

31 January 2024

ASX Announcement

Activities Report for the Quarter Ended 31 December 2023

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

Highlights

New High-Grade Prospects Identified: Drilling at the new Jimmie and Lance Prospects returned multiple zones of thick clay-hosted rare earth element (REE^I) mineralisation under shallow overburden.

Intersections, which number amongst the Project’s best to date, included:

- 15m at 2,919 ppm TREOⁱ (20% MagREOⁱⁱⁱ) from 18m (MRAC1614)
- 26m at 1,808 ppm TREO (21% MagREO) from 15m (MRAC1616)
- 12m at 2,774 ppm TREO (19% MagREO) from 6m (MRAC1623)
- 12m at 2,173 ppm TREO (22% MagREO) from 9m (MRAC1624)
- 30m at 2,026 ppm TREO (20% MagREO) from 9m (MRAC1626)
- 37m at 1,183 ppm TREO (20% MagREO) from 9m (MRAC1627)
- 23m at 1,317 ppm TREO (20% MagREO) from 12m (MRAC1628)
- 15m at 1,994 ppm TREO (21% MagREO) from 13m (MRAC1629)
- 28m at 1,807 ppm TREO (20% MagREO) from 13m (MRAC1630)
- 11m at 1,937 ppm TREO (22% MagREO) from 10m (MRAC1631)

Central Mia Infill Drilling Completed: A program of 155 aircore holes drilled, bringing the drilling density at the central Mia Prospect to traverses 400m apart, with holes spaced between 100m and 400m. Results will augment data for a mineral resource estimate.

Outlook

Assays from the central Mia drill program are being validated ahead of release in early February 2024.

Geological modelling of drilling data is progressing concurrently. The Company anticipates the release of its maiden mineral resource estimate for the Mia Prospect during the March 2024 quarter.

Metallurgical studies of samples from key drill holes will continue, building on earlier successful beneficiation test results which indicated a projected grade upgrade of approximately 160% through screening, and the efficacy of HCl to leach REE’s into solution.

Corporate

At the 31 December 2023, the Company held cash reserves of \$1.433 million and no debt.

EXPLORATION UPDATE

Mount Ridley REE Project

The 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 near the south coast of Western Australia with an area of approximately 3,400km². Mount Ridley Project tenements overlay geological domains including mid-Proterozoic-aged Biranup Zone granitic rocks, Grass Patch mafic rocks and younger-aged Normalup Zone granitic rocks. (Geology: 1:500 000 State Interpreted bedrock geology (DMIRS-016)).

ⁱ 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.

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

ⁱⁱⁱ MagREO means the sum of Nd, Pr, Dy and Tb, each converted to its respective stoichiometric element oxide.

New Prospects: Jimmie and Lance

Results from 36 aircore holes (MRAC1606 – MRAC1641, 988m) drilled at the new Jimmie and Lance Prospects within tenement E63/2117, returned thick intersections of high grade REE mineralisation (Figures 2, 3 and 4, and Table 1).

Drilling was completed along two existing tracks with holes spaced at 400m intervals. These drilling results are the first for the Company from clays overlying Nornalup Zone granitic rocks – all previous drilling targeted clays overlaying Biranup Zone granitic rocks and Grass Patch mafic rocks (geological zones are shown on Figure 1) – and are some of the thickest and highest TREO drilling intersections made at the Mount Ridley Project to date.

The Company holds an 85% interest in E63/2117 which is located 12km east of the Mia Prospect. Odette Geoscience Pty Ltd, a private company, holds a free-carried, 15% interest.

Table 1:
Selected New Rare Earth Oxide Intersections (>700ppm TREO)

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	MagREO (ppm)	MagREO (%)	HREO (ppm)	HREO (%)	CREO (ppm)	LREO (ppm)	NdPr (ppm)
Lance											
MRAC1607	18	33	15	1,077	237	22%	109	10%	236	967	227
MRAC1611	19	29	10	1,182	252	21%	95	8%	238	1,087	243
MRAC1612	24	40	16	1,115	237	21%	108	10%	232	1,007	226
MRAC1614	48	54	6	1,066	238	22%	160	15%	271	906	222
MRAC1614	18	33	15	2,919	586	20%	234	8%	550	2,685	562
MRAC1615	15	19	4	1,592	282	18%	140	9%	293	1,452	271
MRAC1616	15	41	26	1,808	374	21%	200	11%	391	1,608	353
Jimmie											
MRAC1623	6	18	12	2,774	520	19%	126	5%	433	2,648	508
MRAC1624	9	21	12	2,173	482	22%	188	9%	455	1,985	465
MRAC1626	9	39	30	2,026	413	20%	183	9%	402	1,843	396
MRAC1627	9	46	37	1,183	237	20%	107	9%	234	1,076	226
MRAC1628	12	35	23	1,317	261	20%	147	11%	277	1,171	246
MRAC1629	13	28	15	1,994	411	21%	164	8%	393	1,830	396
MRAC1630	13	41	28	1,807	368	20%	164	9%	363	1,643	353
MRAC1631	10	21	11	1,937	425	22%	277	14%	470	1,659	394
MRAC1637	9	30	21	1,180	244	21%	121	10%	250	1,059	232
MRAC1639	9	26	17	1,498	367	24%	158	11%	358	1,340	353
MRAC1641	12	30	18	1,399	295	21%	169	12%	318	1,230	279

Infill Drilling at the central Mia Prospect.

The Company drilled a further 155 aircore holes (MRAC1642-MRAC1796, 6,711m) at the Mia Prospect, infilling previous drilling which had tested the Prospect on a grid pattern of approximately 2,500m x 400m (Figures 5 and 6). The drilling program infilled a 27km² area (central Mia) with 400m-spaced lines, with aircore holes selectively spaced along lines at intervals ranging between 100m and 400m (Figure 7).

Mineralisation at the Mia Prospect is believed to occur in elongate, parallel clay units, which often coincide with geological structures apparent as 'ridges' in aeromagnetic imagery. Intersection grades at Mia frequently average over 1,200 ppm TREO, with thickness ranging from 6m to 41m, averaging approximately 12m. The TREO basket included up to 44% MagREO (average approximately 26%), with very low Uranium and Thorium.

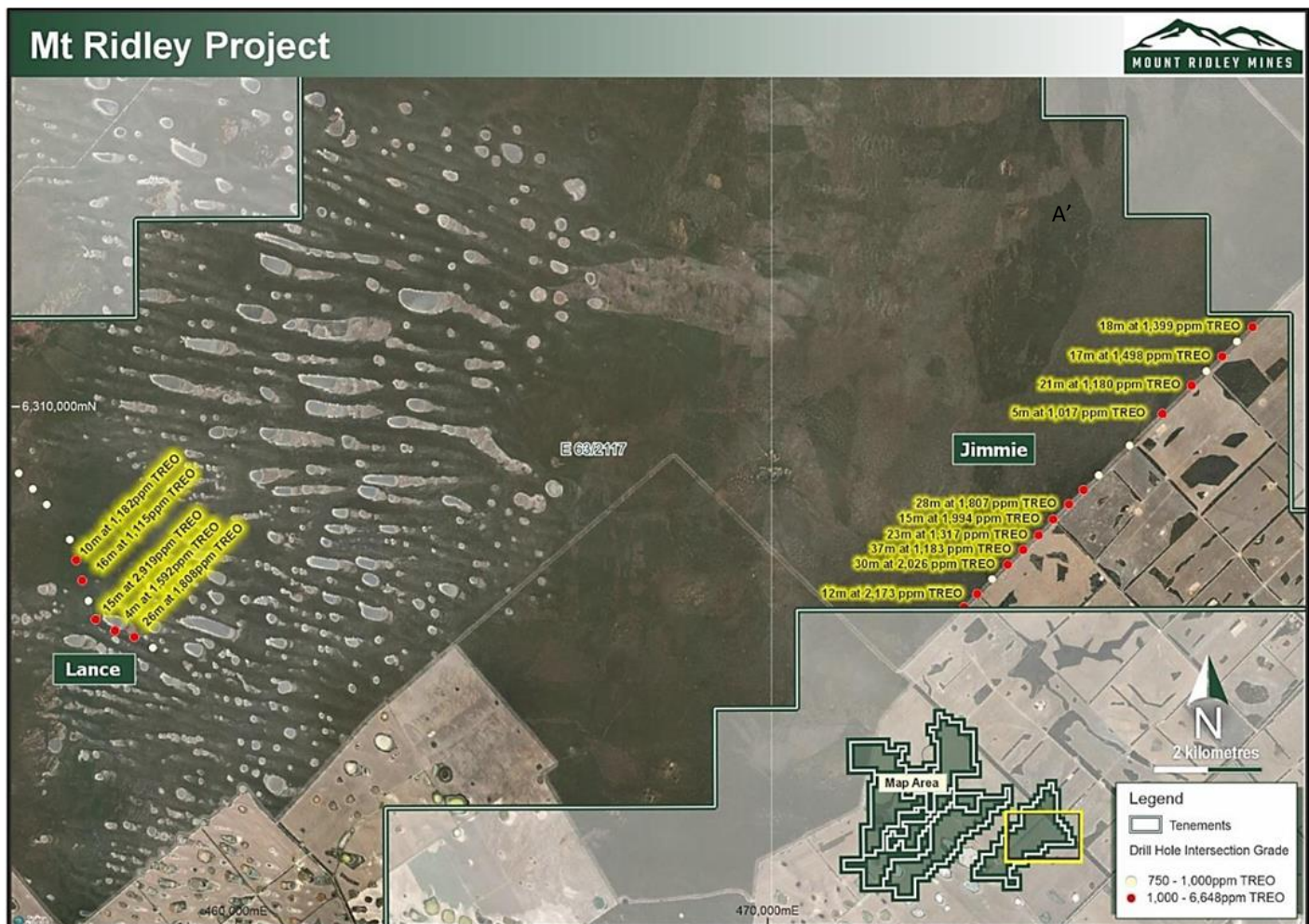


Figure 2: First program of drilling within E63/2117 returned wide, high-grade REE intersections at Jimmie and Lance Prospects.

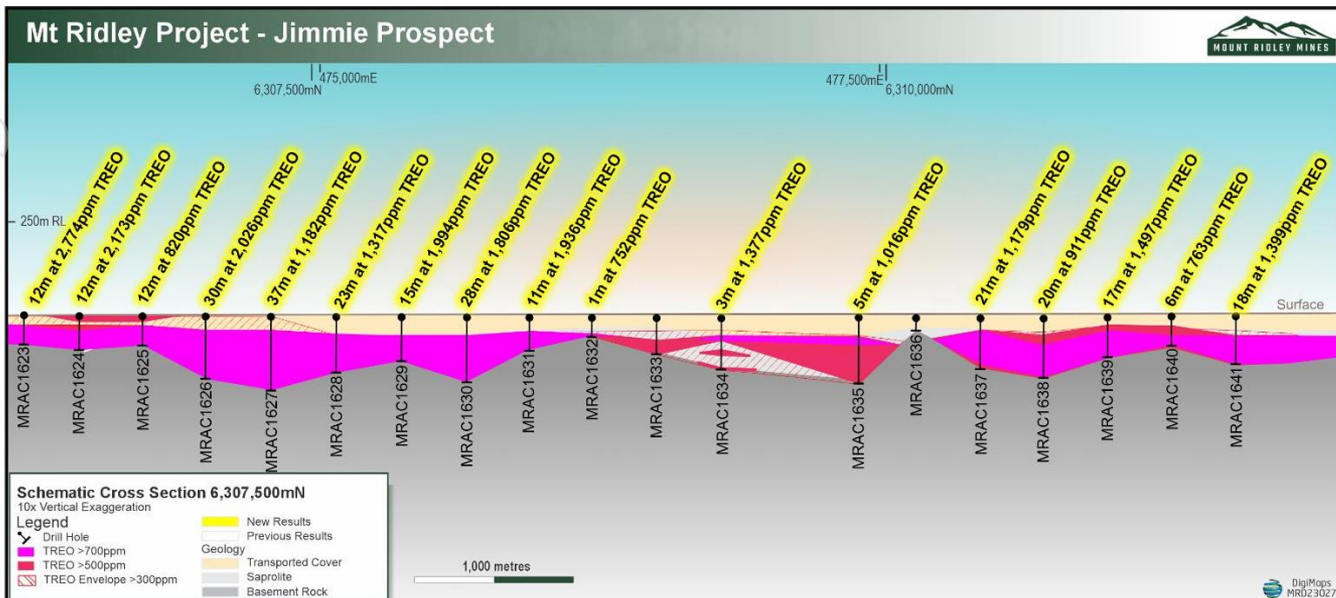


Figure 3: Drilling intersections from the first northeast orientated traverse of drilling at the Jimmie Prospect. The section view is 8.0km long, showing thick zones of high-grade (>700ppm TREO) clay-hosted REE mineralisation. Holes are 400m apart. Vertical scale is 10x horizontal scale.

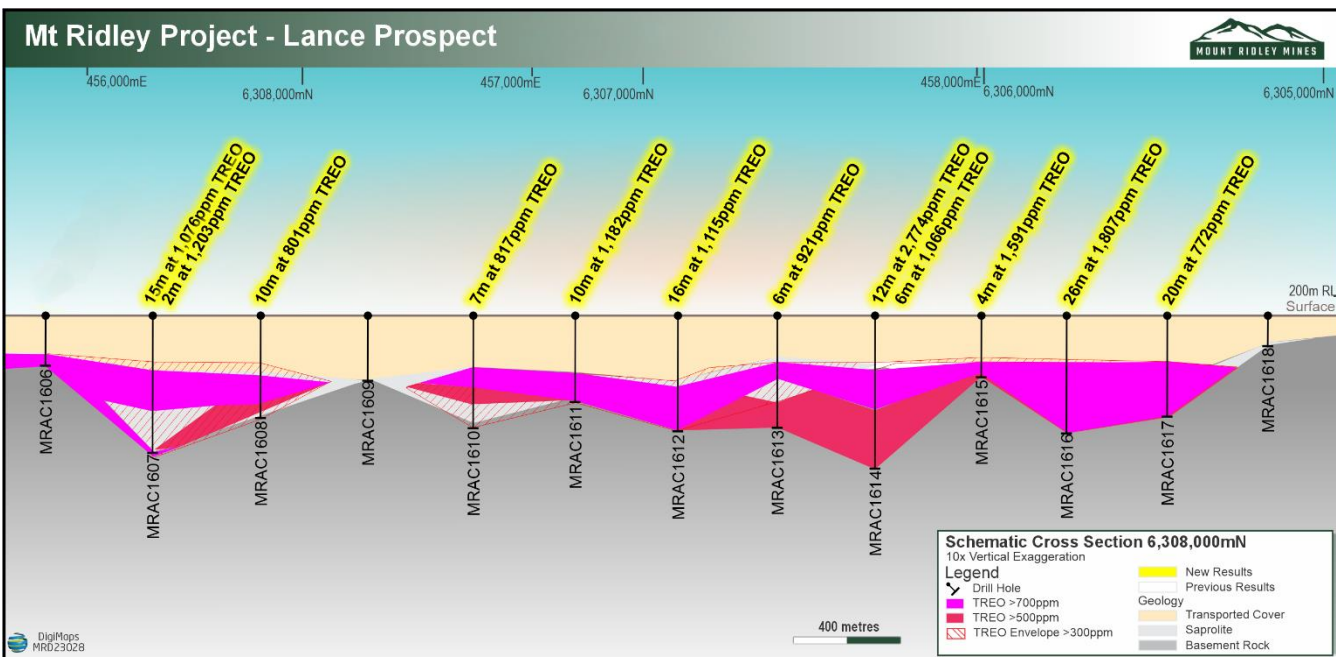


Figure 4: Drilling intersections from the first southeast traverse of drilling at the Land Prospect. The section view is 3.0km wide, showing thick zones of high-grade (>700ppm TREO) clay-hosted REE mineralisation. Holes are 400m apart. Vertical scale is 10x horizontal scale.

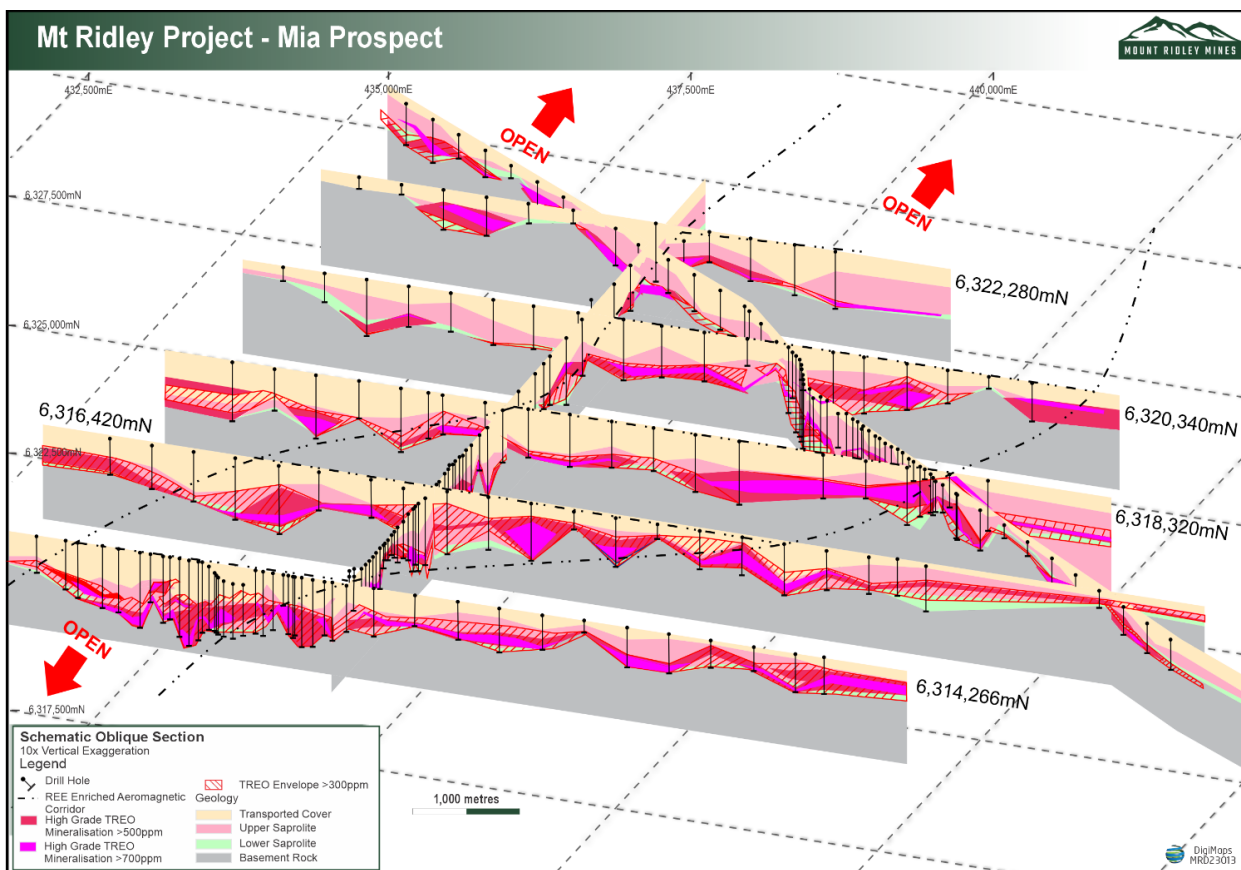


Figure 5: Mia Prospect aircore drilling. Stacked cross sections show drill holes prior to central Mia drilling and layered REE mineralisation. The drill sections are approximately 2.5 km apart. The vertical scale is 10x the horizontal scale.

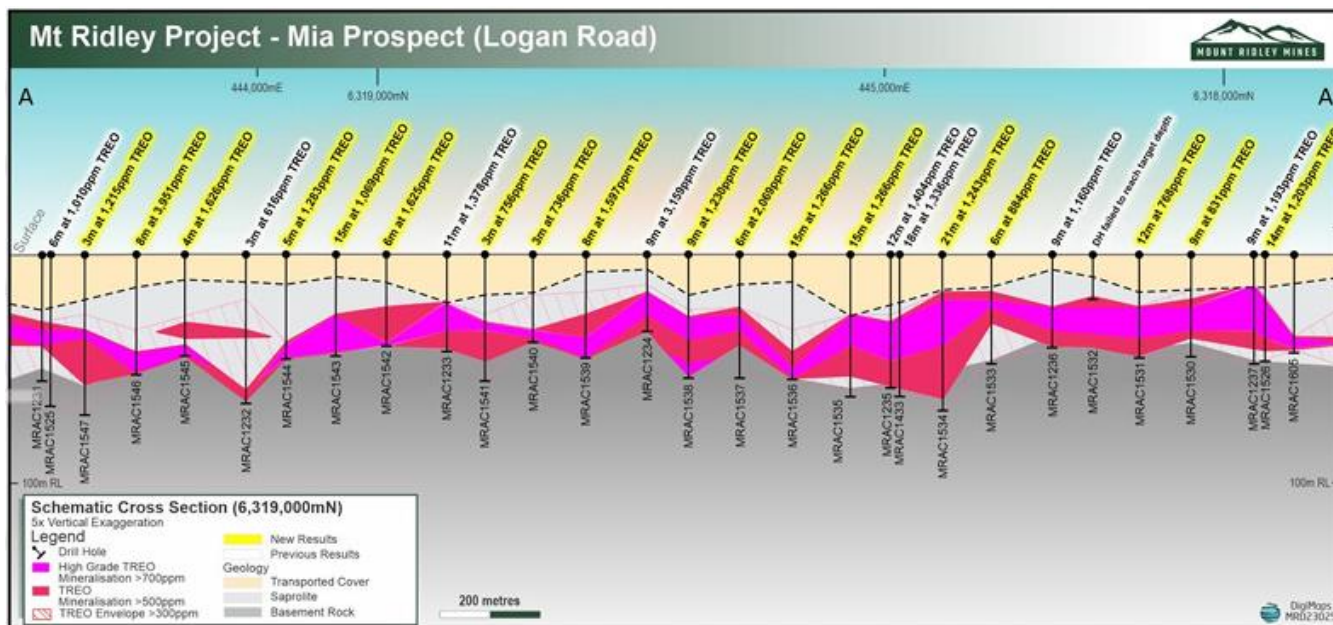


Figure 6: Cross section across the Mia Prospect which is 2.5km wide, showing thick zones of clay-hosted REE mineralisation. Drill holes are 100m apart. Infill holes are shown with yellow highlight. The vertical scale is 5x the horizontal scale.

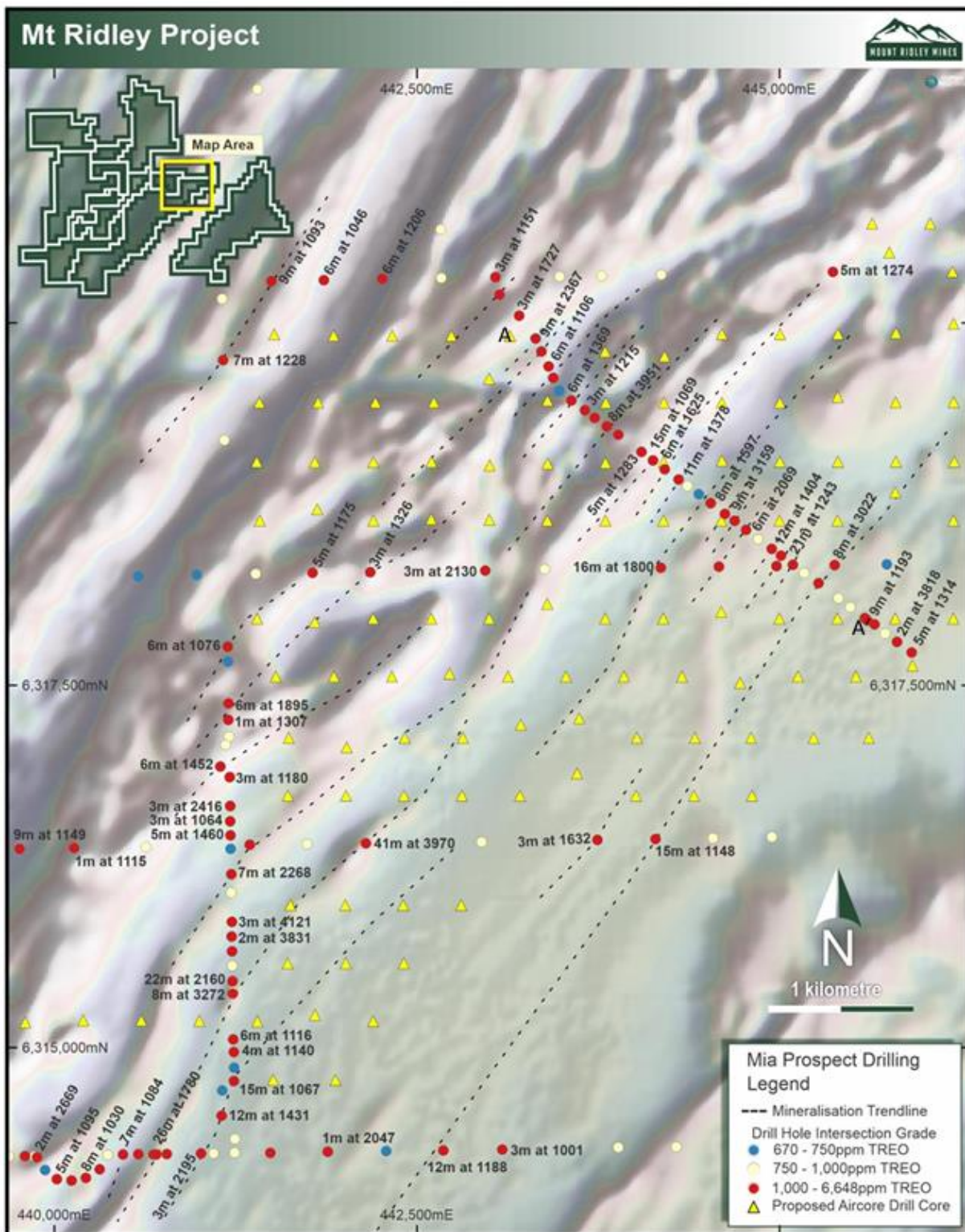


Figure 7: 100m-spaced drill holes demonstrate that highly enriched REE mineralisation is usually continuous between earlier drill holes which were spaced at 400m intervals. Mineralisation often occurs along linear, magnetic 'ridges' seen in aeromagnetic imagery. Red dots are significant intersections with an average grade >1000ppm TREO (using a 700ppm TREO lower cut). The planned locations of the infill aircore drill holes from the October 2023 drilling program are shown as yellow triangles.

Weld Range West Iron Project

Field reconnaissance involving mapping and geochemical sampling commenced targeting the southern-most banded iron formation and an adjacent channel iron deposit.

CORPORATE UPDATE

Annual General Meeting

On 20 November 2023, the Company advised that all resolutions put at the Annual General Meeting held at RM Corporate, Level 1, 1205 Hay Street, West Perth WA 6005, were passed on a poll.

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.

The Company acknowledges the Esperance Nyungar People, custodians of the Project area and thanks the Esperance Tjaltjraak Native Aboriginal Corporation for facilitating the Company's exploration programmes.

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 Mines 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'.

ASX Announcements and 2012 JORC Code Reporting

This Quarterly Activities Report 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 May 2023. "Drilling update for the Mia REE Prospect."
- 06 July 2023. "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."

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.

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 December 2023 quarter and detailed above were \$1,020,203.39.

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.

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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Nedlands WA 6009
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Principal Place of Business

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Forward Shareholder Enquiries to Advanced Share Registry

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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%	Mount Ridley Mines Limited	2
Western Australia	Weld Range West	E20/873*	100%	Mount Ridley Mines Limited	2
Western Australia	Weld Range West	E20/946*	100%	Mount Ridley Mines Limited	2

1. Odette Geoscience Pty Ltd has a 15% free-carried interest in E63/2117.
2. Subject to the Zeedam Enterprises Pty Ltd Royalty Agreement.

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 December 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(1,020)	(1,752)
(b) development	-	-
(c) production	-	-
(d) staff costs	(42)	(84)
(e) administration and corporate costs	(242)	(441)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	21	32
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)	87	190
1.9 Net cash from / (used in) operating activities	(1,196)	(2,055)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation	-	-
(e) investments	-	-
(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 (6 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)	-	(2)
2.6	Net cash from / (used in) investing activities	-	(2)

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	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
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	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,629	3,490
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,196)	(2,055)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(2)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

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 (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,433	1,433

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	1,433	2,629
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)	1,433	2,629

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	42
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. 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)	(1,196)
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)	(1,196)
8.4 Cash and cash equivalents at quarter end (item 4.6)	1,433
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	1,433
8.7(Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.20
<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?	
Answer: No, the Company completed an extensive exploration program in the December quarter. The company is intending to focus on desktop and laboratory work on those and previous results in the first half of 2024.	
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?	
Answer: No, the company hasn't taken any steps to raise further cash.	

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?

Answer: Yes, the Company is carefully budgeting its future activities and is confident in its capacity to raise funds when required. It also is expecting a sizable r&d refund.

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: 31 January 2024

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.