li>Drill hole collars have been surveyed with a DGPS and have and accuracy of 100 mm.</li> <li>Collar coordinates are in MGA Zone 52H 2020 and have been converted from MGA94 and AMG84 grids.</li> </ul>  |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
|  | <p>estimation.</p> <ul style="list-style-type: none"> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>  | <ul style="list-style-type: none"> <li>• Topographic control has been established from surveyed drill collars and are within 100 mm. The Cummins Range deposit is located on flat terrain.</li> </ul>  |
| <b>Data spacing and distribution</b>                           | <ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>                               | <ul style="list-style-type: none"> <li>• Drill hole spacing is considered appropriate to gain a robust understanding of the mineralisation. The RareX exploration team are seeing the same geological positions for mineralisation in each drilling campaign, suggesting RareX have a solid geological model. Drill spacing is considered appropriate to support an Inferred and Indicated Mineral Resource estimate.</li> <li>• 4m drill composites were used by NAV. Where 4 m composites returned cerium assays &gt;1000 ppm, 1 m re-assays were conducted on each of the metres in the composites.</li> </ul>  |
| <b>Orientation of data in relation to geological structure</b> | <ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul> | <ul style="list-style-type: none"> <li>• Navigator (NRC0001-NRC0093), Kimberley Rare Earths (KRC0094-KRC0170) and RareX 2020 drill holes (CRX0001-CRX0048, CRX0050-CRX0058) were drilled at an acute angle to the dominant orientation of the fresh rock rare earths mineralisation. These drill holes are shallow holes and are mostly contained in the regolith profile where a combination of residual, or eluvial and chemical weathering have redistributed rare earths, gallium, scandium and phosphate in orientations that don't align with primary mineralisation. Recent geochemical modelling has established some hard and soft boundaries that will confine grade to certain shapes.</li> </ul> |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>  | <ul style="list-style-type: none"> <li>• Sample security measures for these historic drilling results is unknown.</li> <li>• Sample bags were cable tied and pallets were shrink wrapped. A commercial transporter was used to courier to Perth laboratory.</li> </ul>   |
| <b>Audits or reviews</b>                                       | <ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>  | <ul style="list-style-type: none"> <li>• The competent person for the 2023 mineral resource estimate has audited the assay results with no issues reported. No other audits or reviews have occurred.</li> <li>• The gallium results have not been audited.</li> </ul>   |

## Section 2: Reporting of Exploration Results

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
| <b>Mineral tenement and land tenure status</b> | <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>   | <ul style="list-style-type: none"> <li>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. A mining lease application M80/648 covers the Cummins Range deposit and is expected to be granted in 2025.</li> <li>Heritage agreements have been established on all granted tenements</li> </ul>  |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <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 in 2012.</li> </ul>  |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>  | <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 background levels of 1000-2000 ppm TREO and high-grade zones up to 20% TREO. Disseminated apatite is through all rock types and is also contained in phoscorite. Above the carbonatite dykes is a well-developed regolith profile that extends to 100 m below the surface where a combination of residual, or eluvial and chemical weathering have redistributed and upgraded rare earths and phosphate.</li> </ul> |
| <b>Drillhole information</b>                   | <ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>downhole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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</li> </ul> | <ul style="list-style-type: none"> <li>Drill hole details for the NAV and KRE holes are in the ASX announcement 15 October 2019 "Globally significant Maiden JORC 2012 Resource of 13Mt at 1.13% TREO".</li> <li>Drill hole details for the RareX holes are in the ASX announcement 19 July 2021 "RareX delivers major resource upgrade at Cummins Range rare earths project, WA".</li> </ul>   |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   | <i>why this is the case.</i>   |  |
| <b>Data aggregation methods</b>   | <ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><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></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul> | <ul style="list-style-type: none"> <li>Drill intercepts have been calculated using a weighted average.</li> <li>There are no metal equivalents</li> </ul>  |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</i></li> </ul>  | <ul style="list-style-type: none"> <li>Drilling is at an acute angle to the dominant orientation of the fresh rock rare earths mineralisation. These drill holes are shallow holes and are mostly contained in the regolith profile where a combination of residual, or eluvial and chemical weathering have redistributed gallium, scandium, rare earths and phosphate in orientations that don't align with primary mineralisation. Recent geochemical modelling has established some hard and soft boundaries that will confine grade to certain shapes.</li> </ul> |
| <b>Diagrams</b>   | <ul style="list-style-type: none"> <li><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></li> </ul>   | <ul style="list-style-type: none"> <li>Relevant diagrams are presented in the body of this report.</li> </ul>  |
| <b>Balanced reporting</b>   | <ul style="list-style-type: none"> <li><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></li> </ul>   | <ul style="list-style-type: none"> <li>Reported exploration results are considered balanced.</li> </ul>  |
| <b>Other substantive exploration data</b>                               | <ul style="list-style-type: none"> <li><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></li> </ul>   | <ul style="list-style-type: none"> <li>The Cummins Range project is an advanced rare earths and phosphate project and RareX are in the process of gaining a mining licence. RareX have completed mineral resource estimates and scoping studies on the project. However, no previous work has included gallium.</li> <li>There are 30,000 metres of drilling at Cummins Range which has not been assayed for gallium, and there may be potential for a fresh rock resource.</li> </ul>   |

| Criteria     | JORC Code explanation   | Commentary   |
|--------------|---|--|
| Further work | <ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul> | <ul style="list-style-type: none"> <li>Conduct further assaying for gallium on the RareX drilling</li> <li>Complete mineralogy to establish the source of the gallium</li> </ul> |

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