MOUNT RIDLEY MINES

ASX ANNOUNCEMENT

Highest grades to date returned from Mt Ridley Rare Earth Project Mineralised footprint extended to more than 1,200km^2

6 October 2022

HIGHLIGHTS

- Regional drilling along traverses of up to 40km in length intersect multiple, wide zones of significant (>500ppm) total Rare Earth Element Oxide (TREO) mineralisation with apparent width of 15km in places.
- Key highlight intersections include:
  - **23m at 3,688ppm TREO from 6m in MRAC1053 at Tyrrell's Prospect;**
  - **15m at 2,120ppm TREO from 15m in MRAC1234 at the Mia Prospect;**
  - **47m at 1,521ppm TREO from 33m in MRAC0955 at the Butch Prospect; and**
  - **12m at 2,178ppm TREO from 45m in MRAC1325 at the Fabienne Prospect.**
- Mineralisation has been identified at nine (9) named prospects and remains open in all directions within a 20km radius of the Project centre – a mineralisation footprint area of approximately 1,200km^2.
- On a weighted average basis by sample interval, the average assayed grade is 1,036ppm TREO and comprises 26% Magnet REO (see page 9 for details).
- A 50,000m aircore programme of step-out and infill holes and 1,000m of diamond core for metallurgical testing to commence in the December quarter.
- Results from preliminary metallurgical testwork at ANSTO are imminent.
- Funding of over $6.0 million after underwritten option exercise in November 2022.

Mount Ridley's Chairman Mr. Peter Christie commented:

"With over 90% of assays now received, the regional drilling programme has been an outstanding success in demonstrating widespread clay hosted REE mineralisation throughout the entire Project area.

"We are very encouraged by these results with new targets discovered, higher grade and thicker intersections, and significant mineralisation occurring at shallower depths.

"These results have given the Company confidence to commit to a substantial drilling and metallurgical programme, with more than 50,000m of drilling commencing later this month designed to take this outstanding REE project to the next level."

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Overview

Mount Ridley Mines Limited (ASX: **MRD**, "**Mt Ridley**" or "**the Company**") is pleased to provide a drilling update following the receipt of further assay results from its 2022 drilling programme which specifically targeted clay-hosted rare earth element (**REE**) mineralisation.

The 100% owned Mount Ridley Rare Earth Element Project is located approximately 50km north of the Port of Esperance Western Australia, with an area covering approximately 3,400km^2 (Figure 1).

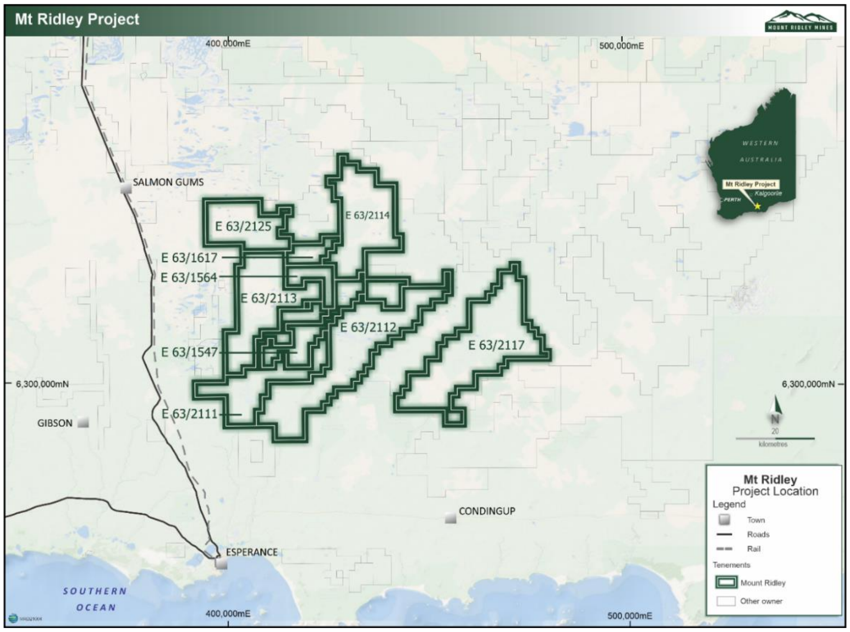

Figure 1: The Mount Ridley REE Project comprises 9 granted exploration licences in south-west Western Australia with an area of approximately 3,400km^2.

Photograph 1: Aircore drilling at the Mount Ridley Project.

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AIRCORE DRILLING INTERSECTS EXTENSIVE REE MINERALISATION WITHIN AN AREA OF AT LEAST 1,200KM^2

Results reported herein are for 223 drill holes[1], and 3,820 samples (excluding quality control samples) now assayed. Collar locations are in Table 4 below and shown in Figure 6.

New prospects, namely Mia, Butch and Fabienne (in addition to the recently announced Vincent and Jules Prospects), have been identified (Figures 2 and 3), with very broad, thick intervals of REE[2] mineralisation grading above 500ppm TREO[3] and 10,000m TREO[4] returned at each (Table 1 and Figures 4 and 5).

Significant drilling intersections include:

- **Tyrrell's - Marcellus**
  - **MRAC1053: 23*[5]m at 3,688ppm TREO from 6m including 959ppm MagREO**
  - **MRCA1068: 11*m at 1,115ppm TREO from 24m including 212ppm MagREO**
- **Mia**
  - MRAC1233: 18m at 1,046ppm TREO from 19m including 341ppm MagREO
  - **MRAC1234: 15*m at 2,120ppm TREO from 15m including 388ppm MagREO**
  - MRAC1235: 24m at 982ppm TREO from 24m including 269ppm MagREO
  - MRAC1236: 15*m at 950ppm TREO from 21m including 248ppm MagREO
- **Keith's - Vincent**
  - MRAC0957: 9*m at 1,154ppm TREO from 42m including 376ppm MagREO
  - **MRAC1101: 12*m at 1,433ppm TREO from 39m including 451ppm MagREO**
  - **MRAC1026: 9*m at 2,447ppm TREO from 54m including 913ppm MagREO**
- **Butch**
  - MRAC0954: 16m at 1,282ppm TREO from 42m including 324ppm MagREO
  - MRAC0955: 47m at 1,521ppm TREO from 33m including 369ppm MagREO
  - MRAC0956: 20*m at 1,948ppm TREO from 42m including 362ppm MagREO
  - **MRAC1012: 16*m at 1,935ppm TREO from 39m including 417ppm MagREO**
  - **MRAC1017: 6*m at 2,690ppm TREO from 36m including 835ppm MagREO**
- **Fabienne**
  - MRAC1259: 12m at 976ppm TREO from 30m including 316ppm MagREO
  - **MRAC1263: 12m at 1,634ppm TREO from 45m including 486ppm MagREO**
  - MRAC1311: 9m at 1,122ppm TREO from 75m including 246ppm MagREO
  - **MRAC1325: 12m at 2,178ppm TREO from 45m including 608ppm MagREO**
  - **MRAC1326: 13*m at 1,561ppm TREO from 63m including 409ppm MagREO**
  - MRAC1327: 15m at 1,157ppm TREO from 60m including 306ppm MagREO

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1 MRAC0950 to MRAC0977, MRAC1011 to MRAC1017, MRAC 1023 to MRAC 1069, MRAC10961 to MRAC1114, MRAC1230 to MRAC1326, MRAC1336 to MRAC1355.
2 REE: 14 rare earth elements plus yttrium 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). Yttrium (Y) is usually included with REE. TREO means the sum of the 14 REE+Y, each converted to its respective element oxide equivalent using the formulae in Table 3.
3 TREO means the sum of the 14 REE+Y, each converted to its respective element oxide equivalent using the formulae in Table 3 (See references).
4 m.TREO means metres of intersection width (m) multiplied by TREO.
5 * indicates mineralisation extended to the end of the drill hole.

The latest drill results have:

- Extended the overall central REE Corridor (Figures 2 and 3), which includes Winston's, Keith's, Jules' and Vincent's, with mineralisation intersections forming a zone that is approximately 30km by 11km - reinforcing the Company's view that REE mineralisation is extensively distributed within the Project.
- Identified new regional mineralisation targets at the Fabienne, Butch and Mia Prospects, located southwest and northeast of previously known mineralisation; and
- Confirmed targets at Marcellus and Tyrrell's. **MRAC1053: 23m at 3,688 ppm TREO from 6m at Tyrrell's is the best drilling intersection from the Mount Ridley region to date**.

All drilling has been along existing bush tracks, and within vacant crown land. The Company has adopted a policy to avoid the adjoining cultivated farmland.

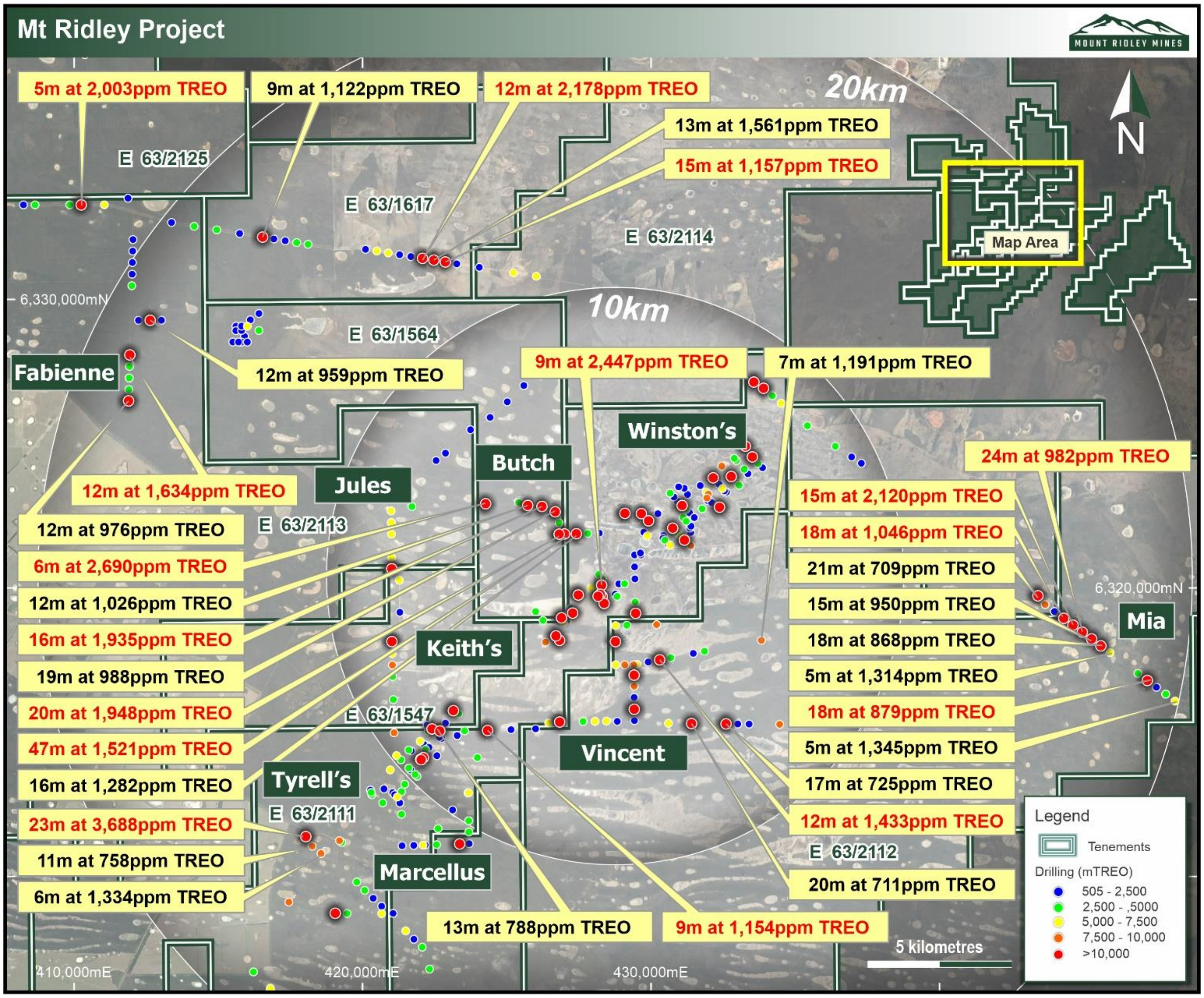


Figure 2: Significant drilling intersections from the latest results (intersections calculated using 500ppm TREO as the lower cut-off), with collar locations coloured by m.TREO and showing Prospect locations. The field of view is approximately 40km by 35km.

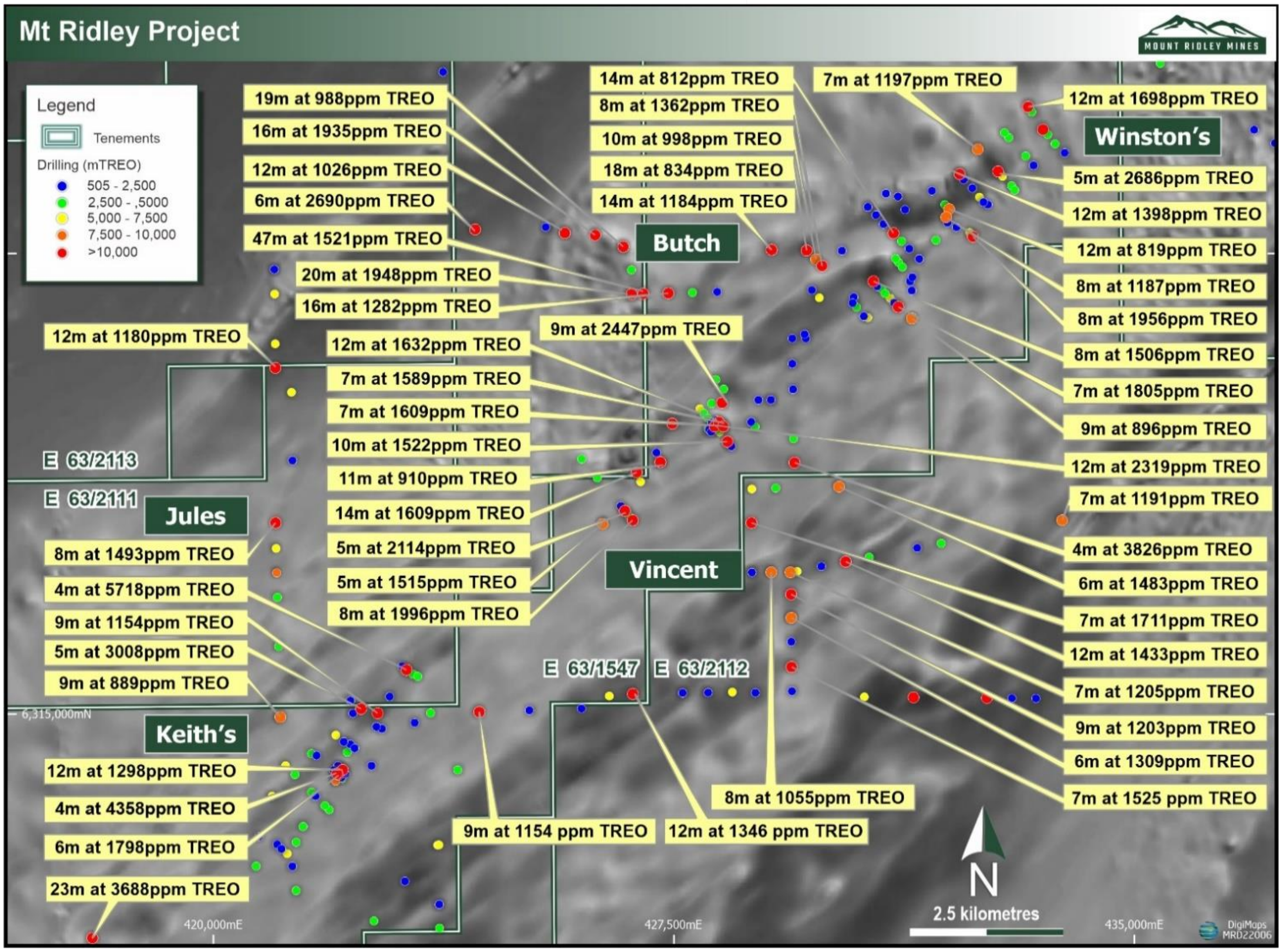


Figure 3: Significant REE mineralisation intersections from all drilling completed to date for the central REE Corridor. This is an area of approximately 30km by 11km which includes the Winston's, Keith's, Jules', and Vincent's Prospects. Tyrrell's and Marcellus Prospects adjoin to the southwest. Intersections are calculated using 500ppm TREO as the lower cut-off. Collar positions are coloured by m.TREO. The field of view is approximately 20km by 14km.

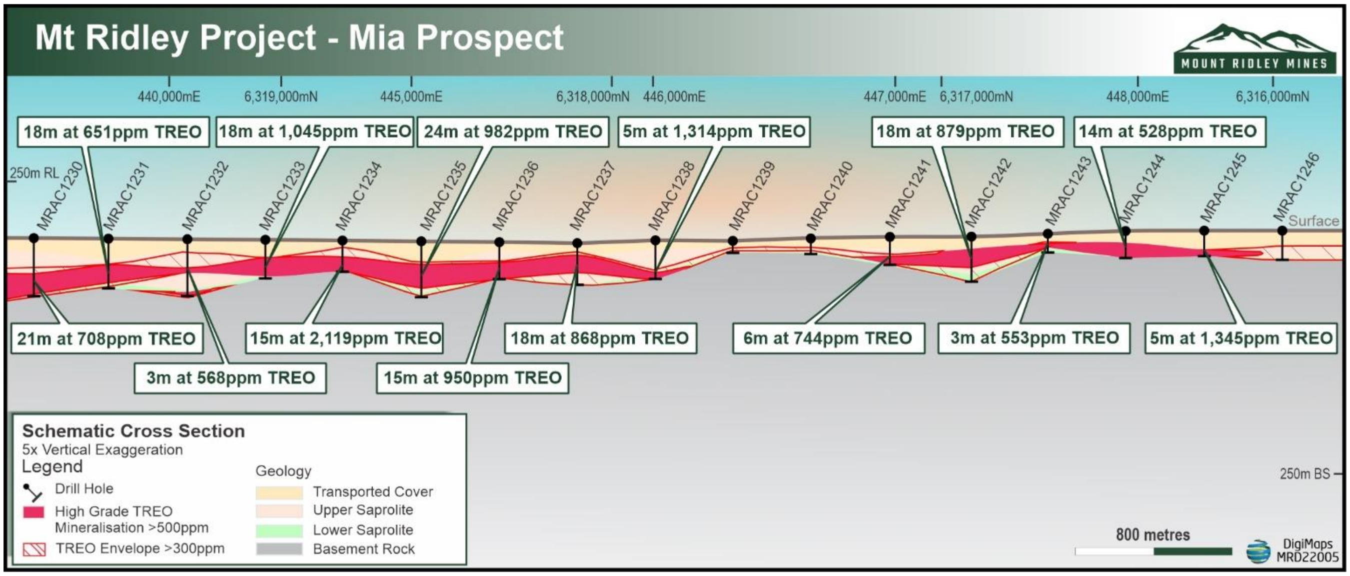


Figure 4: Cross section through the new Mia Prospect. Note drill holes are spaced 400m apart. The section is 6.4km wide.

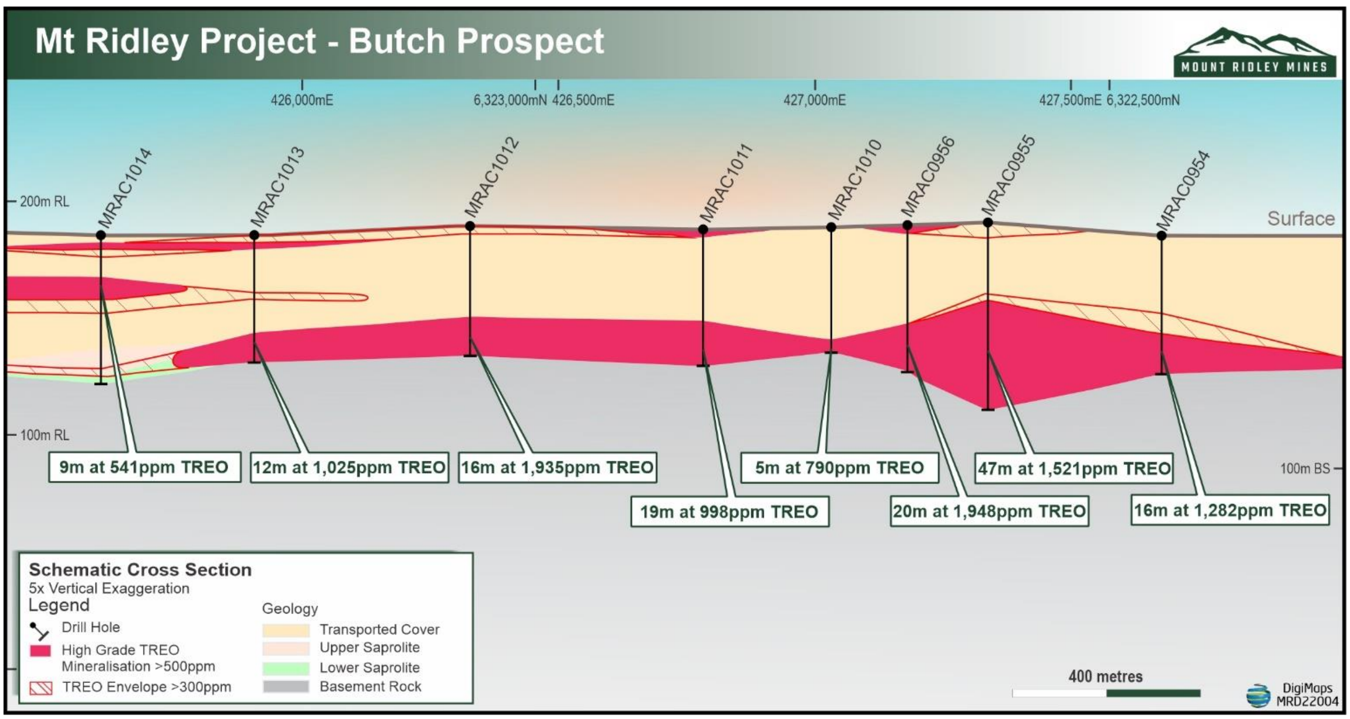


Figure 5: Cross section through the new Butch Prospect. The section is 2.3km wide.

Table 1: Selected Rare Earth Oxide Intersections (>500PPM TREO) and Group Distribution										
Hole_ID	**From**	**To**	**Interval**	**TREO**	**HREO**	**H/TREO**	**MagREO**	**M/TREO**	**CREO**	**LREO**
	(m)	**(m)**	**(m)**	**(ppm)**	**(ppm)**	**(%)**	**(ppm)**	**(%)**	**(ppm)**	**(ppm)**
MRAC0957	42	51	9*	1154	544	47%	376	33%	634	610
MRAC0961	27	40	13*	788	371	47%	183	23%	373	417
MRAC0965	15	24	9	889	349	39%	213	24%	374	540
MRAC1026	**54**	**63**	**9***	**2447**	**927**	**38%**	**913**	**37%**	**1255**	**1520**
MRAC1041	51	56	5*	1189	793	67%	263	22%	739	396
MRAC1051	15	21	6	1334	758	57%	320	24%	751	576
MRAC1052	16	27	11	758	296	39%	193	25%	334	463
MRAC1053	**6**	**29**	**23***	**3688**	**1313**	**36%**	**959**	**26%**	**1638**	**2375**
MRAC1068	**24**	**35**	**11***	**1115**	**673**	**60%**	**212**	**19%**	**648**	**442**
MRAC1092	60	67	7*	1191	586	49%	330	28%	644	605
MRAC1101	**39**	**51**	**12***	**1433**	**785**	**55%**	**451**	**31%**	**822**	**648**
MRAC1114	48	53	5*	1222	559	46%	392	32%	630	663
MRAC1233	19	37	18	1046	229	22%	341	33%	382	817
MRAC1234	**15**	**30**	**15***	**2120**	**249**	**12%**	**338**	**16%**	**391**	**1871**
MRAC1235	24	48	24	982	245	25%	269	27%	350	737
MRAC1236	21	36	15*	950	213	22%	248	26%	304	738
MRAC1237	12	30	18	868	219	25%	200	23%	282	649
MRAC1242	12	30	18	879	285	32%	302	34%	391	595
MRAC1259	30	42	12	976	258	26%	316	32%	387	718
MRAC1263	**45**	**57**	**12**	**1634**	**766**	**47%**	**486**	**30%**	**864**	**868**
MRAC1295	84	89	5*	2003	461	23%	509	25%	654	1542
MRAC1311	75	84	9	1122	361	32%	246	22%	416	760
MRAC1325	**45**	**57**	**12**	**2178**	**414**	**19%**	**608**	**28%**	**652**	**1763**
MRAC1326	**63**	**76**	**13***	**1561**	**351**	**22%**	**409**	**26%**	**515**	**1210**
MRAC1327	60	75	15	1157	513	44%	306	26%	577	643
MRAC1354	57	69	12	959	353	37%	304	32%	447	606

Butch

MRAC0954	42	58	16	1282	118	9%	324	25%	305	1164
MRAC0955	33	80	47	1521	115	8%	369	24%	336	1406
MRAC0956	42	62	20*	1948	99	5%	362	19%	317	1849
MRAC1011	39	58	19*	988	134	14%	243	25%	259	854
MRAC1012	**39**	**55**	**16***	**1935**	**124**	**6%**	**417**	**22%**	**371**	**1811**
MRAC1013	42	54	12*	1026	37	4%	110	11%	98	989
MRAC1017	**36**	**42**	**6***	**2690**	**1279**	**48%**	**835**	**31%**	**1435**	**1411**

The Butch Prospect provided samples with similar grades of heavy and magnet REE, however contains a much higher proportion of light REE when compared to other areas. This may indicate a change in clay-REE provenance.

* indicates mineralisation extended to the end of the drill hole.

DISTRIBUTION OF RARE EARTH ELEMENTS

To date, 869 assays (excluding samples from the Butch Prospect) of 1m samples or composite samples of between 2m and 4m have been analysed and returned an assay of 500ppm TREO[6] or above.

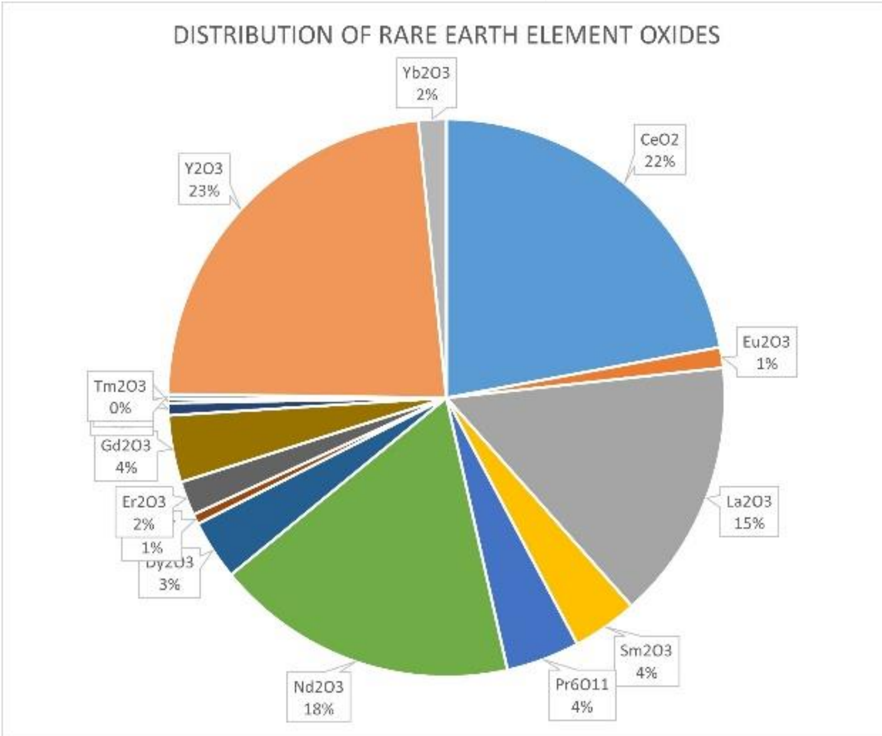
On a weighted average basis by sample interval, the average assayed grade is 1,036ppm TREO and comprises 64% Light REO (LREO[7],) and 36% Heavy REO (HREO[8]).

An important subset of the elements and a likely economic driver for the project, is the Magnet REO (a combination of certain light and heavy rare earth elements) which sits at a global average of 26% Magnet REO (MagREO[9]).

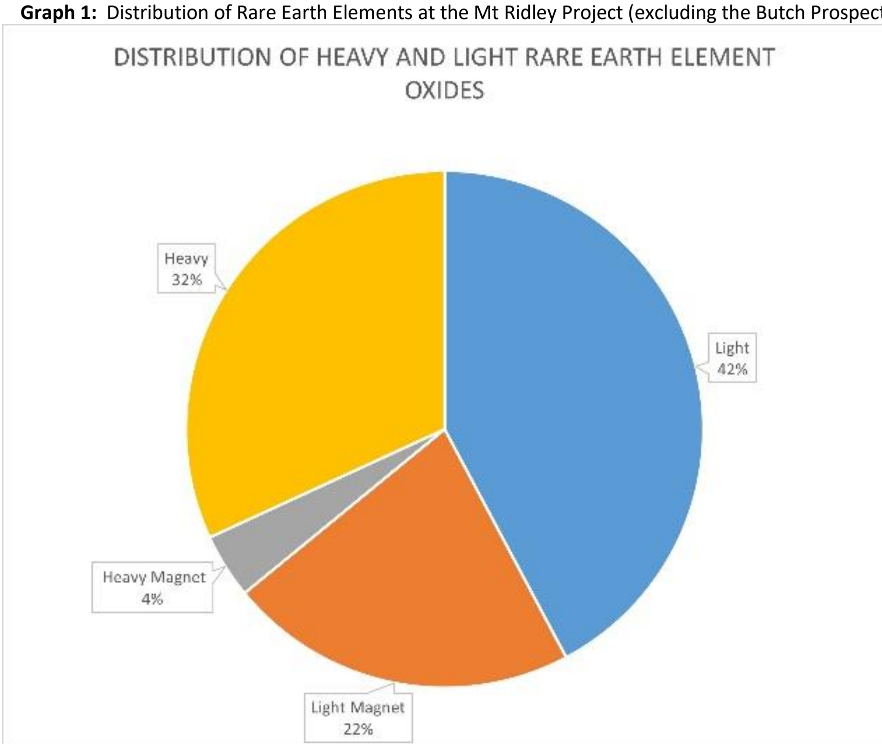
Table 2
Distribution of Rare Earth Element Oxides at the Mount Ridley Project

Light	Light	Light	Light	Light Magnet	Light Magnet			
CeO_2 (ppm)	Eu_2O_3 (ppm)	La_2O_3 (ppm)	Sm_2O_3 (ppm)	Pr_6O_{11} (ppm)	Nd_2O_3 (ppm)			
228.9	12.3	156.9	39.4	44.2	182.3			
22.1%	1.2%	15.1%	3.8%	4.3%	17.6%			
Heavy Magnet	**Heavy Magnet**	**Heavy**	**Heavy**	**Heavy**	**Heavy**	**Heavy**	**Heavy**	**Heavy**
Dy_2O_3 (ppm)	Tb_4O_7 (ppm)	Er_2O_3 (ppm)	Gd_2O_3 (ppm)	Ho_2O_3 (ppm)	Lu_2O_3 (ppm)	Tm_2O_3 (ppm)	Y_2O_3 (ppm)	Yb_2O_3 (ppm)
36.0	6.1	20.6	40.2	7.3	2.5	2.8	240.2	16.7
3.5%	0.6%	2.0%	3.9%	0.7%	0.2%	0.3%	23.2%	1.6%
TREO (ppm)		**Light REO**	**Heavy REO**		**Magnet REO**			
1036.3		64%	36%		26%			

6 TREO means the sum of the 14 REE+Y, each converted to its respective element oxide equivalent using the formulae in Table 4 (See references).
7 Light REO or LREO means Light Rare Earth Oxides; the sum of La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3.
8 Heavy REO or HREO means Heavy Rare Earth Oxides; the sum of Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
9 MagREO means magnet rare earth oxides; the sum of Dy_2O_3, Nd_2O_3, Pr_6O_{11} and Tb_4O_7



Graph 1: Distribution of Rare Earth Elements at the Mt Ridley Project (excluding the Butch Prospect).



Graph 2: Distribution of Heavy, Light and Magnet Rare Earth Elements at the Mt Ridley Project (excluding the Butch Prospect).

OUTLOOK FOR THE MOUNT RIDLEY REE PROJECT

Drilling is scheduled to restart during October 2022.

Stage 4 – Diamond Drilling: Approximately 1,000m of diamond drilling is planned with 20 holes to twin aircore holes that returned strong REE mineralisation. The holes will be completed throughout the Project, including at the Tyrrell's, Keith's, Jules', Vincent, Winston's, Butch, and Mia Prospects.

Samples will be used primarily for metallurgical test work.

Aircore drilling will resume thereafter.

- **Stage 2 – Regional Drilling (continued)**: Very encouraging results were returned from many of the drill holes analysed to date. Ongoing work will continue along existing cleared, dry tracks avoiding cultivated land.
- **Stage 3 – Primary Target Expansion:** Programmes of Work ("POW") approvals received providing for up to 50,000m of aircore drilling, which will be completed initially on a 400m by 400m grid pattern at the Keith's, Marcellus', Winston's, Jules' and Vincent's Prospects.

Additional POW's for drilling at the Mia, Winston's North and Fabienne Prospects are currently being assessed.

Environment and Heritage Protection

The Company has in place an Aboriginal Heritage Management Plan, developed with the Esperance Tjaltjraak Native Title Aboriginal Corporation ("RNTBC").

In addition, the Company has implemented a best practice Exploration Environment Management Plan, developed in conjunction with Government environmental bodies, to record the Company's obligations and procedures when operating at the Mount Ridley Project.

Ore Genesis Petrography and Metallurgy Commences

409 bottom-of-hole samples, which are predominantly reasonably fresh samples of the Proterozoic-aged geological basement, have been submitted to Portable Spectral Services to be scanned using a Bruker M4 Tornado microXRF. 344 samples have previously been scanned.

This technology is used to confirm the lithology of basement rocks, and REE-containing minerals (and other mineralisation indicators) may be identified.

17 composite samples from 8 drill holes distributed throughout the Project have been submitted to ANSTO for sighter REE extraction work. Composites were made up from upper and lower zones of mineralisation from a variety of depths throughout the Project. Results are expected during Q4 2022.

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[10].

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

- Samples from over 3,500m of Company drilling from 2017-2018 were analysed for REE using a 'total digest' fusion technique ("Fusion"), designed to report the total amount of REE in each sample.
- A second analysis of higher grade REE samples was completed using a 'partial digest' weak aqua regia digestion technique ("AR[11]") which would take into solution the most soluble REE. This test indicated that at a grade of approximately 800ppm TREO, 80% of light REO 76% of heavy HREO and 80% of CREO were taken into solution under the conditions trialled.
- Since March 2022[12], the Company has drilled 409 holes for 18,927m along clear tracks. 8,497 samples were taken and results for 7,951 samples (including quality control samples) from 341[13] holes have been received. The remaining samples are at various stages of analytical processing.
- 880 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.
- 344 samples of near fresh rock stubs from the bottom of aircore holes drilled in 2014 were scanned using a Bruker M4 Tornado micro-XRF analyser. An additional 409 samples from recently completed drillholes have also been submitted. Results are a component of a Research and Development project.

10 Mount Ridley Mines Limited announcements to ASX 1 July 2021,2 August 2021, 13 September 2021
11 AR means Weak aqua regia acid, a mix of 1 molar hydrochloric acid (HCl) and 1 molar nitric acid ($HNO3$).
12 Mount Ridley Mines Limited announcement to ASX Drilling Underway at the Mt Ridley Rare Earth Deposit 16 March 2022
13 MRAC0862 to MRAC0901, MRAC0914 to MRAC1017, MRAC1023 to MRAC1069, MRAC1091 to MRAC1114, MRAC1200 to MRAC1208, MRAC1230 to MRAC1326, MRAC1336 to MRAC1355.

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Project Geology

Archaean to Meso-Proterozoic Basement

- Geological Survey of Western Australia mapping[14] shows that basement rocks are interpreted to be Archaean to Meso-Proterozoic-aged gneisses and granites, in parts intermixed with mafic and ultramafic rocks.
- Basement rocks protrude through younger sediments, forming northeast trending ridges and inselbergs. Basement ridges likely control the size and shape of the overlying Eocene-aged basins.
- Certain ultramafic rocks remain prospective for nickel mineralisation.

Eocene

- Eocene-aged sediments fill the onshore Bremmer Basin, infilling depressions in the Meso-Proterozoic-aged basement.
- The Eocene sediments comprise siltstone, sandstone, spongolite, limestone and lignite. Early indications suggest that unconsolidated kaolin- or montmorillonite- rich clays host the Mt Ridley rare earth mineralisation.

Recent

- The current land surface is dominated by deposits of sand and gypsum dunes around numerous ephemeral lakes.

Better intersections of REE mineralisation occur within weathered Proterozoic rocks and to a lesser extent overlying Eocene basin sediments. While the origin of the REE mineralisation hasn't been determined, Proterozoic-aged granitic rocks with elevated REE have been identified in and around the Mount Ridley Project.

The Company acknowledges the Esperance Nyungar People, custodians of the Project area.

This announcement has been authorised for release by the Company's board of directors.

For further information, please contact:

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14 (DMIRS) Department of Mines, Industry Regulation and Safety 1:250,000 Interpreted Bedrock Geology (2020)

ABOUT MOUNT RIDLEY MINES LIMITED

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

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

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

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."*

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.

References

"REO" means the rare earth element converted to its element oxide equivalent using the factors provided at Element-to-stoichiometric oxide conversion factors - JCU Australia. TREO means the sum of the 14 REO+ Y_2O_3.

Table 3: Conversions from elements to oxides		
Ce_ppm	1.2284	CeO_2_ppm
Dy_ppm	1.1477	Dy_2O_3_ppm
Er_ppm	1.1435	Er_2O_3_ppm
Eu_ppm	1.1579	Eu_2O_3_ppm
Gd_ppm	1.1526	Gd_2O_3_ppm
Ho_ppm	1.1455	Ho_2O_3_ppm
La_ppm	1.1728	La_2O_3_ppm
Lu_ppm	1.1372	Lu_2O_3_ppm
Nd_ppm	1.1664	Nd_2O_3_ppm
Pr_ppm	1.2082	Pr_6O_{11}_ppm
Sm_ppm	1.1596	Sm_2O_3_ppm
Tb_ppm	1.1762	Tb_4O_7_ppm
Tm_ppm	1.1421	Tm_2O_3_ppm
Y_ppm	1.2695	Y_2O_3_ppm
Yb_ppm	1.1387	Yb_2O_3_ppm

J. D. A. Clarke (1994) Evolution of the Lefroy and Cowan palaeodrainage channels, Western Australia, Australian Journal of Earth Sciences: An International Geoscience Journal of the Geological Society of Australia, 41:1, 55-68

Appendix 1

A. Drill Hole Collar Locations for Reported Holes.

Table 4: Drill Hole Collar Locations					
Hole ID	Type	East (m)	North (m)	RL (m)	Depth (m)
MRAC0950	AC	429017	6321894	184	57
MRAC0951	AC	428605	6321884	186	65
MRAC0952	AC	428201	6321874	185	60
MRAC0953	AC	427801	6321863	185	57
MRAC0954	AC	427407	6321853	185	59
MRAC0955	AC	426997	6321844	190	81
MRAC0956	AC	426810	6321837	189	62
MRAC0957	AC	424328	6315033	180	51
MRAC0958	AC	423953	6315023	182	43
MRAC0959	AC	423535	6315020	182	48
MRAC0960	AC	423132	6315016	183	30
MRAC0961	AC	422673	6315014	183	40
MRAC0962	AC	422269	6315012	185	39
MRAC0963	AC	421873	6315009	186	35
MRAC0964	AC	421473	6315005	185	34
MRAC0965	AC	421088	6314953	187	25
MRAC0966	AC	421136	6314556	188	39
MRAC0967	AC	421166	6314154	184	27
MRAC0968	AC	421191	6313696	185	9
MRAC0969	AC	421219	6313300	177	4
MRAC0970	AC	421345	6312914	175	33
MRAC0971	AC	421285	6312523	176	28
MRAC0972	AC	421345	6312126	175	25
MRAC0973	AC	421353	6311730	175	40
MRAC0974	AC	421385	6311329	173	39
MRAC0975	AC	421367	6311037	173	41
MRAC0976	AC	421769	6311050	174	58
MRAC0977	AC	422167	6311064	174	55
MRAC1011	AC	426673	6322611	188	58
MRAC1012	AC	426215	6322800	189	55
MRAC1013	AC	425721	6322834	185	54
MRAC1014	AC	425410	6322930	185	63
MRAC1015	AC	424979	6322918	188	60
MRAC1016	AC	424579	6322903	193	62
MRAC1017	AC	424260	6322892	191	42
MRAC1023	AC	421708	6322793	191	57
MRAC1024	AC	421380	6322782	192	74
MRAC1025	AC	428111	6320057	181	59
MRAC1026	AC	428282	6320068	184	63
MRAC1027	AC	428490	6320079	184	63
MRAC1028	AC	428682	6320100	183	49
MRAC1029	AC	428875	6320115	184	43
MRAC1030	AC	429078	6320118	185	52
MRAC1031	AC	429288	6320129	183	51
MRAC1032	AC	421061	6316103	180	24
MRAC1033	AC	423434	6305622	180	30
MRAC1034	AC	423130	6305883	177	38
MRAC1035	AC	422868	6306183	177	15
MRAC1036	AC	422585	6306465	175	34
MRAC1037	AC	422318	6306762	175	43
MRAC1038	AC	422194	6307145	175	42
MRAC1039	AC	422062	6307523	176	34
MRAC1040	AC	421772	6307797	178	58
MRAC1041	AC	421490	6308086	178	56
MRAC1042	AC	421212	6308371	176	48
MRAC1043	AC	420933	6308661	176	58
MRAC1044	AC	420656	6308941	178	44

Table 4: Drill Hole Collar Locations					
Hole ID	Type	East (m)	North (m)	RL (m)	Depth (m)
MRAC1045	AC	420364	6309217	180	42
MRAC1046	AC	420067	6309490	179	52
MRAC1047	AC	419794	6309780	174	27
MRAC1048	AC	419523	6310069	173	18
MRAC1049	AC	419233	6310355	173	19
MRAC1050	AC	418925	6310603	175	10
MRAC1051	AC	418554	6310767	175	23
MRAC1052	AC	418247	6311020	175	29
MRAC1053	AC	418027	6311354	175	29
MRAC1054	AC	417729	6311626	179	14
MRAC1055	AC	417510	6311816	182	14
MRAC1056	AC	414742	6300813	168	34
MRAC1057	AC	414354	6300910	165	25
MRAC1058	AC	413950	6300907	165	18
MRAC1059	AC	413556	6300900	164	10
MRAC1060	AC	413152	6300884	163	18
MRAC1061	AC	412753	6300896	163	22
MRAC1062	AC	412722	6300724	160	22
MRAC1063	AC	412764	6300323	161	19
MRAC1064	AC	412604	6299954	161	17
MRAC1065	AC	412351	6300027	163	19
MRAC1066	AC	412005	6300212	161	18
MRAC1067	AC	411620	6300352	160	34
MRAC1068	AC	411240	6300452	160	35
MRAC1069	AC	410851	6300563	162	30
MRAC1091	AC	434258	6318239	180	29
MRAC1092	AC	433821	6318158	182	67
MRAC1093	AC	433430	6318084	181	77
MRAC1094	AC	433038	6318008	181	73
MRAC1095	AC	432645	6317934	180	61
MRAC1096	AC	432202	6317848	180	54
MRAC1097	AC	431851	6317781	180	54
MRAC1098	AC	431459	6317705	181	85
MRAC1099	AC	431075	6317631	181	38
MRAC1100	AC	430679	6317555	181	31
MRAC1101	AC	430296	6317481	181	51
MRAC1102	AC	429899	6317406	179	46
MRAC1103	AC	429505	6317324	178	43
MRAC1104	AC	434455	6315246	181	58
MRAC1105	AC	434206	6315245	181	43
MRAC1106	AC	433803	6315250	180	59
MRAC1107	AC	433394	6315255	180	69
MRAC1108	AC	433002	6315258	180	57
MRAC1109	AC	432595	6315262	182	56
MRAC1110	AC	432199	6315265	181	67
MRAC1111	AC	431805	6315269	180	31
MRAC1112	AC	431401	6315273	180	47
MRAC1113	AC	431010	6315279	179	42
MRAC1114	AC	430599	6315281	178	53
MRAC1230	AC	443408	6319701	190	58
MRAC1231	AC	443658	6319399	190	50
MRAC1232	AC	443983	6319157	189	58
MRAC1233	AC	444304	6318920	189	38
MRAC1234	AC	444623	6318683	188	30
MRAC1235	AC	444946	6318442	187	56
MRAC1236	AC	445269	6318205	186	36
MRAC1237	AC	445588	6317964	185	43
MRAC1238	AC	445910	6317727	188	39
MRAC1239	AC	446229	6317490	188	11

Table 4: Drill Hole Collar Locations

Hole ID	Type	East (m)	North (m)	RL (m)	Depth (m)
MRAC1240	AC	446550	6317250	190	15
MRAC1241	AC	446872	6317010	192	29
MRAC1242	AC	447201	6316766	191	44
MRAC1243	AC	447517	6316529	194	17
MRAC1244	AC	447839	6316293	197	26
MRAC1245	AC	448163	6316052	200	28
MRAC1246	AC	448480	6315814	198	30
MRAC1247	AC	425585	6326988	198	75
MRAC1248	AC	425240	6326648	198	61
MRAC1249	AC	425013	6326425	198	69
MRAC1250	AC	424728	6326144	197	60
MRAC1251	AC	424417	6325885	198	64
MRAC1252	AC	424067	6325664	198	45
MRAC1253	AC	423737	6325457	198	74
MRAC1254	AC	423400	6325241	199	83
MRAC1255	AC	423087	6324983	200	75
MRAC1256	AC	422869	6324645	201	52
MRAC1257	AC	422544	6324389	203	34
MRAC1258	AC	422230	6324142	196	10
MRAC1259	AC	411883	6326457	207	57
MRAC1260	AC	411893	6326850	210	33
MRAC1261	AC	411904	6327252	210	49
MRAC1262	AC	411915	6327652	210	57
MRAC1263	AC	411926	6328051	210	70
MRAC1264	AC	411939	6328450	211	48
MRAC1265	AC	411950	6328857	211	38
MRAC1266	AC	411973	6329654	208	9
MRAC1267	AC	411982	6330047	208	37
MRAC1268	AC	411995	6330449	209	99
MRAC1269	AC	412005	6330849	210	87
MRAC1270	AC	412015	6331253	212	90
MRAC1271	AC	412026	6331651	213	96
MRAC1272	AC	412036	6332050	211	72
MRAC1273	AC	412050	6332444	208	72
MRAC1274	AC	412060	6332856	210	83
MRAC1275	AC	411862	6333484	211	67
MRAC1276	AC	411748	6333867	213	54
MRAC1277	AC	411637	6334242	216	53
MRAC1278	AC	411519	6334629	217	78
MRAC1279	AC	411402	6335011	218	33
MRAC1280	AC	411291	6335393	218	42
MRAC1281	AC	411177	6335773	218	8
MRAC1282	AC	411060	6336161	219	8
MRAC1283	AC	410944	6336542	217	7
MRAC1284	AC	410827	6336924	219	24
MRAc1285	AC	410712	6337308	223	10
MRAC1286	AC	410595	6337692	226	10
MRAC1287	AC	410481	6338075	228	18
MRAC1288	AC	410367	6338458	232	31
MRAC1289	AC	410250	6338841	233	11
MRAC1290	AC	410133	6339225	233	45
MRAC1291	AC	411821	6333077	212	49
MRAC1292	AC	411436	6333192	215	12
MRAC1293	AC	411043	6333254	215	40
MRAC1294	AC	410641	6333253	215	47
MRAC1295	AC	410242	6333251	215	89
MRAC1296	AC	409844	6333252	213	99
MRAC1297	AC	409441	6333264	213	62
MRAC1298	AC	409039	6333253	215	31

Table 4: Drill Hole Collar Locations					
Hole ID	Type	East (m)	North (m)	RL (m)	Depth (m)
MRAC1299	AC	408641	6333253	217	74
MRAC1300	AC	408239	6333252	216	69
MRAC1301	AC	412207	6332972	212	84
MRAC1302	AC	412590	6332864	211	77
MRAC1303	AC	412977	6332752	211	15
MRAC1304	AC	413759	6332571	211	63
MRAC1305	AC	414154	6332508	210	59
MRAC1306	AC	414547	6332444	212	34
MRAC1307	AC	414941	6332386	211	60
MRAC1308	AC	415341	6332320	215	12
MRAC1309	AC	415733	6332260	213	31
MRAC1310	AC	416127	6332195	213	69
MRAC1311	AC	416530	6332135	213	86
MRAC1312	AC	416919	6332069	213	66
MRAC1313	AC	417313	6332008	213	63
MRAC1314	AC	417709	6331944	213	70
MRAC1315	AC	418104	6331885	212	86
MRAC1316	AC	418495	6331819	210	78
MRAC1317	AC	418893	6331756	208	56
MRAC1318	AC	419295	6331738	209	65
MRAC1319	AC	419700	6331751	209	29
MRAC1320	AC	420096	6331710	210	53
MRAC1321	AC	420487	6331649	210	84
MRAC1322	AC	420885	6331586	216	78
MRAC1323	AC	421279	6331524	218	46
MRAC1324	AC	421668	6331459	216	56
MRAC1325	AC	422073	6331397	214	88
MRAC1326	AC	422465	6331337	213	76
MRAC1336	AC	413372	6332641	213	33
MRAC1337	AC	412179	6338656	230	53
MRAC1338	AC	411834	6338654	228	61
MRAC1339	AC	411432	6338649	231	61
MRAC1340	AC	411033	6338643	234	12
MRAC1341	AC	410638	6338638	235	9
MRAC1342	AC	409447	6338626	225	29
MRAC1343	AC	409835	6338628	229	43
MRAC1344	AC	410231	6338633	231	37
MRAC1345	AC	416229	6329265	212	71
MRAC1346	AC	415832	6329266	214	85
MRAC1347	AC	415429	6329259	215	75
MRAC1348	AC	415028	6329258	217	53
MRAC1349	AC	414626	6329259	212	72
MRAC1350	AC	414220	6329258	211	62
MRAC1351	AC	413827	6329255	212	69
MRAC1352	AC	413433	6329256	211	19
MRAC1353	AC	413021	6329253	211	32
MRAC1354	AC	412631	6329251	213	80
MRAC1355	AC	412226	6329248	210	46

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

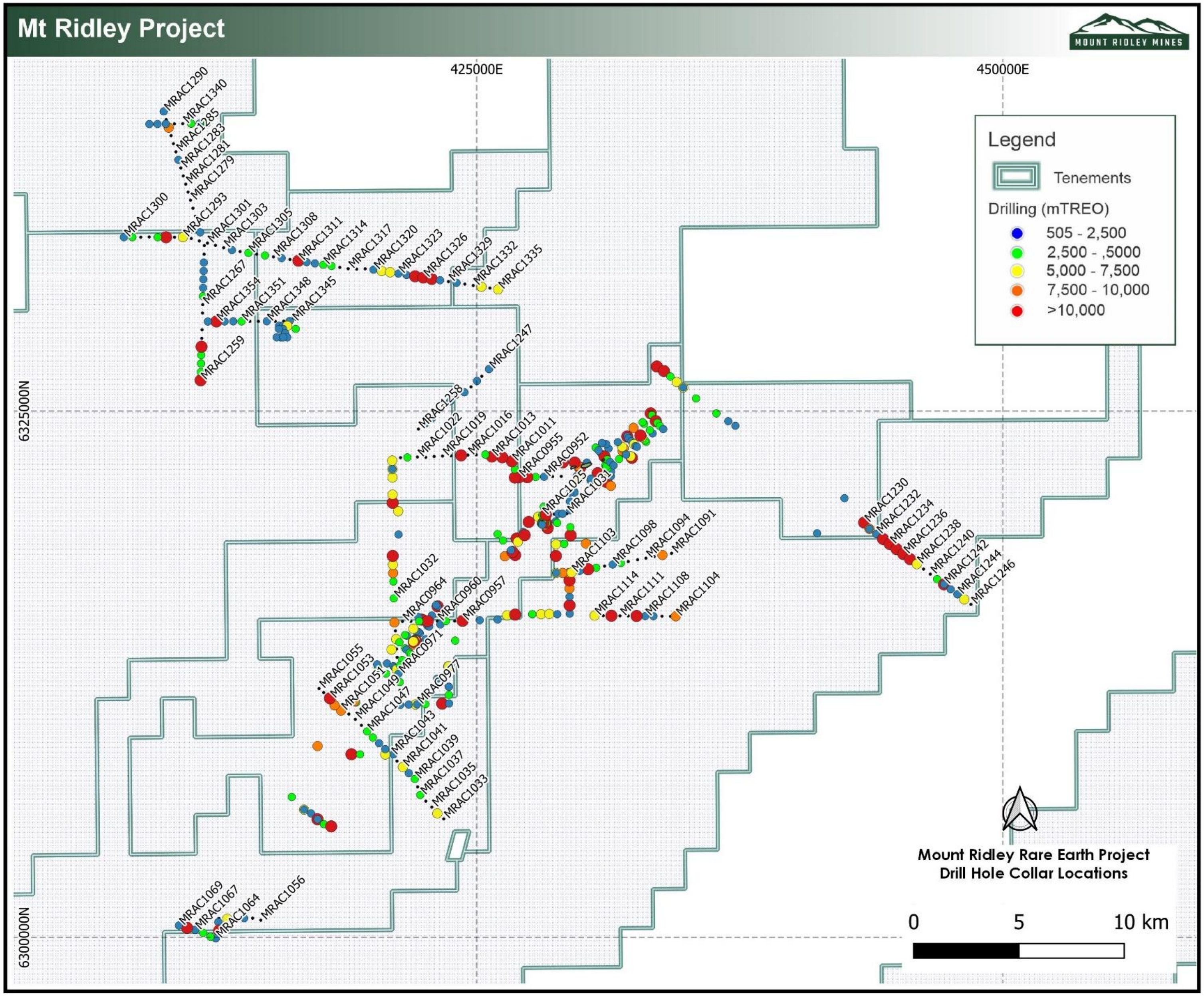

Figure 6: Drill Hole Location Plan for reported drill holes..

Appendix 1

B. Assay Results.

Table 5. Assay Results for Samples with Total Rare Earth Element (TREO) >500 ppm.																			
Hole_ID	From	To	Sample	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	TREO ppm
MRAC0952	57	58	MRM002819	201	1.52	0.98	1.57	3.07	0.30	114	0.19	64	21	7.0	0.35	0.16	8.4	1.04	509
MRAC0953	51	53	MRM002840	238	4.73	1.99	4.16	10.25	0.84	113	0.21	113	29	17.0	0.96	0.24	21.0	1.37	665
MRAC0953	54	56	MRM002842	252	4.24	1.64	4.22	9.80	0.72	121	0.16	117	30	17.5	0.96	0.21	17.8	1.11	693
MRAC0953	56	57	MRM002843	291	4.70	1.88	4.64	11.60	0.83	140	0.19	136	34	20.4	1.10	0.22	21.5	1.28	801
MRAC0954	42	45	MRM002858	414	4.60	1.86	6.31	11.45	0.81	223	0.24	164	44	21.5	1.09	0.23	19.8	1.37	1096
MRAC0954	45	48	MRM002859	697	9.09	3.31	10.10	22.50	1.48	344	0.29	315	81	43.4	2.11	0.40	37.5	1.98	1881
MRAC0954	48	51	MRM002861	503	8.50	3.78	7.11	19.75	1.45	235	0.43	237	59	34.3	1.94	0.41	42.0	2.60	1388
MRAC0954	51	54	MRM002862	373	6.41	2.46	5.49	14.60	0.95	179	0.22	181	46	25.8	1.40	0.29	27.2	1.66	1037
MRAC0954	54	57	MRM002863	395	6.20	2.44	5.79	14.35	1.07	179	0.22	177	45	25.8	1.47	0.28	28.7	1.73	1060
MRAC0954	57	58	MRM002864	429	6.39	2.64	5.94	14.70	1.10	189	0.27	185	47	27.3	1.42	0.28	29.9	1.98	1130
MRAC0955	33	36	MRM002877	334	5.17	1.92	7.27	11.05	0.88	253	0.21	160	46	21.8	1.14	0.27	22.3	1.54	1036
MRAC0955	36	39	MRM002878	335	6.61	2.26	9.22	14.90	1.05	304	0.21	210	61	29.3	1.52	0.28	27.1	1.73	1199
MRAC0955	39	42	MRM002879	264	5.84	2.00	8.06	13.00	0.93	260	0.19	185	54	25.1	1.36	0.29	24.9	1.44	1009
MRAC0955	42	44	MRM002880	219	6.68	2.46	8.12	13.30	1.08	254	0.25	191	53	25.4	1.43	0.30	29.4	1.83	961
MRAC0955	44	45	MRM002881	186	6.08	2.41	7.55	13.20	0.97	228	0.24	182	49	25.3	1.28	0.29	28.1	1.87	871
MRAC0955	45	48	MRM002882	205	6.41	2.30	10.30	15.05	1.00	316	0.25	237	65	31.1	1.36	0.30	28.0	1.68	1093
MRAC0955	48	51	MRM002883	198	5.15	1.94	8.42	12.00	0.83	293	0.23	203	59	25.2	1.19	0.27	22.3	1.54	988
MRAC0955	51	54	MRM002884	459	8.15	2.67	14.25	21.30	1.25	514	0.25	381	104	47.3	1.92	0.29	30.5	1.84	1890
MRAC0955	54	57	MRM002885	257	6.03	2.22	11.10	16.20	0.99	350	0.22	277	76	33.6	1.44	0.25	24.5	1.62	1257
MRAC0955	57	60	MRM002886	255	6.39	2.15	9.88	15.25	0.91	300	0.21	230	63	29.6	1.40	0.25	24.3	1.36	1118
MRAC0955	60	63	MRM002887	1580	6.68	2.32	10.90	16.60	1.05	302	0.24	256	67	34.1	1.56	0.29	27.5	1.92	2797
MRAC0955	63	66	MRM002888	1100	9.83	3.93	12.95	23.00	1.73	398	0.49	353	88	43.6	2.14	0.51	50.1	2.92	2516
MRAC0955	66	69	MRM002889	1805	8.24	3.58	11.85	19.50	1.40	423	0.52	352	95	42.6	1.85	0.48	35.8	3.14	3392
MRAC0955	69	72	MRM002891	509	5.62	2.35	8.40	13.75	0.95	287	0.34	248	64	31.0	1.29	0.33	23.7	2.32	1435
MRAC0955	72	75	MRM002892	467	6.50	2.49	8.17	14.00	1.08	252	0.38	212	55	28.0	1.38	0.35	28.2	2.63	1294
MRAC0955	75	78	MRM002893	491	5.05	2.06	7.23	12.20	0.84	218	0.28	186	48	24.2	1.22	0.28	23.5	1.76	1227
MRAC0955	78	80	MRM002894	395	4.05	1.78	5.95	9.54	0.69	173	0.28	141	39	18.1	0.90	0.21	17.2	1.20	970
MRAC0956	0	3	MRM002896	181	2.40	1.08	3.15	5.34	0.45	103	0.15	84	22	10.5	0.55	0.14	12.0	0.96	511
MRAC0956	42	45	MRM002911	740	7.24	3.44	7.46	16.65	1.28	448	0.42	262	78	31.7	1.59	0.42	41.3	2.54	1971
MRAC0956	45	48	MRM002912	699	4.91	1.95	6.34	12.50	0.79	391	0.24	242	71	26.5	1.14	0.24	22.7	1.48	1779
MRAC0956	48	51	MRM002913	708	5.10	1.99	6.57	12.60	0.80	387	0.27	235	71	26.6	1.20	0.26	22.4	1.51	1777
MRAC0956	51	54	MRM002914	681	4.17	1.70	6.43	11.60	0.70	383	0.23	217	67	26.2	1.00	0.25	18.6	1.40	1705
MRAC0956	54	57	MRM002915	790	5.17	1.93	6.98	13.55	0.78	451	0.20	275	83	30.5	1.22	0.24	23.4	1.39	2022
MRAC0956	57	60	MRM002916	579	4.88	2.02	5.78	11.10	0.78	342	0.27	208	62	23.4	1.08	0.29	23.4	1.51	1518
MRAC0956	60	61	MRM002917	3680	7.57	2.60	8.94	16.60	1.10	236	0.29	216	60	35.7	1.95	0.34	26.6	1.92	5244
MRAC0956	61	62	MRM002918	791	3.19	1.17	3.65	7.14	0.51	173	0.17	112	33	14.3	0.71	0.17	14.5	0.98	1400
MRAC0957	42	45	MRM002936	67	54.80	26.90	18.85	65.30	10.70	230	2.86	306	71	67.4	9.79	3.51	274.0	19.70	1465
MRAC0957	45	48	MRM002937	60	46.00	22.90	15.50	59.30	9.26	232	2.23	257	60	54.9	8.55	2.87	272.0	14.50	1334

Hole_ID	From	To	Sample	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	TREO ppm
MRAC0957	48	50	MRM002938	36	21.10	11.65	6.05	25.80	4.61	96	1.20	94	21	20.7	3.62	1.51	167.0	7.32	624
MRAC0957	50	51	MRM002939	52	24.40	13.60	7.62	30.50	5.45	115	1.43	119	27	25.2	4.41	1.74	182.0	8.79	742
MRAC0959	42	45	MRM002971	188	28.40	15.30	12.85	31.80	5.90	92	1.83	131	28	29.9	4.95	2.03	157.0	11.40	890
MRAC0959	45	47	MRM002972	92	20.40	12.35	6.94	20.20	4.59	57	1.61	71	15	17.0	3.17	1.73	142.5	10.30	576
MRAC0959	47	48	MRM002973	175	32.80	18.25	14.40	36.00	6.91	115	2.33	154	32	34.4	5.48	2.49	193.0	14.70	1005
MRAC0961	27	30	MRM002997	150	24.50	12.65	9.38	24.30	4.43	69	1.87	101	21	26.6	3.77	1.80	107.0	12.30	683
MRAC0961	30	33	MRM002998	172	37.80	22.10	10.60	32.70	7.62	79	3.59	108	23	28.8	5.39	3.35	198.5	23.20	912
MRAC0961	33	36	MRM003000	180	36.40	20.70	10.45	33.10	7.29	87	3.12	115	25	30.9	5.48	3.08	195.5	20.90	932
MRAC0961	36	39	MRM003001	131	27.40	14.95	7.51	25.20	5.35	65	2.23	87	18	21.2	3.87	2.19	154.5	14.60	699
MRAC0961	39	40	MRM003002	106	21.80	13.10	6.16	19.55	4.53	52	1.96	67	14	16.1	3.13	1.93	131.5	12.55	569
MRAC0962	18	21	MRM003010	219	2.93	1.60	1.36	3.67	0.58	134	0.28	42	16	5.6	0.54	0.23	11.5	1.66	530
MRAC0962	30	33	MRM003014	98	18.65	10.20	5.81	19.45	3.58	57	1.32	78	18	17.5	3.05	1.44	100.5	8.96	530
MRAC0962	33	36	MRM003015	106	18.40	10.70	5.55	19.75	3.63	64	1.19	77	18	16.7	3.01	1.36	101.5	8.35	546
MRAC0965	15	18	MRM003051	270	43.30	24.50	12.30	50.10	9.04	154	2.52	177	40	42.2	7.51	2.90	211.0	17.60	1279
MRAC0965	18	21	MRM003052	196	25.80	14.00	7.56	29.90	5.23	107	1.41	119	28	28.1	4.53	1.71	124.5	10.80	844
MRAC0965	21	24	MRM003053	119	18.20	11.15	4.63	19.05	3.83	63	1.24	66	15	16.5	3.00	1.34	101.0	8.45	544
MRAC0970	27	30	MRM003102	94	30.40	18.25	10.15	34.00	6.25	92	2.08	111	25	28.1	5.06	2.32	185.5	14.20	791
MRAC0970	30	32	MRM003103	79	21.30	14.20	6.80	23.20	4.81	64	1.72	73	16	18.1	3.57	1.82	151.0	11.20	591
MRAC0971	24	27	MRM003113	79	33.20	20.50	9.31	35.20	6.87	79	2.57	103	22	27.8	5.48	2.76	184.0	16.35	754
MRAC0972	12	15	MRM003118	119	13.40	8.33	4.38	16.15	2.86	80	0.77	67	16	15.6	2.41	0.95	78.0	5.58	518
MRAC0972	18	21	MRM003120	205	7.80	3.89	3.34	10.40	1.52	60	0.33	61	16	11.5	1.45	0.48	43.3	2.55	518
MRAC0975	33	36	MRM003167	157	20.90	9.62	6.34	21.70	3.79	70	1.12	89	21	22.1	3.37	1.34	87.6	8.79	628
MRAC0976	39	42	MRM003185	57	18.45	12.70	4.95	18.15	4.10	44	1.62	64	15	15.1	2.79	1.59	156.5	10.00	515
MRAC0977	48	51	MRM003210	73	28.40	16.80	8.41	28.80	5.91	57	2.11	99	22	27.7	4.84	2.31	154.5	14.95	656
MRAC1011	0	3	MRM003921	180	4.35	2.17	3.46	7.20	0.83	90	0.25	78	20	11.8	0.85	0.31	23.0	2.04	510
MRAC1011	39	42	MRM003936	188	5.06	2.66	3.96	7.87	0.94	97	0.36	78	22	11.5	0.94	0.39	29.1	2.31	539
MRAC1011	42	45	MRM003937	429	11.80	5.94	8.87	17.85	2.18	226	0.75	191	52	27.9	2.18	0.85	61.0	5.33	1252
MRAC1011	45	48	MRM003938	329	9.64	5.01	7.08	14.75	1.80	172	0.60	147	40	21.1	1.76	0.70	52.3	4.40	969
MRAC1011	48	51	MRM003939	420	10.85	5.14	9.59	18.45	1.96	216	0.65	198	52	29.0	2.13	0.70	55.0	4.50	1228
MRAC1011	51	54	MRM003940	373	9.03	4.07	7.54	16.25	1.52	197	0.48	177	46	25.6	1.73	0.54	44.8	3.24	1088
MRAC1011	54	57	MRM003941	308	7.27	3.35	5.99	13.10	1.26	156	0.39	142	38	20.5	1.50	0.48	36.7	2.73	884
MRAC1011	57	58	MRM003942	310	7.46	3.49	6.12	13.35	1.31	162	0.40	145	38	21.1	1.47	0.47	38.0	2.96	900
MRAC1012	39	42	MRM003956	223	1.90	1.00	1.84	4.08	0.34	118	0.17	80	23	8.6	0.43	0.14	8.5	0.94	566
MRAC1012	42	44	MRM003957	710	6.03	2.46	6.74	14.30	1.01	416	0.31	239	76	27.7	1.45	0.30	28.7	1.89	1839
MRAC1012	44	45	MRM003958	987	8.69	3.74	8.96	20.20	1.40	544	0.35	354	101	42.5	1.97	0.52	37.8	2.59	2538
MRAC1012	45	48	MRM003959	941	9.64	3.70	9.96	21.30	1.48	556	0.43	334	104	39.1	2.08	0.47	44.3	2.76	2484
MRAC1012	48	51	MRM003961	1065	10.20	4.19	11.65	23.60	1.66	598	0.50	382	116	44.8	2.37	0.53	48.3	3.38	2775
MRAC1012	51	54	MRM003962	697	7.41	2.89	8.56	16.65	1.18	396	0.36	261	79	30.5	1.67	0.42	33.8	2.46	1846
MRAC1012	54	55	MRM003963	661	6.24	2.48	7.54	14.65	1.03	378	0.33	239	73	27.6	1.44	0.34	29.4	2.11	1733
MRAC1013	3	6	MRM003965	212	1.99	0.89	2.26	4.42	0.35	117	0.13	73	22	8.5	0.46	0.14	9.8	0.86	545
MRAC1013	42	45	MRM003979	371	1.71	1.03	0.93	2.53	0.34	67	0.16	33	11	4.3	0.32	0.18	8.4	1.20	611
MRAC1013	45	48	MRM003980	681	1.28	0.74	0.91	1.96	0.22	86	0.13	32	11	4.2	0.25	0.13	5.8	0.89	1008
MRAC1013	48	51	MRM003981	569	1.56	0.82	1.02	2.59	0.28	114	0.13	39	14	5.0	0.31	0.15	6.6	0.98	917
MRAC1013	51	53	MRM003982	710	4.75	2.04	3.85	10.00	0.84	279	0.25	167	54	21.6	1.04	0.30	20.0	1.84	1538
MRAC1013	53	54	MRM003983	752	5.15	2.04	4.06	10.20	0.87	299	0.27	176	57	22.4	1.16	0.30	20.2	1.78	1630
MRAC1014	3	6	MRM003985	259	3.55	1.57	2.47	6.65	0.60	168	0.16	110	34	14.5	0.77	0.21	15.7	1.34	740

Hole_ID	From	To	Sample	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	TREO ppm
MRAC1014	18	21	MRM003991	171	3.14	1.30	1.95	5.82	0.53	126	0.13	85	26	11.1	0.64	0.20	13.7	1.13	534
MRAC1014	21	24	MRM003992	201	3.70	1.67	2.02	5.90	0.68	117	0.21	78	24	10.8	0.75	0.24	17.8	1.50	557
MRAC1014	24	27	MRM003993	175	4.02	2.02	2.07	6.60	0.73	113	0.22	83	25	11.9	0.82	0.26	19.9	1.80	533
MRAC1017	36	39	MRM004069	302	130.00	61.00	42.10	152.50	23.60	422	7.09	655	150	156.5	21.10	8.30	595.0	51.50	3319
MRAC1017	39	41	MRM004070	202	72.40	40.80	19.60	81.70	14.65	255	4.82	313	71	70.9	11.25	5.08	510.0	32.30	2052
MRAC1017	41	42	MRM004071	205	74.20	39.80	20.00	83.00	14.50	277	4.98	324	72	73.4	11.55	5.31	490.0	33.30	2078
MRAC1023	48	51	MRM004656	189	5.11	2.52	2.16	7.20	0.94	88	0.30	66	18	10.4	0.94	0.37	25.7	1.99	503
MRAC1023	54	56	MRM004658	196	3.94	1.83	2.14	6.68	0.72	99	0.21	72	19	10.3	0.74	0.26	19.7	1.40	520
MRAC1023	56	57	MRM004659	226	4.37	1.98	2.23	6.98	0.67	111	0.22	80	22	11.5	0.84	0.23	20.7	1.43	589
MRAC1025	54	57	MRM005085	89	34.90	17.50	17.80	41.10	6.39	133	1.93	149	32	35.1	5.90	2.22	182.0	12.95	910
MRAC1026	54	57	MRM005108	200	80.80	38.60	37.60	108.50	14.85	469	4.15	577	130	110.0	14.20	4.83	415.0	27.40	2661
MRAC1026	57	60	MRM005109	206	90.70	40.40	54.60	128.00	16.45	603	4.28	811	191	155.0	18.05	5.27	445.0	30.80	3329
MRAC1026	60	62	MRM005110	82	42.50	20.30	20.20	53.10	7.54	202	2.28	289	64	61.2	7.19	2.57	205.0	15.50	1279
MRAC1026	62	63	MRM005111	98	48.80	23.00	24.10	62.00	8.91	242	2.52	336	75	69.2	8.81	2.95	234.0	16.70	1492
MRAC1029	33	36	MRM005168	70	23.00	14.30	7.01	24.40	4.98	90	1.55	92	21	21.2	3.65	1.70	165.5	10.10	663
MRAC1030	36	39	MRM005185	215	40.50	21.50	20.40	49.30	8.12	113	2.52	183	40	44.3	7.04	2.83	205.0	16.50	1163
MRAC1030	48	51	MRM005189	83	26.00	19.15	7.81	22.50	6.01	37	2.96	58	13	16.0	3.76	2.86	172.0	18.95	592
MRAC1030	51	52	MRM005191	77	24.10	17.70	7.08	20.00	5.65	34	2.75	51	11	14.5	3.50	2.64	161.0	17.65	545
MRAC1032	12	15	MRM005314	136	37.40	18.85	12.50	41.50	7.13	106	2.20	170	39	39.9	6.45	2.65	178.0	15.25	973
MRAC1032	15	18	MRM005315	66	25.00	16.90	6.09	24.90	5.67	56	2.17	73	17	19.3	3.86	2.37	189.5	14.25	631
MRAC1034	24	27	MRM005340	123	17.30	10.20	4.25	16.25	3.62	54	1.25	64	15	15.6	2.74	1.47	94.5	8.83	522
MRAC1034	27	30	MRM005341	173	25.90	15.90	5.72	23.90	5.67	76	2.02	88	20	20.0	3.95	2.28	159.0	13.80	766
MRAC1034	30	33	MRM005342	130	20.30	13.70	4.59	18.70	4.58	61	1.85	69	16	16.1	3.03	1.96	143.5	12.10	624
MRAC1037	24	27	MRM005375	202	24.30	15.80	8.25	26.30	5.56	97	2.19	99	24	21.8	4.10	2.31	161.0	14.00	855
MRAC1039	18	21	MRM005406	161	21.60	10.85	6.51	20.80	3.72	69	1.20	94	20	21.9	3.31	1.52	87.0	8.76	638
MRAC1039	21	23	MRM005407	97	25.40	16.50	5.04	20.80	5.43	50	2.39	60	12	15.6	3.51	2.25	179.0	15.45	619
MRAC1040	57	58	MRM005435	143	68.10	39.90	18.95	76.00	13.90	220	3.60	260	51	62.6	10.70	4.67	531.0	24.10	1844
MRAC1041	51	54	MRM005453	127	74.40	46.40	20.40	72.50	17.10	69	5.85	164	30	51.4	11.70	6.37	500.0	36.40	1493
MRAC1041	54	55	MRM005454	91	30.50	18.15	9.38	31.80	6.86	52	2.27	90	18	25.5	4.96	2.57	207.0	14.60	730
MRAC1041	55	56	MRM005455	84	29.80	18.65	9.43	33.00	6.88	51	2.31	92	18	26.5	5.18	2.64	215.0	15.15	737
MRAC1044	38	39	MRM005735	158	19.00	11.65	5.88	20.10	3.88	64	1.58	87	20	20.0	2.98	1.59	112.0	9.72	647
MRAC1045	39	41	MRM005753	166	13.45	6.65	5.16	15.30	2.50	76	0.65	91	22	19.0	2.34	0.80	57.8	4.87	580
MRAC1046	48	51	MRM005774	78	35.10	19.65	12.30	43.40	7.40	87	2.29	142	27	36.0	6.23	2.64	269.0	14.95	945
MRAC1046	51	52	MRM005775	70	30.40	17.25	10.55	37.80	6.23	73	2.08	124	24	31.7	5.41	2.31	221.0	13.00	806
MRAC1047	21	24	MRM005784	121	48.10	25.50	16.10	59.80	9.69	93	3.30	196	36	51.9	8.69	3.72	278.0	22.10	1169
MRAC1051	15	18	MRM005813	246	92.30	56.00	25.10	92.20	18.05	190	6.43	283	58	68.2	13.05	7.49	575.0	44.30	2142
MRAC1051	18	21	MRM005814	66	20.80	13.30	6.05	21.40	4.48	46	1.73	64	13	16.6	3.27	1.80	143.5	11.80	525
MRAC1052	16	18	MRM005823	186	7.48	2.76	4.11	11.20	1.10	149	0.28	107	31	17.5	1.32	0.33	21.2	1.97	647
MRAC1052	21	24	MRM005825	223	32.20	15.55	12.50	39.70	5.33	134	1.62	181	38	40.6	5.20	2.03	139.0	12.10	1057
MRAC1052	24	27	MRM005826	119	41.30	27.80	9.14	37.60	8.32	64	3.46	101	20	26.0	5.61	3.90	302.0	23.20	960
MRAC1053	6	9	MRM005832	716	103.50	77.90	30.80	91.50	22.70	1025	9.04	713	220	107.5	13.40	10.30	960.0	56.30	5000
MRAC1053	9	12	MRM005834	1260	167.50	132.50	53.90	140.50	37.90	2010	16.35	1370	422	192.5	21.50	17.50	1620.0	100.00	9083
MRAC1053	12	15	MRM005835	927	123.50	88.80	42.50	109.50	26.20	1380	10.35	1030	295	150.0	16.60	11.80	1060.0	68.40	6406
MRAC1053	15	18	MRM005836	646	79.30	52.60	27.50	73.40	15.85	645	6.23	548	150	91.9	11.00	7.20	563.0	41.60	3553
MRAC1053	18	21	MRM005837	156	29.30	18.90	8.39	23.40	5.50	155	2.45	138	36	25.7	3.85	2.82	184.0	16.45	968
MRAC1053	21	24	MRM005838	195	60.00	33.90	21.00	65.90	10.95	289	3.73	305	73	60.3	8.73	4.40	370.0	25.70	1830

Hole_ID	From	To	Sample	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	TREO ppm
MRAC1053	24	27	MRM005839	78	33.40	17.35	11.80	42.30	6.15	158	1.69	159	34	31.5	5.11	2.16	241.0	11.45	1001
MRAC1053	27	28	MRM005840	65	23.30	12.90	7.69	28.70	4.31	114	1.29	111	25	21.2	3.58	1.55	166.0	8.92	713
MRAC1053	28	29	MRM005841	51	19.50	10.65	6.69	24.30	3.96	93	1.27	93	21	20.0	3.23	1.30	134.0	8.00	590
MRAC1058	7	9	MRM006006	212	7.19	2.95	2.16	9.87	1.22	83	0.30	64	18	11.8	1.38	0.35	24.8	1.97	531
MRAC1060	9	12	MRM006019	110	18.40	12.95	3.81	15.25	4.18	56	1.78	60	14	13.8	2.74	1.92	147.0	12.10	574
MRAC1060	12	13	MRM006020	227	26.20	12.65	7.68	27.50	4.75	99	1.29	132	31	30.5	4.50	1.70	135.5	9.76	903
MRAC1060	13	15	MRM006021	159	21.50	10.80	6.05	21.20	4.02	72	1.17	89	21	21.0	3.62	1.52	113.5	8.39	667
MRAC1060	15	17	MRM006022	175	19.30	9.69	4.71	18.05	3.61	81	1.04	77	20	18.2	3.03	1.32	101.5	7.64	652
MRAC1060	17	18	MRM006023	202	26.00	12.10	7.15	25.80	4.71	84	1.30	111	26	28.0	4.34	1.68	127.5	9.89	809
MRAC1062	21	22	MRM006114	114	21.10	11.55	5.82	21.70	4.10	53	1.42	82	17	20.4	3.28	1.66	118.0	9.41	582
MRAC1063	15	17	MRM006039	109	25.40	12.95	9.30	30.80	4.99	98	1.67	145	30	34.4	4.56	1.75	134.5	11.10	782
MRAC1063	17	18	MRM006040	858	452.00	274.00	115.50	478.00	100.50	707	32.80	1425	256	357.0	72.50	36.20	3050.0	210.00	10177
MRAC1064	5	6	MRM006044	79	20.40	11.80	5.66	22.10	4.43	44	1.45	85	17	20.8	3.51	1.55	133.0	9.71	554
MRAC1064	12	15	MRM006047	152	12.80	7.67	3.81	14.45	2.78	54	0.92	76	18	16.2	2.23	0.95	73.8	6.27	532
MRAC1065	9	11	MRM006053	155	12.95	7.34	4.89	15.15	2.68	68	0.96	85	19	18.0	2.27	1.03	76.6	6.49	571
MRAC1065	11	12	MRM006054	153	15.65	7.80	6.12	19.80	2.94	58	0.95	106	22	23.8	2.94	1.08	68.4	6.48	594
MRAC1065	15	18	MRM006056	108	19.50	10.20	6.32	21.00	3.71	41	1.29	89	17	22.3	3.34	1.47	98.5	9.04	543
MRAC1066	12	15	MRM006063	232	14.25	6.80	7.97	21.30	2.54	122	0.75	147	36	27.8	2.90	0.89	56.5	4.85	818
MRAC1066	15	17	MRM006064	124	15.25	8.92	5.37	16.50	3.31	59	1.30	87	19	18.6	2.60	1.33	89.3	8.96	554
MRAC1066	17	18	MRM006065	106	17.45	10.55	5.83	18.75	3.44	50	1.36	82	17	18.5	2.84	1.43	90.0	9.26	521
MRAC1067	18	21	MRM006073	97	22.10	15.70	4.77	17.70	5.05	42	2.18	75	17	17.6	3.21	2.14	166.0	14.50	608
MRAC1067	27	30	MRM006076	143	19.30	11.00	5.45	20.80	3.79	69	1.42	96	21	21.5	3.24	1.45	112.0	9.93	650
MRAC1068	24	27	MRM006088	138	39.80	27.80	8.83	40.20	9.31	92	3.48	108	24	27.9	6.49	3.66	322.0	20.50	1057
MRAC1068	27	30	MRM006089	234	67.90	46.90	13.50	65.00	16.25	150	5.96	183	39	45.7	10.55	6.36	674.0	37.40	1942
MRAC1068	30	33	MRM006091	107	29.60	20.60	6.49	27.60	6.67	60	2.45	79	17	21.0	4.56	2.67	220.0	15.35	751
MRAC1068	33	34	MRM006092	77	18.05	11.45	4.35	17.50	3.87	42	1.62	57	12	13.8	2.88	1.65	143.5	10.55	505
MRAC1068	34	35	MRM006093	79	17.80	11.45	4.09	17.35	4.06	44	1.48	56	12	14.5	2.86	1.58	146.0	10.15	513
MRAC1069	27	29	MRM006104	96	17.75	12.80	4.26	14.85	4.32	35	1.75	47	10	11.0	2.62	1.82	144.5	10.70	503
MRAC1069	29	30	MRM006105	116	21.20	14.40	5.05	17.95	4.86	38	2.07	52	12	13.5	2.98	2.05	165.0	12.50	582
MRAC1092	60	63	MRM007800	104	22.80	10.60	7.77	27.70	4.03	89	1.34	159	38	36.6	4.26	1.53	87.1	9.82	719
MRAC1092	63	66	MRM007801	124	52.60	34.60	9.81	54.30	12.15	213	4.36	214	50	44.0	8.34	4.75	441.0	28.20	1562
MRAC1092	66	67	MRM007802	123	51.00	32.80	10.25	54.10	11.55	209	4.07	220	52	45.7	8.13	4.49	387.0	26.20	1492
MRAC1097	48	51	MRM007920	261	12.50	7.73	4.74	14.90	2.73	127	1.08	108	29	19.1	2.04	1.14	81.7	6.94	817
MRAC1097	51	53	MRM007921	267	8.21	4.56	4.28	11.55	1.66	124	0.64	105	29	17.8	1.44	0.65	48.6	4.05	755
MRAC1097	53	54	MRM007922	256	8.65	4.98	4.22	11.95	1.78	118	0.67	102	28	17.9	1.54	0.69	53.4	4.29	738
MRAC1098	48	51	MRM007941	122	17.95	9.92	6.47	21.70	3.56	65	1.24	98	23	23.8	3.10	1.35	97.9	8.15	604
MRAC1100	27	30	MRM007982	238	46.70	29.30	12.25	46.20	10.15	102	3.51	158	34	43.3	7.35	3.98	324.0	24.00	1309
MRAC1101	39	42	MRM008000	62	37.00	28.60	5.28	21.90	8.96	25	4.15	43	10	14.3	4.81	4.19	267.0	26.80	684
MRAC1101	42	45	MRM008001	46	56.20	28.40	21.30	60.90	10.50	177	4.04	277	64	72.6	9.43	4.08	232.0	27.80	1299
MRAC1101	45	48	MRM008002	86	117.00	60.30	40.60	128.00	22.50	380	7.85	516	116	136.0	19.85	8.43	545.0	53.30	2669
MRAC1101	48	50	MRM008003	50	44.60	25.70	13.25	44.20	9.19	118	3.28	157	34	42.4	7.10	3.52	252.0	22.50	992
MRAC1101	50	51	MRM008004	55	56.10	31.40	17.50	58.50	11.40	156	4.01	217	49	58.2	9.26	4.45	297.0	27.10	1259
MRAC1102	45	46	MRM008021	54	22.10	13.35	7.13	26.20	4.82	70	1.68	91	20	22.8	3.77	1.88	131.0	10.95	578
MRAC1103	33	36	MRM008035	162	12.55	4.23	7.07	21.10	1.97	73	0.43	109	22	25.6	2.65	0.52	31.4	3.02	569
MRAC1103	38	39	MRM008037	289	22.40	12.90	6.84	23.90	4.53	95	1.77	139	35	27.0	3.81	1.93	97.9	12.50	929
MRAC1103	39	42	MRM008038	127	33.40	24.80	6.59	29.30	8.28	46	3.76	81	16	21.4	4.98	3.71	225.0	24.30	794

Hole_ID	From	To	Sample	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	TREO ppm
MRAC1104	42	45	MRM008444	189	8.03	3.97	1.55	9.56	1.47	92	0.60	74	20	12.8	1.30	0.59	41.3	3.74	553
MRAC1104	45	48	MRM008445	170	7.42	4.34	1.68	9.26	1.62	82	0.65	67	18	12.2	1.32	0.66	43.0	4.14	510
MRAC1104	48	51	MRM008446	167	7.86	4.55	1.76	9.67	1.50	83	0.56	65	18	11.6	1.38	0.68	41.1	3.99	503
MRAC1104	54	57	MRM008448	164	8.30	4.69	1.74	9.86	1.66	79	0.67	67	18	11.9	1.44	0.70	44.8	4.50	503
MRAC1104	57	58	MRM008449	234	10.15	5.41	2.97	12.70	2.03	139	0.71	109	29	17.3	1.73	0.76	53.5	4.99	748
MRAC1107	33	36	MRM008501	388	7.56	3.93	1.98	9.78	1.33	93	0.47	83	25	14.3	1.35	0.55	32.5	3.25	805
MRAC1108	56	57	MRM008536	196	9.91	5.74	1.58	11.40	1.94	81	0.81	75	21	13.9	1.72	0.81	52.7	5.77	576
MRAC1109	39	42	MRM008550	214	7.41	3.79	1.66	9.14	1.35	73	0.55	64	18	11.5	1.20	0.50	33.9	3.69	535
MRAC1109	42	45	MRM008551	284	14.30	7.49	3.07	16.80	2.65	123	0.92	113	31	20.8	2.42	0.99	72.2	6.90	841
MRAC1109	45	48	MRM008552	254	12.90	7.01	2.72	15.50	2.41	116	0.78	109	30	20.0	2.24	0.92	62.7	6.02	772
MRAC1109	48	51	MRM008553	233	14.15	7.82	2.61	15.50	2.72	111	1.02	100	27	18.9	2.27	1.14	74.3	7.53	745
MRAC1109	51	54	MRM008554	224	15.15	8.72	2.60	15.95	2.97	108	1.14	95	26	17.9	2.30	1.22	84.0	7.78	738
MRAC1109	54	55	MRM008555	223	14.95	8.98	2.56	15.65	2.88	109	1.16	95	26	17.8	2.37	1.24	85.9	8.17	741
MRAC1109	55	56	MRM008556	213	13.90	8.06	2.47	15.45	2.65	103	0.89	90	25	16.6	2.23	1.10	75.2	7.19	694
MRAC1112	27	30	MRM008605	169	11.00	6.34	1.44	11.30	2.19	84	0.82	80	23	17.0	1.83	0.87	55.7	5.97	565
MRAC1112	30	33	MRM008606	255	14.80	7.03	2.39	19.50	2.67	133	0.81	124	35	24.4	2.70	0.96	68.8	5.91	835
MRAC1112	33	36	MRM008607	213	12.60	5.92	2.18	14.60	2.22	132	0.68	97	27	19.2	2.10	0.76	57.7	5.09	711
MRAC1112	36	39	MRM008608	253	13.25	6.23	2.51	16.50	2.34	158	0.72	113	32	21.1	2.33	0.82	61.1	4.76	825
MRAC1112	39	42	MRM008609	218	11.20	4.88	2.46	14.30	1.88	112	0.61	101	27	20.0	2.04	0.65	49.3	4.23	683
MRAC1112	42	45	MRM008610	210	10.60	5.27	2.22	13.85	1.90	108	0.65	95	25	18.7	1.95	0.70	51.4	4.61	661
MRAC1112	45	46	MRM008611	220	11.40	5.84	2.36	14.35	2.09	109	0.70	99	27	19.7	2.09	0.76	55.3	4.76	690
MRAC1112	46	47	MRM008612	221	10.50	5.27	2.27	14.10	1.89	107	0.64	99	27	18.8	1.93	0.71	53.1	4.51	683
MRAC1114	48	51	MRM008647	157	56.90	29.90	17.25	59.20	10.45	209	4.17	303	73	67.8	9.18	4.20	258.0	28.70	1538
MRAC1114	51	52	MRM008648	64	37.60	24.50	7.69	32.30	7.83	98	4.23	120	27	28.1	5.44	3.85	207.0	25.90	832
MRAC1114	52	53	MRM008649	57	28.50	18.60	6.73	25.90	5.91	81	2.90	104	24	24.2	4.40	2.72	151.5	18.50	666
MRAC1230	36	39	MRM004496	389	3.73	2.05	0.99	4.42	0.60	24	0.30	29	7	5.5	0.55	0.27	16.4	2.00	592
MRAC1230	39	42	MRM004497	332	18.55	10.20	5.68	22.30	3.46	158	1.22	182	50	33.8	3.18	1.39	89.1	9.07	1104
MRAC1230	42	45	MRM004498	150	26.80	15.75	7.04	29.90	5.37	199	2.17	217	57	38.7	4.58	2.38	156.5	15.40	1109
MRAC1230	45	48	MRM004500	99	10.90	6.50	3.03	13.50	2.19	105	0.82	105	29	18.7	1.82	0.87	67.9	6.46	563
MRAC1230	48	51	MRM004614	101	14.85	9.16	3.42	16.25	2.86	121	1.18	112	30	20.4	2.39	1.18	96.3	8.22	646
MRAC1230	54	57	MRM004616	132	12.40	7.33	3.24	13.55	2.28	102	0.92	98	27	17.8	1.96	0.96	75.2	6.79	600
MRAC1231	27	30	MRM004628	132	6.77	2.32	2.84	10.15	1.03	197	0.24	104	31	16.2	1.35	0.30	20.5	1.68	627
MRAC1231	30	33	MRM004629	346	19.90	9.08	6.01	24.70	3.53	201	0.98	173	45	30.7	3.68	1.19	85.0	7.11	1148
MRAC1231	33	36	MRM004631	277	14.60	8.16	4.28	17.65	2.90	134	0.95	116	30	21.7	2.69	1.13	86.9	6.59	872
MRAC1231	42	45	MRM004635	161	9.02	5.40	2.52	10.65	1.86	72	0.78	66	17	12.1	1.59	0.81	54.6	4.98	507
MRAC1232	30	33	MRM004702	206	5.74	2.21	2.06	7.83	0.92	127	0.22	68	19	11.7	1.08	0.30	19.8	1.84	569
MRAC1232	54	57	MRM004710	120	12.60	6.45	3.66	15.15	2.23	110	0.88	122	31	21.7	2.06	0.90	62.2	6.21	616
MRAC1233	19	21	MRM004719	228	6.15	3.03	1.96	8.42	1.13	164	0.41	112	33	16.7	1.04	0.41	27.7	2.86	726
MRAC1233	21	24	MRM004720	307	9.08	5.08	2.96	11.45	1.71	201	0.69	134	39	18.0	1.51	0.70	51.7	4.67	946
MRAC1233	24	27	MRM004721	290	35.90	12.95	14.10	57.00	5.47	371	1.16	472	107	83.8	7.08	1.55	113.0	9.59	1878
MRAC1233	27	30	MRM004722	264	41.60	18.45	12.85	59.00	7.12	292	2.01	411	92	75.8	7.56	2.48	162.5	14.95	1743
MRAC1233	30	33	MRM004723	130	10.55	5.31	3.04	13.45	1.87	88	0.59	100	24	17.7	1.93	0.72	48.0	4.72	539
MRAC1233	33	36	MRM004724	152	8.80	4.75	2.20	11.75	1.75	81	0.65	79	20	14.4	1.54	0.75	44.7	4.86	514
MRAC1233	36	37	MRM004725	150	11.45	5.84	3.12	14.55	2.13	60	0.64	85	19	16.1	1.96	0.82	54.6	5.06	516
MRAC1234	15	18	MRM004734	419	12.30	4.28	4.66	20.10	1.93	428	0.37	202	69	30.1	2.56	0.48	40.3	2.89	1479
MRAC1234	18	21	MRM004735	534	9.30	3.61	3.76	14.20	1.41	106	0.32	120	29	21.4	1.77	0.46	27.2	2.65	1057

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MRAC1234	21	24	MRM004736	3920	52.00	26.10	17.50	75.60	9.40	511	2.77	572	145	109.5	9.73	3.28	241.0	21.40	6940
MRAC1234	24	27	MRM004737	191	9.82	5.75	2.59	12.65	1.94	58	0.68	76	17	14.4	1.67	0.83	50.8	5.47	539
MRAC1234	27	29	MRM004738	174	12.45	7.91	2.80	16.55	2.67	73	1.05	81	19	15.9	2.14	1.10	80.4	7.09	598
MRAC1234	29	30	MRM004739	138	12.05	8.22	1.98	15.10	2.67	72	0.98	70	17	13.4	2.01	1.09	100.5	6.76	557
MRAC1235	24	27	MRM004748	397	19.25	10.05	6.74	27.00	3.60	186	1.17	213	52	39.9	3.58	1.26	91.9	8.47	1273
MRAC1235	27	30	MRM004749	191	34.60	17.60	11.25	48.30	6.50	279	1.86	327	79	62.0	6.21	2.32	182.5	14.10	1507
MRAC1235	30	33	MRM004750	348	30.90	14.40	11.05	44.00	5.63	270	1.35	304	72	55.3	5.57	1.68	146.5	10.35	1579
MRAC1235	33	36	MRM004751	367	24.10	12.80	6.41	29.90	4.56	179	1.42	179	45	33.0	4.11	1.66	148.0	9.92	1259
MRAC1235	36	39	MRM004752	192	8.56	4.75	2.66	10.80	1.76	99	0.57	85	21	13.5	1.52	0.63	45.4	3.96	590
MRAC1235	39	42	MRM004753	176	7.33	3.82	2.35	9.32	1.30	91	0.50	80	20	14.0	1.30	0.55	35.6	3.35	536
MRAC1235	45	48	MRM004755	184	15.00	10.40	2.85	15.10	3.18	91	1.21	88	22	17.2	2.24	1.32	100.5	8.80	679
MRAC1236	21	24	MRM004769	268	13.05	5.74	3.94	18.25	2.21	228	0.75	161	46	29.5	2.47	0.89	42.1	5.66	988
MRAC1236	24	27	MRM004770	363	10.15	4.72	3.11	15.35	1.83	250	0.62	150	43	21.7	2.02	0.69	38.0	4.24	1088
MRAC1236	27	30	MRM004771	362	40.60	19.30	9.29	45.00	7.42	116	2.48	258	58	61.8	7.20	2.88	160.0	19.15	1402
MRAC1236	30	33	MRM004772	227	11.35	5.94	2.79	14.15	2.21	79	0.76	91	22	17.6	2.06	0.88	55.6	5.58	648
MRAC1236	33	35	MRM004773	156	13.60	7.88	3.05	17.10	2.74	77	1.07	103	24	20.0	2.37	1.18	76.2	7.35	615
MRAC1236	35	36	MRM004774	151	15.45	9.62	3.26	18.20	3.38	80	1.37	97	22	19.4	2.61	1.53	102.0	9.09	646
MRAC1237	12	15	MRM004780	359	16.15	6.76	4.16	21.00	2.73	158	0.70	161	45	30.9	3.16	0.97	56.5	5.80	1047
MRAC1237	15	18	MRM004781	451	23.60	11.90	5.48	29.40	4.50	216	1.29	206	55	37.8	4.43	1.71	104.0	10.15	1396
MRAC1237	18	21	MRM004782	336	23.10	12.75	4.58	26.30	4.66	175	1.53	159	40	29.9	4.02	1.87	115.5	11.50	1136
MRAC1237	21	24	MRM004783	156	15.45	11.10	2.34	16.00	3.52	78	1.45	71	18	14.3	2.43	1.63	115.0	9.72	622
MRAC1237	24	27	MRM004784	138	11.20	7.61	1.65	12.10	2.58	68	1.06	60	15	11.8	1.82	1.17	79.4	7.19	506
MRAC1237	27	30	MRM004785	138	11.00	7.34	1.60	11.45	2.50	68	1.14	60	15	12.2	1.84	1.14	79.1	7.32	504
MRAC1238	33	36	MRM004804	270	19.85	11.05	3.73	23.30	4.03	174	1.36	135	36	25.4	3.42	1.66	111.0	9.82	997
MRAC1238	36	38	MRM004805	279	55.30	29.50	11.65	60.60	10.85	243	3.79	359	90	72.5	9.38	4.51	241.0	27.80	1790
MRAC1241	21	24	MRM004827	180	6.93	2.50	3.12	10.40	1.06	94	0.29	91	23	16.1	1.45	0.38	20.6	2.10	542
MRAC1241	24	27	MRM004828	342	18.75	10.45	5.23	22.80	3.80	93	1.28	120	26	24.7	3.18	1.52	102.0	8.81	946
MRAC1242	12	15	MRM004837	87	24.50	12.60	6.78	31.00	4.43	190	1.37	207	54	39.1	4.42	1.66	130.0	10.25	958
MRAC1242	15	18	MRM004838	183	52.00	26.20	13.70	65.80	9.90	371	2.79	428	109	79.8	9.40	3.40	243.0	20.50	1926
MRAC1242	18	21	MRM004839	95	20.20	10.75	5.29	23.10	3.84	100	1.23	124	29	26.6	3.36	1.41	103.0	8.78	665
MRAC1242	23	24	MRM004841	97	45.10	20.00	12.40	61.40	7.57	276	2.07	353	88	71.2	8.41	2.51	168.5	14.85	1457
MRAC1242	27	30	MRM004843	164	12.40	6.97	2.79	15.15	2.37	96	0.81	87	22	17.6	2.19	0.92	58.6	5.83	592
MRAC1242	43	44	MRM004849	140	10.30	7.63	1.44	10.80	2.26	69	0.98	60	16	12.1	1.61	1.03	81.0	6.27	507
MRAC1243	9	12	MRM004854	201	6.63	2.96	2.00	8.68	1.13	101	0.29	74	21	12.0	1.24	0.42	26.4	2.08	553
MRAC1244	11	12	MRM004863	105	9.63	4.72	2.77	13.30	1.89	93	0.61	114	28	20.2	1.81	0.64	44.2	4.47	529
MRAC1244	12	15	MRM004864	105	13.15	7.21	3.90	18.80	2.42	135	0.80	135	36	24.5	2.55	0.89	67.5	5.39	665
MRAC1244	21	24	MRM004868	194	13.50	7.33	3.81	15.35	2.58	87	0.88	94	23	18.6	2.43	1.04	60.7	5.81	636
MRAC1244	24	25	MRM004869	186	7.50	3.82	2.44	9.98	1.37	83	0.48	71	20	12.5	1.41	0.57	36.1	3.31	528
MRAC1245	22	24	MRM004879	164	30.30	15.45	6.14	32.40	5.83	170	1.64	177	45	32.4	5.15	2.05	152.5	11.75	1020
MRAC1245	24	27	MRM004880	238	52.80	33.60	8.27	51.20	11.65	160	3.48	200	45	43.2	8.19	4.06	408.0	22.90	1561
MRAC1247	33	36	MRM004907	284	3.00	1.06	1.55	5.21	0.47	92	0.11	52	16	7.9	0.66	0.16	13.6	0.85	578
MRAC1247	72	74	MRM004921	113	9.04	6.39	5.96	12.10	2.16	111	0.93	83	21	12.6	1.51	0.91	88.1	5.23	567
MRAC1249	63	66	MRM004971	157	7.39	4.31	2.75	9.56	1.58	90	0.54	73	19	11.2	1.30	0.64	53.3	3.64	523
MRAC1251	63	64	MRM005019	383	4.96	2.48	2.99	8.27	0.95	195	0.28	117	36	15.5	1.11	0.31	27.5	1.74	958
MRAC1253	66	69	MRM005062	247	4.17	2.11	1.99	8.78	0.74	125	0.28	93	26	13.8	0.85	0.27	23.1	1.87	659
MRAC1256	48	51	MRM005288	151	22.60	12.70	5.85	23.60	4.73	100	1.56	102	26	21.3	3.74	1.67	153.0	10.40	771

Hole_ID	From	To	Sample	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	TREO ppm
MRAC1257	30	33	MRM005303	199	10.25	5.72	2.61	12.60	1.98	55	0.80	68	17	15.9	1.76	0.78	47.0	5.68	535
MRAC1259	30	33	MRM005487	162	14.60	9.03	4.48	20.40	3.24	219	1.31	168	45	28.4	2.73	1.31	90.9	8.23	930
MRAC1259	33	36	MRM005488	227	27.80	13.05	10.95	38.80	5.17	304	1.51	351	91	60.1	5.46	1.81	115.5	11.15	1504
MRAC1259	36	39	MRM005489	143	9.68	5.78	3.24	12.50	2.00	88	0.91	119	31	21.7	1.84	0.94	45.6	5.95	587
MRAC1259	39	42	MRM005491	152	23.30	14.70	5.28	26.20	5.26	132	2.09	148	36	28.5	4.11	2.28	143.0	13.75	882
MRAC1260	21	24	MRM005506	119	22.50	13.45	7.19	26.70	4.78	69	1.72	134	27	28.8	3.85	1.95	139.5	11.30	733
MRAC1260	24	27	MRM005507	102	17.15	11.80	4.79	19.80	4.32	64	1.54	88	19	19.3	3.01	1.71	141.5	9.98	613
MRAC1261	33	36	MRM005523	291	6.48	3.81	2.47	7.56	1.34	39	0.63	51	12	10.6	1.20	0.63	28.1	4.68	559
MRAC1261	45	48	MRM005527	102	27.10	16.05	7.95	30.50	5.38	88	2.35	140	30	29.1	4.53	2.27	138.0	15.15	764
MRAC1261	48	49	MRM005528	70	17.70	12.40	3.91	18.35	4.10	44	1.69	58	12	11.6	2.70	1.63	152.0	9.84	510
MRAC1262	30	33	MRM005541	175	10.85	5.88	3.48	12.60	2.04	70	0.78	81	19	15.3	1.89	0.88	49.0	5.99	545
MRAC1262	33	36	MRM005542	114	43.00	30.10	9.30	43.30	9.79	79	3.96	147	30	36.5	6.71	4.04	328.0	25.50	1102
MRAC1263	45	48	MRM005568	133	14.50	7.50	4.05	17.90	2.58	106	1.02	119	31	23.6	2.60	1.16	58.3	6.87	631
MRAC1263	48	51	MRM005569	130	22.40	12.45	6.03	26.00	4.37	106	1.84	162	39	34.6	3.87	2.00	109.0	13.00	803
MRAC1263	51	54	MRM005570	219	94.50	55.70	18.55	98.80	19.70	415	7.14	468	115	102.0	15.70	8.21	572.0	46.80	2705
MRAC1263	54	57	MRM005571	124	88.90	57.50	15.40	97.40	20.50	297	7.09	383	86	78.5	14.55	8.34	668.0	44.50	2397
MRAC1268	81	84	MRM005657	96	36.10	21.20	9.50	39.90	7.28	96	2.81	157	33	36.4	5.92	2.97	224.0	18.10	945
MRAC1268	84	87	MRM005658	98	16.35	11.10	4.29	18.10	3.49	68	1.56	75	17	15.8	2.65	1.54	123.0	9.12	560
MRAC1269	69	72	MRM005689	147	8.69	3.80	3.77	12.50	1.47	111	0.41	110	28	20.3	1.58	0.54	30.2	3.16	576
MRAC1270	78	81	MRM005883	72	16.10	8.67	5.93	18.60	3.06	115	1.13	134	32	24.9	2.72	1.20	79.6	8.03	621
MRAC1271	81	84	MRM005917	111	12.75	7.85	4.81	17.35	2.70	103	1.05	105	27	19.3	2.36	1.06	67.8	6.90	584
MRAC1272	63	66	MRM005946	529	0.98	0.70	0.28	0.86	0.21	7	0.15	6	2	1.2	0.18	0.13	4.7	0.88	679
MRAC1275	60	63	MRM006169	257	9.14	5.21	3.23	11.15	1.81	55	0.70	70	17	13.7	1.56	0.74	44.3	5.37	598
MRAC1284	18	21	MRM006288	238	11.20	5.58	3.29	13.95	2.05	91	0.61	97	28	15.5	2.06	0.71	46.3	4.64	673
MRAC1288	21	24	MRM006315	208	5.41	2.13	2.22	7.75	0.87	86	0.17	72	20	11.3	1.08	0.24	19.8	1.55	527
MRAC1288	24	27	MRM006316	403	17.20	6.05	6.57	24.60	2.60	178	0.54	198	50	37.6	3.35	0.77	49.6	4.93	1178
MRAC1288	27	30	MRM006317	500	8.06	3.61	2.53	9.60	1.34	96	0.29	77	22	13.5	1.55	0.50	26.1	2.70	926
MRAC1288	30	31	MRM006318	257	11.20	4.59	3.82	13.50	1.83	111	0.47	106	27	18.4	2.12	0.63	49.6	4.15	735
MRAC1290	24	27	MRM006335	179	12.50	7.30	3.19	14.70	2.51	84	1.08	91	23	16.9	2.10	1.16	63.5	7.20	612
MRAC1290	42	44	MRM006342	99	17.20	10.70	4.81	21.70	3.64	101	1.52	106	26	22.0	3.11	1.56	106.0	10.05	640
MRAC1293	28	30	MRM006378	468	1.20	0.66	0.53	1.62	0.24	32	0.12	14	5	2.3	0.25	0.14	3.8	0.87	648
MRAC1293	30	33	MRM006379	383	1.26	0.67	0.58	1.53	0.22	34	0.12	16	6	2.3	0.24	0.11	3.9	0.81	550
MRAC1293	33	36	MRM006380	530	1.62	0.86	0.70	2.13	0.32	45	0.12	20	7	3.2	0.32	0.15	5.3	0.96	754
MRAC1293	36	39	MRM006381	420	2.88	1.62	1.07	3.30	0.56	33	0.22	23	7	4.7	0.51	0.27	13.9	1.76	626
MRAC1295	84	87	MRM006432	736	31.70	14.75	7.94	39.90	5.73	305	1.70	304	84	54.8	5.73	2.03	140.0	13.40	2100
MRAC1295	87	88	MRM006434	399	45.00	23.60	9.45	55.60	8.70	403	2.47	351	93	64.6	7.80	3.07	254.0	18.75	2083
MRAC1295	88	89	MRM006435	213	39.60	21.50	7.39	48.10	7.91	344	2.43	277	73	49.7	6.65	2.80	256.0	16.55	1634
MRAC1296	75	78	MRM006463	213	13.05	6.30	3.00	16.45	2.35	125	0.67	104	29	20.7	2.31	0.80	59.0	4.91	721
MRAC1296	78	81	MRM006464	154	8.58	4.83	1.92	10.90	1.72	80	0.50	67	19	13.4	1.56	0.67	51.1	3.88	503
MRAC1299	45	48	MRM006524	113	17.35	8.52	5.63	23.10	3.20	105	0.85	143	35	28.2	3.20	1.13	76.6	7.01	680
MRAC1299	48	49	MRM006525	114	12.55	5.90	3.96	16.80	2.41	96	0.71	108	27	21.4	2.19	0.78	55.2	4.90	563
MRAC1300	51	54	MRM006556	107	15.85	8.49	5.22	20.90	2.97	115	1.13	120	31	24.9	2.80	1.28	74.1	8.29	642
MRAC1305	33	36	MRM006669	614	1.88	1.04	0.77	2.38	0.31	57	0.17	30	11	4.6	0.30	0.15	7.7	0.99	893
MRAC1305	36	39	MRM006670	446	2.65	1.57	1.06	2.86	0.51	60	0.27	32	11	5.4	0.41	0.28	12.3	1.69	704
MRAC1307	42	45	MRM006707	259	4.39	2.68	1.83	5.00	0.85	77	0.49	47	16	7.7	0.79	0.47	19.0	3.20	538
MRAC1307	48	51	MRM006709	96	24.20	13.70	7.53	26.40	4.95	77	1.94	110	25	25.5	4.06	2.00	125.0	13.10	666

Hole_ID	From	To	Sample	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	TREO ppm
MRAC1309	30	31	MRM006729	74	43.30	20.50	16.40	46.30	7.95	264	2.74	288	77	58.7	7.88	3.01	157.5	19.40	1290
MRAC1311	75	78	MRM006784	308	22.20	10.95	5.55	26.80	4.17	178	1.30	154	42	30.0	3.92	1.48	101.0	9.27	1078
MRAC1311	78	81	MRM006785	294	21.00	11.95	5.07	24.90	4.23	163	1.50	137	37	25.9	3.67	1.68	109.0	10.45	1022
MRAC1311	81	84	MRM006786	276	34.90	25.50	5.94	32.10	8.04	144	3.72	136	34	28.1	5.20	3.80	284.0	23.40	1264
MRAC1312	65	66	MRM006814	341	7.37	4.43	2.29	8.99	1.42	64	0.52	53	13	9.6	1.20	0.60	38.5	4.00	666
MRAC1313	54	57	MRM006836	218	13.90	7.39	5.43	17.35	2.74	92	1.04	123	30	23.8	2.44	0.95	65.0	6.85	732
MRAC1314	63	64	MRM006862	437	2.21	1.33	0.66	2.07	0.45	14	0.26	13	4	3.1	0.37	0.20	10.8	1.67	601
MRAC1314	64	66	MRM006863	578	4.70	2.85	1.45	4.79	0.92	39	0.40	32	9	7.0	0.78	0.41	21.7	2.64	861
MRAC1314	66	69	MRM006864	137	8.24	5.06	2.45	10.20	1.74	98	0.70	67	19	11.9	1.45	0.65	54.1	4.45	507
MRAC1315	81	84	MRM006896	179	12.35	6.26	4.03	15.80	2.26	98	0.81	109	30	22.3	2.38	0.90	58.4	5.53	656
MRAC1315	84	85	MRM006897	148	12.75	6.80	3.92	16.40	2.44	88	0.84	89	24	18.7	2.40	0.97	64.1	5.83	582
MRAC1315	85	86	MRM006898	161	11.25	6.32	3.40	14.25	2.19	84	0.86	88	23	17.7	2.21	0.86	58.9	5.37	577
MRAC1320	51	52	MRM007416	406	2.54	1.48	0.79	3.13	0.45	26	0.16	27	8	5.2	0.50	0.19	9.8	1.42	602
MRAC1321	69	72	MRM007443	355	3.02	1.48	1.43	4.46	0.52	81	0.19	54	17	8.1	0.58	0.20	12.6	1.11	655
MRAC1321	72	75	MRM007444	285	4.55	2.95	1.77	5.92	0.99	31	0.42	43	10	8.6	0.80	0.48	26.7	2.68	515
MRAC1321	75	78	MRM007445	195	13.40	6.42	4.61	19.10	2.49	105	0.71	119	29	23.3	2.59	0.89	63.4	5.03	706
MRAC1322	75	77	MRM007476	400	24.20	15.95	5.12	24.20	5.33	101	2.16	128	28	24.5	3.70	2.35	165.5	15.75	1145
MRAC1322	77	78	MRM007477	681	133.00	75.60	30.20	133.50	27.30	447	10.30	677	154	138.0	21.50	11.05	657.0	77.90	3928
MRAC1323	45	46	MRM007495	401	3.34	1.94	0.80	4.02	0.67	28	0.29	30	7	6.0	0.57	0.28	16.4	2.31	614
MRAC1324	54	55	MRM007516	158	16.20	8.08	4.54	19.20	3.02	116	1.15	116	32	23.7	2.79	1.36	74.8	7.92	700
MRAC1325	45	48	MRM007535	1165	58.70	19.75	23.00	83.40	8.57	472	1.83	617	170	129.5	12.05	2.71	143.0	15.85	3501
MRAC1325	48	51	MRM007536	1170	67.00	24.40	23.70	90.90	10.30	494	2.32	626	167	130.5	13.35	3.32	187.0	19.75	3631
MRAC1325	51	54	MRM007537	334	20.90	8.83	6.31	25.30	3.40	137	1.00	166	44	35.2	3.82	1.24	75.0	7.74	1043
MRAC1325	54	57	MRM007538	141	11.70	7.02	2.38	13.95	2.32	80	1.00	74	21	15.7	1.92	1.04	66.6	6.45	535
MRAC1326	48	51	MRM007569	391	10.90	3.47	5.47	19.05	1.46	784	0.34	449	156	53.0	2.26	0.39	26.4	2.40	2260
MRAC1326	63	66	MRM007574	857	22.90	10.90	5.33	30.40	3.92	259	1.00	268	72	49.1	4.21	1.25	107.0	8.20	2050
MRAC1326	66	69	MRM007575	536	27.00	15.25	4.10	32.20	5.29	202	1.40	206	51	36.6	4.38	1.78	173.5	11.00	1578
MRAC1326	69	72	MRM007576	321	22.50	12.30	4.47	29.60	4.16	205	1.06	236	58	43.6	4.17	1.46	113.0	8.93	1277
MRAC1326	72	75	MRM007577	207	39.40	19.10	6.85	50.20	6.94	312	1.64	331	83	61.7	7.22	2.30	174.5	13.75	1570
MRAC1326	75	76	MRM007578	155	21.50	10.80	3.21	25.40	4.00	163	1.00	154	39	29.3	3.65	1.27	114.0	7.81	877
MRAC1336	30	32	MRM008051	109	14.45	8.85	3.60	14.85	3.12	68	1.18	75	19	17.1	2.37	1.26	78.2	8.00	509
MRAC1337	45	48	MRM008071	196	20.60	11.85	5.13	22.60	4.19	92	1.66	111	26	25.5	3.51	1.75	111.0	11.10	773
MRAC1337	48	51	MRM008072	124	14.90	10.70	3.09	15.15	3.56	60	1.64	68	16	14.9	2.33	1.62	105.5	10.15	543
MRAC1338	24	27	MRM008083	218	4.48	2.47	1.36	6.10	0.89	120	0.34	57	19	7.8	0.82	0.35	24.4	2.06	560
MRAC1339	18	21	MRM008104	170	7.76	4.35	2.11	8.55	1.65	87	0.64	65	19	11.0	1.35	0.67	42.2	4.03	511
MRAC1339	21	24	MRM008105	167	7.86	4.58	2.07	9.28	1.64	96	0.59	61	18	9.7	1.34	0.61	50.5	3.92	522
MRAC1339	30	33	MRM008108	221	6.89	2.24	2.66	9.97	1.02	163	0.24	119	36	18.4	1.42	0.29	17.1	1.66	719
MRAC1339	45	48	MRM008113	375	47.90	25.80	12.85	54.00	9.62	173	3.14	235	59	58.9	8.33	3.43	274.0	21.40	1640
MRAC1342	24	27	MRM008171	116	16.60	10.10	4.38	19.25	3.54	62	1.32	84	18	19.3	2.74	1.42	118.0	8.57	585
MRAC1343	18	21	MRM008137	187	7.13	3.51	2.38	9.10	1.29	84	0.42	73	21	14.0	1.30	0.47	32.6	2.97	529
MRAC1344	22	24	MRM008155	227	11.60	4.98	4.27	16.90	1.93	97	0.45	127	29	23.3	2.21	0.59	35.6	3.96	702
MRAC1344	33	36	MRM008159	235	9.64	5.69	2.76	11.00	1.88	95	0.79	83	22	13.2	1.57	0.76	44.0	5.27	639
MRAC1348	51	52	MRM008280	136	11.60	6.16	5.54	14.15	2.21	69	0.85	93	21	18.2	2.11	0.87	49.9	6.00	523
MRAC1351	60	63	MRM008355	653	3.07	1.71	0.80	2.75	0.58	26	0.27	19	6	4.1	0.46	0.25	13.3	1.67	896
MRAC1351	66	68	MRM008357	135	12.15	8.19	3.46	13.85	2.66	70	1.17	73	18	15.2	2.10	1.16	75.4	7.34	529
MRAC1352	15	18	MRM008365	399	9.38	4.85	3.52	11.85	1.80	89	0.63	79	21	15.8	1.69	0.65	39.5	4.18	825

Hole_ID	From	To	Sample	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	TREO ppm
MRAC1353	24	27	MRM008376	233	6.31	3.43	2.07	7.38	1.22	62	0.46	53	14	9.4	1.12	0.52	34.3	3.71	522
MRAC1354	57	60	MRM008402	250	17.55	10.60	4.31	17.75	3.76	84	1.53	101	24	20.5	2.95	1.53	104.0	9.53	788
MRAC1354	60	63	MRM008403	145	14.20	10.00	3.83	15.15	3.24	57	1.53	82	18	17.3	2.37	1.44	92.3	8.86	569
MRAC1354	63	66	MRM008404	161	47.10	25.00	16.80	56.20	8.88	240	3.52	402	93	82.1	8.51	3.55	217.0	22.40	1652
MRAC1354	66	69	MRM008405	100	26.20	15.50	7.58	31.10	5.56	83	2.08	162	33	35.9	4.47	2.18	167.5	13.15	827
MRAC1355	42	45	MRM008426	415	2.07	1.02	0.62	2.44	0.37	45	0.18	30	9	4.9	0.36	0.13	8.3	1.12	635

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.*	223 aircore holes MRAC0950 to MRAC0977, MRAC1011 to MRAC1017, MRAC 1023 to MRAC 1069, MRAC10961 to MRAC1114, MRAC1230 to MRAC1326, MRAC1336 to MRAC1355 are reported here. 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.	Drill hole collar locations reported herein were picked-up using a Garmin hand-held GPS with approximately +-3m accuracy. No downhole surveying was undertaken.
	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.	Aircore drilling to deliver Im interval sample piles. Samples of between 1 metre and 3 composited metres taken for analysis depending on geology. 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, and 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).*	Aircore. 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.	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.	Not assessed.
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. All holes 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	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable, no core drilling was complete.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Original aircore samples were collected via a cyclone into a bucket and laid out in rows as single 1m piles.

sample preparation		1m samples or up to 3m composite samples were 'speared' from the sample piles for an approximately 2.5 - 3.5kg sample. Sample composite size determined by geology.
	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.
	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.	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. This is considered fit for purpose at this stage of the project.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample size is considered appropriate for the grainsize of the sampled material and is considered fit for purpose.
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, and 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 considered appropriate when discussed with an ALS Laboratory chemist.
	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, not applicable.
	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 manufactured by an independent 3rd party.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections are calculated by experienced geologists with methodology 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 each rare earth elemental value converted to the respective rare earth element oxide value, calculated using the stoichiometric conversion factor in "Section 2 – Data Aggregation Methods" below.
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.*	Drill hole collar locations noted in Table 6 were surveyed using a hand-held GPS with an accuracy within+- 5m. This is considered fit for purpose.
	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, 200m x 200m within areas of defined mineralisation. Regional traverse drillholes spaced 400m apart on a network of existing exploration tracks of various orientations.

	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.	Samples submitted to the laboratory were of 1m intervals when confirming mineralisation and generally 3m composites for "Regional" drill holes.
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 mineralized 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.
Sample security	*The measures taken to ensure sample security.*	Standard industry practice is used when collecting, transporting and storing samples for analysis. 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.

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 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.*	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.

<table>
<tr>
<td>Data aggregation methods</td>
<td>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.</td>
<td>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.
Conversions from elements to oxides:
<table>
<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>
<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>
<tr><td colspan="3">Source: Element-to-stoichiometric oxide conversion factors - JCU Australia.</td></tr>
</table>
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_3, Y_2O_3, 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_3, Y_2O_3, 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 the sum of Dy2O3, Nd2O3, Dy2O3 and Tb4O7.</td>
</tr>
<tr>
<td>Relationship between mineralisation widths and intercept lengths</td>
<td>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').</td>
<td>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 sheet margins have not been determined.</td>
</tr>
<tr>
<td>Diagrams</td>
<td>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.</td>
<td>Refer to maps, tables and figures in this report.</td>
</tr>
<tr>
<td>Balanced reporting</td>
<td>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.</td>
<td>Selected composite sapmles reported in Table 1.
Assay results as received (except TREO, which is calculated) where TREO > 500ppm, are reported in Table 5.</td>
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</table>

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. 3D geological modelling and mineralisation studies are being carried out. Additional drilling is planned.