ASX Announcement



22 May 2024

Maiden Inferred Mineral Resource Estimate for the Mia Prospect of 168Mt at 1,201ppm TREO

- The Company is pleased to report its maiden Mineral Resource Estimate for the central zone of the Mia REEⁱ Prospect of 168Mt at 1,201ppm TREOⁱⁱ (using a 750ppm TREO lower cutoff), which includes higher-grade zones amounting to 83Mt at 1,558ppm TREO (using a 1,000ppm TREO lower cutoff).
- The central zone of the Mia prospect is an open-ended, 8.5km long corridor of clay-hosted rare earth mineralisation with drilling completed on 400m spaced cross lines and holes spaced between 100m and 400m along each line.
- Sighter metallurgical tests have previously indicated that simple screening could significantly increase the in-situ grade of mineralisation by as much as 160%^{III}, and indicated the efficacy of HCl to leach REE's into solution^{IV}.
- The block model has identified multiple zones of significant mineralisation along the central Mia Prospect. These have been sampled ahead of future metallurgical work designed to refine the effectiveness of beneficiation and acid leach parameters.

Mount Ridley's Chairman, Mr. Peter Christie commented:

"Through drilling, the Company has progressively revealed substantial intersections of clay-hosted REE mineralisation and today, we are pleased to report our maiden Mineral Resource Estimate for the central Mia Prospect.

This is a key milestone for the Company and highlights the potential of the Mt Ridley Project which is in a favourable location just 55km from the Port of Esperance."

The Esperance District hosts wide-spread clay-hosted REE mineralisation and the Mia Prospect is one of 5 priority zones (Figure 4) of strongly anomalous REE accumulations within the Company's greater Project area.



Location

The Mt Ridley Project comprises nine granted exploration licenses, however the Mia Prospect is covered by 2: E63/1564 and E63/2112. The project is located approximately 55 km northeast of Esperance, Western Australia (Figure 1).

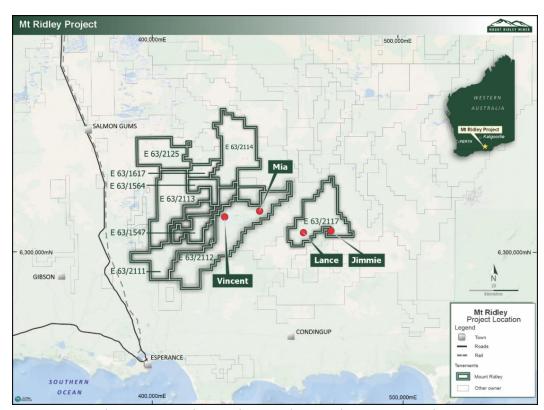


Figure 1: Mount Ridley Project showing the Mia Prospect Location.

Mineral Resource Statement

Mount Ridley Mines Limited (ASX: MRD, "Mt Ridley" or "the Company") is pleased to advise the outcome of its maiden Mineral Resource Estimate (MRE) for the central zone of the Mia Prospect.

The MRE is expressed as units of Total Rare Earth Oxide (TREO), represented by:

Table 1: Central Mia Prospect Mineral Resource Estimate using a lower cut-off grade of 750ppm TREO

Prospect	JORC Category	Tonnes (Mt)	Pr ₆ O ₁₁ (ppm)	Nd₂O₃ (ppm)	Tb ₄ O ₇ (ppm)	Dy ₂ O ₃ (ppm)	TREO (ppm)	MagREO (ppm)	MagREO /TREO (%)
Міа	Inferred	168	57	215	4	25	1,201	301	25%

The MRE for the central Mia Prospect has been reported tabulating mineralisation above a 750ppm TREO cut-off grade. Of these, the 'magnet rare earths' (MagREO), Neodymium (Nd), Praseodymium (Pr), Terbium (Tb) and Dysprosium (Dy) are listed individually as these are the highest in price and demand.



Cutoff Grades, Grade-Tonnage Curve and basis for the selected Cutoff Grades

The lower cut-off grade of 750ppm TREO and resultant headline grade was proposed based on assumptions from a preliminary review of the parameters that may contribute to the viability of a future open pit ore extraction, screen beneficiation and HCI treatment scenario, and following comparisons with other clay-hosted REE deposits.

The MRE was estimated and is reported for consecutive grade groups (refer Table 2) which also allows for the results for different cut-off grades to be presented for comparison purposes in a grade-tonnage curve (refer Figure 2).

Table 2: Central Mia Prospect Rare Earth Mineral Resource Estimate - by global cut-off grade

JORC Category	Lower Cut- off Grade (ppm TREO)	Tonnes (Mt)	Pr ₆ O ₁₁ (ppm)	Nd₂O₃ (ppm)	Tb ₄ O ₇ (ppm)	Dy₂O₃ (ppm)	TREO (ppm)	MagREO (ppm)	MagREO /TREO (%)
Inferred	400	622	33	122	3	14	714	171	24%
Inferred	500	424	39	146	3	17	839	205	24%
Inferred	750	168	57	215	4	25	1,201	301	25%
Inferred	1,000	83	74	284	6	34	1,558	398	26%
Inferred	1,200	51	89	342	7	40	1,840	478	26%

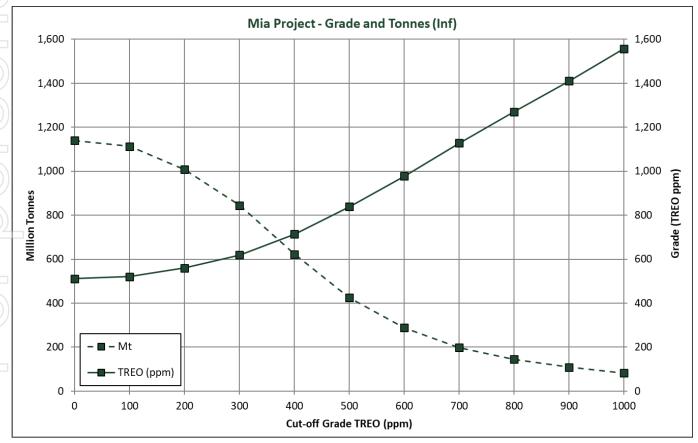


Figure 2: Mount Ridley Project, Mia Prospect Grade-Tonnage Curve.



Competent Persons

The Mineral Resource Estimate was managed by Mr David Crook, a consultant to Mount Ridley Mines Limited through OreSource Pty Ltd, with geologists contracted from OMNI GeoX Pty Ltd; and Mr Lauritz Barnes of Trepanier, a geological consultancy with proficiency in resource block modelling. Mr Crook has supervised the exploration methodology, database management, quality control process and reporting of results^v to date.

Stages and Responsibilities are listed in Table 3.

Table 3: Stages and Responsibilities

Stage	Responsibility
Drilling and sampling protocols, quality control procedure, assaying techniques.	Mount Ridley
Site visits	Mount Ridley
Validation of the digital data and data storage/security protocols, including a review of quality control samples.	Mount Ridley
Generation of cross sections and 3-D geological interpretation to be used for the Mineral Resource block model	Mount Ridley
Basic statistical analyses to assess cut-off grades and general data behaviour	Trepanier
Generation of block model for the Mineral Resource estimation	Trepanier
Classification and reporting of the results according to JORC definitions	Trepanier and Mount Ridley

Mr Crook notes that at the Mia Prospect:

- Mineralisation occurs within saprolite after granites, granitic gneiss and more alkaline rocks of the Biranup Zone of the Albany Frazer Orogen;
- TREO grades are at least comparable with those reported as being commercially exploited and/or studied elsewhere in Australia and the world;
- Mount Ridley has reported preliminary metallurgy results that indicate that the REE's are amenable to clay processing techniques including beneficiation and acid leach;
- Mt Ridley reports an Inferred Mineral Resource estimate for the Mia Prospect of 168 million tonnes grading 1,201 ppm TREO, with internal higher-grade zones; and
- Mia Prospect mineralisation is open towards the northeast and southwest of the central prospect axis.



Tenement Details

The tenements that provide tenure to the Mia Prospect are: E63/1564 and E63/2112 which are identified in Table 4 and shown in Figure 3.

Access to the tenements is via sealed roads and, within the project, on good quality gravel roads and sandy exploration tracks.

The elevation difference over the Mia Prospect is minimal, within an approximate range between 180 and 190m ASL. Low sand plains with dune ridges and flat salt lakes (e.g Lake Halbert 182m ASL) are common throughout the project area. There are low, isolated granite outcrops (e.g. Sheoak Hill (203m ASL) and My Heyward (299m ASL)) above the sand plains, occurring as inselbergs and erosional remnants often with ethnographic significance.

Table 4: Tenement Schedule

	Table 1. Tellelilel	it concadio				
	Tenement	Grant	Expiry	Holder	Expenditure	Area
7		Date	Date		(\$)	(km²)
	E63/1564	31/07/2012	30/07/2023	Mount Ridley Mines Limited	70,000	64.4
	E63/2112	13/08/2021	12/08/2026	Mount Ridley Mines Limited	126,000	352.8

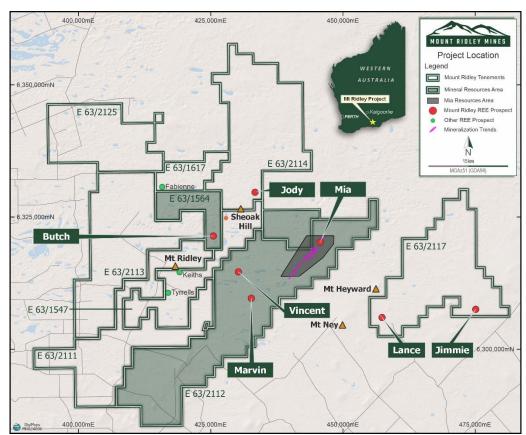


Figure 3: Mount Ridley Project showing landmarks, the central Mia Prospect Mineral Resource area (40km²) and mineralisation trends.



Geology

The Mia Prospect targets areas of the Kepa Kurl Provance of the Albany-Fraser Orogen ("AFO") (Figure 4), including the Meso-Proterozoic-aged eastern Biranup Zone rocks - gneisses and granites with lesser interlayers of alkaline granite, mafic and ultramafic rocks, and includes intrusions of Recherche and Esperance Supersuite rocks.

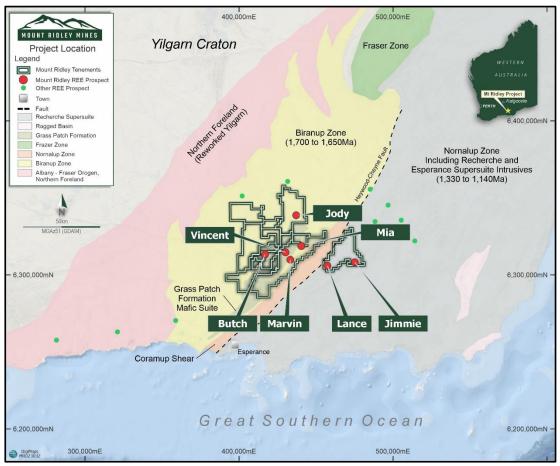


Figure 4: The Mount Ridley REE Project comprises 9 granted exploration licences near the south coast of Western Australia with an area of approximately 3,175km². Mount Ridley Project tenements overlay geological domains including mid-Proterozoic-aged Biranup Zone granitic rocks, Grass Patch mafic rocks and younger-aged Nornalup Zone granitic rocks. (Geology: 1:500 000 State Interpreted bedrock geology (DMIRS-016)).

Litho-geochemistry indicates that many of the highest-grade intersections align with sinuous, niobium-enriched, plutonic dykes which are apparent in aeromagnetic imagery, which occur within a marginal zone between granitic gneisses and granites. Drilling has tested this structural zone over a strike length of 8.5 kilometres to date and potential remains for mineralised extensions in both northeasterly and south westerly directions.

Much of the Project, including the Mia Prospect, is overlain by Tertiary deposits of the western Eucla Basin, including sequences of transgression sediments, comprising marine, coastal, and continental deposits of siltstone, spongolite, sandstone, lesser limestone, and lignite in its lower sections.^{vi}



Regolith and Mineralisation

REE mineralisation occurs as widespread, flat-lying lenses hosted within Proterozoic saprolite (upper brown-red clays to lower grey-green clays) with highest grades at the upper-to-lower redox front, in the lower saprolite horizon and at transition-to-fresh rock zone (Figures 7-9).

Mineralisation is recorded in weathered mafic and granitic rocks, and granitic gneiss, however the highest grades are often associated with more alkaline rocks (using Pearce et al 1984 diagram). The free silica content is important as simple screen beneficiation tests show that a substantial improvement in grade can be achieved by its removal.

A proposed stratigraphic column of the regolith, mineralisation sites and the redox front is illustrated below in Figure 5.

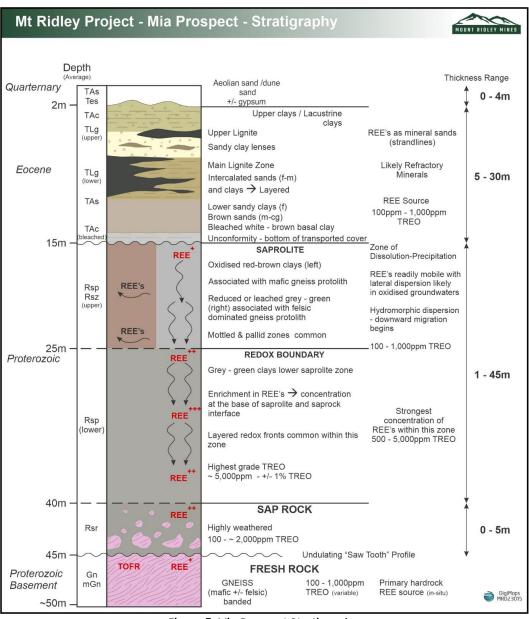


Figure 5: Mia Prospect Stratigraphy.



The Mia Prospect was discovered by drilling 400m-spaced holes along existing tracks. Intersections returned were the amongst the thickest and highest grades among 11 prospects identified within the Project. Further work has reduced this number to 7 priority targets (Figure 4). Three iterations of drilling have been completed at the Mia Prospect.

Overall, the resource model for the central Mia Prospect takes into account 382 aircore holes which cover an area of 40km² where drill holes intersected rare earth mineralisation generally exceeding 700ppm TREO (Figure 3).

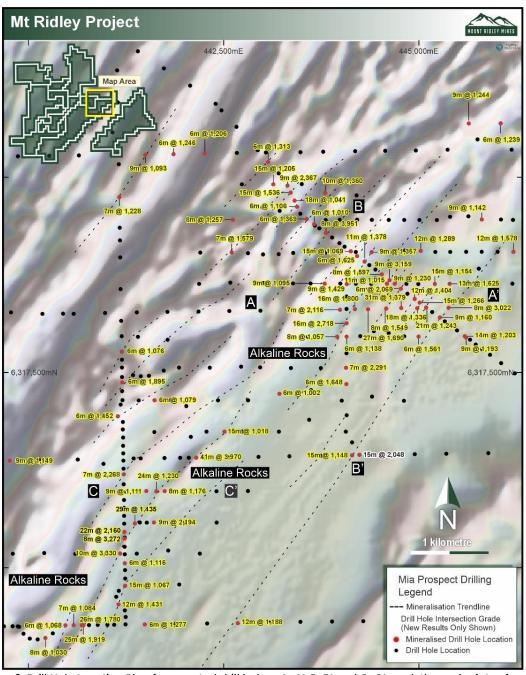


Figure 6: Drill Hole Location Plan for reported drill holes. A-A', B-B' and C-C' mark the endpoints of cross sections in Figures 7-9.



Drilling Techniques

Air core drilling^{vii} was the technique used to test the deposit. The technique used blade bits of approx. 90mm diameter with 3m length drill rods, and holes were drilled to 'blade refusal' when penetration ceased due to the hardness of the rock encountered. A number of holes were extended using a hammer bit to provide fresh rock samples for petrography. The Company notes that air core is the industry-standard drilling technique when testing sands, clay and saprolite. The samples produced were generally dry.

Vertical drillholes along the central Mia Prospect mineralised zone were spaced on eastwest lines 400m apart, with holes spaced generally at 100m apart, increasing to 200m and 400m along the flanks of the targeted mineralisation.

Drill hole collars were located using a handheld GPS to +/-5m accuracy using the MGA 94 Zone 51 grid system and downhole survey was not undertaken, the holes being vertical. While no accurate height data was collected, drill hole collar heights were estimated using open access SRTM^{viii} data to give relative height differences between holes. This was considered 'fit for purpose' given the relatively flat topography and the stage of the development of the Project.

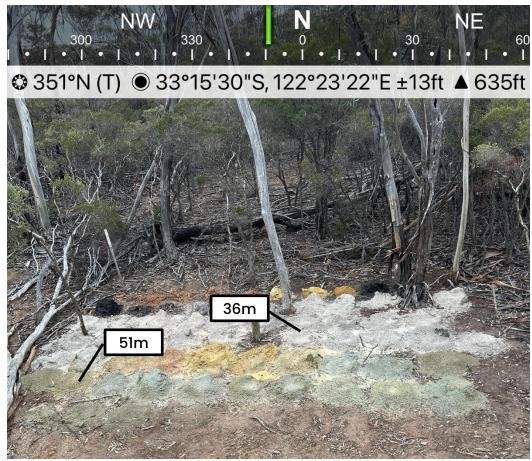
Recoveries from drilling were generally good, however instances of poor recovery were recorded, but are not considered to be materially biased, given the nature of the geology and samples. Holes are wide spaced (typical of regional exploration drilling) designed to test anomalies and Mount Ridley has assessed the assay data against control samples and historical assays, which has not returned any indication of bias.

Sampling and Sub-sampling Techniques

Samples were of metre intervals returned from a conventional air core drilling rig via a rigmounted cyclone. One sample was routinely composited from three contiguous one metre intervals. Three percent (3%) of samples were duplicated for quality control analysis.

Relevant certified reference material and blank samples were also inserted into the sample stream such as to represent approximately 3% of the samples submitted to the laboratory for analysis. A sample from each down-hole metre was placed into a chip tray for future reference and a collection of the end of hole samples were separately collected for other analyses including petrography.





Photograph 1: Shows drill hole samples from MRAC1670 - 15.00m at 1,205 ppm from 36 to 51m. Colours are representative of various regolith conditions, including from surface down-hole, buff coloured Eocene sediments, black Eocene ignites overlaying Proterozoic light grey, light yellow brown saprolite and grey-green saprock.

Sample Preparation and Analysis Method

Samples were submitted for chemical analysis using industry standard sample preparation more fully described in Appendix 2.

Analyses reported herein by ALS Laboratory's ME-MS81, a lithium borate fusion with ICP-MS finish. Samples were also analysed by the ALS ME-ICP06 whole rock package. For the REEs, Elemental results were converted to the equivalent oxide value using element-to-oxide stoichiometric conversion factors (Appendix 2, Table 6). Mount Ridley observes that reporting rare earth oxide values is the industry accepted norm for reporting.



Estimation Methodology

Key regolith stratigraphic contacts (refer Figure 5 above) were modelled using Micromine and Leapfrog software, including base of transported, base of saprolite and base of saprock/top of fresh rock. The key estimated mineralised domains are the saprolite and saprock.

All drill hole samples contained within the mineralisation domains (saprolite and saprock) were composited to Im and supported the estimation of block grades, using hard boundaries into the mineralised domain below the base of transported and above the top of fresh rock. Aggregated grades for TREO, MagREO^{ix}, HREO^x, LREO^{xi} plus individual grades for Pr₆O₁₁, Nd₂O₃, Dy₂O₃ ppm and Tb₄O₇ were estimated into a Surpac[™] model using an Inverse Distance Squared algorithm (ID²). Search ellipses used anisotropy with the ellipses aligned following a clear north-easterly trend as noted in the geology and geophysics and supported by the variography. A minimum of 3 and a maximum of 6 composited (Im) samples were used for block estimates immediately around holes (search ellipse of 150m at 1:2:10 to 00/045) and then increased to a minimum of 4 samples to fill a block and a maximum of 8, (with a maximum from any one informing hole of 3) on increasing search distances until all blocks were populated.

Block sizes were based upon the average drill spacing, with block sizes set to 50m (X) by 50m (Y) by 1m (Z) - approximately a half of the closest drill spacing (100m) in the easting and northing directions. Sub-celling was used to constrain the large block sizes within the geological envelopes.

Density values were derived by way of immersion methods (sealed) on half PQ core, with Mt Ridley measuring 16 samples from two diamond core holes at the Mia Deposit (14 within the defined mineralised domains). Also considered were another 136 measurements taken from other Mt Ridley prospects nearby in similar stratigraphy. Statistical analysis was completed by mineralised domains, rock type and oxidation. Densities applied to the model are transported overburden (waste) of 1.53 t/m³, mineralised saprolite of 1.53 t/m³, mineralised saprock of 1.7 t/m³ and fresh bedrock of 2.7 t/m³.



Criteria used for Classification

The Mineral Resource estimate was classified as Inferred, based on:

- confidence in the geological model;
- · continuity of mineralized zones;
- · drilling density;
- · confidence in the underlying database; and
- available bulk density information.

At this stage, the reported Mineral Resource is classified as Inferred based on the factors listed above. In particular, the current drill spacing ranges from 100m to 400m in both the X and Y directions, and the understanding of geological continuity. Indications of stronger geological trends and potential higher-grade continuity in to the north-east / south-west direction need further infill drilling to continue to better define this (Figure 10).

Mining and Metallurgical methods / material modifying factors

Based on the orientations, thicknesses, and depths to which the mineralised zones have been modelled, the expected mining method would be open pit mining.

To date, 23 samples project-wide, including 5 samples from the central Mia Prospect, have been the subject of a range of metallurgical sighter tests including screen beneficiation and alternative acid leach options. While more investigation is required, a flowsheet that uses a particle size beneficiation process, followed by HCI leaching, shows greatest efficacy.

Future Works and Resource Growth Potential

- Undertake infill drilling to upgrade the maiden MRE to Indicated classification;
- Drill strike extensions to the corridor enclosing the more alkali rocks which are associated with better clay-hosted REE intersections;
- Continue metallurgical studies to confirm optimal areas for acid leach processing, and design an appropriate flow sheet; and
- Determine what is required to estimate an Indicated Mineral Resource of sufficient size to support capital expenditure and progress.

For further information, please contact:

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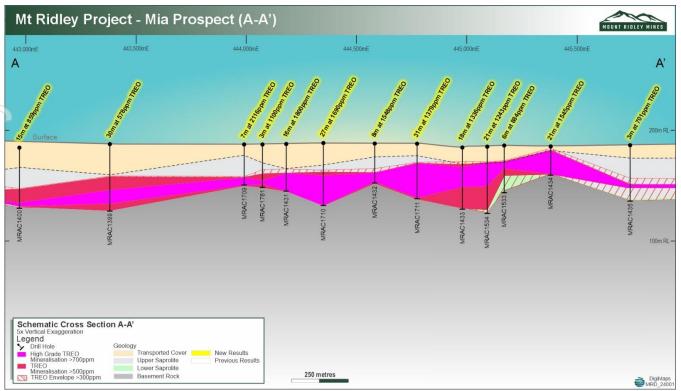


Figure 7: East-west cross section across the Mia Prospect at approximately 6,318,300mN, (see Figure 6 for location). High-grade mineralisation is approximately 1.4km wide. October 2023 holes are shown with yellow highlight. The vertical scale is 5x the horizontal scale.

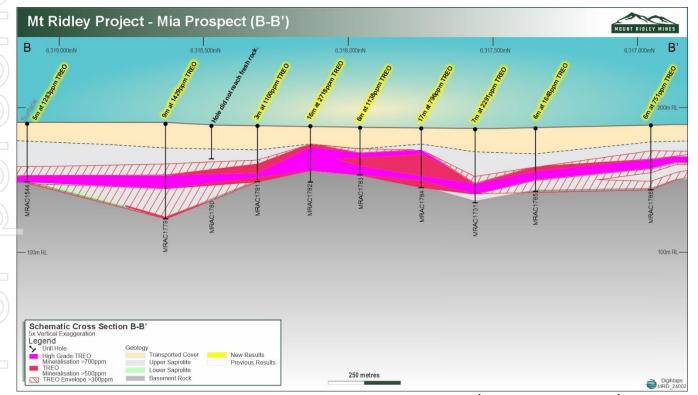


Figure 8: North-south section along the Mia Prospect at approximately 444,070mE, (see Figure 6 for location). High-grade mineralisation has an oblique width exceeding 1km. October 2023 holes are shown with yellow highlight. The vertical scale is 5x the horizontal scale.



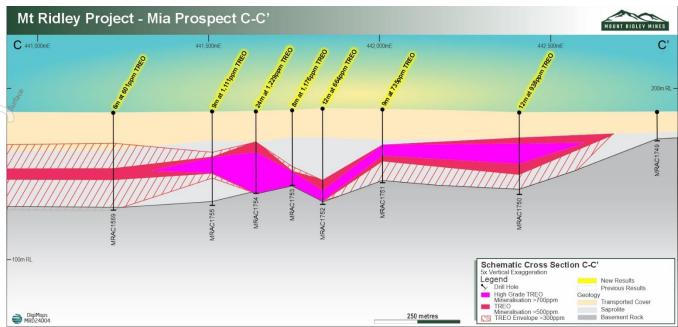


Figure 9: Cross section across the Mia Prospect at approximately 6,315,980mN, (see Figure 6 for location). The thick zone of high grade clay-hosted REE mineralisation is approximately 300m wide. Key drill holes are 100m apart. New holes are shown with yellow highlight. The vertical scale is 5x the horizontal scale.

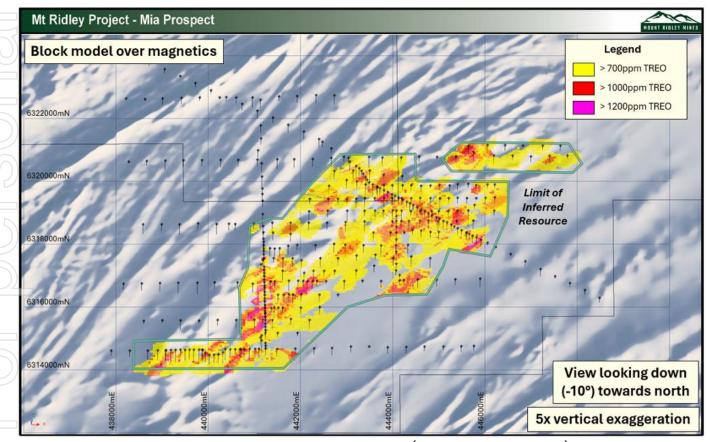


Figure 10: Oblique 3-D diagram illustrating the block model TREO grades (700ppm TREO lower cut-off) overlying magnetics.



i **REE (Rare Earth Element**) means the 14 common rare earth elements; cerium (Ce), dysprosium (Dy), erbium (Er), europium (Eu), gadolinium (Gd), holmium (Ho), lanthanum (La), lutetium (Lu), neodymium (Nd), praseodymium (Pr), samarium (Sm), terbium (Tb), thulium (Tm), ytterbium (Yb). Yttrium (Y) is usually included with REE

ii TREO (Total Rare Earth Oxide) means the sum of the 14 REE+Y, each converted to its respective stoichiometric element oxide.

iii ASX: MRD: 6 July 2023 "Excellent screen beneficiation test results lift REE grades by up to 202% at the Mount Ridley REEI Project".

iv ASX: MRD 21 August 2023, "Leach tests achieve up to 85% recovery of Magnet REE".

v Refer to the list of **announcements** that have JORC tables in Appendix 2.

vi Clarke 1994, Gammon et al. 2000a, b; DMIRS 2020

vii **Aircore** a reverse circulation drilling technique usually using a blade bit and where samples are returned pneumatically to the surface through an inner tube within the drill rods.

viii **Digital Elevation Model** (DEM) data was derived from **SRTM (Shuttle Radar Topographic Mission)** and has a resolution of 1 arcsecond (approx. 30 metres). Drill hole collar elevations have been extrapolated onto this digital elevation model.

ix MagREO means magnet rare earth oxides; the sum of Dy₂O₃, Nd₂O₃, Pr₆O₁₁ and Tb4O7

x HREO means Heavy Rare Earth Oxides; the sum of Gd₂O₃, Tb4O7, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, + Y₂O₃.

xi LREO means Light Rare Earth Oxides; the sum of La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃.



Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr David Crook, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Crook is a consulting geologist retained by Mount Ridley Mines Limited. Mr Crook is also a shareholder of Mount Ridley Mines Limited. Mr Crook has sufficient experience of relevance to the style of mineralisation under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Crook consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources is based on and fairly represents information compiled by Mr David Crook (a consulting geologist retained by Mount Ridley Mines Limited) and Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd). Mr Crook is also a shareholder of Mount Ridley Mines Limited. Both Mr Crook and Mr Barnes are members of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Both have sufficient experience of relevance to the style of mineralisation and type of deposit under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Crook is the Competent Person for the database, site visits, geological model and classification, and Mr Barnes is the Competent Person for the estimation and classification. Mr Crook and Mr Barnes consent to the inclusion in this announcement of the matters based on their information in the form and context in which they appear.

JORC Table 1 included in Previous Mt Ridley announcements to ASX

This announcement contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code). Further details (including 2012 JORC Code reporting tables where applicable) of exploration results referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX:

- 2 August 2021. "REE Potential Unveiled at Mount Ridley."
- 13 September 2021. "REE Targets Extended."
- 21 October 2021. "Encouraging Rare Earth Extraction Results."
- 3 August 2022. "Excellent Drilling Results Expand Rare Earth Mineralisation Footprint at the Mt Ridley Project."



- 6 October 2022. "Highest grades to date returned from Mt Ridley Rare Earth Project, Mineralised footprint extended to more than 1,200km²."
- 14th February 2023. "Thick, shallow and high grade REE mineralisation discovered at the new Jody and Marvin Prospects."
- 30 March 2023. "Resource drilling commences on 30km long Mia Marvin Zone at the Mount Ridley REE Project."
- 10 May 2023. "Coincident High-Grade Rare Earth Elements and Geophysical Anomalies at Mia Prospect."
- 25 May2023. "Drilling update for the Mia REE Prospect."
- 06July2023. "Excellent Beneficiation Test Results Lift REE Grades."
- 21 September 2023. "Leach tests achieve up to 85% recovery of Magnet REE."
- 11 October 2023. "Drilling confirms continuity at Mount Ridley REE Project."
- 5 December 2023. "Drilling returns wide, high-grade REE intersections at two new prospects at the Mount Ridley Project."
- 21st February 2024. "Results flow from Mia resource-focussed drilling at Mount Ridley Rare Earth Element Project"

Mount Ridley confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the exploration results continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Caution Regarding Forward Looking Information

This announcement may contain forward-looking statements that may involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or reflect other future developments.



Appendix 1

Key Intersection Results. Results are of intersections greater than 6m at greater than 1,000ppm TREO, using a 700ppm lower cut off, with up to 3m of internal lower grade dilution.

				ole 5					
			Hole Intersectio				1	Г	Г
Hole ID	East (m)	North (m)	Hole Depth (m)	From (m)	To (m)	Intersection (ppm TREO)	MagREO (ppm)	HREO (ppm)	LREO (ppm)
MRAC1169	441,163	6,319,744	67	24	31	7m at 1,228	254	74	1153
MRAC1174	441,195	6,317,767	70	64	70	6m at 1,076	211	358	718
MRAC1175	441,200	6,317,375	48	42	48	6m at 1,895	315	383	1512
MRAC1178	441,220	6,316,197	65	57	64	7m at 2,268	942	735	1533
MRAC1180	441,230	6,315,374	17	9	17	8m at 3,272	1026	638	2634
MRAC1184	440,683	6,314,263	59	33	58	25m at 1,919	444	297	1622
MRAC1188	439,070	6,314,239	63	57	63	6m at 6,648	2726	2174	4474
MRAC1195	439,760	6,316,372	69	48	57	9m at 1,149	298	360	789
MRAC1218	439,720	6,322,708	27	15	24	9m at 1,028	277	299	730
MRAC1230	443,407	6,319,700	58	39	45	6m at 1,106	328	304	802
MRAC1231	443,658	6,319,398	50	30	36	6m at 1,010	237	217	793
MRAC1233	444,303	6,318,920	38	19	30	11m at 1,378	467	294	1084
MRAC1233	444,623	6,318,683	30	15	24	9m at 3,159	479	310	2849
MRAC1235	444,946	6,318,441	56	24	36	12m at 1,404	410	363	1041
MRAC1236	445,268		36	21	30	9m at 1,160	309	241	919
	· ·	6,318,205	43		21	·			944
MRAC1237	445,587	6,317,964	43	12	18	9m at 1,193	289	249 479	963
MRAC1242	447,200	6,316,766		12		6m at 1,442	521		
MRAC1372	445,756	6,314,343	34	18	27	9m at 1,055	237	268	786
MRAC1380	442,682	6,314,291	44	24	36	12m at 1,188	370	368	820
MRAC1383	441,489	6,314,274	47	30	36	6m at 1,277	398	433	844
MRAC1388	444,145	6,316,440	32	12	27	15m at 1,148	287	353	795
MRAC1393	442,148	6,316,410	56	15	56	41m at 3,970	901	510	3460
MRAC1420	441,496	6,320,289	60	48	57	9m at 1,093	313	277	816
MRAC1421	441,858	6,320,296	51	42	48	6m at 1,046	252	311	736
MRAC1422	442,260	6,320,305	47	33	39	6m at 1,206	58	64	1142
MRAC1431	444,181	6,318,312	43	27	43	16m at 1,800	418	459	1341
MRAC1432	444,582	6,318,319	36	27	35	8m at 1,548	347	476	1073
MRAC1433	444,979	6,318,323	56	18	36	18m at 1,336	329	249	1087
MRAC1434	445,380	6,318,330	26	4	12	8m at 3,022	1002	1239	1782
MRAC1440	441,124	6,322,181	48	36	48	12m at 1,107	174	196	910
MRAC1446	439,010	6,322,238	39	15	24	9m at 1,050	269	211	839
MRAC1526	445,604	6,317,948	42	19	33	14m at 1,203	299	203	1000
MRAC1534	445,092	6,318,332	61	15	36	21m at 1,243	302	214	1028
MRAC1535	445,010	6,318,395	52	27	42	15m at 1,266	403	470	797
MRAC1537	444,769	6,318,573	36	24	30	6m at 2,069	370	244	1825
MRAC1538	444,690	6,318,636	48	25	34	9m at 1,230	280	272	958



			Tal	ole 5					
		Key Drill I	lole Intersectio		ral Mia	Prospect.			
Hole ID	East	North	Hole Depth	From	То	Intersection	MagREO	HREO	LREO
	(m)	(m)	(m)	(m)	(m)	(ppm TREO)	(ppm)	(ppm)	(ppm)
MRAC1539	444,525	6,318,757	41	33	41	8m at 1,597	444	221	1376
MRAC1542	444,208	6,318,991	36	30	36	6m at 1,625	274	163	1462
MRAC1543	444,127	6,319,052	39	24	39	15m at 1,069	263	283	786
MRAC1546	443,809	6,319,287	47	39	47	8m at 3,951	1102	1892	2059
MRAC1548	443,565	6,319,466	71	24	30	6m at 1,369	470	441	928
MRAC1550	443,440	6,319,622	59	30	48	18m at 1,041	308	309	732
MRAC1551	443,358	6,319,804	56	24	39	15m at 1,536	307	236	1300
MRAC1552	443,318	6,319,893	81	42	51	9m at 2,367	389	564	1803
MRAC1554	443,069	6,320,196	60	48	54	6m at 1,313	352	670	643
MRAC1561	441,144	6,316,940	36	30	36	6m at 1,452	396	189	1263
MRAC1573	441,228	6,315,459	34	11	33	22m at 2,160	507	691	1469
MRAC1576	441,233	6,315,057	42	36	42	6m at 1,116	257	237	879
MRAC1578	441,238	6,314,770	42	21	36	15m at 1,067	285	273	795
MRAC1581	441,153	6,314,531	76	54	66	12m at 1,431	534	411	1020
MRAC1587	440,579	6,314,265	40	33	39	6m at 1,068	194	143	924
MRAC1588	440,473	6,314,263	55	48	55	7m at 1,084	274	469	616
MRAC1590	440,217	6,314,102	51	42	50	8m at 1,030	275	324	706
MRAC1599	439,190	6,314,245	72	63	71	8m at 1,106	280	475	631
MRAC1603	440,702	6,314,263	56	30	56	26m at 1,780	407	389	1391
MRAC1642	446,047	6,320,691	55	48	54	6m at 1,239	371	337	902
MRAC1643	445,639	6,320,689	54	36	45	9m at 1,244	233	112	1132
MRAC1650	442,617	6,319,455	52	44	52	8m at 1,257	269	680	576
MRAC1664	445,805	6,319,459	37	27	36	9m at 1,142	294	333	809
MRAC1667	443,801	6,319,799	28	18	28	10m at 1,360	291	238	1121
MRAC1670	443,136	6,319,910	64	36	51	15m at 1,205	298	199	1006
MRAC1673	442,603	6,319,038	36	28	35	7m at 1,579	519	450	1129
MRAC1682	444,395	6,319,042	41	21	30	9m at 1,357	361	240	1117
MRAC1685	445,024	6,319,057	70	9	21	12m at 1,289	321	225	1064
MRAC1691	446,211	6,319,046	50	15	27	12m at 1,578	459	765	813
MRAC1697	443,793	6,318,638	46	18	27	9m at 1,095	223	144	950
MRAC1701	444,590	6,318,637	27	15	26	11m at 1,015	346	316	699
MRAC1704	445,204	6,318,634	37	18	33	15m at 1,154	324	274	879
MRAC1705	445,394	6,318,636	57	11	24	13m at 1,625	525	383	1242
MRAC1709	443,990	6,318,304	37	30	37	7m at 2,116	498	268	1848
MRAC1710	444,349	6,318,310	57	30	57	27m at 1,690	405	472	1218
MRAC1711	444,774	6,318,326	50	18	49	31m at 1,379	299	237	1142
MRAC1712	444,996	6,317,960	47	36	42	6m at 1,561	371	463	1098
MRAC1717	443,953	6,317,958	24	15	23	8m at 1,057	170	87	970
MRAC1731	444,067	6,317,561	51	38	45	7m at 2,291	688	892	1399
MRAC1737	443,214	6,317,228	34	24	30	6m at 1,002	211	181	822



	Table 5 Key Drill Hole Intersections: central Mia Prospect.								
Hole ID	East (m)	North (m)	Hole Depth (m)	From (m)	To (m)	Intersection (ppm TREO)	MagREO (ppm)	HREO (ppm)	LREO (ppm)
MRAC1742	441,615	6,317,145	77	36	42	6m at 1,079	125	51	1028
MRAC1747	442,510	6,316,742	51	15	30	15m at 1,018	145	95	923
MRAC1753	441,744	6,315,981	44	36	44	8m at 1,176	358	317	859
MRAC1754	441,638	6,315,979	48	24	48	24m at 1,230	296	275	955
MRAC1755	441,510	6,315,982	55	27	36	9m at 1,111	309	382	729
MRAC1763	441,607	6,315,580	42	21	30	9m at 2,194	523	446	1748
MRAC1766	441,363	6,315,567	43	13	42	29m at 1,435	322	271	1164
MRAC1779	444,076	6,318,632	66	36	45	9m at 1,429	450	452	977
MRAC1782	444,074	6,318,131	31	15	31	16m at 2,718	707	380	2338
MRAC1783	444,074	6,317,959	33	27	33	6m at 1,138	279	300	838
MRAC1785	444,071	6,317,352	44	30	36	6m at 1,648	436	538	1109
MRAC1788	444,238	6,316,447	37	15	30	15m at 2,048	708	672	1375
MRAC1789	441,174	6,315,182	25	15	25	10m at 3,330	677	390	2941



Appendix 2

JORC Code, 2012 Edition – Table 1 Report for the Mount Ridley Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation		Commentary
Sampling techniques	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.	•	384 aircore holes (MRAC0850 to MRAC0852, MRAC1165 to MRAC1196, MRAC11213 to MRAC1246, MRAC1372 to MRAC1448, MRAC1525 to MRAC1605, MRAC1642 to MRAC1796) are used in this Mineral Resource Estimate. Samples of drill chips drilled using a conventional aircore drilling rig were collected through a cyclone as 1m piles laid out consecutively on the ground then sampled as between 1m and 3m composite spear samples. Samples were analysed at an accredited laboratory using techniques generally used when investigating clay-hosted REE mineralisation. 2 diamond core holes (MRDD043 and MRDD044) were completed for SG and metallurgy study.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	•	Drill hole collar locations reported herein were picked-up using a Garmin hand-held GPS with approximately +-3m accuracy. Holes were drilled vertically. No downhole surveying was undertaken.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where	•	Samples of between 1 metre and 3 composited metres, determined by geology, taken for analysis.
	'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In	•	The size of the sample submitted to the laboratory was 2-4kg in weight. This was prepared in an industry-recognised fashion, including drying, pulverising and packing into a computer-coded packet. A further sub-sample was analysed and the coded packed then stored.
	other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may	•	Analyses reported herein are by ALS Laboratory's ME-MS81 method, a lithium borate fusion with ICP-MS finish, and ME-ICP06 whole rock package.
Drilling techniques	warrant disclosure of detailed information. Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube,	•	Aircore drilling. A type of reverse circulation drilling using slim rods and a nominal 90mm blade bit. The hole advances until blade refusal when hard saprock or fresh rock is



Criteria	JORC Code explanation		Commentary
	depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).		encountered. Occasional holes were extended using an aircore hammer, to provide fresher ock for analysis and petrography.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.		Recovery was visually assessed, recorded on drill logs, and considered to be acceptable within industry standards.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	s	The drill string is 'blown out' every 3m at rod changes to minimise contamination due to sample lag. A cyclone was used to deliver the sample into buckets. The cyclone is cleaned of loose material between drill holes. The great majority of samples were dry and considered representative.
	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.	• N	Not assessed.
Logging	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.	s	All holes were geologically logged to a degree appropriate for this style of drilling and the stage of the project. Chip tray samples for all holes have been retained. Additional end-of-hole samples taken and stored separately for petrography.
<i>V2</i>)	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		Geological logging is inherently qualitative. More specific logging may be undertaken if chemical analyses warrant it.
	The total length and percentage of the relevant intersections logged.	• A	All holes were logged for the entire length of the hole.
Sub-sampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	• S	Samples of half core used for SG measurements.
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.		m samples or up to 3m composite samples were 'speared' from the sample piles for an approximately 2.5 - 3.5kg sample. Sample composite length is determined by geology.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	• S	Sampling technique is appropriate for the drilling method and stage of the project.
	Quality control procedures adopted for all sub- sampling stages to maximize representivity of samples.		Certified reference material (CRM) routinely inserted within the sampling sequence at a rate of 3% each.
1 (2)	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field	• F	rield duplicates taken at pre-specified intervals at the time of drilling at the rate of 3%.
	duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	• S	Sample size is considered fit for purpose.



Criteria	JORC Code explanation		Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	•	Analyses reported herein by ALS Laboratory's ME-MS81, a lithium borate fusion with ICP-MS finish, and ME-ICP06 whole rock package. A suite of 15 Rare Earth Elements was targeted, plus whole rock analysis to assist with identifying the underlying geological units. The analytical techniques were recommended by the Company's geochemical consultant and considered appropriate when discussed with an ALS Laboratory chemist. ALS has a lot of experience analysing clay-hosted REE mineralisation.
	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.	•	None used, not applicable.
Verification of sampling	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. The verification of significant intersections by either	•	Standards and laboratory checks have been assessed and show results within acceptable limits of accuracy, with good precision in most cases. ALS analysed 6 different standards, which were manufactured by an independent 3rd party. Significant intersections are calculated by experienced geologists using recognised
and assaying	independent or alternative company personnel. The use of twinned holes.	•	software and a methodology verified by an independent consultant. No systematic study undertaken.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	•	All collected data stored in a commercially managed database.
O	Discuss any adjustment to assay data.	•	Raw assays are stored in the commercially managed database. Each rare earth elemental value is converted to the respective rare earth element oxide value, calculated using the stoichiometric conversion factor in "Section 2 – Data Aggregation Methods" below.
Location of data points	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.	•	Drill hole collar locations were surveyed using a hand-held GPS with an accuracy within+-3m. This is considered fit for purpose.
	Specification of the grid system used.	•	GDA94-51
// 	Quality and adequacy of topographic control.	•	RL's estimated from a digital elevation model with points gained as a component of an aeromagnetic survey. The datum may have some error, but RL of holes are considered fit for purpose on a hole to hole basis.
15)	Data spacing for reporting of Exploration Results.	•	Variable, 400m x 100m within areas of identified mineralisation trends. Flanking holes spaced 400m apart.



Criteria	JORC Code explanation	Commentary
Data spacing and	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.	The data spacing and distribution is considered sufficient to establish the degree of geological and grade continuity appropriate for an Inferred Mineral Resource estimate.
distribution	Whether sample compositing has been applied.	For the purpose of the block model, the sample compositing procedure is described in the text. For the Key Intersections table (Table 5) the composite comprises the weighted average grade of adjacent samples grading above 700ppm TREO, with up to 3m of internal lower grade dilution. No additional sample compositing has been applied during the Mineral Resource modelling.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Likely unbiased as vertical holes are sampling a horizontal mineralized feature.
D D	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.	Unlikely to be biased.
Sample security	The measures taken to ensure sample security.	Standard industry practice is used with Company representatives transporting samples from the field, transporting samples by courier to the laboratory, and storing samples at the laboratory prior to analysis. Following analysis, samples are stored in a Company-controlled locked facility off site.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are consistent with industry standards. A third-party geochemical specialist is used to periodically review the data and its quality.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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.	 Tenements E 63/1564 and E 63/2112 are key tenements within the Company's Mount Ridley REE Project, and cover the Mia Prospect, the subject of this Mineral Resource Statement. The Mia Prospect is located 77km NE of Esperance, Western Australia. The Registered Holder is Mount Ridley Mines Limited (Company) (100%). The Project is subject to a Full Determination of Native Title: which is held by the Esperance Nyungars NNTT Number: WC2004/010, Federal Court Number: WAD28/2019.
15)	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	 The tenements are in good standing, and there are no impediments to operating in the targeted areas other than requirements of the DEMIRS, DBCA, which are industry-standard, and an ETNTAC Heritage Protection protocol.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Many parties, including Government organisations, private and public companies, have explored the greater Mount Ridley District. A substantial compilation of prior work was undertaken by Bishop who was the first to research the potential of mafic intrusions and metamorphosed sedimentary basins for base metals. Mount Ridley completed a large complement of geophysical surveys and drilling, aimed at nickel sulphides and gold prior to commencing its REE investigations. Nearby, Salazar Gold Pty Ltd were the first company to search for REE in the Great Southern, identifying the Splinter REE deposit.
Geology	Deposit type, geological setting, and style of mineralisation.	Clay-hosted rare earth deposit.
Drill hole Information	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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this	 All relevant data for the drilling conducted is tabulated previous announcements: 2 August 2021. "REE Potential Unveiled at Mount Ridley." 13 September 2021. "REE Targets Extended." 21 October 2021. "Encouraging Rare Earth Extraction Results." 3 August 2022. "Excellent Drilling Results Expand Rare Earth Mineralisation Footprint at the Mt Ridley Project." 6 October 2022. "Highest grades to date returned from Mt Ridley Rare Earth Project, Mineralised footprint extended to more than 1,200km2." 14th February 2023. "Thick, shallow and high grade REE mineralisation discovered at the new Jody and Marvin Prospects."



Criteria	JORC Code explanation			Commentary	
	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	the Mount 10 May 202 Anomalies 25 May202 06 July202 21 Septemi 11 October 5 Decemb	Ridley REE Proj 33. "Coinciden at Mia Prospe 3. "Drilling upo 3. "Excellent Be per 2023. "Lead 2023. "Drilling er 2023. "Drilling at the Mount R ary 2024. "Resu	ect." t High-Grade Rare Ear ct." date for the Mia REE Pr eneficiation Test Resul th tests achieve up to confirms continuity a ng returns wide, high- idley Project." Its flow from Mia reso	•
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Significant inter lower TREO cut- 3m and no exter No metal equivorable 6: Conversion Ce_ppm Dy_ppm Er_ppm Eu_ppm Gd_ppm La_ppm La_ppm Lu_ppm Nd_ppm Pr_ppm Sm_ppm Tb_ppm Tm_ppm Y_ppm Source: Eleme	offs as noted in the interval offs as noted in the interval of int	representation of the specific high growth of the specific	ion factors – JCU Australia. Ho ₂ O ₃ , Lu ₂ O ₃ , Tb ₄ O ₇ , Tm ₂ O ₃ , Y ₂ O ₃ ,



Criteria	JORC Code explanation	Commentary
		HREO: the sum of Sm ₂ O ₃ , Dy ₂ O ₃ , Er ₂ O ₃ , Eu ₂ O ₃ , Gd ₂ O ₃ , Ho ₂ O ₃ , Lu ₂ O ₃ , Tb ₄ O ₇ , Tm ₂ O ₃ , Y ₂ O ₃ , and Yb ₂ O ₃ . LREO: the sum of Ce ₂ O ₃ , La ₂ O ₃ , Nd ₂ O ₃ , and Pr ₆ O ₁₁ . CREO: the sum of Dy ₂ O ₃ , Eu ₂ O ₃ , Nd ₂ O ₃ , Tb ₄ O ₇ , and Y ₂ O ₃ . MagREO: the sum of Nd ₂ O ₃ , Pr ₆ O ₁₁ , Dy ₂ O ₃ and Tb ₄ O ₇ ,
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	The interdependence of mineralisation width and length has not been established. To date the targeted mineralisation seems to be a flat-lying sheet, so vertical drilling suggests true width is similar to downhole width. The sheet margins have not been determined.
Diagrams	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.	Refer to maps, tables and figures in this report.
Balanced reporting	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.	Selected composite samples reported in previous announcements (listed above) and in Table 5.
Other substantive exploration data	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.	All new, meaningful, and material exploration data has been reported.



Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	 Additional drilling is required to increase confidence in this Mineral Resource model. Additional drilling is also required to increase the quantified tonnes of mineralisation. Metallurgical studies are required to ascertain a processing route for the commercial extraction of the REEs.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	



Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in sections 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	 All drilling for the Mia Prospect was completed by Mt Ridley and was uploaded into Mt Ridley's DataShed database, managed by MaxGeo. Mt Ridley data logged in the field is automatically imported into DataShed, with assay files uploaded in digital format upon receipt from the laboratory. Personnel access to the DataShed database is restricted to preserve the security of the data.
	Data validation procedures used.	 Routine database checks are conducted by Mt Ridley's consultant Database Manager using DataShed procedures. All data has been further validated by Mt Ridley or Mt Ridley's consulting geologists during the drilling data review and 3-D modelling processes (using Micromine, Leapfrog Geo and Surpac softwares) prior to inclusion in the resource estimate.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	 Site visits have been completed by co-Competent Person David Crook. A site visit was not undertaken by co-Competent Person Lauritz Barnes.
5)	If no site visits have been undertaken indicate why this is the case.	• N/A
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	 The geological interpretation of the Mia REE deposit is based on all new drilling and sampling (completed between 2022 and 2024 entirely by Mt Ridley) of the host regolith stratigraphy which has been interpreted into a 3D model of the regolith domains. The reasonable density of Air Core drilling throughout the deposit and two Diamond core holes has supported the development of an appropriately robust geological model and understanding of the mineralisation distribution sufficient for an Inferred resource. The host regolith units are generally well defined in the logged lithology records. Data is stored in a master DataShed database. Exports were in Microsoft Access format for import to modelling software No assumptions were made or applied to the data. The data is considered to be robust due to effective database management, and validation checks to verify the quality. Original data and survey records are utilised to validate any noted issues. It is likely that further drilling will bring some variation to interpretation but is unlikely to change the overall understanding of the mineralisation. The grade estimate is wholly constrained within the regolith zone (saprolite and saprock). All geological, grade plus geophysical observations were used to guide the interpretation and further control the trends of the Mineral Resource estimate.



Criteria	JORC Code explanation	Commentary
		 Geophysical data (magnetics) indicated a string north-east / south-west trend to the bedrock geology. Drilling assays indicated higher-grade zones appear to be consistent with these bedrock trends and the basic variography analysis completed supports this.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	The Mia Deposit Mineral Resource has an approximate strike length of 8.5km by 3km. The sub-horizontal thickness of mineralised zones in the model ranges from 5 m to 30 m for the narrower mineralisation Domains.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of byproducts. Estimation of deleterious elements or other nongrade variables of economic significance (e.g., sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping.	 LeapfrogTM Geo – wireframe modelling of geological units SurpacTM – compositing, geostatistics, variography, block modelling, estimation, block model validation, classification and reporting. A parent block of 50m (X) x 50m (Y) x 1m (Z) with sub celling to 25m (X) x 25m (Y) x 0.5m (Z) was applied. This is based on drillhole spacings of 100-400 m in the mineralised domains. This is a maiden resource for the Mia Deposit – no previous estimates (or prior drilling for that matter) exist for this deposit. No by-product recovery has been assumed. Key oxides estimated included TREO, MagREO, HREO, LREO plus Pr6011, Nd2O3, Dy2O3 ppm and Tb4O7 individually. Other elements/oxides estimated included Al2O3, Fe2O3, P2O5, SiO2, Th and U. No correlated variables have been investigated or estimated. The geological interpretation, in particular the host regolith units: saprolite and saprock, were used to constrain the estimation. It was used to guide the orientation and shape of the mineralised domains and then used as boundaries for the grade estimation, using the trend of the mineralisation and geological units to control the search ellipse direction and the major controls on the distribution of grade. Top cuts were used in the estimate to control the over-influence of high-grade outliers. Top cuts, where appropriate, were applied on an individual domain basis and were applied to the composites prior to estimation to reduce the influence of outliers, including 5000ppm for TREO, 2000ppm for MagREO, 2500ppm for HREO and 4500ppm for LREO. Grades were estimated into a Surpac™ model using Inverse Distance Squared (ID2). Search ellipses used anisotropy with the ellipses aligned following a clear north-easterly trend as noted in the geology and geophysics and supported by the variography. A minimum of 3 and a maximum of 6 composited (Im) samples were used for block estimates imme



	Criteria	JORC Code explanation	Commentary
		The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	 Validation checks of the estimate occurred by way of global and local statistical compariso comparison of volumes of wireframe versus the volume of the block model, comparison the model average grade (and general statistics) and the declustered sample grade k domain, swath plots by northing, easting and elevation, visual check of drill data versu model data and comparison of global statistics for check estimates.
M	loisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnage was estimated on a dry basis.
C	cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	 For the model, a nominal lower cut-off grade of 300 ppm TREO was utilised for interpreting geological continuity of the mineralisation. For this report, the cut-off grades applied to the estimate was between 400ppm TREO and 1,200ppm TREO.
	fining factors or ssumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Based on the orientations, thicknesses, and depths to which the mineralised zones have been modelled, the expected mining method would be open pit mining.
7	letallurgical factors r assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 No specific metallurgical methods or parameters were incorporated into the modellin process. A range of metallurgical sighter tests have been reported. These included successf screen beneficiation tests to increase the grade of mineralisation, and alternative ac options. While more investigation is required, a flowsheet that uses a particle siz beneficiation process, followed by HCI leaching, shows greatest efficacy.



Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made	No environmental impacts of mining and processing have been examined as this requires a more in-depth knowledge of the proposed process flowsheet. The clay is naturally occurring and inert.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	 Density values were derived by way of a water-immersion method of sealed core samples of half PQ core, with 16 samples measured from two diamond core holes at the Mia Deposit (14 within the defined mineralised domains). Also considered was another 136 measurements taken from other Mt Ridley prospects nearby in similar stratigraphy. Samples taken were coded by lithology and weathering. Statistical analysis was completed by mineralised domains, rock type and oxidation. Densities applied to the model are transported overburden (waste) of 1.53 t/m3, mineralised saprolite of 1.53 t/m3, mineralised saprock of 1.7 t/m3 and fresh bedrock of 2.7 t/m3.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).	The Mineral Resource estimate was classified as Inferred, based on: confidence in the geological model; continuity of mineralized zones; drilling density; confidence in the underlying database; and available bulk density information. At this stage, the reported Mineral Resource is classified only as Inferred based on the factors listed above, in particular, the current drill spacing and understanding of geological



Criteria	JORC Code explanation		Commentary
	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	continuity. Indications of stronger geological trends and potential higher-grade continuity in to the north-east / south-west direction need further infill drilling to better define this. Current drill spacing supporting Inferred ranges from 100m to 400m in both the X and Y directions.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	•	No external audits have been conducted on the Mineral Resource estimate.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	•	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade. It is likely that further drilling will bring some variation to interpretation but is unlikely to change the overall understanding of the mineralisation. There has been no mining at the Mia Deposit, so it is not possible to compare to production data.