28 March 2020

MAKUUTU INFILL AND RESOURCE EXTENSION DRILLING RETURNS HIGH GRADE RARE EARTHS

KEY HIGHLIGHTS

- **Successful resource extension drilling with high grade intersections near surface and over significant widths, including:**

  RRMDD055: 3.7 metres @ 1,477 ppm TREO from 6.8 metres

  RRMDD057: 8.0 metres @ 1,077 ppm TREO from 4.5 metres

- **High-grade infill intersections over significant widths including:**

  RRMDD047: 7.4 metres @ 886 ppm TREO from 6.30 metres

  RRMDD048: 6.8 metres @ 1,081 ppm TREO from 9.7 metres

  RRMDD049: 8.5 metres @ 909 ppm TREO from 6.90 metres

  RRMDD052: 10.8 metres @ 1,533 ppm TREO from 3.6 metres

  RRMDD054: 4.9 metres @ 1,226 ppm TREO from 9.1 metres

- **Positive results from in-fill and extensional drilling further demonstrates the continuity of rare earth mineralisation, confirming previously reported high Total Rare Earth Oxides (TREO) grades with wide intercepts**
- **New drilling data to be incorporated into a JORC Resource Upgrade which is currently underway**
- **The metallurgical optimisation program continues to progress**
- **Liaison with potential project development partners continues**

Ionic Rare Earths Limited ("IonicRE" or "the Company") (ASX: IXR) is pleased to provide results from 11 core (diamond) drill holes (RRMDD047 to RRMDD057) completed at the Makuutu Rare Earths Project during March 2020, prior to suspending the program as a result of theCovid-19 pandemic.

Of the 11 core holes drilled, eight (8) were infill holes drilled to increase the confidence and classification of the mineral resource and to provide additional metallurgical testwork samples. Three (3) holes were drilled as exploration step outs to validate for extensions to the existing mineral resource area.

Commenting on the completion of the drilling program and envisaged development pathway, IonicRE's Technical Director, Dr Marc Steffens, said:

"These results continue to demonstrate that we have a large, high-grade continuous resource. The results from the three (3) holes drilled outside of the current resource area highlight further the potential for additional drilling to significantly expand the current resource, which will be followed up once the drilling program resumes.

More substantively, these results continue to demonstrate the consistent and widespread nature of the Rare Earth mineralisation at Makuutu. These are fundamental requirements for a Rare Earth project with substantive scale and production capacity.

In addition to this drilling, the Company has redoubled its efforts into developing the metallurgy and processing aspects of the project and exploring strategic partnerships with several groups. We continue to make progress and will provide updates to the market on these initiatives in due course".

PROJECT OVERVIEW

Ionic Rare Earths Limited (ASX: IXR) is developing the Makuutu Rare Earths Project, located 120 kilometres east of Kampala, Uganda, to be a globally significant producer of both Heavy Rare Earths Oxides (HREO) and Critical Rare Earth Oxides (CREO), providing a viable large scale, low cost alternative Rare Earth Oxide (REO) supply chain outside of China.

Since acquiring an interest in the project in July 2019, IonicRE has advanced the project with a number of key highlights to date, including announcing a Maiden Inferred Mineral Resource of **47.3 Mt @ 910 ppm** Total Rare Earths Oxide (TREO), at a cut-off grade of 500 ppm TREO-Ce_2O_3[1]; while maintaining its Exploration Target at **270 – 530 million tonnes grading 0.04 – 0.1%** (400 – 1,000 ppm) TREO[2].

> ***This Exploration Target is conceptual in nature but is based on reasonable grounds and assumptions. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.**

The project area is well supported by infrastructure with substantive hydroelectric generation capacity and electrical grid infrastructure nearby. Importantly, the project area is readily accessible with existing road and rail infrastructure close-by, connecting to Kampala and the Port of Mombasa.

IonicRE presently holds 31% ownership of the Makuutu Rare Earths Project and is both advancing project activities and working towards increasing its ownership interest up to 60%.

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[1] Inferred Resource sourced from ASX announcement "MAIDEN MINERAL RESOURCE AT MAKUUTU RARE EARTH PROJECT CENTRAL ZONE" released 10/03/2020

[2] Exploration Target sourced from ASX announcement "MAKUUTU RARE EARTH EXPLORATION TARGET" released 04/09/2019.

DRILLING PROGRAM

The 2020 drilling program is designed to provide infill data for geological and metallurgical confidence on the current resource, and to evaluate proximal resource extensions and regional exploration targets.

Owing to the Covid-19 pandemic, the 4000-metre program was suspended after only 11 holes (240 metres) were completed due to implemented restrictions (ASX: 26 March 2020). The truncated drilling program completed eight (8) infill holes and three (3) resource extension holes in the Makuutu Central Zone, shown in Figure 1. The Company was able to transport the samples from the completed drilling from the project site to Perth, Australia for analytical and metallurgical testwork.

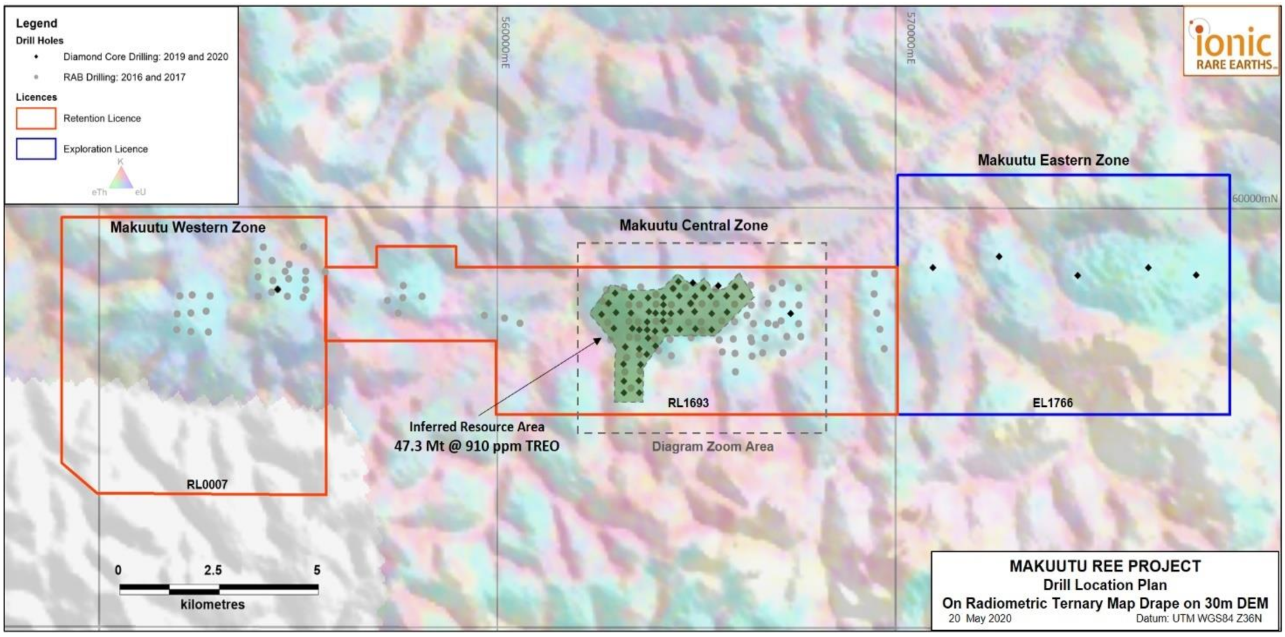

Figure 1: Makuutu Rare Earths Project Exploration Project on Ternary Radiometric Base. [1]

RESOURCE EXTENSION DRILLING

Three resource extension holes were completed in the Makuutu Central Zone. The locations are shown in **Error! Reference source not found.**.

Holes RRMDD055 and RRMDD056 were drilled several hundred metres to the north of the area defined by the current mineral resource estimate. Both holes were successful and intercepted good thicknesses of high grade REE mineralised clays which will support resource extension and highlight potential for further resource growth.

Drill hole RRMDD057 was particularly encouraging by providing a significant clay intercept in an area approximately one (1) kilometre east of the current resource limit. This area had previously been tested with exploratory RAB drilling that had shown the presence of REE mineralisation. The RRMDD057 intercept is significant in grade and thickness providing great encouragement on potential resource expansion in that area.

- RRMDD055: 3.7 metres @ 1,477 ppm TREO from 6.8 metres
- RRMDD056: 9.3 metres @ 753 ppm TREO from 2.6 metres
- RRMDD057: 8.0 metres @ 1,077 ppm TREO from 4.5 metres

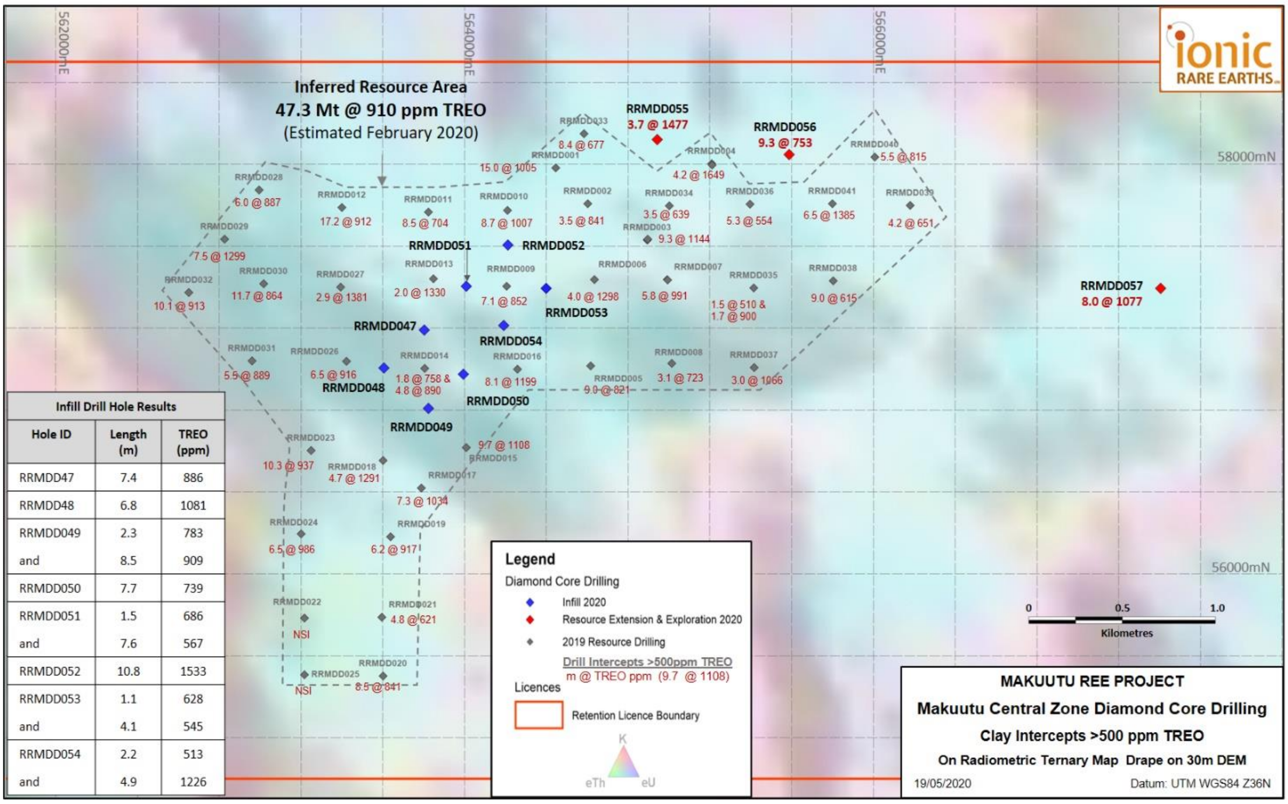

Figure 2: Drilling Location Plan Makuutu REE Project Makuutu Central Zone showing Drill Holes Clay Intercepts >500ppm TREO. [3]

INFILL DRILLING

Infill drilling was conducted on the central portion of the current resource with the aim of providing data on a closer spacing than the existing 400 metre grid. The eight (8) drill holes were centred around, and spaced 200 metres from, holes drilled in 2019.

All holes intercepted clay hosted REE mineralisation consistent with expectation. The geological and analytical data from these holes will be used to update the current resource model, including assisting in evaluating the geological and geostatistical confidence and classification of the resource estimation. The holes have also provided core for metallurgical optimisation testwork.

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[3] Drill results for holes RRMDD001 to RRMDD041 released by the Company in ASX announcements dated 21/11/2019, 10/12/2019 and 23/12/2019

The clay intersections above 500ppm TREO are summarised below and shown in **Error! Reference source not found.**;

- RRMDD047: 7.4 metres @ 886 ppm TREO from 6.30 metres
- RRMDD048: 6.8 metres @ 1,081 ppm TREO from 9.7 metres
- RRMDD049: 2.3 metres @ 783 ppm TREO from 4.60 metres
- RRMDD049: 8.5 metres @ 909 ppm TREO from 6.90 metres
- RRMDD050: 7.7 metres @ 739 ppm TREO from 3.8 metres
- RRMDD051: 1.5 metres @ 686 ppm TREO from 7.7 metres
- RRMDD051: 7.6 metres @ 567 ppm TREO from 12.0 metres
- RRMDD052: 10.8 metres @ 1,533 ppm TREO from 3.6 metres
- RRMDD053: 1.1 metres @ 628 ppm TREO from 4.6 metres
- RRMDD053: 4.1 metres @ 545 ppm TREO from 7.2 metres
- RRMDD054: 2.2 metres @ 513 ppm TREO from 2.4 metres
- RRMDD054: 4.9 metres @ 1,226 ppm TREO from 9.1 metres

STATUS OF CONDITIONS IN UGANDA

The Company continues to closely monitor the Covid-19 situation within Uganda and the anticipated easing of Covid-19 control restrictions by Ugandan authorities. Restrictions are expected to ease in early June 2020, which will hopefully allow drilling and other field activities to recommence promptly. The strict Covid-19 control measures implemented within Uganda in March 2020 has resulted in Uganda reporting 260 cases of Covid-19 cases with no deaths.

IonicRE will continue to observe the situation within Uganda and plans to recommence the drill program once the imposed restrictions are lifted and it is safe to do so within the Makuutu community.

ADDENDUMS

Appendix 1: Makuutu Project RRMDD047 to RRMDD057 Diamond Core Hole Details

Appendix 2: Diamond Core Drilling Analytical Results RRMDD047 to RRMDD057 Including Significant Intersections >500 ppm TREO

JORC Code, 2012 Edition – Table 1 Report.

***** ENDS *****

Authorised for release by Brett Dickson, Company Secretary.

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Competent Person Statements

The information in this Report that relates to Exploration Results for the Makuutu Project is based on information compiled by Mr. Geoff Chapman, who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Chapman is a Director of geological consultancy GJ Exploration Pty Ltd that is engaged by Ionic Rare Earths Limited. Mr. Chapman has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr. Chapman consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Information in this report that relates to previously reported Exploration Targets and Exploration Results has been crossed-referenced in this report to the date that it was originally reported to ASX. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

The information in this report that relates to Mineral Resources for the Makuutu Rare Earths deposit was first released to the ASX on 10 March 2020 and is available to view on www.asx.com.au . Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

Appendix 1: Makuutu Project RRMDD Diamond Core Hole Details (Datum UTM WGS84 Zone 36N)

Drill Hole ID	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Drill Type	Hole Length EOH (m.)	Azimuth	Inclination
RRMDD047	563803	57191	1182	HQ DD	27.00	0	-90
RRMDD048	563606	57005	1180	HQ DD	24.00	0	-90
RRMDD049	563823	56808	1189	HQ DD	18.50	0	-90
RRMDD050	563994	56974	1164	HQ DD	19.00	0	-90
RRMDD051	564009	57405	1175	HQ DD	24.00	0	-90
RRMDD052	564212	57605	1164	HQ DD	19.00	0	-90
RRMDD053	564400	57394	1188	HQ DD	21.70	0	-90
RRMDD054	564192	57213	1212	HQ DD	28.50	0	-90
RRMDD055	564942	58121	1151	HQ DD	17.20	0	-90
RRMDD056	565588	58048	1151	HQ DD	24.00	0	-90
RRMDD057	567405	57393	997	HQ DD	16.50	0	-90

Appendix 2: Diamond Core Drilling Analytical Results RRMDD047 to RRMDD057 Including Significant Intersections >500 ppm TREO

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>500ppm TREO Length (m)	>500ppm TREO TREO ppm
RRMDD047	0.0	1.0	1.0	123.7	357.2	23.5	76.9	12.6	1.9	7.9	1.3	7.6	1.4	4.2	0.7	1.3	0.7	32.5	654	Hardcap		
RRMDD047	1.0	2.0	1.0	196.4	687.6	34.4	106.8	15.4	2.3	9.3	1.5	8.2	1.5	4.3	0.7	1.5	0.7	34.8	1105	Hardcap		
RRMDD047	2.0	3.0	1.0	183.0	529.4	31.9	100.0	14.1	2.0	8.1	1.3	7.2	1.3	4.1	0.7	1.3	0.6	32.6	918	Hardcap		
RRMDD047	3.0	4.0	1.0	213.4	659.4	39.6	124.8	17.9	2.4	8.9	1.3	6.8	1.2	3.6	0.6	1.3	0.5	31.1	1113	Hardcap		
RRMDD047	4.0	4.5	0.5	150.1	528.3	27.0	87.4	13.0	1.9	7.4	1.2	6.2	1.1	3.3	0.5	1.2	0.5	28.1	857	Hardcap	**4.5**	**937**
RRMDD047	4.5	4.8	0.3	81.9	159.9	14.5	46.4	6.9	1.1	4.7	0.8	4.6	0.9	2.8	0.4	0.8	0.5	25.9	352	Mottled		
RRMDD047	4.8	5.3	0.6	45.3	76.6	10.6	39.2	6.7	1.1	5.5	0.8	5.5	1.2	3.7	0.6	0.8	0.7	36.1	234	Mottled		
RRMDD047	5.3	6.3	1.0	74.0	139.4	22.5	89.8	16.1	2.8	11.2	1.6	9.8	1.8	5.5	0.8	1.6	0.8	60.4	438	Clay		
RRMDD047	6.3	7.3	1.0	112.7	224.9	36.2	143.5	26.4	4.6	19.3	2.9	16.4	3.0	9.1	1.3	2.9	1.2	95.2	700	Clay		
RRMDD047	7.3	8.3	1.0	210.5	301.0	51.7	193.6	31.4	5.1	21.6	2.9	16.8	3.0	9.1	1.2	2.9	1.2	99.8	952	Clay		
RRMDD047	8.3	9.3	1.0	192.9	260.0	44.4	164.5	26.7	4.5	19.6	2.7	15.0	2.9	8.4	1.2	2.7	1.1	96.9	843	Clay		
RRMDD047	9.3	10.3	1.0	184.1	231.3	43.5	162.7	26.8	4.7	20.5	3.1	17.0	3.3	10.0	1.4	3.0	1.4	112.8	826	Clay		
RRMDD047	10.3	10.7	0.4	191.8	291.7	53.1	210.0	40.7	7.9	38.8	5.9	36.3	7.3	21.0	2.9	5.9	2.6	257.8	1174	Clay		
RRMDD047	10.7	11.4	0.7	353.0	1009.7	79.9	299.8	48.9	8.4	33.8	4.5	22.4	3.6	9.4	1.3	4.5	1.0	89.4	1970	Clay		
RRMDD047	11.4	12.3	0.9	87.0	154.6	26.6	105.3	18.8	3.5	14.2	2.1	12.4	2.3	6.7	0.9	2.1	0.9	72.9	510	Clay		
RRMDD047	12.3	13.0	0.7	68.1	121.8	27.0	115.6	21.7	3.9	16.4	2.4	13.4	2.5	7.1	1.0	2.4	0.9	74.7	479	Clay		
RRMDD047	13.0	13.7	0.7	106.8	206.1	38.2	169.7	35.5	7.1	37.0	5.7	35.5	7.1	20.4	3.0	5.6	2.7	246.4	927	Clay	**7.4**	**886**
RRMDD047	13.7	14.8	1.1	273.3	388.9	105.6	513.2	104.9	22.3	132.5	19.8	121.7	26.0	76.7	10.4	19.6	9.1	1066.7	2891	Upper Saprolite		
RRMDD047	14.8	15.1	0.3	300.2	342.0	100.9	475.9	96.4	20.3	118.1	17.7	108.8	23.3	67.4	9.1	17.5	8.1	952.4	2658	Upper Saprolite		
RRMDD047	15.1	16.1	1.0	276.8	336.2	96.7	457.2	91.3	18.7	105.5	16.1	99.0	20.8	62.0	8.4	15.9	7.5	802.6	2415	Upper Saprolite		
RRMDD047	16.1	17.1	1.0	200.0	264.7	46.9	208.8	37.3	7.5	39.5	5.6	33.4	6.7	19.7	2.6	5.5	2.4	241.3	1122	Upper Saprolite	**3.4**	**2211**
RRMDD047	17.1	18.1	1.0	69.4	113.5	17.9	79.2	14.3	2.8	14.3	2.0	11.8	2.3	6.8	1.0	2.0	0.9	82.5	421	Upper Saprolite		
RRMDD047	18.1	19.1	1.0	43.4	65.9	10.5	42.8	7.4	1.5	7.2	1.0	6.3	1.3	3.9	0.5	1.0	0.6	45.0	238	Upper Saprolite		
RRMDD047	19.1	20.1	1.0	78.7	155.8	18.8	76.6	13.5	2.8	13.5	2.0	11.7	2.4	7.4	1.1	2.0	0.9	86.0	473	Upper Saprolite		
RRMDD047	20.1	21.0	0.9	70.8	148.2	14.7	56.2	9.3	1.8	9.2	1.3	7.7	1.7	5.2	0.7	1.3	0.7	57.0	386	Upper Saprolite		
RRMDD047	21.0	21.7	0.7	85.4	138.8	18.7	73.9	13.2	2.7	10.7	1.5	8.4	1.5	4.1	0.6	1.4	0.5	42.7	404	Upper Saprolite		
RRMDD047	21.7	22.7	1.0	105.6	205.0	23.4	93.1	16.5	3.4	15.5	2.2	13.0	2.6	7.9	1.1	2.1	1.1	102.6	595	Lower Saprolite		
RRMDD047	22.7	23.7	1.0	72.6	147.0	15.3	55.5	9.2	1.9	8.3	1.1	6.7	1.5	4.5	0.6	1.1	0.6	57.4	383	Lower Saprolite		
RRMDD047	23.7	24.7	1.0	55.4	106.1	12.0	44.1	7.7	1.5	6.1	0.9	5.0	1.0	3.0	0.4	0.9	0.5	37.3	282	Lower Saprolite		
RRMDD047	24.7	25.7	1.0	51.4	103.9	12.2	47.4	8.6	1.7	6.8	1.0	5.6	1.2	3.2	0.5	1.0	0.5	36.4	281	Lower Saprolite		
RRMDD047	25.7	26.2	0.5	51.4	105.4	11.2	42.6	7.4	1.4	5.5	0.8	4.9	1.0	2.9	0.5	0.8	0.4	31.5	268	Lower Saprolite		
RRMDD047	26.2	27.0	0.8	55.0	113.0	11.9	43.9	7.4	1.4	5.4	0.8	4.5	0.9	2.8	0.4	0.8	0.4	28.3	277	Saprock		
RRMDD048	0.0	0.5	0.5	102.4	178.0	21.9	79.2	14.6	2.2	10.9	1.8	10.7	2.1	6.6	1.0	1.8	1.1	63.7	498	Soil		
RRMDD048	0.5	1.5	1.0	79.6	217.9	14.3	46.7	7.5	1.2	5.0	0.9	5.2	1.0	3.2	0.5	0.9	0.6	28.7	413	Hardcap		
RRMDD048	1.5	2.5	1.0	79.3	369.0	15.6	53.8	9.4	1.4	6.6	1.2	6.6	1.3	4.0	0.7	1.2	0.7	36.2	587	Hardcap		
RRMDD048	2.5	3.5	1.0	115.1	614.9	21.3	72.7	12.9	1.9	8.6	1.5	8.3	1.6	4.6	0.8	1.5	0.8	37.7	904	Hardcap		
RRMDD048	3.5	4.2	0.7	129.6	787.1	24.0	78.4	14.9	2.1	9.8	1.6	9.4	1.7	5.5	0.8	1.6	0.8	42.8	1110	Hardcap		
RRMDD048	4.2	4.8	0.6	169.5	233.7	26.3	81.2	11.4	1.9	8.2	1.4	8.1	1.7	5.2	0.8	1.3	0.9	47.4	599	Hardcap	**3.3**	**798**
RRMDD048	4.8	5.7	0.9	140.7	153.4	20.7	59.7	8.0	1.3	5.3	0.8	5.3	1.1	3.3	0.6	0.8	0.7	32.6	434	Mottled		
RRMDD048	5.7	6.7	1.0	74.7	116.1	13.6	46.0	7.4	1.2	4.9	0.8	4.9	1.1	3.6	0.6	0.8	0.7	32.4	309	Mottled		
RRMDD048	6.7	7.7	1.0	55.2	117.7	10.7	37.2	6.3	0.9	4.4	0.7	4.4	0.9	3.2	0.5	0.7	0.6	27.9	271	Mottled		
RRMDD048	7.7	8.7	1.0	44.3	92.4	9.4	32.9	5.8	0.9	4.0	0.6	3.4	0.7	2.3	0.4	0.5	0.4	21.3	219	Mottled		
RRMDD048	8.7	9.7	1.0	63.2	119.5	18.1	67.8	11.7	1.9	6.9	0.9	5.3	1.0	2.9	0.4	0.9	0.5	27.7	329	Clay		
RRMDD048	9.7	10.7	1.0	158.9	295.2	69.3	278.8	54.5	8.4	31.0	3.8	19.7	3.0	7.5	1.0	3.8	0.8	71.9	1008	Clay		
RRMDD048	10.7	11.0	0.3	2744.4	1716.0	387.4	1166.4	154.8	23.5	87.5	10.0	49.4	7.1	16.4	2.1	9.9	1.5	168.9	6545	Clay		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>500ppm TREO Length (m)	>500ppm TREO TREO ppm
RRMDD048	11.0	11.7	0.8	191.8	263.5	49.2	180.2	30.6	4.7	17.5	2.1	11.1	1.8	4.5	0.7	2.1	0.6	44.6	805	Clay		
RRMDD048	11.7	12.6	0.9	193.5	250.7	47.5	174.4	30.3	4.7	17.8	2.2	11.6	1.9	4.8	0.7	2.2	0.6	48.9	792	Clay		
RRMDD048	12.6	13.1	0.5	137.2	305.7	47.4	184.9	33.9	5.2	20.1	2.5	13.6	2.2	5.9	0.8	2.5	0.8	59.7	822	Clay		
RRMDD048	13.1	14.0	0.9	119.6	224.9	38.9	152.8	27.4	4.4	16.9	2.2	11.5	2.0	5.3	0.8	2.2	0.7	55.4	665	Clay		
RRMDD048	14.0	15.0	1.0	185.3	386.5	46.5	176.1	30.5	5.0	21.2	2.7	15.3	2.6	7.4	1.1	2.7	1.0	77.8	962	Clay		
RRMDD048	15.0	15.5	0.5	253.3	466.2	71.5	285.8	49.7	8.1	36.0	4.4	24.7	4.3	11.9	1.6	4.3	1.4	149.2	1373	Clay		
RRMDD048	15.5	16.5	1.0	123.7	219.6	32.9	133.6	24.9	4.2	21.5	2.6	16.0	3.3	9.5	1.3	2.6	1.2	135.9	733	Upper Saprolite	**6.8**	**1081**
RRMDD048	16.5	17.5	1.0	87.1	197.4	21.7	82.9	14.8	2.6	10.9	1.4	8.0	1.5	4.2	0.6	1.4	0.6	46.1	481	Upper Saprolite		
RRMDD048	17.5	18.5	1.0	75.3	159.9	17.9	69.5	12.2	2.1	9.4	1.2	6.9	1.3	3.9	0.6	1.2	0.6	41.4	403	Upper Saprolite		
RRMDD048	18.5	19.1	0.6	69.3	123.0	16.2	63.1	11.9	2.3	10.5	1.4	9.0	1.6	5.2	0.8	1.4	0.7	54.7	371	Upper Saprolite		
RRMDD048	19.1	20.0	0.9	99.6	251.8	24.7	101.8	19.1	3.5	15.7	1.9	11.6	2.1	6.1	0.8	1.9	0.8	70.4	612	Upper Saprolite		
RRMDD048	20.0	21.0	1.0	114.9	229.6	31.1	137.1	26.7	5.2	24.1	3.1	17.7	3.3	9.1	1.3	3.1	1.1	103.5	711	Upper Saprolite	**1.9**	**663**
RRMDD048	21.0	21.7	0.7	60.5	127.1	13.7	51.4	8.5	1.6	7.0	0.9	4.9	0.9	2.6	0.4	0.8	0.4	27.2	308	Upper Saprolite		
RRMDD048	21.7	22.3	0.6	54.2	138.8	12.8	49.1	8.5	1.6	6.6	0.8	4.5	0.9	2.5	0.4	0.8	0.4	25.1	307	Upper Saprolite		
RRMDD048	22.3	23.3	1.0	72.4	134.7	15.6	61.2	10.4	2.0	9.3	1.1	6.3	1.2	3.5	0.5	1.1	0.5	40.8	361	Lower Saprolite		
RRMDD048	23.3	24.0	0.7	62.0	114.7	13.4	51.0	9.4	1.8	7.7	1.0	5.8	1.2	3.5	0.5	1.0	0.5	40.8	314	Lower Saprolite		
RRMDD049	0.0	0.3	0.3	119.0	233.1	26.4	95.2	18.0	2.6	13.9	2.2	13.2	2.6	7.8	1.2	2.1	1.2	76.3	615	Soil		
RRMDD049	0.3	1.3	1.1	75.4	475.5	16.2	56.6	10.0	1.6	6.8	1.2	7.5	1.4	4.3	0.7	1.1	0.7	36.8	696	Hardcap		
RRMDD049	1.3	2.3	1.0	91.9	472.0	18.2	60.8	10.5	1.6	7.4	1.2	7.0	1.4	4.3	0.7	1.1	0.6	37.6	716	Hardcap	**2.3**	**630**
RRMDD049	2.3	3.2	0.8	113.4	653.6	22.1	77.2	12.8	1.8	8.8	1.4	8.8	1.7	5.3	0.8	1.4	0.8	51.3	961	Transition		
RRMDD049	3.2	4.0	0.9	113.4	381.8	20.3	67.5	11.2	1.6	8.2	1.3	7.9	1.6	5.1	0.8	1.2	0.8	49.7	672	Mottled		
RRMDD049	4.0	4.6	0.6	98.0	419.3	18.2	63.7	10.7	1.7	8.2	1.2	8.2	1.7	5.4	0.8	1.2	0.8	53.2	692	Mottled	**2.3**	**783**
RRMDD049	4.6	5.5	0.9	70.5	187.4	13.8	48.9	8.1	1.3	6.6	1.0	7.0	1.4	4.7	0.7	1.0	0.8	46.7	400	Clay		
RRMDD049	5.5	6.3	0.8	62.3	99.2	11.7	41.9	6.5	1.1	5.7	0.8	5.6	1.2	4.3	0.7	0.8	0.8	40.6	283	Clay		
RRMDD049	6.3	6.9	0.6	72.8	111.9	13.0	45.3	7.4	1.2	6.0	0.9	6.0	1.3	4.3	0.7	0.9	0.8	42.3	315	Clay		
RRMDD049	6.9	7.2	0.4	89.8	330.3	19.6	70.7	13.6	2.0	10.3	1.6	10.0	2.0	6.6	0.9	1.6	1.0	59.1	619	Clay		
RRMDD049	7.2	8.2	1.0	157.2	203.2	36.3	133.0	22.5	3.5	16.3	2.1	12.5	2.5	7.7	1.1	2.1	1.0	80.3	681	Clay		
RRMDD049	8.2	9.2	1.0	191.2	294.0	45.2	161.5	26.4	4.3	19.2	2.4	14.6	2.8	8.1	1.2	2.4	1.1	90.4	865	Clay		
RRMDD049	9.2	10.2	1.0	251.0	351.4	63.1	218.1	33.3	5.2	21.3	3.0	16.9	3.2	8.7	1.2	3.0	1.1	96.5	1077	Clay		
RRMDD049	10.2	11.2	1.0	331.9	434.6	90.8	314.9	48.1	7.2	29.5	3.9	22.2	3.8	10.3	1.4	3.9	1.2	109.5	1413	Clay		
RRMDD049	11.2	12.2	1.0	432.8	439.2	97.7	332.4	50.3	7.5	29.7	4.0	22.2	3.9	10.0	1.4	4.0	1.2	104.4	1541	Clay		
RRMDD049	12.2	13.2	1.0	100.5	207.3	24.0	84.2	13.4	2.1	9.2	1.4	8.1	1.6	4.9	0.8	1.3	0.8	50.4	510	Clay		
RRMDD049	13.2	14.1	0.9	123.1	226.1	32.3	113.4	17.6	2.8	11.3	1.6	9.6	1.8	5.2	0.8	1.6	0.8	54.0	602	Clay		
RRMDD049	14.1	15.0	0.9	129.0	246.0	28.7	101.2	15.5	2.6	11.3	1.6	9.7	2.0	6.0	0.9	1.6	0.8	64.4	621	Clay		
RRMDD049	15.0	15.4	0.4	206.4	298.7	49.9	180.8	28.3	4.6	19.2	2.7	15.8	2.9	8.2	1.1	2.7	1.1	93.1	916	Clay	**8.5**	**909**
RRMDD049	15.4	16.4	1.0	228.7	276.4	59.0	218.1	38.8	6.8	28.8	4.4	25.4	4.8	13.4	1.8	4.3	1.6	137.8	1050	Upper Saprolite		
RRMDD049	16.4	17.3	0.9	224.6	256.5	57.5	218.1	40.1	7.4	34.0	5.2	31.2	6.0	16.6	2.2	5.1	1.9	179.7	1086	Upper Saprolite		
RRMDD049	17.3	17.6	0.3	403.4	424.0	112.3	443.2	83.5	16.0	78.8	12.1	73.6	14.5	40.9	5.5	12.0	4.9	439.4	2164	Lower Saprolite	**2.3**	**1238**
RRMDD049	17.6	18.3	0.6	227.5	246.0	44.1	174.4	29.7	5.9	34.0	5.0	32.8	7.4	22.8	3.3	5.0	3.2	318.7	1160	Saprock		
RRMDD049	18.3	18.5	0.3	208.8	267.1	43.8	172.0	29.8	6.1	32.8	4.8	30.8	6.8	19.7	2.8	4.8	2.3	271.8	1104	Fresh Rock		
RRMDD050	0.0	0.2	0.2	150.1	247.1	29.1	100.5	16.8	2.6	11.4	1.6	9.3	1.7	5.1	0.7	1.6	0.8	49.1	628	Soil		
RRMDD050	0.2	0.4	0.2	164.2	256.5	31.6	108.9	18.3	2.8	11.5	1.6	9.0	1.6	4.7	0.7	1.5	0.7	42.7	656	Hardcap		
RRMDD050	0.4	1.3	0.9	190.6	310.4	34.1	116.2	19.5	3.1	12.2	1.6	9.1	1.5	4.3	0.6	1.6	0.6	38.2	743	Hardcap		
RRMDD050	1.3	2.2	0.9	204.7	392.4	36.5	126.0	20.6	3.2	12.4	1.7	9.2	1.6	4.4	0.7	1.6	0.6	42.2	858	Hardcap		
RRMDD050	2.2	3.1	0.9	221.1	454.5	36.6	116.6	18.5	2.7	11.2	1.6	8.6	1.6	4.4	0.6	1.6	0.7	39.7	920	Hardcap		
RRMDD050	3.1	3.8	0.7	148.9	477.9	25.0	78.8	12.9	1.8	8.2	1.2	7.0	1.3	4.0	0.6	1.2	0.6	33.9	803	Hardcap	**3.6**	**823**
RRMDD050	3.8	4.4	0.6	138.4	207.3	22.4	66.6	9.3	1.5	6.5	1.0	6.4	1.2	3.6	0.6	1.0	0.7	35.6	502	Transition		
RRMDD050	4.4	4.5	0.1	40.0	69.7	11.4	41.9	7.3	1.3	5.6	0.9	5.5	1.1	3.2	0.5	0.9	0.6	35.0	225	Mottled		
RRMDD050	4.5	5.4	0.9	242.8	281.1	37.2	123.6	18.4	3.1	16.5	2.3	13.5	2.6	7.3	1.1	2.3	1.0	102.4	855	Clay		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>500ppm TREO Length (m)	>500ppm TREO TREO ppm
RRMDD050	5.4	6.4	1.0	157.2	228.4	33.6	119.0	18.9	3.3	15.0	2.2	12.7	2.3	6.4	0.9	2.2	0.9	71.1	674	Clay		
RRMDD050	6.4	7.1	0.7	105.8	209.7	32.3	120.1	20.4	3.5	16.0	2.4	14.7	2.9	8.2	1.2	2.4	1.1	97.8	638	Clay		
RRMDD050	7.1	7.8	0.7	136.6	251.8	41.1	154.0	25.7	4.7	24.3	3.8	23.1	4.9	14.5	2.0	3.8	1.9	199.4	892	Clay		
RRMDD050	7.8	8.7	0.9	150.1	240.1	37.8	137.6	22.7	4.2	19.7	3.0	17.8	3.6	10.2	1.5	3.0	1.4	121.8	774	Clay		
RRMDD050	8.7	9.7	1.0	189.4	322.1	53.0	198.3	34.2	6.6	28.6	4.3	24.7	4.8	13.3	1.8	4.2	1.6	151.1	1038	Clay		
RRMDD050	9.7	10.7	1.0	139.6	224.3	36.6	140.0	24.6	4.6	22.9	3.5	21.2	4.4	12.8	1.8	3.5	1.6	165.1	806	Clay		
RRMDD050	10.7	11.5	0.8	57.1	89.4	17.7	72.3	14.9	2.9	14.6	2.3	14.2	2.9	8.1	1.1	2.3	1.1	85.8	387	Clay	**7.7**	**739**
RRMDD050	11.5	12.2	0.7	107.0	209.1	46.2	198.9	48.6	9.9	47.5	7.9	48.8	9.5	26.8	3.7	7.8	3.4	260.3	1035	Upper Saprolite		
RRMDD050	12.2	12.9	0.7	122.0	240.1	39.2	154.0	31.2	6.3	28.5	4.4	26.5	5.1	14.1	2.0	4.4	1.8	138.4	818	Upper Saprolite		
RRMDD050	12.9	13.8	0.9	111.7	216.7	34.3	131.8	25.6	5.1	23.5	3.8	23.0	4.4	12.9	1.8	3.7	1.6	126.2	726	Upper Saprolite		
RRMDD050	13.8	14.7	0.9	69.9	131.8	17.4	64.4	10.5	2.0	9.7	1.5	8.9	1.9	5.6	0.8	1.5	0.8	58.9	386	Upper Saprolite		
RRMDD050	14.7	15.5	0.8	52.3	91.6	13.3	50.2	8.3	1.6	8.2	1.2	7.4	1.6	4.6	0.7	1.2	0.7	53.3	296	Upper Saprolite		
RRMDD050	15.5	16.4	0.9	124.3	243.6	35.3	138.8	24.8	4.9	24.4	3.7	21.9	4.6	13.3	1.8	3.7	1.8	148.6	796	Upper Saprolite		
RRMDD050	16.4	17.3	0.9	112.0	224.9	32.1	127.1	21.0	4.1	21.7	3.0	17.9	3.9	11.2	1.6	3.0	1.4	144.1	729	Upper Saprolite		
RRMDD050	17.3	18.2	0.9	112.4	241.3	28.3	106.5	18.5	3.5	16.9	2.2	13.9	2.8	8.0	1.1	2.2	1.1	120.1	679	Upper Saprolite		
RRMDD050	18.2	19.0	0.8	120.8	258.9	26.9	97.2	16.8	3.2	13.8	1.9	11.8	2.3	6.7	0.9	1.9	0.8	87.8	652	Upper Saprolite	**7.5**	**671**
RRMDD051	0.0	0.6	0.6	164.2	366.6	33.2	115.2	18.3	2.7	10.7	1.5	9.0	1.6	4.8	0.7	1.5	0.7	40.4	771	Soil		
RRMDD051	0.6	1.5	0.9	188.8	421.7	37.9	131.2	20.5	3.1	11.9	1.8	10.1	1.8	5.4	0.8	1.7	0.8	43.0	881	Hardcap		
RRMDD051	1.5	2.5	1.0	171.8	304.5	34.9	120.1	19.4	2.8	10.8	1.6	9.3	1.7	5.0	0.7	1.6	0.7	38.6	724	Hardcap		
RRMDD051	2.5	3.5	1.0	147.8	289.3	30.2	105.7	17.0	2.7	9.8	1.4	8.7	1.5	4.6	0.7	1.4	0.7	33.8	655	Hardcap		
RRMDD051	3.5	4.5	1.0	122.0	262.4	23.9	82.9	13.4	2.0	7.6	1.2	6.9	1.2	3.8	0.6	1.1	0.6	29.7	559	Hardcap	**3.9**	**700**
RRMDD051	4.5	5.2	0.7	17.4	45.4	3.4	12.5	2.6	0.4	2.1	0.4	3.0	0.6	2.1	0.4	0.4	0.5	23.5	115	Mottled		
RRMDD051	5.2	5.8	0.6	16.3	26.6	3.4	12.0	2.0	0.5	2.1	0.4	2.9	0.6	2.4	0.4	0.4	0.5	22.5	93	Mottled		
RRMDD051	5.8	6.8	1.0	40.7	69.7	9.4	34.4	6.4	1.3	5.8	0.9	5.3	1.1	3.9	0.6	0.8	0.6	40.3	221	Mottled		
RRMDD051	6.8	7.7	0.9	44.6	71.3	9.4	31.5	6.2	1.1	5.5	0.9	5.6	1.1	4.0	0.6	0.9	0.7	46.1	230	Mottled		
RRMDD051	7.7	8.4	0.7	200.0	303.4	35.9	122.5	21.0	4.4	15.5	1.9	10.2	1.7	4.7	0.7	1.9	0.8	50.5	775	Pallid		
RRMDD051	8.4	9.2	0.8	126.7	249.5	25.3	86.3	15.7	3.0	12.2	1.7	9.4	1.7	5.7	0.8	1.7	0.9	63.6	604	Pallid	**1.5**	**686**
RRMDD051	9.2	10.1	0.9	76.8	169.3	21.8	75.5	15.1	2.5	10.1	1.3	8.6	1.6	4.6	0.7	1.3	0.7	52.7	443	Clay		
RRMDD051	10.1	11.1	1.0	86.8	177.5	22.9	81.8	15.0	2.7	10.6	1.5	10.6	2.0	6.0	0.9	1.5	1.0	72.9	494	Clay		
RRMDD051	11.1	12.0	0.9	81.9	160.5	20.9	73.9	14.8	2.6	10.1	1.5	9.1	1.8	5.8	0.8	1.5	0.9	62.6	449	Clay		
RRMDD051	12.0	12.9	0.9	95.6	213.8	28.9	104.2	21.4	3.8	14.3	2.0	11.3	2.1	6.2	0.9	2.0	0.8	71.0	578	Clay		
RRMDD051	12.9	13.8	0.9	93.4	193.9	25.5	91.8	18.6	3.4	11.9	1.7	9.8	1.8	5.1	0.8	1.7	0.7	57.4	517	Clay		
RRMDD051	13.8	14.6	0.8	84.3	174.5	22.5	81.1	16.1	2.9	10.3	1.5	8.3	1.6	4.9	0.7	1.5	0.8	50.8	462	Clay		
RRMDD051	14.6	15.4	0.8	68.5	196.2	17.6	61.7	11.5	2.3	9.1	1.3	8.9	1.8	5.3	0.8	1.3	0.8	61.2	448	Clay		
RRMDD051	15.4	16.2	0.8	82.0	191.5	21.8	79.3	15.7	3.2	12.9	1.9	12.6	2.4	7.4	1.0	1.9	1.1	83.2	518	Clay		
RRMDD051	16.2	17.1	0.9	86.8	179.8	23.0	87.9	18.4	3.6	13.7	2.2	13.7	2.5	7.0	1.1	2.2	1.0	74.8	518	Clay		
RRMDD051	17.1	18.0	0.9	111.5	244.8	35.3	140.0	33.5	6.5	25.9	3.9	23.2	4.1	12.4	1.8	3.9	1.5	114.2	763	Clay		
RRMDD051	18.0	18.9	0.9	100.3	215.5	28.2	104.6	22.0	4.0	15.5	2.3	13.1	2.5	7.6	1.0	2.2	1.0	84.8	605	Clay		
RRMDD051	18.9	19.6	0.7	100.7	217.9	28.6	110.3	22.9	5.0	20.5	3.1	19.3	3.8	10.8	1.6	3.0	1.5	141.0	690	Clay	**7.6**	**567**
RRMDD051	19.6	20.5	0.9	89.5	191.5	23.8	94.8	21.2	3.9	15.9	2.3	13.3	2.6	7.5	1.0	2.2	1.0	75.7	546	Upper Saprolite		
RRMDD051	20.5	21.1	0.6	103.2	216.7	26.8	105.9	20.5	4.6	19.0	2.8	17.3	3.2	9.4	1.4	2.8	1.2	93.3	628	Upper Saprolite		
RRMDD051	21.1	22.0	0.9	187.6	276.4	33.6	141.7	28.1	6.4	38.5	5.5	39.3	9.2	29.2	4.0	5.5	3.6	476.2	1285	Lower Saprolite	**2.4**	**849**
RRMDD051	22.0	22.6	0.6	84.0	145.8	16.1	59.5	10.5	2.2	10.7	1.3	8.0	1.8	5.7	0.8	1.3	0.8	83.2	432	Lower Saprolite		
RRMDD051	22.6	23.4	0.8	72.9	141.1	15.2	58.6	10.1	1.9	7.8	1.1	6.2	1.4	4.4	0.6	1.1	0.6	56.9	380	Saprock		
RRMDD051	23.4	24.0	0.6	60.9	130.0	14.3	49.3	9.1	1.7	6.1	0.7	4.8	0.9	2.9	0.5	0.7	0.5	31.0	313	Saprock		
RRMDD052	0.0	0.4	0.4	99.6	202.0	20.4	71.3	13.1	2.0	10.2	1.6	9.9	2.0	6.3	0.9	1.6	1.0	58.4	500	Soil		
RRMDD052	0.4	1.2	0.8	181.2	422.8	33.2	107.5	17.1	2.5	10.8	1.6	9.9	1.9	5.9	0.9	1.6	0.9	49.3	847	Hardcap		
RRMDD052	1.2	2.2	1.0	134.9	458.0	24.8	82.7	13.3	2.1	8.9	1.5	8.2	1.4	4.2	0.7	1.5	0.6	36.6	779	Hardcap		
RRMDD052	2.2	3.1	0.9	123.1	370.1	22.6	77.1	13.5	2.2	9.7	1.6	9.8	1.9	5.4	0.8	1.6	0.8	42.5	683	Hardcap		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>500ppm TREO Length (m)	>500ppm TREO TREO ppm
RRMDD052	3.1	3.6	0.5	127.8	463.8	22.9	75.0	13.0	2.2	8.8	1.4	8.9	1.6	5.1	0.8	1.4	0.8	40.3	774	Hardcap	3.2	769
RRMDD052	3.6	4.5	0.9	74.9	1300.1	16.9	63.6	14.3	2.5	12.4	2.4	15.0	2.9	8.8	1.4	2.4	1.3	68.7	1588	Mottled		
RRMDD052	4.5	5.4	0.9	60.0	303.4	14.5	57.0	10.8	1.9	8.9	1.4	8.9	1.6	5.8	0.9	1.4	0.8	56.0	533	Mottled		
RRMDD052	5.4	6.3	0.9	52.0	249.5	12.6	46.0	9.6	1.7	7.5	1.2	7.5	1.5	4.8	0.9	1.2	0.9	48.9	446	Mottled		
RRMDD052	6.3	7.1	0.8	69.2	523.6	17.7	66.3	13.5	2.3	10.2	1.5	10.1	1.9	6.0	1.0	1.5	1.1	64.5	790	Mottled		
RRMDD052	7.1	7.9	0.8	270.9	373.6	85.8	313.8	64.1	11.2	43.6	6.5	36.2	5.9	18.0	2.5	6.5	2.2	160.6	1401	Mottled		
RRMDD052	7.9	8.8	0.9	247.5	222.5	72.9	260.1	50.7	8.0	31.5	4.8	27.5	4.6	14.2	2.0	4.7	1.9	134.6	1088	Pallid		
RRMDD052	8.8	9.7	0.9	408.1	275.3	110.6	394.2	79.7	13.5	53.0	7.5	39.4	6.3	18.3	2.5	7.4	2.2	179.7	1598	Pallid		
RRMDD052	9.7	10.4	0.7	1554.0	1997.1	502.1	1842.9	350.2	59.2	240.9	32.8	169.9	27.6	82.4	11.1	32.5	9.3	905.4	7817	Pallid		
RRMDD052	10.4	11.4	1.0	219.3	251.8	64.1	241.4	50.1	8.9	36.8	5.2	28.0	4.4	13.8	1.9	5.1	1.7	128.3	1061	Clay		
RRMDD052	11.4	12.4	1.0	160.7	140.0	42.6	168.0	36.3	6.8	33.8	5.2	32.0	5.5	17.6	2.4	5.2	2.2	167.0	825	Clay		
RRMDD052	12.4	13.4	1.0	211.7	173.4	54.7	228.6	55.1	12.9	74.6	12.2	79.5	15.6	51.0	7.0	12.1	6.0	579.1	1573	Clay		
RRMDD052	13.4	14.4	1.0	168.3	152.3	30.7	127.1	26.9	6.4	44.1	6.6	43.2	9.6	32.0	4.3	6.5	4.0	478.8	1141	Clay	10.8	1533
RRMDD052	14.4	15.4	1.0	83.3	129.4	17.6	66.0	13.1	2.9	13.0	1.9	11.8	2.4	7.9	1.1	1.9	1.1	108.3	462	Clay		
RRMDD052	15.4	16.3	0.9	70.0	118.3	15.4	56.7	11.8	2.4	11.1	1.7	10.3	2.1	6.6	1.0	1.7	0.9	77.1	387	Upper Saprolite		
RRMDD052	16.3	16.4	0.1	53.2	101.4	12.4	42.6	8.4	1.9	7.8	1.1	6.8	1.2	4.0	0.6	1.1	0.6	46.7	290	Lower Saprolite		
RRMDD052	16.4	17.3	0.9	54.3	109.2	13.2	45.7	8.3	1.8	6.5	1.0	5.6	1.0	3.4	0.5	1.0	0.5	34.3	286	Saprock		
RRMDD052	17.3	18.2	0.9	59.1	116.5	13.7	45.6	8.2	1.6	6.0	0.8	4.7	0.9	3.0	0.4	0.8	0.5	29.2	291	Saprock		
RRMDD052	18.2	18.7	0.4	56.9	114.9	13.8	46.8	8.2	1.7	6.9	1.0	5.6	1.0	3.3	0.5	1.0	0.6	34.2	296	Saprock		
RRMDD052	18.7	19.0	0.4	52.2	107.6	12.9	43.7	7.9	1.6	5.8	0.8	4.8	0.8	2.6	0.4	0.8	0.4	26.4	269	Fresh Rock		
RRMDD053	0.0	0.5	0.5	113.8	213.2	21.1	71.0	11.8	2.0	9.0	1.5	8.7	1.7	5.1	0.8	1.5	0.8	45.5	507	Soil		
RRMDD053	0.5	1.0	0.5	192.9	514.2	35.7	114.0	17.9	2.9	12.1	2.0	11.1	2.1	6.4	1.0	2.0	0.9	49.4	965	Hardcap		
RRMDD053	1.0	1.7	0.7	99.9	269.4	17.5	56.7	9.0	1.5	6.5	1.0	6.1	1.1	3.4	0.6	1.0	0.6	29.7	504	Hardcap	1.2	699
RRMDD053	1.7	2.6	0.9	60.9	289.3	13.3	49.8	9.4	1.4	7.4	1.2	7.8	1.6	4.9	0.7	1.2	0.8	46.5	496	Mottled		
RRMDD053	2.6	3.5	0.9	46.6	126.5	10.5	39.9	7.2	1.2	6.0	0.9	5.9	1.2	3.5	0.6	0.9	0.6	36.3	288	Mottled		
RRMDD053	3.5	4.6	1.1	104.0	149.9	23.3	81.1	15.1	2.7	11.1	1.7	9.7	1.8	5.9	0.9	1.7	0.9	55.7	466	Pallid		
RRMDD053	4.6	5.6	1.1	123.1	246.0	29.0	99.1	18.4	3.3	13.3	2.0	12.0	2.2	6.8	1.0	2.0	1.0	69.2	628	Pallid	1.1	628
RRMDD053	5.6	6.1	0.5	47.9	123.6	11.0	38.7	6.9	1.3	5.0	0.7	4.4	0.8	2.7	0.4	0.7	0.4	25.4	270	Pallid		
RRMDD053	6.1	6.3	0.2	8.7	38.8	2.0	6.8	1.6	0.3	1.2	0.2	1.3	0.2	0.8	0.1	0.2	0.1	6.7	69	Pallid		
RRMDD053	6.3	7.2	0.9	82.6	140.0	22.1	80.1	15.9	2.8	11.3	1.6	9.0	1.5	5.0	0.7	1.5	0.7	47.6	422	Clay		
RRMDD053	7.2	8.1	0.9	97.6	165.7	29.3	110.2	22.1	3.9	16.3	2.3	12.3	2.1	6.4	0.9	2.3	0.8	65.5	538	Clay		
RRMDD053	8.1	9.1	1.0	87.7	125.3	23.4	86.0	17.6	3.2	14.2	2.0	12.2	2.2	7.1	1.0	2.0	1.0	75.9	461	Clay		
RRMDD053	9.1	9.8	0.7	99.9	157.0	29.5	113.0	23.9	4.4	17.5	2.5	12.9	2.1	6.1	0.9	2.4	0.8	60.6	533	Clay		
RRMDD053	9.8	10.0	0.2	77.2	101.3	21.5	80.8	16.4	3.1	12.5	1.8	9.9	1.7	5.3	0.7	1.8	0.8	52.2	387	Clay		
RRMDD053	10.0	10.6	0.6	126.7	192.1	34.5	130.6	27.3	4.8	20.1	2.8	14.7	2.3	6.9	1.0	2.8	0.8	65.3	633	Clay		
RRMDD053	10.6	11.3	0.7	133.7	185.1	36.5	138.2	28.6	5.2	22.0	3.1	17.0	2.8	8.5	1.2	3.1	1.1	81.9	668	Clay	4.1	545
RRMDD053	11.3	11.7	0.4	96.9	125.3	24.5	92.3	18.5	3.5	14.5	2.1	11.2	1.9	5.4	0.8	2.1	0.7	54.9	454	Upper Saprolite		
RRMDD053	11.7	12.1	0.4	171.8	238.9	41.9	159.2	31.8	6.0	25.1	3.4	17.0	2.6	7.4	1.0	3.3	0.9	69.2	779	Upper Saprolite		
RRMDD053	12.1	12.8	0.7	85.5	127.7	21.8	92.8	17.9	3.7	16.7	2.2	12.9	2.3	6.2	0.9	2.1	0.8	64.9	459	Upper Saprolite		
RRMDD053	12.8	13.5	0.7	58.9	66.6	14.6	63.8	12.6	2.7	13.7	2.0	13.0	2.6	7.6	1.1	2.0	1.1	83.1	345	Upper Saprolite		
RRMDD053	13.5	14.3	0.8	150.7	308.1	41.2	189.0	39.0	9.0	46.4	6.5	42.4	8.2	24.1	3.4	6.5	2.9	257.8	1135	Upper Saprolite		
RRMDD053	14.3	15.2	0.9	82.2	142.3	20.8	96.7	20.6	5.0	30.0	4.5	32.4	6.9	20.5	3.0	4.5	2.7	234.3	706	Upper Saprolite		
RRMDD053	15.2	16.1	0.9	120.2	187.4	27.7	119.0	22.3	5.1	24.3	3.1	19.1	3.6	9.6	1.4	3.1	1.1	104.5	651	Upper Saprolite		
RRMDD053	16.1	16.7	0.6	109.7	202.0	22.3	87.5	15.2	3.1	15.9	1.9	12.4	2.4	6.6	0.9	1.9	0.9	77.1	560	Upper Saprolite		
RRMDD053	16.7	17.7	1.0	94.8	181.6	20.0	78.6	13.7	2.8	14.3	1.8	11.1	2.2	6.8	0.9	1.8	0.9	77.7	509	Lower Saprolite	6.4	632
RRMDD053	17.7	18.7	1.0	74.6	154.0	16.0	57.9	9.0	1.8	8.0	0.9	5.7	1.1	3.3	0.5	0.9	0.5	38.1	372	Lower Saprolite		
RRMDD053	18.7	19.8	1.1	66.6	134.7	15.2	56.2	9.2	1.9	7.4	1.0	5.4	1.0	3.0	0.4	0.9	0.5	32.4	336	Saprock		
RRMDD053	19.8	20.7	0.9	65.7	155.2	14.8	55.6	9.0	1.8	6.7	0.8	5.0	1.0	2.9	0.5	0.8	0.5	31.9	352	Saprock		
RRMDD053	20.7	21.7	1.0	66.6	158.1	15.2	56.3	9.4	1.8	6.6	0.9	5.1	1.0	3.1	0.5	0.9	0.5	33.0	359	Saprock		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>500ppm TREO Length (m)	>500ppm TREO TREO ppm
RRMDD054	0.0	0.2	0.2	123.1	275.3	23.4	77.9	12.1	2.0	8.7	1.3	7.2	1.4	4.1	0.6	1.3	0.6	39.7	579	Soil		
RRMDD054	0.2	1.1	0.9	165.4	360.8	32.7	111.5	16.1	2.6	9.4	1.4	7.1	1.4	4.1	0.6	1.3	0.6	34.9	750	Hardcap		
RRMDD054	1.1	2.0	0.9	164.8	319.8	32.9	112.4	15.8	2.7	9.6	1.4	7.6	1.4	4.1	0.7	1.4	0.6	36.1	711	Hardcap		
RRMDD054	2.0	2.4	0.4	150.1	291.7	29.0	95.5	13.9	2.3	8.7	1.3	7.3	1.3	3.8	0.6	1.3	0.5	34.3	642	Hardcap	**2.2**	**715**
RRMDD054	2.4	3.0	0.6	76.5	312.7	14.8	49.7	8.0	1.4	5.5	0.8	4.4	0.8	2.4	0.4	0.8	0.4	21.6	500	Mottled		
RRMDD054	3.0	3.9	0.9	99.2	224.3	20.4	74.2	13.2	2.3	9.5	1.3	6.9	1.1	2.8	0.4	1.3	0.4	26.7	484	Mottled		
RRMDD054	3.9	4.5	0.6	81.0	329.1	18.2	68.7	12.6	2.4	10.2	1.3	7.3	1.2	3.0	0.4	1.3	0.4	29.5	567	Mottled	**2.2**	**513**
RRMDD054	4.5	5.5	1.0	84.8	124.2	17.8	64.3	10.5	1.7	7.2	0.9	5.6	1.1	3.0	0.5	0.9	0.6	34.3	357	Clay		
RRMDD054	5.5	6.4	0.9	56.6	144.7	13.8	50.3	9.5	1.6	7.5	1.1	6.2	1.2	3.6	0.5	1.1	0.5	38.2	336	Clay		
RRMDD054	6.4	7.3	0.9	72.6	130.6	18.0	64.9	12.3	2.1	9.0	1.2	6.9	1.3	3.9	0.6	1.2	0.6	42.8	368	Clay		
RRMDD054	7.3	8.2	0.9	60.5	71.7	17.3	64.3	12.3	2.1	9.2	1.3	7.3	1.4	4.3	0.6	1.3	0.6	46.5	301	Clay		
RRMDD054	8.2	9.1	0.9	88.2	102.7	24.0	88.6	17.6	3.1	13.4	1.9	10.3	2.0	5.9	0.8	1.9	0.8	65.0	426	Clay		
RRMDD054	9.1	10.0	0.9	295.5	288.1	55.6	196.0	39.8	7.5	39.1	6.3	40.1	8.6	25.3	3.5	6.2	3.0	328.9	1343	Clay		
RRMDD054	10.0	10.5	0.5	74.7	80.1	20.0	75.9	15.0	2.7	12.2	1.8	10.0	1.9	5.6	0.8	1.8	0.7	65.9	369	Clay		
RRMDD054	10.5	11.1	0.6	169.5	339.7	54.5	208.2	41.2	6.8	26.4	3.6	17.6	2.9	7.8	1.1	3.5	0.9	83.4	967	Clay		
RRMDD054	11.1	11.7	0.6	136.6	268.2	45.8	180.2	36.8	6.1	23.6	3.2	15.8	2.7	7.1	1.0	3.2	0.9	78.4	809	Clay		
RRMDD054	11.7	12.1	0.4	62.9	303.4	17.4	67.3	14.4	2.5	11.2	1.6	9.2	1.8	5.0	0.7	1.6	0.7	48.4	548	Clay		
RRMDD054	12.1	13.0	0.9	635.7	664.1	124.1	496.9	89.8	15.2	64.9	7.6	34.3	4.8	10.6	1.3	7.6	1.0	108.7	2266	Clay		
RRMDD054	13.0	14.0	1.0	234.6	340.8	56.3	236.8	48.4	9.1	45.3	6.6	38.8	7.4	20.9	3.0	6.6	2.8	223.5	1281	Clay	**4.9**	**1226**
RRMDD054	14.0	14.9	0.9	119.6	171.0	41.1	187.8	44.9	9.0	46.3	6.7	38.2	7.0	18.4	2.5	6.6	2.2	202.5	904	Upper Saprolite		
RRMDD054	14.9	15.8	0.9	101.7	164.6	28.4	123.1	29.1	6.0	33.9	5.2	31.3	6.4	18.2	2.5	5.2	2.3	217.2	775	Upper Saprolite		
RRMDD054	15.8	16.7	0.9	126.1	185.1	44.5	213.5	54.3	11.3	72.2	10.5	62.3	12.9	35.8	4.7	10.4	3.9	458.4	1306	Upper Saprolite		
RRMDD054	16.7	17.6	0.9	143.7	217.3	48.9	235.6	56.9	11.6	72.5	11.1	66.8	14.3	40.5	5.4	11.0	4.9	539.7	1480	Upper Saprolite		
RRMDD054	17.6	18.2	0.6	171.2	236.6	63.8	331.3	96.6	23.5	187.3	28.4	185.9	43.4	124.1	16.2	28.2	14.3	2044.5	3595	Upper Saprolite	**4.2**	**1465**
RRMDD054	18.2	19.1	0.9	43.2	54.8	11.0	43.9	8.6	1.6	7.7	1.1	6.1	1.2	3.2	0.5	1.1	0.5	37.7	222	Upper Saprolite		
RRMDD054	19.1	20.0	0.9	37.6	60.6	9.4	38.6	7.7	1.5	7.5	1.1	6.0	1.3	3.4	0.5	1.1	0.5	37.1	214	Upper Saprolite		
RRMDD054	20.0	20.9	0.9	61.8	119.5	14.6	57.3	10.7	2.1	9.9	1.4	7.8	1.6	4.4	0.7	1.4	0.6	51.9	346	Upper Saprolite		
RRMDD054	20.9	21.7	0.8	134.3	147.6	32.3	146.4	30.5	6.8	46.6	7.2	47.3	11.0	32.0	4.3	7.1	3.8	464.8	1122	Upper Saprolite	**0.8**	**1122**
RRMDD054	21.7	22.6	0.9	75.6	113.1	18.1	76.9	13.7	2.8	15.8	1.9	10.9	2.4	6.4	0.8	1.9	0.8	104.0	445	Upper Saprolite		
RRMDD054	22.6	23.5	0.9	71.3	120.1	14.7	53.9	8.5	1.5	8.1	1.0	5.3	1.1	3.0	0.4	0.9	0.4	42.9	333	Upper Saprolite		
RRMDD054	23.5	24.0	0.5	76.2	141.1	17.0	65.1	11.2	2.0	9.3	1.2	5.9	1.2	3.1	0.5	1.2	0.4	43.3	379	Upper Saprolite		
RRMDD054	24.0	24.9	0.9	64.7	127.7	13.2	48.4	8.2	1.6	7.0	0.9	5.3	1.1	3.3	0.5	0.9	0.5	46.9	330	Lower Saprolite		
RRMDD054	24.9	25.6	0.7	62.6	130.6	14.0	53.4	9.8	2.0	8.4	1.1	6.5	1.3	3.4	0.5	1.1	0.5	47.9	343	Lower Saprolite		
RRMDD054	25.6	26.4	0.8	64.2	124.7	15.5	58.6	11.5	2.3	9.2	1.3	6.9	1.3	3.5	0.5	1.3	0.5	38.6	340	Lower Saprolite		
RRMDD054	26.4	27.2	0.8	84.1	165.2	18.1	67.5	13.2	2.4	10.6	1.5	8.6	1.7	4.7	0.7	1.5	0.6	60.3	441	Lower Saprolite		
RRMDD054	27.2	28.0	0.8	74.2	165.7	16.8	61.2	11.2	2.1	9.6	1.4	8.5	1.8	5.2	0.8	1.4	0.7	63.0	424	Lower Saprolite		
RRMDD054	28.0	28.5	0.5	83.6	233.7	18.4	63.6	10.5	1.9	6.5	0.9	4.8	0.9	2.6	0.4	0.9	0.4	24.1	453	Lower Saprolite		
RRMDD055	0.0	0.8	0.8	115.8	224.3	18.7	59.3	9.0	1.5	6.2	1.0	5.9	1.1	3.3	0.5	1.0	0.5	30.6	479	Soil		
RRMDD055	0.8	1.7	0.9	86.6	1452.4	15.5	48.1	7.4	1.3	5.5	1.0	5.3	1.0	3.0	0.5	1.0	0.5	26.2	1655	Hardcap		
RRMDD055	1.7	2.6	0.9	83.0	1265.0	14.9	47.2	7.6	1.3	5.4	1.0	5.1	1.0	3.2	0.5	1.0	0.5	25.3	1462	Hardcap		
RRMDD055	2.6	3.6	1.0	84.4	791.8	15.5	50.6	8.2	1.4	5.9	1.0	5.6	1.1	3.5	0.5	1.0	0.6	29.0	1000	Hardcap		
RRMDD055	3.6	4.6	1.0	95.1	1000.3	19.3	65.4	10.9	1.7	7.7	1.4	7.2	1.4	4.2	0.7	1.4	0.6	36.4	1254	Hardcap		
RRMDD055	4.6	5.6	1.0	109.3	766.0	18.7	59.0	9.6	1.6	6.6	1.1	5.8	1.2	3.6	0.6	1.1	0.5	30.2	1015	Hardcap	**4.8**	**801**
RRMDD055	5.6	6.2	0.6	42.7	157.0	8.6	30.1	5.8	1.0	4.5	0.7	4.9	1.1	3.3	0.5	0.7	0.5	32.0	293	Transition		
RRMDD055	6.2	6.8	0.7	34.7	42.9	7.3	26.7	5.1	0.9	4.9	0.8	5.4	1.2	3.7	0.6	0.8	0.7	36.2	172	Transition		
RRMDD055	6.8	7.2	0.4	113.9	213.2	25.0	87.0	14.4	2.4	10.5	1.5	9.7	1.9	5.4	0.8	1.5	0.8	59.7	548	Mottled		
RRMDD055	7.2	8.0	0.8	548.9	388.9	126.4	438.6	68.9	10.3	41.4	5.2	25.6	4.5	11.3	1.5	5.1	1.2	141.0	1819	Pallid		
RRMDD055	8.0	8.5	0.4	115.8	215.5	25.3	90.3	15.1	2.6	11.5	1.7	10.1	2.0	5.7	0.8	1.7	0.8	64.0	563	Pallid		
RRMDD055	8.5	8.8	0.3	90.5	214.3	19.7	69.5	11.9	1.9	8.5	1.3	7.7	1.6	4.6	0.7	1.3	0.7	49.4	484	Clay		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>500ppm TREO Length (m)	>500ppm TREO TREO ppm
RRMDD055	8.8	9.6	0.9	728.3	499.0	186.7	642.7	103.3	15.4	57.4	7.2	35.6	6.2	14.7	1.9	7.1	1.5	181.0	2488	Clay		
RRMDD055	9.6	10.5	0.9	327.2	429.9	86.7	300.9	50.2	7.6	29.3	4.0	21.7	4.0	10.3	1.4	4.0	1.2	128.9	1407	Clay	**3.7**	**1477**
RRMDD055	10.5	11.4	0.9	242.8	1099.9	66.2	230.9	41.9	6.7	25.4	4.1	22.8	4.2	11.8	1.6	4.1	1.4	121.3	1885	Upper Saprolite		
RRMDD055	11.4	12.3	0.9	2474.6	1170.1	585.2	2099.5	353.7	57.2	253.6	31.2	156.1	28.3	68.0	8.3	31.0	6.0	1233.1	8556	Upper Saprolite		
RRMDD055	12.3	13.2	0.9	844.4	573.9	184.3	695.2	125.2	20.8	93.5	12.6	68.1	12.8	33.4	4.4	12.5	3.5	461.0	3146	Upper Saprolite		
RRMDD055	13.2	14.0	0.8	572.3	358.4	116.6	443.2	81.9	14.2	68.5	9.4	53.3	10.4	27.8	3.6	9.3	3.0	408.9	2181	Upper Saprolite		
RRMDD055	14.0	14.7	0.7	160.7	178.0	28.4	113.0	19.8	3.8	20.1	2.7	16.6	3.5	9.6	1.3	2.7	1.1	158.1	720	Lower Saprolite	**4.2**	**3447**
RRMDD055	14.7	15.6	0.9	78.7	155.8	17.3	65.2	12.9	2.4	10.2	1.5	8.7	1.8	4.6	0.6	1.5	0.6	59.3	421	Saprock		
RRMDD055	15.6	16.5	0.9	71.3	152.3	17.0	61.9	11.8	2.2	10.3	1.6	10.1	2.0	6.6	0.9	1.5	0.9	63.9	414	Saprock		
RRMDD055	16.5	17.2	0.7	66.1	147.0	16.9	67.1	15.0	3.0	13.9	2.0	13.0	2.4	7.0	0.9	2.0	0.8	71.0	428	Saprock		
RRMDD056	0.0	0.6	0.6	161.3	489.6	28.1	88.2	13.2	2.3	9.4	1.4	7.5	1.4	4.0	0.6	1.4	0.5	35.4	844	Soil		
RRMDD056	0.6	1.6	1.0	161.3	673.5	27.4	84.9	12.8	2.1	8.4	1.3	6.7	1.1	3.2	0.5	1.3	0.5	30.5	1015	Hardcap		
RRMDD056	1.6	2.6	1.0	140.7	884.3	23.9	74.2	11.1	1.8	7.1	1.1	5.9	1.0	3.0	0.4	1.1	0.4	26.3	1182	Hardcap	**2.6**	**1043**
RRMDD056	2.6	2.8	0.2	98.2	194.4	23.3	85.6	15.0	2.7	12.0	1.7	9.8	1.8	5.3	0.8	1.7	0.7	59.2	512	Mottled		
RRMDD056	2.8	3.7	1.0	191.2	287.0	39.7	141.7	24.1	4.4	18.7	2.6	13.4	2.3	6.4	0.9	2.5	0.8	71.9	807	Pallid		
RRMDD056	3.7	4.6	0.9	151.9	246.0	34.2	126.0	22.4	3.9	16.4	2.3	12.1	2.2	6.0	0.8	2.2	0.8	68.4	696	Pallid		
RRMDD056	4.6	5.5	0.9	292.0	346.7	51.5	176.7	29.3	4.9	22.8	2.8	16.0	2.7	7.5	1.0	2.7	0.8	85.3	1043	Pallid		
RRMDD056	5.5	6.0	0.5	636.8	720.3	106.3	362.8	60.5	9.4	41.3	4.8	25.5	3.8	10.1	1.2	4.8	1.0	108.7	2097	Pallid		
RRMDD056	6.0	6.9	0.9	108.5	180.4	26.8	95.6	17.2	3.0	12.9	1.9	10.4	2.0	5.8	0.8	1.8	0.7	64.9	533	Clay		
RRMDD056	6.9	7.8	0.9	103.3	179.8	26.7	95.5	17.2	3.0	12.4	1.7	9.9	1.9	5.3	0.7	1.7	0.7	59.9	520	Clay		
RRMDD056	7.8	8.7	0.9	132.5	235.4	35.0	126.0	23.7	4.2	16.6	2.4	13.0	2.4	6.8	0.9	2.4	0.8	72.1	674	Clay		
RRMDD056	8.7	9.6	0.9	124.9	236.6	32.7	115.7	21.0	3.7	15.3	2.1	11.9	2.3	6.2	0.9	2.1	0.8	68.4	645	Clay		
RRMDD056	9.6	10.6	1.0	112.8	192.7	28.4	101.4	18.2	3.3	13.8	1.9	10.8	2.0	6.1	0.8	1.9	0.8	67.4	562	Clay		
RRMDD056	10.6	11.2	0.6	136.6	257.7	32.5	119.0	22.7	4.1	17.2	2.6	14.5	2.8	7.8	1.1	2.6	1.0	82.7	705	Clay		
RRMDD056	11.2	11.9	0.7	120.2	213.2	29.1	106.5	20.4	3.7	15.6	2.3	12.9	2.5	6.9	1.0	2.2	0.9	74.3	612	Clay	**9.3**	**753**
RRMDD056	11.9	12.7	0.9	150.7	301.0	38.6	140.6	26.4	4.5	20.6	3.0	18.4	3.2	9.3	1.3	2.9	1.1	91.9	813	Upper Saprolite		
RRMDD056	12.7	13.1	0.4	128.4	226.6	31.9	115.9	21.1	3.6	16.9	2.2	14.2	2.5	7.2	1.0	2.2	0.8	76.6	651	Upper Saprolite		
RRMDD056	13.1	14.1	1.0	136.0	243.6	33.5	123.6	22.6	3.8	17.7	2.5	14.6	2.6	7.6	1.1	2.4	0.9	80.3	693	Upper Saprolite		
RRMDD056	14.1	15.0	0.9	143.1	269.4	36.5	134.7	26.7	4.8	22.0	3.1	19.3	3.5	10.1	1.4	3.1	1.2	103.9	783	Upper Saprolite		
RRMDD056	15.0	16.0	1.0	125.5	216.7	30.8	112.8	21.5	3.6	17.1	2.4	15.0	2.7	7.8	1.1	2.4	1.0	83.3	644	Upper Saprolite		
RRMDD056	16.0	17.0	1.0	154.8	316.3	40.8	153.4	27.8	4.7	22.9	3.0	18.3	3.3	9.0	1.1	3.0	1.0	110.6	870	Upper Saprolite		
RRMDD056	17.0	18.0	1.0	129.6	211.4	31.1	116.6	20.9	3.6	18.1	2.4	15.8	2.9	8.6	1.2	2.4	1.0	116.6	682	Upper Saprolite		
RRMDD056	18.0	18.9	0.9	130.2	308.1	30.1	109.3	20.2	3.6	18.0	2.5	15.8	2.8	7.9	1.0	2.5	0.9	82.5	735	Upper Saprolite		
RRMDD056	18.9	19.8	0.9	181.8	256.5	40.8	155.7	28.2	4.9	25.1	3.2	20.0	3.5	10.6	1.3	3.2	1.1	121.1	857	Upper Saprolite		
RRMDD056	19.8	20.4	0.6	122.0	210.2	27.9	103.5	20.1	3.5	17.0	2.3	14.9	2.7	7.7	1.0	2.3	0.9	82.8	619	Upper Saprolite		
RRMDD056	20.4	21.1	0.7	107.5	264.7	23.6	85.5	15.1	2.7	13.7	1.8	11.2	2.1	6.5	0.8	1.8	0.8	67.2	605	Upper Saprolite	**9.3**	**732**
RRMDD056	21.1	22.0	0.9	90.4	149.3	19.7	74.4	13.7	2.3	11.8	1.5	8.3	1.5	4.2	0.6	1.5	0.5	47.6	427	Upper Saprolite		
RRMDD056	22.0	23.0	1.0	80.6	175.1	16.9	59.3	9.7	1.6	7.9	1.1	7.1	1.4	4.4	0.6	1.1	0.5	48.4	416	Lower Saprolite		
RRMDD056	23.0	24.0	1.0	72.7	134.1	15.7	54.4	8.7	1.4	6.6	0.8	4.5	0.9	2.5	0.4	0.8	0.3	28.8	333	Lower Saprolite		
RRMDD057	0.0	0.6	0.6	107.2	303.4	23.9	85.0	15.4	2.7	12.6	1.9	11.0	2.2	6.7	1.0	1.9	0.9	63.6	639	Soil		
RRMDD057	0.6	1.6	1.0	70.5	558.7	15.7	55.8	10.5	1.8	8.3	1.3	7.8	1.5	4.5	0.7	1.3	0.7	42.5	782	Hardcap		
RRMDD057	1.6	2.6	1.0	47.4	1079.9	10.7	38.0	6.9	1.2	5.4	0.9	5.3	1.0	3.0	0.5	0.9	0.5	27.3	1229	Hardcap		
RRMDD057	2.6	3.6	1.0	65.1	850.4	12.8	43.4	7.2	1.2	6.0	1.0	6.0	1.1	3.5	0.6	1.0	0.6	32.9	1033	Hardcap		
RRMDD057	3.6	4.5	0.9	95.5	2354.3	20.4	69.8	12.4	2.1	8.9	1.6	8.3	1.6	4.8	0.7	1.6	0.7	45.2	2628	Transition	**3.9**	**1387**
RRMDD057	4.5	5.4	0.9	122.6	428.7	25.0	87.8	14.8	2.4	11.1	1.7	10.0	2.0	6.2	0.9	1.7	0.9	63.1	779	Mottled		
RRMDD057	5.4	6.0	0.7	108.0	483.7	22.6	79.0	13.5	2.2	10.5	1.6	9.5	1.9	5.7	0.9	1.6	0.9	56.9	798	Mottled		
RRMDD057	6.0	6.6	0.6	114.8	421.7	24.3	88.4	14.5	2.4	11.0	1.6	9.7	1.9	5.8	0.9	1.6	0.9	58.2	758	Mottled		
RRMDD057	6.6	7.5	0.9	107.5	159.9	22.7	82.6	12.8	2.2	10.2	1.5	9.3	1.8	5.6	0.8	1.5	0.8	57.1	476	Mottled		
RRMDD057	7.5	8.4	0.9	168.3	439.2	36.9	133.0	20.9	3.4	15.7	2.3	12.9	2.4	6.9	1.1	2.3	1.0	72.4	919	Mottled		

																					>500ppm TREO	
Hole ID	From	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3ppm	Sm_2O_3ppm	Eu_2O_3 ppm	Gd_2O_3ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD057	8.4	9.0	0.7	321.3	666.5	73.7	262.4	39.9	6.3	26.6	3.6	18.8	3.3	9.1	1.2	3.6	1.1	92.3	1530	Pallid		
RRMDD057	9.0	9.7	0.7	426.9	330.3	99.1	349.9	53.7	8.7	37.5	4.8	25.0	4.2	11.0	1.4	4.8	1.3	117.1	1476	Pallid		
RRMDD057	9.7	10.6	0.9	402.3	352.6	88.6	307.9	46.6	7.6	31.5	4.1	21.7	3.8	10.3	1.4	4.1	1.2	109.8	1394	Clay		
RRMDD057	10.6	11.5	0.9	309.6	272.9	76.4	268.3	41.2	6.6	27.2	3.8	20.0	3.5	9.9	1.3	3.7	1.2	109.6	1155	Clay		
RRMDD057	11.5	12.5	1.0	407.0	271.7	96.3	346.4	53.2	8.9	37.1	4.9	27.2	4.8	12.9	1.8	4.9	1.5	168.9	1448	Clay	**8.0**	**1077**
RRMDD057	12.5	13.2	0.7	618.1	222.0	138.1	526.0	91.4	17.0	78.8	11.0	62.7	10.9	29.4	4.0	11.0	3.3	307.3	2131	Lower Saprolite	**0.7**	**2131**
RRMDD057	13.2	14.2	1.0	308.4	158.1	44.4	177.9	28.5	6.0	37.5	5.0	29.8	6.1	17.4	2.2	4.9	1.9	255.2	1083	Saprock		
RRMDD057	14.2	15.2	1.0	72.5	146.4	16.3	59.0	9.0	1.5	6.2	0.8	4.3	0.8	2.2	0.4	0.8	0.3	25.4	346	Fresh Rock		

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	**Diamond Core Drilling** Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Using either method core was initial cut in half then one half was further cut in half to give quarter core. Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques. Half core was collected for metallurgical testwork
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).*	**Diamond Core Drilling** Core size was HQ triple tube. The core was not oriented (vertical).
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to*	**Diamond Drilling** Core recovery was calculated by measuring actual core length versus drillers core run lengths. Core recovery ranged from 70% to 100% and averaged 97%. No relationship exists between core recovery and grade.

Criteria	JORC Code explanation	Commentary
	preferential loss/gain of fine/coarse material.	
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	All (100%) drill core has been geologically logged and core photographs taken. Logging is qualitative with description of colour, weathering status, alteration, major and minor rock types, texture, grain size and comments added where further observation is made. Additional non-geological qualitative logging includes comments for sample recovery, humidity, and hardness for each logged interval.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of 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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Diamond Drill Core** Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Samples were collected from core trays by hand and placed in individually numbered bags. These bags were dispatched to ALS for analysis with no further field preparation. Sample weights were recorded prior to sample dispatch. Sample mass is considered appropriate for the grain size of the material being sampled that is generally very fine grained and uniform. Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample.
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.* • *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.* • *Nature of quality control procedures adopted (eg standards,*	**Assay and Laboratory Procedures – All Samples** Samples were dispatched by air freight direct to ALS laboratory Perth Australia. The preparation and analysis protocol used is as follows: **ALS Code** / **Description** WEI-21 / Received sample weight

Criteria	JORC Code explanation	Commentary
	blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	(see tables below)

LOG-22	Sample Login w/o Barcode
DRY-21	High temperature drying
CRU-21	Crush entire sample
CRU-31	Fine crushing – 70% <2mm
SPL-22Y	Split sample – Boyd Rotary Splitter
PUL-31h	Pulverise 750g to 85% passing 75 micron
CRU-QC	Crushing QC Test
PUL-QC	Pulverising QC test

The assay technique used for REE was Lithium Borate Fusion ICP-MS (ALS code ME-MS81). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:

Ba	Ce	Cr	Cs	Dy	Er	Eu	Ga
Gd	Hf	Ho	La	Lu	Nb	Nd	Pr
Rb	Sm	Sn	Sr	Ta	Tb	Th	Tm
U	V	W	Y	Yb	Zr		

Analysis for scandium (Sc) was by Lithium Borate Fusion ICP-AES (ALS code Sc-ICP06).

The sample preparation and assay techniques used are industry standard and provide a total analysis.

All laboratories used are ISO 17025 accredited

QAQC

Diamond Drill Core Samples

- Analytical Standards

CRM AMIS0275 and AMIS0276 were included in sample batches at a ratio of 1:25 to drill samples submitted. This is an acceptable ratio.

Criteria	JORC Code explanation	Commentary
		The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident. • Blanks CRM blanks AMIS0681 and OREAS22e were included in sample batches at a ratio of 1:25 to drill samples submitted for analysis. This is an acceptable ratio. Both CRM blanks contain some REE, with elements critical elements Ce, Nd, Dy and Y present in small quantities. The analysis results were consistent with the certified values for the blanks. No laboratory contamination or bias is evident from these results. • Duplicates Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample. Variability between duplicate results is considered acceptable and no sampling bias is evident. Laboratory inserted standards, blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	No independent verification of significant intersection undertaken. No twinning of diamond core drill holes was undertaken. Sampling protocols for diamond core sampling and QAQC were documented and held on site by the responsible geologist. No procedures for data storage and management have been compiled as yet. Data were collected in the field by hand and entered into Excel spreadsheet. Data are then compiled with assay results compiled and stored in Access database. Data verification is conducted on data entry including hole depths, sample intervals and sample numbers. Sample numbers from assay data are verified by algorithm in spreadsheet prior to entry int the database. Assay data was received in digital format from the laboratory and merged with the sampling data into an Excel spreadsheet format for QAQC analysis and review against field data. Once finalised and validated data is stored in a protected Access database.

Criteria	JORC Code explanation	Commentary
		Data validation of assay data and sampling data have been conducted to ensure data entry is correct. All assay data is received from the laboratory in element form is unadjusted for data entry. Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.(Source:https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors)

Element ppm	Conversion Factor	Oxide Form
Ce	1.1713	Ce_2O_3
Dy	1.1477	Dy_2O_3
Er	1.1435	Er_2O_3
Eu	1.1579	Eu_2O_3
Gd	1.1526	Gd_2O_3
Ho	1.1455	Ho_2O_3
La	1.1728	La_2O_3
Lu	1.1371	Lu_2O_3
Nd	1.1664	Nd_2O_3
Pr	1.1703	Pr_2O_3
Sm	1.1596	Sm_2O_3
Tb	1.151	Tb_2O_3
Tm	1.1421	Tm_2O_3
Y	1.2699	Y_2O_3
Yb	1.1387	Yb_2O_3

Criteria	JORC Code explanation	Commentary
		Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups: TREO (Total Rare Earth Oxide) = La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3. Note that Y_2O_3 is included in the TREO calculation. HREO (Heavy Rare Earth Oxide) = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3, + Y_2O_3 + Lu_2O_3 CREO (Critical Rare Earth Oxide) = Nd_2O_3 + Eu_2O_3 + Tb_2O_3 + Dy_2O_3 + Y_2O_3 LREO (Light Rare Earth Oxide) = La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 HREO% of TREO= HREO/TREO x 100 In elemental form the classifications are: TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y CREE: Nd+Eu+Tb+Dy+Y LREE: La+Ce+Pr+Nd
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Drill hole collar locations for holes RRMDD001 to RRMDD041 were surveyed a relational DGPS system. The general accuracy for x,y and z is ± 0.2m. Hole locations for RRMDD042 – RRMDD057 were surveyed using handheld GPS. The accuracy for this type of device is considered ± 5m in x and y coordinates however the elevation component of coordinates is variable and z accuracy may be low using this type of device. Datum WGS84 Zone 36 North was used for location data collection and storage. This is the appropriate datum for the project area. No grid transformations were applied to the data. No downhole surveys were conducted. As all holes were vertical and shallow, the rig setup was checked using a spirit level for horizontal and vertical orientation Any deviation will be insignificant given the short lengths of the holes Detailed topographic data was not sourced or used.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	Drilling of holes RRMDD001 to RRMDD041 was conducted on a nominal 400m x 400m spacing. Historic RAB drilling has also been conducted on this spacing however the diamond drilling was offset by 200m from the RAB drilling Infill drill holes RRMDD047 to RRMDD054 were drilled on a 200 metre offset from 2019 400m spaced holes providing an approximate 200m grid in those areas. Drill holes RRMDD055 to 057 were designed to conform with 400m x 400m grid spacing. Exploration drill holes on EL1766 were drilled where convenient on ternary and elevation anomalies and are not to any specific spacing. There has been no resource estimate made on the project.
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.* • *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.*	The Makuutu mineralisation is interpreted to be in a flat lying weathered profile including cover soil, lateritic caprock, clays transitioning to saprolite and saprock. Below the saprock are fresh shales, siltstones and mudstones. Pit mapping and diamond drilling indicate the mineralised regolith to be generally horizontal All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.
Sample security	• *The measures taken to ensure sample security.*	After collection, the samples were transported by Company representatives to Entebbe airport and dispatched via airfreight to Perth Australia. Samples were received by Australian customs authorities in Perth within 10 days of dispatch and were still contained in the sealed shipment bags. Samples were subsequently transported from Australian customs to ALS Perth via road freight and inspected on arrival by a Company representative.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No audits or reviews have been undertaken

Section 2 Reporting of Exploration Results

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>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.
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</td><td>The Makuutu Project is located in the Republic of Uganda. The mineral tenements comprise two (1) granted Retention Licences (RL1693 and RL0007), one (1) Exploration Licence (EL1766).

All licences are in good standing with no known impediments.

The Makuutu Rare Earth Project is 100% owned by Rwenzori Rare Metals Limited, a Ugandan registered company. Ionic Rare Earths (IXR) currently has a 31% shareholding in Rwenzori and may increase its shareholding to 60% by meeting expenditure commitments.

1. IXR to contribute US$1,700,000 of expenditure by 1 October 2020 to earn up to a 51% staged interest in RRM as follows

<table><tr><th>Spend</th><th>Interest earned</th><th>Cumulative Interest earned</th></tr><tr><td>Exercise of Option US$100,000 of cash plus US$150,000 of shares</td><td>20%</td><td>20%</td></tr><tr><td>Expenditure contribution of US$650,000</td><td>11%</td><td>31%</td></tr><tr><td>Expenditure contribution of a further US$800,000</td><td>15%</td><td>46%</td></tr><tr><td>Expenditure contribution of a further US$350,000</td><td>5%</td><td>51%</td></tr></table>
2. IXR to fund to completion of a bankable feasibility study to earn an additional 9% interest for a cumulative 60% interest in RRM.
3. During the earn-in phase there are milestone payments, payable in cash or IXR shares at the election of the Vendor, as follows:</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• US$750,000 on the Grant of Retention Licence over RL1693 which is due to expire on 1 November 2020; • US$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and • US$375,000 on conversion of existing licences to mining licences. • At any time should IXR not continue to invest in the project and project development ceases for at least two months RRM has the right to return the capital sunk by IXR and reclaim all interest earnt by IXR.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous exploration includes: 1980: Country wide airborne geophysical survey identifying uranium anomalies in the Project area. 1990s: French BRGM and Ugandan DGSM undertook geochemical and geological survey over South-Eastern Uganda including the Project area. Anomalous Au, Zn, Cu, Sn, Nb and V identified. 2006-2009: Country wide high resolution airborne magnetic and radiometric survey identified U anomalism in the Project area. 2009: Finland GTK reprocessed radiometric data and refined the Project anomalies. 2010: Kweri Ltd undertook field verification of radiometric anomalies including scout sampling of existing community pits. Samples showed an enrichment of REE and Sc. 2011: Kweri Ltd conducted ground radiometric survey and evaluated historic groundwater borehole logs. 2012: Kweri Ltd and partner Berkley Reef Ltd conducted prospect wide pit excavation and sampling of 48 pits and a ground gravity traverse. Pit samples showed enrichment of REE weathered profile. Five (5) samples sent to Toronto Aqueous Research Laboratory for REE leach testwork.

Criteria	JORC Code explanation	Commentary
		2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole. 2019: Diamond core drilling of the Makuutu Central Zone on RL1693 and broad spaced drilling on EL1766. 2020: Resource model estimation on a portion of Makuutu Central Zone diamond drilled in 2019. The historic exploration has been conducted to a professional standard and is appropriate to the stage of the project.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Makuutu deposit is interpreted to be an ionic adsorption REE clay-type deposits similar to those in South China, Madagascar and Brazil. The mineralisation is contained within the tropical lateritic weathering profile of a basin filled with sedimentary rocks including shales, mudstones and sandstones potentially derived from the surrounding granitic rocks. These granitic rocks are considered the original source of the REE which were then accumulated in the sediments of the basin as the granites have degraded. These sediments then form the protolith that was subjected to prolonged tropical weathering. The weathering developed a lateritic regolith with a surface indurated hardcap, followed downward by clay rich zones that grade down through saprolite and saprock to unweathered sediments. The thickness of the regolith is between 10 and 20 metres from surface. The REE mineralisation is concentrated in the weathered profile where it has dissolved from its primary mineral form, such as monazite and xenotime, then adsorbed on to fine particles of aluminosilicate clays (e.g. kaolinite, illite, smectite). This adsorbed REE is the target for extraction and production of REO. There is insufficient geological study to determine any geological disruptions, such as faults or dykes, that may cause variability in the mineralisation.
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:*	The material information for drill holes relating to this announcement are contained in Appendix 1.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	A lower cut-off of 500 ppm TREO was used for data aggregation of significant intervals with a maximum of 2 metres of internal dilution and no top-cuts applied. Significant intervals were tabulated downhole for reporting. All individual samples were included in length weighted averaging over the entire tabulated range. No metal equivalents values are used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Down hole lengths, true widths are not known. The mineralisation is interpreted to be horizontal, flat lying sediments and weathering profile, with the vertical drilling perpendicular to mineralisation. Any internal variations to REE distribution within the horizontal layering was not defined, therefore the true width is considered not known.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to diagrams in body of text.

Criteria	JORC Code explanation	Commentary
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	This report contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.
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.*	Metallurgical leach testing was previously conducted on samples derived from exploration pits, RAB drilling, and one 8.5 tonne bulk pit sample. In 2012, 5 pit samples were sent to the Toronto Aqueous Research Laboratory at the University of Toronto for leachability tests In 2017, 2 pit samples were sent to SGS Laboratory Toronto for leachability tests. 2017/18, 29 samples were collected from 7 RAB drill holes. 20 of these were consigned to SGS Canada and 4 to Aqueous Process Research (APR) in Ontario Canada. The remaining 5 samples were consigned to Bio Lantanidos in Chile. 2018/19, 8.5 tonne bulk sample was consigned to Mintek, South Africa, to evaluate using Resin-in-leach (RIL) technology for the recovery of REE. 2019: 118 samples from 31 holes from the 2019 diamond drilling program had preliminary variation testwork conducted TREE-Ce extraction ranged from 3% to 75%. Evaluation of results from these programs and testing of samples from the project is ongoing.
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.*	Future work programs are intended to evaluate the economic opportunity of the project including extraction recovery maximisation, resource definition and estimation on the known areas of mineralisation, regional exploration on adjoining licences and compilation of a Preliminary Economic Assessment (PEA)