ASX Announcement

5 December 2023

Drilling returns wide, high-grade REE[i] intersections at two new prospects at the Mount Ridley Project

New Drilling Highlights include:

- *15m at 2,919 ppm TREO[ii] (20% MagREO[iii]) 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)*
- *21m at 1,180 ppm TREO (21% MagREO) from 9m (MRAC1637)*
- *17m at 1,498 ppm TREO (24% MagREO) from 9m (MRAC1639)*
- *18m at 1,399 ppm TREO (21% MagREO) from 12m (MRAC1641)*

Drilling at the Company's eastern-most tenement, E63/2117, has returned thick intersections of rare earth elements, amongst some of the Project's highest to date (Table 1), revealing two new prospects now named Lance and Jimmie (Figures 1, 2 and 3, and Tables).

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

"The fact that drilling in untested areas is still locating new, high-grade zones underlines the prodigious extent of clay-hosted rare earth mineralisation at the Mount Ridley Project.

"It is noteworthy that almost all of the world's critical heavy rare earths, in particular terbium and dysprosium, are sourced from clay deposits in China and Myanmar. As the Mount Ridley clay-hosted REE project advances, the potential for it to become an alternative source of these critical heavy rare earths is becoming more apparent."

Exploration Update

Mount Ridley Mines Limited (ASX: **MRD**, "**Mt Ridley**" or "**the Company**") is pleased to report results from 36 aircore holes (MRAC1606-MRAC1641, 988m) completed within E63/2117, a tenement located approximately 12km east of the Company's priority Mia Prospect. The Company holds an 85% joint venture interest in E63/2117 with Odette Geoscience Pty Ltd, a private company, holding 15%. The drill sites are located approximately 90km northeast of the Port of Esperance, Western Australia (Figures 1, 2 and 5).

Drilling was completed along two existing tracks with holes spaced at 400m intervals.

All previous Mount Ridley REE drilling has investigated clays overlying mid-Proterozoic-aged Biranup Zone granites and Grass Patch mafic rocks. These new drilling results are the first for the Company from clays overlying younger-aged Nornalup Zone granites, which have been the focus of exploration efforts by OD6 Metals Limited (ASX: OD6) and West Cobar Metals Limited (ASX: WC1) (Figure 5).

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)
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
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

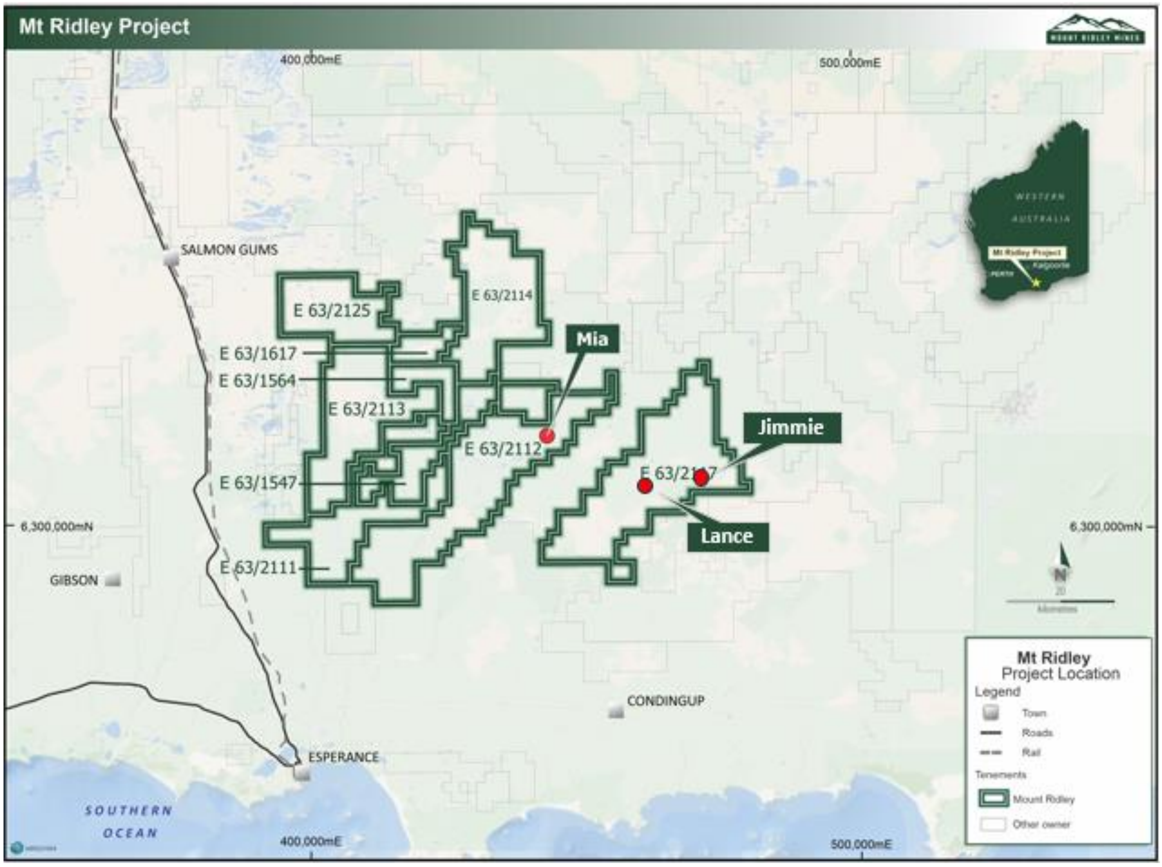

Figure 1: The Mount Ridley REE Project is located in southern Western Australia with an area of approximately 3,400km^2. The reported drilling is within E63/2117.

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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.

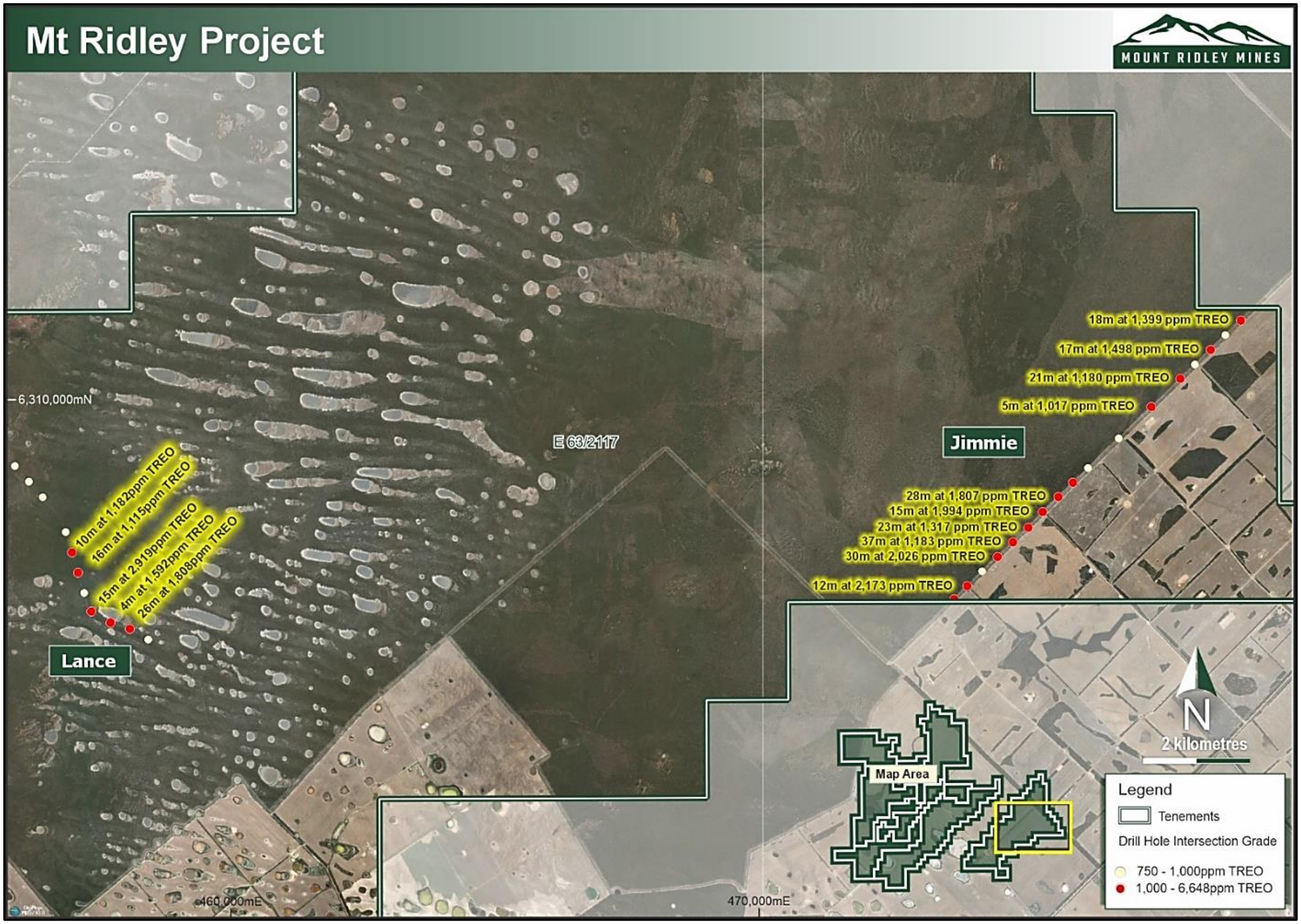

Figure 2: First pass drilling within E63/2117 returned wide, high-grade REE intersections at Lance and Jimmie Prospects.

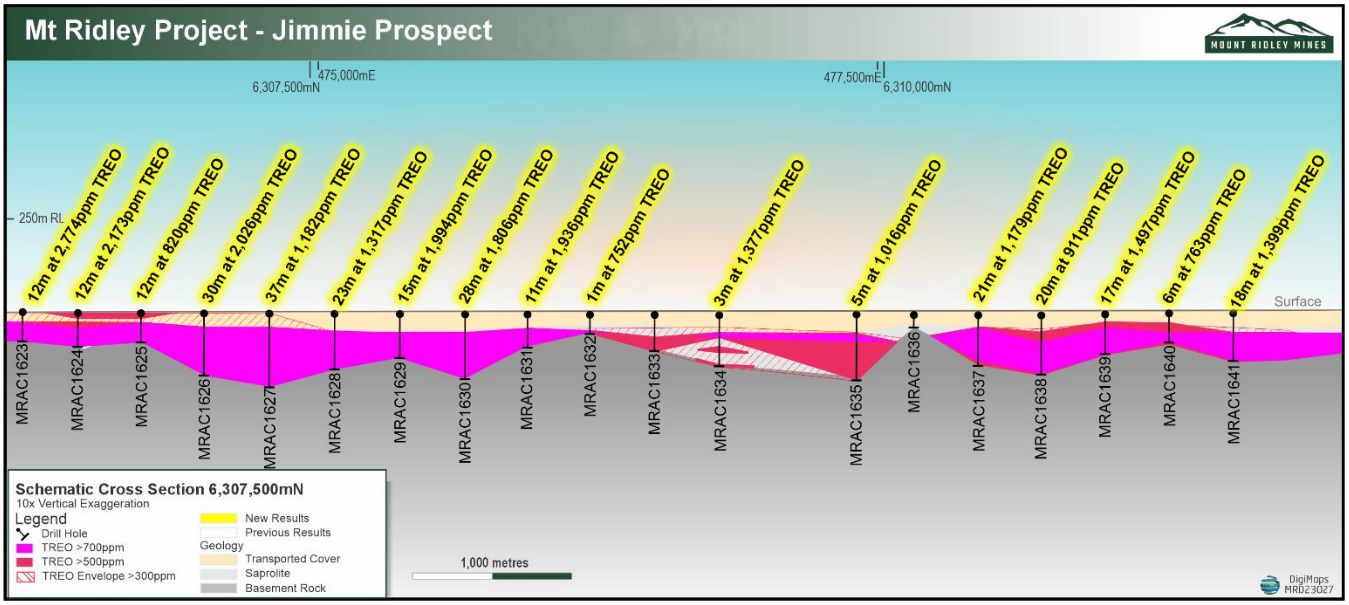

Figure 3: Drilling intersections from the first northeast orientated traverse of drilling at the Jimmie Prospect. The section view is 8.0km long, showing thick zones of high-grade (>700ppm TREO) clay-hosted REE mineralisation. Holes are 400m apart. Vertical scale is 10x horizontal scale.

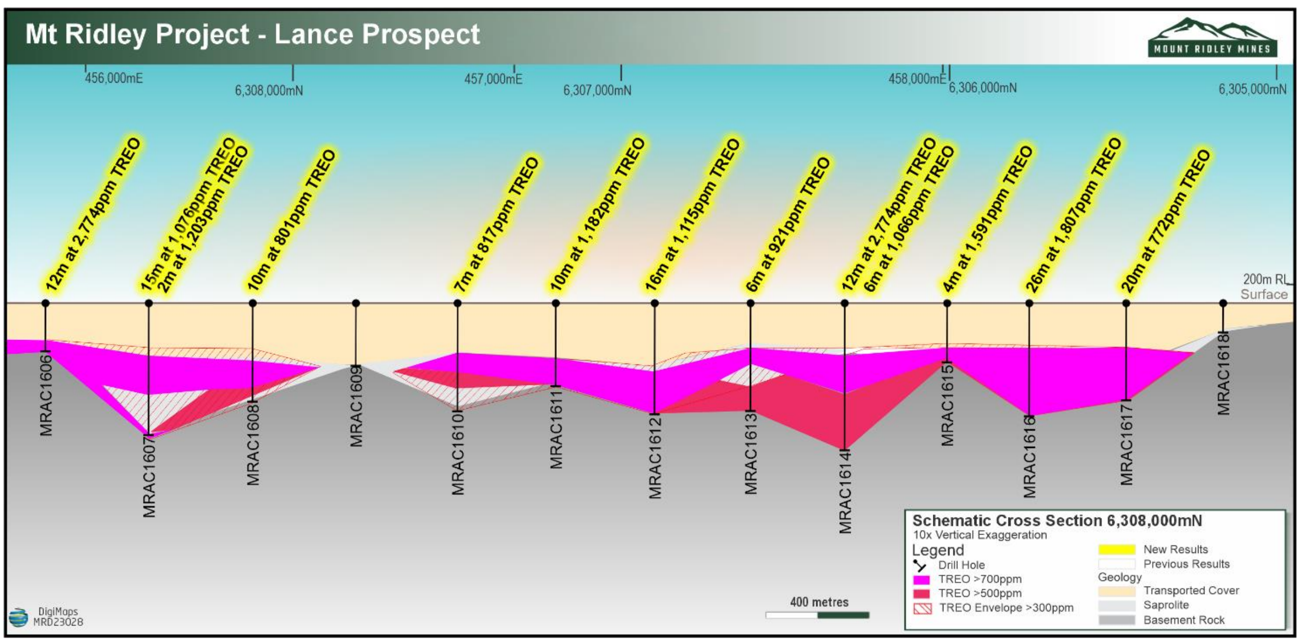

Figure 4: Drilling intersections from the first southeast traverse of drilling at the Lance Prospect. The section view is 3.0km wide, showing thick zones of high-grade (>700ppm TREO) clay-hosted REE mineralisation. Holes are 400m apart. Vertical scale is 10x horizontal scale.

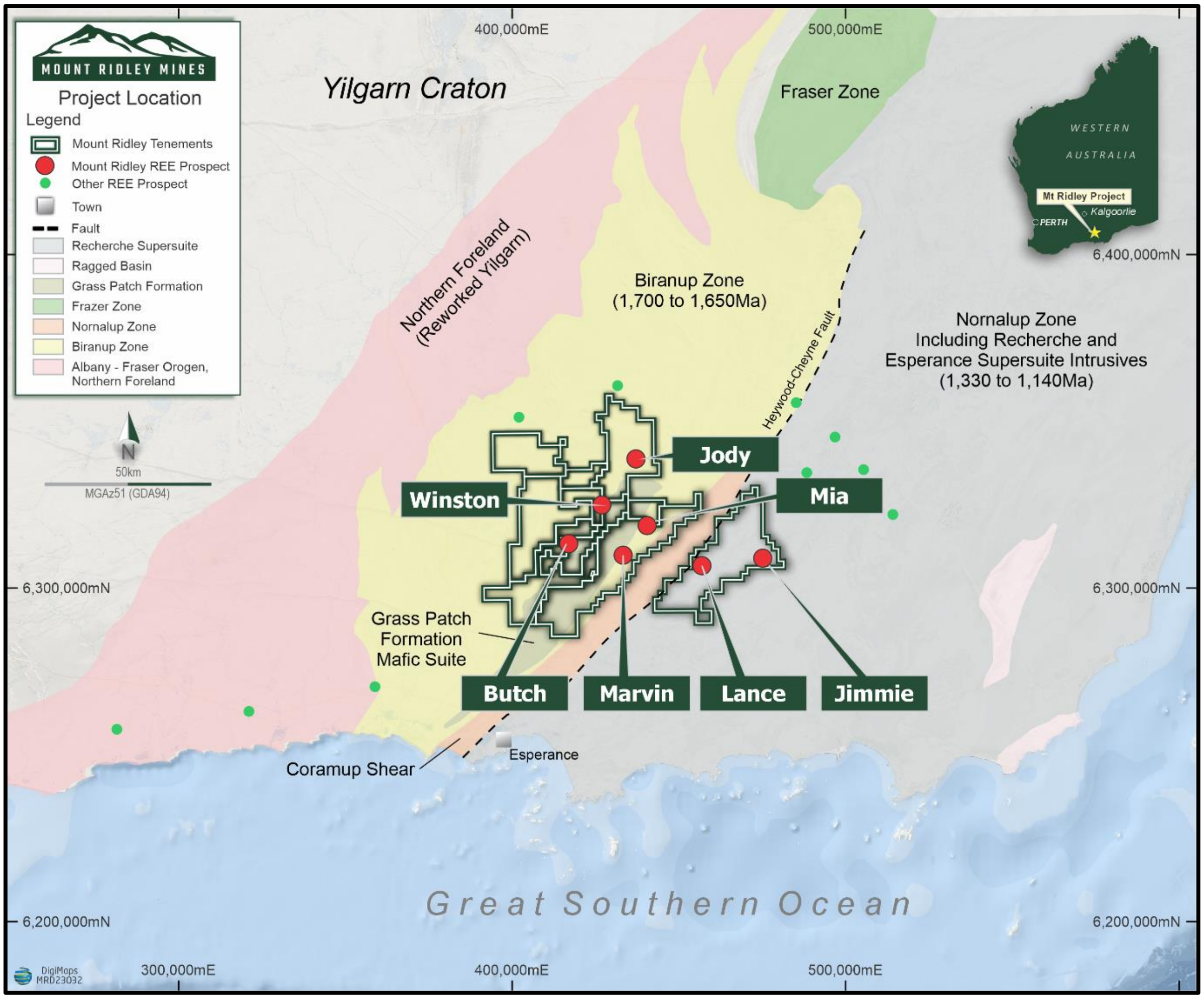

Figure 5: Mount Ridley Project tenements overlaying geological domains. All previous Mount Ridley REE drilling has investigated clays overlying mid-Proterozoic-aged Biranup Zone granites and Grass Patch mafic rocks. These new drilling results are the first for the Company from clays overlying younger-aged Nornalup Zone granites. (Geology: 1:500 000 State interpreted bedrock geology (DMIRS-016)).

Exploration Outlook

Drilling: During October 2023, the Company completed a 155-hole infill drilling programme (MRAC1642-MRAC1796, 6,712m) at its priority Mia Prospect, within 100% owned Mount Ridley tenements.

The Company had previously tested the Mia Prospect on a grid pattern of approximately 2,500m x 400m. New drilling has infilled a 27km^2 area with 400m-spaced lines, with aircore holes selectively spaced along lines at intervals between 100m and 400m.

The drilling programme was designed to confirm the apparent continuity of high grade (>700ppm TREO) clay-hosted REE mineralisation, and if successful, will augment data for the Company's initial mineral resource statement.

Mineralisation at the Mia Prospect is thought to occur in elongate, parallel clay units, which often coincide with geological structures apparent in aeromagnetic imagery. To date, mineralisation ranges between 6m and 41m true thickness at an average of approximately 12m. The TREO basket includes up to 44% MagREO (average approximately 26%), with very low Uranium and Thorium.

Assays: Assays from the October 2023 drilling programme are not expected to be received and processed before February 2024.

Metallurgy:

- Previously reported screen beneficiation test work on Mia samples suggests that a grade upgrade of approximately 160% may be achieved when samples were passed through a 75 micron screen, within 50% of the original sample mass[iv].
- A high extraction rate of up to 72% of TREO using 25g/kg HCl was achieved at the Mia Prospect, including up to 85% of high-value MagREO, within a leaching period of 24 hours[v].
- The new drill samples, once assayed, will provide material for grid-patterned screen beneficiation and further acid leach extraction tests to give a better idea of the uniformity of these characteristics.
- When complete, the next step will be to undertake more precise HCl extraction tests on slurry samples, using larger samples at a higher pulp density, and at a number of acid concentrations, to better estimate acid consumption.

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, a town with approximately 12,000 people and 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

- Since March 2022, the Company has assayed 885 AC holes representing over 50,000m of drilling. This work identified wide-spread clay-hosted REE mineralisation, with 11 targets warranting further work. Samples from another 155 holes, drilled for 6,712m, are currently in the laboratory, with assays expected to be released in February 2024.
- Twenty diamond drill holes for a total of 961.5m of core were complete across the Project in December 2022, with suitable core being used for metallurgical test work.
- 3,433 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.
- Over 1000 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 and may also identify hard-rock REE targets.
- Screen beneficiation tests of 19 samples from a range of different prospects returned an average grade upgrade of 164% from Mia and 154% from Vincent. Over 80% of the TREO is contained within 50% of the original sample mass, and the barren proportion can be rejected when simply screened at -75 microns.
- HCl acid leach tests returned high extraction rates of up to 72% of TREO from Mia and Vincent samples, including up to 85% of high-value MagREO, within a leaching period of 24 hours.

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 for iron and gold.

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.

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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."
- 14 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 September2023. "Leach tests achieve up to 85% recovery of Magnet REE"
- 10 October 2023. "Drilling confirms continuity at 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 developments.

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iv ASX: MRD: 6 July 2023 "Excellent screen beneficiation test results lift REE grades by up to 202% at the Mount Ridley REE1 Project".
v ASX: MRD 21 August 2023, "Leach tests achieve up to 85% recovery of Magnet REE".

Appendix 1

A. Drill Hole Collar Locations for Reported Holes.

Table 2: Drill hole Collar Locations						
Hole ID	Prospect	Drill Type	Depth m	East m	North m	Nominal RL m
MRAC1606	Lance	AC	17	455,909	6,308,747	191
MRAC1607	Lance	AC	50	456,173	6,308,452	191
MRAC1608	Lance	AC	36	456,434	6,308,157	191
MRAC1609	Lance	AC	23	456,703	6,307,850	191
MRAC1610	Lance	AC	39	456,871	6,307,498	191
MRAC1611	Lance	AC	30	456,989	6,307,112	191
MRAC1612	Lance	AC	40	457,103	6,306,730	191
MRAC1613	Lance	AC	39	457,219	6,306,346	191
MRAC1614	Lance	AC	54	457,354	6,305,995	191
MRAC1615	Lance	AC	20	457,720	6,305,783	191
MRAC1616	Lance	AC	41	458,085	6,305,665	191
MRAC1617	Lance	AC	35	458,433	6,305,464	191
MRAC1618	Lance	AC	10	458,782	6,305,253	191
MRAC1619	Lance	AC	5	459,081	6,305,003	191
MRAC1620	Lance	AC	5	459,385	6,304,738	191
MRAC1621	Lance	AC	4	459,484	6,304,360	191
MRAC1622	Lance	AC	5	459,543	6,304,015	191
MRAC1623	Jimmie	AC	18	473,693	6,306,231	191
MRAC1624	Jimmie	AC	21	473,939	6,306,479	191
MRAC1625	Jimmie	AC	18	474,220	6,306,757	191
MRAC1626	Jimmie	AC	39	474,512	6,307,027	191
MRAC1627	Jimmie	AC	46	474,803	6,307,306	191
MRAC1628	Jimmie	AC	35	475,095	6,307,580	191
MRAC1629	Jimmie	AC	28	475,367	6,307,879	191
MRAC1630	Jimmie	AC	41	475,663	6,308,163	191
MRAC1631	Jimmie	AC	21	475,939	6,308,433	191
MRAC1632	Jimmie	AC	12	476,226	6,308,710	191
MRAC1633	Jimmie	AC	24	476,516	6,309,000	191
MRAC1634	Jimmie	AC	33	476,805	6,309,269	191
MRAC1635	Jimmie	AC	42	477,423	6,309,863	191
MRAC1636	Jimmie	AC	10	477,681	6,310,112	191
MRAC1637	Jimmie	AC	32	477,971	6,310,397	191
MRAC1638	Jimmie	AC	38	478,248	6,310,665	191
MRAC1639	Jimmie	AC	26	478,548	6,310,944	191
MRAC1640	Jimmie	AC	19	478,825	6,311,224	191
MRAC1641	Jimmie	AC	32	479,119	6,311,499	191

- Grid is GDA94-51
- Coordinates by hand-held GPS with a presumed accuracy within +-5m
- All holes drilled vertically (dip = -90°, azimuth = 0°)

Appendix 1

B. Representative Assay Results.

Table 3: Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections																		
Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREE ppm
MRAC1607	MRM015395	18	19	302	4.26	1.83	1.46	7.57	0.75	155	0.17	109	31.90	14.25	0.84	0.26	17.70	1.36	654
MRAC1607	MRM015396	19	21	533	7.53	3.13	3.23	13.15	1.24	274	0.37	181	54.90	23.50	1.57	0.44	31.50	2.77	1,145
MRAC1607	MRM015397	21	24	402	7.35	3.41	4.16	13.25	1.29	227	0.35	157	47.50	21.50	1.63	0.47	37.40	2.81	944
MRAC1607	MRM015398	24	27	469	10.05	4.76	5.94	16.15	1.88	260	0.48	191	54.00	27.40	1.95	0.58	48.10	3.61	1,116
MRAC1607	MRM015400	27	30	287	5.84	2.93	3.26	9.05	1.11	164	0.32	105	30.40	15.05	1.12	0.38	31.20	2.75	667
MRAC1607	MRM015401	30	33	360	6.80	3.50	3.82	11.55	1.24	202	0.47	137	40.30	19.75	1.43	0.48	40.50	2.97	848
MRAC1607	MRM015402	33	36	130	2.27	1.13	1.91	3.74	0.43	78	0.15	48	14.35	6.81	0.46	0.18	13.20	0.97	306
MRAC1607	MRM015406	45	48	133	3.48	2.22	1.85	4.80	0.72	75	0.35	45	13.85	7.37	0.65	0.33	22.00	2.10	331
MRAC1607	MRM015407	48	49	414	7.92	4.11	3.57	12.55	1.49	208	0.56	143	42.30	21.20	1.52	0.59	43.70	3.34	938
MRAC1607	MRM015408	49	50	488	7.67	3.83	5.00	13.95	1.44	257	0.49	194	53.70	26.70	1.56	0.51	39.30	3.28	1,110
MRAC1611	MRM015455	18	19	49	1.87	1.18	0.52	2.25	0.38	27	0.19	19	5.20	3.03	0.32	0.15	10.90	1.07	131
MRAC1611	MRM015456	19	21	459	7.35	2.83	2.75	13.85	1.26	236	0.29	169	45.50	22.90	1.64	0.35	32.20	2.19	1,017
MRAC1611	MRM015457	21	24	583	7.96	2.81	2.86	15.30	1.25	304	0.30	205	57.60	27.70	1.76	0.35	32.60	1.85	1,266
MRAC1611	MRM015458	24	27	334	4.40	1.56	2.16	8.95	0.64	185	0.22	115	33.60	15.05	0.98	0.21	18.00	1.20	735
MRAC1611	MRM015459	27	29	467	6.63	2.74	2.74	12.40	1.18	217	0.24	159	44.30	21.90	1.41	0.32	37.10	1.56	988
MRAC1611	MRM015461	29	30	160	2.92	1.30	1.62	4.61	0.49	84	0.13	60	16.85	8.56	0.57	0.20	14.50	0.91	362
MRAC1612	MRM015471	22	24	179	3.03	1.44	0.73	4.09	0.50	108	0.20	53	16.65	6.97	0.55	0.22	13.30	1.32	409
MRAC1612	MRM015472	24	27	379	4.37	2.03	1.34	7.06	0.78	202	0.24	112	33.20	14.40	0.95	0.29	19.20	1.65	793
MRAC1612	MRM015473	27	30	605	11.50	5.05	4.00	20.00	2.12	296	0.43	233	67.30	33.90	2.39	0.65	47.20	3.49	1,345
MRAC1612	MRM015474	30	33	460	8.42	4.31	1.92	12.50	1.58	212	0.50	156	46.50	23.50	1.59	0.58	40.00	3.45	986
MRAC1612	MRM015475	33	36	357	7.45	3.45	1.91	11.10	1.49	175	0.36	125	36.50	19.10	1.47	0.48	35.20	2.90	790
MRAC1612	MRM015476	36	39	389	8.08	3.95	2.33	11.25	1.51	199	0.38	131	38.70	19.75	1.54	0.53	37.70	3.08	859
MRAC1612	MRM015477	39	40	340	6.28	3.00	1.88	9.44	1.08	170	0.35	107	31.40	16.75	1.37	0.38	28.90	2.64	728
MRAC1614	MRM015501	18	19	571	8.79	4.43	1.84	13.65	1.67	288	0.59	160	50.30	22.50	1.82	0.60	43.70	3.96	1,219
MRAC1614	MRM015502	19	21	999	16.40	7.90	2.94	25.20	3.14	561	0.84	294	91.20	41.50	3.44	1.04	81.00	5.74	2,198

Table 3:
Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections

Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREE ppm
MRAC1614	MRM015503	21	24	781	14.65	6.36	2.64	22.70	2.59	434	0.79	274	78.70	40.40	3.06	0.86	61.60	5.17	1,790
MRAC1614	MRM015504	24	27	1170	17.40	7.51	2.99	29.20	3.04	658	0.82	365	113.00	50.50	3.74	0.97	77.40	5.20	2,534
MRAC1614	MRM015505	27	30	2050	29.80	12.10	4.64	51.80	5.17	1040	1.31	689	203.00	96.70	6.78	1.60	125.00	8.88	4,366
MRAC1614	MRM015506	30	33	870	9.84	4.00	2.19	16.75	1.67	451	0.42	256	81.80	33.90	2.21	0.52	39.80	2.99	1,789
MRAC1614	MRM015507	33	36	188	2.97	1.30	0.87	4.09	0.45	98	0.16	58	18.30	8.04	0.64	0.15	11.90	1.00	399
MRAC1614	MRM015511	45	48	200	8.79	4.87	2.10	11.85	1.82	105	0.55	94	23.50	14.75	1.60	0.65	50.70	3.84	529
MRAC1614	MRM015512	48	51	322	11.50	6.11	1.94	16.00	2.17	150	0.60	136	36.20	21.10	2.13	0.76	58.70	4.21	781
MRAC1614	MRM015513	51	53	437	11.45	6.22	2.21	17.40	2.38	188	0.74	159	44.20	24.00	2.22	0.86	61.30	4.99	967
MRAC1614	MRM015514	53	54	515	13.30	7.31	2.45	19.40	2.72	205	0.85	167	45.60	25.40	2.48	0.99	73.20	5.86	1,093
MRAC1615	MRM015515	0	3	249	8.46	4.72	1.82	11.85	1.73	108	0.52	89	23.90	14.20	1.54	0.60	45.20	3.68	570
MRAC1616	MRM015529	14	15	112	3.51	1.84	0.84	3.85	0.65	70	0.24	38	11.85	5.60	0.57	0.25	16.30	1.68	289
MRAC1616	MRM015531	15	18	720	15.45	6.14	3.42	21.20	2.60	376	0.53	237	70.60	31.60	2.98	0.70	59.30	4.25	1,589
MRAC1616	MRM015532	18	21	1290	44.60	23.30	12.75	56.20	8.85	800	2.40	489	136.50	65.30	7.99	2.96	244.00	17.35	3,246
MRAC1616	MRM015534	21	24	725	17.00	7.98	3.73	22.00	3.19	383	0.78	250	73.30	33.50	3.11	1.02	82.20	5.71	1,648
MRAC1616	MRM015535	24	27	682	12.30	5.48	2.57	18.00	2.13	342	0.55	229	67.80	29.00	2.43	0.68	49.90	4.16	1,477
MRAC1616	MRM015536	27	30	585	11.40	4.99	3.08	16.15	2.00	282	0.45	200	58.40	26.60	2.18	0.65	46.40	3.62	1,273
MRAC1616	MRM015537	30	33	525	10.10	4.71	2.83	14.20	1.86	249	0.48	177	51.80	23.60	1.98	0.62	43.80	3.44	1,134
MRAC1616	MRM015538	33	36	609	9.97	5.06	3.03	14.35	1.98	304	0.58	196	58.80	23.70	1.88	0.66	51.40	4.22	1,299
MRAC1616	MRM015539	36	39	333	6.32	3.31	2.15	8.84	1.28	176	0.41	108	32.30	14.50	1.14	0.47	33.20	2.74	739
MRAC1616	MRM015540	39	40	499	9.47	4.71	2.46	12.45	1.84	247	0.59	157	47.60	23.30	1.70	0.64	47.80	3.80	1,080
MRAC1616	MRM015541	40	41	698	11.35	5.31	2.72	16.10	2.16	396	0.61	223	67.00	30.40	2.08	0.74	59.30	4.29	1,537
MRAC1617	MRM015552	27	30	220	5.22	2.90	1.72	7.17	0.93	123	0.34	71	21.10	10.45	0.89	0.38	33.90	2.35	509
MRAC1617	MRM015553	30	33	338	7.11	3.42	1.99	10.55	1.23	168	0.35	105	31.80	15.25	1.30	0.46	32.80	2.68	729
MRAC1617	MRM015554	33	34	521	10.95	5.52	2.94	16.35	2.05	244	0.62	180	51.80	26.60	2.01	0.70	55.10	4.51	1,151
MRAC1617	MRM015555	34	35	459	9.04	4.63	4.16	15.00	1.72	220	0.51	166	47.30	24.30	1.72	0.61	47.50	3.94	1,027
MRAC1623	MRM015575	3	6	50	1.19	0.66	0.35	1.36	0.26	27	0.10	15	4.57	2.38	0.19	0.11	5.80	0.91	118
MRAC1623	MRM015576	6	9	2540	20.90	7.45	12.85	43.90	3.10	1290	0.50	755	233.00	96.80	4.63	0.86	68.50	4.70	5,117

Table 3: Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections																			
Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREE ppm
MRAC1623	MRM015577	9	12	744	4.27	1.34	2.65	8.53	0.60	447	0.12	176	61.10	19.55	0.88	0.14	13.30	0.94	1,506
MRAC1623	MRM015578	12	15	735	3.73	1.11	3.04	7.97	0.52	397	0.08	184	65.80	19.95	0.93	0.15	12.50	0.72	1,457
MRAC1623	MRM015579	15	17	543	4.11	1.38	3.45	9.49	0.64	255	0.11	182	56.30	22.80	0.99	0.15	11.90	0.72	1,116
MRAC1623	MRM015580	17	18	792	4.64	1.79	3.74	9.81	0.75	384	0.16	212	73.90	24.40	1.10	0.20	16.90	1.30	1,548
MRAC1624	MRM015581	0	3	568	6.25	2.88	3.24	10.45	1.08	253	0.36	163	54.30	21.50	1.26	0.39	27.40	2.11	1,131
MRAC1624	MRM015582	3	6	69	2.23	1.26	0.84	2.91	0.44	33	0.20	27	7.77	4.24	0.44	0.22	12.90	1.44	174
MRAC1624	MRM015583	6	9	226	3.63	1.86	1.75	6.05	0.68	106	0.21	82	23.90	11.10	0.73	0.27	18.90	1.59	529
MRAC1624	MRM015584	9	11	685	8.04	4.19	4.60	15.00	1.59	359	0.53	209	66.40	27.80	1.69	0.55	44.80	2.90	1,474
MRAC1624	MRM015585	11	12	1040	11.85	5.74	7.05	22.50	2.10	534	0.90	320	100.00	40.90	2.33	0.75	61.30	4.37	2,211
MRAC1624	MRM015586	12	15	917	12.20	5.99	6.72	22.50	2.27	475	0.90	311	93.30	39.90	2.51	0.87	63.10	4.85	2,003
MRAC1624	MRM015587	15	18	776	12.80	6.47	7.11	22.80	2.42	380	0.96	278	80.40	39.00	2.50	0.90	65.70	5.22	1,712
MRAC1624	MRM015588	18	20	905	14.45	4.95	9.22	28.90	2.29	385	0.53	401	108.50	58.60	3.20	0.65	47.60	3.43	2,003
MRAC1624	MRM015589	20	21	809	14.55	5.03	9.40	29.50	2.19	372	0.49	373	98.30	59.00	3.20	0.66	48.10	3.38	1,857
MRAC1626	MRM015601	6	9	60	1.51	0.94	0.50	1.62	0.31	31	0.12	21	6.17	3.13	0.29	0.14	8.00	1.09	161
MRAC1626	MRM015602	9	12	780	16.15	8.70	6.31	25.30	3.14	421	1.19	281	81.00	39.40	3.14	1.27	87.00	6.94	1,799
MRAC1626	MRM015603	12	15	2390	42.30	21.50	16.30	67.20	8.11	1320	2.58	853	258.00	116.50	8.17	3.02	215.00	16.65	5,370
MRAC1626	MRM015604	15	18	960	19.55	11.10	6.64	30.20	3.95	603	1.31	329	96.90	44.50	3.52	1.46	113.50	8.13	2,252
MRAC1626	MRM015605	18	21	292	4.44	2.36	1.96	7.40	0.86	151	0.29	90	28.60	13.10	0.93	0.32	22.70	1.91	636
MRAC1626	MRM015606	21	24	344	4.55	2.11	2.26	7.84	0.79	175	0.28	101	32.40	13.75	0.95	0.30	18.90	1.86	726
MRAC1626	MRM015607	24	27	540	7.45	3.25	3.32	12.80	1.24	263	0.42	169	53.60	23.20	1.47	0.45	31.70	2.54	1,135
MRAC1626	MRM015608	27	30	568	7.76	3.42	3.68	13.80	1.44	296	0.40	194	59.20	27.50	1.66	0.50	32.90	3.02	1,239
MRAC1626	MRM015609	30	33	418	5.06	2.35	2.40	8.58	0.92	213	0.29	123	40.00	16.20	1.04	0.33	23.20	1.86	872
MRAC1626	MRM015610	33	36	440	5.34	2.44	2.69	9.00	0.94	224	0.29	140	43.90	17.35	1.05	0.34	24.70	2.12	929
MRAC1626	MRM015611	36	38	1110	11.85	5.51	5.44	19.85	2.14	610	0.67	315	105.00	37.90	2.43	0.74	52.50	4.01	2,310
MRAC1626	MRM015612	38	39	814	11.15	5.55	4.43	18.30	2.04	487	0.67	254	78.90	32.00	2.04	0.76	54.80	4.12	1,792
MRAC1627	MRM015613	0	3	168	5.21	3.00	1.81	6.60	0.93	98	0.34	67	19.15	10.35	0.85	0.39	26.30	2.20	420
MRAC1627	MRM015617	10	12	218	4.68	2.25	1.68	6.76	0.88	153	0.33	92	26.10	12.70	0.78	0.39	23.40	2.35	583

MOUNT RIDLEY MINES

Table 3: Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections																			
Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREE ppm
MRAC1627	MRM015618	12	15	322	6.09	3.41	2.26	8.48	1.14	188	0.46	106	30.60	15.30	1.04	0.52	32.20	3.26	755
MRAC1627	MRM015619	15	18	344	5.66	2.73	2.31	8.29	1.06	207	0.38	119	35.10	15.45	1.08	0.49	28.50	2.54	796
MRAC1627	MRM015620	18	21	340	6.75	3.62	2.17	8.36	1.24	175	0.47	108	30.70	15.55	1.07	0.51	34.80	3.30	760
MRAC1627	MRM015621	21	24	288	5.41	2.86	1.88	7.21	0.94	155	0.35	93	26.60	13.40	0.96	0.48	25.30	2.71	648
MRAC1627	MRM015622	24	27	328	5.54	2.72	1.84	6.94	0.95	183	0.39	95	29.30	12.80	0.92	0.44	27.60	2.72	720
MRAC1627	MRM015623	27	30	423	7.41	3.79	1.86	8.40	1.28	240	0.52	118	37.20	16.30	1.08	0.61	38.70	3.46	926
MRAC1627	MRM015624	30	33	468	7.79	3.89	2.76	10.60	1.27	245	0.43	145	43.10	20.40	1.34	0.56	36.20	3.06	1,015
MRAC1627	MRM015625	33	36	453	5.96	2.47	2.98	9.96	0.99	233	0.22	138	40.70	18.15	1.12	0.34	24.40	1.88	944
MRAC1627	MRM015626	36	39	762	10.80	4.67	5.22	17.05	1.84	388	0.44	254	74.10	34.50	2.01	0.65	49.10	3.94	1,629
MRAC1627	MRM015627	39	42	717	11.25	4.62	5.33	17.00	1.80	359	0.48	235	67.40	33.30	2.00	0.68	46.20	3.58	1,533
MRAC1627	MRM015628	42	45	704	11.70	5.71	4.89	16.50	2.02	364	0.61	235	67.40	32.40	2.05	0.86	59.90	4.81	1,540
MRAC1627	MRM015629	45	46	771	13.75	6.14	5.89	21.70	2.61	398	0.63	288	80.70	39.40	2.80	0.85	72.90	4.91	1,731
MRAC1628	MRM015635	9	12	31	1.26	0.88	0.16	1.18	0.23	16	0.11	11	3.14	1.84	0.17	0.13	7.50	0.86	87
MRAC1628	MRM015636	12	15	319	6.95	3.49	2.21	8.73	1.28	182	0.44	111	32.10	16.15	1.16	0.51	33.50	3.22	754
MRAC1628	MRM015637	15	18	772	14.90	7.88	4.33	19.50	2.96	538	0.87	232	70.70	30.40	2.59	1.10	92.30	6.81	1,836
MRAC1628	MRM015638	18	21	368	8.18	4.39	2.02	9.10	1.40	201	0.46	117	34.50	17.55	1.24	0.63	37.20	3.71	848
MRAC1628	MRM015639	21	24	402	10.35	5.89	2.19	10.60	1.90	213	0.72	128	37.00	19.05	1.50	0.93	55.50	5.25	928
MRAC1628	MRM015640	24	27	408	8.05	4.25	2.17	9.57	1.42	199	0.44	130	38.50	18.85	1.36	0.68	38.20	3.65	896
MRAC1628	MRM015641	27	30	578	16.85	9.03	3.39	17.30	2.95	293	1.02	192	53.70	30.50	2.56	1.38	76.20	7.38	1,326
MRAC1628	MRM015642	30	33	517	10.25	5.29	3.55	14.50	1.86	264	0.50	181	53.80	26.20	1.78	0.71	48.00	4.48	1,159
MRAC1628	MRM015643	33	34	697	14.10	6.44	4.35	17.65	2.30	352	0.70	243	71.20	34.50	2.38	0.97	55.20	5.25	1,546
MRAC1628	MRM015644	34	35	526	16.10	7.18	3.32	17.35	2.80	263	0.77	207	58.30	30.40	2.53	1.16	63.20	6.34	1,237
MRAC1629	MRM015649	12	13	176	2.82	1.48	1.26	4.18	0.54	92	0.23	65	19.00	8.56	0.52	0.23	15.30	1.40	416
MRAC1629	MRM015650	13	15	363	5.54	2.82	2.73	10.00	0.97	195	0.40	138	38.80	18.45	0.98	0.39	28.60	2.88	846
MRAC1629	MRM015651	15	18	591	8.84	4.12	3.98	14.15	1.63	313	0.57	202	60.30	27.10	1.73	0.63	49.20	3.80	1,325
MRAC1629	MRM015652	18	21	843	11.70	5.43	5.56	18.35	2.19	417	0.77	273	82.00	34.90	2.42	0.87	63.10	5.16	1,807
MRAC1629	MRM015653	21	24	1535	19.35	8.79	9.58	33.10	3.49	812	1.08	509	152.50	65.80	3.96	1.26	93.70	7.70	3,281

Table 3: Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections																			
Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREE ppm
MRAC1629	MRM015654	24	27	494	6.28	2.96	3.10	10.15	1.14	252	0.40	156	46.80	20.30	1.34	0.46	29.00	2.88	1,040
MRAC1629	MRM015655	27	28	587	10.05	5.11	4.26	15.15	1.92	308	0.72	201	57.30	27.10	1.96	0.82	58.30	4.78	1,297
MRAC1630	MRM015662	13	15	237	4.54	2.44	1.48	7.00	0.88	175	0.28	96	29.80	13.15	0.90	0.29	24.80	1.91	619
MRAC1630	MRM015663	15	18	692	11.00	5.17	3.16	15.50	2.05	369	0.57	206	61.50	27.70	2.15	0.71	54.60	4.43	1,506
MRAC1630	MRM015664	18	21	474	7.43	4.23	2.48	11.10	1.41	288	0.52	162	51.10	20.80	1.32	0.55	39.60	3.78	1,102
MRAC1630	MRM015665	21	24	662	8.77	4.54	3.37	13.95	1.72	334	0.57	207	62.70	27.90	1.77	0.67	47.60	4.29	1,424
MRAC1630	MRM015667	24	27	767	11.35	5.92	4.60	18.05	2.14	410	0.85	266	79.30	35.30	2.33	0.88	62.50	5.56	1,731
MRAC1630	MRM015668	27	30	876	13.35	6.47	5.05	19.90	2.46	434	0.96	296	86.10	39.40	2.55	1.00	71.20	6.43	1,917
MRAC1630	MRM015669	30	33	790	12.40	6.72	4.81	18.30	2.38	380	0.96	266	78.00	35.80	2.45	1.00	70.70	6.39	1,727
MRAC1630	MRM015670	33	36	935	13.00	6.77	4.77	19.60	2.52	502	0.93	295	88.20	38.00	2.55	1.04	78.40	6.28	2,038
MRAC1630	MRM015671	36	39	711	12.15	5.98	4.24	17.15	2.32	427	0.78	234	71.00	29.90	2.13	0.96	67.80	5.52	1,626
MRAC1630	MRM015672	39	40	677	12.40	5.92	4.87	18.65	2.29	368	0.75	252	71.70	33.20	2.27	0.93	61.90	5.33	1,557
MRAC1630	MRM015673	40	41	583	10.40	4.48	4.83	16.80	1.82	278	0.53	234	62.90	33.50	2.17	0.64	46.80	3.63	1,313
MRAC1631	MRM015677	9	10	85	0.96	0.44	0.24	1.30	0.16	66	0.07	18	6.68	2.14	0.19	0.07	4.30	0.49	192
MRAC1631	MRM015678	10	12	531	14.75	5.97	3.03	18.35	2.49	275	0.57	187	55.00	31.10	2.73	0.83	56.50	4.35	1,234
MRAC1631	MRM015679	12	15	528	18.90	7.98	3.27	22.20	3.26	233	0.67	196	55.60	34.00	3.49	1.14	81.40	6.13	1,237
MRAC1631	MRM015680	15	18	657	24.30	10.70	4.12	28.40	4.40	310	0.95	245	68.50	43.50	4.55	1.42	104.50	7.90	1,562
MRAC1631	MRM015681	18	20	1330	39.50	16.45	7.16	48.50	6.93	624	1.43	478	139.00	79.80	7.71	2.29	191.50	12.45	3,045
MRAC1631	MRM015682	20	21	556	16.95	7.22	3.46	20.50	2.93	240	0.64	210	60.20	35.90	3.19	1.02	74.20	5.49	1,292
MRAC1637	MRM015739	8	9	56	1.75	1.24	0.27	1.66	0.34	47	0.22	17	5.60	2.39	0.28	0.20	11.00	1.41	161
MRAC1637	MRM015740	9	12	476	6.00	3.89	1.80	7.11	1.32	294	0.60	118	39.70	13.00	1.06	0.56	38.50	3.92	1,029
MRAC1637	MRM015741	12	15	305	4.52	2.75	1.89	5.69	0.92	168	0.39	76	24.40	10.00	0.85	0.40	28.40	2.33	645
MRAC1637	MRM015742	15	18	422	8.86	5.11	2.67	12.25	1.75	204	0.68	144	41.20	20.50	1.58	0.79	49.70	4.96	950
MRAC1637	MRM015743	18	21	417	11.20	6.07	3.14	14.80	2.16	172	0.82	153	39.90	23.30	2.00	0.86	61.20	5.35	947
MRAC1637	MRM015744	21	24	376	9.36	5.36	2.46	11.95	1.84	192	0.72	135	38.00	19.85	1.60	0.77	55.10	4.97	881
MRAC1637	MRM015745	24	27	230	3.76	2.45	1.34	4.82	0.74	134	0.37	64	20.40	8.08	0.62	0.40	24.00	2.52	504
MRAC1637	MRM015746	27	30	929	15.45	6.10	4.84	23.40	2.48	465	0.58	387	104.00	50.00	2.84	0.80	54.60	4.49	2,063

Table 3: Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections																			
Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREE ppm
MRAC1637	MRM015747	30	31	226	5.22	2.81	1.46	6.74	1.06	140	0.34	81	23.00	11.10	0.92	0.42	29.50	2.47	538
MRAC1638	MRM015755	15	18	200	3.11	1.70	1.57	5.19	0.56	134	0.24	85	26.70	10.90	0.61	0.27	14.20	1.96	498
MRAC1638	MRM015756	18	21	454	6.76	3.59	2.94	11.00	1.23	227	0.44	142	42.40	17.85	1.24	0.52	34.10	2.80	961
MRAC1638	MRM015757	21	24	286	4.50	2.44	2.12	7.23	0.90	190	0.35	118	35.50	13.85	0.79	0.39	22.30	2.74	701
MRAC1638	MRM015758	24	27	493	4.09	2.63	2.15	6.82	0.81	163	0.35	108	32.40	12.85	0.67	0.42	25.30	2.73	866
MRAC1638	MRM015759	27	30	315	5.19	4.62	2.21	6.92	1.32	161	0.61	96	29.30	11.15	0.74	0.63	56.80	4.26	707
MRAC1638	MRM015761	30	33	359	3.80	2.95	2.08	5.44	0.88	185	0.49	100	32.40	10.05	0.65	0.47	28.00	3.08	745
MRAC1638	MRM015762	33	36	318	3.66	2.51	1.88	4.63	0.85	182	0.43	88	28.90	8.59	0.55	0.41	25.10	2.83	679
MRAC1638	MRM015763	36	37	362	3.75	3.01	1.94	5.23	0.88	170	0.44	84	27.20	8.59	0.58	0.43	28.70	2.90	711
MRAC1638	MRM015764	37	38	325	4.25	3.34	1.83	5.01	0.94	175	0.56	88	28.20	9.41	0.63	0.46	34.50	3.27	691
MRAC1639	MRM015769	9	12	644	7.52	3.58	4.09	12.75	1.21	356	0.45	219	70.50	25.50	1.47	0.53	32.50	3.23	1,416
MRAC1639	MRM015770	12	15	613	13.05	5.20	8.56	24.50	2.10	295	0.48	318	77.60	51.40	2.66	0.69	50.10	4.16	1,494
MRAC1639	MRM015771	15	18	501	14.65	6.73	8.29	26.20	2.43	247	0.65	252	62.40	43.60	2.82	0.93	63.40	5.49	1,264
MRAC1639	MRM015772	18	21	481	11.65	5.11	6.10	20.20	1.98	245	0.52	209	56.90	31.70	2.27	0.71	51.90	4.07	1,150
MRAC1639	MRM015773	21	24	500	8.86	4.10	5.70	15.55	1.56	260	0.40	204	56.50	27.90	1.64	0.56	43.90	3.19	1,153
MRAC1639	MRM015774	24	25	525	8.85	3.78	6.11	16.45	1.47	269	0.41	228	62.50	31.20	1.72	0.51	42.40	2.91	1,220
MRAC1639	MRM015775	25	26	437	6.60	2.68	4.46	12.45	1.11	217	0.32	184	49.40	26.20	1.32	0.35	32.00	2.22	995
MRAC1641	MRM015788	9	12	166	3.23	1.98	0.86	3.68	0.72	89	0.35	51	16.00	5.86	0.51	0.33	18.40	2.18	380
MRAC1641	MRM015789	12	15	465	5.13	3.16	1.60	7.65	1.08	250	0.69	130	43.60	14.75	0.90	0.52	34.60	4.00	994
MRAC1641	MRM015791	15	18	485	8.22	4.63	2.39	11.30	1.45	245	0.79	156	48.40	19.90	1.33	0.74	46.00	5.14	1,068
MRAC1641	MRM015792	18	21	718	15.60	8.49	4.72	20.20	3.20	428	1.04	264	76.20	33.20	2.60	1.32	95.40	7.36	1,724
MRAC1641	MRM015793	21	24	562	13.30	6.73	3.80	16.80	2.51	284	0.87	219	61.80	30.00	2.27	1.08	68.90	6.53	1,323
MRAC1641	MRM015794	24	27	580	19.15	10.95	3.19	22.60	3.91	282	1.41	220	63.50	32.80	3.18	1.66	113.00	10.20	1,419
MRAC1641	MRM015795	27	30	286	8.62	4.73	1.95	10.95	1.72	134	0.54	111	31.70	16.65	1.54	0.67	43.70	4.59	689

Appendix 2

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

Section 1 Sampling Techniques and Data: Aircore Drilling

(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.	Mount Ridley Mines Limited (ASX: MRD) is reporting results from Aircore ("AC") drilling. Samples of drill chips were collected through a cyclone as 1m piles laid out consecutively on the ground then sampled as 1m or 3m composite spear samples.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The AC bulk sample from the cyclone was placed into neat piles on the ground in rows of 10 samples where possible.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where '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 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 warrant disclosure of detailed information.	AC drilling delivers Im interval sample piles. Samples of between 1 metre and 3 composited metres taken for analysis. The size of the sample submitted to the laboratory was 2-4kg in weight, which was dried, pulverised, and packaged in a computer-coded packet. A sub-sample was analysed, and the coded packet then stored. 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.
Drilling techniques	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, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	AC. A type of reverse circulation drilling using slim rods and a 100mm blade bit drilled to refusal (saprock to fresh rock).
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.	The majority of sample were of good quality. Samples were visually checked for recovery, moisture, and contamination. A cyclone was used to deliver the sample into buckets.
	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.	Unknown at this stage.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral	Geological logging was complete in full for every hole, this includes lithology, weathering, oxidation state, alteration, veining, mineralisation if present.

	Resource estimation, mining studies and metallurgical studies.	Considered appropriate for this style of drilling and the stage of the project. All holes were chipped for the entire hole for a complete chip tray record.
	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.	All holes were logged for the entire length of the hole.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not core.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Original AC samples were collected via a cyclone into a bucket and laid out in rows as single 1m piles. 1m or up to 3m composite samples were 'speared' from the sample piles for an approximately 2.5 - 3.5kg sample.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	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.	Duplicates and certified reference material (CRM) were routinely inserted within the sampling sequence approximately one in every thirty samples. CRM material was selected form a range of REE grade populations.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	For AC, field QAQC procedures included the insertion of field duplicates and CRM's at pre-specified intervals at the time of drilling. All duplicate samples were speared for single metre samples and composite sampling, the size/quantity of the samples were kept consistent (approx. 2 kg). This is considered fit for purpose at this stage of the project. An independent appraisal of QC/field duplicates shows that the sample variance is acceptable.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	To date this has not been studied as the host material is clay.
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. Selected samples were also analysed by the ALS 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 nominated as appropriate by ALS..
	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	None used, not applicable.

	derivation, etc.	
	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.	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 predominantly 3rd party independently manufactured.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are calculated by experienced geologists and verified by an independent consultant.
	The use of twinned holes.	None, not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All collected data stored in a commercially managed database.
	Discuss any adjustment to assay data.	Raw assays are stored in the commercially managed database with elemental values calculated to oxide for 15 REE's see Section 2 – Data Aggregation Methods.
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.	AC drill hole collar locations were surveyed using a hand-held GPS with +-3m accuracy. No down-hole surveys were carried out, drillholes were also vertical. This is considered satisfactory for the stage of the project. DDH collars were surveyed by DGPS.
	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 should be relative to each other and fit for purpose on a hole to hole basis.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Variable, generally 400 along traverses.
	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.	There is insufficient data collected for a Mineral Resource Estimate.
	Whether sample compositing has been applied.	Both 1m intervals and 3m composites analysed.
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.	Not determined yet. Likely unbiased as vertical holes are sampling a horizontal mineralised feature.
	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 as the mineralisation is represented as flat lying lenses and the drilling orientation is perpendicular to mineralisation.
Sample security	The measures taken to ensure sample security.	Standard industry practice is used when collecting, transporting, and storing

		samples for analysis. Calico samples are sealed into poly weave bags, labelled and cable tied. These are then sealed in labelled bulka bags and transported to the laboratory in Perth by established freight companies. Chain of custody is known at all stages of the process. Drilling pulps are retained and stored off site in a designated storage facility.
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 reviewing the data. Drilling results and geological logging are also cross checked by project geologists.

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 63/1547, E 63/1564, E 63/1564, E 63/1564, E 63/1564, E 63/1617, E 63/2111, E 63/2112, E 63/2113, E 63/2114, E 63/2117 and E 63/2125 located from 35km northwest of Esperance, Western Australia. Registered Holder is Mount Ridley Mines Limited (Company) (100%). Odette One Pty Ltd has a 15% free-carried beneficial interest in E 63/2117. 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.
	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 DMIRS, DBCA and Heritage Protection Agreements, all of which are industry-standard.
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 area. A substantial compilation of work prior to Mount Ridley was undertaken by Bishop who was the first to research and champion the potential of the Grass Patch Complex, interpreted as a large, crudely layered, amphibolite-gabbro complex beneath shallow cover sediments. The mafic complex is considered to have the potential to host nickel-copper sulphide deposits and PGE deposits. Completed detailed litho-geochemistry interpretation from 'best available' end of hole assays, resulting in a crude basement geological map. Additional drilling tested the models but didn't return assays of commercial consequence. Mount Ridley has completed a large complement of geophysical surveys and drilling, aimed at nickel sulphides and gold. Nearby, Salazar Gold Pty Ltd were the first company to search for REE in the Great Southern, identifying the Splinter REE deposit. Work started in 2010 and continues now.
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 exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	All relevant data for the drilling conducted is tabulated in Appendix 1 of this announcement. It should be noted that RL is estimated from a digital elevation model gained during an aeromagnetic survey.
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.	Assay results not reported. Significant intersections are calculated using a minimum 1m thickness, minimum 300ppm TREO cut-off, maximum internal dilution of 3m, no external dilution. No metal equivalent values have been used. Stoichiometric factors to convert elements to oxides:

Ce_ppm	1.2284	CeO2_ppm
Dy_ppm	1.1477	Dy2O3_ppm
Er_ppm	1.1435	Er2O3_ppm
Eu_ppm	1.1579	Eu2O3_ppm
Gd_ppm	1.1526	Gd2O3_ppm
Ho_ppm	1.1455	Ho2O3_ppm
La_ppm	1.1728	La2O3_ppm
Lu_ppm	1.1372	Lu2O3_ppm
Nd_ppm	1.1664	Nd2O3_ppm
Pr_ppm	1.2082	Pr6O11_ppm
Sm_ppm	1.1596	Sm2O3_ppm
Tb_ppm	1.1762	Tb4O7_ppm
Tm_ppm	1.1421	Tm2O3_ppm
Y_ppm	1.2695	Y2O3_ppm
Yb_ppm	1.1387	Yb2O3_ppm
Source: Element-to-stoichiometric oxide conversion factors - JCU Australia.		
TREO: the sum of Sm_2O_3, Dy_2O_3, Er_2O_3, Eu_2O_3, Gd_2O_3, Ho_2O_3, Lu_2O_3, Tb_4O_7, Tm_2O Yb_2O_3, Ce_2O_3, La_2O_3, Nd_2O_3, and Pr_2O_3. HREO: the sum of Sm_2O_3, Dy_2O_3, Er_2O_3, Eu_2O_3, Gd_2O_3, Ho_2O_3, Lu_2O_3, Tb_4O_7, Tm_2O and Yb_2O_3. LREO: the sum of Ce_2O_3, La_2O_3, Nd_2O_3, and Pr_2O_3. CREO: the sum of Dy_2O_3, Eu_2O_3, Nd_2O_3, Tb_4O_7, and Y_2O_3. MagREO: the sum of Dy_2O_3, Nd2O3, Pr_6O_{11} and Tb_4O_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 marginsto mineralisation 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 Table 1 are converted from REE values and aggregated according to the stoichiometric factors and formula above. Assay results in Table 3 are as received (except TREE, which is calculated).
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.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Analysis of additional samples is progressing and will be reported when received. Metallurgical testwork has commenced and will be ongoing. 3D geological modelling and mineralisation studies are being carried out. Additional drilling is planned.