

Activities Report for the Quarter Ended 31 March 2023

Mount Ridley Mines Limited (ASX: MRD, “Mt Ridley” or “the Company”) is pleased to provide an Activities Report for the March 2023 quarter.

Highlights

A total of 234 aircore holes for 11,144m of drilling was completed, targeting clay-hosted rare earth element (“REE”) mineralisation. Drilling is continuing at the Mia Prospect.

Drilling results from 175 holes drilled in 2022 identified 2 new prospects: Jody and Marvin, and confirmed Mia as the Company’s first target for resource drilling. Results included:

Mia Prospect

- MRAC1188: 6*m at 6,648 ppm TREO² from 57m including 2,726ppm MagREO³ including 1m at 28,831 ppm (2.9%) TREO in fresh rock at the end of the hole
- MRAC1175: 9m at 1,476 ppm TREO from 39m including 267ppm MagREO)
- MRAC1178: 8m at 1,605 ppm TREO from 57m including 651ppm MagREO)
- MRAC1180: 8m at 3,272 ppm TREO from 9m including 1,026ppm MagREO)
- MRAC1184: 29m at 1,748 ppm TREO from 30m including 407ppm MagREO)

Jody Prospect

- MRAC1121: 24m at 1,060ppm TREO from 21m including 252ppm MagREO
- MRAC1125: 6m at 3,182ppm TREO from 24m including 1,056ppm MagREO
- MRAC1146: 11m at 1,550 ppm TREO from 33m including 328ppm MagREO
- MRAC1161: 20m at 1,514ppm TREO from 12m including 381ppm MagREO
- MRAC1162: 35m at 1,999ppm TREO from 18m including 512ppm MagREO
- MRAC1209: 15m at 1,284 ppm TREO from 24m including 308ppm MagREO

Marvin Prospect

- MRAC1075: 23m at 974ppm TREO from 36m including 246ppm MagREO
- MRAC1077: 15m at 1,736ppm TREO from 36m including 399ppm MagREO
- MRAC1082: 21m at 1,906ppm TREO from 45m including 349ppm MagREO

1 REE 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.

2 TREO means the sum of the 14 REE+Y, each converted to its respective stoichiometric element oxide

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

Drill results from diamond drill holes (for metallurgy) included:

- Mia: MRDD044: 10m at 866 ppm TREO from 26m
- Butch: MRDD038: 46.00m at 1,558 ppm TREO from 31m
- Winston's: MRDD036: 17.60m at 1,643 ppm TREO from 41m
- Vincent: MRDD029: 9.20m at 2,338 ppm TREO from 30m

Mount Ridley REE Project

The 100% owned Mount Ridley REE Project is located approximately 50km north-east of the Port of Esperance Western Australia, with an area covering approximately 3,400km².

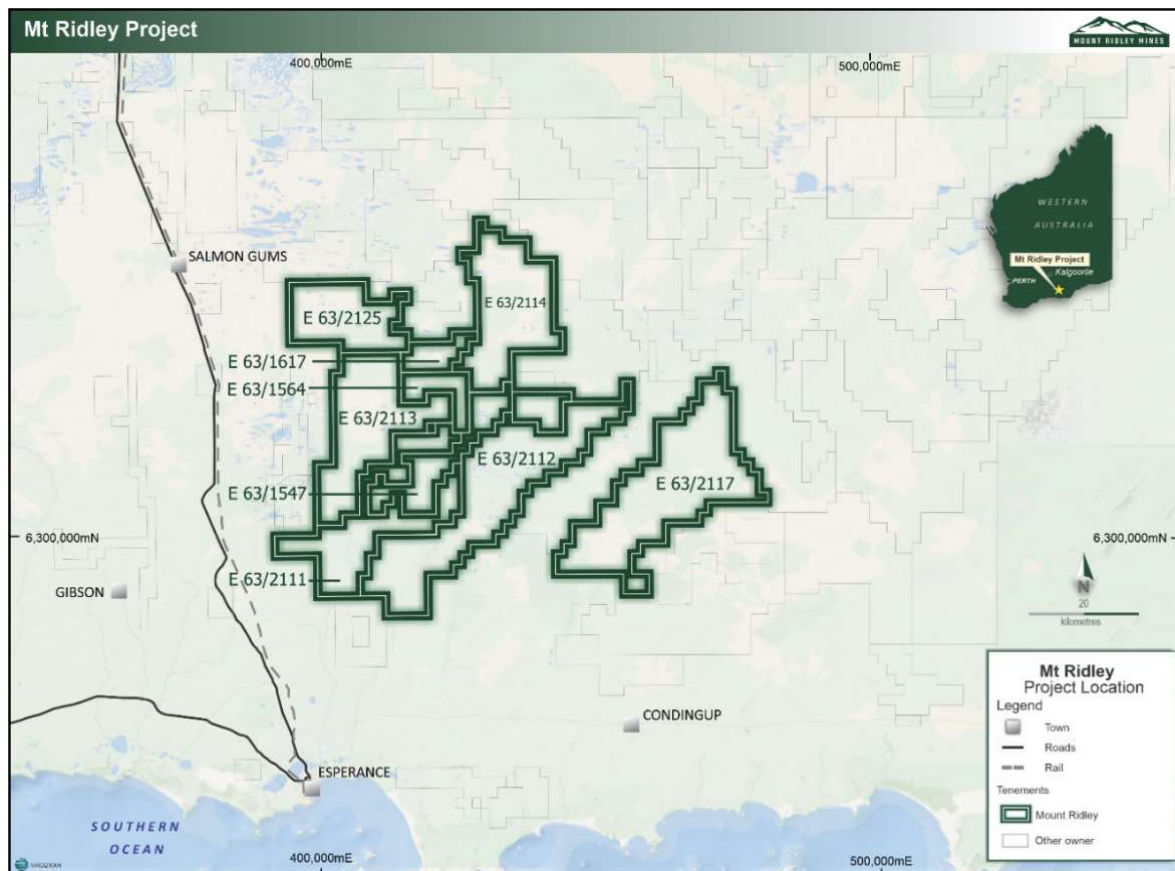


Figure 1: The Mount Ridley REE Project comprises 9 granted exploration licences in south-west Western Australia with an area of approximately 3,400km².

Aircore Drilling

Drilling during the quarter totalled 234 aircore holes for 11,144m. The following were completed;

- Regional lines at the Fabienne Prospect, completing the planned Stage 2 – Regional Drilling Programme.
- Second pass drilling of the 25km², Mia area where holes were drilled along 5 lines spaced 2km apart, each between 5 and 7 km long, and with holes spaced at 400m along these lines. Assays from this work are expected at the end of April 2023, and will establish the area for the Mia resource drill-out.
- North-south and east-west aircore traverses across and along the axis of known mineralisation at Mia. Holes were drilled on 100m spacings to provide geostatistical data for future resource estimations. Traverses also targeted drill hole high grade intersections, including MRAC1188 which ended in 2.9% TREO.

Aircore Drilling Results

Results from 175 drill holes received this quarter resulted in:

- The identification of two new priority prospects, named Jody and Marvin,
- Confirmation of Mia as a priority target for the Project's first drill out, and
- Extension of 4 previously identified prospects.
- Of the holes analysed, 139 showed significant (>500ppm) TREO. The drilling was conducted along existing tracks that form a project-wide network, with drill holes spaced 400m apart.

Of note, **MRAC1188 at the Mia Prospect returned 1m at 2.9%TREO** in fresh granitic rock at the end of the drill hole, the highest-grade TREO intersection to date from the Mt Ridley Project. Additional holes have been drilled at this locality, and a petrographic study is underway to determine whether this is an occurrence of primary mineralisation.

Metallurgy

The geological units that host the Mia, Marvin and Jody Prospects are dominated by felsics which, when weathered, form a layer of silica-kaolin clay that may have similarities to REE deposits in China, Africa and elsewhere in Australia. The Company is targeting high silica-kaolin saprolite specifically as this may beneficiate through simple screening.

The Company retained Independent Metallurgical Operations (IMO), a metallurgical consultancy and laboratory based in Perth, to plan and oversee the REE extraction test work as the primary step towards creating a process flowsheet.

Nineteen (19) samples are currently undergoing screen beneficiation testing ahead of acid leach testing. Samples will initially be tested in parallel at the Australian Nuclear Science and Technology Organisation (ANSTO), Simulus and IMO.

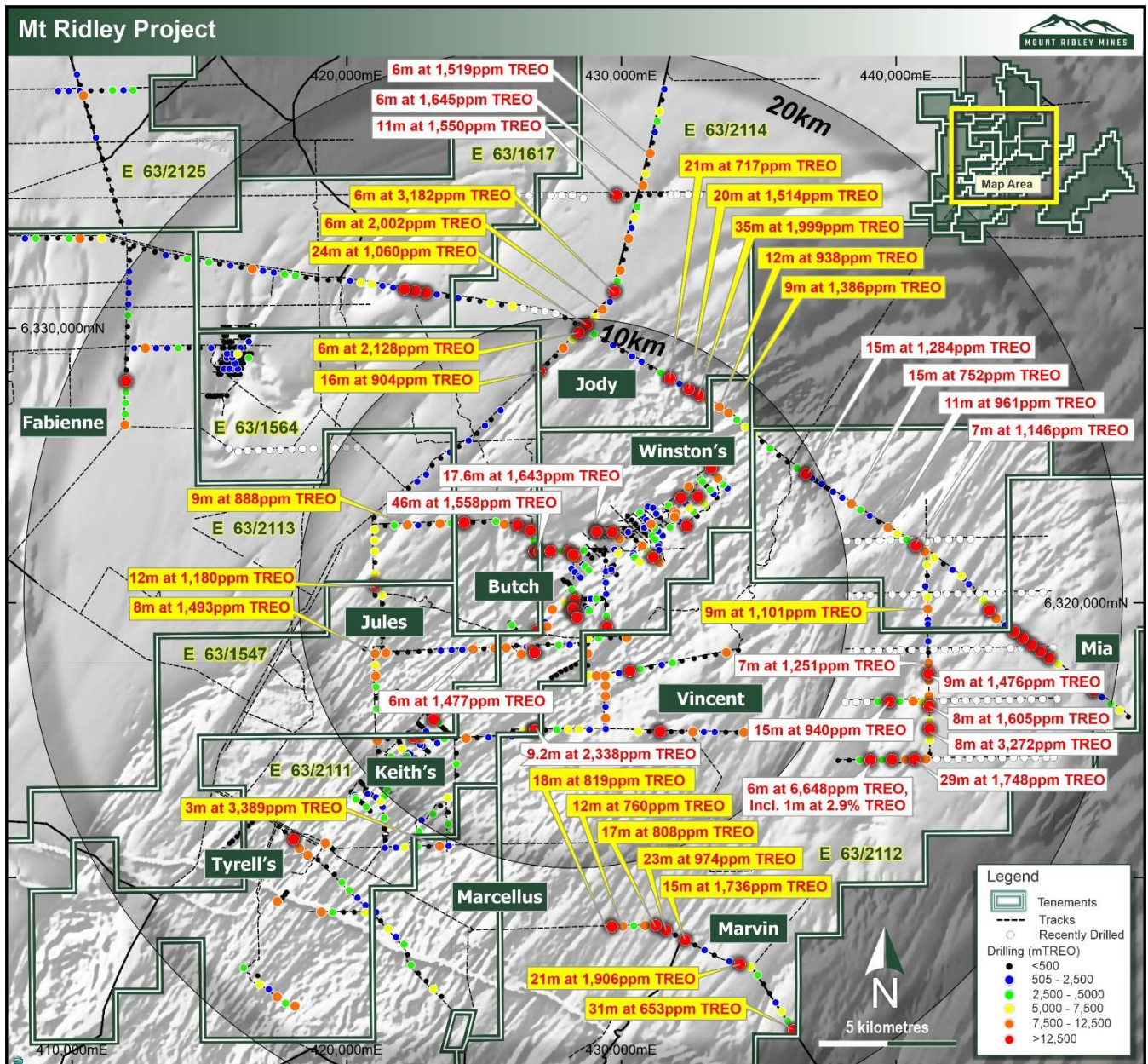


Figure 2: Prospect locations and significant drilling intersections (intersections calculated using 500ppm TREO as the lower cut-off), with all DH locations coloured by grade x thickness (mTREO). The field of view is approximately 40km by 40km.

The New Discoveries

The Jody Prospect is situated approximately 3 kilometres north of the Winston’s Prospect in felsic clays. Mineralisation is relatively shallow, with 24 metres of cover and an average mineralised thickness of 13 meters (above 500ppm TREO). The average MagREO content is 25%. Mineralisation remains open in all directions.

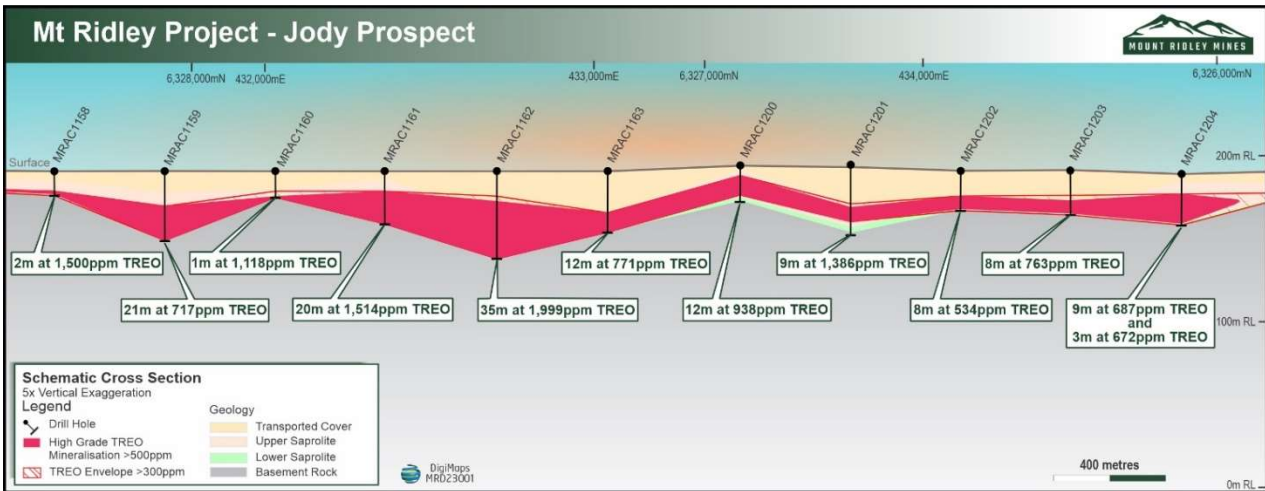


Figure 3: Cross section through the new Jody Prospect. Note drill holes are spaced 400m apart. The section is 4.8km wide.

The Marvin Prospect: Significant mineralisation (above 500ppm TREO) has been discovered along an 8-kilometre-long traverse approximately 15km southwest of the Mia Prospect. The average thickness of mineralisation is 11m sitting beneath approximately 20m of cover. The Marvin to Mia prospective corridor exceeds 20km in length.

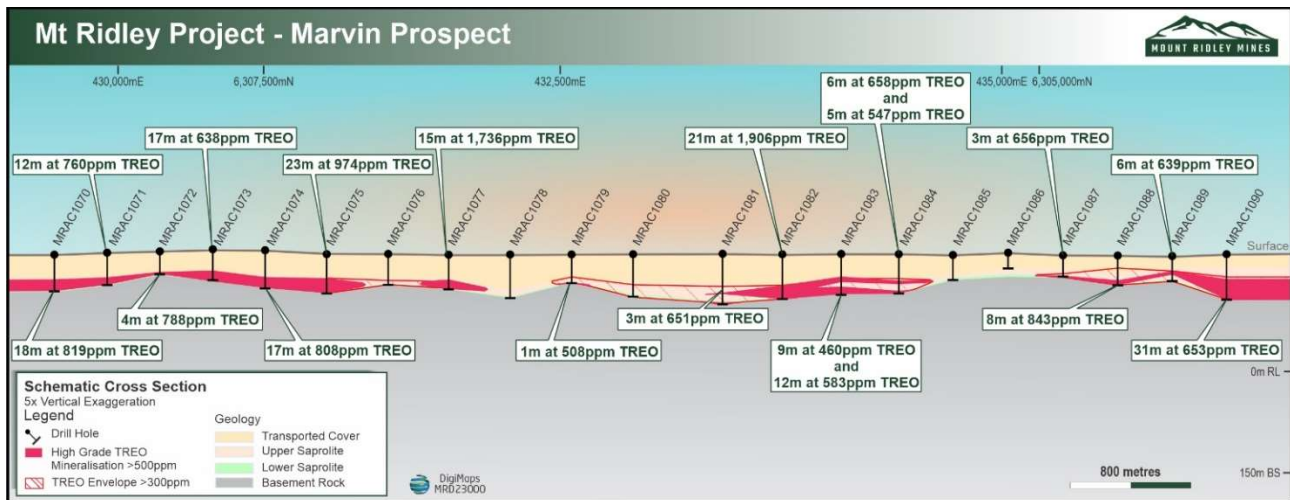


Figure 4: Cross section through the new Marvin Prospect. The section is 8km wide.

Outlook

Successive phases of aircore drilling are intersecting felsic volcanic intrusives and metasediments situated between Mia and Marvin. These units can be observed in aeromagnetic imagery for over 30km in length and 3km in width.

First-pass drill traverses will also be completed along existing tracks within nearby tenement E63/2117 (MRD 85%)

Drilling approvals, environmental and heritage protection surveys were broken down into the following;

- **Scheduled:** Subject to results, infill drilling of the 25km² Mia Prospect to bring the drilling density down to a 400m x 400m grid pattern. A POW for this work has been approved subject to completing heritage and flora surveys. The Heritage Protection survey has commenced.
- **Further Drilling:** Separate POWs have been applied for and are currently being assessed, to enable drilling up to 9 kilometres north and up to 10 kilometres south of the Mia Prospect and as far south as the Marvin Prospect. These approvals include provisions to progressively infill the drilling grid to a 400m x 400m pattern.
- **Metallurgy:** Beneficiation testwork on 19 samples is in progress. This will be followed by leach testing using different acids, over variable times and with different acid strengths. This work will be undertaken in parallel by three laboratories, ANSTO, IMO and Simulus.

About the Mount Ridley REE Project

The Company announced on 1 July 2021 that laterally extensive REE mineralisation had been identified at its namesake Mount Ridley Project.

The Mount Ridley Project is located from approximately 50 kilometres northeast of the deep-water port of Esperance, with a town of approximately 12,000 people which is a hub for tourism, agriculture, and fishing (Figure 1). The Port exports minerals including nickel sulphide, iron ore and spodumene.

The Project is approximately 20 kilometres east of the sealed Goldfields Esperance Highway and infrastructure corridor which includes the Kalgoorlie–Esperance railway line and gas pipeline. The Esperance airport is located at Gibson Soak, approximately 20 kilometres from the Project.

Work undertaken to date

- Samples from over 3,500m of Company drilling from 2017–2018 were analysed for REE using a ‘total digest’ fusion technique (“Fusion”), designed to report the total amount of REE in each sample.
- A second analysis of higher grade REE samples was completed using a weak aqua regia digestion technique intended to take into solution soluble REE. This test indicated that at a grade of approximately 800ppm TREO, 80% of light REO⁴ and 76% of heavy HREO⁵ were taken into solution under the conditions trialled.
- Since March 2022, the Company has drilled 780 AC holes for 35,291m along pre-existing tracks.
- Twenty (20) DDH’s for a total of 961.5m were completed across the Project in December 2022. Suitable core is being used for metallurgical test work.
- 1,264 drill pulps have been analysed using a short wave infra-red (“SWIR”) instrument to help map clay mineral distribution as a component of an ongoing Research and Development project studying the REE mineralisation genesis.
- 691 samples of near fresh rock stubs from the bottom of aircore holes drilled in 2014 and 2022 have been scanned using a Bruker M4 Tornado micro-XRF analyser. This is a Research and Development project designed to geologically map basement rocks (protolith). The protolith has a major bearing on the style of clay that the REE mineralisation is hosted in.

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

5 Heavy REO or HREO means Heavy Rare Earth Oxides; the sum of Gd₂O₃, Tb₄O₇, Dy₂O₃Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃

Additional ASX Information

Summary of Exploration Expenditure (ASX Listing Rule 5.3.1)

In accordance with Listing Rule 5.3.1, the Company advises the cash outflows on its mining exploration activities reported in 1.2(1) of its Appendix 5B for the March 2023 quarter and detailed above were \$1,059,423.

Mining Production and Development (ASX Listing Rule 5.3.2)

There were no substantive mining production and development activities during the quarter.

Payment to Related Parties (ASX Listing Rule 5.3.5)

The Company advises the payments in section 6.1 of Appendix 5B for the quarter related to Director fees.

The mining tenement interests acquired or relinquished during the quarter and their location.

Not applicable.

The Company acknowledges the Esperance Nyungar People, custodians of the Project area. This announcement has been authorised for release by the Company's board of directors.

For further information, please contact:

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Chairman
+61 8 6165 8858

David Crook
Technical Manager
+61 8 6165 8858

Competent Person

The information in this report that relates to exploration strategy and results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a consulting geologist retained by Mount Ridley Limited. Mr Crook is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the exploration processes undertaken to qualify as a Competent Person as defined in the 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

With respect to JORC Table 1 included in MRD announcements to ASX dated:

- 2 August 2021. "REE Potential Unveiled at Mount Ridley."
- 13 September 2021. "REE Targets Extended."
- 21 October 2021. "Encouraging Rare Earth Extraction Results."
- 2 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."

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 to reflect other future development.

About Mount Ridley Mines Limited

Mount Ridley is a company targeting demand driven metals in Western Australia.

Its namesake Mount Ridley Project, located within a Fraser Range sub-basin, was initially acquired for its nickel and copper sulphides potential, and is now recognised as being prospective for clay hosted REE deposits.

The Company also holds approximately 18% of the Weld Ranges in the mid-west of Western Australia. Areas of the tenements are prospective iron and gold.

Board

Peter Christie	Non-Executive Chairman
Simon Mitchell	Non-Executive Director
Guy Le Page	Non-Executive Director
Johnathon Busing	Company Secretary

Registered Office

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Telephone: +61 8 6165 8858

Principal Place of Business

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West Perth, WA 6005

Forward Shareholder Enquiries to Advanced Share Registry

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Nedlands WA 6906
Telephone: +61 8 9389 8033

Issued Share Capital

As at the of this report, the total fully paid ordinary shares on issue were 7,784,882,867.

TENEMENT INFORMATION (ASX Listing Rule 5.3.3)

The table below shows the interests in tenements held by Mount Ridley Mines and is provided in accordance with ASX Listing Rule 5.3.3.

Location	Project Name	Tenement #	Ownership	Titleholder	Note
Western Australia	Mt Ridley	E 63/1547	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/1564	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/1617	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/1719	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/2111	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/2112	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/2113	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/2114	100%	Mount Ridley Mines Limited	
Western Australia	Mt Ridley	E 63/2117	100%	Mount Ridley Mines Limited	1
Western Australia	Mt Ridley	E 63/2125	100%	Mount Ridley Mines Limited	
Western Australia	Weld Range West	E20/842*	100%	Zeendam Enterprises Pty Ltd	2
Western Australia	Weld Range West	E20/873*	100%	Zeendam Enterprises Pty Ltd	2
Western Australia	Weld Range West	E20/946*	100%	Zeendam Enterprises Pty Ltd	2

1. Odette Geoscience Pty Ltd has a 15% free-carried interest in E63/2117.
2. Mount Ridley Mines Limited beneficial owner.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

MOUNT RIDLEY MINES LIMITED

ABN

93 092 304 964

Quarter ended ("current quarter")

31 March 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (09 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(1,059)	(3,025)
(b) development	-	-
(c) production	-	-
(d) staff costs	(20)	(102)
(e) administration and corporate costs	(140)	(594)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (GST & Other Refunds)	208	423
1.9 Net cash from / (used in) operating activities	(1,011)	(3,299)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	(235)
(d) exploration & evaluation	-	-
(e) investments	-	24
(f) other non-current assets	-	-

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (09 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (loan facility)	(14)	(31)
2.6	Net cash from / (used in) investing activities	(14)	(242)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	5,783
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(327)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	5,456

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,204	2,264
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,011)	(3,299)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(14)	(242)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	5,456

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (09 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	4,179	4,179

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	4,179	5,204
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	4,179	5,204

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	20
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	-	-
7.5 Unused financing facilities available at quarter end		-
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(1,011)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(1,011)
8.4 Cash and cash equivalents at quarter end (item 4.6)	4,179
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	4,179
8.7(Estimated quarters of funding available (item 8.6 divided by item 8.3)	4.13
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
N/A	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
N/A	

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 28 April 2023

Authorised by: Johnathon Busing

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.