

Major new drilling program to commence at Cummins Range with high-grade extensional targets

Geological review reveals significant upside which could change the project's scale

Highlights

- Over 6,000m of Reverse Circulation and diamond drilling set to begin in late April 2021
- New geological model highlights the potential for high-grade depth extensions with the Main Fault structure open in all directions
- Good potential for high-grade parallel structures also identified
- Work continuing on upgrade to the existing Inferred Resource of 13Mt at 1.13% TREO with 22.1% NdPr¹, with an updated Mineral Resource expected to be released in May 2021

RareX Limited (ASX: REE; **RareX or the Company**) is pleased to advise that it will commence a major new exploration drilling program later this month at its flagship 100%-owned Cummins Range Rare Earths Project, located in the Kimberley region of Western Australia.

The new phase of exploration, comprising more than 6,000m of reverse circulation (**RC**) and diamond drilling, follows the highly successful drill program completed in 2020 and a thorough geological review of the Cummins Range deposit undertaken by RareX geologists over the wet season.

A revised geological model has recently been established, based largely on the 58 RC drill holes that were completed in August-October 2020, leading to the identification of significant new high-grade exploration targets.

The new interpretation has established that, while there is general erosion of the entire carbonatite pipe leading to an upgrade in the regolith profile, there are also pre-existing high-grade fault structures that represent high-priority exploration targets with the potential to substantially change the scale of the Cummins Range Project.

This new understanding has formed the basis of the upcoming RC and diamond drill program planned to commence in late April.

RareX Managing Director, Jeremy Robinson, said: *"The work undertaken over the wet season by the RareX geological team has the potential to be a game-changer for the Cummins Range Project, building on its existing attributes as an advanced, high-quality rare earths project in a Tier-1 mining jurisdiction with the ability to yield a premium product."*

¹ See ASX announcements 15 October 2019 entitled "Globally significant maiden JORC 2012 Resource of 13 million tonnes at 1.13% TREO" and 26 May 2020 "High Neodymium-Praseodymium enrichment confirmed at Cummins Range Rare Earths Project"



“If the new geological interpretation is confirmed, the upcoming drilling has the potential to dramatically expand the scale of the deposit and delineate a significant volume of new high-grade material. We are looking forward to what the upcoming drilling can deliver.”

Geological Discussion

Deeper RC drilling completed as part of the 2020 drill program has identified for the first time the presence of a strongly rare earth element (REE) mineralised fault that sits beneath the length of the known mineralisation at the Cummins Range deposit. The RareX geological team has identified a mineralised fault that has been intersected over 550m of strike length and is open in all directions.

The Main Fault (MF) strikes in a north-westerly direction of 230 degrees and dips to the south-west at 50-60 degrees as shown in Figure 1. Identifying the fault in the upper 70m can very difficult due to the strong weathering profile, which is most likely the reason for it not being recognised previously.

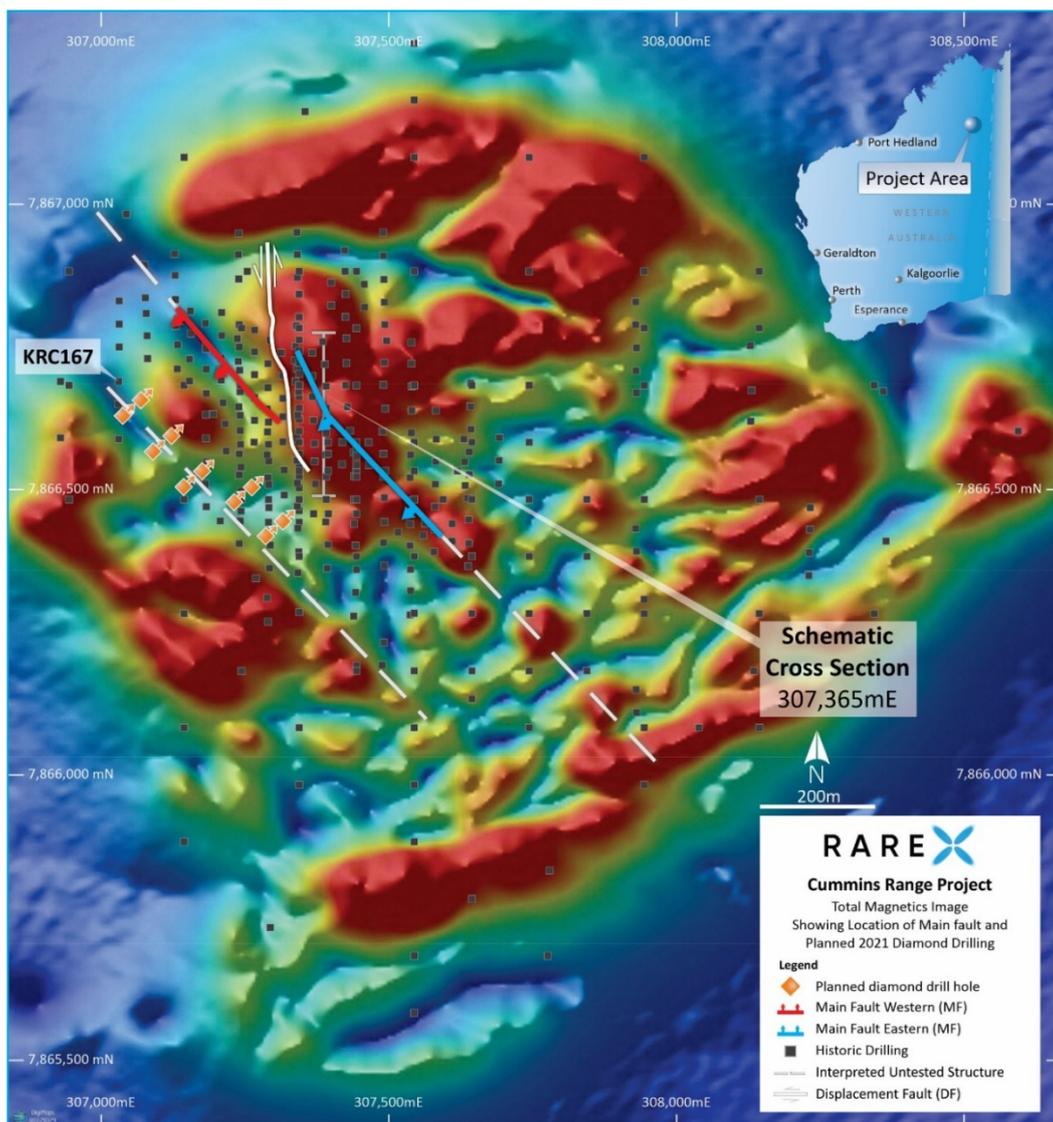


Figure 1. Total Magnetic Image of Cummins Range Pipe with Main Fault position and planned 2021 diamond drilling

At depth, where weathering has decreased, the fault is characterised by strong wall rock silicification with quartz veining and the fault itself is a silicified sulphidic milled breccia and is 5-20m in true width. High-grade REE mineralisation is consistently greater than 1% TREO.

In addition to the MF mineralisation, the 2020 drilling has shown that a significant proportion of the grade is also related to dispersion in the regolith as shown in Figure 2.

Grade within the dispersion or enriched areas is often moderate to high grade: for example, in Figure 2, the upper 20m of the significant intercept in hole CRX0035 is an enriched zone that sits beneath a 40m deep REE and Nb₂O₅ depleted zone. This enriched zone contains 20m at 4.5% TREO and 0.6% Nb₂O₅, including 6m @ 9.4% TREO and 1.5% Nb₂O₅ (see ASX: 17 November 2020).

Dispersion and enrichment are seen in the regolith profile along the entire strike of the known mineralised system and will be an exploration target for this year's RC drill program.

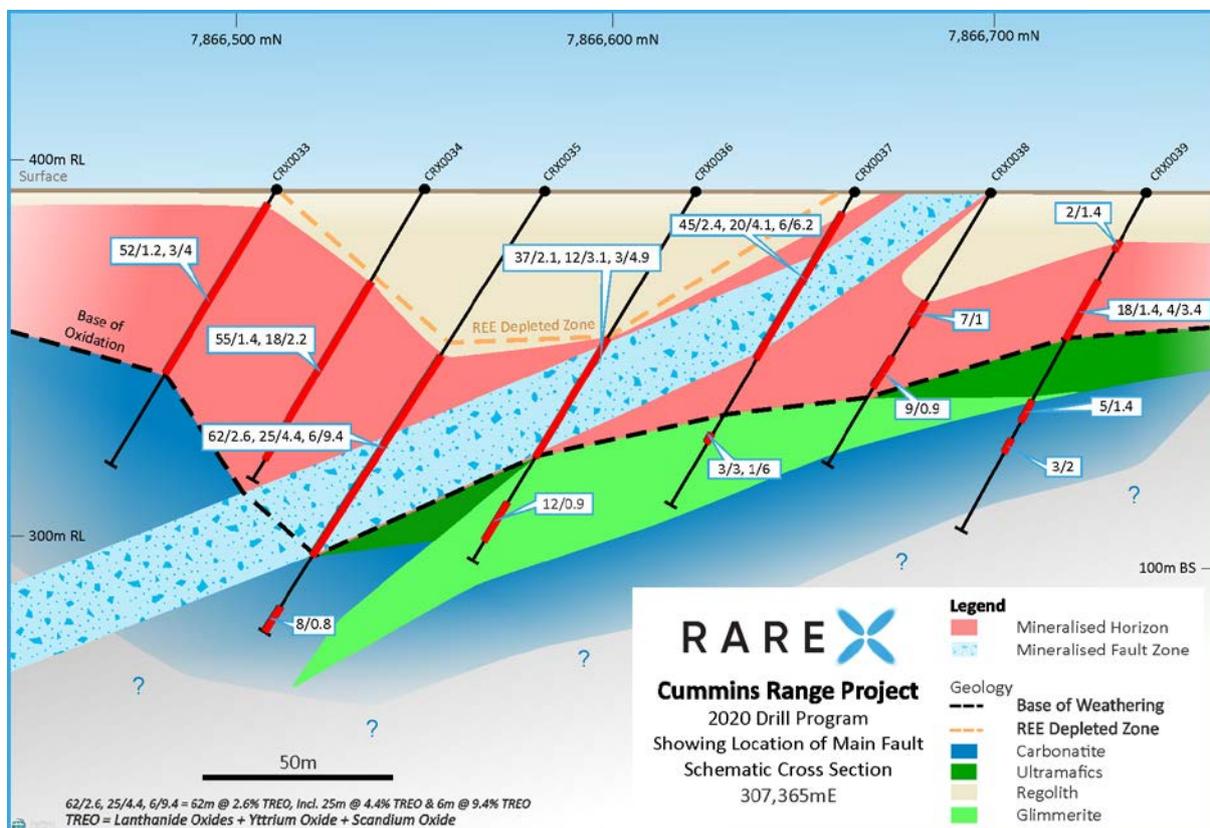
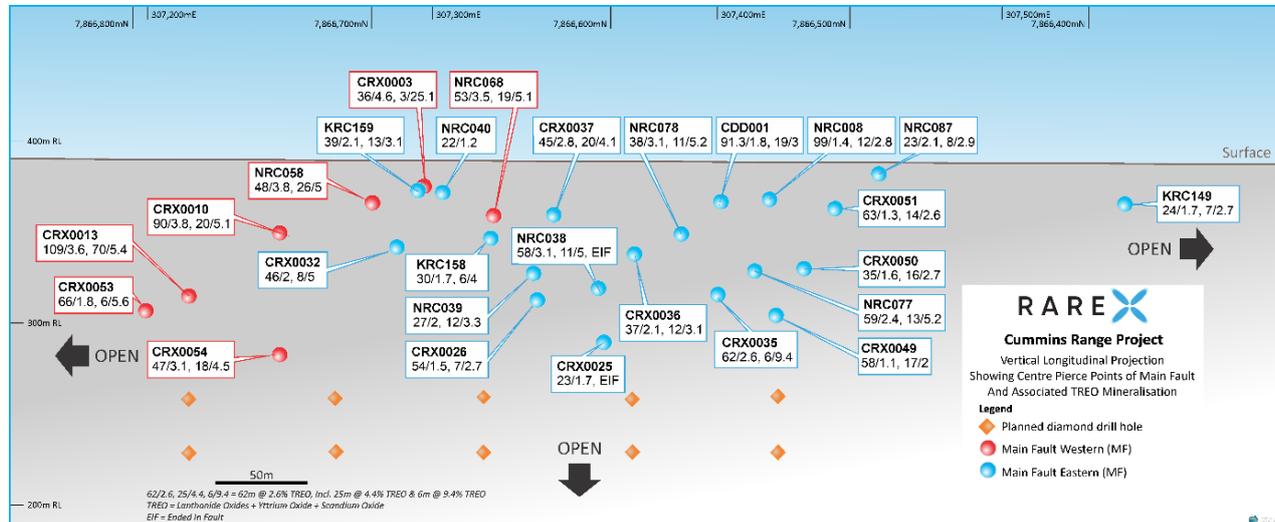


Figure 2. Cross-section 307365E showing geological interpretation, oblique view of Main Fault, true thickness is approximately 40% of drilled metres.

The surface expression of the MF can be seen in Figure 1. At 307300E, the MF has been displaced by an interpreted north-south trending fault. At this position, the MF is displaced by 100m and is showing sinistral displacement.

Mineralised intervals associated with the MF are shown in the vertical longitudinal projection (VLP) in Figure 3. The red dots are the MF on the western side of the displacement fault and the blue dots are the MF on the eastern side of the displacement fault.

Also shown on the VLP are the 10 diamond drill holes that will be drilled in coming months. These holes are designed to target the down-dip extension of the MF, which has proven to be fertile in all MF intersections to date.



The MF strike of 230 degrees is parallel to the north-eastern and south-western walls of the Cummins Range carbonatite pipe, as seen in the magnetics in Figure 1. This structural orientation is likely to be repeated throughout the pipe from a micro to a macro scale.

A parallel candidate to the south-west of the MF has been identified from the magnetics and is shown in Figure 1. This location has not been tested from an appropriate angle and a historical drill hole KRC167 finishing in REE and Nb₂O₅ mineralisation with assays up to 3.2% TREO and 0.67% Nb₂O₅ (ASX: 15 September 2019). This target will be tested with RC drilling during the 2021 program.

Planned Drilling

Drilling is planned to begin in late April, slightly later than initially planned due to a prolonged wet season. The 2021 drilling campaign is split into two programs – Mining Study Work and Mineral Exploration. All drill contractors are locked in and mobilisation of the camp has begun from Perth pending station tracks becoming useable.

1. Mineral Exploration drill program

- 1.1 2,000-3,000m of HQ/NQ2 diamond drilling to test for down-dip extensions to the MF. 10 drill holes ranging from 150m to 400m deep as shown on Figure 1 and Figure 3.
- 1.2 2,000-3,000m of RC will be used to test for extensions to the MF to the north-west and south-east and above 280mRL. Other structures as described above will also be tested with the RC drilling.



2. Mining study work

2.1 Three PQ diamond drill holes will be drilled into high-grade ore to obtain geotechnical information for pit designs, SG data and further metallurgical samples.

2.2 Six water monitoring bores will be drilled to assess ground water movement and impacts on local and regional environments, in line with pre-mining requirements.

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

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Competent Person's Statement

Information in this release that relates to current Exploration Results and the Inferred Resource is based on and fairly represents information and supporting documentation reviewed by Mr Guy Moulang, an experienced geologist consulting for RareX Limited. Mr Moulang is a Member of the Australian Institute of Geoscientist and has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Moulang consents to the inclusion in this release of the matters based on his information in the form and context in which it appears. The Company confirms that the information in this report and the assumptions underpinning the Inferred Resource have not materially changed from when first reported.