

16 September 2021

## MAKUUTU PHASE 4 DRILLING TRANCHE 1 ASSAY RESULTS

- **First Tranche of Phase 4 drilling results (50 holes) received confirming notable thick, high-grade and near surface intervals of ionic adsorption clay hosted REEs**
- **Reported holes have all intersected REE mineralised clay above MRE cut-off grade including:**

<b>RRMDD324</b>	<b>8.2 metres at 1,359 ppm TREO from 3.3 metres</b>
<b>RRMDD316</b>	<b>8.4 metres at 1,258 ppm TREO from 2.8 metres</b>
<b>RRMDD320</b>	<b>13.4 metres at 1,232 ppm TREO from 4.0 metres</b>
<b>RRMDD294</b>	<b>8.4 metres at 1,214 ppm TREO from 3.0 metres</b>
<b>RRMDD315</b>	<b>11.2 metres at 1,160 ppm TREO from 2.1 metres</b>
- **A further two (2) Tranches of samples currently at the Perth laboratory with fourth tranche to be dispatched from Uganda in days**
- **Phase 4 program progressing with over 325 holes (6,200 metres) completed**
- **Phase 4 infill drilling results augurs well for updated resource estimate**

Ionic Rare Earths Limited (“**IonicRE**” or “the Company”) (ASX: IXR) is pleased to announce the receipt of assays for Tranche 1 of the Phase 4 drill program in progress at the Makuutu Rare Earths Project (“**Makuutu**”) in Uganda.

Makuutu is a large scale, ionic adsorption clay (IAC) hosted rare earth element (REE) project well supported by existing infrastructure and one of less than a handful of such deposits identified globally.

Drill assay results have been received for the Tranche 1 submission consisting of 50 drill holes, RRMDD280 to 330 (excluding hole RRMDD0326). All holes were drilled to infill the current Makuutu Central Zone East Mineral Resource Estimate (MRE) area on a 200-metre spacing, aimed at

increasing confidence from Inferred to Indicated resource classification. Additionally, new holes have been added around the perimeter of the previously announced MRE which has the potential for a minor increase in the total size of the resource across this area.

This is the first tranche of drilling results from the 7,800 metre Phase 4 drilling program, with a further two tranches currently at the Perth laboratory, and a third in transit to Australia. The Phase 4 program is progressing well, having now completed in excess of 6,200 metres, with all three (3) drill rigs currently active completing the 200 metres spaced infill on the large MRE area I.

All 50 holes reported in this announcement have delivered clay and saprolite mineralisation intersections above the cut-off grade of 200 ppm Total Rare Earth Oxide less CeO<sub>2</sub> (TREO-CeO<sub>2</sub>), consistent with the initial drilling phases (2019 and H1 2020) and the current MRE.

Notable thick, high-grade and near surface intervals reported from the tranche one assay results include:

- RRMDD324 8.2 metres at 1,359 ppm TREO from 3.3 metres
- RRMDD316 8.4 metres at 1,258 ppm TREO from 2.8 metres
- RRMDD317 7.1 metres at 1,238 ppm TREO from 2.8 metres
- RRMDD320 13.4 metres at 1,232 ppm TREO from 4.0 metres
- RRMDD294 8.4 metres at 1,214 ppm TREO from 3.0 metres
- RRMDD315 11.2 metres at 1,160 ppm TREO from 2.1 metres
- RRMDD311 5.2 metres at 1,156 ppm TREO from 2.1 metres
- RRMDD291 7.7 metres at 1,136 ppm TREO from 2.4 metres
- RRMDD300 8.3 metres at 1,120 ppm TREO from 3.6 metres
- RRMDD308 5.8 metres at 1,072 ppm TREO from 3.1 metres
- RRMDD310 6.9 metres at 1,014 ppm TREO from 3.5 metres
- RRMDD313 6.6 metres at 1,008 ppm TREO from 2.0 metres

Ionic Rare Earths Managing Director Mr. Tim Harrison commented:

*“These infill results align well with expectation, given the continuity of the clay previously observed at Makuutu. The thick clay mineralisation in the Makuutu Central Eastern Zone is expected to add substantial grade and tonnage in the Indicated resource classification for the Project as part of the next MRE update expect late Q1 2022, and a key input for the feasibility study expected before October 2022.”*

*“The near surface results with such thick zones of elevated TREO grades observed within these infill results are very positive, inferring potential to have a higher-grade mining inventory earlier in the mine plan for the Project, and potentially leading to a significant positive impact on the economics of the feasibility study.”*

## **Drilling Results**

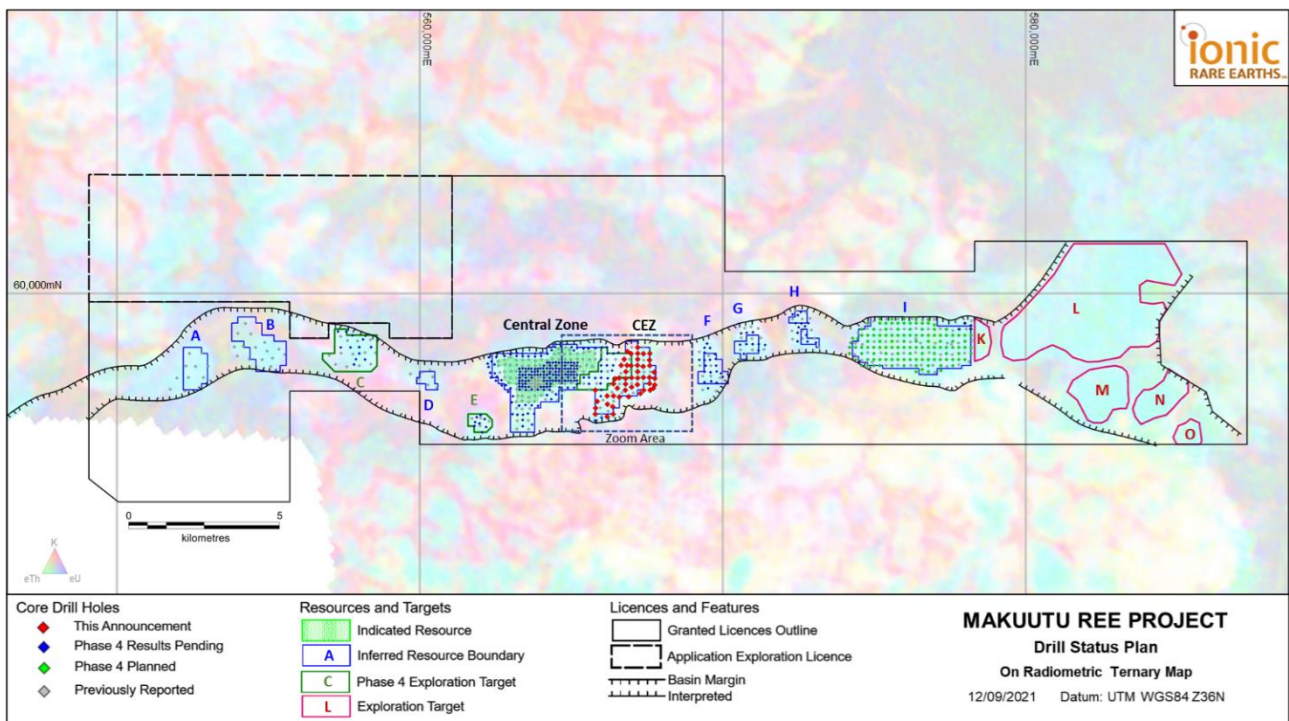
The first tranche of assays have been received from the Makuutu Phase 4 drill program. The aim of the program is to increase MRE confidence in the Central Zone and areas F, G, H and I. In addition,

exploration targets C, E and the area between the Central Zone and Central Zone East have been infill drilled to allow resource estimation of these zones to be supported.

Figure 1 illustrates the drill status over the entire Makuutu Rare Earths Project area, including;

- 1) the hole locations relevant to this announcement, which are shown in red;
- 2) completed Phase 4 holes with assay results pending shown as blue points;
- 3) planned holes that are part of the ongoing Phase 4 program shown in green; and
- 4) all previously reported holes, which are shown in grey.

The drill results reported in Tranche 1 consist of fifty (50) infill drill holes, predominantly from within the current MRE area Central East Zone (CEZ), and some holes drilled outside the resource area to test for resource extensions. The infill holes increase the drill density to a 200-metre grid designed to provide sufficient data to increase resource confidence to Indicated status under JORC guidelines.



**Figure 1: Phase 4 Drill Program status plan showing completed and planned drill holes covering the Makuutu Rare Earths Project with the MRE and target areas.**

Figure 2 shows the locations of the results reported in this announcement within the zoom area of Figure 1. The hole location points are shown as the TREO intercept grade above the MRE cutoff of 200ppm TREO-CeO<sub>2</sub>.

The infill drill program was very successful with all 50 infill drill holes delivering clay and saprolite mineralisation intersections consistent with the initial drilling phases (2019 and H1 2020) on which the current MRE was based. The existing Inferred Resource for the CEZ is 37 million tonnes at 740ppm TREO with the Tranche 1 infill drilling results including some extensions with potential to expand the resource of this zone.

The drilling has provided definition of a core zone within the CEZ resource area with intersection grades all exceeding 800ppm TREO and many exceeding 1,000ppm TREO (refer to Figure 2 red and purple points). Figure 2: Makuutu Central Zone East drill plan with 50 infill drill holes showing hole locations by drill intercept TREO grade and RRMD drill hole ID

The intersections above the MRE cut-off grade of 200 ppm TREO-CeO<sub>2</sub>, from the 50 tranche 1 drill holes are listed in Table 1, which includes results displayed as Total Rare Earth Oxides (TREO), Total Rare Earth Oxide less CeO<sub>2</sub> (TREO-CeO<sub>2</sub>), Heavy Rare Earth Oxides (HREO) and Critical Rare Earth Oxides (CREO) grade. Hole locations are shown in Figure 2.

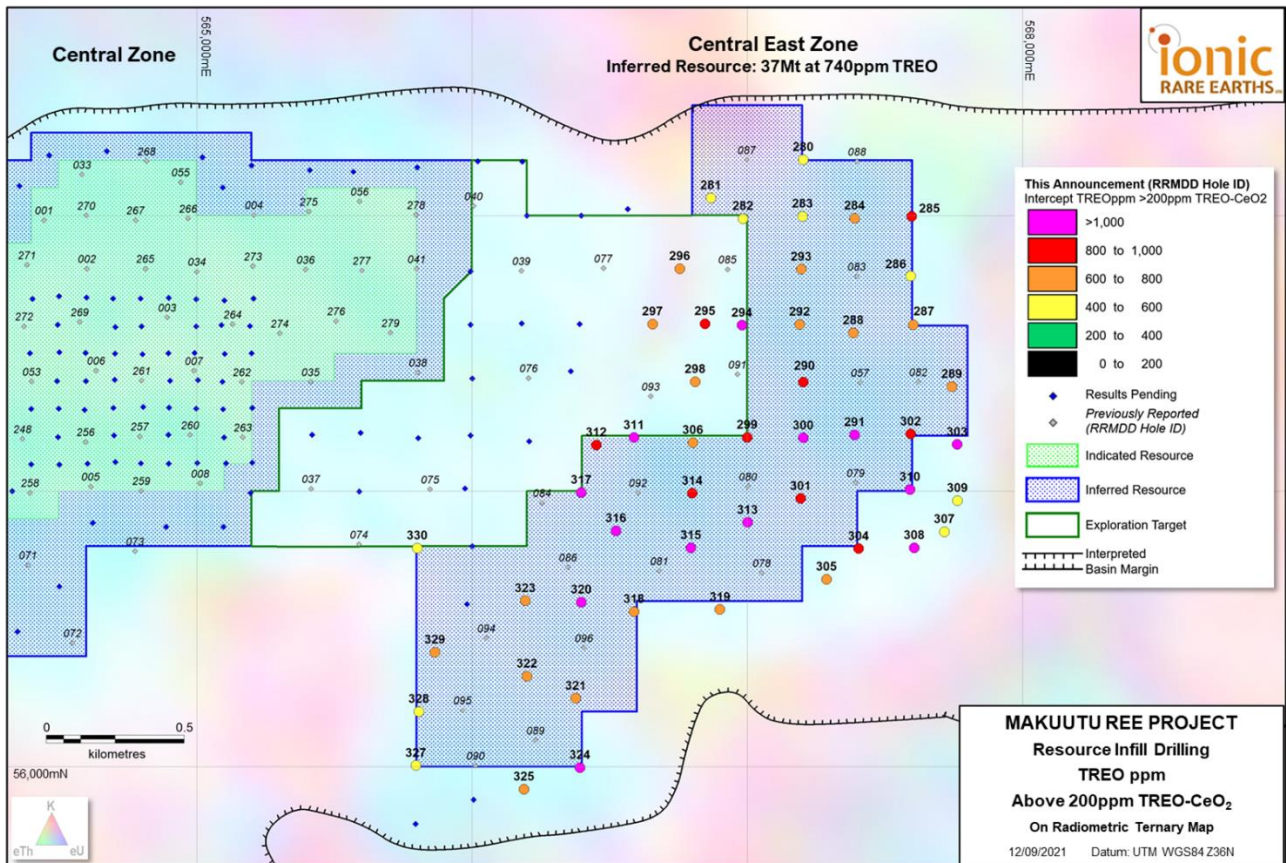


Figure 2: Makuutu Central Zone East drill plan with 50 infill drill holes showing hole locations by drill intercept TREO grade and RRMD drill hole ID

## Drilling Program Update

The Phase 4 drilling program has now completed 325 holes, consisting of 6,200 metres of drilling at Makuutu. The Company has three (3) drill rigs operating on RL00234, progressing through the large heavy rare earth dominant Area I, working through the final allocation of infill drilling as part of the Phase 4 drill program.

The Phase 4 drill program includes 7,800 metres of drilling with the objective of increasing the resource confidence to JORC Indicated status over most of the current resource. The drill program



is the largest undertaken on the Project to date and will be followed by a MRE update currently anticipated to be undertaken in early 2022.

The Phase 4 drill program is expected to deliver a substantial upgrade of resources at Makuutu, with the potential to define up to 250 million tonnes of Indicated Resources at Makuutu to support the Feasibility Study expected to be completed before October 2022.

In addition to the assay samples, several tonnes of metallurgical samples, consisting of individual drill core intervals, are also being delivered from the program to specialised testing laboratories in Australia. Testing of existing and current samples is ongoing.

**Table 1: Infill Drilling Results above MRE cut-off grade of 300ppm TREO-CeO<sub>2</sub>**

Hole ID	Depth From (metres)	Length (metres)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	HREO (ppm)	CREO (ppm)
RRMDD280	2.5	23.6	583	397	125	190
RRMDD281	0.2	4.1	481	278	97	133
RRMDD282	5.4	2.6	425	259	96	128
RRMDD283	3.1	9.1	556	331	113	153
RRMDD284	1.6	9.6	698	401	142	190
RRMDD285	4.1	2.4	851	592	186	277
RRMDD286	2.6	5.6	507	348	116	166
RRMDD287	2.6	3.9	730	467	143	213
RRMDD288	2.4	10.7	800	519	174	245
RRMDD289	2.6	1.8	795	458	128	204
RRMDD290	3.4	8.0	862	572	219	283
RRMDD291	2.4	7.7	1136	682	215	316
RRMDD292	3.9	13.5	796	551	172	255
RRMDD293	2.8	12.5	660	433	163	216
RRMDD294	3.0	8.4	1214	832	268	392
RRMDD295	3.1	5.1	881	595	190	276
RRMDD296	1.7	0.9	683	476	196	239
RRMDD297	7.5	1.9	600	383	160	209
RRMDD298	4.0	5.2	756	536	171	256
RRMDD299	3.7	8.3	853	536	167	249
RRMDD300	3.6	8.3	1120	735	229	342
RRMDD301	3.1	9.4	964	529	160	246
RRMDD302	4.2	6.7	876	558	167	255
RRMDD303	2.4	1.6	1423	994	271	432
RRMDD304	2.3	6.4	984	646	220	323
RRMDD305	3.2	7.5	782	486	136	221
RRMDD306	3.2	11.9	725	457	132	203
RRMDD307	2.4	8.1	511	313	105	148
RRMDD308	3.1	5.8	1072	725	269	367
RRMDD309	2.9	1.2	567	355	131	173
RRMDD310	3.5	6.9	1014	665	232	322
RRMDD311	2.1	5.2	1156	733	197	316
RRMDD312	2.5	1.5	922	562	178	258
RRMDD313	2.0	6.6	1008	482	135	214
RRMDD314	3.3	8.2	994	587	186	268
RRMDD315	2.1	11.2	1160	731	213	339
RRMDD316	2.8	8.4	1258	843	205	372
RRMDD317	2.8	4.3	1238	887	236	394
RRMDD318	3.1	8.9	791	548	184	270
RRMDD319	2.4	12.7	671	444	118	199
RRMDD320	4.0	13.4	1232	882	261	398
RRMDD321	3.6	4.8	759	504	189	255
RRMDD322	4.1	8.3	656	512	173	243
RRMDD323	3.3	18.8	768	479	141	221
RRMDD324	3.3	8.2	1359	916	243	385
RRMDD325	2.7	8.2	759	530	219	278
RRMDD327	3.9	15.2	589	347	134	174
RRMDD328	3.4	16.5	428	282	102	136
RRMDD329	6.8	7.2	626	434	148	214
RRMDD330	2.5	2.7	578	365	124	174

Note: Rounding may create arithmetic differences

TREO, HREO and CREO definitions provided within JORC Table 1.

**Table 2: Makuutu Rare Earths Project core 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
RRMDD280	567203	58203	1112	DD HQ3	31.3	0	-90
RRMDD281	566868	58064	1109	DD HQ3	5.4	0	-90
RRMDD282	566985	57989	1132	DD HQ3	8.4	0	-90
RRMDD283	567201	57997	1136	DD HQ3	14.4	0	-90
RRMDD284	567390	57990	1142	DD HQ3	11.4	0	-90
RRMDD285	567597	57997	1129	DD HQ3	8.4	0	-90
RRMDD286	567594	57781	1109	DD HQ3	11.4	0	-90
RRMDD287	567603	57603	1112	DD HQ3	8.4	0	-90
RRMDD288	567385	57574	1100	DD HQ3	14.4	0	-90
RRMDD289	567743	57379	1120	DD HQ3	5.4	0	-90
RRMDD290	567204	57395	1117	DD HQ3	12.4	0	-90
RRMDD291	567390	57204	1121	DD HQ3	13.1	0	-90
RRMDD292	567191	57605	1117	DD HQ3	19.4	0	-90
RRMDD293	567197	57805	1125	DD HQ3	15.2	0	-90
RRMDD294	566981	57602	1125	DD HQ3	11.4	0	-90
RRMDD295	566847	57607	1107	DD HQ3	10.0	0	-90
RRMDD296	566755	57807	1113	DD HQ3	4.3	0	-90
RRMDD297	566657	57606	1113	DD HQ3	14.2	0	-90
RRMDD298	566811	57397	1119	DD HQ3	10.4	0	-90
RRMDD299	567000	57195	1145	DD HQ3	12.6	0	-90
RRMDD300	567204	57193	1142	DD HQ3	13.1	0	-90
RRMDD301	567194	56973	1129	DD HQ3	14.4	0	-90
RRMDD302	567594	57207	1106	DD HQ3	11.4	0	-90
RRMDD303	567762	57169	1097	DD HQ3	5.4	0	-90
RRMDD304	567405	56791	1119	DD HQ3	9.9	0	-90
RRMDD305	567288	56680	1123	DD HQ3	22.6	0	-90
RRMDD306	566803	57176	1130	DD HQ3	15.0	0	-90
RRMDD307	567716	56852	1111	DD HQ3	10.5	0	-90
RRMDD308	567607	56794	1111	DD HQ3	9.4	0	-90
RRMDD309	567764	56965	1109	DD HQ3	5.4	0	-90
RRMDD310	567591	57006	1117	DD HQ3	11.0	0	-90
RRMDD311	566589	57194	1114	DD HQ3	8.4	0	-90
RRMDD312	566452	57167	1113	DD HQ3	5.4	0	-90
RRMDD313	567002	56886	1130	DD HQ3	14.9	0	-90
RRMDD314	566801	56992	1130	DD HQ3	11.0	0	-90
RRMDD315	566796	56794	1132	DD HQ3	14.4	0	-90
RRMDD316	566524	56856	1129	DD HQ3	13.1	0	-90
RRMDD317	566398	56995	1123	DD HQ3	8.4	0	-90
RRMDD318	566589	56562	1129	DD HQ3	12.0	0	-90
RRMDD319	566901	56570	1123	DD HQ3	16.4	0	-90
RRMDD320	566398	56597	1129	DD HQ3	17.4	0	-90
RRMDD321	566377	56248	1128	DD HQ3	8.4	0	-90
RRMDD322	566200	56328	1139	DD HQ3	26.4	0	-90
RRMDD323	566194	56602	1144	DD HQ3	23.4	0	-90
RRMDD324	566393	55996	1134	DD HQ3	11.5	0	-90
RRMDD325	566189	55918	1147	DD HQ3	10.9	0	-90
RRMDD327	565797	56004	1145	DD HQ3	19.1	0	-90
RRMDD328	565808	56200	1144	DD HQ3	19.9	0	-90
RRMDD329	565866	56415	1141	DD HQ3	13.9	0	-90
RRMDD330	565802	56793	1123	DD HQ3	6.4	0	-90

Authorised for release by the Board.

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## Makuutu Mineral Resource Estimate

**Table 3: Makuutu Resource above 200ppm TREO-CeO<sub>2</sub> Cut-off Grade**

Resource Classification	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	LREO (ppm)	HREO (ppm)	CREO (ppm)	Sc <sub>2</sub> O <sub>3</sub> (ppm)
Indicated Resource	66	820	570	590	230	300	30
Inferred Resource	248	610	410	450	160	210	30
<b>Total Resource</b>	<b>315</b>	<b>650</b>	<b>440</b>	<b>480</b>	<b>170</b>	<b>230</b>	<b>30</b>

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

All REO are tabulated in MRE announcement dated 3 March 2021 with formulas defining composition of Light Rare Earth Oxides (LREO), Heavy Rare Earth Oxides (HREO), Critical Rare Earth Oxides (CREO) and Total Rare Earth Oxides (TREO).

**Table 4: Mineral Resources by Area**

Classification	Indicated Resource			Inferred Resource			Total Resource		
	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)
<b>Central Zone</b>	66	820	570	51	730	500	118	780	540
<b>A</b>				12	570	390	12	570	390
<b>B</b>				25	410	280	25	410	280
<b>C</b>				-	-	-	-	-	-
<b>D</b>				6	560	400	6	560	400
<b>E</b>				-	-	-	-	-	-
<b>Central Zone East</b>				37	740	520	37	740	520
<b>F</b>				11	570	390	11	570	390
<b>G</b>				6	660	450	6	660	450
<b>H</b>				4	780	560	4	780	560
<b>I</b>				96	550	350	96	550	350
<b>Total Resource</b>	<b>66</b>	<b>820</b>	<b>570</b>	<b>248</b>	<b>610</b>	<b>410</b>	<b>315</b>	<b>650</b>	<b>440</b>

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

## About Makuutu Rare Earths Project

The Makuutu Rare Earths Project is an ionic adsorption clay (“IAC”) hosted rare earth element (“REE”) deposit located 120 km east of Kampala in Uganda and is well serviced by existing high quality infrastructure including roads, rail, power infrastructure and cell communications. The installed infrastructure is illustrated in Figure 3.



The Company will move to 60% ownership of Makuutu on the completion of the Feasibility Study and has a pre-emptive right over the remaining 40% stake in the Project.

The deposit stretches 37 km in length and has demonstrated potential for a long life, low-cost capital source of critical and heavy rare earths. These IAC deposits are prevalent in southern China which have been the source of the world’s lowest cost critical and heavy REE production, however these deposits are gradually being exhausted and Makuutu represents one of only a handful of such deposits outside of southern China.

The Makuutu deposit is shallow, with less than 3 m of cover over a 9 m average thickness clay and saprolite zone which results in low-cost bulk mining methods with low strip ratio. A maximum thickness of 19.5 m has been identified at Makuutu. Processing is via simple acidified salt desorption heap leaching, breaking the chemical ionic bond which washes the rare earths (in a chemical form) from the ore into a pregnant leach solution (“PLS”). The PLS is concentrated up using membrane technology, from which the rare earths are precipitated as a mixed rare earth carbonate product; a product which attracts both a higher payability and achieves a high basket price due to the dominant high value critical and heavy rare earths which make up over 70% of the product basket.

The Project has the potential of generating a high margin product with an operation life exceeding 27 years. The Project is also prospective for a low-cost Scandium co-product.



Figure 3: Makuutu Rare Earths Project Location with major existing infrastructure.

### Existing Infrastructure

One of the Makuutu Rare Earths Project’s competitive advantages is its proximity to existing infrastructure. The Makuutu site is approximately 10km from Highway 109 which is a sealed bitumen road connecting to Kampala, to Kenya and on to the Port of Mombasa. All weather access roads connecting the site to the adjacent sealed bitumen highway are already existing. A rail line lies within 10 kilometres north of the Makuutu site near the town of Iganga. There are four hydroelectric power

plants located within 65 km of the project area, with total installed generating capacity of approximately 810 MW, providing an abundant supply of cheap power to the Project.

Water will be sourced at the project by harvesting water from the Makuutu site, given the Project location in a positive rainfall environment, and a net positive process water balance will require membrane processes to be used to process site discharge water for reagent recovery. Excess water management will be a key focus of the Project to ensure environmental standards are met and reagent consumption is minimised.

A workforce of semi-skilled and artisanal workers is available in nearby towns and population centres. The closest major population centre is Iganga, which has a population of 50,000. The town of Mayuge is approximately 10 km from the Project site and the intent is to source local operations staff from the immediate districts and train staff accordingly. The operation is to be staffed by a residential workforce. No fly in – fly out is envisaged, and the number of expatriate staff is intended to be low, and to be phased out over time. Industrial facilities are available in the city of Jinja, approximately 40 km from the Project area. Additional industrial facilities are available on the outskirts of Kampala.

### **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 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 3 March 2021 and is available to view on [www.asx.com.au](http://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.*

### **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: Diamond Core Drilling Analytical Results RRMD246 to RRMD279 Including Highlighted Intersections >300 ppm TREO-CeO<sub>2</sub>**  
 (Note: Rounding will cause minor value differences)

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval			
																					Length (m)	TREO ppm		
RRMDD280	0.0	1.1	1.1	59.5	323.1	13.0	45.8	8.3	1.4	7.0	1.2	7.1	1.5	4.4	0.6	4.4	0.7	40.9	519	Soil				
	1.1	2.2	1.1	63.2	493.8	14.9	52.4	9.7	1.6	7.4	1.2	7.4	1.5	4.4	0.7	4.4	0.7	38.4	702	Hardcap				
	2.2	2.5	0.3	67.7	2002.3	16.7	59.6	10.9	1.7	7.9	1.5	7.8	1.5	4.5	0.7	4.5	0.6	38.6	2226	Transition				
	2.5	3.4	0.9	133.7	567.5	22.7	80.0	13.7	2.2	10.8	1.6	9.2	1.7	5.1	0.7	4.6	0.7	49.7	904	Clay				
	3.4	4.6	1.1	118.5	92.9	23.7	84.9	14.4	2.3	11.6	1.7	10.4	2.0	6.1	0.8	5.6	0.8	63.2	439	Clay				
	4.6	5.5	0.9	129.0	147.4	27.9	102.4	16.8	2.8	13.2	1.9	10.7	2.1	5.9	0.8	5.4	0.8	63.9	531	Clay				
	5.6	6.4	0.8	149.5	154.8	37.8	134.7	22.3	3.4	16.1	2.2	13.3	2.5	7.0	0.9	6.3	0.9	76.8	629	Clay				
	6.4	7.2	0.9	129.6	181.2	31.3	112.2	18.7	3.0	14.8	2.1	12.0	2.4	6.9	0.9	6.0	0.8	74.0	596	Clay				
	7.3	8.2	0.9	156.6	296.0	39.6	142.9	23.0	3.5	16.3	2.3	13.0	2.4	7.0	0.9	5.8	0.8	74.0	784	Clay				
	8.2	9.1	0.9	150.7	155.4	36.9	131.2	21.6	3.5	16.0	2.2	12.7	2.4	7.0	0.9	6.0	0.8	73.5	621	Clay				
	9.1	10.0	0.9	144.8	321.8	35.8	127.7	20.8	3.3	15.1	2.1	11.6	2.2	6.0	0.8	5.3	0.7	67.6	766	Clay				
	10.0	10.9	0.9	183.5	167.7	47.2	170.9	27.3	4.3	18.8	2.5	14.0	2.5	7.1	1.0	5.9	0.8	77.3	731	Clay				
	10.9	11.8	0.9	189.4	160.9	49.1	176.7	28.3	4.5	19.7	2.6	14.5	2.6	7.4	0.9	6.2	0.8	81.7	745	Clay				
	11.8	12.7	0.9	175.9	194.7	46.3	162.7	26.8	4.4	19.7	2.7	15.7	2.9	8.5	1.1	6.9	1.0	99.1	768	Clay				
	12.7	13.7	0.9	169.5	180.6	41.6	149.9	24.8	4.2	18.6	2.6	14.5	2.8	7.7	1.0	6.3	0.9	92.7	718	Clay				
	13.7	14.6	0.9	162.4	501.2	40.4	145.8	24.0	4.0	17.9	2.5	13.7	2.5	7.1	0.9	5.7	0.8	74.5	1003	Clay				
	14.6	15.5	0.9	128.4	172.6	29.1	108.2	18.7	3.2	14.4	2.0	11.1	2.0	5.8	0.8	5.0	0.7	63.2	565	Clay				
	15.5	16.5	0.9	124.9	181.8	31.3	115.4	18.9	3.2	13.0	1.7	9.6	1.7	4.7	0.6	4.0	0.6	50.5	562	Clay				
	16.5	17.4	0.9	120.2	124.7	31.8	115.8	18.7	3.1	12.0	1.6	8.3	1.4	3.9	0.5	3.6	0.5	39.5	486	Clay				
	17.4	18.3	0.9	110.2	117.1	29.5	104.3	17.0	2.7	10.6	1.4	7.6	1.3	3.6	0.5	3.5	0.5	36.7	447	Clay				
	18.3	19.3	0.9	108.6	125.9	28.3	99.6	16.3	2.7	10.6	1.4	7.6	1.3	3.8	0.5	3.7	0.5	37.6	448	Clay				
	19.3	20.2	0.9	106.4	132.1	26.8	95.4	16.0	2.6	10.4	1.4	7.8	1.4	4.1	0.6	3.8	0.6	40.8	450	Upper Saprolite				
	20.2	21.1	1.0	101.9	120.8	24.8	91.7	16.4	3.0	12.4	1.7	9.5	1.7	4.9	0.7	4.4	0.6	51.4	446	Upper Saprolite				
	21.1	22.1	1.0	102.4	138.2	23.8	88.9	14.3	2.5	11.0	1.5	7.8	1.4	4.2	0.5	3.7	0.5	41.0	442	Upper Saprolite				
	22.1	22.8	0.7	99.8	127.1	23.3	87.2	15.2	2.7	11.8	1.6	8.9	1.6	4.7	0.6	4.5	0.6	43.9	434	Upper Saprolite				
	22.8	23.6	0.8	87.1	114.4	19.6	72.6	12.3	2.2	9.9	1.4	7.7	1.4	3.8	0.6	3.7	0.5	41.0	378	Upper Saprolite				
	23.6	24.5	0.9	74.1	100.7	15.9	60.3	10.7	1.9	8.4	1.1	6.7	1.2	3.4	0.5	3.1	0.4	35.6	324	Lower Saprolite				
	24.5	25.4	0.9	92.8	137.6	23.5	100.8	21.6	4.5	22.1	3.1	18.2	3.2	8.1	1.0	5.9	0.8	93.7	537	Lower Saprolite				
25.4	26.3	0.9	73.9	127.1	16.9	65.6	12.5	2.4	11.4	1.6	9.3	1.7	4.8	0.6	4.0	0.6	54.5	387	Lower Saprolite					
26.3	27.2	0.9	57.2	108.0	12.4	43.9	7.5	1.4	5.9	0.8	5.0	1.0	2.9	0.4	2.9	0.4	29.3	279	Lower Saprolite					
27.2	28.2	0.9	57.6	113.4	12.2	44.6	7.5	1.4	6.3	0.9	5.6	1.1	3.3	0.5	3.1	0.4	34.4	292	Lower Saprolite					
28.2	29.1	0.9	55.9	110.8	12.1	42.8	7.1	1.4	6.4	0.9	5.7	1.1	3.5	0.5	3.2	0.4	39.0	291	Lower Saprolite					
29.2	29.8	0.7	58.1	126.5	15.3	58.1	12.2	2.6	11.0	1.7	9.7	1.8	5.2	0.7	4.3	0.6	59.6	367	Saprock					
29.8	30.6	0.8	53.9	117.4	12.6	43.3	7.8	1.6	6.4	1.0	5.6	1.1	3.2	0.5	3.2	0.4	36.1	294	Saprock					
30.6	31.3	0.8	52.4	112.2	11.9	38.7	6.4	1.2	4.7	0.7	3.8	0.7	2.2	0.4	2.5	0.4	22.5	261	Saprock					
RRMDD281	0.0	0.2	0.2	50.5	121.9	11.1	39.2	7.3	1.2	6.0	1.0	6.6	1.3	4.3	0.7	5.0	0.8	41.8	299	Soil				
	0.2	1.0	0.8	58.3	129.6	13.0	46.8	9.0	1.5	7.2	1.2	7.5	1.5	4.9	0.7	4.7	0.7	44.1	331	Clay				
	1.0	1.7	0.7	63.8	146.2	13.9	48.6	9.4	1.6	7.4	1.2	7.7	1.5	4.6	0.7	4.8	0.7	44.4	357	Clay				
	1.7	2.2	0.4	191.2	432.4	40.7	145.2	26.2	4.7	20.4	3.2	18.6	3.6	10.5	1.4	8.7	1.3	102.2	1010	Clay				
	2.2	2.4	0.2	160.7	305.9	36.1	126.0	23.7	4.7	21.9	3.3	18.8	3.6	10.4	1.4	9.0	1.2	111.8	838	Upper Saprolite				
	2.4	3.4	1.0	81.7	184.9	18.8	63.9	10.4	2.0	7.8	1.1	5.8	1.2	3.2	0.5	3.3	0.4	35.0	420	Lower Saprolite				
	3.4	4.4	1.0	79.9	193.5	19.8	67.9	11.6	2.2	8.2	1.1	5.8	1.1	3.1	0.4	3.1	0.4	32.8	431	Lower Saprolite				
4.4	5.4	1.1	79.3	196.5	19.7	67.7	12.1	2.3	9.0	1.3	6.8	1.2	3.5	0.5	3.2	0.5	37.5	441	Saprock					
RRMDD282	0.0	0.8	0.8	103.6	227.3	22.1	77.4	13.9	2.3	10.9	1.7	10.2	2.1	6.3	0.9	6.5	1.0	63.6	550	Soil				
	0.8	2.0	1.2	98.3	961.8	18.4	61.5	11.1	1.9	8.3	1.4	8.2	1.7	5.0	0.7	5.0	0.8	43.2	1227	Hardcap				
																						23.6	583	
																							4.1	481

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	2.0	5.4	3.4	81.4	702.6	15.9	50.5	9.2	1.7	7.2	1.2	7.3	1.4	4.4	0.7	4.9	0.7	39.2	928	Transition	2.6	425
	5.4	5.9	0.4	140.1	216.8	31.8	109.8	19.0	3.7	16.4	2.3	12.6	2.5	7.3	1.0	6.3	0.9	89.9	660	Clay		
	5.9	6.0	0.2	85.3	200.2	19.1	67.7	12.5	2.5	10.6	1.5	8.5	1.7	5.0	0.7	4.6	0.7	62.1	483	Upper Saprolite		
	6.0	7.1	1.1	55.9	130.8	13.6	47.0	8.9	1.8	7.1	1.0	5.9	1.1	3.3	0.5	3.2	0.4	35.0	316	Lower Saprolite		
	7.1	8.0	1.0	71.1	175.7	18.3	65.6	12.8	2.6	10.2	1.5	8.3	1.6	4.6	0.6	4.5	0.6	47.2	425	Lower Saprolite		
	8.0	8.0	0.0	59.5	148.6	14.6	50.0	9.2	1.8	7.1	1.1	5.9	1.2	3.4	0.5	3.6	0.5	34.8	342	Saprock		
RRMDD283	0.0	0.8	0.8	80.1	222.3	16.4	57.2	9.6	1.7	7.6	1.3	7.5	1.5	4.3	0.7	4.7	0.7	43.6	459	Soil	9.1	556
	0.8	1.6	0.8	83.7	230.9	14.4	47.8	8.3	1.4	6.7	1.1	6.5	1.3	3.9	0.7	4.6	0.7	39.7	452	Hardcap		
	1.6	2.3	0.8	82.4	248.1	16.6	59.4	9.8	1.6	7.7	1.2	7.4	1.6	4.5	0.7	5.3	0.8	48.4	496	Transition		
	2.3	3.1	0.8	102.9	227.3	18.2	58.2	9.7	1.7	7.9	1.2	7.5	1.5	4.7	0.7	5.1	0.7	44.6	492	Transition		
	3.1	4.1	1.0	85.8	185.5	16.8	55.2	9.1	1.6	7.5	1.2	7.3	1.5	4.6	0.7	4.9	0.8	46.5	429	Clay		
	4.1	5.1	1.0	85.3	235.9	17.1	56.0	9.4	1.7	7.8	1.3	7.6	1.6	4.8	0.7	5.4	0.8	49.4	485	Clay		
	5.1	6.1	1.0	80.6	151.7	16.9	56.2	9.5	1.7	8.0	1.3	7.8	1.6	4.9	0.7	5.3	0.8	50.7	398	Clay		
	6.1	7.1	1.0	83.2	208.2	16.5	54.6	9.6	1.7	8.1	1.3	7.7	1.6	4.9	0.7	5.3	0.8	48.4	453	Clay		
	7.1	8.1	1.0	98.2	134.5	19.0	62.6	11.2	2.0	9.3	1.4	8.7	1.7	5.3	0.8	5.7	0.8	53.6	415	Clay		
	8.1	9.1	1.0	76.8	125.9	17.9	60.8	11.0	2.1	9.1	1.5	8.7	1.7	5.2	0.8	5.7	0.8	52.6	381	Clay		
	9.1	10.1	1.0	143.1	523.3	39.0	130.1	22.3	4.1	15.7	2.5	13.2	2.5	7.2	1.1	7.2	1.1	70.2	982	Clay		
	10.1	11.1	1.0	233.4	232.2	42.3	134.1	22.5	4.2	17.0	2.5	14.4	2.7	7.8	1.1	7.6	1.1	80.1	803	Clay		
	11.1	11.5	0.4	208.2	304.6	56.1	187.8	33.4	6.3	24.6	3.7	20.8	3.8	11.1	1.6	10.5	1.4	110.6	984	Upper Saprolite		
	11.5	12.2	0.7	78.1	192.2	19.6	68.4	12.9	2.6	10.3	1.5	8.3	1.6	4.6	0.6	4.2	0.6	47.4	453	Lower Saprolite		
12.2	13.3	1.1	78.2	187.9	18.9	62.8	10.4	1.8	6.9	1.0	5.5	1.0	3.0	0.4	2.9	0.4	29.7	411	Saprock			
13.3	14.4	1.1	68.6	170.1	17.3	60.2	11.8	2.4	9.5	1.4	8.1	1.5	4.6	0.6	3.8	0.5	47.0	408	Saprock			
RRMDD284	0.0	1.4	1.4	60.4	507.3	13.3	47.0	8.6	1.5	7.1	1.2	7.1	1.4	4.2	0.7	4.8	0.7	41.1	706	Hardcap	9.6	698
	1.4	1.6	0.2	55.1	585.9	11.3	40.4	7.2	1.2	5.3	1.0	6.0	1.3	3.7	0.6	4.7	0.7	37.3	762	Transition		
	1.6	2.5	0.9	69.0	631.4	13.7	46.1	7.6	1.3	6.1	1.0	6.4	1.4	4.2	0.7	5.0	0.8	41.1	836	Clay		
	2.5	3.5	0.9	82.0	336.6	15.9	52.3	8.5	1.5	7.4	1.2	7.1	1.5	4.8	0.7	5.2	0.8	45.8	571	Clay		
	3.5	4.4	0.9	114.7	348.9	17.2	55.5	8.8	1.5	7.4	1.2	7.1	1.5	4.6	0.6	4.9	0.8	45.2	620	Clay		
	4.4	5.4	0.9	76.7	297.3	14.1	47.5	7.8	1.4	6.5	1.1	6.7	1.4	4.4	0.6	4.8	0.7	39.9	511	Clay		
	5.4	5.6	0.2	80.1	171.4	14.9	51.0	8.2	1.4	6.6	1.0	6.2	1.3	4.0	0.6	4.3	0.7	39.2	391	Clay		
	5.6	6.6	1.0	91.0	273.9	16.3	53.9	9.2	1.6	7.5	1.2	7.4	1.4	4.6	0.7	4.9	0.8	44.2	519	Clay		
	6.6	7.5	1.0	82.8	193.5	14.6	48.8	8.2	1.4	6.7	1.1	6.7	1.4	4.1	0.6	4.8	0.7	40.8	416	Clay		
	7.5	8.5	1.0	102.3	224.2	21.5	74.5	12.2	2.2	10.0	1.5	9.1	1.8	5.4	0.7	5.7	0.8	51.3	523	Clay		
	8.5	9.1	0.6	551.2	326.8	129.9	450.2	73.2	13.0	56.8	7.7	43.6	7.8	20.7	2.6	17.4	2.4	226.7	1930	Upper Saprolite		
	9.1	10.2	1.1	256.8	207.6	52.2	194.2	34.4	6.8	34.8	4.9	29.2	5.8	16.8	2.0	13.1	1.9	227.9	1088	Lower Saprolite		
10.2	11.2	1.0	83.2	195.9	19.8	71.7	12.9	2.5	10.6	1.5	8.4	1.7	4.8	0.6	3.8	0.6	53.6	472	Lower Saprolite			
11.2	11.4	0.2	83.6	183.0	20.1	72.8	12.9	2.5	10.7	1.6	9.3	1.7	4.9	0.6	4.0	0.6	50.5	459	Saprock			
RRMDD285	0.0	2.0	2.0	50.2	323.1	11.8	41.3	7.7	1.3	6.7	1.2	6.9	1.4	4.3	0.7	5.1	0.8	42.3	505	Hardcap	2.4	851
	2.0	3.2	1.2	37.2	453.3	8.8	30.8	6.0	1.0	4.8	0.9	5.6	1.1	3.5	0.6	4.4	0.7	30.7	589	Hardcap		
	3.2	4.1	0.9	69.4	340.3	14.4	49.8	8.7	1.4	7.0	1.2	7.5	1.5	4.9	0.7	5.5	0.8	44.2	557	Transition		
	4.1	4.7	0.6	174.2	297.3	40.2	137.1	21.4	3.5	14.8	2.1	12.3	2.4	6.8	0.9	6.4	1.0	64.0	784	Clay		
	4.7	5.7	1.0	283.8	280.1	63.9	224.5	37.3	6.4	28.5	3.9	22.3	4.1	11.2	1.4	9.2	1.3	114.2	1092	Clay		
	5.7	6.0	0.3	201.1	225.4	38.4	142.3	25.2	4.9	25.7	3.8	23.8	4.9	14.5	1.7	10.8	1.6	187.9	912	Upper Saprolite		
6.0	6.5	0.6	89.1	191.6	20.2	72.2	12.4	2.4	9.9	1.4	7.8	1.5	4.6	0.6	3.6	0.5	50.9	469	Lower Saprolite			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	6.5	7.4	0.9	84.0	197.2	20.3	74.9	13.3	2.5	10.4	1.5	8.5	1.6	4.9	0.6	3.9	0.6	50.5	475	Saprock		
	7.4	8.4	1.0	84.4	199.6	19.7	71.5	13.7	2.9	12.0	1.8	9.8	1.8	5.1	0.6	3.8	0.5	55.0	482	Saprock		
RRMDD286	0.0	2.3	2.3	61.6	308.3	13.5	46.5	8.7	1.4	7.1	1.2	7.3	1.5	4.6	0.7	5.4	0.8	44.2	513	Hardcap		
	2.3	2.6	0.3	62.7	237.7	15.1	54.0	10.3	1.8	8.8	1.5	9.3	1.8	5.6	0.8	6.0	0.8	47.0	463	Transition		
	2.6	3.4	0.8	65.4	145.0	16.7	60.4	11.8	2.2	10.2	1.7	10.9	2.1	6.6	0.9	6.7	1.0	55.4	397	Clay		
	3.4	4.1	0.8	81.9	112.6	20.0	70.3	12.9	2.3	11.1	1.8	11.3	2.2	6.7	1.0	6.9	1.0	59.8	402	Clay		
	4.1	5.2	1.1	88.9	149.3	19.3	67.0	11.3	2.0	9.1	1.4	8.2	1.6	5.0	0.7	4.9	0.7	47.2	416	Clay		
	5.2	6.2	1.1	95.1	126.5	21.5	74.9	12.4	2.2	9.4	1.4	7.9	1.5	4.6	0.6	4.5	0.7	44.6	408	Clay		
	6.2	6.9	0.6	201.1	213.1	45.9	158.6	24.2	4.2	17.0	2.2	11.6	2.1	5.4	0.7	4.9	0.7	54.7	747	Clay		
	6.9	7.1	0.3	180.0	183.6	38.3	137.1	21.7	3.9	16.3	2.1	11.3	2.0	5.6	0.7	5.2	0.7	56.8	665	Upper Saprolite		
	7.1	8.2	1.1	141.3	205.1	32.9	126.0	22.6	4.4	19.1	2.6	14.5	2.6	7.2	0.9	6.1	0.9	79.4	666	Lower Saprolite	5.6	507
	8.2	9.3	1.1	63.0	114.0	14.1	48.5	8.2	1.4	5.9	0.8	4.9	1.0	2.9	0.4	2.8	0.4	31.0	299	Saprock		
	9.3	10.3	1.1	68.4	143.1	16.5	61.6	11.4	2.2	9.5	1.3	7.7	1.4	4.2	0.5	3.6	0.5	44.7	377	Saprock		
10.3	11.4	1.1	80.2	253.1	18.8	65.4	11.1	2.2	8.4	1.2	6.7	1.3	3.4	0.5	3.3	0.5	37.2	493	Saprock			
RRMDD287	0.0	2.0	2.0	51.5	474.2	12.0	41.8	7.9	1.4	6.4	1.1	6.9	1.4	4.2	0.7	4.8	0.8	39.1	654	Hardcap		
	2.0	2.6	0.6	69.0	743.2	16.4	57.7	10.6	1.9	8.5	1.4	8.4	1.8	5.2	0.8	6.0	0.9	49.4	981	Transition		
	2.6	3.5	0.9	148.9	337.8	34.0	119.6	19.0	3.3	14.8	2.2	12.4	2.4	6.9	1.0	6.9	1.0	69.7	780	Clay		
	3.5	4.5	0.9	290.9	355.0	59.9	210.0	35.1	6.0	25.9	3.6	19.4	3.6	9.2	1.3	7.8	1.1	98.2	1127	Clay		
	4.5	4.9	0.5	231.0	234.0	42.9	151.6	26.0	4.7	22.6	3.2	17.0	3.4	9.3	1.2	7.4	1.1	106.9	862	Upper Saprolite		
	4.9	5.7	0.8	75.3	151.1	16.1	57.5	9.9	1.9	7.4	1.1	6.2	1.2	3.4	0.5	3.0	0.5	40.5	376	Lower Saprolite		
	5.7	6.5	0.8	77.1	188.6	19.2	69.9	13.9	2.7	11.4	1.7	8.7	1.6	4.2	0.6	3.6	0.5	46.0	450	Lower Saprolite	3.9	730
	6.5	7.4	1.0	68.3	186.1	15.6	55.1	9.8	1.8	7.2	1.1	5.6	1.1	3.2	0.5	2.9	0.5	32.1	391	Saprock		
7.4	8.4	1.0	68.3	176.3	16.3	56.3	10.1	1.7	7.1	1.0	5.5	1.1	3.1	0.5	3.3	0.5	31.7	383	Saprock			
RRMDD288	0.0	1.7	1.7	82.2	733.4	17.8	63.6	11.1	1.9	8.8	1.5	8.4	1.7	5.2	0.8	5.5	0.8	54.0	997	Hardcap		
	1.7	2.4	0.7	67.7	243.8	13.7	47.1	8.1	1.4	6.6	1.1	6.4	1.4	4.1	0.7	4.7	0.7	44.4	452	Transition		
	2.4	3.2	0.8	73.9	493.8	14.1	48.2	8.6	1.5	7.1	1.2	7.0	1.5	4.6	0.7	4.9	0.8	43.7	711	Clay		
	3.2	3.9	0.8	71.0	215.6	13.6	44.4	7.9	1.3	6.6	1.1	6.5	1.5	4.3	0.7	4.6	0.7	42.0	422	Clay		
	3.9	4.7	0.8	87.7	351.3	18.4	62.6	10.8	1.8	8.7	1.4	8.4	1.8	5.2	0.8	5.5	0.8	53.1	618	Clay		
	4.7	5.5	0.8	102.6	144.3	23.3	79.9	14.1	2.4	11.8	1.8	10.3	2.2	6.4	0.9	6.3	0.9	65.5	473	Clay		
	5.5	6.3	0.8	113.3	213.7	26.9	93.7	16.5	2.8	13.1	2.0	11.4	2.4	6.8	1.0	6.6	1.0	70.1	581	Clay		
	6.3	7.1	0.8	208.2	296.0	48.4	166.8	29.8	5.0	21.6	3.2	16.6	3.2	8.6	1.2	7.7	1.1	92.7	910	Clay		
	7.1	8.1	1.0	289.7	301.0	71.9	253.1	45.2	7.6	31.7	4.5	23.0	4.3	11.1	1.5	9.3	1.3	117.2	1172	Clay		
	8.1	9.1	1.0	364.7	315.7	76.5	263.6	46.3	8.0	33.4	4.9	26.1	5.1	13.5	1.8	11.2	1.6	149.8	1322	Clay		
	9.1	9.7	0.6	280.3	353.8	62.7	222.2	39.8	7.3	32.8	4.8	25.7	5.1	14.0	1.9	11.6	1.7	153.7	1217	Clay		
	9.7	10.4	0.7	201.1	293.6	45.2	161.0	29.2	5.2	23.6	3.4	18.4	3.7	10.1	1.4	8.7	1.2	122.4	928	Clay		
	10.4	11.1	0.8	151.9	232.2	33.2	117.2	20.6	3.8	16.5	2.5	13.5	2.7	7.6	1.0	7.1	1.0	86.9	698	Clay		
	11.1	11.9	0.8	135.5	225.4	29.0	104.0	18.4	3.3	14.9	2.1	11.5	2.3	6.5	0.9	6.0	0.9	70.4	631	Clay		
11.9	12.7	0.8	137.2	250.6	29.5	106.4	18.8	3.3	15.3	2.1	11.2	2.3	6.1	0.9	5.4	0.8	68.8	659	Upper Saprolite			
12.7	13.1	0.4	83.5	240.8	23.7	94.8	21.7	4.4	20.1	3.1	18.1	3.6	9.4	1.3	7.8	1.1	107.3	641	Lower Saprolite	10.7	800	
13.1	14.4	1.3	74.0	207.0	16.9	57.0	9.4	1.7	6.9	1.0	5.2	1.0	2.9	0.4	2.7	0.4	30.6	417	Saprock			
RRMDD289	0.0	0.8	0.8	37.8	109.3	7.9	27.5	4.8	0.8	4.1	0.7	4.3	1.0	3.2	0.5	3.7	0.6	32.4	239	Soil		
	0.8	2.6	1.8	104.5	299.7	22.1	80.8	13.6	2.3	11.4	1.7	9.5	1.9	5.7	0.8	5.5	0.8	61.0	621	Watercourse		
	2.6	3.5	0.9	188.2	337.8	37.3	131.8	22.1	3.6	18.3	2.5	14.3	2.8	6.9	1.0	5.9	0.8	90.7	864	Upper Saprolite		



Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	3.5	4.5	1.0	155.4	336.6	34.3	116.1	17.6	2.6	11.6	1.5	7.6	1.4	3.5	0.5	3.4	0.5	41.0	734	Lower Saprolite	1.8	795
	4.5	5.4	1.0	93.0	276.4	22.2	76.6	12.2	2.0	8.5	1.1	6.2	1.2	3.1	0.5	2.9	0.4	34.0	540	Saprock		
RRMDD290	0.0	1.2	1.2	65.1	658.4	15.6	56.2	10.4	1.8	8.3	1.5	8.1	1.6	4.7	0.7	5.2	0.7	46.6	885	Hardcap	8.0	862
	1.2	2.4	1.2	67.4	2131.3	16.4	56.7	10.7	1.7	7.6	1.4	7.3	1.5	4.2	0.7	4.8	0.7	38.7	2351	Hardcap		
	2.4	3.3	0.9	122.0	519.6	26.2	90.4	15.1	2.4	11.9	1.9	11.0	2.3	6.5	1.0	6.5	1.0	66.9	885	Transition		
	3.4	4.5	1.0	154.8	533.1	30.6	104.4	17.6	2.9	14.4	2.2	12.5	2.6	7.7	1.1	7.4	1.1	75.9	968	Clay		
	4.5	5.4	0.9	164.2	434.9	32.5	114.2	18.9	3.0	15.0	2.3	13.5	2.7	7.7	1.1	7.5	1.1	82.0	901	Clay		
	5.4	6.1	0.7	223.4	142.5	46.4	160.4	26.9	4.4	22.3	3.3	18.8	3.8	10.8	1.5	9.6	1.5	124.7	800	Clay		
	6.1	6.8	0.7	180.6	191.0	38.1	134.1	22.6	3.8	18.3	2.7	15.7	3.2	8.9	1.3	8.3	1.2	100.2	730	Clay		
	6.8	7.5	0.7	166.0	232.8	35.9	121.9	20.9	3.6	17.8	2.6	14.6	3.0	8.7	1.2	7.6	1.2	94.1	732	Clay		
	7.5	8.2	0.7	146.0	314.5	31.8	111.5	18.6	3.1	15.4	2.3	13.2	2.7	7.5	1.1	6.9	1.0	86.0	762	Clay		
	8.2	9.0	0.7	382.3	347.6	79.7	286.9	53.6	9.7	45.0	6.7	37.6	7.2	18.5	2.5	15.2	2.1	224.1	1519	Clay		
	9.0	9.9	0.9	159.5	197.8	37.6	137.6	25.6	4.8	24.3	3.7	21.9	4.6	12.9	1.8	11.0	1.6	149.8	795	Clay		
	9.9	10.8	0.9	140.7	191.6	29.8	109.5	19.8	3.9	22.1	3.4	20.3	4.5	13.0	1.7	10.1	1.5	161.3	733	Upper Saprolite		
10.8	11.5	0.6	114.0	199.6	23.8	86.8	14.0	2.6	15.6	2.1	13.7	3.2	9.4	1.4	8.2	1.3	154.3	650	Lower Saprolite			
11.5	12.4	1.0	80.7	177.5	19.0	67.8	11.5	2.0	8.5	1.2	6.7	1.3	3.6	0.6	3.6	0.5	40.4	425	Saprock			
RRMDD291	0.0	1.2	1.2	71.1	705.1	15.5	54.5	9.5	1.6	7.5	1.2	7.0	1.4	4.1	0.6	4.5	0.7	43.9	928	Hardcap	7.7	1136
	1.2	2.4	1.2	97.0	800.9	20.6	71.5	11.3	1.9	8.8	1.5	8.3	1.7	5.1	0.8	5.5	0.8	52.8	1088	Transition		
	2.4	3.3	0.9	106.5	331.7	22.2	77.1	11.9	1.9	9.8	1.5	9.1	1.9	5.6	0.9	6.1	0.9	59.7	647	Clay		
	3.3	4.3	0.9	110.7	375.9	23.5	80.1	12.9	2.0	10.3	1.5	9.0	1.9	5.4	0.9	5.9	0.9	58.3	699	Clay		
	4.3	5.3	1.0	146.6	372.2	30.7	105.8	17.5	2.8	13.6	2.0	11.6	2.4	6.8	1.1	7.0	1.0	70.4	791	Clay		
	5.3	5.9	0.6	205.2	323.1	46.3	154.5	25.4	4.2	19.4	2.7	15.8	3.1	8.7	1.4	8.9	1.3	90.8	911	Clay		
	5.9	6.9	1.0	122.0	1056.4	30.2	98.8	16.4	2.7	12.4	1.9	10.1	2.0	5.6	0.9	6.0	0.9	54.0	1420	Clay		
	6.9	7.8	0.9	223.4	355.0	49.9	172.0	28.4	4.7	22.1	3.0	17.2	3.3	9.1	1.4	8.9	1.3	97.4	997	Clay		
	7.8	8.6	0.9	676.7	498.7	154.6	517.9	82.1	13.5	66.2	8.4	44.8	8.4	20.8	3.0	17.0	2.3	275.6	2390	Clay		
	8.6	9.6	1.0	374.1	364.8	81.3	286.9	45.7	7.9	37.8	4.9	27.0	4.9	12.5	1.8	10.9	1.6	144.8	1407	Upper Saprolite		
	9.6	10.1	0.5	185.9	232.2	30.7	116.2	19.9	3.9	26.5	3.6	23.2	5.2	14.1	2.0	11.3	1.7	201.9	878	Lower Saprolite		
	10.1	11.1	1.0	111.1	261.6	25.6	89.3	14.4	2.4	11.4	1.6	8.3	1.6	4.2	0.6	3.9	0.6	57.7	594	Saprock		
11.1	12.1	1.0	109.1	261.6	25.7	89.7	15.0	2.5	12.6	1.8	10.1	1.9	5.1	0.8	4.9	0.7	57.8	599	Saprock			
12.1	13.1	1.0	107.7	244.5	24.3	83.7	13.1	2.1	10.0	1.3	6.8	1.3	3.5	0.5	3.5	0.5	38.2	541	Saprock			
RRMDD292	0.0	1.5	1.5	49.7	781.3	10.5	37.4	6.6	1.1	5.3	0.9	5.3	1.1	3.4	0.5	3.6	0.5	30.6	938	Hardcap	7.7	1136
	1.5	3.0	1.5	63.3	1492.5	13.4	47.0	7.7	1.3	5.8	1.1	6.1	1.2	3.6	0.6	3.9	0.6	37.3	1686	Hardcap		
	3.0	3.9	0.9	91.7	1182.9	19.9	68.2	10.9	1.8	9.2	1.4	7.9	1.6	4.8	0.8	5.4	0.8	48.0	1455	Transition		
	3.9	4.7	0.9	106.3	176.3	23.7	84.8	13.9	2.3	11.8	1.8	10.7	2.2	6.2	1.0	6.4	1.0	70.0	518	Clay		
	4.7	5.6	0.9	269.7	183.6	48.7	163.9	25.7	4.4	20.7	2.8	15.4	3.0	7.9	1.3	7.6	1.1	91.2	847	Clay		
	5.6	6.6	0.9	122.0	175.7	27.8	95.1	15.2	2.7	13.0	1.8	10.4	2.1	5.9	1.0	6.1	0.9	65.7	545	Clay		
	6.6	7.3	0.7	173.6	187.9	38.1	131.2	20.4	3.6	17.7	2.4	13.5	2.7	7.3	1.1	7.0	1.0	89.3	697	Clay		
	7.3	8.0	0.7	180.6	182.4	39.6	135.3	21.3	3.7	18.4	2.5	14.0	2.7	7.7	1.2	7.1	1.0	91.6	709	Clay		
	8.0	9.1	1.1	195.3	358.7	45.5	155.1	24.6	4.3	19.4	2.6	14.2	2.8	7.4	1.1	7.0	1.0	87.1	926	Upper Saprolite		
	9.1	10.1	1.1	226.9	246.9	56.5	193.0	30.6	5.1	22.1	2.9	16.1	3.0	8.0	1.2	7.3	1.0	94.0	915	Upper Saprolite		
	10.1	11.2	1.1	313.1	324.3	70.6	240.3	38.6	6.6	29.9	3.8	20.5	3.7	9.8	1.4	8.5	1.2	114.3	1187	Upper Saprolite		
	11.2	12.2	1.1	323.7	297.3	77.1	269.4	44.5	7.8	35.3	4.5	23.6	4.2	11.1	1.6	10.0	1.3	123.2	1235	Upper Saprolite		
12.2	13.3	1.1	177.7	237.7	36.4	126.6	21.9	3.6	17.5	2.6	14.2	2.8	7.5	1.0	6.2	0.9	83.8	740	Upper Saprolite			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	13.3	14.3	1.1	155.4	287.4	38.2	145.2	29.7	5.3	24.2	3.7	20.0	3.8	10.2	1.3	7.9	1.1	112.0	846	Upper Saprolite	13.5	796
	14.3	15.4	1.1	174.7	302.2	35.5	125.4	22.3	3.8	17.6	2.6	14.3	2.9	8.1	1.1	6.7	1.0	88.9	807	Upper Saprolite		
	15.4	16.4	1.0	112.9	203.9	24.2	83.6	14.8	2.4	11.6	1.7	9.9	2.0	5.6	0.8	5.1	0.7	60.7	540	Upper Saprolite		
	16.4	17.4	1.0	104.0	196.5	21.1	73.0	12.1	1.9	9.3	1.3	7.2	1.4	3.9	0.5	3.5	0.5	42.0	478	Lower Saprolite		
	17.4	18.4	1.0	86.9	148.6	17.8	60.4	10.1	1.7	8.0	1.1	6.4	1.3	3.8	0.6	3.5	0.5	40.8	391	Saprock		
	18.4	19.4	1.0	78.3	148.0	18.8	69.8	13.9	2.4	11.0	1.7	9.4	1.9	5.3	0.7	4.2	0.6	57.8	424	Saprock		
RRMDD293	0.0	1.2	1.2	80.6	379.6	15.2	52.7	9.2	1.6	7.0	1.2	6.7	1.3	4.0	0.6	4.0	0.6	36.4	601	Hardcap	12.5	660
	1.2	2.4	1.2	36.4	649.8	7.3	25.0	4.9	0.8	3.8	0.7	4.0	0.8	2.7	0.4	3.0	0.4	21.2	761	Hardcap		
	2.4	2.8	0.4	118.5	1124.0	20.8	67.2	11.1	1.7	8.8	1.5	8.5	1.7	5.1	0.8	5.2	0.8	52.8	1429	Transition		
	2.8	3.7	0.9	112.1	301.0	23.0	79.8	13.3	2.2	11.0	1.7	10.2	2.1	6.0	0.9	6.0	0.9	63.5	634	Clay		
	3.7	4.6	0.9	110.9	189.2	25.1	89.2	16.1	2.6	13.0	2.0	11.8	2.5	7.0	1.0	6.8	1.0	73.5	552	Clay		
	4.6	5.4	0.8	137.8	447.1	26.9	89.5	15.8	2.7	13.1	2.1	11.8	2.4	7.0	1.0	7.0	1.0	70.9	836	Clay		
	5.4	6.4	0.9	100.5	238.9	24.4	89.2	16.6	2.6	12.2	2.0	11.5	2.3	6.9	1.0	6.9	1.1	68.8	585	Clay		
	6.4	7.3	1.0	120.2	213.7	30.1	106.5	19.9	3.4	15.7	2.3	13.3	2.6	7.6	1.1	7.1	1.1	77.0	622	Clay		
	7.3	8.3	1.0	91.5	183.0	22.9	82.1	15.1	2.6	12.2	1.9	11.1	2.3	6.5	1.0	6.5	1.0	67.3	507	Clay		
	8.3	9.2	0.9	72.7	180.0	20.0	71.9	13.3	2.4	10.5	1.7	10.0	2.0	5.7	0.9	5.9	0.9	57.1	455	Clay		
	9.2	10.1	0.9	159.5	291.1	40.4	141.1	25.4	4.4	18.9	2.6	14.5	2.7	7.7	1.1	6.8	1.0	75.4	793	Clay		
	10.2	12.0	1.8	144.8	202.1	34.7	121.3	22.2	3.9	16.9	2.6	14.5	2.9	8.0	1.2	7.5	1.2	81.5	665	Clay		
	11.1	12.8	1.7	161.3	187.3	41.2	151.6	29.8	5.2	22.6	3.4	18.9	3.7	10.3	1.4	9.1	1.3	102.9	750	Clay		
	12.0	12.8	0.9	168.3	193.5	40.8	145.2	27.4	5.3	25.1	3.8	20.5	4.1	12.1	1.6	9.6	1.5	132.1	791	Clay		
12.8	13.6	0.8	131.4	175.7	29.2	112.4	20.9	4.2	22.0	3.2	17.8	3.7	11.2	1.5	8.8	1.4	153.0	697	Upper Saprolite			
13.6	14.4	0.8	65.6	143.7	15.9	57.4	11.1	2.1	8.7	1.3	6.8	1.3	3.8	0.6	3.6	0.6	43.9	366	Saprock			
14.4	15.2	0.8	66.3	140.7	15.2	52.1	9.3	1.6	6.4	0.9	4.4	0.9	2.7	0.4	2.7	0.4	26.8	331	Saprock			
RRMDD294	0.0	1.2	1.2	65.8	667.0	13.8	47.6	8.6	1.5	7.0	1.2	6.7	1.4	4.2	0.6	4.7	0.7	39.7	871	Hardcap	8.4	1214
	1.2	2.4	1.2	59.7	312.0	11.8	41.1	6.7	1.2	5.7	0.9	5.7	1.1	3.5	0.5	3.6	0.5	33.1	487	Hardcap		
	2.4	3.0	0.6	88.4	301.0	17.9	61.2	9.9	1.5	7.9	1.3	7.5	1.6	4.9	0.7	5.0	0.8	51.0	561	Transition		
	3.0	3.9	0.9	94.4	250.6	19.8	69.8	12.2	1.9	9.5	1.5	8.6	1.8	5.3	0.8	5.3	0.8	53.6	536	Clay		
	3.9	4.8	0.9	243.9	262.9	53.2	187.8	32.5	5.3	25.7	3.8	21.3	4.1	11.0	1.5	9.2	1.4	126.0	989	Clay		
	4.8	5.6	0.8	137.2	455.7	26.2	87.8	15.4	2.4	11.1	1.7	10.1	2.0	5.9	0.8	5.7	0.9	59.9	823	Clay		
	5.6	6.6	1.0	358.9	547.9	82.6	285.8	50.4	8.3	37.5	5.3	28.1	5.2	13.4	1.8	11.0	1.6	149.8	1588	Clay		
	6.6	7.6	1.0	371.8	565.1	87.4	299.8	51.0	8.2	38.0	5.3	27.9	5.3	14.0	1.8	10.9	1.6	161.3	1649	Clay		
	7.6	8.6	1.0	315.5	470.5	71.8	249.6	43.0	7.1	32.8	4.6	25.0	4.8	12.6	1.7	10.3	1.5	146.7	1398	Clay		
	8.6	9.6	1.0	349.5	278.8	83.2	292.8	52.3	8.5	36.8	5.2	26.9	5.0	12.7	1.7	10.0	1.5	142.2	1307	Clay		
	9.6	10.0	0.4	248.6	404.1	56.2	196.5	35.8	5.9	26.4	3.7	20.9	3.9	10.6	1.4	8.7	1.3	116.3	1140	Upper Saprolite		
10.0	10.8	0.8	381.2	293.6	92.9	337.1	67.1	11.6	53.0	7.9	42.1	7.7	20.2	2.6	15.7	2.3	215.9	1551	Upper Saprolite			
10.8	11.4	0.6	217.6	194.1	40.7	156.3	29.9	5.5	28.6	4.0	21.9	4.5	11.9	1.5	8.6	1.3	181.0	907	Lower Saprolite			
RRMDD295	0.0	2.0	2.0	81.5	549.1	15.1	52.1	8.7	1.5	7.1	1.2	6.0	1.1	3.1	0.5	3.1	0.4	27.9	759	Hardcap	7.1	763
	2.0	3.1	1.1	55.2	402.9	11.1	36.4	6.3	1.0	4.8	0.8	4.4	1.0	2.7	0.4	2.7	0.5	28.1	558	Transition		
	3.1	4.1	1.1	238.1	272.7	52.7	177.3	31.1	4.9	22.2	3.2	16.0	3.1	9.2	1.2	7.3	1.1	97.5	938	Clay		
	4.1	5.2	1.1	246.3	481.5	54.7	188.4	31.8	5.0	22.8	3.3	17.7	3.5	10.1	1.4	8.7	1.3	110.4	1187	Clay		
	5.2	6.1	0.9	222.2	285.0	48.6	168.5	29.2	4.9	20.7	3.0	15.2	2.9	8.4	1.2	6.9	1.1	92.7	910	Clay		
	6.1	7.1	1.0	208.2	211.9	42.4	155.1	26.7	4.7	21.7	3.1	16.6	3.3	9.4	1.3	7.4	1.1	110.1	823	Clay		
7.1	7.5	0.4	184.1	205.8	33.1	121.3	21.9	4.1	20.7	3.0	16.3	3.4	9.8	1.3	8.0	1.2	128.9	763	Upper Saprolite			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	7.5	8.2	0.7	84.4	154.2	17.2	59.7	10.2	1.9	9.2	1.3	7.3	1.6	4.8	0.7	4.1	0.7	62.5	420	Lower Saprolite	5.1	881
	8.2	8.8	0.7	61.3	124.7	13.5	44.8	7.9	1.3	5.7	0.9	4.8	1.0	3.3	0.5	3.3	0.5	33.5	307	Lower Saprolite		
	8.8	10.0	1.2	71.1	169.5	17.8	63.2	11.9	2.3	9.6	1.4	7.5	1.5	4.4	0.6	3.6	0.6	47.4	412	Saprock		
RRMDD296	0.0	1.7	1.7	32.7	98.4	7.4	26.2	5.0	0.9	4.1	0.8	4.5	0.9	3.1	0.4	3.4	0.5	23.9	212	Hardcap	0.9	683
	1.7	1.9	0.3	94.5	175.0	19.9	71.6	11.9	2.0	9.3	1.5	9.2	1.8	5.6	0.9	6.1	0.9	53.5	464	Clay		
	1.9	2.6	0.7	163.0	220.5	33.7	123.1	23.5	4.5	22.4	3.4	18.7	3.9	12.3	1.7	10.6	1.6	132.7	776	Lower Saprolite		
	2.6	3.5	0.9	69.7	154.8	16.7	61.0	12.3	2.5	10.7	1.8	10.9	2.5	8.3	1.3	8.2	1.3	84.1	446	Saprock		
	3.5	4.3	0.9	69.9	163.4	16.6	57.3	10.2	1.9	7.7	1.1	6.1	1.2	3.8	0.6	3.7	0.6	37.2	381	Saprock		
RRMDD297	0.0	0.8	0.8	68.4	160.9	14.9	53.7	9.5	1.6	7.9	1.3	7.5	1.6	4.6	0.7	4.9	0.7	45.6	384	Watercourse	1.9	600
	0.8	1.6	0.8	99.8	213.7	20.1	73.8	12.1	2.2	10.3	1.7	9.6	1.9	5.6	0.8	5.5	0.8	61.3	519	Watercourse		
	1.6	2.4	0.8	59.7	135.7	12.6	44.8	7.6	1.4	6.4	1.0	6.3	1.2	3.8	0.6	3.7	0.6	36.7	322	Watercourse		
	2.4	3.1	0.7	61.0	117.9	13.7	47.9	8.5	1.5	6.6	1.0	5.3	1.1	3.2	0.5	2.9	0.5	31.2	303	Watercourse		
	3.1	3.9	0.8	61.8	116.7	14.2	48.6	8.8	1.5	6.7	0.9	5.0	1.0	3.0	0.4	2.6	0.4	31.4	303	Clay		
	3.9	4.7	0.8	34.5	64.6	8.3	29.6	5.7	1.0	4.4	0.6	3.1	0.6	1.9	0.3	1.8	0.3	19.4	176	Upper Saprolite		
	4.7	5.6	0.8	50.9	104.4	11.5	39.3	6.7	1.3	5.1	0.7	3.8	0.8	2.3	0.4	2.2	0.4	24.0	254	Upper Saprolite		
	5.6	6.6	1.1	52.3	104.4	13.6	49.1	9.5	1.8	7.3	1.1	5.7	1.1	3.3	0.5	2.7	0.4	35.4	288	Lower Saprolite		
	6.6	7.7	1.0	46.9	83.2	10.5	36.5	6.3	1.2	4.7	0.7	3.5	0.7	2.2	0.3	2.0	0.3	21.7	221	Lower Saprolite		
	7.5	8.5	1.0	113.1	267.8	36.2	141.7	29.2	5.6	24.6	3.6	18.5	3.5	10.0	1.2	6.8	0.9	110.9	774	Lower Saprolite		
	8.5	9.4	0.9	61.8	155.4	17.0	63.6	12.8	2.4	10.5	1.6	8.1	1.5	4.4	0.6	3.4	0.5	48.8	392	Lower Saprolite		
	9.4	10.4	1.0	74.7	172.6	17.1	56.8	9.4	1.7	6.9	1.0	5.2	1.0	3.1	0.4	2.8	0.5	31.6	385	Saprock		
	10.4	11.4	1.0	64.5	162.1	15.3	53.8	9.8	1.8	7.4	1.1	5.8	1.1	3.4	0.5	2.9	0.5	35.6	365	Saprock		
	11.5	12.5	1.0	76.0	200.2	19.3	68.8	13.4	2.5	10.7	1.6	8.5	1.6	4.9	0.7	4.1	0.7	52.3	465	Saprock		
12.5	13.4	1.0	65.4	180.0	13.7	45.6	7.5	1.4	5.4	0.8	3.9	0.8	2.4	0.4	2.3	0.4	23.9	354	Saprock			
13.4	14.2	0.8	62.2	132.7	16.3	60.7	12.2	2.4	10.5	1.6	8.5	1.6	4.7	0.6	3.6	0.6	51.4	370	Saprock			
RRMDD298	0.0	0.5	0.5	95.2	824.3	19.3	68.6	12.1	2.2	9.4	1.7	9.0	1.8	5.4	0.8	5.3	0.8	49.7	1105	Soil	5.2	756
	0.5	1.3	0.8	67.9	366.1	13.8	49.2	8.4	1.5	6.8	1.2	6.7	1.4	4.5	0.7	4.6	0.7	41.4	575	Transition		
	1.3	2.1	0.8	86.9	145.0	16.6	58.0	8.8	1.6	7.5	1.3	7.6	1.5	5.1	0.7	4.9	0.7	49.8	396	Transition		
	2.1	2.9	0.8	88.9	137.0	17.8	63.1	10.1	1.8	8.4	1.3	8.0	1.6	5.1	0.7	5.1	0.7	51.0	401	Transition		
	4.0	4.9	0.9	146.0	181.8	27.2	97.0	15.9	2.7	12.4	1.8	10.7	2.1	6.3	0.9	6.0	0.9	62.5	574	Clay		
	4.9	5.8	0.9	130.2	350.1	28.3	102.5	17.5	3.0	13.7	2.1	12.1	2.3	7.1	1.0	6.9	1.0	73.5	751	Clay		
	5.8	6.6	0.7	192.9	226.6	44.0	155.1	25.6	4.2	17.7	2.6	14.9	2.7	8.4	1.2	7.6	1.1	88.6	793	Clay		
	6.6	7.3	0.7	285.0	177.5	78.0	276.4	46.8	7.6	29.2	4.1	22.0	3.8	10.6	1.4	9.2	1.2	108.6	1061	Clay		
	7.3	8.0	0.7	262.7	230.3	66.3	243.8	41.7	6.8	28.0	4.1	22.0	3.9	11.3	1.5	9.6	1.3	115.2	1049	Clay		
	8.0	8.3	0.3	165.4	202.7	35.6	138.8	25.0	4.6	22.6	3.3	19.4	3.7	11.1	1.4	8.9	1.2	127.6	771	Upper Saprolite		
8.3	9.2	0.9	75.3	146.8	17.2	67.9	13.5	2.6	11.6	1.6	8.9	1.6	4.7	0.6	4.0	0.6	59.6	416	Lower Saprolite			
9.2	10.4	1.2	68.1	146.8	15.6	55.9	9.2	1.6	6.2	0.8	4.6	0.8	2.5	0.4	2.7	0.4	25.3	341	Saprock			
RRMDD299	0.0	1.4	1.4	60.4	1052.7	14.7	53.3	10.2	1.8	8.1	1.5	8.2	1.6	4.8	0.7	5.0	0.7	42.3	1266	Hardcap	5.2	756
	1.4	2.7	1.4	113.1	906.6	20.4	67.0	12.0	2.1	9.0	1.7	9.1	1.7	5.4	0.8	5.8	0.8	43.6	1199	Hardcap		
	2.7	3.7	1.0	128.4	371.0	26.2	91.8	15.4	2.5	11.9	1.9	11.1	2.1	6.3	0.9	6.3	0.9	61.0	738	Transition		
	3.7	4.6	0.9	150.1	388.2	28.3	98.7	15.9	2.6	12.3	1.9	10.9	2.1	6.4	0.9	6.3	0.9	65.0	791	Clay		
	4.6	5.5	0.9	243.9	232.8	29.7	86.4	12.8	1.9	8.8	1.3	8.0	1.5	4.9	0.7	4.8	0.7	46.2	685	Clay		
	5.5	6.2	0.7	301.4	191.0	41.0	114.9	15.7	2.3	10.0	1.4	8.0	1.4	4.3	0.6	4.1	0.6	40.5	737	Clay		
6.2	7.0	0.7	67.4	128.4	12.6	42.8	7.5	1.3	5.7	0.9	5.3	1.0	3.2	0.5	3.6	0.5	30.0	311	Clay			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	7.0	7.7	0.8	78.1	315.7	19.5	71.7	11.9	2.0	8.5	1.3	7.3	1.4	4.4	0.6	4.7	0.7	40.8	569	Clay	8.3	853
	7.7	8.5	0.8	196.4	391.9	52.2	191.9	33.7	5.2	21.3	2.9	14.9	2.4	6.6	0.9	5.6	0.7	65.3	992	Clay		
	8.5	9.1	0.6	173.0	497.5	48.8	182.0	31.0	4.9	20.1	2.6	13.5	2.2	6.3	0.8	5.7	0.8	62.9	1052	Clay		
	9.1	9.7	0.6	213.4	497.5	62.1	235.6	40.9	6.6	28.6	4.0	21.2	3.6	10.2	1.3	8.5	1.1	108.8	1244	Clay		
	9.7	10.8	1.0	285.0	330.4	75.8	302.1	55.1	10.0	49.6	7.1	40.9	7.4	20.6	2.5	15.5	2.0	229.9	1434	Upper Saprolite		
	10.8	11.9	1.2	134.3	265.3	29.1	109.3	18.3	2.9	15.7	2.1	12.2	2.3	6.8	0.9	5.2	0.8	96.1	702	Lower Saprolite		
	11.9	12.6	0.7	97.5	215.0	22.7	83.3	14.5	2.3	10.7	1.5	7.9	1.4	3.9	0.5	3.6	0.5	43.2	508	Saprock		
RRMDD300	0.0	1.5	1.5	80.2	971.7	18.4	65.9	12.2	2.1	9.5	1.6	9.1	1.7	5.2	0.7	5.2	0.7	49.1	1233	Soil	8.3	1120
	1.5	2.9	1.5	59.1	1652.2	14.5	50.6	9.1	1.6	6.7	1.4	6.9	1.4	4.2	0.6	4.3	0.6	36.3	1849	Hardcap		
	2.9	3.6	0.7	97.2	776.3	20.7	75.5	12.5	2.0	9.4	1.6	9.5	1.8	5.7	0.8	5.7	0.8	53.2	1073	Transition		
	3.6	4.6	1.0	117.9	242.6	23.7	84.3	13.5	2.1	10.6	1.6	9.7	1.9	5.8	0.8	5.8	0.8	61.2	583	Clay		
	4.6	5.5	1.0	122.0	388.2	24.4	88.6	14.6	2.4	11.3	1.8	10.4	2.0	6.2	0.8	5.9	0.8	63.5	743	Clay		
	5.5	6.1	0.6	140.1	867.3	28.4	102.3	17.2	2.7	13.4	2.1	12.2	2.3	6.8	0.9	6.5	0.9	68.3	1271	Clay		
	6.1	6.7	0.6	220.5	391.9	41.3	145.8	23.9	3.9	18.7	2.7	15.5	2.8	8.7	1.1	7.3	1.0	87.8	973	Clay		
	6.7	7.6	0.9	342.5	427.5	77.8	276.4	45.6	7.2	32.0	4.5	25.0	4.2	11.8	1.5	9.7	1.3	123.8	1391	Clay		
	7.6	8.4	0.9	378.8	337.8	87.8	310.3	51.7	8.0	34.6	4.7	26.1	4.3	11.9	1.5	9.3	1.2	117.6	1386	Clay		
	8.4	9.5	1.1	296.7	328.0	62.9	235.6	39.4	6.7	32.5	4.6	25.6	4.6	13.4	1.6	10.3	1.4	154.9	1218	Clay		
	9.5	10.3	0.8	390.5	485.2	84.7	318.4	53.3	8.9	41.7	5.8	31.4	5.5	14.8	1.8	11.2	1.5	175.9	1631	Upper Saprolite		
	10.3	11.1	0.8	320.2	301.0	66.5	242.6	41.9	7.1	34.3	4.9	27.5	4.8	13.4	1.6	10.5	1.5	157.5	1235	Upper Saprolite		
	11.1	11.5	0.4	232.2	230.9	45.1	169.7	29.5	5.2	27.7	3.9	22.6	4.2	11.9	1.5	9.8	1.4	146.7	942	Upper Saprolite		
11.5	11.9	0.4	151.9	238.3	28.5	107.4	18.3	3.2	18.0	2.4	14.3	2.8	8.2	1.0	6.1	0.9	107.2	709	Lower Saprolite			
11.9	13.1	1.2	87.6	199.0	20.2	71.9	12.5	2.0	8.7	1.2	6.6	1.1	3.5	0.5	3.4	0.5	38.7	457	Saprock			
RRMDD301	0.0	1.2	1.2	73.9	386.9	16.4	58.2	10.5	1.8	8.6	1.4	8.3	1.6	5.1	0.7	4.9	0.7	44.7	624	Hardcap	9.4	964
	1.2	2.4	1.2	54.7	787.4	11.2	38.7	7.0	1.2	5.5	1.0	5.6	1.1	3.4	0.5	3.9	0.6	29.6	951	Hardcap		
	2.4	3.1	0.7	95.9	1762.8	20.7	70.9	12.2	2.0	8.6	1.6	8.4	1.6	5.1	0.7	5.2	0.8	45.2	2042	Transition		
	3.1	3.8	0.7	137.8	1621.5	29.7	100.3	16.9	2.7	12.3	2.1	11.5	2.1	6.4	0.9	6.5	0.9	61.1	2013	Clay		
	3.8	4.6	0.8	156.0	896.7	30.0	98.7	16.6	2.5	12.3	1.9	10.7	2.0	6.0	0.9	6.0	0.9	59.2	1300	Clay		
	4.6	5.4	0.8	140.1	511.0	31.1	107.7	18.0	2.8	14.1	2.2	12.5	2.4	7.1	1.0	7.0	1.1	72.8	931	Clay		
	5.4	5.9	0.4	358.9	221.7	83.6	293.9	47.5	7.4	34.8	4.9	27.2	4.9	14.1	1.7	11.4	1.7	163.2	1277	Clay		
	5.9	6.6	0.8	310.8	150.5	71.3	250.8	40.4	6.3	29.6	4.1	23.0	4.1	11.8	1.5	9.4	1.4	137.8	1053	Clay		
	6.6	7.5	0.9	221.7	460.7	51.6	180.2	29.2	4.3	20.4	3.0	16.5	2.9	8.5	1.1	7.3	1.1	95.9	1104	Clay		
	7.5	8.6	1.1	134.3	113.3	31.7	110.0	17.6	2.7	12.4	1.7	9.7	1.8	5.2	0.7	4.3	0.6	58.5	505	Clay		
	8.6	9.5	0.9	115.2	232.8	27.9	93.8	15.2	2.2	9.5	1.3	7.0	1.2	3.6	0.5	3.5	0.6	37.8	552	Upper Saprolite		
	9.5	10.4	0.9	122.0	211.9	28.8	98.4	15.9	2.4	10.0	1.4	7.2	1.2	3.8	0.6	3.9	0.6	38.4	546	Upper Saprolite		
	10.4	11.4	1.0	117.9	228.5	27.5	94.4	15.5	2.5	10.5	1.5	7.7	1.4	4.1	0.6	3.9	0.6	41.8	558	Lower Saprolite		
	11.4	12.5	1.0	283.8	406.6	66.2	243.8	41.9	6.8	34.2	4.8	27.5	4.8	14.0	1.7	11.4	1.6	155.6	1305	Lower Saprolite		
12.5	13.2	0.8	182.4	307.1	36.6	130.1	20.5	3.1	16.6	2.1	11.6	2.2	6.6	0.8	5.4	0.9	84.8	811	Saprock			
13.2	14.0	0.8	137.2	267.8	31.1	106.8	16.2	2.2	10.4	1.3	7.0	1.2	4.0	0.5	4.0	0.6	41.1	632	Saprock			
14.0	14.4	0.4	129.6	289.9	29.7	102.4	16.9	2.4	11.1	1.5	7.8	1.4	4.1	0.5	3.8	0.6	45.3	647	Saprock			
RRMDD302	0.0	1.7	1.7	54.8	760.4	12.5	45.4	8.1	1.5	6.4	1.1	6.4	1.3	4.2	0.6	4.2	0.6	34.4	942	Hardcap		
	1.7	3.5	1.7	55.6	686.7	13.4	47.8	8.9	1.6	6.7	1.2	7.1	1.4	4.3	0.6	4.6	0.7	36.7	877	Hardcap		
	3.5	4.2	0.7	98.6	810.7	22.6	79.0	14.4	2.3	10.3	1.7	10.2	1.9	6.0	0.8	6.1	0.9	53.8	1119	Transition		
	4.2	5.1	0.9	111.4	313.2	24.2	84.3	14.6	2.4	11.1	1.8	10.6	2.0	6.3	0.9	6.4	1.0	61.1	651	Clay		

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	5.1	5.9	0.9	111.5	363.6	24.9	86.7	14.8	2.4	11.3	1.8	10.5	2.0	6.5	0.9	6.8	1.0	63.0	708	Clay	6.7	876
	5.9	6.7	0.8	119.0	398.0	27.2	94.2	16.4	2.5	11.8	1.8	10.5	1.9	6.0	0.9	6.2	0.9	60.6	758	Clay		
	6.7	7.5	0.8	120.8	246.9	27.5	95.5	16.5	2.5	11.6	1.8	10.0	1.8	5.5	0.8	5.5	0.8	54.2	602	Clay		
	7.5	8.3	0.8	267.4	291.1	61.7	214.0	35.9	5.7	24.2	3.4	17.8	3.0	8.3	1.1	7.3	1.0	80.9	1023	Clay		
	8.3	8.9	0.6	350.7	373.4	79.7	278.8	47.9	7.7	34.6	4.8	26.4	4.4	12.3	1.5	9.6	1.4	135.2	1369	Clay		
	8.9	9.5	0.6	310.8	269.0	70.1	247.3	41.4	6.4	29.0	3.9	20.8	3.5	9.9	1.2	8.2	1.2	103.1	1126	Upper Saprolite		
	9.5	10.1	0.6	231.6	287.4	47.5	173.8	29.0	4.8	22.8	3.2	17.7	3.2	9.3	1.2	8.1	1.2	107.6	948	Upper Saprolite		
	10.1	10.9	0.8	218.7	309.6	44.9	160.4	26.7	4.3	20.3	2.8	15.2	2.6	7.6	1.0	7.0	1.0	87.2	909	Lower Saprolite		
10.9	11.4	0.5	124.3	229.7	25.5	87.9	15.1	2.7	14.1	2.0	12.1	2.6	7.2	1.0	5.8	0.9	92.1	623	Saprock			
RRMDD303	0.0	1.6	1.6	33.3	156.6	7.7	27.6	5.5	1.0	4.3	0.8	4.8	1.0	3.1	0.5	3.7	0.5	27.4	278	Hardcap	1.6	1423
	1.6	2.4	0.8	32.6	183.0	8.0	30.2	6.1	1.0	5.2	0.9	5.6	1.1	3.7	0.6	4.1	0.6	29.5	312	Transition		
	2.4	3.4	1.0	282.6	344.0	58.4	194.8	30.6	4.8	21.8	3.1	17.0	3.3	8.8	1.2	7.3	1.1	99.3	1078	Upper Saprolite		
	3.4	4.0	0.6	565.3	578.6	110.9	380.2	60.5	9.9	47.3	6.3	33.7	6.3	16.2	2.1	12.0	1.7	203.2	2034	Lower Saprolite		
	4.0	4.7	0.7	181.2	272.7	37.6	130.1	20.9	3.3	16.1	2.2	12.5	2.6	7.1	0.9	5.5	0.9	96.1	790	Saprock		
4.7	5.4	0.7	118.5	325.5	26.8	93.0	15.3	2.5	10.0	1.3	6.9	1.2	3.3	0.5	2.9	0.4	36.3	645	Saprock			
RRMDD304	0.0	0.8	0.8	88.5	173.2	14.3	47.1	8.3	1.4	6.4	1.1	6.3	1.2	3.8	0.6	4.0	0.6	33.3	390	Hardcap	6.4	984
	0.8	1.6	0.7	74.4	975.3	14.0	46.4	8.0	1.3	6.2	1.2	6.5	1.3	4.0	0.6	4.4	0.6	35.0	1179	Hardcap		
	1.6	2.3	0.7	158.9	1283.7	21.2	61.5	9.3	1.6	6.9	1.3	7.0	1.4	4.4	0.7	4.9	0.7	39.2	1603	Transition		
	2.3	3.1	0.8	78.7	744.4	14.3	45.1	7.5	1.2	5.8	1.0	6.1	1.3	4.1	0.6	4.4	0.7	38.0	953	Mottled		
	3.1	3.9	0.8	56.1	198.4	10.1	31.7	5.5	0.9	4.5	0.8	4.9	1.1	3.4	0.5	3.8	0.6	31.6	354	Mottled		
	3.9	4.5	0.6	198.2	156.0	31.3	91.3	14.0	2.3	10.2	1.4	8.3	1.7	4.7	0.7	4.6	0.7	49.5	575	Clay		
	4.5	5.1	0.6	155.4	223.0	42.3	153.4	26.6	4.2	19.2	2.8	15.4	3.1	8.3	1.1	6.9	1.0	97.8	760	Clay		
	5.1	6.2	1.1	282.6	298.5	70.7	243.8	41.3	6.8	30.0	4.2	22.3	4.3	11.2	1.5	8.8	1.2	126.7	1154	Upper Saprolite		
	6.2	7.3	1.1	287.3	388.2	98.7	367.4	63.7	10.4	43.8	6.0	31.3	5.5	13.9	1.8	10.3	1.4	150.5	1480	Upper Saprolite		
	7.3	8.0	0.7	211.1	294.8	59.7	221.6	38.6	6.8	33.5	4.8	26.7	5.4	14.6	2.0	11.5	1.6	182.9	1116	Lower Saprolite		
	8.0	8.7	0.7	206.4	305.9	53.5	201.8	37.6	6.8	34.6	5.1	29.5	6.1	16.5	2.2	13.4	1.9	208.3	1130	Lower Saprolite		
8.7	9.3	0.7	167.1	251.8	37.0	139.4	25.6	4.9	27.0	3.9	23.1	5.0	13.6	1.9	11.0	1.7	191.1	904	Saprock			
9.3	9.9	0.6	95.7	194.7	20.8	69.4	11.8	2.1	9.6	1.4	7.5	1.5	4.4	0.6	3.8	0.6	58.8	483	Saprock			
RRMDD305	0.0	1.4	1.4	51.3	508.6	10.3	36.0	6.9	1.2	5.4	1.0	5.5	1.0	3.2	0.5	3.4	0.5	28.1	663	Hardcap	7.5	782
	1.4	2.7	1.4	70.1	625.3	13.3	45.0	7.2	1.3	6.0	1.0	5.5	1.1	3.5	0.6	3.6	0.5	30.6	815	Hardcap		
	2.7	3.2	0.5	84.9	2039.1	19.3	62.3	10.8	1.9	8.2	1.5	8.2	1.6	4.7	0.7	5.1	0.7	42.5	2292	Transition		
	3.2	4.0	0.8	120.8	167.1	27.8	96.6	15.9	2.6	12.6	1.9	11.4	2.4	6.8	1.0	6.2	0.9	76.2	550	Clay		
	4.0	5.0	1.0	205.8	267.8	49.7	172.6	27.6	4.4	21.4	3.0	16.6	3.3	8.8	1.2	7.3	1.1	107.7	898	Clay		
	5.0	5.7	0.7	156.0	398.0	39.4	133.0	21.2	3.2	13.8	1.8	9.4	1.7	4.4	0.6	3.7	0.5	51.4	838	Clay		
	5.7	6.3	0.7	255.7	386.9	62.2	212.3	34.2	5.1	22.5	2.9	14.9	2.6	6.6	0.8	5.2	0.7	75.6	1088	Clay		
	6.3	7.0	0.6	195.3	305.9	45.8	158.6	26.9	4.3	19.1	2.7	13.9	2.5	6.5	0.9	5.1	0.7	74.3	862	Upper Saprolite		
	7.0	7.6	0.6	190.6	301.0	45.7	162.7	27.8	4.5	20.5	2.9	14.9	2.7	7.1	0.9	5.8	0.8	78.9	867	Upper Saprolite		
	7.6	8.0	0.4	106.1	215.6	25.1	88.5	14.4	2.1	9.4	1.3	6.5	1.1	2.9	0.4	2.5	0.4	30.2	507	Upper Saprolite		
	8.0	8.9	0.9	180.0	352.6	38.4	127.7	19.7	2.9	12.8	1.7	8.7	1.6	4.3	0.6	3.6	0.5	47.1	802	Upper Saprolite		
	8.9	9.8	0.9	181.2	339.0	37.5	126.0	20.1	3.0	13.3	1.7	8.9	1.7	4.5	0.6	3.6	0.5	53.6	795	Upper Saprolite		
	9.8	10.7	0.9	121.4	231.6	26.6	88.3	14.6	2.3	10.7	1.4	8.1	1.6	4.4	0.6	3.7	0.6	53.1	569	Upper Saprolite		
10.7	11.6	0.9	46.0	81.3	10.4	33.7	5.5	0.9	3.8	0.5	3.0	0.6	1.6	0.2	1.6	0.2	19.2	209	Upper Saprolite			
11.6	12.6	1.0	20.8	58.0	4.9	15.6	2.6	0.5	1.7	0.2	1.5	0.3	0.9	0.1	1.0	0.1	8.5	117	Upper Saprolite			



Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	12.6	13.6	1.1	20.1	72.4	4.7	15.0	2.7	0.5	1.8	0.3	1.5	0.3	0.9	0.1	0.9	0.1	8.3	129	Upper Saprolite		
	13.6	14.7	1.1	21.1	79.7	4.7	15.5	2.8	0.5	1.8	0.3	1.6	0.3	0.9	0.1	1.0	0.1	8.9	139	Upper Saprolite		
	14.7	15.7	1.1	18.9	71.4	4.4	15.0	2.8	0.5	2.1	0.4	2.1	0.5	1.5	0.3	1.7	0.2	16.8	139	Upper Saprolite		
	15.7	16.8	1.1	21.5	36.7	4.8	15.4	2.6	0.5	1.9	0.3	1.5	0.3	1.0	0.2	1.1	0.2	9.9	98	Upper Saprolite		
	16.8	17.9	1.1	21.7	44.2	4.8	16.0	2.9	0.5	2.2	0.4	2.0	0.4	1.2	0.2	1.2	0.2	13.1	111	Upper Saprolite		
	17.9	19.0	1.1	31.2	76.5	7.0	22.4	3.9	0.7	2.8	0.4	2.3	0.5	1.4	0.2	1.4	0.2	14.9	166	Upper Saprolite		
	19.0	20.0	1.0	72.2	143.7	15.5	50.3	8.6	1.5	5.8	0.8	4.4	0.9	2.5	0.4	2.5	0.4	26.8	336	Lower Saprolite		
	20.0	21.2	1.2	49.4	105.4	16.4	68.9	17.3	3.4	16.1	2.5	14.0	2.8	7.1	0.9	4.6	0.6	87.4	397	Lower Saprolite		
	21.2	21.9	0.7	28.0	59.8	6.4	21.9	4.0	0.7	3.1	0.5	2.7	0.5	1.6	0.2	1.7	0.2	17.0	148	Lower Saprolite		
21.9	22.6	0.7	78.0	229.1	18.1	61.6	11.7	2.3	9.4	1.3	6.5	1.2	3.1	0.5	2.9	0.4	36.1	462	Saprock			
RRMDD306	0.0	1.3	1.3	110.9	718.6	24.4	85.6	15.6	2.5	12.4	2.0	11.2	2.2	6.4	0.9	6.5	0.9	57.7	1058	Soil		
	1.3	2.5	1.3	53.5	1388.1	13.8	48.1	9.4	1.5	7.2	1.3	7.0	1.4	4.2	0.6	4.7	0.6	31.7	1573	Hardcap		
	2.5	3.2	0.6	71.3	1253.0	16.1	53.9	9.9	1.5	7.2	1.3	7.2	1.4	4.2	0.6	4.5	0.6	34.5	1467	Transition		
	3.2	4.0	0.8	114.6	384.5	24.2	78.7	13.6	2.2	10.5	1.6	9.3	2.0	6.0	0.9	6.0	1.0	59.3	714	Clay		
	4.0	4.8	0.8	122.6	388.2	26.2	86.7	15.5	2.5	11.3	1.8	10.0	2.0	5.8	0.9	6.1	0.9	61.5	742	Clay		
	4.8	5.7	0.9	96.5	452.1	21.2	69.3	12.6	2.1	9.5	1.5	8.8	1.8	5.2	0.8	5.7	0.9	50.8	739	Clay		
	5.7	6.6	0.9	101.1	222.3	21.4	68.5	12.1	1.9	8.5	1.3	7.0	1.4	4.1	0.6	4.6	0.7	42.0	498	Clay		
	6.6	7.5	0.9	118.5	201.5	25.6	84.4	14.8	2.3	10.6	1.5	8.3	1.5	4.4	0.7	4.9	0.7	48.1	528	Clay		
	7.5	8.4	0.9	156.6	249.4	34.6	111.9	19.8	3.2	13.3	1.8	9.0	1.6	4.6	0.7	5.0	0.7	48.3	660	Clay		
	8.4	9.3	1.0	170.1	314.5	39.5	129.5	23.0	3.8	15.8	2.1	10.4	1.8	5.0	0.7	4.9	0.7	53.3	775	Clay		
	9.3	10.1	0.8	300.2	260.4	63.8	224.5	36.5	6.2	25.5	3.3	15.6	2.6	6.3	0.8	5.3	0.7	68.8	1021	Clay		
	10.1	10.9	0.8	283.8	293.6	58.0	207.0	33.9	5.8	24.7	3.3	15.6	2.6	6.8	0.9	6.1	0.8	73.3	1016	Clay		
	10.9	11.7	0.8	317.8	283.8	64.2	228.0	38.0	6.7	31.1	4.4	21.6	4.1	10.9	1.5	9.4	1.2	137.8	1160	Clay		
11.7	12.9	1.2	225.2	148.0	44.9	169.1	29.9	5.5	27.0	3.8	19.4	3.7	9.8	1.3	7.9	1.1	131.4	828	Upper Saprolite			
12.9	13.8	0.9	36.0	76.3	7.5	26.6	4.4	0.7	3.3	0.5	2.6	0.5	1.5	0.2	1.6	0.2	16.0	178	Upper Saprolite			
13.8	15.0	1.2	162.4	267.8	32.0	111.6	17.6	2.9	12.4	1.7	7.9	1.4	3.6	0.5	3.3	0.5	39.5	665	Lower Saprolite			
RRMDD307	0.0	1.1	1.1	57.0	141.3	11.6	39.9	7.4	1.2	6.2	1.0	6.4	1.3	4.0	0.6	4.6	0.6	35.3	318	Soil		
	1.1	2.4	1.3	38.1	139.4	8.2	29.0	5.8	1.0	5.1	0.9	6.0	1.2	4.0	0.6	4.8	0.7	32.0	277	Hardcap		
	2.4	3.0	0.6	80.6	109.1	17.7	64.2	10.7	1.9	9.2	1.5	7.9	1.6	4.5	0.7	4.6	0.6	44.6	359	Clay		
	3.0	3.6	0.6	162.4	239.5	38.4	132.4	24.1	3.9	19.4	2.8	15.6	3.1	8.5	1.2	7.2	1.1	95.4	755	Clay		
	3.6	4.3	0.7	134.9	221.7	29.0	105.4	17.8	3.1	14.5	2.2	11.4	2.3	6.1	0.9	5.6	0.7	72.0	628	Upper Saprolite		
	4.3	5.0	0.7	136.0	261.6	31.4	105.8	18.1	2.8	13.0	1.8	9.6	1.9	5.1	0.7	4.5	0.7	55.1	648	Upper Saprolite		
	5.0	6.0	1.0	112.0	210.1	24.8	85.0	15.1	2.3	11.3	1.6	9.0	1.9	5.3	0.7	4.2	0.6	60.1	544	Upper Saprolite		
	6.0	7.0	1.0	79.5	151.7	18.0	62.8	11.2	1.8	8.4	1.2	6.8	1.4	3.7	0.5	3.2	0.5	40.8	391	Upper Saprolite		
	7.0	7.9	0.9	90.9	203.9	20.6	71.5	13.0	2.2	10.2	1.5	8.8	1.8	4.7	0.7	4.2	0.6	53.2	488	Lower Saprolite		
	7.9	8.8	0.9	86.2	223.0	21.1	75.3	15.1	2.5	11.5	1.8	9.5	1.9	5.0	0.7	4.0	0.6	53.0	511	Lower Saprolite		
8.8	9.7	0.9	88.5	193.5	20.5	69.4	12.5	1.9	8.5	1.3	6.9	1.4	3.8	0.5	3.7	0.5	40.0	453	Lower Saprolite			
9.7	10.5	0.8	81.6	176.3	19.6	66.7	12.1	1.9	8.5	1.2	6.5	1.3	3.6	0.5	3.5	0.5	37.6	421	Lower Saprolite			
RRMDD308	0.0	1.5	1.5	67.0	643.7	13.1	44.1	7.7	1.4	6.4	1.1	6.7	1.3	4.0	0.6	4.5	0.6	33.3	836	Soil		
	1.5	3.1	1.6	63.7	1155.9	14.6	49.5	9.2	1.4	7.2	1.3	7.3	1.4	4.3	0.7	4.8	0.7	33.3	1355	Hardcap		
	3.1	4.0	0.9	307.3	676.8	55.3	190.1	29.2	4.8	21.3	3.1	15.7	3.0	7.9	1.2	7.3	1.0	90.2	1414	Clay		
	4.0	4.9	1.0	113.5	313.2	29.7	111.4	19.5	3.4	15.4	2.3	12.3	2.4	6.8	1.0	6.6	0.9	72.1	711	Clay		
	4.9	5.9	1.0	453.9	450.8	132.3	486.4	86.9	14.0	75.8	10.5	56.9	11.4	30.2	4.0	23.5	3.5	379.7	2220	Upper Saprolite		

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	5.9	6.9	1.0	243.9	281.3	48.1	178.5	30.4	5.2	32.0	4.6	26.6	5.9	16.4	2.2	13.1	2.0	241.3	1132	Upper Saprolite	5.8	1072
	6.9	7.8	0.9	80.9	173.8	19.6	70.2	13.7	2.3	10.8	1.6	9.0	1.8	4.9	0.7	4.4	0.6	57.4	452	Upper Saprolite		
	7.8	8.9	1.0	103.9	205.1	22.4	77.2	12.3	2.1	8.7	1.3	6.8	1.3	3.7	0.5	3.2	0.4	39.0	488	Lower Saprolite		
	8.9	9.4	0.6	30.8	49.3	6.7	23.7	4.1	0.7	3.4	0.6	3.3	0.8	2.2	0.3	2.0	0.3	23.9	152	Saprock		
RRMDD309	0.0	1.4	1.4	65.3	170.1	14.1	48.3	8.7	1.4	7.5	1.2	8.0	1.6	4.9	0.8	5.4	0.8	44.4	383	Soil	1.2	567
	1.4	2.9	1.4	50.0	97.0	11.3	39.8	8.0	1.4	7.0	1.2	7.5	1.5	4.7	0.7	5.2	0.7	36.3	272	Watercourse		
	2.9	3.4	0.5	137.8	234.0	26.2	95.3	15.5	2.9	14.4	2.1	12.1	2.5	7.2	1.0	6.3	0.9	88.1	646	Upper Saprolite		
	3.4	4.1	0.7	100.5	195.3	20.7	75.0	12.7	2.3	10.8	1.6	8.6	1.8	5.2	0.8	4.8	0.7	63.9	505	Lower Saprolite		
	4.1	4.9	0.8	89.8	184.9	18.5	65.2	10.7	1.9	8.1	1.2	6.0	1.2	3.5	0.5	3.6	0.5	40.3	436	Saprock		
	4.9	5.4	0.5	99.6	208.2	21.3	75.3	12.3	2.2	10.0	1.4	8.2	1.6	4.8	0.7	4.6	0.6	51.4	502	Saprock		
RRMDD310	0.0	2.1	2.1	92.8	1068.7	19.1	65.3	12.0	1.9	9.3	1.5	8.6	1.7	5.1	0.7	5.1	0.7	41.8	1334	Hardcap	6.9	1014
	2.1	2.8	0.7	176.5	1639.9	33.6	114.3	19.5	3.1	14.6	2.4	12.5	2.5	7.1	1.1	7.1	0.9	67.4	2103	Transition		
	2.8	3.5	0.7	203.5	941.0	40.6	140.0	23.3	3.4	17.8	2.8	14.1	2.8	8.4	1.2	8.1	1.2	78.0	1486	Transition		
	3.5	4.2	0.7	177.1	841.5	36.7	128.9	22.1	3.4	17.9	2.9	14.6	2.9	8.8	1.4	8.8	1.3	87.2	1356	Clay		
	4.2	5.0	0.8	104.3	264.1	23.1	80.6	14.8	2.2	11.8	1.9	10.3	2.1	6.5	1.0	6.8	1.0	60.8	591	Clay		
	5.0	5.8	0.8	202.9	406.6	48.6	168.5	28.6	4.2	20.6	3.0	14.6	2.8	8.2	1.2	8.0	1.1	79.5	999	Clay		
	5.8	6.7	0.9	333.1	382.0	81.3	278.8	43.8	6.5	29.2	4.2	20.3	3.7	10.1	1.5	9.1	1.3	105.9	1311	Clay		
	6.7	7.7	1.1	238.1	291.1	54.1	189.0	31.0	4.6	21.3	3.0	14.9	2.8	8.0	1.1	7.4	1.1	81.1	949	Clay		
	7.7	8.5	0.8	280.3	294.8	60.8	224.5	40.2	6.6	33.5	4.9	24.3	4.5	12.8	1.8	11.1	1.5	134.6	1136	Clay		
	8.5	9.3	0.8	337.8	249.4	61.5	255.4	48.7	9.1	62.8	9.1	49.8	11.1	32.6	4.3	24.6	3.6	472.4	1632	Upper Saprolite		
	9.3	10.0	0.8	105.7	226.0	22.9	79.0	12.9	2.0	9.4	1.3	6.6	1.3	4.3	0.6	3.9	0.6	54.7	531	Upper Saprolite		
10.0	10.4	0.4	75.9	169.5	17.8	62.3	11.4	2.0	9.0	1.3	6.4	1.2	3.6	0.6	3.5	0.5	37.5	402	Lower Saprolite			
10.4	11.0	0.6	69.3	148.0	16.0	56.8	10.1	1.6	7.2	1.1	5.4	1.0	3.1	0.5	3.1	0.4	31.7	355	Saprock			
RRMDD311	0.0	1.2	1.2	77.8	506.1	16.9	59.1	10.4	1.8	8.6	1.4	8.0	1.6	4.8	0.7	5.1	0.8	42.5	746	Hardcap	5.2	1156
	1.2	2.1	0.9	72.1	1265.3	16.4	55.6	10.6	1.8	8.1	1.4	8.0	1.5	5.0	0.7	5.3	0.7	38.9	1491	Transition		
	2.1	3.1	1.0	90.9	476.6	19.0	65.0	11.0	1.7	8.8	1.4	7.7	1.6	4.9	0.8	5.0	0.8	46.7	742	Clay		
	3.1	3.9	0.8	137.8	434.9	28.6	99.0	17.3	2.5	12.4	1.9	9.4	1.8	5.6	0.8	5.4	0.8	55.6	814	Clay		
	3.9	4.7	0.8	351.8	567.5	77.7	261.3	42.8	6.1	28.1	3.9	18.3	3.3	9.1	1.3	8.4	1.2	93.7	1475	Clay		
	4.7	5.5	0.8	747.1	417.7	162.5	534.2	86.6	13.1	63.5	8.6	41.0	7.3	19.0	2.6	15.7	2.1	217.8	2339	Clay		
	5.5	6.3	0.8	303.8	380.8	54.4	194.2	32.6	5.3	27.5	3.8	18.1	3.4	9.4	1.3	8.0	1.1	115.1	1159	Upper Saprolite		
	6.3	7.3	1.0	137.8	288.7	29.2	104.0	18.4	2.8	13.2	1.9	9.3	1.7	4.7	0.7	4.2	0.6	53.5	671	Lower Saprolite		
7.3	8.4	1.1	112.1	297.3	26.5	96.9	18.0	3.0	14.5	2.1	10.5	2.1	5.9	0.8	5.6	0.7	62.2	658	Saprock			
RRMDD312	0.0	1.2	1.2	56.5	144.3	11.8	41.3	7.9	1.3	6.6	1.1	6.7	1.4	4.4	0.6	4.7	0.7	35.8	325	Watercourse	1.5	922
	1.2	2.5	1.3	51.3	110.7	11.6	40.7	7.7	1.4	6.7	1.1	7.0	1.4	4.4	0.7	5.0	0.7	34.9	285	Watercourse		
	2.5	3.2	0.8	249.8	441.0	52.6	191.9	34.6	5.4	27.5	4.1	19.8	3.8	10.4	1.4	8.8	1.2	109.5	1162	Upper Saprolite		
	3.2	3.9	0.7	139.6	275.2	28.2	98.0	16.2	2.5	13.5	1.9	9.8	1.9	5.6	0.8	5.2	0.8	67.2	666	Lower Saprolite		
	3.9	4.6	0.7	103.3	299.7	26.1	99.0	19.4	3.3	16.5	2.4	12.5	2.5	6.8	1.0	5.6	0.8	75.2	674	Saprock		
4.6	5.4	0.8	75.6	205.1	18.7	69.3	13.1	2.3	10.8	1.6	8.0	1.6	4.7	0.6	4.3	0.6	48.6	465	Saprock			
RRMDD313	0.0	2.0	2.0	74.1	980.3	13.9	45.3	8.0	1.4	6.7	1.1	6.6	1.2	3.6	0.6	4.0	0.5	32.8	1180	Hardcap		
	2.0	2.8	0.8	109.5	2198.8	23.0	76.9	13.0	2.1	10.2	1.7	9.4	1.9	5.4	0.8	5.5	0.8	49.8	2509	Clay		
	2.8	3.6	0.8	178.9	289.9	32.3	108.7	17.7	2.7	14.6	2.2	11.3	2.2	6.6	1.0	6.0	0.9	69.2	744	Clay		
	3.6	4.3	0.7	58.6	219.9	12.1	41.4	6.9	1.1	5.5	0.8	4.1	0.8	2.3	0.3	2.2	0.3	24.0	380	Clay		
	4.3	5.2	0.9	166.5	278.8	39.9	142.3	24.2	3.6	17.9	2.6	12.7	2.4	6.7	1.0	6.1	0.9	73.4	779	Clay		

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	5.2	6.1	0.9	222.2	339.0	53.4	189.5	32.2	4.7	23.6	3.2	14.7	2.7	7.6	1.1	6.8	1.0	79.6	982	Clay	6.6	1008
	6.1	7.0	0.9	161.3	245.7	40.1	134.1	23.3	3.4	15.7	2.2	11.6	2.1	5.7	0.8	5.1	0.8	62.1	714	Clay		
	7.0	7.3	0.3	227.5	314.5	51.2	177.3	30.7	4.6	22.1	3.1	14.5	2.7	7.1	1.0	5.9	0.8	80.0	943	Upper Saprolite		
	7.3	8.2	0.8	184.7	332.9	44.1	153.4	26.6	3.9	18.7	2.5	11.8	2.1	6.0	0.8	4.9	0.7	64.9	858	Upper Saprolite		
	8.2	8.6	0.4	358.9	383.3	67.1	218.1	36.8	5.6	25.2	3.3	15.2	2.5	6.6	0.8	5.2	0.7	73.7	1203	Lower Saprolite		
	8.6	9.7	1.1	201.1	346.4	49.8	168.0	28.8	4.1	18.8	2.6	12.3	2.2	5.7	0.8	4.6	0.7	65.9	912	Saprock		
	9.7	10.7	1.1	200.0	315.7	44.7	149.3	26.1	3.7	18.7	2.6	13.4	2.5	6.6	0.9	5.7	0.8	80.0	871	Saprock		
	10.7	11.8	1.1	191.2	315.7	41.8	142.9	25.0	3.9	20.7	3.0	15.9	3.3	9.2	1.3	8.1	1.2	119.5	903	Saprock		
	11.8	12.8	1.1	195.9	336.6	44.6	151.0	27.0	3.8	20.6	2.9	15.3	3.1	8.1	1.1	6.8	1.1	101.5	919	Saprock		
	12.8	13.9	1.1	163.6	316.9	35.3	116.4	18.8	2.5	12.6	1.6	8.4	1.6	4.5	0.6	4.1	0.6	57.7	745	Saprock		
13.9	14.9	1.1	133.1	285.0	30.7	98.6	15.9	2.1	9.2	1.2	5.7	1.0	2.8	0.4	2.8	0.4	31.5	621	Saprock			
RRMDD314	0.0	1.3	1.3	114.2	755.5	24.2	85.3	15.4	2.7	13.0	2.0	12.0	2.3	6.6	1.0	7.0	1.0	61.1	1103	Soil	8.2	994
	1.3	2.5	1.3	83.6	1867.2	19.1	64.0	12.6	2.0	9.4	1.7	9.5	1.8	5.6	0.8	6.1	0.8	39.9	2124	Hardcap		
	2.5	3.3	0.7	116.0	2383.1	25.9	82.2	15.4	2.5	11.1	2.0	10.3	2.1	6.2	1.0	6.4	0.9	53.6	2719	Transition		
	3.3	4.2	1.0	161.3	886.9	30.2	95.1	16.4	2.7	12.8	2.1	10.9	2.3	7.0	1.1	7.1	1.0	70.4	1307	Clay		
	4.2	5.2	1.0	312.0	458.2	43.0	126.6	20.9	3.4	15.9	2.4	13.7	2.7	8.2	1.2	7.9	1.1	82.5	1100	Clay		
	5.2	6.2	1.0	265.1	342.7	38.3	125.4	20.1	3.2	14.6	2.4	13.2	2.6	7.5	1.1	7.1	1.1	85.8	930	Clay		
	6.2	7.2	1.0	185.9	351.3	37.0	131.8	22.1	3.5	15.4	2.5	13.4	2.6	7.3	1.1	6.9	1.0	83.6	865	Clay		
	7.2	8.2	1.0	101.8	329.2	29.1	110.3	19.5	3.3	14.1	2.2	12.2	2.4	6.7	1.0	5.9	0.9	75.7	714	Clay		
	8.2	9.2	1.0	269.7	229.7	48.4	163.3	25.4	4.0	16.7	2.5	12.9	2.4	6.6	0.9	5.7	0.8	75.7	865	Clay		
	9.2	9.9	0.7	225.8	363.6	67.1	260.1	46.2	7.8	33.3	5.0	25.5	4.7	12.3	1.7	9.6	1.3	144.8	1209	Upper Saprolite		
9.9	10.6	0.7	211.1	256.7	51.7	217.5	41.7	8.1	43.0	6.4	35.6	7.1	19.1	2.4	13.2	1.9	275.6	1191	Upper Saprolite			
10.6	11.4	0.8	183.5	396.8	39.7	142.9	22.8	3.3	13.7	2.0	9.5	1.7	4.1	0.6	3.7	0.6	48.8	874	Lower Saprolite			
RRMDD315	0.0	1.6	1.6	113.3	445.9	21.4	71.2	12.1	2.0	9.7	1.5	9.0	1.7	5.1	0.8	5.3	0.8	46.4	746	Hardcap	11.2	1160
	1.6	2.1	0.5	103.3	852.5	21.3	72.4	12.2	1.9	10.1	1.5	9.2	1.8	5.6	0.8	5.8	0.9	49.8	1149	Transition		
	2.1	2.9	0.8	137.2	633.9	28.2	100.8	15.3	2.3	11.4	1.8	9.9	2.1	6.2	0.9	5.8	0.9	67.1	1024	Clay		
	2.9	3.8	0.8	166.0	571.2	34.2	123.1	19.6	3.0	14.3	2.3	12.4	2.5	7.3	1.1	6.7	1.0	83.6	1048	Clay		
	3.8	4.4	0.6	136.0	321.8	27.9	99.1	16.4	2.5	12.0	1.9	10.4	2.2	6.3	1.0	6.2	0.9	70.1	715	Clay		
	4.4	5.0	0.6	194.1	299.7	40.5	143.5	22.5	3.4	15.3	2.3	12.3	2.5	7.0	1.0	6.9	1.0	80.4	832	Clay		
	5.0	5.8	0.8	303.8	488.9	66.0	231.5	35.7	5.1	21.9	3.2	16.2	3.1	8.2	1.2	7.7	1.2	99.3	1293	Clay		
	5.8	6.6	0.8	320.2	664.6	70.2	246.1	37.3	5.4	24.3	3.5	17.6	3.3	8.7	1.3	7.8	1.2	114.8	1526	Clay		
	6.6	7.6	1.0	369.4	442.2	82.3	299.8	46.5	7.0	31.4	4.3	21.2	4.1	10.4	1.4	8.6	1.3	137.8	1468	Clay		
	7.6	8.5	0.9	516.0	461.9	125.0	442.1	72.1	11.0	46.2	6.4	30.8	5.3	13.3	1.7	10.6	1.5	162.5	1907	Clay		
	8.5	9.5	1.0	396.4	406.6	90.6	326.6	52.3	8.3	35.7	4.9	24.1	4.2	10.6	1.5	9.0	1.3	128.9	1501	Clay		
	9.5	10.2	0.8	272.1	313.2	52.1	200.0	34.7	6.0	32.2	4.8	25.9	5.3	14.5	2.0	11.4	1.8	186.7	1163	Clay		
	10.2	11.0	0.7	195.9	305.9	36.5	137.1	22.4	3.7	19.3	2.8	15.1	3.2	8.9	1.2	7.3	1.1	126.9	887	Clay		
11.0	11.6	0.6	127.2	254.3	25.9	99.7	19.0	3.3	17.6	2.7	15.0	3.2	9.1	1.2	7.1	1.1	133.3	720	Upper Saprolite			
11.6	12.4	0.8	232.2	527.0	50.3	176.7	23.5	3.5	14.2	2.0	10.6	2.0	5.4	0.8	5.0	0.7	66.5	1120	Lower Saprolite			
12.4	13.3	0.9	83.6	197.8	22.6	89.6	20.2	3.6	16.0	2.3	12.5	2.3	6.4	0.9	5.5	0.7	62.7	527	Lower Saprolite			
13.3	14.4	1.2	81.7	184.3	18.7	64.5	10.1	1.8	7.3	1.1	5.6	1.1	3.2	0.5	3.2	0.5	37.0	421	Saprock			
RRMDD316	0.0	1.4	1.4	82.1	1214.9	18.8	65.4	12.6	2.2	10.4	1.7	10.7	2.0	6.1	0.9	6.4	0.9	49.0	1484	Hardcap		
	1.4	2.8	1.4	62.7	1052.7	14.1	48.9	9.3	1.5	6.9	1.2	7.1	1.4	4.2	0.7	4.6	0.7	32.8	1249	Transition		
	2.8	3.6	0.9	167.7	474.2	41.6	139.4	22.3	3.4	14.8	2.1	11.1	2.1	6.3	0.9	6.0	0.9	61.1	954	Clay		

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	3.6	4.5	0.9	173.0	336.6	42.5	142.9	22.7	3.4	15.3	2.2	11.4	2.2	6.4	0.9	6.2	0.9	63.4	830	Clay	8.4	1258
	4.5	5.4	0.9	110.2	172.0	25.0	84.6	14.1	2.4	10.5	1.5	9.2	1.9	5.6	0.9	5.6	0.9	54.9	499	Clay		
	5.4	6.0	0.6	153.6	378.3	38.4	128.3	20.1	3.2	13.4	1.9	9.9	1.9	5.8	0.9	5.8	0.9	58.0	820	Clay		
	6.0	6.6	0.6	222.8	334.1	58.0	188.4	29.6	4.6	18.0	2.4	12.0	2.2	6.0	0.8	5.9	0.8	62.4	948	Clay		
	6.6	7.2	0.6	404.6	412.7	106.3	361.6	56.1	8.7	34.1	4.2	20.3	3.3	8.6	1.1	6.9	1.0	89.1	1519	Clay		
	7.2	8.1	0.9	390.5	426.3	104.6	341.8	53.1	7.8	30.8	3.8	18.5	3.1	8.1	1.1	6.3	1.0	84.6	1481	Clay		
	8.1	9.0	0.9	505.5	453.3	125.0	426.9	67.8	10.0	41.1	5.5	25.6	4.3	10.7	1.4	8.8	1.1	115.2	1802	Upper Saprolite		
	9.0	9.8	0.9	470.3	581.0	117.8	400.1	64.4	10.2	41.4	5.3	25.4	4.2	11.1	1.4	8.4	1.2	107.4	1849	Upper Saprolite		
	9.8	10.5	0.6	497.3	568.7	111.3	389.6	63.7	10.4	46.3	5.9	28.6	4.8	12.3	1.6	9.3	1.3	127.6	1879	Upper Saprolite		
	10.5	11.1	0.7	267.4	447.1	54.0	194.2	32.1	5.8	30.4	4.1	22.9	4.7	13.2	1.8	11.0	1.7	167.0	1257	Lower Saprolite		
	11.1	12.0	0.9	96.8	224.2	22.9	80.4	12.6	2.2	8.8	1.2	6.1	1.1	3.5	0.5	3.3	0.5	39.7	504	Saprock		
	12.0	13.1	1.1	90.0	210.1	21.3	75.7	12.2	2.1	9.5	1.4	7.5	1.4	4.1	0.6	3.5	0.5	43.7	483	Fresh Rock		
RRMDD317	0.0	1.1	1.1	95.0	429.9	22.0	76.9	13.7	2.4	11.6	1.7	10.9	2.1	6.3	1.0	7.0	1.0	56.0	738	Hardcap	4.3	1238
	1.1	2.2	1.1	68.0	781.3	16.2	55.6	10.0	1.7	8.4	1.4	8.0	1.6	4.7	0.7	5.3	0.8	40.0	1004	Hardcap		
	2.2	2.8	0.6	83.6	644.9	18.7	64.5	11.0	1.8	8.7	1.5	8.2	1.7	5.3	0.8	5.7	0.9	47.9	905	Transition		
	2.8	3.5	0.7	100.4	319.4	19.7	65.9	10.7	1.7	7.8	1.2	7.1	1.4	4.3	0.7	4.5	0.7	42.2	588	Clay		
	3.5	4.2	0.7	208.8	449.6	49.3	169.7	27.0	4.3	20.1	2.9	15.9	3.1	8.8	1.3	8.3	1.2	88.6	1059	Clay		
	4.2	4.5	0.3	378.8	445.9	93.4	312.6	48.7	7.6	31.6	4.3	22.0	3.9	10.4	1.4	9.0	1.3	115.1	1486	Upper Saprolite		
	4.5	5.6	1.1	582.9	426.3	134.7	449.1	68.3	10.9	46.8	5.9	30.1	5.4	15.0	1.9	11.4	1.6	181.0	1971	Upper Saprolite		
	5.6	6.2	0.6	353.0	310.8	83.4	275.3	41.9	6.9	28.4	3.7	18.2	3.2	8.8	1.2	7.8	1.1	90.7	1234	Lower Saprolite		
	6.2	7.1	0.9	255.7	212.5	47.1	172.0	27.4	4.7	24.8	3.4	17.9	3.5	10.1	1.4	8.6	1.3	126.9	917	Lower Saprolite		
7.1	8.4	1.3	107.0	234.6	25.1	87.5	14.4	2.5	10.7	1.4	7.3	1.3	3.8	0.5	3.2	0.5	51.3	551	Saprock			
RRMDD318	0.0	1.3	1.3	61.8	793.5	13.0	44.7	7.8	1.4	6.9	1.2	6.8	1.4	4.1	0.7	4.6	0.6	36.7	985	Soil	8.9	791
	1.3	2.5	1.3	58.6	1947.0	12.4	40.8	7.2	1.2	5.5	1.1	5.8	1.2	3.5	0.6	4.0	0.5	28.2	2118	Hardcap		
	2.5	3.1	0.5	60.8	1633.8	13.9	46.4	8.3	1.4	6.5	1.2	6.3	1.2	3.9	0.6	4.4	0.7	33.7	1823	Transition		
	3.1	4.1	1.0	72.4	364.8	18.7	63.9	9.6	1.6	7.0	1.0	5.4	1.0	2.9	0.4	3.0	0.4	31.2	583	Upper Saprolite		
	4.1	5.1	1.0	82.8	200.8	20.3	68.4	10.6	1.7	7.6	1.1	6.0	1.1	3.4	0.5	3.3	0.5	36.1	444	Upper Saprolite		
	5.1	6.1	1.0	228.1	216.8	50.0	166.8	26.1	4.5	19.8	2.6	13.5	2.5	6.7	0.9	5.5	0.8	73.5	818	Upper Saprolite		
	6.1	7.1	1.0	140.1	240.2	35.3	123.6	20.0	3.0	13.6	1.9	10.0	1.9	5.3	0.8	4.7	0.6	61.8	663	Upper Saprolite		
	7.1	8.1	1.0	211.1	243.2	46.2	162.1	27.6	4.2	19.0	2.6	13.5	2.5	6.4	0.9	5.5	0.8	73.9	819	Upper Saprolite		
	8.1	9.1	1.0	209.3	236.5	57.0	201.8	34.1	5.1	22.0	2.9	15.3	2.8	7.7	1.0	6.1	0.9	92.2	895	Upper Saprolite		
	9.1	10.0	0.8	407.0	236.5	103.9	390.7	67.3	11.2	53.6	7.7	40.6	7.4	19.6	2.6	15.5	2.1	217.8	1583	Lower Saprolite		
10.0	11.0	1.1	139.6	248.1	37.9	163.3	33.7	6.3	34.9	5.2	31.0	6.7	19.5	2.5	13.8	2.1	260.3	1005	Lower Saprolite			
11.0	12.0	1.0	84.9	195.9	18.8	64.6	10.7	1.8	7.8	1.0	5.7	1.1	3.3	0.5	3.0	0.5	38.6	438	Lower Saprolite			
RRMDD319	0.0	0.8	0.8	76.5	614.2	13.0	41.2	7.3	1.2	5.8	0.9	5.7	1.1	3.6	0.6	4.0	0.6	31.4	807	Hardcap	8.9	791
	0.8	1.8	1.0	62.0	1213.7	13.3	44.1	8.1	1.4	6.6	1.1	6.9	1.4	4.6	0.7	5.1	0.8	38.1	1408	Transition		
	1.8	2.4	0.5	55.7	447.1	11.3	38.8	6.8	1.2	6.3	1.1	7.0	1.5	4.8	0.7	5.4	0.8	42.3	631	Clay		
	2.4	2.9	0.5	90.2	358.7	20.5	71.5	11.8	1.8	8.4	1.2	7.2	1.4	4.3	0.7	4.3	0.6	43.9	627	Clay		
	2.9	3.6	0.7	268.6	320.6	63.1	213.5	32.9	4.7	21.9	3.0	15.5	2.9	8.1	1.1	6.8	1.0	90.4	1054	Clay		
	3.6	4.3	0.7	404.6	391.9	83.2	279.9	43.8	6.2	27.9	3.7	19.3	3.4	8.9	1.2	7.5	1.1	104.3	1387	Clay		
	4.3	5.1	0.9	368.3	377.1	87.7	298.6	47.4	6.6	30.0	4.0	21.5	3.8	10.6	1.4	8.6	1.3	121.4	1388	Clay		
	5.1	6.0	0.9	387.0	405.4	93.4	319.6	49.3	6.8	29.9	4.0	19.1	3.4	9.1	1.2	7.1	1.0	99.9	1436	Clay		
6.0	6.8	0.9	363.6	362.4	86.4	295.1	46.3	6.8	30.4	4.0	20.5	3.7	10.3	1.3	8.3	1.2	115.2	1355	Clay			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	6.8	7.2	0.4	145.4	181.2	32.0	110.5	16.9	2.6	11.9	1.6	8.4	1.6	4.4	0.6	3.9	0.6	51.9	574	Upper Saprolite	12.7	671
	7.2	7.8	0.7	129.0	205.8	27.1	96.9	15.5	2.3	11.4	1.5	7.9	1.4	4.0	0.6	3.4	0.5	42.7	550	Upper Saprolite		
	7.8	8.5	0.7	93.7	98.9	19.0	66.7	10.5	1.7	7.9	1.0	5.4	1.1	3.1	0.4	2.8	0.4	37.0	350	Upper Saprolite		
	8.5	9.6	1.1	34.7	37.2	7.4	25.3	4.2	0.7	2.8	0.4	2.1	0.4	1.2	0.2	1.2	0.2	12.7	131	Upper Saprolite		
	9.6	11.4	1.8	23.5	38.8	5.3	18.2	2.8	0.5	1.7	0.2	1.4	0.2	0.7	0.1	0.7	0.1	7.2	101	Upper Saprolite		
	11.4	12.3	0.9	74.8	203.9	17.6	63.1	11.5	1.9	8.1	1.1	5.8	1.1	3.0	0.4	2.8	0.4	30.5	426	Upper Saprolite		
	12.3	13.2	0.9	89.0	391.9	23.3	89.1	17.8	3.3	13.4	2.0	10.3	1.8	5.0	0.7	4.3	0.6	50.2	703	Lower Saprolite		
	13.2	14.1	0.9	88.2	211.9	20.5	75.2	13.6	2.6	11.3	1.7	9.9	1.9	5.3	0.7	4.8	0.7	62.4	511	Lower Saprolite		
	14.1	15.0	0.9	71.9	131.4	16.9	60.1	10.7	1.9	8.4	1.2	7.0	1.4	4.0	0.5	3.4	0.5	46.0	365	Lower Saprolite		
15.0	16.4	1.4	86.1	221.1	20.8	78.6	15.6	2.8	12.0	1.8	9.9	1.9	5.0	0.6	3.7	0.5	53.1	514	Saprock			
RRMDD320	0.0	1.5	1.5	54.9	345.2	12.0	42.0	8.2	1.4	6.6	1.1	6.8	1.4	4.2	0.6	4.6	0.6	36.1	526	Hardcap	13.4	1232
	1.5	3.1	1.6	67.0	1045.4	13.4	44.6	8.4	1.4	6.6	1.1	6.8	1.3	3.9	0.6	4.4	0.6	31.9	1237	Hardcap		
	3.1	4.0	1.0	59.8	254.3	12.4	44.2	7.7	1.3	6.2	1.0	6.1	1.3	4.0	0.6	4.3	0.7	38.5	442	Clay		
	4.0	4.9	0.9	107.8	113.4	23.1	82.3	14.0	2.3	11.8	1.8	10.7	2.2	6.6	1.0	6.2	1.0	69.3	453	Clay		
	4.9	5.8	0.9	122.6	869.7	27.1	94.9	16.1	2.7	13.1	2.1	11.8	2.4	6.8	1.0	6.2	0.9	74.7	1252	Clay		
	5.8	6.6	0.8	195.9	192.2	43.6	152.2	24.8	3.9	19.2	2.7	14.9	3.0	8.7	1.2	7.5	1.1	97.3	768	Clay		
	6.6	7.5	0.9	187.1	238.9	43.5	150.5	25.0	4.0	18.2	2.6	13.8	2.7	7.5	1.1	6.8	1.0	83.8	786	Clay		
	7.5	8.4	0.9	163.0	280.1	36.6	126.6	20.8	3.3	16.2	2.4	12.9	2.6	7.4	1.1	6.8	1.0	82.7	763	Clay		
	8.4	9.3	0.9	497.3	490.1	115.0	388.4	63.3	10.0	43.1	5.8	29.8	5.3	14.5	1.9	11.2	1.6	158.7	1836	Clay		
	9.3	10.1	0.9	836.2	396.8	109.1	339.4	49.4	8.0	35.5	4.7	23.3	4.1	10.6	1.4	8.6	1.3	120.3	1948	Clay		
	10.1	11.0	0.9	229.3	345.2	54.5	193.6	32.5	5.0	22.7	3.2	16.9	3.2	8.9	1.2	7.5	1.1	98.3	1023	Clay		
	11.0	12.0	1.0	741.2	567.5	176.4	615.9	102.0	17.0	73.3	9.9	49.0	8.8	22.3	2.8	16.5	2.3	238.7	2644	Clay		
	12.0	13.0	1.0	328.4	316.9	71.6	249.6	40.2	6.6	29.3	4.1	20.7	3.9	10.5	1.4	8.7	1.3	119.2	1212	Clay		
	13.0	14.0	1.0	317.8	299.7	68.7	240.3	39.3	6.4	31.0	4.4	23.2	4.7	13.3	1.7	10.3	1.5	158.1	1221	Clay		
	14.0	14.8	0.9	378.8	341.5	84.0	310.3	53.2	9.1	45.9	6.5	36.2	7.4	20.8	2.7	15.6	2.3	250.8	1565	Upper Saprolite		
14.8	15.6	0.8	433.9	337.8	84.5	327.8	58.3	11.1	61.9	9.2	50.4	10.3	28.2	3.6	21.3	3.1	328.9	1770	Upper Saprolite			
15.6	16.5	0.9	119.6	189.2	23.1	83.5	13.6	2.3	11.8	1.6	8.4	1.7	5.0	0.7	4.0	0.6	61.2	526	Lower Saprolite			
16.5	17.4	0.9	127.2	250.6	27.8	96.0	15.5	2.4	11.0	1.4	7.7	1.4	4.0	0.5	3.4	0.5	45.0	594	Lower Saprolite			
RRMDD321	0.0	1.8	1.8	48.8	500.0	10.3	34.1	6.5	1.1	5.1	1.0	5.4	1.1	3.4	0.6	3.8	0.6	31.5	653	Hardcap	4.8	759
	1.8	3.6	1.8	45.4	669.5	10.6	35.2	6.8	1.1	5.0	0.9	5.6	1.1	3.1	0.5	3.7	0.5	28.3	817	Transition		
	3.6	4.2	0.5	130.8	110.9	23.2	78.5	12.5	2.1	9.2	1.4	7.4	1.5	4.6	0.7	4.5	0.7	45.7	434	Mottled		
	4.2	5.0	0.8	149.5	297.3	34.0	111.0	18.6	3.1	12.2	1.7	9.0	1.7	4.9	0.7	4.6	0.7	46.6	696	Clay		
	5.0	5.7	0.8	116.6	272.7	30.1	105.6	17.6	3.1	12.7	1.9	10.1	2.0	5.7	0.8	5.2	0.7	58.7	644	Upper Saprolite		
	5.7	6.5	0.8	120.2	269.0	31.9	113.4	19.1	3.2	13.7	2.0	11.3	2.3	6.8	1.0	6.2	0.9	72.6	674	Upper Saprolite		
	6.5	7.3	0.8	248.6	373.4	73.0	271.8	48.7	8.7	37.9	5.6	30.4	6.1	17.6	2.3	14.7	2.1	177.8	1319	Upper Saprolite		
	7.3	7.9	0.6	164.2	189.8	32.9	131.8	25.4	5.3	30.2	4.6	27.0	6.2	18.6	2.4	13.6	2.1	234.3	888	Lower Saprolite		
7.9	8.4	0.6	84.4	191.6	19.9	73.8	15.0	3.0	12.9	2.0	11.6	2.5	7.3	1.0	5.9	0.9	84.8	517	Lower Saprolite			
RRMDD322	0.0	1.6	1.6	54.3	235.2	12.3	42.1	8.3	1.3	6.5	1.1	6.6	1.4	4.1	0.7	4.5	0.7	38.5	418	Hardcap	4.8	759
	1.6	3.2	1.6	43.0	578.6	10.9	37.9	7.8	1.2	5.7	1.1	6.2	1.3	3.8	0.7	4.3	0.6	31.2	734	Hardcap		
	3.2	4.1	0.9	61.2	58.2	12.4	43.0	7.6	1.3	6.5	1.1	6.3	1.4	4.3	0.6	4.4	0.6	40.6	250	Mottled		
	4.1	5.0	0.9	130.8	111.9	26.9	95.4	15.8	2.8	13.5	2.0	11.5	2.5	7.3	1.0	6.6	1.0	77.7	507	Mottled		
	5.0	6.0	0.9	131.4	108.8	30.6	105.0	17.6	3.0	13.9	2.1	11.8	2.5	7.5	1.1	6.5	1.0	84.7	527	Clay		
	6.0	6.6	0.6	103.3	170.7	25.4	87.8	14.8	2.5	10.7	1.5	7.8	1.5	4.2	0.6	3.7	0.5	45.5	481	Upper Saprolite		



Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	6.6	7.4	0.8	239.3	221.1	52.6	181.4	29.8	5.2	23.5	3.3	17.4	3.5	9.6	1.3	8.0	1.2	111.9	909	Upper Saprolite	8.3	656
	7.4	8.2	0.8	230.5	253.1	50.3	173.8	28.8	5.1	22.7	3.2	16.2	3.3	9.0	1.2	7.3	1.1	102.9	908	Upper Saprolite		
	8.2	8.6	0.5	151.9	127.1	33.7	119.6	20.5	3.7	16.5	2.4	13.0	2.6	7.8	1.0	6.5	1.0	83.9	591	Upper Saprolite		
	8.6	9.5	0.8	290.9	165.8	62.5	219.9	36.8	6.4	29.0	4.0	20.8	4.1	11.2	1.5	9.0	1.3	125.5	989	Upper Saprolite		
	9.5	10.5	1.0	168.3	151.1	37.0	128.9	22.0	4.0	19.2	2.8	15.8	3.4	9.9	1.3	8.4	1.3	116.1	690	Upper Saprolite		
	10.5	11.5	1.0	184.1	98.3	34.7	126.0	20.8	4.0	19.2	2.7	14.6	2.9	8.3	1.1	6.8	1.0	94.6	619	Upper Saprolite		
	11.5	12.4	1.0	90.7	68.5	17.2	65.1	11.3	2.3	11.7	1.7	9.9	2.0	6.1	0.9	5.9	0.9	66.0	360	Upper Saprolite		
	12.4	12.6	0.1	41.8	43.0	7.2	26.6	4.5	0.9	4.4	0.6	3.8	0.9	2.7	0.4	2.3	0.4	30.0	169	Upper Saprolite		
	12.6	13.5	0.9	51.1	75.8	9.8	35.9	6.0	1.2	5.8	0.9	5.7	1.3	4.5	0.7	4.6	0.7	45.1	249	Upper Saprolite		
	13.5	14.1	0.7	32.1	49.0	6.6	23.2	3.9	0.8	3.4	0.5	2.8	0.6	2.0	0.3	2.2	0.3	19.9	148	Upper Saprolite		
	14.1	15.7	1.6	63.4	138.8	13.2	43.9	7.1	1.3	5.5	0.8	4.2	0.8	2.6	0.4	2.6	0.4	26.9	312	Upper Saprolite		
	15.7	16.4	0.6	47.7	87.0	10.3	36.6	6.1	1.2	5.3	0.8	5.8	1.3	4.6	0.7	5.5	0.8	45.3	259	Upper Saprolite		
	16.4	17.4	1.0	49.4	141.3	12.7	47.0	8.5	1.6	7.1	1.0	6.1	1.2	3.7	0.5	3.9	0.5	32.9	318	Upper Saprolite		
	17.4	18.4	1.0	46.7	100.2	10.6	36.9	6.4	1.0	4.7	0.6	3.6	0.7	2.3	0.3	2.3	0.3	21.8	238	Upper Saprolite		
	18.4	19.4	1.0	46.2	90.9	11.3	42.2	8.2	1.5	6.9	0.9	5.8	1.1	3.3	0.4	3.2	0.4	31.9	254	Upper Saprolite		
	19.4	20.4	1.0	47.7	75.8	10.5	37.2	6.5	1.1	5.0	0.7	3.9	0.8	2.4	0.3	2.4	0.3	23.2	218	Upper Saprolite		
	20.4	21.4	1.0	57.6	109.5	16.6	69.2	14.7	2.9	13.1	1.9	11.4	2.1	5.9	0.7	4.4	0.6	68.8	379	Upper Saprolite		
	21.4	22.4	1.0	54.2	103.3	14.7	56.8	11.7	2.2	9.8	1.4	8.5	1.6	4.7	0.6	3.9	0.5	47.4	321	Upper Saprolite		
	22.4	23.4	1.0	48.8	93.5	12.8	50.4	10.2	2.0	9.0	1.2	7.3	1.4	3.8	0.5	3.3	0.4	41.3	286	Upper Saprolite		
	23.4	24.4	1.0	49.8	99.4	13.1	50.7	10.3	2.0	8.8	1.2	7.3	1.4	3.7	0.4	3.0	0.4	42.3	294	Lower Saprolite		
24.4	25.4	1.0	57.0	118.7	12.7	45.6	7.7	1.4	6.0	0.8	4.7	0.9	2.7	0.4	2.6	0.4	26.7	288	Lower Saprolite			
25.4	26.4	1.0	59.0	160.9	13.5	47.4	7.6	1.4	5.7	0.8	4.5	0.8	2.5	0.3	2.5	0.3	23.6	331	Lower Saprolite			
RRMDD323	0.0	1.7	1.7	93.9	362.4	21.1	72.4	14.0	2.1	11.2	1.8	10.0	2.1	6.0	0.9	6.1	0.9	60.7	666	Hardcap		
	1.6	3.3	1.7	57.0	879.5	13.1	44.9	9.0	1.4	6.5	1.2	6.4	1.3	3.8	0.6	4.3	0.6	35.3	1065	Hardcap		
	3.3	4.1	0.8	97.8	488.9	22.1	79.5	12.8	2.0	10.8	1.6	9.7	1.9	6.0	0.8	5.7	0.8	55.6	796	Clay		
	4.1	4.9	0.8	100.9	160.3	22.6	81.3	13.3	2.0	10.8	1.5	9.7	1.9	6.0	0.8	5.8	0.8	57.8	476	Clay		
	4.9	5.6	0.7	39.2	132.7	8.8	30.2	5.0	0.8	3.9	0.6	3.7	0.7	2.3	0.3	2.4	0.3	20.8	252	Clay		
	5.6	6.3	0.7	113.4	79.5	24.4	86.3	13.9	2.2	11.8	1.6	10.3	2.0	6.1	0.8	5.5	0.8	64.0	423	Clay		
	6.3	7.1	0.8	143.7	151.1	33.1	119.0	19.2	3.1	16.9	2.4	14.3	2.8	8.2	1.1	7.5	1.1	88.8	612	Clay		
	7.1	7.8	0.7	139.0	162.8	31.4	112.7	18.8	2.9	15.8	2.2	13.3	2.6	7.7	1.1	7.1	1.0	77.2	596	Clay		
	7.8	8.8	1.0	362.4	288.7	69.0	235.6	35.9	5.6	26.9	3.5	19.8	3.5	10.0	1.3	8.3	1.1	109.7	1181	Clay		
	8.8	9.8	1.0	260.4	402.9	65.2	226.9	36.8	5.6	26.7	3.4	19.5	3.5	9.6	1.3	8.1	1.1	103.6	1175	Clay		
	9.8	10.8	1.0	265.1	347.6	63.2	221.0	35.5	5.3	25.7	3.3	18.6	3.4	9.5	1.2	8.0	1.1	105.3	1114	Clay		
	10.8	11.8	1.0	233.4	651.1	58.2	205.9	33.4	4.9	24.1	3.1	17.4	3.1	8.7	1.1	7.4	1.0	94.5	1347	Clay		
	11.8	12.7	0.9	242.8	358.7	60.5	214.0	34.4	5.1	24.0	3.0	16.7	2.9	8.0	1.0	6.5	0.9	82.5	1061	Clay		
	12.7	13.6	0.9	143.1	189.2	34.7	123.1	20.2	3.2	14.9	1.9	10.5	1.9	5.1	0.7	4.5	0.6	52.7	606	Clay		
	13.6	14.6	1.0	239.3	524.5	57.3	206.5	34.0	5.4	26.2	3.5	19.7	3.6	10.0	1.2	8.6	1.1	111.6	1252	Clay		
	14.6	15.6	1.0	218.1	353.8	50.5	182.0	28.9	4.4	21.2	2.6	14.8	2.6	7.4	1.0	6.5	0.8	79.5	974	Clay		
	15.6	16.4	0.8	194.7	399.2	44.9	156.3	24.6	3.8	18.0	2.2	12.3	2.1	5.9	0.8	5.1	0.7	62.5	933	Clay		
	16.4	17.4	1.0	103.4	270.2	23.6	84.4	13.6	2.2	10.4	1.4	8.3	1.5	4.6	0.6	4.4	0.6	43.8	573	Clay		
17.4	17.9	0.5	157.7	321.8	36.5	127.1	19.3	3.0	12.7	1.6	8.3	1.5	4.1	0.5	3.7	0.5	41.9	740	Clay			
17.9	18.9	1.0	89.8	139.4	21.1	75.2	12.1	1.9	8.6	1.1	6.2	1.1	3.4	0.4	3.2	0.4	32.6	397	Clay			
18.9	19.5	0.6	66.3	123.5	14.5	49.9	9.0	1.4	6.4	0.9	4.9	0.9	2.5	0.4	2.3	0.3	26.7	310	Upper Saprolite			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	19.5	20.3	0.8	42.6	82.1	9.6	34.8	6.5	1.1	4.9	0.7	3.9	0.7	2.0	0.3	2.0	0.3	21.2	213	Upper Saprolite	18.8	768
	20.3	21.2	0.9	136.0	328.0	31.1	110.8	20.8	3.6	15.0	2.2	10.8	1.9	5.3	0.7	4.1	0.6	54.7	726	Upper Saprolite		
	21.2	22.1	0.9	81.9	175.7	19.9	73.6	15.3	3.0	13.2	2.0	10.7	2.0	5.5	0.7	4.5	0.6	64.9	473	Lower Saprolite		
	22.1	23.4	1.3	59.9	136.4	13.3	45.0	8.2	1.4	5.7	0.8	4.4	0.8	2.5	0.4	2.4	0.4	26.4	308	Saprock		
RRMDD324	0.0	1.4	1.4	34.0	540.5	7.3	24.4	4.9	0.8	3.9	0.8	4.4	0.9	2.7	0.5	3.2	0.5	21.8	651	Hardcap	8.2	1359
	1.4	2.8	1.4	41.0	1259.1	9.2	32.0	5.9	1.0	4.8	0.9	5.2	1.1	3.1	0.5	3.9	0.5	24.9	1393	Hardcap		
	2.8	3.3	0.5	54.8	481.5	9.9	31.8	5.7	0.9	4.7	0.8	4.9	1.0	3.2	0.5	3.6	0.6	30.4	634	Transition		
	3.3	4.0	0.7	87.6	224.2	19.0	65.4	11.8	1.9	9.7	1.5	9.1	1.8	5.8	0.8	5.8	0.9	59.3	505	Clay		
	4.0	4.7	0.7	1806.1	1707.5	293.6	950.6	171.0	27.2	104.2	13.5	60.8	8.5	18.8	2.1	12.1	1.5	190.5	5368	Clay		
	4.7	5.1	0.5	139.6	172.0	30.7	105.6	18.2	3.0	15.1	2.2	12.7	2.5	7.5	1.1	7.2	1.1	81.1	600	Clay		
	5.1	6.2	1.0	178.9	234.0	37.8	128.3	21.6	3.4	15.7	2.2	12.2	2.3	6.8	1.0	6.7	0.9	73.8	726	Clay		
	6.2	7.2	1.0	239.3	369.7	59.1	197.7	34.1	5.3	22.4	3.1	16.5	3.0	8.6	1.2	7.5	1.0	89.1	1058	Clay		
	7.2	7.9	0.7	445.7	461.9	80.9	260.1	44.8	7.2	30.2	4.1	21.1	3.6	9.4	1.3	7.7	1.1	95.5	1475	Clay		
	7.9	8.7	0.8	315.5	500.0	77.9	272.9	49.6	7.9	33.7	4.7	24.9	4.3	11.7	1.6	9.7	1.3	131.4	1447	Clay		
	8.7	9.5	0.8	283.8	394.3	65.7	230.4	41.9	7.1	33.7	4.9	25.9	4.8	13.5	1.7	10.8	1.6	142.2	1262	Clay		
	9.5	10.3	0.8	235.7	371.0	54.6	191.3	36.4	6.1	28.2	4.0	21.7	3.9	11.4	1.5	9.5	1.3	124.7	1102	Upper Saprolite		
10.3	11.5	1.2	160.1	229.7	33.3	125.4	22.8	4.1	22.6	3.2	17.5	3.6	10.2	1.3	8.4	1.2	130.2	774	Lower Saprolite			
RRMDD325	0.0	1.5	1.5	44.8	277.6	9.6	34.2	5.9	1.0	5.0	0.8	5.3	1.1	3.2	0.5	3.8	0.5	30.2	423	Hardcap	8.2	759
	1.5	2.1	0.6	86.2	1289.8	17.6	61.2	9.4	1.6	7.6	1.3	7.1	1.5	4.3	0.7	4.7	0.7	42.2	1536	Transition		
	2.1	2.7	0.6	106.4	427.5	21.3	71.0	13.0	2.0	9.4	1.5	9.0	1.7	5.3	0.8	5.4	0.8	50.9	726	Transition		
	2.7	3.5	0.8	76.5	250.6	16.5	57.5	10.2	1.6	8.1	1.3	7.4	1.5	4.4	0.6	4.6	0.7	44.3	486	Clay		
	3.5	4.4	0.9	71.2	309.6	18.2	63.7	11.8	2.0	9.4	1.5	8.2	1.6	4.7	0.7	4.6	0.7	49.8	558	Clay		
	4.4	5.2	0.7	134.9	194.1	37.0	126.6	21.7	3.5	15.3	2.2	12.7	2.4	6.9	1.0	6.6	1.0	76.3	642	Clay		
	5.2	5.7	0.6	136.6	192.2	34.6	117.8	20.5	3.1	13.5	2.0	10.7	1.9	5.6	0.8	5.2	0.8	57.8	603	Clay		
	5.7	6.6	0.9	168.9	238.3	42.2	142.3	24.1	3.9	16.7	2.3	12.7	2.2	6.7	0.9	6.0	0.9	70.9	739	Clay		
	6.6	7.1	0.5	76.1	203.3	19.1	66.8	11.8	1.9	8.9	1.3	7.6	1.5	4.6	0.6	4.4	0.6	45.2	454	Clay		
	7.1	7.8	0.7	214.0	264.1	46.6	159.8	30.0	5.1	22.6	3.6	21.1	3.9	11.5	1.6	9.9	1.4	113.8	909	Clay		
	7.8	8.4	0.6	223.4	168.3	38.9	124.8	21.3	3.6	15.7	2.3	13.1	2.4	7.0	1.0	6.3	0.9	74.2	703	Clay		
	8.4	9.6	1.2	179.4	240.8	54.7	210.5	41.6	7.0	30.7	4.2	21.9	3.7	9.9	1.3	7.9	1.0	98.4	913	Upper Saprolite		
9.6	10.9	1.3	147.8	195.9	38.2	162.1	34.4	7.2	47.3	7.4	45.3	9.9	30.2	3.9	23.5	3.5	379.7	1136	Lower Saprolite			
RRMDD327	0.0	1.5	1.5	76.9	621.6	15.6	54.9	9.1	1.5	6.7	1.2	7.2	1.5	4.2	0.7	4.7	0.7	40.0	847	Hardcap	8.2	759
	1.5	3.0	1.5	117.3	1182.9	23.0	78.0	12.8	2.1	9.2	1.7	9.0	1.8	5.0	0.8	5.8	0.8	45.8	1496	Hardcap		
	3.0	3.9	0.9	234.0	1151.0	39.1	121.3	20.5	3.3	15.0	2.3	13.1	2.6	7.6	1.1	7.8	1.1	73.4	1693	Transition		
	3.9	4.9	1.0	181.8	335.4	38.9	136.5	25.4	4.5	19.8	2.8	15.5	3.0	8.7	1.2	8.3	1.2	90.7	874	Clay		
	4.9	5.8	0.9	139.6	266.6	32.9	121.3	23.3	4.3	18.6	2.7	16.0	3.0	8.8	1.2	8.1	1.2	94.1	742	Clay		
	5.8	6.7	0.9	156.6	278.8	36.7	126.6	23.4	4.1	18.4	2.7	15.5	2.9	8.8	1.2	8.0	1.2	91.6	777	Clay		
	6.7	7.4	0.8	126.7	307.1	29.7	104.0	19.2	3.3	15.3	2.2	11.6	2.4	6.5	0.9	6.2	0.9	74.5	711	Clay		
	7.4	8.4	1.0	95.6	254.3	22.5	80.9	16.0	3.0	13.5	2.0	11.3	2.3	6.5	0.9	6.0	0.9	76.2	592	Clay		
	8.4	9.4	1.0	89.1	203.3	21.1	77.7	15.5	2.7	13.2	2.0	11.2	2.2	6.0	0.9	6.0	0.8	70.7	523	Clay		
	9.4	10.3	0.9	122.0	307.1	29.0	97.7	17.3	2.9	12.5	1.8	10.0	1.9	5.2	0.8	5.2	0.8	56.6	671	Clay		
	10.3	11.2	0.9	94.9	303.4	23.1	82.8	16.3	3.0	13.1	1.9	10.5	2.0	5.5	0.8	5.5	0.8	59.6	623	Clay		
11.2	12.0	0.9	80.2	242.0	19.5	71.4	14.9	2.8	13.0	2.0	10.9	2.3	6.2	0.9	5.9	0.9	70.0	543	Clay			
12.0	12.9	0.9	93.6	220.5	24.1	92.7	20.7	4.0	19.8	3.1	17.4	3.5	9.4	1.4	8.4	1.3	113.4	633	Clay			

Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO <sub>2</sub> Interval	
																					Length (m)	TREO ppm
	12.9	13.8	0.9	91.7	219.3	23.5	85.1	17.2	3.2	15.0	2.2	12.5	2.6	7.3	1.0	6.4	1.0	88.1	576	Clay	15.2	589
	13.8	14.6	0.8	93.7	250.6	23.5	85.7	15.9	2.8	13.5	2.0	10.5	2.2	6.1	0.9	5.5	0.8	95.9	610	Upper Saprolite		
	14.6	15.5	0.8	76.8	202.1	18.5	64.2	12.3	2.1	9.2	1.3	7.0	1.4	3.7	0.5	3.7	0.5	42.8	446	Upper Saprolite		
	15.5	16.5	1.0	72.6	189.2	18.1	61.6	11.6	2.1	8.5	1.2	6.8	1.3	3.5	0.5	3.4	0.5	39.5	420	Upper Saprolite		
	16.5	17.1	0.7	72.5	173.8	17.2	61.2	11.6	2.2	9.3	1.4	7.6	1.5	4.1	0.6	4.2	0.6	47.6	415	Upper Saprolite		
	17.1	18.1	1.0	76.2	180.0	18.4	65.4	12.7	2.4	10.3	1.6	8.5	1.7	4.6	0.6	4.3	0.6	51.2	439	Lower Saprolite		
	18.1	19.1	1.0	69.8	169.5	16.5	58.2	11.1	2.1	9.1	1.3	7.5	1.5	4.3	0.7	4.1	0.6	47.0	403	Lower Saprolite		
RRMDD328	0.0	1.2	1.2	65.4	379.6	13.9	50.6	8.7	1.5	7.1	1.2	7.5	1.6	4.5	0.7	5.0	0.8	44.3	592	Soil	16.5	428
	1.2	2.5	1.2	43.4	1461.8	10.0	36.0	6.6	1.1	4.9	1.0	5.3	1.1	3.2	0.5	3.9	0.5	28.3	1608	Hardcap		
	2.5	3.4	0.9	51.0	1320.5	11.2	39.1	7.6	1.2	5.5	1.1	5.6	1.2	3.4	0.6	4.2	0.6	31.0	1484	Transition		
	3.4	4.4	1.0	85.7	178.1	17.7	59.4	10.4	1.6	8.3	1.3	7.6	1.6	4.7	0.7	5.1	0.7	49.7	433	Clay		
	4.4	5.3	1.0	66.0	115.2	13.8	48.9	8.7	1.3	7.1	1.1	6.1	1.3	3.8	0.6	3.8	0.6	41.1	319	Clay		
	5.3	6.2	0.9	53.4	107.1	11.1	38.8	6.8	1.1	5.5	0.9	5.0	1.0	3.2	0.5	3.5	0.5	32.8	271	Clay		
	6.2	7.2	1.0	55.6	92.9	11.8	39.1	7.1	1.1	5.7	0.9	5.3	1.2	3.4	0.6	3.8	0.6	35.3	264	Clay		
	7.2	8.1	0.9	129.0	154.2	23.7	80.1	13.5	2.3	10.9	1.6	9.2	1.8	5.0	0.7	5.2	0.8	55.4	493	Clay		
	8.1	9.1	1.0	32.5	40.5	6.4	21.3	3.8	0.6	2.9	0.4	2.5	0.5	1.6	0.2	1.7	0.2	16.4	132	Clay		
	9.1	10.0	1.0	80.1	130.2	17.3	58.1	9.6	1.6	7.3	1.0	6.1	1.2	3.6	0.6	3.8	0.6	41.0	362	Clay		
	10.0	11.0	1.0	103.2	176.3	20.3	67.3	11.1	1.9	8.5	1.2	6.3	1.2	3.5	0.5	3.6	0.5	39.0	444	Clay		
	11.0	12.0	1.0	149.5	162.8	31.2	104.5	18.1	3.2	12.8	1.8	9.3	1.7	4.5	0.6	4.2	0.6	47.7	552	Clay		
	12.0	12.9	0.9	67.7	214.4	15.5	51.9	8.9	1.5	6.4	0.9	5.0	1.0	2.9	0.4	3.0	0.4	33.3	413	Clay		
	12.9	13.9	1.0	70.0	101.0	15.8	53.1	8.8	1.5	6.5	0.9	4.9	1.0	2.7	0.4	2.8	0.4	30.2	300	Clay		
	13.9	14.5	0.6	201.7	227.9	38.7	127.1	22.8	4.0	15.8	2.1	11.1	2.0	4.9	0.7	4.3	0.6	53.2	717	Clay		
	14.5	15.1	0.6	60.4	93.4	15.9	53.2	10.1	1.7	6.4	0.9	4.9	0.9	2.7	0.4	2.9	0.4	27.2	281	Clay		
	15.1	15.9	0.8	165.4	220.5	52.1	206.5	45.1	8.8	41.3	6.5	38.2	8.1	21.9	3.0	17.6	2.4	270.5	1108	Upper Saprolite		
15.9	16.8	0.9	97.1	133.3	23.1	87.9	16.1	2.9	14.6	2.1	12.9	2.5	7.8	1.0	6.4	0.9	88.6	497	Upper Saprolite			
16.8	17.6	0.8	106.5	152.9	23.0	88.4	16.4	3.0	14.9	2.0	12.5	2.3	7.0	0.9	6.0	0.8	74.2	511	Upper Saprolite			
17.6	18.4	0.8	78.5	173.2	16.1	57.0	9.5	1.6	8.0	1.1	6.3	1.3	3.9	0.5	3.6	0.5	44.3	406	Upper Saprolite			
18.4	19.2	0.8	69.4	156.0	15.2	52.8	9.2	1.6	7.1	1.0	5.6	1.1	3.5	0.5	3.2	0.5	36.8	364	Lower Saprolite			
19.2	19.9	0.8	83.7	207.6	19.3	69.1	11.8	2.0	8.6	1.2	6.7	1.3	3.9	0.5	3.5	0.5	39.2	459	Lower Saprolite			
RRMDD329	0.0	1.7	1.7	59.8	184.9	13.8	49.9	8.9	1.5	7.3	1.2	7.7	1.6	4.5	0.7	5.2	0.7	45.3	393	Soil	7.2	626
	1.7	3.5	1.7	51.0	492.6	11.3	39.3	6.9	1.2	5.4	1.0	5.7	1.2	3.4	0.6	4.2	0.6	31.2	656	Hardcap		
	3.5	4.1	0.6	67.7	176.9	14.8	50.7	9.7	1.5	7.5	1.1	7.2	1.4	4.2	0.6	4.6	0.6	38.4	387	Transition		
	4.1	4.9	0.8	64.0	152.3	13.7	48.6	9.0	1.5	7.6	1.2	7.7	1.6	5.1	0.7	5.2	0.7	47.4	366	Clay		
	4.9	5.8	0.9	48.9	339.0	11.4	41.5	8.2	1.3	6.5	1.1	6.4	1.3	4.2	0.6	4.4	0.6	34.8	510	Clay		
	5.8	6.8	1.0	47.3	178.1	11.3	40.5	7.6	1.2	5.9	0.9	5.9	1.1	3.5	0.5	3.9	0.5	32.0	340	Clay		
	6.8	7.8	1.0	86.2	168.3	22.8	83.2	14.7	2.4	11.4	1.6	9.7	1.9	5.7	0.8	5.3	0.7	58.4	473	Clay		
	7.8	8.8	1.0	107.7	152.3	28.8	105.2	18.7	3.0	13.8	1.9	11.6	2.2	7.0	0.9	6.1	0.9	72.0	532	Clay		
	8.8	9.7	1.0	159.5	228.5	40.2	146.4	25.7	4.3	19.8	2.6	15.4	2.8	8.5	1.1	7.2	1.0	89.5	753	Clay		
	9.7	10.6	0.9	147.2	224.8	39.7	145.8	26.8	4.3	19.1	2.5	14.0	2.4	6.8	0.9	5.9	0.8	70.1	711	Clay		
	10.6	11.6	0.9	117.9	154.8	28.5	105.0	19.4	3.3	14.1	1.9	11.5	2.0	5.7	0.8	4.9	0.7	57.7	528	Clay		
	11.6	12.5	0.9	146.6	229.1	36.5	136.5	24.4	3.9	17.9	2.4	13.9	2.4	7.1	0.9	6.1	0.8	73.0	702	Clay		
	12.5	13.2	0.7	198.2	234.0	42.4	154.5	28.6	5.1	24.2	3.4	19.5	3.6	10.2	1.3	8.2	1.1	115.4	850	Upper Saprolite		
13.2	13.9	0.7	98.9	145.0	27.2	99.1	18.1	2.9	12.8	1.8	10.5	1.9	5.6	0.8	5.0	0.7	56.9	487	Upper Saprolite			

																				>200ppm TREO-CeO <sub>2</sub> Interval		
Hole ID	From m	To m	Int. m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD330	0.0	1.2	1.2	33.7	106.7	7.2	25.1	4.3	0.8	4.0	0.7	4.3	1.0	2.9	0.5	3.5	0.5	26.7	222	Soil	2.7	578
	1.2	2.5	1.2	36.1	253.1	7.9	27.6	5.1	0.9	4.2	0.8	4.9	1.1	3.2	0.5	4.0	0.6	27.8	378	Hardcap		
	2.5	3.2	0.8	158.9	303.4	35.3	128.3	21.9	3.6	16.5	2.4	14.3	2.5	8.0	1.1	7.8	1.0	70.2	775	Clay		
	3.2	4.0	0.8	144.8	219.3	31.5	114.0	19.9	3.3	15.5	2.2	13.3	2.5	7.8	1.0	7.1	1.0	73.3	656	Clay		
	4.0	5.2	1.2	76.3	152.9	17.7	66.0	12.5	2.2	10.1	1.4	8.3	1.5	4.3	0.6	4.0	0.5	47.2	406	Lower Saprolite		
	5.2	6.4	1.2	64.3	146.8	14.9	55.1	10.4	1.8	8.3	1.1	7.1	1.3	4.0	0.5	3.3	0.5	39.1	359	Saprock		

# 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p><b>Diamond Core Drilling</b></p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Using either method core was initial cut in half then one half was further cut in half to give quarter core.</p> <p>Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques.</p> <p>Half core was collected for metallurgical testwork.</p>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p><b>Diamond Core Drilling</b></p> <p>Core size was HQ triple tube.</p> <p>The core was not oriented (vertical)</p>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<p><b>Diamond Drilling</b></p> <p>Core recovery was calculated by measuring actual core length versus drillers core run lengths. Core recovery ranged from 83% to 100% and averaged 98%.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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.</li> </ul>	No relationship exists between core recovery and grade.
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>All (100%) drill core has been geologically logged and core photographs taken.</p> <p>Logging is qualitative with description of colour, weathering status, alteration, major and minor rock types, texture, grain size, regolith zone, presence of kaolinite, hematite, veins and alteration and comments added where further observation is made.</p> <p>Additional non-geological qualitative logging includes comments for sample recovery, humidity, and hardness for each logged interval.</p>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p><b>Diamond Drill Core</b></p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Quality of assay data</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is</li> </ul>	<b>Assay and Laboratory Procedures – All Samples</b>



Criteria	JORC Code explanation	Commentary																																																				
<b>and laboratory tests</b>	<p><i>considered partial or total.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<p>Samples were dispatched by air freight direct to ALS laboratory Perth Australia. The preparation and analysis protocol used is as follows:</p> <table border="1" data-bbox="1111 392 1966 954"> <thead> <tr> <th>ALS Code</th> <th>Description</th> </tr> </thead> <tbody> <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% &lt;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> </tbody> </table> <p>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:</p> <table border="1" data-bbox="1279 1118 1928 1318"> <tbody> <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> </tbody> </table>	ALS Code	Description	WEI-21	Received sample weight	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	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		
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		<p>Analysis for scandium (Sc) was by Lithium Borate Fusion ICP-AES (ALS code Sc-ICP06).</p> <p>The sample preparation and assay techniques used are industry standard and provide a total analysis.</p> <p>All laboratories used are ISO 17025 accredited</p> <p><b>QAQC</b></p> <p><u>Diamond Drill Core Samples</u></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident.</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>Laboratory inserted standards, blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.</p>

Criteria	JORC Code explanation	Commentary															
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<p>No independent verification of significant intersection undertaken.</p> <p>No twinning of diamond core drill holes was undertaken.</p> <p>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.</p> <p>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 into the database.</p> <p>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.</p> <p>Data validation of assay data and sampling data have been conducted to ensure data entry is correct.</p> <p>All assay data is received from the laboratory in element form is unadjusted for data entry.</p> <p>Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors. (Source: <a href="https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors">https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors</a>)</p> <table border="1"> <thead> <tr> <th>Element ppm</th> <th>Conversion Factor</th> <th>Oxide Form</th> </tr> </thead> <tbody> <tr> <td>Ce</td> <td>1.2284</td> <td>CeO<sub>2</sub></td> </tr> <tr> <td>Dy</td> <td>1.1477</td> <td>Dy<sub>2</sub>O<sub>3</sub></td> </tr> <tr> <td>Er</td> <td>1.1435</td> <td>Er<sub>2</sub>O<sub>3</sub></td> </tr> <tr> <td>Eu</td> <td>1.1579</td> <td>Eu<sub>2</sub>O<sub>3</sub></td> </tr> </tbody> </table>	Element ppm	Conversion Factor	Oxide Form	Ce	1.2284	CeO <sub>2</sub>	Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>	Er	1.1435	Er <sub>2</sub> O <sub>3</sub>	Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>
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Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>
Ho	1.1455	Ho <sub>2</sub> O <sub>3</sub>
La	1.1728	La <sub>2</sub> O <sub>3</sub>
Lu	1.1371	Lu <sub>2</sub> O <sub>3</sub>
Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub>
Pr	1.2082	Pr <sub>6</sub> O <sub>11</sub>
Sm	1.1596	Sm <sub>2</sub> O <sub>3</sub>
Tb	1.1762	Tb <sub>4</sub> O <sub>7</sub>
Tm	1.1421	Tm <sub>2</sub> O <sub>3</sub>
Y	1.2699	Y <sub>2</sub> O <sub>3</sub>
Yb	1.1387	Yb <sub>2</sub> O <sub>3</sub>
Sc	1.5338	Sc <sub>2</sub> O <sub>3</sub>

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<sub>2</sub>O<sub>3</sub> is included in the TREO, HREO and CREO calculation.

TREO (Total Rare Earth Oxide) = La<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub> + Sm<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Tm<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub>.

HREO (Heavy Rare Earth Oxide) = Sm<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Tm<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub>

CREO (Critical Rare Earth Oxide) = Nd<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub>

(From U.S. Department of Energy, Critical Materials Strategy, December 2011)

LREO (Light Rare Earth Oxide) = La<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub>

NdPr = Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>

HREO% of TREO = HREO/TREO x 100

In elemental form the classifications are:

Criteria	JORC Code explanation	Commentary
		<p>Note that Y is included in the TREE, HREE and CREE calculation.</p> <p>TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y</p> <p>HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Y+Lu</p> <p>CREE: Nd+Eu+Tb+Dy+Y</p> <p>LREE: La+Ce+Pr+Nd</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<p>Drill hole collar locations for all holes were surveyed using a hand held GPS. The general accuracy for x,y and z is <math>\pm 5.0\text{m}</math>.</p> <p>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.</p> <p>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</p> <p>Detailed topographic data was not sourced or used.</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<p>Drilling relating to this report was conducted on a nominal 200m x 200m grid spacing.</p> <p>Resource estimates have been made on the deposit and announce to the ASX and detail on classification and drill quality and spacing are made in the Table 1 related to the corresponding resource announcements.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<p>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</p> <p>All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.</p>

Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<p>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.</p> <p>Samples were subsequently transported from Australian customs to ALS Perth via road freight and inspected on arrival by a Company representative.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	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
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<p>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.</p> <p>All granted licences are in good standing with no known impediments. TN03573 is pending grant with all application requirements met.</p> <p>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:</p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Milestone payments, payable in cash or IonicRE shares at the election of the Vendor, as follows: <ol style="list-style-type: none"> <li>a. US\$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and</li> </ol> </li> </ol>



Criteria	JORC Code explanation	Commentary
		<p>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 earned by IonicRE.</p>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>Previous exploration includes:</p> <p>1980: Country wide airborne geophysical survey identifying uranium anomalies in the Project area.</p> <p>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.</p> <p>2006-2009: Country wide high resolution airborne magnetic and radiometric survey identified U anomalism in the Project area.</p> <p>2009: Finland GTK reprocessed radiometric data and refined the Project anomalies.</p> <p>2010: Kweri Ltd undertook field verification of radiometric anomalies including scout sampling of existing community pits. Samples showed an enrichment of REE and Sc.</p> <p>2011: Kweri Ltd conducted ground radiometric survey and evaluated historic groundwater borehole logs.</p> <p>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.</p> <p>2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole.</p> <p>The historic exploration has been conducted to a professional standard and is appropriate for the exploration stage of the prospect.</p>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>The Makuutu deposit is interpreted to be an ionic adsorption REE clay-type deposits similar to those in south China, Madagascar and Brazil.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<p>The material information for drill holes relating to this announcement are contained in Table 3.</p>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>A lower cut-off of 200 ppm TREO-CeO<sub>2</sub> 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</p> <p>Significant intervals were tabulated downhole for reporting. All individual samples were included in length weighted averaging over the entire tabulated range.</p> <p>No metal equivalents values are used.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<p>Down hole lengths are considered true widths.</p> <p>The mineralisation is interpreted to be horizontal, flat lying sediments and weathering profile, with the vertical drilling perpendicular to mineralisation.</p>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>Refer to diagrams in body of text.</p>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>This report contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.</p>
<b>Other substantive</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk</i></li> </ul>	<p>Metallurgical leach testing was previously conducted on samples derived from exploration pits, RAB drilling, and one 8.5 tonne bulk pit sample.</p>

Criteria	JORC Code explanation	Commentary
<b>exploration data</b>	<i>samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<p>In 2012, 5 pit samples were sent to the Toronto Aqueous Research Laboratory at the University of Toronto for leachability tests</p> <p>In 2017, 2 pit samples were sent to SGS Laboratory Toronto for leachability tests.</p> <p>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.</p> <p>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.</p> <p>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%.</p> <p>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.</p> <p>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</p> <p>Testing of samples from the project is ongoing.</p>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>Future work programs are intended to further evaluate the economic opportunity of the project including extraction recovery maximisation, resource definition and estimation on the known areas of mineralisation.</p>