ASX Announcement
Released 21st January 2025

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NEW DRILLING ASSAYS CONFIRM GRADES AND THICKNESS OF MINERALISATION WITHIN STARTER ZONE

Highlights

- Third assay batch comprising 76 holes received from the 2024 Mineral Resource infill drilling program continue to show excellent grades and thicknesses in line with previous results
- Mineralisation now confirmed to be widespread within central starter area over 21km^2
- Strongly elevated NdPr grades directly above the fresh bedrock contact are ideal for supporting the ISR mining approach
- Assay results will be used to further extend the area of the Indicated Resource during Q1 2025
- Results to support Ore Reserve calculations and pre-planning of in-situ field trials required as part of a feasibility study scheduled for 2025
- Scoping Study is progressing well and on track for release during Q1
- Environmental baseline assessment on track for completion during Q2

Significant results >1,000ppm include:

- 10m@**1,273ppm TREO** from 7m (EMA-TR-319), ending in **1,183ppm** TREO
- 10m@**1,214ppm TREO** from 6m (EMA-TR-347), ending in **824ppm** TREO
- 8m@**1,189ppm TREO** from 11m (EMA-TR-350), ending in **466ppm** TREO

Brazilian Critical Minerals Limited (**ASX: BCM**) ("**BCM**" or the "**Company**") is pleased to announce the assay results for the third batch of infill auger holes drilled for rare earth elements (REEs) at Ema in the Apuí region of Brazil (Figure 1), aimed at defining an Indicated Mineral Resource Estimate over the central portion of the Ema Mineral Resource limits.

Andrew Reid, Managing Director, commented:

"All 3 batches of assay results released for the 2024 drilling program have confirmed widespread mineralisation being intersected over the majority of the central starter area. Results returned confirm that the starter area alone should be able to support a long-life rare-earth project, with all the mineralisation within 20m of the surface and ideal for in-situ recovery mining techniques. We are now pushing ahead with finalising our low capex scoping study, preparing for the permeability field trials and commencing a feasibility study over the coming months. The year ahead looks promising for BCM, with multiple catalysts that could significantly enhance shareholder value and position the company as a key player in the rare earths sector."

Figure 1. Location of the Ema Project, Brazil.

A total of 212 holes (78%) of the 270-hole drilling program have now returned assay results. Results generally returned thick mineralised intercepts with the highest grades of NdPr being found directly above the fresh rock interface.

Drilling was designed on 300m centres within the high priority starter zone (red dashed line area Figure 2) which comprises approximately 24% of the previously announced **977Mt[1]** MRE area. Drilling commenced on the western portion of this area (Figures 2 and 3) with assays now received for 212 holes.

Results indicate a strong increase in magnetic rare earths (MREO's) grade towards the base of the weathering profile in the saprock portion of the profile with intervals of generally 5-10m thick, considered ideal for in-situ leaching purposes.

The significant increase in the proportion of valuable heavy rare earth elements (HREEs) to over 31% of the MREO composition at the end of the holes underscores the economic potential of the lower saprolite zone. This enhancement of HREE content suggests that further exploration and development in these areas could be potentially highly beneficial towards developing a low cost in-situ leach operation which is the current focus of the scoping study nearing completion.

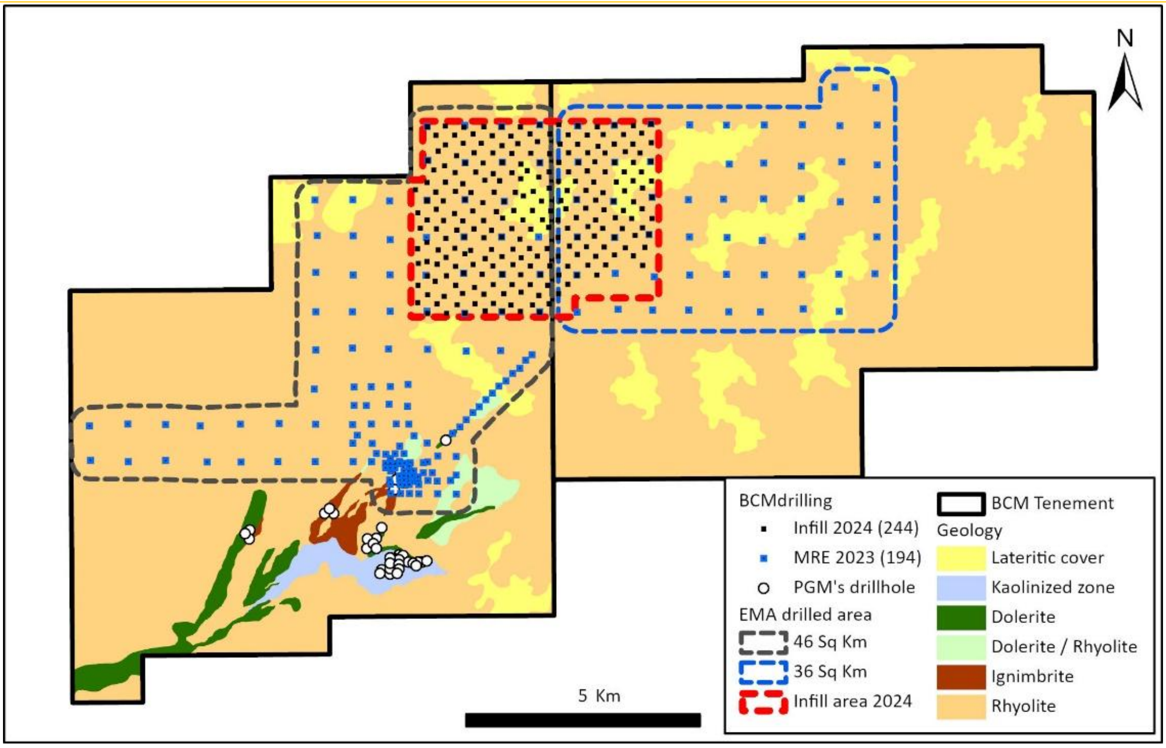

Figure 2 - Ema REE project – Mineral Resource covering 82 km2 with auger holes on 800m spacing and infill auger holes on 300m centres over 21 sq km.

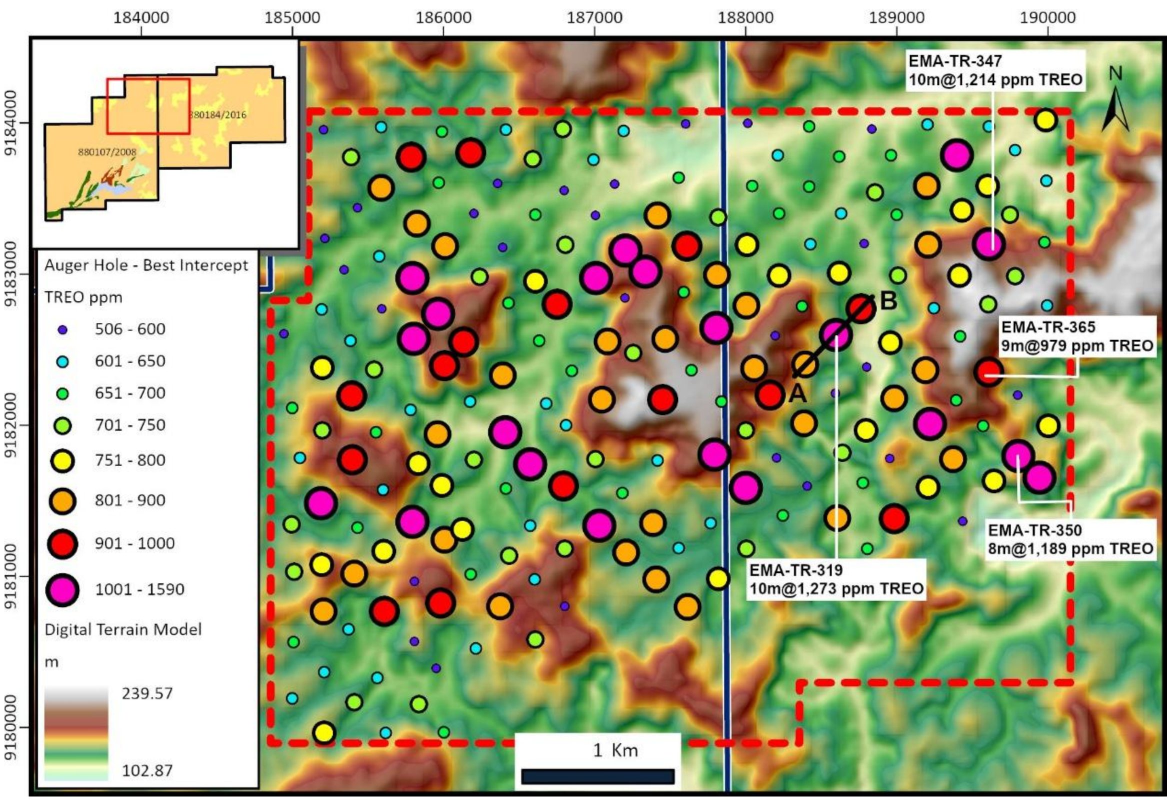

Figure 3 – Location map of the auger infill holes with assay results received to date, with cross section A-B.

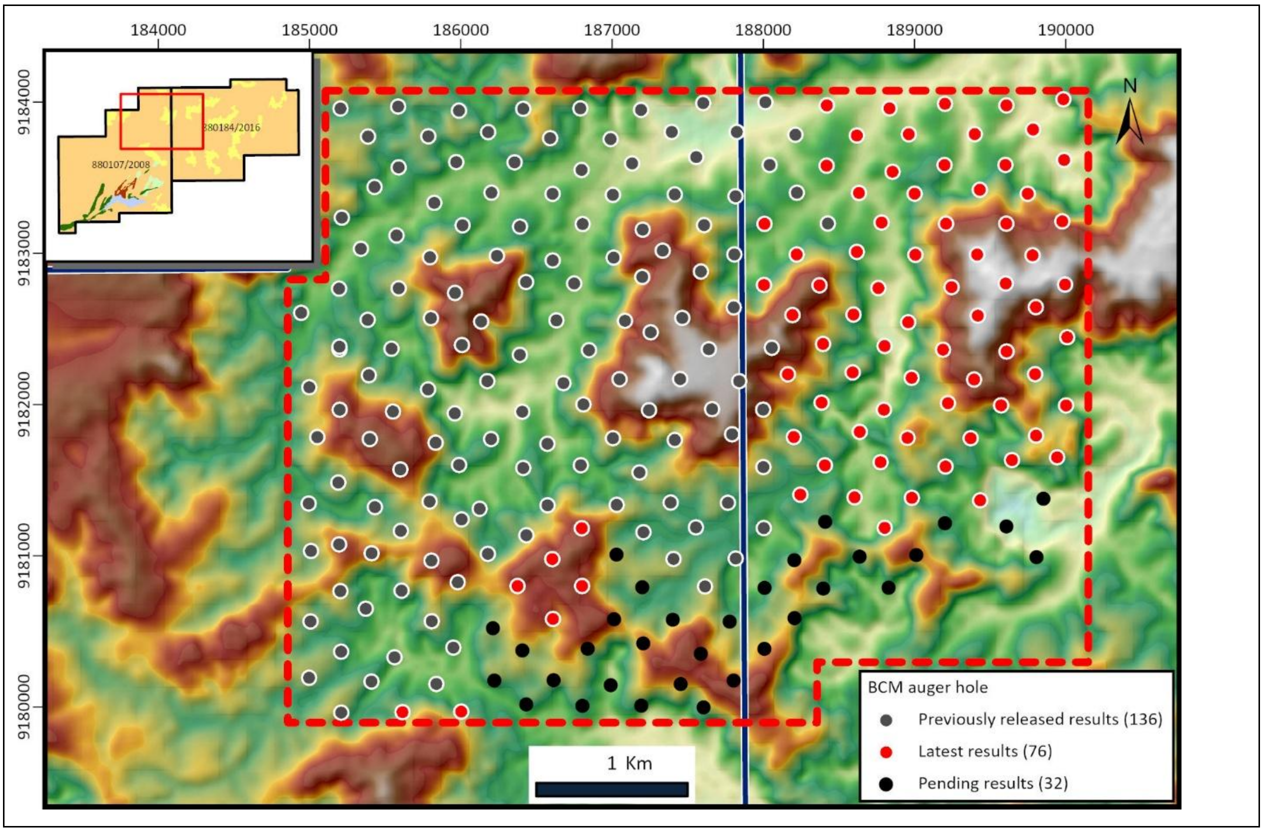

Figure 4 – Location map of the auger infill holes with assay results received to date and those left outstanding.

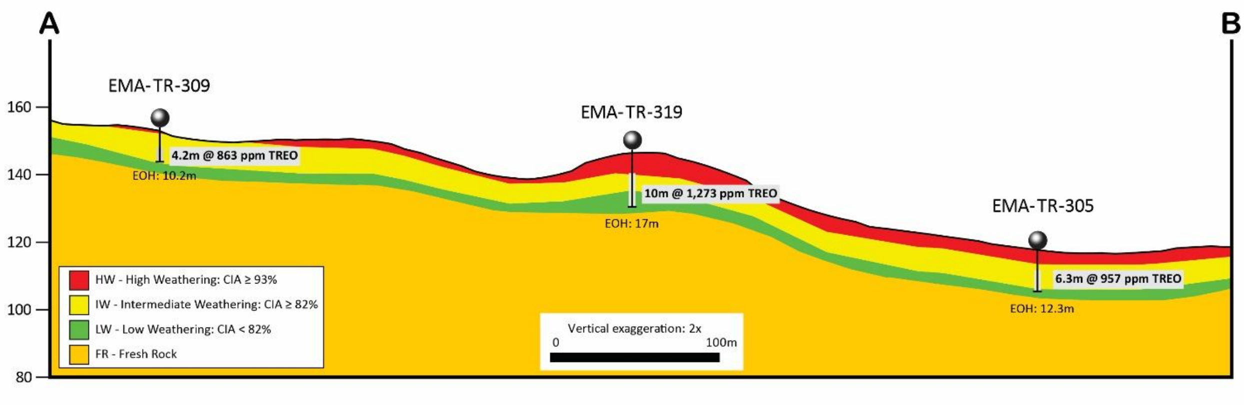

Figure 5 - Cross section A-B from EMA-TR-305, EMA-TR-309 and EMA-TR-19

Ema REE project

The EMA ionic REE project is unique amongst Brazilian REE projects in that it shares almost identical characteristics with the ionic REE deposits developed over volcanic rocks in southwest China and Myanmar, the world´s largest known ionic clay region, producing significant quantities of the world's rare earth production in 2024.

Exploration drilling is conducted with hand-held auger drills, which offer the advantage of low-cost, rapid deployment and mobility. One key constraint of auger drilling is the depth limitation, with the deepest holes, generally containing the highest-grade results, drilled to ~20m. In addition, most of the exploration to date has been conducted on widely spaced (800m) centres, with infill drilling on 300m centres in the central resource area.

Infill drilling at 300-metre centres provides a more detailed assessment of the mineralisation grade and thickness, leading to an increase in the confidence level of the Mineral Resource Estimate. This transition to closer spacing has led to the identification of some exceptional intercepts, suggesting the presence of high-grade pods within the mineralised zones. These findings will be crucial for the next phase of exploration as the team works to define these high-grade areas for potential in-situ recovery (ISR).

Despite the variability in collar elevations of the drilled holes, the typical enrichment of Neodymium (Nd) and Praseodymium (Pr) is consistently encountered at a similar depth within the lower saprolite zone, located just above the fresh rock. The enriched zone generally measures around 10 meters in thickness indicating a continuous mineralised horizon. This widespread occurrence strongly suggests the presence of continuous high-grade zones across the project area.

The high-value heavy magnetic REE' Tb and Dy consistently comprise about 10% of the NdPr levels, making a strong contribuition to the basket value in the MREC[2]. The increased values at the bottom of the holes highlight the possible economic potential of the lower saprolite zones and the zone to be targeted for in-situ extraction.

Strip logs of holes EMA-TR-301, 345 and 360 (Figure 6) are examples of the lower enrichment zone with the presence of high NdPr grades towards the base of the regolith profile drilling in the low weathering zone.

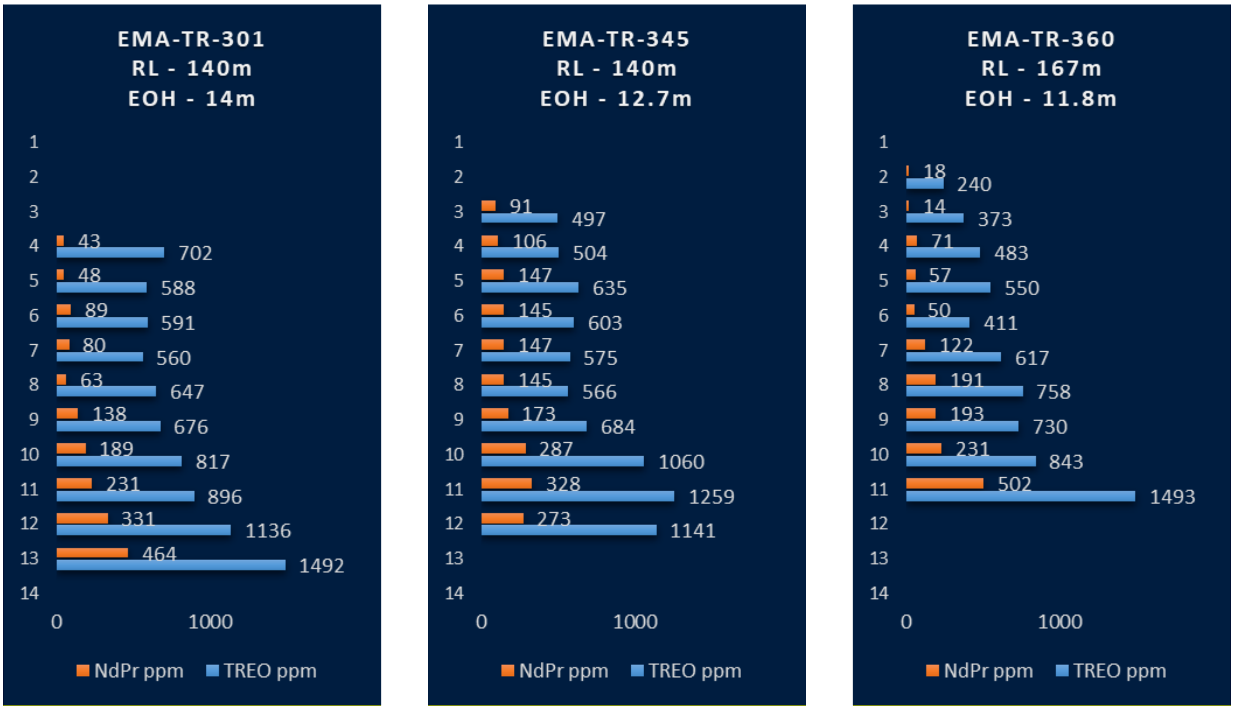

Figure 6 – Drill-hole profiles showing typical ionic REE enrichment zone with high NdPr grades close to the fresh rock interface.

Ongoing Work Program at Ema, Q1 2025

1. Finalise assaying of the Mineral Resource infill drilling program

- All assays anticipated during Q1

2. Processing and Metallurgical Testing

- Complete magnesium sulfate leaching assays of every metre of every hole to extract additional data from selected infill drilling holes which will underpin and support both the MRE update, the scoping study and create a geo metallurgical model to assist with the next phases of project design
- Conduct a comprehensive suite of metallurgical tests on a representative master sample to determine processing characteristics from the current infill program to be completed by ANSTO

3. Mineral Resource Estimate update

- An updated MRE to convert the entire infill drilling area to indicated status to be conducted in March-April

4. Completion of Scoping Study

The Scoping Study, utilising the updated MRE, metallurgical test results and groundwater modelling data is currently nearing completion and due for release during Q1.

References

[1]Brazilian Critical Minerals (ASX:BCM) – Updated Mineral Resource Estimate for Ema 14th January 2025

[2]Brazilian Critical Minerals (ASX:BCM) – High-Value Mixed Rare Earth Carbonate Produced For Ema 11th November 2024

This announcement has been authorised for release by the Board of Directors.

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About Brazilian Critical Minerals Ltd

Brazilian Critical Minerals Limited (BCM) is a mineral exploration company listed on the Australian Securities Exchange.

Its major exploration focus is Brazil, in the Apuí region, where BCM has discovered a world class Ionic Adsorbed Clay (IAC) Rare Earth Elements deposit. The Ema IAC project is contained within the 781 km² of exploration tenements within the Colider Group.

BCM has defined an inferred MRE of 977Mt of REE's with metallurgical recoveries averaging 68% MREO some of the highest for these types of deposits anywhere in the world.

The Company is currently converting this MRE from Inferred into the Indicated category with an extensive drill program which will inform the scoping study and economic analysis due for completion in Q1 2025.

JORC Category	cut-off ppm TREO	Tonnes Mt	TREO ppm	NdPr ppm	DyTb ppm	MREO ppm	MREO:TREO %
Indicated	500	135	763	174	16	190	25
Inferred	500	842	724	172	16	188	26
Total	**500**	**977**	**729**	**172**	**16**	**188**	**26**

Competent Person Statement

The information in this announcement that relates to exploration results is based on information compiled by Mr. Antonio de Castro, BSc (Hons), MAusIMM, CREA, who acts as BCM´s Senior Consulting Geologist through the consultancy firm, ADC Geologia Ltda. Mr. de Castro has sufficient experience which is relevant to the type of deposit under consideration and to the reporting of exploration results and analytical and metallurgical test work to qualify as a competent person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Castro consents to the report being issued in the form and context in which it appears.

The Company confirms that is not aware of any new information or data that materially affects the information included in the above-mentioned releases.

Appendices

Appendix 1 – Auger hole intersections at a 500ppm TREO cut-off grade (batch 3)

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-157	7	8	636	20	21	119	14
EMA-TR-295	3	4	678	5	13	23	9
EMA-TR-295	8	11	671	24	23	151	15
EMA-TR-296	5	9	768	25	25	177	19
EMA-TR-297	5	2	698	28	20	179	13
EMA-TR-298	9	8	653	19	14	117	10
EMA-TR-299	3	9.35	665	22	21	141	14
EMA-TR-300	1	1	669	12	12	70	9
EMA-TR-300	3	7.4	900	26	20	220	18
EMA-TR-301	4	10	810	20	17	167	14
EMA-TR-302	10	1	537	17	19	83	10
EMA-TR-302	12	1	515	22	23	104	12
EMA-TR-303	3	9.5	733	20	17	150	12
EMA-TR-304	2	1	555	19	23	93	13
EMA-TR-305	6	6.3	957	21	17	166	14
EMA-TR-306	11	1	571	19	20	94	12
EMA-TR-306	14	3	598	24	27	129	16
EMA-TR-307	7	1.2	784	8	11	55	9
EMA-TR-308	10	5.7	688	23	20	145	14
EMA-TR-309	6	4.2	863	28	19	247	16
EMA-TR-310	9	5	669	24	20	145	13
EMA-TR-311	2	5	792	26	22	192	16
EMA-TR-312	3	2	626	10	18	48	13
EMA-TR-312	7	2	586	21	20	114	12
EMA-TR-313	7	1	523	19	21	89	12
EMA-TR-314	4	2.5	962	29	19	270	18

[1] MREO (Magnetic Rare Earth Oxide) = Tb4O7 + Dy2O3 + Nd2O3 + Pr6O11
[2] HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-315	8	1	686	15	13	93	9
EMA-TR-316	5	4	889	22	16	183	13
EMA-TR-317	7	1	514	12	18	52	10
EMA-TR-317	9	5	734	27	21	185	15
EMA-TR-318	18	5	562	21	16	109	9
EMA-TR-319	7	10	1,273	34	20	410	24
EMA-TR-320	3	10	756	24	16	172	12
EMA-TR-321	1	7	690	19	17	121	12
EMA-TR-322	4	4	601	20	14	115	8
EMA-TR-323	4	1.5	654	17	19	107	12
EMA-TR-324	5	1	668	12	14	69	10
EMA-TR-324	7	7.8	679	26	21	166	13
EMA-TR-325	1	3	540	13	18	59	11
EMA-TR-325	5	1	545	11	17	48	10
EMA-TR-325	7	1.5	734	15	13	97	10
EMA-TR-326	7	5	795	15	14	105	11
EMA-TR-327	7	6	806	14	11	102	9
EMA-TR-328	2	1	514	9	13	39	7
EMA-TR-328	6	1	514	23	24	108	12
EMA-TR-329	4	13.5	636	19	18	107	11
EMA-TR-330	3	5.5	838	28	18	232	15
EMA-TR-331	3	1	578	13	17	62	11
EMA-TR-331	8	2	546	10	19	41	11
EMA-TR-331	11	7	776	25	20	191	15
EMA-TR-332	7	6	843	25	16	198	12
EMA-TR-333	1	5	966	9	10	64	7
EMA-TR-333	7	2	1,018	20	14	194	14
EMA-TR-334	1	6.5	783	25	16	189	13
EMA-TR-335	7	1.5	556	21	20	106	11
EMA-TR-336	9	4.6	985	31	23	291	24
EMA-TR-337	5	9.65	818	27	19	209	15
EMA-TR-338	3	2	588	15	18	76	11
EMA-TR-338	6	5.5	814	27	22	218	18
EMA-TR-339	2	9	622	23	20	135	12
EMA-TR-340	7	2	600	18	18	95	12
EMA-TR-340	10	1	548	17	19	81	11
EMA-TR-340	13	2.4	1,590	8	7	132	11
EMA-TR-341	3	1	695	2	5	8	4
EMA-TR-341	5	2	586	8	10	38	6
EMA-TR-342	8	9	696	23	18	147	13
EMA-TR-343	8	10	666	18	21	101	13
EMA-TR-344	4	7	601	15	14	84	9
EMA-TR-345	4	8.7	768	27	22	192	18
EMA-TR-346	11	8	792	25	26	186	21
EMA-TR-347	6	10	1,214	32	26	348	34
EMA-TR-348	4	1	519	22	16	104	10
EMA-TR-348	6	3	629	23	21	131	14
EMA-TR-349	2	5	723	25	20	170	15
EMA-TR-350	11	8	1,189	33	19	390	19
EMA-TR-351	8	1	524	22	17	107	10
EMA-TR-352	4	3	566	23	17	122	10

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-352	8	1.5	793	30	24	220	18
EMA-TR-354	6	3	1,016	31	25	291	25
EMA-TR-355	10	7.3	765	28	22	202	17
EMA-TR-356	7	6	643	20	18	118	12
EMA-TR-357	15	6	570	149	26	137	12
EMA-TR-358	4	7	699	21	17	138	12
EMA-TR-359	10	4	810	12	9	89	8
EMA-TR-359	15	5	779	26	26	192	22
EMA-TR-360	5	1	550	13	23	57	14
EMA-TR-360	7	4.8	863	28	18	237	15
EMA-TR-361	13	9.5	631	13	16	70	10
EMA-TR-362	5	2	588	20	18	105	11
EMA-TR-363	6	1	697	29	21	185	15
EMA-TR-364	14	6	729	23	20	152	14
EMA-TR-365	2	9	979	28	25	257	23
EMA-TR-366	6	2.45	735	20	16	139	12
EMA-TR-367	3	3	618	7	16	33	11
EMA-TR-367	8	4.3	738	20	19	134	14
EMA-TR-369	4	5	705	27	21	182	15
EMA-TR-370	8	3.7	616	20	17	118	11

Appendix 2 – Total REE oxide distribution down-hole (batch 3)

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-157	5	6	398	25	9	23	11	
EMA-TR-157	6	7	390	26	10	26	12	
EMA-TR-157	7	8	511	20	8	31	11	636
EMA-TR-157	8	9	667	19	12	68	14	
EMA-TR-157	9	10	567	20	14	70	12	
EMA-TR-157	10	11	625	19	21	117	12	
EMA-TR-157	11	12	537	23	25	120	13	
EMA-TR-157	12	13	743	21	25	171	15	
EMA-TR-157	13	14	662	22	27	162	14	
EMA-TR-157	14	15	772	24	30	213	17	
EMA-TR-295	0.5	1	216	40	12	16	10	
EMA-TR-295	1	2	329	26	6	12	9	
EMA-TR-295	2	3	443	20	6	17	10	
EMA-TR-295	3	4	743	12	3	14	9	678
EMA-TR-295	4	5	815	10	3	16	9	
EMA-TR-295	5	6	595	14	5	21	9	
EMA-TR-295	6	7	561	15	9	41	9	
EMA-TR-295	7	8	488	19	16	69	10	
EMA-TR-295	8	9	534	18	18	88	10	671
EMA-TR-295	9	10	543	18	23	118	10	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-295	10	11	804	18	28	209	14	
EMA-TR-295	11	12	846	20	28	223	17	
EMA-TR-295	12	13	793	23	28	205	18	
EMA-TR-295	13	14	712	26	25	161	18	
EMA-TR-295	14	15	783	26	25	175	20	
EMA-TR-295	15	16	794	27	24	170	21	
EMA-TR-295	16	17	518	25	23	104	14	
EMA-TR-295	17	18	541	25	23	108	14	
EMA-TR-295	18	19	511	26	22	100	13	
EMA-TR-295	19	20	497	25	22	97	12	
EMA-TR-296	5	6	557	18	12	55	11	
EMA-TR-296	6	7	772	15	17	120	12	
EMA-TR-296	7	8	912	22	28	233	19	
EMA-TR-296	8	9	956	27	30	259	25	
EMA-TR-296	9	10	997	28	30	271	28	768
EMA-TR-296	10	11	867	29	29	224	24	
EMA-TR-296	11	12	706	30	28	176	20	
EMA-TR-296	12	13	600	30	26	139	17	
EMA-TR-296	13	14	543	28	25	120	16	
EMA-TR-296	14	14.25	465	28	24	97	14	
EMA-TR-297	0.5	1	234	42	18	31	11	
EMA-TR-297	1	2	227	41	19	32	10	
EMA-TR-297	2	3	256	41	18	35	12	
EMA-TR-297	3	4	203	39	21	33	9	
EMA-TR-297	4	5	440	21	26	106	9	
EMA-TR-297	5	6	761	16	27	191	12	698
EMA-TR-297	6	7	634	23	29	167	15	
EMA-TR-298	7	8	264	33	13	25	10	
EMA-TR-298	8	9	416	23	13	43	12	
EMA-TR-298	9	10	504	14	13	57	7	
EMA-TR-298	10	11	616	15	20	115	9	
EMA-TR-298	11	12	611	15	21	118	10	
EMA-TR-298	12	13	597	14	21	115	9	
EMA-TR-298	13	14	724	13	21	146	9	653
EMA-TR-298	14	15	672	17	22	136	11	
EMA-TR-298	15	16	707	14	19	121	10	
EMA-TR-298	16	17	790	14	17	125	11	
EMA-TR-299	3	4	503	20	17	73	10	665

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-299	4	5	583	19	17	86	11	
EMA-TR-299	5	6	624	18	17	91	12	
EMA-TR-299	6	7	557	19	20	102	11	
EMA-TR-299	7	8	528	21	22	106	11	
EMA-TR-299	8	9	840	25	30	232	20	
EMA-TR-299	9	10	995	24	29	267	22	
EMA-TR-299	10	11	716	24	27	176	16	
EMA-TR-299	11	12	670	22	23	143	15	
EMA-TR-299	12	12.35	569	21	22	115	12	
EMA-TR-300	1	2	669	12	12	70	9	669
EMA-TR-300	2	3	488	19	16	71	10	
EMA-TR-300	3	4	586	18	22	116	10	900
EMA-TR-300	4	5	831	15	23	180	12	
EMA-TR-300	5	6	839	17	27	212	14	
EMA-TR-300	6	7	973	17	26	239	16	
EMA-TR-300	7	8	1,007	20	27	250	20	
EMA-TR-300	8	9	1,087	23	29	293	25	
EMA-TR-300	9	10	1,015	28	28	259	28	
EMA-TR-300	10	10.4	808	34	27	188	27	
EMA-TR-301	4	5	702	12	7	43	9	810
EMA-TR-301	5	6	588	15	10	48	9	
EMA-TR-301	6	7	591	19	17	89	12	
EMA-TR-301	7	8	560	17	16	80	10	
EMA-TR-301	8	9	647	13	11	63	9	
EMA-TR-301	9	10	676	15	22	138	11	
EMA-TR-301	10	11	817	16	25	189	13	
EMA-TR-301	11	12	896	17	27	231	14	
EMA-TR-301	12	13	1,136	19	31	331	20	
EMA-TR-301	13	14	1,492	23	33	464	31	
EMA-TR-302	6	7	161	50	16	16	9	
EMA-TR-302	7	8	276	30	12	23	9	
EMA-TR-302	8	9	424	21	13	45	10	
EMA-TR-302	9	10	485	20	14	58	10	
EMA-TR-302	10	11	537	19	18	83	10	537
EMA-TR-302	11	12	478	23	21	88	11	
EMA-TR-302	12	13	515	23	22	104	12	515
EMA-TR-302	13	14	456	23	22	90	11	
EMA-TR-302	14	15	427	25	22	85	11	
EMA-TR-302	15	15.35	531	23	23	111	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-303	3	4	636	14	6	28	10	
EMA-TR-303	4	5	500	19	12	48	10	
EMA-TR-303	5	6	833	12	13	96	11	
EMA-TR-303	6	7	675	15	20	124	10	
EMA-TR-303	7	8	585	15	17	94	8	733
EMA-TR-303	8	9	522	17	22	107	9	
EMA-TR-303	9	10	586	19	24	132	11	
EMA-TR-303	10	11	677	23	29	181	14	
EMA-TR-303	11	12	1,189	20	33	368	21	
EMA-TR-303	12	12.5	1,512	21	34	492	29	
EMA-TR-304	0.5	1	137	62	16	14	9	
EMA-TR-304	1	2	148	46	18	19	7	
EMA-TR-304	2	3	555	23	19	93	13	555
EMA-TR-304	3	4	425	27	20	75	11	
EMA-TR-304	4	5	457	28	20	81	12	
EMA-TR-304	5	6	412	23	21	75	10	
EMA-TR-304	6	6.5	402	25	21	73	10	
EMA-TR-305	3	4	152	54	17	17	9	
EMA-TR-305	4	5	224	37	19	35	8	
EMA-TR-305	5	6	327	28	21	60	9	
EMA-TR-305	6	7	570	20	20	100	11	
EMA-TR-305	7	8	602	18	22	125	10	
EMA-TR-305	8	9	2,581	8	15	355	22	
EMA-TR-305	9	10	785	17	20	148	13	957
EMA-TR-305	10	11	689	19	23	145	13	
EMA-TR-305	11	12	601	21	23	128	13	
EMA-TR-305	12	12.3	668	20	23	142	13	
EMA-TR-306	7	8	353	26	10	27	9	
EMA-TR-306	8	9	326	31	14	35	10	
EMA-TR-306	9	10	388	23	15	51	9	
EMA-TR-306	10	11	400	25	18	62	10	
EMA-TR-306	11	12	571	20	19	95	12	571
EMA-TR-306	12	13	389	29	20	67	11	
EMA-TR-306	13	14	395	24	22	76	9	
EMA-TR-306	14	15	501	26	23	102	13	
EMA-TR-306	15	16	548	26	24	120	14	598
EMA-TR-306	16	17	745	29	25	166	20	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-307	0.5	1	138	57	12	8	8	
EMA-TR-307	1	2	110	52	13	8	6	
EMA-TR-307	2	3	107	60	12	6	7	
EMA-TR-307	3	4	130	62	12	8	8	
EMA-TR-307	4	5	133	56	12	9	8	
EMA-TR-307	5	6	163	43	12	12	7	
EMA-TR-307	6	7	207	41	14	20	9	
EMA-TR-307	7	8	740	11	8	48	9	784
EMA-TR-307	8	8.2	1,007	12	10	89	11	
EMA-TR-308	6	7	253	32	11	19	8	
EMA-TR-308	7	8	215	34	8	10	8	
EMA-TR-308	8	9	286	26	7	11	8	
EMA-TR-308	9	10	360	22	10	28	9	
EMA-TR-308	10	11	557	18	14	67	11	
EMA-TR-308	11	12	904	14	17	138	12	
EMA-TR-308	12	13	561	18	22	110	11	688
EMA-TR-308	13	14	762	23	31	217	18	
EMA-TR-308	14	15	698	24	30	189	17	
EMA-TR-308	15	15.7	631	22	26	150	13	
EMA-TR-309	0.5	1	218	22	7	10	5	
EMA-TR-309	1	2	361	16	7	18	6	
EMA-TR-309	2	3	380	16	9	30	6	
EMA-TR-309	3	4	350	19	15	43	7	
EMA-TR-309	4	5	341	20	14	42	7	
EMA-TR-309	5	6	409	17	17	64	7	
EMA-TR-309	6	7	531	17	17	80	10	
EMA-TR-309	7	8	648	21	27	159	14	
EMA-TR-309	8	9	1,098	18	34	356	19	863
EMA-TR-309	9	10	1,151	21	35	382	22	
EMA-TR-309	10	10.2	975	21	33	302	18	
EMA-TR-310	8	9	491	14	8	32	7	
EMA-TR-310	9	10	541	16	16	81	8	
EMA-TR-310	10	11	826	14	18	135	11	
EMA-TR-310	11	12	678	23	28	173	14	669
EMA-TR-310	12	13	615	25	28	158	15	
EMA-TR-310	13	14	684	23	28	175	16	
EMA-TR-310	14	15	483	24	23	99	12	
EMA-TR-310	15	16	406	24	23	81	10	
EMA-TR-310	16	17	408	23	22	81	9	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-310	17	17.5	452	22	22	88	10	
EMA-TR-311	0.5	1	237	30	12	21	8	
EMA-TR-311	1	2	426	17	10	37	8	
EMA-TR-311	2	3	940	12	19	166	11	792
EMA-TR-311	3	4	644	19	26	154	12	
EMA-TR-311	4	5	813	23	30	223	18	
EMA-TR-311	5	6	893	27	31	253	23	
EMA-TR-311	6	7	670	28	27	165	19	
EMA-TR-311	7	8	442	27	24	93	12	
EMA-TR-312	0.5	1	191	51	14	16	11	
EMA-TR-312	1	2	230	48	13	18	12	
EMA-TR-312	2	3	424	23	10	31	11	
EMA-TR-312	3	4	716	15	9	49	13	626
EMA-TR-312	4	5	536	21	11	46	13	
EMA-TR-312	5	6	458	22	12	43	11	
EMA-TR-312	6	7	402	25	16	55	11	
EMA-TR-312	7	8	532	20	19	91	11	586
EMA-TR-312	8	9	640	20	24	137	14	
EMA-TR-313	0.5	1	155	52	15	14	9	
EMA-TR-313	1	2	157	52	13	13	9	
EMA-TR-313	2	3	224	37	12	17	9	
EMA-TR-313	3	4	215	41	11	14	10	
EMA-TR-313	4	5	224	39	12	17	10	
EMA-TR-313	5	6	253	35	18	36	10	
EMA-TR-313	6	7	392	24	21	74	10	
EMA-TR-313	7	8	523	21	19	89	12	523
EMA-TR-313	8	9	485	19	15	64	9	
EMA-TR-314	0.5	1	327	25	9	21	9	
EMA-TR-314	1	2	438	20	8	26	9	
EMA-TR-314	2	3	452	20	9	30	9	
EMA-TR-314	3	4	460	21	12	45	10	
EMA-TR-314	4	5	688	18	21	135	13	962
EMA-TR-314	5	6	1,135	19	33	352	20	
EMA-TR-314	6	6.5	1,163	21	34	378	23	
EMA-TR-315	0.5	1	115	62	17	12	8	
EMA-TR-315	1	2	124	60	17	12	8	
EMA-TR-315	2	3	104	70	14	7	8	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-315	3	4	101	74	14	6	8	
EMA-TR-315	4	5	128	59	14	10	8	
EMA-TR-315	5	6	173	40	16	20	7	
EMA-TR-315	6	7	317	24	18	50	8	
EMA-TR-315	7	8	430	18	18	69	8	
EMA-TR-315	8	9	686	13	15	93	9	686
EMA-TR-316	0.5	1	100	74	15	6	8	
EMA-TR-316	1	2	100	67	15	8	7	
EMA-TR-316	2	3	92	76	14	5	8	
EMA-TR-316	3	4	143	55	17	16	9	
EMA-TR-316	4	5	267	28	20	45	8	
EMA-TR-316	5	6	634	15	18	106	10	889
EMA-TR-316	6	7	1,198	11	16	184	13	
EMA-TR-316	7	8	882	20	28	232	16	
EMA-TR-316	8	9	842	18	26	209	14	
EMA-TR-317	4	5	144	59	13	10	9	
EMA-TR-317	5	6	177	45	11	11	8	
EMA-TR-317	6	7	197	40	12	16	8	
EMA-TR-317	7	8	514	18	12	52	10	514
EMA-TR-317	8	9	496	19	18	81	10	
EMA-TR-317	9	10	792	20	28	207	16	734
EMA-TR-317	10	11	999	19	29	270	19	
EMA-TR-317	11	12	766	20	27	189	14	
EMA-TR-317	12	13	584	25	27	142	15	
EMA-TR-317	13	14	528	23	25	118	12	
EMA-TR-318	13	14	378	11	9	30	4	
EMA-TR-318	14	15	333	13	18	54	4	
EMA-TR-318	15	16	433	11	18	73	5	
EMA-TR-318	16	17	440	13	19	79	6	
EMA-TR-318	17	18	484	16	20	90	8	
EMA-TR-318	18	19	520	16	21	103	8	562
EMA-TR-318	19	20	528	16	21	101	8	
EMA-TR-318	20	21	540	15	19	93	9	
EMA-TR-318	21	22	628	17	22	125	10	
EMA-TR-318	22	23	595	17	23	124	10	
EMA-TR-319	7	8	999	17	35	335	16	1,273
EMA-TR-319	8	9	1,081	17	34	356	16	
EMA-TR-319	9	10	1,259	16	32	387	18	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-319	10	11	1,260	18	34	413	20	
EMA-TR-319	11	12	1,411	19	34	456	25	
EMA-TR-319	12	13	1,466	21	35	486	28	
EMA-TR-319	13	14	1,402	23	35	461	30	
EMA-TR-319	14	15	1,343	24	34	425	30	
EMA-TR-319	15	16	1,322	25	34	416	31	
EMA-TR-319	16	17	1,183	24	34	370	27	
EMA-TR-320	3	4	543	16	16	80	9	756
EMA-TR-320	4	5	654	15	20	122	11	
EMA-TR-320	5	6	621	14	19	111	9	
EMA-TR-320	6	7	675	14	20	127	10	
EMA-TR-320	7	8	707	15	23	153	11	
EMA-TR-320	8	9	688	15	23	148	11	
EMA-TR-320	9	10	800	15	26	197	13	
EMA-TR-320	10	11	1,030	15	29	280	16	
EMA-TR-320	11	12	982	19	30	275	18	
EMA-TR-320	12	13	857	18	28	227	16	
EMA-TR-321	0.5	1	349	24	14	41	9	
EMA-TR-321	1	2	510	18	12	53	10	690
EMA-TR-321	2	3	583	15	14	75	9	
EMA-TR-321	3	4	777	14	15	108	11	
EMA-TR-321	4	5	608	17	19	106	11	
EMA-TR-321	5	6	806	17	22	159	15	
EMA-TR-321	6	7	804	19	24	181	15	
EMA-TR-321	7	8	744	22	24	165	16	
EMA-TR-322	0.5	1	176	40	19	26	8	
EMA-TR-322	1	2	203	38	18	28	8	
EMA-TR-322	2	3	342	28	21	61	10	
EMA-TR-322	3	4	414	20	21	78	9	
EMA-TR-322	4	5	563	15	18	92	9	601
EMA-TR-322	5	6	594	14	21	114	8	
EMA-TR-322	6	7	590	13	21	115	8	
EMA-TR-322	7	8	657	14	22	137	9	
EMA-TR-323	0.5	1	272	30	14	30	9	
EMA-TR-323	1	2	449	23	16	61	11	
EMA-TR-323	2	3	458	22	18	73	11	
EMA-TR-323	3	4	420	21	20	73	10	
EMA-TR-323	4	5	503	21	16	68	11	654

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-323	5	5.5	956	14	21	185	14	
EMA-TR-324	5	6	668	14	12	69	10	668
EMA-TR-324	6	7	438	18	17	67	8	
EMA-TR-324	7	8	532	20	23	111	11	679
EMA-TR-324	8	9	586	20	26	141	12	
EMA-TR-324	9	10	679	19	30	194	12	
EMA-TR-324	10	11	835	18	31	241	14	
EMA-TR-324	11	12	850	23	26	202	18	
EMA-TR-324	12	13	835	22	28	218	17	
EMA-TR-324	13	14	557	22	21	107	12	
EMA-TR-324	14	14.8	524	20	21	97	11	
EMA-TR-325	0.5	1	283	25	8	15	8	
EMA-TR-325	1	2	550	17	10	44	11	540
EMA-TR-325	2	3	507	19	17	76	11	
EMA-TR-325	3	4	563	18	12	56	12	
EMA-TR-325	4	5	485	20	11	44	11	
EMA-TR-325	5	6	545	17	11	48	10	545
EMA-TR-325	6	7	485	18	13	54	9	
EMA-TR-325	7	8	744	12	12	82	10	734
EMA-TR-325	8	8.5	713	15	19	127	11	
EMA-TR-326	2	3	344	39	16	40	15	
EMA-TR-326	3	4	434	34	18	62	16	
EMA-TR-326	4	5	412	27	21	74	12	
EMA-TR-326	5	6	398	30	20	66	13	
EMA-TR-326	6	7	384	33	20	63	14	
EMA-TR-326	7	8	991	10	10	91	10	795
EMA-TR-326	8	9	727	13	11	72	10	
EMA-TR-326	9	10	760	13	14	94	10	
EMA-TR-326	10	11	752	17	19	127	13	
EMA-TR-326	11	12	745	18	21	139	13	
EMA-TR-327	3	4	434	19	16	60	9	
EMA-TR-327	4	5	337	19	8	20	7	
EMA-TR-327	5	6	371	18	5	9	8	
EMA-TR-327	6	7	372	20	6	15	8	
EMA-TR-327	7	8	910	10	17	149	9	806
EMA-TR-327	8	9	1,081	6	6	54	8	
EMA-TR-327	9	10	685	12	13	78	8	
EMA-TR-327	10	11	649	13	14	85	8	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-327	11	12	824	11	14	107	10	
EMA-TR-327	12	13	689	14	22	142	10	
EMA-TR-328	0.5	1	252	26	13	26	7	
EMA-TR-328	1	2	365	20	12	38	7	
EMA-TR-328	2	3	514	13	9	39	7	514
EMA-TR-328	3	4	409	19	11	38	8	
EMA-TR-328	4	5	234	30	18	34	7	
EMA-TR-328	5	6	271	27	20	47	7	
EMA-TR-328	6	7	514	24	23	108	12	514
EMA-TR-329	0.5	1	181	38	18	25	7	
EMA-TR-329	1	2	259	32	15	30	9	
EMA-TR-329	2	3	242	33	12	20	9	
EMA-TR-329	3	4	241	32	12	21	8	
EMA-TR-329	4	5	657	12	5	27	8	
EMA-TR-329	5	6	733	14	14	95	12	
EMA-TR-329	6	7	635	15	14	79	10	
EMA-TR-329	7	8	675	12	13	82	9	
EMA-TR-329	8	9	646	15	14	83	10	
EMA-TR-329	9	10	642	16	18	108	10	
EMA-TR-329	10	11	669	17	21	132	11	
EMA-TR-329	11	12	653	17	23	141	11	636
EMA-TR-329	12	13	669	19	24	147	13	
EMA-TR-329	13	14	601	22	24	132	13	
EMA-TR-329	14	15	580	23	24	126	13	
EMA-TR-329	15	16	577	23	23	121	13	
EMA-TR-329	16	17	578	24	23	120	14	
EMA-TR-329	17	17.5	535	25	23	110	13	
EMA-TR-330	0.5	1	215	36	13	20	9	
EMA-TR-330	1	2	366	20	13	40	8	
EMA-TR-330	2	3	498	14	15	67	7	
EMA-TR-330	3	4	529	17	20	96	9	
EMA-TR-330	4	5	637	17	25	147	10	
EMA-TR-330	5	6	864	16	28	232	13	
EMA-TR-330	6	7	897	20	32	273	17	838
EMA-TR-330	7	8	1,244	21	34	392	24	
EMA-TR-330	8	8.5	872	20	33	268	17	
EMA-TR-331	0.5	1	232	37	9	11	9	
EMA-TR-331	1	2	248	34	8	10	9	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-331	2	3	284	28	6	8	9	
EMA-TR-331	3	4	578	17	13	62	11	578
EMA-TR-331	4	5	398	22	6	15	9	
EMA-TR-331	5	6	364	24	6	14	10	
EMA-TR-331	6	7	384	23	6	13	10	
EMA-TR-331	7	8	363	25	8	19	10	
EMA-TR-331	8	9	556	19	10	43	11	546
EMA-TR-331	9	10	536	19	9	39	11	
EMA-TR-331	10	11	370	25	14	40	10	
EMA-TR-331	11	12	505	20	12	53	11	776
EMA-TR-331	12	13	629	19	18	103	11	
EMA-TR-331	13	14	589	19	23	127	11	
EMA-TR-331	14	15	901	19	29	247	16	
EMA-TR-331	15	16	1,013	20	32	308	18	
EMA-TR-331	16	17	981	23	31	283	20	
EMA-TR-331	17	18	813	23	29	215	18	
EMA-TR-332	3	4	129	59	13	9	8	
EMA-TR-332	4	5	128	55	13	9	7	
EMA-TR-332	5	6	150	45	13	13	6	
EMA-TR-332	6	7	295	20	13	34	6	
EMA-TR-332	7	8	853	10	13	105	8	843
EMA-TR-332	8	9	912	12	19	166	10	
EMA-TR-332	9	10	926	14	27	241	12	
EMA-TR-332	10	11	1,057	18	32	319	18	
EMA-TR-332	11	12	718	20	30	198	14	
EMA-TR-332	12	13	594	23	29	159	13	
EMA-TR-333	0.5	1	188	26	19	31	5	
EMA-TR-333	1	2	539	17	14	68	9	966
EMA-TR-333	2	3	566	12	10	48	7	
EMA-TR-333	3	4	1,887	3	4	62	6	
EMA-TR-333	4	5	1,167	6	7	73	7	
EMA-TR-333	5	6	673	10	11	70	7	
EMA-TR-333	6	7	465	13	12	52	6	
EMA-TR-333	7	8	872	11	14	114	9	1,018
EMA-TR-333	8	9	1,164	17	25	274	19	
EMA-TR-334	0.5	1	349	19	16	48	7	
EMA-TR-334	1	2	581	14	16	85	9	
EMA-TR-334	2	3	700	13	19	120	10	
EMA-TR-334	3	4	822	13	24	186	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-334	4	5	848	14	28	224	12	783
EMA-TR-334	5	6	668	16	28	175	11	
EMA-TR-334	6	7	965	20	32	284	20	
EMA-TR-334	7	7.5	1,013	22	32	300	22	
EMA-TR-335	0.5	1	165	42	16	20	8	
EMA-TR-335	1	2	129	52	15	12	7	
EMA-TR-335	2	3	105	63	15	9	7	
EMA-TR-335	3	4	131	58	16	13	8	
EMA-TR-335	4	5	224	37	19	34	9	
EMA-TR-335	5	6	405	23	21	74	10	
EMA-TR-335	6	7	495	19	21	94	10	
EMA-TR-335	7	8	574	20	21	110	11	556
EMA-TR-335	8	8.5	521	21	21	98	11	
EMA-TR-336	4	5	411	15	7	23	6	
EMA-TR-336	5	6	450	16	11	43	7	
EMA-TR-336	6	7	440	16	9	33	7	
EMA-TR-336	7	8	408	18	9	30	7	
EMA-TR-336	8	9	346	17	8	21	6	
EMA-TR-336	9	10	594	18	28	155	11	985
EMA-TR-336	10	11	1,131	19	35	375	21	
EMA-TR-336	11	12	1,056	21	31	309	24	
EMA-TR-336	12	13	1,223	29	33	367	36	
EMA-TR-336	13	13.6	880	30	29	225	27	
EMA-TR-337	5	6	643	19	21	122	12	818
EMA-TR-337	6	7	787	18	25	184	15	
EMA-TR-337	7	8	787	15	23	170	12	
EMA-TR-337	8	9	734	17	26	179	12	
EMA-TR-337	9	10	835	14	24	191	12	
EMA-TR-337	10	11	761	17	28	204	13	
EMA-TR-337	11	12	862	16	25	202	13	
EMA-TR-337	12	13	1,023	22	34	327	22	
EMA-TR-337	13	14	860	24	32	254	20	
EMA-TR-337	14	14.65	921	27	33	279	24	
EMA-TR-338	0.5	1	331	29	9	20	11	
EMA-TR-338	1	2	420	21	8	21	10	
EMA-TR-338	2	3	486	20	11	41	11	
EMA-TR-338	3	4	661	16	14	82	11	588
EMA-TR-338	4	5	514	19	16	70	10	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-338	5	6	489	20	20	87	10	
EMA-TR-338	6	7	554	18	16	80	10	814
EMA-TR-338	7	8	517	21	21	97	11	
EMA-TR-338	8	9	797	19	28	206	15	
EMA-TR-338	9	10	1,067	23	34	338	23	
EMA-TR-338	10	11	1,071	26	34	337	26	
EMA-TR-338	11	11.5	939	27	33	286	24	
EMA-TR-339	1	2	434	25	15	52	11	
EMA-TR-339	2	3	516	21	16	71	11	622
EMA-TR-339	3	4	650	16	14	79	11	
EMA-TR-339	4	5	571	19	21	107	11	
EMA-TR-339	5	6	527	20	24	115	10	
EMA-TR-339	6	7	629	21	26	150	13	
EMA-TR-339	7	8	662	19	28	172	12	
EMA-TR-339	8	9	716	21	28	188	14	
EMA-TR-339	9	10	724	23	28	189	15	
EMA-TR-339	10	11	600	21	25	141	12	
EMA-TR-340	6	7	445	20	8	27	10	
EMA-TR-340	7	8	652	17	18	105	12	600
EMA-TR-340	8	9	547	20	18	85	12	
EMA-TR-340	9	10	464	20	11	43	10	
EMA-TR-340	10	11	548	19	17	81	11	548
EMA-TR-340	11	12	359	23	15	45	8	
EMA-TR-340	12	13	463	18	11	40	9	
EMA-TR-340	13	14	1,188	8	5	46	11	1,590
EMA-TR-340	14	15	2,028	5	11	219	10	
EMA-TR-340	15	15.4	1,497	8	10	133	12	
EMA-TR-341	1	2	212	28	9	13	6	
EMA-TR-341	2	3	401	12	4	11	5	
EMA-TR-341	3	4	695	5	2	8	4	695
EMA-TR-341	4	5	397	10	4	11	4	
EMA-TR-341	5	6	562	10	9	47	6	586
EMA-TR-341	6	7	611	9	6	30	6	
EMA-TR-341	7	8	480	14	13	55	7	
EMA-TR-341	8	9	482	13	15	64	7	
EMA-TR-341	9	10	443	12	18	73	6	
EMA-TR-341	10	10.4	173	14	16	24	3	
EMA-TR-342	7	8	488	17	18	80	8	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-342	8	9	546	18	18	86	11	696
EMA-TR-342	9	10	661	17	19	113	11	
EMA-TR-342	10	11	586	18	19	101	11	
EMA-TR-342	11	12	731	11	14	96	8	
EMA-TR-342	12	13	604	16	24	137	10	
EMA-TR-342	13	14	719	19	25	163	14	
EMA-TR-342	14	15	878	23	28	229	20	
EMA-TR-342	15	16	734	20	28	187	14	
EMA-TR-342	16	17	809	23	28	209	19	
EMA-TR-343	8	9	993	10	8	70	12	666
EMA-TR-343	9	10	658	16	13	77	11	
EMA-TR-343	10	11	531	23	16	74	12	
EMA-TR-343	11	12	501	23	17	77	10	
EMA-TR-343	12	13	593	19	15	78	11	
EMA-TR-343	13	14	788	20	15	102	15	
EMA-TR-343	14	15	666	25	20	119	15	
EMA-TR-343	15	16	622	24	22	124	14	
EMA-TR-343	16	17	623	24	24	136	15	
EMA-TR-343	17	18	683	24	26	159	16	
EMA-TR-344	1	2	278	29	19	45	9	
EMA-TR-344	2	3	453	16	8	27	8	
EMA-TR-344	3	4	391	20	9	26	8	
EMA-TR-344	4	5	541	16	12	55	10	601
EMA-TR-344	5	6	591	15	12	63	10	
EMA-TR-344	6	7	631	14	14	80	9	
EMA-TR-344	7	8	584	11	9	47	7	
EMA-TR-344	8	9	661	12	16	96	8	
EMA-TR-344	9	10	552	16	21	108	9	
EMA-TR-344	10	11	650	14	22	137	9	
EMA-TR-345	3	4	497	17	20	91	9	
EMA-TR-345	4	5	504	17	23	106	8	768
EMA-TR-345	5	6	635	15	25	147	10	
EMA-TR-345	6	7	603	15	26	145	9	
EMA-TR-345	7	8	575	18	27	147	10	
EMA-TR-345	8	9	566	19	27	145	10	
EMA-TR-345	9	10	684	21	27	173	14	
EMA-TR-345	10	11	1,060	30	30	287	31	
EMA-TR-345	11	12	1,259	36	29	328	43	
EMA-TR-345	12	12.7	1,141	32	27	273	34	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-346	9	10	378	31	19	59	13	
EMA-TR-346	10	11	351	27	17	49	10	
EMA-TR-346	11	12	628	23	20	109	15	
EMA-TR-346	12	13	753	19	23	158	15	
EMA-TR-346	13	14	863	25	28	220	21	
EMA-TR-346	14	15	1,469	29	30	395	44	792
EMA-TR-346	15	16	888	31	29	234	28	
EMA-TR-346	16	17	655	30	25	145	19	
EMA-TR-346	17	18	557	29	25	122	16	
EMA-TR-346	18	19	520	26	23	108	14	
EMA-TR-347	6	7	791	15	32	239	12	
EMA-TR-347	7	8	1,000	14	34	328	14	
EMA-TR-347	8	9	1,009	15	36	350	15	
EMA-TR-347	9	10	1,023	16	36	358	15	
EMA-TR-347	10	11	1,408	23	35	460	31	1,214
EMA-TR-347	11	12	1,114	18	36	388	18	
EMA-TR-347	12	13	1,838	33	32	529	61	
EMA-TR-347	13	14	1,973	41	27	446	83	
EMA-TR-347	14	15	1,161	49	24	218	58	
EMA-TR-347	15	16	824	39	24	166	32	
EMA-TR-348	0.5	1	259	22	19	44	6	
EMA-TR-348	1	2	435	17	21	82	8	
EMA-TR-348	2	3	497	18	22	100	10	
EMA-TR-348	3	4	416	18	20	77	8	
EMA-TR-348	4	5	519	16	22	104	10	519
EMA-TR-348	5	6	478	16	21	91	8	
EMA-TR-348	6	7	534	17	22	108	10	
EMA-TR-348	7	8	640	18	22	130	12	629
EMA-TR-348	8	9	714	28	25	156	21	
EMA-TR-349	0.5	1	273	26	17	39	8	
EMA-TR-349	1	2	497	23	21	91	13	
EMA-TR-349	2	3	716	18	21	135	14	
EMA-TR-349	3	4	708	17	23	149	13	
EMA-TR-349	4	5	610	19	25	141	12	723
EMA-TR-349	5	6	836	22	29	227	18	
EMA-TR-349	6	7	744	26	29	197	19	
EMA-TR-350	11	12	865	15	30	247	12	1,189

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-350	12	13	1,325	14	38	484	15	
EMA-TR-350	13	14	1,532	14	38	560	18	
EMA-TR-350	14	15	1,507	16	37	532	20	
EMA-TR-350	15	16	1,399	18	36	484	22	
EMA-TR-350	16	17	1,381	21	34	441	27	
EMA-TR-350	17	18	945	26	30	256	25	
EMA-TR-350	18	19	558	25	24	120	15	
EMA-TR-350	19	20	419	24	23	84	11	
EMA-TR-350	20	21	466	23	25	105	11	
EMA-TR-351	0.5	1	222	30	11	16	8	
EMA-TR-351	1	2	345	18	6	15	7	
EMA-TR-351	2	3	450	14	5	16	7	
EMA-TR-351	3	4	281	20	8	16	6	
EMA-TR-351	4	5	463	14	6	21	7	
EMA-TR-351	5	6	400	17	13	45	7	
EMA-TR-351	6	7	336	20	13	38	7	
EMA-TR-351	7	8	413	18	22	83	7	
EMA-TR-351	8	9	524	17	22	107	10	524
EMA-TR-351	9	10	452	17	23	96	8	
EMA-TR-352	0.5	1	201	33	11	14	7	
EMA-TR-352	1	2	320	19	7	16	7	
EMA-TR-352	2	3	368	18	10	27	7	
EMA-TR-352	3	4	470	19	16	67	10	
EMA-TR-352	4	5	548	16	18	88	9	
EMA-TR-352	5	6	624	20	28	160	12	566
EMA-TR-352	6	7	526	16	24	119	8	
EMA-TR-352	7	8	495	16	22	103	8	
EMA-TR-352	8	9	773	23	30	215	17	793
EMA-TR-352	9	9.5	834	25	30	230	21	
EMA-TR-353	0.5	1	187	39	13	16	8	
EMA-TR-353	1	2	377	22	12	37	9	
EMA-TR-353	2	3	347	25	13	35	10	
EMA-TR-353	3	4	431	18	10	35	9	
EMA-TR-353	4	5	462	17	12	47	9	
EMA-TR-353	5	6	486	19	14	59	10	
EMA-TR-353	6	6.5	454	16	19	77	7	
EMA-TR-354	0.5	1	604	17	15	81	11	
EMA-TR-354	1	2	333	26	16	44	10	

BRAZILIAN CRITICAL MINERALS

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-354	2	3	383	21	9	24	9	
EMA-TR-354	3	4	337	23	9	21	9	
EMA-TR-354	4	5	348	24	13	36	10	
EMA-TR-354	5	6	398	22	18	62	10	
EMA-TR-354	6	7	778	18	28	203	14	1016
EMA-TR-354	7	8	1,137	24	33	351	26	
EMA-TR-354	8	9	1,132	32	31	319	35	
EMA-TR-355	0.5	1	231	29	14	25	7	
EMA-TR-355	1	2	257	28	11	21	8	
EMA-TR-355	2	3	256	27	11	22	7	
EMA-TR-355	3	4	249	29	13	24	8	
EMA-TR-355	4	5	299	22	13	31	7	
EMA-TR-355	5	6	398	19	13	43	8	
EMA-TR-355	6	7	325	24	15	41	8	
EMA-TR-355	7	8	363	22	17	52	8	
EMA-TR-355	8	9	403	21	20	71	9	
EMA-TR-355	9	10	460	21	21	86	10	
EMA-TR-355	10	11	562	18	24	125	10	765
EMA-TR-355	11	12	659	19	28	169	13	
EMA-TR-355	12	13	802	16	28	212	14	
EMA-TR-355	13	14	731	17	29	201	13	
EMA-TR-355	14	15	733	21	31	209	15	
EMA-TR-355	15	16	849	26	29	225	22	
EMA-TR-355	16	17	998	33	30	266	32	
EMA-TR-355	17	17.3	846	32	28	211	27	
EMA-TR-356	3	4	192	36	16	24	8	
EMA-TR-356	4	5	213	41	15	22	10	
EMA-TR-356	5	6	433	16	7	24	8	
EMA-TR-356	6	7	469	19	11	40	10	
EMA-TR-356	7	8	566	13	8	40	8	643
EMA-TR-356	8	9	607	13	13	69	8	
EMA-TR-356	9	10	650	14	15	91	9	
EMA-TR-356	10	11	603	19	24	134	11	
EMA-TR-356	11	12	743	24	29	198	17	
EMA-TR-356	12	13	690	25	28	178	17	
EMA-TR-357	15	16	521	18	25	119	10	570
EMA-TR-357	16	17	568	19	27	140	11	
EMA-TR-357	17	18	584	20	27	144	12	
EMA-TR-357	18	19	586	21	27	147	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-357	19	20	603	24	26	145	14	
EMA-TR-357	20	21	560	28	25	126	15	
EMA-TR-357	21	22	460	27	22	88	12	
EMA-TR-357	22	23	439	25	21	83	12	
EMA-TR-357	23	24	319	23	22	61	7	
EMA-TR-357	24	25	385	24	21	72	9	
EMA-TR-358	1	2	304	27	10	20	9	
EMA-TR-358	2	3	355	25	9	20	10	
EMA-TR-358	3	4	380	24	11	29	10	
EMA-TR-358	4	5	503	21	12	47	12	
EMA-TR-358	5	6	865	13	11	84	12	
EMA-TR-358	6	7	549	20	21	102	12	
EMA-TR-358	7	8	636	18	22	128	12	699
EMA-TR-358	8	9	743	17	23	161	13	
EMA-TR-358	9	10	725	17	27	183	12	
EMA-TR-358	10	11	869	16	32	263	13	
EMA-TR-359	10	11	707	9	18	123	7	
EMA-TR-359	11	12	858	10	16	127	10	810
EMA-TR-359	12	13	1007	7	8	71	8	
EMA-TR-359	13	14	669	9	6	37	6	
EMA-TR-359	14	15	412	16	12	42	7	
EMA-TR-359	15	16	501	17	12	50	9	
EMA-TR-359	16	17	792	26	29	206	21	
EMA-TR-359	17	18	1,039	29	32	300	31	779
EMA-TR-359	18	19	901	31	30	245	28	
EMA-TR-359	19	20	662	29	27	162	19	
EMA-TR-360	2	3	240	29	11	18	8	
EMA-TR-360	3	4	373	18	6	14	8	
EMA-TR-360	4	5	483	18	17	71	9	
EMA-TR-360	5	6	550	23	13	57	14	550
EMA-TR-360	6	7	411	13	13	50	5	
EMA-TR-360	7	8	617	18	21	122	11	
EMA-TR-360	8	9	758	17	27	191	13	
EMA-TR-360	9	10	730	16	28	193	12	863
EMA-TR-360	10	11	843	19	29	231	15	
EMA-TR-360	11	11.8	1,493	19	35	502	28	
EMA-TR-361	13	14	716	13	8	47	10	631
EMA-TR-361	14	15	725	14	9	55	10	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-361	15	16	705	13	10	64	10	
EMA-TR-361	16	17	617	16	13	70	10	
EMA-TR-361	17	18	611	15	13	72	10	
EMA-TR-361	18	19	554	21	16	76	11	
EMA-TR-361	19	20	672	16	13	74	11	
EMA-TR-361	20	21	548	15	15	73	8	
EMA-TR-361	21	22	576	21	19	95	12	
EMA-TR-361	22	22.5	545	16	15	71	9	
EMA-TR-362	0.5	1	262	29	8	13	8	
EMA-TR-362	1	2	322	25	7	13	9	
EMA-TR-362	2	3	348	25	8	17	10	
EMA-TR-362	3	4	346	25	10	26	10	
EMA-TR-362	4	5	401	24	17	59	11	
EMA-TR-362	5	6	521	20	19	87	11	588
EMA-TR-362	6	7	654	17	21	124	12	
EMA-TR-363	0.5	1	306	25	10	23	8	
EMA-TR-363	1	2	308	25	6	12	8	
EMA-TR-363	2	3	445	22	15	57	10	
EMA-TR-363	3	4	400	22	16	56	9	
EMA-TR-363	4	5	447	21	21	83	10	
EMA-TR-363	5	6	489	20	21	91	10	
EMA-TR-363	6	7	697	21	29	185	15	697
EMA-TR-364	10	11	294	39	18	39	13	
EMA-TR-364	11	12	355	29	19	57	11	
EMA-TR-364	12	13	328	28	17	46	10	
EMA-TR-364	13	14	433	21	21	82	10	
EMA-TR-364	14	15	521	20	22	106	11	729
EMA-TR-364	15	16	825	16	17	127	13	
EMA-TR-364	16	17	781	20	22	153	16	
EMA-TR-364	17	18	777	19	21	152	15	
EMA-TR-364	18	19	736	21	26	173	15	
EMA-TR-364	19	20	732	22	30	200	16	
EMA-TR-365	1	2	420	20	19	70	9	
EMA-TR-365	2	3	501	20	24	109	10	979
EMA-TR-365	3	4	900	21	33	278	18	
EMA-TR-365	4	5	2014	20	29	556	38	
EMA-TR-365	5	6	1644	26	30	453	39	
EMA-TR-365	6	7	1190	29	29	312	33	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-365	7	8	843	31	28	208	26	
EMA-TR-365	8	9	588	27	26	137	15	
EMA-TR-365	9	10	579	26	25	131	15	
EMA-TR-365	10	11	554	25	26	129	14	
EMA-TR-366	0.5	1	363	26	13	37	10	
EMA-TR-366	1	2	301	29	12	26	10	
EMA-TR-366	2	3	358	24	9	21	9	
EMA-TR-366	3	4	357	26	11	29	11	
EMA-TR-366	4	5	336	27	15	41	10	
EMA-TR-366	5	6	417	23	16	58	10	
EMA-TR-366	6	7	638	16	16	90	11	
EMA-TR-366	7	8	755	16	23	161	12	735
EMA-TR-366	8	8.45	904	15	23	199	13	
EMA-TR-367	3	4	678	14	6	32	11	
EMA-TR-367	4	5	587	17	9	39	11	618
EMA-TR-367	5	6	589	16	6	27	10	
EMA-TR-367	6	7	454	24	9	29	12	
EMA-TR-367	7	8	401	23	9	26	11	
EMA-TR-367	8	9	557	20	17	81	13	
EMA-TR-367	9	10	791	12	11	78	11	
EMA-TR-367	10	11	733	16	20	138	12	738
EMA-TR-367	11	12	851	25	28	220	20	
EMA-TR-367	12	12.3	806	25	27	195	19	
EMA-TR-369	0.5	1	335	23	13	34	9	
EMA-TR-369	1	2	440	18	11	41	9	
EMA-TR-369	2	3	410	19	13	46	8	
EMA-TR-369	3	4	468	17	17	71	9	
EMA-TR-369	4	5	535	18	21	104	10	
EMA-TR-369	5	6	625	18	25	147	11	
EMA-TR-369	6	7	726	20	30	205	13	705
EMA-TR-369	7	8	862	24	31	250	20	
EMA-TR-369	8	9	776	27	29	204	20	
EMA-TR-370	2	3	313	26	9	19	9	
EMA-TR-370	3	4	345	22	9	21	8	
EMA-TR-370	4	5	316	22	9	23	8	
EMA-TR-370	5	6	344	27	14	36	11	
EMA-TR-370	6	7	389	21	11	32	9	
EMA-TR-370	7	8	327	24	13	35	9	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-370	8	9	513	17	17	76	9	616
EMA-TR-370	9	10	570	17	17	85	10	
EMA-TR-370	10	11	635	17	20	115	11	
EMA-TR-370	11	11.7	801	18	30	227	14	

Many drillholes did not intersect the complete weathering profile, with some holes stopping in the pedolith or saprolite domains due to the depth limitations of the auger drilling, particularly below the water table, and difficulties in penetrating semi-compact rocks.

Appendix 4: Auger drill-hole locations

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-157	185614.94	9179966.06	152.53	15	0	-90	880.107/2008
EMA-TR-295	186003.248	9179969.548	142.419	20	0	-90	880.107/2008
EMA-TR-296	188008.264	9183195.133	128.005	14.25	0	-90	880.184/2016
EMA-TR-297	188420.759	9183978.649	118.289	7	0	-90	880.184/2016
EMA-TR-298	188418.899	9183579.028	128.828	17	0	-90	880.184/2016
EMA-TR-299	188372.04	9182788.991	193.755	12.35	0	-90	880.184/2016
EMA-TR-300	188004.996	9182791.285	137.703	10.4	0	-90	880.184/2016
EMA-TR-301	188384.662	9182011.552	139.95	14	0	-90	880.184/2016
EMA-TR-302	188835.493	9183959.354	122.252	15.35	0	-90	880.184/2016
EMA-TR-303	188853.184	9183539.207	127.707	12.5	0	-90	880.184/2016
EMA-TR-304	188782.61	9183203.979	118.032	6.5	0	-90	880.184/2016
EMA-TR-305	188761.256	9182770.465	124.905	12.3	0	-90	880.184/2016
EMA-TR-306	188802.578	9182387.449	131.316	17	0	-90	880.184/2016
EMA-TR-307	188798.348	9181966.412	131.222	8.2	0	-90	880.184/2016
EMA-TR-308	188775.79	9181619.074	144.255	15.7	0	-90	880.184/2016
EMA-TR-309	188395.39	9182400.972	153.798	10.2	0	-90	880.184/2016
EMA-TR-310	188804.197	9181183.75	146.281	17.5	0	-90	880.184/2016
EMA-TR-311	188220.994	9182992.552	132.978	8	0	-90	880.184/2016
EMA-TR-312	188193.415	9182592.055	197.245	9	0	-90	880.184/2016

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-313	188202.164	9181785.613	145.63	9	0	-90	880.184/2016
EMA-TR-314	188163.056	9182200.227	163.647	6.5	0	-90	880.184/2016
EMA-TR-315	188245.435	9181404.26	138.669	9	0	-90	880.184/2016
EMA-TR-316	188603.72	9181386.779	138.678	9	0	-90	880.184/2016
EMA-TR-317	188638.161	9181819.776	136.667	14	0	-90	880.184/2016
EMA-TR-318	188591.496	9182212.677	147.465	23	0	-90	880.184/2016
EMA-TR-319	188596.692	9182595.455	143.418	17	0	-90	880.184/2016
EMA-TR-320	188618.778	9183009.807	132.509	13	0	-90	880.184/2016
EMA-TR-321	188618.913	9183779.501	119.222	8	0	-90	880.184/2016
EMA-TR-322	188632.856	9183399.569	120.27	8	0	-90	880.184/2016
EMA-TR-323	188962.542	9183787.601	123.274	5.5	0	-90	880.184/2016
EMA-TR-324	189001.085	9183394.739	137.47	14.8	0	-90	880.184/2016
EMA-TR-325	189006.081	9182990.408	131.567	8.5	0	-90	880.184/2016
EMA-TR-326	188958.572	9182544.311	134.184	12	0	-90	880.184/2016
EMA-TR-327	188981.07	9182176.945	137.952	13	0	-90	880.184/2016
EMA-TR-328	188953.844	9181779.713	178.475	7	0	-90	880.184/2016
EMA-TR-329	189201.67	9183989.065	125.285	17.5	0	-90	880.184/2016
EMA-TR-330	189208.644	9183196.051	174.21	8.5	0	-90	880.184/2016
EMA-TR-331	189205.253	9181590.329	138.631	18	0	-90	880.184/2016
EMA-TR-332	189371.613	9181777.409	133.901	13	0	-90	880.184/2016
EMA-TR-333	189398.548	9183788.431	123.66	9	0	-90	880.184/2016
EMA-TR-334	189431.981	9183420.646	145.612	7.5	0	-90	880.184/2016
EMA-TR-335	188407.856	9181598.387	135.721	8.5	0	-90	880.184/2016
EMA-TR-336	188982.748	9181383.389	149.881	13.6	0	-90	880.184/2016
EMA-TR-337	189198.807	9183584.352	132.904	14.65	0	-90	880.184/2016
EMA-TR-338	189188.752	9182363.215	167.734	11.5	0	-90	880.184/2016
EMA-TR-339	189245.167	9182776.778	167.642	11	0	-90	880.184/2016
EMA-TR-340	189221.124	9182009.4	159.632	15.4	0	-90	880.184/2016
EMA-TR-341	189434.339	9181366.804	132.122	10.4	0	-90	880.184/2016

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-342	189394.284	9182165.953	188.084	17	0	-90	880.184/2016
EMA-TR-343	189418.812	9182588.026	221.344	18	0	-90	880.184/2016
EMA-TR-344	189607.934	9183978.625	127.977	11	0	-90	880.184/2016
EMA-TR-345	189601.529	9183585.033	139.972	12.7	0	-90	880.184/2016
EMA-TR-346	189414.228	9182992.176	210.993	19	0	-90	880.184/2016
EMA-TR-347	189606.996	9183196.444	183.81	16	0	-90	880.184/2016
EMA-TR-348	189784.199	9183818.908	121.758	9	0	-90	880.184/2016
EMA-TR-349	189748.75	9183394.42	146.603	7	0	-90	880.184/2016
EMA-TR-350	189803.12	9181794.003	178.423	21	0	-90	880.184/2016
EMA-TR-351	189797.582	9182201.13	151.639	10	0	-90	880.184/2016
EMA-TR-352	190002.284	9181994.167	129.737	9.5	0	-90	880.184/2016
EMA-TR-353	190009.946	9182445.246	143.176	6.5	0	-90	880.184/2016
EMA-TR-354	189943.123	9181651.521	145.227	9	0	-90	880.184/2016
EMA-TR-355	189984.362	9184018.894	132.364	17.3	0	-90	880.184/2016
EMA-TR-356	189989.355	9183617.75	123.833	13	0	-90	880.184/2016
EMA-TR-357	189802.478	9182644.863	183.31	25	0	-90	880.184/2016
EMA-TR-358	189572.654	9181995.051	158.968	11	0	-90	880.184/2016
EMA-TR-359	189644.841	9181633.124	143.884	20	0	-90	880.184/2016
EMA-TR-360	186375.569	9180800.134	167.141	11.8	0	-90	880.107/2008
EMA-TR-361	189995.891	9182793.735	225.628	22.5	0	-90	880.184/2016
EMA-TR-362	186802.595	9180800.558	183.052	7	0	-90	880.107/2008
EMA-TR-363	189977.404	9183211.815	173.123	7	0	-90	880.184/2016
EMA-TR-364	189603.212	9182800.665	230.363	20	0	-90	880.184/2016
EMA-TR-365	189608.888	9182351.045	165.318	11	0	-90	880.184/2016
EMA-TR-366	186609.727	9180582.45	152.825	8.45	0	-90	880.107/2008
EMA-TR-367	189780.692	9182987.193	211.22	12.3	0	-90	880.184/2016
EMA-TR-369	186800.384	9181182.338	192.027	9	0	-90	880.107/2008
EMA-TR-370	186605.197	9180978.35	193.355	11.7	0	-90	880.107/2008

Appendix 5

The following Table and Sections are provided to ensure compliance with JORC Code (2012 Edition).

JORC (2012) Table 1 – Section 1: Sampling Techniques and Data for auger hole drilling

Item	JORC code explanation	Comments
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 representativity 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.	• Exploration results are based on auger drilling conducted by BCM´s exploration team. • The data presented is based on the assay of soils and saprolite by auger drilling at 1m sample intervals. • Sampling was supervised by a GE21 geologist and two mining technicians. • Every 1-metre sample was collected in a big plastic bag in the field and transported to the exploration shed to be dried in the muffle. prior to homogenisation. • Samples were homogenised and subsequently riffle split with about 1 kg sent to SGS for analysis and a similar amount stored. • 1 certified blank sample. 1 certified reference material (standard) samples and 1 field duplicate sample were inserted into the sample sequence for each 25 samples.
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).	• Auger drilling was completed by a hand held-mechanical auger with a 3" auger bit. The drilling is an open hole. meaning there is a significant chance of contamination from surface and other parts of the auger hole. Holes are vertical and not oriented.
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.	• No recoveries are recorded. • The operator observes the volume of each metre and notes any discrepancy. • No relationship is believed to exist between recovery and grade.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation. mining studies and metallurgical studies.	• All holes were logged by GE21 geologist. detailing the colour. weathering. alteration. texture and any geological observations. Care is taken to identify transported cover from in-situ saprolite/clay zones and the moisture content. Logging was done to a level that would support a Mineral Resource Estimate.

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td>Whether logging is qualitative or quantitative in nature. Core (or costean. channel. etc) photography.
The total length and percentage of the relevant intersections logged.</td><td>Qualitative logging with systematic photography of the stored box.
The entire auger hole is logged.</td></tr>
<tr><td>Sub-Sampling Techniques and Sampling Procedures</td><td>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 representativity of samples.
Measures taken to ensure that the sampling is representative of the in-situ material collected. including for instance results for field duplicate/second-half sampling.
Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>Auger sampling procedure is completed in the exploration shed in Apui.
The entire one metre sample is bagged on site. in a big plastic bag which is transported to the exploration shed. where it is dried at 70-90C prior to homogenisation. then quartered to about 1kg to go to SGS and another 1kg to store on site.
Sample preparation for the auger samples was conducted at SGS Vespasiano (greater Belo Horizonte) comprising oven drying at 105C. crushing of entire sample to 75% < 3mm followed by rotary splitting and pulverisation of 250 to 300 grams at 95% minus 150#
The <3mm rejects and the 250-300 grams pulverised sample were returned to BCM for storage.
Only the last 10 metres of each hole were sent to assay. the samples above will be sent if required.</td></tr>
<tr><td>Quality of Assay Data and Laboratory Tests</td><td>The nature. quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
For geophysical tools. spectrometers. handheld XRF instruments. etc. the parameters used in determining the analysis including instrument make and model. reading times. calibrations factors applied and their derivation. etc.
Nature of quality control procedures adopted (eg standards. blanks. duplicates. external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established</td><td>1 blank sample. 1 certified reference material (standard) sample and 1 field duplicate sample were inserted by BBX into each 25-sample sequence.
Standard laboratory QA/QC procedures were followed. including inclusion of standard. duplicate and blank samples.
The assay results of the standards fall within acceptable tolerance limits and no material bias is evident.
The assay technique used for REE was Lithium Metaborate Fusion ICP-MS (SGS code ICP95A and IMS95A). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:
<table>
<tr><td>Ba</td><td>Ce</td><td>Cr</td><td>Cs</td><td>Dy</td><td>Er</td><td>Eu</td><td>Ga</td></tr>
<tr><td>Gd</td><td>Hf</td><td>Ho</td><td>La</td><td>Lu</td><td>Nb</td><td>Nd</td><td>Pr</td></tr>
<tr><td>Rb</td><td>Sm</td><td>Sn</td><td>Sr</td><td>Ta</td><td>Tb</td><td>Th</td><td>Tm</td></tr>
<tr><td>U</td><td>V</td><td>W</td><td>Y</td><td>Yb</td><td>Zr</td><td>Zn</td><td>Co</td></tr>
<tr><td>Cu</td><td>Ni</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
The sample preparation and assay techniques used are industry standard and provide total analysis.
The ICP95A reports the major elements oxides used to calculate the Chemical Index of Alteration (CIA) at % levels included:
<table>
<tr><td>Al2O3</td><td>CaO</td><td>Cr2O3</td><td>F2O3</td></tr>
<tr><td>K2O</td><td>MgO</td><td>MnO</td><td>Na2O</td></tr>
<tr><td>P2O5</td><td>SiO2</td><td>TiO2</td><td></td></tr>
</table></td></tr>
</table>

Item	JORC code explanation	Comments
		• The SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited. • Analytical standard for REE ITAK-713 and 714 were used as CRM material in the batches sent to SGS. • The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident. • The blanks used contain some REE. with critical elements Ce. Nd. Dy and Y present in small quantities. • 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.	• Apart from the routine QA/QC procedures by the Company and the laboratory. there was no other independent or alternative verification of sampling and assaying procedures. • Analytical results for REE were supplied digitally. directly from the SGS laboratory in Vespasiano to the BCMs Exploration Manager in Rio de Janeiro. • No twinned holes were used. • Geological data was logged onto paper and transferred to Excel spreadsheets at end of the day and then transferred into the drill hole database. Microsoft Access is used for database storage and management and incorporates numerous data validation and data integrity checks. All assay data is imported directly into the Microsoft Access database. • No adjustments were made to the data. • All REE assay data received from the laboratory in element form is unadjusted for data entry. • Conversion of elements analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors. (Source:https://www.jcu.edu.au/advanced-analytical-centre/resources/element-to-stoichiometric-oxide-conversion-factors).

Element ppm	Conversion Factor	Oxide Form
Ce	1.2284	CeO2
Dy	1.1477	Dy2O3
Er	1.1435	Er2O3
Eu	1.1579	Eu2O3
Gd	1.1526	Gd2O3
Ho	1.1455	Ho2O3

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td></td><td>

La	1.1728	La2O3
Lu	1.1371	Lu2O3
Nd	1.1664	Nd2O3
Pr	1.2082	Pr6O11
Sm	1.1596	Sm2O3
Tb	1.1762	Tb4O7
Tm	1.1421	Tm2O3
Y	1.2699	Y2O3
Yb	1.1387	Yb2O3

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:
TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3
LREO (Light Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3
HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3
CREO (Critical Rare Earth Oxide) = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3
(From U.S. Department of Energy. Critical Material Strategy. December 2011)
MREO (Magnetic Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3
NdPr = Nd2O3 + Pr6O11
DyTb = Dy2O3 + Tb4O7
In elemental from the classifications are:
TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y
HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y
CREE: Nd+Eu+Tb+Dy+Y
LREE: La+Ce+Pr+Nd</td></tr>
<tr><td>Location of Data Points</td><td>• 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.</td><td>• The UTM WGS84 zone 21S grid datum is used for current reporting. The drill holes collar coordinates for the holes reported are currently controlled by hand-held GPS.</td></tr>
<tr><td>Data Spacing and Distribution</td><td>• 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.</td><td>• Auger holes were in lines 400m apart with holes with 300m centers, designed for testing iREE mineralization over the mapped felsic volcanics.
• The data spacing and distribution is sufficient to establish the level of REE elements present in the target area and its continuity along the regolith profile appropriate for a Mineral Resource.</td></tr>
</table>

Item	JORC code explanation	Comments
	• Whether sample compositing has been applied.	• No sample composition was applied.
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 location and depth of the sampling is appropriate for the deposit type. • Relevant REE values are compatible with the exploration model for ionic REEs. • No relationship between mineralisation and drilling orientation is known at this stage.
Sample security	• The measures taken to ensure sample security.	• The auger samples in sealed plastic bags were sent directly to SGS by bus and then airfreight. The Company has no reason to believe that sample security poses a material risk to the integrity of the assay data.
Audit or Reviews	• The results of any audits or reviews of sampling techniques and data.	• The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard.

JORC (2012) Table 1 - Section 2: Reporting of Exploration Results

Criteria	JORC code explanation	Commentary
Mineral Tenement and Land Tenure Status	• Type. reference name/number. location and ownership including agreements or material issues with third parties such as joint ventures. partnerships. overriding royalties. native title interests. historical sites. wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The EMA and EMA EAST leases are 100% owned by BCM with no issues in respect to native title interests. historical sites. wilderness or national park and environmental settings. • The company is not aware of any impediment to obtain a licence to operate in the area.
Exploration done by Other Parties	• Acknowledgment and appraisal of exploration by other parties.	• No exploration by other parties has been conducted in the region.
Geology	• Deposit type. geological setting and style of mineralisation.	• The REE mineralisation at EMA is contained within the tropical lateritic weathering profile developed on top of felsic rocks. rhyolites as per the Chinese deposits. • The REE mineralisation is concentrated in the weathered profile where it has dissolved from the primary mineral. such as monazite and xenotime. then adsorbed on to the neo-forming fine particles of aluminosilicate clays (e.g. kaolinite. illite. smectite). • This adsorbed iREE is the target for extraction and production of REO.

Drill Hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
	  ◦ easting and northing of the drill hole collar
	  ◦ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
	  ◦ dip and azimuth of the hole
	  ◦ down hole length and interception depth
	  ◦ hole length.
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report. the Competent Person should clearly explain why this is the case.
		• Auger locations and diagrams are presented in this announcement.
		• Details are tabulated in the announcement.

Criteria	JORC code explanation	Commentary
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.	• Weighted averages were calculated for all intercepts. • 500ppm TREO cut-off grade was applied to define the relevant intersections. • No metal equivalent values reported.
Relationship between mineralization widths and intercepted 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').	• Significant values of REE were reported for the auger samples. • Mineralisation orientation is not known at this stage although assumed to be flat. • The downhole depths are reported, true widths are not known at this stage.
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.	• Maps and tables of the auger holes location and target location are inserted.
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.	• Relevant REE mineralisation with grades higher than 500ppm TREO in auger holes were reported with confirmation of IAC (Ionic Adsorbed Clay) type mineralisation obtained in almost all the auger holes from phase 1. in this same geological setting.
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.	• No other significant exploration data has been acquired by the Company.

Criteria	JORC code explanation	Commentary
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.	• Specific Densities were collected for the High, Intermediate and Low weathered horizons for the MRE. • Additional metallurgical test work with magnesium sulphate leach. • Permeability test works under WSP co-ordination. • SS under Ausenco and WSP coordination.