26 October 2020

TRANCHE 2 DRILLING RESULTS CONFIRM SIGNIFICANT MINERALISED EXTENSION AT MAKUUTU

- **Tranche 2 assays confirm a material extension of Rare Earth mineralisation east of current Mineral Resource boundary**
- **Drill program testing an area three (3) times the size of the current Mineral Resource Estimate area**
- **Assay results confirm exploration targeting model**
- **Two further tranches of drill assay results to be released near-term**

Ionic Rare Earths Limited ("**IonicRE**" or "the Company") (ASX: IXR) is pleased to provide an update on the progress of the Phase 2 drill program at the Makuutu Rare Earths Project ("**Makuutu**") in Uganda.

Phase 2 drill program has been completed with 3,745 metres of core drilled across the three (3) tenements at Makuutu. The aim of the program was to validate the Company's Exploration Target (set out within), quantify the potential of the 26-kilometre-long Makuutu mineralisation corridor and provide data for an upcoming mineral resource expansion which was successful.

Phase 2 drill program tested an area greater than three (3) times the existing mineral resource estimate area with 222 holes drilled, consisting of 165 resource extensional holes and 57 infill drill holes on a 200 metre spacing across the bulk of the current Mineral Resource Estimate area, with an average depth of 16.9 metres. Drilling was completed safely and on time, sample processing and packaging is now being finalised in Uganda.

The second tranche of assay results of the resource expansion program have been received. The results are from three different target areas as described below and illustrated in Figure 1.

Mineral Resource Extension: Four (4) extension drill holes (RRMDD074 to 077) directly east, and on the same plateau as the existing mineral resource. These holes are between 150 and 300 metres beyond the current mineral resource (MRE) limit. Intersections in these holes were generally narrow reflecting the margins of the mineralisation on the edge of that plateau. The best clay and saprolite intersection above the resource cut-off grade of 300 ppm TREO-Ce_2O_3 is:

- RRMDD076 3.8 metres at 761 ppm TREO from 4.2 metres

Resource Expansion Area F: 19 resource expansion drill holes (RRMDD078 to 096) on a discrete plateau 1 kilometre east of the current mineral resource estimate (MRE) boundary. The plateau is approximately 2.6 kilometres long and 1 kilometre wide. All holes intersected mineralisation above the resource cut-off grade and show near surface mineralisation through the area consistent with the style of the MRE area with notable intersections:

- RRMDD078 8.1 metres at 1,069 ppm TREO from 3.4 metres
- RRMDD079 8.8 metres at 1,166 ppm TREO from 3.3 metres
- RRMDD080 5.7 metres at 1,102 ppm TREO from 6.6 metres
- RRMDD082 3.7 metres at 1,573 ppm TREO from 3.6 metres
- RRMDD092 6.5 metres at 1,035 ppm TREO from 4.1 metres

Resource Expansion Area G: Nine (9) resource expansion drill holes (RRMDD097 to 105) on a discrete plateau 3 kilometre east of the MRE boundary. The plateau is approximately 1.3 kilometres long and 500 metres wide. Eight (8) holes intersected mineralisation above resource cut-off grade:

- RRMDD097 7.1 metres at 604 ppm TREO from 7.3 metres
- RRMDD098 6.5 metres at 649 ppm TREO from 3.5 metres
- RRMDD0101 5.1 metres at 824 ppm TREO from 2.3 metres
- RRMDD0102 14.3 metres at 775 ppm TREO from 3.5 metres
- RRMDD0104 11.4 metres at 661 ppm TREO from 6.3 metres
- RRMDD0105 5.7 metres at 834 ppm TREO from 3.3 metres and,
  5.3 metres at 626 ppm TREO from 11.5 metres

Mineralised intersection thicknesses in Area G are consistent with those seen in the resource area however the grade is marginally lower due, in part, to disruption to the mineralised zones from unmineralised sand horizons intercalated with mineralised clay in some holes. These sand zones may indicate a proximity to the southern margin of the mineralised sedimentary basin. The southernmost hole (RRMDD103) intersected partially weathered and fresh granite outside the mineralised basin with no intervals above cut-off.

The location and results for these drill holes are shown on the plan of the Makuutu Central Zone, Figure 2.

Due to elevated demand at analytical laboratories in Western Australia, drill assays have been delayed. IonicRE expect a steady flow of drill assays from now until the end of the year. A fifth tranche of samples (31 drill holes) have been received in Western Australia this past week. Assay results for tranches three (3) and four (4) consisting of 75 drill holes are pending.

Ionic Rare Earths Chief Executive Officer Mr. Tim Harrison commented:

"We are very happy with recent results, confirming, as expected, that the clay bearing REE mineralisation extends east of the current mineral resource area outlined by the exploration target and remains well defined by radiometric signatures. Pleasingly this bodes well for the other targets which have used the same targeting methods with all intersecting clay. We continue to see near surface thick clay intervals which we expect will all be included in the next resource update.

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Additionally, it has been a tremendous effort by the team to complete the drill program on time given the challenges experienced during 2020 with Covid-19. The pending technical and economic study submissions to the Ugandan DGSM kicks off an exciting 3 to 4 months for IonicRE. We expect the strategic importance of Makuutu, as one of only a handful of non-off-take contracted ionic clay projects globally with appreciable heavy rare earth content, with in excess of a 30% product basket of magnet metals including 5% DyTb, to be further realised over this timeframe."

Drilling Program

The final phase of drilling has been completed and the drilling fleet demobilised from the Project area. The diamond core drilling program, which followed on from the previous drilling program undertaken by the Company in Q1 2020, is illustrated in Figure 1 with Figure 2 showing the results from this announcement. The program consisted of 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 5 drill holes reported 18th September 2020, 32 drill holes reported in this announcement.*
3) Exploration drilling on adjacent tenement EL 1766, or Makuutu Eastern Zone (MEZ) – *68 drill holes completed. All drill hole samples arrived in Perth for analysis. Assays pending.*
4) Exploration drilling on adjacent tenement RL 00007, or Makuutu Western Zone (MWZ) – *25 drill holes completed. All drill hole samples arrived in Perth for analysis. Assays pending.*
5) Exploration drilling on the western side of the current Mineral Resource area further to the west (on tenement RL 1693) *–24 drill holes completed. Samples from 11 drill holes arrived in Perth for analysis, remining samples from 11 holes awaiting shipment to Perth.*
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 and samples awaiting shipment to Perth.*

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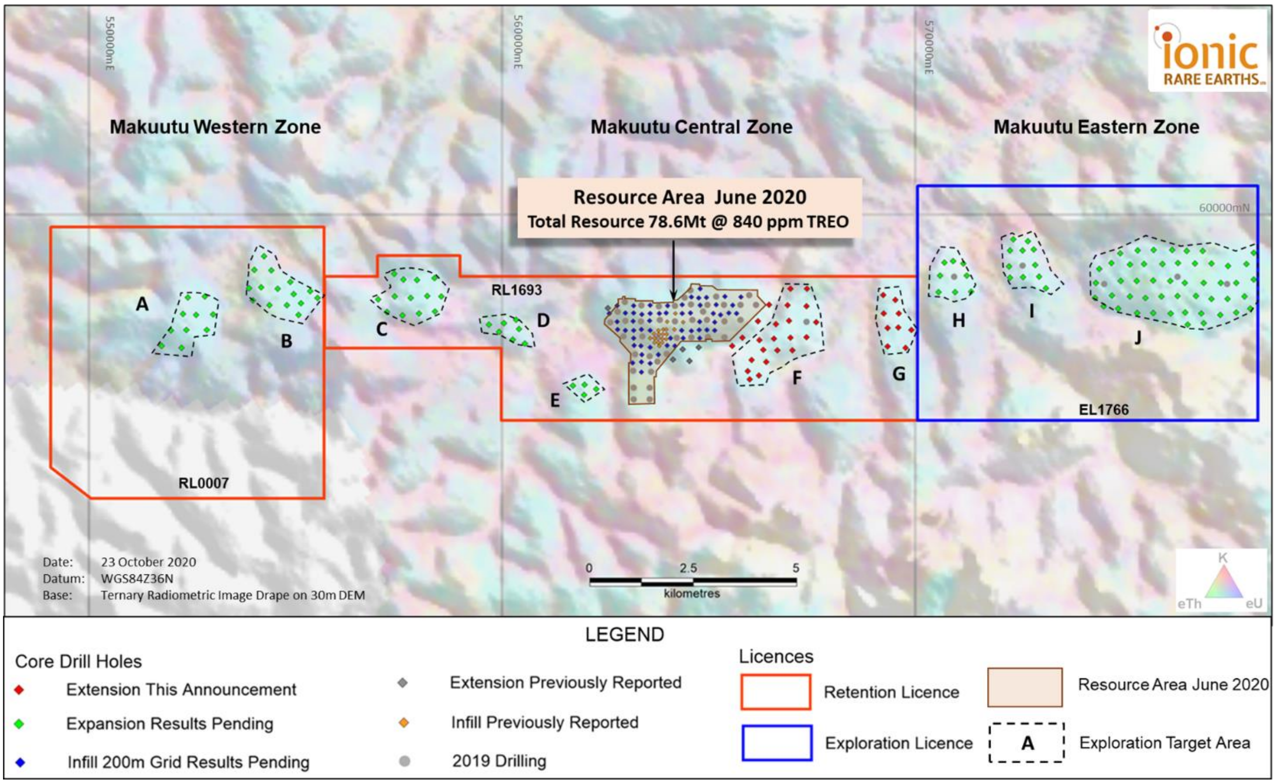

Figure 1: Drill program plan showing drill holes stretching over 26 kilometres across the three tenements at the Makuutu Rare Earths Project with the MRE and target areas.

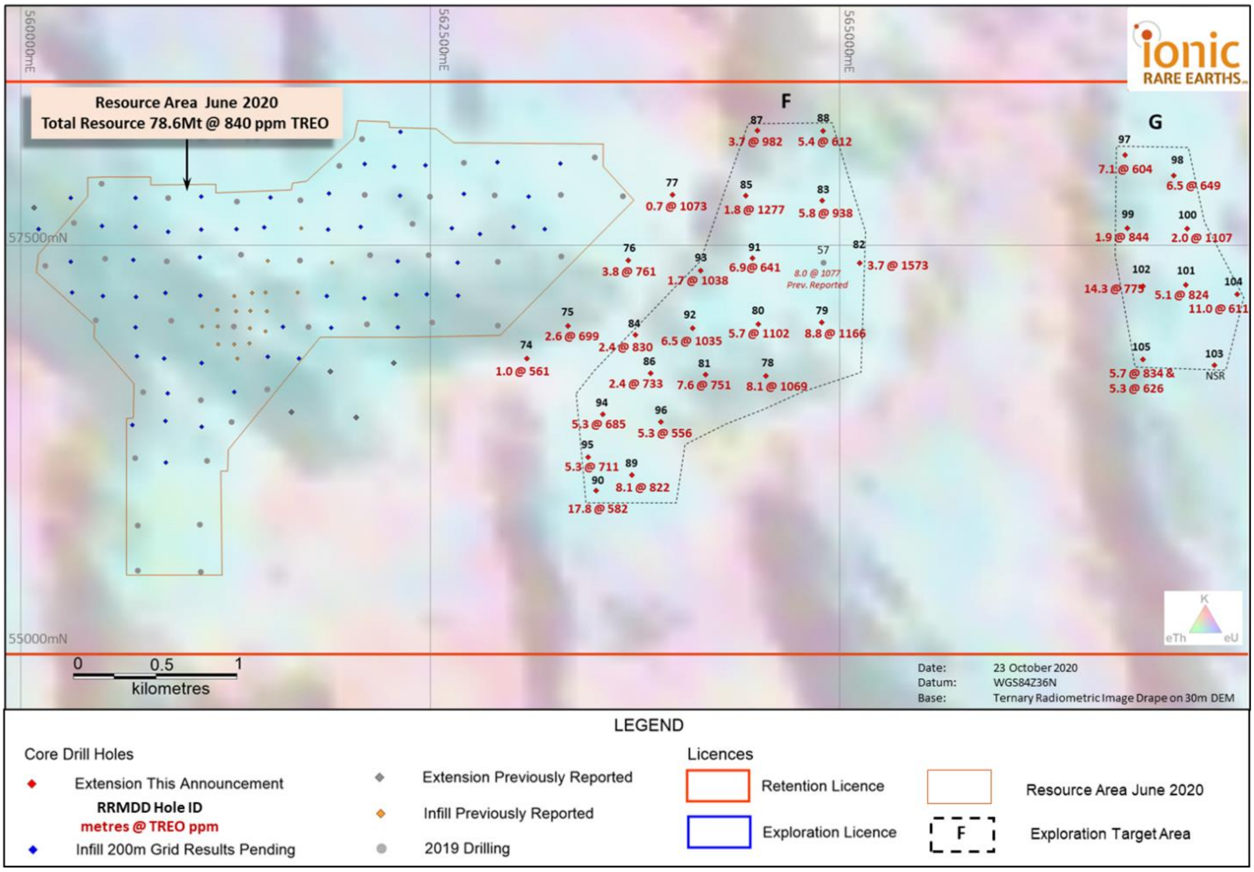

Figure 2: Makuutu Central Zone drill plan and MRE area. Holes RRMDD074 to 105 highlighted (red).

In addition to the analytical samples, a total of 2,246 kg of core samples for metallurgical testwork has arrived in Perth with a further 1,100 to 1,500 kg awaiting shipment.

This 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 1, 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 26-kilometre-long Makuutu mineralisation corridor with the initial Exploration Target* of **270 – 530 million tonnes grading 0.04 – 0.1%** (400 – 1,000 ppm) TREO as announced to the ASX on 4th September 2019.

***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.

Remaining field work over the coming weeks includes dispatch of final sample batches for analysis in Perth, drill site rehabilitation, accurate drill collar location surveys and insitu bulk density testwork.

Table 1: 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.

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Table 2: Makuutu Rare Earths Project Core Hole Details This Announcement (Datum UTM WGS84 Zone 36N)

Drill Hole ID	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Drill Type	Hole Length EOH (m.)	Azimuth	Inclination
RRMDD074	565591	56808	1148	HQ DD	10.50	0	-90
RRMDD075	565841	57007	1126	HQ DD	12.00	0	-90
RRMDD076	566210	57407	1128	HQ DD	10.10	0	-90
RRMDD077	566479	57809	1115	HQ DD	8.30	0	-90
RRMDD078	567051	56702	1081	HQ DD	24.00	0	-90
RRMDD079	567392	57029	1079	HQ DD	12.00	0	-90
RRMDD080	567004	57018	1127	HQ DD	13.70	0	-90
RRMDD081	566681	56709	1128	HQ DD	12.50	0	-90
RRMDD082	567623	57393	1124	HQ DD	9.80	0	-90
RRMDD083	567394	57775	1127	HQ DD	14.00	0	-90
RRMDD084	566253	56952	1126	HQ DD	6.00	0	-90
RRMDD085	566928	57804	1127	HQ DD	9.20	0	-90
RRMDD086	566346	56719	1152	HQ DD	12.00	0	-90
RRMDD087	566998	58201	1124	HQ DD	11.60	0	-90
RRMDD088	567400	58200	1117	HQ DD	25.50	0	-90
RRMDD089	566231	56096	1146	HQ DD	12.50	0	-90
RRMDD090	566013	56000	1131	HQ DD	29.90	0	-90
RRMDD091	566967	57421	1124	HQ DD	19.50	0	-90
RRMDD092	566603	56993	1120	HQ DD	13.30	0	-90
RRMDD093	566652	57346	1098	HQ DD	9.00	0	-90
RRMDD094	566054	56467	1125	HQ DD	27.00	0	-90
RRMDD095	565964	56204	1127	HQ DD	13.40	0	-90
RRMDD096	566408	56422	1139	HQ DD	26.50	0	-90
RRMDD097	569243	58052	1086	HQ DD	16.20	0	-90
RRMDD098	569540	57927	1087	HQ DD	13.20	0	-90
RRMDD099	569258	57604	1116	HQ DD	10.30	0	-90
RRMDD100	569621	57602	1117	HQ DD	16.50	0	-90
RRMDD101	569613	57258	1122	HQ DD	11.00	0	-90
RRMDD102	569353	57250	1122	HQ DD	23.00	0	-90
RRMDD103	569790	56767	1128	HQ DD	15.70	0	-90
RRMDD104	569928	57200	1114	HQ DD	22.50	0	-90
RRMDD105	569352	56802	1120	HQ DD	22.00	0	-90

Authorised for release by Brett Dickson, Company Secretary.

***** ENDS *****

For enquiries, contact: Brett Dickson

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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.

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Appendix 1: Diamond Core Drilling Analytical Results RRMDD058 to RRMDD068 Including Highlighted Intersections >300 ppm TREO-Ce_2O_3 (Note: Rounding will cause minor value differences)

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD074	0.0	0.2	0.2	35.9	80.8	7.2	25.0	4.4	0.8	3.7	0.6	3.8	0.8	2.4	0.4	0.6	0.5	26.0	193	Soil		
RRMDD074	0.2	1.1	0.9	45.4	107.5	9.0	30.9	5.2	0.8	4.1	0.7	4.1	0.9	2.6	0.4	0.7	0.5	26.9	240	Soil		
RRMDD074	1.1	2.1	1.0	113.1	231.9	23.5	83.9	13.9	2.7	11.3	1.6	9.0	1.8	4.8	0.7	1.6	0.6	60.2	561	Lower Saprolite	**1.0**	**561**
RRMDD074	2.1	3.1	1.0	69.2	157.5	15.9	58.1	10.1	2.0	7.9	1.1	6.3	1.2	3.2	0.5	1.1	0.5	38.5	373	Lower Saprolite		
RRMDD074	3.1	4.1	1.0	73.9	166.3	16.0	57.0	9.7	1.9	7.2	1.0	5.5	1.1	3.0	0.4	1.0	0.4	33.7	378	Lower Saprolite		
RRMDD074	4.1	5.1	1.0	67.4	148.8	15.2	56.9	10.1	1.6	6.7	0.9	5.3	1.0	2.6	0.4	0.9	0.4	29.5	348	Lower Saprolite		
RRMDD074	5.1	6.1	1.0	71.0	177.5	17.3	66.5	12.5	2.1	9.2	1.2	7.5	1.3	3.6	0.5	1.2	0.5	40.1	412	Lower Saprolite		
RRMDD074	6.1	7.1	1.0	52.3	115.0	12.7	48.8	8.9	1.4	6.2	0.9	5.4	1.0	2.6	0.4	0.9	0.4	31.4	288	Saprock		
RRMDD074	7.1	8.1	1.0	73.2	168.7	15.7	59.4	10.0	1.5	6.4	0.9	5.4	1.0	2.8	0.4	0.9	0.4	31.1	378	Saprock		
RRMDD074	8.1	9.1	1.0	77.8	168.7	19.5	79.9	15.6	2.6	11.5	1.7	10.3	1.9	5.1	0.7	1.7	0.6	59.3	457	Saprock		
RRMDD074	9.1	9.8	0.8	81.6	185.1	18.8	70.7	12.2	1.9	8.5	1.2	6.9	1.2	3.5	0.5	1.2	0.5	38.5	432	Saprock		
RRMDD074	9.8	10.5	0.7	122.0	511.9	30.2	115.6	17.2	2.5	10.8	1.5	9.1	1.7	4.4	0.6	1.5	0.6	50.7	880	Saprock		
RRMDD075	0.0	0.2	0.2	76.8	542.3	14.6	50.3	8.5	1.5	6.9	1.2	6.4	1.3	3.9	0.6	1.1	0.7	38.9	755	Soil		
RRMDD075	0.2	1.1	1.0	77.6	448.6	15.0	51.7	8.9	1.6	7.0	1.2	6.8	1.4	3.9	0.6	1.2	0.6	38.6	665	Hardcap		
RRMDD075	1.1	2.0	0.9	83.9	491.9	16.2	56.1	9.4	1.7	7.3	1.2	6.9	1.4	4.0	0.6	1.2	0.6	40.5	723	Hardcap		
RRMDD075	2.0	2.9	0.9	67.4	906.6	14.1	48.6	8.4	1.4	6.4	1.1	6.0	1.2	3.6	0.6	1.1	0.5	36.3	1103	Hardcap		
RRMDD075	2.9	3.8	0.9	73.7	603.2	14.6	50.2	9.0	1.6	7.0	1.1	6.6	1.3	3.8	0.6	1.1	0.6	38.0	812	Hardcap		
RRMDD075	3.8	4.5	0.7	80.9	517.7	16.7	57.5	10.0	1.8	7.5	1.3	7.2	1.4	4.0	0.6	1.2	0.6	40.6	749	Hardcap		
RRMDD075	4.5	5.2	0.7	29.6	36.0	6.4	23.8	3.9	0.6	3.2	0.4	2.5	0.5	1.4	0.2	0.4	0.2	16.3	125	Pallid		
RRMDD075	5.2	5.7	0.5	110.7	171.6	25.5	94.8	15.8	2.3	10.2	1.4	8.8	1.5	4.1	0.6	1.4	0.6	49.7	499	Pallid		
RRMDD075	5.7	6.7	1.1	149.5	169.3	34.3	127.7	21.2	3.2	13.9	1.8	10.8	2.0	5.2	0.7	1.8	0.7	62.2	604	Clay		
RRMDD075	6.7	7.8	1.0	181.8	246.0	41.1	167.4	31.0	5.2	26.6	3.7	22.4	4.1	10.8	1.5	3.6	1.2	136.5	883	Upper Saprolite	**2.6**	**699**
RRMDD075	7.8	8.7	0.9	78.5	157.0	16.7	64.7	11.1	1.8	9.0	1.2	7.6	1.5	4.3	0.6	1.2	0.5	56.1	412	Lower Saprolite		
RRMDD075	8.7	9.5	0.8	65.2	126.5	15.2	59.1	10.7	1.7	8.2	1.1	6.4	1.2	3.4	0.5	1.1	0.4	36.3	337	Saprock		
RRMDD075	9.5	10.1	0.6	73.3	154.0	16.4	62.8	11.1	1.9	8.2	1.1	6.4	1.2	3.3	0.5	1.1	0.5	37.2	379	Saprock		
RRMDD076	0.0	0.3	0.3	147.2	309.2	28.0	98.7	16.5	3.0	13.4	2.0	11.6	2.4	6.8	1.0	2.0	1.0	80.3	723	Soil		
RRMDD076	0.3	1.2	0.9	96.1	411.1	18.5	63.3	11.4	2.0	8.9	1.5	8.6	1.8	5.2	0.9	1.5	0.9	53.1	685	Hardcap		
RRMDD076	1.2	2.0	0.8	111.9	264.7	23.1	81.8	13.8	2.5	10.9	1.7	9.8	2.0	5.6	0.9	1.7	0.9	64.9	596	Hardcap		
RRMDD076	2.0	2.9	0.9	108.4	275.3	21.6	75.8	12.8	2.4	10.3	1.6	9.3	1.8	5.6	0.8	1.6	0.8	60.3	588	Hardcap		
RRMDD076	2.9	3.6	0.7	93.8	470.9	19.7	68.5	11.7	2.2	9.4	1.5	8.7	1.8	5.0	0.8	1.5	0.8	55.1	751	Hardcap		
RRMDD076	3.6	4.2	0.7	114.8	234.3	25.5	91.9	15.2	2.8	12.3	1.9	11.0	2.2	6.3	1.0	1.8	0.9	72.5	594	Transition		
RRMDD076	4.2	4.8	0.6	115.1	199.1	27.6	109.4	19.2	3.1	13.5	1.9	12.5	2.3	6.3	1.0	1.9	0.9	69.7	583	Clay		
RRMDD076	4.8	5.7	0.9	289.7	226.6	70.3	264.8	46.2	7.4	30.2	3.9	23.4	3.9	10.6	1.4	3.9	1.2	118.4	1102	Clay		
RRMDD076	5.7	6.6	0.9	163.6	175.7	37.2	147.0	27.0	4.5	18.6	2.6	16.2	2.9	8.0	1.2	2.6	1.0	92.3	701	Upper Saprolite		
RRMDD076	6.6	7.3	0.7	135.5	220.2	30.3	128.9	25.4	4.8	21.8	3.0	18.7	3.5	9.5	1.4	3.0	1.3	121.4	729	Upper Saprolite	**3.8**	**761**
RRMDD076	7.3	8.2	0.9	75.5	144.7	17.5	67.4	12.0	2.2	9.2	1.3	8.1	1.6	4.4	0.7	1.3	0.7	60.4	407	Lower Saprolite		
RRMDD076	8.2	9.1	0.9	70.4	130.6	15.5	57.3	9.2	1.5	6.0	0.7	4.5	0.8	2.4	0.4	0.7	0.4	25.3	326	Saprock		
RRMDD076	9.1	10.0	0.9	67.2	129.4	15.0	55.6	9.5	1.6	6.5	0.8	4.8	0.9	2.5	0.4	0.8	0.4	27.3	323	Saprock		
RRMDD076	10.0	11.0	1.0	80.2	188.6	20.9	85.1	17.0	3.0	12.6	1.7	9.8	1.8	4.5	0.7	1.7	0.6	54.5	483	Saprock		
RRMDD076	11.0	12.0	1.0	73.2	162.8	15.8	58.9	10.6	1.6	7.1	1.0	5.2	0.9	2.6	0.4	0.9	0.4	28.8	370	Saprock		
RRMDD077	0.0	0.3	0.3	71.5	180.4	12.9	43.3	7.6	1.4	6.1	1.0	6.0	1.2	3.7	0.6	1.0	0.7	35.9	373	Soil		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval	
																					Length (m)	TREO ppm
RRMDD077	0.3	1.2	0.9	75.1	177.5	14.3	48.4	7.3	1.3	5.1	0.8	4.9	1.0	3.0	0.5	0.8	0.5	27.7	368	Hardcap		
RRMDD077	1.2	2.1	0.9	46.7	224.3	9.0	32.2	6.3	1.2	5.6	1.0	6.0	1.3	3.8	0.6	1.0	0.7	34.9	374	Hardcap		
RRMDD077	2.1	3.0	0.9	64.2	255.3	13.9	50.5	9.8	1.9	7.5	1.3	8.1	1.6	4.8	0.8	1.3	0.8	46.0	468	Upper Saprolite		
RRMDD077	3.0	3.7	0.7	346.0	347.9	54.1	170.9	26.7	4.9	17.8	2.6	14.5	2.6	7.2	1.1	2.5	1.1	73.7	1073	Upper Saprolite	**0.7**	**1073**
RRMDD077	3.7	4.8	1.1	61.1	130.0	14.8	56.3	10.3	2.0	8.1	1.1	6.8	1.3	3.9	0.6	1.1	0.6	42.2	340	Lower Saprolite		
RRMDD077	4.8	5.8	1.1	60.8	130.0	14.1	51.2	8.8	1.7	6.5	0.9	5.2	0.9	2.4	0.4	0.8	0.4	27.4	312	Saprock		
RRMDD077	5.8	6.8	1.0	65.8	141.7	15.6	59.5	10.7	1.9	7.5	1.0	6.0	1.1	3.3	0.5	1.0	0.4	34.5	351	Saprock		
RRMDD077	6.8	7.8	1.0	60.6	130.0	14.2	54.9	9.8	1.7	6.6	1.0	5.4	1.0	2.9	0.4	1.0	0.4	31.4	321	Saprock		
RRMDD077	7.8	8.3	0.5	63.8	136.5	14.5	53.5	9.5	1.7	6.8	0.9	5.3	1.0	2.6	0.4	0.9	0.4	29.5	327	Saprock		
RRMDD078	0.0	0.3	0.3	79.4	446.3	16.0	55.5	9.7	1.7	7.7	1.3	7.7	1.6	4.7	0.8	1.3	0.8	51.0	685	Soil		
RRMDD078	0.3	1.1	0.8	53.7	702.8	11.5	39.7	7.5	1.3	5.6	1.1	5.9	1.2	3.5	0.6	1.1	0.6	30.4	866	Hardcap		
RRMDD078	1.1	1.9	0.8	50.5	835.1	9.2	30.0	5.3	0.9	3.9	0.7	4.2	0.8	2.5	0.4	0.7	0.4	21.5	966	Hardcap		
RRMDD078	1.9	2.8	0.9	74.6	1440.7	14.2	46.7	7.5	1.2	5.5	1.0	5.4	1.1	3.2	0.5	1.0	0.5	30.6	1634	Hardcap		
RRMDD078	2.8	3.4	0.7	86.1	706.3	16.4	55.5	9.2	1.4	6.8	1.1	6.6	1.3	3.8	0.6	1.1	0.6	37.7	935	Transition		
RRMDD078	3.4	4.2	0.8	215.8	212.0	52.4	186.6	30.4	4.9	20.5	2.8	15.0	2.7	7.2	1.0	2.8	0.9	82.5	838	Mottled		
RRMDD078	4.2	4.9	0.7	188.8	169.8	51.3	185.5	29.7	4.4	19.8	2.5	14.7	2.6	6.9	1.1	2.5	0.9	85.3	766	Clay		
RRMDD078	4.9	6.0	1.1	166.5	149.3	42.4	151.0	24.7	4.2	18.0	2.3	12.3	2.2	5.6	0.8	2.3	0.6	62.0	644	Clay		
RRMDD078	6.0	6.9	0.9	375.3	305.7	102.1	375.6	63.7	10.7	46.1	6.2	33.1	6.0	15.8	2.1	6.1	1.7	179.7	1530	Clay		
RRMDD078	6.9	7.9	1.0	414.0	369.0	106.3	403.6	69.9	12.3	55.8	7.5	40.1	7.2	18.9	2.5	7.4	2.0	215.9	1732	Clay		
RRMDD078	7.9	8.8	0.9	247.5	270.6	59.3	232.1	43.5	8.3	46.6	6.9	42.4	8.8	24.2	3.2	6.9	2.8	314.9	1318	Upper Saprolite		
RRMDD078	8.8	9.7	0.9	229.9	226.6	48.3	199.5	40.0	8.3	54.7	8.0	50.7	11.4	32.5	4.1	8.0	3.8	462.2	1388	Upper Saprolite		
RRMDD078	9.7	10.6	0.9	155.4	283.5	33.6	124.2	18.6	3.0	15.8	2.1	12.4	2.7	7.5	1.0	2.1	1.0	109.2	772	Upper Saprolite		
RRMDD078	10.6	11.5	0.9	109.0	218.4	23.6	84.6	13.4	2.2	10.0	1.3	7.6	1.6	4.7	0.6	1.3	0.6	65.4	544	Upper Saprolite	8.1	1069
RRMDD078	11.5	12.5	1.0	81.6	176.3	17.8	63.0	10.2	1.7	6.9	0.9	5.1	0.9	2.6	0.4	0.9	0.4	31.1	400	Upper Saprolite		
RRMDD078	12.5	13.4	0.9	91.4	203.2	20.1	71.6	11.9	1.9	8.7	1.1	6.1	1.2	3.3	0.5	1.1	0.5	36.8	459	Upper Saprolite		
RRMDD078	13.4	14.3	0.9	71.7	159.3	15.6	55.3	9.1	1.5	6.4	0.9	4.5	0.9	2.5	0.3	0.9	0.3	26.3	355	Upper Saprolite		
RRMDD078	14.3	15.0	0.7	80.9	188.6	18.2	65.1	11.2	1.9	8.4	1.1	6.1	1.2	3.2	0.4	1.1	0.4	35.6	423	Lower Saprolite		
RRMDD078	15.0	16.1	1.1	88.5	205.6	19.6	69.4	11.6	1.9	8.1	1.1	6.0	1.1	3.2	0.5	1.1	0.4	35.0	453	Lower Saprolite		
RRMDD078	16.1	17.0	0.9	84.3	182.7	18.0	61.7	9.9	1.7	7.2	1.0	5.3	1.0	2.9	0.4	0.9	0.4	31.4	409	Lower Saprolite		
RRMDD078	17.0	18.0	1.0	95.2	197.4	20.7	72.2	11.9	2.0	8.4	1.1	5.9	1.1	3.4	0.5	1.1	0.5	36.6	458	Lower Saprolite		
RRMDD078	18.0	19.0	1.0	78.1	149.9	17.2	59.6	9.2	1.5	6.4	0.8	4.5	0.9	2.5	0.4	0.8	0.4	27.0	359	Lower Saprolite		
RRMDD078	19.0	20.0	1.0	91.7	190.9	20.4	74.6	13.6	2.3	11.0	1.5	9.0	1.8	5.0	0.7	1.5	0.7	61.8	487	Lower Saprolite		
RRMDD078	20.0	21.0	1.0	86.4	174.5	18.3	61.9	9.7	1.4	6.3	0.8	4.7	0.9	2.5	0.4	0.8	0.4	25.7	395	Lower Saprolite		
RRMDD078	21.0	22.0	1.0	88.1	166.9	20.4	75.1	14.4	2.6	11.8	1.7	9.8	1.9	5.2	0.7	1.7	0.7	57.5	459	Saprock		
RRMDD078	22.0	23.0	1.0	77.1	156.4	17.4	62.9	12.1	2.2	9.8	1.4	7.9	1.5	4.2	0.6	1.4	0.6	46.2	401	Saprock		
RRMDD078	23.0	24.0	1.0	94.2	214.3	20.2	70.9	12.5	2.0	9.3	1.3	6.9	1.3	3.6	0.5	1.3	0.5	38.6	477	Saprock		
RRMDD079	0.0	0.3	0.3	130.8	289.3	26.8	94.2	15.8	2.6	12.9	1.9	11.6	2.3	6.5	1.0	1.9	1.0	73.5	672	Soil		
RRMDD079	0.3	1.3	1.0	91.1	499.0	19.1	67.3	12.1	2.0	9.5	1.5	8.9	1.8	5.3	0.8	1.5	0.8	54.0	775	Hardcap		
RRMDD079	1.3	2.3	1.0	95.9	627.8	17.5	59.4	10.6	1.7	7.8	1.3	7.6	1.6	4.7	0.7	1.3	0.8	44.8	884	Hardcap		
RRMDD079	2.3	3.3	1.0	123.1	1095.2	26.7	92.6	15.7	2.4	11.6	1.9	10.6	2.1	6.3	1.0	1.9	0.9	61.5	1453	Transition		
RRMDD079	3.3	3.6	0.4	225.8	211.4	45.5	158.6	25.4	4.1	20.3	2.9	16.7	3.3	9.4	1.4	2.9	1.3	103.1	832	Mottled		
RRMDD079	3.6	4.1	0.5	234.0	161.6	49.3	170.9	27.8	4.4	21.1	3.0	16.9	3.2	9.1	1.3	2.9	1.2	100.8	808	Mottled		
RRMDD079	4.1	5.0	0.9	80.1	205.6	19.1	67.0	11.3	1.9	7.9	1.1	6.7	1.3	3.6	0.5	1.1	0.5	38.4	446	Clay		
RRMDD079	5.0	5.9	0.9	302.6	275.3	63.5	222.2	35.0	5.8	26.0	3.5	19.1	3.7	9.7	1.3	3.5	1.2	120.5	1093	Clay		
RRMDD079	5.9	6.8	0.9	281.5	335.0	62.8	221.6	35.8	5.8	26.7	3.6	19.9	3.6	9.6	1.3	3.6	1.1	114.0	1126	Clay		
RRMDD079	6.8	7.6	0.8	457.4	488.4	105.1	362.8	56.9	8.7	38.8	5.0	26.6	4.7	12.2	1.6	4.9	1.3	152.4	1727	Clay		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD079	7.6	8.7	1.1	419.9	473.2	93.9	325.4	50.4	7.7	33.3	4.2	21.7	3.8	9.8	1.3	4.2	1.1	115.3	1565	Clay		
RRMDD079	8.7	9.7	1.0	459.7	401.8	85.2	316.1	51.8	8.9	45.0	5.8	32.3	6.1	16.1	2.1	5.8	1.9	205.7	1644	Clay		
RRMDD079	9.7	10.7	1.0	354.2	373.6	69.7	261.3	47.4	8.1	41.4	5.7	32.1	6.0	15.7	2.0	5.7	1.7	189.9	1414	Upper Saprolite		
RRMDD079	10.7	11.0	0.3	164.8	313.9	36.2	123.1	18.1	2.6	10.9	1.4	7.0	1.3	3.6	0.5	1.3	0.6	38.6	724	Lower Saprolite		
RRMDD079	11.0	12.0	1.0	160.1	324.5	33.9	116.6	18.0	2.6	11.7	1.4	7.3	1.4	3.9	0.6	1.4	0.6	42.4	726	Lower Saprolite	**8.8**	**1166**
RRMDD080	0.0	0.9	0.9	68.3	556.4	14.6	52.5	10.1	1.7	8.2	1.4	7.9	1.6	4.8	0.7	1.3	0.7	45.3	776	Soil		
RRMDD080	0.9	1.8	0.9	66.7	477.9	14.3	50.9	10.1	1.7	8.0	1.3	7.7	1.6	4.6	0.7	1.3	0.7	43.7	691	Hardcap		
RRMDD080	1.8	2.7	0.9	65.9	650.1	12.9	45.8	8.8	1.5	7.0	1.3	7.1	1.4	4.3	0.7	1.3	0.7	39.2	848	Hardcap		
RRMDD080	2.7	3.6	0.9	98.0	1229.9	16.0	53.1	9.5	1.6	7.2	1.3	6.8	1.4	4.1	0.6	1.3	0.6	38.7	1470	Hardcap		
RRMDD080	3.6	4.5	0.9	114.2	1288.4	23.4	79.5	14.5	2.4	10.6	1.8	9.8	1.9	5.6	0.9	1.8	0.9	51.7	1608	Hardcap		
RRMDD080	4.5	5.7	1.2	156.0	578.6	25.6	82.2	12.9	2.1	9.9	1.5	9.1	1.8	5.6	0.8	1.5	0.8	55.5	944	Hardcap		
RRMDD080	5.7	6.6	0.9	141.9	311.6	29.8	102.1	17.5	2.9	13.5	2.1	12.1	2.4	6.8	1.0	2.1	1.0	71.2	718	Transition		
RRMDD080	6.6	7.6	1.0	140.7	270.6	33.1	115.2	20.1	3.3	14.9	2.2	12.3	2.3	6.4	0.9	2.2	0.8	62.9	688	Clay		
RRMDD080	7.6	8.5	0.9	89.7	176.9	23.3	83.6	15.0	2.6	11.3	1.7	9.5	1.9	5.0	0.7	1.7	0.7	48.4	472	Clay		
RRMDD080	8.5	9.4	0.9	117.9	318.6	32.8	120.1	21.3	3.8	16.4	2.4	13.7	2.7	7.5	1.1	2.4	1.0	77.5	739	Clay		
RRMDD080	9.4	10.0	0.7	140.7	449.8	37.9	137.6	23.7	4.0	16.9	2.5	13.8	2.6	7.2	1.0	2.5	0.9	74.9	916	Clay		
RRMDD080	10.0	10.4	0.4	213.4	343.2	65.4	243.8	42.8	7.2	29.9	4.2	22.6	4.1	10.7	1.4	4.2	1.2	116.8	1111	Clay		
RRMDD080	10.4	11.4	1.0	513.7	480.2	141.6	580.9	111.4	21.8	117.0	16.7	94.8	18.6	48.8	6.3	16.6	4.8	604.5	2778	Upper Saprolite		
RRMDD080	11.4	12.2	0.8	143.1	263.5	31.4	113.4	18.8	3.3	19.3	2.7	15.4	3.4	9.4	1.2	2.6	1.0	147.9	777	Lower Saprolite	**5.7**	**1102**
RRMDD080	12.2	13.0	0.8	93.9	199.1	21.6	77.6	12.7	2.2	9.6	1.3	6.9	1.4	3.8	0.5	1.3	0.5	40.6	473	Lower Saprolite		
RRMDD080	13.0	13.7	0.7	102.5	255.3	23.3	80.4	12.5	2.1	8.8	1.2	6.3	1.2	3.2	0.5	1.2	0.4	33.7	532	Lower Saprolite		
RRMDD081	0.0	0.7	0.7	84.7	793.0	15.9	54.2	10.3	1.6	7.7	1.3	7.5	1.5	4.3	0.7	1.3	0.7	41.3	1026	Soil		
RRMDD081	0.7	1.6	0.9	73.9	571.6	13.4	45.5	8.4	1.4	6.7	1.1	6.4	1.3	4.0	0.6	1.1	0.6	35.0	771	Hardcap		
RRMDD081	1.6	2.3	0.7	63.8	561.1	13.0	45.6	8.8	1.5	7.1	1.2	6.9	1.4	4.3	0.7	1.2	0.7	38.6	756	Hardcap		
RRMDD081	2.3	3.6	1.3	96.1	747.3	17.8	59.7	10.5	1.7	8.1	1.3	7.7	1.6	4.8	0.8	1.3	0.8	44.6	1004	Hardcap		
RRMDD081	3.6	4.3	0.7	116.1	223.1	24.3	86.2	14.0	2.3	11.3	1.7	10.2	2.1	6.3	0.9	1.7	1.0	67.8	569	Transition		
RRMDD081	4.3	4.9	0.6	115.2	223.1	25.9	91.8	15.5	2.6	12.9	2.0	12.1	2.5	7.2	1.1	2.0	1.1	76.8	592	Mottled		
RRMDD081	4.9	5.8	0.9	86.8	144.1	20.2	72.0	12.2	2.2	10.3	1.6	9.6	2.0	5.8	0.8	1.6	0.9	61.6	432	Mottled		
RRMDD081	5.8	6.6	0.8	96.4	174.5	19.3	67.4	11.4	2.0	9.5	1.5	8.4	1.7	5.1	0.8	1.5	0.8	52.3	453	Mottled		
RRMDD081	6.6	7.5	0.9	159.5	172.8	24.8	80.4	12.8	2.2	9.8	1.5	8.5	1.7	5.0	0.8	1.5	0.8	50.8	533	Mottled		
RRMDD081	7.5	8.3	0.8	151.9	229.6	30.0	101.8	16.3	2.9	12.9	1.9	10.5	2.0	6.0	0.9	1.9	0.9	59.9	629	Clay		
RRMDD081	8.3	9.1	0.8	188.2	258.9	45.1	157.5	26.2	4.6	19.0	2.7	15.0	2.8	7.8	1.1	2.7	1.1	83.3	816	Clay		
RRMDD081	9.1	9.9	0.8	183.0	230.2	53.6	196.5	33.4	5.9	23.7	3.4	17.8	3.2	8.4	1.2	3.3	1.1	87.2	852	Clay		
RRMDD081	9.9	10.6	0.7	251.0	248.3	70.1	274.1	50.2	9.5	43.5	6.1	32.8	6.1	15.6	2.1	6.1	1.7	182.9	1200	Clay		
RRMDD081	10.6	11.3	0.7	308.4	224.9	70.9	288.1	52.4	10.9	62.2	9.0	54.2	11.0	29.5	3.8	9.0	3.3	383.5	1521	Upper Saprolite		
RRMDD081	11.3	11.9	0.6	116.5	204.4	25.2	94.7	17.5	3.5	17.5	2.6	15.8	3.3	9.3	1.2	2.6	1.2	134.0	649	Lower Saprolite	**7.6**	**751**
RRMDD081	11.9	12.4	0.5	77.5	172.2	20.5	82.8	18.6	3.9	18.2	2.9	16.2	3.1	8.6	1.1	2.9	1.0	93.7	523	Saprock		
RRMDD081	12.4	12.5	0.1	86.7	183.9	18.4	61.6	9.2	1.5	6.4	1.0	5.2	1.0	3.0	0.4	0.9	0.5	31.7	412	Fresh		
RRMDD082	0.0	0.8	0.8	66.7	331.5	14.3	50.5	9.4	1.5	7.4	1.2	7.1	1.4	4.3	0.7	1.2	0.7	42.4	540	Soil		
RRMDD082	0.8	1.5	0.7	63.9	381.8	14.0	48.8	9.0	1.5	7.3	1.2	7.2	1.5	4.4	0.7	1.2	0.7	42.4	586	Soil		
RRMDD082	1.5	2.3	0.8	39.9	434.6	9.0	32.0	6.5	1.1	5.0	0.9	5.2	1.1	3.2	0.5	0.9	0.5	28.1	568	Hardcap		
RRMDD082	2.3	2.9	0.5	65.7	903.1	14.6	51.2	9.3	1.5	6.8	1.2	6.8	1.4	4.0	0.6	1.2	0.6	35.7	1104	Hardcap		
RRMDD082	2.9	3.6	0.8	141.9	2881.4	33.6	112.4	20.9	3.3	13.8	2.5	12.6	2.4	6.9	1.0	2.4	1.0	55.0	3291	Transition		
RRMDD082	3.6	4.5	0.9	252.2	261.2	53.8	175.5	28.3	4.9	19.9	2.8	14.6	2.7	7.5	1.0	2.8	1.0	74.0	902	Mottled		
RRMDD082	4.5	5.4	0.9	473.8	407.6	101.3	334.8	53.8	9.2	38.4	5.1	25.6	4.5	12.2	1.6	5.1	1.4	130.2	1605	Mottled		
RRMDD082	5.4	6.3	0.9	716.6	282.3	134.0	463.1	73.4	13.4	63.5	8.3	42.2	7.7	20.0	2.5	8.3	1.9	255.2	2092	Mottled		

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Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD082	6.3	7.3	1.0	512.5	282.3	80.0	283.4	45.0	8.8	49.1	6.7	37.0	7.6	21.7	2.7	6.6	2.4	339.1	1685	Upper Saprolite	**3.7**	**1573**
RRMDD082	7.3	8.0	0.7	103.9	199.7	23.8	83.9	15.8	3.0	13.5	1.9	10.5	2.0	5.6	0.8	1.9	0.7	64.6	532	Saprock		
RRMDD082	8.0	8.7	0.8	101.9	211.4	23.2	83.6	16.8	3.1	14.4	2.1	11.1	2.0	5.6	0.7	2.1	0.6	62.4	541	Saprock		
RRMDD082	8.7	9.8	1.1	92.3	163.4	19.4	64.9	10.9	2.1	8.7	1.2	6.7	1.3	3.9	0.6	1.2	0.5	43.2	420	Saprock		
RRMDD083	0.0	0.6	0.6	101.8	263.5	20.4	71.0	12.6	2.2	10.6	1.6	9.6	2.0	6.0	0.9	1.6	0.9	63.9	569	Soil		
RRMDD083	0.6	1.7	1.1	97.7	277.6	19.3	67.3	12.1	2.1	10.0	1.5	9.4	1.9	5.6	0.9	1.5	0.9	61.0	569	Soil		
RRMDD083	1.7	2.5	0.8	70.7	807.0	12.8	43.4	7.7	1.3	6.0	1.0	5.9	1.2	3.5	0.6	1.0	0.6	36.1	999	Hardcap		
RRMDD083	2.5	3.3	0.8	51.7	880.8	10.2	35.1	6.2	1.1	4.9	0.9	4.9	1.0	3.1	0.5	0.9	0.5	29.8	1032	Hardcap		
RRMDD083	3.3	4.2	0.9	64.3	1311.9	12.5	42.6	7.3	1.3	5.5	1.0	5.3	1.1	3.2	0.5	1.0	0.5	30.7	1489	Hardcap		
RRMDD083	4.2	4.6	0.4	64.2	550.5	10.5	34.5	5.8	1.0	4.4	0.8	4.3	0.9	2.8	0.4	0.8	0.5	27.8	709	Transition		
RRMDD083	4.6	5.4	0.8	90.3	125.3	16.9	58.6	9.8	1.8	8.5	1.3	7.7	1.6	4.8	0.7	1.3	0.7	53.1	382	Mottled		
RRMDD083	5.4	6.2	0.8	94.6	106.2	20.1	72.3	11.9	2.2	10.7	1.6	9.4	2.0	5.8	0.8	1.6	0.8	66.9	407	Clay		
RRMDD083	6.2	8.0	1.8	120.8	194.4	28.1	100.9	17.0	3.2	14.8	2.2	12.4	2.5	7.1	1.0	2.1	0.9	83.7	591	Clay		
RRMDD083	8.0	8.6	0.6	511.3	728.5	87.7	304.4	49.2	8.8	37.3	5.1	26.9	5.0	12.9	1.8	5.0	1.5	142.9	1928	Clay		
RRMDD083	8.6	9.3	0.7	254.5	236.6	62.8	229.2	39.2	7.0	29.0	4.1	22.4	4.2	11.2	1.6	4.1	1.3	125.3	1032	Upper Saprolite		
RRMDD083	9.3	10.0	0.8	202.9	220.8	47.7	173.2	29.5	5.7	26.4	3.9	23.2	4.9	14.0	1.9	3.9	1.8	175.9	936	Upper Saprolite		
RRMDD083	10.0	11.2	1.2	282.6	210.8	58.5	228.6	41.7	8.6	45.5	6.5	39.3	8.4	23.3	3.2	6.5	2.9	306.0	1273	Upper Saprolite	**5.8**	**938**
RRMDD083	11.2	12.1	0.9	82.6	129.4	16.8	61.9	11.2	2.3	10.6	1.5	8.7	1.9	5.5	0.8	1.5	0.8	74.4	410	Lower Saprolite		
RRMDD083	12.1	13.0	0.9	74.4	143.5	16.3	54.9	10.1	1.9	7.7	1.1	5.8	1.2	3.6	0.6	1.1	0.6	38.4	361	Saprock		
RRMDD083	13.0	14.0	1.0	75.9	172.8	15.9	51.9	8.4	1.7	6.3	0.9	5.1	1.0	3.5	0.5	0.9	0.6	33.8	379	Saprock		
RRMDD084	0.0	0.8	0.8	37.9	156.4	8.5	30.2	6.0	1.1	5.1	0.8	5.4	1.1	3.6	0.6	0.8	0.6	32.0	290	Soil		
RRMDD084	0.8	1.7	0.9	45.7	165.2	9.3	33.4	6.3	1.1	5.3	0.9	5.5	1.2	3.6	0.6	0.9	0.6	32.8	312	Soil		
RRMDD084	1.7	2.6	0.9	36.0	215.5	8.3	29.6	5.9	1.0	5.0	0.9	5.5	1.2	3.7	0.6	0.8	0.6	31.0	346	Hardcap		
RRMDD084	2.6	3.3	0.7	63.8	268.2	14.9	49.7	9.4	1.7	7.6	1.3	7.8	1.5	5.0	0.8	1.3	0.8	40.0	474	Hardcap		
RRMDD084	3.3	4.2	0.9	220.5	384.2	47.2	156.9	25.2	4.1	17.5	2.4	11.5	2.1	6.2	0.9	2.3	0.8	61.8	943	Upper Saprolite		
RRMDD084	4.2	5.0	0.8	180.6	374.8	37.0	125.4	21.8	3.7	17.2	2.3	11.8	2.2	6.2	0.8	2.3	0.7	79.2	866	Lower Saprolite		
RRMDD084	5.0	5.7	0.7	135.5	272.9	30.0	100.2	17.8	3.1	13.4	1.8	9.1	1.7	4.7	0.6	1.8	0.5	51.3	644	Lower Saprolite	**2.4**	**830**
RRMDD084	5.7	6.0	0.3	148.4	298.7	31.5	102.2	15.0	2.3	9.8	1.3	6.3	1.1	3.5	0.5	1.3	0.5	35.7	658	Saprock		
RRMDD085	0.0	1.0	1.0	96.5	330.3	20.4	73.1	12.1	2.1	10.4	1.5	9.5	1.9	5.9	0.9	1.5	0.8	59.9	627	Soil		
RRMDD085	1.0	1.9	0.9	56.6	1235.7	12.6	45.1	7.6	1.3	5.7	1.1	5.9	1.2	3.9	0.5	1.1	0.5	33.4	1412	Hardcap		
RRMDD085	1.9	2.8	0.9	98.0	318.6	21.0	77.0	11.7	1.8	9.3	1.4	8.6	1.7	5.2	0.8	1.4	0.8	54.2	611	Transition		
RRMDD085	2.8	3.7	0.9	99.2	373.6	23.0	86.7	13.3	2.5	11.3	1.6	10.7	2.1	6.3	0.9	1.6	0.9	67.6	701	Transition		
RRMDD085	3.7	4.4	0.7	382.3	359.6	87.2	295.1	49.5	9.5	39.8	5.7	29.7	5.7	15.6	2.1	5.6	1.9	174.0	1463	Clay		
RRMDD085	4.4	5.0	0.6	304.9	229.0	63.1	222.8	40.8	8.5	39.5	5.9	33.4	6.8	19.9	2.7	5.8	2.4	233.7	1219	Clay		
RRMDD085	5.0	5.5	0.5	289.7	175.7	49.2	177.3	30.4	6.6	33.4	4.7	26.7	5.9	17.9	2.3	4.7	2.0	264.1	1091	Upper Saprolite	**1.8**	**1277**
RRMDD085	5.5	6.4	0.9	84.8	149.3	18.3	64.6	12.5	2.7	11.2	1.6	9.1	1.8	5.5	0.8	1.6	0.7	62.4	427	Lower Saprolite		
RRMDD085	6.4	7.3	0.9	74.5	144.1	16.5	59.8	11.5	2.6	10.2	1.5	8.2	1.6	5.0	0.7	1.5	0.7	55.4	394	Lower Saprolite		
RRMDD085	7.3	8.9	1.6	68.4	130.6	15.2	51.8	9.3	2.0	7.5	1.1	5.8	1.1	3.3	0.5	1.1	0.5	35.8	334	Lower Saprolite		
RRMDD085	8.9	9.0	0.1	67.7	139.4	15.2	52.1	9.6	2.1	7.8	1.1	6.0	1.1	3.5	0.5	1.1	0.5	35.7	343	Lower Saprolite		
RRMDD085	9.0	9.2	0.2	63.3	132.4	14.2	49.9	9.0	2.0	7.5	1.1	5.8	1.1	3.5	0.5	1.1	0.5	36.6	328	Saprock		
RRMDD086	0.0	0.4	0.4	95.5	475.5	20.8	77.8	12.9	2.2	10.7	1.6	10.1	2.0	6.1	0.9	1.5	0.9	62.4	781	Soil		
RRMDD086	0.4	1.1	0.7	59.8	695.8	13.6	50.2	8.4	1.6	7.4	1.2	7.5	1.5	4.8	0.7	1.2	0.7	40.4	895	Hardcap		
RRMDD086	1.1	1.9	0.8	84.8	1282.6	17.2	59.6	10.0	1.8	8.1	1.4	8.4	1.6	5.1	0.8	1.4	0.8	41.9	1526	Hardcap		
RRMDD086	1.9	2.8	1.0	75.3	393.6	15.5	54.4	8.6	1.5	7.2	1.2	7.6	1.5	4.6	0.7	1.2	0.7	44.2	618	Transition		
RRMDD086	2.8	3.8	1.0	94.3	502.5	17.6	61.9	9.5	1.7	7.9	1.2	7.6	1.5	4.7	0.8	1.2	0.8	44.7	758	Transition		
RRMDD086	3.8	4.7	1.0	118.5	204.4	22.9	83.6	13.8	2.2	10.3	1.6	9.6	1.9	5.9	0.8	1.6	0.9	57.9	536	Mottled	**1.0**	**536**

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD086	4.7	5.6	0.9	93.6	170.4	19.9	73.6	12.1	1.9	9.2	1.4	8.8	1.8	5.4	0.8	1.4	0.8	54.9	456	Mottled		
RRMDD086	5.6	6.5	0.9	69.8	96.4	15.6	57.3	9.9	1.6	7.4	1.1	7.1	1.4	4.2	0.6	1.1	0.7	44.2	318	Mottled		
RRMDD086	6.5	7.1	0.6	76.7	216.1	17.1	63.2	10.8	1.8	7.6	1.2	7.4	1.4	4.7	0.7	1.2	0.7	45.6	456	Mottled		
RRMDD086	7.1	7.6	0.5	83.0	401.8	19.3	70.7	12.0	2.0	8.1	1.3	7.7	1.5	4.5	0.7	1.3	0.7	45.7	660	Clay		
RRMDD086	7.6	8.5	0.9	169.5	264.7	38.2	135.9	22.1	3.5	14.9	2.2	11.9	2.3	6.4	0.9	2.2	0.9	70.4	746	Clay		
RRMDD086	8.5	9.1	0.6	259.2	227.8	62.0	229.8	38.4	6.6	26.0	3.6	20.7	3.6	9.9	1.3	3.6	1.1	106.9	1001	Clay		
RRMDD086	9.1	10.0	0.9	112.5	158.1	23.2	88.2	15.3	2.9	13.5	2.0	11.8	2.4	6.9	0.9	2.0	0.9	90.4	531	Upper Saprolite	**2.4**	**733**
RRMDD086	10.0	10.8	0.8	93.5	184.5	20.2	72.9	12.2	2.0	7.8	1.1	6.1	1.2	3.5	0.5	1.1	0.6	33.4	441	Upper Saprolite		
RRMDD086	10.8	11.0	0.2	61.3	114.8	19.0	82.8	18.4	3.5	13.0	1.9	10.1	1.8	4.7	0.7	1.9	0.7	45.8	380	Lower Saprolite		
RRMDD086	11.0	12.0	1.1	73.4	152.9	16.9	62.3	10.3	1.8	7.2	1.0	5.4	1.1	3.1	0.4	1.0	0.4	34.9	372	Saprock		
RRMDD087	0.0	0.8	0.8	59.9	165.7	12.7	46.9	7.6	1.4	6.9	1.0	7.1	1.4	4.3	0.6	1.0	0.7	43.3	361	Soil		
RRMDD087	0.8	1.5	0.7	58.3	153.4	12.3	44.7	7.3	1.3	6.6	1.0	6.5	1.4	3.9	0.6	1.0	0.6	40.9	340	Soil		
RRMDD087	1.5	2.4	0.9	55.8	596.2	11.5	40.1	6.4	1.0	5.1	0.9	5.0	1.0	3.1	0.5	0.8	0.5	27.6	755	Hardcap		
RRMDD087	2.4	3.1	0.7	47.7	1265.0	11.8	42.2	7.1	1.3	5.6	1.0	5.9	1.2	3.6	0.5	1.0	0.5	32.9	1427	Hardcap		
RRMDD087	3.1	3.4	0.3	50.8	426.4	11.1	40.4	6.5	1.1	5.8	1.0	6.3	1.2	4.1	0.6	1.0	0.6	37.2	594	Transition		
RRMDD087	3.4	3.8	0.4	102.5	264.7	22.5	76.6	13.8	2.6	11.6	1.9	10.5	2.1	6.4	0.9	1.9	0.9	64.1	583	Mottled		
RRMDD087	3.8	4.1	0.3	117.9	576.3	26.3	89.2	16.2	3.0	13.4	2.1	11.5	2.3	6.7	0.9	2.1	0.9	66.7	935	Mottled		
RRMDD087	4.1	4.9	0.8	217.6	651.2	50.8	167.4	28.1	5.0	20.7	3.0	15.3	2.8	7.8	1.1	2.9	0.9	81.3	1256	Mottled		
RRMDD087	4.9	5.7	0.8	211.7	198.5	49.9	162.7	27.6	5.1	19.9	2.8	14.5	2.6	7.3	1.0	2.8	0.9	74.0	781	Mottled		
RRMDD087	5.7	6.5	0.8	308.4	222.0	62.8	214.6	36.5	6.9	29.9	4.1	20.7	3.7	10.2	1.3	4.0	1.1	110.0	1036	Upper Saprolite		
RRMDD087	6.5	7.1	0.6	321.3	218.4	54.4	194.8	32.8	6.7	35.0	4.8	25.9	5.2	15.0	1.9	4.8	1.6	194.3	1117	Upper Saprolite	**3.7**	**982**
RRMDD087	7.1	7.5	0.4	81.3	137.6	16.3	54.8	9.4	1.9	7.6	1.0	5.0	1.0	2.7	0.4	1.0	0.3	40.3	361	Lower Saprolite		
RRMDD087	7.5	8.4	0.9	67.3	131.8	15.5	56.2	9.5	1.6	6.3	0.9	4.8	0.9	2.4	0.4	0.9	0.3	27.4	326	Lower Saprolite		
RRMDD087	8.4	9.5	1.1	68.5	145.2	16.1	59.6	10.5	1.9	8.0	1.1	6.6	1.2	3.4	0.4	1.1	0.4	40.4	365	Lower Saprolite		
RRMDD087	9.5	9.9	0.4	56.3	121.8	12.9	49.0	8.2	1.5	5.8	0.9	5.0	1.0	2.8	0.4	0.8	0.4	30.1	297	Lower Saprolite		
RRMDD087	9.9	10.7	0.8	68.7	154.0	15.3	56.3	10.2	2.0	7.8	1.1	6.1	1.1	3.1	0.4	1.1	0.4	33.1	361	Saprock		
RRMDD087	10.7	11.6	0.9	61.8	132.4	13.6	50.3	8.7	1.6	6.5	1.0	5.3	0.9	2.6	0.4	0.9	0.3	28.4	315	Saprock		
RRMDD088	0.0	0.5	0.5	60.2	128.8	13.3	48.9	8.3	1.5	7.4	1.2	7.6	1.6	4.7	0.7	1.2	0.7	46.2	332	Soil		
RRMDD088	0.5	1.4	0.9	51.0	200.3	9.8	34.2	5.8	1.0	4.7	0.8	5.1	1.0	3.3	0.5	0.8	0.5	30.9	350	Hardcap		
RRMDD088	1.4	2.3	0.9	35.3	802.3	7.4	25.9	4.4	0.7	3.8	0.7	3.9	0.8	2.7	0.4	0.7	0.5	23.7	913	Hardcap		
RRMDD088	2.3	3.3	1.0	35.4	496.6	8.1	28.7	4.9	0.8	3.9	0.7	4.5	0.9	2.9	0.5	0.7	0.5	26.5	616	Hardcap		
RRMDD088	3.3	4.3	1.0	49.3	1259.1	12.3	44.6	7.7	1.2	5.9	1.0	6.1	1.2	3.7	0.6	1.0	0.6	30.1	1424	Hardcap		
RRMDD088	4.3	5.2	0.9	61.9	279.9	12.6	45.3	7.5	1.2	6.3	0.9	6.1	1.3	3.9	0.6	0.9	0.6	38.2	467	Transition		
RRMDD088	5.2	6.0	0.9	83.2	119.5	14.9	53.1	8.8	1.5	7.1	1.2	7.0	1.5	4.8	0.7	1.2	0.7	48.1	353	Mottled		
RRMDD088	6.0	6.8	0.8	80.2	75.3	17.2	64.7	11.1	1.8	9.1	1.4	8.9	1.9	5.5	0.8	1.4	0.8	60.7	341	Mottled		
RRMDD088	6.8	7.7	0.9	89.8	104.6	19.2	72.2	11.5	1.9	9.1	1.3	8.0	1.7	5.1	0.7	1.3	0.8	57.3	385	Clay		
RRMDD088	7.7	8.6	0.9	71.3	125.3	15.4	56.2	9.6	1.5	7.1	1.1	6.5	1.3	4.0	0.6	1.1	0.6	43.8	346	Clay		
RRMDD088	8.6	9.5	0.9	86.2	125.9	17.8	66.4	10.4	1.8	7.9	1.1	6.6	1.3	4.0	0.6	1.1	0.6	45.1	377	Clay		
RRMDD088	9.5	10.0	0.5	135.5	282.3	24.1	84.8	13.5	2.0	9.2	1.4	7.7	1.5	4.4	0.6	1.4	0.6	46.4	615	Clay		
RRMDD088	10.0	10.4	0.4	112.9	193.9	20.7	69.9	10.8	1.8	7.3	1.1	6.2	1.2	3.8	0.6	1.1	0.6	39.4	471	Clay		
RRMDD088	10.4	11.3	0.9	127.2	325.6	28.4	101.4	16.5	2.6	10.8	1.5	8.8	1.8	5.0	0.7	1.5	0.7	54.4	687	Clay		
RRMDD088	11.3	12.2	0.9	133.1	272.9	30.7	108.8	17.4	2.8	11.5	1.6	8.8	1.7	4.7	0.7	1.6	0.7	51.7	649	Clay		
RRMDD088	12.2	13.1	0.9	150.1	199.7	35.7	131.2	21.5	3.6	14.6	2.1	12.0	2.3	6.8	0.9	2.1	0.9	73.3	657	Upper Saprolite		
RRMDD088	13.1	14.0	0.9	136.6	223.7	31.5	111.6	18.8	3.1	12.9	1.8	10.0	1.9	5.2	0.8	1.8	0.8	61.1	622	Upper Saprolite		
RRMDD088	14.0	14.9	0.9	114.2	121.8	26.8	106.6	18.7	3.2	14.1	2.0	11.9	2.3	6.5	0.8	2.0	0.8	73.4	505	Upper Saprolite	**5.4**	**612**
RRMDD088	15.8	16.7	0.9	57.5	72.5	14.2	56.5	10.9	1.8	8.3	1.3	7.3	1.3	3.7	0.5	1.2	0.4	46.5	284	Upper Saprolite		

Hole ID	From	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	TREO ppm
RRMDD088	16.7	17.7	1.0	75.6	99.7	16.5	64.9	11.5	2.0	8.3	1.3	7.1	1.4	3.9	0.5	1.2	0.5	43.3	338	Upper Saprolite		
RRMDD088	17.7	18.7	1.0	92.2	164.6	22.4	90.4	17.1	3.2	13.5	2.1	10.7	2.0	5.4	0.7	2.0	0.7	59.4	486	Upper Saprolite	**1.0**	**486**
RRMDD088	18.7	19.7	1.0	67.6	99.1	15.6	61.6	11.4	2.1	9.2	1.3	7.2	1.4	3.9	0.5	1.3	0.5	43.8	327	Upper Saprolite		
RRMDD088	19.7	20.7	1.0	72.0	118.3	14.1	52.7	8.8	1.7	7.2	1.1	6.0	1.2	3.8	0.5	1.1	0.5	46.5	336	Lower Saprolite		
RRMDD088	20.7	21.7	1.0	70.3	114.1	14.0	51.9	8.7	1.6	7.1	1.0	5.5	1.1	3.3	0.5	1.0	0.5	39.4	320	Lower Saprolite		
RRMDD088	21.7	22.6	0.9	47.5	83.9	9.8	38.5	6.9	1.3	5.6	0.9	4.4	0.9	2.6	0.4	0.9	0.4	29.0	233	Lower Saprolite		
RRMDD088	22.6	23.5	0.9	66.8	152.9	20.4	91.2	21.2	4.1	19.7	3.0	15.7	3.0	8.5	1.1	3.0	0.9	103.5	515	Lower Saprolite	**0.9**	**515**
RRMDD088	23.5	24.5	1.0	55.0	101.9	11.3	41.8	7.4	1.4	5.5	0.8	4.5	0.9	2.6	0.4	0.8	0.4	27.7	262	Lower Saprolite		
RRMDD088	24.5	25.5	1.0	55.6	105.7	11.7	42.2	7.4	1.3	5.7	0.8	4.1	0.8	2.4	0.3	0.8	0.3	26.0	265	Lower Saprolite		
RRMDD089	0.0	0.4	0.4	81.6	232.5	17.6	65.8	10.6	1.9	9.1	1.4	8.5	1.7	5.1	0.7	1.4	0.8	52.1	491	Soil		
RRMDD089	0.4	1.3	0.9	46.6	945.2	10.4	37.9	6.3	1.1	5.4	0.9	5.6	1.1	3.4	0.5	0.9	0.5	29.0	1095	Hardcap		
RRMDD089	1.3	2.3	1.0	69.3	2043.9	17.7	63.2	10.3	1.8	7.8	1.4	8.0	1.5	4.5	0.7	1.4	0.7	35.7	2268	Hardcap		
RRMDD089	2.3	3.3	1.0	89.4	1423.1	22.9	83.4	13.6	2.4	10.5	1.7	10.2	1.9	5.9	0.8	1.7	0.9	48.4	1717	Hardcap		
RRMDD089	3.3	4.4	1.1	130.2	598.5	31.5	117.2	18.1	3.3	15.4	2.4	14.8	2.9	8.3	1.2	2.3	1.1	86.9	1034	Mottled		
RRMDD089	4.4	5.5	1.1	159.5	1009.7	39.6	154.0	27.4	4.4	21.0	3.3	18.2	3.6	10.9	1.5	3.3	1.4	114.4	1572	Clay		
RRMDD089	5.5	6.5	1.0	169.5	584.5	39.3	151.0	25.7	4.3	19.8	2.9	16.0	3.1	8.9	1.2	2.9	1.2	104.0	1134	Clay		
RRMDD089	6.5	7.5	1.0	148.4	224.3	34.8	130.1	21.2	3.6	15.1	2.0	10.7	2.1	6.0	0.8	2.0	0.8	65.5	667	Clay		
RRMDD089	7.5	8.5	1.0	99.2	197.4	24.8	95.6	16.5	2.9	12.6	1.7	9.6	1.8	5.4	0.7	1.7	0.7	59.7	530	Upper Saprolite		
RRMDD089	8.5	9.5	1.0	137.2	210.2	33.1	127.1	22.9	3.9	16.5	2.3	12.4	2.4	6.9	1.0	2.3	0.9	81.9	661	Upper Saprolite		
RRMDD089	9.5	10.5	1.0	79.5	124.2	17.8	69.2	12.5	2.3	10.4	1.5	7.7	1.6	4.4	0.6	1.4	0.6	50.2	384	Upper Saprolite		
RRMDD089	10.5	11.4	0.9	101.2	165.2	21.8	83.5	15.1	2.9	14.1	2.2	12.1	2.4	7.2	0.9	2.1	0.9	83.6	515	Lower Saprolite	**8.1**	**822**
RRMDD089	11.4	12.5	1.1	92.7	184.5	19.4	79.5	16.0	3.3	16.3	2.3	13.3	2.8	8.6	1.2	2.3	1.0	121.8	565	Saprock		
RRMDD090	0.0	0.8	0.8	58.8	776.6	13.6	52.7	9.8	1.7	7.5	1.3	7.6	1.5	4.6	0.7	1.3	0.7	40.4	979	Soil		
RRMDD090	0.8	1.5	0.7	37.2	118.3	9.8	38.4	7.6	1.3	5.8	1.0	6.7	1.3	3.9	0.6	1.0	0.6	32.0	266	Hardcap		
RRMDD090	1.5	1.9	0.4	43.0	932.4	10.5	39.1	7.1	1.2	5.6	1.0	5.9	1.2	3.6	0.6	1.0	0.6	30.2	1083	Hardcap		
RRMDD090	1.9	2.9	0.9	108.1	1335.3	19.7	68.6	11.1	1.9	8.5	1.5	8.3	1.6	4.8	0.8	1.4	0.8	44.2	1617	Hardcap		
RRMDD090	2.9	3.8	1.0	126.1	294.0	23.6	84.3	12.6	2.2	10.0	1.5	9.8	1.9	5.8	0.9	1.5	0.9	57.5	633	Hardcap		
RRMDD090	3.8	4.5	0.7	162.4	200.9	30.7	104.4	16.9	2.7	12.2	1.8	10.3	2.1	6.3	1.0	1.8	0.9	66.4	621	Transition		
RRMDD090	4.5	5.2	0.7	151.3	299.9	30.0	103.6	16.5	2.5	11.4	1.7	9.7	2.0	6.0	0.9	1.7	0.9	61.8	700	Transition		
RRMDD090	5.2	6.0	0.8	156.0	234.3	31.1	109.1	17.7	2.7	12.4	1.7	10.5	2.1	6.2	0.9	1.7	0.9	65.0	652	Transition		
RRMDD090	6.0	6.8	0.8	191.2	285.8	37.6	129.5	19.7	3.0	13.6	1.9	10.5	2.1	6.1	0.9	1.9	0.9	64.5	769	Clay		
RRMDD090	7.6	8.4	0.8	143.1	264.7	33.4	118.4	18.0	2.8	12.0	1.6	9.6	2.0	5.7	0.8	1.6	0.8	59.3	674	Clay		
RRMDD090	8.4	9.2	0.8	154.2	253.0	32.8	107.5	15.1	2.3	10.5	1.5	8.5	1.6	5.1	0.7	1.4	0.7	53.1	648	Clay		
RRMDD090	9.2	10.0	0.8	157.2	262.4	33.0	108.0	16.1	2.7	11.8	1.7	9.9	2.0	6.1	0.9	1.7	0.9	62.0	676	Clay		
RRMDD090	10.0	11.1	1.1	121.4	219.6	26.6	97.7	16.5	3.1	13.5	1.9	12.1	2.3	6.8	1.0	1.9	1.0	71.9	597	Clay		
RRMDD090	11.1	11.8	0.8	133.7	254.2	27.4	97.4	16.1	2.7	12.7	1.7	10.4	2.0	6.1	0.8	1.7	0.9	65.7	633	Clay		
RRMDD090	11.8	12.6	0.8	94.5	162.2	21.8	85.7	16.2	2.7	13.0	1.8	10.8	2.2	6.5	0.9	1.8	0.9	69.5	491	Clay		
RRMDD090	12.6	13.3	0.7	83.0	141.7	19.3	77.2	15.0	2.6	12.3	1.7	10.1	2.0	5.9	0.9	1.7	0.9	66.9	441	Clay		
RRMDD090	13.3	14.1	0.8	49.1	138.8	16.2	74.3	17.0	3.2	15.7	2.3	14.1	2.9	8.8	1.2	2.3	1.1	93.1	440	Clay		
RRMDD090	14.1	14.9	0.8	178.9	338.5	36.6	131.8	23.8	4.6	18.9	2.7	15.3	3.0	9.1	1.2	2.7	1.2	93.3	862	Clay		
RRMDD090	14.9	15.7	0.8	58.1	93.5	18.6	86.9	18.9	3.5	17.7	2.5	15.0	3.1	9.8	1.3	2.5	1.2	107.6	440	Clay		
RRMDD090	15.7	16.5	0.8	79.9	169.8	22.4	95.6	19.2	3.5	17.0	2.4	14.3	2.9	9.0	1.3	2.4	1.2	99.2	540	Clay		
RRMDD090	16.5	17.3	0.8	145.4	256.5	35.2	149.9	32.1	5.9	27.3	3.8	22.8	4.5	13.9	1.9	3.8	1.6	152.4	857	Clay		
RRMDD090	17.3	18.1	0.8	67.0	94.4	24.9	119.6	26.4	5.1	24.7	3.6	21.6	4.3	13.0	1.8	3.5	1.5	157.5	569	Clay		
RRMDD090	18.1	18.9	0.8	37.5	150.5	13.3	59.8	13.3	2.4	11.9	1.7	10.6	2.2	6.3	1.0	1.7	0.9	74.0	387	Clay		
RRMDD090	18.9	19.7	0.8	51.8	103.4	18.7	82.9	18.6	3.5	16.9	2.5	15.1	3.0	9.0	1.3	2.5	1.0	97.4	428	Clay		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD090	19.7	20.5	0.8	110.0	193.3	29.1	118.4	23.2	4.1	19.3	2.7	15.8	3.2	9.8	1.3	2.6	1.1	108.3	642	Clay		
RRMDD090	20.5	21.3	0.8	102.3	209.7	23.0	89.5	17.2	3.1	14.3	2.0	11.5	2.4	6.8	0.9	2.0	0.9	79.4	565	Clay		
RRMDD090	21.3	22.1	0.8	86.9	225.5	22.2	86.2	16.4	3.0	13.3	1.9	11.8	2.3	6.6	0.9	1.9	0.8	78.1	558	Clay		
RRMDD090	22.1	22.9	0.8	97.9	181.0	25.3	98.9	18.2	3.1	14.8	2.1	11.8	2.4	6.9	0.9	2.0	0.8	82.5	549	Clay		
RRMDD090	22.9	23.7	0.8	102.2	192.7	23.2	85.5	15.2	2.8	12.2	1.6	10.0	1.9	5.7	0.8	1.6	0.7	69.0	525	Clay		
RRMDD090	23.7	24.6	0.9	93.7	192.7	21.2	81.1	14.6	2.6	11.9	1.6	9.7	1.9	5.4	0.8	1.6	0.7	66.8	506	Clay	17.8	582
RRMDD090	24.6	25.4	0.8	55.0	120.6	12.1	47.2	8.5	1.5	6.9	1.0	6.1	1.2	3.6	0.5	1.0	0.5	39.6	305	Upper Saprolite		
RRMDD090	25.4	26.1	0.7	49.0	106.1	10.8	41.1	7.5	1.4	6.3	0.9	5.3	1.0	3.0	0.4	0.9	0.4	33.7	268	Saprock		
RRMDD090	26.1	27.0	0.8	121.4	272.9	25.9	89.2	13.9	2.3	9.0	1.4	8.0	1.5	4.3	0.6	1.4	0.6	45.6	598	Saprock		
RRMDD090	27.0	27.8	0.9	100.3	229.0	23.8	93.1	15.7	2.7	11.1	1.6	9.3	1.7	4.6	0.7	1.6	0.6	50.3	546	Saprock		
RRMDD090	27.8	28.5	0.7	105.0	241.3	26.3	111.0	21.3	3.9	17.4	2.6	15.4	2.8	7.8	1.1	2.6	0.9	87.0	646	Fresh		
RRMDD090	28.5	29.2	0.7	108.7	243.6	25.3	96.9	15.9	2.8	11.5	1.6	9.0	1.6	4.5	0.6	1.6	0.6	41.8	566	Fresh		
RRMDD090	29.2	29.9	0.7	79.3	174.5	17.7	63.7	10.8	1.7	6.9	1.0	5.9	1.1	3.1	0.4	1.0	0.4	33.0	401	Fresh		
RRMDD091	0.0	0.5	0.5	86.6	281.1	17.7	67.1	12.0	2.2	10.2	1.6	9.3	1.8	5.5	0.8	1.5	0.9	54.4	553	Soil		
RRMDD091	0.5	1.3	0.8	57.1	846.8	12.3	46.7	9.1	1.7	7.7	1.3	7.6	1.5	4.7	0.7	1.3	0.7	36.4	1035	Hardcap		
RRMDD091	1.3	2.1	0.8	121.4	395.9	16.2	54.9	9.7	1.7	7.7	1.3	7.6	1.4	4.3	0.7	1.3	0.7	35.8	661	Hardcap		
RRMDD091	2.1	2.9	0.8	60.9	413.5	12.1	44.4	8.5	1.4	7.1	1.1	7.0	1.4	3.9	0.7	1.1	0.7	35.9	600	Hardcap		
RRMDD091	2.9	3.7	0.8	175.3	1007.3	28.8	97.3	15.5	2.5	11.6	1.8	10.3	1.9	5.9	0.8	1.8	0.9	52.6	1414	Hardcap		
RRMDD091	3.7	4.4	0.7	130.8	412.3	25.6	92.8	15.2	2.7	12.6	1.8	11.2	2.2	6.5	0.9	1.8	0.9	59.6	777	Transition		
RRMDD091	4.4	5.1	0.7	102.4	230.7	22.4	83.2	14.1	2.2	11.1	1.7	9.6	2.0	5.8	0.9	1.7	0.9	62.1	551	Clay	**0.7**	**551**
RRMDD091	5.1	5.8	0.7	85.0	160.5	18.8	70.5	12.8	2.0	9.8	1.6	8.8	1.8	5.4	0.8	1.6	0.8	55.9	436	Clay		
RRMDD091	5.8	6.7	0.9	83.3	270.6	19.3	73.9	13.4	2.1	9.2	1.4	8.1	1.6	4.7	0.7	1.4	0.7	50.3	541	Clay		
RRMDD091	6.7	7.6	0.9	83.3	205.6	18.8	69.2	11.8	2.0	8.5	1.3	6.9	1.4	4.0	0.6	1.3	0.6	42.2	457	Clay		
RRMDD091	7.6	8.5	0.9	76.0	137.6	17.6	68.0	11.9	2.1	8.2	1.2	7.1	1.4	4.1	0.6	1.2	0.6	44.3	382	Clay		
RRMDD091	8.5	9.4	0.9	84.8	186.8	19.0	72.2	13.3	2.3	10.2	1.6	8.5	1.7	4.9	0.7	1.6	0.7	55.1	463	Clay		
RRMDD091	9.4	10.2	0.8	119.0	130.0	27.4	104.5	17.6	3.0	14.1	1.9	10.8	2.1	5.8	0.8	1.9	0.8	73.7	513	Upper Saprolite		
RRMDD091	10.2	10.7	0.5	134.9	138.8	28.3	107.8	18.8	3.3	14.6	2.2	12.0	2.3	6.4	0.8	2.1	0.8	79.2	552	Upper Saprolite		
RRMDD091	10.7	11.6	0.9	172.4	161.6	34.4	127.7	21.2	3.8	16.1	2.2	11.8	2.3	6.5	0.9	2.2	0.8	79.4	643	Upper Saprolite		
RRMDD091	11.6	12.7	1.1	177.7	133.5	36.0	132.4	22.0	3.8	16.1	2.3	12.1	2.3	6.3	0.8	2.2	0.8	78.4	627	Upper Saprolite		
RRMDD091	12.7	13.6	0.9	187.6	167.5	39.9	144.6	24.2	4.3	17.5	2.5	12.6	2.5	6.9	0.9	2.4	0.8	83.6	698	Upper Saprolite		
RRMDD091	13.6	14.7	1.1	165.4	247.1	40.0	159.8	28.3	5.0	20.8	2.9	14.7	2.7	7.3	1.0	2.9	0.9	86.5	785	Upper Saprolite		
RRMDD091	14.7	15.5	0.8	168.3	176.9	37.9	147.0	25.5	4.6	20.5	2.8	14.9	2.8	8.0	1.0	2.8	0.9	94.1	708	Upper Saprolite		
RRMDD091	15.5	16.3	0.8	109.1	127.7	26.0	103.1	18.3	3.2	14.8	2.2	11.6	2.3	6.3	0.9	2.2	0.8	78.1	507	Upper Saprolite	**6.9**	**641**
RRMDD091	16.3	17.1	0.8	81.4	118.9	17.8	66.8	11.5	2.1	9.3	1.3	7.3	1.5	4.7	0.7	1.3	0.6	54.6	380	Upper Saprolite		
RRMDD091	17.1	18.1	0.9	85.4	134.1	18.8	70.7	12.2	2.2	10.3	1.4	8.1	1.6	5.0	0.6	1.4	0.6	55.2	408	Upper Saprolite		
RRMDD091	18.1	18.5	0.5	36.2	71.6	8.3	30.9	5.4	1.0	4.7	0.6	3.7	0.8	2.3	0.3	0.6	0.3	26.8	194	Saprock		
RRMDD091	18.5	19.3	0.7	72.7	159.3	16.9	64.4	12.2	2.0	9.1	1.2	7.2	1.4	4.0	0.5	1.2	0.5	43.8	396	Saprock		
RRMDD091	19.3	19.5	0.2	85.5	206.1	18.9	66.8	10.9	1.9	8.1	1.1	5.7	1.1	3.1	0.5	1.1	0.4	31.7	443	Saprock		
RRMDD092	0.0	0.7	0.7	97.9	719.2	19.5	72.1	12.5	2.1	10.9	1.7	10.2	1.9	5.9	0.9	1.7	0.9	55.2	1013	Soil		
RRMDD092	0.7	1.4	0.7	76.7	928.8	13.6	49.2	8.9	1.6	7.8	1.3	7.5	1.4	4.7	0.7	1.3	0.7	37.6	1142	Soil		
RRMDD092	1.4	2.3	0.9	124.3	723.9	18.4	60.7	11.8	2.0	9.4	1.6	9.4	1.7	5.5	0.9	1.6	0.8	42.8	1015	Hardcap		
RRMDD092	2.3	3.1	0.8	100.2	896.0	17.5	61.9	12.9	2.1	9.8	1.7	10.3	2.0	6.0	0.9	1.7	0.9	48.9	1173	Hardcap		
RRMDD092	3.1	3.9	0.8	80.1	513.0	16.4	59.7	11.0	2.0	9.2	1.5	9.0	1.7	5.4	0.9	1.5	0.9	45.7	758	Transition		
RRMDD092	3.9	4.1	0.2	172.4	211.4	27.2	90.6	13.6	2.0	10.0	1.4	8.7	1.7	5.2	0.8	1.4	0.8	52.8	600	Transition		
RRMDD092	4.1	5.0	1.0	236.9	246.0	31.4	99.1	14.1	2.1	9.5	1.4	8.9	1.7	5.4	0.8	1.4	0.8	54.5	714	Mottled		
RRMDD092	5.0	6.0	1.0	101.9	226.6	20.5	78.0	12.8	2.1	10.0	1.5	9.2	1.8	5.6	0.8	1.5	0.8	55.5	529	Clay		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm $TREO-Ce_2O_3$ Interval Length (m)	>300ppm $TREO-Ce_2O_3$ Interval TREO ppm
RRMDD092	6.0	6.8	0.8	106.1	269.4	24.6	94.2	15.4	2.5	11.8	1.7	10.6	2.0	6.1	0.9	1.7	0.9	64.9	613	Clay		
RRMDD092	6.8	7.5	0.8	89.8	186.8	21.0	80.6	13.2	2.2	10.8	1.6	9.3	1.8	5.5	0.8	1.6	0.8	57.5	483	Clay		
RRMDD092	7.5	8.5	1.0	108.0	278.8	28.3	106.8	18.2	2.9	13.0	1.8	10.7	1.9	5.6	0.8	1.8	0.8	59.6	639	Clay		
RRMDD092	8.5	9.4	0.9	547.7	652.4	152.1	586.7	96.8	15.2	64.0	8.5	44.2	7.3	19.3	2.4	8.4	1.8	218.4	2425	Clay		
RRMDD092	9.4	10.5	1.1	375.3	516.5	87.2	341.8	57.4	9.2	40.9	5.6	30.8	5.5	14.6	2.0	5.6	1.7	160.6	1655	Clay	6.5	1035
RRMDD092	10.5	11.4	0.9	127.8	204.4	26.9	97.7	17.2	3.1	16.9	2.1	12.7	2.5	7.2	1.0	2.1	0.8	105.5	628	Saprock		
RRMDD092	11.4	12.3	0.9	70.0	158.1	17.0	59.5	11.0	1.8	8.1	1.1	5.9	1.0	3.1	0.4	1.1	0.4	31.1	370	Saprock		
RRMDD092	12.3	13.3	1.0	105.7	223.1	24.6	86.1	14.9	2.4	11.1	1.4	7.7	1.3	3.7	0.5	1.4	0.5	40.6	525	Saprock		
RRMDD093	0.0	0.8	0.8	64.2	617.3	13.3	51.1	9.6	1.8	8.3	1.3	8.5	1.6	4.9	0.8	1.3	0.8	42.3	827	Hardcap		
RRMDD093	0.8	1.6	0.8	62.6	589.2	13.3	50.5	9.4	1.8	8.2	1.4	8.3	1.6	5.2	0.7	1.4	0.7	40.4	794	Hardcap		
RRMDD093	1.6	2.4	0.8	61.5	1341.1	12.9	46.2	8.5	1.5	7.0	1.3	7.1	1.4	4.1	0.7	1.3	0.6	34.2	1529	Hardcap		
RRMDD093	2.4	2.8	0.4	70.7	568.1	14.7	53.1	9.5	1.7	7.9	1.2	7.3	1.5	4.7	0.7	1.2	0.8	40.5	784	Transition		
RRMDD093	2.8	3.7	0.9	201.7	284.6	45.5	156.9	26.8	4.5	20.3	2.8	16.2	3.0	8.8	1.2	2.8	1.3	84.4	861	Clay		
RRMDD093	3.7	4.5	0.8	371.8	209.7	79.1	274.1	45.1	8.0	35.4	4.7	26.6	4.8	13.7	1.8	4.7	1.6	149.8	1231	Clay	1.7	1038
RRMDD093	4.5	5.3	0.8	113.5	149.3	22.8	78.8	13.2	2.4	10.9	1.5	8.8	1.7	5.2	0.7	1.5	0.7	68.6	480	Saprock		
RRMDD093	5.3	6.1	0.8	70.4	135.3	16.2	56.6	9.5	1.7	7.5	1.0	5.7	1.1	3.0	0.5	1.0	0.5	33.1	343	Saprock		
RRMDD093	6.1	6.9	0.8	69.8	135.9	15.7	53.9	9.6	1.9	7.5	1.0	6.2	1.2	3.6	0.5	1.0	0.5	37.7	346	Saprock		
RRMDD093	6.9	7.5	0.6	71.4	142.3	16.6	60.0	12.2	2.3	10.0	1.5	9.6	1.9	6.1	0.9	1.5	0.9	63.9	401	Saprock		
RRMDD093	7.5	8.3	0.8	68.5	138.2	15.9	56.5	10.8	2.1	8.8	1.3	7.8	1.5	4.5	0.7	1.3	0.7	47.6	366	Fresh Rock		
RRMDD093	8.3	9.0	0.7	69.5	138.8	15.7	54.5	9.3	1.9	7.7	1.0	5.9	1.1	3.4	0.5	1.0	0.5	34.8	346	Fresh Rock		
RRMDD094	0.0	0.4	0.4	72.7	161.6	14.5	54.9	9.6	1.7	8.7	1.5	8.6	1.6	5.0	0.7	1.4	0.8	49.3	393	Soil		
RRMDD094	0.4	0.8	0.5	50.4	135.9	10.2	39.0	7.3	1.4	6.8	1.1	6.7	1.4	4.1	0.6	1.1	0.6	35.2	302	Hardcap		
RRMDD094	0.8	1.7	0.9	48.6	390.0	10.3	38.6	7.8	1.4	6.1	1.0	6.6	1.3	4.1	0.6	1.0	0.6	34.2	552	Hardcap		
RRMDD094	1.7	2.6	0.9	50.3	816.4	10.9	40.8	8.2	1.4	6.2	1.2	6.8	1.3	4.0	0.6	1.2	0.6	32.3	982	Hardcap		
RRMDD094	2.6	3.7	1.1	74.1	1218.2	15.3	56.1	9.7	1.7	8.1	1.4	7.7	1.6	4.7	0.7	1.4	0.7	41.5	1443	Hardcap		
RRMDD094	3.7	4.1	0.4	96.4	543.5	20.0	69.6	11.3	2.0	9.0	1.5	8.7	1.8	5.4	0.8	1.5	0.8	53.2	825	Transition		
RRMDD094	4.1	4.9	0.8	126.7	107.5	24.5	85.6	13.7	2.4	11.8	1.8	11.1	2.3	6.9	1.0	1.8	1.0	74.2	472	Mottled	0.8	472
RRMDD094	4.9	5.5	0.6	93.9	94.8	19.7	69.5	11.2	2.0	9.9	1.6	9.9	2.1	6.3	0.9	1.6	1.0	68.1	392	Mottled		
RRMDD094	5.5	6.5	1.0	45.7	165.2	9.2	32.1	5.2	0.9	4.6	0.8	5.2	1.1	3.4	0.5	0.8	0.6	36.1	311	Clay		
RRMDD094	6.5	7.5	1.0	36.8	72.4	7.3	25.4	4.3	0.8	3.9	0.7	4.4	1.0	3.0	0.5	0.7	0.5	31.9	193	Clay		
RRMDD094	7.5	8.5	1.0	20.4	32.2	3.8	13.5	2.4	0.5	2.4	0.4	2.9	0.6	2.0	0.3	0.4	0.3	21.0	103	Clay		
RRMDD094	8.5	9.4	0.9	75.8	100.8	16.7	60.1	10.3	2.0	9.0	1.4	8.3	1.8	5.2	0.8	1.4	0.8	59.1	353	Clay		
RRMDD094	9.4	10.2	0.9	253.3	320.9	50.3	175.5	29.0	5.5	22.1	3.1	16.0	2.9	7.2	0.9	3.0	0.8	83.2	974	Clay		
RRMDD094	10.2	11.1	0.9	248.6	243.6	48.8	171.5	29.2	5.5	23.1	3.4	18.9	3.6	9.8	1.3	3.3	1.1	119.1	931	Clay		
RRMDD094	11.1	11.9	0.9	139.6	222.0	31.6	115.5	19.4	3.6	15.4	2.1	11.8	2.3	6.2	0.8	2.1	0.8	75.9	649	Clay		
RRMDD094	11.9	12.7	0.8	103.4	155.8	23.6	85.8	14.4	2.9	12.3	1.8	10.1	2.1	5.8	0.8	1.8	0.8	68.7	490	Clay		
RRMDD094	12.7	13.7	1.0	134.9	195.0	31.7	116.5	20.6	4.0	17.6	2.6	15.5	3.2	8.8	1.2	2.6	1.0	106.0	661	Upper Saprolite		
RRMDD094	13.7	14.7	1.0	91.6	137.6	22.4	84.9	14.8	2.9	11.9	1.7	9.8	1.9	5.1	0.7	1.7	0.6	58.7	446	Upper Saprolite	5.3	685
RRMDD094	14.7	15.5	0.8	19.6	50.7	4.7	16.6	2.9	0.6	2.1	0.3	1.8	0.4	1.1	0.2	0.3	0.2	11.2	113	Upper Saprolite		
RRMDD094	15.5	16.2	0.8	63.4	134.7	15.2	54.5	9.3	1.7	6.5	1.0	5.2	1.0	2.9	0.4	0.9	0.4	30.6	328	Lower Saprolite		
RRMDD094	16.2	17.0	0.8	45.3	102.4	11.4	42.3	8.1	1.7	6.5	0.9	5.0	0.9	2.5	0.4	0.9	0.4	25.4	254	Lower Saprolite		
RRMDD094	17.0	17.9	0.9	82.9	199.7	17.8	62.6	11.1	2.3	9.3	1.3	7.2	1.4	3.8	0.5	1.3	0.5	37.7	439	Lower Saprolite		
RRMDD094	17.9	18.7	0.8	67.1	158.7	15.5	56.5	10.5	2.2	8.5	1.2	6.5	1.2	3.2	0.4	1.2	0.4	32.6	366	Lower Saprolite		
RRMDD094	18.7	19.5	0.8	77.9	181.6	18.3	66.0	12.3	2.6	10.4	1.5	8.2	1.5	4.1	0.5	1.5	0.5	42.2	429	Lower Saprolite		
RRMDD094	19.5	20.5	1.0	19.1	29.2	4.2	14.5	2.5	0.6	2.1	0.3	1.9	0.4	1.2	0.2	0.3	0.2	11.9	89	Lower Saprolite		
RRMDD094	20.5	21.2	0.6	42.6	82.0	9.0	31.8	5.5	1.1	4.2	0.6	3.6	0.7	2.1	0.3	0.6	0.3	20.7	205	Lower Saprolite		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD094	21.2	21.8	0.6	61.2	165.2	14.3	52.0	9.7	2.0	7.8	1.1	6.5	1.2	3.4	0.4	1.1	0.4	33.3	360	Lower Saprolite		
RRMDD094	21.8	22.6	0.9	74.1	179.8	18.0	66.3	12.9	2.7	11.6	1.7	10.0	2.0	5.5	0.7	1.7	0.6	63.5	451	Lower Saprolite		
RRMDD094	22.6	23.4	0.8	29.1	57.5	6.1	20.6	3.4	0.6	2.5	0.3	2.1	0.4	1.4	0.2	0.3	0.3	12.6	137	Lower Saprolite		
RRMDD094	23.4	24.2	0.8	52.3	106.0	11.4	40.6	7.3	1.5	6.1	0.9	5.3	1.0	3.2	0.5	0.8	0.4	32.6	270	Lower Saprolite		
RRMDD094	24.2	25.0	0.7	25.7	55.3	6.4	23.1	4.6	1.0	4.4	0.7	5.3	1.2	3.9	0.6	0.7	0.6	38.6	172	Lower Saprolite		
RRMDD094	25.0	26.0	1.0	61.8	131.2	14.0	50.4	9.8	2.0	8.4	1.2	7.4	1.4	4.2	0.6	1.2	0.5	43.4	337	Lower Saprolite		
RRMDD094	26.0	27.0	1.1	61.3	128.3	13.0	44.6	7.7	1.5	6.1	0.9	5.5	1.1	3.5	0.5	0.9	0.5	35.0	310	Lower Saprolite		
RRMDD095	0.0	0.5	0.5	72.9	230.2	14.9	58.3	10.9	1.8	9.2	1.5	9.3	1.7	5.4	0.8	1.5	0.8	50.8	470	Soil		
RRMDD095	0.5	1.2	0.7	38.9	296.3	8.1	31.5	6.2	1.1	5.4	0.9	5.6	1.0	3.4	0.5	0.9	0.5	27.8	428	Hardcap		
RRMDD095	1.2	2.0	0.8	45.6	216.7	8.8	32.1	6.0	1.1	4.8	0.8	5.2	1.0	3.3	0.5	0.8	0.5	26.8	354	Hardcap		
RRMDD095	2.0	3.0	1.0	73.3	691.1	14.9	49.1	8.7	1.4	6.6	1.0	6.5	1.2	3.7	0.6	1.0	0.6	35.0	895	Transition		
RRMDD095	3.0	3.5	0.5	66.3	204.4	13.1	44.7	7.9	1.3	6.4	1.0	5.8	1.2	3.7	0.6	1.0	0.6	35.0	393	Transition		
RRMDD095	3.5	4.5	1.0	38.6	41.9	7.4	25.1	4.5	0.9	4.0	0.6	4.0	0.8	2.7	0.4	0.6	0.5	25.7	158	Mottled		
RRMDD095	4.5	5.4	1.0	97.8	113.6	18.3	62.6	10.8	2.1	8.4	1.1	6.5	1.2	3.5	0.5	1.1	0.5	33.8	362	Mottled		
RRMDD095	5.4	6.2	0.8	36.2	126.5	7.3	25.3	4.3	0.8	3.4	0.5	3.2	0.7	2.1	0.3	0.5	0.4	21.5	233	Clay		
RRMDD095	6.2	6.8	0.6	68.3	128.8	12.7	42.9	7.1	1.3	5.9	0.8	4.9	1.0	3.1	0.5	0.8	0.5	31.1	310	Clay		
RRMDD095	6.8	7.3	0.6	103.4	119.5	19.3	65.1	10.6	2.0	8.1	1.1	6.5	1.3	3.8	0.5	1.1	0.6	39.7	383	Clay		
RRMDD095	7.3	8.3	0.9	95.3	137.6	24.9	87.4	15.6	2.8	11.1	1.6	9.1	1.7	5.0	0.7	1.6	0.7	51.8	447	Upper Saprolite		
RRMDD095	8.3	9.2	1.0	315.5	246.0	54.4	185.5	31.3	5.8	24.1	3.2	17.6	3.3	8.9	1.1	3.2	1.1	103.1	1004	Upper Saprolite		
RRMDD095	9.2	10.2	0.9	160.7	227.8	36.0	128.9	23.2	4.3	17.9	2.5	14.3	2.8	7.9	1.1	2.5	0.9	84.2	715	Upper Saprolite		
RRMDD095	10.2	11.3	1.1	127.8	212.6	30.5	107.9	19.2	3.6	14.9	2.2	12.8	2.6	7.4	1.0	2.2	0.9	80.0	626	Upper Saprolite		
RRMDD095	11.3	12.0	0.7	123.1	224.9	27.3	94.7	16.5	3.1	12.7	1.8	10.5	2.1	5.9	0.8	1.8	0.8	58.9	585	Lower Saprolite		
RRMDD095	12.0	12.6	0.6	198.2	230.7	37.6	147.5	27.6	5.7	30.7	4.4	27.0	5.7	16.9	2.3	4.3	2.0	201.9	942	Lower Saprolite	**5.3**	**711**
RRMDD095	12.6	13.4	0.8	106.3	219.6	21.9	79.2	13.2	2.6	12.4	1.7	10.0	2.1	6.2	0.8	1.7	0.8	83.4	562	Saprock		
RRMDD096	0.0	0.3	0.3	55.6	179.8	11.0	41.3	7.5	1.3	6.5	1.1	6.5	1.3	4.2	0.7	1.1	0.7	39.1	358	Soil		
RRMDD096	0.3	1.0	0.7	40.2	179.8	8.0	30.0	5.4	1.1	5.3	0.8	5.3	0.9	3.3	0.5	0.8	0.6	28.3	310	Hardcap		
RRMDD096	1.0	1.7	0.7	59.3	725.0	11.0	39.7	7.6	1.2	5.6	1.0	6.4	1.2	3.8	0.6	1.0	0.6	32.6	897	Hardcap		
RRMDD096	1.7	2.5	0.8	90.5	542.3	17.6	64.9	10.7	1.8	8.7	1.4	8.3	1.5	4.8	0.8	1.3	0.8	44.3	800	Transition		
RRMDD096	2.5	3.2	0.7	83.5	159.3	16.7	64.5	10.5	1.8	8.8	1.3	8.0	1.6	5.1	0.7	1.3	0.8	49.0	413	Clay		
RRMDD096	3.2	3.9	0.7	107.5	220.8	22.8	82.9	13.0	2.5	11.2	1.7	10.3	2.0	6.3	0.9	1.7	0.9	59.4	544	Clay	**0.7**	**323**
RRMDD096	3.9	4.6	0.8	88.0	118.9	19.0	71.9	11.8	2.0	9.8	1.5	8.9	1.6	5.0	0.7	1.5	0.7	51.7	393	Clay		
RRMDD096	4.6	5.1	0.5	76.0	392.4	17.8	60.2	10.3	1.8	7.6	1.2	6.7	1.3	3.5	0.5	1.2	0.6	37.2	618	Clay		
RRMDD096	5.1	5.9	0.8	77.2	128.3	20.4	67.0	11.2	2.0	7.8	1.1	6.0	1.1	3.1	0.5	1.1	0.5	32.9	360	Clay		
RRMDD096	5.9	6.9	1.0	136.0	163.4	33.8	114.0	18.7	3.4	12.6	1.6	8.7	1.5	4.3	0.6	1.6	0.6	43.3	544	Upper Saprolite		
RRMDD096	6.9	7.7	0.8	156.6	207.9	38.0	133.6	24.1	4.5	18.9	2.8	15.7	2.9	8.3	1.1	2.7	1.0	94.1	712	Upper Saprolite		
RRMDD096	7.7	8.5	0.8	142.5	148.8	33.5	113.7	18.8	3.5	14.3	1.9	11.2	1.9	5.5	0.8	1.9	0.7	62.4	561	Upper Saprolite		
RRMDD096	8.5	9.4	1.0	103.4	104.2	22.7	84.4	14.7	2.7	12.4	1.7	9.6	1.8	4.9	0.7	1.6	0.6	55.2	421	Upper Saprolite		
RRMDD096	9.4	9.7	0.3	59.9	88.6	16.4	64.7	13.8	2.9	12.5	1.9	10.7	1.8	4.7	0.6	1.9	0.5	51.6	333	Upper Saprolite		
RRMDD096	9.7	10.5	0.8	116.9	237.8	26.6	96.1	18.3	3.7	16.4	2.3	13.5	2.6	7.0	0.9	2.3	0.9	83.3	629	Upper Saprolite		
RRMDD096	10.5	11.2	0.8	107.3	223.7	22.8	80.2	14.4	3.0	14.3	2.0	12.3	2.5	7.3	1.0	2.0	1.0	93.2	587	Upper Saprolite	**5.3**	**556**
RRMDD096	11.2	12.0	0.8	85.5	177.5	19.0	65.7	11.7	2.1	9.4	1.3	7.8	1.4	4.0	0.6	1.3	0.6	46.2	434	Upper Saprolite		
RRMDD096	12.0	12.7	0.7	74.9	153.4	16.4	55.1	8.7	1.6	6.9	1.0	5.3	1.0	2.9	0.4	0.9	0.5	32.9	362	Upper Saprolite		
RRMDD096	12.7	13.5	0.8	29.8	59.0	6.6	22.0	3.7	0.8	3.0	0.4	2.6	0.5	1.5	0.3	0.4	0.3	15.0	146	Upper Saprolite		
RRMDD096	13.5	14.2	0.7	110.2	192.1	24.3	83.0	14.8	2.9	11.9	1.6	8.7	1.5	4.2	0.6	1.6	0.5	44.3	502	Upper Saprolite	**0.7**	**310**
RRMDD096	14.2	14.7	0.6	39.1	76.4	9.7	34.6	6.4	1.2	4.9	0.7	4.0	0.8	2.2	0.3	0.7	0.3	21.2	202	Upper Saprolite		
RRMDD096	14.7	15.6	0.8	71.7	162.8	18.0	64.4	12.3	2.6	11.1	1.5	9.0	1.7	4.9	0.6	1.5	0.6	54.2	417	Upper Saprolite		

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD096	15.6	16.0	0.5	79.4	193.9	19.2	68.4	13.0	2.6	11.2	1.6	8.9	1.7	4.8	0.7	1.5	0.6	63.7	471	Lower Saprolite		
RRMDD096	16.0	16.3	0.2	27.2	48.4	5.9	20.8	3.5	0.7	2.6	0.4	2.5	0.5	1.7	0.3	0.4	0.3	17.7	133	Lower Saprolite		
RRMDD096	16.3	17.0	0.8	65.2	144.7	16.9	65.1	12.9	2.7	11.2	1.7	9.8	1.9	4.9	0.6	1.7	0.6	58.3	398	Lower Saprolite		
RRMDD096	17.0	17.6	0.6	72.5	164.6	18.1	69.3	13.3	2.7	11.4	1.7	9.7	1.9	4.9	0.7	1.7	0.6	57.7	431	Lower Saprolite		
RRMDD096	17.6	18.6	1.0	16.7	26.4	3.7	13.1	2.1	0.4	1.6	0.3	1.5	0.3	1.2	0.2	0.3	0.2	11.3	79	Lower Saprolite		
RRMDD096	18.6	19.1	0.5	79.6	145.8	17.4	60.9	10.2	1.9	7.9	1.2	6.8	1.3	4.0	0.6	1.2	0.6	43.3	383	Lower Saprolite		
RRMDD096	19.1	19.8	0.7	34.7	52.5	7.5	25.9	4.1	0.8	2.9	0.4	2.4	0.5	1.6	0.2	0.4	0.3	15.2	150	Lower Saprolite		
RRMDD096	19.8	20.7	0.9	68.5	138.2	14.8	50.7	8.3	1.6	5.9	0.9	4.8	0.9	2.7	0.4	0.8	0.4	28.8	328	Lower Saprolite		
RRMDD096	20.7	21.5	0.8	53.6	89.4	11.6	39.9	6.5	1.3	4.6	0.6	3.5	0.7	2.0	0.3	0.6	0.3	20.7	236	Lower Saprolite		
RRMDD096	21.5	22.5	1.0	29.6	53.6	6.9	24.4	4.2	0.8	3.1	0.5	2.8	0.6	1.8	0.3	0.5	0.3	17.8	147	Lower Saprolite		
RRMDD096	22.5	23.5	1.0	16.2	27.9	3.6	12.7	2.1	0.5	1.6	0.2	1.3	0.3	0.9	0.1	0.2	0.1	8.1	76	Lower Saprolite		
RRMDD096	23.5	24.5	1.0	34.4	60.9	7.7	26.6	4.3	0.8	3.0	0.4	2.4	0.5	1.4	0.2	0.4	0.2	14.6	158	Lower Saprolite		
RRMDD096	24.5	25.5	1.0	28.7	51.2	6.2	22.0	3.5	0.7	2.5	0.4	2.1	0.4	1.3	0.2	0.4	0.2	12.6	133	Lower Saprolite		
RRMDD096	25.5	26.5	1.0	42.0	68.6	9.1	31.5	5.0	1.0	3.5	0.5	2.8	0.6	1.7	0.3	0.5	0.3	16.5	184	Lower Saprolite		
RRMDD097	0.0	0.8	0.8	103.0	428.7	19.6	67.7	12.8	2.1	10.0	1.5	9.2	1.7	5.4	0.8	1.5	0.9	50.2	715	Soil		
RRMDD097	0.8	1.6	0.8	83.3	575.1	16.4	54.9	10.9	1.8	8.7	1.3	8.4	1.5	4.6	0.7	1.3	0.7	41.5	811	Soil		
RRMDD097	1.6	2.4	0.8	100.0	668.8	15.0	47.0	8.3	1.4	5.8	1.0	6.0	1.2	3.6	0.5	1.0	0.6	30.4	891	Hardcap		
RRMDD097	2.4	3.2	0.8	78.1	484.9	14.7	51.2	9.5	1.5	6.9	1.1	7.2	1.4	4.0	0.6	1.1	0.6	37.6	701	Hardcap		
RRMDD097	3.2	3.8	0.6	103.0	372.5	21.7	75.0	13.5	2.3	10.6	1.7	10.0	2.0	6.0	0.9	1.7	1.0	55.7	677	Transition		
RRMDD097	3.8	4.4	0.6	81.9	216.1	18.1	63.1	11.7	2.0	9.0	1.4	8.4	1.7	5.2	0.8	1.4	0.8	47.4	469	Transition		
RRMDD097	4.4	5.0	0.6	84.4	190.3	19.6	70.3	12.9	2.3	10.0	1.5	8.5	1.7	5.1	0.8	1.5	0.8	48.4	458	Transition		
RRMDD097	5.0	5.6	0.6	97.5	182.7	23.2	81.1	15.1	2.7	11.4	1.6	9.1	1.7	5.0	0.7	1.6	0.7	49.4	483	Transition		
RRMDD097	5.6	6.5	0.9	109.8	188.0	25.6	98.9	18.4	3.2	13.8	2.0	11.7	2.3	6.7	1.0	2.0	0.9	66.5	551	Transition		
RRMDD097	6.5	7.3	0.8	156.0	233.7	36.5	138.2	23.9	3.9	16.9	2.3	11.8	2.3	6.4	0.9	2.2	0.8	62.6	698	Transition		
RRMDD097	7.3	8.3	1.0	178.9	202.6	41.4	154.5	25.5	4.0	17.4	2.2	11.8	2.3	6.0	0.9	2.2	0.8	62.1	713	Upper Saprolite		
RRMDD097	8.3	9.3	1.0	144.3	249.5	31.7	120.1	20.5	3.3	14.3	2.0	10.0	1.9	5.2	0.7	1.9	0.7	54.5	660	Upper Saprolite		
RRMDD097	9.3	10.3	1.0	124.3	172.8	28.7	107.4	19.1	3.2	14.5	1.9	9.7	1.9	5.5	0.7	1.9	0.7	54.9	547	Upper Saprolite		
RRMDD097	10.3	11.2	0.9	176.5	196.2	40.3	152.8	27.5	4.6	20.5	2.7	13.0	2.5	6.7	0.9	2.6	0.8	69.1	717	Upper Saprolite		
RRMDD097	11.2	12.0	0.8	125.5	127.1	26.7	100.1	15.9	2.6	11.4	1.4	6.5	1.2	3.4	0.4	1.4	0.5	34.0	458	Upper Saprolite		
RRMDD097	12.0	12.7	0.7	109.3	142.3	22.6	87.0	14.4	2.6	11.2	1.4	6.8	1.2	3.5	0.5	1.4	0.4	35.0	440	Upper Saprolite		
RRMDD097	12.7	13.5	0.8	152.5	203.2	31.0	115.0	19.7	4.0	19.3	2.6	14.0	2.6	7.8	1.0	2.6	0.9	100.1	676	Upper Saprolite		
RRMDD097	13.5	14.5	1.0	116.6	227.2	23.9	84.6	13.5	2.5	12.3	1.6	8.2	1.6	4.7	0.6	1.5	0.6	66.4	566	Lower Saprolite	**7.1**	**604**
RRMDD097	14.5	15.5	1.0	92.2	198.5	20.6	69.5	10.9	2.0	8.2	1.1	5.5	1.0	3.0	0.4	1.1	0.4	30.0	444	Lower Saprolite		
RRMDD097	15.5	16.2	0.7	84.6	192.1	18.8	65.6	10.8	2.0	8.4	1.1	5.9	1.1	3.3	0.4	1.1	0.5	34.3	430	Saprock		
RRMDD098	0.0	0.6	0.6	112.9	237.8	25.4	91.4	16.3	2.8	13.0	1.9	11.8	2.4	7.1	0.9	1.9	1.0	69.3	596	Soil		
RRMDD098	0.6	1.5	0.9	88.0	1224.0	18.8	63.8	12.3	1.9	8.6	1.5	8.8	1.8	5.0	0.8	1.4	0.7	39.6	1477	Hardcap		
RRMDD098	1.5	2.5	1.0	79.6	1044.8	15.7	55.9	10.0	1.7	7.4	1.3	7.4	1.5	4.3	0.7	1.3	0.7	35.7	1268	Hardcap		
RRMDD098	2.5	3.5	1.0	128.4	865.6	27.2	94.6	16.4	2.8	11.8	1.8	11.6	2.3	6.3	0.9	1.8	0.9	57.0	1229	Hardcap		
RRMDD098	3.5	4.3	0.7	198.8	330.3	39.7	133.0	21.0	3.8	17.9	2.6	15.3	2.9	9.2	1.3	2.6	1.2	90.9	871	Clay		
RRMDD098	4.3	5.0	0.7	128.4	168.1	26.6	92.8	15.6	3.0	14.1	2.1	12.2	2.5	7.4	1.1	2.1	1.0	76.2	553	Mottled		
RRMDD098	5.0	5.7	0.7	81.5	281.1	20.6	76.6	14.1	2.7	12.7	2.0	11.5	2.2	7.2	0.9	2.0	1.0	69.3	585	Mottled		
RRMDD098	5.7	6.6	0.9	150.7	213.8	42.0	151.0	25.5	4.6	19.5	2.7	14.3	2.7	8.0	1.1	2.6	1.0	81.4	721	Clay		
RRMDD098	6.6	7.5	0.9	160.7	224.3	46.1	169.7	28.9	5.5	22.8	3.2	16.8	3.2	9.1	1.2	3.2	1.1	89.8	785	Clay		
RRMDD098	7.5	8.5	1.0	133.1	186.8	32.2	119.6	21.7	4.5	21.0	3.1	17.6	3.4	10.4	1.3	3.1	1.2	113.7	673	Clay		
RRMDD098	8.5	9.5	1.0	65.0	104.0	16.8	69.9	14.8	3.5	19.8	3.0	18.0	3.8	11.4	1.4	2.9	1.3	147.9	484	Upper Saprolite		
RRMDD098	9.5	10.1	0.6	90.5	163.4	17.3	58.9	9.9	2.1	10.6	1.5	9.6	2.1	6.8	0.8	1.5	0.8	90.7	467	Upper Saprolite	**6.5**	**649**

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD098	10.1	11.0	0.9	75.5	161.6	17.2	58.8	9.5	1.8	7.6	1.0	5.7	1.1	3.3	0.4	1.0	0.5	35.3	380	Lower Saprolite		
RRMDD098	11.0	11.9	0.9	66.8	146.4	15.7	55.5	9.9	2.1	8.8	1.3	7.3	1.4	4.3	0.6	1.3	0.6	44.7	367	Lower Saprolite		
RRMDD098	11.9	12.8	0.9	68.7	158.1	16.3	58.3	10.2	2.1	8.8	1.3	7.3	1.4	4.2	0.6	1.3	0.6	44.3	383	Lower Saprolite		
RRMDD098	12.8	13.2	0.4	58.2	129.4	13.8	48.8	8.2	1.7	6.6	0.9	4.8	0.9	2.7	0.4	0.9	0.4	27.8	305	Saprock		
RRMDD099	0.0	0.6	0.6	67.4	420.5	13.0	45.4	7.8	1.3	6.3	1.0	6.6	1.3	4.0	0.6	1.0	0.6	38.5	615	Soil		
RRMDD099	0.6	1.5	0.9	43.4	502.5	8.3	30.2	5.6	0.9	4.3	0.8	4.8	1.0	2.9	0.4	0.8	0.5	26.4	633	Soil		
RRMDD099	1.5	2.1	0.6	43.2	559.9	8.6	29.7	5.7	1.0	4.5	0.8	4.7	1.0	3.1	0.5	0.8	0.5	25.1	689	Hardcap		
RRMDD099	2.1	2.8	0.7	95.8	952.3	18.7	61.6	11.2	1.6	7.9	1.3	7.8	1.5	4.7	0.8	1.3	0.7	43.0	1210	Transition		
RRMDD099	2.8	3.9	1.1	115.5	268.2	21.6	70.0	10.8	1.9	8.3	1.3	7.0	1.4	4.5	0.7	1.3	0.7	43.4	557	Clay		
RRMDD099	3.9	4.7	0.8	231.0	206.7	52.5	193.6	33.2	6.6	31.2	4.4	25.5	4.8	14.1	1.7	4.4	1.5	150.5	962	Clay		
RRMDD099	4.7	5.8	1.1	141.3	182.7	30.0	117.2	21.5	4.8	25.8	3.8	22.0	4.5	13.8	1.7	3.8	1.4	179.1	753	Upper Saprolite	**1.9**	**844**
RRMDD099	5.8	6.4	0.7	72.8	158.7	16.6	58.6	10.2	2.1	9.3	1.3	7.1	1.3	4.0	0.5	1.3	0.5	43.6	388	Lower Saprolite		
RRMDD099	6.4	6.7	0.3	71.3	166.3	17.6	65.3	12.8	2.7	11.7	1.7	9.4	1.7	5.1	0.6	1.7	0.6	54.6	423	Lower Saprolite		
RRMDD099	7.0	7.8	0.8	71.8	167.5	16.9	66.5	11.3	2.2	8.8	1.1	6.1	1.2	3.1	0.4	1.1	0.4	32.4	391	Saprock		
RRMDD099	7.8	9.0	1.2	69.3	162.8	16.3	61.4	9.8	1.7	6.7	0.9	5.0	0.9	2.4	0.3	0.9	0.3	24.1	363	Saprock		
RRMDD099	9.0	10.3	1.3	67.3	149.3	15.3	59.3	11.4	2.1	8.9	1.2	6.9	1.2	3.5	0.5	1.2	0.5	36.6	365	Saprock		
RRMDD100	0.0	0.3	0.3	106.7	214.9	22.4	77.6	14.7	2.2	11.9	1.7	10.8	2.1	6.2	0.9	1.7	1.0	66.2	541	Soil		
RRMDD100	0.3	1.3	1.0	54.9	534.1	10.1	32.1	5.9	0.9	4.5	0.7	4.7	1.0	3.0	0.5	0.7	0.5	26.5	680	Hardcap		
RRMDD100	1.3	2.3	1.0	139.0	287.0	19.7	61.6	10.9	1.7	8.2	1.1	6.8	1.3	3.4	0.5	1.1	0.5	34.4	577	Hardcap		
RRMDD100	2.3	3.4	1.0	89.7	705.1	18.7	65.7	11.5	1.9	9.2	1.4	8.3	1.6	4.8	0.7	1.4	0.8	46.9	968	Hardcap		
RRMDD100	3.4	4.0	0.6	122.0	527.1	26.1	86.8	15.0	2.5	12.5	1.8	11.8	2.2	6.5	0.9	1.8	1.0	66.5	885	Transition		
RRMDD100	4.0	5.0	1.0	221.7	151.1	44.2	163.3	24.9	3.8	21.3	3.0	18.9	3.7	11.2	1.5	3.0	1.4	121.7	795	Mottled		
RRMDD100	5.0	6.0	1.0	371.8	390.0	73.0	269.4	41.0	6.4	34.1	4.7	28.3	5.5	15.7	2.2	4.7	2.0	186.0	1435	Mottled	**2.0**	**1107**
RRMDD100	6.0	7.0	1.0	31.4	150.5	6.4	22.2	3.7	0.6	3.0	0.4	2.5	0.5	1.5	0.2	0.4	0.2	14.7	238	Upper Saprolite		
RRMDD100	7.0	7.7	0.7	33.3	21.4	5.8	20.3	3.1	0.5	2.5	0.3	2.0	0.4	1.3	0.2	0.3	0.2	15.0	107	Upper Saprolite		
RRMDD100	7.7	8.3	0.7	23.3	17.0	3.9	13.9	2.2	0.3	1.5	0.2	1.4	0.3	0.9	0.1	0.2	0.1	9.4	75	Upper Saprolite		
RRMDD100	8.3	9.2	0.9	16.9	42.3	3.2	11.1	1.9	0.3	1.4	0.2	1.3	0.3	0.8	0.1	0.2	0.1	8.5	89	Upper Saprolite		
RRMDD100	9.2	10.0	0.8	19.0	56.0	3.6	13.1	2.0	0.3	1.7	0.2	1.7	0.3	1.1	0.2	0.2	0.2	10.3	110	Upper Saprolite		
RRMDD100	10.0	11.0	1.0	14.0	41.3	2.6	9.4	1.5	0.3	1.2	0.2	1.3	0.3	0.8	0.1	0.2	0.1	7.5	81	Upper Saprolite		
RRMDD100	11.0	11.8	0.8	11.3	39.0	2.1	8.0	1.2	0.2	0.9	0.2	1.1	0.2	0.7	0.1	0.2	0.1	6.6	72	Upper Saprolite		
RRMDD100	11.8	12.5	0.7	17.8	75.7	3.3	12.7	2.2	0.3	1.8	0.3	1.6	0.3	1.1	0.2	0.3	0.2	9.9	128	Upper Saprolite		
RRMDD100	12.5	13.0	0.6	18.2	75.2	3.4	12.6	2.0	0.3	1.5	0.2	1.6	0.3	1.0	0.1	0.2	0.2	9.1	126	Upper Saprolite		
RRMDD100	13.0	13.7	0.7	50.1	89.7	10.8	40.6	6.7	1.1	4.4	0.6	3.5	0.6	1.9	0.3	0.6	0.3	18.7	230	Lower Saprolite		
RRMDD100	13.7	14.4	0.7	109.7	199.7	24.6	91.3	14.6	2.2	9.2	1.1	5.7	1.0	2.7	0.4	1.1	0.4	25.8	489	Lower Saprolite		
RRMDD100	14.4	15.2	0.8	88.1	188.0	22.5	86.9	14.5	2.4	10.0	1.3	7.6	1.4	4.0	0.6	1.3	0.5	40.0	469	Lower Saprolite		
RRMDD100	15.2	15.9	0.7	153.6	251.8	31.0	126.0	20.5	3.5	18.3	2.4	14.9	3.0	8.7	1.1	2.4	1.0	106.3	744	Saprock		
RRMDD100	15.9	16.2	0.3	140.7	317.4	31.6	120.1	20.8	3.1	13.7	1.8	9.8	1.9	5.0	0.6	1.8	0.6	57.0	726	Saprock		
RRMDD101	0.0	0.5	0.5	49.6	801.2	11.4	39.8	8.1	1.4	6.5	1.1	6.9	1.3	3.8	0.6	1.1	0.6	34.4	968	Hardcap		
RRMDD101	0.5	1.3	0.8	90.8	493.1	17.6	60.0	11.3	1.7	8.6	1.3	8.2	1.7	5.1	0.8	1.3	0.9	47.0	749	Transition		
RRMDD101	1.3	2.3	1.0	90.1	254.2	18.8	63.8	11.9	1.9	9.6	1.4	9.4	1.8	5.4	0.9	1.4	0.9	54.5	526	Mottled		
RRMDD101	2.3	3.4	1.1	104.7	260.0	20.1	73.2	12.8	2.2	9.8	1.6	9.9	2.0	5.9	1.0	1.6	1.0	61.5	567	Mottled		
RRMDD101	3.4	4.4	1.0	190.6	520.1	33.6	116.5	17.9	2.8	12.1	1.8	10.6	2.1	6.1	0.9	1.8	0.9	62.6	980	Pallid		
RRMDD101	4.4	5.5	1.1	280.3	269.4	48.7	158.0	22.2	3.6	14.2	2.2	12.2	2.3	6.6	1.0	2.1	0.9	70.0	894	Pallid		
RRMDD101	5.5	6.0	0.6	367.1	338.5	79.0	258.9	35.4	5.6	20.9	2.9	16.5	3.2	8.5	1.2	2.9	1.2	93.8	1236	Pallid		
RRMDD101	6.0	6.5	0.5	136.0	257.7	36.9	156.9	30.1	5.4	22.7	3.5	19.6	3.9	10.6	1.5	3.5	1.3	120.8	810	Pallid		
RRMDD101	6.5	7.4	0.9	84.4	179.8	24.2	106.5	22.7	4.5	24.3	3.4	19.9	4.1	11.5	1.5	3.4	1.3	130.2	622	Clay	**5.1**	**824**

Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	>300ppm TREO-Ce_2O_3 Interval Length (m)	>300ppm TREO-Ce_2O_3 Interval TREO ppm
RRMDD101	7.4	8.0	0.6	66.7	147.0	14.5	54.0	10.5	2.1	9.6	1.3	8.0	1.6	4.6	0.6	1.3	0.6	54.9	377	Upper Saprolite		
RRMDD101	8.0	9.0	1.0	58.6	135.9	13.6	51.0	10.3	1.9	7.9	1.2	6.4	1.2	3.6	0.5	1.2	0.4	36.6	330	Saprock		
RRMDD101	9.0	10.0	1.0	74.6	173.4	17.7	66.6	12.2	2.3	9.7	1.4	7.5	1.5	4.5	0.6	1.4	0.6	47.6	421	Saprock		
RRMDD101	10.0	11.0	1.0	74.7	182.1	17.5	65.4	12.1	2.2	9.5	1.3	6.9	1.3	4.0	0.6	1.3	0.5	39.7	419	Saprock		
RRMDD102	0.0	0.2	0.2	74.2	761.3	14.3	49.6	9.2	1.4	7.2	1.2	7.3	1.4	4.3	0.7	1.2	0.6	43.9	978	Soil		
RRMDD102	0.2	1.1	0.9	53.2	318.6	9.2	30.1	5.7	0.9	4.8	0.8	4.6	1.0	3.0	0.4	0.8	0.4	25.1	459	Hardcap		
RRMDD102	1.1	2.0	0.9	56.2	332.6	9.7	31.1	6.3	0.9	4.6	0.8	5.1	0.9	2.9	0.5	0.8	0.4	27.3	480	Hardcap		
RRMDD102	2.0	3.1	1.1	65.0	1206.4	12.4	40.1	7.4	1.2	5.6	0.9	5.8	1.1	3.3	0.5	0.9	0.5	28.4	1380	Hardcap		
RRMDD102	3.1	3.5	0.4	90.2	173.9	19.5	68.6	12.9	2.0	10.1	1.5	9.8	1.8	5.7	0.8	1.5	0.9	55.5	455	Transition		
RRMDD102	3.5	4.1	0.6	152.5	152.9	28.2	100.7	16.9	2.7	13.4	1.9	12.3	2.4	6.9	1.0	1.9	1.0	72.3	567	Clay		
RRMDD102	4.1	4.7	0.6	181.2	142.3	30.9	110.3	17.2	2.7	13.4	1.9	12.2	2.3	6.8	0.9	1.8	0.9	71.2	596	Clay		
RRMDD102	4.7	5.7	1.0	126.7	175.7	22.8	83.3	13.9	2.1	10.5	1.5	9.4	1.8	5.5	0.8	1.5	0.8	54.5	511	Clay		
RRMDD102	5.7	6.3	0.6	95.0	125.9	21.4	81.3	14.4	2.4	11.1	1.7	10.1	2.1	6.0	0.9	1.7	0.8	62.0	437	Clay		
RRMDD102	6.3	6.8	0.6	105.8	114.2	26.0	101.8	18.0	3.0	13.8	2.0	11.8	2.2	6.7	0.9	2.0	0.8	69.2	478	Clay		
RRMDD102	6.8	7.6	0.7	146.6	185.7	41.3	157.5	28.2	4.3	19.0	2.7	14.8	2.7	7.8	1.1	2.6	1.0	82.2	697	Clay		
RRMDD102	7.6	8.4	0.8	192.3	193.9	52.2	209.4	36.8	6.1	28.9	4.1	24.4	4.7	13.2	1.7	4.1	1.4	145.4	918	Clay		
RRMDD102	8.4	9.2	0.8	168.9	137.0	44.5	176.7	31.4	5.3	25.6	3.5	21.1	4.0	11.3	1.6	3.5	1.3	131.4	767	Clay		
RRMDD102	9.2	10.1	0.9	192.3	203.2	50.9	200.6	34.8	5.8	27.2	3.7	22.6	4.1	12.0	1.5	3.7	1.3	129.5	893	Clay		
RRMDD102	10.1	10.9	0.9	150.7	255.3	36.6	145.8	25.0	4.3	21.2	2.9	17.7	3.4	9.6	1.3	2.9	1.1	106.4	784	Clay		
RRMDD102	10.9	11.8	0.9	145.4	272.9	39.0	151.0	26.0	4.5	19.3	2.8	15.9	3.2	8.7	1.2	2.8	1.1	106.9	801	Clay		
RRMDD102	11.8	12.3	0.5	166.5	166.3	47.0	182.0	31.9	5.4	21.8	3.1	18.3	3.5	9.4	1.3	3.1	1.1	120.8	782	Clay		
RRMDD102	12.3	13.0	0.6	141.3	193.9	38.9	151.0	26.4	4.6	19.4	2.8	16.6	3.3	8.8	1.2	2.8	1.1	111.2	723	Clay		
RRMDD102	13.0	13.9	1.0	153.1	182.1	41.3	163.3	28.6	5.1	20.6	3.1	17.4	3.5	9.0	1.2	3.0	1.1	109.1	742	Upper Saprolite		
RRMDD102	13.9	14.9	1.0	155.4	165.7	42.4	166.8	29.7	5.0	21.3	3.1	17.2	3.3	8.8	1.2	3.1	1.0	107.8	732	Upper Saprolite		
RRMDD102	14.9	15.9	1.0	186.5	212.0	52.0	213.5	40.6	7.4	32.7	4.9	27.7	5.4	14.8	2.0	4.8	1.6	193.0	999	Upper Saprolite		
RRMDD102	15.9	16.9	1.0	338.9	178.6	65.4	270.6	49.4	9.5	43.0	6.3	36.4	7.1	19.0	2.5	6.2	2.0	242.6	1277	Upper Saprolite		
RRMDD102	16.9	17.8	0.9	168.9	168.1	41.3	170.3	32.0	5.9	28.1	4.2	23.9	4.7	12.8	1.8	4.1	1.5	161.9	829	Upper Saprolite	**14.3**	**775**
RRMDD102	17.8	18.9	1.0	48.8	154.0	11.7	44.7	8.1	1.6	6.5	1.0	5.6	1.1	2.9	0.4	0.9	0.4	33.9	322	Upper Saprolite		
RRMDD102	18.9	19.7	0.8	77.9	182.1	18.7	71.7	13.0	2.4	9.6	1.4	7.1	1.4	3.7	0.6	1.3	0.5	39.1	431	Lower Saprolite		
RRMDD102	19.7	20.5	0.8	69.0	147.0	16.0	60.1	10.7	2.1	8.9	1.4	8.4	1.7	5.0	0.7	1.4	0.6	57.3	390	Lower Saprolite		
RRMDD102	20.5	21.2	0.7	86.1	182.1	19.0	72.2	12.6	2.5	10.5	1.5	8.1	1.6	4.5	0.6	1.5	0.6	57.1	460	Saprock		
RRMDD102	21.2	21.9	0.7	70.5	148.8	14.9	53.0	8.2	1.5	5.8	0.8	4.2	0.8	2.4	0.4	0.8	0.4	27.2	339	Saprock		
RRMDD102	21.9	22.7	0.8	57.2	124.2	12.3	45.5	7.0	1.3	5.0	0.7	4.3	0.8	2.3	0.4	0.7	0.4	26.8	289	Saprock		
RRMDD102	22.7	23.0	0.4	64.2	139.4	13.8	50.0	8.2	1.5	5.5	0.9	4.3	1.0	2.8	0.4	0.9	0.4	30.7	324	Saprock		
RRMDD103	0.0	0.4	0.4	72.5	244.8	15.3	54.5	10.0	1.7	9.2	1.4	8.4	1.7	4.9	0.7	1.4	0.7	53.7	481	Soil		
RRMDD103	0.4	1.4	1.0	35.5	338.5	7.8	27.2	5.5	0.9	4.6	0.8	4.8	1.0	3.0	0.5	0.8	0.5	26.5	458	Hardcap		
RRMDD103	1.4	2.4	1.0	35.5	392.4	6.9	23.7	4.3	0.7	3.6	0.6	3.6	0.8	2.3	0.4	0.6	0.4	22.0	498	Hardcap		
RRMDD103	2.4	3.4	1.0	69.4	965.2	16.6	58.0	10.8	1.8	8.5	1.5	8.4	1.6	5.0	0.8	1.5	0.8	45.8	1196	Hardcap		
RRMDD103	3.4	4.2	0.8	49.1	159.3	10.8	39.3	7.7	1.1	6.7	1.1	6.7	1.3	3.9	0.6	1.1	0.6	40.8	330	Upper Saprolite		
RRMDD103	4.2	5.0	0.8	25.3	65.7	5.7	21.3	4.3	0.6	4.1	0.7	4.4	0.9	2.8	0.4	0.7	0.4	29.3	167	Upper Saprolite		
RRMDD103	5.0	5.7	0.7	13.6	53.5	3.5	13.2	2.9	0.6	2.9	0.5	3.3	0.7	2.0	0.3	0.5	0.3	19.0	117	Upper Saprolite		
RRMDD103	5.7	6.3	0.6	42.1	18.2	12.5	48.6	10.8	2.2	9.6	1.6	9.4	1.8	5.0	0.7	1.5	0.7	48.3	213	Upper Saprolite		
RRMDD103	6.3	7.3	1.0	25.7	16.7	6.4	25.0	5.2	1.1	5.2	0.8	4.8	1.0	2.9	0.4	0.8	0.4	30.9	127	Upper Saprolite		
RRMDD103	7.3	8.3	1.0	36.4	22.6	8.6	34.4	6.6	1.2	6.5	0.9	5.4	1.1	3.3	0.5	0.9	0.4	41.3	170	Upper Saprolite		
RRMDD103	8.3	9.3	1.0	39.6	58.2	9.4	36.3	6.6	1.0	6.2	0.8	5.0	1.0	2.9	0.4	0.8	0.4	38.7	207	Upper Saprolite		
RRMDD103	9.3	10.2	0.9	112.6	237.8	27.5	96.1	14.7	0.4	7.8	0.8	3.6	0.6	1.6	0.2	0.8	0.2	20.2	525	Upper Saprolite		

																					>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD103	10.2	11.1	0.9	83.7	223.7	22.7	81.1	13.5	0.4	7.4	0.8	3.7	0.6	1.7	0.3	0.8	0.3	21.2	462	Upper Saprolite		
RRMDD103	11.1	12.1	0.9	89.5	227.8	24.7	88.1	14.6	0.4	8.7	1.0	4.8	0.8	2.1	0.3	1.0	0.3	25.9	490	Upper Saprolite		
RRMDD103	12.1	12.8	0.7	40.5	79.1	10.3	39.1	7.5	0.9	6.1	0.9	4.8	0.9	2.6	0.4	0.8	0.4	28.7	223	Upper Saprolite		
RRMDD103	12.8	13.7	0.9	33.7	87.8	9.6	37.0	7.1	0.4	4.7	0.7	3.6	0.7	1.8	0.3	0.7	0.3	21.1	209	Upper Saprolite		
RRMDD103	13.7	14.7	1.0	15.8	35.4	4.7	18.0	4.5	0.2	3.2	0.6	3.0	0.5	1.5	0.2	0.5	0.3	17.8	106	Upper Saprolite		
RRMDD103	14.7	15.7	1.0	64.6	153.4	17.4	64.5	10.3	0.3	5.3	0.6	2.5	0.4	1.3	0.2	0.6	0.2	12.6	334	Saprock		
RRMDD104	0.0	0.5	0.5	66.6	112.9	14.0	50.3	9.4	1.6	7.6	1.2	7.9	1.6	4.6	0.6	1.2	0.7	45.7	326	Soil		
RRMDD104	0.5	1.3	0.9	61.7	134.7	10.1	33.7	6.3	1.0	4.6	0.7	5.0	1.0	3.3	0.5	0.7	0.5	28.4	292	Hardcap		
RRMDD104	1.3	2.1	0.8	56.1	359.6	10.2	35.0	6.4	1.0	4.9	0.8	5.3	1.1	3.2	0.5	0.8	0.5	27.9	513	Hardcap		
RRMDD104	2.1	2.9	0.8	57.0	591.5	12.2	42.3	8.1	1.3	6.2	1.1	6.5	1.3	3.9	0.6	1.1	0.6	33.0	767	Hardcap		
RRMDD104	2.9	3.7	0.8	65.6	709.8	14.5	50.9	9.3	1.6	7.0	1.3	7.3	1.4	4.3	0.7	1.2	0.7	37.2	913	Hardcap		
RRMDD104	3.7	4.3	0.6	67.3	564.6	15.1	53.9	10.0	1.7	7.9	1.3	8.1	1.6	4.8	0.7	1.3	0.8	42.3	781	Transition		
RRMDD104	4.3	5.3	1.0	101.1	113.1	18.1	62.5	11.1	1.8	9.7	1.5	8.8	1.9	5.6	0.9	1.5	0.9	55.6	394	Mottled		
RRMDD104	5.3	6.3	1.0	76.8	114.2	16.3	61.1	10.9	1.9	9.8	1.5	9.3	2.0	6.0	0.9	1.5	0.9	61.0	374	Mottled		
RRMDD104	6.3	7.2	0.9	94.3	154.0	19.7	72.4	13.0	2.2	11.2	1.7	9.9	2.1	6.3	1.0	1.7	1.0	66.0	456	Mottled		
RRMDD104	7.2	8.0	0.8	90.3	138.2	20.2	71.7	11.8	1.9	9.2	1.3	8.3	1.7	5.2	0.8	1.3	0.8	61.8	425	Clay		
RRMDD104	8.0	8.7	0.7	85.4	152.9	21.4	77.0	12.8	2.1	10.2	1.5	9.4	1.9	5.8	0.9	1.5	0.9	65.3	449	Clay		
RRMDD104	8.7	9.6	0.9	86.1	104.7	24.1	89.2	15.4	2.6	12.2	1.8	10.9	2.2	6.5	0.9	1.8	0.9	70.9	430	Clay		
RRMDD104	9.6	10.5	0.9	216.4	322.1	75.3	272.9	45.2	7.4	28.8	3.9	21.5	4.0	10.9	1.5	3.8	1.3	120.9	1136	Clay		
RRMDD104	10.5	11.4	0.9	58.3	54.8	13.8	52.5	10.3	1.9	9.6	1.5	9.4	2.0	6.1	0.9	1.5	0.9	61.5	285	Clay		
RRMDD104	11.4	12.3	0.9	83.5	110.9	25.6	98.3	18.1	3.3	14.6	2.2	13.5	2.7	8.0	1.2	2.2	1.1	84.7	470	Clay		
RRMDD104	12.3	13.3	1.0	137.2	172.2	27.6	103.8	19.7	3.7	17.7	2.7	16.3	3.2	9.0	1.3	2.6	1.2	103.4	622	Upper Saprolite		
RRMDD104	13.3	14.3	1.0	98.3	125.9	28.1	112.7	23.8	4.7	22.4	3.4	20.8	4.2	11.9	1.7	3.4	1.5	134.0	597	Upper Saprolite		
RRMDD104	14.3	15.3	1.0	123.7	162.2	35.9	144.6	29.5	5.7	27.3	4.1	24.4	4.9	14.0	2.0	4.1	1.7	165.1	749	Upper Saprolite		
RRMDD104	15.3	16.3	1.0	141.9	220.8	40.4	161.5	30.0	5.8	29.5	4.1	24.4	5.1	14.7	2.0	4.1	1.7	192.4	879	Upper Saprolite		
RRMDD104	16.3	17.3	1.0	135.5	192.7	31.1	122.5	20.0	3.7	19.7	2.6	15.7	3.4	9.9	1.3	2.6	1.2	156.2	718	Upper Saprolite	**11.0**	**611**
RRMDD104	17.3	18.4	1.1	74.2	128.3	16.9	64.9	11.2	2.1	10.2	1.4	8.6	1.9	5.4	0.8	1.4	0.7	80.5	408	Lower Saprolite		
RRMDD104	18.4	19.4	1.0	48.6	87.4	9.7	34.6	5.8	1.1	4.7	0.7	4.5	0.9	3.0	0.4	0.7	0.5	32.9	236	Saprock		
RRMDD104	19.4	20.4	1.0	46.1	94.4	10.2	36.7	6.6	1.3	5.2	0.8	5.2	1.1	3.4	0.5	0.8	0.6	33.3	246	Saprock		
RRMDD104	20.4	21.4	1.0	23.8	51.9	5.7	20.4	3.6	0.6	2.7	0.4	2.7	0.6	1.9	0.3	0.4	0.4	17.5	133	Saprock		
RRMDD104	21.4	21.8	0.4	27.6	60.0	6.6	23.2	4.1	0.7	3.1	0.5	3.1	0.7	2.2	0.4	0.5	0.4	20.1	153	Saprock		
RRMDD104	21.8	22.5	0.7	182.4	324.5	30.7	106.3	18.0	3.1	15.1	2.4	15.7	3.2	8.8	1.2	2.4	0.9	97.4	812	Saprock		
RRMDD105	0.0	0.4	0.4	58.4	112.4	11.4	39.7	7.4	1.2	6.3	1.0	6.3	1.3	4.0	0.6	1.0	0.6	40.3	292	Soil		
RRMDD105	0.4	1.2	0.7	37.6	77.2	6.4	21.0	3.8	0.6	3.0	0.5	3.5	0.7	2.2	0.4	0.5	0.4	19.7	178	Hardcap		
RRMDD105	1.2	1.9	0.7	41.0	223.1	6.9	23.0	3.9	0.6	3.1	0.6	3.4	0.7	2.3	0.4	0.5	0.4	20.7	331	Hardcap		
RRMDD105	1.9	2.6	0.7	55.9	919.5	10.5	35.3	6.1	1.0	4.8	0.9	5.1	1.0	3.0	0.5	0.9	0.5	28.6	1074	Hardcap		
RRMDD105	2.6	3.3	0.8	75.2	864.4	16.4	56.6	10.4	1.7	8.0	1.4	7.8	1.6	4.7	0.7	1.4	0.8	41.3	1092	Transition		
RRMDD105	3.3	4.3	1.0	117.9	205.0	30.1	114.1	18.9	3.1	14.1	2.0	11.9	2.3	6.8	1.0	2.0	1.0	71.0	601	Mottled		
RRMDD105	4.3	5.3	1.0	165.4	201.5	43.5	165.6	27.0	4.3	18.5	2.7	15.2	3.0	8.4	1.2	2.7	1.0	93.5	754	Clay		
RRMDD105	5.3	6.3	1.0	315.5	283.5	59.7	218.7	35.4	5.6	25.0	3.6	20.5	4.0	11.3	1.5	3.6	1.4	128.9	1118	Clay		
RRMDD105	6.3	7.3	1.0	218.1	209.7	44.6	165.6	27.1	4.3	19.4	2.7	14.9	2.9	7.8	1.1	2.7	1.0	86.9	809	Clay		
RRMDD105	7.3	8.3	1.0	316.7	216.1	57.0	208.2	34.4	5.7	23.9	3.2	16.7	2.9	7.5	1.0	3.2	1.0	79.7	977	Clay		
RRMDD105	8.3	9.0	0.7	177.7	144.7	42.4	156.9	26.3	4.4	18.7	2.8	15.6	3.1	8.4	1.2	2.7	1.1	92.4	698	Clay	**5.7**	**834**
RRMDD105	9.0	10.0	1.0	74.9	71.6	14.8	53.2	8.9	1.5	6.4	0.9	5.6	1.1	3.2	0.4	0.9	0.5	33.5	277	Clay		
RRMDD105	10.0	10.8	0.8	103.0	125.9	22.3	78.8	13.1	2.4	10.8	1.4	8.1	1.6	4.5	0.7	1.4	0.6	46.9	421	Clay		
RRMDD105	10.8	11.5	0.7	93.0	118.3	22.1	81.3	13.5	2.3	9.9	1.4	7.9	1.5	4.5	0.7	1.4	0.7	49.9	408	Clay		

																				>300ppm TREO-Ce_2O_3 Interval	
Hole ID	From m	To m	Int.	La_2O_3 ppm	Ce_2O_3 ppm	Pr_2O_3 ppm	Nd_2O_3 ppm	Sm_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm	TREO ppm	Regolith Zone	Length (m)	TREO ppm
RRMDD105	11.5	12.3	0.8	135.5	499.0	31.8	119.6	20.9	3.6	16.9	2.4	14.2	2.9	8.6	1.2	2.4	1.2	94.0	954	Clay		
RRMDD105	12.3	13.2	0.9	129.0	163.4	29.7	112.0	19.0	3.4	15.0	2.0	11.6	2.2	6.7	1.0	2.0	0.9	71.5	569	Upper Saprolite		
RRMDD105	13.2	14.1	0.9	93.8	147.6	23.3	89.1	15.3	2.7	10.9	1.5	9.0	1.7	4.8	0.7	1.5	0.7	51.2	454	Upper Saprolite		
RRMDD105	14.1	15.0	0.9	115.2	217.9	28.3	113.7	19.1	3.5	14.5	2.0	10.8	2.0	5.8	0.8	2.0	0.8	62.5	599	Upper Saprolite		
RRMDD105	15.0	15.9	0.9	114.7	169.8	26.3	102.5	18.0	3.4	14.2	2.0	11.1	2.1	6.0	0.8	2.0	0.7	63.5	537	Upper Saprolite		
RRMDD105	15.9	16.8	0.9	123.1	246.0	28.9	112.9	19.9	3.6	16.9	2.3	14.0	2.9	8.6	1.2	2.3	1.0	103.9	688	Upper Saprolite	**5.3**	**626**
RRMDD105	16.8	17.7	0.9	85.7	189.8	19.5	74.3	12.9	2.5	11.3	1.6	9.4	1.9	5.5	0.8	1.6	0.7	59.3	477	Upper Saprolite		
RRMDD105	17.7	19.0	1.3	93.5	179.2	20.1	76.9	13.2	2.5	9.7	1.4	8.4	1.6	4.5	0.7	1.4	0.6	42.4	456	Upper Saprolite		
RRMDD105	19.0	20.0	1.0	80.5	174.5	17.1	64.0	11.2	2.1	10.6	1.5	9.3	1.9	5.7	0.9	1.5	0.8	62.6	444	Lower Saprolite		
RRMDD105	20.0	21.0	1.0	89.4	197.4	20.0	80.6	16.2	3.3	15.8	2.3	13.8	2.8	8.2	1.1	2.3	1.0	95.0	549	Lower Saprolite	**1.0**	**549**
RRMDD105	21.0	22.0	1.0	83.9	200.3	18.8	69.3	13.1	2.5	11.4	1.6	9.6	2.1	6.3	0.9	1.6	0.8	70.2	492	Lower Saprolite		

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	**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: (see table below)

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.

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

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

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:

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 holes RRMDD001 to RRMDD041 were surveyed a relational DGPS system. The general accuracy for x,y and z is ± 0.2m. Hole locations for RRMDD042 – RRMDD0105 were surveyed using handheld GPS. The accuracy for this type of device is considered ± 5m in x and y coordinates however the elevation component of coordinates is variable and z accuracy may be low using this type of device. Datum WGS84 Zone 36 North was used for location data collection and storage. This is the appropriate datum for the project area. No grid transformations were applied to the data. No downhole surveys were conducted. As all holes were vertical and shallow, the rig setup was checked using a spirit level for horizontal and vertical orientation Any deviation will be insignificant given the short lengths of the holes Detailed topographic data was not sourced or used.
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.*	Drilling was conducted on a nominal 400m x 400m spacing for holes RRMDD001 to RRMDD0041, RRMDD055, RRMDD056 and RRMDD069 to RRMDD0105

Criteria	JORC Code explanation	Commentary
	• *Whether sample compositing has been applied.*	Infill drill holes on RL1693 have been drilled on a 200m x 200m spacing for holes RRMDD047 to RRMDD053, and 100m x 100m spacing for drill holes RRMDD0058 to RRMDD068 Exploration drill holes RRMDD042 to RRMDD046 on EL1766 were drilled where convenient on ternary and elevation anomalies and are not to any specific spacing. Historic RAB drilling has also been conducted on this spacing however the diamond drilling was offset by 200m from the RAB drilling 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 geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The Makuutu mineralisation is interpreted to be in a flat lying weathered profile including cover soil, lateritic caprock, clays transitioning to saprolite and saprock. Below the saprock are fresh shales, siltstones and mudstones. Pit mapping and diamond drilling indicate the mineralised regolith to be generally horizontal All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.
Sample security	• *The measures taken to ensure sample security.*	After collection, the samples were transported by Company representatives to Entebbe airport and dispatched via airfreight to Perth Australia. Samples were received by Australian customs authorities in Perth within 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*	The Makuutu Project is located in the Republic of Uganda. The mineral tenements comprise two (1) granted Retention Licences (RL1693 and RL0007), one (1) Exploration Licence (EL1766).

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>interests, historical sites, wilderness or national park and environmental settings.
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</td><td>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 46% 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;
<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.</td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>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.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		2010: Kweri Ltd undertook field verification of radiometric anomalies including scout sampling of existing community pits. Samples showed an enrichment of REE and Sc. 2011: Kweri Ltd conducted ground radiometric survey and evaluated historic groundwater borehole logs. 2012: Kweri Ltd and partner Berkley Reef Ltd conducted prospect wide pit excavation and sampling of 48 pits and a ground gravity traverse. Pit samples showed enrichment of REE weathered profile. Five (5) samples sent to Toronto Aqueous Research Laboratory for REE leach testwork. 2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole. The historic exploration has been conducted to a professional standard and is appropriate for the exploration stage of the prospect.
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*	The material information for drill holes relating to this announcement are contained in Table 2.

Criteria	JORC Code explanation	Commentary
	○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	A lower cut-off of 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.

Criteria	JORC Code explanation	Commentary
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	This report contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Metallurgical leach testing was previously conducted on samples derived from exploration pits, RAB drilling, and one 8.5 tonne bulk pit sample. In 2012, 5 pit samples were sent to the Toronto Aqueous Research Laboratory at the University of Toronto for leachability tests In 2017, 2 pit samples were sent to SGS Laboratory Toronto for leachability tests. 2017/18, 29 samples were collected from 7 RAB drill holes. 20 of these were consigned to SGS Canada and 4 to Aqueous Process Research (APR) in Ontario Canada. The remaining 5 samples were consigned to Bio Lantanidos in Chile. 2018/19, 8.5 tonne bulk sample was consigned to Mintek, South Africa, to evaluate using Resin-in-leach (RIL) technology for the recovery of REE. 2019: 118 samples from 31 holes from the 2019 diamond drilling program had preliminary variation testwork conducted TREE-Ce extraction ranged from 3% to 75%. 2020: Testing of composite samples with lower extractions from the 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, regional exploration and compilation of a Preliminary Economic Assessment (PEA)