



ASX ANNOUNCEMENT

RARE EARTH ELEMENT TARGETS EXTENDED

13 September 2021

HIGHLIGHTS

- Re-assay of a further 160 air core sample pulps from 59 drill holes (drilled from 2017 to 2019) at the Winston's and Keith's Prospects have returned significant rare earth element (REE¹) values extending prospective horizons to **in excess of 25 strike kilometres**.
- The Extended Winston's Prospect (which includes the Lake prospect) exceeds 10 kilometres in apparent length and 1 kilometre in width. The Keith's Prospect is over 4 kilometres in length and 1 kilometre in width. This equates to a further 1 km extended strike to the NE.
- Significant new intercepts from the latest re-assaying include:

○ Winston's	○ MRAC0590: 24 to 36m,	12m at 1,230 ppm TREO
	○ MRAC0593: 24 to 30m,	6m at 2,005 ppm TREO
	○ MRAC0596: 12 to 21m,	9*m at 943 ppm TREO
	○ MRAC0637: 16 to 23m,	7m at 1,338 ppm TREO
	○ MRAC0638: 24 to 40m,	16m at 1,580 ppm TREO
○ Keith's	○ MRAC0643: 28 to 45m,	17*m at 746 ppm TREO
	○ MRAC0484: 32 to 45m,	13*m at 2,632 ppm TREO
	○ MRAC0514: 16 to 21m,	5m at 1,260 ppm TREO
	○ MRAC0518: 16 to 21m,	5*m at 3,949 ppm TREO

** Denotes hole did not completely pierce the mineralised REE horizon, ending in mineralization*

- REE grades compare favourably to the Ugandan Makuutu REE Project resource² (**Ionic Rare Earths Ltd**, ASX: **IXR** earning 60%) which has a reported JORC Inferred and Indicated Resource of 78.6Mt @ 840ppm TREO (cut-off grade 250ppm TREO³). MRD has not yet defined a Resource defined in accordance with the JORC code.
- 5 of 6 tenements recently applied for by the Company have been granted. The 6 Mount Ridley Project tenements cover approximately **3,400km²**.
- Material characterisation and REE extraction tests have commenced including a programme of partial leach analyses and mineral identification by microXRF.

¹ 15 rare earth elements (REE) were analysed: 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), and yttrium (Y).

² Ionic Rare Earths Limited announcement to ASX dated 3 March 2021.

³ TREO means the sum of the 15 REE, each converted to its respective element oxide equivalent using the formulae in Appendix 2 Section 2.

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Following the Company's announcement on 2 August 2021 of laterally extensive rare earth element mineralisation at its 100% owned Mount Ridley Project with a peak intercept of **10,461ppm** (1.05%) TREO from 23m downhole in MRAC0711, Mount Ridley Mines Ltd (ASX: MRD) (or "the Company") is pleased to provide the following update.

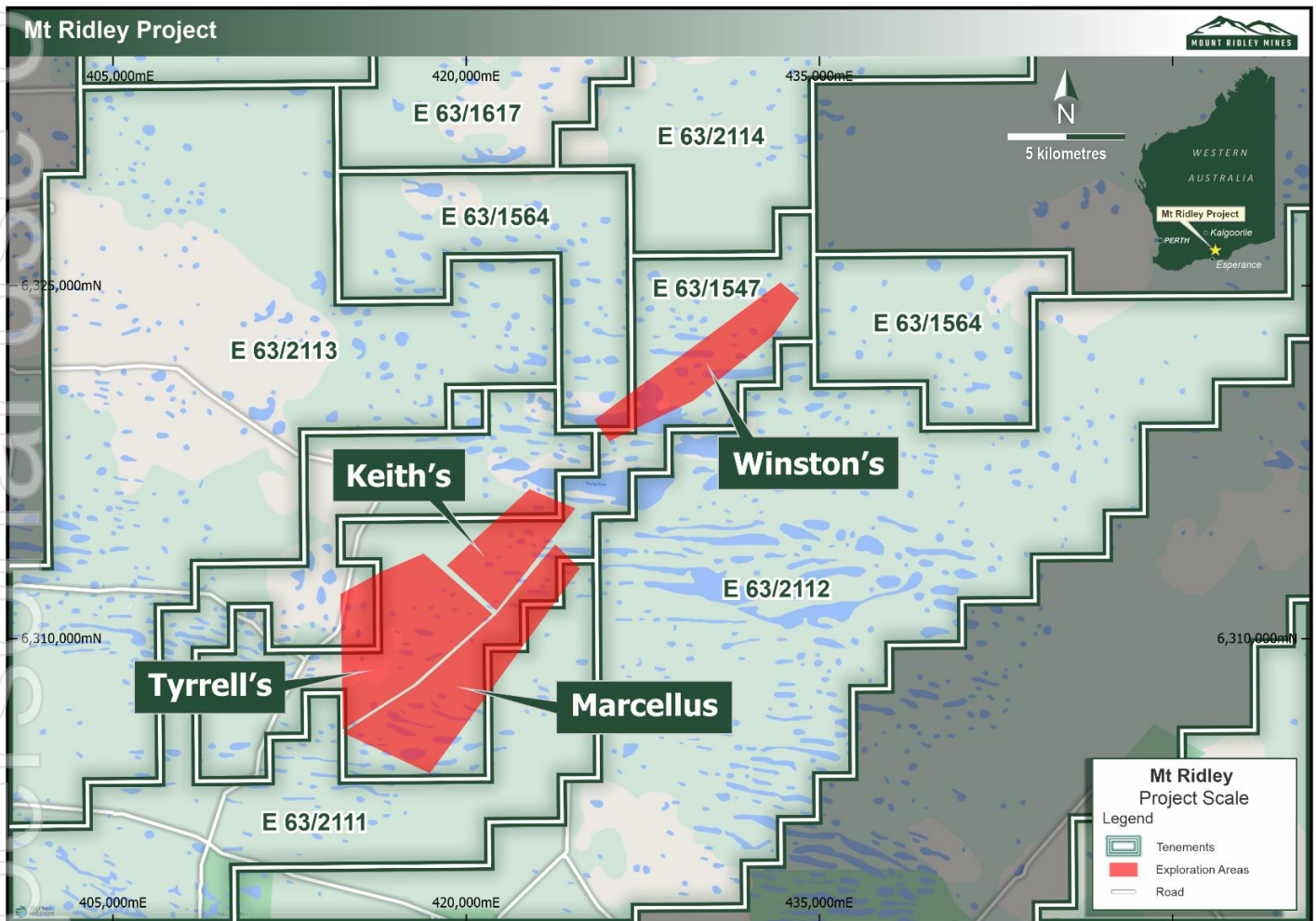


Figure 1: Mount Ridley Project showing key prospects.

Mount Ridley's Chairman Mr. Peter Christie commented:

"The identification of relatively shallow REE accumulations within the Company's extensive land holding was the result of a re-examination of previous drilling data at the Mount Ridley Project over the previous 5 years. We now have an interesting REE project on our hands and while it is early days in our technical analysis, the preliminary TREO grades and lateral extent of mineralisation would seem to indicate a rare earth project worthy of detailed investigation. The next step is to determine the nature of the mineralisation and by what means the REE's are going to be extractable."

WINSTON'S

The recently received assays increase the extent of REE mineralisation at Winston's by at least 1 kilometre in a north-easterly direction. These results also demonstrate the continuity of REE mineralisation over the intervening 4 kilometres between the now-merged Winston's and the Lake Prospects.

Winston's now has an apparent strike length of at least 10 km and a width exceeding 1 km. Aircore holes drilled between 2017 and 2019 were generally collared on a 500m by 80m grid, a reconnaissance pattern not suitable for JORC estimations.

The Company is planning and infill and extensional drilling campaign with the market to be advised in due course.

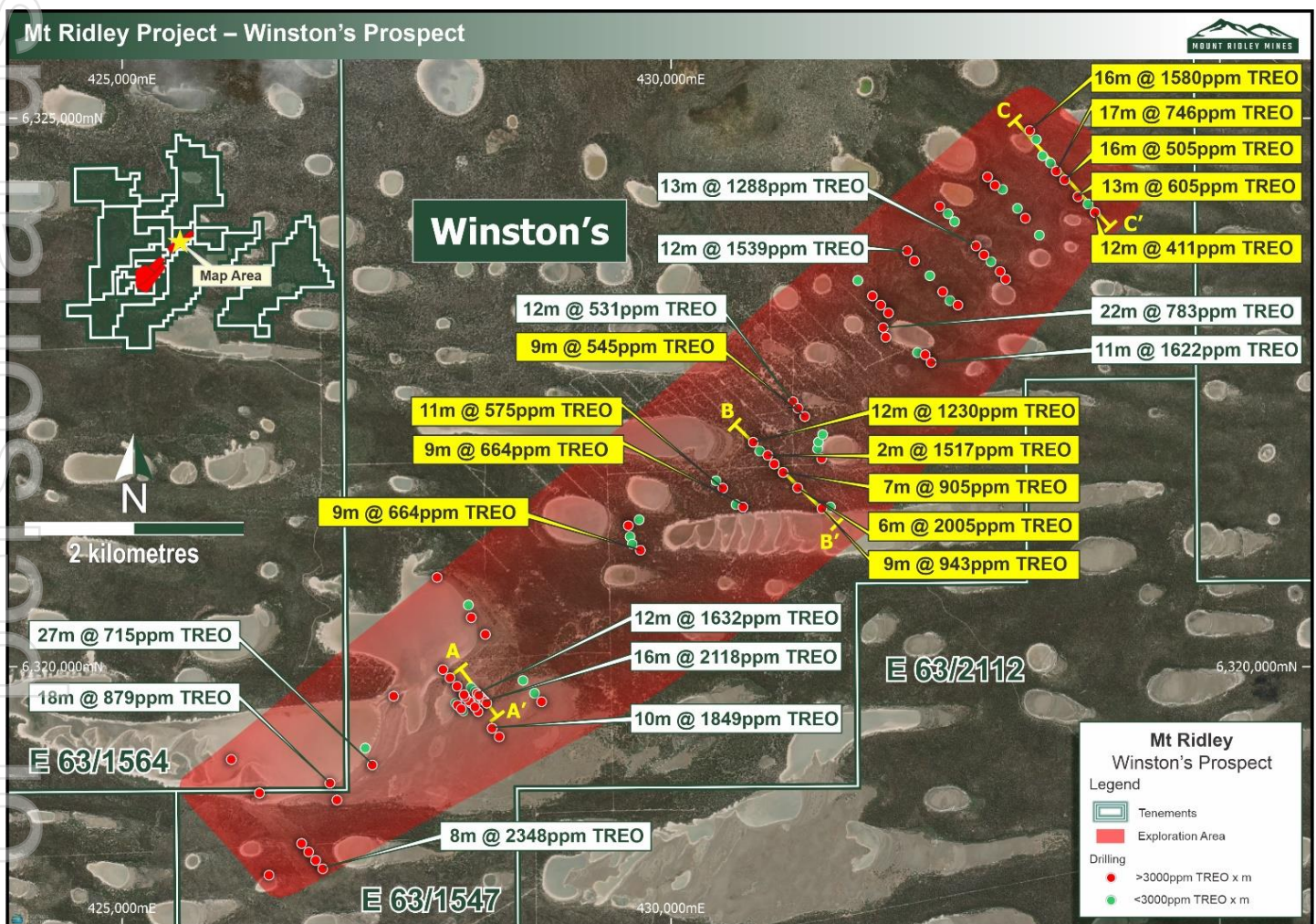


Figure 2: Winston's Prospect showing drill hole locations and significant intersections. The intersections reported in this announcement are highlighted in yellow.

**Table 1: Winston's Prospect
Composite Drill Hole Sample Intersections > 300ppm TREO.**

Prospect	Hole ID	From	To	Intersection	TREO	HREO ₄	LREO ₅	CREO ₆
		(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)
Winston's	MRAC0577	40	48	8	405	196	208	197
Winston's	MRAC0578	48	51	3	645	235	409	260
Winston's	MRAC0579	44	51	7	413	111	302	138
Winston's	MRAC0580	44	56	12	392	164	228	172
Winston's	MRAC0582	44	55	11	575	205	370	238
Winston's	MRAC0584	44	45	1	719	366	353	390
Winston's	MRAC0585	32	41	9*	664	235	429	280
Winston's	MRAC0587	32	38	6	553	288	265	286
Winston's	MRAC0588	24	26	2	1517	767	750	821
Winston's	MRAC0589	20	23	3	751	277	474	322
Winston's	MRAC0590	24	36	12	1230	890	340	824
Winston's	MRAC0591	20	27	7	905	442	462	472
Winston's	MRAC0593	24	30	6	2005	919	1086	980
Winston's	MRAC0593	12	16	4	473	158	315	193
Winston's	MRAC0596	12	21	9*	943	250	693	333
Winston's	MRAC0598	20	26	6	564	232	331	254
Winston's	MRAC0600	24	27	3	716	276	439	331
Winston's	MRAC0601	28	31	3	538	188	350	210
Winston's	MRAC0603A	28	37	9*	545	162	383	186
Winston's	MRAC0635	12	20	8	340	75	265	99
Winston's	MRAC0637	16	23	7	1338	742	595	801
Winston's	MRAC0638	24	40	16	1580	778	802	789
Winston's	MRAC0639	28	32	4	703	217	486	296
Winston's	MRAC0643	28	45	17*	746	252	493	318
Winston's	MRAC0644	24	40	16	505	216	287	236
Winston's	MRAC0646	16	29	13*	605	297	307	292
Winston's	MRAC0647	28	33	5*	449	190	259	195
Winston's	MRAC0648	20	32	12	411	38	373	60
Winston's	MRAC0651	30	31	1*	814	399	415	428
Winston's	MRAC0653	32	38	6	646	276	369	312
Winston's	MRAC0656	32	37	5	465	145	320	170
Winston's	MRAC0657	40	46	6	567	342	225	336
Winston's	MRAC0658	48	52	4	755	323	432	349

* Denotes hole did not completely pierce the mineralised REE horizon, ending in mineralisation

⁴ HREO means Heavy Rare Earth Oxides; the sum of Sm₂O₃, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, and Yb₂O₃.

⁵ LREO means Light Rare Earth Oxides; the sum of Ce₂O₃, La₂O₃, Nd₂O₃, and Pr₂O₃.

⁶ CREO means Critical Rare Earth Oxides; the sum of Dy₂O₃, Eu₂O₃, Nd₂O₃, Tb₄O₇, and Y₂O₃.

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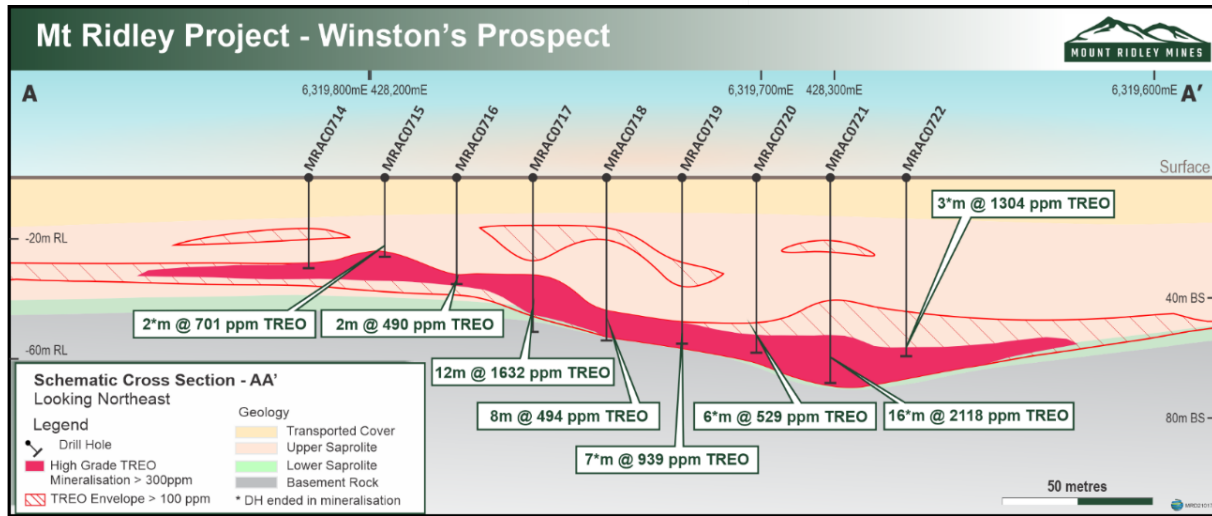


Figure 3: Cross section through Winston's Prospect. Central northing is 6,319,750mN.

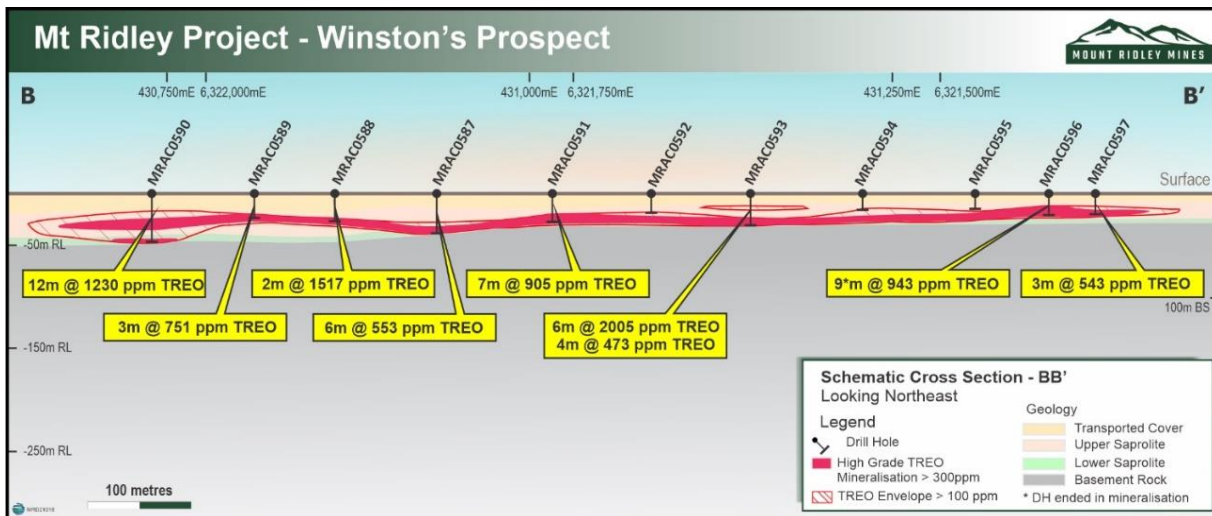


Figure 4: Cross Section through Winston's Prospect. Central northing is 6,321,750mN.

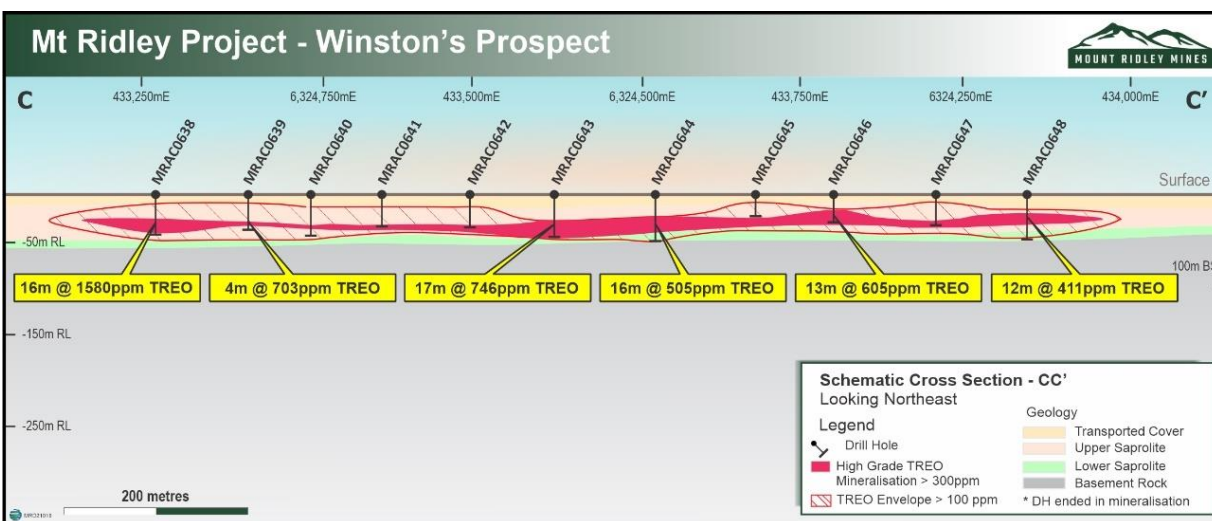


Figure 5: Cross Section through Winston's Prospect. Central northing is 6,324,500mN.

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KEITH'S

REE mineralisation at Keith's exceeds 4 kilometres in length and is at least 1 km in width. Drill hole traverses are sited on an approximate 500m by 100m grid with one infill pattern drilled on a 100m by 25m grid.

**Table 2: Keith's Prospect
Composite Drill Hole Sample Intersections > 300ppm TREO.**

Prospect	Hole ID	From	To	Intersection	TREO	HREO	LREO	CREO
		(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)
Keith's	MRAC0482	20	24	4	451	51	399	91
Keith's	MRAC0482	32	34	2	1041	388	652	439
Keith's	MRAC0483	28	36	8	645	400	245	383
Keith's	MRAC0484	32	45	13*	2162	796	1365	1044
Keith's	MRAC0485	0	4	4	445	153	292	175
Keith's	MRAC0485	36	41	5	374	199	175	199
Keith's	MRAC0488	36	39	3	491	216	274	228
Keith's	MRAC0492	12	21	9*	457	138	319	169
Keith's	MRAC0498	32	33	1	463	97	366	121
Keith's	MRAC0499	16	20	4	323	83	239	113
Keith's	MRAC0502	24	30	6	507	239	267	253
Keith's	MRAC0503	20	22	2	1022	451	571	521
Keith's	MRAC0507	20	23	3	697	240	457	298
Keith's	MRAC0510	12	17	5	587	170	417	223
Keith's	MRAC0511	12	13	1	534	123	410	165
Keith's	MRAC0513	24	25	1*	1134	622	512	619
Keith's	MRAC0514	16	21	5	1260	565	695	599
Keith's	MRAC0518	16	21	5*	3949	2557	1391	2413
Keith's	MRAC0520	36	37	1	930	244	685	307

* Denotes hole did not completely pierce the mineralised REE horizon, ending in mineralisation

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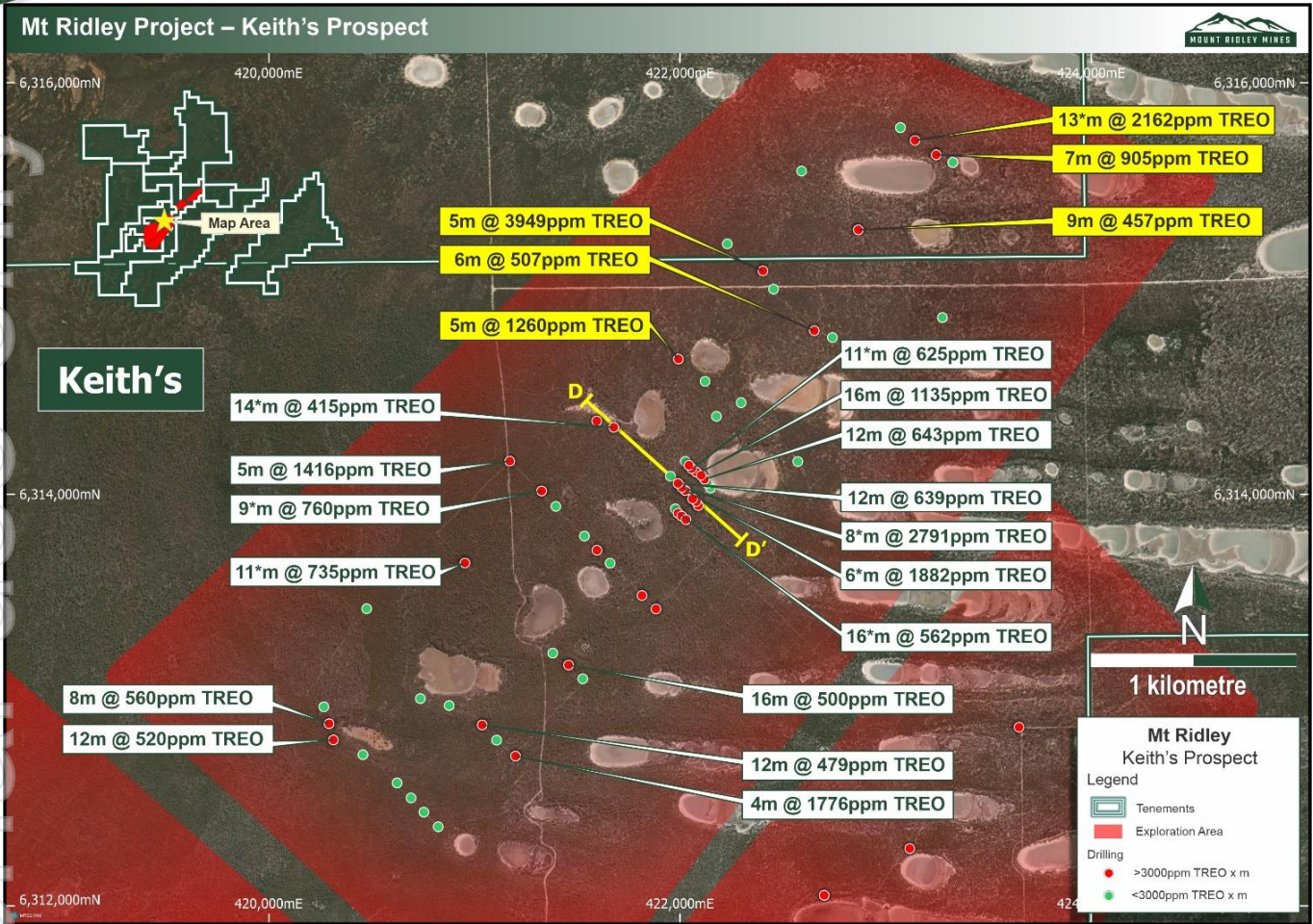


Figure 6: Keith's Prospect showing drill hole locations and significant intersections. The intersections reported in this announcement are highlighted in yellow.

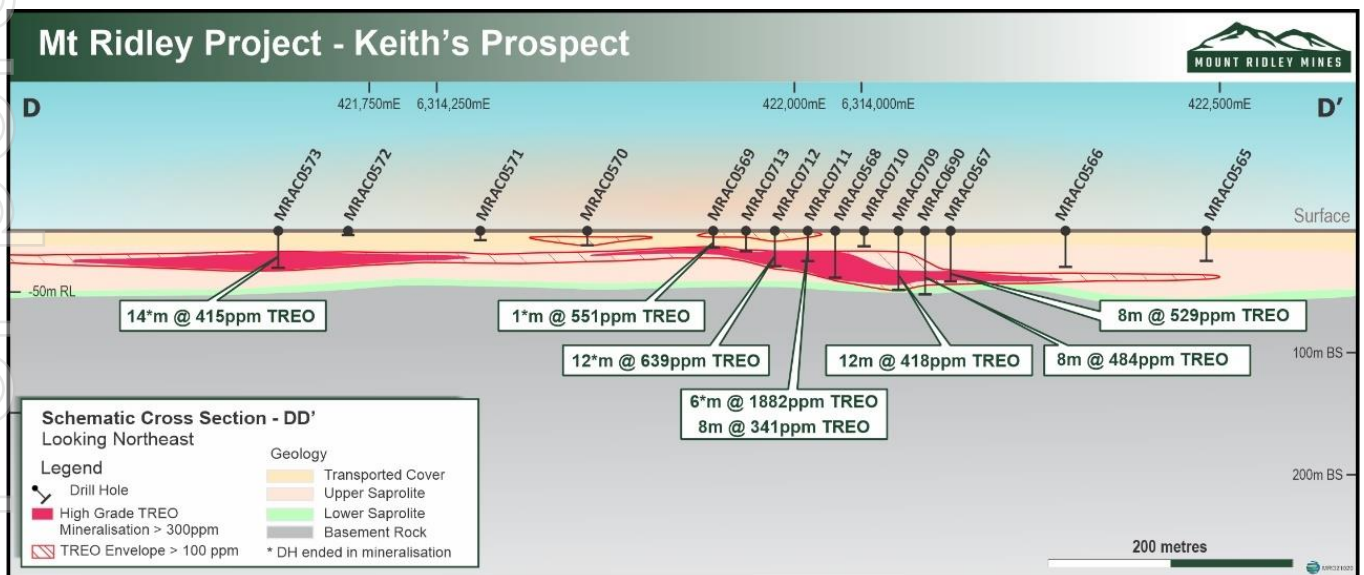


Figure 7: Cross section through Keith's Prospect. Central northing is 6,314,500mN.



PROJECT OUTLOOK

Litho-geochemistry

A comprehensive geological and litho-geochemical study is underway to differentiate transported and in-situ clay horizons and their relationship with REE mineralisation. This study will also examine the underlying fresh rocks as a possible source of REE, to try and better understand the controls of the genesis of the REE mineralisation.

Mineralogy and Metallurgy

REE assays have been determined using a lithium borate fusion 'total extraction' technique. Clay-hosted REE deposits may have multiple phases of mineralisation including the targeted ionic adsorption clay, colloidal clay, and refractory primary minerals (or mixtures of each).

Initial metallurgical testing now underway will study the extractability of RE elements using a partial leach analysis technique. This is intended to take into solution the ionic adsorption clay-hosted RE elements as well as REE in colloidal clay phases, but not refractory minerals such as xenotime and monazite.

Drilling

Planning is also underway for an extensive aircore drill program, which will include:

- Re-drilling some of the holes that terminated in REE mineralisation;
- Extending drilling traverses where mineralisation remained open;
- Reconnaissance drilling traverses to test other targets; and
- Core drilling (the Company is considering the use of sonic drilling, a technique effective in poorly consolidated rocks) to provide in-tact core for regolith studies, geotechnical and metallurgical testing, and to test the quality of some of the significantly mineralised, earlier, aircore holes.

Environment and Heritage

Most areas slated for drilling have been drilled for other commodities before, and therefore there is a body of existing environmental protection and heritage protection work in existence and held by the Company. The forthcoming drilling program is designed to generally use existing cleared tracks which already provide fit-for-purpose coverage.

Updates to existing flora, and fauna surveys have been initiated, and Heritage Protection Surveys are being reviewed prior to updates that may be required, focusing on the identified target areas and extensions to known REE mineralisation.

When completed satisfactorily, reports from these are submitted to the DMIRS under its program of works (POW) approval process. It is anticipated that the first areas should be approved for drilling in October 2021 if no unexpected issues are raised.

About the Mount Ridley REE Project

The Mount Ridley Project is located approximately 35 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 8). The Port exports minerals including nickel concentrates, 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 holds eight granted exploration licences and 1 exploration licence application covering approximately 3,400 km² (inclusive of areas under application).

REE mineralisation occurs as large, horizontal, near surface, sheet-like lenses up to a depth of 89 metres. REE mineralisation is interpreted to be present within the in-situ saprolite clay horizon. Patchy lower grade zones occur within transported cover which may vector towards stronger REE mineralisation deeper within the regolith.

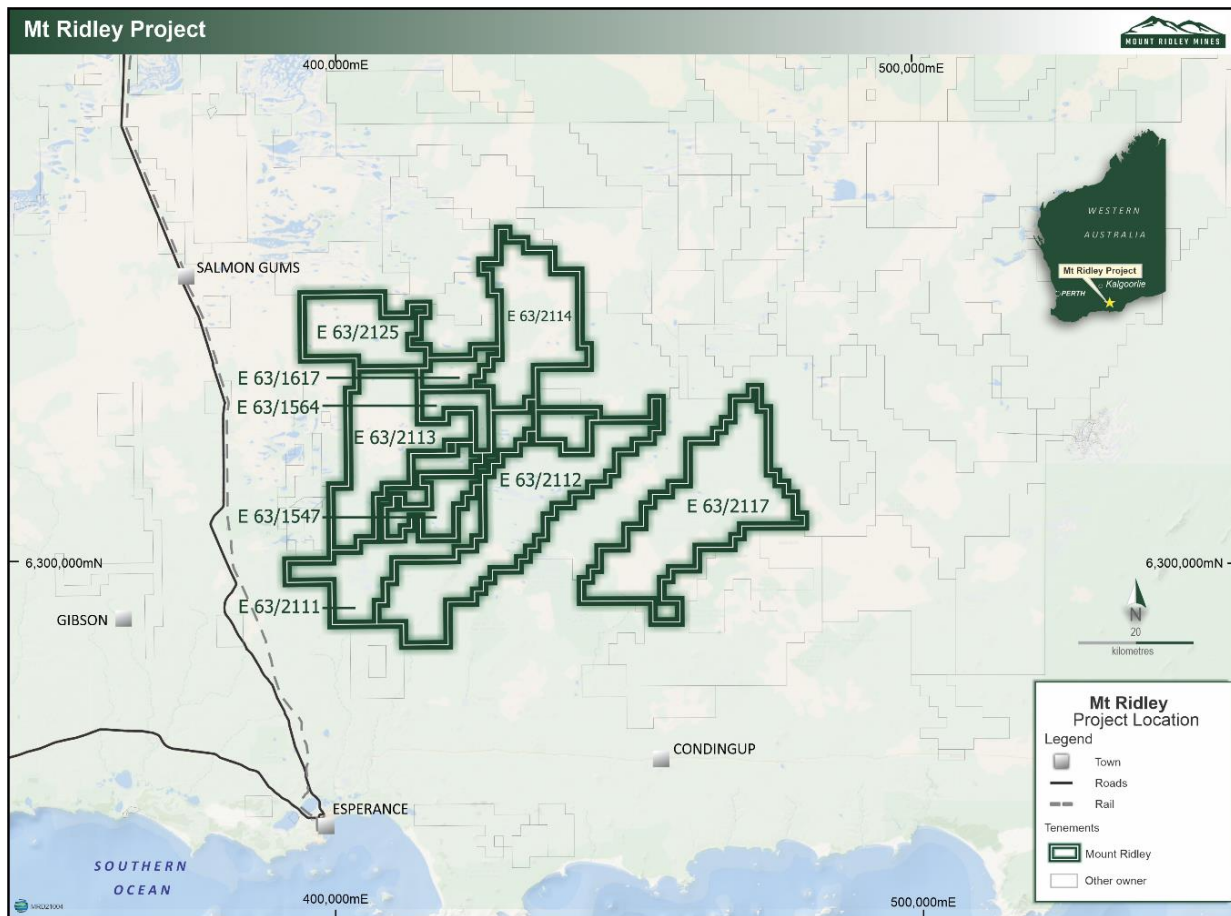


Figure 8: Mount Ridley Project location and tenements.



Geological Survey of Western Australia (DMIRS) mapping⁷ shows that the Mount Ridley Project REE mineralisation occurs within the weathered mantle (regolith) of the Recherche Super-suite, which is described as “granitic and mafic gneiss; and may include intrusions of Esperance Super-suite”.

While the source of the REE mineralisation is currently unknown, a detailed sample and litho-geochemistry dataset from bottom of hole aircore samples has been established which includes whole-rock chemical analyses, sample pulps and some end-of-hole air core samples. These samples and data are being studied by the Company’s consultant geochemist to identify the primary rock-type and whether units are REE-enriched.

Insufficient work has been undertaken to date to categorise the Mount Ridley REE mineralisation. With respect to the Splinter Deposit (Salazar Gold Pty Ltd) located 75 kilometres northeast of the Mount Ridley Project, in her Honours thesis, Tiffany Collins noted:

“The regolith enrichment shows similarities to the ion-adsorption clays of China in its formation and dominantly granitic protolith, however lacks a significant adsorbed fraction and thus cannot be classed as such. It is better classified as a residual lateritic clay deposit, a type of REE deposit otherwise not recognised in Australia”⁸.

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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⁷ (DMIRS) Department of Mines, Industry Regulation and Safety 1:100,000 Interpreted Bedrock Geology

⁸ Collins, Tiffany, 2014



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 ionic clay REE deposits.

The Company also holds the Weld Range West Iron Project in the mid-west of Western Australia. Drilling is progressively testing targets for direct-shipping iron ore. Areas of the tenements are also prospective for gold.

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'.

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.



References

Collins, Tiffany. 2014. Understanding the geochemistry and mineralogy of regolith hosted REE mineralisation. (Thesis for a Bachelor of Science (honours) Faculty of Science, The University of Western Australia.

Guillaume Estrade, Eva Marquis, Martin Smith, Kathryn Goodenough, Peter Nason, REE concentration processes in ion adsorption deposits: Evidence from the Ambohimirahavavy alkaline complex in Madagascar, *Ore Geology Reviews*, Volume 112, 2019.

Ionic Rare Earths Announcement to ASX dated 3rd March 2021.

Mount Ridley Mines Limited Announcement to ASX dated 2nd August 2021.

Salazar Gold Pty Ltd, Esperance Project Exploration Licences E63/1415, E63/1469, E63/1496, E69/2783, E69/2784, E69/2944 and E69/3010. Combined Annual Technical Report for the period 6 May 2013 to 5 May 2014. Prepared by: KA Rogers Date: 5 July 2014.

Van Gosen, B.S., Verplanck, P.L., Seal, R.R., II, Long, K.R., and Gambogi, Joseph, 2017, Rare-earth elements, chap. O of Schulz, K.J., DeYoung, J.H., Jr., Seal, R.R., II, and Bradley, D.C., eds., *Critical mineral resources of the United States—Economic and environmental geology and prospects for future supply*: U.S. Geological Survey Professional Paper 1802, p. O1– O31, U.S. Geological Survey, Reston, Virginia: 2017.

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APPENDIX 1: Drill Hole Summary and Significant Assay Results

Table 3
Collar Locations for Re-Assayed Drill Holes

Hole ID	East (m)	North (m)	RL (m)	Depth (m)	Dip (o)	Azimuth (o)
MRAC0482	423,327	6,315,613	183.2	35	-90	0
MRAC0483	423,246	6,315,650	183.9	38	-90	0
MRAC0484	423,143	6,315,720	186.4	45	-90	0
MRAC0485	423,072	6,315,782	187.0	42	-90	0
MRAC0488	422,591	6,315,571	183.3	40	-90	0
MRAC0492	422,867	6,315,285	188.0	21	-90	0
MRAC0498	423,276	6,314,859	186.5	34	-90	0
MRAC0499	422,455	6,314,997	191.1	21	-90	0
MRAC0502	422,653	6,314,795	187.5	31	-90	0
MRAC0503	422,741	6,314,762	186.8	23	-90	0
MRAC0507	422,573	6,314,159	183.7	24	-90	0
MRAC0510	422,177	6,314,379	187.7	18	-90	0
MRAC0511	422,297	6,314,445	182.7	14	-90	0
MRAC0513	422,122	6,314,549	183.6	25	-90	0
MRAC0514	421,992	6,314,657	186.0	22	-90	0
MRAC0518	422,403	6,315,086	191.8	21	-90	0
MRAC0520	422,230	6,315,217	189.4	38	-90	0
MRAC0576	429,709	6,321,339	188.9	45	-90	0
MRAC0577	429,610	6,321,285	189.5	50	-90	0
MRAC0578	429,626	6,321,185	191.3	52	-90	0
MRAC0579	429,646	6,321,118	194.4	52	-90	0
MRAC0580	429,720	6,321,061	192.9	57	-90	0
MRAC0582	430,471	6,321,627	192.8	56	-90	0
MRAC0584	430,591	6,321,477	189.4	46	-90	0
MRAC0585	430,655	6,321,455	188.4	41	-90	0
MRAC0586	430,409	6,321,694	194.1	55	-90	0
MRAC0587	430,940	6,321,847	199.0	39	-90	0
MRAC0588	430,880	6,321,927	195.1	27	-90	0
MRAC0589	430,808	6,321,965	189.5	24	-90	0
MRAC0590	430,748	6,322,046	186.9	47	-90	0
MRAC0591	431,021	6,321,770	193.3	28	-90	0
MRAC0593	431,153	6,321,630	191.7	31	-90	0
MRAC0596	431,374	6,321,442	186.6	21	-90	0
MRAC0597	431,451	6,321,456	188.5	20	-90	0
MRAC0598	431,371	6,321,896	189.2	27	-90	0
MRAC0599	431,335	6,321,986	188.7	39	-90	0
MRAC0600	431,343	6,322,048	191.7	28	-90	0
MRAC0601	431,380	6,322,115	191.4	32	-90	0
MRAC0603A	431,218	6,322,280	192.1	37	-90	0
MRAC0635	432,582	6,324,057	192.5	23	-90	0
MRAC0636	432,523	6,324,129	189.2	23	-90	0
MRAC0637	432,447	6,324,196	192.0	24	-90	0
MRAC0638	433,266	6,324,887	189.4	41	-90	0
MRAC0639	433,327	6,324,805	188.2	36	-90	0
MRAC0641	433,384	6,324,657	192.8	33	-90	0
MRAC0642	433,455	6,324,593	192.6	34	-90	0

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Table 3
Collar Locations for Re-Assayed Drill Holes

Hole ID	East (m)	North (m)	RL (m)	Depth (m)	Dip (o)	Azimuth (o)
MRAC0643	433,509	6,324,517	191.5	45	-90	0
MRAC0644	433,585	6,324,437	189.6	48	-90	0
MRAC0646	433,706	6,324,285	194.1	29	-90	0
MRAC0647	433,798	6,324,217	192.1	33	-90	0
MRAC0648	433,862	6,324,140	189.9	48	-90	0
MRAC0651	433,354	6,323,934	190.1	31	-90	0
MRAC0653	433,227	6,324,088	190.3	39	-90	0
MRAC0654	433,155	6,324,178	190.3	33	-90	0
MRAC0656	433,019	6,324,350	191.7	38	-90	0
MRAC0657	432,950	6,324,388	193.2	47	-90	0
MRAC0658	432,882	6,324,465	197.2	58	-90	0

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Table 4
Anomalous Sample Analyses: TREO>300ppm

Hole ID	Sample	From	To	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TREO	HREO	LREO
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC0482	MR10993	20	24	17.8	84.5	178.0	17.4	52.4	7.3	1.8	4.9	0.8	4.3	0.8	2.2	0.3	2.3	0.4	451	51	400
MRAC0482	MR10996	32	34	158.5	115.0	242.0	34.3	153.5	34.5	14.5	34.8	5.3	31.4	6.3	17.0	2.4	14.7	2.3	1042	389	653
MRAC0483	MR12032	28	32	332.0	67.3	99.7	20.0	90.1	23.5	11.0	35.4	6.3	43.9	10.1	28.2	3.6	19.0	3.0	964	633	331
MRAC0483	MR12033	32	36	80.0	34.4	50.4	8.7	39.7	9.9	3.6	12.2	1.9	12.1	2.6	7.1	1.0	6.0	0.9	326	167	159
MRAC0484	MR12044	32	36	799.0	1035.0	579.0	326.0	1435.0	312.0	105.0	263.0	37.2	201.0	35.3	86.5	11.9	71.4	9.8	6314	2321	3993
MRAC0484	MR12045	36	40	61.6	67.2	50.6	17.6	72.6	15.4	5.1	13.7	2.1	12.1	2.4	6.7	1.0	6.0	0.9	400	153	247
MRAC0484	MR12047	44	45	86.3	95.9	144.5	26.9	112.0	24.8	8.4	22.3	3.3	19.2	3.7	9.8	1.4	8.3	1.2	681	228	453
MRAC0485	MR12048	0	4	63.4	52.9	113.5	15.2	62.1	13.2	4.7	13.6	2.1	12.4	2.5	6.8	1.0	6.3	1.0	446	154	292
MRAC0485	MR12058	36	40	82.7	29.9	60.0	9.4	40.6	9.8	3.0	10.2	1.6	10.9	2.4	6.9	0.9	5.7	0.9	333	165	168
MRAC0485	MR12059	40	41	177.0	39.5	73.4	10.6	49.2	12.6	4.5	19.1	3.1	21.1	5.0	14.7	2.1	11.6	1.9	541	335	207
MRAC0488	MR12094	36	39	115.5	72.3	94.4	12.1	51.0	9.7	5.3	14.4	2.0	12.3	2.8	7.7	0.9	5.2	0.8	492	217	275
MRAC0492	MR12120	12	16	14.3	74.6	78.8	14.0	47.4	7.7	3.0	5.4	0.8	4.2	0.8	2.2	0.3	2.5	0.4	306	49	256
MRAC0492	MR12121	16	20	49.8	40.6	109.0	14.8	66.5	16.0	6.3	14.3	2.1	12.7	2.4	6.7	1.0	6.5	1.0	420	143	277
MRAC0492	MR12122	20	21	181.0	99.5	283.0	41.3	197.0	48.8	19.5	47.7	7.1	41.2	7.7	19.5	2.7	17.0	2.5	1220	476	744
MRAC0498	MR12153	32	33	34.4	38.3	199.0	12.9	52.5	11.2	4.2	9.4	1.5	8.8	1.7	4.4	0.6	4.1	0.6	463	97	366
MRAC0499	MR12159	16	20	24.6	37.3	92.9	13.3	56.5	13.1	4.8	9.8	1.4	7.9	1.3	3.2	0.5	2.9	0.4	323	83	240
MRAC0502	MR12179	24	28	61.9	38.0	55.9	15.1	69.0	17.2	6.7	17.0	2.7	15.6	2.9	7.7	1.1	7.0	1.0	381	169	212
MRAC0502	MR12180	28	30	178.0	72.4	129.5	20.2	95.3	23.0	9.6	28.8	4.5	28.0	5.9	16.0	2.2	12.9	2.0	758	379	380
MRAC0503	MR12188	20	22	189.5	137.0	114.0	45.2	185.5	40.9	15.5	36.3	5.7	34.6	6.9	19.2	2.9	18.2	2.9	1023	451	572
MRAC0507	MR12227	20	23	94.3	122.5	112.0	29.7	120.0	24.4	11.4	22.6	3.3	18.8	3.7	9.7	1.4	8.6	1.3	698	241	457
MRAC0510	MR12252	12	16	55.7	82.7	169.0	27.4	113.0	23.6	9.0	17.6	2.6	14.3	2.6	6.7	0.9	5.6	0.8	637	167	469
MRAC0510	MR12253	16	17	84.8	42.0	71.9	11.2	48.4	11.1	4.7	13.0	2.1	14.0	3.0	8.4	1.2	7.5	1.2	391	184	208
MRAC0511	MR12258	12	13	41.7	75.2	168.0	20.2	78.8	16.3	5.0	13.8	2.0	11.2	2.0	5.2	0.7	4.2	0.6	534	123	411
MRAC0513	MR12274	24	25	295.0	111.0	146.0	29.9	143.0	35.6	14.3	46.6	7.2	46.3	9.9	27.6	3.6	21.2	3.2	1135	622	512
MRAC0514	MR12280	16	20	272.0	122.0	294.0	41.4	200.0	46.9	18.4	53.1	7.8	48.2	10.1	27.0	3.7	22.2	3.3	1410	622	788
MRAC0514	MR12281	20	21	160.0	53.2	120.0	17.2	81.8	19.7	7.8	24.3	3.7	24.1	5.4	15.3	2.1	12.5	2.0	663	337	326
MRAC0518	MR12306	16	20	1270.0	312.0	358.0	99.7	575.0	156.5	67.2	233.0	32.7	205.0	43.2	121.5	16.9	103.0	16.3	4355	2758	1597
MRAC0518	MR12307	20	21	872.0	92.2	163.5	33.4	192.0	59.8	28.7	109.0	18.0	126.0	29.8	87.8	12.6	80.5	13.2	2330	1757	573
MRAC0520	MR12324	36	37	111.5	158.5	268.0	28.9	116.0	20.4	6.1	20.3	2.9	17.3	3.6	9.7	1.3	7.2	1.1	930	245	685
MRAC0576	MR12756	44	45	86.2	58.8	131.5	16.1	70.5	15.3	5.3	15.7	2.4	14.6	3.1	8.7	1.2	7.8	1.3	528	196	332

Table 4
Anomalous Sample Analyses: TREO>300ppm

Hole ID	Sample	From	To	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TREO	HREO	LREO
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC0577	MR12769	40	44	93.4	41.5	94.3	12.8	61.6	14.2	5.7	17.2	2.6	17.4	3.8	10.6	1.5	9.7	1.5	467	216	252
MRAC0577	MR12770	44	48	86.1	28.7	63.2	8.3	38.2	9.1	3.4	11.2	1.8	12.1	2.8	8.5	1.3	8.3	1.4	344	178	166
MRAC0578	MR12785	48	51	93.2	65.8	163.5	20.6	91.3	21.6	7.8	21.2	3.2	19.6	4.0	11.3	1.6	10.5	1.5	645	236	409
MRAC0579	MR12798	44	48	29.3	40.5	95.3	11.1	42.9	8.9	3.9	7.3	1.1	6.7	1.3	3.7	0.5	3.7	0.6	309	81	228
MRAC0579	MR12799	48	51	53.5	69.4	165.5	19.4	79.8	17.2	9.9	14.8	2.2	13.0	2.5	6.4	0.9	5.9	0.9	554	153	401
MRAC0580	MR12812	44	48	41.0	43.3	103.5	12.6	51.3	10.2	4.7	9.7	1.4	8.6	1.7	4.7	0.7	4.4	0.7	359	106	253
MRAC0580	MR12813	48	52	49.4	43.8	93.0	11.7	51.8	11.7	5.8	12.4	1.8	10.6	2.1	5.6	0.8	5.1	0.8	368	128	240
MRAC0580	MR12814	52	56	129.0	34.9	72.7	9.5	43.7	11.3	5.1	16.2	2.6	18.0	4.2	12.3	1.7	10.3	1.6	452	259	193
MRAC0582	MR12842	44	48	35.7	35.4	119.0	10.2	42.8	9.9	3.5	8.8	1.4	8.2	1.6	4.2	0.6	4.0	0.6	344	95	250
MRAC0582	MR12843	48	52	158.5	134.5	191.0	37.9	165.5	36.0	12.8	35.8	5.1	30.6	5.9	15.1	2.0	11.4	1.6	1012	381	631
MRAC0582	MR12844	52	55	48.4	32.7	68.8	9.5	41.3	9.9	3.5	10.0	1.6	10.1	2.0	5.7	0.8	5.3	0.8	301	119	183
MRAC0584	MR12872	44	45	170.5	84.9	79.8	23.5	109.5	23.9	9.7	30.4	4.3	26.4	5.7	15.2	1.9	11.0	1.7	720	366	354
MRAC0585	MR12882	32	36	106.0	87.5	92.2	23.2	101.5	21.7	8.2	23.4	3.4	20.2	4.0	10.7	1.4	8.0	1.2	614	252	362
MRAC0585	MR12883	36	40	118.5	120.5	189.0	27.8	113.0	20.7	7.7	20.2	2.7	16.3	3.5	9.2	1.2	6.7	1.1	792	253	539
MRAC0585	MR12884	40	41	37.6	54.2	102.0	13.0	51.1	9.5	3.8	8.2	1.1	6.6	1.3	3.6	0.5	3.0	0.5	356	92	264
MRAC0586	MR12900	52	54	74.5	54.3	67.0	10.8	45.8	9.5	3.7	11.9	1.8	10.9	2.4	6.5	0.9	5.1	0.8	368	156	212
MRAC0587	MR12910	32	36	178.5	64.5	116.5	15.9	73.3	17.0	7.5	23.4	3.6	23.9	5.4	14.8	2.0	11.5	1.8	678	354	323
MRAC0587	MR12911	36	38	75.3	27.7	56.2	7.4	33.5	8.5	4.1	10.8	1.7	11.2	2.4	6.9	1.0	5.8	0.9	306	157	150
MRAC0588	MR12919	24	26	331.0	149.0	185.0	51.1	246.0	59.5	27.3	62.6	9.8	62.0	12.8	34.7	4.6	24.6	3.5	1518	767	751
MRAC0589	MR12927	20	23	107.5	122.0	124.5	29.4	122.5	26.6	10.0	27.2	4.1	23.7	4.6	12.4	1.7	10.7	1.6	752	278	474
MRAC0590	MR12935	24	28	773.0	128.5	59.4	37.9	182.5	52.2	20.6	85.2	13.6	92.1	21.6	62.3	8.1	44.5	7.1	1932	1450	482
MRAC0590	MR12936	28	32	537.0	128.5	56.9	27.4	132.5	35.9	14.1	62.0	9.7	64.5	15.3	43.3	5.7	32.2	5.3	1421	1013	408
MRAC0590	MR12937	32	36	102.5	30.1	35.3	7.8	36.5	9.5	3.5	14.5	2.4	15.9	3.6	10.0	1.3	7.6	1.2	340	210	131
MRAC0590	MR12940	44	46	59.7	30.4	74.3	9.9	44.8	10.8	3.1	12.0	1.9	11.7	2.4	6.5	0.9	5.6	0.9	331	140	191
MRAC0590	MR12941	46	47	69.7	31.0	74.2	10.1	47.2	11.4	3.3	13.0	2.1	13.1	2.7	7.5	1.1	6.4	1.0	354	159	195
MRAC0591	MR12948	20	24	234.0	131.5	157.0	42.1	190.5	42.7	19.8	44.2	6.9	42.6	8.8	24.1	3.4	19.7	3.1	1165	545	620
MRAC0591	MR12949	24	27	148.0	55.8	76.0	14.3	65.2	15.2	7.8	21.3	3.4	22.5	5.0	13.6	1.8	10.6	1.7	558	306	252
MRAC0593	MR12960	12	16	56.8	59.4	105.0	18.5	80.7	18.2	6.6	16.5	2.5	14.4	2.7	7.2	1.0	5.5	0.8	474	159	315
MRAC0593	MR12963	24	28	393.0	225.0	354.0	68.3	305.0	68.1	25.9	77.6	12.1	73.1	15.4	41.3	5.5	30.6	4.6	2044	907	1137
MRAC0593	MR12964	28	30	477.0	221.0	320.0	54.7	229.0	48.0	18.0	60.1	9.5	63.7	14.7	41.3	5.4	29.8	4.8	1931	945	985

Table 4
Anomalous Sample Analyses: TREO>300ppm

Hole ID	Sample	From	To	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TREO	HREO	LREO
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC0596	MR12979	12	16	89.0	97.7	113.0	20.8	85.3	16.8	5.1	18.0	2.6	14.9	3.1	8.2	1.1	6.0	0.9	579	201	378
MRAC0596	MR12980	16	20	146.0	213.0	396.0	48.5	195.5	32.0	8.7	27.2	3.6	21.2	4.5	12.0	1.6	8.8	1.4	1348	325	1023
MRAC0596	MR12981	20	21	59.6	122.5	257.0	30.4	119.5	20.2	5.1	14.9	1.7	8.9	1.8	4.5	0.5	3.2	0.5	782	146	635
MRAC0597	MR12987	16	19	87.5	72.9	126.5	16.9	73.2	15.0	4.7	16.9	2.5	15.1	3.2	8.4	1.2	6.8	1.0	544	197	347
MRAC0598	MR12994	20	24	65.1	47.3	62.8	13.1	58.2	12.5	5.6	13.5	2.1	14.0	2.9	8.3	1.2	7.7	1.2	378	162	216
MRAC0598	MR12995	24	26	170.5	108.5	206.0	28.6	125.0	26.4	11.6	30.2	4.5	26.9	5.8	15.8	2.1	12.2	1.9	935	375	561
MRAC0599	MR13006	36	38	121.5	46.8	72.1	12.5	60.0	14.5	7.0	19.6	3.1	19.1	4.1	11.0	1.5	8.9	1.4	487	258	229
MRAC0600	MR13014	24	27	102.0	79.0	126.0	30.8	133.0	29.9	12.4	26.3	4.1	24.4	4.8	12.5	1.7	10.4	1.6	717	277	440
MRAC0601	MR13023	28	31	87.3	63.2	146.5	16.6	65.3	12.4	4.7	15.2	2.3	13.7	2.9	7.9	1.1	6.1	1.0	538	188	350
MRAC0603A	MR13042	28	32	31.3	87.9	207.0	15.2	46.2	6.7	2.2	7.3	1.1	6.5	1.3	3.4	0.5	2.9	0.5	507	77	430
MRAC0603A	MR13043	32	36	112.0	82.0	125.5	21.7	92.1	20.2	7.6	23.2	3.5	21.1	4.3	11.4	1.6	9.4	1.5	646	262	384
MRAC0603A	MR13044	36	37	44.8	38.8	76.8	9.7	39.3	8.1	2.9	8.6	1.3	8.6	1.8	5.0	0.7	4.4	0.7	303	105	197
MRAC0635	MR13316	12	16	28.4	52.4	120.5	12.3	49.4	9.4	2.4	7.7	1.2	6.7	1.3	3.7	0.6	3.7	0.6	361	79	282
MRAC0635	MR13317	16	20	26.4	28.0	125.5	10.6	41.6	7.7	2.2	6.7	1.1	6.5	1.3	3.4	0.5	3.4	0.5	320	72	248
MRAC0636	MR13325	20	22	29.4	53.2	139.0	11.8	45.5	8.3	2.2	7.1	1.0	6.1	1.2	3.2	0.5	3.0	0.5	376	75	300
MRAC0637	MR13331	16	20	542.0	199.0	107.0	62.6	293.0	64.4	20.4	78.5	10.6	60.8	13.3	36.1	4.2	23.6	3.3	1833	1051	782
MRAC0637	MR13332	20	23	157.5	65.5	101.5	22.1	100.5	22.8	7.1	26.0	3.9	22.4	4.8	13.7	1.8	10.8	1.5	677	332	345
MRAC0638	MR13340	24	28	213.0	63.6	111.0	27.2	132.5	34.3	10.5	39.4	6.1	35.4	7.6	22.6	3.2	20.8	2.9	879	481	398
MRAC0638	MR13341	28	32	1110.0	343.0	839.0	108.0	483.0	108.0	35.1	142.5	21.4	132.5	31.5	98.7	13.0	82.4	12.1	4315	2188	2127
MRAC0638	MR13342	32	36	170.0	87.0	191.0	23.8	100.5	21.0	7.0	24.5	3.5	20.9	4.8	15.2	2.0	13.4	2.0	830	347	483
MRAC0638	MR13343	36	40	46.1	43.2	81.1	9.1	35.2	6.6	2.8	7.1	1.0	6.1	1.4	4.3	0.6	3.9	0.6	300	98	202
MRAC0639	MR13353	28	32	83.3	108.0	128.5	34.1	137.5	27.1	7.8	22.2	2.9	15.4	3.1	8.9	1.2	7.7	1.1	704	218	486
MRAC0641	MR13376	32	33	19.0	11.8	217.0	3.7	16.2	4.5	1.5	4.7	0.8	4.9	1.0	3.2	0.5	3.3	0.5	356	53	304
MRAC0642	MR13386	32	33	47.7	29.3	91.8	8.7	36.6	8.7	3.3	9.8	1.5	9.4	1.9	5.6	0.8	5.3	0.7	315	115	200
MRAC0643	MR13396	28	32	34.8	157.0	118.0	42.9	157.0	28.4	8.9	19.6	2.5	12.1	1.9	4.5	0.6	3.9	0.6	704	140	564
MRAC0643	MR13397	32	36	120.0	153.5	209.0	46.3	196.5	40.4	13.7	35.4	4.9	25.4	4.8	13.1	1.7	10.9	1.6	1049	327	722
MRAC0643	MR13398	36	40	117.5	93.0	150.5	30.0	130.5	30.4	10.7	29.2	4.2	23.4	4.5	12.5	1.6	10.8	1.5	780	297	482
MRAC0643	MR13399	40	44	124.5	58.7	85.8	17.1	76.4	18.3	7.3	21.4	3.2	18.5	4.0	11.5	1.5	9.9	1.5	554	270	284
MRAC0643	MR13400	44	45	76.1	38.0	62.6	10.5	45.3	10.8	4.4	12.8	1.9	11.2	2.4	6.8	0.9	6.0	0.9	350	163	187
MRAC0644	MR13407	24	28	57.3	41.4	64.0	12.3	51.2	10.0	3.5	9.6	1.4	8.1	1.8	5.3	0.7	4.7	0.7	327	126	202

Table 4
Anomalous Sample Analyses: TREO>300ppm

Hole ID	Sample	From	To	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TREO	HREO	LREO
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC0644	MR13408	28	32	92.4	55.1	92.1	16.1	70.0	14.1	5.5	14.5	2.1	12.7	2.8	8.5	1.1	7.6	1.1	477	198	279
MRAC0644	MR13409	32	36	167.5	73.6	138.0	22.6	100.5	21.7	9.0	23.6	3.4	21.7	5.0	15.5	2.2	15.0	2.3	750	350	400
MRAC0644	MR13410	36	40	84.6	51.4	97.1	14.5	63.3	13.9	6.3	15.4	2.2	13.5	3.0	9.4	1.3	9.2	1.4	465	194	271
MRAC0646	MR13425	16	20	21.8	14.2	179.0	5.1	19.0	4.7	2.2	4.3	0.9	5.2	1.1	3.6	0.6	4.6	0.7	324	60	265
MRAC0646	MR13426	20	24	118.5	25.9	136.5	7.9	33.6	8.5	4.6	11.0	1.9	12.8	3.2	10.6	1.5	9.6	1.4	472	225	247
MRAC0646	MR13427	24	28	293.0	107.5	87.3	33.7	146.0	35.0	20.7	43.6	6.8	42.1	9.4	29.0	3.8	25.2	3.6	1068	624	444
MRAC0646	MR13428	28	29	115.5	36.3	53.8	10.1	45.3	11.1	5.8	14.4	2.3	14.5	3.3	10.8	1.4	9.2	1.3	406	232	174
MRAC0647	MR13437	28	32	94.0	40.8	112.5	11.4	51.9	11.7	5.0	13.7	2.2	14.4	3.4	10.0	1.4	9.3	1.4	463	203	260
MRAC0647	MR13438	32	33	67.2	51.8	96.0	12.8	51.5	9.8	3.4	9.5	1.4	9.0	2.1	6.2	0.9	5.4	0.9	395	141	254
MRAC0648	MR13445	20	24	16.6	68.8	206.0	15.6	47.9	6.8	1.7	4.2	0.6	3.6	0.8	2.2	0.3	2.1	0.3	456	47	408
MRAC0648	MR13447	28	32	15.2	68.8	312.0	12.1	35.9	5.3	1.4	3.3	0.5	2.8	0.6	1.8	0.3	1.9	0.3	560	40	520
MRAC0651	MR13480	30	31	188.5	96.5	108.5	27.4	116.5	27.0	15.1	28.2	4.4	26.8	5.8	15.5	2.0	12.2	1.9	815	399	415
MRAC0653	MR13497	32	36	100.5	73.3	109.0	26.5	120.0	28.1	9.7	26.9	3.9	22.6	4.5	11.6	1.6	10.1	1.5	658	266	392
MRAC0653	MR13498	36	38	136.5	69.6	91.8	20.8	91.6	21.0	8.0	22.6	3.5	20.9	4.5	12.3	1.6	10.0	1.5	622	295	326
MRAC0654	MR13508	32	33	50.1	40.1	88.9	12.6	55.5	12.3	4.3	12.2	1.8	10.8	2.1	5.6	0.8	5.0	0.7	364	128	236
MRAC0656	MR13531	32	36	54.0	69.5	116.0	16.5	66.6	14.6	4.8	13.5	2.1	11.9	2.4	6.3	0.9	5.8	0.9	463	141	322
MRAC0656	MR13532	36	37	68.8	54.8	130.0	15.1	64.9	13.9	4.3	13.6	2.0	11.9	2.6	7.0	1.0	6.2	0.9	478	160	318
MRAC0657	MR13544	40	44	144.0	61.2	71.3	17.9	77.5	18.4	6.3	22.0	3.4	21.1	4.6	12.3	1.6	9.6	1.5	570	299	271
MRAC0657	MR13545	44	46	251.0	25.6	44.4	7.3	33.8	9.5	4.0	16.9	3.0	21.8	6.0	17.7	2.3	13.3	2.2	562	430	133
MRAC0658	MR13553	24	28	17.7	52.3	138.5	11.4	35.6	6.4	1.5	5.0	0.8	4.6	0.8	2.4	0.3	2.1	0.3	337	50	287
MRAC0658	MR13559	48	52	141.0	77.8	152.0	23.0	108.5	25.0	8.8	29.9	4.4	25.2	5.3	13.4	1.7	10.1	1.4	755	323	432

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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	<i>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.</i>	Mount Ridley Mines Limited (ASX: MRD) has re-assayed parts of 57 aircore holes (MRAC0482 – MRAC0658 (not consecutive)) drilled by the Company between 2016 and 2018. Samples from these holes were available for re-assay as the pulps were stored at ALS Laboratories, Perth, since the first assays were completed. In the respective years' Annual Technical Report, the Company notes that samples were generally 4m composites and a 1m end of hole sample.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Drill hole collar locations reported herein were picked-up using a Garmin handheld GPS with approximately +/-3m accuracy. No downhole surveying was undertaken
	<i>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.</i>	Aircore drilling to deliver 1m interval sample piles. Samples of between 1 metre and 4 compositing metres taken for analysis. The size of the sample submitted to the laboratory was 2-4kg in weight, which was dried, pulverized and packaged in a computer-coded packet. A sub-sample was analysed and the coded packed then stored. 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.
Drilling techniques	<i>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).</i>	Aircore. A type of reverse circulation drilling using slim rods and a blade bit.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Recovery was visually assessed, recorded on drill logs, and considered to be acceptable within industry standards.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Samples were visually checked for recovery, moisture, and contamination. A cyclone was used to deliver the sample into buckets.
	<i>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.</i>	Not evaluated

Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological logging appropriate for this style of drilling and the stage of the project.
	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.	Logging of the drill holes was cursory.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Original aircore samples were collected by a cyclone into a bucket and laid out in rows. 1m or up to 4m composite samples were 'speared' from the sample piles.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	Sampling technique is appropriate for the stage of the project.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	Not undertaken, as reported analyses are of previously prepared sample pulps.
	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.	While field QAQC procedures included the insertion of field duplicates and commercial standards at pre-specified intervals at the time of drilling, these were not available for the program of re-analysis.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample size meets the industry standard.
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 suits 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 derivation, etc.	None used
	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.	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 verified by an independent consultant.
	The use of twinned holes.	Not applicable.

	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All collected data stored in a commercially managed database.
	<i>Discuss any adjustment to assay data.</i>	Raw assays are stored in the commercially managed database
Location of data points	<i>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.</i>	Preliminary drill hole collar locations noted in Table 6 were surveyed using a hand-held GPS with +/- 3m accuracy.
	<i>Specification of the grid system used.</i>	GDA94-51
	<i>Quality and adequacy of topographic control.</i>	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 fit for purpose on a hole to hole basis.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Varies. Generally 400 x 100m. Occasional infills on 100 x 20m, and additional semi regional traverses.
	<i>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.</i>	Insufficient data collected for an Mineral Resource Estimate.
	<i>Whether sample compositing has been applied.</i>	1m intervals and 2-4m composites analysed.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Not determined yet. Likely unbiased as vertical holes are sampling a horizontal mineralized feature.
	<i>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.</i>	Unlikely to be biased.
Sample security	<i>The measures taken to ensure sample security.</i>	Samples were stored at the laboratory.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques are consistent with industry standards. A third party geochemical specialist is reviewing the data.

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 E63/1547, E63/1564 and E63/1617, located from 35km northwest of Esperance, Western Australia. Registered Holder is Mount Ridley Mines Limited (Company) (100%). The Project is subject to a Full Determination of Native Title: which is held by the Esperance Nyungars NNTT Number: WC2004/010, Federal Court Number : WAD28/2019						
	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 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 by Bishop who was the first to research and champion the potential of Grass Patch, 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, development of a geological map based on this information. 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. The samples reported herein were generated during the search for nickel sulphides. 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.	Ionic Adsorption Clay or Saprolite-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.	Assay results not reported. Conversions from elements to oxides: <table border="1" data-bbox="1094 1419 1656 1481"> <tr> <td>Ce_ppm</td> <td>1.2284</td> <td>CeO2_ppm</td> </tr> <tr> <td>Dy_ppm</td> <td>1.1477</td> <td>Dy2O3_ppm</td> </tr> </table>	Ce_ppm	1.2284	CeO2_ppm	Dy_ppm	1.1477	Dy2O3_ppm
Ce_ppm	1.2284	CeO2_ppm						
Dy_ppm	1.1477	Dy2O3_ppm						

	<p>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.</p>	<table border="1" data-bbox="1094 167 1661 586"> <tr><td>Er_ppm</td><td>1.1435</td><td>Er2O3_ppm</td></tr> <tr><td>Eu_ppm</td><td>1.1579</td><td>Eu2O3_ppm</td></tr> <tr><td>Gd_ppm</td><td>1.1526</td><td>Gd2O3_ppm</td></tr> <tr><td>Ho_ppm</td><td>1.1455</td><td>Ho2O3_ppm</td></tr> <tr><td>La_ppm</td><td>1.1728</td><td>La2O3_ppm</td></tr> <tr><td>Lu_ppm</td><td>1.1372</td><td>Lu2O3_ppm</td></tr> <tr><td>Nd_ppm</td><td>1.1664</td><td>Nd2O3_ppm</td></tr> <tr><td>Pr_ppm</td><td>1.2082</td><td>Pr6O11_ppm</td></tr> <tr><td>Sm_ppm</td><td>1.1596</td><td>Sm2O3_ppm</td></tr> <tr><td>Tb_ppm</td><td>1.1762</td><td>Tb4O7_ppm</td></tr> <tr><td>Tm_ppm</td><td>1.1421</td><td>Tm2O3_ppm</td></tr> <tr><td>Y_ppm</td><td>1.2695</td><td>Y2O3_ppm</td></tr> <tr><td>Yb_ppm</td><td>1.1387</td><td>Yb2O3_ppm</td></tr> </table> <p>Source: www.geol.umd.edu/~piccoli/probe/molweight.html</p> <p>TREO: the sum of Sm₂O₃, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, Yb₂O₃, Ce₂O₃, La₂O₃, Nd₂O₃, and Pr₂O₃. TREO-Ce: TREO- Ce₂O₃ HREO: the sum of Sm₂O₃, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, and Yb₂O₃. LREO: the sum of Ce₂O₃, La₂O₃, Nd₂O₃, and Pr₂O₃. CREO: the sum of Dy₂O₃, Eu₂O₃, Nd₂O₃, Tb₄O₇, and Y₂O₃.</p>	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
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<p>Relationship between mineralisation widths and intercept lengths</p>	<p>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').</p>	<p>The interdependence of mineralisation width and length has not been established. To date the targeted mineralisation seems to be a flat-lying sheet. The sheet margins have not been determined.</p>																																							
<p>Diagrams</p>	<p>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.</p>	<p>Refer to Figures 2 to 6 in the body of text.</p>																																							
<p>Balanced reporting</p>	<p>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>	<p>Assay results where TREO > 300ppm is reported in Table 7.</p>																																							
<p>Other substantive exploration data</p>	<p>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.</p>	<p>All new, meaningful, and material exploration data has been reported</p>																																							

Further work	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p>	<p>Analysis of additional samples is progressing and will be reported when received.</p>
	<p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>Drilling is then planned.</p>

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