

6 July 2023

Excellent screen beneficiation test results lift REE grades by up to 202% at the Mount Ridley REE¹ Project.

- Screen beneficiation results return an excellent average upgrade of 164% from Mia and Jody Prospects with a maximum upgrade of 202% returned from a Vincent sample.
- Tests show that over 80% of the TREO² is contained within 50% of the original sample mass, and that the barren proportion can be rejected when simply screened at -75 microns.
- Results for samples at -75 microns included:
 - 172% upgrade (2,771 ppm to 4,759 ppm TREO) from Mia MRAC1180 9m to 17m
 - 140% upgrade (1,477 ppm to 2,062 ppm TREO) from Mia MRAC1184 30m to 59m
 - 156% upgrade (6,304 ppm to 9,848 ppm TREO) from Mia MRAC1188 69m to 74m
 - 151% upgrade (1,480 ppm to 2,229 ppm TREO) from Jody MRAC1162 18m to 53m
 - 162% upgrade (2,470 ppm to 4,003 ppm TREO) from Vincent MRDD0029 30m to 34m
 - 130% upgrade (1,871 ppm to 2,440 ppm TREO) from Fabienne MRAC1259 30m to 42m
 - 202% upgrade (498 ppm to 1,007 ppm TREO) from Vincent MRAC1109 39m to 56m
- Eighty-one (81) resource aircore drill holes (MRAC1525-MRAC1605) for a total of 4,083m completed at the Mia Prospect. Results expected during July and August 2023.

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

"Beneficiation results have delivered an important breakthrough, identifying the ability to substantially increase the grade of REE mineralisation through an inexpensive, simple, and broadly adopted mineral processing technique.

"The Company believes that targeted drilling throughout the central zone of the Mia Prospect can generate intersections at grades high enough to ultimately beneficiate above 2,000ppm TREO, which will have a very positive impact on project economics."

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.

Exploration Update – Beneficiation Test Results

Mount Ridley Mines Limited (ASX: MRD, “Mt Ridley” or “the Company”) is pleased to provide a summary of results from a programme of screen beneficiation testing of samples from its 100% owned Mount Ridley REE Project, located approximately 50km north of the Port of Esperance, Western Australia (Figure 1).

Beneficiation testing was initiated following the return of very high silica assays from the Mia and other prospects hosted in clays with a felsic rock protolith. Beneficiation is a process which removes barren minerals from mineralisation to achieve an improvement in grade.

Screen beneficiation tests were undertaken by the Simulus Group on nineteen (19) samples from 15 drill holes. Samples were from 6 of the 11 prospects that form the Mount Ridley REE Project (Figures 2 and 3).

A range of screens with apertures between 500 micron (μm) and 25 μm were used, with results showing that optimum beneficiation, being the relationship between mass rejected and REE recovered, was achieved by screening at 75 μm (Table 1 and Graph 1).

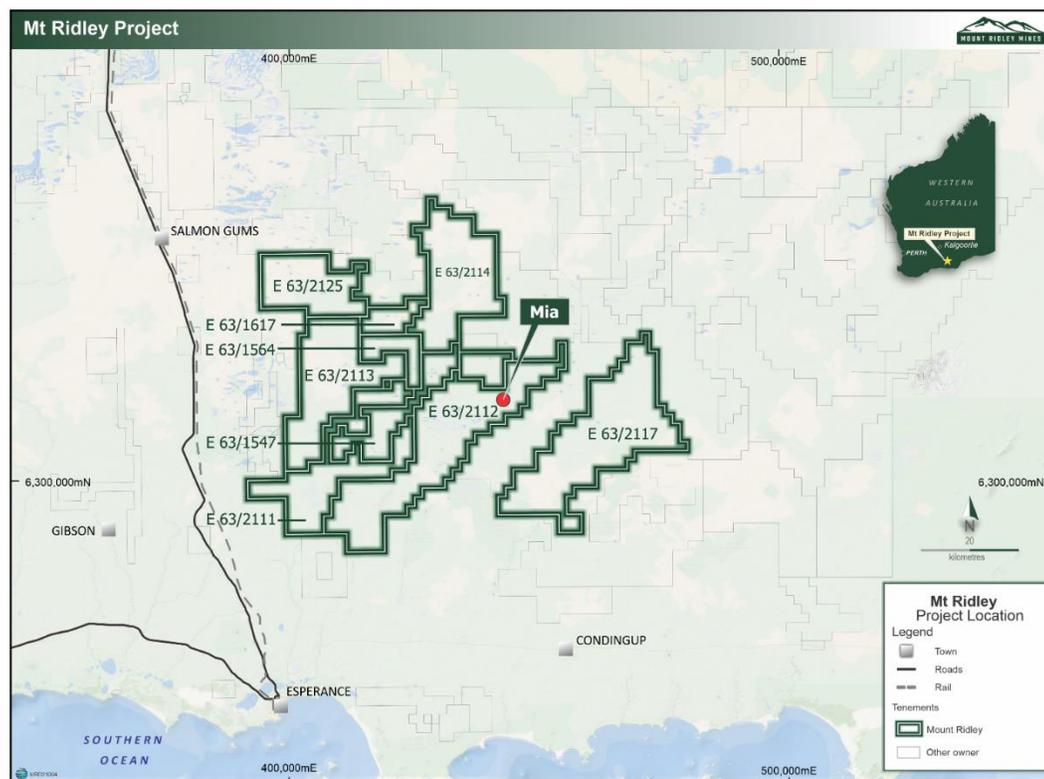


Figure 1: The Mount Ridley REE Project is located in southern Western Australia with an area of approximately 3,400km².

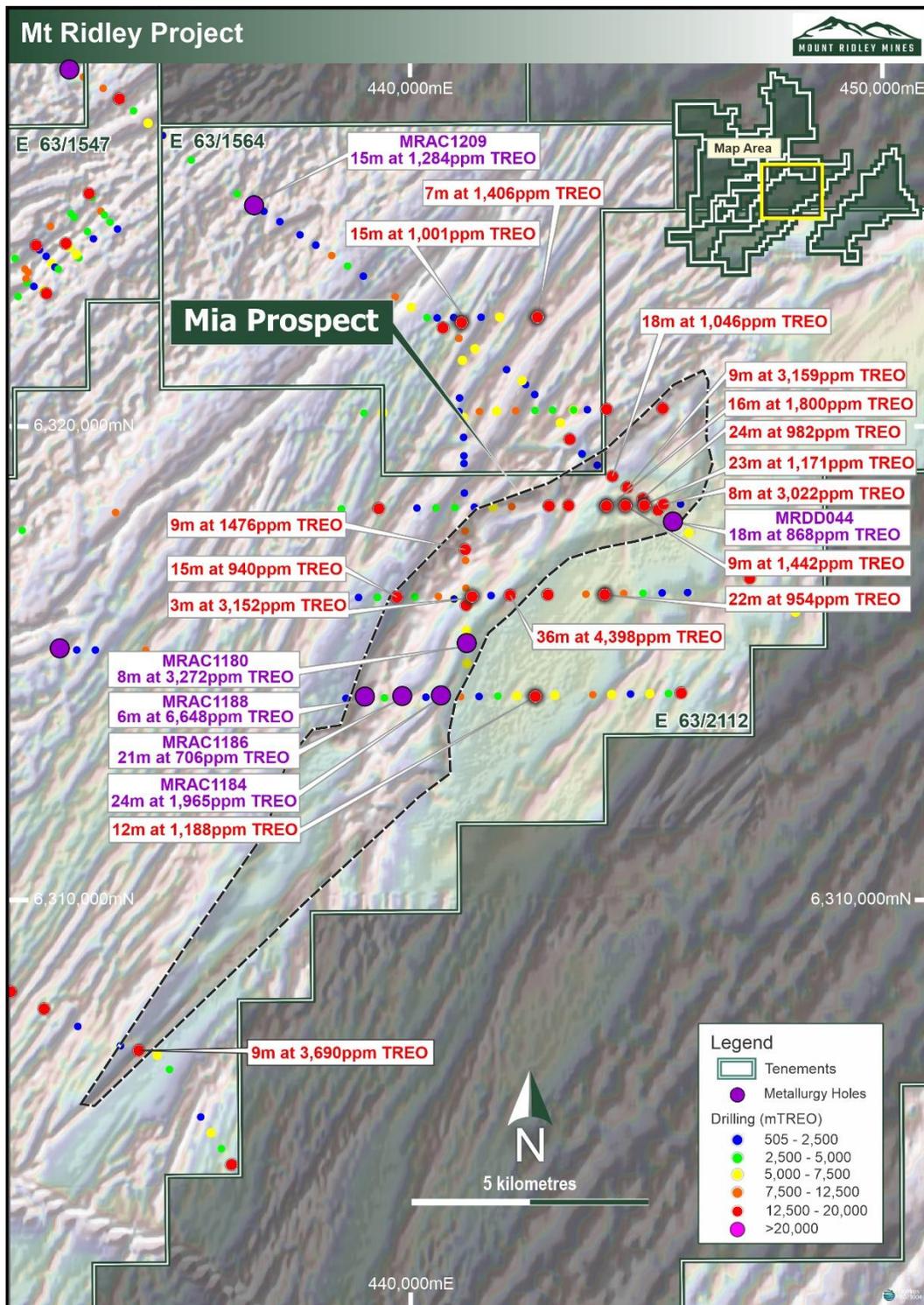
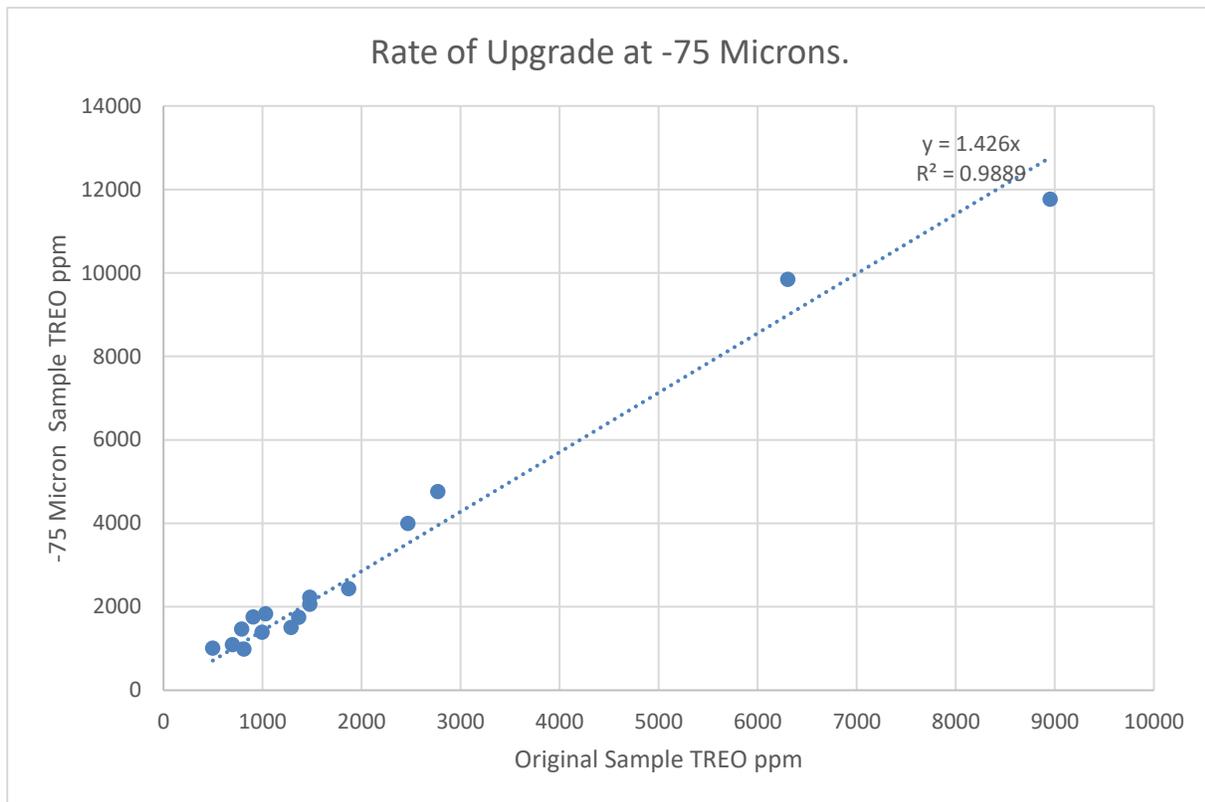


Figure 3: The Mia Prospect showing the location and TREO intersection of the drill holes that provided screen beneficiation samples.

Table 1. Summary of Screen Beneficiation Results at -75 Microns.

Prospect	Sample	Mass		Head	-75um Grade			-75um Recovery			Grade Upgrade		
		Recovery	Reject	TREO	HREO	LREO	TREO	HREO	LREO	TREO	HREO	LREO	TREO
		-75um %	+75um %	ppm	ppm	ppm	ppm	%	%	%	%	%	%
Mia	MRDD044 29-36m	38.5	61.5	905	371	1406	1758	70%	76%	75%	181%	197%	194%
Mia	MRAC1180 9-17m	52.4	47.6	2771	576	4257	4759	88%	90%	90%	167%	172%	172%
Mia	MRAC1184 30-59m	63.8	36.2	1477	212	1885	2062	82%	90%	89%	129%	141%	140%
Mia	MRAC1186 45-66m	56.9	43.1	698	213	892	1093	91%	89%	89%	159%	156%	157%
Mia	MRAC1188 57-63m	46.5	53.5	6304	2462	7477	9848	69%	74%	73%	148%	159%	156%
		51.6	48.4					80%	84%	83%	157%	165%	164%
Jody	MRAC1146 33-44m	46.0	54.0	1033	554	1289	1834	71%	87%	82%	155%	190%	177%
Jody	MRAC1162 18-53m	49.0	51.0	1480	276	1987	2229	79%	73%	74%	160%	149%	151%
		47.5	52.5					75%	80%	78%	158%	169%	164%
Vincent	MRDD0029 30-34m	56.6	43.4	2470	1698	2299	4003	90%	93%	92%	159%	165%	162%
Vincent	MRDD0029 34-39.2m	66.8	33.2	1366	516	1246	1752	79%	89%	86%	118%	133%	128%
Vincent	MRAC1101 39-51m	68.0	32.0	1289	649	856	1506	79%	79%	79%	117%	117%	117%
Vincent	MRAC1109 39-56m	40.8	59.2	498	165	855	1007	80%	83%	83%	196%	203%	202%
		58.1	41.9					82%	86%	85%	148%	155%	152%
Winston	MRDD0036 41-51m	73.8	26.2	814	31	975	985	88%	89%	89%	119%	121%	121%
Winston	MRDD0036 51-52.6m	69.2	30.8	8952	1113	10854	11767	91%	91%	91%	131%	131%	131%
Winston	MRAC1209 24-39m	57.6	42.4	997	82	1339	1394	64%	82%	81%	110%	142%	140%
		66.9	33.1					81%	87%	87%	120%	132%	131%
Fabienne	MRAC1259 30-42m	42.2	57.8	1871	714	1741	2440	35%	74%	55%	82%	175%	130%
Fabienne	MRAC1263 45-57m	43.9	56.1	792	260	1229	1470	79%	82%	81%	180%	187%	186%
		43.0	57.0					57%	78%	68%	131%	181%	158%
Butch	MRDD0038 35-58m	31.4	68.6	1217	47	1386	1405	42%	36%	36%	133%	114%	115%
Butch	MRDD0038 62-70m	73.6	26.4	1600	61	1748	1772	78%	82%	81%	106%	111%	111%
Butch	MRDD0038 70-77m	56.0	44.0	2281	57	2937	2932	84%	72%	72%	149%	128%	129%
		53.6	46.4					68%	63%	63%	130%	118%	118%



Graph 1: The relationship between the original sample grade (excluding Butch data) and the sample grade after screening indicates a reasonably constant degree of upgrade should be achieved project-wide, where clays are kaolin and silica, derived from a felsic rock protolith. The Butch samples have a mafic rock protolith with much lower silica.

Next Steps

Metallurgy using HCl acid leach

Fifteen samples from the Mia, Jody, Winston and Vincent Prospects, having been screened to -25 microns, are undergoing leach testing by ANSTO³ and Independent Metallurgical Operations Pty Ltd (IMO) laboratories. Following screening, these samples have grades ranging from 1,035ppm TREO to 12,408 (1.24%) TREO. Samples will be leached with hydrochloric acid at two strengths: 3.6g/l HCl (pH 1) and 25g/l HCl; and at a range of times from 6 hours to 24 hours. Nearby tenement holder, OD6 Metals Limited reported excellent metallurgical recoveries using 25g/l HCl for a 6-hour exposure time.⁴

³ Australian Nuclear Science and Technology Organisation, NSW

⁴ ASX: OD6, 3 April 2023: "Very High Magnet Rare Earth Recoveries Achieved at Splinter Rock Project."

Resource drilling

A programme of 81 aircore holes, (MRAC1525–MRAC1605) were drilled at the Mia Prospect for 4,083m. Drill holes infilled broad zones of thick higher-grade mineralisation (>1,000ppm TREO) and targeted strongly TREO-mineralised structures, bringing hole spacings down to 100m from 400m apart (Figures 4, 5, 6 and 7).

The closer spaced holes will provide detailed geometry of the high-grade zones, TREO-hosting structures and the distribution of grades within the structures. Results will provide data for variograms when resource calculations are undertaken later this year. All samples are with the laboratory and assays are expected to be received during July and August 2023.

Programmes of Work approvals have been received from the Department of Mines Industry Regulation and Safety, (subject to completing heritage and flora surveys), to drill the central Mia Prospect area to a 400m x 400m density. Following the successful beneficiation tests, the Company is targeting high silica-kaolin clays for additional metallurgical testing.

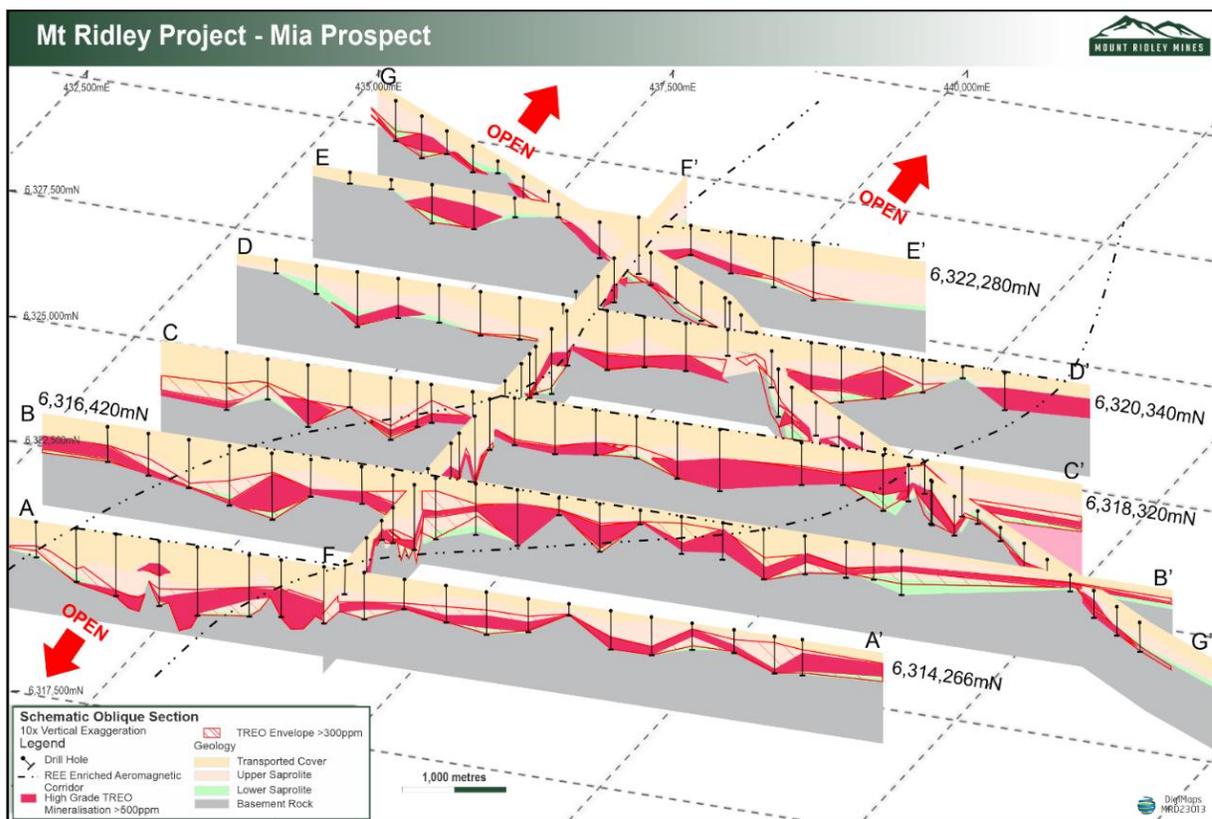


Figure 4: Mia Prospect aircore drilling. Stacked cross sections show drill holes and layered REE mineralisation. The grid lines are 2.5 km apart. Vertical scale is 10x the horizontal scale. The dotted line shows the geological corridor which is the focus of resource drilling.

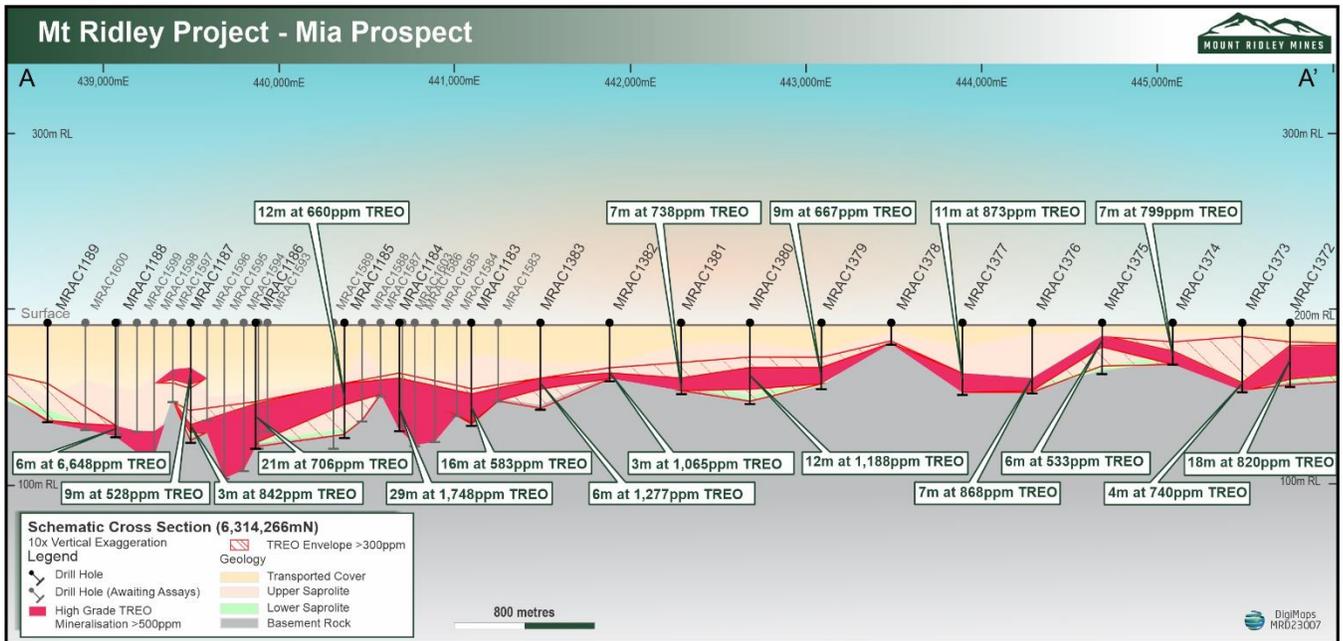


Figure 5: Cross section across the Mia Prospect at A-A', (refer to Figure 4), which is 7.2 km wide, showing thick zones of clay-hosted REE mineralisation. Holes with mineralisation are 400m apart. Infill holes drilled 100m apart are also shown; assays for these are awaited.

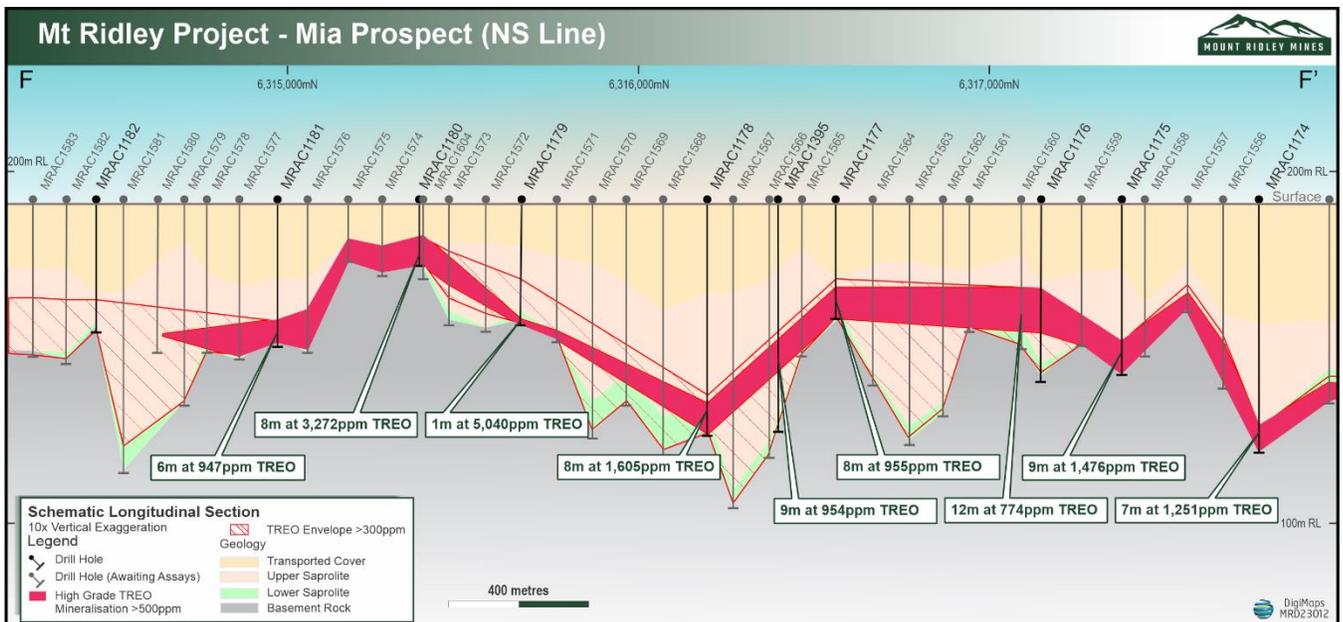


Figure 6: North-South long section along the Mia Prospect central access track at F-F' (refer to Figure 4), which is 3.0 km long. Holes are 400m apart. Infill holes are 100m apart.

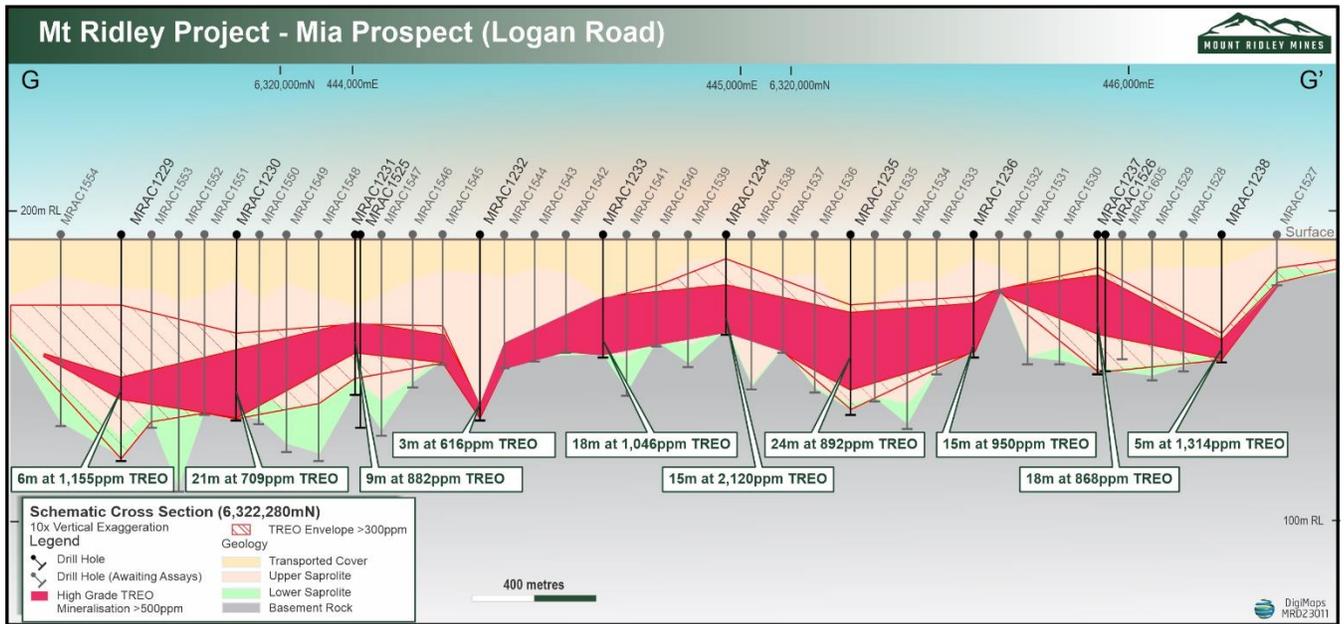


Figure 7: Oblique section across the Mia Prospect at G-G' (refer to Figure 4), which is 5.0 km wide. Holes with assays shown are 400m apart. Infills are 100m apart.

Heritage and Flora/Fauna Surveys

Heritage Protection surveys are advancing, with drone work complete and follow-up field work booked for September 2023. Spring flora surveys are also scheduled for September.

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.

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 and thanks the Esperance Tjaltjraak Native Title Aboriginal Corporation for facilitating the Company's exploration programmes.

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'.

The information in this document that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation reviewed by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who has been engaged by Mt Ridley Mines Limited to provide metallurgical consulting services. Mr Adamini has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

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 May 2023. "Drilling update for the Mia REE Prospect."

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.

Appendix 1

A. Drill Hole Collar Locations for Reported Holes.

Table 2: Drill hole Collar Locations and Sample Intervals							
Hole ID	Prospect	Drill Type	Depth m	East m	North m	Nominal RL m	Composite Interval
MRAC1180	Mia	AC	17	441230	6315374	191	9-17m
MRAC1184	Mia	AC	59	440683	6314263	191	30-59m
MRAC1186	Mia	AC	69	439863	6314250	191	45-66m
MRAC1188	Mia	AC	63	439070	6314239	191	57-63m
MRDD044	Mia	DD	45.6	445607	6317954	204	29-36m
MRAC1146	Jody	AC	45	429813	6334831	191	33-44m
MRAC1162	Jody	AC	53	432800	6327551	191	18-53m
MRAC1101	Vincent	AC	51	430296	6317481	191	39-51m
MRAC1109	Vincent	AC	56	432595	6315262	191	39-56m
MRDD029	Vincent	DD	46.4	426833	6315327	180	30-34m 34-39.2m
MRAC1209	Winston	AC	40	436719	6324666	191	24-39m
MRDD036	Winston	DD	58.6	429073	6322574	190	41-51m 51-52.6m
MRAC1259	Fabienne	AC	57	411883	6326457	191	30-42m
MRAC1263	Fabienne	AC	70	411926	6328051	191	45-57m
MRDD038	Butch	DD	89.6	426976	6321837	202	35-58m 62-70m 70-77m

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

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 beneficiation results from samples of Aircore (“AC”) or diamond (“DDH”) drilling. Primary sample analyses and techniques have previously been reported. Selected samples have been composited and supplied to Simulus Pty Ltd (“Simulus”) for screen beneficiation testing, described in Tables 1 and 2.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Beneficiation samples described in Tables 1 and 2 were composited based on earlier primary sample analyses. Composite head assays have been compared to original assays and are sufficiently close to consider the samples to be ‘fit for purpose’.
	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 and DDH drilling generated samples of between 1 metre and 3 composited metres taken for primary analysis. Remaining, unprepared sample bulks were submitted to Simulus and then subsampled to generate beneficiation sample composites of 10kg each.
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). DDH: PQ core is recovered from diamond drilling.
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	Geological logging was complete in full for every hole, this includes lithology,

	geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	weathering, oxidation state, alteration, veining, mineralisation if present. 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.	DDH core samples – quarter core.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	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. Selected mineralised intervals (refer to Tables 1 and 2) were further composited for the beneficiation test work reported herein. Beneficiation samples were screened at +500 microns, -500+106 microns, -106+75 microns, -75+38 microns, -38+25 microns and -25 microns.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	Sampling technique is appropriate for the intended testing.
	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 original sampling sequence approximately one in every thirty samples. CRM material was selected from 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.	Screen beneficiation test work by wet screening reported herein was undertaken by Simulus. Analyses of head and screened fraction samples reported herein were undertaken Simulus by a lithium borate fusion with ICP-MS finish. Simulus' laboratory is not NATA accredited however is considered 'fit for purpose'. The analytical technique was agreed between Simulus and the Company's metallurgical consultant, IMO.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument	None used, not applicable.

	make and model, reading times, calibrations factors applied and their 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 3 rd 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 throughout project. See Figure 2.
	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.	Sample composites are described in Tables 1 and 2. Composites of 10kg were made from the listed intervals.
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	Unlikely to be biased as the mineralisation is represented as flat lying lenses

	bias, this should be assessed and reported if material.	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

		<p>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.</p>																																													
Geology	Deposit type, geological setting, and style of mineralisation.	Clay-hosted rare earth deposit.																																													
Drill hole Information	<p>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.</p> <p>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.</p>	<p>All relevant data for the drilling conducted is tabulated in Appendix 1 of this announcement.</p> <p>It should be noted that RL is estimated from a digital elevation model gained during an aeromagnetic survey.</p>																																													
Data aggregation methods	<p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>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.</p> <p>No metal equivalent values have been used.</p> <p>Stoichiometric factors to convert elements to oxides:</p> <table border="1" data-bbox="1312 906 1787 1404"> <tr><td>Ce</td><td>1.2284</td><td>CeO₂</td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy₂O₃</td></tr> <tr><td>Er</td><td>1.1435</td><td>Er₂O₃</td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu₂O₃</td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd₂O₃</td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho₂O₃</td></tr> <tr><td>La</td><td>1.1728</td><td>La₂O₃</td></tr> <tr><td>Lu</td><td>1.1372</td><td>Lu₂O₃</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd₂O₃</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr₆O₁₁</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm₂O₃</td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb₄O₇</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm₂O₃</td></tr> <tr><td>Y</td><td>1.2695</td><td>Y₂O₃</td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb₂O₃</td></tr> </table> <p>Source: Element-to-stoichiometric oxide conversion factors - JCU Australia</p>	Ce	1.2284	CeO ₂	Dy	1.1477	Dy ₂ O ₃	Er	1.1435	Er ₂ O ₃	Eu	1.1579	Eu ₂ O ₃	Gd	1.1526	Gd ₂ O ₃	Ho	1.1455	Ho ₂ O ₃	La	1.1728	La ₂ O ₃	Lu	1.1372	Lu ₂ O ₃	Nd	1.1664	Nd ₂ O ₃	Pr	1.2082	Pr ₆ O ₁₁	Sm	1.1596	Sm ₂ O ₃	Tb	1.1762	Tb ₄ O ₇	Tm	1.1421	Tm ₂ O ₃	Y	1.2695	Y ₂ O ₃	Yb	1.1387	Yb ₂ O ₃
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		<ul style="list-style-type: none"> TREO: the sum of Sm₂O₃, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, Yb₂O₃, CeO₂, La₂O₃, Nd₂O₃, and Pr₆O₁₁ HREO: the sum of Sm₂O₃, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, and Yb₂O₃. LREO: the sum of CeO₂, La₂O₃, Nd₂O₃, and Pr₆O₁₁. CREO: the sum of Dy₂O₃, Eu₂O₃, Nd₂O₃, Tb₄O₇, and Y₂O₃. MagREO: the sum of Nd₂O₃, Pr₆O₁₁, Dy₂O₃ and Tb₄O₇. NdPr: the sum of Nd₂O₃ and Pr₆O₁₁
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	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 margins to 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.	<p>Selected composite samples reported in Table 1 are converted from REE values and aggregated according to the stoichiometric factors and formula above.</p> <p>Assay results in Table 3 are as received (except TREE, which is calculated).</p>
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	<p>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<p>Analysis of additional samples is progressing and will be reported when received.</p> <p>Metallurgical testwork has commenced and will be ongoing.</p> <p>3D geological modelling and mineralisation studies are being carried out.</p> <p>Additional drilling is planned.</p>