22 January 2021

MAKUUTU TRANCHE 6 ASSAYS RESULTS

- **The remaining resource extension drill hole assays extend existing REE clay mineralisation close to surface at Makuutu Western Zone**
- **Infill drilling of the current resource area confirms continuity and grade of mineralisation, with numerous high-grade zones intersected**

Ionic Rare Earths Limited ("**IonicRE**" or "the Company") (ASX: IXR) is pleased to provide an update on the tranche six (6) drill assays from the recently completed Phase 2 drill program at its 51% owned Makuutu Rare Earths Project ("**Makuutu**") in Uganda.

Drill assay results have been received for drill holes RRMDD212 to 245, including 11 resource extension holes drilled on the Makuutu Western Zone (MWZ) exploration target areas D and E, and 23 holes drilled to infill the current Mineral Resource Estimate (MRE) area. The Mineral Resource update is due to commence upon the receipt of the final infill drill assays from 34 remaining holes, expected before the end of January.

Intervals above the resource cut-off grade of 300ppm TREO-Ce_2O_3 were achieved in all areas.

Notable resource extension intercepts are:

- RRMDD214 7.7 metres at 873 ppm TREO from 8.3 metres
- RRMDD218 7.2 metres at 728 ppm TREO from 6.1 metres
- RRMDD220 13.4 metres at 722 ppm TREO from 6.1 metres

Notable resource infill intercepts include:

- RRMDD225 15.8 metres at 1,375 ppm TREO from 5.9 metres
- RRMDD226 16.6 metres at 1,379 ppm TREO from 6.8 metres
- RRMDD229 9.1 metres at 1,113 ppm TREO from 3.9 metres
- RRMDD232 10.1 metres at 1,754 ppm TREO from 4.7 metres
- RRMDD233 13.2 metres at 1,101 ppm TREO from 8.2 metres
- RRMDD242 10.6 metres at 1,140 ppm TREO from 6.5 metres
- RRMDD243 12.0 metres at 1,661 ppm TREO from 9.8 metres
- RRMDD245 5.0 metres at 2,965 ppm TREO from 11.9 metres

Ionic Rare Earths Managing Director Mr. Tim Harrison commented:

"These assay results extend and identify additional near surface REE clay mineralisation immediately west of the existing Mineral Resource area. The grade and thickness reported is as expected and

consistent with other areas of the Makuutu project area. It confirms a very high success rate on the identification of clay REE mineralisation based upon the exploration targeting method used including the radiometrics trend."

"These assays also include the first of the Phase 2 infill drilling results which show numerous high grade REE intervals with various zones of elevated HREO and CREO content. The remainder of the infill assays are expected by the end of the month, so we are planning for the Mineral Resource upgrade to commence shortly thereafter."

Drilling Results

The sixth tranche of assay results for the Makuutu resource expansion program have been received from the Phase 2 drill program which consisted of 3,745 metres of core drilling across the three (3) tested tenements at Makuutu. The aim of the program was to validate the Company's initial Exploration Target, quantify the potential of the previous 26-kilometre-long Makuutu mineralisation corridor contained within licences RL0007, RL1693 and EL1766, and provide data for an upcoming mineral resource expansion, all of which has proven to be successful. Since that time, the newly awarded Exploration Licences (ASX: 14 December 2020) have extended the Makuutu mineralisation corridor to 37-kilometres in length and a substantial increase in Exploration Target (ASX: 5th January 2021).

The Phase 2 drill program tested an area which is more than three (3) times greater than the area covered by the existing mineral resource estimate. These areas are defined by annotations A to J shown in Figure 1 below.

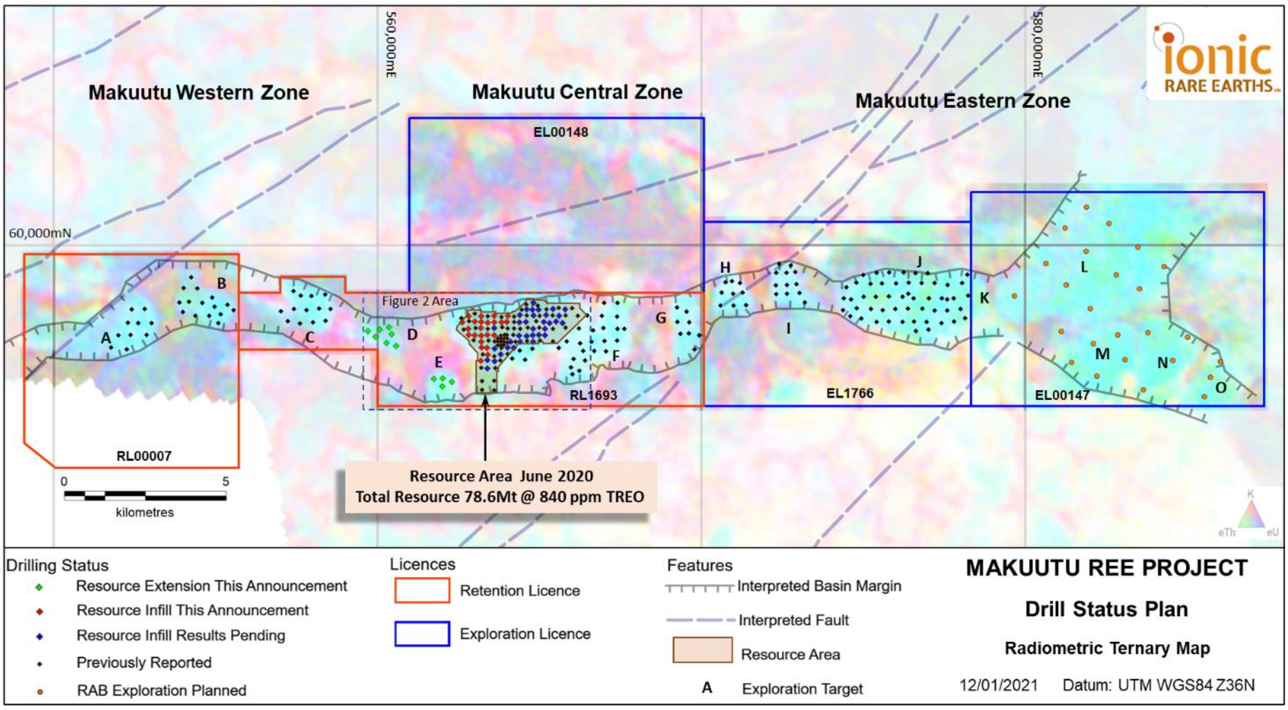

Figure 1: Drill program status plan showing completed and planned drill holes covering the Makuutu Rare Earths Project with the MRE and target areas. Zoom area diagram shown in Figure 2.

The drill results reported in this tranche include 11 drill holes in the MWZ testing Exploration Target areas D and E, and the first 23 infill drill holes from within the current mineral resource estimate (MRE) area. Figure 1 also illustrates the drill status over the entire Makuutu Rare Earths Project area, including 1) the hole locations relevant to this announcement, 2) holes with assay results pending to be reported in tranche 7, and 3) the planned RAB drilling on the recently granted licence EL00147 due to commence in Q2, 2021.

Figure 2 shows the locations for the results reported in this announcement within the highlighted area of Figure 1.

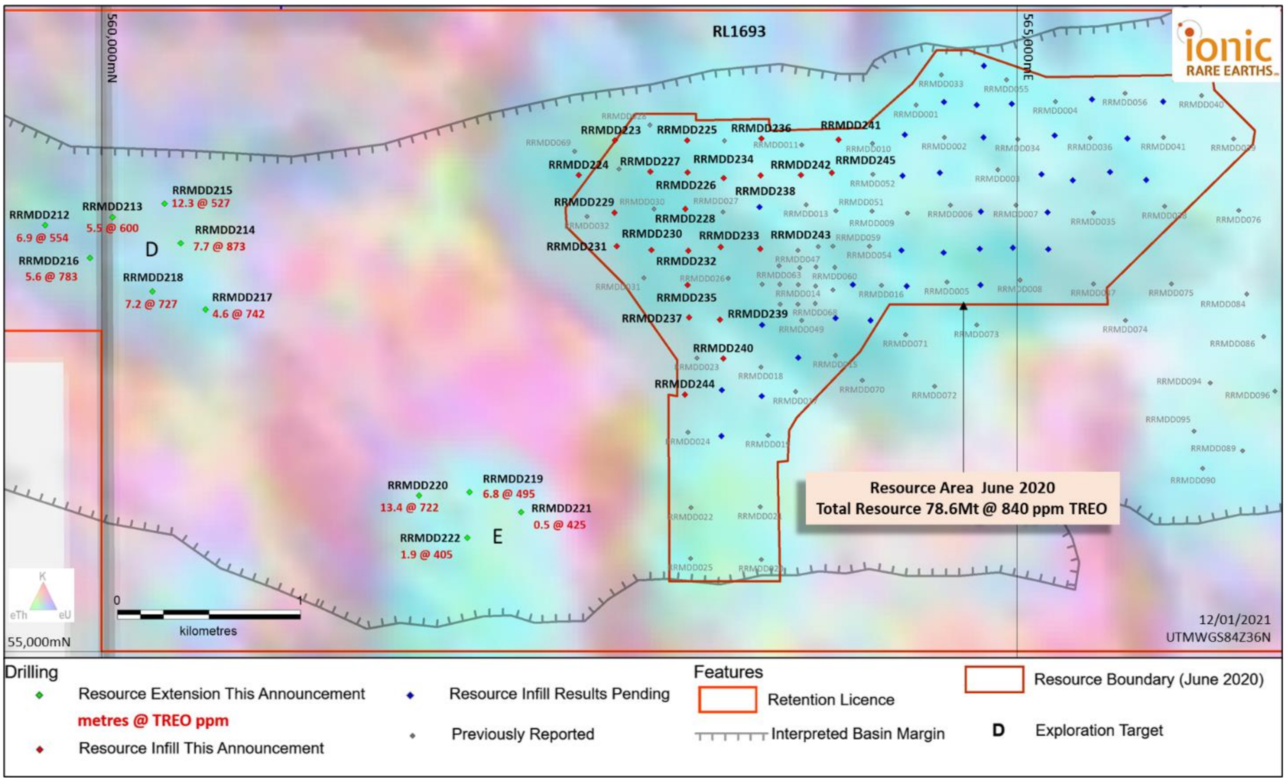

Figure 2: Makuutu Western and Central Zone drill plan with drill holes showing hole locations RRMDD212 to 245.

Resource Expansion Area D

Seven (7) resource expansion drill holes (RRMDD212 to 218) on a discrete plateau centered approximately 2.5 kilometres west of the current MRE on the recently renewed retention licence RL1693. The drilled area is approximately 1 kilometre wide and 1.1 kilometers long. Hole spacing ranged from 230 metres to 400 metres to accommodate the dimensions of the plateau and ensure adequate drill coverage.

All holes intersected consistent clay and saprolite hosted mineralisation above the resource cut-off grade.

Notable intersections are:

- RRMDD214 7.7 metres at 873 ppm TREO from 8.3 metres
- RRMDD218 7.2 metres at 728 ppm TREO from 6.1 metres

Resource Expansion Area E

Four (4) resource expansion drill holes (RRMDD219 to 222) on a discrete plateau centered approximately 1.0 kilometre south west of the current MRE on the recently renewed retention licence RL1693. The plateau is approximately 600 metres by 700 metres in dimension with the drill holes between 250 metres to 300 metres apart. This area was not drill or pit tested during the initial exploration stages of the Project.

All holes contained clay and saprolite hosted REO mineralisation however in 3 holes (RRMDD219, 221 and 222) mineralised intervals were interbedded with unmineralised sand intervals leading to narrow and generally lower grade mineralisation. Relatively thick and consistent mineralisation was intersected in one hole:

- RRMDD220 13.4 metres at 722 ppm TREO from 6.1 metres

The thick mineralised intersection in RMDD220 provides encouragement for further evaluation of this area in future programs.

Resource Infill Makuutu Central

The infill drilling of the current MRE area on the Makuutu Central Zone was designed to give a 200 metre spacing within the existing drilling for increasing resource estimation confidence in the upcoming Project wide resource estimate update.

Results for 23 of the 57 infill drill holes have been received with all showing clay and saprolite mineralisation intersections consistent with the initial drilling phases (2019 and H1 2020) and the current MRE.

The intersections above the MRE cut-off are listed in Table 1 including Total Rare Earth Oxides (TREO), Heavy Rare Earth Oxides (HREO) and Critical Rare Earth Oxides (CREO) grade. Hole locations are shown in Figure 2.

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Table 1 Infill Drilling Results above MRE cut-off grade of 300ppm TREO-Ce_2O_3

Hole ID	Depth From (metres)	Length (metres)	TREO (ppm)	TREO-Ce_2O_3 (ppm)	HREO (ppm)	CREO (ppm)
RRMDD223	3.6	6.0	633	428	166	246
RRMDD224	6.1	9.5	795	553	181	283
RRMDD225	5.9	15.8	1,375	978	213	558
RRMDD226	6.8	16.6	1,379	950	134	530
RRMDD227	3.8	12.6	761	460	214	232
RRMDD228	5.9	17.2	871	596	165	316
RRMDD229	3.9	9.1	1,113	793	220	426
RRMDD230	10.3	10.7	784	570	112	292
RRMDD231	6.8	10.5	591	444	164	213
RRMDD232	4.7	10.1	1,754	1,415	111	809
RRMDD233	8.2	13.2	1,101	814	106	421
RRMDD234	3.4	8.1	631	410	208	200
RRMDD235	6.3	11.4	800	602	195	274
RRMDD236	3.6	9.8	701	453	433	246
RRMDD237	7.1	1.0	827	315	409	152
RRMDD237	11.4	8.8	944	744	169	353
RRMDD238	7.0	15.6	689	465	237	257
RRMDD239	8.3	13.1	702	488	312	229
RRMDD240	4.7	6.7	902	649	201	309
RRMDD241	14.5	5.1	644	399	140	189
RRMDD242	6.5	10.6	1,140	865	658	498
RRMDD243	9.8	12.0	1,661	1,204	308	637
RRMDD244	2.3	12.4	977	656	142	320
RRMDD245	11.9	5.0	2,965	2,391	995	1,318

Note: Rounding may create arithmetic differences

Drilling Program

The Phase 2 drilling program totaled 3,745 metres of drilling from 222 holes with the following objectives:

1) In-fill drilling within the area of the current Mineral Resource (on tenement RL 1693) to assess short range REE grade variability for application to resource grade estimation confidence – *11 drill holes completed and reported 10th September 2020*.

2) Resource extensional drilling to expand the current Mineral Resource area further to the east (on tenement RL 1693) – *37 drill holes completed and reported by 26th September 2020.*

3) Exploration drilling on adjacent tenement EL 1766, or Makuutu Eastern Zone (MEZ) – *68 holes completed. 68 holes completed and reported in two releases on 5th November 2020 and 23rd November 2020.*

4) Exploration drilling on tenement RL 00007, or Makuutu Western Zone (MWZ) – *25 drill holes completed and reported on 18th December 2020.*

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5) Exploration drilling on the western side of the current Mineral Resource area further to the west (on tenement RL 1693) – *13 holes released on 18th December 2020 plus 11 drill holes released in this announcement.*

6) In-fill drilling within the area of the current Mineral Resource (on tenement RL 1693) to enhance resource grade estimation confidence. – *57 drill holes completed with 23 holes released in this announcement. Results from remaining 34 holes pending.*

The drill program is the largest undertaken on the Project to date, and is a material increase on the previous 990 metres of core drilling which delivered a MRE announced to the ASX on 23rd June 2020 and set out in Table 2, of:

78.6 Million tonnes @ 840 ppm TREO, at a cut-off grade of 300 ppm TREO-Ce_2O_3

The current drill program has tested the previous 26-kilometre-long Makuutu mineralisation corridor covering RL 1693, RL 00007 and EL 1766 which is included within the Exploration Target* of **240 – 800 million tonnes grading 0.045 – 0.09%** (450 – 900 ppm) TREO as announced to the ASX on 5th January 2021.

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

All remaining geochemical and metallurgical samples from the program have now been received in Perth and are the subject of further analysis and testwork.

Makuutu Rare Earths Project Status

A Mineral Resource Estimate (MRE) update is planned to start shortly once all drill hole assays have been reported. Due to advised assay backlogs and elevated sample quantities at the assay lab, it is expected the final drill hole assays will be received by the end of January, with the MRE update targeting completion by late Feb 2021.

Given the material increase in the MRE that is expected in late Feb 2021, the Company will also be completing an update of the Scoping Study ("Study") to reflect the significant increase in the scale of the Makuutu Rare Earths Project. The updated Study has the potential to feature multiple process modules and present options for accelerated production capacity ramp up further to the scenarios considered in the Study.

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Table 2: Makuutu Resource above 300ppm TREO-Ce2O3 Cut-off Grade.

Resource Classification	Tonnes (millions)	TREO (ppm)	TREO-Ce_2O_3 (ppm)	LREO (ppm)	HREO (ppm)	CREO (ppm)
Indicated Resource	9.5	750	520	550	200	280
Inferred Resource	69.1	860	620	640	210	320
Total Resource	**78.6**	**840**	**610**	**630**	**210**	**310**

Rounding has been applied to 0.1Mt and 10ppm which may influence grade average calculations.

Table 3: 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
RRMDD212	559693	57328	1151	HQ DD	19.00	0	-90
RRMDD213	560060	57372	1153	HQ DD	20.80	0	-90
RRMDD214	560432	57229	1148	HQ DD	18.20	0	-90
RRMDD215	560344	57446	1151	HQ DD	22.00	0	-90
RRMDD216	559936	57148	1150	HQ DD	15.40	0	-90
RRMDD217	560568	56867	1146	HQ DD	15.00	0	-90
RRMDD218	560277	56966	1149	HQ DD	20.40	0	-90
RRMDD219	562009	55869	1154	HQ DD	23.60	0	-90
RRMDD220	561733	55851	1152	HQ DD	18.90	0	-90
RRMDD221	562291	55761	1154	HQ DD	11.20	0	-90
RRMDD222	561997	55621	1157	HQ DD	20.00	0	-90
RRMDD223	562803	57790	1158	HQ DD	14.60	0	-90
RRMDD224	562606	57601	1154	HQ DD	16.50	0	-90
RRMDD225	563197	57791	1168	HQ DD	23.30	0	-90
RRMDD226	563200	57615	1168	HQ DD	24.20	0	-90
RRMDD227	562996	57620	1163	HQ DD	17.00	0	-90
RRMDD228	563186	57416	1166	HQ DD	24.00	0	-90
RRMDD229	562801	57396	1155	HQ DD	13.70	0	-90
RRMDD230	563002	57192	1159	HQ DD	21.00	0	-90
RRMDD231	562812	57213	1153	HQ DD	19.00	0	-90
RRMDD232	563203	57189	1163	HQ DD	17.00	0	-90
RRMDD233	563381	57209	1167	HQ DD	22.30	0	-90
RRMDD234	563396	57585	1170	HQ DD	14.30	0	-90
RRMDD235	563200	57000	1158	HQ DD	19.00	0	-90
RRMDD236	563602	57801	1167	HQ DD	14.00	0	-90
RRMDD237	563208	56824	1155	HQ DD	21.30	0	-90
RRMDD238	563599	57599	1172	HQ DD	27.40	0	-90
RRMDD239	563377	56812	1160	HQ DD	23.00	0	-90
RRMDD240	563395	56599	1158	HQ DD	12.00	0	-90
RRMDD241	564024	57795	1159	HQ DD	19.50	0	-90
RRMDD242	563819	57601	1172	HQ DD	18.80	0	-90
RRMDD243	563596	57198	1172	HQ DD	22.60	0	-90
RRMDD244	563186	56403	1153	HQ DD	14.60	0	-90
RRMDD245	563986	57613	1171	HQ DD	17.50	0	-90

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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. The deposit stretches 37 km in length and has demonstrated potential for a long life, low-cost capital intensity 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 12 m thick clay zone which results in low-cost bulk mining methods with low strip ratio. Processing is via simple acidified salt desorption heap leaching which washes the rare earths (in a chemical form) from the ore. The rare earths are precipitated as a mixed rare earth carbonate product, which attracts both a higher payability and is 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 30 years. The Project is also prospective for a low-cost Scandium co-product.

Authorised for release by the Board.

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Competent Person Statements

The information in this Report that relates to Exploration Results for the Makuutu Project is based on information compiled by Mr. Geoff Chapman, who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Chapman is a Director of geological consultancy GJ Exploration Pty Ltd that is engaged by Ionic Rare Earths 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 crossed-referenced in this report to the date that it was originally reported to ASX. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

The information in this report that relates to Mineral Resources for the Makuutu Rare Earths deposit was first released to the ASX on 23 June 2020 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

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.

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Appendix 1: Diamond Core Drilling Analytical Results RRMDD174 to RRMDD211 Including Highlighted Intersections >300 ppm TREO-Ce_2O_3
(Note: Rounding will cause minor value differences)

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																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD212	0.0	0.7	0.7	74.0	155.2	15.7	55.5	10.0	1.7	8.6	1.3	8.1	1.6	4.8	0.7	1.3	0.7	52.1	391	Soil		
RRMDD212	0.7	1.3	0.7	86.3	183.9	18.6	63.9	11.5	2.1	9.8	1.5	9.7	1.9	5.7	0.9	1.5	0.8	60.3	459	Soil		
RRMDD212	1.3	2.3	1.0	76.6	176.3	15.7	53.2	10.0	1.8	8.2	1.3	8.1	1.6	4.7	0.7	1.3	0.8	48.5	409	Hardcap		
RRMDD212	2.3	3.3	1.0	74.2	174.5	14.8	50.2	9.1	1.7	7.3	1.2	7.5	1.5	4.4	0.7	1.2	0.7	43.4	392	Hardcap		
RRMDD212	3.3	4.4	1.1	118.5	221.4	21.7	67.9	11.6	1.9	8.2	1.2	7.7	1.5	4.5	0.7	1.2	0.7	41.7	510	Hardcap		
RRMDD212	4.4	5.2	0.8	103.0	175.1	20.1	71.7	11.1	1.9	8.4	1.3	8.4	1.6	4.7	0.7	1.3	0.8	47.5	458	Clay		
RRMDD212	5.2	6.1	0.8	106.5	213.8	26.4	103.7	21.2	4.3	17.8	2.6	13.8	2.4	6.6	0.9	2.6	0.8	68.2	591	Clay		
RRMDD212	6.1	6.9	0.8	88.2	182.7	19.8	74.6	12.7	2.4	10.7	1.5	9.3	1.8	5.1	0.8	1.5	0.7	54.5	466	Clay		
RRMDD212	6.9	7.5	0.6	68.4	121.2	13.3	47.7	8.2	1.4	6.8	1.1	6.7	1.4	4.3	0.6	1.1	0.7	41.1	324	Clay		
RRMDD212	7.5	8.0	0.5	101.8	205.0	26.2	104.4	20.6	4.1	18.0	2.6	14.1	2.5	6.9	1.0	2.6	0.9	71.1	582	Clay		
RRMDD212	8.0	9.0	1.0	99.1	207.3	26.9	109.6	21.6	4.3	19.8	3.1	18.4	3.6	10.2	1.4	3.0	1.3	116.6	646	Clay		
RRMDD212	9.0	10.0	1.0	81.9	181.6	21.6	89.5	17.6	3.6	15.6	2.4	15.4	2.9	8.3	1.2	2.4	1.1	90.9	536	Clay		
RRMDD212	10.0	11.0	1.1	83.6	175.1	23.4	101.7	21.3	4.4	22.7	3.6	23.3	4.7	13.2	1.8	3.6	1.7	155.6	640	Clay		
RRMDD212	11.0	12.1	1.1	85.8	185.7	20.7	83.2	14.7	2.9	14.6	2.1	13.0	2.8	8.2	1.1	2.1	1.1	119.6	558	Clay	**6.9**	**554**
RRMDD212	12.1	12.9	0.8	88.2	190.9	19.5	70.9	11.7	2.1	8.6	1.2	7.4	1.4	3.8	0.6	1.2	0.6	44.2	452	Upper Saprolite		
RRMDD212	12.9	13.6	0.8	78.6	178.0	17.6	64.7	10.7	2.0	7.8	1.2	7.2	1.4	3.9	0.6	1.2	0.6	40.3	416	Upper Saprolite		
RRMDD212	13.6	14.6	1.0	66.6	148.2	15.3	56.5	9.8	1.9	7.3	1.0	5.2	1.0	2.6	0.4	1.0	0.4	26.0	343	Lower Saprolite		
RRMDD212	14.6	15.6	1.0	73.5	161.6	17.2	64.3	11.4	2.3	10.1	1.5	9.1	1.7	5.3	0.7	1.5	0.7	55.4	416	Lower Saprolite		
RRMDD212	15.6	16.5	0.9	73.2	161.1	16.5	61.6	11.0	2.0	8.3	1.3	7.1	1.3	3.8	0.5	1.2	0.5	39.1	388	Lower Saprolite		
RRMDD212	16.5	17.3	0.8	45.2	101.2	10.3	38.4	6.8	1.4	5.6	0.8	4.8	0.9	2.8	0.4	0.8	0.4	29.0	249	Saprock		
RRMDD212	17.3	18.2	0.9	63.0	142.3	14.6	53.3	9.5	1.9	7.9	1.2	6.1	1.1	3.1	0.4	1.2	0.4	33.4	339	Saprock		
RRMDD212	18.2	19.0	0.8	69.4	154.6	16.0	58.1	9.8	1.9	7.4	1.1	5.8	1.1	3.2	0.5	1.1	0.5	33.3	364	Saprock		
RRMDD213	0.0	0.9	0.9	60.9	90.0	12.3	40.8	7.3	1.3	6.0	1.0	6.2	1.3	3.7	0.6	1.0	0.6	40.1	273	Soil		
RRMDD213	0.9	1.7	0.9	65.3	91.0	12.9	43.2	7.5	1.4	6.3	1.0	6.6	1.3	3.9	0.6	1.0	0.6	43.6	286	Soil		
RRMDD213	1.7	2.6	0.9	74.1	103.2	15.1	49.0	8.8	1.6	7.3	1.2	7.5	1.5	4.5	0.7	1.2	0.7	48.4	325	Hardcap		
RRMDD213	2.6	3.4	0.9	72.0	97.7	14.4	48.3	8.8	1.6	7.3	1.2	7.2	1.5	4.4	0.7	1.2	0.7	47.2	314	Hardcap		
RRMDD213	3.4	4.2	0.8	61.5	84.0	11.8	40.7	7.7	1.3	6.4	1.0	6.5	1.3	3.9	0.6	1.0	0.6	40.8	269	Hardcap		
RRMDD213	4.2	4.8	0.6	79.8	88.0	12.8	40.5	6.9	1.2	5.3	0.9	5.4	1.1	3.5	0.6	0.9	0.6	31.5	279	Hardcap		
RRMDD213	4.8	5.8	1.0	84.4	684.0	14.8	50.3	9.1	1.5	6.9	1.2	7.2	1.4	4.2	0.7	1.2	0.7	35.7	903	Hardcap		
RRMDD213	5.8	6.7	0.9	129.0	177.5	27.2	93.8	14.9	2.6	10.7	1.6	9.5	1.8	5.1	0.8	1.6	0.7	48.6	525	Clay		
RRMDD213	6.7	7.6	0.9	109.4	184.5	27.0	105.7	18.3	3.4	14.6	2.2	12.6	2.3	6.6	0.9	2.2	0.9	65.3	556	Clay		
RRMDD213	7.6	8.4	0.9	107.2	168.7	29.7	117.2	22.4	4.4	19.8	2.9	16.8	2.9	8.2	1.2	2.8	1.1	90.4	596	Clay		
RRMDD213	8.4	9.5	1.1	99.2	183.9	31.4	135.3	26.1	4.9	22.9	3.4	20.6	4.1	11.9	1.6	3.4	1.5	128.9	679	Clay		
RRMDD213	9.5	10.2	0.7	99.5	189.2	36.3	165.6	31.9	6.1	29.3	4.4	25.2	5.1	14.6	2.0	4.3	1.8	170.8	786	Clay		
RRMDD213	10.2	11.3	1.1	75.1	154.0	19.3	79.0	14.7	3.0	16.5	2.3	14.2	2.9	8.4	1.2	2.3	1.0	112.5	506	Upper Saprolite	**5.5**	**600**
RRMDD213	11.3	12.4	1.1	82.6	176.3	19.3	71.7	12.8	2.4	10.4	1.5	8.8	1.6	4.7	0.7	1.5	0.7	58.2	453	Upper Saprolite		
RRMDD213	12.4	13.4	1.0	67.7	147.6	15.7	57.6	10.1	2.0	8.5	1.2	7.1	1.3	3.6	0.6	1.2	0.5	40.6	366	Upper Saprolite		
RRMDD213	13.4	14.2	0.8	81.3	182.7	19.1	69.2	12.0	2.3	9.8	1.4	7.8	1.5	4.4	0.6	1.4	0.6	46.6	441	Upper Saprolite		
RRMDD213	14.2	15.0	0.8	79.5	176.9	17.9	65.6	11.5	2.2	8.6	1.2	6.8	1.2	3.6	0.5	1.2	0.5	36.1	413	Upper Saprolite		
RRMDD213	15.0	16.0	1.1	71.2	161.6	16.7	62.6	11.1	2.2	9.4	1.3	7.5	1.5	4.0	0.6	1.3	0.6	45.5	397	Lower Saprolite		
RRMDD213	16.0	17.1	1.1	69.0	155.8	16.0	60.4	10.1	2.0	8.0	1.1	6.4	1.3	3.4	0.5	1.1	0.5	37.0	372	Lower Saprolite		
RRMDD213	17.1	18.2	1.1	68.7	157.5	16.1	61.6	10.9	2.2	9.2	1.3	7.8	1.5	4.2	0.6	1.3	0.5	44.3	388	Lower Saprolite		
RRMDD213	18.2	19.2	1.1	71.3	161.6	16.6	63.3	11.0	2.1	9.0	1.2	7.6	1.4	4.1	0.6	1.2	0.6	44.2	396	Lower Saprolite		
RRMDD213	19.2	20.1	0.8	69.0	156.4	16.0	60.7	11.0	2.2	8.7	1.2	7.7	1.4	4.1	0.5	1.2	0.5	43.7	384	Saprock		
RRMDD213	20.1	20.8	0.7	65.7	150.5	15.1	56.3	9.4	1.8	7.1	0.9	5.4	1.0	2.8	0.4	0.9	0.4	28.8	347	Saprock		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD214	0.0	1.0	1.0	56.5	92.8	10.8	37.9	7.0	1.3	6.4	1.0	6.0	1.3	4.0	0.6	1.0	0.7	39.6	267	Soil		
RRMDD214	1.0	1.0	0.0	74.7	121.2	14.0	49.8	9.2	1.7	8.1	1.3	7.7	1.6	4.8	0.7	1.2	0.8	49.9	347	Soil		
RRMDD214	1.0	2.8	1.8	65.8	107.9	12.5	44.2	8.2	1.4	7.4	1.1	7.4	1.4	4.5	0.7	1.1	0.7	46.2	311	Soil		
RRMDD214	2.8	3.5	0.8	76.2	130.6	14.7	52.3	9.8	1.7	8.6	1.3	8.3	1.7	5.2	0.8	1.3	0.8	52.2	366	Soil		
RRMDD214	3.5	4.4	0.9	67.1	135.3	12.6	44.8	8.4	1.4	7.1	1.1	7.0	1.4	4.6	0.7	1.1	0.7	41.0	334	Hardcap		
RRMDD214	4.4	5.3	0.9	50.2	1103.4	12.2	43.5	8.5	1.6	7.1	1.2	7.1	1.4	4.3	0.7	1.2	0.7	35.2	1278	Hardcap		
RRMDD214	5.3	6.1	0.9	55.4	1101.0	12.7	45.6	9.2	1.6	7.4	1.4	7.8	1.5	4.8	0.8	1.4	0.7	37.6	1289	Hardcap		
RRMDD214	6.1	6.8	0.7	74.9	241.3	14.6	52.7	9.2	1.6	7.7	1.3	8.4	1.7	5.5	0.8	1.3	0.8	47.6	469	Transition		
RRMDD214	6.8	7.5	0.7	70.5	73.0	13.3	47.2	8.2	1.4	7.2	1.2	7.4	1.5	5.1	0.8	1.1	0.8	48.0	287	Transition		
RRMDD214	7.5	8.3	0.8	92.8	106.7	20.1	73.6	12.4	2.2	10.1	1.5	9.1	1.9	5.8	0.9	1.5	0.9	59.6	399	Mottled		
RRMDD214	8.3	9.1	0.8	193.5	174.5	33.7	120.1	19.5	3.5	15.4	2.3	13.6	2.7	8.0	1.1	2.3	1.1	84.1	675	Clay		
RRMDD214	9.1	10.0	0.8	506.6	250.7	51.0	132.4	16.0	2.7	11.3	1.5	9.2	1.8	5.1	0.7	1.5	0.7	52.8	1044	Clay		
RRMDD214	10.0	11.0	1.0	408.1	309.2	81.6	292.8	45.8	8.0	31.6	4.2	23.0	4.0	11.2	1.5	4.2	1.3	113.4	1340	Clay		
RRMDD214	11.0	12.0	1.0	226.9	262.4	62.6	234.4	38.4	6.4	25.8	3.6	19.5	3.6	9.8	1.4	3.6	1.2	103.2	1003	Clay		
RRMDD214	12.0	12.9	1.0	183.0	216.1	60.4	243.8	43.0	7.6	32.0	4.5	24.4	4.4	11.8	1.6	4.4	1.4	117.5	956	Clay		
RRMDD214	12.9	13.9	1.0	141.3	205.0	42.2	172.0	30.8	6.1	28.5	4.1	25.2	5.2	15.2	2.0	4.1	1.9	164.5	848	Clay		
RRMDD214	13.9	15.0	1.0	114.6	150.5	28.4	118.4	22.1	4.4	23.0	3.3	21.2	4.5	13.3	1.8	3.2	1.6	162.5	673	Upper Saprolite		
RRMDD214	15.0	16.0	1.0	81.5	148.2	18.1	70.2	12.2	2.5	12.4	1.7	11.1	2.4	7.0	0.9	1.7	0.9	101.3	472	Upper Saprolite	**7.7**	**873**
RRMDD214	16.0	17.0	1.0	67.6	148.2	16.4	63.5	11.4	2.2	8.8	1.2	7.7	1.5	4.6	0.6	1.2	0.6	49.4	385	Lower Saprolite		
RRMDD214	17.0	18.2	1.2	60.2	131.2	14.3	54.0	9.4	1.9	7.7	1.1	6.7	1.4	4.0	0.6	1.1	0.6	41.4	335	Lower Saprolite		
RRMDD215	0.0	0.8	0.8	59.8	81.1	11.6	40.6	7.3	1.3	6.8	1.0	6.6	1.4	4.1	0.6	1.0	0.7	43.4	267	Soil		
RRMDD215	0.8	1.7	0.8	59.2	101.4	11.4	41.1	7.5	1.3	7.0	1.0	7.0	1.4	4.2	0.7	1.0	0.7	43.9	289	Soil		
RRMDD215	1.7	2.2	0.6	78.6	122.4	14.7	51.0	8.9	1.5	7.6	1.2	7.6	1.5	4.6	0.7	1.2	0.8	48.5	351	Soil		
RRMDD215	2.2	2.8	0.6	79.8	106.0	14.3	49.0	8.6	1.5	7.2	1.1	6.9	1.4	4.2	0.7	1.1	0.7	41.9	324	Soil		
RRMDD215	2.8	3.6	0.9	70.1	231.9	11.1	35.3	6.1	1.0	4.7	0.8	5.0	1.0	3.2	0.5	0.8	0.5	27.3	399	Hardcap		
RRMDD215	3.6	4.5	0.9	86.4	459.1	14.5	46.4	8.0	1.4	6.6	1.1	6.7	1.3	4.0	0.7	1.1	0.7	34.7	673	Hardcap		
RRMDD215	4.5	5.4	0.9	157.2	183.9	29.3	94.5	13.7	2.2	9.6	1.4	8.0	1.6	4.7	0.7	1.4	0.7	46.1	555	Clay		
RRMDD215	5.4	6.3	0.9	140.1	162.8	28.3	95.6	13.7	2.2	9.5	1.4	7.8	1.4	4.1	0.6	1.4	0.7	42.5	512	Clay		
RRMDD215	6.3	7.2	0.9	114.8	173.9	26.2	91.9	13.7	2.4	9.8	1.4	8.1	1.5	4.4	0.7	1.4	0.6	44.4	495	Clay		
RRMDD215	7.2	8.2	1.0	116.3	181.0	27.7	101.7	17.0	2.8	11.9	1.7	9.3	1.7	5.0	0.7	1.7	0.7	49.8	529	Clay		
RRMDD215	8.2	9.2	1.0	91.6	156.4	23.1	87.0	15.0	2.7	11.5	1.6	9.4	1.8	5.1	0.7	1.6	0.7	50.3	458	Clay		
RRMDD215	9.2	10.1	0.9	94.2	168.1	23.8	91.1	15.9	2.9	11.7	1.7	9.9	1.9	5.5	0.7	1.7	0.8	55.1	485	Clay		
RRMDD215	10.1	11.1	1.0	92.8	172.2	24.0	96.0	16.9	3.1	13.3	1.9	11.0	2.2	6.2	0.8	1.9	0.8	62.1	505	Clay		
RRMDD215	11.1	12.0	0.9	112.4	187.4	31.6	128.9	23.3	4.4	19.0	2.7	14.7	2.7	7.5	1.0	2.6	1.0	76.7	616	Clay		
RRMDD215	12.0	13.0	0.9	91.0	155.2	24.8	99.6	18.5	3.5	15.4	2.2	12.6	2.3	6.8	0.9	2.1	0.9	66.5	502	Clay		
RRMDD215	13.0	13.9	1.0	74.8	143.5	20.9	85.4	16.0	3.1	13.7	2.0	11.7	2.2	6.6	0.8	2.0	0.8	65.4	449	Clay		
RRMDD215	13.9	14.9	1.0	86.6	174.5	24.2	101.2	19.3	3.7	16.6	2.4	13.5	2.6	7.2	1.0	2.4	0.9	73.9	530	Clay		
RRMDD215	14.9	15.8	0.9	85.3	172.2	25.3	113.0	23.8	4.9	26.5	3.8	22.1	4.7	13.4	1.7	3.7	1.6	151.8	654	Upper Saprolite		
RRMDD215	15.8	16.8	0.9	78.1	166.3	19.3	79.1	15.2	3.1	18.0	2.6	16.4	3.9	10.9	1.5	2.6	1.4	153.7	572	Upper Saprolite	**12.3**	**528**
RRMDD215	16.8	17.7	0.9	81.4	179.8	18.3	69.4	12.7	2.4	10.6	1.5	8.1	1.6	4.7	0.7	1.5	0.6	55.5	449	Upper Saprolite		
RRMDD215	17.7	18.6	0.9	72.4	158.1	16.2	59.7	10.7	2.1	8.7	1.2	6.9	1.4	4.0	0.6	1.2	0.6	41.3	385	Upper Saprolite		
RRMDD215	18.6	19.5	0.9	79.5	179.2	18.4	69.2	12.3	2.3	9.7	1.4	7.5	1.5	4.1	0.6	1.4	0.6	43.3	431	Upper Saprolite		
RRMDD215	19.5	20.6	1.1	72.4	158.7	16.7	62.1	11.3	2.2	9.2	1.3	6.9	1.4	4.0	0.6	1.3	0.6	40.5	389	Lower Saprolite		
RRMDD215	20.6	21.6	1.1	77.6	169.3	17.3	65.6	11.4	2.0	9.0	1.3	7.3	1.5	4.2	0.6	1.2	0.6	45.0	414	Saprock		
RRMDD215	21.6	22.0	0.4	66.7	149.9	15.3	56.2	10.4	1.9	7.7	1.0	5.2	1.0	2.8	0.4	1.0	0.4	26.5	347	Saprock		
RRMDD216	0.0	0.9	0.9	73.9	141.1	14.3	51.1	9.6	1.7	8.7	1.3	8.5	1.7	5.1	0.8	1.3	0.8	52.3	372	Soil		
RRMDD216	0.9	1.8	0.9	74.6	150.5	14.5	52.4	10.1	1.7	8.8	1.3	8.5	1.7	5.3	0.8	1.3	0.9	53.5	386	Soil		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD216	1.8	2.2	0.4	54.7	142.9	10.3	37.4	7.5	1.3	6.4	1.0	6.5	1.3	4.0	0.6	1.0	0.7	38.0	314	Soil		
RRMDD216	2.2	3.1	0.9	60.5	93.4	10.3	35.6	6.8	1.2	5.9	0.9	5.8	1.2	3.9	0.6	0.9	0.6	34.2	262	Hardcap		
RRMDD216	3.1	3.7	0.6	68.1	544.7	12.1	41.6	7.8	1.4	6.4	1.1	6.8	1.3	4.0	0.7	1.1	0.7	37.2	735	Hardcap		
RRMDD216	3.7	4.6	0.9	81.5	202.6	13.4	45.6	7.8	1.3	6.6	1.0	6.7	1.4	4.3	0.7	1.0	0.8	43.6	418	Transition		
RRMDD216	4.6	5.2	0.6	69.0	82.1	12.4	44.0	7.8	1.3	6.9	1.0	6.4	1.4	4.3	0.7	1.0	0.7	41.9	281	Mottled		
RRMDD216	5.2	5.8	0.6	84.7	122.4	18.8	67.2	11.7	2.0	9.6	1.3	7.8	1.6	4.7	0.7	1.3	0.7	45.0	380	Mottled		
RRMDD216	5.8	6.4	0.6	117.3	152.3	26.4	96.7	16.7	2.8	13.3	1.8	10.3	2.0	5.7	0.9	1.8	0.8	60.3	509	Mottled		
RRMDD216	6.4	7.0	0.6	182.4	233.7	50.3	184.3	32.0	5.5	24.4	3.2	17.0	3.2	8.7	1.2	3.2	1.1	92.7	843	Mottled		
RRMDD216	7.0	8.2	1.2	195.9	323.3	48.7	180.2	30.3	5.2	23.3	3.2	17.8	3.5	9.7	1.3	3.1	1.3	103.4	950	Clay		
RRMDD216	8.2	8.9	0.7	266.2	219.6	56.4	212.3	37.6	6.5	28.6	3.9	20.2	3.8	9.5	1.3	3.9	1.2	98.5	969	Clay		
RRMDD216	8.9	9.8	0.9	179.4	182.7	46.0	184.9	33.3	6.3	30.2	3.9	22.4	4.0	11.2	1.5	3.9	1.3	113.1	824	Upper Saprolite		
RRMDD216	9.8	10.6	0.9	137.2	147.6	34.1	141.7	28.1	5.8	30.9	4.4	25.7	5.3	15.0	1.9	4.4	1.8	163.8	748	Upper Saprolite		
RRMDD216	10.6	11.4	0.8	93.5	123.0	19.1	76.7	14.4	3.2	19.1	2.6	16.5	3.8	11.4	1.5	2.6	1.4	151.1	540	Lower Saprolite	**5.6**	**784**
RRMDD216	11.4	12.4	1.0	55.0	112.9	12.9	49.6	9.5	2.0	8.9	1.2	6.9	1.4	4.2	0.6	1.2	0.5	53.0	320	Saprock		
RRMDD216	12.4	13.4	1.0	50.0	106.5	11.9	45.6	8.5	1.7	7.3	1.0	5.6	1.2	3.4	0.5	1.0	0.5	35.3	280	Saprock		
RRMDD216	13.4	14.4	1.0	45.0	95.7	10.8	42.8	8.6	1.6	7.1	1.0	6.0	1.2	3.6	0.5	1.0	0.5	38.2	264	Saprock		
RRMDD216	14.4	15.4	1.0	61.1	135.3	14.8	58.2	11.7	2.3	9.6	1.4	8.3	1.7	5.2	0.7	1.4	0.7	53.0	365	Saprock		
RRMDD217	0.0	0.9	0.9	59.2	124.2	11.7	41.5	8.2	1.4	7.5	1.2	7.2	1.5	4.7	0.7	1.2	0.7	44.3	315	Soil		
RRMDD217	0.9	1.8	0.9	59.3	133.5	12.2	44.1	8.2	1.4	7.0	1.1	6.6	1.4	4.5	0.7	1.1	0.7	45.7	328	Soil		
RRMDD217	1.8	2.5	0.7	59.8	169.8	12.9	46.5	8.3	1.5	7.5	1.2	7.4	1.6	4.9	0.7	1.2	0.8	47.5	372	Soil		
RRMDD217	2.5	3.3	0.7	62.0	157.0	13.0	47.5	8.7	1.6	7.6	1.2	7.2	1.5	4.7	0.7	1.2	0.7	47.1	362	Soil		
RRMDD217	3.3	4.1	0.8	34.0	465.0	6.8	23.8	4.3	0.8	3.8	0.7	3.9	0.8	2.6	0.4	0.7	0.4	23.7	572	Hardcap		
RRMDD217	4.1	4.8	0.8	33.9	159.3	6.4	23.4	4.0	0.7	3.6	0.6	3.6	0.8	2.3	0.4	0.6	0.4	22.9	263	Transition		
RRMDD217	4.8	5.6	0.8	17.9	50.0	3.6	13.1	2.3	0.4	2.1	0.3	2.1	0.5	1.6	0.2	0.3	0.3	14.2	109	Clay		
RRMDD217	5.6	6.5	0.8	32.8	48.0	6.9	25.4	4.7	0.9	4.5	0.7	4.6	1.0	3.2	0.5	0.7	0.5	30.0	165	Clay		
RRMDD217	6.5	7.3	0.9	52.1	73.6	11.6	41.5	7.6	1.2	5.9	0.8	5.1	1.1	3.3	0.5	0.8	0.5	32.1	238	Clay		
RRMDD217	7.3	8.2	0.9	44.1	65.9	9.9	35.5	6.2	1.1	5.1	0.8	4.3	1.0	2.9	0.4	0.8	0.5	28.1	207	Clay		
RRMDD217	8.2	8.8	0.6	64.5	105.4	15.1	53.7	9.1	1.6	7.2	1.0	5.5	1.1	3.2	0.5	1.0	0.5	32.8	302	Clay		
RRMDD217	8.8	9.7	0.9	207.6	381.8	58.5	210.0	35.5	6.0	22.8	2.9	14.7	2.5	6.4	0.9	2.9	0.8	59.3	1013	Upper Saprolite		
RRMDD217	9.7	10.6	0.9	154.8	231.3	32.2	113.0	19.2	3.4	13.3	1.9	10.7	2.0	5.7	0.8	1.9	0.7	57.8	649	Upper Saprolite		
RRMDD217	10.6	11.7	1.1	144.8	271.7	36.5	134.1	25.3	4.6	18.8	2.9	16.2	3.1	8.6	1.2	2.8	1.1	83.6	755	Lower Saprolite		
RRMDD217	11.7	12.5	0.9	137.2	184.5	30.4	115.4	22.3	4.2	20.2	3.0	18.1	3.7	10.8	1.5	3.0	1.4	122.8	678	Lower Saprolite		
RRMDD217	12.5	13.4	0.9	127.8	173.9	23.2	90.9	15.9	3.4	16.3	2.3	13.9	2.9	8.3	1.1	2.3	1.0	108.3	591	Lower Saprolite	**4.6**	**743**
RRMDD217	13.4	14.2	0.8	69.2	141.1	16.4	61.9	10.6	2.2	8.4	1.2	7.2	1.4	3.9	0.6	1.2	0.5	51.4	377	Saprock		
RRMDD217	14.2	15.0	0.8	63.6	144.1	15.0	56.5	10.7	2.0	8.0	1.1	6.8	1.4	4.0	0.5	1.1	0.5	40.4	356	Saprock		
RRMDD218	0.0	1.0	1.0	73.2	130.6	15.3	55.1	10.0	1.7	8.4	1.3	7.6	1.6	4.7	0.7	1.2	0.8	51.2	363	Soil		
RRMDD218	1.0	1.9	1.0	71.7	127.7	15.0	54.8	9.7	1.7	8.6	1.3	7.8	1.6	4.9	0.7	1.3	0.7	51.9	359	Soil		
RRMDD218	1.9	3.1	1.2	77.1	164.0	16.9	60.9	10.9	2.0	9.6	1.5	8.8	1.8	5.4	0.8	1.5	0.8	56.8	418	Soil		
RRMDD218	3.1	4.1	1.0	44.7	1844.8	10.2	36.0	6.8	1.3	5.6	1.2	5.8	1.2	3.8	0.6	1.2	0.6	31.9	1996	Hardcap		
RRMDD218	4.1	5.1	1.0	70.4	465.0	12.9	43.2	7.6	1.4	6.2	1.0	6.4	1.4	4.2	0.6	1.0	0.7	39.9	662	Hardcap		
RRMDD218	5.1	6.1	1.0	65.4	451.0	13.9	45.4	8.3	1.5	6.8	1.2	7.4	1.5	4.5	0.8	1.2	0.8	43.9	654	Hardcap		
RRMDD218	6.1	7.0	0.9	242.8	143.5	35.9	117.8	19.7	3.6	16.2	2.4	14.1	2.9	8.3	1.2	2.4	1.2	93.1	705	Mottled		
RRMDD218	7.0	7.8	0.9	155.4	111.0	32.4	116.5	20.2	3.5	17.5	2.4	15.1	3.1	8.6	1.2	2.4	1.1	106.4	597	Mottled		
RRMDD218	7.8	8.7	0.9	309.6	161.1	48.0	163.3	28.9	5.4	26.7	3.8	23.0	4.8	13.4	1.8	3.8	1.7	154.9	950	Clay		
RRMDD218	8.7	9.6	0.9	174.2	109.5	37.8	142.3	24.4	4.6	22.4	3.2	19.0	4.0	11.1	1.5	3.2	1.4	135.9	694	Clay		
RRMDD218	9.6	10.4	0.8	165.4	72.3	36.3	135.3	24.9	4.7	23.6	3.5	20.9	4.3	12.0	1.6	3.5	1.5	146.0	656	Clay		
RRMDD218	10.4	11.5	1.1	188.8	94.8	40.8	154.0	25.6	4.8	23.3	3.3	19.6	4.1	11.8	1.6	3.2	1.5	146.0	723	Clay		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD218	11.5	12.4	0.9	182.4	305.7	41.0	151.6	26.9	4.9	23.7	3.4	20.3	4.1	11.7	1.6	3.4	1.4	140.3	922	Upper Saprolite		
RRMDD218	12.4	13.2	0.8	133.7	110.7	30.5	111.4	19.7	3.5	16.9	2.5	13.9	3.0	8.1	1.1	2.4	1.0	98.5	557	Upper Saprolite	7.2	728
RRMDD218	13.2	14.2	1.0	15.0	29.3	3.4	12.4	2.2	0.4	1.9	0.3	1.6	0.3	1.0	0.2	0.3	0.1	10.0	78	Sand		
RRMDD218	14.2	15.1	0.9	6.7	9.4	1.5	5.6	1.0	0.2	0.8	0.1	0.8	0.2	0.5	0.1	0.1	0.1	4.4	31	Sand		
RRMDD218	15.1	16.1	1.0	4.0	6.4	0.9	3.3	0.6	0.1	0.5	0.1	0.5	0.1	0.4	0.1	0.1	0.1	3.4	21	Sand		
RRMDD218	16.1	17.1	1.0	3.3	6.2	0.8	2.8	0.6	0.1	0.5	0.1	0.5	0.1	0.4	0.1	0.1	0.1	3.2	19	Sand		
RRMDD218	17.1	17.9	0.8	42.9	88.4	10.6	39.2	7.5	1.5	5.6	0.8	4.1	0.8	2.4	0.4	0.8	0.4	23.4	229	Lower Saprolite		
RRMDD218	17.9	18.6	0.7	47.6	90.2	13.0	52.7	11.4	2.5	9.3	1.3	7.2	1.3	3.6	0.5	1.3	0.4	37.5	280	Lower Saprolite		
RRMDD218	18.6	19.4	0.8	36.8	74.8	9.1	34.3	7.0	1.4	5.1	0.8	4.3	0.8	2.2	0.3	0.8	0.3	24.4	202	Lower Saprolite		
RRMDD218	19.4	20.4	1.0	50.0	95.5	12.0	46.2	9.4	1.9	7.8	1.0	5.2	1.1	2.8	0.4	1.0	0.4	33.1	268	Saprock		
RRMDD219	0.0	0.7	0.7	75.3	236.6	14.5	47.9	8.7	1.6	6.9	1.1	7.1	1.4	4.4	0.6	1.1	0.7	44.4	453	Soil		
RRMDD219	0.7	1.5	0.7	68.5	172.2	13.0	43.3	7.6	1.5	6.4	1.0	6.5	1.3	3.8	0.6	1.0	0.6	40.1	368	Soil		
RRMDD219	1.5	2.5	1.0	55.2	265.9	10.9	34.8	6.7	1.2	5.4	0.9	5.9	1.2	3.5	0.5	0.9	0.6	33.0	427	Soil		
RRMDD219	2.5	3.5	1.0	52.7	262.4	10.4	34.2	6.7	1.2	5.5	0.9	5.7	1.2	3.4	0.5	0.9	0.5	32.1	418	Soil		
RRMDD219	3.5	4.3	0.8	39.8	644.2	8.6	28.2	5.8	0.9	4.4	0.8	4.8	0.9	3.1	0.5	0.8	0.5	26.4	770	Hardcap		
RRMDD219	4.3	5.2	0.8	68.0	393.6	14.9	50.3	9.3	1.6	6.9	1.2	7.1	1.5	4.4	0.7	1.2	0.7	43.7	605	Hardcap		
RRMDD219	5.2	5.9	0.7	107.4	349.0	23.9	80.8	14.1	2.3	11.0	1.7	10.5	2.1	6.5	1.0	1.6	1.0	65.3	678	Transition		
RRMDD219	5.9	6.7	0.8	85.5	112.0	19.0	67.0	11.7	2.0	9.5	1.5	9.3	2.0	6.0	0.9	1.5	0.9	57.9	387	Clay		
RRMDD219	6.7	7.5	0.8	74.7	96.4	16.2	58.7	10.4	1.7	8.3	1.3	7.9	1.7	5.1	0.8	1.3	0.8	50.2	335	Clay		
RRMDD219	7.5	7.9	0.4	36.4	39.7	7.9	28.6	5.4	0.9	4.1	0.7	4.2	0.9	2.7	0.4	0.7	0.4	25.9	159	Sand		
RRMDD219	7.9	8.5	0.5	91.1	100.5	20.2	71.9	11.8	2.0	9.3	1.4	7.8	1.7	4.7	0.7	1.4	0.7	51.0	376	Clay		
RRMDD219	8.5	9.2	0.8	119.6	164.6	28.1	98.6	16.8	2.9	12.4	1.8	10.4	2.1	5.9	0.9	1.8	0.9	66.4	533	Clay		
RRMDD219	9.2	10.0	0.8	120.2	179.8	27.2	96.0	16.3	2.8	11.5	1.6	9.5	1.8	5.1	0.7	1.6	0.7	57.5	532	Clay		
RRMDD219	10.0	10.8	0.8	94.2	171.0	23.9	88.6	15.0	2.8	9.8	1.3	7.8	1.4	3.9	0.5	1.3	0.5	36.8	459	Clay		
RRMDD219	10.8	11.6	0.8	98.5	155.8	20.8	76.2	11.8	2.2	8.9	1.2	7.3	1.5	4.1	0.6	1.2	0.5	44.1	435	Upper Saprolite		
RRMDD219	11.6	12.6	1.0	130.2	144.7	28.7	109.4	18.8	3.7	16.0	2.3	13.7	2.8	7.9	1.0	2.3	0.9	93.8	576	Lower Saprolite		
RRMDD219	12.6	13.5	0.9	79.8	84.7	16.4	61.6	9.9	1.9	8.1	1.2	6.7	1.4	4.0	0.6	1.2	0.5	45.2	323	Lower Saprolite		
RRMDD219	13.5	14.4	0.9	137.2	174.5	29.6	111.5	17.8	3.6	14.5	2.1	12.6	2.5	7.4	1.0	2.1	0.8	82.4	600	Lower Saprolite		
RRMDD219	14.4	15.2	0.9	121.4	166.3	24.8	94.2	14.8	2.6	11.1	1.5	9.0	1.8	5.2	0.7	1.5	0.7	56.4	512	Lower Saprolite	6.8	495
RRMDD219	15.2	16.1	0.9	79.5	118.9	16.3	60.1	9.5	1.6	6.8	1.0	5.6	1.1	3.1	0.4	0.9	0.5	33.7	339	Lower Saprolite		
RRMDD219	16.1	17.0	0.8	89.7	127.1	22.5	93.0	17.7	3.5	13.3	1.9	10.1	1.6	4.1	0.5	1.9	0.4	37.1	424	Lower Saprolite		
RRMDD219	17.0	17.8	0.8	22.0	36.0	4.6	16.6	2.6	0.5	1.9	0.3	1.7	0.4	1.2	0.2	0.3	0.2	12.1	101	Lower Saprolite		
RRMDD219	17.8	18.8	1.0	60.2	98.6	12.5	46.8	7.1	1.4	5.5	0.8	4.6	0.9	2.7	0.4	0.8	0.4	26.8	269	Lower Saprolite		
RRMDD219	18.8	19.8	1.0	80.0	131.2	17.6	68.5	12.2	2.4	10.9	1.7	10.3	2.2	6.2	0.8	1.7	0.7	75.6	422	Lower Saprolite		
RRMDD219	19.8	20.7	1.0	83.3	162.8	17.1	62.8	10.1	1.9	8.0	1.2	7.2	1.5	4.5	0.6	1.2	0.6	51.2	414	Lower Saprolite		
RRMDD219	20.7	21.7	1.0	77.8	159.3	16.9	62.3	9.7	1.6	6.9	0.9	5.0	1.1	2.7	0.4	0.9	0.4	32.0	378	Lower Saprolite		
RRMDD219	21.7	22.6	0.9	77.9	159.9	17.0	64.3	11.3	2.0	10.4	1.4	8.7	1.8	5.4	0.7	1.4	0.7	65.9	429	Lower Saprolite		
RRMDD219	22.6	23.6	1.0	64.2	118.9	13.8	51.8	8.3	1.5	6.6	0.9	5.1	1.0	2.8	0.4	0.9	0.4	31.2	308	Lower Saprolite		
RRMDD220	0.0	1.1	1.1	67.4	121.2	14.5	48.8	9.3	1.6	7.9	1.2	7.9	1.6	4.7	0.7	1.2	0.8	49.9	339	Soil		
RRMDD220	1.1	2.1	1.1	69.4	128.8	15.0	50.5	9.6	1.7	8.0	1.3	8.2	1.7	5.0	0.8	1.2	0.8	51.0	353	Soil		
RRMDD220	2.1	3.0	0.9	95.5	147.0	21.2	71.6	12.9	2.3	10.3	1.7	10.5	2.0	6.0	0.9	1.7	0.9	63.5	448	Hardcap		
RRMDD220	3.0	3.8	0.9	73.9	154.0	16.3	58.2	10.1	1.8	8.7	1.4	8.4	1.7	5.5	0.8	1.4	0.8	52.6	396	Hardcap		
RRMDD220	3.8	4.7	0.9	78.6	767.2	16.7	56.6	9.8	1.7	7.6	1.3	7.1	1.5	4.4	0.7	1.3	0.7	38.6	994	Hardcap		
RRMDD220	4.7	5.5	0.8	105.0	1047.1	21.8	74.1	12.8	2.3	9.8	1.7	8.9	1.8	5.3	0.8	1.7	0.8	45.7	1339	Hardcap		
RRMDD220	5.5	6.5	1.0	127.8	236.6	28.7	104.9	16.7	2.8	12.6	1.8	10.8	2.2	5.9	0.8	1.8	0.9	63.1	617	Clay		
RRMDD220	6.5	7.5	1.0	295.5	463.8	69.6	247.3	38.0	6.5	27.1	3.7	21.2	4.0	11.0	1.5	3.7	1.3	137.8	1332	Clay		
RRMDD220	7.5	8.6	1.0	181.2	570.4	42.0	151.6	23.2	4.1	16.5	2.3	13.6	2.6	7.2	1.0	2.3	0.9	77.1	1096	Clay		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD220	8.6	9.4	0.9	246.3	182.7	60.0	209.4	32.2	5.5	22.4	3.1	16.5	3.1	8.5	1.1	3.0	1.0	93.2	888	Clay		
RRMDD220	9.4	10.4	0.9	200.0	387.7	48.0	169.1	26.4	4.7	18.1	2.4	13.5	2.4	6.7	0.9	2.4	0.7	72.8	956	Clay		
RRMDD220	10.4	11.2	0.9	177.7	123.0	40.1	145.8	22.8	4.0	16.3	2.3	12.5	2.4	6.4	0.9	2.3	0.8	74.4	632	Clay		
RRMDD220	11.2	12.3	1.1	209.9	107.3	44.5	166.2	26.4	4.7	20.5	2.8	16.4	3.1	8.4	1.1	2.8	0.9	98.7	714	Upper Saprolite		
RRMDD220	12.3	13.0	0.7	195.9	147.6	44.5	168.5	27.9	5.0	21.2	2.9	16.3	3.0	8.3	1.1	2.9	0.9	89.9	736	Upper Saprolite		
RRMDD220	13.0	13.7	0.7	160.7	149.3	37.1	138.8	23.3	4.3	17.2	2.4	13.9	2.6	6.9	1.0	2.4	0.8	75.8	637	Upper Saprolite		
RRMDD220	13.7	14.4	0.8	72.2	60.8	16.4	64.7	11.3	2.1	8.5	1.2	6.8	1.2	3.2	0.4	1.2	0.3	32.8	283	Upper Saprolite		
RRMDD220	14.4	15.4	1.0	57.0	71.8	11.0	41.1	6.2	1.3	5.3	0.7	4.2	0.8	2.3	0.3	0.7	0.3	24.1	227	Lower Saprolite		
RRMDD220	15.4	16.4	1.0	174.7	186.8	29.1	126.0	22.7	5.2	31.6	4.8	30.9	7.1	20.2	2.6	4.8	2.3	264.1	913	Lower Saprolite		
RRMDD220	16.4	17.3	0.8	144.8	147.0	24.0	99.1	16.1	3.6	19.7	2.7	17.9	3.8	10.9	1.4	2.7	1.2	156.2	651	Lower Saprolite		
RRMDD220	17.3	18.1	0.8	57.6	88.6	11.4	41.6	6.5	1.3	5.2	0.7	4.2	0.9	2.5	0.4	0.7	0.4	25.0	247	Lower Saprolite		
RRMDD220	18.1	18.9	0.8	137.8	316.3	30.0	106.0	15.9	2.5	10.2	1.4	7.8	1.5	3.8	0.5	1.4	0.5	43.6	679	Lower Saprolite	**13.4**	**722**
RRMDD221	0.0	0.9	0.9	51.5	135.3	10.3	37.0	6.5	1.1	5.6	0.9	5.5	1.1	3.6	0.5	0.9	0.5	33.7	294	Soil		
RRMDD221	0.9	1.8	0.9	50.9	139.4	10.2	35.6	6.4	1.1	5.4	0.9	5.3	1.1	3.5	0.5	0.9	0.6	32.8	295	Soil		
RRMDD221	1.8	2.9	1.1	43.6	128.8	9.2	32.5	5.7	0.9	4.7	0.8	4.6	1.0	3.2	0.5	0.8	0.5	27.9	265	Hardcap		
RRMDD221	2.9	3.9	1.1	50.9	401.8	10.7	38.1	6.5	1.0	5.1	0.9	5.2	1.1	3.5	0.6	0.9	0.6	33.3	560	Hardcap		
RRMDD221	3.9	4.4	0.5	112.2	443.9	27.6	114.2	20.6	4.1	17.0	2.6	15.0	2.9	7.8	1.0	2.6	0.9	82.9	855	Transition		
RRMDD221	4.4	5.1	0.7	86.0	338.5	17.1	61.7	9.2	1.6	6.9	1.0	6.0	1.2	3.4	0.5	1.0	0.5	38.0	572	Clay		
RRMDD221	5.1	5.9	0.7	50.0	171.6	9.8	35.5	5.6	1.0	4.8	0.8	4.8	1.0	3.1	0.5	0.8	0.5	30.5	320	Clay		
RRMDD221	5.9	6.4	0.5	105.9	108.7	21.2	79.0	12.6	2.4	9.9	1.5	9.1	2.0	5.9	0.8	1.5	0.8	64.1	425	Upper Saprolite	**0.5**	**425**
RRMDD221	6.4	7.3	1.0	49.0	60.9	10.0	36.4	5.5	1.0	4.4	0.7	4.1	1.0	2.9	0.4	0.7	0.5	30.6	208	Lower Saprolite		
RRMDD221	7.3	8.3	1.0	108.0	108.9	21.8	79.8	11.8	2.3	9.1	1.3	7.2	1.4	3.9	0.6	1.2	0.5	41.5	399	Lower Saprolite		
RRMDD221	8.3	9.3	1.0	108.7	106.4	21.6	78.6	12.0	2.2	9.2	1.2	6.7	1.3	3.6	0.5	1.2	0.5	37.8	392	Lower Saprolite		
RRMDD221	9.3	10.3	1.0	51.1	51.5	10.1	36.2	5.3	1.0	4.3	0.6	3.5	0.7	2.1	0.3	0.6	0.3	20.3	188	Sand		
RRMDD221	10.3	11.2	0.9	47.4	57.6	9.1	32.3	4.7	0.9	3.9	0.5	2.8	0.5	1.5	0.2	0.5	0.2	16.6	179	Sand		
RRMDD222	0.0	0.7	0.7	107.1	202.0	23.4	84.7	14.4	2.5	12.4	1.9	11.0	2.3	6.7	1.0	1.9	1.0	72.0	544	Soil		
RRMDD222	0.7	1.4	0.7	102.0	205.6	22.3	80.1	13.9	2.4	12.5	1.9	10.9	2.3	6.8	1.0	1.9	0.9	69.5	534	Soil		
RRMDD222	1.4	2.3	0.9	115.8	236.6	25.6	92.4	15.7	2.8	14.2	2.1	12.6	2.5	7.2	1.1	2.1	1.0	77.2	609	Soil		
RRMDD222	2.3	3.2	0.9	112.7	336.2	24.8	89.1	15.6	2.6	13.0	2.0	11.8	2.4	7.0	1.0	2.0	1.0	72.5	694	Soil		
RRMDD222	3.2	4.0	0.8	51.6	483.7	9.7	33.0	6.4	1.1	5.0	0.9	5.6	1.2	3.5	0.6	0.9	0.6	29.1	633	Hardcap		
RRMDD222	4.0	4.8	0.8	52.5	1265.0	11.3	39.0	7.3	1.3	6.1	1.1	6.3	1.2	3.8	0.6	1.1	0.6	31.9	1429	Hardcap		
RRMDD222	4.8	5.4	0.7	78.3	1247.4	16.8	57.5	9.8	1.7	8.2	1.3	8.0	1.5	4.6	0.7	1.3	0.7	43.3	1481	Hardcap		
RRMDD222	5.4	6.4	1.0	130.8	188.0	25.0	91.3	14.8	2.7	13.6	2.0	12.3	2.5	7.5	1.1	2.0	1.0	76.3	571	Transition		
RRMDD222	6.4	7.2	0.7	54.2	86.6	10.3	36.7	6.0	1.1	5.2	0.8	5.0	1.0	3.1	0.4	0.8	0.4	31.6	243	Sand		
RRMDD222	7.2	7.9	0.7	30.8	50.2	5.2	18.4	2.8	0.5	2.4	0.4	2.2	0.5	1.4	0.2	0.4	0.2	15.4	131	Sand		
RRMDD222	7.9	8.6	0.7	18.5	33.0	3.4	12.0	2.0	0.3	1.7	0.3	1.7	0.4	1.1	0.2	0.3	0.2	11.4	87	Sand		
RRMDD222	8.6	9.6	1.0	63.7	54.3	12.2	44.9	7.1	1.3	6.2	0.9	6.1	1.3	3.9	0.6	0.9	0.6	39.6	244	Clay		
RRMDD222	9.6	10.6	1.0	64.6	42.3	12.5	45.4	7.2	1.2	6.0	0.9	5.6	1.1	3.5	0.5	0.9	0.5	37.7	230	Clay		
RRMDD222	10.6	11.5	0.9	116.9	86.9	21.6	78.3	11.9	2.3	10.7	1.5	9.7	2.1	5.7	0.8	1.5	0.8	64.5	415	Clay		
RRMDD222	11.5	12.5	0.9	108.2	87.8	21.5	77.0	12.1	2.3	9.9	1.4	8.9	1.8	5.1	0.7	1.4	0.7	56.0	395	Clay	**1.9**	**405**
RRMDD222	12.5	13.2	0.8	34.6	126.5	8.3	31.6	5.2	1.0	4.0	0.6	3.6	0.8	2.0	0.3	0.6	0.3	20.7	240	Clay		
RRMDD222	13.2	14.0	0.8	32.6	38.4	6.8	25.2	4.0	0.8	3.2	0.5	3.1	0.7	2.0	0.3	0.5	0.3	20.7	139	Sand		
RRMDD222	14.0	14.3	0.4	83.9	98.4	17.1	64.3	10.6	2.1	8.9	1.3	7.8	1.6	4.8	0.6	1.3	0.6	49.9	353	Upper Saprolite		
RRMDD222	14.3	15.3	1.0	81.3	104.8	18.4	69.4	11.9	2.4	9.2	1.3	8.0	1.5	4.1	0.5	1.3	0.5	45.2	360	Upper Saprolite		
RRMDD222	15.3	16.2	0.8	34.9	47.2	7.4	27.2	4.4	0.9	3.3	0.5	3.0	0.6	1.9	0.3	0.5	0.2	18.5	151	Sand		
RRMDD222	16.2	17.0	0.9	33.1	44.3	6.8	24.4	3.8	0.8	2.8	0.4	2.5	0.5	1.6	0.2	0.4	0.3	17.0	139	Sand		
RRMDD222	17.0	18.0	1.0	97.2	138.2	19.5	73.0	11.9	2.2	8.6	1.2	7.0	1.4	3.7	0.5	1.2	0.5	39.6	406	Lower Saprolite		

Hole ID	From	To	Int.	La_2O_3	Ce_2O_3	Pr_2O_3	Nd_2O_3	Sm_2O_3	Eu_2O_3	Gd_2O_3	Tb_2O_3	Dy_2O_3	Ho_2O_3	Er_2O_3	Tm_2O_3	Yb_2O_3	Lu_2O_3	Y_2O_3	TREO	Regolith	>300ppm TREO-Ce_2O_3 Interval	
	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Zone	Length (m)	TREO ppm
RRMDD222	18.0	19.0	1.0	96.8	140.0	19.5	71.5	12.2	2.2	9.7	1.3	7.7	1.6	4.4	0.6	1.3	0.6	47.2	417	Lower Saprolite		
RRMDD222	19.0	20.0	1.0	87.0	136.5	18.0	66.5	11.4	2.2	9.2	1.3	7.9	1.6	4.5	0.6	1.3	0.6	47.9	396	Lower Saprolite		
RRMDD223	0.0	0.8	0.8	83.9	152.3	16.6	54.8	9.3	1.8	7.9	1.2	7.8	1.5	4.7	0.7	1.2	0.7	44.2	388	Soil		
RRMDD223	0.8	1.6	0.8	78.3	133.5	15.4	52.0	8.8	1.5	7.1	1.1	7.2	1.4	4.0	0.7	1.1	0.6	41.1	354	Soil		
RRMDD223	1.6	2.7	1.2	125.5	461.5	24.1	79.0	12.9	2.3	9.5	1.6	9.4	1.8	5.3	0.8	1.5	0.8	42.9	779	Hardcap		
RRMDD223	2.7	3.6	0.9	227.5	406.4	40.0	123.6	18.3	3.3	12.4	1.7	10.4	1.9	5.6	0.9	1.7	0.8	51.0	906	Transition		
RRMDD223	3.6	4.7	1.1	170.6	295.2	33.7	120.1	19.6	3.4	13.7	2.0	11.4	2.1	5.9	0.8	2.0	0.9	56.4	738	Clay		
RRMDD223	4.7	5.7	1.0	122.6	188.6	28.7	115.7	21.5	4.1	18.3	2.8	16.4	3.3	9.1	1.3	2.7	1.2	106.8	643	Clay		
RRMDD223	5.7	6.7	1.0	83.2	186.8	20.5	87.7	19.7	4.2	23.2	3.6	22.0	4.8	14.0	1.9	3.6	1.7	178.4	655	Clay		
RRMDD223	6.7	7.7	1.0	80.6	175.7	17.3	61.8	12.1	2.8	15.9	2.7	16.6	4.0	12.3	1.7	2.6	1.5	161.9	570	Clay		
RRMDD223	7.7	8.7	1.0	80.5	180.4	18.4	69.8	13.4	2.8	15.7	2.5	15.3	3.7	11.4	1.5	2.5	1.5	155.6	575	Clay		
RRMDD223	8.7	9.6	0.9	79.9	190.9	20.9	88.9	18.8	3.7	17.9	2.6	14.9	3.3	10.1	1.3	2.5	1.2	144.1	601	Clay	6.0	633
RRMDD223	9.6	10.7	1.1	69.7	161.1	16.1	60.0	11.1	2.2	9.0	1.3	7.2	1.5	4.3	0.6	1.3	0.6	53.1	399	Clay		
RRMDD223	10.7	11.8	1.1	72.1	164.0	15.9	60.2	11.5	2.3	9.5	1.5	8.6	1.6	4.9	0.7	1.4	0.6	48.8	404	Upper Saprolite		
RRMDD223	11.8	12.7	0.9	71.1	168.7	17.0	66.1	13.7	2.9	13.0	2.1	13.3	2.6	7.3	0.9	2.1	0.9	85.1	467	Upper Saprolite		
RRMDD223	12.7	13.5	0.9	75.2	172.2	17.3	64.9	11.7	2.1	8.4	1.3	7.1	1.4	3.9	0.5	1.2	0.5	41.0	409	Lower Saprolite		
RRMDD223	13.5	14.6	1.1	67.8	157.5	15.4	58.7	10.6	2.0	7.3	1.1	6.2	1.2	3.7	0.5	1.1	0.5	36.8	370	Saprock		
RRMDD224	0.0	1.4	1.4	117.9	183.3	25.5	89.6	15.7	2.7	13.4	2.0	12.7	2.5	7.5	1.1	2.0	1.1	80.0	557	Soil		
RRMDD224	1.4	3.1	1.7	96.1	905.4	19.8	66.4	12.1	2.0	9.0	1.5	9.3	1.8	5.4	0.9	1.5	0.9	51.3	1184	Hardcap		
RRMDD224	3.1	4.3	1.2	92.7	265.9	17.4	60.1	9.8	1.7	8.1	1.3	8.0	1.7	5.3	0.8	1.3	0.9	51.0	526	Transition		
RRMDD224	4.3	5.2	1.0	93.5	113.6	17.9	66.7	11.0	1.8	9.0	1.4	8.6	1.8	5.7	0.9	1.4	0.9	59.1	393	Mottled		
RRMDD224	5.2	6.1	0.9	82.0	142.3	17.4	65.1	10.9	2.0	9.4	1.4	8.7	1.9	6.0	0.9	1.4	0.9	61.1	411	Mottled		
RRMDD224	6.1	7.1	1.0	95.2	157.0	23.1	85.5	14.3	2.4	10.7	1.6	9.5	1.9	6.0	0.9	1.6	0.9	63.4	474	Clay		
RRMDD224	7.1	8.0	0.9	195.3	337.3	55.9	203.5	34.6	5.5	20.6	2.9	15.0	2.8	8.2	1.1	2.9	1.0	82.9	970	Clay		
RRMDD224	8.0	9.0	1.0	364.7	475.5	100.3	387.2	66.4	11.3	41.6	5.8	29.7	5.3	14.3	1.9	5.7	1.5	139.1	1650	Clay		
RRMDD224	9.0	9.9	0.9	221.7	315.1	55.7	208.2	34.4	5.9	23.5	3.3	18.2	3.6	10.5	1.3	3.3	1.3	116.4	1022	Clay		
RRMDD224	9.9	10.9	0.9	172.4	240.1	40.0	149.9	24.7	4.3	18.5	2.6	15.0	3.2	9.2	1.2	2.6	1.1	110.2	795	Clay		
RRMDD224	10.9	11.8	0.9	133.7	227.2	29.8	112.8	20.1	3.6	15.0	2.2	12.3	2.5	7.4	1.0	2.2	1.0	80.1	651	Clay		
RRMDD224	11.8	12.8	1.0	126.1	194.4	26.8	104.3	19.2	3.8	17.8	2.7	16.0	3.5	10.3	1.3	2.7	1.3	117.5	648	Upper Saprolite		
RRMDD224	12.8	13.7	1.0	123.1	160.5	26.7	107.7	22.4	4.8	23.6	3.7	21.8	4.7	14.4	1.8	3.6	1.7	151.1	672	Upper Saprolite		
RRMDD224	13.7	14.7	1.0	97.2	148.2	20.1	78.6	14.0	2.7	13.0	2.0	12.2	2.7	8.0	1.1	2.0	1.1	94.9	498	Upper Saprolite		
RRMDD224	14.7	15.6	0.9	113.5	172.8	24.8	98.1	17.7	3.5	15.2	2.2	13.3	2.8	8.6	1.2	2.2	1.1	98.7	576	Upper Saprolite	9.5	795
RRMDD224	15.6	16.5	0.9	107.8	196.2	23.3	92.8	16.7	3.2	16.1	2.2	13.4	2.9	8.8	1.2	2.2	1.1	115.4	604	Saprock		
RRMDD225	0.0	1.9	1.9	200.0	325.6	37.2	117.8	17.3	3.1	11.5	1.6	9.4	1.7	4.8	0.7	1.6	0.7	46.9	780	Soil		
RRMDD225	1.9	3.4	1.5	205.2	455.6	36.3	105.6	14.7	2.4	9.4	1.3	7.4	1.3	3.7	0.6	1.3	0.6	33.1	879	Hardcap		
RRMDD225	3.4	4.9	1.5	133.7	210.2	24.5	80.0	12.5	2.0	8.6	1.3	7.8	1.4	4.1	0.7	1.3	0.6	39.2	528	Hardcap		
RRMDD225	4.9	5.9	1.0	147.8	206.1	28.8	99.6	16.4	2.7	11.7	1.8	10.0	1.9	6.2	0.9	1.7	0.9	58.9	596	Transition		
RRMDD225	5.9	6.8	0.9	186.5	257.7	38.9	129.5	20.7	3.4	12.4	1.9	10.2	2.1	5.8	0.9	1.8	0.9	58.9	731	Mottled		
RRMDD225	6.8	7.7	0.9	235.7	360.8	48.7	151.0	21.8	3.4	12.1	1.8	9.4	1.7	5.1	0.7	1.8	0.7	47.6	902	Clay		
RRMDD225	7.7	8.7	0.9	694.3	1041.3	146.9	454.9	57.5	8.0	27.0	3.4	16.6	2.6	6.7	0.8	3.4	0.8	63.1	2527	Clay		
RRMDD225	8.7	9.6	0.9	467.9	672.3	105.1	338.3	45.6	6.9	24.2	3.2	15.7	2.6	6.8	0.9	3.2	0.8	67.2	1761	Clay		
RRMDD225	9.6	10.5	0.9	210.5	436.9	65.8	254.3	47.7	8.9	41.3	6.3	38.4	8.0	23.2	3.0	6.2	2.7	353.0	1506	Clay		
RRMDD225	10.5	11.4	0.9	235.7	404.1	59.9	210.5	34.9	6.1	27.1	4.1	23.9	4.7	12.9	1.9	4.1	1.7	177.8	1209	Clay		
RRMDD225	11.4	12.4	0.9	247.5	421.7	62.6	216.4	36.3	6.3	27.0	4.0	22.8	4.4	11.9	1.7	4.0	1.6	161.3	1229	Clay		
RRMDD225	12.4	13.3	0.9	240.4	411.1	65.5	232.1	38.6	6.6	28.7	4.2	24.1	4.7	12.9	1.9	4.2	1.7	179.7	1256	Clay		
RRMDD225	13.3	14.3	0.9	348.3	613.8	117.6	466.6	88.8	15.8	80.2	12.3	74.8	15.7	45.4	6.6	12.2	5.8	613.4	2517	Clay		
RRMDD225	14.3	15.2	0.9	204.1	424.0	86.0	398.9	88.1	16.4	87.5	13.6	83.8	17.9	52.0	7.5	13.5	6.7	722.6	2223	Clay		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD225	15.2	16.2	0.9	143.1	308.1	55.6	260.1	55.3	10.0	47.3	6.7	39.3	7.7	21.8	3.1	6.7	2.7	312.4	1280	Clay		
RRMDD225	16.2	17.1	1.0	131.4	268.2	40.7	179.6	37.1	6.7	30.8	4.4	24.4	4.7	13.2	1.9	4.4	1.7	161.9	911	Clay		
RRMDD225	17.1	18.1	0.9	130.8	272.9	46.6	212.3	42.9	7.8	36.7	5.3	30.8	6.0	16.5	2.4	5.3	2.1	221.0	1039	Upper Saprolite		
RRMDD225	18.1	18.9	0.8	87.1	187.4	28.4	131.8	31.0	5.9	28.4	4.3	25.5	5.0	14.1	2.0	4.3	1.8	163.2	720	Upper Saprolite		
RRMDD225	18.9	19.6	0.7	116.2	240.1	36.9	171.5	40.9	8.0	38.5	6.0	35.1	6.7	18.6	2.6	5.9	2.3	201.9	931	Upper Saprolite		
RRMDD225	19.6	20.3	0.7	91.7	196.2	31.0	154.0	40.8	8.4	41.3	6.5	38.6	7.4	20.4	2.9	6.4	2.5	222.2	870	Upper Saprolite		
RRMDD225	20.3	21.0	0.7	98.4	231.3	47.7	268.3	76.6	15.4	76.9	12.1	72.3	14.1	38.7	5.5	12.0	4.7	400.0	1374	Upper Saprolite		
RRMDD225	21.0	21.7	0.7	101.0	238.9	49.2	283.4	80.1	16.4	85.3	13.4	81.7	16.2	45.7	6.6	13.2	5.8	459.7	1497	Upper Saprolite	**15.8**	**1375**
RRMDD225	21.7	22.5	0.8	105.0	260.0	45.3	244.9	58.1	11.6	65.4	9.4	58.0	12.3	35.3	5.0	9.4	4.5	411.4	1336	Saprock		
RRMDD225	22.5	23.3	0.8	99.7	249.5	35.8	173.8	30.1	5.8	35.6	4.5	27.4	6.3	18.6	2.5	4.5	2.3	317.5	1014	Saprock		
RRMDD226	0.0	1.7	1.7	144.8	229.0	26.4	83.7	12.6	2.2	8.3	1.2	7.6	1.4	3.8	0.6	1.2	0.6	35.6	559	Soil		
RRMDD226	1.7	3.3	1.7	238.1	712.2	45.2	149.3	23.3	4.1	17.0	2.5	14.3	2.5	6.9	1.0	2.5	1.0	66.3	1286	Soil		
RRMDD226	3.3	5.0	1.7	245.1	775.4	47.5	150.5	25.0	3.9	16.5	2.4	12.7	2.2	6.0	0.8	2.4	0.7	54.0	1345	Hardcap		
RRMDD226	5.0	5.8	0.8	25.6	50.8	6.2	23.1	4.4	0.7	3.4	0.6	3.7	0.8	2.7	0.5	0.6	0.5	25.7	149	Mottled		
RRMDD226	5.8	6.8	1.0	76.0	125.3	19.8	75.0	14.1	2.4	10.4	1.6	8.6	1.7	5.1	0.8	1.5	0.8	53.8	397	Mottled		
RRMDD226	6.8	7.6	0.8	136.6	281.1	44.7	174.4	34.2	5.5	22.7	3.2	17.6	3.2	8.6	1.2	3.2	1.1	93.7	831	Mottled		
RRMDD226	7.6	8.5	0.9	200.5	446.3	72.8	283.4	55.8	8.9	34.8	4.9	24.7	4.2	11.1	1.6	4.8	1.3	119.5	1275	Mottled		
RRMDD226	8.5	9.5	1.0	289.7	700.4	118.2	439.7	85.1	13.7	55.8	7.4	37.4	6.3	15.9	2.1	7.3	1.7	179.1	1960	Clay		
RRMDD226	9.5	10.5	1.0	243.9	529.4	80.0	314.9	60.0	9.7	42.1	5.7	29.3	5.3	13.6	1.9	5.7	1.5	167.0	1510	Clay		
RRMDD226	10.5	11.4	0.9	212.9	422.8	64.2	250.8	47.3	8.2	34.1	4.7	25.2	4.6	12.6	1.7	4.6	1.5	149.2	1244	Clay		
RRMDD226	11.4	12.4	1.0	150.1	277.6	39.4	152.2	28.1	4.9	21.4	3.1	17.7	3.4	9.6	1.4	3.1	1.3	112.9	826	Clay		
RRMDD226	12.4	13.3	0.9	178.3	344.4	52.3	204.1	40.8	6.9	29.9	4.4	24.9	4.7	12.9	1.9	4.4	1.6	144.1	1055	Upper Saprolite		
RRMDD226	13.3	14.2	0.9	118.5	214.3	33.4	134.1	26.1	4.7	21.1	3.2	18.7	3.7	10.6	1.5	3.2	1.4	124.6	719	Upper Saprolite		
RRMDD226	14.2	14.9	0.8	180.0	311.6	47.5	188.4	40.0	7.4	33.4	5.2	30.5	6.0	17.0	2.4	5.1	2.2	211.4	1088	Upper Saprolite		
RRMDD226	14.9	15.7	0.8	272.1	475.5	73.8	298.6	65.5	12.3	53.7	8.3	49.2	9.4	26.3	3.7	8.2	3.4	276.8	1637	Upper Saprolite		
RRMDD226	15.7	16.7	1.0	315.5	549.3	84.0	339.4	75.8	14.2	61.4	9.8	58.8	11.4	31.8	4.7	9.7	4.2	325.1	1895	Upper Saprolite		
RRMDD226	16.7	17.7	1.0	304.9	497.8	74.9	297.4	68.1	14.1	60.1	9.5	58.1	11.2	32.0	4.6	9.5	4.1	306.0	1752	Upper Saprolite		
RRMDD226	17.7	18.8	1.0	265.1	460.3	67.9	269.4	59.3	12.3	56.4	8.5	52.1	10.3	28.9	4.1	8.5	3.6	301.0	1608	Upper Saprolite		
RRMDD226	18.8	19.8	1.0	269.7	507.2	72.2	289.3	59.8	12.3	56.9	8.5	51.8	10.4	29.7	4.2	8.4	3.8	312.4	1696	Upper Saprolite		
RRMDD226	19.8	20.8	1.0	236.9	434.6	63.5	256.6	53.5	11.1	54.3	8.1	49.4	10.2	29.2	4.1	8.0	3.7	326.4	1549	Upper Saprolite		
RRMDD226	20.8	21.7	0.9	195.3	372.5	51.1	207.6	38.8	8.1	42.5	6.0	37.4	8.1	23.7	3.3	6.0	2.9	299.7	1303	Lower Saprolite		
RRMDD226	21.7	22.5	0.8	217.0	410.0	52.9	207.6	34.2	7.2	39.3	5.5	33.7	7.7	22.8	3.1	5.4	2.7	342.9	1392	Lower Saprolite		
RRMDD226	22.5	23.4	0.9	191.2	373.6	44.5	173.8	29.1	5.8	29.2	3.9	23.1	4.9	14.2	2.0	3.9	1.6	229.2	1130	Lower Saprolite	**16.6**	**1379**
RRMDD226	23.4	24.2	0.8	130.2	264.7	28.0	105.6	17.5	3.5	17.2	2.2	13.2	2.7	7.9	1.1	2.2	1.0	114.9	712	Saprock		
RRMDD227	0.0	1.8	1.8	111.5	351.4	18.4	54.5	8.2	1.4	5.8	0.9	5.6	1.1	3.1	0.5	0.9	0.5	29.8	594	Soil		
RRMDD227	1.8	3.3	1.6	114.7	136.5	19.8	59.8	9.3	1.6	7.1	1.1	7.1	1.4	4.2	0.7	1.1	0.7	42.4	408	Hardcap		
RRMDD227	3.3	3.8	0.5	77.1	182.1	15.4	52.1	8.6	1.4	6.8	1.0	6.2	1.2	3.5	0.5	1.0	0.5	34.7	392	Transition		
RRMDD227	3.8	4.7	0.9	208.2	190.9	27.0	78.5	12.1	2.1	9.3	1.4	8.2	1.7	4.8	0.8	1.4	0.8	47.5	595	Mottled		
RRMDD227	4.7	5.6	0.9	275.6	509.5	42.8	131.8	20.6	3.7	14.9	2.2	13.0	2.5	7.5	1.2	2.2	1.1	76.3	1105	Mottled		
RRMDD227	5.6	6.4	0.9	150.1	236.6	35.2	121.3	21.0	3.8	15.7	2.3	13.8	2.7	7.9	1.2	2.3	1.1	81.8	697	Clay		
RRMDD227	6.4	7.3	0.9	173.0	488.4	36.2	120.1	20.5	3.7	14.6	2.2	12.8	2.5	7.3	1.1	2.2	1.1	77.1	963	Clay		
RRMDD227	7.3	8.2	0.9	157.7	698.1	37.2	126.6	22.1	3.8	15.0	2.2	12.0	2.3	6.8	1.0	2.2	0.9	67.1	1155	Clay		
RRMDD227	8.2	9.4	1.2	45.0	140.0	10.0	34.9	6.5	1.2	4.9	0.8	4.8	0.9	2.7	0.4	0.8	0.4	24.3	278	Clay		
RRMDD227	9.4	10.1	0.7	85.6	172.8	20.5	73.1	12.9	2.5	9.4	1.4	8.0	1.6	4.8	0.7	1.4	0.7	50.8	446	Clay		
RRMDD227	10.1	10.8	0.7	111.4	330.3	27.0	96.6	16.5	3.2	12.6	1.8	10.2	2.0	5.9	0.9	1.8	0.8	66.7	688	Clay		
RRMDD227	10.8	11.7	0.9	140.7	262.4	30.1	109.3	20.2	4.1	17.7	2.6	15.6	3.1	9.1	1.3	2.6	1.2	106.5	727	Upper Saprolite		
RRMDD227	11.7	12.5	0.9	133.1	255.3	31.8	124.8	21.3	3.9	16.8	2.3	14.0	2.8	9.0	1.2	2.3	1.1	96.6	717	Upper Saprolite		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD227	12.5	13.5	1.0	147.8	248.3	39.7	166.2	32.6	6.5	29.0	4.2	24.6	4.8	14.7	1.9	4.1	1.6	151.8	878	Upper Saprolite		
RRMDD227	13.5	14.4	1.0	146.0	231.3	39.7	173.2	35.7	7.0	33.1	4.8	27.9	5.6	17.1	2.1	4.7	1.9	168.3	898	Upper Saprolite		
RRMDD227	14.4	15.4	1.0	126.1	209.7	32.1	132.4	24.8	4.9	23.0	3.2	18.5	3.9	12.1	1.5	3.1	1.3	125.7	722	Lower Saprolite		
RRMDD227	15.4	16.4	1.0	147.8	284.6	36.0	148.7	26.6	4.9	22.1	3.1	17.6	3.7	11.5	1.4	3.1	1.2	122.3	835	Lower Saprolite	**12.6**	**760**
RRMDD227	16.4	17.0	0.6	134.9	272.9	30.7	127.7	21.2	3.9	20.7	2.6	15.1	3.3	10.1	1.2	2.6	1.1	148.6	797	Saprock		
RRMDD228	0.0	1.9	1.9	104.8	179.8	22.3	75.8	13.6	2.2	11.2	1.6	10.3	2.0	5.9	0.9	1.6	0.9	62.5	495	Soil		
RRMDD228	1.9	3.7	1.8	115.6	395.9	20.1	60.3	10.1	1.7	7.0	1.1	7.2	1.4	4.1	0.7	1.1	0.7	35.4	663	Hardcap		
RRMDD228	3.7	5.4	1.8	185.9	583.3	36.0	110.9	17.2	2.9	11.6	1.8	10.7	1.9	5.5	0.9	1.8	0.9	44.7	1016	Hardcap		
RRMDD228	5.4	5.9	0.5	74.1	118.9	16.5	60.9	10.1	1.5	7.5	1.1	6.6	1.4	4.6	0.6	1.1	0.7	38.7	344	Transition		
RRMDD228	5.9	6.8	0.9	142.5	420.5	52.2	200.6	33.7	4.9	20.1	2.7	14.0	2.4	7.1	0.9	2.7	0.8	59.9	965	Mottled		
RRMDD228	6.8	7.8	0.9	401.1	826.9	52.4	173.8	25.2	3.7	15.4	2.0	10.4	1.8	5.2	0.7	2.0	0.6	47.2	1569	Mottled		
RRMDD228	7.8	8.7	1.0	94.2	211.4	29.8	116.5	19.5	3.0	13.0	1.8	10.0	1.9	6.0	0.8	1.8	0.8	57.3	568	Clay		
RRMDD228	8.7	9.7	0.9	114.3	214.3	32.4	128.9	21.2	3.3	15.8	2.2	12.9	2.7	8.6	1.1	2.2	1.0	90.8	652	Clay		
RRMDD228	9.7	10.6	0.9	106.1	253.0	29.0	117.2	19.1	3.2	16.6	2.4	13.5	3.0	9.3	1.2	2.4	1.2	100.7	678	Clay		
RRMDD228	10.6	11.6	0.9	106.8	102.5	29.1	109.9	18.7	3.5	17.4	2.6	15.7	3.2	9.4	1.3	2.6	1.2	109.2	533	Clay		
RRMDD228	11.6	12.5	0.9	89.7	426.4	24.2	91.2	15.9	2.9	14.6	2.2	13.0	2.7	7.7	1.1	2.2	1.0	91.6	786	Clay		
RRMDD228	12.5	13.4	0.9	87.7	278.8	23.8	90.2	15.4	2.9	14.2	2.2	12.7	2.7	7.8	1.1	2.2	1.0	91.7	634	Clay		
RRMDD228	13.4	14.4	1.0	107.1	100.8	28.2	106.7	17.9	3.4	16.5	2.4	14.8	3.0	8.7	1.2	2.4	1.1	104.8	519	Clay		
RRMDD228	14.4	15.3	0.9	85.1	78.1	24.2	95.8	17.0	3.4	17.5	2.6	16.4	3.6	10.2	1.4	2.6	1.3	142.2	502	Clay		
RRMDD228	15.3	16.3	0.9	414.0	350.2	53.6	180.8	26.0	4.6	22.1	2.9	16.9	3.3	8.8	1.2	2.9	1.1	103.8	1192	Clay		
RRMDD228	16.3	17.1	0.8	240.4	256.5	60.6	235.6	47.3	9.1	41.1	6.3	37.3	7.2	19.8	2.6	6.3	2.3	208.3	1181	Upper Saprolite		
RRMDD228	17.1	18.0	0.9	268.6	290.5	57.0	215.8	40.6	7.8	35.4	5.3	31.1	6.0	16.6	2.2	5.2	1.9	182.2	1166	Upper Saprolite		
RRMDD228	18.0	18.8	0.8	122.0	174.5	37.4	146.4	28.8	5.6	26.5	4.1	25.4	5.0	14.2	1.9	4.1	1.7	154.3	752	Upper Saprolite		
RRMDD228	18.8	19.7	0.9	120.8	173.9	38.2	149.9	31.0	6.1	28.2	4.5	27.4	5.5	15.0	2.1	4.4	1.9	163.8	773	Upper Saprolite		
RRMDD228	19.7	20.5	0.8	141.9	216.1	42.6	168.5	34.8	6.9	31.5	4.9	29.7	5.9	16.4	2.2	4.8	2.0	176.5	885	Upper Saprolite		
RRMDD228	20.5	21.4	0.9	164.2	250.7	49.7	198.3	40.4	8.2	38.5	5.8	35.7	7.2	20.2	2.7	5.8	2.4	212.1	1042	Lower Saprolite		
RRMDD228	21.4	22.2	0.9	171.2	272.9	52.4	209.4	42.8	8.8	41.3	6.4	38.4	7.7	21.8	2.9	6.3	2.6	224.1	1109	Lower Saprolite		
RRMDD228	22.2	23.1	0.9	182.4	292.8	53.0	210.5	40.2	8.2	40.6	6.0	36.3	7.5	20.8	2.8	5.9	2.5	237.5	1147	Lower Saprolite	**17.2**	**871**
RRMDD228	23.1	24.0	0.9	184.1	297.5	51.8	206.5	37.2	7.5	37.9	5.5	33.2	6.9	19.6	2.6	5.5	2.3	235.6	1134	Saprock		
RRMDD229	0.0	0.8	0.8	97.5	160.5	20.8	72.7	12.8	2.2	11.0	1.7	11.0	2.2	6.5	1.0	1.7	1.0	67.9	471	Soil		
RRMDD229	0.8	2.3	1.5	61.2	370.1	12.0	39.2	6.9	1.3	5.3	0.9	6.0	1.2	3.5	0.6	0.9	0.6	31.7	541	Hardcap		
RRMDD229	2.3	3.9	1.5	80.8	620.8	17.3	61.6	12.2	1.9	9.0	1.5	9.0	1.7	5.1	0.8	1.5	0.8	44.6	869	Hardcap		
RRMDD229	3.9	4.6	0.8	119.6	135.3	29.8	108.2	18.2	3.2	15.6	2.3	14.1	2.9	8.2	1.2	2.3	1.1	93.1	555	Mottled		
RRMDD229	4.6	5.4	0.8	146.0	193.3	36.4	132.4	22.0	3.9	18.0	2.6	15.4	3.2	8.9	1.3	2.6	1.2	101.2	688	Mottled		
RRMDD229	5.4	6.2	0.8	200.5	311.6	56.1	200.6	33.7	5.8	24.2	3.4	18.5	3.5	9.2	1.3	3.4	1.1	104.1	977	Clay		
RRMDD229	6.2	7.0	0.8	138.4	210.8	34.8	123.6	20.4	3.6	15.2	2.1	12.1	2.3	6.6	0.9	2.1	0.9	73.5	647	Clay		
RRMDD229	7.0	7.8	0.8	143.1	517.7	36.4	131.2	22.3	4.1	17.6	2.6	15.0	3.0	8.2	1.1	2.5	1.1	94.1	1000	Clay		
RRMDD229	7.8	8.6	0.8	218.1	398.2	61.7	225.7	38.7	6.6	28.6	4.0	22.3	4.1	11.0	1.5	4.0	1.4	125.2	1151	Clay		
RRMDD229	8.6	9.4	0.8	299.1	373.6	81.7	309.1	52.1	9.6	43.1	6.1	34.8	6.5	17.8	2.4	6.1	2.0	208.3	1452	Clay		
RRMDD229	9.4	10.2	0.8	336.6	484.9	96.2	359.3	61.5	11.2	50.8	7.2	40.5	7.8	20.8	2.7	7.2	2.3	250.2	1739	Clay		
RRMDD229	10.2	11.2	1.0	317.8	351.4	81.0	302.1	51.5	9.7	46.1	6.5	38.2	7.4	20.3	2.7	6.5	2.4	253.3	1497	Upper Saprolite		
RRMDD229	11.2	12.2	1.0	278.0	320.9	67.8	271.8	50.0	10.5	57.3	8.7	54.6	11.8	33.5	4.4	8.6	3.9	439.4	1621	Upper Saprolite		
RRMDD229	12.2	13.0	0.7	95.6	183.3	20.4	76.2	13.2	2.8	13.3	1.9	11.4	2.5	7.3	1.0	1.9	0.9	118.7	550	Saprock	**9.1**	**1113**
RRMDD229	13.0	13.7	0.7	70.6	158.7	16.2	57.7	10.7	2.2	8.9	1.3	7.5	1.5	4.0	0.6	1.3	0.5	44.6	386	Saprock		
RRMDD230	0.0	1.5	1.5	134.9	283.5	28.2	103.0	18.6	3.0	14.8	2.2	13.3	2.6	7.7	1.1	2.2	1.1	81.5	698	Soil		
RRMDD230	1.5	3.0	1.5	123.1	276.4	25.0	91.1	16.5	2.6	13.4	2.0	11.9	2.4	7.0	1.1	2.0	1.1	72.1	648	Soil		
RRMDD230	3.0	4.1	1.1	101.1	1128.0	16.9	53.3	9.2	1.4	6.0	1.1	6.1	1.2	3.6	0.6	1.1	0.6	28.6	1359	Hardcap		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD230	4.1	5.2	1.1	114.1	661.8	17.4	55.5	9.1	1.4	6.2	1.0	6.2	1.2	3.5	0.6	1.0	0.6	31.0	911	Hardcap		
RRMDD230	5.2	6.2	1.0	118.5	586.8	22.2	79.9	13.1	2.1	9.6	1.6	9.4	1.9	6.1	0.9	1.6	0.9	56.0	911	Transition		
RRMDD230	6.2	7.1	1.0	98.9	407.6	19.6	71.6	11.6	2.0	8.8	1.3	8.4	1.7	5.4	0.8	1.3	0.8	50.3	690	Transition		
RRMDD230	7.1	8.1	1.0	93.7	195.0	18.5	65.1	10.7	1.7	8.5	1.3	7.8	1.6	5.1	0.7	1.3	0.8	48.4	460	Mottled		
RRMDD230	8.1	8.9	0.8	95.5	169.3	17.0	59.0	9.3	1.5	7.0	1.1	6.9	1.4	4.6	0.7	1.1	0.7	41.9	417	Mottled		
RRMDD230	8.9	9.6	0.8	116.0	130.6	19.1	63.8	9.9	1.7	7.4	1.2	6.9	1.5	4.6	0.7	1.2	0.7	44.6	410	Mottled		
RRMDD230	9.6	10.3	0.7	112.9	169.8	19.1	65.0	9.8	1.7	7.7	1.2	7.3	1.5	4.7	0.7	1.2	0.7	47.0	450	Mottled		
RRMDD230	10.3	11.0	0.7	278.0	197.4	33.6	96.1	12.8	2.0	8.7	1.3	7.5	1.4	4.3	0.7	1.2	0.6	43.7	689	Mottled		
RRMDD230	11.0	12.1	1.1	222.8	170.4	29.1	86.5	12.2	2.0	8.1	1.3	7.2	1.4	4.6	0.7	1.3	0.7	44.2	593	Mottled		
RRMDD230	12.1	12.9	0.9	168.9	167.5	29.8	100.8	15.9	2.8	11.6	1.6	9.5	1.9	5.3	0.8	1.6	0.7	55.6	574	Mottled		
RRMDD230	12.9	13.8	0.9	168.9	188.0	30.3	104.3	16.2	2.8	11.1	1.6	9.0	1.7	5.2	0.7	1.6	0.8	50.7	593	Clay		
RRMDD230	13.8	14.6	0.9	127.8	205.6	24.8	86.8	13.3	2.4	9.9	1.4	8.1	1.6	4.7	0.8	1.4	0.7	47.9	537	Clay		
RRMDD230	14.6	15.6	1.0	86.0	192.7	22.2	82.7	14.2	2.5	10.1	1.5	8.6	1.7	5.0	0.7	1.5	0.7	48.1	478	Upper Saprolite		
RRMDD230	15.6	16.6	1.0	110.0	220.8	34.3	127.7	22.7	4.1	15.8	2.1	11.8	2.2	6.7	0.9	2.1	0.8	62.2	624	Upper Saprolite		
RRMDD230	16.6	17.5	0.9	170.1	240.1	60.7	247.3	45.0	8.3	31.0	4.2	21.1	3.6	9.8	1.3	4.1	1.0	91.4	939	Upper Saprolite		
RRMDD230	17.5	18.3	0.9	199.4	270.6	72.8	302.1	53.1	9.7	37.0	4.9	25.4	4.2	11.3	1.5	4.8	1.1	109.2	1107	Upper Saprolite		
RRMDD230	18.3	19.2	0.9	181.8	265.9	61.6	254.3	45.7	8.0	31.5	4.2	22.5	4.0	10.9	1.5	4.2	1.2	116.6	1014	Upper Saprolite		
RRMDD230	19.2	20.1	0.9	178.9	263.5	56.8	241.4	44.6	8.6	33.9	4.8	25.4	4.5	12.6	1.6	4.7	1.3	127.0	1010	Upper Saprolite		
RRMDD230	20.1	21.0	0.9	157.7	189.2	42.6	196.5	41.5	9.9	58.0	8.8	56.0	12.1	36.9	4.7	8.7	4.0	472.4	1299	Lower Saprolite	**10.7**	**784**
RRMDD231	0.0	1.4	1.4	73.7	766.0	13.3	45.1	8.2	1.3	5.8	1.0	6.4	1.2	3.6	0.6	1.0	0.6	32.1	960	Soil		
RRMDD231	1.4	2.8	1.4	73.1	917.1	13.5	46.2	7.8	1.3	5.7	1.0	5.8	1.1	3.6	0.6	1.0	0.6	33.7	1112	Hardcap		
RRMDD231	2.8	3.2	0.4	76.6	496.6	16.8	62.6	10.5	1.7	8.2	1.3	7.6	1.6	4.9	0.7	1.3	0.8	47.5	739	Transition		
RRMDD231	3.2	4.3	1.1	49.3	182.1	10.7	39.5	6.7	1.2	5.7	0.9	5.5	1.1	3.7	0.6	0.9	0.6	38.4	347	Mottled		
RRMDD231	4.3	5.1	0.9	42.6	84.7	9.2	33.4	5.6	1.0	5.0	0.8	4.7	1.0	3.5	0.5	0.8	0.6	33.1	226	Mottled		
RRMDD231	5.1	6.0	0.8	46.4	68.1	9.8	36.4	6.1	1.0	4.8	0.7	4.5	0.9	3.0	0.5	0.7	0.5	30.2	214	Mottled		
RRMDD231	6.0	6.8	0.9	54.1	69.8	11.7	42.8	7.1	1.3	5.8	0.9	5.4	1.1	3.5	0.6	0.9	0.6	35.7	241	Clay		
RRMDD231	6.8	7.6	0.8	118.5	125.3	28.2	105.3	16.8	2.9	12.2	1.7	9.2	1.8	5.4	0.7	1.6	0.7	54.5	485	Clay		
RRMDD231	7.6	8.4	0.8	139.6	156.4	32.9	120.7	19.7	3.5	14.4	2.0	11.1	2.1	6.0	0.8	2.0	0.8	65.1	577	Clay		
RRMDD231	8.4	9.3	0.8	184.7	142.9	44.2	162.7	26.6	4.8	19.6	2.7	14.5	2.9	7.9	1.1	2.6	1.0	86.1	704	Clay		
RRMDD231	9.3	10.1	0.8	142.5	111.0	31.5	114.0	17.9	3.4	14.4	2.0	11.5	2.3	7.0	0.9	2.0	0.9	76.7	538	Clay		
RRMDD231	10.1	10.9	0.8	161.8	116.8	36.2	132.4	21.6	3.9	16.8	2.2	12.3	2.4	6.7	0.9	2.2	0.9	72.4	589	Clay		
RRMDD231	10.9	11.5	0.6	110.7	98.3	24.7	89.0	14.2	2.6	10.3	1.4	8.0	1.6	4.6	0.7	1.4	0.7	51.8	420	Clay		
RRMDD231	11.5	12.1	0.6	142.5	117.7	32.2	115.2	17.7	3.2	13.5	1.9	11.1	2.1	6.1	0.9	1.9	0.9	68.8	536	Clay		
RRMDD231	12.1	12.8	0.7	192.3	159.3	47.0	167.4	26.7	4.5	19.1	2.6	14.5	2.6	7.5	1.1	2.6	1.0	79.9	728	Clay		
RRMDD231	12.8	13.5	0.7	167.7	142.3	40.8	146.4	23.7	4.3	17.8	2.5	14.1	2.5	7.2	1.0	2.5	0.9	77.0	651	Clay		
RRMDD231	13.5	14.2	0.7	120.8	120.6	28.0	98.2	16.4	3.0	12.0	1.6	9.2	1.7	5.0	0.7	1.6	0.6	51.0	470	Upper Saprolite		
RRMDD231	14.2	14.8	0.7	92.5	93.6	20.0	72.4	11.9	2.2	10.0	1.3	7.6	1.5	4.4	0.6	1.3	0.6	45.2	365	Upper Saprolite		
RRMDD231	14.8	15.6	0.8	197.6	173.9	41.0	159.2	27.3	5.5	25.9	3.5	20.1	3.7	10.8	1.4	3.5	1.3	114.8	790	Lower Saprolite		
RRMDD231	15.6	16.5	0.8	150.7	236.6	32.5	121.9	21.0	4.2	19.4	2.7	15.8	3.0	8.3	1.2	2.7	1.1	86.7	708	Lower Saprolite		
RRMDD231	16.5	17.3	0.9	129.6	219.0	27.0	100.0	16.5	3.2	14.0	1.9	11.7	2.2	6.0	0.9	1.9	0.9	64.4	599	Lower Saprolite	**10.5**	**591**
RRMDD231	17.3	18.2	0.8	114.3	138.8	21.5	84.2	15.2	3.3	16.1	2.3	13.7	2.7	7.7	1.1	2.2	1.0	88.3	512	Saprock		
RRMDD231	18.2	19.0	0.8	105.9	133.5	19.6	73.5	12.6	2.5	12.2	1.7	10.3	1.9	5.6	0.8	1.7	0.8	61.7	444	Saprock		
RRMDD232	0.0	1.3	1.3	116.3	193.3	23.8	84.0	15.1	2.6	12.4	2.0	11.7	2.4	7.3	1.1	2.0	1.2	74.4	550	Soil		
RRMDD232	1.3	2.6	1.3	139.0	244.8	28.9	101.9	19.0	3.2	15.2	2.4	13.9	2.9	8.6	1.3	2.4	1.4	85.1	670	Soil		
RRMDD232	2.6	4.7	2.0	115.6	925.3	19.6	63.1	11.0	1.8	7.8	1.3	7.0	1.5	4.6	0.7	1.3	0.7	38.6	1200	Hardcap		
RRMDD232	4.7	5.6	0.9	119.6	634.8	33.0	116.6	18.8	3.1	13.3	1.8	10.0	1.8	5.3	0.8	1.8	0.8	52.2	1014	Clay		
RRMDD232	5.6	6.5	0.9	128.4	207.9	32.7	114.3	18.2	2.9	12.3	1.7	10.1	1.8	5.4	0.8	1.7	0.8	52.3	591	Clay		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD232	6.5	7.3	0.9	153.1	195.0	40.8	151.0	24.5	4.0	17.5	2.5	13.8	2.5	7.1	1.0	2.5	1.0	75.3	692	Clay		
RRMDD232	7.3	8.2	0.9	336.6	335.0	105.0	395.4	66.8	11.1	48.4	6.4	34.9	5.9	16.0	2.2	6.3	1.8	179.1	1551	Clay		
RRMDD232	8.2	9.1	0.9	614.5	578.6	192.5	747.7	126.4	22.5	107.1	14.7	83.3	15.5	42.8	5.9	14.6	5.0	534.6	3106	Clay		
RRMDD232	9.1	9.9	0.8	566.5	325.6	84.5	307.9	48.4	8.9	47.3	6.9	44.4	9.1	27.1	3.8	6.9	3.6	405.1	1896	Clay		
RRMDD232	9.9	10.7	0.8	562.9	448.6	141.6	564.5	107.0	22.8	137.7	22.0	146.9	32.0	98.9	13.8	21.8	12.6	1253.4	3587	Clay		
RRMDD232	10.7	11.6	0.8	567.6	410.0	145.1	582.0	102.2	19.5	107.3	15.5	94.8	19.5	56.4	7.6	15.4	7.0	689.6	2840	Clay		
RRMDD232	11.6	12.4	0.8	388.2	264.7	85.2	345.3	59.5	11.6	64.0	9.4	57.3	11.6	34.4	4.7	9.3	4.5	416.5	1766	Upper Saprolite		
RRMDD232	12.4	13.2	0.8	326.0	226.6	63.1	267.1	47.0	10.1	61.4	9.1	59.7	12.4	36.2	4.9	9.0	4.5	447.0	1584	Upper Saprolite		
RRMDD232	13.2	14.1	0.8	281.5	221.4	51.4	222.8	41.9	9.9	71.1	10.6	70.9	16.4	49.7	6.8	10.6	6.5	716.2	1788	Upper Saprolite		
RRMDD232	14.1	14.7	0.7	99.5	165.2	21.4	82.0	15.0	3.0	15.2	2.2	13.4	2.9	8.8	1.2	2.1	1.2	114.3	547	Lower Saprolite	**10.1**	**1754**
RRMDD232	14.7	15.4	0.7	78.8	157.0	18.5	70.3	12.6	2.5	11.5	1.7	11.1	2.3	7.1	1.0	1.7	0.9	73.1	450	Saprock		
RRMDD232	15.4	16.2	0.8	72.7	147.6	16.5	60.4	10.2	2.0	8.0	1.1	6.3	1.2	3.6	0.5	1.1	0.5	39.9	372	Saprock		
RRMDD232	16.2	17.0	0.8	70.3	145.2	16.2	59.6	10.8	2.0	8.6	1.2	6.8	1.3	3.6	1.0	1.1	0.5	40.4	369	Saprock		
RRMDD233	0.0	2.0	2.0	101.9	132.4	19.0	66.7	11.5	2.0	10.1	1.5	9.2	2.1	6.2	1.0	1.5	1.0	64.3	430	Soil		
RRMDD233	2.0	3.5	1.6	80.2	331.5	14.5	48.3	8.6	1.4	7.0	1.1	6.7	1.4	4.4	0.7	1.1	0.8	39.4	547	Hardcap		
RRMDD233	3.5	5.1	1.6	88.9	951.1	16.6	57.0	10.0	1.6	7.4	1.3	7.1	1.5	4.7	0.8	1.3	0.8	39.4	1189	Hardcap		
RRMDD233	5.1	6.7	1.6	78.1	445.1	13.3	44.9	7.7	1.2	5.6	1.0	5.5	1.2	3.7	0.6	1.0	0.6	32.3	642	Hardcap		
RRMDD233	6.7	7.4	0.7	118.5	99.3	11.9	36.0	5.0	0.9	5.0	0.7	4.6	1.0	3.0	0.5	0.7	0.6	30.2	318	Mottled		
RRMDD233	7.4	8.2	0.8	79.2	105.2	17.7	62.9	10.2	1.7	8.1	1.2	7.3	1.5	4.5	0.7	1.2	0.8	48.5	350	Mottled		
RRMDD233	8.2	9.2	1.0	239.3	357.2	76.8	271.8	44.5	6.9	29.4	3.9	19.9	3.4	9.1	1.2	3.9	1.0	101.6	1170	Clay		
RRMDD233	9.2	10.2	1.0	587.6	802.3	186.7	681.2	110.4	17.4	72.0	9.2	45.2	6.9	16.8	2.0	9.1	1.5	163.8	2712	Clay		
RRMDD233	10.2	11.1	1.0	146.0	189.2	36.5	133.6	21.3	3.6	15.9	2.2	12.2	2.2	6.4	0.9	2.2	0.9	69.5	643	Clay		
RRMDD233	11.1	12.2	1.0	476.2	487.3	107.8	384.9	72.6	12.6	61.1	8.7	47.4	9.5	27.0	3.7	8.7	3.2	321.3	2032	Upper Saprolite		
RRMDD233	12.2	13.2	1.0	261.5	289.3	63.0	228.0	43.6	7.9	38.2	5.4	31.0	6.1	17.2	2.5	5.4	2.1	200.0	1201	Upper Saprolite		
RRMDD233	13.2	14.2	1.0	206.4	261.2	49.5	182.5	33.0	5.8	27.3	3.7	20.0	3.9	10.8	1.6	3.7	1.3	118.9	930	Upper Saprolite		
RRMDD233	14.2	15.2	1.0	310.8	360.8	74.3	267.1	51.1	9.0	43.2	6.0	31.9	6.2	17.3	2.4	5.9	2.1	192.4	1381	Upper Saprolite		
RRMDD233	15.2	16.3	1.0	165.4	207.3	40.4	146.4	28.4	5.4	26.3	3.8	20.9	4.2	12.1	1.8	3.8	1.5	135.9	804	Upper Saprolite		
RRMDD233	16.3	17.3	1.0	189.4	229.0	42.5	162.1	32.5	6.4	34.8	5.4	32.5	7.0	20.5	3.0	5.4	2.7	222.2	995	Upper Saprolite		
RRMDD233	17.3	18.3	1.0	137.2	175.7	28.1	102.5	19.9	4.0	22.8	3.5	21.6	4.9	15.2	2.2	3.5	2.0	171.4	715	Upper Saprolite		
RRMDD233	18.3	19.4	1.0	115.5	158.1	23.0	84.8	16.5	3.3	18.7	2.8	16.9	3.9	11.9	1.8	2.8	1.6	153.0	615	Upper Saprolite		
RRMDD233	19.4	20.0	0.6	110.6	135.3	20.5	73.1	13.5	2.7	14.2	2.0	12.3	2.7	8.2	1.2	2.0	1.1	94.2	494	Upper Saprolite		
RRMDD233	20.0	20.5	0.6	119.0	119.5	21.6	84.0	17.9	4.1	24.8	3.9	25.0	5.6	17.0	2.4	3.9	2.3	182.2	633	Lower Saprolite		
RRMDD233	20.5	21.4	0.9	111.3	119.5	19.9	79.5	17.9	3.9	25.0	3.8	24.6	5.8	17.7	2.5	3.8	2.4	215.9	654	Lower Saprolite	**13.2**	**1101**
RRMDD233	21.4	22.3	0.9	73.3	117.7	15.2	55.9	11.1	2.3	11.5	1.6	8.8	2.0	6.4	0.9	1.5	0.8	98.7	408	Saprock		
RRMDD234	0.0	1.9	1.9	114.1	182.1	23.0	81.6	14.6	2.4	11.4	1.7	9.7	2.1	6.3	0.9	1.7	1.0	62.0	515	Soil		
RRMDD234	1.9	2.5	0.6	186.5	367.8	38.0	131.8	20.8	3.6	13.5	2.0	10.4	1.9	5.4	0.8	2.0	0.8	47.9	833	Hardcap		
RRMDD234	2.5	3.4	0.9	76.3	134.1	16.7	57.5	10.9	1.9	8.6	1.4	7.6	1.6	5.0	0.8	1.4	0.8	45.7	370	Mottled		
RRMDD234	3.4	4.3	0.9	130.8	235.4	31.7	105.3	18.6	3.2	12.7	1.8	9.5	1.8	5.6	0.9	1.8	0.9	53.5	614	Clay		
RRMDD234	4.3	5.2	0.9	116.7	237.8	26.7	92.5	15.7	2.8	10.3	1.6	8.7	1.7	4.6	0.7	1.6	0.7	50.7	573	Clay		
RRMDD234	5.2	6.1	0.9	97.6	162.2	22.1	74.9	14.3	2.5	10.1	1.5	8.1	1.6	4.6	0.7	1.5	0.6	48.0	450	Clay		
RRMDD234	6.1	7.1	1.0	103.3	195.0	24.5	78.0	14.3	2.7	11.0	1.6	8.4	1.7	4.8	0.7	1.6	0.7	49.3	497	Clay		
RRMDD234	7.1	8.1	1.0	108.7	233.7	27.3	95.5	17.9	3.3	13.7	2.0	11.4	2.2	6.5	1.0	2.0	0.9	61.6	588	Upper Saprolite		
RRMDD234	8.1	8.9	0.8	173.6	289.3	47.9	174.4	35.3	6.3	25.2	3.5	18.1	3.3	9.0	1.2	3.5	1.0	79.1	871	Upper Saprolite		
RRMDD234	8.9	9.8	0.9	133.7	220.8	39.0	144.1	30.1	5.8	22.9	3.2	16.9	3.0	8.3	1.2	3.2	0.9	77.8	711	Lower Saprolite		
RRMDD234	9.8	10.5	0.7	104.0	217.3	25.4	90.0	18.7	3.5	14.8	2.1	11.6	2.2	6.2	0.9	2.1	0.8	57.5	557	Lower Saprolite		
RRMDD234	10.5	11.5	0.9	191.2	205.0	32.7	129.5	25.4	5.2	27.5	3.5	20.1	4.3	11.8	1.6	3.5	1.3	170.2	833	Lower Saprolite	**8.1**	**631**
RRMDD234	11.5	12.4	1.0	70.3	110.0	14.5	49.9	8.9	1.7	7.3	1.0	5.5	1.1	3.4	0.5	1.0	0.4	40.5	316	Lower Saprolite		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD234	12.4	13.4	0.9	97.6	210.2	20.9	71.7	14.2	2.8	13.6	2.0	11.3	2.5	7.4	1.0	2.0	0.9	99.3	557	Saprock		
RRMDD234	13.4	14.3	1.0	80.5	201.5	17.1	60.7	11.9	2.5	11.0	1.6	8.9	1.9	5.4	0.7	1.6	0.6	67.1	473	Saprock		
RRMDD235	0.0	1.9	1.9	81.5	115.6	14.9	51.2	9.0	1.6	7.8	1.3	8.1	1.7	5.3	0.8	1.3	0.9	53.7	355	Soil		
RRMDD235	1.9	3.7	1.8	51.6	217.9	10.6	37.2	6.4	1.3	5.3	0.9	5.5	1.2	3.6	0.6	0.9	0.6	31.2	375	Hardcap		
RRMDD235	3.7	5.4	1.8	54.1	351.4	11.6	40.9	8.2	1.4	6.4	1.1	6.4	1.3	4.1	0.7	1.1	0.8	34.7	524	Hardcap		
RRMDD235	5.4	6.3	0.8	62.9	67.6	12.8	43.6	8.2	1.4	6.3	1.0	5.8	1.2	3.8	0.6	1.0	0.6	34.5	251	Mottled		
RRMDD235	6.3	7.1	0.8	308.4	226.1	77.7	251.9	44.4	7.0	27.0	3.7	18.2	3.3	8.3	1.2	3.7	1.0	79.5	1061	Mottled		
RRMDD235	7.1	7.9	0.8	347.1	176.3	48.8	152.8	25.2	4.0	17.3	2.3	12.2	2.3	6.5	0.9	2.3	0.9	64.3	863	Clay		
RRMDD235	7.9	8.7	0.8	196.4	168.7	50.2	164.5	28.5	4.6	18.9	2.7	14.3	2.7	7.6	1.2	2.6	1.0	75.9	740	Clay		
RRMDD235	8.7	9.5	0.8	297.9	210.2	68.7	236.8	38.6	5.9	23.9	3.1	16.5	2.8	8.0	1.1	3.1	1.0	78.4	996	Clay		
RRMDD235	9.5	10.5	1.0	322.5	276.4	84.3	295.1	48.4	7.4	28.0	3.6	18.6	3.1	8.6	1.1	3.6	1.0	84.8	1187	Clay		
RRMDD235	10.5	11.5	1.1	312.0	335.0	76.9	283.4	48.5	8.0	33.8	4.3	23.2	4.0	10.7	1.5	4.2	1.2	104.8	1251	Clay		
RRMDD235	11.5	12.5	0.9	136.0	164.6	32.8	115.4	20.0	3.3	14.6	2.0	9.9	1.8	5.3	0.7	2.0	0.7	50.2	559	Clay		
RRMDD235	12.5	13.5	1.0	157.7	185.7	38.9	140.6	24.5	4.1	17.5	2.3	12.3	2.1	5.9	0.8	2.3	0.8	55.9	651	Clay		
RRMDD235	13.5	14.5	1.0	109.2	124.7	27.2	96.3	16.6	2.7	12.0	1.6	9.3	1.7	5.2	0.7	1.6	0.7	52.8	462	Clay		
RRMDD235	14.5	15.2	0.8	110.0	127.1	25.2	90.5	15.2	2.6	10.9	1.5	9.0	1.8	5.3	0.8	1.5	0.7	57.5	460	Upper Saprolite		
RRMDD235	15.2	16.0	0.8	118.5	145.8	28.6	105.1	18.1	2.9	12.6	1.8	10.3	2.1	6.3	0.9	1.8	0.9	69.8	525	Upper Saprolite		
RRMDD235	16.0	16.8	0.8	127.2	166.9	31.0	111.4	19.1	3.3	15.7	2.3	13.1	2.8	8.5	1.2	2.2	1.1	98.4	604	Upper Saprolite		
RRMDD235	16.8	17.7	0.9	217.6	214.9	48.6	186.6	34.3	6.4	31.8	4.3	23.6	4.5	12.6	1.7	4.2	1.4	130.2	923	Lower Saprolite	**11.4**	**800**
RRMDD235	17.7	18.4	0.7	100.5	153.4	16.5	64.0	12.3	2.3	12.6	1.6	9.1	2.1	6.6	0.8	1.6	0.8	118.2	502	Saprock		
RRMDD235	18.4	19.0	0.6	54.2	108.5	11.4	38.5	6.4	1.2	4.9	0.6	3.6	0.7	2.2	0.3	0.6	0.3	21.5	255	Saprock		
RRMDD236	0.0	1.3	1.3	91.1	224.9	16.9	56.9	9.8	1.7	8.1	1.2	7.3	1.4	4.5	0.7	1.2	0.7	44.3	471	Soil		
RRMDD236	1.3	2.4	1.2	85.4	373.6	14.5	46.1	7.5	1.3	5.6	0.9	5.3	1.1	3.2	0.5	0.9	0.5	27.2	574	Hardcap		
RRMDD236	2.4	3.6	1.2	98.9	402.9	18.2	59.3	10.5	1.7	8.0	1.3	7.3	1.5	4.4	0.7	1.3	0.8	35.9	653	Hardcap		
RRMDD236	3.6	4.4	0.8	164.2	376.0	38.0	125.4	19.6	3.3	13.3	1.8	9.4	1.8	5.5	0.7	1.7	0.8	56.3	818	Mottled		
RRMDD236	4.4	5.1	0.8	144.3	351.4	39.4	137.6	23.3	4.2	17.0	2.2	11.5	2.1	6.3	0.9	2.2	0.8	62.4	806	Mottled		
RRMDD236	5.1	5.9	0.7	212.3	351.4	58.5	205.9	33.7	5.4	21.2	2.8	14.9	2.6	7.0	1.0	2.8	0.9	71.2	991	Clay		
RRMDD236	5.9	6.6	0.7	127.8	187.4	36.5	126.6	21.6	3.6	14.0	1.9	10.9	1.9	5.2	0.7	1.9	0.7	50.4	591	Clay		
RRMDD236	6.6	7.3	0.7	126.7	254.2	36.0	138.2	25.2	4.6	19.9	2.8	15.2	2.7	7.1	0.9	2.8	0.8	71.5	709	Clay		
RRMDD236	7.3	8.0	0.7	114.0	234.3	32.4	130.1	24.0	4.5	19.9	2.8	15.9	2.8	7.8	1.0	2.8	0.9	79.7	673	Upper Saprolite		
RRMDD236	8.0	8.8	0.8	105.3	240.1	34.2	159.2	32.1	6.0	27.3	3.6	20.1	3.5	9.1	1.1	3.6	0.9	94.6	741	Upper Saprolite		
RRMDD236	8.8	9.6	0.8	88.9	199.1	22.0	92.3	20.4	4.1	20.0	2.9	16.6	3.0	8.6	1.1	2.9	0.9	86.6	569	Upper Saprolite		
RRMDD236	9.6	10.5	0.8	78.1	179.8	18.5	71.7	15.4	3.1	15.2	2.1	12.4	2.4	7.0	0.9	2.0	0.9	69.2	479	Upper Saprolite		
RRMDD236	10.5	11.2	0.8	93.1	215.5	20.4	78.5	17.4	3.5	18.2	2.6	15.8	3.3	9.4	1.3	2.6	1.1	95.0	578	Upper Saprolite		
RRMDD236	11.2	12.0	0.7	97.2	237.8	22.9	92.5	20.6	4.3	22.5	3.3	21.3	4.7	14.6	2.0	3.3	1.8	153.7	702	Lower Saprolite		
RRMDD236	12.0	12.7	0.7	87.8	210.2	21.8	87.0	18.8	4.1	22.8	3.3	21.2	4.9	15.3	2.1	3.3	1.8	224.8	729	Lower Saprolite		
RRMDD236	12.7	13.4	0.7	80.7	194.4	22.7	99.7	20.5	4.3	24.8	3.3	21.8	5.4	16.9	2.2	3.3	2.2	262.9	765	Lower Saprolite	**9.8**	**701**
RRMDD236	13.4	14.0	0.6	74.7	168.7	16.8	64.3	11.5	2.1	9.5	1.3	7.2	1.4	4.2	0.6	1.3	0.6	57.8	422	Saprock		
RRMDD237	0.0	1.9	1.9	114.7	255.3	19.7	63.8	10.8	1.9	8.2	1.3	7.7	1.5	4.8	0.7	1.3	0.8	42.4	535	Soil		
RRMDD237	1.9	3.8	1.9	76.3	732.1	14.5	48.1	8.5	1.5	6.8	1.1	6.3	1.4	4.2	0.7	1.1	0.7	38.5	942	Hardcap		
RRMDD237	3.8	5.7	1.9	85.1	767.2	17.8	61.9	10.5	1.8	8.4	1.3	7.5	1.6	4.8	0.7	1.3	0.8	45.7	1017	Hardcap		
RRMDD237	5.7	6.4	0.7	74.6	109.8	15.6	55.1	9.3	1.6	7.8	1.2	7.2	1.5	4.9	0.7	1.2	0.7	47.9	339	Transition		
RRMDD237	6.4	7.1	0.7	89.3	270.6	17.9	64.6	10.6	1.8	9.1	1.3	8.2	1.7	5.1	0.8	1.3	0.8	54.0	537	Mottled		
RRMDD237	7.11	8.06	0.95	105.4	511.9	22.5	80.9	13.9	2.2	10.8	1.5	9.2	1.9	5.6	0.9	1.5	0.8	58.0	827	Clay	**1.0**	**827**
RRMDD237	8.1	9.0	0.9	90.4	234.3	19.4	68.8	12.1	2.0	9.1	1.3	7.3	1.5	4.5	0.7	1.3	0.7	45.3	499	Clay		
RRMDD237	9.0	9.7	0.7	78.9	315.1	16.9	60.1	10.3	1.8	8.3	1.1	6.5	1.3	4.1	0.6	1.1	0.7	41.4	548	Clay		
RRMDD237	9.7	10.3	0.7	87.7	175.7	19.5	65.0	11.4	2.0	9.0	1.3	7.3	1.5	4.4	0.6	1.3	0.7	44.1	431	Clay		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	TREO ppm
RRMDD237	10.3	11.4	1.1	68.5	91.5	14.3	50.5	8.5	1.4	6.5	1.0	5.8	1.2	3.5	0.5	1.0	0.6	38.5	293	Clay		
RRMDD237	11.4	12.2	0.8	167.7	137.0	40.4	141.1	25.7	4.6	21.6	3.2	20.1	4.2	12.4	1.7	3.2	1.6	167.6	752	Upper Saprolite		
RRMDD237	12.2	13.1	0.8	738.9	292.8	132.8	457.2	81.8	14.2	62.1	8.9	49.5	9.3	24.7	3.2	8.8	2.8	307.3	2194	Upper Saprolite		
RRMDD237	13.1	13.9	0.8	377.6	414.6	76.9	271.8	47.4	8.2	35.3	4.8	25.9	4.5	11.7	1.5	4.8	1.3	124.3	1411	Upper Saprolite		
RRMDD237	13.9	14.7	0.8	464.4	223.7	71.7	269.4	46.2	8.7	40.8	5.9	34.2	6.4	20.0	2.4	5.9	2.2	266.7	1469	Upper Saprolite		
RRMDD237	14.7	15.6	0.9	293.2	176.9	57.5	225.7	39.2	7.3	32.0	4.6	26.6	4.6	14.0	1.7	4.5	1.5	151.1	1040	Upper Saprolite		
RRMDD237	15.6	16.5	0.9	133.7	137.6	28.2	106.8	17.9	3.3	14.5	2.1	12.1	2.2	7.1	0.9	2.1	0.9	77.8	547	Upper Saprolite		
RRMDD237	16.5	17.5	0.9	95.2	135.9	20.1	77.7	13.4	2.5	10.7	1.6	9.1	1.6	5.1	0.7	1.5	0.6	54.1	430	Upper Saprolite		
RRMDD237	17.5	18.4	0.9	116.2	158.1	22.7	77.7	13.5	2.5	11.8	1.7	9.3	1.8	5.1	0.8	1.6	0.7	54.7	478	Lower Saprolite		
RRMDD237	18.4	19.3	0.9	160.7	151.7	29.0	109.4	20.8	4.1	23.0	3.4	20.9	4.5	13.0	1.8	3.4	1.7	153.0	701	Lower Saprolite		
RRMDD237	19.3	20.2	0.9	119.0	196.8	23.3	88.1	16.8	3.5	17.6	2.6	16.0	3.3	9.6	1.3	2.6	1.2	102.6	604	Lower Saprolite	8.8	944
RRMDD237	20.2	21.3	1.1	83.7	192.1	18.3	63.2	12.2	2.3	10.6	1.5	8.3	1.8	5.3	0.8	1.5	0.7	68.7	471	Saprock		
RRMDD238	0.0	2.0	2.0	150.1	261.2	26.7	88.6	14.0	2.5	10.6	1.5	8.9	1.8	5.2	0.8	1.5	0.8	49.5	624	Soil		
RRMDD238	2.0	3.4	1.5	212.9	606.7	35.0	113.7	17.6	2.9	11.7	1.8	9.9	2.1	5.7	0.9	1.8	0.9	46.5	1070	Hardcap		
RRMDD238	3.4	4.9	1.5	226.9	859.7	41.0	128.3	20.1	3.4	13.4	2.0	10.8	2.1	6.0	0.9	2.0	0.9	48.8	1366	Hardcap		
RRMDD238	4.9	6.3	1.5	202.3	486.1	38.0	123.6	18.8	2.8	12.1	1.8	9.7	1.9	5.6	0.9	1.8	0.9	46.1	952	Hardcap		
RRMDD238	6.3	7.0	0.7	79.2	132.9	17.5	62.9	11.7	2.1	9.9	1.5	9.3	1.9	5.7	0.8	1.5	0.8	55.1	393	Mottled		
RRMDD238	7.0	7.6	0.7	95.8	186.8	27.2	96.7	19.1	3.3	14.3	2.1	11.7	2.2	6.3	0.9	2.1	0.8	62.9	532	Mottled		
RRMDD238	7.6	8.4	0.8	132.5	296.3	43.3	161.0	33.6	5.6	22.5	3.3	17.5	3.1	8.4	1.1	3.3	1.0	80.1	813	Clay		
RRMDD238	8.4	9.2	0.8	133.1	291.7	43.0	157.5	32.2	5.5	22.6	3.4	17.8	3.2	8.5	1.2	3.3	1.0	81.8	806	Clay		
RRMDD238	9.2	10.0	0.8	123.7	255.3	37.8	141.1	28.3	5.1	20.6	3.0	16.3	3.1	8.2	1.1	3.0	1.0	78.7	726	Clay		
RRMDD238	10.0	10.6	0.6	100.4	183.9	26.7	93.3	18.1	3.1	14.0	2.1	12.1	2.4	6.7	1.0	2.1	0.9	67.1	534	Clay		
RRMDD238	10.6	11.3	0.7	113.3	227.2	33.2	124.8	25.5	4.7	21.0	3.3	18.8	3.7	10.3	1.4	3.2	1.3	107.7	700	Clay		
RRMDD238	11.3	11.9	0.6	97.8	186.8	26.7	93.7	19.1	3.5	15.3	2.3	13.5	2.7	7.5	1.1	2.3	1.0	75.3	549	Upper Saprolite		
RRMDD238	11.9	12.6	0.6	78.2	154.0	20.9	76.6	14.0	2.4	9.8	1.5	8.7	1.8	5.1	0.7	1.5	0.7	51.4	427	Upper Saprolite		
RRMDD238	12.6	13.5	0.9	122.6	261.2	31.8	117.2	21.6	3.6	13.9	2.0	10.7	1.9	5.4	0.8	2.0	0.7	49.9	645	Upper Saprolite		
RRMDD238	13.5	14.5	1.0	90.1	195.0	26.0	92.8	18.2	3.3	13.8	2.1	11.5	2.1	6.3	0.9	2.0	0.8	54.5	519	Upper Saprolite		
RRMDD238	14.5	15.5	1.0	113.4	222.0	33.5	123.6	24.4	4.3	17.2	2.6	13.7	2.5	6.6	0.9	2.6	0.8	58.3	626	Upper Saprolite		
RRMDD238	15.5	16.5	1.0	91.7	182.7	24.9	91.8	18.3	3.6	16.0	2.5	14.2	2.8	7.6	1.1	2.5	1.0	70.4	531	Lower Saprolite		
RRMDD238	16.5	17.5	1.0	88.8	176.9	22.0	79.4	16.0	3.1	14.8	2.5	15.3	3.1	8.5	1.2	2.5	1.2	76.4	512	Lower Saprolite		
RRMDD238	17.5	18.5	1.0	79.5	152.9	18.8	68.4	13.6	2.6	12.1	2.0	12.3	2.5	7.2	1.1	2.0	1.1	63.6	440	Lower Saprolite		
RRMDD238	18.5	19.5	1.0	128.4	276.4	37.9	158.6	35.8	7.4	41.8	6.9	43.5	9.6	26.5	3.7	6.8	3.6	322.6	1110	Lower Saprolite		
RRMDD238	19.5	20.5	0.9	166.0	317.4	42.1	177.3	34.8	7.2	40.8	5.9	36.7	7.8	21.4	2.9	5.9	2.7	269.2	1138	Lower Saprolite		
RRMDD238	20.5	21.6	1.2	175.3	258.9	33.0	141.7	24.5	5.6	35.5	4.5	28.5	6.4	18.5	2.4	4.5	1.9	265.4	1007	Lower Saprolite		
RRMDD238	21.6	22.6	1.0	98.7	169.8	19.3	78.5	14.8	3.1	17.1	2.1	13.4	2.9	8.3	1.0	2.1	0.9	128.3	560	Lower Saprolite	15.6	689
RRMDD238	22.6	23.5	0.9	91.8	176.9	18.3	63.2	10.6	2.0	9.2	1.2	6.7	1.4	3.8	0.5	1.1	0.4	52.4	439	Saprock		
RRMDD238	23.5	24.5	1.0	72.9	144.7	14.7	52.3	8.6	1.6	6.2	0.8	4.7	0.9	2.4	0.3	0.8	0.3	28.8	340	Saprock		
RRMDD238	24.5	25.5	1.0	70.0	150.5	15.2	55.3	9.6	1.8	7.8	1.1	6.2	1.2	3.4	0.5	1.1	0.5	34.3	358	Saprock		
RRMDD238	25.5	26.5	1.0	73.1	164.0	16.3	56.3	9.9	1.8	7.5	1.0	6.3	1.1	3.2	0.5	1.0	0.4	32.3	375	Saprock		
RRMDD238	26.5	27.4	0.9	71.0	161.6	15.4	53.5	9.3	1.7	7.2	0.9	5.6	1.1	3.0	0.4	0.9	0.4	29.6	362	Saprock		
RRMDD239	0.0	1.6	1.6	134.9	214.3	27.5	98.3	17.6	3.0	14.4	2.2	12.5	2.6	7.8	1.1	2.2	1.2	82.3	622	Soil		
RRMDD239	1.6	3.2	1.6	143.7	248.3	27.7	96.6	17.9	3.0	14.2	2.1	12.1	2.5	7.4	1.1	2.0	1.2	73.8	654	Soil		
RRMDD239	3.2	4.7	1.5	70.4	404.1	13.3	46.3	8.8	1.5	6.6	1.2	6.8	1.4	4.4	0.7	1.2	0.7	36.8	604	Hardcap		
RRMDD239	4.7	6.2	1.5	98.5	424.0	20.1	69.3	12.3	1.9	9.0	1.5	9.1	1.8	5.7	0.9	1.5	0.9	50.2	707	Hardcap		
RRMDD239	6.2	7.7	1.5	102.6	641.9	21.2	73.1	11.9	2.0	9.6	1.5	8.7	1.8	5.5	0.9	1.5	0.9	54.1	937	Transition		
RRMDD239	7.7	8.3	0.6	123.1	220.8	25.4	87.6	14.0	2.3	12.0	1.7	10.8	2.2	6.5	0.9	1.7	0.9	66.2	576	Transition		
RRMDD239	8.3	9.2	0.9	108.2	159.9	22.2	75.9	12.1	2.2	10.5	1.5	10.1	2.0	6.0	0.9	1.5	0.9	60.4	475	Clay		

Hole ID	From m	To m	Int. m	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD239	9.2	10.1	0.9	112.4	247.1	21.6	75.8	11.1	2.0	10.5	1.4	9.1	1.9	5.9	0.9	1.4	0.9	60.6	563	Clay		
RRMDD239	10.1	11.0	0.9	93.4	155.2	18.4	63.7	9.9	1.6	8.9	1.2	7.7	1.5	4.8	0.7	1.2	0.7	48.0	417	Clay		
RRMDD239	11.0	11.9	0.9	86.8	182.1	18.1	63.2	10.6	1.8	8.8	1.2	7.7	1.6	5.2	0.8	1.2	0.8	47.1	437	Clay		
RRMDD239	11.9	12.7	0.8	152.5	173.4	37.0	128.9	21.6	3.6	15.6	2.0	11.3	2.1	5.8	0.8	2.0	0.8	55.4	613	Clay		
RRMDD239	12.7	13.5	0.8	261.5	358.4	62.3	213.5	34.6	5.8	23.0	2.9	15.8	2.7	7.1	1.0	2.9	0.9	65.4	1058	Clay		
RRMDD239	13.5	14.3	0.8	304.9	298.7	78.8	283.4	50.7	8.8	36.3	4.7	25.1	4.2	10.5	1.3	4.7	1.0	95.5	1209	Clay		
RRMDD239	14.3	15.0	0.7	233.4	249.5	54.0	193.6	32.5	5.4	21.9	2.8	15.1	2.6	6.5	0.9	2.7	0.8	63.1	885	Clay		
RRMDD239	15.0	15.8	0.8	132.5	174.5	30.1	104.0	17.6	3.0	13.2	1.6	9.5	1.7	4.8	0.7	1.6	0.6	47.2	543	Clay		
RRMDD239	15.8	16.3	0.5	281.5	338.5	68.9	243.8	39.9	7.1	28.7	3.6	19.5	3.1	8.2	1.1	3.5	0.9	76.3	1125	Clay		
RRMDD239	16.3	17.3	1.0	140.7	204.4	30.9	108.9	17.9	3.3	13.9	1.9	10.4	1.9	5.4	0.8	1.9	0.7	55.5	599	Clay		
RRMDD239	17.3	18.3	1.0	151.9	235.4	31.5	115.6	19.0	3.6	17.2	2.4	14.6	2.9	8.4	1.1	2.3	1.0	91.8	699	Upper Saprolite		
RRMDD239	18.3	19.3	1.0	144.3	130.0	31.1	114.2	20.4	4.2	20.5	3.0	19.5	4.1	12.0	1.6	3.0	1.5	139.1	648	Upper Saprolite		
RRMDD239	19.3	20.3	1.0	177.7	189.2	38.6	144.6	25.6	5.0	22.0	3.1	17.8	3.2	8.7	1.2	3.0	1.0	82.7	723	Upper Saprolite		
RRMDD239	20.3	21.4	1.1	190.0	190.9	37.6	145.2	25.7	5.5	26.5	3.7	22.6	4.2	12.5	1.7	3.7	1.5	115.4	787	Upper Saprolite	13.1	702
RRMDD239	21.4	22.2	0.8	89.5	130.6	15.9	59.0	10.5	2.2	13.7	1.9	13.3	3.0	9.3	1.3	1.9	1.2	126.6	480	Saprock		
RRMDD239	22.2	23.0	0.8	77.1	141.1	15.6	57.2	10.1	2.0	9.2	1.3	8.4	1.8	5.2	0.8	1.3	0.7	74.0	406	Saprock		
RRMDD240	0.0	1.8	1.8	104.3	220.2	21.1	75.1	13.2	2.3	11.0	1.7	9.5	2.0	6.0	0.9	1.7	0.9	59.3	529	Soil		
RRMDD240	1.8	3.3	1.5	67.1	340.8	14.5	51.1	9.8	1.7	7.6	1.2	6.9	1.5	4.3	0.7	1.2	0.7	40.9	550	Hardcap		
RRMDD240	3.3	4.7	1.5	111.4	564.6	23.4	81.2	14.4	2.4	11.2	1.8	10.8	2.1	6.0	0.9	1.8	1.0	61.6	895	Transition		
RRMDD240	4.7	5.4	0.6	632.1	496.6	91.8	277.6	37.0	5.9	25.6	3.5	19.6	3.5	9.9	1.4	3.4	1.3	95.2	1704	Mottled		
RRMDD240	5.4	6.3	1.0	211.7	138.8	35.9	115.5	18.1	3.0	14.6	2.0	12.6	2.5	7.5	1.1	2.0	1.1	73.7	640	Clay		
RRMDD240	6.3	7.2	0.9	143.1	238.9	29.5	101.4	16.4	2.8	13.2	1.9	11.3	2.2	6.4	0.9	1.8	1.0	63.0	634	Clay		
RRMDD240	7.2	8.1	0.9	109.5	214.9	27.9	99.0	16.5	2.8	13.0	1.8	11.1	2.2	6.4	0.9	1.8	0.9	66.7	576	Upper Saprolite		
RRMDD240	8.1	9.0	0.9	203.5	278.8	57.7	215.8	38.8	7.0	32.3	4.4	24.9	4.5	12.3	1.7	4.3	1.5	126.7	1014	Upper Saprolite		
RRMDD240	9.0	9.8	0.8	282.6	313.9	70.8	283.4	52.6	9.6	45.4	6.3	33.5	6.4	17.4	2.3	6.3	2.0	198.1	1331	Upper Saprolite		
RRMDD240	9.8	10.7	0.9	168.9	233.1	37.7	144.6	26.4	5.0	25.6	3.7	21.7	4.5	13.0	1.8	3.7	1.6	149.8	841	Upper Saprolite		
RRMDD240	10.7	11.4	0.7	123.1	167.5	25.3	100.7	19.5	4.1	24.0	3.5	20.4	4.8	13.7	1.8	3.5	1.6	203.2	717	Lower Saprolite	6.7	902
RRMDD240	11.4	12.0	0.7	84.4	171.6	18.4	67.2	11.9	2.2	9.4	1.2	7.1	1.4	4.1	0.6	1.2	0.6	43.2	424	Lower Saprolite		
RRMDD241	0.0	1.9	1.9	127.8	281.1	23.1	75.7	12.5	2.2	10.1	1.6	9.4	1.8	5.1	0.8	1.6	0.8	54.6	608	Soil		
RRMDD241	1.9	3.9	2.0	143.1	514.2	24.8	75.7	11.4	1.9	7.5	1.2	7.0	1.4	3.9	0.7	1.2	0.7	35.4	830	Hardcap		
RRMDD241	3.9	6.0	2.0	151.9	1020.2	26.4	81.5	12.5	2.0	8.2	1.4	8.1	1.5	4.3	0.7	1.4	0.8	40.9	1362	Hardcap		
RRMDD241	6.0	8.0	2.0	120.2	637.2	21.5	67.3	10.4	1.6	7.2	1.1	6.6	1.2	3.7	0.6	1.1	0.6	34.3	915	Hardcap		
RRMDD241	8.0	10.0	2.0	86.2	336.2	14.8	47.4	7.4	1.2	5.1	0.8	5.0	1.0	2.8	0.5	0.8	0.5	28.7	538	Transition		
RRMDD241	10.0	10.9	0.9	44.8	112.1	8.6	31.1	5.4	1.0	5.0	0.8	5.1	1.1	3.5	0.6	0.8	0.6	33.8	255	Mottled		
RRMDD241	10.9	11.7	0.8	26.0	144.1	5.8	23.1	4.4	0.9	4.5	0.8	4.9	1.1	3.5	0.6	0.8	0.6	35.4	256	Clay		
RRMDD241	11.7	12.6	0.9	33.8	86.0	6.8	25.8	4.9	0.9	4.7	0.7	5.2	1.1	3.7	0.6	0.7	0.6	36.1	212	Clay		
RRMDD241	12.6	13.5	0.9	39.2	109.4	8.6	32.3	5.8	1.1	5.7	0.9	5.5	1.2	3.6	0.6	0.9	0.5	39.6	255	Clay		
RRMDD241	13.5	14.5	0.9	51.5	134.1	10.8	40.0	7.4	1.4	6.3	1.0	6.0	1.3	3.8	0.6	1.0	0.6	38.7	305	Clay		
RRMDD241	14.5	15.4	0.9	136.6	201.5	34.9	123.1	21.2	3.6	13.8	2.0	10.4	2.0	5.4	0.8	2.0	0.7	53.6	611	Clay		
RRMDD241	15.4	16.3	0.9	133.7	248.3	33.2	117.2	20.8	3.7	14.9	2.2	11.8	2.2	6.2	0.9	2.2	0.7	60.1	658	Upper Saprolite		
RRMDD241	16.3	16.9	0.6	126.7	283.5	28.9	103.7	17.8	3.1	13.5	1.8	9.8	2.0	5.5	0.8	1.8	0.7	63.7	663	Upper Saprolite		
RRMDD241	16.9	17.5	0.6	121.4	228.4	27.4	100.2	16.3	3.0	12.9	1.8	10.1	2.1	5.7	0.8	1.8	0.7	65.7	598	Upper Saprolite		
RRMDD241	17.5	18.3	0.7	130.2	392.4	30.8	111.9	18.4	3.2	12.9	1.7	9.3	1.9	5.0	0.7	1.7	0.7	56.4	777	Lower Saprolite		
RRMDD241	18.3	19.0	0.7	142.5	216.1	34.6	119.6	19.8	3.6	13.1	1.7	9.0	1.6	4.7	0.6	1.7	0.6	50.5	620	Lower Saprolite		
RRMDD241	19.0	19.5	0.5	138.4	125.3	38.4	139.4	24.2	4.1	14.6	2.0	10.6	1.8	5.1	0.6	2.0	0.6	50.2	557	Lower Saprolite	5.1	644
RRMDD242	0.0	1.5	1.5	177.7	400.6	30.4	93.5	14.0	2.4	9.5	1.4	8.6	1.6	4.6	0.7	1.4	0.7	41.8	789	Soil		
RRMDD242	1.5	3.0	1.5	234.0	625.5	40.5	122.5	17.7	2.9	11.6	1.9	10.8	2.0	5.7	0.9	1.8	0.9	50.0	1129	Hardcap		

Hole ID	From	To	Int.	La_2O_3	Ce_2O_3	Pr_2O_3	Nd_2O_3	Sm_2O_3	Eu_2O_3	Gd_2O_3	Tb_2O_3	Dy_2O_3	Ho_2O_3	Er_2O_3	Tm_2O_3	Yb_2O_3	Lu_2O_3	Y_2O_3	TREO	Regolith	>300ppm TREO-Ce_2O_3 Interval	
	m	m	m	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Zone	Length (m)	TREO ppm
RRMDD242	3.0	4.5	1.5	148.9	507.2	26.2	79.9	11.7	1.9	8.3	1.3	7.7	1.5	4.4	0.7	1.2	0.8	43.4	845	Hardcap		
RRMDD242	4.5	5.1	0.6	107.4	785.9	19.1	63.7	10.6	1.6	7.3	1.3	7.7	1.4	4.8	0.7	1.3	0.8	41.7	1055	Transition		
RRMDD242	5.1	5.8	0.7	52.8	140.6	10.1	35.8	5.9	1.0	4.9	0.8	5.3	1.1	3.8	0.6	0.8	0.7	34.3	298	Mottled		
RRMDD242	5.8	6.5	0.7	41.4	48.7	7.8	27.6	4.6	0.8	3.9	0.7	4.4	0.9	3.1	0.5	0.7	0.6	29.3	175	Mottled		
RRMDD242	6.5	7.5	1.0	249.8	203.2	24.7	78.1	10.8	1.8	8.2	1.1	5.8	1.1	3.4	0.5	1.1	0.6	35.9	626	Mottled		
RRMDD242	7.5	8.4	0.9	208.8	262.4	59.1	226.9	44.2	7.9	37.7	5.4	31.8	7.1	21.2	2.8	5.4	2.5	321.3	1244	Clay		
RRMDD242	8.4	9.4	0.9	280.3	328.0	58.7	224.5	42.4	7.6	35.2	5.0	28.1	5.8	16.6	2.3	5.0	2.0	224.8	1266	Clay		
RRMDD242	9.4	10.3	0.9	260.4	343.2	76.3	306.8	60.6	11.1	51.1	7.2	40.6	8.7	24.7	3.3	7.2	2.8	346.7	1551	Clay		
RRMDD242	10.3	11.3	1.0	373.0	554.0	115.7	482.9	97.1	18.3	82.6	13.0	78.3	14.9	48.0	6.0	12.9	5.5	615.9	2518	Clay		
RRMDD242	11.3	12.3	1.0	252.2	365.4	75.0	317.3	65.3	12.3	59.9	8.6	49.6	10.6	30.3	4.2	8.6	3.5	398.7	1661	Clay		
RRMDD242	12.3	13.3	1.0	163.6	261.2	51.0	212.9	42.8	8.6	43.5	6.4	37.3	8.0	23.0	3.2	6.4	2.8	290.8	1161	Clay		
RRMDD242	13.3	14.3	1.0	99.5	159.9	24.1	92.7	17.9	3.7	17.2	2.5	13.9	2.9	8.5	1.2	2.5	1.1	90.7	538	Clay		
RRMDD242	14.3	15.3	1.0	110.1	185.7	24.2	90.0	17.1	3.6	16.8	2.4	14.1	3.0	8.6	1.2	2.4	1.1	90.0	570	Clay		
RRMDD242	15.3	16.2	0.9	112.4	175.1	24.0	93.4	17.3	3.4	15.7	2.2	13.4	2.8	7.9	1.2	2.2	1.1	88.5	561	Upper Saprolite		
RRMDD242	16.2	17.1	0.9	107.9	177.5	30.9	141.1	31.8	6.9	37.6	5.5	32.7	7.0	19.3	2.6	5.5	2.3	213.3	822	Upper Saprolite	**10.6**	**1140**
RRMDD242	17.1	18.0	0.8	96.8	168.7	24.2	105.8	19.2	4.1	25.0	3.3	20.9	4.9	14.4	1.9	3.3	1.6	227.9	722	Saprock		
RRMDD242	18.0	18.8	0.8	67.7	142.3	15.8	62.2	11.6	2.2	8.6	1.2	7.1	1.4	3.8	0.6	1.2	0.5	45.7	372	Saprock		
RRMDD243	0.0	1.1	1.1	120.8	197.9	23.2	77.1	13.5	2.3	10.9	1.7	10.4	2.0	5.8	0.9	1.6	0.9	62.1	531	Soil		
RRMDD243	1.1	2.3	1.1	130.2	212.6	23.9	77.4	12.8	2.3	9.6	1.5	9.1	1.8	5.0	0.8	1.5	0.9	51.2	540	Soil		
RRMDD243	2.3	4.1	1.9	99.3	414.6	17.6	55.4	9.0	1.5	6.3	1.0	6.5	1.3	3.6	0.6	1.0	0.6	35.0	653	Hardcap		
RRMDD243	4.1	4.7	0.6	81.2	123.6	14.6	51.0	7.8	1.3	6.2	1.0	6.3	1.3	4.0	0.7	1.0	0.7	40.1	341	Clay		
RRMDD243	4.7	5.3	0.6	64.3	185.7	12.1	42.9	7.0	1.2	5.7	0.9	5.9	1.3	4.1	0.7	0.9	0.8	38.1	371	Clay		
RRMDD243	5.3	6.4	1.1	54.9	113.5	10.9	38.6	6.2	1.1	5.3	0.8	5.5	1.2	3.6	0.6	0.8	0.6	35.9	280	Mottled		
RRMDD243	6.4	7.5	1.1	62.3	112.1	11.8	40.5	6.5	1.1	5.2	0.9	5.3	1.2	3.8	0.6	0.9	0.7	34.4	287	Mottled		
RRMDD243	7.5	8.2	0.7	50.5	122.4	8.9	31.5	5.2	0.9	4.4	0.7	4.6	1.0	3.3	0.5	0.7	0.6	30.2	265	Clay		
RRMDD243	8.2	8.9	0.7	37.9	114.4	8.2	29.3	5.2	0.9	4.8	0.8	5.0	1.1	3.2	0.5	0.8	0.6	32.5	245	Clay		
RRMDD243	8.9	9.8	0.8	33.5	190.3	8.1	30.2	5.5	0.9	5.0	0.8	5.1	1.1	3.3	0.5	0.8	0.5	34.2	320	Clay		
RRMDD243	9.8	10.6	0.8	98.5	316.3	33.5	129.5	22.9	3.6	15.9	2.3	12.6	2.3	6.2	0.9	2.2	0.8	60.8	708	Clay		
RRMDD243	10.6	11.5	1.0	681.4	609.1	65.3	195.4	24.7	3.9	17.5	2.2	11.5	2.0	5.2	0.7	2.2	0.7	54.4	1676	Clay		
RRMDD243	11.5	12.5	1.0	65.2	127.1	18.3	67.0	10.7	1.8	8.2	1.1	6.8	1.4	4.1	0.6	1.1	0.6	45.3	359	Clay		
RRMDD243	12.5	13.2	0.8	112.5	151.7	24.0	86.1	13.7	2.5	12.7	1.9	11.8	2.6	7.9	1.1	1.9	1.1	99.1	530	Clay		
RRMDD243	13.2	14.3	1.1	205.2	345.5	56.3	207.6	31.9	5.3	24.4	3.3	18.9	3.9	10.9	1.5	3.3	1.3	135.2	1055	Clay		
RRMDD243	14.3	15.4	1.1	150.1	238.9	37.3	131.2	20.6	3.5	16.2	2.2	12.9	2.6	7.4	1.1	2.2	1.0	86.9	714	Clay		
RRMDD243	15.4	16.4	1.0	263.9	398.2	76.1	278.8	47.9	7.9	31.2	4.4	23.9	4.2	11.7	1.6	4.3	1.4	123.1	1279	Clay		
RRMDD243	16.4	17.4	1.1	208.8	275.3	45.9	170.3	26.9	4.6	24.3	3.5	20.8	4.4	13.0	1.8	3.4	1.5	167.6	972	Clay		
RRMDD243	17.4	18.5	1.1	965.2	1475.8	361.6	1358.9	243.5	40.8	166.0	23.1	125.7	22.5	58.0	7.6	23.0	6.0	652.7	5530	Clay		
RRMDD243	18.5	19.3	0.8	207.0	373.6	64.5	254.3	46.3	8.0	35.0	5.0	30.0	5.8	15.9	2.1	5.0	1.9	193.7	1248	Upper Saprolite		
RRMDD243	19.3	20.0	0.8	520.7	714.5	146.3	597.2	107.3	19.9	90.1	12.9	71.6	13.6	37.2	4.8	12.8	4.0	412.7	2766	Upper Saprolite		
RRMDD243	20.0	20.8	0.8	446.8	488.4	103.3	442.1	82.9	17.0	91.6	13.8	82.6	17.1	48.4	6.2	13.6	5.5	535.9	2395	Upper Saprolite		
RRMDD243	20.8	21.7	0.9	340.1	320.9	58.7	269.4	52.5	12.4	84.8	13.1	88.4	20.4	60.3	7.9	13.0	7.4	749.2	2099	Lower Saprolite	**12.0**	**1661**
RRMDD243	21.7	22.6	0.9	86.0	158.1	20.2	80.8	14.8	3.2	13.8	2.1	12.5	2.7	8.2	1.1	2.1	1.0	104.8	511	Saprock		
RRMDD244	0.0	1.1	1.1	117.9	429.9	25.0	87.7	15.6	2.8	13.3	2.0	12.3	2.4	6.7	1.0	2.0	1.0	71.5	791	Soil		
RRMDD244	1.1	2.3	1.1	110.9	1376.3	19.6	64.4	11.8	2.0	8.6	1.5	8.1	1.5	4.3	0.7	1.5	0.7	41.9	1654	Hardcap		
RRMDD244	2.3	3.3	1.1	334.2	240.1	46.5	156.3	23.2	3.7	18.0	2.6	15.0	3.0	8.2	1.1	2.5	1.1	87.1	943	Clay		
RRMDD244	3.3	4.3	1.0	193.5	236.6	38.7	138.8	21.6	3.9	17.9	2.7	15.7	3.3	9.2	1.3	2.7	1.3	102.5	790	Clay		
RRMDD244	4.3	5.4	1.0	182.4	288.1	45.4	166.8	26.0	4.1	18.3	2.5	14.2	2.7	7.6	1.0	2.5	1.0	81.4	844	Clay		
RRMDD244	5.4	6.4	1.0	164.2	195.0	40.3	147.0	23.9	3.8	17.3	2.4	14.6	2.8	8.3	1.2	2.4	1.1	85.0	709	Clay		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	**From m**	**To m**	**Int. m**	**La_2O_3 ppm**	**Ce_2O_3 ppm**	**Pr_2O_3 ppm**	**Nd_2O_3 ppm**	**Sm_2O_3 ppm**	**Eu_2O_3 ppm**	**Gd_2O_3 ppm**	**Tb_2O_3 ppm**	**Dy_2O_3 ppm**	**Ho_2O_3 ppm**	**Er_2O_3 ppm**	**Tm_2O_3 ppm**	**Yb_2O_3 ppm**	**Lu_2O_3 ppm**	**Y_2O_3 ppm**	**TREO ppm**	**Regolith Zone**	**Length (m)**	**TREO ppm**
RRMDD244	6.4	7.4	1.0	130.2	424.0	32.2	120.7	19.4	3.2	14.8	2.1	12.3	2.4	7.0	0.9	2.1	0.9	74.5	847	Clay		
RRMDD244	7.4	8.5	1.0	214.0	550.5	52.3	190.1	29.6	5.0	21.8	3.0	17.2	3.3	9.0	1.3	3.0	1.2	94.9	1196	Clay		
RRMDD244	8.5	9.5	1.1	240.4	440.4	59.6	218.1	34.9	5.7	24.8	3.4	18.0	3.3	8.6	1.1	3.4	1.0	85.5	1148	Clay		
RRMDD244	9.5	10.6	1.1	245.1	439.2	59.0	215.2	36.4	6.2	26.6	3.9	22.2	4.1	10.6	1.5	3.8	1.4	105.9	1181	Upper Saprolite		
RRMDD244	10.6	11.5	0.9	308.4	364.3	70.0	257.8	45.3	8.4	39.6	5.9	36.7	7.6	20.9	2.9	5.9	2.6	259.1	1435	Upper Saprolite		
RRMDD244	11.5	12.3	0.9	228.7	249.5	52.1	187.2	32.1	5.8	24.3	3.5	19.1	3.5	9.0	1.3	3.4	1.2	90.5	911	Upper Saprolite		
RRMDD244	12.3	13.2	0.9	197.0	257.7	43.7	162.1	28.2	5.2	23.0	3.3	18.9	3.6	9.7	1.3	3.3	1.2	95.2	853	Upper Saprolite		
RRMDD244	13.2	13.9	0.7	171.2	196.2	34.6	131.8	23.4	4.6	23.4	3.4	21.2	4.3	11.6	1.6	3.4	1.5	122.9	755	Lower Saprolite		
RRMDD244	13.9	14.6	0.7	211.1	190.3	32.9	133.6	24.2	5.3	35.4	5.0	33.6	8.0	22.9	3.0	5.0	2.8	372.1	1085	Lower Saprolite	**12.4**	**977**
RRMDD245	0.0	1.5	1.5	157.7	329.1	26.8	83.5	12.6	2.2	9.0	1.4	8.4	1.7	4.9	0.7	1.4	0.8	49.8	690	Soil		
RRMDD245	1.5	3.0	1.6	212.3	486.1	34.8	101.2	14.1	2.2	8.9	1.4	8.3	1.5	4.3	0.7	1.4	0.7	39.9	918	Hardcap		
RRMDD245	3.0	4.6	1.6	274.4	680.5	43.4	123.6	15.9	2.4	9.7	1.5	8.7	1.7	4.7	0.7	1.5	0.8	43.9	1213	Hardcap		
RRMDD245	4.6	6.2	1.6	299.1	858.6	50.8	147.5	19.1	3.1	11.9	1.9	10.7	2.0	5.8	0.9	1.9	0.9	53.5	1468	Transition		
RRMDD245	6.2	7.5	1.3	323.7	667.6	57.9	173.8	22.1	3.4	13.0	2.0	11.8	2.2	6.5	1.0	2.0	1.1	62.7	1351	Transition		
RRMDD245	7.5	8.8	1.3	317.8	500.1	56.1	167.4	20.9	3.0	11.8	1.8	10.7	2.1	6.1	1.0	1.8	1.0	63.5	1165	Transition		
RRMDD245	8.8	9.6	0.8	161.3	736.7	25.3	78.4	11.0	1.9	8.5	1.3	8.1	1.7	5.1	0.8	1.3	0.9	51.7	1094	Transition		
RRMDD245	9.6	10.3	0.8	79.0	254.2	14.0	44.9	6.7	1.2	5.3	0.9	5.8	1.3	3.9	0.7	0.9	0.7	37.6	457	Mottled		
RRMDD245	10.3	11.1	0.8	76.2	92.2	13.5	43.2	6.3	1.1	5.0	0.9	5.4	1.2	3.7	0.7	0.8	0.8	36.8	288	Mottled		
RRMDD245	11.1	11.9	0.8	49.3	45.9	9.5	33.5	5.7	1.0	5.1	0.8	5.6	1.2	3.8	0.6	0.8	0.8	37.3	201	Mottled		
RRMDD245	11.9	12.8	0.9	191.2	267.1	65.5	246.1	48.0	7.6	28.8	3.7	18.9	3.3	8.5	1.2	3.7	1.1	89.4	984	Clay		
RRMDD245	12.8	13.6	0.9	54.5	118.9	11.8	43.2	8.1	1.5	7.3	1.2	7.3	1.5	4.6	0.7	1.2	0.8	46.5	309	Clay		
RRMDD245	13.6	14.5	0.9	355.4	549.3	123.5	488.7	100.7	18.2	80.5	12.2	70.4	13.7	36.7	5.1	12.1	4.5	406.4	2277	Clay		
RRMDD245	14.5	15.2	0.7	2932.0	2436.3	832.1	3265.9	638.9	116.4	548.6	76.8	445.3	86.3	233.3	32.0	76.2	28.5	2565.2	14314	Upper Saprolite		
RRMDD245	15.2	15.8	0.7	491.4	383.0	108.7	400.1	68.0	12.0	54.1	8.1	49.1	10.3	29.4	4.2	8.0	4.1	325.1	1956	Upper Saprolite		
RRMDD245	15.8	16.7	0.9	150.1	212.6	38.6	168.0	31.2	6.8	40.3	5.5	35.2	8.2	23.7	3.2	5.5	3.2	367.0	1099	Upper Saprolite		
RRMDD245	16.7	16.9	0.3	88.8	136.5	23.0	93.5	18.3	4.0	20.4	3.0	18.8	4.2	12.1	1.7	3.0	1.7	168.3	597	Lower Saprolite	**5.0**	**2965**
RRMDD245	16.9	17.5	0.6	159.5	207.3	40.0	155.7	29.1	5.6	23.7	3.4	19.3	3.8	10.1	1.4	3.4	1.3	114.0	778	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
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	**Diamond Core Drilling** Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Using either method core was initial cut in half then one half was further cut in half to give quarter core. Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques. Half core was collected for metallurgical testwork.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	**Diamond Core Drilling** Core size was HQ triple tube. The core was not oriented (vertical)
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**Diamond Drilling** Core recovery was calculated by measuring actual core length versus drillers core run lengths. Core recovery ranged from 83% to 100% and averaged 98%. No relationship exists between core recovery and grade.
Logging	• *Whether core and chip samples have been geologically and*	All (100%) drill core has been geologically logged and core photographs taken.

Criteria	JORC Code explanation	Commentary
	geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	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. Additional non-geological qualitative logging includes comments for sample recovery, humidity, and hardness for each logged interval.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Diamond Drill Core** Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Samples were collected from core trays by hand and placed in individually numbered bags. These bags were dispatched to ALS for analysis with no further field preparation. Sample weights were recorded prior to sample dispatch. Sample mass is considered appropriate for the grain size of the material being sampled that is generally very fine grained and uniform. Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	**Assay and Laboratory Procedures – All Samples** Samples were dispatched by air freight direct to ALS laboratory Perth Australia. The preparation and analysis protocol used is as follows: **ALS Code** / **Description** WEI-21 / Received sample weight LOG-22 / Sample Login w/o Barcode DRY-21 / High temperature drying

ALS Code	Description
WEI-21	Received sample weight
LOG-22	Sample Login w/o Barcode
DRY-21	High temperature drying

Criteria	JORC Code explanation	Commentary

CRU-21	Crush entire sample
CRU-31	Fine crushing – 70% <2mm
SPL-22Y	Split sample – Boyd Rotary Splitter
PUL-31h	Pulverise 750g to 85% passing 75 micron
CRU-QC	Crushing QC Test
PUL-QC	Pulverising QC test

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

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

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

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

All laboratories used are ISO 17025 accredited

QAQC

Diamond Drill Core Samples

- Analytical Standards

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

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
All assay data is received from the laboratory in element form is unadjusted for data entry.

Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.(Source:https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors)

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

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:
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		TREO (Total Rare Earth Oxide) = La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3. Note that Y_2O_3 is included in the TREO calculation. HREO (Heavy Rare Earth Oxide) = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3, + Y_2O_3 + Lu_2O_3 CREO (Critical Rare Earth Oxide) = Nd_2O_3 + Eu_2O_3 + Tb_2O_3 + Dy_2O_3 + Y_2O_3 LREO (Light Rare Earth Oxide) = La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 HREO% of TREO= HREO/TREO x 100 In elemental form the classifications are: TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y CREE: Nd+Eu+Tb+Dy+Y LREE: La+Ce+Pr+Nd
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Drill hole collar locations for all holes were surveyed using a relational DGPS system. The general accuracy for x,y and z is ± 0.2m. Datum WGS84 Zone 36 North was used for location data collection and storage. This is the appropriate datum for the project area. No grid transformations were applied to the data. No downhole surveys were conducted. As all holes were vertical and shallow, the rig setup was checked using a spirit level for horizontal and vertical orientation Any deviation will be insignificant given the short lengths of the holes Detailed topographic data was not sourced or used.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	Drilling relating to this report was conducted on a nominal 400m x 400m grid spacing. 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.
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The Makuutu mineralisation is interpreted to be in a flat lying weathered profile including cover soil, lateritic caprock, clays transitioning to saprolite and saprock.

Criteria	JORC Code explanation	Commentary
geological structure	• *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.*	Below the saprock are fresh shales, siltstones and mudstones. Pit mapping and diamond drilling indicate the mineralised regolith to be generally horizontal All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.
Sample security	• *The measures taken to ensure sample security.*	After collection, the samples were transported by Company representatives to Entebbe airport and dispatched via airfreight to Perth Australia. Samples were received by Australian customs authorities in Perth within 48 hours of dispatch and were still contained in the sealed shipment bags. Samples were subsequently transported from Australian customs to ALS Perth via road freight and inspected on arrival by a Company representative.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No audits or reviews have been undertaken

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Makuutu Project is located in the Republic of Uganda. The mineral tenements comprise two (1) granted Retention Licences (RL1693 and RL00007), one (1) Exploration Licence (EL1766). All licences are in good standing with no known impediments. The Makuutu Rare Earths Project is 100% owned by Rwenzori Rare Metals Limited (RRM), a Ugandan registered company. Ionic Rare Earths (IXR) currently has a 51% shareholding in RRM and may increase its shareholding to 60% by meeting expenditure commitments. 1. IXR to contribute US$1,700,000 of expenditure by 1 October 2020 to earn up to a 51% staged interest in RRM as follows;

Criteria	JORC Code explanation	Commentary
		<table><tr><th>Spend</th><th>Interest earned</th><th>Cumulative Interest earned</th></tr><tr><td>Exercise of Option US$100,000 of cash plus US$150,000 of shares</td><td>20%</td><td>20%</td></tr><tr><td>Expenditure contribution of US$650,000</td><td>11%</td><td>31%</td></tr><tr><td>Expenditure contribution of a further US$800,000</td><td>15%</td><td>46%</td></tr><tr><td>Expenditure contribution of a further US$350,000</td><td>5%</td><td>51%</td></tr></table>2. IXR to fund to completion of a bankable feasibility study to earn an additional 9% interest for a cumulative 60% interest in RRM. 3. During the earn-in phase there are milestone payments, payable in cash or IXR shares at the election of the Vendor, as follows: • US$750,000 on the Grant of Retention Licence over RL1693 which is due to expire on 1 November 2020; • US$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and • US$375,000 on conversion of existing licences to mining licences. At any time should IXR not continue to invest in the project and project development ceases for at least two months RRM has the right to return the capital sunk by IXR and reclaim all interest earnt by IXR.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous exploration includes: 1980: Country wide airborne geophysical survey identifying uranium anomalies in the Project area. 1990s: French BRGM and Ugandan DGSM undertook geochemical and geological survey over South-Eastern Uganda including the Project area. Anomalous Au, Zn, Cu, Sn, Nb and V identified. 2006-2009: Country wide high resolution airborne magnetic and radiometric survey identified U anomalism in the Project area. 2009: Finland GTK reprocessed radiometric data and refined the Project anomalies. 2010: Kweri Ltd undertook field verification of radiometric anomalies including scout sampling of existing community pits. Samples showed an enrichment of REE and Sc. 2011: Kweri Ltd conducted ground radiometric survey and evaluated historic groundwater borehole logs. 2012: Kweri Ltd and partner Berkley Reef Ltd conducted prospect wide pit excavation and sampling of 48 pits and a ground gravity traverse. Pit samples

Criteria	JORC Code explanation	Commentary
		showed enrichment of REE weathered profile. Five (5) samples sent to Toronto Aqueous Research Laboratory for REE leach testwork. 2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole. The historic exploration has been conducted to a professional standard and is appropriate for the exploration stage of the prospect.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Makuutu deposit is interpreted to be an ionic adsorption REE clay-type deposits similar to those in South China, Madagascar and Brazil. The mineralisation is contained within the tropical lateritic weathering profile of a basin filled with sedimentary rocks including shales, mudstones and sandstones potentially derived from the surrounding granitic rocks. These granitic rocks are considered the original source of the REE which were then accumulated in the sediments of the basin as the granites have degraded. These sediments then form the protolith that was subjected to prolonged tropical weathering. The weathering developed a lateritic regolith with a surface indurated hardcap, followed downward by clay rich zones that grade down through saprolite and saprock to unweathered sediments. The thickness of the regolith is between 10 and 20 metres from surface. The REE mineralisation is concentrated in the weathered profile where it has dissolved from its primary mineral form, such as monazite and xenotime, then adsorbed on to fine particles of aluminosilicate clays (e.g. kaolinite, illite, smectite). This adsorbed REE is the target for extraction and production of REO.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not*	The material information for drill holes relating to this announcement are contained in Table 2.

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	detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	A lower cut-off of 300 ppm TREO-Ce_2O_3 was used for data aggregation of significant intervals with a maximum of 2 metres of internal dilution and no top-cuts applied. This lower cut-off is consistent with the marginal cut-off grade estimated and applied in the resource statements on the Makuutu Project Significant intervals were tabulated downhole for reporting. All individual samples were included in length weighted averaging over the entire tabulated range. No metal equivalents values are used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Down hole lengths are considered true widths. The mineralisation is interpreted to be horizontal, flat lying sediments and weathering profile, with the vertical drilling perpendicular to mineralisation.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to diagrams in body of text.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	This report contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock*	Metallurgical leach testing was previously conducted on samples derived from exploration pits, RAB drilling, and one 8.5 tonne bulk pit sample. In 2012, 5 pit samples were sent to the Toronto Aqueous Research Laboratory at the University of Toronto for leachability tests

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	characteristics; potential deleterious or contaminating substances.	In 2017, 2 pit samples were sent to SGS Laboratory Toronto for leachability tests. 2017/18, 29 samples were collected from 7 RAB drill holes. 20 of these were consigned to SGS Canada and 4 to Aqueous Process Research (APR) in Ontario Canada. The remaining 5 samples were consigned to Bio Lantanidos in Chile. 2018/19, 8.5 tonne bulk sample was consigned to Mintek, South Africa, to evaluate using Resin-in-leach (RIL) technology for the recovery of REE. 2019: 118 samples from 31 holes from the 2019 diamond drilling program had preliminary variation testwork conducted TREE-Ce extraction ranged from 3% to 75%. 2020: Testing of composite samples with lower extractions from the variation testing were tested using increasing rates of acid addition and leach time. Significant increases in extractions were achieved by adding acid to the leach liquor. Testing of samples from the project is ongoing.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Future work programs are intended to further evaluate the economic opportunity of the project including extraction recovery maximisation, resource definition and estimation on the known areas of mineralisation.