EXTENSION DRILLING CONFIRMS PREMIUM GRADE MAGNET MINERALISATION AT EMA

First results from the infill and extensional program show grades and widths that validate and enhance known extents of mineralisation

Highlights

- Notably elevated magnet (Nd,Pr,Dy,Tb) grades regularly >200ppm reinforce the high-quality REE composition and the potential for a long-life ISR project at Ema
- Infill drilling outside of the initial starter zone area delivers rare earth grades and thicknesses confirming 4kms of additional mineralisation

Significant results (average grade >800ppm) include:

- 10m @ **1,048ppm TREO** from 10m (EMA-TR-417), ending in **1,443ppm** TREO
- 6m @ **1,033ppm TREO** from 2m (EMA-TR-418), ending in **1,089ppm** TREO
- 6m @ **1,341ppm TREO** from 9m (EMA-TR-430), ending in **1,299ppm** TREO
- 10m @ **934ppm TREO** from 3m (EMA-TR-426), ending in **1,239ppm** TREO
- 7m @ **888ppm TREO** from 11m (EMA-TR-444), ending in **1,790ppm** TREO
- 10m @ **949ppm TREO** from 12 (EMA-TR-448), ending in **1,071ppm** TREO

- Drilling focused on areas best suited to future ISR operations
- Results strengthen and validate the ISR-optimised geological model
- Results further define REE mineralisation now spread across 82 km²

Brazilian Critical Minerals Limited (**ASX: BCM**) (“**BCM**” or the “**Company**”) is pleased to announce the assay results for the 2025 first batch of infill auger holes drilled for rare earth elements (REEs) at Ema in the Apuí region of Brazil, aimed at increasing the confidence level of the Mineral Resource Estimate.

Andrew Reid, Managing Director, commented:

“Ema continues to deliver exactly what we expect from a large-scale ionic clay REE system: continuity, predictable grades and a clean clay-hosted profile optimised for ISR. With the ISR extraction method already field tested and proven, each new batch of drilling enhances our confidence in the scale, economic potential and long-term development trajectory of the Project.

The combination of demonstrated ISR amenability, continuous mineralisation geometry and consistent rare earth distribution firmly positions the Ema Project as a technically mature, globally competitive ionic clay REE development. The current results further strengthen the project’s transition from exploration into near-term ISR deployment and mineral resource conversion.”

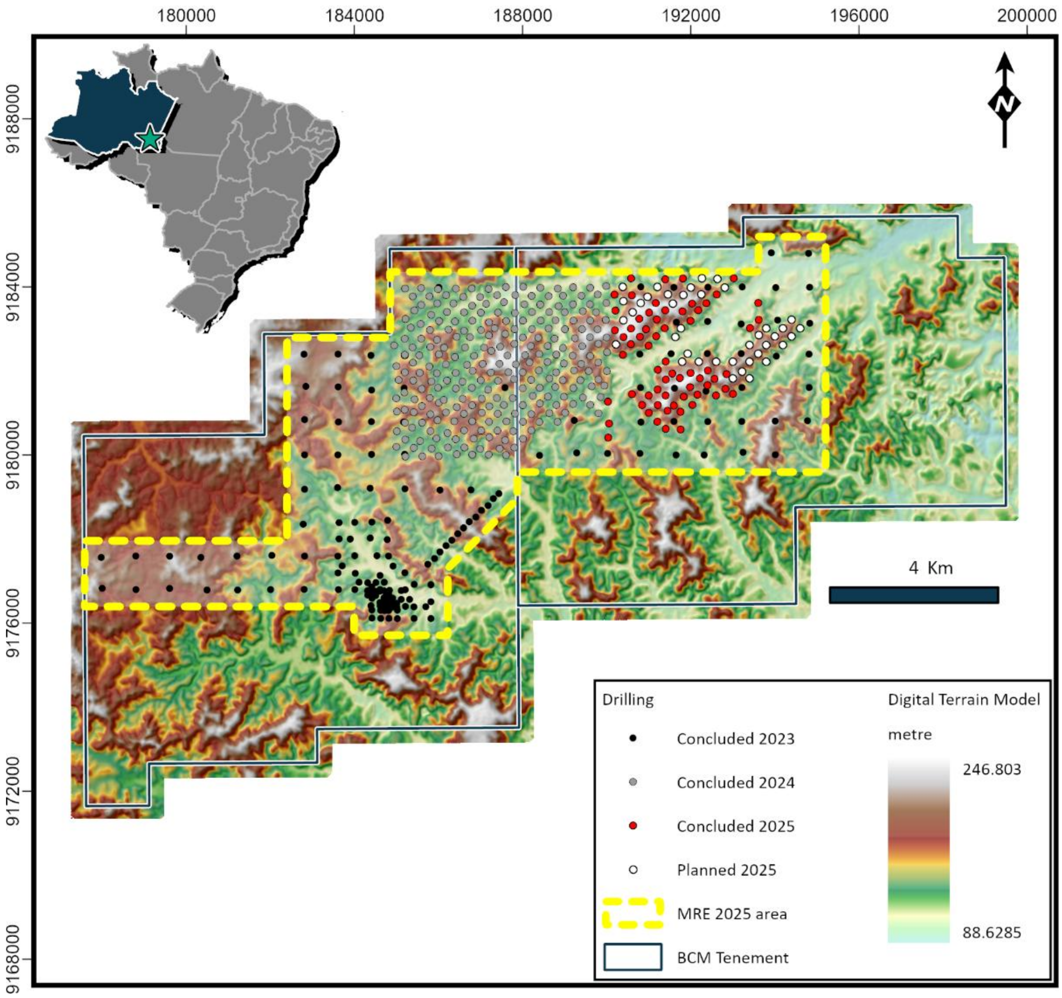

Figure 1. Location of 2025 MRE outline (Indicated + Inferred) with red dots representing completed drilling and white dots holes remaining to be drilled.

A total of 24 holes (23%) of the 101-hole drilling program have now returned assay results. Results generally returned thick mineralised intercepts with the highest grades of NdPr located at the bottom of the auger holes within the semi-weathered zone, directly above the fresh rock interface in-line with mineralisation intercepted in previous drilling campaigns.

Drilling was designed on 300m centres (**Figure 2**) the same pattern as used in the central starter area which facilitated the inclusion of 248Mt of Indicated material into the current MRE of **943Mt (ASX:BCM Feb 2025)**

Comments of Grades

Results, similar to all drilling conducted at the Ema project indicate a strong increase in magnetic rare earths (MREO) grade towards the base of the weathered profile at the top of the saprock portion of the profile over intervals of 5-10m, considered ideal for in-situ leaching.

Appreciable increases in the percentages of both light (Nd,Pr) and heavy (Dy,Tb) rare earths through the grade profile with depth are a key feature of these results. 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 suggests that deeper drilling in these areas could further improve the viability of the low-cost in-situ leach operation.

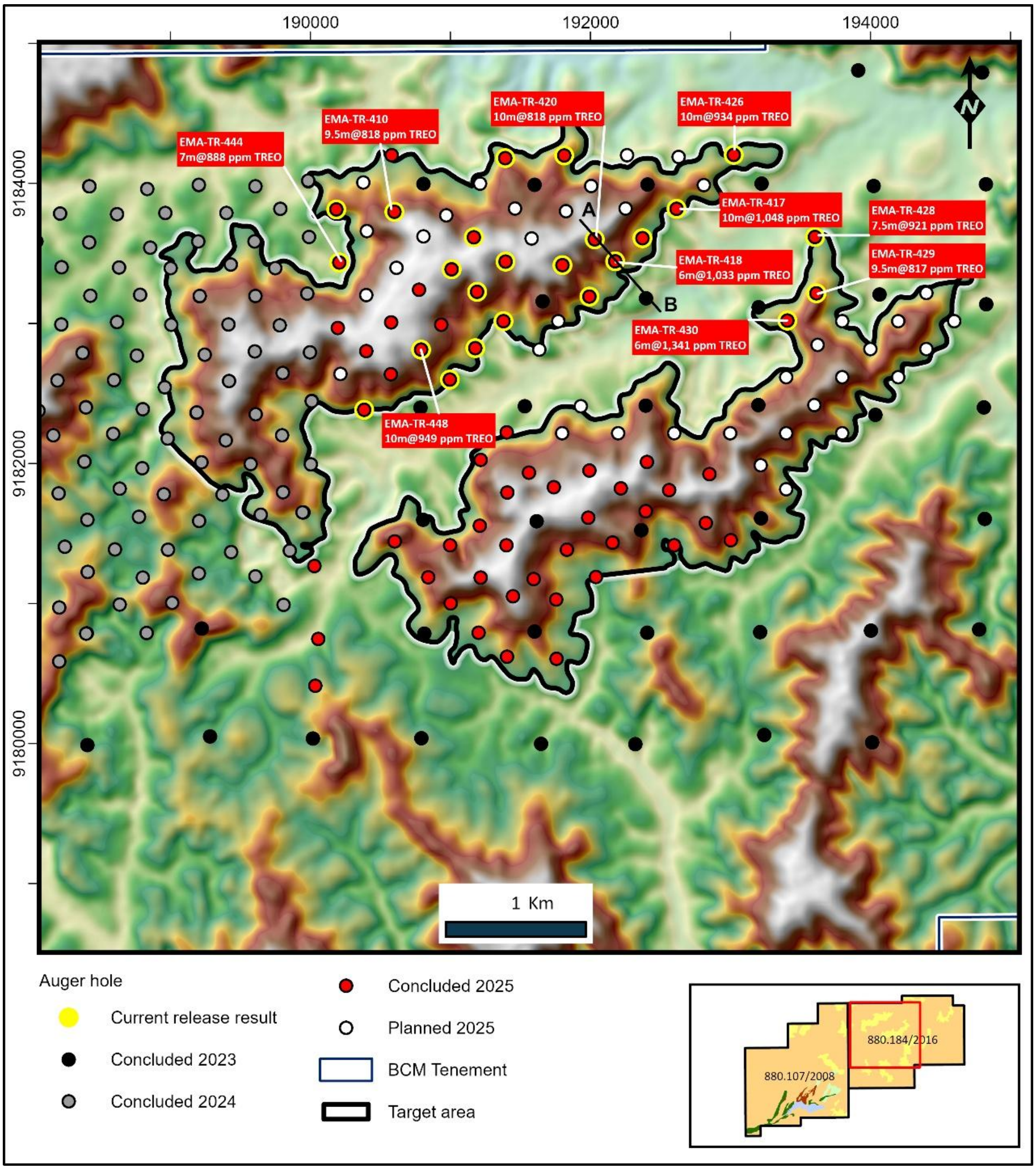

Figure 2 – Location map of the auger infill holes with assay results received to date, with cross section A-B.

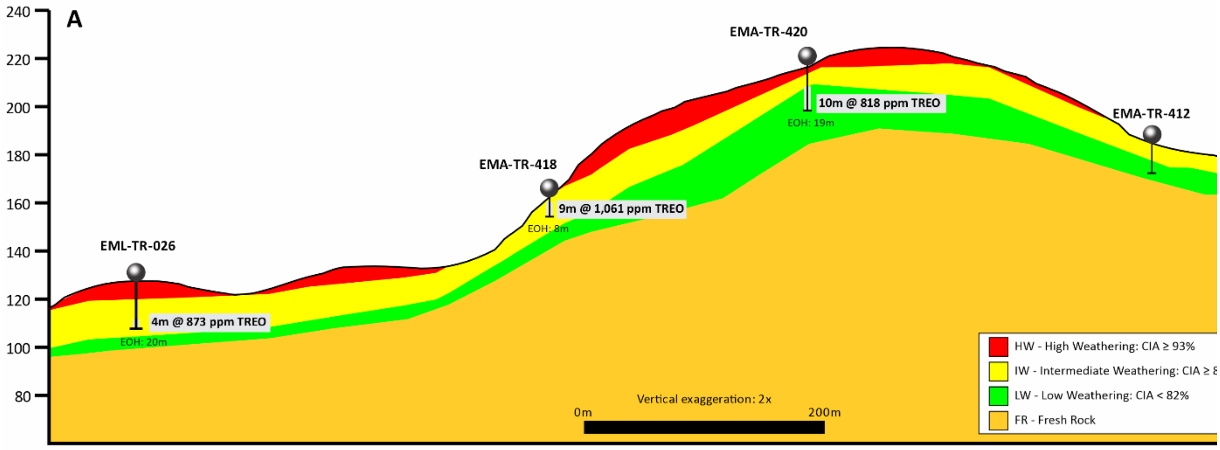

Figure 3 - Cross section A-B from EMA-TR-418 & EMA-TR-420

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 annualised production.

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

Strip logs of holes EMA-TR-417, 420 and 430 (Figure 4) 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 4 – Drill-hole profiles showing typical ionic REE enrichment zone with high NdPr grades close to the fresh rock interface.

Current Work Program at Ema

1. Finalise assaying of the Mineral Resource infill drilling program
    - All assays anticipated by Feb 2026
2. Processing and Metallurgical Testing
    - Complete magnesium sulphate leaching assays of drill samples to extract additional data from selected infill drilling holes which will underpin and support both the MRE update and its conversion to an Ore Reserve
3. Mineral Resource Estimate update
    - An updated MRE to completed during Q1 2026
4. Bankable Feasibility Study
    - Completion of the BSF in early 2026 utilising the updated MRE, metallurgical test results and groundwater modelling, currently in progress

5. Permitting

- BCM continues to be fully engaged with all relevant authorities and stakeholders with many progressive discussions taking place. Updates on progress will be made as appropriate.

6. Offtake Discussions

- Generation of a final MREC product from field trial PLS solution, to be sent to potential offtake partners for analysis Dec 2025

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

For more information:

Andrew Reid

Managing Director
Brazilian Critical Minerals Ltd
E: andrew.reid@braziliancriticalminerals.com
M: +61 432 740 975

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 and adjacent sediments.

BCM has defined an indicated and inferred MRE of 943Mt of REE’s with metallurgical recoveries averaging 74% MREO, representing some of the highest for these types of deposits anywhere in the world.

The Company is now completing an extensional drilling program to increase the MRE confidence in areas outside of the central starter zone to assist with the BFS scheduled for completion in early 2026.

The information in this announcement relates to previously reported exploration results and mineral resource estimates for the Ema Project released by the Company to ASX on 22 May 2023, 17 July 2023, 19 July 2023, 31 July 2023, 13 Sep 2023, 19 Oct 2023, 06 Dec 2023, 06 Feb 2024, 22 Feb 2024, 13 Mar 2024, 02 Apr 2024, 08 Oct 2024 19 Nov 2024, 21 Jan 2025, 17th Feb 2025, 26th Feb 2025, 10th March 2025, 13th March 2025, 28th April 2025, 27th May 2025, 28th May, 13 June 2025, 01 July 2025, 18 August 2025, 01 Sep 2025, 22 Sep 2025 and 23 Oct 2025. The Company confirms that is not aware of any new information or data that materially affects the information included in the above-mentioned releases and CONTINUES TO APPLY and have not materially changed in accordance with listing Rule 5.23.2.

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), Member of AusIMM, 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.

Appendices

Appendix 1 – Auger hole intersections at a 500ppm TREO cut-off grade (batch 1_2025)

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-406	13	10	682	27	18	169	12
EMA-TR-407	5	8	616	25	21	144	12
EMA-TR-413	13	6	600	24	17	135	8
EMA-TR-417	10	10	1048	23	14	239	14
EMA-TR-418	2	6	1033	30	25	286	27
EMA-TR-420	9	10	818	22	16	159	14
EMA-TR-421	9	7	724	29	24	191	18
EMA-TR-422	4	9	785	27	25	191	21
EMA-TR-424	8	7	621	27	21	158	12
EMA-TR-426	3	10	934	24	16	216	15
EMA-TR-428	7	7,5	921	28	19	272	18
EMA-TR-429	6	9,5	817	23	19	188	16
EMA-TR-430	9	6	1,341	36	26	443	35
EMA-TR-434	5	5	597	22	17	120	11
EMA-TR-435	9	5,5	624	25	19	148	13

---

[1] MREO (Magnetic Rare Earth Oxide) = $Tb_4O_7 + Dy_2O_3 + Nd_2O_3 + Pr_6O_{11}$

[2] HREO (Heavy Rare Earth Oxide) = $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-436	12	19	652	24	19	146	12
EMA-TR-437	12	19	751	24	19	171	14
EMA-TR-438	13	22,5	852	28	19	226	15
EMA-TR-439	10	16	742	25	22	182	15
EMA-TR-442	17	27	760	28	23	192	18
EMA-TR-443	9	18	1,306	13	11	105	12
EMA-TR-444	11	18	888	29	17	252	16
EMA-TR-448	12	22	949	31	20	281	18

Appendix 2 – Total REE oxide distribution down-hole (batch 1_2025)

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-406	13	14	591	25	18	138	11	682
EMA-TR-406	14	15	602	24	17	137	10	
EMA-TR-406	15	16	707	24	16	160	11	
EMA-TR-406	16	17	690	26	16	166	11	
EMA-TR-406	17	18	665	27	16	172	10	
EMA-TR-406	18	19	737	28	17	194	12	
EMA-TR-406	19	20	701	28	18	185	12	
EMA-TR-406	20	21	713	28	20	184	14	
EMA-TR-406	21	22	719	27	22	182	15	
EMA-TR-406	22	23	697	27	23	172	16	
EMA-TR-407	3	4	396	8	20	22	8	
EMA-TR-407	4	5	345	10	25	27	8	
EMA-TR-407	5	6	634	12	21	62	13	616
EMA-TR-407	6	7	588	15	15	83	8	
EMA-TR-407	7	8	553	26	23	133	11	
EMA-TR-407	8	9	656	29	20	177	11	
EMA-TR-407	9	10	700	30	22	195	13	
EMA-TR-407	10	11	677	29	21	187	12	
EMA-TR-407	11	12	571	30	23	161	12	
EMA-TR-407	12	13	553	29	24	150	11	
EMA-TR-410	6	7	695	25	22	164	14	
EMA-TR-410	7	8	809	25	15	191	12	
EMA-TR-410	8	9	754	30	16	214	11	
EMA-TR-410	9	10	801	28	15	211	11	
EMA-TR-410	10	11	828	27	15	212	12	

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-410	11	12	805	26	14	197	11	818
EMA-TR-410	12	13	814	24	15	185	11	
EMA-TR-410	13	14	834	23	16	182	13	
EMA-TR-410	14	15	851	25	18	195	16	
EMA-TR-410	15	15.5	1,163	22	19	236	23	
EMA-TR-413	9	10	341	19	21	58	7	
EMA-TR-413	10	11	359	21	20	69	7	
EMA-TR-413	11	12	363	23	19	76	6	
EMA-TR-413	12	13	478	21	17	91	7	
EMA-TR-413	13	14	503	24	18	115	8	600
EMA-TR-413	14	15	596	27	16	149	8	
EMA-TR-413	15	16	880	19	11	157	8	
EMA-TR-413	16	17	561	26	17	137	9	
EMA-TR-413	17	18	545	26	19	132	9	
EMA-TR-413	18	19	517	25	19	122	9	
EMA-TR-417	10	11	560	22	22	114	12	1048
EMA-TR-417	11	12	505	17	16	75	8	
EMA-TR-417	12	13	704	23	12	153	9	
EMA-TR-417	13	14	937	25	20	218	18	
EMA-TR-417	14	15	1,050	16	10	158	10	
EMA-TR-417	15	16	1,014	16	9	159	9	
EMA-TR-417	16	17	1,573	18	9	268	14	
EMA-TR-417	17	18	1,485	27	13	388	18	
EMA-TR-417	18	19	1,205	30	14	350	17	
EMA-TR-417	19	20	1,443	37	18	506	25	
EMA-TR-418	0.5	1	367	18	23	58	10	
EMA-TR-418	1	2	369	15	22	47	9	
EMA-TR-418	2	3	565	22	17	115	10	1033
EMA-TR-418	3	4	797	30	18	225	14	
EMA-TR-418	4	5	1,102	34	22	352	24	
EMA-TR-418	5	6	1,356	33	26	409	35	
EMA-TR-418	6	7	1,288	31	31	356	40	
EMA-TR-418	7	8	1,089	28	38	258	42	
EMA-TR-420	9	10	700	21	14	137	11	
EMA-TR-420	10	11	1,301	10	7	120	10	
EMA-TR-420	11	12	720	22	14	148	11	
EMA-TR-420	12	13	780	24	15	173	13	
EMA-TR-420	13	14	692	22	16	136	12	

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-420	14	15	669	24	17	150	12	818
EMA-TR-420	15	16	1,142	24	21	244	24	
EMA-TR-420	16	17	721	25	18	166	13	
EMA-TR-420	17	18	701	24	21	150	16	
EMA-TR-420	18	19	757	24	20	164	16	
EMA-TR-421	6	7	357	6	18	15	8	
EMA-TR-421	7	8	308	8	20	16	8	
EMA-TR-421	8	9	356	15	22	46	9	
EMA-TR-421	9	10	561	26	20	134	12	724
EMA-TR-421	10	11	650	28	19	169	12	
EMA-TR-421	11	12	756	30	20	209	15	
EMA-TR-421	12	13	877	29	22	239	19	
EMA-TR-421	13	14	788	30	26	217	21	
EMA-TR-421	14	15	673	27	31	164	20	
EMA-TR-421	15	16	765	30	29	204	23	
EMA-TR-422	3	4	435	17	19	66	10	
EMA-TR-422	4	5	615	17	13	97	9	785
EMA-TR-422	5	6	722	26	16	176	11	
EMA-TR-422	6	7	769	30	20	214	16	
EMA-TR-422	7	8	896	31	24	251	22	
EMA-TR-422	8	9	946	31	30	259	30	
EMA-TR-422	9	10	927	28	33	227	31	
EMA-TR-422	10	11	856	27	33	204	29	
EMA-TR-422	11	12	724	26	32	161	24	
EMA-TR-422	12	13	612	24	27	128	17	
EMA-TR-424	5	6	301	9	24	21	7	
EMA-TR-424	6	7	388	14	22	46	9	
EMA-TR-424	7	8	420	21	21	80	9	
EMA-TR-424	8	9	564	26	21	138	11	621
EMA-TR-424	9	10	749	29	22	203	15	
EMA-TR-424	10	11	686	29	20	187	12	
EMA-TR-424	11	12	642	28	21	167	12	
EMA-TR-424	12	13	614	28	22	157	12	
EMA-TR-424	13	14	585	27	22	144	12	
EMA-TR-424	14	15	505	25	22	114	11	
EMA-TR-426	3	4	656	13	12	76	8	
EMA-TR-426	4	5	1,059	10	8	92	10	
EMA-TR-426	5	6	790	12	11	89	9	

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-426	6	7	574	25	14	135	8	934
EMA-TR-426	7	8	810	27	16	208	12	
EMA-TR-426	8	9	946	30	17	269	14	
EMA-TR-426	9	10	1,089	29	17	296	17	
EMA-TR-426	10	11	1,079	32	21	329	20	
EMA-TR-426	11	12	1,102	31	25	317	25	
EMA-TR-426	12	13	1,239	30	22	348	24	
EMA-TR-428	5	6	521	16	20	70	11	
EMA-TR-428	6	7	431	17	22	62	9	
EMA-TR-428	7	8	527	17	18	81	10	921
EMA-TR-428	8	9	632	13	14	74	8	
EMA-TR-428	9	10	623	22	17	128	11	
EMA-TR-428	10	11	696	25	17	163	11	
EMA-TR-428	11	12	882	31	18	256	15	
EMA-TR-428	12	13	1,268	36	26	427	32	
EMA-TR-428	13	14	1,430	40	21	545	29	
EMA-TR-428	14	14.5	1,700	45	20	726	32	
EMA-TR-429	6	7	523	15	16	72	8	817
EMA-TR-429	7	8	681	17	14	108	10	
EMA-TR-429	8	9	629	19	16	111	10	
EMA-TR-429	9	10	704	18	18	114	12	
EMA-TR-429	10	11	774	19	14	136	10	
EMA-TR-429	11	12	712	24	17	162	11	
EMA-TR-429	12	13	724	24	16	165	11	
EMA-TR-429	13	14	1,083	30	24	301	24	
EMA-TR-429	14	15	1,338	35	28	435	35	
EMA-TR-429	15	15.5	1,183	33	31	356	33	
EMA-TR-430	5	6	497	17	20	75	10	
EMA-TR-430	6	7	557	23	19	116	10	1341
EMA-TR-430	7	8	678	28	18	181	11	
EMA-TR-430	9	10	1,293	37	21	446	26	
EMA-TR-430	10	11	1,330	38	23	471	29	
EMA-TR-430	11	12	1,335	37	24	456	32	
EMA-TR-430	12	13	1,381	36	27	458	36	
EMA-TR-430	13	14	1,406	35	30	445	42	
EMA-TR-430	14	15	1,299	33	33	383	44	
EMA-TR-434	0.5	1	301	14	25	34	9	
EMA-TR-434	1	2	332	14	23	36	9	

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-434	2	3	405	15	19	53	9	
EMA-TR-434	3	4	417	19	20	70	9	
EMA-TR-434	4	5	421	16	20	56	10	
EMA-TR-434	5	6	544	19	18	91	11	597
EMA-TR-434	6	7	603	20	17	109	11	
EMA-TR-434	7	8	512	21	17	97	10	
EMA-TR-434	8	9	616	22	17	127	11	
EMA-TR-434	9	10	711	26	17	176	13	
EMA-TR-435	5	6	337	7	21	14	9	
EMA-TR-435	6	7	350	12	21	33	9	
EMA-TR-435	7	8	408	16	18	59	8	
EMA-TR-435	8	9	409	19	19	67	9	
EMA-TR-435	9	10	512	21	17	95	10	624
EMA-TR-435	10	11	516	23	17	110	9	
EMA-TR-435	11	12	555	25	17	126	10	
EMA-TR-435	12	13	625	27	19	155	13	
EMA-TR-435	13	14	805	30	24	218	20	
EMA-TR-435	14	14.5	837	29	22	224	18	
EMA-TR-436	9	10	368	18	23	58	10	
EMA-TR-436	10	11	508	13	16	59	9	
EMA-TR-436	11	12	474	22	18	93	9	
EMA-TR-436	12	13	777	20	17	143	14	652
EMA-TR-436	13	14	713	21	17	138	13	
EMA-TR-436	14	15	560	24	19	122	11	
EMA-TR-436	15	16	635	25	18	147	12	
EMA-TR-436	16	17	613	26	18	147	11	
EMA-TR-436	17	18	531	26	18	128	10	
EMA-TR-436	18	19	733	29	24	199	17	
EMA-TR-437	9	10	370	8	22	22	9	
EMA-TR-437	10	11	452	10	21	33	11	
EMA-TR-437	11	12	419	15	24	50	11	
EMA-TR-437	12	13	598	15	18	77	12	751
EMA-TR-437	13	14	690	19	17	121	13	
EMA-TR-437	14	15	657	21	18	128	13	
EMA-TR-437	15	16	702	22	18	145	13	
EMA-TR-437	16	17	735	26	18	180	13	
EMA-TR-437	17	18	847	32	20	251	16	
EMA-TR-437	18	19	1,028	31	21	296	21	

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-438	13	14	894	28	18	235	16	852
EMA-TR-438	14	15	958	26	19	235	17	
EMA-TR-438	15	16	1,003	29	17	277	16	
EMA-TR-438	16	17	880	30	18	251	15	
EMA-TR-438	17	18	886	29	19	240	17	
EMA-TR-438	18	19	839	29	18	231	14	
EMA-TR-438	19	20	741	30	17	207	12	
EMA-TR-438	20	21	757	28	20	195	15	
EMA-TR-438	21	22	785	27	21	193	16	
EMA-TR-438	22	22,5	705	25	20	164	14	
EMA-TR-439	6	7	383	7	25	15	11	
EMA-TR-439	7	8	321	8	28	15	10	
EMA-TR-439	8	9	352	7	27	12	10	
EMA-TR-439	9	10	390	6	23	15	10	
EMA-TR-439	10	11	502	13	20	56	11	742
EMA-TR-439	11	12	768	26	20	188	15	
EMA-TR-439	12	13	1,025	30	20	292	19	
EMA-TR-439	13	14	934	30	22	263	19	
EMA-TR-439	14	15	678	28	24	172	15	
EMA-TR-439	15	16	542	25	25	120	14	
EMA-TR-442	17	18	752	28	22	192	17	760
EMA-TR-442	18	19	726	29	23	188	18	
EMA-TR-442	19	20	765	28	22	193	17	
EMA-TR-442	20	21	736	28	22	191	17	
EMA-TR-442	21	22	802	28	21	207	17	
EMA-TR-442	22	23	769	28	23	198	18	
EMA-TR-442	23	24	800	28	24	206	20	
EMA-TR-442	24	25	785	27	24	193	20	
EMA-TR-442	25	26	713	27	24	173	18	
EMA-TR-442	26	27	752	27	25	184	20	
EMA-TR-443	8	9	499	10	16	43	9	
EMA-TR-443	9	10	771	7	10	45	9	1306
EMA-TR-443	10	11	1,554	2	4	31	7	
EMA-TR-443	11	12	1,469	4	5	43	9	
EMA-TR-443	12	13	924	8	9	68	10	
EMA-TR-443	13	14	649	21	16	127	12	
EMA-TR-443	14	15	598	23	18	128	12	
EMA-TR-443	15	16	666	24	18	148	13	
EMA-TR-443	16	17	4,190	4	4	144	18	

HoleID	From	To	TREO ppm	MREO %	HREO %	NdPr ppm	DyTb ppm	Average TREO
EMA-TR-443	17	18	936	24	19	207	20	
EMA-TR-444	8	9	787	8	11	55	11	
EMA-TR-444	9	10	506	10	14	45	8	
EMA-TR-444	10	11	458	19	17	79	9	
EMA-TR-444	11	12	574	23	17	119	11	888
EMA-TR-444	12	13	720	18	12	121	9	
EMA-TR-444	13	14	595	27	16	152	9	
EMA-TR-444	14	15	715	30	16	204	11	
EMA-TR-444	15	16	836	33	18	263	14	
EMA-TR-444	16	17	988	34	20	319	20	
EMA-TR-444	17	18	1,790	35	21	583	40	
EMA-TR-448	12	13	759	27	16	194	11	949
EMA-TR-448	13	14	744	32	16	224	11	
EMA-TR-448	14	15	826	32	17	253	13	
EMA-TR-448	15	16	925	32	17	279	15	
EMA-TR-448	16	17	902	33	19	281	15	
EMA-TR-448	17	18	903	32	20	274	17	
EMA-TR-448	18	19	1,063	31	21	312	22	
EMA-TR-448	19	20	1,129	32	23	337	25	
EMA-TR-448	20	21	1,169	32	24	345	27	
EMA-TR-448	21	22	1,071	31	25	310	25	

Appendix 4: Auger drill-hole locations

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-406	190,184.03	9,183,814.95	144.57	23.00	0	-90	880.184/2016
EMA-TR-407	191,391.93	9,184,180.19	164.50	13.00	0	-90	880.184/2016
EMA-TR-410	190,599.86	9,183,797.73	175.69	15.50	0	-90	880.184/2016
EMA-TR-413	191,812.29	9,184,198.63	164.94	19.00	0	-90	880.184/2016
EMA-TR-417	192,615.47	9,183,818.28	136.97	20.00	0	-90	880.184/2016
EMA-TR-418	192,176.12	9,183,443.37	154.96	8.00	0	-90	880.184/2016
EMA-TR-420	192,030.64	9,183,600.72	203.57	19.00	0	-90	880.184/2016
EMA-TR-421	191,799.96	9,183,415.90	190.76	16.00	0	-90	880.184/2016
EMA-TR-422	191,392.48	9,183,441.10	191.16	13.00	0	-90	880.184/2016
EMA-TR-424	192,370.69	9,183,609.30	141.03	15.00	0	-90	880.184/2016
EMA-TR-426	193,022.31	9,184,202.47	140.81	13.00	0	-90	880.184/2016
EMA-TR-428	193,603.04	9,183,616.46	125.73	14.50	0	-90	880.184/2016
EMA-TR-429	193,613.32	9,183,214.87	159.91	15.50	0	-90	880.184/2016

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-430	193,407.28	9,183,019.32	174.71	15.00	0	-90	880.184/2016
EMA-TR-434	191,176.89	9,182,824.28	133.52	10.00	0	-90	880.184/2016
EMA-TR-435	191,992.91	9,183,190.84	153.89	14.50	0	-90	880.184/2016
EMA-TR-436	191,378.45	9,183,015.13	133.37	19.00	0	-90	880.184/2016
EMA-TR-437	190994.602	9182599.617	136.572	19.00	0	-90	880.184/2016
EMA-TR-438	191190.649	9183225.715	183.038	22.50	0	-90	880.184/2016
EMA-TR-439	190383.854	9182383.002	135.526	16.00	0	-90	880.184/2016
EMA-TR-442	191167.336	9183615.091	208.565	27.00	0	-90	880.184/2016
EMA-TR-443	191008.991	9183387.075	229.449	18.00	0	-90	880.184/2016
EMA-TR-444	190206.547	9183435.611	135.772	18.00	0	-90	880.184/2016
EMA-TR-448	190790.130	9182812.376	203.678	22.00	0	-90	880.184/2016

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 BCM 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-	• 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

Item	JORC code explanation	Comments
	sampling bit or other type. whether core is oriented and if so. by what method. etc).	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. • Whether logging is qualitative or quantitative in nature. Core (or costean. channel. etc) photography. • The total length and percentage of the relevant intersections logged.	• All holes were logged by BCM 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. • Qualitative logging with systematic photography of the stored box. • The entire auger hole is logged.
Sub-Sampling Techniques and Sampling Procedures	• 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.	• 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.
Quality of Assay Data and Laboratory Tests	• The nature. quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools. spectrometers. handheld XRF instruments. etc. the parameters used in determining the analysis including instrument make and model. reading times. calibrations factors applied and their derivation. etc. • Nature of quality control procedures adopted (eg standards. blanks. duplicates. external laboratory checks) and whether acceptable	• 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

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td>levels of accuracy (ie lack of bias) and precision have been established</td><td>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>

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.
</td></tr>
<tr><td>Verification of Sampling and Assaying</td><td>
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.
</td><td>
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.
</td></tr>
</table>

Item	JORC code explanation	Comments

- 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
Ce	1.2284
Dy	1.1477
Er	1.1435
Eu	1.1579
Gd	1.1526
Ho	1.1455
La	1.1728
Lu	1.1371
Nd	1.1664
Pr	1.2082
Sm	1.1596
Tb	1.1762
Tm	1.1421
Y	1.2699
Yb	1.1387

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

Item	JORC code explanation	Comments
		LREE: La+Ce+Pr+Nd
Location of Data Points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys). trenches. mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• 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.
Data Spacing and Distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• 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. • 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.	• Downstream processes at ANSTO to produce MREC from PLS collected during the permeability field test works • Continue the infill drilling to cover the 20y mine life area. • Progressing with DFS.