

23 November 2023

MAKUUTU PHASE 5 INFILL TRANCHE 1 DRILLING ASSAYS PROVIDE THICKER AND HIGHER-GRADE RESULTS, SHOWS EXTENTION POTENTIAL TO THE EAST

- Clay hosted rare earth intersections achieved in 53 of 56 infill core drill holes received, including:
 - 9.9 metres at 1,163 ppm TREO from 4.2 metres in RRMDD767
 - 6.7 metres at 1,008 ppm TREO from 9.5 metres in RRMDD713
 - 2.7 metres at 977 ppm TREO from 4.4 metres in RRMDD734
 - 9.9 metres at 952 ppm TREO from 3.9 metres in RRMDD712
 - 7.3 metres at 828 ppm TREO from 4.8 metres in RRMDD724
 - 6.8 metres at 792 ppm TREO from 5.3 metres in RRMDD758
 - 21.8 metres at 783 ppm TREO from 4.7 metres in RRMDD762
- Resource extension drilling shows mineralisation extends at least 1.8 kilometres west of current mineral resource limit on Retention Licence (RL) 00007;
- Infill drilling results thicker and higher-grade intersections than previous wide spaced drilling;
- Samples for the remaining 72 holes are being analysed or in transit from Uganda to assay laboratory; and
- Makuutu's basket contains 71% magnet and heavy rare earths content, and is one of the most advanced heavy rare earth projects globally available as a source for new supply chains emerging across Europe, the US, and Asia.

Ionic Rare Earths Limited (“IonicRE” or “the Company”) (ASX: IXR) is pleased to advise initial drill results from the Phase 5 resource infill and extension drilling at its 60 per cent owned Makuutu Heavy Rare Earths Project (“Makuutu” or “the Project”) in Uganda.

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

Assay results for 56 holes of the 128-hole Phase 5 resource infill and extension drilling program completed on Retention Licence (RL) 00007 have been received. The program is intended to increase resource estimation confidence from inferred to indicated status on resource areas A and B, and to test extensions of those areas to expand the mineral resource area. Figure 1 is a plan of the Makuutu 2022 Mineral Resource Estimate (MRE) and exploration target areas with MRE areas A and B located on the western end of the deposit located within RL00007.

Intersections compiled above the MRE lower cut-off of 200ppm Total Rare Earth Oxide less Cerium Oxide (TREO-CeO₂) are listed in Table 1 and shown diagrammatically in plan view in Figure 2.

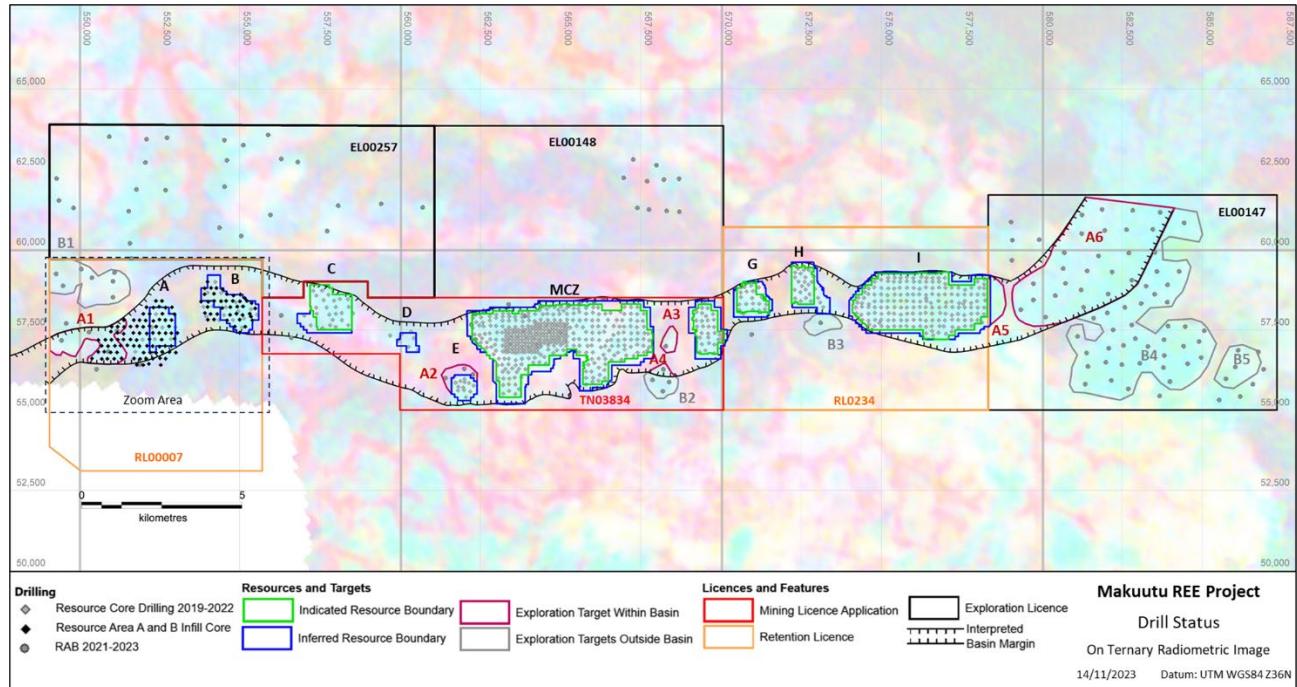


Figure 1: Makuutu project drill status plan showing location of infill and extension drilling results on licence RL00007, MRE Areas A and B.

Drilling was on a 200 metre spaced pattern with forty nine (49) of the drill holes being extensions to the MRE and seven (7) are MRE Area A infill holes. Figure 2 shows the core hole locations (diamond shape) with intersection thickness (point size) and TREO grade (point colour) with the reported 200 metre spaced holes with bold hole numbers and the previous 400m spaced holes in italic hole numbers. Previously reported regional exploration RAB drill holes are also shown (round points).

The 49 extension holes were drilled up to 1.8 kilometres west of the western boundary of MRE Area A, within the Makuutu mineralised trend. This extension drilling shows mineralisation continues beyond the MRE boundary with narrow intersections in low lying areas on the margins of the mineralised plateaus and increasing in thickness on the plateaus.

The resulted infill holes have generally shown thicker and higher-grade intervals than the original 400 metre spaced drill holes used to estimate the inferred resource. Best intersections include;

- RRMDD762, with 21.8 metres at 783ppm TREO from 4.7 metres depth; and
- RRMDD761, with 16.7 metres at 714ppm TREO from 4.7 metres depth.

Table 1 Phase 5 resource infill and extension results above MRE cut-off grade of 200ppm TREO-CeO₂.

Drill Hole ID	Depth From (metres)	Length (metres)	TREO (ppm)	TREO-CeO ₂ (ppm)	HREO (ppm)	CREO (ppm)	Hole Purpose
RRMDD712	3.9	9.9	952	845	430	505	Extension
RRMDD713	2.8	6.7	1008	811	428	483	Extension
RRMDD714 and	4.5	2.5	317	224	95	119	Extension
	10.7	16.8	435	336	143	183	
RRMDD715	2.8	13.4	629	512	216	286	Extension
RRMDD716				NSI			Extension
RRMDD717	3.6	15.2	700	394	102	174	Extension
RRMDD718	11.3	8.8	399	302	123	159	Extension
RRMDD719	27.4	1.0	288	202	71	102	Extension
RRMDD720 and	3.2	10.9	422	248	96	125	Extension
	16.2	4.7	346	257	90	130	Extension
RRMDD721 and and	4.0	9.7	606	432	165	220	Extension
	16.8	1.5	285	218	74	106	
	19.1	3.0	292	212	109	123	
RRMDD722	6.6	9.1	521	403	166	214	Extension
RRMDD723	5.3	6.3	782	564	219	293	Extension
RRMDD724	4.8	7.3	828	602	230	301	Extension
RRMDD725	2.5	9.9	372	257	103	130	Extension
RRMDD726	4.8	7.9	623	379	151	198	Extension
RRMDD727	2.0	10.3	328	232	98	122	Extension
RRMDD728	2.3	3.4	363	259	104	133	Extension
RRMDD729	2.0	9.8	658	531	193	269	Extension
RRMDD730 and	1.1	10.8	342	227	88	115	Extension
	14.6	1.0	282	229	109	128	
RRMDD731	2.5	9.2	489	327	148	177	Extension
RRMDD732	3.5	10.3	775	542	161	258	Extension
RRMDD733	4.0	10.4	668	491	241	279	Extension
RRMDD734	4.4	2.7	977	805	417	475	Extension
RRMDD735 and	2.1	16.3	634	491	246	288	Extension
	29.8	2.0	353	279	93	137	
RRMDD736 and and	2.7	5.5	321	222	86	110	Extension
	13.5	8.3	423	326	137	174	
	25.4	1.5	305	226	93	118	
RRMDD737	3.3	6.4	752	579	270	320	Extension
RRMDD738	5.3	9.2	449	312	138	168	Extension
RRMDD739	3.3	11.0	676	473	189	243	Extension
RRMDD740	3.8	12.4	495	333	140	174	Extension
RRMDD741	5.8	6.1	673	485	211	264	Extension
RRMDD742				NSI			Extension
RRMDD743	2.6	9.7	562	394	199	228	Extension
RRMDD744	5.8	10.7	580	408	195	224	Extension
RRMDD745	22.2	3.5	348	246	114	141	Extension
RRMDD746	2.1	1.8	341	210	87	104	Extension

and	19.4	2.7	415	344	137	178	
RRMDD747	19.8	6.7	415	302	136	173	Extension
RRMDD748	4.5	4.9	700	517	257	294	Extension
RRMDD749	3.4	15.0	615	424	228	247	Infill Area A
RRMDD750 and	2.5	2.6	380	213	87	107	Extension
	7.9	7.5	439	342	155	189	Extension
RRMDD751	3.5	5.3	499	304	128	160	Extension
RRMDD752	6.8	1.6	536	297	75	126	Extension
RRMDD753 and	5.1	1.4	568	467	128	204	Extension
	10.8	1.7	340	219	75	108	Extension
RRMDD754 and	3.5	1.7	467	260	100	131	Extension
	8.8	9.9	476	368	142	194	
RRMDD755 and and	3.1	2.9	487	291	117	150	Infill Area A
	12.9	2.8	308	220	86	116	
	18.6	2.6	365	298	111	157	
RRMDD756	12.4	13.3	434	336	119	172	Extension
RRMDD757				NSI			Extension
RRMDD758	5.3	6.8	792	675	256	346	Extension
RRMDD759	3.8	16.3	442	271	104	137	Infill Area A
RRMDD760 and	4.4	4.0	384	242	88	117	Infill Area A
	16.2	3.8	421	338	143	186	
RRMDD761	4.6	16.7	714	491	190	255	Infill Area A
RRMDD762	4.7	21.8	783	513	208	270	Infill Area A
RRMDD763	4.7	10.9	667	472	215	262	Infill Area A
RRMDD764	3.6	10.6	580	395	174	212	Infill Area A
RRMDD765	3.9	13.7	585	378	142	191	Infill Area A
RRMDD766	4.1	13.9	667	464	217	268	Infill Area A
RRMDD767	4.2	9.9	1163	962	672	641	Infill Area A

NSI=No significant intercept above cut-off grade

Several of both extension and infill drill holes show high grade heavy rare earth (HREO) and critical rare earth (CREO) intersections including extension holes;

- RRMDD712, with 9.9 metres at 952ppm TREO including 430ppm HREO and 530ppm CREO;
- RRMDD713, with 6.7 metres at 1,008ppm TREO with 428ppm HREO and 483ppm CREO; and
- RRMDD767, with 9.9 metres at 1,163ppm TREO with 672ppm HREO and 641ppm CREO.

The elevated proportions of HREO and CREO coincide with weathered limonitic veining and alteration in the clay and underlying saprock. Furter investigations of these results is required to determine the extents of these high-grade zones.

The results from the remaining 72 drill holes are currently at the laboratory in Perth being analysed or in transit from Makutu to Perth for analysis.

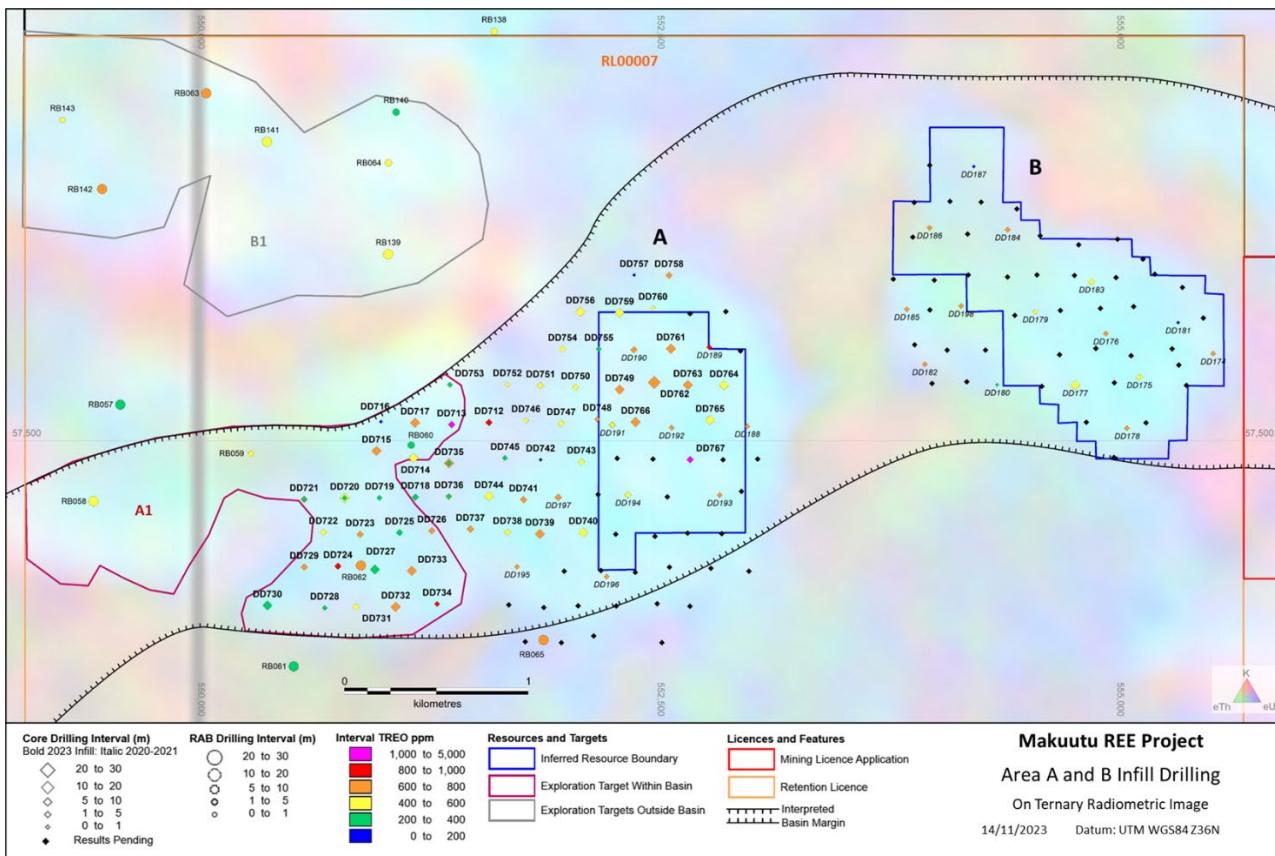


Figure 2: Drilling results Phase 5 resource infill and extension on RL00007.

Following completion of drilling and receipt of results, an updated resource estimation will be completed.

Authorised for release by the Board.

For enquiries, contact:

For Company

Tim Harrison

Ionic Rare Earths Limited

investors@ionicre.com

+61 (3) 9776 3434

For Media

Nigel Kassulke

Teneo

Nigel.Kassulke@Teneo.com

+61 (0) 407 904 874

For Investor Relations

Peter Taylor

NWR Communications

peter@nwrcommunications.com.au

+61 (0) 412 036 231

Table 2: Makuutu Rare Earth Project Resource Tabulation of REO Reporting Groups at 200ppm TREO-CeO₂ Cut-off Grade (ASX: 3 May 2022).

Resource Classification	Tonnes (millions)	TREO (ppm)	TREO-CeO ₂ (ppm)	LREO (ppm)	HREO (ppm)	CREO (ppm)	Sc ₂ O ₃ (ppm)
Indicated	404	670	450	500	170	230	30
Inferred	127	540	360	400	140	180	30
Total	532	640	430	480	160	220	30

Notes; Tonnes are dry tonnes rounded to the nearest 1.0Mt.

All ppm rounded from original estimate to the nearest 10 ppm which may lead to differences in averages. TREO = Total Rare Earth Oxide

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

Classification	Indicated Resource			Inferred Resource			Total Resource			
	Area	Tonnes (millions)	TREO (ppm)	TREO-CeO ₂ (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO ₂ (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO ₂ (ppm)
	A				13	580	390	13	580	390
	B				26	410	290	26	410	290
	C	31	580	400	3	490	350	35	570	400
	D				6	560	400	6	560	400
	E				18	430	280	18	430	280
	Central Zone	151	780	540	12	670	460	163	770	530
	Central Zone East	59	750	490	12	650	430	72	730	480
	F	18	630	420	7	590	400	25	620	410
	G	9	750	500	5	710	450	14	730	480
	H	6	800	550	7	680	480	13	740	510
	I	129	540	350	19	530	350	148	540	350
	Total Resource	404	670	450	127	540	360	532	640	430

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

About Ionic Rare Earths Ltd

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

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

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

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

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

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

Competent Persons Statement

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

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

The information in this report that relates to Mineral Resources for the Makuutu Rare Earths deposit was first released to the ASX on 20 March 2022 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

The information in this report that relates to Ore Reserves for the Makuutu Rare Earths deposit was first released to the ASX on 20 March 2023 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

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

Forward Looking Statements

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

Appendix 1: Drill Hole Details This Announcement (Datum UTM WGS84 Zone 36N)

Drill Hole ID	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Drill Type	Hole Length EOH (m.)	Azimuth	Inclination
RRMDD712	551606	57600	1169	DD	15.80	000	-90
RRMDD713	551403	57588	1136	DD	11.70	000	-90
RRMDD714	551196	57407	1173	DD	27.80	000	-90
RRMDD715	550994	57445	1176	DD	18.80	000	-90
RRMDD716	551018	57604	1154	DD	23.30	000	-90
RRMDD717	551204	57598	1171	DD	18.80	000	-90

RRMDD718	551206	57194	1145	DD	33.40	000	-90
RRMDD719	551011	57190	1165	DD	30.80	000	-90
RRMDD720	550821	57189	1166	DD	29.90	000	-90
RRMDD721	550601	57182	1158	DD	23.30	000	-90
RRMDD722	550705	57003	1159	DD	17.30	000	-90
RRMDD723	550905	56991	1163	DD	14.00	000	-90
RRMDD724	550785	56818	1162	DD	14.30	000	-90
RRMDD725	551120	57001	1164	DD	19.00	000	-90
RRMDD726	551295	57011	1160	DD	15.10	000	-90
RRMDD727	550986	56800	1158	DD	16.00	000	-90
RRMDD728	550713	56592	1153	DD	8.80	000	-90
RRMDD729	550601	56814	1152	DD	18.60	000	-90
RRMDD730	550402	56605	1152	DD	18.00	000	-90
RRMDD731	550884	56597	1152	DD	17.10	000	-90
RRMDD732	551099	56597	1155	DD	14.10	000	-90
RRMDD733	551187	56793	1160	DD	18.00	000	-90
RRMDD734	551324	56613	1145	DD	8.60	000	-90
RRMDD735	551389	57378	1170	DD	36.70	000	-90
RRMDD736	551388	57198	1166	DD	30.00	000	-90
RRMDD737	551505	57020	1159	DD	10.90	000	-90
RRMDD738	551707	57003	1164	DD	15.00	000	-90
RRMDD739	551883	56994	1168	DD	16.00	000	-90
RRMDD740	552119	57002	1170	DD	17.50	000	-90
RRMDD741	551794	57180	1169	DD	22.40	000	-90
RRMDD742	551887	57397	1158	DD	34.50	000	-90
RRMDD743	552109	57386	1178	DD	17.00	000	-90
RRMDD744	551606	57199	1166	DD	18.00	000	-90
RRMDD745	551693	57406	1177	DD	30.40	000	-90
RRMDD746	551807	57611	1185	DD	27.00	000	-90
RRMDD747	551999	57595	1179	DD	42.40	000	-90
RRMDD748	552195	57618	1177	DD	11.90	000	-90
RRMDD749	552317	57779	1186	DD	19.90	000	-90
RRMDD750	552077	57790	1183	DD	33.40	000	-90
RRMDD751	551887	57800	1159	DD	12.00	000	-90
RRMDD752	551706	57806	1167	DD	14.70	000	-90
RRMDD753	551394	57805	1168	DD	16.50	000	-90
RRMDD754	552007	57999	1168	DD	18.70	000	-90
RRMDD755	552204	57999	1176	DD	24.00	000	-90
RRMDD756	552103	58202	1177	DD	37.00	000	-90
RRMDD757	552396	58401	1173	DD	24.70	000	-90
RRMDD758	552585	58400	1165	DD	16.90	000	-90
RRMDD759	552316	58196	1177	DD	26.20	000	-90
RRMDD760	552498	58222	1162	DD	28.10	000	-90
RRMDD761	552596	58001	1174	DD	21.90	000	-90
RRMDD762	552505	57817	1165	DD	26.50	000	-90
RRMDD763	552688	57803	1174	DD	18.00	000	-90
RRMDD764	552884	57802	1169	DD	15.00	000	-90
RRMDD765	552808	57613	1164	DD	17.60	000	-90
RRMDD766	552403	57602	1177	DD	18.00	000	-90
RRMDD767	552700	57398	1176	DD	15.00	000	-90

Hole ID	From m	To m	Int. m	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₂ O ₃ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₂ O ₃ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm	TREO ppm	Regolith Zone	>200ppm TREO-CeO ₂ Interval	
																					Length (m)	TREO ppm
RRMDD766	6.57	7.25	0.68	103.8	184.3	23.5	81.6	14.0	1.9	8.9	1.2	7.6	1.4	4.0	0.6	3.3	0.6	44.4	481	Mottled	13.89	667
RRMDD766	7.25	8.20	0.95	139.0	294.8	50.5	244.9	48.4	8.8	33.7	4.2	24.2	4.0	10.5	1.4	8.7	1.3	134.0	1008	Clay		
RRMDD766	8.20	9.08	0.88	102.9	193.5	23.7	94.4	22.3	5.3	31.8	5.2	36.2	7.9	26.2	3.4	21.2	3.1	370.8	948	Upper Saprolite		
RRMDD766	9.08	9.96	0.88	93.8	178.7	20.8	81.9	15.1	2.7	12.1	1.8	10.8	2.1	5.6	0.8	5.5	0.9	69.7	502	Upper Saprolite		
RRMDD766	9.96	10.83	0.87	97.3	209.4	23.8	94.8	15.8	2.8	11.8	1.7	10.0	1.9	5.2	0.8	4.2	0.6	57.7	538	Upper Saprolite		
RRMDD766	10.83	11.73	0.90	80.0	162.8	18.5	71.7	14.6	2.5	12.0	1.6	10.4	2.0	6.1	0.8	5.3	0.8	63.5	453	Lower Saprolite		
RRMDD766	11.73	12.63	0.90	86.1	180.6	22.8	94.4	19.6	4.0	18.6	2.8	17.3	3.6	9.6	1.6	9.2	1.2	106.8	578	Lower Saprolite		
RRMDD766	12.63	13.53	0.90	93.5	242.0	42.9	221.0	47.1	9.6	53.0	8.2	57.0	12.1	39.8	5.4	34.7	5.3	527.0	1399	Lower Saprolite		
RRMDD766	13.53	14.43	0.90	71.8	154.8	20.3	93.3	20.4	3.9	22.0	3.2	19.7	4.1	12.5	1.7	10.7	1.5	158.7	599	Lower Saprolite		
RRMDD766	14.43	15.33	0.90	75.5	155.4	18.0	79.0	16.9	3.4	15.2	2.4	14.7	2.9	8.8	1.3	7.4	1.1	104.8	507	Lower Saprolite		
RRMDD766	15.33	16.23	0.90	71.0	152.3	17.3	68.7	13.8	3.0	12.5	1.9	11.6	2.2	6.4	1.0	5.8	0.9	93.3	462	Lower Saprolite		
RRMDD766	16.23	17.13	0.90	71.4	148.6	16.6	63.9	13.1	2.4	9.6	1.4	8.6	1.5	4.5	0.7	3.7	0.5	48.6	395	Lower Saprolite		
RRMDD766	17.13	18.00	0.87	75.8	162.1	17.6	65.3	13.5	2.2	10.2	1.3	7.6	1.6	4.4	0.6	3.8	0.6	46.7	413	Lower Saprolite		
RRMDD767	0.00	1.44	1.44	78.8	136.4	13.7	44.6	8.0	1.3	6.2	1.0	5.8	1.2	3.8	0.6	3.9	0.6	30.2	336	Hardcap	9.85	1163
RRMDD767	1.44	2.87	1.43	86.9	472.9	17.0	55.9	10.1	1.6	7.6	1.4	7.4	1.4	4.6	0.7	4.9	0.7	37.1	710	Hardcap		
RRMDD767	2.87	4.17	1.30	133.7	208.2	25.3	91.9	15.8	2.6	10.9	1.7	10.3	2.0	6.1	1.0	5.9	1.1	58.8	575	Transition		
RRMDD767	4.17	4.97	0.80	181.8	221.7	34.8	114.8	18.2	2.8	12.4	1.6	9.1	1.8	4.6	0.7	5.0	0.7	51.0	661	Mottled		
RRMDD767	4.97	5.77	0.80	173.0	240.8	38.4	136.5	23.3	3.9	14.3	1.7	9.1	1.6	4.5	0.8	4.5	0.7	48.4	701	Clay		
RRMDD767	5.77	6.66	0.89	185.9	262.9	46.8	174.4	28.1	4.5	17.5	2.0	11.6	1.9	5.1	0.7	4.5	0.6	46.9	793	Clay		
RRMDD767	6.66	7.54	0.88	143.1	223.6	38.4	141.1	21.7	3.8	13.8	1.8	9.0	1.7	4.6	0.7	4.0	0.7	41.4	649	Clay		
RRMDD767	7.54	8.49	0.95	130.8	217.4	38.3	156.9	27.6	4.9	20.0	2.8	15.1	2.3	6.3	0.8	4.6	0.8	60.2	689	Upper Saprolite		
RRMDD767	8.49	9.44	0.95	98.7	187.3	26.0	105.7	20.7	3.9	16.9	2.4	13.7	2.1	5.9	0.9	5.1	0.8	60.6	551	Upper Saprolite		
RRMDD767	9.44	10.39	0.95	92.5	172.0	24.2	92.8	17.9	3.5	14.8	2.3	12.2	2.2	6.0	0.8	5.4	0.7	57.7	505	Upper Saprolite		
RRMDD767	10.39	11.32	0.93	76.5	174.4	38.5	311.4	177.4	46.5	363.1	62.5	441.9	94.5	290.4	40.2	228.9	34.5	3758.9	6140	Upper Saprolite		
RRMDD767	11.32	12.22	0.90	91.0	179.3	24.2	104.6	22.8	4.9	24.2	3.8	24.8	4.7	12.8	1.8	11.1	1.6	126.5	638	Lower Saprolite		
RRMDD767	12.22	13.12	0.90	82.2	173.8	22.5	97.3	22.5	5.2	29.4	4.4	28.6	6.7	19.0	2.7	16.5	2.6	262.9	776	Lower Saprolite		
RRMDD767	13.12	14.02	0.90	81.4	174.4	19.9	75.2	14.2	3.0	13.1	1.8	10.9	2.4	6.5	0.9	5.4	0.8	92.6	502	Lower Saprolite		
RRMDD767	14.02	15.00	0.98	73.3	159.1	17.7	63.8	12.1	2.5	10.4	1.5	9.0	1.8	5.1	0.7	4.3	0.7	60.7	423	Saprock		

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed.</p> <p>Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low.</p> <p>Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw.</p> <p>Using either method core was initial cut in half then one half was further cut in half to give quarter core.</p> <p>Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques.</p>
Drilling techniques	<ul style="list-style-type: none"> 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). 	<p>Core size was HQ triple tube. The core was not oriented (vertical)</p>
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>Core recovery was calculated by measuring actual core length versus drillers core run lengths. Core recovery ranged from 25% to 100% and averaged 95.6%. Core loss I most common in the hardcap and transition regolith types which are not reported as resource or in exploration results. No relationship exists between core recovery and grade.</p>
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<p>All (100%) drill core has been geologically logged and core photographs taken. Logging is qualitative with description of colour, weathering status, alteration, major and minor rock types, texture, grain size, 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.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<p>Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low.</p>

Criteria	JORC Code explanation	Commentary																																																				
	<ul style="list-style-type: none"> 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. 	<p>Samples were collected from core trays by hand and placed in individually numbered bags. These bags were dispatched to ALS for analysis with no further field preparation.</p> <p>Sample weights were recorded prior to sample dispatch. Sample mass is considered appropriate for the grain size of the material being sampled that is generally very fine grained and uniform.</p> <p>Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample..</p>																																																				
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<p>Assay and Laboratory Procedures – All Samples</p> <p>Samples were dispatched by air freight direct to ALS laboratory Perth Australia. The preparation and analysis protocol used is as follows:</p> <table border="1" data-bbox="1080 504 1933 837"> <thead> <tr> <th data-bbox="1080 504 1462 528">ALS Code</th><th data-bbox="1462 504 1933 528">Description</th></tr> </thead> <tbody> <tr> <td data-bbox="1080 528 1462 552">WEI-21</td><td data-bbox="1462 528 1933 552">Received sample weight</td></tr> <tr> <td data-bbox="1080 552 1462 576">LOG-22</td><td data-bbox="1462 552 1933 576">Sample Login w/o Barcode</td></tr> <tr> <td data-bbox="1080 576 1462 599">DRY-21</td><td data-bbox="1462 576 1933 599">High temperature drying</td></tr> <tr> <td data-bbox="1080 599 1462 623">CRU-21</td><td data-bbox="1462 599 1933 623">Crush entire sample</td></tr> <tr> <td data-bbox="1080 623 1462 647">CRU-31</td><td data-bbox="1462 623 1933 647">Fine crushing – 70% <2mm</td></tr> <tr> <td data-bbox="1080 647 1462 671">SPL-22Y</td><td data-bbox="1462 647 1933 671">Split sample – Boyd Rotary Splitter</td></tr> <tr> <td data-bbox="1080 671 1462 695">PUL-31h</td><td data-bbox="1462 671 1933 695">Pulverise 750g to 85% passing 75 micron</td></tr> <tr> <td data-bbox="1080 695 1462 718">CRU-QC</td><td data-bbox="1462 695 1933 718">Crushing QC Test</td></tr> <tr> <td data-bbox="1080 718 1462 742">PUL-QC</td><td data-bbox="1462 718 1933 742">Pulverising QC test</td></tr> </tbody> </table> <p>The assay technique used for REE was Lithium Borate Fusion ICP-MS (ALS code ME-MS81). This is a recognised industry standard analysis technique for REE suite and associated elements.</p> <p>Elements analysed at ppm levels:</p> <table border="1" data-bbox="1282 949 1911 1068"> <tbody> <tr> <td>Ba</td><td>Ce</td><td>Cr</td><td>Cs</td><td>Dy</td><td>Er</td><td>Eu</td><td>Ga</td></tr> <tr> <td>Gd</td><td>Hf</td><td>Ho</td><td>La</td><td>Lu</td><td>Nb</td><td>Nd</td><td>Pr</td></tr> <tr> <td>Rb</td><td>Sm</td><td>Sn</td><td>Sr</td><td>Ta</td><td>Tb</td><td>Th</td><td>Tm</td></tr> <tr> <td>U</td><td>V</td><td>W</td><td>Y</td><td>Yb</td><td>Zr</td><td></td><td></td></tr> </tbody> </table> <p>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.</p> <p>All laboratories used are ISO 17025 accredited.</p> <p>QAQC</p> <p><u>Diamond Drill Core Samples</u></p> <ul style="list-style-type: none"> Analytical Standards <p>CRM AMIS0275 and AMIS0276 and a specific Makuutu CRM MUIACREI01 were included in sample batches at a ratio of 1:25 to drill samples submitted. This is an acceptable ratio.</p>	ALS Code	Description	WEI-21	Received sample weight	LOG-22	Sample Login w/o Barcode	DRY-21	High temperature drying	CRU-21	Crush entire sample	CRU-31	Fine crushing – 70% <2mm	SPL-22Y	Split sample – Boyd Rotary Splitter	PUL-31h	Pulverise 750g to 85% passing 75 micron	CRU-QC	Crushing QC Test	PUL-QC	Pulverising QC test	Ba	Ce	Cr	Cs	Dy	Er	Eu	Ga	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th	Tm	U	V	W	Y	Yb	Zr		
ALS Code	Description																																																					
WEI-21	Received sample weight																																																					
LOG-22	Sample Login w/o Barcode																																																					
DRY-21	High temperature drying																																																					
CRU-21	Crush entire sample																																																					
CRU-31	Fine crushing – 70% <2mm																																																					
SPL-22Y	Split sample – Boyd Rotary Splitter																																																					
PUL-31h	Pulverise 750g to 85% passing 75 micron																																																					
CRU-QC	Crushing QC Test																																																					
PUL-QC	Pulverising QC test																																																					
Ba	Ce	Cr	Cs	Dy	Er	Eu	Ga																																															
Gd	Hf	Ho	La	Lu	Nb	Nd	Pr																																															
Rb	Sm	Sn	Sr	Ta	Tb	Th	Tm																																															
U	V	W	Y	Yb	Zr																																																	

Criteria	JORC Code explanation	Commentary																		
		<p>The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident.</p> <ul style="list-style-type: none"> • 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. • Duplicates Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the $\frac{1}{4}$ 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. <p>Laboratory inserted standards, blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.</p> <p>Laboratory inserted standards, blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.</p>																		
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • 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. 	<p>No independent verification of significant intersection undertaken.</p> <p>No twinning of diamond core drill holes was undertaken.</p> <p>Sampling protocols for diamond core sampling and QAQC were documented and held on site by the responsible geologist. No procedures for data storage and management have been compiled as yet.</p> <p>Data were collected in the field by hand and entered into Excel spreadsheet. Data are then compiled with assay results compiled and stored in Access database. Data verification is conducted on data entry including hole depths, sample intervals and sample numbers. Sample numbers from assay data are verified by algorithm in spreadsheet prior to entry into the database. Assay data was received in digital format from the laboratory and merged with the sampling data into an Excel spreadsheet format for QAQC analysis and review against field data. Once finalised and validated data is stored in a protected Access database.</p> <p>Data validation of assay data and sampling data have been conducted to ensure data entry is correct.</p> <p>All assay data is received from the laboratory in element form is unadjusted for data entry. 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)</p> <table border="1" data-bbox="1282 1271 1927 1447"> <thead> <tr> <th data-bbox="1282 1271 1394 1302">Element ppm</th><th data-bbox="1507 1271 1731 1302">Conversion Factor</th><th data-bbox="1754 1271 1927 1302">Oxide Form</th></tr> </thead> <tbody> <tr> <td data-bbox="1282 1302 1394 1334">Ce</td><td data-bbox="1507 1302 1731 1334">1.2284</td><td data-bbox="1754 1302 1927 1334">CeO₂</td></tr> <tr> <td data-bbox="1282 1334 1394 1366">Dy</td><td data-bbox="1507 1334 1731 1366">1.1477</td><td data-bbox="1754 1334 1927 1366">Dy₂O₃</td></tr> <tr> <td data-bbox="1282 1366 1394 1398">Er</td><td data-bbox="1507 1366 1731 1398">1.1435</td><td data-bbox="1754 1366 1927 1398">Er₂O₃</td></tr> <tr> <td data-bbox="1282 1398 1394 1429">Eu</td><td data-bbox="1507 1398 1731 1429">1.1579</td><td data-bbox="1754 1398 1927 1429">Eu₂O₃</td></tr> <tr> <td data-bbox="1282 1429 1394 1461">Gd</td><td data-bbox="1507 1429 1731 1461">1.1526</td><td data-bbox="1754 1429 1927 1461">Gd₂O₃</td></tr> </tbody> </table>	Element ppm	Conversion Factor	Oxide Form	Ce	1.2284	CeO ₂	Dy	1.1477	Dy ₂ O ₃	Er	1.1435	Er ₂ O ₃	Eu	1.1579	Eu ₂ O ₃	Gd	1.1526	Gd ₂ O ₃
Element ppm	Conversion Factor	Oxide Form																		
Ce	1.2284	CeO ₂																		
Dy	1.1477	Dy ₂ O ₃																		
Er	1.1435	Er ₂ O ₃																		
Eu	1.1579	Eu ₂ O ₃																		
Gd	1.1526	Gd ₂ O ₃																		

Criteria	JORC Code explanation	Commentary																																	
		<table border="1"> <tr><td>Ho</td><td>1.1455</td><td>Ho₂O₃</td></tr> <tr><td>La</td><td>1.1728</td><td>La₂O₃</td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu₂O₃</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd₂O₃</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr₆O₁₁</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm₂O₃</td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb₄O₇</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm₂O₃</td></tr> <tr><td>Y</td><td>1.2699</td><td>Y₂O₃</td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb₂O₃</td></tr> <tr><td>Sc</td><td>1.5338</td><td>Sc₂O₃</td></tr> </table>	Ho	1.1455	Ho ₂ O ₃	La	1.1728	La ₂ O ₃	Lu	1.1371	Lu ₂ O ₃	Nd	1.1664	Nd ₂ O ₃	Pr	1.2082	Pr ₆ O ₁₁	Sm	1.1596	Sm ₂ O ₃	Tb	1.1762	Tb ₄ O ₇	Tm	1.1421	Tm ₂ O ₃	Y	1.2699	Y ₂ O ₃	Yb	1.1387	Yb ₂ O ₃	Sc	1.5338	Sc ₂ O ₃
Ho	1.1455	Ho ₂ O ₃																																	
La	1.1728	La ₂ O ₃																																	
Lu	1.1371	Lu ₂ O ₃																																	
Nd	1.1664	Nd ₂ O ₃																																	
Pr	1.2082	Pr ₆ O ₁₁																																	
Sm	1.1596	Sm ₂ O ₃																																	
Tb	1.1762	Tb ₄ O ₇																																	
Tm	1.1421	Tm ₂ O ₃																																	
Y	1.2699	Y ₂ O ₃																																	
Yb	1.1387	Yb ₂ O ₃																																	
Sc	1.5338	Sc ₂ O ₃																																	
		<p>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:</p> <p>Note that Y₂O₃ is included in the TREO, HREO and CREO calculation.</p> <p>TREO (Total Rare Earth Oxide) = La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Y₂O₃ + Lu₂O₃.</p> <p>HREO (Heavy Rare Earth Oxide) = Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃, + Y₂O₃ + Lu₂O₃</p> <p>CREO (Critical Rare Earth Oxide) = Nd₂O₃ + Eu₂O₃ + Tb₄O₇ + Dy₂O₃ + Y₂O₃</p> <p>(From U.S. Department of Energy, Critical Materials Strategy, December 2011)</p> <p>LREO (Light Rare Earth Oxide) = La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃</p> <p>NdPr = Nd₂O₃ + Pr₆O₁₁</p> <p>HREO% of TREO= HREO/TREO x 100</p> <p>In elemental form the classifications are:</p> <p>Note that Y is included in the TREE, HREE and CREE calculation.</p> <p>TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y</p> <p>HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Y+Lu</p> <p>CREE: Nd+Eu+Tb+Dy+Y</p> <p>LREE: La+Ce+Pr+Nd</p>																																	
Location of data points	<ul style="list-style-type: none"> 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. 	<p>Drill hole collar locations were surveyed using handheld GPS. For this type of instrument, the general accuracy in x and y coordinates is + 5m. The elevation component of coordinates is variable and may be low accuracy using this type of device.</p> <p>Datum WGS84 Zone 36 North was used for location data collection and storage. This is the appropriate datum for the project area. No grid transformations were applied to the data.</p>																																	
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	RAB reconnaissance drill holes have been drilled on a broad spacing, generally >1km, based on testing radiometric anomalies over a large area																																	
Orientation of data in relation to	<ul style="list-style-type: none"> 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 	Orientation of potential mineralisation unknown in this area but assumed to be horizontal as seen in the Makuutu deposit																																	

Criteria	JORC Code explanation	Commentary
geological structure	<i>key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<p>After collection, the samples were transported by Company representatives to Entebbe airport and dispatched via airfreight to Perth Australia. Samples were received by Australian customs authorities in Perth within 48 hours of dispatch and were still contained in the sealed shipment bags.</p> <p>Samples were subsequently transported from Australian customs to ALS Perth via road freight and inspected on arrival by a Company representative</p>
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	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	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	<p>The Makuutu Project is located in the Republic of Uganda. The mineral tenements comprise two (2) granted Retention Licences (RL1693 and RL00007), three (3) Exploration Licences (EL1766, EL00147 and EL00148) and one (1) Exploration Licence application TN03573.</p> <p>All granted licences are in good standing with no known impediments. TN03573 is pending grant with all application requirements met.</p> <p>The Makuutu Rare Earths Project is 100% owned by Rwenzori Rare Metals Limited ("RRM"), a Ugandan registered company. IonicRE currently has earned a 51% shareholding in RRM and may increase its shareholding to 60% by meeting further commitments as follows:</p> <ol style="list-style-type: none"> 1. IonicRE to fund to completion of a Bankable Feasibility Study (BFS) to earn an additional 9% interest for a cumulative 60% interest in RRM. 2. Milestone payments, payable in cash or IonicRE shares at the election of the Vendor, as follows: <ol style="list-style-type: none"> a. US\$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and b. US\$375,000 on conversion of existing licences to mining licences. <p>At any time should IonicRE not continue to invest in the project and project development ceases for at least two months RRM has the right to return the capital sunk by IonicRE and reclaim all interest earned by IonicRE.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>Previous exploration includes:</p> <p>1980: Country wide airborne geophysical survey identifying uranium anomalies in the Project area.</p> <p>1990s: French BRGM and Ugandan DGSM undertook geochemical and geological survey over South-Eastern Uganda including the Project area. Anomalous Au, Zn, Cu, Sn, Nb and V identified.</p> <p>2006-2009: Country wide high resolution airborne magnetic and radiometric survey identified U anomalism in the Project area.</p> <p>2009: Finland GTK reprocessed radiometric data and refined the Project anomalies.</p> <p>2010: Kweri Ltd undertook field verification of radiometric anomalies including scout sampling of existing community pits. Samples showed an enrichment of REE and Sc.</p> <p>2011: Kweri Ltd conducted ground radiometric survey and evaluated historic groundwater borehole logs.</p>

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>2012: Kweri Ltd and partner Berkley Reef Ltd conducted prospect wide pit excavation and sampling of 48 pits and a ground gravity traverse. Pit samples showed enrichment of REE weathered profile. Five (5) samples sent to Toronto Aqueous Research Laboratory for REE leach testwork.</p> <p>2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole.</p> <p>The historic exploration has been conducted to a professional standard and is appropriate for the exploration stage of the prospect.</p> <p>2019-2022: Ionic Rare Earths under agreement with RRM completed 711 core drill holes and processing testwork leading to compilation of a DFS and statement of an ore reserve.</p>
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<p>The material information for drill holes relating to this announcement are contained in Appendix 1.</p>
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<p>A lower cut-off of 200 ppm TREO-Ce₂O₃ 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.</p> <p>No metal equivalents values are used.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	Down hole lengths, true widths are not known.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Refer to diagrams in body of text.
Balanced reporting	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<p>Metallurgical leach testing was previously conducted on samples derived from exploration pits, RAB drilling, and one 8.5 tonne bulk pit sample.</p> <p>In 2012, 5 pit samples were sent to the Toronto Aqueous Research Laboratory at the University of Toronto for leachability tests</p> <p>In 2017, 2 pit samples were sent to SGS Laboratory Toronto for leachability tests.</p> <p>2017/18, 29 samples were collected from 7 RAB drill holes. 20 of these were consigned to SGS Canada and 4 to Aqueous Process Research (APR) in Ontario Canada. The remaining 5 samples were consigned to Bio Lantanidos in Chile.</p> <p>2018/19, 8.5 tonne bulk sample was consigned to Mintek, South Africa, to evaluate using Resin-in-leach (RIL) technology for the recovery of REE.</p> <p>2019: 118 samples from 31 holes from the 2019 diamond drilling program had preliminary variation testwork conducted TREE-Ce extraction ranged from 3% to 75%.</p> <p>2020: Testing of composite samples with lower extractions from the 2019 variation testing using increasing rates of acid addition and leach time. Significant increases in extractions were achieved.</p> <p>2020: Testing of composited samples from two exploration holes east of the Makuutu Central Zone provided an average extraction of TREE-Ce recovery of 41% @ pH 1</p> <p>2021-2023 extensive metallurgical testwork..</p>
Further work	<ul style="list-style-type: none"> 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 include demonstration plant testwork