2 October 2023

DRILLING PROGRAM SUPPORTS ADDITIONAL GROWTH POTENTIAL AT MAKUUTU

- **Phase 5 Rotary Air Blast (RAB) Tranche 2 assays received on Exploration Licence (EL) 00257 and Retention Licence (RL) 00007 reporting clay-hosted rare earth intersections achieved in 26 of 31 drill holes, including;**
    - **8 metres at 975 ppm TREO from 7 metres in RRMRB117;**
    - **20 metres at 865 ppm TREO from 6 metres in RRMRB115;**
    - **20 metres at 789 ppm TREO from 4 metres in RRMRB116;**
    - **24 metres at 781 ppm TREO from 4 metres in RRMRB129; and**
    - **20 metres at 756 ppm TREO from 4 metres in RRMRB120**
- **Completed Phase 5 RAB assays confirming clay-hosted rare earth intersections in 69 of 76 drill holes across EL 00147, EL00257, and RL00007;**
- **Metallurgical test work initiated on RAB samples from drill program, feeding into revised Makuutu Exploration Target expected late 2023;**
- **Makuutu's basket contains 71% magnet and heavy rare earths content, and is one of the most advanced heavy rare earth projects globally available as a source for new supply chains emerging across Europe, the US, and Asia; and**
- **Diamond drilling is continuing infill drilling at Retention Licence (RL) 00007, aiming to increase resource classification to Indicated Resource, with 103 holes completed (2,032 metres) to date.**

The Board of Ionic Rare Earths Limited ("IonicRE" or "The Company") (ASX: IXR) advises on progress at its 60 per cent owned Makuutu Heavy Rare Earths Project ("Makuutu" or "the Project") in Uganda.

The Company is progressing the development at the Makuutu Heavy Rare Earths Project through local Ugandan operating entity Rwenzori Rare Metals Limited ("RRM").

IonicRE's Managing Director Mr Tim Harrison said the Phase 5 RAB Tranche 2 assay results confirmed the expected potential of the northwest tenement to provide additional growth potential for a much larger Makuutu Project in years to come.

"EL00257 has now confirmed clay-hosted rare earth mineralisation in 21 of 26 RAB holes drilled in this program.

“The Project now moves to metallurgical test work on a selection of sample intervals to map the potential of this tenement and EL00147, expected to add significantly to the Makuutu Project development plan.

“Our focus on the delivery of the Makuutu Heavy Rare Earths Project in Uganda positions us to provide a secure, sustainable, and traceable supply of magnet rare earth oxides. Along with our Belfast recycling facility, Makuutu is key to us harnessing our technology to accelerate mining, refining, and recycling of magnets and heavy rare earths that are critical for the energy transition, advanced manufacturing, and defence,” Mr Harrison said.

The Tranche 2 results are from drilling located on Exploration Licence EL00257 (26 holes) and Retention Licence (RL) 00007 (5 holes), located at the western end of the extensive licence holding at Makuutu (see Figure 1).

A total of 31 rotary air blast (RAB) holes were drilled across EL00257 and RL00007, with 26 holes recording intervals of regolith hosted rare earth mineralisation above the 2022 Mineral Resource Estimate (MRE) cut-off grade of 200 ppm Total Rare Earth Oxide minus Cerium oxide (TREO-CeO_2). (ASX: 3 May 2022). Table 1 lists the intersection compilations and Figure 2 shows the location of the drill results.

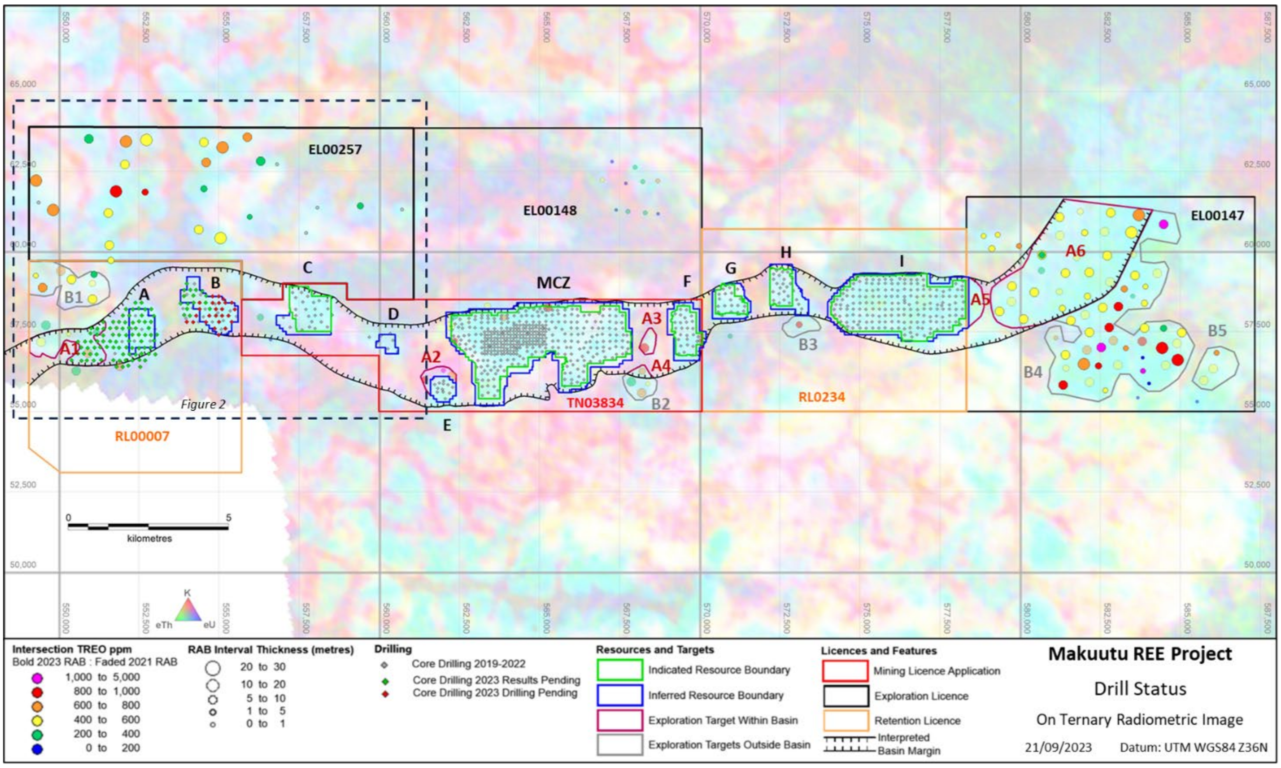

Figure 1: Makuutu project drill status plan showing location of RAB results and current core drilling program location (refer to Figure 2 area dashed outline).

Table 1: Makuutu Phase 5 Tranche 1 RAB results above MRE cut-off grade of 200ppm $TREO-CeO_2$.

Drill Hole ID	Depth From (metres)	Length (metres)	TREO (ppm)	$TREO-CeO_2$ (ppm)	HREO (ppm)	CREO (ppm)
RRMRB113	4	25	605	392	148	203
RRMRB114	NSI					
RRMRB115	6	20	865	559	200	282
RRMRB116	4	20	789	470	114	200
RRMRB117	7	8	975	737	202	344
RRMRB118	3	13	465	282	94	135
RRMRB119	3	4	589	283	96	133
and	16	14	351	301	167	182
RRMRB120	4	20	756	415	97	177
RRMRB121	6	20	448	291	82	131
RRMRB122	5	17	401	237	84	117
RRMRB123	6	10	584	395	150	195
RRMRB124	5	2	574	254	94	123
and	11	10	451	266	94	133
RRMRB125	6	6	363	226	84	113
RRMRB126	3	23	423	243	78	111
RRMRB127	6	17	627	523	170	239
RRMRB128	5	16	587	432	167	217
RRMRB129	4	24	781	427	113	190
RRMRB130	3	16	719	401	109	183
RRMRB131	4	3	453	259	93	125
and	13	12	312	209	66	98
RRMRB132	NSI					
RRMRB133	5	4	367	210	76	100
RRMRB134	NSI					
RRMRB135	NSI					
RRMRB136	10	8	322	279	156	162
RRMRB137	NSI					
RRMRB138	4	5	469	240	91	116
RRMRB139	4	10	419	285	83	128
RRMRB140	2	6	352	226	132	132
RRMRB141	2	11	434	285	104	139
RRMRB142	6	18	612	494	186	243
RRMRB143	5	2	426	254	102	125
and	21	2	318	200	85	101

Note: NSI: No significant results in mottled, clay upper or lower saprolite zones of regolith.

EL00257 RAB Drilling

The RAB drilling on EL00257 is the first drilling to test this tenement. The aim of the drilling was to test the endowment of rare earth element (REE) in the regolith and determine the extent and thickness of mineralisation. This drilling has successfully confirmed zones of thick REE mineralisation on the northwestern half of the licence.

Results from the drilling (Figure 2) show the northwestern half of the area contains greater thickness of regolith under hardcap with significant intersections including;

- 8 metres at 975 ppm TREO from 7 metres in RRMRB117;
- 20 metres at 865 ppm TREO from 6 metres in RRMRB115;
- 20 metres at 789 ppm TREO from 4 metres in RRMRB116;
- 24 metres at 781 ppm TREO from 4 metres in RRMRB129; and
- 20 metres at 756 ppm TREO from 4 metres in RRMRB120.

This area is interpreted to be underlain by the Iganga Suite granite basement rocks, an older and different protolith from the Makuutu deposit hosted in a Karoo age sedimentary basin.

RL00007 RAB Drilling

Five (5) RAB holes (RRMRB139 to 143) tested exploration target B1 which had produced significant intersections above a granite host from 2 broad spaced holes drilled in 2021 (RRMRB063 10 metres at 698 ppm TREO and RRMRB064 8 metres 512) (ASX: 20 July 2021). These 2 holes were used to identify exploration target B1 with a target range of 15Mt to 45Mt with a grade range of 500 ppm TREO to 700 ppm TREO (see Table 2).

The results of these Phase 5 RAB holes have shown the mineralisation to be variable in thickness and grade with a best intersection in RRMRB142 of 18 metres at 612 ppm TREO from 6 metres. As a result, the exploration Target is not expected to change.

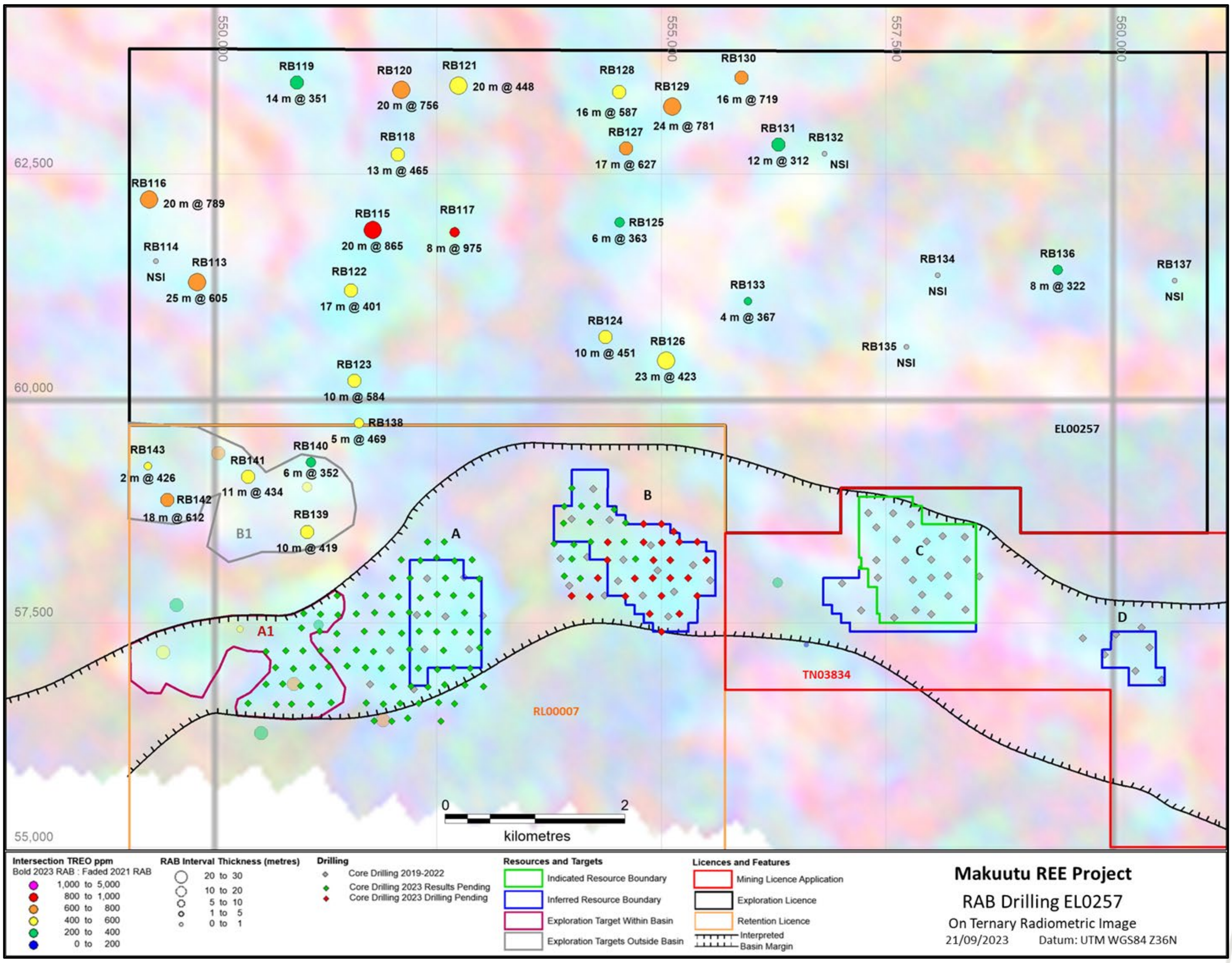

Figure 2: RAB drilling results EL00257 and RL00007 (bold intersection grades 2023 drilling, faded 2021 drilling) and Areas A and B resource infill drilling (green points results pending, red points awaiting drilling).

Resource Infill Area A and B

Resource infill drilling is ongoing on Mineral Resource Estimate (MRE) areas A and B (refer Figure 2 green points results pending, red points awaiting drilling), with the drilling designed to increase resource confidence from inferred to indicated status. To date 103 holes (2,032 metres) have been drilled and it is expected that the program will be completed later this month.

Exploration Target Drilling

As detailed earlier, the existing Makuutu Exploration Target (ASX: 1 June 2022), which is additional to the current Makuutu MRE, indicated a range for additional potential mineralisation at Makuutu estimated at;

216 – 535 million tonnes grading 400 – 600 ppm TREO*

*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 2021 Phase 3 RAB reconnaissance drilling campaign tested multiple targets in the Makuutu area and identified clay hosted REE mineralisation within, and outside, the sedimentary basin that contains the Makuutu resource[1,2].

The success of that program allowed a revision of the Exploration Target. The revised Exploration Target was separated into target areas within the sedimentary basin, and those outside the basin with clay hosted REE mineralisation derived from a mixture of rock types including granite, granodiorite and some mafic rocks.

The Exploration Target ranges are listed in Table 2 and locations shown on Figure 1.

The aim of the exploration program in the target areas is to establish further input ahead of the next phase to progress to Inferred level resources in accordance with the guidelines of the JORC code.

Pending drill assays are aimed to initially determine the endowment of REE in the area with the goal of generating additions to an updated Exploration Target following indicative extraction test work of new areas.

Metallurgical Testwork

Extraction test work has been initiated to evaluate the economic potential of this mineralisation drilled across EL00147, EL00257 and RL00007.

[1] ASX Announcement 14 July 2021: "Phase 3 Drilling Results Confirm Major Extension Potential At Makuutu"
[2] ASX Announcement 20 July 2021: "Phase 3 Drilling Results Indicate Potential Extension to Northwest at Makuutu"

Table 2: Makuutu Exploration Target (ASX : 1 June 2022)

		Tonnes Range (millions)		TREO ppm Range	
Zone	**Target ID**	**Minimum**	**Maximum**	**Minimum**	**Maximum**
Inside Basin	**A1**	14	28	400	600
	A2	2	5	600	800
	A3	2	5	600	800
	A4	2	4	500	700
	A5	4	8	400	600
	A6	90	180	400	600
Outside Basin	**B1**	15	45	500	700
	B2	4	12	400	600
	B3	2	6,	600	800
	B4	73	220	400	600
	B5	8	28	400	600
Total		**216**	**535**	**400**	**600**

Authorised for release by the Board.

For enquiries, contact:

For Company	For Media	For Investor Relations
Tim Harrison	Nigel Kassulke	Peter Taylor
Ionic Rare Earths Limited	Teneo	NWR Communications
investors@ionicre.com	Nigel.Kassulke@Teneo.com	peter@nwrcommunications.com.au
+61 (3) 9776 3434	+61 (0) 407 904 874	+61 (0) 412 036 231

Table 3: Makuutu Rare Earth Project Resource Tabulation of REO Reporting Groups at 200ppm TREO-CeO_2 Cut-off Grade (ASX: 3 May 2022).

Resource Classification	Tonnes (millions)	TREO (ppm)	TREO-CeO_2 (ppm)	LREO (ppm)	HREO (ppm)	CREO (ppm)	Sc_2O_3 (ppm)
Indicated	404	670	450	500	170	230	30
Inferred	127	540	360	400	140	180	30
Total	532	640	430	480	160	220	30

Notes; Tonnes are dry tonnes rounded to the nearest 1.0Mt.
All ppm rounded from original estimate to the nearest 10 ppm which may lead to differences in averages. TREO = Total Rare Earth Oxide

Table 4: Mineral Resources by Area (ASX: 3 May 2022), RL00007 Resource Areas shaded blue.

Classification	Indicated Resource			Inferred Resource			Total Resource		
Area	Tonnes (millions)	TREO (ppm)	TREO-CeO_2 (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO_2 (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO_2 (ppm)
A				13	580	390	13	580	390
B				26	410	290	26	410	290
C	31	580	400	3	490	350	35	570	400
D				6	560	400	6	560	400
E				18	430	280	18	430	280
Central Zone	151	780	540	12	670	460	163	770	530
Central Zone East	59	750	490	12	650	430	72	730	480
F	18	630	420	7	590	400	25	620	410
G	9	750	500	5	710	450	14	730	480
H	6	800	550	7	680	480	13	740	510
I	129	540	350	19	530	350	148	540	350
Total Resource	**404**	**670**	**450**	**127**	**540**	**360**	**532**	**640**	**430**

Rounding has been applied to 1Mt and 10ppm which may influence averaging calculations.

About Ionic Rare Earths Ltd

Ionic Rare Earths Limited (ASX: IXR or IonicRE) is set to become a miner, refiner and recycler of sustainable and traceable magnet and heavy rare earths needed to develop net-zero carbon technologies.

The flagship Makuutu Rare Earths Project in Uganda, 60% owned by IonicRE, is well-supported by existing tier-one infrastructure and is on track to become a long-life, low Capex, scalable and sustainable supplier of high-value magnet and heavy rare earths oxides (REO). In March 2023, IonicRE announced a positive stage 1 Definitive Feasibility Study (DFS) for the first of six (6) tenements to progress to a Mining Licence Application (MLA) which is pending in Uganda. The Makuutu Stage 1 DFS defined a 35-year life initial project producing a 71% rich magnet and heavy rare earth carbonate (MREC) product basket and the potential for significant potential and scale up through additional tenements.

Ionic Technologies International Limited ("Ionic Technologies"), a 100% owned UK subsidiary acquired in 2022, has developed processes for the separation and recovery of rare earth elements (REE) from mining ore concentrates and recycled permanent magnets. Ionic Technologies is focusing on the commercialisation of the technology to achieve near complete extraction from end of life / spent magnets and waste (swarf) to high value, separated and traceable magnet rare earth products with grades exceeding 99.9% rare earth oxide (REO). In June 2023, Ionic Technologies announced initial production of high purity magnet REOs from its newly commissioned Demonstration Plant. This technology and operating Demonstration Plant provides first mover advantage in the industrial elemental extraction of REEs from recycling, enabling near term magnet REO production capability to support demand for early-stage alternative supply chains.

As part of an integrated strategy to create downstream supply chain value, IonicRE is also evaluating the development of its own magnet and heavy rare earth refinery, or hub, to separate the unique and high value magnet and heavy rare earths dominant Makuutu basket into the full spectrum of REOs plus scandium.

This three-pillar strategy completes the circular economy of sustainable and traceable magnet and heavy rare earth products needed to supply applications critical to electric vehicles, offshore wind turbines, communication, and key defence initiatives.

IonicRE is a Participant of the UN Global Compact and adheres to its principles-based approach to responsible business.

Competent Persons Statement

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 Ltd. 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 cross-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 20 March 2022 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.

The information in this report that relates to Ore Reserves for the Makuutu Rare Earths deposit was first released to the ASX on 20 March 2023 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.

The information in this report that relates to Production Targets or forecast financial information derived from production the production target for the Makuutu Rare Earths deposit was first released to the ASX on 20 March 2023 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that all material assumptions and technical parameters underpinning the Production Targets or forecast financial estimates in the announcement continue to apply and have not materially changed.

Forward Looking Statements

This announcement has been prepared by Ionic Rare Earths Limited and may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Ionic Rare Earths Limited. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this document speak only at the date of issue of this document. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Ionic Rare Earths Limited does not undertake any obligation to update or revise any information or any of the forward-looking statements in this document or any changes in events, conditions, or circumstances on which any such forward looking statement is based.

Appendix 1: Drill Hole Details This Announcement (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
RRMRB113	549831	61294	1157	RAB	29.0	000	-90
RRMRB114	549375	61526	1153	RAB	32.0	000	-90
RRMRB115	551789	61875	1154	RAB	26.0	000	-90
RRMRB116	549297	62214	1164	RAB	26.0	000	-90
RRMRB117	552697	61851	1154	RAB	18.0	000	-90
RRMRB118	552069	62713	1150	RAB	16.0	000	-90
RRMRB119	550944	63515	1155	RAB	30.0	000	-90
RRMRB120	552103	63436	1155	RAB	24.0	000	-90
RRMRB121	552740	63483	1156	RAB	26.0	000	-90
RRMRB122	551547	61199	1175	RAB	22.0	000	-90
RRMRB123	551585	60194	1161	RAB	27.0	000	-90
RRMRB124	554377	60682	1158	RAB	21.0	000	-90
RRMRB125	554537	61959	1159	RAB	26.0	000	-90
RRMRB126	555052	60421	1171	RAB	28.0	000	-90
RRMRB127	554608	62783	1135	RAB	23.0	000	-90
RRMRB128	554532	63409	1155	RAB	21.0	000	-90
RRMRB129	555119	63250	1136	RAB	28.0	000	-90
RRMRB130	555893	63573	1142	RAB	19.0	000	-90
RRMRB131	556303	62823	1132	RAB	25.0	000	-90
RRMRB132	556816	62724	1127	RAB	25.0	000	-90
RRMRB133	555965	61081	1157	RAB	25.0	000	-90
RRMRB134	558078	61370	1141	RAB	21.0	000	-90
RRMRB135	557727	60575	1143	RAB	20.0	000	-90
RRMRB136	559414	61428	1141	RAB	22.0	000	-90
RRMRB137	560712	61313	1148	RAB	24.0	000	-90
RRMRB138	551634	59726	1172	RAB	24.0	000	-90
RRMRB139	551058	58514	1168	RAB	18.0	000	-90
RRMRB140	551101	59287	1172	RAB	18.0	000	-90
RRMRB141	550399	59126	1156	RAB	20.0	000	-90
RRMRB142	549502	58869	1152	RAB	24.0	000	-90
RRMRB143	549287	59244	1167	RAB	24.0	000	-90

Appendix 2: RAB Drilling Analytical Results RRMRB113 to RRMRB143including highlighted Intersections >200 ppm TREO-CeO2.

(Note: Rounding will cause minor value differences)

																					>200ppm $TREO-CeO_2$ Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	Length (m)	TREO ppm
RRMRB113	0	2	2	33.9	335.4	6.9	23.6	4.2	0.6	3.5	0.6	3.3	0.7	1.9	0.3	2.2	0.4	19.3	436.6	Hardcap		
RRMRB113	2	4	2	66.4	506.1	14.4	52.1	8.6	1.3	6.5	1.0	5.5	1.1	3.5	0.5	3.6	0.6	33.9	705.2	Hardcap		
RRMRB113	4	6	2	104.5	384.5	24.4	85.6	13.8	1.9	10.7	1.6	9.3	1.9	5.6	0.9	5.5	0.9	54.9	706.0	Clay		
RRMRB113	6	8	2	115.2	273.9	27.7	97.4	15.4	2.5	12.5	1.9	10.8	2.2	6.1	1.0	6.5	1.0	62.4	636.3	Clay		
RRMRB113	8	9	1	57.7	87.0	14.1	49.2	8.2	1.3	6.7	1.1	6.7	1.3	3.8	0.6	3.9	0.5	37.0	279.2	Clay		
RRMRB113	9	11	2	184.7	163.4	53.5	185.5	29.5	4.5	18.9	2.6	12.7	2.2	6.0	0.8	4.8	0.7	62.1	731.7	Upper Saprolite		
RRMRB113	11	13	2	140.1	248.1	37.1	129.5	20.2	3.2	13.8	1.8	9.4	1.7	4.6	0.7	4.2	0.6	49.4	664.4	Upper Saprolite		
RRMRB113	13	15	2	83.5	208.2	20.9	76.9	12.1	2.6	10.5	1.5	8.2	1.6	4.4	0.7	4.3	0.6	46.9	482.9	Upper Saprolite		
RRMRB113	15	17	2	90.5	227.3	22.4	83.2	13.9	2.8	12.5	1.7	9.5	1.9	5.0	0.7	4.8	0.7	58.4	535.2	Upper Saprolite		
RRMRB113	17	19	2	147.2	192.2	34.6	145.2	24.5	6.0	28.4	4.0	22.7	4.5	12.5	1.8	9.9	1.5	165.7	800.6	Upper Saprolite		
RRMRB113	19	21	2	110.5	199.6	26.9	111.3	18.7	4.3	21.2	2.8	16.2	3.5	10.1	1.3	8.2	1.2	140.3	676.3	Upper Saprolite		
RRMRB113	21	23	2	91.2	164.6	23.1	90.6	16.2	3.6	14.8	2.0	11.5	2.2	5.9	0.9	5.7	0.9	79.9	513.1	Upper Saprolite		
RRMRB113	23	25	2	88.8	192.2	22.1	86.2	14.4	3.4	14.2	2.0	11.0	2.4	6.7	0.9	5.6	0.8	79.1	529.9	Upper Saprolite		
RRMRB113	25	27	2	101.9	184.3	24.9	98.3	17.6	4.1	18.4	2.5	13.4	2.8	7.5	1.2	6.7	1.0	101.1	585.8	Upper Saprolite		
RRMRB113	27	29	2	98.3	184.9	24.5	94.8	16.8	3.6	16.5	2.3	12.9	2.6	7.1	1.1	6.4	1.0	91.7	564.5	Upper Saprolite	25	605
RRMRB114	0	2	2	65.6	1719.8	14.7	49.6	9.2	1.3	7.0	1.2	5.9	1.3	3.9	0.6	4.3	0.6	32.3	1917.2	Hardcap		
RRMRB114	2	4	2	67.8	1277.5	13.7	45.0	8.0	1.2	6.1	1.0	5.4	1.2	3.4	0.5	3.7	0.5	27.7	1462.7	Gravel		
RRMRB114	4	6	2	64.5	363.6	13.8	46.9	7.6	1.0	5.5	0.9	4.7	1.0	2.8	0.4	3.0	0.4	27.4	543.6	Gravel		
RRMRB114	6	8	2	205.8	404.1	46.8	154.0	22.3	2.2	14.1	1.8	9.0	1.7	3.9	0.6	3.5	0.5	41.5	911.7	Gravel		
RRMRB114	8	10	2	222.2	385.7	49.1	158.6	22.3	2.0	14.1	1.7	8.7	1.5	3.7	0.5	3.0	0.5	39.4	913.1	Gravel		
RRMRB114	10	12	2	265.1	410.3	59.3	196.5	28.3	2.7	18.2	2.4	11.8	2.1	4.9	0.7	3.9	0.6	52.6	1059.3	Gravel		
RRMRB114	12	14	2	205.8	357.5	44.1	146.4	20.8	1.6	13.5	1.6	7.8	1.5	3.6	0.5	3.0	0.5	41.7	849.8	Gravel		
RRMRB114	14	16	2	194.1	374.7	42.3	137.1	19.2	1.5	12.0	1.5	7.4	1.4	3.2	0.4	2.9	0.4	37.0	835.1	Gravel		
RRMRB114	16	18	2	224.6	425.0	48.6	158.6	21.8	1.7	13.3	1.7	8.5	1.5	3.5	0.5	3.3	0.5	43.6	956.7	Gravel		
RRMRB114	18	20	2	189.4	357.5	41.6	135.3	18.6	1.5	11.8	1.5	6.8	1.3	3.1	0.5	2.7	0.4	37.3	809.2	Gravel		
RRMRB114	20	22	2	248.6	452.1	53.9	175.0	25.3	1.9	15.0	1.9	9.6	1.7	4.4	0.5	3.5	0.6	45.8	1039.7	Gravel		
RRMRB114	22	24	2	241.6	457.0	51.8	171.5	24.6	1.9	15.2	1.9	9.6	1.8	4.2	0.6	3.5	0.6	47.5	1033.2	Gravel		
RRMRB114	24	26	2	242.8	428.7	52.0	173.8	22.9	1.9	15.3	1.9	9.6	1.7	4.3	0.6	3.7	0.5	48.6	1008.3	Gravel		
RRMRB114	26	28	2	261.5	416.4	58.1	188.4	25.9	2.4	17.5	2.1	10.2	1.8	4.4	0.6	3.8	0.5	52.3	1046.0	Gravel		
RRMRB114	28	30	2	249.8	436.1	54.6	181.4	25.9	2.2	15.8	2.0	10.1	1.7	4.5	0.6	3.6	0.6	47.4	1036.2	Gravel		
RRMRB114	30	32	2	246.3	443.5	54.0	179.6	26.4	2.1	16.4	2.1	9.7	1.7	4.2	0.6	3.8	0.6	47.2	1038.3	Gravel		
RRMRB115	0	2	2	110.0	728.4	21.6	74.1	11.7	1.5	8.6	1.3	7.1	1.3	4.2	0.6	4.1	0.6	36.1	1011.2	Hardcap		
RRMRB115	2	4	2	103.7	952.0	19.1	63.8	11.5	1.8	8.5	1.4	8.3	1.6	4.9	0.8	5.3	0.8	40.0	1223.4	Hardcap		
RRMRB115	4	6	2	101.6	1437.2	22.4	74.4	13.5	2.1	9.8	1.5	8.9	1.7	5.0	0.8	5.2	0.8	45.6	1730.4	Transition		
RRMRB115	6	8	2	82.9	584.7	19.2	64.6	10.3	1.7	8.8	1.3	7.8	1.5	4.3	0.7	4.6	0.7	43.2	836.4	Clay		
RRMRB115	8	10	2	71.2	264.1	15.5	53.2	8.7	1.3	7.2	1.2	7.0	1.5	4.6	0.7	5.3	0.7	44.1	486.3	Upper Saprolite		
RRMRB115	10	11	1	103.7	286.2	26.5	91.1	15.0	2.3	11.2	1.5	8.5	1.7	4.6	0.8	5.2	0.8	48.8	607.8	Upper Saprolite		
RRMRB115	11	13	2	295.5	463.1	82.2	290.4	48.9	6.1	33.7	4.5	22.5	4.2	10.7	1.5	9.6	1.4	112.3	1386.5	Upper Saprolite		
RRMRB115	13	15	2	357.7	508.6	99.3	355.8	62.2	8.6	46.7	6.4	34.1	6.4	16.6	2.4	14.8	2.1	193.0	1714.6	Upper Saprolite		
RRMRB115	15	17	2	283.8	242.6	70.0	264.8	47.4	8.3	46.6	6.9	38.3	7.8	21.0	3.0	17.5	2.5	267.9	1328.5	Upper Saprolite		
RRMRB115	17	19	2	101.4	122.8	20.8	80.6	14.1	2.9	16.5	2.3	13.1	3.0	8.5	1.2	6.5	1.0	126.4	521.2	Upper Saprolite		
RRMRB115	19	21	2	136.6	249.4	30.8	113.6	17.9	3.1	16.1	2.0	11.5	2.2	5.6	0.8	4.6	0.7	75.3	670.3	Upper Saprolite		
RRMRB115	21	23	2	95.5	152.9	23.0	86.3	14.4	2.4	12.7	1.8	9.9	2.0	5.3	0.8	4.7	0.7	67.4	479.8	Lower Saprolite		
RRMRB115	23	25	2	118.5	202.7	29.4	106.7	18.4	3.0	15.3	2.1	11.5	2.2	6.1	0.9	5.6	0.8	74.7	597.8	Lower Saprolite		
RRMRB115	25	26	1	122.6	253.1	28.9	105.8	18.0	2.9	15.0	2.1	11.7	2.2	6.3	0.9	5.2	0.9	71.5	647.1	Lower Saprolite	20	865
RRMRB116	0	2	2	128.4	357.5	30.1	107.2	19.2	2.6	14.8	2.2	12.2	2.4	7.1	1.0	6.3	1.0	67.4	759.2	Soil		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	>200ppm TREO-CeO_2 Interval Length (m)	>200ppm TREO-CeO_2 Interval TREO ppm
RRMRB116	2	4	2	120.2	389.4	26.7	94.1	16.5	2.1	12.2	1.9	9.9	2.0	5.9	0.8	5.8	0.9	56.6	745.1	Transition		
RRMRB116	4	6	2	106.0	324.3	23.4	79.3	13.7	1.8	9.7	1.5	8.2	1.8	4.5	0.7	5.1	0.7	44.2	625.0	Clay		
RRMRB116	6	7	1	134.3	355.0	27.9	90.5	14.1	1.9	10.8	1.6	8.9	1.7	4.7	0.7	4.5	0.8	46.9	704.3	Clay		
RRMRB116	7	9	2	268.6	237.1	47.7	140.6	20.0	2.4	12.0	1.7	8.9	1.6	4.2	0.7	4.3	0.6	43.9	794.3	Clay		
RRMRB116	9	11	2	159.5	261.6	33.1	109.5	16.5	2.0	11.6	1.6	8.6	1.6	4.4	0.7	4.2	0.6	44.3	659.7	Upper Saprolite		
RRMRB116	11	13	2	198.8	296.0	48.2	164.5	24.5	2.8	16.1	2.1	10.1	1.8	4.9	0.7	4.2	0.6	48.1	823.4	Upper Saprolite		
RRMRB116	13	15	2	197.6	312.0	48.8	168.5	26.0	2.6	17.1	2.3	11.1	1.9	5.4	0.7	4.4	0.6	54.0	853.0	Upper Saprolite		
RRMRB116	15	17	2	229.9	385.7	50.1	175.5	28.2	2.8	21.3	2.8	14.9	2.7	7.7	1.1	6.5	0.9	90.3	1020.4	Upper Saprolite		
RRMRB116	17	18	1	175.9	353.8	39.1	134.1	21.0	2.0	15.7	2.2	11.3	2.1	6.1	0.8	5.2	0.8	69.2	839.5	Upper Saprolite		
RRMRB116	18	20	2	203.5	405.4	45.5	150.5	22.6	2.0	14.9	2.0	10.7	1.9	5.4	0.7	4.6	0.7	61.7	932.1	Upper Saprolite		
RRMRB116	20	22	2	175.3	329.2	38.2	128.3	19.1	1.9	13.5	1.8	9.2	1.6	4.6	0.6	4.2	0.6	51.0	779.1	Lower Saprolite		
RRMRB116	22	24	2	136.6	277.6	30.2	101.8	15.1	1.5	10.1	1.4	7.2	1.2	3.6	0.5	3.1	0.5	38.0	628.4	Lower Saprolite	20	789
RRMRB116	24	26	2	147.8	288.7	32.3	110.0	16.4	1.7	11.2	1.5	7.2	1.3	3.7	0.5	3.6	0.6	41.1	667.4	Saprock		
RRMRB117	0	2	2	110.2	203.9	25.9	93.0	16.4	2.4	13.3	1.9	10.8	2.2	6.3	1.0	6.1	1.0	62.6	556.9	Soil		
RRMRB117	2	4	2	79.2	170.1	17.5	60.9	10.4	1.8	8.6	1.3	7.4	1.6	4.6	0.7	4.9	0.8	43.3	413.1	Gravel		
RRMRB117	4	5	1	64.2	500.0	14.7	49.9	9.6	1.4	6.5	1.1	6.5	1.2	3.7	0.6	4.0	0.6	30.7	694.5	Gravel		
RRMRB117	5	7	2	90.7	721.1	22.5	77.8	14.7	2.6	11.0	2.0	11.2	2.1	6.3	1.0	6.9	1.1	48.8	1019.6	Hardcap		
RRMRB117	7	9	2	126.7	281.3	29.0	101.1	17.0	2.8	13.0	1.9	10.5	2.0	6.1	0.9	6.1	1.0	58.0	657.3	Upper Saprolite		
RRMRB117	9	11	2	336.6	226.0	88.2	309.1	47.9	8.3	33.2	4.3	23.3	3.7	10.0	1.4	9.4	1.3	104.0	1206.8	Upper Saprolite		
RRMRB117	11	13	2	295.5	176.3	80.9	293.9	47.7	8.5	33.5	4.6	23.1	3.8	10.5	1.4	9.3	1.3	105.8	1096.1	Upper Saprolite		
RRMRB117	13	15	2	214.0	267.8	57.5	208.2	35.6	6.4	24.8	3.5	18.0	2.8	8.5	1.2	7.4	1.1	82.0	938.8	Upper Saprolite	8	975
RRMRB117	15	17	2	181.8	254.3	46.8	165.6	27.4	5.0	19.6	2.9	14.6	2.6	7.7	1.0	6.9	1.1	72.9	810.2	Saprock		
RRMRB117	17	18	1	214.0	425.0	54.9	195.4	31.7	5.4	22.3	3.1	16.0	2.7	7.9	1.1	7.1	1.1	77.6	1065.0	Saprock		
RRMRB118	0	2	2	45.7	518.4	11.6	42.8	9.2	1.5	7.2	1.2	7.2	1.3	4.2	0.6	4.5	0.6	31.2	687	Hardcap		
RRMRB118	2	3	1	58.2	1234.5	14.0	47.2	10.2	1.8	7.5	1.3	6.9	1.3	4.1	0.6	4.3	0.6	28.6	1421	Hardcap		
RRMRB118	3	5	2	103.1	400.5	24.6	84.3	13.9	2.2	11.2	1.6	9.1	1.8	5.0	0.8	5.6	0.8	53.1	718	Clay		
RRMRB118	5	7	2	94.3	189.8	22.8	78.3	13.3	2.3	10.3	1.5	7.9	1.5	4.6	0.7	5.0	0.7	44.4	477	Upper Saprolite		
RRMRB118	7	9	2	93.7	133.9	22.0	76.7	12.8	2.2	10.4	1.5	7.4	1.5	4.3	0.7	4.7	0.7	48.6	421	Upper Saprolite		
RRMRB118	9	11	2	85.0	180.6	20.5	72.2	11.8	1.9	9.3	1.3	7.5	1.5	4.3	0.6	4.5	0.7	47.6	450	Upper Saprolite		
RRMRB118	11	13	2	84.2	124.7	20.3	70.7	11.2	2.0	9.8	1.3	7.6	1.6	4.2	0.6	4.5	0.6	46.6	390	Upper Saprolite		
RRMRB118	13	15	2	88.4	105.5	20.7	72.4	12.0	2.2	9.7	1.4	8.2	1.5	4.4	0.6	4.5	0.6	48.6	381	Upper Saprolite		
RRMRB118	15	16	1	84.1	108.3	19.9	71.5	11.4	2.1	9.8	1.4	8.1	1.5	4.4	0.6	4.4	0.6	46.4	374	Upper Saprolite	13	465
RRMRB119	0	2	2	112.6	606.8	20.7	64.7	10.7	1.9	7.9	1.4	8.0	1.4	4.4	0.6	4.6	0.7	38.4	885	Hardcap		
RRMRB119	2	3	1	153.1	791.1	24.6	70.5	11.7	2.0	8.0	1.3	7.0	1.4	4.1	0.6	4.1	0.6	33.1	1113	Transition		
RRMRB119	3	5	2	100.6	318.2	22.1	76.5	12.1	2.2	10.2	1.5	8.2	1.7	4.9	0.8	5.1	0.7	49.4	614	Clay		
RRMRB119	5	7	2	87.5	293.6	19.6	68.1	11.2	2.1	9.8	1.4	8.8	1.7	5.1	0.7	5.1	0.8	48.4	564	Clay	4	589
RRMRB119	7	9	2	54.8	85.7	13.4	49.0	8.8	1.6	7.6	1.1	6.7	1.3	3.6	0.6	4.0	0.6	38.1	277	Clay		
RRMRB119	9	11	2	38.6	54.4	10.0	36.7	7.0	1.3	6.3	0.9	5.8	1.2	3.4	0.5	3.8	0.6	33.4	204	Clay		
RRMRB119	11	12	1	26.9	44.7	7.2	27.4	4.6	1.1	5.2	0.8	5.1	0.9	2.8	0.5	3.3	0.4	27.8	159	Clay		
RRMRB119	12	14	2	19.8	28.1	5.6	21.7	4.6	1.2	4.5	0.7	4.3	0.9	2.4	0.4	2.8	0.4	24.6	122	Upper Saprolite		
RRMRB119	14	16	2	21.5	34.6	6.2	25.7	5.0	1.3	5.4	0.8	5.6	1.1	2.9	0.4	3.4	0.5	30.5	145	Upper Saprolite		
RRMRB119	16	18	2	45.3	36.6	14.1	55.3	11.1	2.9	11.1	1.8	11.2	2.2	6.4	0.9	6.1	0.9	74.3	280	Upper Saprolite		
RRMRB119	18	20	2	42.2	49.5	11.5	45.5	9.5	2.4	10.2	1.7	10.1	2.2	6.4	0.9	6.2	0.9	77.2	276	Upper Saprolite		
RRMRB119	20	22	2	38.0	60.2	10.5	41.6	8.5	2.3	9.8	1.6	10.0	2.0	5.5	0.8	6.0	0.8	66.5	264	Upper Saprolite		
RRMRB119	22	24	2	54.7	52.8	15.5	67.2	14.4	4.0	16.7	2.6	14.7	3.2	8.8	1.2	7.9	1.0	102.7	367	Upper Saprolite		
RRMRB119	24	26	2	68.0	50.9	19.6	81.6	17.2	4.7	19.1	3.0	18.1	3.5	9.8	1.3	9.3	1.3	119.4	427	Upper Saprolite		
RRMRB119	26	28	2	77.4	54.2	23.8	99.5	21.1	5.7	24.2	3.7	20.9	4.2	11.8	1.6	10.6	1.4	138.4	499	Upper Saprolite		
RRMRB119	28	29	1	53.2	44.3	15.1	61.9	13.9	3.9	15.7	2.4	14.8	3.2	9.0	1.1	7.8	1.1	108.8	356	Upper Saprolite		
RRMRB119	29	30	1	48.0	43.1	14.5	58.1	13.2	3.6	15.2	2.4	13.8	2.8	7.7	1.1	7.2	1.0	94.2	326	Lower Saprolite	14	351
RRMRB120	0	2	2	110.1	1474.1	24.5	85.0	14.6	2.8	11.6	1.8	10.0	1.8	5.9	0.8	5.9	0.9	49.5	1799	Hardcap		
RRMRB120	2	4	2	77.5	1467.9	16.8	56.9	10.7	1.7	7.5	1.2	6.9	1.3	4.3	0.6	4.4	0.6	34.0	1692	Transition		

																					>200ppm $TREO-CeO_2$ Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	Length (m)	TREO ppm
RRMRB120	4	6	2	141.3	399.2	30.1	99.5	14.5	2.6	11.7	1.6	9.2	1.9	5.8	0.9	6.4	0.9	58.4	784	Clay		
RRMRB120	6	8	2	146.0	321.8	30.1	99.8	13.3	2.3	10.1	1.4	8.4	1.5	4.6	0.7	5.2	0.7	50.7	697	Clay		
RRMRB120	8	10	2	107.9	171.4	22.7	75.3	10.8	1.8	8.1	1.0	5.7	1.0	3.1	0.5	3.2	0.5	35.0	448	Clay		
RRMRB120	10	11	1	191.2	265.3	41.8	142.9	18.9	3.1	13.0	1.6	8.8	1.7	4.5	0.6	4.6	0.7	52.2	751	Clay		
RRMRB120	11	13	2	150.7	351.3	33.2	110.7	14.7	2.5	10.8	1.5	7.7	1.4	4.2	0.6	4.4	0.7	46.5	741	Upper Saprolite		
RRMRB120	13	15	2	160.7	341.5	36.6	119.0	15.7	2.2	10.4	1.2	6.9	1.3	3.6	0.5	4.2	0.5	42.8	747	Upper Saprolite		
RRMRB120	15	17	2	180.0	412.7	40.4	134.1	17.3	2.7	11.3	1.4	7.9	1.4	3.8	0.5	4.4	0.6	46.7	865	Upper Saprolite		
RRMRB120	17	19	2	185.9	384.5	41.7	135.9	18.3	2.6	11.6	1.5	7.9	1.5	4.2	0.5	4.0	0.7	47.6	848	Upper Saprolite		
RRMRB120	19	21	2	188.2	362.4	41.8	136.5	18.0	2.7	12.4	1.6	7.7	1.5	4.1	0.6	4.3	0.6	47.4	830	Upper Saprolite		
RRMRB120	21	23	2	187.1	352.6	40.5	135.9	18.7	2.8	11.7	1.5	7.5	1.4	3.9	0.6	4.3	0.6	46.5	816	Lower Saprolite		
RRMRB120	23	24	1	188.2	358.7	41.3	137.6	19.3	2.6	12.2	1.5	7.4	1.4	4.2	0.6	3.9	0.6	46.1	826	Lower Saprolite	20	756
RRMRB121	0	2	2	91.9	152.9	21.1	75.6	12.1	2.3	10.1	1.6	8.9	1.7	5.1	0.8	5.3	0.8	49.0	439	Soil		
RRMRB121	2	4	2	53.6	355.0	12.6	42.9	7.5	1.4	6.2	1.1	6.0	1.2	3.5	0.6	4.3	0.6	30.7	527	Hardcap		
RRMRB121	4	5	1	60.3	630.2	15.2	50.4	9.1	1.6	6.8	1.2	6.6	1.3	3.9	0.6	4.3	0.6	33.0	825	Hardcap		
RRMRB121	5	6	1	73.8	547.9	16.7	58.3	9.6	1.8	7.6	1.3	6.9	1.5	4.3	0.7	4.5	0.8	39.9	775	Transition		
RRMRB121	6	8	2	90.5	186.7	19.9	68.2	10.6	2.0	8.0	1.2	6.4	1.3	3.6	0.6	3.9	0.6	41.5	445	Upper Saprolite		
RRMRB121	8	10	2	107.5	165.2	24.6	83.2	13.2	2.2	9.5	1.3	7.0	1.4	3.8	0.6	3.5	0.5	41.9	466	Upper Saprolite		
RRMRB121	10	12	2	106.0	157.8	23.9	82.2	12.4	2.4	9.4	1.2	6.4	1.3	3.4	0.6	3.5	0.5	42.0	453	Upper Saprolite		
RRMRB121	12	14	2	99.9	124.7	22.2	75.7	11.8	2.4	8.8	1.1	6.0	1.2	3.4	0.5	3.1	0.5	39.0	400	Upper Saprolite		
RRMRB121	14	16	2	111.2	162.8	24.9	84.2	13.7	2.6	9.5	1.4	7.0	1.4	3.7	0.6	3.8	0.6	43.6	471	Upper Saprolite		
RRMRB121	16	18	2	110.7	152.3	23.9	81.6	12.8	2.5	9.4	1.2	6.5	1.2	3.3	0.5	3.6	0.5	40.8	451	Upper Saprolite		
RRMRB121	18	20	2	112.9	153.6	24.8	86.5	12.6	2.5	9.2	1.3	6.7	1.3	3.5	0.5	3.6	0.5	41.8	461	Upper Saprolite		
RRMRB121	20	22	2	109.7	156.6	24.2	84.1	13.3	2.4	9.5	1.2	7.2	1.3	3.9	0.5	3.7	0.6	44.4	463	Upper Saprolite		
RRMRB121	22	24	2	99.1	165.2	22.1	73.6	11.7	2.4	8.5	1.1	5.6	1.1	3.0	0.4	2.9	0.4	35.9	433	Upper Saprolite		
RRMRB121	24	26	2	105.2	146.2	23.3	80.5	12.3	2.4	8.7	1.2	6.7	1.3	3.5	0.5	3.3	0.6	40.6	436	Upper Saprolite	20	448
RRMRB122	0	2	2	126.1	411.5	24.3	82.3	14.0	2.7	11.0	1.8	9.7	1.9	5.5	0.7	5.5	0.8	50.7	748	Hardcap		
RRMRB122	2	4	2	172.4	762.8	28.0	83.6	12.8	2.3	8.9	1.3	7.7	1.3	3.8	0.6	4.1	0.6	33.5	1124	Hardcap		
RRMRB122	4	5	1	134.9	588.4	29.0	98.9	17.0	3.0	13.1	2.0	10.9	2.0	5.8	0.9	5.7	0.9	57.5	970	Transition		
RRMRB122	5	7	2	133.1	334.1	29.7	107.8	18.8	3.7	14.5	2.2	11.6	2.2	5.9	0.9	6.0	0.9	62.9	734	Clay		
RRMRB122	7	9	2	73.7	174.4	17.9	66.0	11.7	2.5	9.8	1.5	7.9	1.5	4.3	0.6	4.1	0.7	42.9	419	Clay		
RRMRB122	9	11	2	53.6	160.3	14.4	55.6	10.4	2.1	8.6	1.2	6.5	1.3	3.7	0.5	3.4	0.5	39.9	362	Upper Saprolite		
RRMRB122	11	13	2	57.2	159.1	14.0	52.4	10.2	2.2	8.4	1.2	6.2	1.1	3.3	0.5	3.1	0.5	34.4	354	Upper Saprolite		
RRMRB122	13	15	2	67.0	102.4	15.9	58.9	11.0	2.8	8.6	1.2	6.7	1.1	3.2	0.5	2.6	0.4	34.8	317	Upper Saprolite		
RRMRB122	15	17	2	58.1	139.4	15.0	54.5	10.3	2.4	8.5	1.2	6.4	1.2	3.3	0.5	3.1	0.5	36.6	341	Upper Saprolite		
RRMRB122	17	19	2	58.2	131.4	14.8	57.4	10.5	2.5	8.9	1.3	6.7	1.2	3.4	0.5	3.4	0.4	40.5	341	Upper Saprolite		
RRMRB122	19	21	2	69.4	129.0	17.2	66.4	13.2	2.9	9.5	1.3	6.9	1.3	3.4	0.5	3.1	0.4	38.6	363	Upper Saprolite		
RRMRB122	21	22	1	68.7	121.9	16.6	63.1	12.2	2.7	10.0	1.2	6.9	1.2	3.5	0.5	3.1	0.4	39.1	351	Upper Saprolite	17	401
RRMRB123	0	2	2	67.7	165.2	15.6	56.6	10.6	1.6	9.5	1.6	8.9	1.8	5.5	0.8	5.8	0.8	53.5	405	Hardcap		
RRMRB123	2	4	2	45.5	329.2	9.9	34.6	6.3	1.2	5.5	1.0	6.4	1.2	3.9	0.6	4.2	0.6	35.0	485	Hardcap		
RRMRB123	4	6	2	77.3	218.0	17.1	58.6	11.1	1.7	9.8	1.6	9.8	1.9	5.8	1.0	6.4	0.9	62.6	484	Transition		
RRMRB123	6	7	1	85.5	400.5	19.0	64.9	12.2	1.9	10.6	1.7	10.5	2.2	6.1	1.0	7.1	1.0	70.1	694	Clay		
RRMRB123	7	9	2	61.0	200.2	13.8	47.9	8.8	1.3	8.0	1.4	8.1	1.7	4.7	0.8	5.2	0.8	53.6	417	Upper Saprolite		
RRMRB123	9	10	1	64.2	111.7	15.4	53.2	10.6	1.7	8.2	1.4	7.8	1.6	4.7	0.8	5.2	0.8	50.8	338	Upper Saprolite		
RRMRB123	10	12	2	141.9	129.6	33.5	115.2	21.5	3.2	17.0	2.6	14.7	2.9	8.1	1.2	8.1	1.2	94.4	595	Upper Saprolite		
RRMRB123	12	14	2	181.8	237.1	43.0	147.5	25.2	4.2	22.1	3.1	16.8	3.5	10.0	1.5	10.0	1.5	107.4	815	Upper Saprolite		
RRMRB123	14	16	2	143.7	124.7	31.3	111.0	19.6	3.3	17.2	2.6	13.8	2.8	8.3	1.3	8.7	1.4	89.7	579	Upper Saprolite	10	584
RRMRB123	16	18	2	58.5	73.7	13.3	48.4	8.5	1.6	8.3	1.3	6.2	1.5	3.8	0.6	3.8	0.6	40.0	270	Upper Saprolite		
RRMRB123	18	20	2	54.5	90.3	12.2	43.5	8.1	1.5	7.7	1.1	6.0	1.2	3.2	0.5	3.3	0.4	33.5	267	Upper Saprolite		
RRMRB123	20	22	2	53.1	68.2	11.8	42.6	8.2	1.5	7.9	1.2	6.6	1.4	3.5	0.5	3.4	0.5	37.8	248	Upper Saprolite		
RRMRB123	22	24	2	40.1	60.3	9.0	34.2	6.3	1.3	6.2	0.9	5.5	1.0	2.9	0.4	3.2	0.5	32.5	204	Upper Saprolite		
RRMRB123	24	26	2	49.4	79.4	11.6	40.2	7.4	1.6	7.1	1.1	5.9	1.2	3.4	0.5	3.5	0.5	35.2	248	Upper Saprolite		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	>200ppm TREO-CeO_2 Interval Length (m)	TREO ppm
RRMRB123	26	27	1	59.5	77.4	13.1	48.2	9.3	1.7	8.1	1.3	7.0	1.3	4.0	0.5	4.2	0.6	40.5	277	Upper Saprolite		
RRMRB124	0	2	2	71.2	595.8	16.6	59.4	10.7	1.9	9.5	1.4	8.5	1.6	4.9	0.8	4.6	0.7	47.9	835	Hardcap		
RRMRB124	2	4	2	46.6	216.8	9.6	34.2	6.4	0.7	4.9	0.9	5.1	1.0	3.1	0.5	3.5	0.5	32.8	367	Gravel		
RRMRB124	4	5	1	70.6	255.5	15.6	53.3	9.6	1.3	8.4	1.4	8.0	1.7	4.8	0.8	5.5	0.9	54.2	492	Gravel		
RRMRB124	5	7	2	80.1	320.6	18.1	61.2	10.7	1.7	8.4	1.4	8.2	1.6	4.8	0.8	5.4	0.8	50.3	574	Clay	2	574
RRMRB124	7	9	2	54.2	133.9	12.3	41.8	7.7	1.2	6.4	1.0	5.9	1.3	3.9	0.5	4.3	0.7	35.9	311	Clay		
RRMRB124	9	11	2	49.8	241.4	12.0	42.5	7.2	1.3	7.0	1.0	6.2	1.3	3.7	0.6	4.1	0.6	40.0	419	Upper Saprolite		
RRMRB124	11	13	2	66.6	191.0	16.1	60.0	9.3	1.4	8.6	1.3	7.3	1.5	4.1	0.6	4.3	0.6	48.3	421	Upper Saprolite		
RRMRB124	13	15	2	99.9	204.5	25.1	87.1	13.7	1.9	11.1	1.6	8.3	1.7	5.2	0.7	4.6	0.6	57.1	523	Upper Saprolite		
RRMRB124	15	17	2	74.1	171.4	18.3	65.8	10.5	1.6	9.0	1.3	7.4	1.5	4.1	0.6	4.2	0.6	49.3	420	Upper Saprolite		
RRMRB124	17	19	2	80.6	186.1	20.6	71.9	11.8	1.8	9.6	1.3	7.7	1.6	4.1	0.6	3.9	0.6	50.7	453	Upper Saprolite		
RRMRB124	19	21	2	82.0	168.9	20.1	71.2	12.1	1.6	9.8	1.4	7.7	1.5	4.2	0.6	3.9	0.6	51.4	437	Upper Saprolite	10	451
RRMRB125	0	2	2	51.5	1240.7	10.5	36.2	6.4	1.2	5.1	0.8	4.8	0.9	2.9	0.4	3.0	0.4	27.0	1392	Hardcap		
RRMRB125	2	4	2	66.6	593.3	14.6	49.6	8.4	1.5	7.1	1.0	5.9	1.1	3.2	0.5	3.3	0.5	32.1	789	Hardcap		
RRMRB125	4	5	1	89.8	277.6	20.2	69.3	11.3	1.8	9.4	1.3	7.8	1.7	4.2	0.6	4.7	0.7	47.7	548	Hardcap		
RRMRB125	5	6	1	88.9	164.6	19.0	65.4	10.0	1.9	8.9	1.3	7.5	1.4	4.2	0.6	4.2	0.5	43.3	422	Transition		
RRMRB125	6	8	2	64.3	179.3	15.0	53.3	9.0	1.8	7.2	1.2	6.2	1.4	4.1	0.5	3.9	0.5	43.4	391	Clay		
RRMRB125	8	10	2	77.3	128.4	18.0	64.7	10.8	2.1	9.7	1.3	7.4	1.6	4.3	0.6	4.3	0.6	47.4	378	Clay		
RRMRB125	10	11	1	59.8	102.6	14.1	51.6	8.9	1.6	7.6	1.1	6.5	1.4	3.8	0.5	3.7	0.6	45.2	309	Clay		
RRMRB125	11	12	1	65.4	105.5	15.7	56.8	9.4	2.1	8.8	1.3	7.1	1.4	4.1	0.5	3.7	0.5	46.2	329	Upper Saprolite	6	363
RRMRB125	12	14	2	45.0	84.5	11.0	39.3	6.8	1.6	6.4	1.0	5.7	1.1	3.1	0.5	3.2	0.4	38.7	249	Upper Saprolite		
RRMRB125	14	16	2	42.2	80.2	10.5	39.9	7.2	1.7	6.2	0.9	5.2	1.1	3.0	0.4	2.7	0.4	33.1	235	Upper Saprolite		
RRMRB125	16	18	2	61.0	136.4	14.7	50.5	8.3	1.5	6.6	0.9	4.5	0.8	2.6	0.3	2.4	0.4	27.6	318	Upper Saprolite		
RRMRB125	18	20	2	40.8	107.2	9.4	33.8	5.7	1.4	5.0	0.7	4.1	0.8	2.3	0.3	2.4	0.4	25.9	240	Upper Saprolite		
RRMRB125	20	22	2	41.3	92.3	10.1	34.3	6.4	1.3	5.1	0.7	4.0	0.9	2.3	0.3	2.2	0.3	25.5	227	Upper Saprolite		
RRMRB125	22	24	2	44.2	100.5	10.9	37.7	6.0	1.5	5.0	0.8	4.1	0.8	2.4	0.3	2.1	0.3	26.0	243	Upper Saprolite		
RRMRB125	24	26	2	46.6	106.1	11.4	38.5	7.1	1.4	5.4	0.8	4.4	1.0	2.4	0.3	2.3	0.3	25.4	253	Upper Saprolite		
RRMRB126	0	2	2	64.7	312.0	15.3	51.8	9.4	1.8	8.2	1.3	7.2	1.4	4.6	0.6	4.3	0.6	40.8	524	Hardcap		
RRMRB126	2	3	1	76.5	1189.1	17.5	61.0	10.6	1.7	7.7	1.3	7.0	1.3	4.3	0.6	4.5	0.6	38.1	1422	Hardcap		
RRMRB126	3	5	2	117.3	291.1	26.0	86.9	14.3	2.3	11.1	1.6	9.4	1.8	5.5	0.8	5.4	0.9	61.0	635	Clay		
RRMRB126	5	6	1	115.8	199.0	25.6	86.1	14.1	2.3	10.9	1.6	9.6	1.9	5.7	0.8	5.5	0.9	59.1	539	Clay		
RRMRB126	6	8	2	91.1	139.4	20.1	68.6	11.1	1.8	8.6	1.3	7.3	1.6	4.6	0.7	4.4	0.7	46.0	407	Clay		
RRMRB126	8	10	2	69.2	100.7	15.7	51.8	8.8	1.4	6.9	1.0	5.9	1.1	3.4	0.5	3.3	0.5	35.8	306	Upper Saprolite		
RRMRB126	10	12	2	54.1	69.5	12.4	43.5	7.2	1.4	5.6	0.8	5.0	1.0	2.9	0.4	2.9	0.4	31.2	239	Upper Saprolite		
RRMRB126	12	14	2	89.6	287.4	16.7	54.2	9.3	2.1	7.2	1.1	6.2	1.2	3.5	0.5	3.3	0.5	36.1	519	Upper Saprolite		
RRMRB126	14	16	2	74.8	221.1	17.0	59.3	9.5	2.1	8.4	1.2	6.9	1.4	4.0	0.6	3.7	0.5	41.3	452	Upper Saprolite		
RRMRB126	16	18	2	104.6	180.0	19.8	65.7	10.5	2.4	9.4	1.3	6.9	1.4	3.6	0.5	3.4	0.6	39.7	450	Upper Saprolite		
RRMRB126	18	20	2	101.2	165.2	18.8	63.6	10.2	2.2	8.3	1.2	6.6	1.3	4.0	0.5	3.3	0.5	38.1	425	Upper Saprolite		
RRMRB126	20	22	2	87.5	155.4	16.7	57.7	9.5	2.2	8.0	1.2	6.6	1.3	3.5	0.5	3.4	0.5	37.2	391	Upper Saprolite		
RRMRB126	22	24	2	75.6	203.3	15.2	50.6	8.8	2.0	6.5	1.0	6.1	1.2	3.3	0.5	2.9	0.5	32.9	410	Upper Saprolite		
RRMRB126	24	26	2	71.5	156.6	14.6	51.9	7.6	1.9	6.5	1.0	5.8	1.1	3.1	0.5	2.9	0.5	32.8	358	Upper Saprolite	23	423
RRMRB126	26	28	2	69.4	125.3	14.5	49.1	8.3	1.9	6.8	0.9	5.1	1.1	3.0	0.4	2.7	0.4	30.4	319	Upper Saprolite		
RRMRB127	0	2	2	66.4	122.7	16.1	58.0	11.1	2.2	9.4	1.4	8.4	1.7	5.1	0.8	4.7	0.7	44.3	353	Hardcap		
RRMRB127	2	4	2	46.0	556.5	11.2	38.4	7.0	1.4	6.0	1.0	6.0	1.1	3.5	0.6	3.8	0.6	28.4	711	Hardcap		
RRMRB127	4	6	2	62.4	839.0	15.8	55.3	10.7	2.1	8.0	1.3	7.9	1.5	4.5	0.7	4.7	0.7	36.4	1051	Transition		
RRMRB127	6	8	2	167.1	139.4	27.4	93.1	14.8	2.7	11.4	1.6	9.4	1.9	5.3	0.8	5.7	0.7	54.5	536	Clay		
RRMRB127	8	10	2	314.3	103.9	48.8	156.3	23.5	4.3	16.3	2.0	11.6	2.1	5.4	0.7	4.7	0.7	57.4	752	Upper Saprolite		
RRMRB127	10	12	2	232.2	107.2	43.6	140.6	21.5	4.3	14.4	1.8	9.8	1.6	4.2	0.6	3.7	0.6	47.6	634	Upper Saprolite		
RRMRB127	12	14	2	142.5	80.8	29.7	100.0	15.8	3.5	12.3	1.6	8.8	1.6	4.6	0.6	4.4	0.6	48.8	456	Upper Saprolite		
RRMRB127	14	16	2	124.3	116.2	38.5	163.3	34.8	9.5	39.4	5.6	34.1	6.9	19.7	2.7	16.1	2.4	262.9	876	Upper Saprolite		
RRMRB127	16	18	2	73.2	99.6	21.5	94.9	19.3	5.4	20.7	2.9	17.2	3.7	10.9	1.4	8.2	1.3	141.6	522	Upper Saprolite		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	>200ppm $TREO-CeO_2$ Interval Length (m)	TREO ppm
RRMRB127	18	20	2	137.2	93.2	29.7	102.3	18.2	4.3	14.6	1.9	11.4	2.1	5.7	0.7	4.8	0.7	72.4	499	Upper Saprolite		
RRMRB127	20	22	2	280.3	97.0	48.2	155.7	23.4	5.3	16.0	2.1	11.2	1.9	5.1	0.6	4.1	0.6	53.3	705	Upper Saprolite		
RRMRB127	22	23	1	272.1	95.2	47.5	158.0	23.8	4.9	16.7	2.1	11.2	2.0	5.1	0.7	4.4	0.7	58.0	702	Lower Saprolite	17	627
RRMRB128	0	2	2	109.3	547.9	20.5	67.7	12.3	2.0	10.3	1.5	9.3	1.8	5.2	0.8	5.2	0.7	45.1	839	Hardcap		
RRMRB128	2	4	2	154.2	894.3	21.7	63.7	10.0	1.9	6.6	1.1	6.4	1.2	3.4	0.5	3.1	0.4	25.9	1194	Gravel		
RRMRB128	4	5	1	144.3	1480.2	28.3	92.1	17.2	2.7	11.6	1.8	10.9	2.0	6.3	0.9	5.9	0.9	53.6	1859	Transition		
RRMRB128	5	7	2	148.4	218.0	32.6	110.7	19.2	3.2	13.6	2.0	11.6	2.2	6.2	1.0	5.9	0.9	62.1	638	Clay		
RRMRB128	7	9	2	201.1	110.2	51.1	177.9	30.5	5.2	20.3	2.9	15.4	2.7	7.7	1.0	6.5	0.8	76.3	710	Clay		
RRMRB128	9	10	1	176.5	170.1	39.9	145.8	25.0	4.7	20.9	2.8	16.0	2.8	8.1	1.1	6.7	0.9	81.4	703	Clay		
RRMRB128	10	12	2	207.0	121.1	40.6	152.8	27.3	5.9	27.7	4.1	24.2	4.6	13.4	1.7	10.3	1.5	156.8	799	Upper Saprolite		
RRMRB128	12	13	1	131.4	115.6	25.4	98.4	18.1	3.9	18.4	2.6	14.3	2.8	7.2	1.0	6.1	0.9	95.2	541	Upper Saprolite		
RRMRB128	13	15	2	107.2	130.8	21.4	86.8	17.4	4.4	20.6	2.8	18.6	3.8	10.7	1.3	7.5	1.1	150.5	585	Lower Saprolite		
RRMRB128	15	17	2	85.7	166.4	18.5	71.4	13.1	2.9	12.9	1.9	11.1	2.1	5.9	0.8	5.4	0.8	78.4	477	Lower Saprolite		
RRMRB128	17	19	2	70.0	160.9	16.0	59.0	11.8	2.7	11.2	1.6	9.7	1.9	5.8	0.7	4.5	0.7	63.1	420	Lower Saprolite		
RRMRB128	19	21	2	76.2	185.5	17.0	63.6	12.5	2.7	10.8	1.5	9.1	1.7	4.7	0.7	3.9	0.5	54.2	445	Lower Saprolite	16	587
RRMRB129	0	2	2	92.3	545.4	21.9	78.1	13.6	2.4	11.6	1.7	10.1	1.9	5.6	0.8	5.4	0.9	51.9	844	Hardcap		
RRMRB129	2	3	1	118.5	1443.4	26.8	88.4	14.8	2.5	11.5	1.9	10.3	1.9	6.0	0.9	5.6	0.8	46.5	1780	Hardcap		
RRMRB129	3	4	1	114.8	2149.7	27.1	90.4	15.9	2.6	11.0	1.7	10.5	1.9	5.2	0.9	5.6	0.8	49.5	2488	Transition		
RRMRB129	4	6	2	107.9	471.7	23.3	79.4	12.8	2.3	10.0	1.4	8.3	1.4	4.4	0.6	4.2	0.6	45.8	774	Clay		
RRMRB129	6	8	2	102.3	315.7	22.9	79.5	12.1	2.1	8.9	1.2	6.5	1.2	3.6	0.5	3.1	0.5	38.1	598	Clay		
RRMRB129	8	10	2	135.5	335.4	31.7	106.3	17.6	2.4	10.8	1.4	7.4	1.3	3.6	0.5	3.5	0.5	40.4	698	Upper Saprolite		
RRMRB129	10	12	2	214.6	445.9	49.4	165.0	25.9	3.3	16.5	2.0	10.8	1.9	5.0	0.7	4.3	0.6	59.1	1005	Upper Saprolite		
RRMRB129	12	14	2	164.8	334.1	38.9	127.7	21.2	2.8	14.6	1.9	10.0	1.8	5.1	0.6	4.1	0.6	54.1	782	Upper Saprolite		
RRMRB129	14	16	2	138.4	298.5	31.9	111.7	18.5	2.6	12.0	1.6	8.4	1.6	4.7	0.6	3.7	0.6	48.8	684	Upper Saprolite		
RRMRB129	16	18	2	174.7	364.8	42.2	138.2	23.2	3.1	15.6	2.1	10.6	2.0	5.6	0.7	4.5	0.6	62.6	851	Upper Saprolite		
RRMRB129	18	20	2	161.3	329.2	37.5	132.4	21.6	3.0	16.0	2.0	11.0	2.0	5.5	0.8	4.7	0.6	61.8	789	Upper Saprolite		
RRMRB129	20	22	2	179.4	363.6	41.8	137.6	22.0	3.1	13.7	1.8	9.6	1.6	4.7	0.6	4.0	0.6	50.0	834	Upper Saprolite		
RRMRB129	22	24	2	167.1	334.1	38.8	139.4	23.1	3.2	16.6	2.1	11.0	2.1	6.0	0.8	5.2	0.7	65.5	816	Upper Saprolite		
RRMRB129	24	26	2	156.6	330.4	36.7	129.5	22.1	2.8	15.6	2.0	10.7	2.0	5.4	0.8	4.8	0.7	61.1	781	Upper Saprolite		
RRMRB129	26	27	1	167.1	334.1	38.5	135.3	21.7	2.9	15.2	1.8	9.9	1.9	5.2	0.7	4.4	0.6	57.0	796	Upper Saprolite		
RRMRB129	27	28	1	143.7	308.3	32.9	116.6	19.5	2.7	13.5	1.8	9.1	1.8	4.7	0.6	4.4	0.6	50.9	711	Lower Saprolite	24	781
RRMRB130	0	2	2	47.9	1008.5	10.9	38.0	6.9	1.2	5.6	1.0	5.4	1.0	3.1	0.5	3.4	0.5	26.4	1160	Hardcap		
RRMRB130	2	3	1	83.7	470.5	17.6	62.5	10.1	2.1	8.0	1.2	7.4	1.3	4.1	0.7	4.5	0.7	41.3	716	Transition		
RRMRB130	3	4	1	126.1	409.1	29.6	104.3	17.0	3.1	12.0	1.8	9.9	2.0	6.0	0.9	6.2	1.0	59.4	788	Clay		
RRMRB130	4	6	2	133.7	362.4	31.5	107.3	17.2	3.4	12.6	1.9	10.3	2.1	5.9	0.9	5.6	0.9	59.3	755	Clay		
RRMRB130	6	8	2	129.0	324.3	31.9	102.8	15.9	3.4	10.2	1.4	7.4	1.5	4.0	0.6	3.9	0.6	41.3	678	Clay		
RRMRB130	8	10	2	129.0	275.2	31.9	107.9	17.2	3.5	11.1	1.5	8.2	1.5	4.3	0.5	3.8	0.6	41.7	638	Upper Saprolite		
RRMRB130	10	12	2	151.3	347.6	37.9	133.6	21.1	4.4	14.1	1.8	9.6	1.8	4.5	0.6	4.0	0.6	51.3	784	Upper Saprolite		
RRMRB130	12	14	2	167.7	335.4	42.2	148.1	24.2	4.8	16.7	2.2	11.2	2.2	5.8	0.7	4.6	0.7	61.2	828	Upper Saprolite		
RRMRB130	14	16	2	160.7	307.1	39.6	142.9	23.3	4.3	16.0	2.0	10.7	2.0	5.4	0.8	4.0	0.7	61.8	781	Upper Saprolite		
RRMRB130	16	17	1	129.6	281.3	31.7	107.4	17.7	3.3	12.0	1.5	8.3	1.4	3.9	0.5	3.2	0.5	43.9	646	Upper Saprolite		
RRMRB130	17	19	2	115.6	245.7	27.4	96.0	15.8	3.0	10.1	1.4	6.7	1.3	3.3	0.4	2.9	0.5	38.1	568	Lower Saprolite	16	719
RRMRB131	0	2	2	46.9	230.9	11.0	39.1	7.2	1.4	6.5	1.1	6.6	1.3	3.8	0.6	3.8	0.6	35.8	396	Hardcap		
RRMRB131	2	4	2	38.9	285.0	9.6	34.4	5.9	1.2	5.0	0.8	4.9	1.0	3.1	0.5	3.0	0.4	26.3	420	Transition		
RRMRB131	4	5	1	86.7	277.6	19.7	70.8	11.9	2.0	10.1	1.4	8.0	1.7	4.9	0.7	4.9	0.7	49.3	550	Clay		
RRMRB131	5	7	2	78.9	152.3	17.6	63.9	11.2	2.0	9.4	1.3	7.5	1.7	4.8	0.7	4.6	0.6	47.2	404	Upper Saprolite	3	453
RRMRB131	7	9	2	58.4	93.5	12.9	44.9	8.7	1.5	7.3	1.2	6.4	1.3	3.8	0.6	3.9	0.5	39.5	284	Upper Saprolite		
RRMRB131	9	10	1	44.4	87.8	10.1	36.6	6.4	1.3	5.6	0.9	5.0	1.1	3.3	0.4	3.0	0.4	32.5	239	Upper Saprolite		
RRMRB131	10	11	1	21.6	41.4	4.8	17.5	3.2	0.6	2.6	0.4	2.4	0.5	1.4	0.2	1.5	0.2	15.7	114	Upper Saprolite		
RRMRB131	11	13	2	46.4	68.3	10.9	38.7	7.0	1.5	5.6	0.8	4.4	0.9	2.7	0.4	2.5	0.3	27.3	218	Upper Saprolite		
RRMRB131	13	15	2	83.4	111.8	19.3	68.2	11.9	2.6	8.8	1.2	5.9	1.2	3.2	0.4	2.8	0.4	36.2	357	Upper Saprolite		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	>200ppm TREO-CeO_2 Interval Length (m)	>200ppm TREO-CeO_2 Interval TREO ppm
RRMRB131	15	17	2	76.6	105.0	17.9	62.9	10.7	2.4	8.1	1.1	5.7	1.0	2.9	0.4	2.3	0.4	32.3	330	Upper Saprolite		
RRMRB131	17	18	1	59.1	84.1	13.8	50.4	8.1	1.8	6.6	0.9	4.6	1.0	2.7	0.4	2.4	0.4	30.1	266	Upper Saprolite		
RRMRB131	18	19	1	67.9	107.0	15.5	55.4	10.1	2.1	7.7	1.0	5.3	1.1	2.8	0.4	2.4	0.4	30.5	310	Upper Saprolite		
RRMRB131	19	21	2	70.5	93.8	16.0	57.7	10.6	2.2	7.7	1.1	5.5	1.1	3.4	0.4	2.8	0.4	33.1	306	Upper Saprolite		
RRMRB131	21	23	2	56.6	102.0	13.0	48.2	8.4	1.7	6.2	0.9	5.0	0.9	2.6	0.4	2.4	0.3	29.0	278	Lower Saprolite		
RRMRB131	23	25	2	67.7	109.1	15.9	56.0	9.3	2.1	7.0	1.0	5.4	1.1	2.9	0.4	2.4	0.4	31.7	312	Lower Saprolite	12	312
RRMRB132	0	2	2	33.7	759.2	7.6	26.7	5.3	0.9	4.3	0.7	4.7	0.9	2.9	0.4	3.0	0.5	25.4	876	Hardcap		
RRMRB132	2	4	2	40.5	633.9	9.2	32.1	5.9	1.1	5.0	0.9	5.0	1.0	3.3	0.5	4.1	0.6	31.9	775	Hardcap		
RRMRB132	4	6	2	44.0	108.2	10.9	37.3	7.0	1.0	5.5	0.8	4.8	1.0	3.1	0.5	3.7	0.6	30.7	259	Gravel		
RRMRB132	6	8	2	54.2	88.7	11.1	39.5	6.2	1.4	5.7	0.8	4.8	1.0	2.8	0.4	2.9	0.5	31.6	252	Upper Saprolite		
RRMRB132	8	10	2	50.2	110.4	10.9	39.2	6.2	1.5	5.5	0.8	4.9	1.0	2.8	0.4	2.6	0.4	31.2	268	Upper Saprolite		
RRMRB132	10	12	2	45.2	98.4	11.9	41.5	7.4	1.2	5.4	0.8	4.1	0.8	2.2	0.3	1.9	0.3	24.1	246	Upper Saprolite		
RRMRB132	12	14	2	39.5	86.0	10.1	36.4	6.4	1.2	5.0	0.7	3.8	0.8	2.5	0.3	2.4	0.4	24.4	220	Upper Saprolite		
RRMRB132	14	16	2	37.9	89.3	9.8	33.4	6.0	1.3	4.9	0.8	4.5	0.9	2.6	0.4	2.5	0.4	29.0	224	Upper Saprolite		
RRMRB132	16	18	2	42.8	79.4	10.7	36.7	6.6	1.5	5.6	0.8	4.6	0.9	2.4	0.3	2.2	0.4	29.8	225	Upper Saprolite		
RRMRB132	18	20	2	52.5	110.8	13.2	45.5	7.7	1.1	5.9	0.9	4.7	0.9	2.4	0.3	2.3	0.4	28.1	277	Upper Saprolite		
RRMRB132	20	22	2	52.7	118.5	12.9	43.2	7.8	0.8	5.9	0.8	4.3	0.8	2.3	0.3	2.2	0.4	26.2	279	Lower Saprolite		
RRMRB132	22	24	2	57.9	127.1	14.1	47.0	8.3	0.9	6.5	0.9	5.0	1.0	2.9	0.4	2.6	0.4	31.1	306	Lower Saprolite		
RRMRB132	24	25	1	59.1	131.4	13.4	47.4	8.6	0.7	6.8	0.8	4.6	0.9	2.5	0.4	2.6	0.4	29.7	309	Lower Saprolite		
RRMRB133	0	2	2	74.9	174.4	17.2	60.3	10.6	1.8	10.1	1.4	7.9	1.6	4.7	0.6	4.7	0.7	48.1	419	Hardcap		
RRMRB133	2	4	2	49.5	173.2	9.7	32.9	6.0	1.0	5.1	0.8	4.8	0.8	3.0	0.4	3.1	0.5	25.7	316	Transition		
RRMRB133	4	5	1	33.9	214.4	6.2	21.8	3.5	0.6	3.0	0.5	3.0	0.6	2.0	0.3	1.8	0.3	19.0	311	Gravel		
RRMRB133	5	7	2	74.6	181.2	15.2	51.9	9.5	1.3	7.2	1.1	6.8	1.3	4.1	0.6	4.2	0.6	40.8	400	Clay		
RRMRB133	7	9	2	64.9	132.1	13.7	49.0	7.7	1.6	7.2	1.1	6.4	1.3	4.3	0.5	3.4	0.6	40.1	334	Clay	4	367
RRMRB133	9	11	2	58.5	96.8	12.7	45.1	7.2	1.3	5.9	1.0	6.1	1.1	3.3	0.5	3.3	0.5	34.2	278	Upper Saprolite		
RRMRB133	11	12	1	58.5	115.7	13.1	45.8	8.2	1.4	6.4	0.8	4.8	1.0	2.8	0.4	2.7	0.4	30.4	292	Upper Saprolite		
RRMRB133	12	14	2	54.7	114.7	13.3	44.6	7.7	0.9	4.8	0.6	3.0	0.6	1.6	0.2	1.6	0.2	18.8	267	Upper Saprolite		
RRMRB133	14	16	2	65.2	126.5	15.6	52.6	8.8	1.2	6.2	0.8	4.0	0.7	1.9	0.3	1.9	0.3	24.9	311	Upper Saprolite		
RRMRB133	16	18	2	44.2	84.4	10.4	37.2	6.5	1.5	5.7	0.8	3.5	0.7	2.0	0.3	2.0	0.3	24.9	224	Upper Saprolite		
RRMRB133	18	20	2	47.9	90.9	11.5	40.4	7.7	1.2	5.5	0.7	3.5	0.7	1.9	0.3	1.9	0.3	24.8	239	Upper Saprolite		
RRMRB133	20	22	2	43.7	98.9	10.8	36.2	6.4	1.2	5.0	0.7	3.5	0.8	2.1	0.3	1.8	0.3	23.5	235	Upper Saprolite		
RRMRB133	22	24	2	44.3	78.9	9.9	37.7	6.6	1.4	5.6	0.8	4.3	0.8	2.3	0.3	2.2	0.3	28.2	224	Upper Saprolite		
RRMRB133	24	25	1	45.9	88.4	10.5	36.3	6.3	1.3	5.7	0.7	4.0	0.8	2.1	0.3	2.1	0.3	27.3	232	Upper Saprolite		
RRMRB134	0	2	2	48.6	332.9	8.2	28.1	5.2	1.0	3.8	0.7	4.1	0.7	2.3	0.4	2.3	0.4	21.8	461	Soil		
RRMRB134	2	4	2	40.2	155.4	8.9	30.3	5.8	0.9	4.4	0.8	4.2	0.8	2.5	0.3	2.7	0.4	24.4	282	Gravel		
RRMRB134	4	5	1	64.4	136.4	14.7	50.9	8.1	1.6	7.2	1.0	5.8	1.1	3.4	0.5	3.3	0.5	35.8	335	Clay		
RRMRB134	5	7	2	48.0	74.2	10.0	35.3	5.3	1.1	4.6	0.7	3.4	0.8	2.0	0.3	2.0	0.3	24.9	213	Upper Saprolite		
RRMRB134	7	9	2	32.5	59.3	7.2	24.8	3.7	0.8	3.2	0.5	2.3	0.5	1.3	0.2	1.3	0.2	15.9	154	Upper Saprolite		
RRMRB134	9	11	2	37.3	90.9	8.3	28.7	4.1	0.9	3.2	0.4	2.3	0.4	1.3	0.2	1.0	0.2	14.0	193	Upper Saprolite		
RRMRB134	11	13	2	45.0	94.1	10.0	33.1	5.1	0.9	3.0	0.4	1.9	0.4	0.9	0.1	1.0	0.1	11.7	208	Upper Saprolite		
RRMRB134	13	15	2	73.2	149.3	17.0	54.6	7.7	1.0	4.2	0.5	2.2	0.4	1.2	0.1	1.2	0.2	14.7	327	Upper Saprolite		
RRMRB134	15	17	2	75.9	148.0	17.9	55.2	8.4	0.9	4.5	0.6	2.5	0.4	1.2	0.2	1.0	0.2	14.0	331	Lower Saprolite		
RRMRB134	17	19	2	51.5	113.0	11.9	39.8	6.0	0.7	3.7	0.4	2.2	0.3	0.9	0.1	0.8	0.1	10.9	242	Lower Saprolite		
RRMRB134	19	21	2	37.1	76.9	8.6	29.0	4.2	0.7	2.5	0.3	1.6	0.3	0.7	0.1	0.8	0.1	9.7	173	Lower Saprolite		
RRMRB135	0	2	2	45.0	198.4	9.9	33.4	6.4	1.2	5.1	0.8	4.9	1.0	2.9	0.4	3.0	0.5	28.8	342	Soil		
RRMRB135	2	4	2	32.0	121.1	6.5	23.1	4.0	0.8	3.2	0.5	2.8	0.6	1.8	0.3	2.0	0.3	17.5	217	Gravel		
RRMRB135	4	5	1	28.7	72.5	6.0	21.7	3.6	0.7	3.3	0.4	2.6	0.6	1.6	0.3	1.8	0.3	17.5	162	Transition		
RRMRB135	5	7	2	29.2	59.8	6.1	23.0	3.5	0.6	2.9	0.4	2.2	0.5	1.5	0.2	1.7	0.3	15.7	148	Clay		
RRMRB135	7	8	1	23.7	36.5	5.1	17.5	2.8	0.7	2.5	0.3	2.0	0.5	1.3	0.2	1.3	0.2	13.2	108	Upper Saprolite		
RRMRB135	8	10	2	49.7	49.6	10.8	36.7	5.8	1.1	4.9	0.7	3.8	0.7	2.2	0.3	2.0	0.3	24.9	194	Upper Saprolite		
RRMRB135	10	12	2	34.7	57.2	8.4	28.5	4.5	1.0	3.6	0.5	2.5	0.5	1.5	0.2	1.5	0.2	16.4	161	Upper Saprolite		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	>200ppm TREO-CeO_2 Interval Length (m)	TREO ppm
RRMRB135	12	14	2	42.3	85.9	9.8	33.4	5.2	0.9	3.5	0.5	2.1	0.5	1.2	0.2	1.1	0.2	14.2	201	Upper Saprolite		
RRMRB135	14	16	2	57.5	116.0	12.5	41.1	5.9	1.0	4.1	0.5	2.2	0.4	1.3	0.2	1.3	0.2	14.2	258	Upper Saprolite		
RRMRB135	16	17	1	62.9	119.0	13.8	47.1	7.3	1.3	4.8	0.6	3.1	0.6	1.5	0.2	1.5	0.2	18.0	282	Lower Saprolite		
RRMRB135	17	19	2	41.5	86.2	9.0	30.2	5.0	0.9	3.0	0.5	2.4	0.5	1.4	0.2	1.3	0.2	14.2	196	Lower Saprolite		
RRMRB135	19	20	1	49.0	96.2	10.8	36.2	6.1	1.0	4.0	0.5	3.2	0.5	1.5	0.2	1.5	0.2	18.3	229	Lower Saprolite		
RRMRB136	0	2	2					8.4			1.1				0.5	4.0		35.8		Soil		
RRMRB136	2	4	2	34.6	644.9	8.2	28.9	5.1	1.1	4.8	0.8	5.2	0.9	2.9	0.5	3.0	0.5	24.6	766	Clay		
RRMRB136	4	6	2	31.7	133.3	7.6	26.2	5.0	0.9	4.0	0.7	4.3	0.8	2.7	0.4	2.7	0.4	26.3	247	Gravel		
RRMRB136	6	8	2	43.0	135.1	9.9	36.5	7.6	1.3	6.4	1.1	6.6	1.3	4.1	0.6	4.1	0.6	36.8	295	Upper Saprolite		
RRMRB136	8	10	2	36.7	55.0	9.0	33.8	7.4	1.6	6.2	1.0	6.8	1.3	4.1	0.7	4.2	0.6	38.0	207	Upper Saprolite		
RRMRB136	10	11	1	50.3	63.0	11.5	44.3	9.6	2.1	9.5	1.6	10.5	2.1	6.4	0.9	6.4	0.9	64.3	284	Upper Saprolite		
RRMRB136	11	13	2	62.7	45.5	15.3	60.3	12.1	3.5	14.2	2.4	15.4	3.1	9.2	1.4	9.5	1.4	91.7	348	Upper Saprolite		
RRMRB136	13	15	2	74.4	23.3	17.8	75.6	17.9	4.6	21.0	3.4	20.3	3.9	11.4	1.6	9.6	1.4	126.1	412	Upper Saprolite		
RRMRB136	15	16	1	38.1	27.5	9.4	37.2	9.0	2.6	11.0	1.9	11.5	2.5	7.0	1.0	6.7	1.0	75.2	242	Upper Saprolite		
RRMRB136	16	18	2	40.7	60.1	10.2	39.1	8.9	2.4	10.8	1.6	11.0	2.1	6.4	0.8	6.3	0.9	65.9	267	Lower Saprolite	8	322
RRMRB136	18	20	2	30.0	35.6	7.8	32.2	7.8	2.2	9.6	1.6	9.6	1.9	6.0	0.9	5.5	0.9	62.0	214	Lower Saprolite		
RRMRB136	20	22	2	18.1	32.1	5.2	21.1	5.7	1.7	6.7	1.1	7.3	1.5	4.5	0.6	4.2	0.7	45.8	156	Saprock		
RRMRB137	0	2	2	35.7	669.5	8.3	29.6	5.6	1.1	4.7	0.8	4.2	0.8	2.2	0.4	2.6	0.4	23.7	790	Hardcap		
RRMRB137	2	4	2	33.1	134.5	7.2	23.4	4.3	0.8	3.7	0.6	3.3	0.7	2.0	0.3	2.4	0.4	20.8	237	Transition		
RRMRB137	4	6	2	53.2	113.5	10.5	38.5	6.2	1.1	5.1	0.8	4.1	0.9	2.7	0.4	2.6	0.4	29.6	270	Clay		
RRMRB137	6	8	2	34.1	61.3	7.2	26.8	5.1	0.8	3.6	0.5	3.3	0.6	1.9	0.3	2.0	0.3	22.6	171	Upper Saprolite		
RRMRB137	8	9	1	37.2	62.5	8.6	30.4	5.2	0.9	4.1	0.6	3.7	0.7	2.1	0.3	2.1	0.3	24.1	183	Upper Saprolite		
RRMRB137	9	10	1	16.8	35.9	3.2	10.4	2.0	0.5	1.6	0.2	1.6	0.2	1.0	0.1	1.1	0.2	10.3	85	Upper Saprolite		
RRMRB137	10	12	2	24.2	56.5	5.6	19.7	3.4	0.8	2.8	0.5	2.7	0.5	1.4	0.2	1.6	0.3	15.2	135	Upper Saprolite		
RRMRB137	12	14	2	35.1	78.2	9.0	33.5	5.2	1.4	4.2	0.6	3.2	0.6	1.8	0.3	1.7	0.3	18.5	193	Upper Saprolite		
RRMRB137	14	16	2	49.6	114.2	12.4	45.1	8.0	1.8	5.9	0.8	4.0	0.7	2.0	0.3	1.9	0.2	22.6	270	Upper Saprolite		
RRMRB137	16	18	2	49.0	107.1	12.3	44.6	7.9	1.5	5.3	0.7	3.6	0.6	1.8	0.2	1.5	0.2	21.0	257	Upper Saprolite		
RRMRB137	18	20	2	46.6	103.8	11.8	42.7	7.1	1.5	5.0	0.7	3.4	0.6	1.7	0.2	1.3	0.2	20.3	247	Upper Saprolite		
RRMRB137	20	22	2	34.0	65.5	8.2	30.6	4.9	1.1	3.9	0.5	2.8	0.4	1.3	0.2	1.2	0.2	16.3	171	Lower Saprolite		
RRMRB137	22	24	2	31.2	71.4	7.7	28.0	5.1	1.2	3.7	0.5	2.6	0.5	1.3	0.2	1.5	0.2	15.4	170	Lower Saprolite		
RRMRB138	0	2	2	73.1	156.6	17.0	59.0	11.5	1.9	10.4	1.6	9.5	1.9	6.0	0.8	5.9	0.9	58.7	415	Soil		
RRMRB138	2	4	2	52.7	581.0	12.5	42.7	7.9	1.2	6.3	1.0	6.8	1.2	3.6	0.5	4.0	0.6	35.4	757	Hardcap		
RRMRB138	4	6	2	72.9	269.0	15.4	54.0	9.8	1.5	8.0	1.2	7.8	1.5	4.3	0.6	4.6	0.7	49.5	501	Clay		
RRMRB138	6	8	2	89.5	235.2	17.0	60.5	10.5	1.7	8.3	1.3	8.2	1.7	5.0	0.7	5.4	0.7	52.4	498	Clay		
RRMRB138	8	9	1	63.4	133.9	14.3	50.7	9.0	1.4	7.7	1.1	7.5	1.4	4.5	0.6	4.2	0.6	45.0	345	Clay	5	469
RRMRB138	9	10	1	56.5	173.8	11.8	40.8	7.4	1.2	6.3	1.0	6.1	1.2	3.5	0.5	3.6	0.5	37.8	352	Upper Saprolite		
RRMRB138	10	12	2	48.4	119.5	9.9	35.6	6.0	1.0	5.3	0.8	5.0	1.0	2.8	0.5	2.9	0.4	31.5	271	Upper Saprolite		
RRMRB138	12	14	2	45.9	137.6	11.0	38.6	6.6	1.0	5.4	0.8	4.5	0.9	2.7	0.4	2.4	0.4	27.6	286	Upper Saprolite		
RRMRB138	14	16	2	43.7	116.6	10.0	34.9	6.2	1.0	5.1	0.7	4.7	0.8	2.7	0.3	2.5	0.3	27.2	257	Upper Saprolite		
RRMRB138	16	18	2	53.9	112.4	12.4	42.8	7.2	1.1	5.6	0.8	5.2	0.9	2.9	0.4	2.6	0.4	29.0	278	Upper Saprolite		
RRMRB138	18	20	2	46.3	136.4	10.7	37.0	7.1	1.1	5.2	0.7	4.3	0.9	2.5	0.3	2.4	0.4	26.9	282	Upper Saprolite		
RRMRB138	20	22	2	55.2	110.9	13.1	46.5	8.4	1.2	5.6	0.9	5.3	0.9	2.7	0.4	2.5	0.4	32.5	287	Upper Saprolite		
RRMRB138	22	24	2	52.5	94.2	12.4	43.5	7.8	1.3	5.9	0.9	5.0	0.9	2.8	0.4	2.6	0.4	30.0	261	Upper Saprolite		
RRMRB139	0	2	2	106.5	226.0	23.0	81.3	13.9	2.0	11.9	1.9	10.7	2.0	6.3	0.8	6.0	0.9	64.8	558	Soil		
RRMRB139	2	4	2	63.1	289.9	13.9	50.0	8.8	1.1	6.4	1.0	6.2	1.3	3.6	0.5	4.1	0.6	38.2	489	Hardcap		
RRMRB139	4	6	2	88.9	237.1	18.2	61.7	10.5	1.3	7.8	1.2	7.8	1.5	4.5	0.6	4.6	0.7	47.1	494	Clay		
RRMRB139	6	8	2	104.8	179.3	22.5	76.2	12.2	1.7	10.2	1.6	9.0	1.8	5.2	0.7	5.1	0.7	57.8	489	Clay		
RRMRB139	8	10	2	126.7	109.5	28.8	96.0	15.1	2.0	10.3	1.5	7.9	1.4	4.0	0.5	3.9	0.5	45.5	454	Upper Saprolite		
RRMRB139	10	12	2	110.7	77.6	24.8	81.3	12.8	1.9	8.6	1.1	6.2	1.1	3.0	0.4	2.9	0.4	33.1	366	Upper Saprolite		
RRMRB139	12	13	1	53.8	49.5	10.7	37.2	6.0	1.1	4.4	0.6	3.5	0.7	1.8	0.3	1.9	0.3	20.3	192	Upper Saprolite		
RRMRB139	13	14	1	116.2	84.0	26.7	91.6	15.2	1.9	8.9	1.2	6.2	1.1	2.9	0.4	2.6	0.4	32.5	392	Lower Saprolite	10	419

Hole ID	From m	To m	Int. m	La_2O_3 ppm	CeO_2 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	>200ppm $TREO-CeO_2$ Interval Length (m)	
																					Length (m)	TREO ppm
RRMRB139	14	16	2	80.2	96.4	18.4	60.2	9.3	1.3	6.5	0.8	4.0	0.7	1.8	0.3	1.6	0.3	20.4	302	Saprock		
RRMRB139	16	18	2	55.9	86.2	12.6	42.2	7.1	1.3	5.4	0.7	3.8	0.7	1.7	0.3	1.6	0.3	20.7	240	Saprock		
RRMRB140	0	2	2	38.0	213.1	7.7	26.2	4.6	0.5	4.1	0.8	5.1	1.1	3.5	0.5	3.8	0.6	36.7	346	Hardcap		
RRMRB140	2	4	2	63.1	218.7	13.6	47.2	8.3	1.1	7.2	1.1	7.5	1.6	4.7	0.7	5.1	0.8	49.0	430	Clay		
RRMRB140	4	6	2	43.6	97.4	9.8	34.3	7.4	0.8	9.0	1.7	13.5	3.0	9.9	1.7	11.7	1.9	109.0	355	Clay		
RRMRB140	6	8	2	34.7	61.7	7.6	26.5	5.6	0.6	7.2	1.5	11.1	2.6	8.5	1.4	9.2	1.5	90.7	271	Upper Saprolite	6	352
RRMRB140	8	10	2	45.0	89.6	10.1	32.7	6.2	0.6	6.3	1.1	7.9	1.7	5.4	1.0	6.3	1.0	61.7	277	Upper Saprolite		
RRMRB140	10	12	2	59.5	116.2	13.6	44.4	8.5	0.7	5.6	0.8	4.6	0.9	2.5	0.4	2.5	0.4	29.2	290	Upper Saprolite		
RRMRB140	12	14	2	58.2	104.2	13.6	44.3	7.5	0.8	6.2	0.9	4.6	0.9	2.6	0.3	2.5	0.4	29.8	277	Upper Saprolite		
RRMRB140	14	16	2	50.1	89.2	11.9	37.9	7.1	0.7	5.2	0.7	4.2	0.8	2.5	0.4	2.1	0.3	26.3	239	Upper Saprolite		
RRMRB140	16	18	2	59.2	124.1	14.1	45.6	8.7	0.8	6.2	0.8	4.5	0.8	2.3	0.4	2.2	0.4	26.5	297	Upper Saprolite		
RRMRB141	0	2	2	41.8	470.5	9.6	35.0	6.5	1.0	5.5	1.0	5.1	1.0	3.2	0.5	3.4	0.6	33.0	618	Hardcap		
RRMRB141	2	4	2	66.1	315.7	14.5	50.3	8.8	1.4	7.4	1.2	7.1	1.4	4.3	0.7	4.7	0.7	44.4	529	Clay		
RRMRB141	4	5	1	97.6	219.3	23.7	80.4	13.2	2.2	11.9	1.9	11.2	2.2	6.4	1.0	6.2	1.0	71.4	550	Clay		
RRMRB141	5	7	2	82.9	137.6	19.6	68.2	11.5	1.9	9.5	1.5	9.2	2.0	5.5	0.9	5.3	0.8	59.6	416	Upper Saprolite		
RRMRB141	7	9	2	110.5	93.0	24.5	88.8	14.8	2.4	10.6	1.5	9.1	1.8	5.5	0.8	5.4	0.8	60.4	430	Upper Saprolite		
RRMRB141	9	11	2	110.5	87.6	24.0	83.6	14.1	2.3	11.4	1.5	8.5	1.7	4.6	0.7	4.6	0.6	56.3	412	Upper Saprolite		
RRMRB141	11	13	2	77.3	74.9	16.1	56.6	10.5	2.1	9.8	1.4	8.4	1.6	4.5	0.7	4.1	0.7	56.0	325	Upper Saprolite	11	434
RRMRB141	13	15	2	41.5	64.9	9.5	31.1	6.2	1.2	5.6	1.0	5.9	1.1	3.4	0.5	3.1	0.5	39.6	215	Upper Saprolite		
RRMRB141	15	17	2	34.9	52.0	8.0	27.2	4.7	0.9	4.5	0.8	4.9	1.0	3.0	0.5	2.9	0.5	34.4	180	Lower Saprolite		
RRMRB141	17	19	2	47.1	81.2	10.1	34.8	6.6	1.3	5.5	0.8	5.6	1.1	2.9	0.5	2.8	0.4	34.0	235	Lower Saprolite		
RRMRB141	19	20	1	39.2	88.2	8.9	30.4	5.9	1.1	4.9	0.7	4.4	0.9	2.6	0.4	2.5	0.4	29.8	220	Lower Saprolite		
RRMRB142	0	2	2	73.8	194.1	17.9	64.0	12.7	1.8	10.6	1.7	10.6	2.0	6.5	1.0	6.4	1.0	64.1	468	Soil		
RRMRB142	2	4	2	52.1	359.9	12.4	43.7	8.4	1.2	7.3	1.2	7.8	1.5	4.9	0.7	5.6	0.8	44.4	552	Hardcap		
RRMRB142	4	6	2	63.7	337.8	14.9	51.1	10.1	1.5	8.7	1.4	8.7	1.8	5.3	0.9	5.9	0.9	53.7	566	Transition		
RRMRB142	6	7	1	84.3	270.2	19.9	65.8	12.9	1.8	11.0	1.8	10.9	2.2	6.5	1.1	7.2	1.0	69.7	566	Clay		
RRMRB142	7	8	1	80.2	144.3	18.4	63.2	12.2	1.6	9.6	1.5	9.1	1.8	5.3	0.9	5.8	1.0	59.4	415	Upper Saprolite		
RRMRB142	8	10	2	59.9	60.4	13.8	49.0	8.4	1.2	6.7	1.0	6.6	1.2	4.0	0.6	4.1	0.6	45.8	263	Upper Saprolite		
RRMRB142	10	12	2	82.0	60.2	18.8	66.4	11.7	1.7	10.3	1.4	8.7	1.7	5.0	0.8	5.2	0.8	61.5	336	Upper Saprolite		
RRMRB142	12	14	2	207.6	138.2	48.1	159.2	28.9	4.6	26.3	4.0	24.3	4.9	14.5	2.2	13.2	2.4	185.4	864	Upper Saprolite		
RRMRB142	14	16	2	430.4	141.9	106.8	352.3	64.4	9.5	47.6	6.7	37.5	6.3	17.2	2.4	15.1	2.4	203.8	1444	Lower Saprolite		
RRMRB142	16	18	2	148.4	104.3	32.3	108.0	21.6	2.9	18.5	2.8	16.2	3.0	8.4	1.3	8.0	1.2	101.8	579	Lower Saprolite		
RRMRB142	18	20	2	127.2	122.0	28.4	100.3	16.4	2.4	15.6	2.4	13.4	2.4	6.8	1.0	6.6	1.1	84.1	530	Lower Saprolite		
RRMRB142	20	22	2	145.4	116.6	32.7	110.7	21.8	3.0	17.8	2.7	15.4	3.0	8.8	1.3	8.3	1.3	98.3	587	Lower Saprolite		
RRMRB142	22	24	2	90.9	107.1	20.4	68.8	13.5	1.6	12.0	1.8	10.5	2.0	5.7	0.9	6.0	0.9	68.6	411	Lower Saprolite	18	612
RRMRB143	0	2	2	57.8	193.5	12.4	44.3	8.5	1.1	7.2	1.1	6.7	1.4	4.2	0.6	4.1	0.6	40.8	384	Hardcap		
RRMRB143	2	4	2	35.2	384.5	7.2	25.8	5.1	0.8	3.8	0.7	4.2	0.8	2.5	0.4	2.8	0.4	25.8	500	Hardcap		
RRMRB143	4	5	1	63.6	204.5	13.9	45.4	7.8	1.1	6.5	1.1	7.0	1.4	4.1	0.7	4.7	0.7	45.8	408	Transition		
RRMRB143	5	7	2	78.8	171.4	17.0	56.7	10.6	1.6	8.8	1.4	8.3	1.7	5.3	0.8	5.5	0.8	56.9	426	Clay	2	426
RRMRB143	7	9	2	38.6	79.7	8.4	28.3	5.9	0.6	4.4	0.7	4.4	0.9	3.0	0.5	3.2	0.5	30.7	210	Clay		
RRMRB143	9	11	2	44.0	87.8	10.0	31.8	6.3	0.7	5.0	0.8	5.1	1.1	3.2	0.5	3.3	0.6	34.3	235	Upper Saprolite		
RRMRB143	11	13	2	44.7	97.2	10.5	35.5	6.8	0.7	5.7	1.0	5.7	1.2	3.4	0.5	3.8	0.6	37.2	254	Upper Saprolite		
RRMRB143	13	15	2	49.3	101.8	11.8	38.0	6.9	0.6	5.6	1.0	5.9	1.2	3.9	0.6	4.3	0.7	38.2	270	Upper Saprolite		
RRMRB143	15	17	2	52.8	111.3	12.5	40.4	8.2	0.7	6.4	1.0	6.6	1.4	4.3	0.7	4.4	0.7	43.2	294	Upper Saprolite		
RRMRB143	17	19	2	55.2	116.5	13.1	43.7	8.8	0.7	6.1	1.0	6.8	1.3	4.1	0.7	4.8	0.8	45.5	309	Upper Saprolite		
RRMRB143	19	21	2	53.0	114.2	12.5	41.5	9.0	0.7	6.7	1.0	6.6	1.3	4.1	0.6	4.4	0.7	42.4	299	Upper Saprolite		
RRMRB143	21	23	2	57.0	117.8	13.7	44.6	9.2	0.8	7.0	1.2	6.9	1.5	4.6	0.8	4.6	0.8	47.9	318	Upper Saprolite	2	318
RRMRB143	23	24	1	55.1	114.5	13.2	43.3	8.2	0.7	6.4	1.1	5.9	1.3	3.7	0.6	3.9	0.6	39.9	298	Upper Saprolite		

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.*	Rotary Air Blast (RAB) Drilling RAB drill cuttings collected by a specifically designed sample collection tray at the collar of the hole for each measured 1 metre of drill advance. All (100%) of collected sample transferred from tray to individually numbered plastic bag.
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).*	Hole diameter was 10.16cm (4 inch)
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 preferential loss/gain of fine/coarse material.*	Individual 1 metre samples weighed after collection in its plastic sample bag. There is no evidence of grade bias due to sample recovery
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.*	RAB chips geologically logged based on 1 metre drill interval. Logging is qualitative with description of colour, weathering status, alteration, major and minor rock types, texture, grain size, regolith zone 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.*	Sample collected by a tray at the collar of the hole for each 1 metre of drill advance. All (100%) of collected sample transferred from tray to individually numbered plastic bag. Samples are then transferred to a plastic basin an mixed by hand prior to extraction of a 1.5kg sample for geochemical analysis.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>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.</td><td>This sample collection protocol is adequate for the reconnaissance style exploration being conducted.
A geological sample increment is selected and transferred to a chip tray for geological logging and storage.</td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>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, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>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:
<table>
<tr><th>ALS Code</th><th>Description</th></tr>
<tr><td>WEI-21</td><td>Received sample weight</td></tr>
<tr><td>LOG-22</td><td>Sample Login w/o Barcode</td></tr>
<tr><td>DRY-21</td><td>High temperature drying</td></tr>
<tr><td>CRU-21</td><td>Crush entire sample</td></tr>
<tr><td>CRU-31</td><td>Fine crushing – 70% <2mm</td></tr>
<tr><td>SPL-22Y</td><td>Split sample – Boyd Rotary Splitter</td></tr>
<tr><td>PUL-31h</td><td>Pulverise 750g to 85% passing 75 micron</td></tr>
<tr><td>CRU-QC</td><td>Crushing QC Test</td></tr>
<tr><td>PUL-QC</td><td>Pulverising QC test</td></tr>
</table>
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:
<table>
<tr><td>Ba</td><td>Ce</td><td>Cr</td><td>Cs</td><td>Dy</td><td>Er</td><td>Eu</td><td>Ga</td></tr>
<tr><td>Gd</td><td>Hf</td><td>Ho</td><td>La</td><td>Lu</td><td>Nb</td><td>Nd</td><td>Pr</td></tr>
<tr><td>Rb</td><td>Sm</td><td>Sn</td><td>Sr</td><td>Ta</td><td>Tb</td><td>Th</td><td>Tm</td></tr>
<tr><td>U</td><td>V</td><td>W</td><td>Y</td><td>Yb</td><td>Zr</td><td></td><td></td></tr>
</table>
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
Analytical Standards
CRMs AMIS0276 and MUIACREI01 were included in sample batches at a ratio of 1:25 to drill samples submitted. This is an acceptable ratio.
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.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• Duplicates Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by Selecting a separate 1.5kg sample from the composited sample intervals. 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. 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	1.2284	CeO_2
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	1.2082	Pr_6O_{11}
Sm	1.1596	Sm_2O_3
Tb	1.1762	Tb_4O_7
Tm	1.1421	Tm_2O_3
Y	1.2699	Y_2O_3
Yb	1.1387	Yb_2O_3
Sc	1.5338	Sc_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: Note that Y_2O_3 is included in the TREO, HREO and CREO calculation. TREO (Total Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3. HREO (Heavy Rare Earth Oxide) = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + 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_4O_7 + Dy_2O_3 + Y_2O_3 (From U.S. Department of Energy, Critical Materials Strategy, December 2011) LREO (Light Rare Earth Oxide) = La_2O_3 + CeO2 + Pr_6O_{11} + Nd_2O_3 NdPr = Nd_2O_3 + Pr_6O_{11} HREO% of TREO= HREO/TREO x 100 In elemental form the classifications are: Note that Y is included in the TREE, HREE and CREE calculation. TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Y+Lu 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.*	RAB collar locations were surveyed using handheld GPS. For this type of instrument, the general accuracy in x and y coordinates is + 5m. The elevation component of coordinates is variable and may be low accuracy 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.
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.*	RAB reconnaissance drill holes have been drilled on a broad spacing, generally >1km, based on testing radiometric anomalies over a large area
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.*	Orientation of potential mineralisation unknown in this area but assumed to be horizontal as seen in the Makuutu deposit
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 48 hours 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.)

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.* • *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.*	The Makuutu Project is located in the Republic of Uganda. The mineral tenements comprise two (2) granted Retention Licences (RL1693 and RL00007), three (3) Exploration Licences (EL1766, EL00147 and EL00148) and one (1) Exploration Licence application TN03573. All granted licences are in good standing with no known impediments. TN03573 is pending grant with all application requirements met. The Makuutu Rare Earths Project is 100% owned by Rwenzori Rare Metals Limited ("RRM"), a Ugandan registered company. IonicRE currently has earned a 51% shareholding in RRM and may increase its shareholding to 60% by meeting further commitments as follows: 1. IonicRE to fund to completion of a Bankable Feasibility Study (BFS) to earn an additional 9% interest for a cumulative 60% interest in RRM. 2. Milestone payments, payable in cash or IonicRE shares at the election of the Vendor, as follows: a. US$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and b. US$375,000 on conversion of existing licences to mining licences. At any time should IonicRE 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 IonicRE and reclaim all interest earnt by IonicRE.
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. 2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole. The historic exploration has been conducted to a professional standard and is appropriate for the exploration stage of the prospect. 2019-2022: Ionic Rare Earths under agreement with RRM completed 711 core drill holes and processing testwork leading to compilation of a DFS and statement of an ore reserve.
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, Chile, Madagascar and Brazil.

Criteria	JORC Code explanation	Commentary
		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 and mafic rocks. These rocks are considered the original source of the REE which were then accumulated in the sediments (via ionic bonds with the clays) of the basin as the surrounding rocks 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 ionically bonded (adsorbed) or colloidally bonded on to fine particles of aluminosilicate clays (e.g. kaolinite, illite, smectite). The adsorbed and colloidal REE is the target for extraction and production of REO at Makuutu.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	The material information for drill holes relating to this announcement are contained in Appendix 1.
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 200 ppm TREO-Ce_2O_3 was used for data aggregation of significant intervals with a maximum of 2 metres of internal dilution and no top-cuts applied. This lower cut-off is consistent with the marginal cut-off grade estimated and applied in the resource statements on the Makuutu Project 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.
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%. 2020: Testing of composite samples with lower extractions from the 2019 variation testing using increasing rates of acid addition and leach time. Significant increases in extractions were achieved. 2020: Testing of composited samples from two exploration holes east of the Makuutu Central Zone provided an average extraction of TREE-Ce recovery of 41% @ pH1 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, continued resource definition and estimation, regional exploration on adjoining licences and compilation of a Scoping Study.