Detailed auger drilling at Ema continues to deliver positive REE results.

Highlights

- **Consistent 5-6 metres at end of holes with TREO grades consistent with Chinese iREE deposits.**
- **Follow-up drilling around EMD_017 confirms extensive horizontal extension of the REE- enriched horizon immediately above the fresh rhyolite.**

Significant results:

- 5 metres **@ 850 ppm TREO** from 9m at EOH (TR-28)
- 17 metres **@ 648 ppm TREO** from 4m, including 5m @ **837 ppm TREO** at EOH (TR-024)
- 11 metres **@627 ppm TREO** from 11m at EOH (TR-23)
- 10 metres **@869 ppm TREO** from 5m at EOH, including 5m @ **1009 ppm TREO** (TR-32)
- 9 metres **@ 607 ppm TREO** from 7m at EOH (TR-25)
- 3 metres **@ 860 ppm TREO** from 9m at EOH (TR-022)

BBX Minerals Limited (**ASX: BBX**) ("**BBX**" or the "**Company**") is pleased to announce the assay results from the follow-up auger drilling programme around EMD_017 for rare earth elements (REEs) at Ema in the Apuí region in Brazil. The Ema-Ema East REE project comprises 2 tenements (Figure 1) of a total of 9 tenements secured for REE exploration, encompassing an area of 700 sq km.

123 auger holes already completed at Ema at reconnaissance and infill level with **32 sq km** tested of a total of 189 sq km, with results received for the first 24 auger holes.

8 of the 11 holes assayed reported significant Total Rare Oxide (TREO[1]) values (2); the remainder did not hit the target depth and will be re-tested with a twin hole designed to intersect the 5–10 metre zone immediately above the fresh rock target zone. This will generate the required information for incorporation in the programmed MRE calculation.

TR-024 intersected an exceptional 17-metre-thick zone with progressive REE enrichment with increasing depth from 11 metres, with the last 5 metres averaging 837 ppm TREO, similar to EMD-017. This is generally consistent with grades obtained in other holes in the sap-rock immediately above the fresh rhyolite (Appendix 1).

This hole clearly shows that the levels of NdPr and TbDy increase systematically with depth (Table 1) at a much higher rate than the overall TREO values, reaching the highest values at the base with up to 31% MREO. Good recoveries of up to 61% were previously obtained in this zone by a simple ammonium leach extraction.

---

[1] TREO = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$

Table 1. Auger hole TR-024 assay results (11-21m)

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm
EMA-TR-024	11	12	613	18	18	100	11
EMA-TR-024	12	13	591	20	23	124	12
EMA-TR-024	13	14	632	19	27	158	12
EMA-TR-024	14	15	679	18	29	183	12
EMA-TR-024	15	16	623	18	29	167	11
EMA-TR-024	16	17	784	18	30	225	13
EMA-TR-024	17	18	818	19	31	238	15
EMA-TR-024	18	19	827	20	31	243	16
EMA-TR-024	19	20	827	22	31	240	17
EMA-TR-024	20	21	931	26	30	259	22

The concentration of the high-grade zones at the base of the regolith profile at Ema differs from the profile in the Chinese deposits, where the highest grades are in the upper portion of the profile. This may be due to the differing climatic regimes, with the Chinese deposits developed in a sub-tropical climate and Ema under higher rainfall tropical conditions, with more intensive leaching deeper in the profile.

Results show that the ionic REE enrichment horizon immediately above the fresh rhyolite in EMD_017, with positive ammonium sulphate leach characteristics and TREO grades above 800 ppm were also intersected in the follow-up drillholes that reached the target depth. The confirmation of the areal continuity of this zone supports the strategy of conducting infill drilling in this area to support an initial MRE.

The average grade for this target is likely to increase with the inclusion of the basal portion of the sap-rock, generally not fully recovered by the auger drilling.

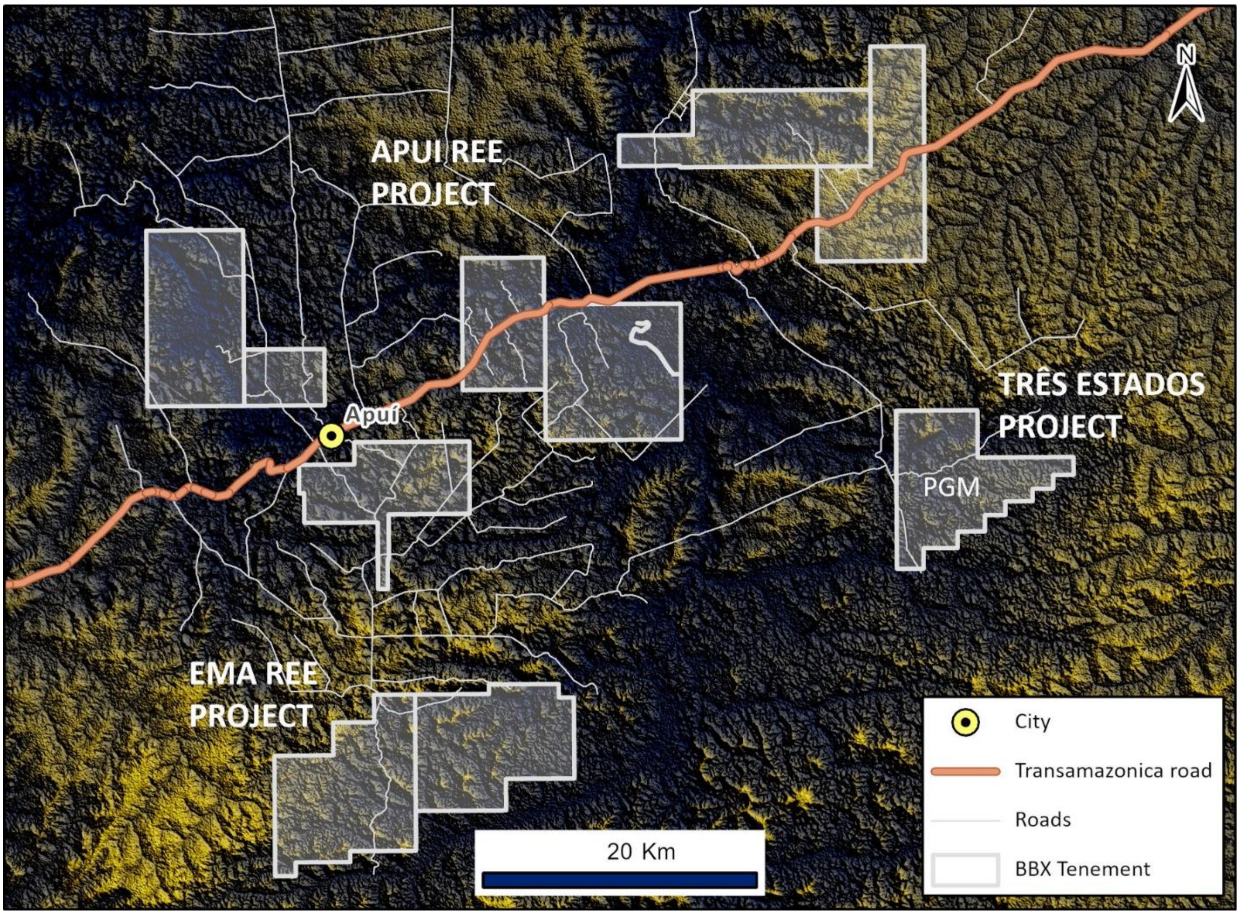
BBX has received and announced the full assay results for 24 holes of the 123 holes drilled to date (Figure 4). The timing to receive assay results from the laboratory is currently around 8 weeks.

Drilling is progressing with 4 auger drills to complete the infill in time to receive assay results for the MRE and to expand the mineralised zone with reconnaissance drill holes 400 and 800 metres apart in the Ema/Ema East iREE project.

Andre J. Douchane, CEO, commented: *"The Ema REE discovery continues to show good consistency and better grades at depth. CETEM, the Brazilian National Lab, has completed all their technical work on the Ema REE sample that BBX sent for additional metal recovery work, and they are now in the process of drafting their report. We will release the report as soon as we receive CETEM's final report. Additionally, The Catalão Lab has completed their report on methodology for recovering the precious metals after bioleaching and sent it to GE21 for review by their metallurgical QP. Once they have made their comments and signed off on the report, BBX will also release this report. We are hoping to get both reports released within the next few weeks.*

Due to the large amount of REE exploration in Brazil SGS is now experiencing an 8-week back up so if BBX is to produce a JORC Resource by the end of March 2024, then holes drilled after the end of November will not get in the initial resource estimate."

Figure 1 BBX´s REE projects



Ema REE project

The EMA iREE project (Ema & Ema East leases) is unique amongst Brazilian REE projects in that it shares almost identical characteristics with the iREE deposits developed over felsic volcanic rocks in southwest China, with an area of 189 sq km to be prospected, with similar REE grades.

Ionic REE deposits are hosted in clays within the lateritic profile, commonly up to 20 meters thick, with economic TREO grades generally above 600 ppm. The weathered portions of the 2021 drill holes returned values up to 8 times higher than those in the fresh rock, which is typical of the ionic REE adsorbed clay deposits found in China developed on top of rhyolites. These results indicate the presence of a lateritic regolith at Ema-Ema East with REE-enriched horizons potentially at economic grades. Ionic adsorption-type REE deposits associated with felsic volcanic rocks account for 38% of the total deposits of this type in southwest China.

The total REE oxide (TREO) concentrations of all the regolith samples developed over rhyolite in China is from 502 to 1737 ppm, with an average of 846 ppm, significantly higher than the parent rock (376 ppm). The highest TREO concentrations are found in the highly weathered zone, with the lowest concentrations in the semi-weathered zone. TREO concentrations vary significantly from the fully weathered zone (average 684 ppm) to the highly weathered zone (618-1737 ppm) and semi-weathered zone (502-594 ppm).

The TREO grades and REE recoveries by a simple ammonium sulphate leach announced for Ema are in the range of similar deposits in China.

Auger hole results

Table 2: Ema intersections above 500ppm TREO cut-off grade

Auger hole	From (m)	Interval (metres)	TREO ppm	% HREO[2]	% MREO[3]	NdPr ppm	DyTb ppm
EMA-TR-021	11	1	541	23	18	82	13
EMA-TR-022	3	2	962	12	18	162	12
EMA-TR-022	9	3	860	11	13	101	9
EMA-TR-023	11	11	627	17	25	145	10
EMA-TR-024	4	17	648	20	23	146	13
EMA-TR-025	7	9	607	19	15	77	12
EMA-TR-028	9	5	850	18	18	132	15
EMA-TR-031	8	2	540	19	21	102	11
EMA-TR-032	5	10	869	10	7	47	9

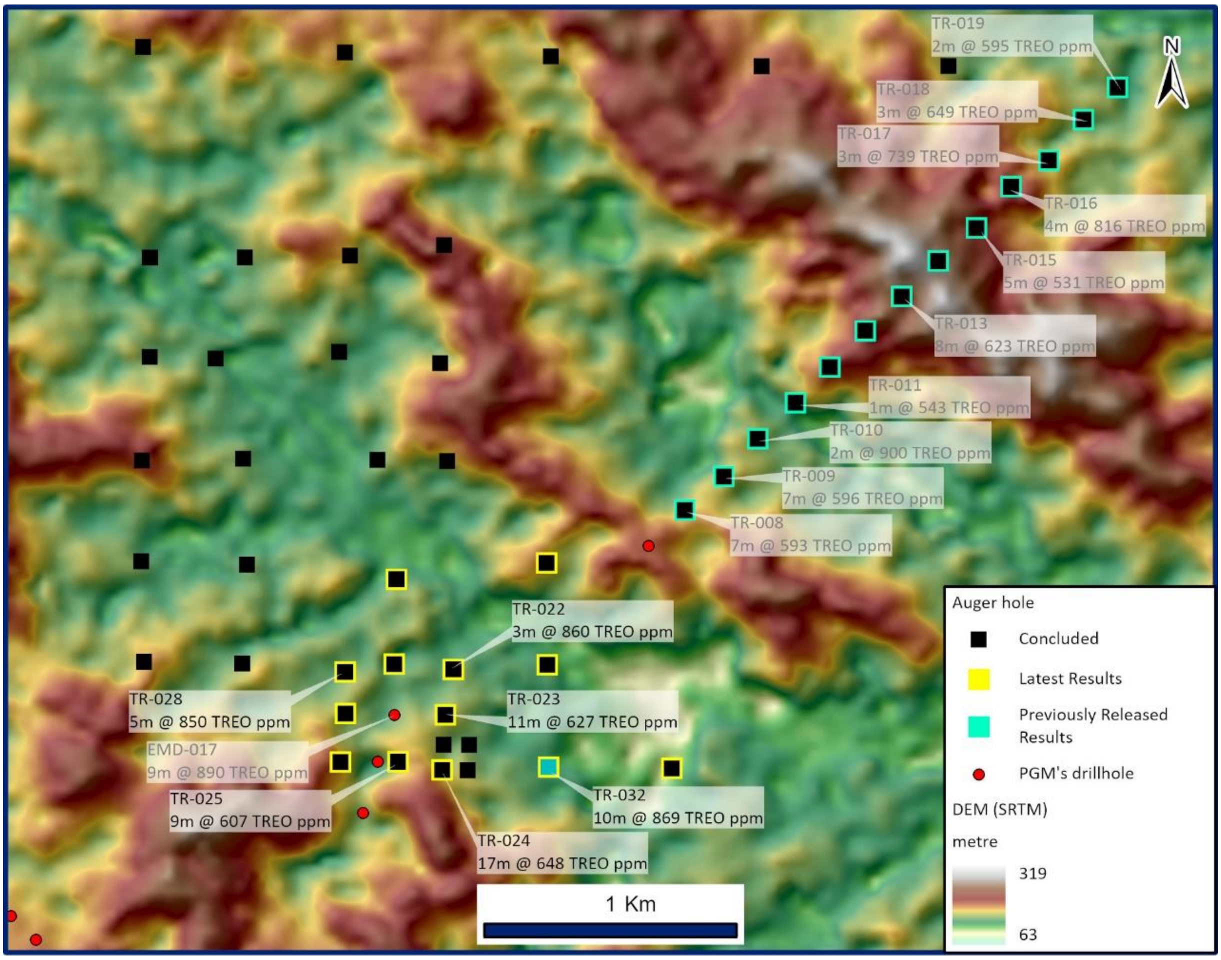


Figure 1 - Ema auger status

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

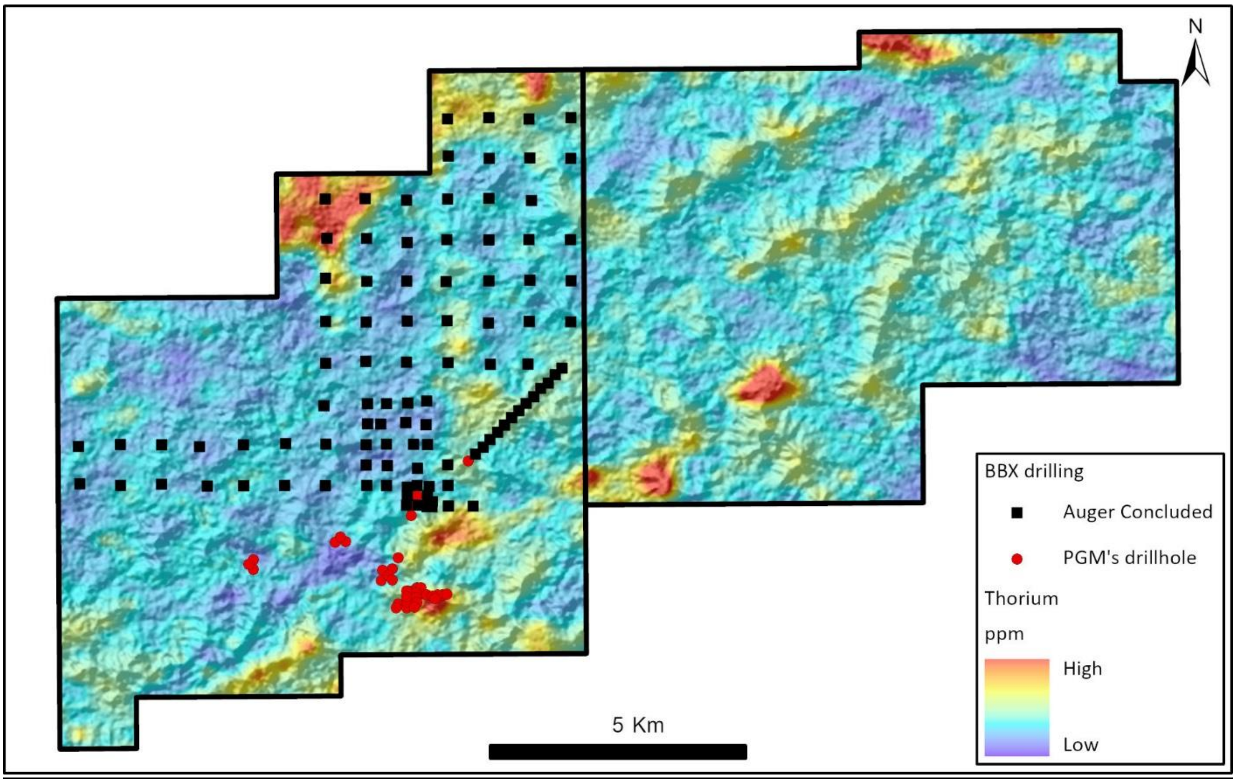


Figure 2 - Ema-Ema East REE project – reconnaissance and infill drilling status

Exploration strategy and future work at Ema/Ema East

It is planned to continue infill drilling to follow up the latest results to define the mineralised zone with grades higher than 800 ppm TREO with good recoveries by ammonium sulphate leaching to support the initial MRE, planned for the 1st quarter of 2024.

The ongoing programme of broad-spaced auger drilling will be extended to Ema East to further investigate the REE distribution within the weathered zone on top of the felsic volcanics, identifying the highest-grade zones in this lease (800-1200ppm TREO) for future follow up.

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

For more information:

André Douchane
Chief Executive Officer
adouchane@bbxminerals.com

About BBX Minerals Ltd

BBX Minerals Limited is a unique mineral exploration and mineral processing technology company listed on the Australian Securities Exchange.

Its major exploration focus is Brazil, mainly in the southern Amazon, a region BBX believes is vastly underexplored with high potential for the discovery of world class gold-PGM, base metal and Ionic Adsorbed Clay (IAC) Rare Earth Element deposits. BBX's key assets are the Três Estados and Ema gold-PGM projects and the iREE projects at Ema, Ema East and Apui. The company has 718km² of exploration tenements within the Colider Group and adjacent sediments, a prospective geological environment for gold, PGM, base metal and iREE deposits.

BBX is also developing an environmentally friendly and sustainable beneficiation process to extract precious metals using a unique bio leach process. This leading-edge process, that extracts precious metals naturally, is being developed initially for the primary purpose of economically extracting Platinum Group metals from the Três Estados mineral deposit. It is expected that such technology will be transferable and relevant to many other PGM projects. BBX believes that this processing technology is critical in the environmentally timely PGM space and supports a societal need to move towards a carbon neutral economy.

Competent Person Statement

The information in this report that relates to exploration results is based on information compiled by Mr. Antonio de Castro, BSc (Hons), MAusIMM, CREA, who acts as BBX´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.

CREA/RJ:02526-6D
AusIMM:230624

Appendices

Appendix 1 – Total REE oxide distribution down-hole

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm	Int
EMA-TR-021	0	1	161	43	18	22	7	
EMA-TR-021	1	2	150	41	19	22	6	
EMA-TR-021	2	3	186	36	19	30	7	
EMA-TR-021	3	4	273	30	21	49	9	
EMA-TR-021	4	5	332	25	23	69	8	
EMA-TR-021	5	6	290	26	22	55	8	
EMA-TR-021	6	7	243	31	20	40	8	
EMA-TR-021	7	8	219	30	19	35	7	
EMA-TR-021	8	9	325	23	19	54	8	
EMA-TR-021	9	10	439	20	15	57	9	
EMA-TR-021	10	11	457	23	16	59	12	
EMA-TR-021	11	12	541	23	18	82	13	541
EMA-TR-022	0	1	114	56	16	12	6	
EMA-TR-022	1	2	127	52	17	15	7	
EMA-TR-022	2	3	156	33	17	22	5	
EMA-TR-022	3	4	565	11	16	83	6	962
EMA-TR-022	4	5	1359	12	19	241	17	
EMA-TR-022	5	6	175	45	18	24	8	
EMA-TR-022	6	7	211	35	19	33	7	
EMA-TR-022	7	8	342	25	20	61	9	
EMA-TR-022	8	9	483	18	19	86	9	
EMA-TR-022	9	10	698	11	12	74	8	860
EMA-TR-022	10	11	1092	8	10	103	9	
EMA-TR-022	11	12	791	15	17	125	11	
EMA-TR-023	0	1	161	42	11	10	7	
EMA-TR-023	1	2	350	19	4	7	7	
EMA-TR-023	2	3	442	15	3	6	7	
EMA-TR-023	3	4	460	13	3	8	6	
EMA-TR-023	4	5	294	26	8	15	8	
EMA-TR-023	5	6	235	35	9	12	9	
EMA-TR-023	6	7	235	33	8	11	8	
EMA-TR-023	7	8	255	31	9	15	9	
EMA-TR-023	8	9	475	16	6	21	8	
EMA-TR-023	9	10	390	21	14	47	9	
EMA-TR-023	10	11	402	20	16	57	9	
EMA-TR-023	11	12	748	12	13	87	9	627

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm	Int
EMA-TR-023	12	13	530	18	22	108	10	
EMA-TR-023	13	14	579	18	24	127	12	
EMA-TR-023	14	15	620	16	24	137	11	
EMA-TR-023	15	16	594	17	25	141	10	
EMA-TR-023	16	17	628	17	26	156	10	
EMA-TR-023	17	18	571	17	26	141	9	
EMA-TR-023	18	19	569	18	27	143	9	
EMA-TR-023	19	20	670	17	25	159	10	
EMA-TR-023	20	21	771	16	33	246	12	
EMA-TR-023	21	22	615	19	27	153	11	
EMA-TR-024	0	1	279	28	12	25	8	
EMA-TR-024	1	2	414	20	12	42	9	
EMA-TR-024	2	3	467	16	12	50	8	
EMA-TR-024	3	4	436	20	15	58	9	
EMA-TR-024	4	5	610	17	15	80	11	
EMA-TR-024	5	6	456	21	17	67	10	
EMA-TR-024	6	7	565	18	14	71	11	
EMA-TR-024	7	8	450	21	18	69	10	
EMA-TR-024	8	9	511	21	19	85	11	
EMA-TR-024	9	10	570	18	17	86	11	
EMA-TR-024	10	11	530	20	18	87	11	
EMA-TR-024	11	12	613	18	18	100	11	
EMA-TR-024	12	13	591	20	23	124	12	648
EMA-TR-024	13	14	632	19	27	158	12	
EMA-TR-024	14	15	679	18	29	183	12	
EMA-TR-024	15	16	623	18	29	167	11	
EMA-TR-024	16	17	784	18	30	225	13	
EMA-TR-024	17	18	818	19	31	238	15	
EMA-TR-024	18	19	827	20	31	243	16	
EMA-TR-024	19	20	827	22	31	240	17	
EMA-TR-024	20	21	931	26	30	259	22	
EMA-TR-025	0	1	219	33	9	12	8	
EMA-TR-025	1	2	272	24	8	13	7	
EMA-TR-025	2	3	281	22	7	13	6	
EMA-TR-025	3	4	295	23	7	14	7	
EMA-TR-025	4	5	307	27	7	14	9	
EMA-TR-025	5	6	303	25	6	9	8	
EMA-TR-025	6	7	343	24	6	13	9	
EMA-TR-025	7	8	512	18	21	95	11	607
EMA-TR-025	8	9	323	26	8	18	9	

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm	Int
EMA-TR-025	9	10	410	27	15	48	13	
EMA-TR-025	10	11	855	11	6	44	11	
EMA-TR-025	11	12	644	16	12	68	11	
EMA-TR-025	12	13	835	15	13	98	15	
EMA-TR-025	13	14	575	18	17	88	10	
EMA-TR-025	14	15	642	19	21	121	13	
EMA-TR-025	15	16	668	17	19	117	12	
EMA-TR-026	0	1	170	29	19	27	5	
EMA-TR-026	1	2	121	31	17	18	4	
EMA-TR-026	2	3	99	34	17	14	3	
EMA-TR-026	3	4	108	35	18	15	4	
EMA-TR-026	4	5	80	34	19	12	3	
EMA-TR-026	5	6	68	37	18	10	3	
EMA-TR-026	6	7	102	31	17	14	3	
EMA-TR-026	7	8	119	34	17	16	4	
EMA-TR-026	8	9	179	30	20	30	6	
EMA-TR-026	9	10	117	30	19	19	4	
EMA-TR-026	10	11	150	27	20	26	4	
EMA-TR-026	11	12	125	26	21	23	3	
EMA-TR-026	12	13	112	27	21	20	3	
EMA-TR-026	13	14	118	27	21	21	3	
EMA-TR-027	0	1	162	35	12	14	6	
EMA-TR-027	1	2	208	30	9	12	7	
EMA-TR-027	2	3	218	31	8	11	7	
EMA-TR-027	3	4	233	28	7	9	7	
EMA-TR-027	4	5	208	28	7	9	6	
EMA-TR-027	5	6	220	33	9	11	8	
EMA-TR-027	6	7	292	30	9	15	10	
EMA-TR-027	7	8	232	29	9	14	7	
EMA-TR-027	8	9	300	25	11	25	8	
EMA-TR-027	9	10	239	27	13	25	7	
EMA-TR-027	10	11	273	25	18	42	7	
EMA-TR-027	11	12	342	23	20	62	8	
EMA-TR-027	12	13	287	24	20	49	7	
EMA-TR-028	0	1	117	44	15	11	6	
EMA-TR-028	1	2	131	46	12	10	6	
EMA-TR-028	2	3	145	41	14	15	6	
EMA-TR-028	3	4	165	44	18	21	8	
EMA-TR-028	4	5	121	44	18	16	5	
EMA-TR-028	5	6	126	43	17	16	6	

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm	Int
EMA-TR-028	6	7	96	40	18	13	4	
EMA-TR-028	7	8	159	38	19	24	6	
EMA-TR-028	8	9	340	34	21	61	11	
EMA-TR-028	9	10	528	18	18	87	9	
EMA-TR-028	10	11	1153	11	10	105	13	
EMA-TR-028	11	12	876	17	18	139	15	850
EMA-TR-028	12	13	864	20	20	158	17	
EMA-TR-028	13	14	829	25	23	173	20	
EMA-TR-029	0	1	130	54	17	15	7	
EMA-TR-029	1	2	141	50	16	16	7	
EMA-TR-029	2	3	82	45	16	9	4	
EMA-TR-029	3	4	108	39	14	11	5	
EMA-TR-029	4	5	230	37	14	22	9	
EMA-TR-029	5	6	184	51	14	16	9	
EMA-TR-029	6	7	466	20	39	170	12	
EMA-TR-029	7	8	198	44	16	24	9	
EMA-TR-029	8	9	188	40	16	23	8	
EMA-TR-029	9	10	276	31	21	49	9	
EMA-TR-029	10	11	303	25	22	60	8	
EMA-TR-029	11	12	325	24	25	72	8	
EMA-TR-029	12	13	333	24	24	71	8	
EMA-TR-031	0	1	134	52	16	15	7	
EMA-TR-031	1	2	138	49	17	17	7	
EMA-TR-031	2	3	133	45	17	17	6	
EMA-TR-031	3	4	146	41	16	19	6	
EMA-TR-031	4	5	202	38	18	29	7	
EMA-TR-031	5	6	157	42	18	21	7	
EMA-TR-031	6	7	170	26	22	33	4	
EMA-TR-031	7	8	461	20	21	89	9	
EMA-TR-031	8	9	574	18	21	109	11	540
EMA-TR-031	9	10	505	19	21	95	10	
EMA-TR-032	0	1	157	57	16	15	10	
EMA-TR-032	1	2	236	34	18	34	9	
EMA-TR-032	2	3	250	34	19	38	9	
EMA-TR-032	3	4	235	37	17	30	9	
EMA-TR-032	4	5	213	35	12	17	8	
EMA-TR-032	5	6	918	8	3	23	9	
EMA-TR-032	6	7	559	13	4	13	8	869
EMA-TR-032	7	8	892	8	2	13	8	
EMA-TR-032	8	9	620	11	4	17	7	

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm	Int
EMA-TR-032	9	10	1445	7	3	37	11	
EMA-TR-032	10	11	870	9	6	44	8	
EMA-TR-032	11	12	920	10	8	69	9	
EMA-TR-032	12	13	725	13	12	80	10	
EMA-TR-032	13	14	1085	9	8	79	9	
EMA-TR-032	14	15	653	15	15	92	10	

Appendix 2: Auger drill-hole location

Hole ID	East	North	RL (m)	Depth	Azimuth	Dip	Tenement
EMA-TR-021	184605.81	9176794.86	137.96	12	0	-90	880.107/2008
EMA-TR-022	184838.72	9176775.00	126.19	12	0	-90	880.107/2008
EMA-TR-023	184808.50	9176595.82	140.48	22	0	-90	880.107/2008
EMA-TR-024	184797.20	9176378.69	135.07	21	0	-90	880.107/2008
EMA-TR-025	184622.99	9176409.66	99.00	16	0	-90	880.107/2008
EMA-TR-026	184396.74	9176407.32	154.49	14	0	-90	880.107/2008
EMA-TR-027	184414.84	9176598.26	152.21	13	0	-90	880.107/2008
EMA-TR-028	184412.67	9176762.17	133.88	14	0	-90	880.107/2008
EMA-TR-029	184612.16	9177128.95	131.77	13	0	-90	880.107/2008
EMA-TR-031	185208.60	9176795.76	118.26	10	0	-90	880.107/2008
EMA-TR-032	185216.39	9176392.69	122.36	15	0	-90	880.107/2008

Appendix 3

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 BBX´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 BBX geologist or field assistants. • Every 1-metre sample was collected in a raffia bag in the field and transported to the exploration shed to be dried in the sun, prior to homogenisation. • Samples were homogenised and subsequently riffle split with about 2 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	• 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.

Item	JORC code explanation	Comments
	tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	
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 BBX geologists or field technicians, 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.	• Auger sampling procedure is completed in the exploration shed in Apui. • The entire one metre sample is bagged on site, in a raffia bag which is transported to the exploration shed, where it is naturally dried 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, crushing of entire sample to 75% < 3mm followed by rotary splitting and pulverisation of 250 to 300 grams at 95% minus 150#.

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td>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>The <3mm rejects and the 250-300 grams pulverised sample were returned to BBX for storage.</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 SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited.</td></tr>
</table>

Item	JORC code explanation	Comments
		• Analytical standard for REE ITAK-705 was 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 BBX´s 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

Item	JORC code explanation	Comments
		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
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

Item	JORC code explanation	Comments
		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) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + 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 LREO (Light Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 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 CREO (Critical Rare Earth Oxide) = Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3 (From U.S. Department of Energy, Critical Material Strategy, December 2011) MREO (Magnetic Rare Earth Oxide) = Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3 NdPr = Nd_2O_3 + Pr_6O_{11} DyTb = Dy_2O_3 + Tb_4O_7 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

Item	JORC code explanation	Comments
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 over 200m apart, designed for reconnaissance testing over a single target area. • 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. • 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 BBX 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	• Auger locations and diagrams are presented in this announcement. • Details are tabulated in the announcement.

Criteria	JORC code explanation	Commentary
	- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Weighted averages were calculated for all intercepts. • 500ppm TREO cut-off grade was applied to define the relevant intersections. • 1 metre internal dilution was accepted. • 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.	• 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.

Criteria	JORC code explanation	Commentary
	• 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').	
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 soil 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 800ppm TREO in auger holes was reported with confirmation of IAC (Ionic Adsorbed Clay) type mineralisation was obtained for EMD-017 and TR-016 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.
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.	• Conduct infill drilling in the EMD-017 region for an MRE. • Reconnaissance 400 and 800m spacing auger drilling in the EMA. • Drill hole and samples will go to metallurgical test work with ammonium sulphate leach.