

ASX Release / 12 August 2026

Proprietary Leach Process Delivers Exceptional HREE, Scandium & Gallium Recoveries

Selectro™ Process results demonstrate a potential step change in critical minerals processing

Highlights

- **Selectro™ Process** is MRD's proprietary in-house developed leach technology for critical minerals recovery
- Selectro™ Process achieves **more than double the average recovery of the industry-standard HCl leach across MRD's REE, scandium and gallium mineral resources**, applied to the same composite sample
- **HREE recoveries of 77-83%** achieved including terbium, dysprosium and yttrium, with **LREE recoveries of 70 to 77%** including neodymium and praseodymium
- **Scandium recovery of 80%** achieved, a pivotal result for **one of the largest scandium resources globally**, significantly outperforming the HCl baseline test
- **Gallium recovery averaging 56%**, while comparative HCl leaching recovered zero gallium
- Selectro™ demonstrates the **potential to recover three critical mineral streams through a single proprietary leach process**.
- The Selectro™ Process is **designed as a closed loop process**, delivering materially lower reagent costs than HCl with a cleaner environmental profile than conventional hydrometallurgical approaches
- All results achieved **prior to beneficiation, reagent and process optimisation**, providing multiple opportunities to further enhance process performance
- The Selectro™ Process demonstrates **potential applicability across a range of deposit types beyond regolith-hosted systems** including lateritic and sedimentary hosted deposits, with the Company assessing third party licensing pathways globally
- Metallurgical testwork remains ongoing, with **further programs focused on beneficiation, process optimisation, reagent recycling and downstream product development**

Mount Ridley Mines Limited (ASX: **MRD**) ("**Mount Ridley**" or "**the Company**") is pleased to announce the initial results from its ongoing metallurgical testwork program conducted on historical drill samples from the Grass Patch Complex, located in Western Australia.

The initial results represent a pivotal technical milestone for the Company, demonstrating the ability of its wholly owned Selectro™ Process to recover HREE, LREE, scandium and gallium from unbeneficiated Grass Patch material through a single proprietary leach process. Across HREE, LREE, scandium and gallium, the Selectro™ Process delivered materially higher recoveries than comparative hydrochloric acid (HCl) leach testing. As beneficiation and optimisation studies progress, the Company believes there is significant opportunity to further improve process performance and expedite future commercial development.

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

"These are the first metallurgical testwork results the Company has produced since the definition of our HREE, scandium and gallium mineral resources and the establishment of the current management team and corporate strategy. The Selectro™ Process results validate what we believed to be true about Grass Patch, that we have a genuinely polymetallic system where all three critical minerals can be recovered from a single leach process. We look forward to providing further updates in due course."

Initial Metallurgical Testwork Results

The metallurgical testwork program was conducted by Nagrom Pty Ltd, an independent metallurgical laboratory in Perth, Western Australia. The program comprised a series of leach tests designed to evaluate the recoveries of heavy rare earth elements (HREE), light rare earth elements (LREE), scandium and gallium from historical Grass Patch Complex drill samples using the Company's proprietary Selectro™ Process. All results are initial and unoptimised, with further improvements to recovery, leach time and reagent consumption likely as the testwork program advances.

Heavy Rare Earth Element Recovery

The Selectro™ Process achieved exceptional HREE recoveries of 77% to 83% across dysprosium, terbium, yttrium, erbium, europium, gadolinium and holmium, materially outperforming comparative hydrochloric acid (HCl) recoveries ranging from 0% to 51% for the same elements.

HEAVY RARE EARTH RECOVERY

Recovery by processing method (%)

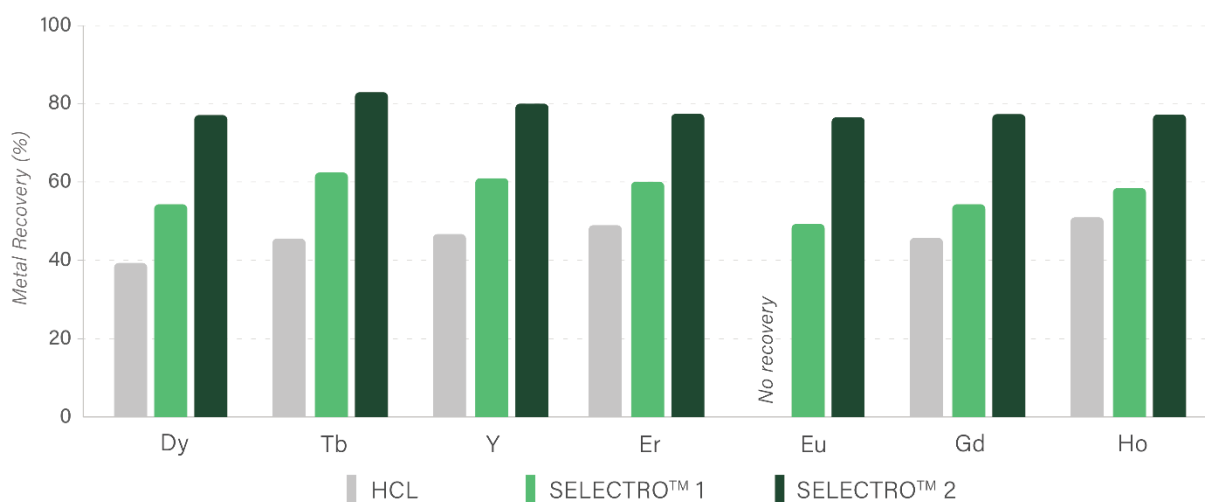


Figure 1: Heavy REE Recovery for Selectro tests 1 and 2 against baseline HCl performed on the same composite sample.

Dysprosium and terbium, the two highest-value HREEs given their irreplaceable role in permanent magnets used in electric vehicles, wind turbines and defence systems, achieved average recoveries of above 80%, compared to an average HCl recovery of 38% on the same sample. Global supply remains highly concentrated in China and China-linked supply chains, with relatively few advanced sources of dysprosium and terbium being developed in stable Western-

aligned jurisdictions.¹ The scale of the Grass Patch HREE Inferred Mineral Resource therefore provides Mount Ridley with exposure to a strategically important segment of the rare earth market where diversified supply remains limited.

Scandium and Gallium Recovery

Scandium recovery of 80% was achieved from the Grass Patch feedstock, materially outperforming the HCl baseline of approximately 25% on the same sample. The Company considers this a strong initial result for an unoptimised first pass test and intends to focus subsequent testwork on improving scandium recovery, with confidence that further improvements can be achieved through reagent and process optimization. The Grass Patch Complex hosts one of the largest scandium resources globally at 367.98Mt at 57.3ppm Sc (JORC 2012 Inferred). These recovery results, if confirmed at scale, would support a significant scandium production pathway from an already defined and large resource base.

Gallium recovery averaging 56% was achieved by the Selectro™ Process. Critically, the comparative HCl baseline recovered zero gallium, while the Selectro™ Process consistently recovered more than 55% across both tests. With gallium now subject to Chinese export controls and global supply chains under acute pressure, the ability to recover gallium as a co-product from the same leach circuit represents a material commercial opportunity. The Grass Patch Complex hosts a JORC 2012 Inferred gallium resource of 838.7Mt at 29.3ppm Ga.

SCANDIUM AND GALLIUM RECOVERY

Recovery by processing method (%)

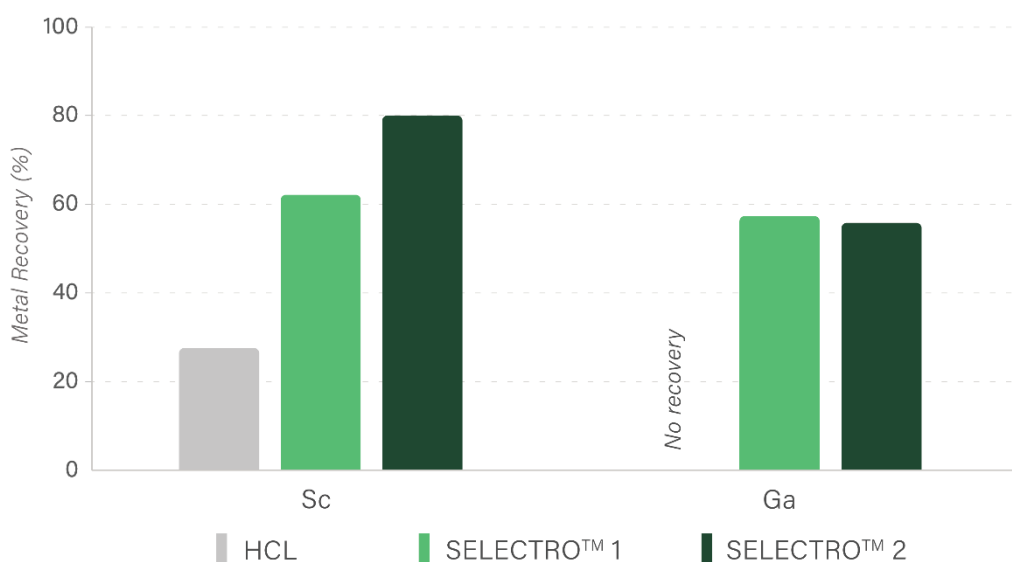


Figure 2: Scandium and gallium recovery vs HCl test conducted on the same composite sample.

¹ <https://www.iea.org/reports/rare-earth-elements/executive-summary>

Scandium Market Context

Scandium is one of the world's most supply-constrained critical minerals. Despite growing demand from solid oxide fuel cells, aerospace alloys and defence applications, global primary scandium production remains limited and is insufficient to meet forecast demand, with existing supply supplemented by inventories and secondary sources. Independent industry forecasts project scandium demand to increase materially over the coming decade as commercial adoption accelerates. Scandium's strategic importance has recently been reinforced by United States Government support for the development of new Western scandium supply chains, highlighting the increasing focus on securing diversified sources of this critical mineral.²

The Grass Patch Complex hosts one of the world's largest independently defined scandium resources at 367.98Mt at 57.3ppm Sc (JORC 2012 Inferred). The Company believes the Selectro™ Process provides a potential proprietary pathway to become one of the few operations globally focused on producing scandium alongside heavy rare earth elements and gallium through a single leach circuit, into a market where supply has persistently failed to keep pace with demand.

Light Rare Earth Recovery

LREE recoveries were between 70% and 77% across neodymium, praseodymium, lanthanum, cerium and samarium from the same sample tested under the HCl baseline. The HCl leach, the conventional approach applied across the rare earth industry, achieved recoveries of between 28% and 36% for the same elements. The Selectro™ Process more than doubles HCl recovery across the full LREE suite.

LIGHT RARE EARTH RECOVERY

Recovery by processing method (%)

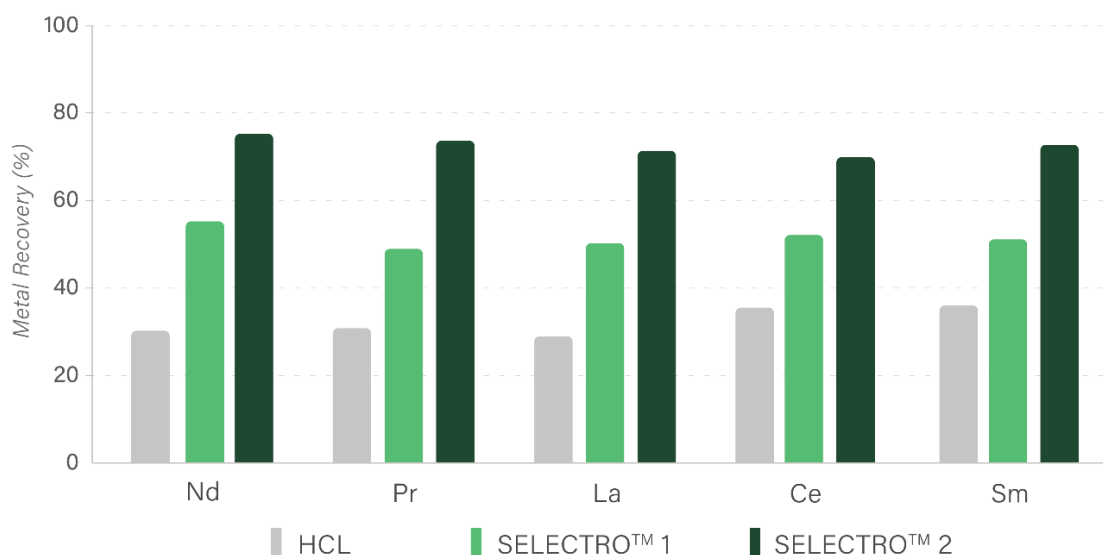


Figure 3: Light REE Recovery for Selectro™ tests 1 and 2 against baseline HCl performed on the same composite sample.

The strong LREE recoveries, together with the successful recovery of gallium, provide increased confidence in the potential to enhance the economic prospects of the Company's MagREO-rich Mia deposit (Block 3) through further metallurgical optimisation and by-product recovery.

² <https://www.ft.com/content/d88b7e46-6806-4286-94d7-3bb16facee41?syn-25a6b1a6=1>

Selectro™ Leach Process

The Selectro™ Process is MRD's proprietary hydrometallurgical technology developed to recover multiple critical minerals through a single leach process. The process has been developed with a focus on achieving high metal recoveries using lower-cost reagents, while incorporating reagent recycling through a closed-loop processing system. Unlike conventional processing approaches that may require separate treatment pathways for different metals, Selectro™ is being developed to enable the recovery of rare earth elements, scandium and gallium from a common feed stream.

The current testwork represents the first application of the Selectro™ Process to Mount Ridley material and was undertaken on unbeneficiated feed without systematic reagent or process optimisation. Importantly, the testwork demonstrated a material improvement in recoveries between Selectro™ Test 1 and Test 2 following refinement of the process conditions. Test 2 achieved HREE recoveries of up to 83.1%, LREE recoveries of up to 75.2% and scandium recovery of 80.0%.

Mount Ridley Chief Technology Officer, Mr Chris Larder commented:

"The Selectro™ Process is the culmination of over a decade of development and refinement, so it is very encouraging to see the technology deliver strong results on Mount Ridley material. These results provide further confidence in the process and support its progression into the next phase of optimisation and larger-scale testwork."

Broader Applicability and Commercial Significance

The Selectro™ Process has demonstrated the ability to mobilise a range of metals present within the Grass Patch regolith profile beyond the primary HREE, scandium and gallium suite. The Company intends to assess its applicability across a broader range of elements as the testwork program advances, with initial indications suggesting potential recovery of additional metals of commercial interest. More broadly, the Company believes the Selectro™ Process could represent a significant processing innovation applicable to a range of mineral deposit types beyond Grass Patch, including regolith-hosted critical minerals deposits and other lateritic and sedimentary hosted systems. The Company is actively assessing pathways to commercialise the Selectro™ Process both as the foundation of its own project development and as a potential licensed technology for application by third parties globally.

Process Economics

The Selectro™ Process utilises reagents that are lower cost per unit than the hydrochloric acid conventionally used in regolith-hosted rare earth processing. The process operates as a closed loop system with effective solids removal and does not require continuous reagent addition during the leach cycle. These characteristics mean the Selectro™ Process offers a materially lower cost profile than traditional approaches regardless of the volume of ore treated, providing a viable pathway to assess both beneficiated and raw ore from an economic perspective.

Environmental Benefits

The closed loop design of the Selectro™ Process also delivers meaningful environmental advantages over conventional HCl leaching. By minimising reagent discharge and reducing the volume of processing chemicals required, the process presents a lower environmental footprint than traditional hydrometallurgical approaches. The Company considers these characteristics to be a significant advantage in the context of increasing environmental scrutiny of critical minerals processing globally.

Additional Metallurgical Testwork Information

The metallurgical testwork was undertaken by Nagrom Pty Ltd at its Kelmscott laboratory in Western Australia using a composite prepared from historical Grass Patch drill material. The program comprised comparative hydrochloric acid (HCl) baseline testing and two Selectro™ leach tests to assess the recovery response of rare earth elements, scandium and gallium. The material was tested without prior beneficiation and the results represent first-pass laboratory testwork.

The comparative recoveries from the HCl and Selectro™ Tests 1 & 2 are set out below. The results should be considered in the context of initial, unbeneficiated laboratory testwork and are intended to provide a comparative assessment of metallurgical response ahead of further optimisation.

Table 1: Comparative Metal Recoveries (%)

Grouping	Element	HCl	Selectro™ Test 1	Selectro™ Test 2
LREE	Nd	30.2%	55.2%	75.2%
	Pr	30.8%	48.9%	73.6%
	La	28.9%	50.2%	71.3%
	Ce	35.5%	52.1%	69.9%
	Sm	36.0%	51.1%	72.7%
HREE	Dy	39.4%	54.4%	77.3%
	Tb	45.7%	62.6%	83.1%
	Y	46.8%	61.1%	80.2%
	Er	49.1%	60.2%	77.6%
	Eu	0.0%	49.4%	76.7%
	Gd	45.8%	54.4%	77.5%
	Ho	51.1%	58.6%	77.4%
Scandium	Sc	27.6%	62.1%	80.0%
Gallium	Ga	0.0%	57.3%	55.8%

*The metallurgical testwork suite did not include thulium (Tm), lutetium (Lu) or ytterbium (Yb)

The comparative metallurgical testwork was undertaken at laboratory scale using representative dry-weight aliquots of approximately 90 g derived from a 16.8 kg homogenised composite prepared from five historical Grass Patch diamond drill holes. The HCl baseline and Selectro™ tests were each conducted over a 24-hour leach period with the Selectro™ results achieving maximum recoveries in under 4 hours. The HCl baseline was undertaken at 30°C and 10% pulp density. All leach tests were conducted at atmospheric pressure. Detailed Selectro™ reagent chemistry, concentrations and reagent additions are proprietary and have not been disclosed.

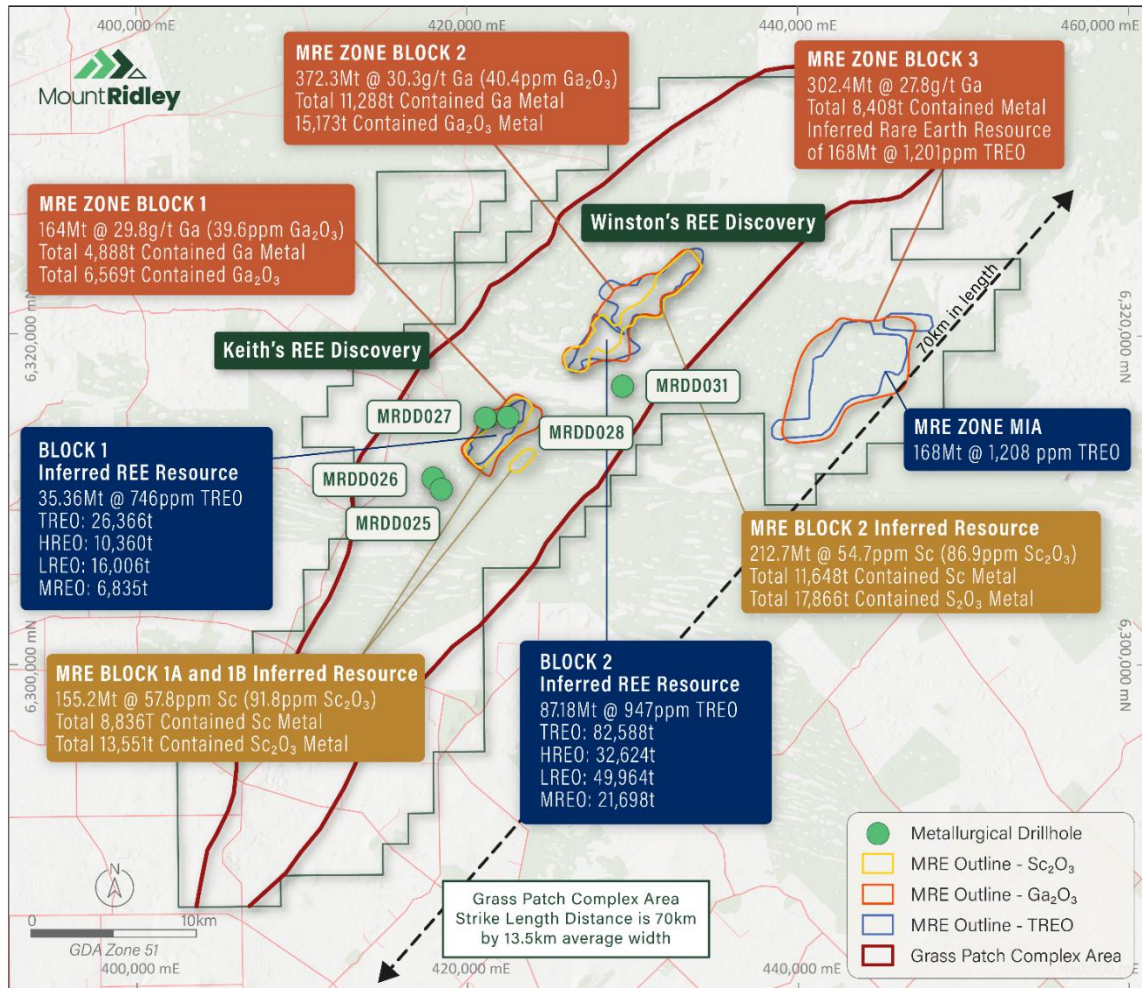


Figure 4: Location of the Grass Patch samples used to prepare the Selectro™ & TIMA composite

Next Steps

- The Selectro™ Process will now be tested on a bulk sample from the Grass Patch Project.
- Following on from the encouraging TIMA results (refer ASX announcement released 6 August 2026), the bulk sample testwork will also test the Selectro™ Process on beneficiated feed, with flotation to be applied to a portion of the bulk sample prior to leaching
- Validate the Selectro™ process on 3rd party feed

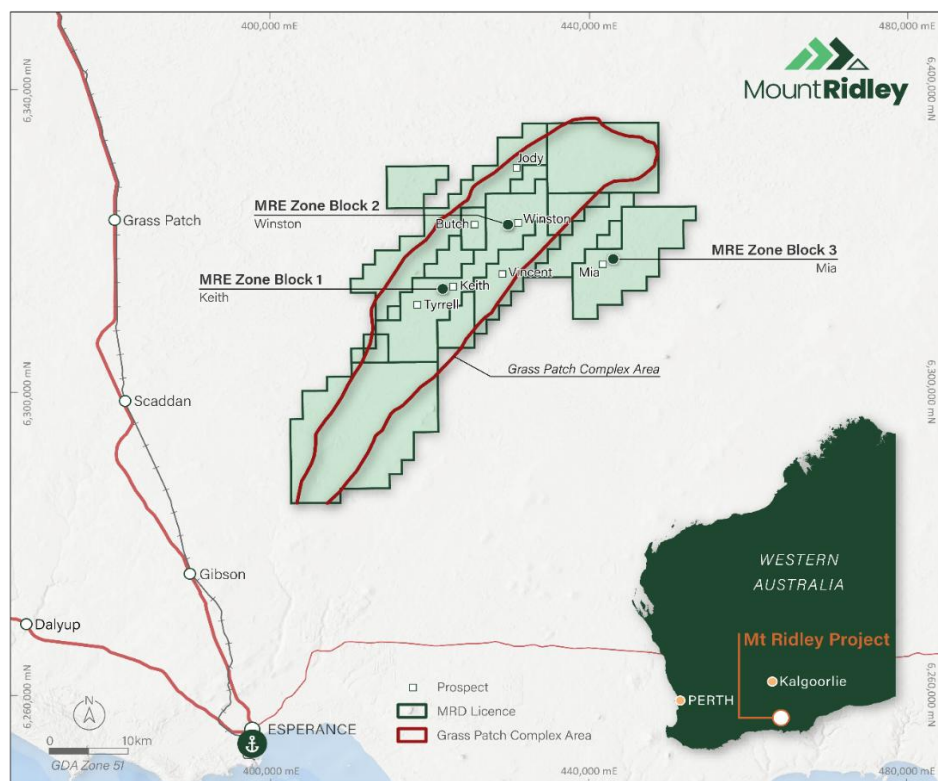
The Company will provide further updates as results become available.

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

For further information, please contact:

Allister Caird, Chief Executive Officer
Mount Ridley Mines Ltd

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Location of the Grass Patch Project 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. Complementary 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.

Grass Patch Project

The flagship Grass Patch Project is located approximately 25 kilometres north of the deep water port of Esperance and hosts defined heavy rare earth element, scandium and gallium resources 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 Grass Patch 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.

Competent Persons Statement

The information in this announcement that relates to Exploration Results is based on information compiled and reviewed by Mr Pedro Kastellorizos, a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Kastellorizos is a Technical Advisor to Mount Ridley Mines Limited and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Kastellorizos consents to the inclusion in this announcement of the matters based on his information in the form and context in which they appear.

The information in this announcement that relates to metallurgical results is based on information compiled and reviewed by Mr Chris Larder, a Fellow of the AusIMM. Mr Larder is the Chief Technology Officer of Mount Ridley Mines Limited and has sufficient experience relevant to the metallurgical testwork and processing of the style of mineralisation under consideration 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 Larder consents to the inclusion in this announcement of the matters based on his information in the form and context in which they appear.

The information in this announcement that relates to Mineral Resources is based on information compiled and reviewed by Mr Alfred Gillman, a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a Director of Odessa Resource Pty Ltd. Mr Gillman has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original Mineral Resource announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Forward-Looking Statement

This announcement contains forward-looking statements that are subject to risks, uncertainties and assumptions. Forward-looking statements include, but are not limited to, statements regarding future exploration activities, resource growth potential, resource model updates, Mineral Resource Estimate upgrades, development opportunities, metallurgical outcomes, market conditions, commodity demand, project economics and the timing and outcome of future work programs.

Such statements are based on the Company's current expectations, estimates, projections and assumptions as at the date of this announcement. Forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of the Company, that may cause actual results, performance or achievements to differ materially from those expressed or implied in such statements. Factors that could cause actual results to differ materially include, but are not limited to, changes in commodity prices, exploration and development risks, resource estimation outcomes, metallurgical performance, regulatory approvals, environmental and heritage matters, funding availability, market conditions and general economic factors.

Readers are cautioned not to place undue reliance on forward-looking statements. Except as required by applicable law or the ASX Listing Rules, the Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Any references to exploration targets, resource growth potential or future development opportunities are conceptual in nature and there can be no assurance that further exploration work will result in the estimation of additional Mineral Resources or that any Mineral Resource will ultimately be converted to an Ore Reserve.

For further information please refer to previous ASX announcement from Mount Ridley Mines Ltd:

30 March 2023. "Resource Drilling Commences at Mount Ridley REE Project"
 28 October 2025. "838.7Mt Gallium Resource Estimate at Mt Ridley"
 12 November 2025. "MRD Expands Rare Earth and Gallium Tenure"
 25 November 2025. "33km of New REE-Gallium Targets Defined at Mt Ridley"
 28 January 2026. "367.98Mt Scandium Resource Estimate at Mount Ridley"
 11 March 2026. "Mount Ridley Strengthens Board and Leadership Team"
 24 March 2026. "Major Heavy Rare Earth Resource at Mount Ridley"
 20 May 2026. "Phase 1 Metallurgical Testwork Commences"
 6 August 2026. "Grass Patch Rare Earths Confirmed to be Hosted in Phosphates"

REOs

TREO: the sum of La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃.

HREO: the sum of Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Eu₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃.

LREO: the sum of La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃.

MREO: the sum of Dy₂O₃, Pr₆O₁₁, Nd₂O₃, Tb₄O₇.

About Mount Ridley Resource Estimations

Table 1 shows the Gallium Global JORC 2012 Resource Estimation tonnes/grade by Inferred category which currently stands at 838.7Mt @ 29.3 ppm Gallium. The MRE has been reported tabulating mineralisation above a 25 ppm Ga cut-off grade.

Table 1: Global Total Gallium Inferred Mineral Resource Estimation

Project	Mass t	Average Grade (ppm Ga)	Contained Ga Metal (t)	Average Grade (ppm Ga ₂ O ₃)	Contained Ga ₂ O ₃ Metal (t)
Blocks 1 to 3	838,771,284	29.3	24,584	39.5	33,045

Table 2 shows the Scandium Global JORC 2012 Resource Estimation tonnes/grade by Inferred category which currently stands at 367.9Mt @ 57.3 ppm Scandium. The MRE has been reported tabulating mineralisation above a 25 ppm Sc cut-off grade.

Table 2: Global Total Scandium Inferred Mineral Resource Estimation

Project	Mass t	Average Grade (ppm Sc)	Contained Sc Metal (t)	Average Grade (ppm Sc ₂ O ₃)	Contained Sc ₂ O ₃ Metal (t)
Blocks 1A, 1B & 2	367,982,521	57.3	18,855	87.9	28,920

Table 3 shows the Rare Earth Oxide Global JORC 2012 Resource Estimation tonnes/grade by Inferred category which currently stands at 122.5Mt @ 889 ppm TREO for 108,954 tonnes contained TREO metal with 44,610t contained HREO reported at a 300 ppm TREO cut-off.

Table 3: Mount Ridley Global Rare Earth Oxide Deposits Inferred Mineral Resource Estimate

Block Id	Tonnage (t)	Average Grade (TREO ppm)	Average Grade (HREO ppm)	Average Grade (LREO ppm)	Average Grade (MREO ppm)
Blocks 1 & 2	122,546,251	889	364	525	233

Table 4 shows the Global JORC 2012 Resource Estimation tonnes/grade by Inferred category which currently stands at 168Mt @ 1,201 ppm Total Rare Earth Oxide (TREO). The MRE for the central Mia Prospect has been reported tabulating mineralisation above a 750ppm TREO cut-off grade.

Table 4: Global Total TREO Inferred Mineral Resource Estimation

Project	Mass t	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	TREO ppm	MagREO ppm	MagREO/TREO ppm
Block 3 Mia	168,000,000	57	215	4	25	1201	301	25%

The Company is not aware of any new information or data that materially affects the information included in the original market announcement and all material assumptions and technical parameters underpinning the Mineral Resources for all Projects continue to apply and have not materially changed.

Appendix 1: Metallurgical Drill Hole Location Details

Hole ID	Easting GDA94, Zone 51	Northing GDA94, Zone 51	RL (m)	Total Depth (m)	Hole Type	Dip	Azimuth
MRDD025	418546	6310767	177.74	31.4	Diamond	-90	0
MRDD026	418016	6311366	182.99	36.1	Diamond	-90	0
MRDD027	421088	6314958	197.91	30.2	Diamond	-90	0
MRDD028	422679	6315013	186.62	42.9	Diamond	-90	0
MRDD031	429405	6316955	185.08	28.6	Diamond	-90	0

Appendix 2

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling technique	<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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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</i>	Diamond (DDH) was completed over 5 holes, totalling 169.2m diamond drilling, sampled between 1m in the barren zones and between 0.6 to 1 metre within the ore zones. Every sample weighed between 1 and 2kgs. All holes were drilled vertically to refusal, terminating in basement rocks aimed to locate coarse-grained, mineralised gabbroic rocks of intrusive mafic-ultramafic origin and identify contacts. Drill holes were located just off existing tracks and drilled to blade refusal into basement rocks. All drill hole collars in the supplied database have been accurately located with coordinates in GDA94, Zone 51 grid system. Down hole surveys have not been taken as drill holes are all vertical. All drill samples were collected at 1m intervals. Whole samples were taken when sample return was less than 2kg. A twin riffle splitter was used for samples weighing more than 2kg, with one split collected in a calico bag for analysis and the remainder dropped on the ground. Sampling and QAQC procedures were carried out to industry standards. Analyses reported herein by ALS Laboratory’s ME-MS61 with ICP-MS finish.

Criteria	JORC Code explanation	Commentary
	<i>nodules) may warrant disclosure of detailed information.</i>	
<i>Drilling techniques</i>	<i>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).</i>	Diamond drilling was undertaken using PQ core cut with a diamond-impregnated drill bit, producing continuous cylinders of sample. The relevant TIMA sample holes were drilled vertically at -90° dip with an azimuth of 0°.
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <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>	Recovery was visually assessed and recorded on drill logs and was considered acceptable within industry standards. Diamond drill core recoveries were measured and exceeded 98%. No relationship between sample recovery and grades exist.
<i>Logging</i>	<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> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i>	Geological logging was completed for the full length of each hole and included lithology, weathering, oxidation state, alteration, veining and mineralisation where present. Geological logging was qualitative in nature and was considered appropriate for the stage of the project and for selection of material for metallurgical and mineralogical testwork.
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Composite preparation and sample splitting were undertaken by Nagrom Pty Ltd at its Kelmscott laboratory in Western Australia. The metallurgical testwork utilised the same composite prepared from the five diamond drill intervals identified above. A total composite mass of 16.8 kg was prepared from core obtained from the five diamond drill holes. The individual core samples were homogenised into a single metallurgical composite sample using a rotary sample divider (RSD). Representative 1 kg sub-samples were

Criteria	JORC Code explanation	Commentary
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	produced using the RSD, from which approximately 90 g dry-weight aliquots were prepared for each individual leach test. The material was tested without prior beneficiation.
Quality of assay data and laboratory test	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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>	Original diamond drill samples were analysed by ALS Laboratory in Perth using ICP-MS methods as previously reported. The current metallurgical testwork was undertaken by Nagrom Pty Ltd using a composite prepared from historical Grass Patch drill material. The composite sample was analysed by Nagrom Pty Ltd using XRF and ICP analytical techniques. Laboratory QA/QC procedures included the use of certified reference materials, laboratory duplicates and pulp repeats. The analytical results for the composite sample were considered representative of the original assay data. The analytical data and laboratory QA/QC results are considered acceptable for reporting the metallurgical recoveries presented in this announcement.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	The metallurgical results were reviewed by the Company and its Competent Person for metallurgy. Metal recoveries were determined by calculation of quantity of metal that was dissolved in the leaching process divided by the calculated metal in the feed solids. The calculated metal in the feed was determined by addition of metal in solution with the assayed metal in leach residue multiplied by the dry weight of solids in the leach feed. No new drill assays or intercepts are reported in this announcement.

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<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> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	Diamond drill hole collars were surveyed by DGPS. The grid system is GDA94, Zone 51. RLs were derived from project topographic control/digital elevation model information. Collar details for the five source holes were previously disclosed and are set out in Appendix 1 of the announcement.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.</i>	No new drilling or drill spacing is reported. The metallurgical results relate to a single composite prepared from selected material from five previously reported diamond drill holes. The testwork is not intended to establish geological or grade continuity and the results are not extrapolated beyond the material tested.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	The relevant diamond holes were drilled vertically at - 90°. The targeted regolith mineralisation is generally flat lying and vertical drilling is considered approximately perpendicular to the mineralised profile. No new drill intercepts are reported. No new drill intercepts are reported in this announcement.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Sample security procedures for the original diamond drilling were previously reported by the Company. The composite used for the metallurgical program was prepared and retained/handled by Nagrom Pty Ltd. The material from the diamond drillholes was identified by the CTO and delivered personally to the Senior Metallurgist at Nagrom. Samples were identified by Nagrom and logged into the laboratory under Job Number T3803.
<i>Audits or review</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques are consistent with industry standards. The metallurgical program and results have been reviewed by the Company's Competent Person for metallurgical testwork.

Criteria	JORC Code explanation	Commentary
		No independent audit of the metallurgical testwork has been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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.</i> <i>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>	The relevant diamond holes are located within the Mount Ridley/Grass Patch Project area in Western Australia. Tenements E63/1547, E63/1564, E63/2111 & E63/2112 are key tenements within the Company's Mt Ridley Project and are the subject of this announcement. The Prospect is located 55km NE of Esperance, Western Australia. The Registered Holder is Mount Ridley Mines Limited (Company) (100%). There are no overriding royalties other than the standard government royalties for the relevant minerals. There are no other material issues affecting the tenements at this stage.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Historical exploration in the area has been undertaken by government organisations and private and public companies, including work by Bishop on the Grass Patch Complex. Mount Ridley subsequently completed extensive geophysical surveys and drilling across the Project. No new third-party exploration results are reported in this announcement
<i>Geology</i>	<i>Deposit type, geological setting, and style of mineralisation.</i>	The mineralisation has previously been described as a shallow regolith-hosted rare earth system at Grass Patch. The Company's ASX announcement dated 6 August 2026 relating to a TIMA study confirmed that rare earths in the tested composite are predominantly hosted in discrete phosphate minerals, including xenotime, crandallite group phosphates and monazite/rhabdophane. The current metallurgical testwork evaluates the leach response of material from this composite.

Criteria	JORC Code explanation	Commentary
Drill hole Information	<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> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level)</i> ○ <i>elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> <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>	The composite was prepared from material sourced from five diamond holes: MRDD025 (18–19m), MRDD026 (25–26m), MRDD027 (19–20m), MRDD028 (36–37m) and MRDD031 (23–24.5m). Hole locations are shown in the accompanying figure 4. Collar coordinates are included in Appendix 1 and were previously disclosed in the Company’s 30 March 2023 announcement.
Data aggregation method	<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> <i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregate should be stated and some typical examples of such aggregate should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No new aggregate drill intercepts, grade truncations, cut-off grades or metal equivalent values are reported in this announcement. Metallurgical recoveries are reported for individual elements from the tested composite.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept length</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <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., 'down hole length, true width not known').</i>	All drill holes were vertical and intersected the mineralisation orthogonally No new drilling widths or intercept lengths are reported in this announcement.
<i>Diagrams</i>	<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>	A plan showing the location of the five diamond holes from which the metallurgical composite was sourced, relative to the Grass Patch Complex areas, is included in the announcement as Figure 4. A table of comparative HCl and Selectro™ recoveries is also provided as Table 1.
<i>Balanced reporting</i>	<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>	The announcement reports the comparative results of the HCl baseline and Selectro™ Tests 1 and 2 for the tested element suite. The results relate to a single composite sourced from five diamond drill intervals and are not represented as demonstrating metallurgical performance across the entirety of the Grass Patch. The material was unbeneficiated and the Selectro™ testwork represents first-pass, non-systematically optimised laboratory testing. The metallurgical analytical suite did not include thulium (Tm), lutetium (Lu) or ytterbium (Yb).
<i>Other substantive exploration data</i>	<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>	The substantive new technical information is the metallurgical leach performance of the Grass Patch composite under a comparative HCl baseline and two Selectro™ tests. The Selectro™ Process is a proprietary hydrometallurgical process being developed by the Company. The material was tested without prior beneficiation. The scale of each leach test was about 90 grams of solid at a pulp density of 15% solids. The hydrochloric acid baseline test was conducted at 30 degrees centigrade, in line with previous testwork undertaken by MRD. All leach tests were conducted at atmospheric pressure. Detailed reagent chemistry and process parameters have not been disclosed as they comprise proprietary intellectual property; however, the Company considers the information provided sufficient for investors to understand the basis and significance of the reported metallurgical results.

Criteria	JORC Code explanation	Commentary
Further work	<i>The nature and scale of planned further work (eg., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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>	The Selectro™ Process is planned to be tested on a bulk sample from the Grass Patch Project. Following the TIMA results announced on 6 August 2026, the bulk sample program is also planned to evaluate beneficiated feed, with flotation to be applied to a portion of the bulk sample prior to leaching. Further work is expected to assess beneficiation, process and reagent optimisation, reagent recycling and downstream processing. The Company also plans to evaluate the Selectro™ Process on third-party feedstock to assess broader applicability.