

ASX Release / 20 May 2026

Phase 1 Metallurgical Testwork Commences at Grass Patch HREE Project

Mount Ridley Appoints Nagrom to Advance Processing Pathway for Regolith-Hosted Rare Earth Mineralisation

Highlights

- **Phase 1 metallurgical testwork program has commenced at leading Perth-based laboratory Nagrom** focused on the Company's regolith-hosted HREE mineralisation across the Grass Patch Complex in Western Australia
- **Testwork program designed and led by newly appointed Technical Advisor – Processing and Metallurgy, Chris Larder** who brings extensive experience in Western Australian rare earth and gallium processing flowsheet development and metallurgical testwork
- Program **builds on historical baseline metallurgical testwork** previously completed on the Project including historical results at the Winstons and Keiths Prospects which are the **primary focus of the current program**
- Phase 1 designed to establish a **comprehensive characterisation and beneficiation baseline at the Winstons and Keiths Prospects** to optimise feed ahead of **hydrometallurgical processing**
- Results from the Phase 1 program will be **integrated into the Company's broader international metallurgical development initiatives** as Mount Ridley advances its processing strategy and its institutional research partnerships
- Mount Ridley is progressing toward a processing solution that encompasses **beneficiation extraction and separation of its regolith hosted and collocated heavy rare earth, scandium and gallium mineralisation**

Mount Ridley Mines Limited (ASX: MRD) ("**Mount Ridley**" or "**the Company**") is pleased to provide an operations update on the commencement of Phase 1 metallurgical testwork at its Grass Patch Heavy Rare Earth Element Project in Western Australia.

Mount Ridley has appointed leading Perth-based metallurgical laboratory Nagrom to conduct Phase 1 of the Company's domestic testwork on representative mineralised clay samples from the Winstons and Keiths Prospects within the heavy rare earth dominated Grass Patch Project. The commencement of this program represents the first significant metallurgical program focused on the Company's newly defined heavy rare earth scandium and gallium mineralisation following the establishment of maiden Mineral Resource Estimates at Winstons and Keiths and marks an important milestone in translating this resource base into a defined processing pathway.

While historical metallurgical testwork was previously completed on the Project's lighter rare earth mineralisation at the Mia Prospect and included preliminary baseline work at Winstons and Keiths, the current program is specifically designed to advance the characterisation beneficiation and hydrometallurgical processing of the Company's regolith-hosted HREE scandium and gallium mineralisation which is the primary focus of Mount Ridley's development activities going forward.

The Phase 1 program has been designed and will be led by Mount Ridley's recently appointed Technical Advisor – Processing and Metallurgy, Chris Larder. Mr Larder brings significant experience in the development and optimisation of processing flowsheets for Western Australian rare earth and gallium bearing systems and his appointment reflects the Company's commitment to building a technically credible and experienced in-house capability to advance the Grass Patch processing story.

The Phase 1 testwork program is designed to:

- Establish a robust baseline characterisation of the well-crystallised kaolinite dominated saprolitic mineralisation at the Winstons and Keiths Prospects (within the Grass Patch Complex)
- Evaluate beneficiation pathways to upgrade TREO grades ahead of hydrometallurgical processing
- Develop and optimise leaching parameters suited to the clay mineralogy of the Grass Patch HREE Project
- Generate conditioned feed material to underpin subsequent stages of the Company's broader metallurgical development pathway

The Phase 1 Nagrom program forms the first stage of a broader multi-stage metallurgical development pathway that Mount Ridley is advancing in parallel with its institutional technology partnerships. Results generated through this program will provide the foundational technical dataset required to progress subsequent and more advanced stages of metallurgical development and will be integrated into the Company's broader international metallurgical development initiatives including ongoing work with its institutional research partners.

Mount Ridley Managing Director & CEO, Mr Allister Caird commented:

"The commencement of testwork at Nagrom is an important milestone for Mount Ridley. It is the first major metallurgical program we have undertaken since establishing our maiden resource estimates across the mafic derived Grass Patch Complex. This new phase of test work sets the foundation for everything that follows from a processing standpoint. The program will be led by Chris Larder whose experience in Western Australian rare earth and gallium processing systems is directly relevant to our substantial asset base at Mount Ridley. The outcomes from this program will be integral to advancing our broader metallurgical strategy and we look forward to keeping the market informed as results come to hand."

This ASX announcement has been authorised for release by the Board of Mount Ridley Mines Ltd.

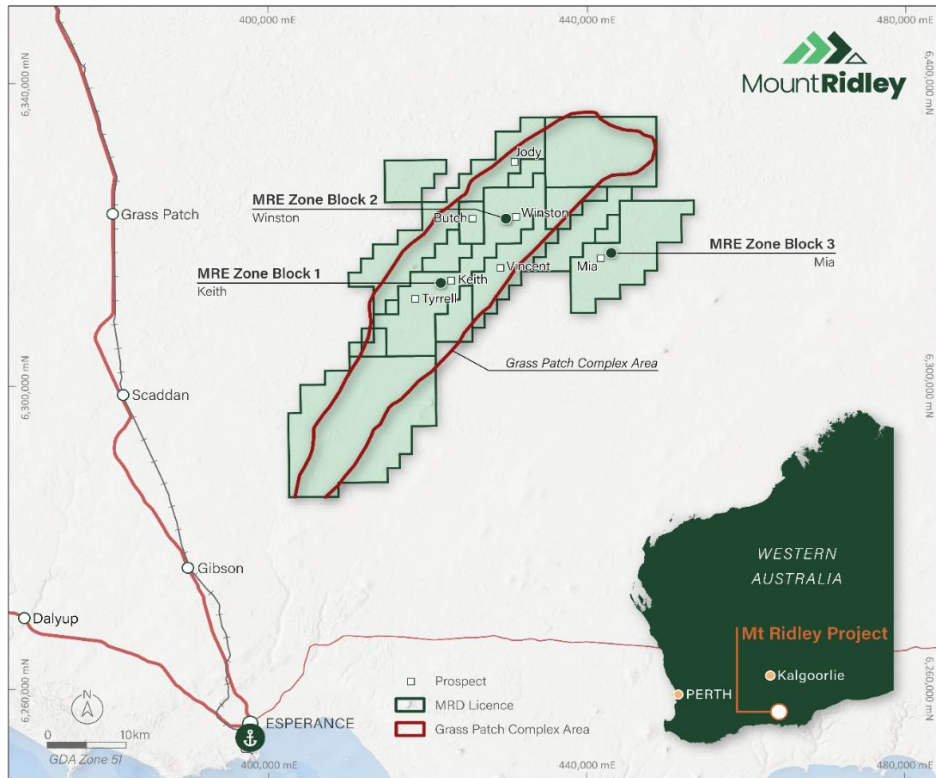
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Location of the Mount Ridley Project in 25km north of Esperance, Western Australia

About Mount Ridley Mines Ltd

Mount Ridley Mines Ltd is an Australian critical minerals explorer focused on the discovery and development of heavy rare earth elements, gallium and scandium across its wholly owned Mount Ridley and Weld Range projects in Western Australia. Complimentary to its upstream business, the Company is actively pursuing longer term downstream pathways aimed at enhancing value through processing and separation of critical minerals for supply into allied markets.

Mount Ridley Project

The flagship Mount Ridley Project is located approximately 25 kilometres north of the deep water port of Esperance and hosts defined heavy rare earth element, scandium and gallium resourced identified through 70 000 metres of historical drilling. A majority of the project tenure is centred on the Grass Patch Complex, which is widely interpreted to be the primary source of the heavy rare earth enrichment identified across the project area.

The Mount Ridley Project remains significantly underexplored relative to its scale and geological endowment. Multiple high priority walk up drill targets have been identified through historical drilling, geophysics and recent technical reviews. These targets are currently being assessed and prioritised with the intention of supporting future drilling programs planned for 2026.

Weld Range Project

The Company also holds the Weld Range Project in Western Australia, which provides additional exposure to large scale mineral systems within a well-established mining region. Together, the Mount Ridley and Weld Range projects position the Company as an emerging participant in the supply of critical minerals into allied markets.