

25 May 2023

Drilling update for the Mia REE¹ Prospect

- First assays from east-west crosslines at the Mia Prospect confirms REE mineralisation continuity between sections. Mia is the most advanced of eleven prospects at the Mount Ridley REE Project.
- Multiple, parallel, high-grade trends of clay-hosted REE mineralisation with grades
 >1000ppm TREO² have been outlined within a 3 km wide zone, over a length exceeding
 16km, that remains open to the northeast and southwest.
- Intersections of REE mineralisation range between 3m and 41m, with an average thickness of approximately 12m.
- Specific gravity measurements from five diamond core samples of Mia clay-hosted
 REE mineralisation ranged between 1.4 and 1.7, with an average of 1.6.
- Drilling has tested the central Mia area on a grid pattern of 2,000m x 400m. Tie-lines with holes spaced at 100m have also been drilled; assays are pending.
- Screen up-grade beneficiation testing of 19 samples is advancing well, with initial results due before the end of May.

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

"These results provide confidence regarding the continuity of mineralisation between drill sections for the Mia Prospect as we progress towards our maiden Mineral Resource Estimate. Mount Ridley's geologists have interpreted Mia mineralisation as structurally controlled within a 3km wide corridor. Drilling has outlined mineralisation over a strike length of approximately 16km and the prospective corridor remains open."

¹ REE means the 14 common rare earth elements; cerium (Ce), dysprosium (Dy), erbium (Er), europium (Eu), gadolinium (Gd), holmium (Ho), lanthanum (La), lutetium (Lu), neodymium (Nd), praseodymium (Pr), samarium (Sm), terbium (Tb), thulium (Tm), ytterbium (Yb). Yttrium (Y) is usually included with REE.

² TREO means the sum of the 14 REE+Y, each converted to its respective stoichiometric element oxide.



New Mia intersections included:

- MRAC1380: 12m at 1,188ppm TREO with 31% MagREO
- MRAC1388: 22m at 954ppm TREO with 24% MagREO including 15m at 1,148ppm TREO
- MRAC1395: 3m at 3,152ppm TREO with 19% MagREO
- MRAC1431: 16m at 1,800ppm TREO with 23% MagREO
- MRAC1432: 9m at 1,442ppm TREO with 23% MagREO
- MRAC1433: 23m at 1,171ppm TREO with 25% MagREO including 15m at 1,420ppm TREO
- MRAC1436: 7m at 1,406ppm TREO with 23% MagREO
- MRAC1440: 15m at 1,001ppm TREO with 15% MagREO

Previously reported Mia intersections included:

- MRAC1082: 9m at 3,690 ppm TREO, including 3m at 7,410 ppm TREO (0.74% TREO)
- MRAC1175: 9m at 1,476 ppm TREO
- MRAC1180: 8m at 3,272 ppm TREO, including 3m at 9,329 ppm TREO (0.93% TREO)
- MRAC1184: 24m at 1,965 ppm TREO
- MRAC1188: 6m at 6,648 ppm TREO, including 1m at 28,831 ppm TREO (2.88% TREO)
- MRAC1195: 15m at 940 ppm TREO
- MRAC1218: 11m at 961 ppm TREO
- MRAC1234: 9m at 3,159 ppm TREO
- MRAC1235: 24m at 982 ppm TREO
- MRAC1236: 15m at 950ppm TREO
- MRAC1393: 41m at 3,970 ppm TREO, including 6m at 9,523 ppm TREO (0.95% TREO)
- MRAC1420: 12m at 970 ppm TREO
- MRAC1434: 8m at 3,022 ppm TREO



Exploration Update

Mount Ridley Mines Limited (ASX: MRD, "Mt Ridley" or "the Company") is pleased to report further aircore drilling results from the Mia Prospect, one of eleven prospects at the 100% owned Mount Ridley REE Project, located approximately 50km north of the Port of Esperance, Western Australia (Figure 1).

Resource-evaluation drilling continues to return clay-hosted REE mineralisation with better intersection grades exceeding 1000ppm TREO which occur consistently within a 3km wide corridor of parallel in-situ clay units.

Elongate, parallel clay units often coincide with geological structures apparent as 'ridges' in aeromagnetic imagery, over a strike length that exceeds 16 kilometres (Figure 2). Very high grade REE mineralisation (~4000ppm) has been previously reported from these structures (ASX: MRD ASX Announcement, 10th May 2023, Coincident High-Grade Rare Earth Elements and Geophysical Anomalies at Mia Prospect) including a project-high intersection of 36m at 4,398 ppm TREO (0.44% TREO), which included 6m at 9,523 ppm TREO (0.95% TREO); and 6m at 6,648 ppm TREO, that included 1m at 28,831 ppm TREO (2.88% TREO).

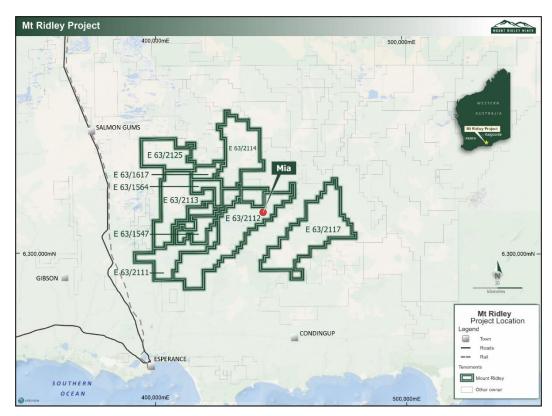


Figure 1: The Mount Ridley REE Project is located in south-west Western Australia with an area of approximately 3,400km². The location of the Mia Prospect is shown within E63/2112.



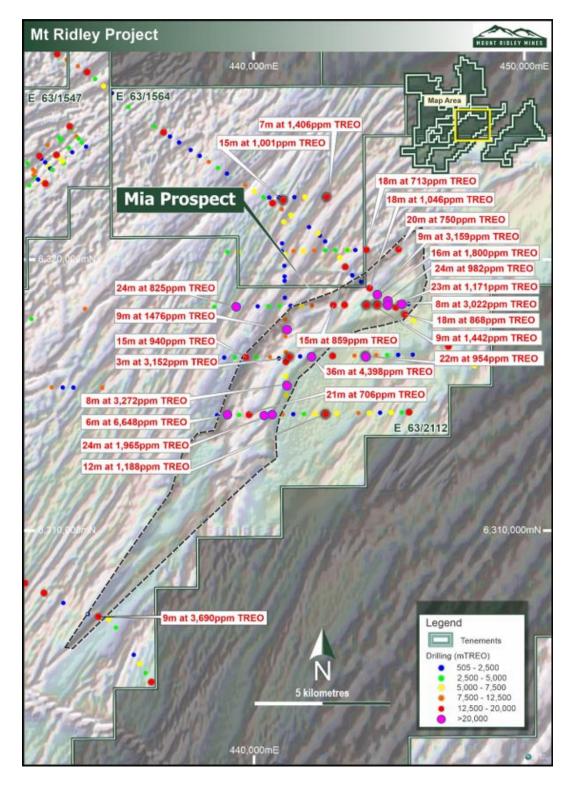


Figure 2: Highly enriched REE intersections occur in proximity to a series of parallel, approximately linear, magnetic 'ridges' seen in aeromagnetic imagery over a strike length that exceeds 16 kilometres at the Mia Prospect to date.



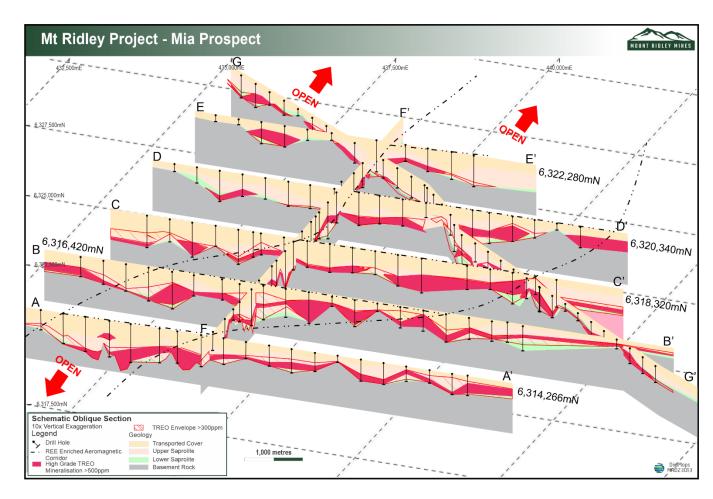


Figure 3: Mia Prospect aircore drilling within 10km long corridor. Stacked cross sections show drill holes and layered REE mineralisation approximately 7km wide. The grid lines are 2.5 km apart. The vertical scale is 10x the horizontal scale.



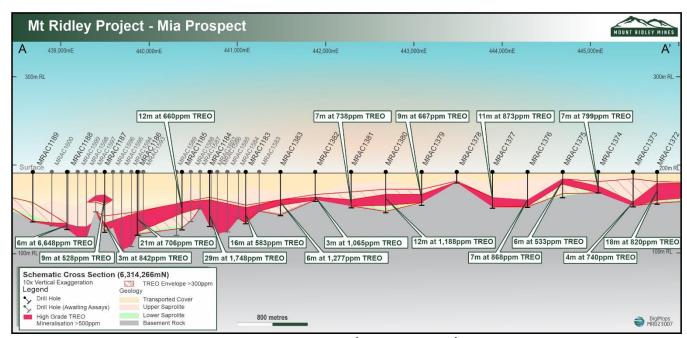


Figure 5: Cross section across the Mia Prospect at A-A', (refer to Figure 3), which is 7.2 km wide, showing thick zones of clay-hosted REE mineralisation. Holes with mineralisation are 400m apart. Infill holes drilled 100m apart are also shown; assays for these are awaited.

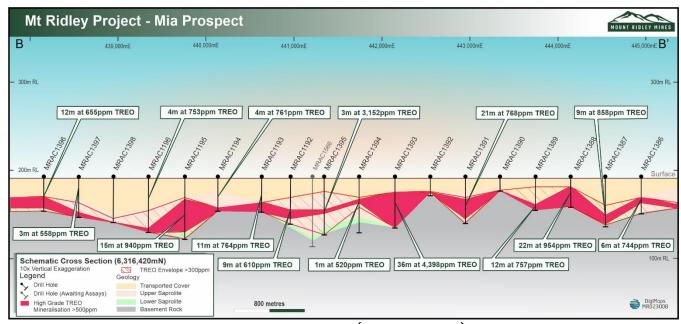


Figure 6: Cross section across the Mia Prospect at B-B' (refer to Figure 3), which is 7.0 km wide. Holes with mineralisation are 400m apart.



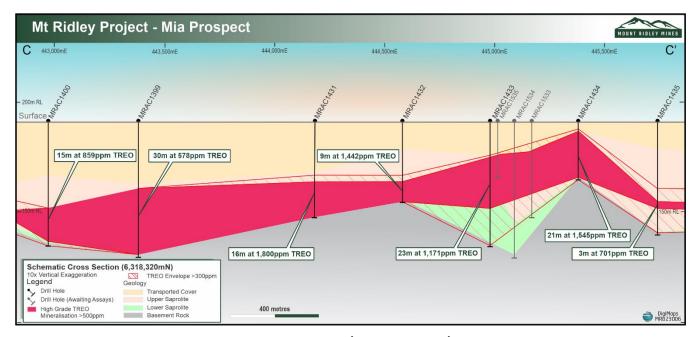


Figure 7: Cross section across the Mia Prospect at C-C' (refer to Figure 3), which is 2.9 km wide. Holes are 400m apart. Infill holes are 100m apart.

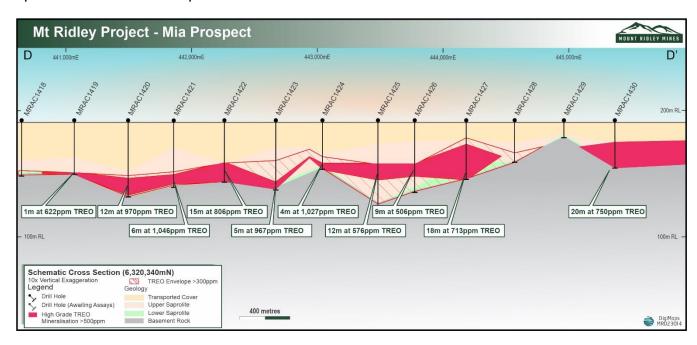


Figure 8: Cross section across the Mia Prospect at D-D' (refer to Figure 3), which is 4.8 km wide. Holes are 400m apart.



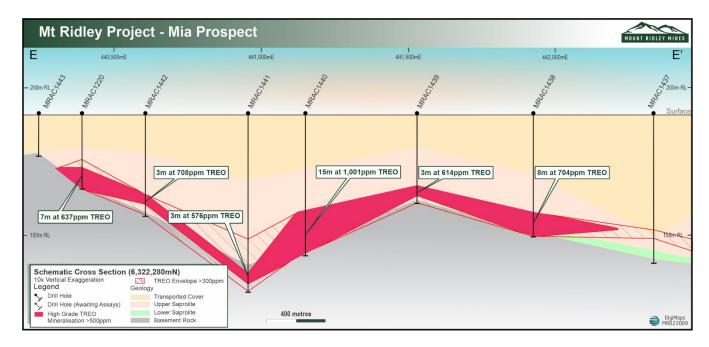


Figure 9: Cross section across the Mia Prospect at E-E' (refer to Figure 3), which is 2.2 km wide. Holes are approximately 400m apart.

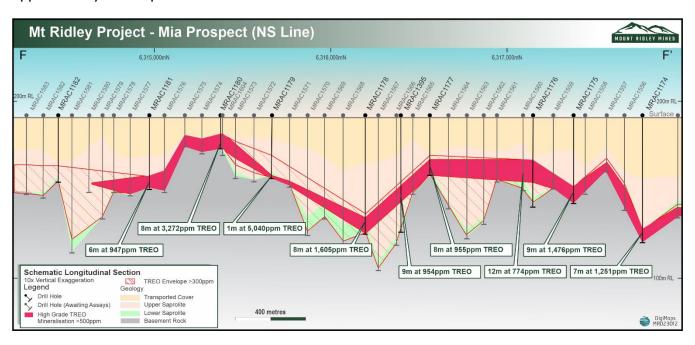


Figure 10: North-South long section along the Mia Prospect central access track at F-F' (refer to Figure 3), length shown is 4.0 km long. Holes are 400m apart. Infill holes are 100m apart.



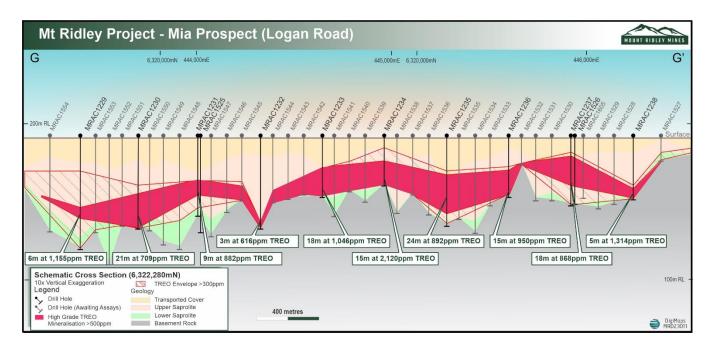


Figure 11: Oblique section across the Mia Prospect at G-G' (refer to Figure 3), which is 5.0 km wide. Holes with assays shown are 400m apart. Infills are 100m apart.

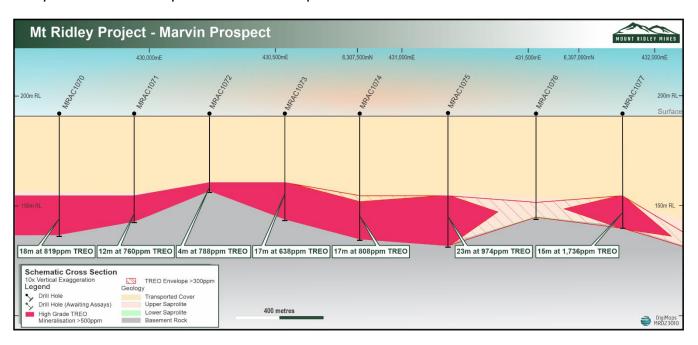


Figure 12: Cross section across the Marvin Prospect, which is 3.0 km wide. Holes with assays shown are 400m apart. The Marvin Prospect is 10 km southwest along the structural corridor from the Mia Prospect.



Exploration Outlook

- **Assays**: Aircore drilling results are flowing through with all results expected by the end of May.
- **Metallurgy**: Beneficiation testwork is progressing well. Most samples have been screened and are being filtered. When complete, the fine fraction will be tested by ANSTO³, IMO⁴ and Simulus laboratories.
- **Surveys**: Aboriginal Heritage Protection surveys are advancing, with a drone survey in progress. Spring flora surveys are scheduled for priority drilling areas at the contiguous Mia and Marvin Prospects. Targets take into consideration the location of the magnetic 'ridges' evident in aeromagnetic imagery.
- **Drilling**: Programmes of Work approvals have been received from the DMIRS⁵, (subject to completing heritage and flora surveys), to drill up to 9 kilometres north and up to 10 kilometres south of the central Mia Prospect area and as far south as the Marvin Prospect. These approvals include provisions to progressively infill the drilling grid in areas to a 400m x 400m density. The Company is targeting high silica-kaolin saprolite that may be amenable to beneficiation through simple screening.
- Geology and Mineralogy: A geological map of basement rock types is progressing under a Research and Development (R&D) programme, with emphasis on distinguishing regional and local units with elevated REE. A separate R&D study is looking at the relationship between clay type, Redox fronts and the distribution of REE mineralisation.

³ Australian Nuclear Science and Technology Organisation, NSW

⁴ Independent Metallurgy Operations, WA

⁵ Department of Mines Industry Regulation and Safety, WA



					Table	• 1:					
			s	elected No	ew Rare Eartl		rsections				
Hala ID	From	То	Interval	TREO	MagREO	MagREO	HREO	HREO	CREO	LREO	NdPr
Hole ID	(m)	(m)	(m)	(ppm)	(ppm)	(%)	(ppm)	(%)	(ppm)	(ppm)	(ppm)
MRAC1372	12	30	18	820	171	21%	200	24%	249	620	149
MRAC1373	18	24	6	619	136	22%	184	30%	220	434	118
MRAC1374	15	22	7	799	233	29%	277	35%	341	522	202
MRAC1375	6	12	6	533	112	21%	50	9%	105	483	106
MRAC1376	30	37	7	868	209	24%	214	25%	288	654	187
MRAC1377	27	38	11	873	186	21%	245	28%	299	628	163
MRAC1379	24	33	9	667	139	21%	194	29%	234	473	122
MRAC1380	24	36	12	1188	370	31%	368	31%	501	820	333
MRAC1381	30	37	7	738	175	24%	208	28%	262	530	155
MRAC1382	27	30	3	1065	182	17%	182	17%	242	883	163
MRAC1383	30	36	6	1277	398	31%	433	34%	558	844	352
MRAC1386	21	27	6	744	169	23%	134	18%	203	610	154
MRAC1387	42	51	9	858	190	22%	167	19%	239	690	172
MRAC1388	9	31	22	954	227	24%	283	30%	347	671	199
MRAC1389	24	36	12	757	155	20%	204	27%	251	554	137
MRAC1391	24	45	21	768	178	23%	198	26%	256	570	158
MRAC1393	15	56	41	3970	901	23%	510	13%	943	3460	842
MRAC1395	15	24	9	954	293	31%	177	19%	308	777	271
MRAC1395	36	39	3	3152	591	19%	270	9%	559	2881	555
MRAC1396	21	33	12	655	156	24%	130	20%	193	524	142
MRAC1399	30	60	30	578	141	24%	122	21%	177	456	128
MRAC1400	39	54	15	859	203	24%	187	22%	265	672	184
MRAC1402	33	45	12	759	178	23%	151	20%	224	607	163
MRAC1403	45	50	5	1175	310	26%	266	23%	391	909	282
MRAC1405	24	30	6	598	157	26%	135	23%	188	463	140
MRAC1407	36	60	24	825	184	22%	278	34%	313	547	155
MRAC1410	30	37	7	670	177	26%	206	31%	261	463	156
MRAC1411	27	34	7	655	161	25%	144	22%	208	511	147
MRAC1414	45	51	6	541	115	21%	128	24%	167	413	104
MRAC1415	27	38	11	648	139	21%	129	20%	182	519	126
MRAC1420	45	57	12	970	258	27%	220	23%	322	750	235
MRAC1421	42	48	6	1046	252	24%	311	30%	385	736	222
MRAC1422	32	47	15	806	51	6%	56	7%	72	749	45
MRAC1423	48	53	5	967	227	23%	204	21%	304	763	211
MRAC1424	33	37	4	1027	239	23%	283	28%	364	745	213
MRAC1425	33	45	12	576	138	24%	138	24%	188	437	124
MRAC1426	33	42	9	506	146	29%	50	10%	132	456	141
MRAC1427	27	45	18	713	181	25%	142	20%	221	570	167
MRAC1430	16	36	20	750	177	24%	148	20%	224	601	163
MRAC1431	27	43	16	1800	418	23%	459	26%	607	1341	376
MRAC1432	27	36	9	1442	325	23%	438	30%	525	1005	281



			s	elected No	Table ew Rare Earth		rsections							
Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	MagREO (ppm)	MagREO (%)	HREO (ppm)	HREO (%)	CREO (ppm)	LREO (ppm)	NdPr (ppm)			
MRAC1433	16	39	23	1171	288	25%	223	19%	344	948	264			
MRAC1433	45 55 10 600 150 25% 122 20% 181 478													
MRAC1434	45 55 10 600 150 25% 122 20% 181 478 4 25 21 1545 471 30% 563 36% 710 982													
MRAC1436	21	24	3	1027	130	13%	46	4%	113	981	125			
MRAC1436	48	55	7	1406	319	23%	231	16%	368	1176	295			
MRAC1438	33	41	8	704	154	22%	134	19%	192	570	139			
MRAC1440	33	48	15	1001	153	15%	170	17%	218	831	137			
MRAC1445	15	37	22	751	163	22%	150	20%	208	601	146			
MRAC1446	12	27	15	897	223	25%	198	22%	287	699	201			

About the Mount Ridley REE Project

The Company announced on 1 July 2021 that laterally extensive REE mineralisation had been identified at its namesake Mount Ridley Project.

The Mount Ridley Project is located from approximately 50 kilometres northeast of the deepwater port of Esperance, a town with approximately 12,000 people and a hub for tourism, agriculture, and fishing (Figure 1). The Port exports minerals including nickel sulphide, iron ore and spodumene.

The Project is approximately 20 kilometres east of the sealed Goldfields Esperance Highway and infrastructure corridor which includes the Kalgoorlie-Esperance railway line and gas pipeline. The Esperance airport is located at Gibson Soak, approximately 20 kilometres from the Project.

Work undertaken to date

- Since March 2022, the Company has assayed over 800 AC holes representing over 36,000m of drilling. This work identified wide-spread clay-hosted REE mineralisation, which has resolved into 11 targets for further detailed work.
- Twenty diamond drill holes for a total of 961.5m of core were complete across the Project in December 2022, with suitable core being used for metallurgical test work.
- 1,264 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.
- 691 samples of near fresh rock stubs from the bottom of aircore holes drilled in 2014 and 2022 have been scanned using a Bruker M4 Tornado micro-XRF analyser. This is a Research and Development project designed to geologically map basement rocks



(protolith). The protolith has a major bearing on the style of clay that the REE mineralisation is hosted in and may also identify hard-rock REE targets.

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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Chairman Technical Manager

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About Mount Ridley Mines Limited

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

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

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

Competent Person

The information in this report that relates to exploration strategy and results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a consulting geologist retained by Mount Ridley Limited. Mr Crook is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the exploration processes undertaken to qualify as a Competent Person as defined in the 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

With respect to JORC Table 1 included in MRD announcements to ASX dated:

- 2 August 2021. "REE Potential Unveiled at Mount Ridley."
- 13 September 2021. "REE Targets Extended."
- 21 October 2021. "Encouraging Rare Earth Extraction Results."
- 2 August 2022. "Excellent Drilling Results Expand Rare Earth Mineralisation Footprint at the Mt Ridley Project."
- 6 October 2022. "Highest grades to date returned from Mt Ridley Rare Earth Project, Mineralised footprint extended to more than 1,200km2."
- 14 February 2023. "Thick, shallow and high grade REE mineralisation discovered at the new Jody and Marvin Prospects.
- 30 March 2023. "Resource drilling commences on 30km long Mia Marvin Zone at the Mount Ridley REE Project."



 10 May 2023. "Coincident High-Grade Rare Earth Elements and Geophysical Anomalies at Mia Prospect"

Mount Ridley confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the exploration results continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



Caution Regarding Forward Looking Information

This announcement may contain forward-looking statements that may involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.



Appendix 1

A. Drill Hole Collar Locations for Reported Holes.

		Drill	Table 2: hole Collar L			
Hole ID	Prospect	Drill Type	Depth	East	North	Nominal RL
		J , po	m	m	m	m
MRAC1372	Mia	AC	34	445,756	6,314,343	191
MRAC1373	Mia	AC	37	445,485	6,314,337	191
MRAC1374	Mia	AC	22	445,091	6,314,331	191
MRAC1375	Mia	AC	27	444,684	6,314,326	191
MRAC1376	Mia	AC	38	444,288	6,314,316	191
MRAC1377	Mia	AC	39	443,888	6,314,312	191
MRAC1378	Mia	AC	10	443,483	6,314,308	191
MRAC1379	Mia	AC	36	443,088	6,314,297	191
MRAC1380	Mia	AC	44	442,682	6,314,291	191
MRAC1381	Mia	AC	37	442,288	6,314,287	191
MRAC1382	Mia	AC	30	441,885	6,314,282	191
MRAC1383	Mia	AC	47	441,489	6,314,274	191
MRAC1384	Mia	AC	48	445,889	6,316,468	191
MRAC1385	Mia	AC	34	445,351	6,316,460	191
MRAC1386	Mia	AC	40	444,947	6,316,454	191
MRAC1387	Mia	AC	54	444,541	6,316,446	191
MRAC1388	Mia	AC	32	444,145	6,316,440	191
MRAC1389	Mia	AC	36	443,744	6,316,434	191
MRAC1390	Mia	AC	14	443,342	6,316,428	191
MRAC1391	Mia	AC	51	442,946	6,316,420	191
MRAC1392	Mia	AC	19	442,550	6,316,417	191
MRAC1393	Mia	AC	56	442,148	6,316,410	191
MRAC1394	Mia	AC	61	441,742	6,316,405	191
MRAC1395	Mia	AC	64	441,347	6,316,400	191
MRAC1396	Mia	AC	37	438,157	6,316,351	191
MRAC1397	Mia	AC	44	438,555	6,316,358	191
MRAC1397	Mia	AC	50	438,947	6,316,364	191
MRAC1398	Mia	AC	61	443,381	6,318,301	191
MRAC1400	Mia	AC	56	443,381	6,318,292	191
MRAC1400 MRAC1401	Mia	AC	42	442,572	6,318,288	191
MRAC1401 MRAC1402	Mia	AC	45	442,372	6,318,281	191
	†		50	442,178	1	191
MRAC1403	Mia Mia	AC AC	48	1	6,318,277	191
MRAC1404	+			441,388	6,318,270	
MRAC1405	Mia	AC	57	438,583	6,318,229	191
MRAC1406	Mia	AC	41	438,983	6,318,233	191
MRAC1407	Mia	AC	60	439,377	6,318,239	191
MRAC1408	Mia	AC	36	439,776	6,318,271	191
MRAC1409	Mia	AC	62	440,179	6,318,251	191
MRAC1410	Mia	AC	38	440,579	6,318,252	191
MRAC1411	Mia	AC	34	440,981	6,318,262	191
MRAC1412	Mia	AC	14	438,274	6,320,241	191
MRAC1413	Mia	AC	29	438,665	6,320,248	191
MRAC1414	Mia	AC	54	439,062	6,320,256	191



			Table 2:			
		Drill	hole Collar L	ocations		
Hole ID	Prospect	Drill Type	Depth	East	North	Nominal RL
			m	m	m	m
MRAC1415	Mia	AC	38	439,463	6,320,264	191
MRAC1416	Mia	AC	38	439,865	6,320,268	191
MRAC1417	Mia	AC	44	440,265	6,320,275	191
MRAC1418	Mia	AC	42	440,646	6,320,280	191
MRAC1419	Mia	AC	41	441,065	6,320,288	191
MRAC1420	Mia	AC	60	441,496	6,320,289	191
MRAC1421	Mia	AC	51	441,858	6,320,296	191
MRAC1422	Mia	AC	47	442,260	6,320,305	191
MRAC1423	Mia	AC	53	442,668	6,320,311	191
MRAC1424	Mia	AC	37	443,041	6,320,317	191
MRAC1425	Mia	AC	65	443,483	6,320,321	191
MRAC1426	Mia	AC	55	443,774	6,320,327	191
MRAC1427	Mia	AC	45	444,184	6,320,334	191
MRAC1428	Mia	AC	32	444,569	6,320,339	191
MRAC1429	Mia	AC	12	444,961	6,320,343	191
MRAC1430	Mia	AC	36	445,368	6,320,353	191
MRAC1431	Mia	AC	43	444,181	6,318,312	191
MRAC1432	Mia	AC	36	444,582	6,318,319	191
MRAC1433	Mia	AC	56	444,979	6,318,323	191
MRAC1434	Mia	AC	26	445,380	6,318,330	191
MRAC1435	Mia	AC	51	445,740	6,318,335	191
MRAC1436	Mia	AC	55	442,727	6,322,296	191
MRAC1437	Mia	AC	50	442,335	6,322,294	191
MRAC1438	Mia	AC	41	441,924	6,322,280	191
MRAC1439	Mia	AC	30	441,530	6,322,278	191
MRAC1440	Mia	AC	48	441,124	6,322,181	191
MRAC1441	Mia	AC	60	440,955	6,322,272	191
MRAC1442	Mia	AC	34	440,606	6,322,264	191
MRAC1443	Mia	AC	14	440,242	6,322,261	191
MRAC1444	Mia	AC	20	439,815	6,322,253	191
MRAC1445	Mia	AC	37	439,418	6,322,247	191
MRAC1446	Mia	AC	39	439,010	6,322,238	191
MRAC1447	Mia	AC	13	438,625	6,322,218	191
MRAC1448	Mia	AC	13	438,215	6,322,224	191

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



Appendix 1

B. Representative Assay Results.

								т	able 4:										
		Repres	entativ	e Assay R	esults fo	or New Re	eported I			jh Grade	Total Rar	e Earth E	lement (TREE) Int	ersectio	ns			
Hole ID	Sample ID	From	То	Ce	Dy	Er	Eu	Gd	Но	La	Lu	Nd	Pr	Sm	Tb	Tm	Υ	Yb	TREE
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC1372	MRM010325	15	18	268	7.05	3.73	1.53	6.86	1.39	85.6	0.64	50.6	14.65	8.78	1.17	0.58	32.9	4.1	488
MRAC1372	MRM010326	18	21	606	14.6	8.22	3.77	17.2	2.93	104.5	1.1	118	29.8	23.7	2.72	1.18	67.2	7.15	1,008
MRAC1372	MRM010327	21	24	319	20.9	12.7	4.53	23	4.32	110	1.55	129	31.5	25.9	3.4	1.73	120	10.6	818
MRAC1372	MRM010328	24	27	155.5	27.7	14.7	6.22	31.8	5.22	132.5	1.93	179	44.3	38.5	4.77	2.07	142	12.15	798
MRAC1372	MRM010329	27	30	131.5	18.95	11.55	3.11	19.7	3.94	89.2	1.39	86.8	22.8	18.85	3.21	1.58	120	9.35	542
MRAC1372	MRM010331	30	33	125	9.66	5.71	2.05	11.05	2.02	67.4	0.73	63.3	17.2	12.6	1.6	0.83	63.3	4.84	387
MRAC1376	MRM010380	27	30	125	3.12	1.89	0.56	3.4	0.63	22	0.37	21	5.47	3.73	0.5	0.32	17.6	1.96	208
MRAC1376	MRM010381	30	33	273	9.64	4.34	2.45	12.95	1.63	99.5	0.57	108	28.4	18.25	1.76	0.56	41.1	3.53	606
MRAC1376	MRM010382	33	36	262	24.7	12.25	4.92	28.4	4.61	177.5	1.46	158	41.2	30.7	4.11	1.73	142	10.55	904
MRAC1376	MRM010383	36	37	178.5	14.05	7.05	2.85	15.5	2.62	90.9	0.94	84.4	21.2	16.15	2.36	0.96	78.6	6.01	522
MRAC1376	MRM010384	37	38	90.9	7.94	4.6	1.7	8.95	1.61	48.4	0.59	44.1	11	8.43	1.36	0.61	47.5	4.34	282
MRAC1377	MRM010394	24	27	79.4	3.96	2.2	1.01	4.7	0.7	23.7	0.34	33.1	8.7	5.38	0.64	0.3	18.7	2.05	185
MRAC1377	MRM010395	27	30	387	9.06	4.11	3.74	12.05	1.56	189.5	0.54	128	39.3	20.2	1.64	0.57	39.2	3.85	840
MRAC1377	MRM010396	30	33	190.5	13.6	9.09	3.39	15.9	3	90.8	1.29	87.3	21.6	16.45	2.15	1.24	104.5	7.87	569
MRAC1377	MRM010397	33	36	252	24.2	13.45	6.02	26.7	4.72	144.5	1.88	136.5	34.1	26.3	3.91	1.92	131	11.65	819
MRAC1377	MRM010398	36	38	147	23.5	16.7	3.86	20.3	5.54	86.2	2.2	74.8	17.8	15.4	3.35	2.33	210	14.2	643
MRAC1377	MRM010400	38	39	60.2	4.44	3.07	1.24	4.86	1	31.5	0.52	25.6	6.52	5.5	0.71	0.46	30.5	3.18	179
MRAC1379	MRM010414	21	24	64.1	2.72	1.68	0.71	2.95	0.59	34.8	0.32	22.2	6.68	3.92	0.44	0.28	14	1.93	157
MRAC1379	MRM010415	24	27	239	7.49	4.31	1.75	9.41	1.46	98.2	0.56	67	19.4	10.55	1.31	0.52	43.4	3.97	508
MRAC1379	MRM010416	27	30	120	4.96	3.34	1.34	5.57	1.04	79.3	0.49	50.2	16.4	7.58	0.76	0.49	28.2	3.24	323
MRAC1379	MRM010417	30	33	211	25.1	17.55	4.41	26.6	6.07	122	2.28	128.5	31.1	23.9	3.92	2.47	209	14.1	828
MRAC1379	MRM010418	33	35	62.1	5.47	3.34	1.52	6.36	1.16	30.8	0.45	30.5	7.41	5.91	0.9	0.47	34.3	3.01	194
MRAC1380	MRM010428	21	24	229	5.32	3.15	1.33	6.12	1.1	36.6	0.47	43.6	10.7	8.09	0.87	0.48	33.6	3.11	384
MRAC1380	MRM010429	24	27	561	12.15	7.02	2.67	13.5	2.51	60.2	0.94	100.5	24.4	19.95	2.08	1.02	59.3	6.56	874
MRAC1380	MRM010431	27	30	161.5	54.6	29.8	14.2	73.8	10.7	388	3.87	549	131	98	9.75	4.2	270	27.1	1,826



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	1			e Assay R			•												
Hole ID	Sample ID	From	То	Ce	Dy	Er	Eu	Gd	Но	La	Lu	Nd	Pr	Sm	Tb	Tm	Υ	Yb	TREE
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC1380	MRM010432	30	33	101	19.5	10.4	4.87	24.4	3.88	137.5	1.36	174.5	43.7	32.6	3.48	1.44	87.7	10.1	656
MRAC1380	MRM010434	33	36	104.5	23.3	16.45	3.51	20.7	5.54	102	2.11	89.7	22	17.7	3.41	2.2	183.5	14.3	611
MRAC1380	MRM010435	36	39	110	8.63	5.66	2.16	10.7	1.87	60.7	0.8	55.8	13.85	10.8	1.53	0.77	67.3	5.13	356
MRAC1381	MRM010446	18	21	57	2.1	1.17	0.28	1.7	0.35	23.6	0.2	11.1	3.59	1.94	0.31	0.16	9.6	1.12	114
MRAC1381	MRM010447	21	24	212	2.24	1.26	0.72	2.83	0.42	222	0.16	56.7	25.4	5.47	0.38	0.17	9.9	1.04	541
MRAC1381	MRM010448	24	27	218	3.1	1.69	0.7	2.92	0.51	67.9	0.24	28.4	9.62	4.09	0.45	0.26	13.6	1.76	353
MRAC1381	MRM010449	27	30	182	3.2	2.08	0.54	2.79	0.67	47.3	0.34	18.5	6.37	2.99	0.46	0.31	15.9	2.36	286
MRAC1381	MRM010450	30	33	287	11.6	6.52	2.42	12.15	2.21	106.5	0.83	79	21.1	14.05	1.82	0.86	56.7	6.05	609
MRAC1381	MRM010451	33	36	137	16.3	9.77	3.83	18.7	3.28	108	1.26	126	31	22.9	2.5	1.37	90.2	9	581
MRAC1381	MRM010452	36	37	137	25.6	16.65	3.87	24.9	5.54	121.5	1.92	120.5	29.4	21.6	3.75	2.29	195	13.3	723
MRAC1382	MRM010453	0	3	42.7	3.7	2.38	0.85	4.32	0.8	27.7	0.34	25.8	6.58	4.74	0.59	0.34	24.7	2.25	148
MRAC1382	MRM010464	27	29	296	8.15	5.46	1.28	7.75	1.61	41.8	0.9	43.2	10.75	8.18	1.17	0.88	39.4	6.22	473
MRAC1382	MRM010465	29	30	836	27.2	15.35	6.48	34.1	5.24	263	1.9	243	64.5	42.9	4.48	2.17	136	14.3	1,697
MRAC1383	MRM010467	0	3	156.5	6.96	4.33	1.88	8.59	1.41	59.4	0.52	56.9	14.45	9.78	1.14	0.58	36.7	3.63	363
MRAC1383	MRM010477	27	30	163	1.96	1.69	0.26	1.3	0.48	9.9	0.26	6.2	1.8	1.16	0.26	0.25	14.4	1.88	205
MRAC1383	MRM010478	30	33	261	47.2	24.4	10.45	55	8.49	279	3.16	350	86.2	72.7	7.88	3.37	226	22.7	1,458
MRAC1383	MRM010479	33	36	146	21.1	12.5	4.04	23.1	4.02	133.5	1.74	130	32.6	25.6	3.34	1.73	126	11.55	677
MRAC1383	MRM010480	36	39	113.5	8.24	5.01	1.54	9.17	1.64	53.7	0.77	51.9	13.8	10.85	1.34	0.71	45.3	5.16	323
MRAC1387	MRM010549	39	42	183	5.62	3.45	0.93	5.6	1.07	36.3	0.44	40.2	10.5	7.54	0.89	0.45	28.4	3.48	328
MRAC1387	MRM010550	42	45	510	9.19	5.12	2.05	10.05	1.67	71.3	0.81	64.6	17.5	12.25	1.36	0.72	49.7	5.59	762
MRAC1387	MRM010551	45	48	260	12.85	6.96	3.55	15.75	2.17	164.5	0.88	129.5	38.4	23.3	2.1	0.97	64.3	6.66	732
MRAC1387	MRM010552	48	51	153	16.9	8.74	4.35	21	2.94	122.5	1.08	151.5	38.7	27.4	2.69	1.14	82.6	8.69	643
MRAC1387	MRM010553	51	53	86	8.39	5.21	1.53	8.35	1.62	42.8	0.61	43.3	11.6	8.8	1.2	0.73	50.7	4.94	276
MRAC1388	MRM010559	9	12	294	4.08	2.09	1.28	4.93	0.68	45.6	0.31	40.1	11.2	7.48	0.63	0.27	14.4	2.54	430
MRAC1388	MRM010561	12	15	447	18.35	6.95	6.14	25.8	2.62	369	0.89	272	84.2	44.4	3.38	0.94	51.8	6.28	1,340
MRAC1388	MRM010562	15	18	319	15.85	9.56	3.47	18.85	3.33	143.5	1.14	117.5	32.3	20.9	2.58	1.16	120	7.26	816
MRAC1388	MRM010563	18	21	217	32	20.1	5.67	31.4	6.53	120.5	2.63	151.5	37.1	29.7	4.79	2.7	183.5	18.2	863



		_							able 4:										
Hala ID	Comenta ID			e Assay R			•		Ĭ								Υ	VI	TDEE
Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	OH mag	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm mag	Tb ppm	Tm ppm	y ppm	Yb ppm	TREE
MRAC1388	MRM010564	21	24	233	34.3	20.9	6.54	35.2	6.26	121.5	2.79	162	39	35.1	4.84	2.97	194.5	19.1	918
MRAC1388	MRM010565	24	27	180	32.1	20.9	5.86	34.5	6.9	98.5	2.89	145	31.3	30.6	4.94	2.86	221	18.65	836
MRAC1388	MRM010567	27	30	137	15.05	9.66	2.59	15.25	3.26	68.3	1.36	69.6	17.05	16	2.37	1.4	101	8.87	469
MRAC1389	MRM010580	30	33	160	10.6	6.4	2.39	11.65	2.22	73.2	0.82	73.2	19.25	13.85	1.74	0.89	91.9	5.8	474
MRAC1389	MRM010581	33	35	452	26.7	16.15	5.03	31.4	5.7	177	1.88	162.5	40.4	31.9	4.38	2.15	186.5	13.35	1,157
MRAC1389	MRM010582	35	36	679	41.9	25.4	7.58	48.2	8.87	255	2.91	233	58.1	44.7	6.65	3.36	302	20.1	1,737
MRAC1390	MRM010583	0	3	30.2	2.04	1.28	0.46	1.97	0.36	15.1	0.18	12.9	3.25	2.62	0.28	0.16	11.5	1.18	83
MRAC1391	MRM010600	26	27	128	3.73	2.02	0.96	5.59	0.67	49.6	0.28	41.7	11.65	7.62	0.75	0.29	16.4	1.99	271
MRAC1391	MRM010601	27	30	365	15.85	6.22	4.01	22.6	2.45	171.5	0.61	184	49	36	3.02	0.72	49.3	4.81	915
MRAC1391	MRM010602	30	33	248	12.4	6.69	2.64	14.7	2.41	129.5	0.81	108.5	29.4	19.45	2.08	0.93	64.2	5.74	647
MRAC1391	MRM010603	33	36	264	18.5	9.68	3.84	21.3	3.39	113	1.32	131.5	32.4	24.4	3.03	1.39	86.6	8.8	723
MRAC1391	MRM010604	36	39	207	21.5	13.5	3.25	19.55	4.37	92.3	1.92	102.5	24.7	20.4	3.03	1.87	129	12.5	657
MRAC1391	MRM010605	39	42	240	17.65	9.87	3.3	20.3	3.38	119.5	1.18	106.5	26	21.1	2.76	1.3	97.2	8.6	679
MRAC1391	MRM010606	42	45	115.5	15.5	11.95	1.96	12.8	3.77	60	1.54	54.1	13.35	10.15	2.13	1.64	138	9.74	452
MRAC1393	MRM010622	12	15	16.2	0.65	0.27	0.15	0.84	0.12	7.9	0.07	6.4	1.88	1.28	0.12	0.05	3.1	0.34	39
MRAC1393	MRM010623	15	18	3550	88.3	34.2	34.2	137	13.9	1600	3.26	1520	405	228	17	4.25	342	24.1	8,001
MRAC1393	MRM010624	18	21	3480	115.5	54.9	46.6	162.5	20.4	1365	6.46	1400	361	226	20.3	6.86	538	44.1	7,848
MRAC1393	MRM010625	21	24	1425	45	20.4	21.5	70.7	7.62	643	2.49	611	159.5	95.8	8.46	2.67	206	16.2	3,335
MRAC1393	MRM010626	24	27	2440	70.3	28.7	19.95	106	11.6	1170	2.68	952	265	142.5	13.25	3.21	261	19.1	5,505
MRAC1393	MRM010627	27	30	2350	58.7	23.9	13.45	84.3	9.7	1245	2.37	877	259	122	10.75	2.74	220	15.85	5,295
MRAC1393	MRM010628	30	33	1835	42.9	18.55	9.14	58.9	7.27	934	2.05	592	180	84.7	7.89	2.21	165.5	13.3	3,953
MRAC1393	MRM010629	33	36	575	16.85	9.4	2.81	18.45	3.18	289	1.41	160	51.1	25	2.72	1.21	70.5	8.38	1,235
MRAC1393	MRM010631	36	39	797	25	12	6.69	33.5	4.52	399	1.38	279	80.7	43.1	4.43	1.43	103	9.7	1,800
MRAC1393	MRM010632	39	42	827	32.8	14.4	6.05	38.3	5.55	444	1.66	289	86.2	48.4	5.68	1.84	110.5	10.85	1,922
MRAC1393	MRM010634	42	45	1165	38.1	17.05	7.99	46.7	6.53	652	1.87	414	123.5	62.7	6.63	2.04	120	12.6	2,677
MRAC1393	MRM010635	45	48	575	21.7	9.8	4.44	27.3	3.69	344	1.29	226	65.3	35	3.84	1.23	72.6	8.09	1,399
MRAC1393	MRM010636	48	51	404	14.2	6.8	3.04	17.35	2.53	233	1.1	143.5	45.1	24.9	2.51	0.95	51.1	6.23	956



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	T			e Assay R					1									1	
Hole ID	Sample ID	From	То	Ce	Dy	Er	Eu	Gd	Но	La	Lu	Nd	Pr	Sm	Tb	Tm	Υ	Yb	TREE
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC1393	MRM010637	51	54	280	10.05	5.5	2	11.65	1.86	174.5	1.11	105	34.2	16.7	1.65	0.85	38.5	6.38	690
MRAC1393	MRM010638	54	55	327	9.92	5.78	2.28	12.15	1.86	174.5	1.04	107	34.2	17.25	1.72	0.81	40.8	5.98	742
MRAC1393	MRM010639	55	56	369	12.05	6.07	2.73	14.85	2.15	236	0.95	137.5	45	20.6	2.12	0.77	46.2	5.83	902
MRAC1395	MRM010669	14	15	139.5	6.31	3.18	2.37	8.33	1.16	94.7	0.39	65	19.95	11.3	1.06	0.4	29.6	2.79	386
MRAC1395	MRM010670	15	18	271	33.8	10.55	12.3	52.8	4.97	393	0.58	338	91.9	62.4	6.66	1.05	109.5	5.14	1,394
MRAC1395	MRM010671	18	21	115	5.09	2.16	2.35	7.77	0.8	117	0.29	75.3	22.4	11.7	0.98	0.26	22.3	1.81	385
MRAC1395	MRM010672	21	24	141	9.39	3.52	3.13	14.95	1.35	233	0.35	125.5	38.6	19.1	1.68	0.43	32.7	2.23	627
MRAC1395	MRM010673	24	27	63.5	2.59	1.38	0.51	2.78	0.42	46	0.22	20.9	6.64	3.36	0.42	0.19	11.5	1.38	162
MRAC1395	MRM010674	27	30	87.6	4.71	2.17	1.31	5.62	0.7	64.5	0.3	41.8	11.9	7.4	0.76	0.29	16.2	1.89	247
MRAC1395	MRM010675	30	33	35.8	2.07	1.56	0.43	2.21	0.39	16.8	0.25	12.2	3.32	2.06	0.29	0.23	10.1	1.5	89
MRAC1395	MRM010676	33	36	224	3.24	1.92	0.85	3.68	0.55	28.9	0.32	24.8	6.3	4.76	0.52	0.27	12.3	1.95	314
MRAC1395	MRM010677	36	39	1320	26.7	8.6	9.07	42.3	3.57	601	0.67	362	110	54.2	4.84	0.94	70.8	5.45	2,620
MRAC1395	MRM010678	39	42	98	5.64	2.4	1.64	6.83	0.88	85.3	0.3	51.4	14.85	8.11	0.89	0.31	18.3	2.11	297
MRAC1396	MRM010695	20	21	126.5	5.69	2.85	2.21	6.81	1.02	58.2	0.4	52.5	13.85	9.8	1.04	0.4	25.7	2.58	310
MRAC1396	MRM010696	21	24	216	8.9	4.52	3.51	10.6	1.63	100	0.59	93.1	24.4	15.7	1.43	0.63	40.6	4.13	526
MRAC1396	MRM010697	24	27	273	12.15	6.45	4.88	14.3	2.24	131.5	0.85	121.5	31.5	19.75	2.06	0.86	56.3	5.78	683
MRAC1396	MRM010698	27	30	174	10.35	5.71	3.63	11.4	2.01	83	0.81	80.1	20.5	15.05	1.66	0.81	49.4	5.86	464
MRAC1399	MRM010753	39	42	242	7.02	3.96	1.82	8.65	1.32	63.6	0.69	68.1	16.5	11.65	1.27	0.75	30.7	4.11	462
MRAC1399	MRM010754	42	45	226	11.2	6.34	3	15.3	2.1	116.5	0.96	119.5	29.2	21	1.96	1.02	55.6	5.55	615
MRAC1399	MRM010755	45	48	182.5	11.05	6.72	2.53	13.25	2.27	89.2	0.85	90	23.7	16.75	1.73	0.9	69.5	5.6	517
MRAC1399	MRM010756	48	51	146.5	10.35	5.61	3.04	14.5	2.03	103	0.79	114	28.3	20.6	1.91	0.9	50.7	4.65	507
MRAC1399	MRM010757	51	54	193.5	18.6	9.45	4.87	23.7	3.43	147.5	1.18	153	37.5	27.4	3.06	1.34	88.7	7.42	721
MRAC1399	MRM010758	54	57	134.5	10.25	5.6	2.9	12.45	2	89	0.61	78.8	21	14.85	1.68	0.75	56.9	4.62	436
MRAC1400	MRM010775	36	39	101	3.81	1.95	1.36	5.31	0.68	50.1	0.21	43	11.45	7.27	0.71	0.26	18	1.74	247
MRAC1400	MRM010776	39	42	253	5.39	2.13	2.32	8.17	0.93	124.5	0.23	90.2	25.8	14.7	0.98	0.3	19.6	1.78	550
MRAC1400	MRM010777	42	45	176	3.45	1.83	1.65	5.24	0.64	94.8	0.27	59.3	17.5	8.74	0.62	0.28	14.1	1.72	386
MRAC1400	MRM010778	45	48	219	5.05	2.47	2.32	7.05	0.94	123	0.29	84.6	24	12.5	0.96	0.37	25.3	2.19	510



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Hole ID	Sample ID	From m	To m	Ce ppm	Dy	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd mag	Pr ppm	Sm mag	Tb ppm	Tm ppm	Y	Yb ppm	TREE
NADA 61400	MDM010770			- ' '	ppm							- ' '				- ' '	ppm		- ' '
MRAC1400	MRM010779	48	51	162	4.83	3.3	1.32	6.15	0.98	67.9	0.49	53.4	14.3	8.06	0.75	0.53	27.7	3.21	355
MRAC1400	MRM010780	51	54	557	51.4	30	13.1	62.1	10.45	237	3.79	340	74.8	65.6	8.44	4.12	287	26	1,771
MRAC1400	MRM010781	54	55	107.5	11.15	7.13	2.5	11.95	2.38	59.9	0.96	64.5	14.75	11.5	1.72	0.95	69.8	6.36	373
MRAC1402	MRM010811	30	33	30.8	2.24	1.39	0.52	1.88	0.45	17	0.33	11.2	3.19	2.28	0.3	0.29	9.9	2.11	84
MRAC1402	MRM010812	33	36	482	14.25	6.31	5.28	19.4	2.3	230	0.73	196	53.4	32.2	2.55	0.87	53.2	5.49	1,104
MRAC1402	MRM010813	36	39	214	11.25	6.47	2.92	12.9	2.22	107.5	0.79	93.3	23.7	16.35	1.76	0.88	63.8	5.68	564
MRAC1402	MRM010814	39	42	148	10.45	6.36	3.29	12.35	2.12	69.8	0.92	73.7	17.95	13.9	1.63	0.9	70.5	5.51	437
MRAC1403	MRM010832	42	45	125.5	3.86	2.26	1.26	4.8	0.81	58.4	0.35	42.5	11.3	6.12	0.65	0.34	21.7	2.13	282
MRAC1403	MRM010834	45	48	289	15.9	8.34	4.34	18.35	2.92	149.5	1.12	152	39.1	25.2	2.6	1.21	78.6	8.18	796
MRAC1403	MRM010835	48	49	425	30.7	16.45	8.27	34.7	6.06	261	2.26	267	68.1	46.3	5.08	2.49	157.5	16.25	1,347
MRAC1403	MRM010836	49	50	377	25.6	13.7	6.96	29.3	5.06	214	1.92	233	58.4	39.1	4.18	2.16	134.5	13.7	1,159
MRAC1404	MRM010837	0	3	109	9.16	5.29	2.25	10.1	1.8	69.6	0.81	71.4	18.3	12.8	1.41	0.83	54	5.27	372
MRAC1404	MRM010852	42	45	151.5	5.06	2.52	1.63	6.32	0.92	63.3	0.36	59.1	16.6	10.05	0.88	0.35	22.2	2.34	343
MRAC1404	MRM010853	45	47	287	6.5	3.57	2.65	9.01	1.24	149.5	0.38	108	31	15.85	1.16	0.47	30.5	3.2	650
MRAC1404	MRM010854	47	48	227	9.32	4.94	2.67	11.45	1.74	118.5	0.54	93.2	25.5	14.75	1.54	0.74	51	4.98	568
MRAC1405	MRM010855	0	3	75.8	3.77	2.23	1.1	4.48	0.71	38.3	0.29	33.7	9.49	5.53	0.61	0.29	20.2	1.9	198
MRAC1407	MRM010907	33	36	41.8	1.99	1.1	0.77	2.27	0.38	21.1	0.17	16.5	4.25	3.15	0.3	0.17	9.5	1.36	105
MRAC1407	MRM010908	36	39	220	10.9	4.89	5.13	13.45	2.01	103	0.63	94.6	24.7	17.4	1.92	0.67	41.5	4.77	546
MRAC1407	MRM010909	39	42	570	32.6	14.1	14.35	42.5	5.47	294	1.45	266	66.4	50.6	5.55	1.61	122.5	11.35	1,498
MRAC1407	MRM010910	42	45	156	10.8	4.51	4.42	12.35	1.75	78.7	0.48	80.7	18.7	15.2	1.84	0.56	39.7	3.84	430
MRAC1407	MRM010911	45	48	129	22.8	13.6	5.99	21.3	4.47	59.5	1.98	79.3	16.55	18.65	3.21	1.79	123.5	13.4	515
MRAC1407	MRM010912	48	51	118.5	21.4	12.75	5.48	20	4.32	53.5	1.88	73.6	15.05	17	3	1.83	112	13.8	474
MRAC1407	MRM010913	51	54	162.5	50.6	34.7	10.2	43.4	10.9	80.2	4.67	109	22	29.1	7.07	4.58	312	30.6	912
MRAC1407	MRM010914	54	57	210	19.8	13.25	4.57	17.75	4.25	118.5	1.93	85.8	22.5	15.9	2.86	1.85	142.5	12.15	674
MRAC1407	MRM010915	57	59	157	10.75	6.77	2.73	10.9	2.13	86	0.96	62.2	16.65	11.45	1.69	0.92	62.6	6.32	439
MRAC1410	MRM010965	27	30	291	3.23	2.17	0.73	3.09	0.56	43.5	0.48	23.3	6.75	4.49	0.5	0.35	15.6	3.02	399
MRAC1410	MRM010967	30	33	167.5	15.65	8.26	4.23	18.2	2.92	116	1.24	125	29.3	23.5	2.57	1.06	76.8	7.27	600



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Hole ID	Sample ID	From m	To m	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	OH mag	La ppm	Lu ppm	Nd mag	Pr ppm	Sm mag	Tb ppm	Tm ppm	Y	Yb ppm	TREE
MDA 01410	MDM010060			- ' '				- ' '		• •		- ' '				- ' '	ppm		
MRAC1410	MRM010968	33	36	144.5	11.1	5.9	2.76	12.6	1.98	74.8	0.75	87.5	19.95	16.9	1.8	0.81	47.1	5.65	434
MRAC1410	MRM010969	36	37	173	33.1	22.7	5.38	30.7	7.16	101.5	2.75	117	26.7	24.6	4.79	2.95	232	18.65	803
MRAC1410	MRM010970	37	38	117	12.15	8.62	2.06	12.05	2.49	62.1	0.95	60	14	10.1	1.78	1.04	99.3	7.04	411
MRAC1411	MRM010981	27	30	168	8.69	5.38	3.3	10.6	1.62	72.8	0.58	82.2	20	15.45	1.36	0.67	45.5	4.35	441
MRAC1411	MRM010982	30	33	235	12.25	6.62	4.72	14.6	2.33	107	0.73	112.5	28	19.55	2.1	0.77	65.4	5.82	617
MRAC1411	MRM010983	33	34	244	12.7	6.6	5.04	15.45	2.26	112	0.76	116.5	29.5	20.4	2.17	0.89	63.8	5.87	638
MRAC1420	MRM010984	0	3	17.1	1.27	0.66	0.31	1.4	0.21	9.4	0.13	8.5	2.27	1.6	0.19	0.12	6.6	0.76	51
MRAC1420	MRM011002	45	48	332	4.16	2.17	1.78	5.12	0.69	49.6	0.33	56.3	15.35	9.41	0.71	0.37	14.7	2.45	495
MRAC1420	MRM011003	48	51	342	31.2	17.05	10.4	38.5	5.92	309	2.58	308	77.3	50.5	5.46	2.66	144.5	17.1	1,362
MRAC1420	MRM011004	51	54	215	17.9	9.92	5.24	21.1	3.59	157	1.58	154	39.2	26.7	2.97	1.56	94.7	11.2	762
MRAC1420	MRM011005	54	57	178	14.6	8.74	4.26	16.35	2.95	124	1.47	118.5	30.3	20.5	2.35	1.28	83.5	9.61	616
MRAC1421	MRM011023	42	45	354	29.6	17.25	8.02	30.6	5.8	111.5	2.23	177.5	41.8	38	4.36	2.4	166.5	17.65	1,007
MRAC1421	MRM011024	45	48	270	15.55	9.42	4.82	19.3	3.14	110	1.18	128	31.5	23.7	2.58	1.41	99.8	8.87	729
MRAC1415	MRM011078	33	36	236	8.61	4.51	2.56	9.9	1.68	96.8	0.56	76.6	21.9	13.65	1.46	0.66	43.4	3.75	522
MRAC1415	MRM011079	36	37	241	9.29	5.29	2.48	10.6	1.93	118.5	0.76	86.2	25.9	13.8	1.52	0.69	55.4	4.95	578
MRAC1415	MRM011080	37	38	386	15.3	7.9	4.04	17.6	2.94	190	1	137	41.3	22.5	2.57	1.14	76.3	7.24	913
MRAC1416	MRM011081	0	3	83.7	6.42	3.42	1.9	8.07	1.29	53.5	0.4	50.2	13.05	8.73	1.1	0.51	37.4	2.99	273
MRAC1422	MRM011159	32	33	291	4.45	2.3	1.05	4.59	0.81	60.2	0.41	33.6	10.45	5.75	0.75	0.36	17.3	2.62	436
MRAC1422	MRM011161	33	36	689	4.72	2.92	1	4.57	0.94	38.5	0.45	30.6	8.07	5.94	0.76	0.45	21.6	3.52	813
MRAC1422	MRM011162	36	39	1015	5.68	3.44	1.39	6	1.14	37.1	0.61	39	9.6	7.83	0.91	0.55	27.6	3.91	1,160
MRAC1422	MRM011163	39	42	145.5	1.65	0.94	0.42	1.59	0.33	28.9	0.23	13.7	4.49	2.15	0.24	0.14	8.6	1.26	210
MRAC1422	MRM011164	42	45	441	3.91	2.55	0.87	3.91	0.84	29.7	0.43	25.1	6.57	4.7	0.64	0.36	22.8	2.65	546
MRAC1422	MRM011165	45	46	346	5.89	3.9	1.46	6.59	1.24	63.8	0.56	43.4	11.4	8.02	0.97	0.55	38.3	3.78	536
MRAC1422	MRM011167	46	47	519	7.76	5.27	1.72	7.69	1.6	68.8	0.74	52.6	14.15	9.1	1.14	0.75	46.5	4.79	742
MRAC1423	MRM011168	0	3	47.3	1.85	1.29	0.51	2.46	0.41	17.9	0.18	15.3	3.98	2.72	0.36	0.18	11.5	1.21	107
MRAC1423	MRM011184	45	48	170	4.27	2.29	2.02	6.12	0.77	76.1	0.26	68	18.25	9.7	0.8	0.28	17.9	2.04	379
MRAC1423	MRM011185	48	51	298	15.75	10.35	5	19.25	3.28	151	1.6	149.5	37.1	23.1	2.54	1.52	116	10.05	844



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Hole ID	Sample ID	From	То	Ce	Dy	Er	Eu	Gd	Но	La	Lu	Nd	Pr	Sm	Tb	Tm	Υ	Yb	TREE
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC1423	MRM011186	51	52	249	7	4.71	3.67	10.95	1.58	138.5	0.75	113.5	29.1	16.75	1.3	0.68	53.8	4.12	635
MRAC1423	MRM011187	52	53	365	7.52	4.06	4.95	13.05	1.44	185.5	0.55	153	41.4	20	1.43	0.58	51.2	3.56	853
MRAC1424	MRM011188	0	3	57.9	3.95	2.34	1.26	5.1	0.82	35.2	0.32	32.7	8.64	5.88	0.7	0.32	23.9	2.13	181
MRAC1424	MRM011201	30	33	21.3	2.45	1.73	0.69	2.36	0.5	23.2	0.38	14.2	3.8	2.61	0.33	0.28	12.2	2.32	88
MRAC1424	MRM011202	33	36	317	22.1	13.85	7	24.6	4.61	178	1.97	165.5	40.9	26.4	3.6	2.01	136	13.7	957
MRAC1424	MRM011203	36	37	178.5	11.2	7.56	3.47	12.8	2.45	94.5	1.18	85.7	21.8	13.25	1.76	1.08	99.7	7.6	543
MRAC1425	MRM011204	0	3	97.2	6.7	3.91	2.1	7.76	1.39	55.4	0.51	52.1	13.2	8.2	1.05	0.58	40.7	3.87	295
MRAC1427	MRM011254	15	18	63.8	5.67	3.14	1.84	7.12	1.09	95.4	0.37	59	17.45	9.22	0.98	0.42	29.7	2.48	298
MRAC1427	MRM011255	18	21	114	10.8	4.97	4.01	14.5	1.94	217	0.58	160.5	45.5	22.1	1.96	0.67	49.5	4.22	652
MRAC1427	MRM011256	21	24	82.7	5.63	2.88	2.19	7.86	1.08	87.2	0.29	74.2	19.85	11.1	1	0.36	24.9	2.13	323
MRAC1427	MRM011257	24	27	129	6.83	3.51	2.61	8.94	1.21	89.6	0.4	93.7	24.2	15.5	1.29	0.44	30.5	2.79	411
MRAC1427	MRM011258	27	30	190.5	11.25	5.79	4.27	15.55	2.09	123.5	0.61	143	35.8	23.9	2.04	0.75	52	4.46	616
MRAC1427	MRM011259	30	33	103	5.62	3.04	1.58	6.12	1.05	49.5	0.33	49.2	12.8	8.49	0.96	0.42	30.7	2.61	275
MRAC1427	MRM011261	33	36	236	8.52	4.52	3.34	10.8	1.68	117	0.51	103.5	27.7	17.4	1.59	0.63	46	3.95	583
MRAC1427	MRM011262	36	39	215	8.21	4.48	3.35	10.85	1.68	106.5	0.58	97.2	24.9	16.3	1.44	0.65	44.2	4.1	539
MRAC1427	MRM011263	39	42	265	16.2	9.28	5.22	17.6	3.17	124	1.28	132	33	24.7	2.57	1.35	90.7	8.76	735
MRAC1427	MRM011264	42	44	311	12.15	6.47	5.42	15.9	2.33	159.5	0.78	157.5	39	25	2.12	0.89	67.4	5.76	811
MRAC1427	MRM011265	44	45	321	12.8	7.52	5.16	16.3	2.44	154.5	0.81	146	39.6	23.8	2.14	0.93	75.1	6.55	815
MRAC1428	MRM011267	0	3	44.7	3.21	2	0.98	4	0.71	31.3	0.25	26.8	7	4.99	0.54	0.29	20.5	1.88	149
MRAC1430	MRM011291	15	16	40.3	1.28	0.85	0.49	1.62	0.26	22.4	0.14	14.5	3.93	2.27	0.22	0.12	6.9	0.84	96
MRAC1430	MRM011292	16	18	457	8.17	3.11	5.75	14.3	1.31	218	0.27	177	46.4	26.6	1.67	0.35	29	2.3	991
MRAC1430	MRM011293	18	21	461	11.35	4.98	6.82	18.55	2.04	254	0.4	209	56	30.8	2.14	0.6	48.2	3.23	1,109
MRAC1430	MRM011294	21	24	149	6.86	4.1	2.45	8.88	1.39	106.5	0.5	92.1	24.2	13.65	1.21	0.52	39.5	3.42	454
MRAC1431	MRM011310	24	27	162	3.24	2.21	0.74	2.83	0.61	28	0.37	21.2	5.8	3.93	0.46	0.3	17.9	2.15	252
MRAC1431	MRM011311	27	30	500	17.15	8.12	7.2	23.9	2.99	232	0.87	223	57.5	38.9	3.19	1	73	7.27	1,196
MRAC1431	MRM011312	30	33	468	27.4	17.55	8.16	32.3	5.59	202	2.15	222	54	41.2	4.39	2.31	184.5	14.25	1,286
MRAC1431	MRM011313	33	36	603	47.3	32.3	12	49.9	10.4	248	4.35	291	68	56.9	7.33	4.69	350	29.4	1,815



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Hole ID	Sample ID	From	То	Ce	Dy	Er	Eu	Gd	Но	La	Lu	Nd	Pr	Sm	Tb	Tm	Υ	Yb	TREE
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC1431	MRM011314	36	39	630	40.7	23.3	11.85	48.2	7.84	260	2.83	302	72.6	59.6	6.92	3.25	250	19.55	1,739
MRAC1431	MRM011315	39	42	629	30.9	17.05	9.14	39.2	5.86	272	2.25	273	68.6	49	5.17	2.23	181.5	14.3	1,599
MRAC1431	MRM011316	42	43	426	14.85	8.09	5.28	20.4	2.75	187.5	1.07	175.5	45.6	30.2	2.49	1.02	84.1	6.69	1,012
MRAC1432	MRM011317	0	3	181.5	10.2	5.79	3.07	12.35	1.94	81.8	0.78	84.5	20.6	15.6	1.66	0.77	60.4	4.99	486
MRAC1432	MRM011325	24	27	117	7.22	3.89	1.61	7.59	1.38	53.5	0.59	51.2	13.5	11.05	1.15	0.64	32.4	4.15	307
MRAC1432	MRM011326	27	30	706	61.7	36.8	10.65	60.3	12.45	270	4.68	322	79.9	65.8	9.43	5.19	355	31.4	2,031
MRAC1432	MRM011327	30	33	269	18.75	10.75	4.37	19.75	3.68	127.5	1.52	124	31.1	24.6	2.88	1.57	108.5	10	758
MRAC1432	MRM011328	33	35	326	21.5	14.35	5.61	23	4.8	165.5	1.72	148.5	37.7	23.7	3.51	1.77	163	11.35	952
MRAC1432	MRM011329	35	36	184.5	8.62	5.45	3.19	10.6	1.8	89.5	0.74	89.1	22	14.9	1.44	0.73	59	4.58	496
MRAC1433	MRM011338	16	18	187	10.5	6.12	2.34	12.35	2.12	93.8	0.8	79.9	20.7	15.7	1.83	0.82	53.8	5.3	493
MRAC1433	MRM011339	18	21	477	18.85	8.23	8.98	26.9	3.28	172.5	0.83	196	51.6	36.9	3.53	1.01	85.6	5.93	1,097
MRAC1433	MRM011340	21	24	628	22.8	10.45	12.5	35.1	4.05	272	1.21	281	74.8	47.7	4.43	1.28	104.5	8.21	1,508
MRAC1433	MRM011341	24	27	544	20.6	9.53	10.35	31.9	3.68	235	1	238	60.9	42	4.05	1.25	98.4	7.13	1,308
MRAC1433	MRM011342	27	30	432	18.3	8.57	8.09	26.5	3.33	189	0.89	195	49.6	35.8	3.52	1.14	87.7	6.71	1,066
MRAC1433	MRM011343	30	33	372	16.95	7.88	6.49	23.9	2.98	169	0.78	169.5	42.2	32.5	3.17	0.91	76.8	5.53	931
MRAC1433	MRM011344	33	36	275	16.5	7.7	5.87	23.5	3.05	117.5	0.73	153	36.4	31.5	3.32	0.97	79.6	5.8	760
MRAC1434	MRM011354	3	4	75.8	8.74	5.04	2.57	11	1.71	47.2	0.63	71.8	17.65	13.6	1.55	0.67	40.1	4.24	302
MRAC1434	MRM011355	4	6	160	120	65.3	33.1	152	23.7	588	7.2	852	194.5	176	21	8.83	629	52.9	3,084
MRAC1434	MRM011356	6	9	197	115	66	30.1	146	23.7	658	7.38	780	179	158.5	20	8.79	701	52.1	3,143
MRAC1434	MRM011357	9	12	378	42.3	26.7	9.95	47.8	9.04	283	2.84	278	68.6	51.8	7.12	3.48	313	20.1	1,542
MRAC1434	MRM011358	12	15	203	9.75	5.98	2.38	11.75	1.99	112.5	0.73	90.3	24.2	15.6	1.65	0.82	64.1	5.03	550
MRAC1434	MRM011359	15	18	231	9.99	6.04	2.6	11.9	2.03	111	0.65	92.4	25.4	16.25	1.7	0.77	60.2	4.74	577
MRAC1434	MRM011361	18	21	162.5	9.23	5.74	2.02	10.7	1.91	72.3	0.75	67.4	17.2	12.8	1.54	0.8	55.5	4.97	425
MRAC1434	MRM011362	21	24	197.5	12.6	7.09	3.21	15.5	2.33	87.3	0.83	95.4	22.7	19	2.14	0.93	65	5.93	537
MRAC1434	MRM011363	24	25	228	13.25	7.18	3.72	18.15	2.66	100.5	0.79	109	25.9	21.4	2.33	0.93	66.9	5.43	606
MRAC1434	MRM011364	25	26	134	7.79	5.05	1.69	9.61	1.64	64.2	0.69	57.6	15.1	10.8	1.28	0.75	45.8	4.45	360
MRAC1436	MRM011403	48	51	227	5.49	2.66	1.98	8.2	0.92	80.6	0.28	72.9	20.4	11.85	1.05	0.32	24.2	2.42	460



	Table 4: Representative Assay Results for New Reported Drill Holes with High Grade Total Rare Earth Element (TREE) Intersections																		
	1						•											.,,	
Hole ID	Sample ID	From	To	Ce	Dy	Er	Eu	Gd	Но	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	TREE
		m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MRAC1436	MRM011404	51	54	706	26.3	13.95	8.68	38	4.99	331	1.67	290	74.8	47.1	4.71	1.96	126	12.9	1,688
MRAC1436	MRM011405	54	55	710	27.7	14.6	9.24	39.3	5.34	348	1.66	301	79.4	51.1	5.08	2.05	134.5	13.45	1,742
MRAC1437	MRM011406	0	3	126.5	6.87	3.55	2.08	7.87	1.28	64.3	0.5	58.8	15.45	9.86	1.1	0.49	30.8	3.16	333
MRAC1438	MRM011437	30	33	84.2	4.11	2.69	0.72	3.92	0.84	27.8	0.38	26.3	6.74	4.56	0.6	0.36	21.6	2.47	187
MRAC1438	MRM011438	33	36	286	7.41	3.84	1.4	8.4	1.36	68	0.51	63.8	17.3	11.4	1.18	0.58	36.8	3.57	512
MRAC1438	MRM011439	36	39	243	9.63	5.46	1.44	10.25	1.94	72.2	0.7	73.8	19.7	14.25	1.6	0.79	51.7	5.28	512
MRAC1438	MRM011440	39	40	271	16.75	8.04	3.21	20.6	2.95	148.5	0.97	156.5	41.7	29.7	2.92	1.09	71.9	7.47	783
MRAC1438	MRM011441	40	41	250	17.6	9.01	3.62	21.3	3.25	162	1.13	178	47.6	32.5	3.13	1.23	82.4	8.3	821
MRAC1439	MRM011442	0	3	42.7	2.05	1.16	0.55	2.13	0.4	16.2	0.17	15.4	3.86	2.77	0.37	0.18	11.2	1.2	100
MRAC1440	MRM011468	33	36	277	4.76	3.09	0.9	5.1	1.04	91.2	0.43	40.8	14.55	6.99	0.76	0.43	25.5	3.38	476
MRAC1440	MRM011469	36	39	472	4.87	2.73	1.06	5.12	0.89	124.5	0.46	56.5	19.8	8.44	0.84	0.39	21.4	2.91	722
MRAC1440	MRM011470	39	42	562	6.38	3.4	1.48	7.36	1.23	154	0.54	76.2	25.7	10.95	1.15	0.51	30.1	3.85	885
MRAC1440	MRM011471	42	45	418	10	6.16	1.7	10.7	2.02	141	0.87	85.8	25.5	14.1	1.75	0.82	57.7	5.99	782
MRAC1440	MRM011472	45	47	426	34.2	21.2	5.56	34.1	7.29	176.5	2.8	177.5	45.1	35.8	5.47	2.96	216	21.1	1,212
MRAC1440	MRM011473	47	48	456	42.1	26.3	6.78	42	9.05	189	3.48	211	51.8	43.2	6.95	3.83	275	26.6	1,393
MRAC1445	MRM011535	18	21	267	7.74	3.94	2.11	8.26	1.44	84.4	0.46	64.6	17.95	11.75	1.23	0.53	35	3.68	510
MRAC1445	MRM011536	21	24	234	6.99	3.29	1.76	7.84	1.29	71.2	0.42	62.4	17.3	11.5	1.14	0.48	29.7	3.05	452
MRAC1445	MRM011537	24	27	286	9.42	4.02	2.71	10.85	1.66	110.5	0.51	87.1	24	16.15	1.54	0.61	34.9	3.86	594
MRAC1445	MRM011538	27	30	267	12.7	5.8	3.55	14.45	2.3	100	0.75	112	28.4	22.4	2.16	0.85	55.3	6.11	634
MRAC1445	MRM011539	30	33	322	21.5	8.87	5.84	25.6	3.81	173.5	1.07	158.5	41.2	32.2	3.63	1.4	83.4	8.4	891
MRAC1445	MRM011540	33	36	287	23.2	11.8	5.52	25.9	4.46	147.5	1.52	150	37	30.3	4	1.8	121.5	11.5	863
MRAC1445	MRM011541	36	37	207	14.25	7.55	3.35	16.1	2.67	104	0.91	97	24.8	19.15	2.42	1.1	76.8	6.62	584
MRAC1446	MRM011545	9	12	11.8	0.69	0.42	0.17	0.65	0.13	4.5	0.09	3.9	1.24	0.96	0.11	0.07	3.3	0.47	29
MRAC1446	MRM011546	12	15	211	11.65	4.98	3.25	14.1	1.97	105.5	0.54	101.5	26	18.15	2.05	0.58	50.6	3.86	556
MRAC1446	MRM011547	15	18	502	19.05	8.14	6.25	24.5	3.34	213	0.83	227	57.8	36.6	3.58	1.05	74.6	6.03	1,184
MRAC1446	MRM011548	18	21	282	16.45	7.46	4.47	19.25	2.87	124.5	0.86	148	36.3	26.9	3.08	1.07	65.9	6.41	746
MRAC1446	MRM011549	21	24	230	17.85	9.49	4.1	19.8	3.48	120	1.28	126	30.5	24.3	3.03	1.33	94.8	8.26	694



	Table 5									
	Water Immersion SG Results									
Hole ID	Sample ID	From	То	Length	Sample	Description	Technique	Method	SG	Mineralised
MRDD043	MSG139	32.35	32.55	0.20	Half PQ	clay	Water Immersion	cling film heat wrap	1.4	Yes
MRDD043	MSG140	35.57	35.70	0.13	Half PQ	clay	Water Immersion	cling film heat wrap	1.6	Yes
MRDD044	MSG148	27.80	27.90	0.10	Half PQ	clay	Water Immersion	cling film heat wrap	1.7	Yes
MRDD044	MSG149	29.82	29.94	0.12	Half PQ	clay	Water Immersion	cling film heat wrap	1.7	Yes
MRDD044	MSG150	33.25	33.35	0.10	Half PQ	clay	Water Immersion	cling film heat wrap	1.7	Yes

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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	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Mount Ridley Mines Limited (ASX: MRD) is reporting results from Aircore ("AC") drilling. Samples of drill chips were collected through a cyclone as 1m piles laid out consecutively on the ground then sampled as 1m or 3m composite spear samples. The Company also reports SG determinations made on short pieces of half PQ core.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The AC bulk sample from the cyclone was placed into neat piles on the ground in rows of 10 samples where possible.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	AC drilling delivers Im interval sample piles. Samples of between 1 metre and 3 composited metres taken for analysis. The size of the sample submitted to the laboratory was 2-4kg in weight, which was dried, pulverised, and packaged in a computer-coded packet. A subsample was analysed, and the coded packet then stored. Analyses reported herein by ALS Laboratory's ME-MS81, a lithium borate fusion with ICP-MS finish. Samples were also analysed by the ALS ME-ICP06 whole rock package.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	AC. A type of reverse circulation drilling using slim rods and a 100mm blade bit drilled to refusal (saprock to fresh rock). PQ core is recovered from diamond drilling.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Recovery was visually assessed, recorded on drill logs, and considered to be acceptable within industry standards.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The majority of sample were of good quality. Samples were visually checked for recovery, moisture, and contamination. A cyclone was used to deliver the sample into buckets.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Unknown at this stage.

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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 was complete in full for every hole, this includes lithology, weathering, oxidation state, alteration, veining, mineralisation if present. Considered appropriate for this style of drilling and the stage of the project. All holes were chipped for the entire hole for a complete chip tray record.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging is inherently qualitative. More specific logging may be undertaken if chemical analyses warrant it.
	The total length and percentage of the relevant intersections logged.	All holes were logged for the entire length of the hole.
Sub-sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	Assays: not core. SG samples from cut half PQ core.
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Original AC samples were collected via a cyclone into a bucket and laid out in rows as single Im piles. Im or up to 3m composite samples were 'speared' from the sample piles for an approximately 2.5 - 3.5kg sample.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	Sampling technique is appropriate for the drilling method and stage of the project.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	Duplicates and certified reference material (CRM) were routinely inserted within the sampling sequence approximately one in every thirty samples. CRM material was selected form a range of REE grade populations.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	For AC, field QAQC procedures included the insertion of field duplicates and CRM's at pre-specified intervals at the time of drilling. All duplicate samples were speared for single metre samples and composite sampling, the size/quantity of the samples were kept consistent (approx. 2 kg). This is considered fit for purpose at this stage of the project. An independent appraisal of QC/field duplicates shows that the sample variance is acceptable.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	To date this has not been studied as the host material is clay.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Analyses reported herein by ALS Laboratory's ME-MS81, a lithium borate fusion with ICP-MS finish. Selected samples were also analysed by the ALS ME-ICP06 whole rock package. A suite of 15 Rare Earth Elements was targeted, plus whole rock analysis to assist with identifying the underlying geological units. The analytical techniques were recommended by the Company's geochemical consultant, and nominated as appropriate by ALS.
		SG determined by sealing the sample in clingwrap and suspending it in a

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		known volume of water. Known also as the Archimedes method. This is fit for purpose.
	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 3 rd party independently manufactured.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are calculated by experienced geologists and verified by an independent consultant.
assaying	The use of twinned holes.	None, not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All collected data stored in a commercially managed database.
	Discuss any adjustment to assay data.	Raw assays are stored in the commercially managed database with elemental values calculated to oxide for 15 REE's see Section 2 – Data Aggregation Methods.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	AC drill hole collar locations were surveyed using a hand-held GPS with +- 3m accuracy. No down-hole surveys were carried out, drillholes were also vertical. This is considered satisfactory for the stage of the project. DDH collars were surveyed by DGPS.
	Specification of the grid system used.	GDA94-51
	Quality and adequacy of topographic control.	RL's estimated from a digital elevation model with points gained as a component of an aeromagnetic survey. The datum may have some error, but RL of holes should be relative to each other and fit for purpose on a hole to hole basis.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Variable, generally 400 along traverses. One diamond core hole sampled through mineralisation for SG determination.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	There is insufficient data collected for a Mineral Resource Estimate.



	Whether sample compositing has been applied.	Both 1m intervals and 3m composites analysed.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Not determined yet. Likely unbiased as vertical holes are sampling a horizontal mineralised feature.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Unlikely to be biased as the mineralisation is represented as flat lying lenses and the drilling orientation is perpendicular to mineralisation.
Sample security	The measures taken to ensure sample security.	Standard industry practice is used when collecting, transporting, and storing samples for analysis. Calico samples are sealed into poly weave bags, labelled and cable tied. These are then sealed in labelled bulka bags and transported to the laboratory in Perth by established freight companies. Chain of custody is known at all stages of the process. Drilling pulps are retained and stored off site in a designated storage facility.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are consistent with industry standards. A third-party geochemical specialist is reviewing the data. Drilling results and geological logging are also cross checked by project geologists.



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary				
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	s, 63/2111, E 63/2112, E 63/2113, E 63/2114, E 63/2117 and E 63/2125 located f				
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The tenements are in good standing, and there are no impediments to operating in the targeted areas other than requirements of the DMIRS, DBCA and Heritage Protection Agreements, all of which are industry-standard.				
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Many parties, including Government organisations, private and public companies, have explored the area. A substantial compilation of work prior to Mount Ridley was undertaken by Bishop who was the first to research and champion the potential of the Grass Patch Complex, interpreted as a large, crudely layered, amphibolite-gabbro complex beneath shallow cover sediments. The mafic complex is considered to have the potential to host nickel-copper sulphide deposits and PGE deposits. Completed detailed litho-geochemistry interpretation from 'best available' end of hole assays, resulting in a crude basement geological map. Additional drilling tested the models but didn't return assays of commercial consequence. Mount Ridley has completed a large complement of geophysical surveys and drilling, aimed at nickel sulphides and gold. Nearby, Salazar Gold Pty Ltd were the first company to search for REE in the Great Southern, identifying the Splinter REE deposit. Work started in 2010 and continues now.				
Geology	Deposit type, geological setting, and style of mineralisation.	Clay-hosted rare earth deposit.				



Duill hala	A company of all information represents to the consequentian of the	All valayers dates for the a		ulated in Amazadiu 1 of this		
Drill hole Information	A summary of all information material to the understanding of the		irilling conducted is tab	ulated in Appendix 1 of this		
mormation	exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar	announcement.	is satingated from a dia	ital alayatian madal aginad		
	elevation or RL (Reduced Level – elevation above sea level in metres) of	during an aeromagnetic s	•	ital elevation model gained		
	the drill hole collar dip and azimuth of the hole down hole length and	during an deromagnetic s	survey.			
	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.					
Data aggregation	In reporting Exploration Results, weighting averaging techniques,	Assay results not reporte	d. Significant intersection	ons are calculated using a		
methods	maximum and/or minimum grade truncations (eg cutting of high		_	cut-off, maximum internal		
	grades) and cut-off grades are usually Material and should be stated.	dilution of 3m, no external	• • •			
	Where aggregate intercepts incorporate short lengths of high grade	No metal equivalent value	es have been used.			
	results and longer lengths of low grade results, the procedure used for	Stoichiometric factors to a	convert elements to oxid	les:		
	such aggregation should be stated and some typical examples of such					
	aggregations should be shown in detail.	Ce_ppm	1.2284	CeO2_ppm		
	The assumptions used for any reporting of metal equivalent values	Dy_ppm	1.1477	Dy2O3_ppm		
	should be clearly stated.	Er_ppm	1.1435	Er2O3_ppm		
		Eu_ppm	1.1579	Eu2O3_ppm		
		Gd_ppm	1.1526	Gd2O3_ppm		
		Ho_ppm	1.1455	Ho2O3_ppm		
		La_ppm	1.1728	La2O3_ppm		
		Lu_ppm	1.1372	Lu2O3_ppm		
		Nd_ppm	1.1664	Nd2O3_ppm		
		Pr_ppm	1.2082	Pr6O11_ppm		
		Sm_ppm	1.1596	Sm2O3_ppm		
		Tb_ppm	1.1762	Tb4O7_ppm		
		Tm_ppm	1.1421	Tm2O3_ppm		
		Y_ppm	1.2695	Y2O3_ppm		
		Yb_ppm	1.1387	Yb2O3_ppm		
		Source: Element-to-stoi	chiometric oxide conve	rsion factors - JCU Australia		
		TREO: the sum of Sm ₂ O ₃	, Dy ₂ O ₃ , Er ₂ O ₃ , Eu ₂ O ₃ , Gd	2O ₃ , Ho ₂ O ₃ , Lu ₂ O ₃ , Tb ₄ O ₇ , Tm ₂ O ₃		
		Yb ₂ O ₃ , Ce ₂ O ₃ , La ₂ O ₃ , Nd ₂ C	₃ , and Pr ₂ O ₃ .			
		HREO: the sum of Sm ₂ O ₃	3, Dy ₂ O ₃ , Er ₂ O ₃ , Eu ₂ O ₃ , Gd	₂ O ₃ , Ho ₂ O ₃ , Lu ₂ O ₃ , Tb ₄ O ₇ , Tm ₂ (
		and Yb ₂ O ₃ .				
		LREO: the sum of Ce ₂ O ₃ , La ₂ O ₃ , Nd ₂ O ₃ , and Pr ₂ O ₃ .				
		CREO: the sum of Dy ₂ O ₃ , Eu ₂ O ₃ , Nd ₂ O ₃ , Tb ₄ O ₇ , and Y ₂ O ₃ .				
		MagREO: the the sum of Dy2O3, Nd2O3, Dy2O3 and Tb4O7.				



Relationship	These relationships are particularly important in the reporting of	The interdependence of mineralisation width and length has not been
between	Exploration Results.	established. To date the targeted mineralisation seems to be a flat-lying
mineralisation	If the geometry of the mineralisation with respect to the drill hole angle	sheet, so vertical drilling suggests true width is similar to downhole width. The
widths and	is known, its nature should be reported.	marginsto mineralisation have not been determined.
intercept lengths	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').	
Diagrams	Appropriate maps and sections (with scales) and tabulations of	Refer to maps, tables and figures in this report.
	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.	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not	Selected composite samples reported in Table 1 are converted from REE
	practicable, representative reporting of both low and high grades	values and aggregated according to the stoichiometric factors and formula
	and/or widths should be practiced to avoid misleading reporting of	above.
	Exploration Results.	Assay results in Table 3 are as received (except TREE, which is calculated).
Other substantive	Other exploration data, if meaningful and material, should be reported	All new, meaningful, and material exploration data has been reported.
exploration data	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.	
Further work	The nature and scale of planned further work (eg tests for lateral	Analysis of additional samples is progressing and will be reported when
	extensions or depth extensions or large-scale step-out drilling).	received.
	Diagrams clearly highlighting the areas of possible extensions,	Metallurgical testwork has commenced and will be ongoing.
	programme endury mighting the disease of procession extensioner,	
	including the main geological interpretations and future drilling areas,	3D geological modelling and mineralisation studies are being carried out.