EMA assay results – significant levels of REEs identified
Additional exploration tenements applications within Apuí region

BBX Minerals Limited (**ASX: BBX**) (“**BBX**” or the “**Company**”) is pleased to announce assay results for 13 selected drill holes from its 2021 drilling programme at the Ema Project (Appendix 1) in Brazil. Multi-element assays were conducted at independent laboratory SGS, aiming to evaluate the rare earth element (**REE**) enrichment level in the lateritic regolith.

Seven of the 13 holes reported significant Total Rare Oxide (TREO[1]) values, with the intersection selection based on values above 200ppm of TREO-CeO2.

Significant results:

- **EMRC002: 8.0 m at 1,607 ppm TREO from surface**
- **EMRC011: 6.0 m at 376 ppm TREO from 6 metres**
- **EMD013: 10.0 m at 458 ppm TREO from 11 metres**
- **EMD017: 9.0 m at 890 ppm TREO from 10 metres**
- **EMD019: 6.3 m at 394 ppm TREO from 4 metres**
- **EMD022: 7.8 m at 776 ppm TREO from 4 metres**
- **EMD025: 10.0 m at 633 TREO ppm from 2 metres**

The Company is also pleased to advise that it has submitted applications for three new exploration tenements (Figure 2) within the Apuí region in the state of Amazonas, Brazil. Given the Company’s existing in-country exploration and operational capabilities, as well as its strong long-term relationship with key stakeholders in the region, the Board deems it prudent to undertake low cost, strategic exploration concurrently with the development activities related to the Três Estados project. Três Estados remains the Company’s flagship project and top priority. BBX’s dedicated exploration team will conduct all exploration activities, while assays will be completed at an external laboratory. These activities will not impact the ongoing development activities related to Três Estados.

Anomalous REE values

Following up indications of the presence of anomalous levels of REEs in recently completed multi-element fresh rock assays, selected portions of 13 holes drilled in the felsic volcanics and pyroclastics at Ema were submitted for whole rock analysis at SGS. Significant levels of TREO were returned from within the clay-rich lateritic weathered profile in seven holes (Table 1). The multi-element fresh rock assays were conducted only recently as part of the work required to complete the Ema final exploration report lodged with the local relevant department.

Ionic REE deposits are hosted in clays within the lateritic profile, commonly up to 20 meters thick, with economic TREO grades are generally in the range of 400 ppm to 1,200 ppm. The weathered portions of the 2021 drill holes returned values of 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 with REE-enriched horizons potentially at economic grades. Ongoing follow-up will include leaching tests to determine the recoverable ionic rare earth component using simple and low-cost leaching technology.

[1] TREO = La2O3 + CeO2 +Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu 2O3 + Y2O3

In addition to directly following up of these significant REE intercepts, areas of preserved regolith in identified plateaus both with and without lateritic cover developed over the felsic volcanics at Ema and Ema East (18,874 Ha) (Appendix 1) will be tested by regional exploratory auger hole drilling.

Ongoing exploration and follow-up of the Ema REE results will proceed concurrently and independently with the high-priority activities at Três Estados, BBX's flagship project. Brazil is home to a number of REE projects, including operating mines (Figure 1). These results reflect the significant REE exploration potential at Ema and in the adjacent Ema East tenement. The work to advance the REE discovery is relatively low cost and will continue in parallel with our primary focus, advancing the Três Estados project.

REEs are key components of EVs and wind turbines, and as such, they are directly aligned with BBX's commitment to supporting the transition towards a carbon neutral economy.

Table 1: EMA project drilling results above 200ppm TREO-CeO_2

Hole ID	Depth From (meters)	Length (meters)	TREO ppm	TREO - Ce_2O_3 ppm	HREO ppm	CREO ppm	MREO ppm
EMD-013	11.00	10.00	458	278	85	130	107
EMD-017	10.00	9.00	890	679	207	342	292
EMD-019	4.00	6.33	394	250	102	127	85
EMD-022	4.00	7.80	776	613	246	320	233
EMD-025	2.00	12.06	633	292	95	132	104
EMRC-002	0.00	8.00	1607	1265	133	477	591
EMRC-011	6.00	6.00	376	235	82	112	82

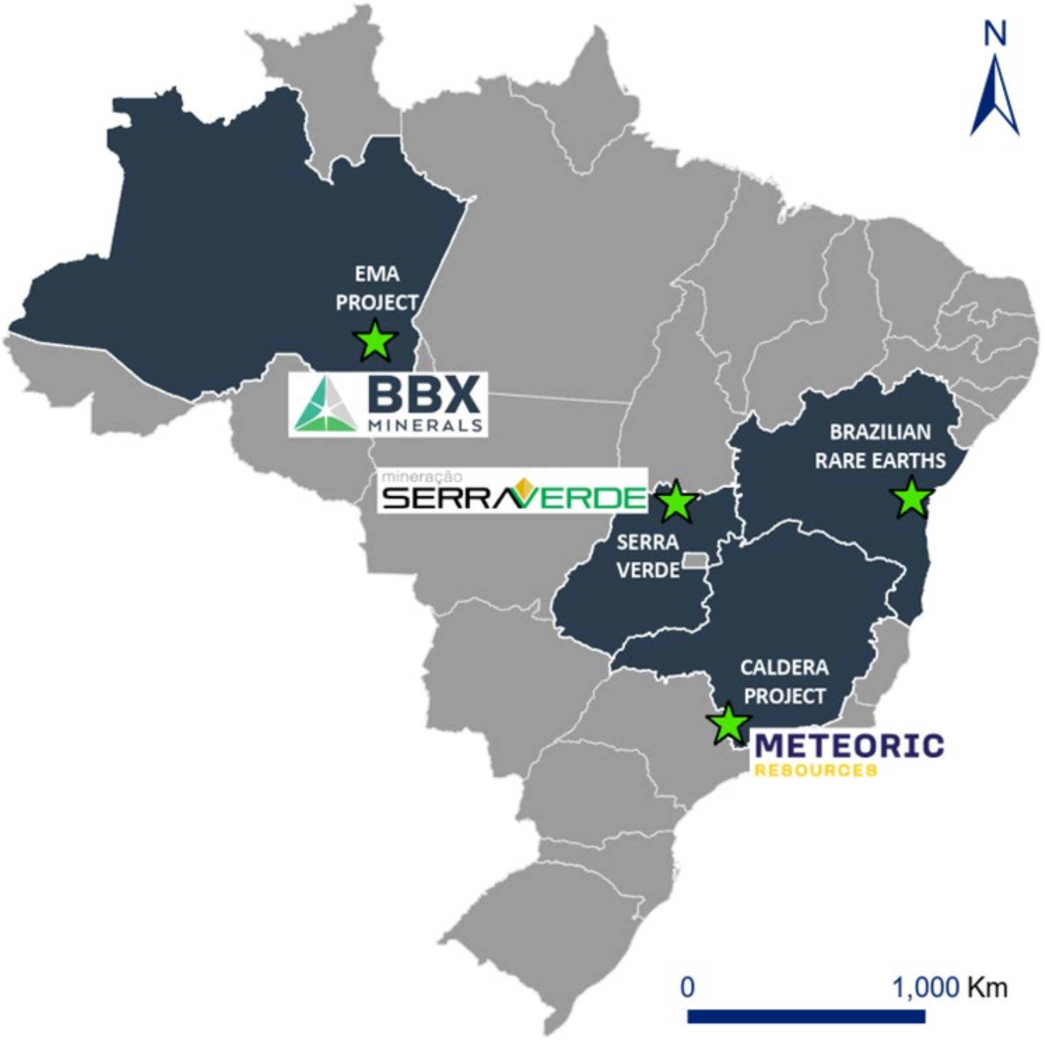
These results demonstrate both extensive areal distribution, with holes spaced up to 3 km apart, and preserved regolith with a near-surface REE enriched horizon containing potentially economic grades. These are the key characteristics of ionic adsorbed clay REE deposits.

The REE distribution from the relevant intersections shows that 29.1% comprise the high cost magnetic REE´s (MREO) (Table 1 and Table 2) compatible with other ionic adsorbed clay deposits.

Table 2: REE elements distribution from the relevant intersections from the Ema project

Classification	Element	Element	REE ppm	Factor	Oxide	REO ppm	REO/TREO %
LREE	Lanthanum	La	154.4	1.1728	La_2O_3	181.1	24.8
	Cerium	Ce	176.9	1.2284	CeO_2	217.3	29.7
	Praseodymium	Pr	38.9	1.2082	Pr_6O_{11}	47.0	6.4
	Neodymium	Nd	130.7	1.1664	Nd_2O_3	152.5	20.8
HREE	Samarim	Sm	18.7	1.1596	Sm_2O_3	21.7	3.0
	Europium	Eu	3.6	1.1579	Eu_2O_3	4.2	0.6
	Gadolium	Gd	13.9	1.1526	Gd_2O_3	16.1	2.2
	Terbium	Tb	1.8	1.1762	Tb_4O_7	2.1	0.3
	Dysprosium	Dy	10.1	1.1477	Dy_2O_3	11.6	1.6
	Holmium	Ho	2.0	1.1455	Ho_2O_3	2.2	0.3
	Erbium	Er	5.2	1.1435	Er_2O_3	6.0	0.8
	Thulium	Tm	0.8	1.1421	Tm_2O_3	0.9	0.1
	Ytterbium	Yb	5.0	1.1387	Yb_2O_3	5.7	0.8
	Lutetium	Lu	0.7	1.1371	Lu_2O_3	0.8	0.1
	Ytrium	Y	48.9	1.2699	Y_2O_3	62.1	8.5
	Totals		612			731	100

Figure 1: REE projects in Brazil



Andre J Douchane, CEO, commented: "*The exploration team lead by Antonio de Castro has, over the past several years, been continuously exploring in both the Apui region and around Brazil for precious metal opportunities and other valuable metals such as Rare Earth Elements. I congratulate them on making this fantastic new REE discovery. We are very excited about the potential of this new rare earth discovery, and its potential complement to our existing PGM project. The majority of the technical team continues to work diligently on the Três Estados precious metal deposit. Our Technical Manager, Edmar Medeiros, is currently in the US working very closely with Ecobiome at Ecobiome's Woodlands, TX facility on the second pilot plant test. I will be joining Edmar there next week for this test. As the world looks forward to a carbon neutral economy, we expect that both REEs and PGMs will play very key roles*."

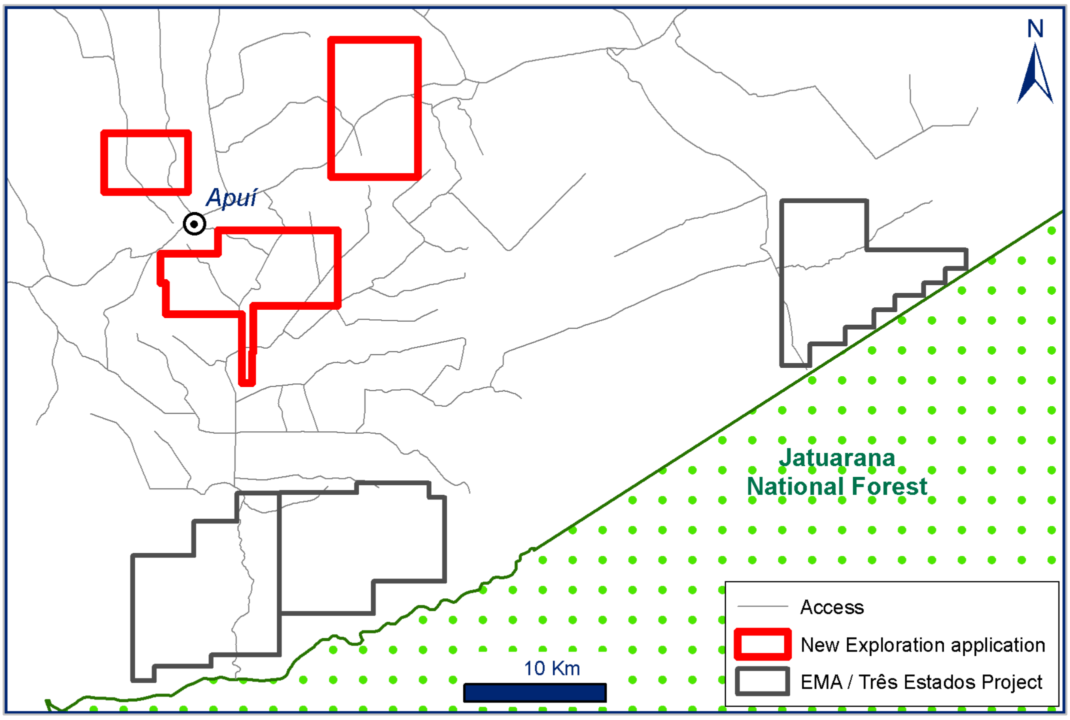
Tenement applications

The Company has applied for three exploration tenements in the vicinity of Apui (Table 3), with potential for multi-element mineralisation, expanding BBX's tenement area to 419.11 km^2 (Figure 2). These areas were strategically selected given their potential for multi-element mineralisation. Reconnaissance soil sampling and auger drilling will be conducted once the exploration leases are granted.

Table 3: Tenements applications

Project	Tenement	Area (Ha)	Status
Apuí Regional	880.025/2023	2,417	Exploration Application
	880.026/2023	6,591.9	Exploration Application
	880.027/2023	5,856	Exploration Application

Figure 2: BBX's tenements



Assay results for Gold and PGMs – EMD-013 to EMD-027

Results for drill holes EMD-013 to EMD-027 from its 2021 drilling programme at the Ema Project (Appendix 1) have been received. Assays were conducted for gold, platinum, palladium, iridium and rhodium at Catalão, using BBX´s proprietary nickel fusion assay technique.

EMD-026 returned 2 metres at 1.69 g/t Au from 64m. No other significant results for PGMs and Au were obtained. The holes (Appendix 2 and Appendix 3) were drilled in felsic volcanics and in the gabbro bodies, targeting principally gold mineralisation. Assaying of the 2021 diamond drill hole program at Ema is now complete.

Drill holes EMD-020 to 024, testing the gabbro body at the Ema central target, will be submitted to the bioleaching process as part of the PGM investigation programme and additional test work.

Additionally, the Company is planning testing of a number of the Ema drill holes by ICP-MS.

About Rare Earth Elements (REE)

REES are a group of 17 metals - 15 elements of the lanthanide series as well as two chemically similar elements, scandium and yttrium. Metals in the lanthanide series are lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), promethium (Pm), samarium (Sm), europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb) and lutetium (Lu). In addition, yttrium (Y) and scandium (Sc) are often grouped with the lanthanides and referred to as REE.

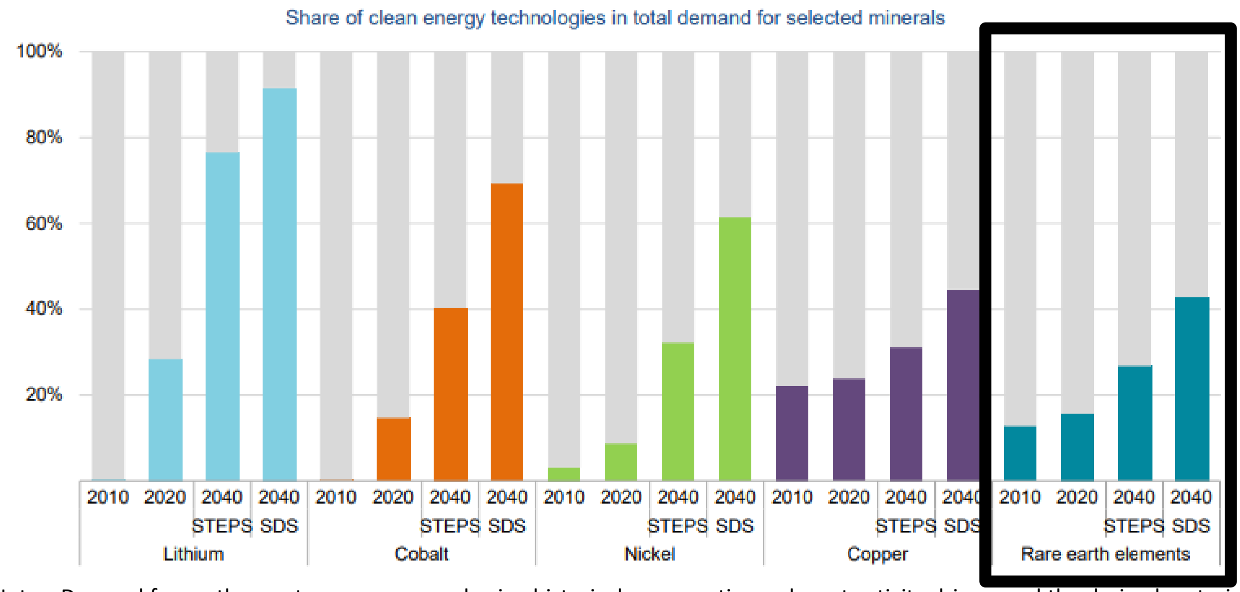
Rapid technological advances have resulted in the REE growing in importance in many domestic, medical, industrial and strategic applications because of their unique catalytic, metallurgical, nuclear, electrical, magnetic and luminescent properties. Examples of the many applications for REE are their use in magnets and super magnets, motors, metal alloys, electronic and computing equipment, batteries, catalytic converters, petroleum refining, medical imaging, colouring agents in glass and ceramics, phosphors, lasers and special glass (Australian Government Geoscience Australia, 2023).

Role of RRE in renewable energies

Rare earth elements are essential for permanent magnets that are vital for wind turbines and EV motors. The four magnetic rare earths (MREO), Pr, Nd, Tb and Dy are all present in the Ema results.

The shift to a clean energy system is set to drive a huge increase in the requirements for these minerals, meaning that the energy sector is emerging as a major force in mineral markets.

The energy sector becomes a leading consumer of minerals as energy transitions accelerate



Notes: Demand from other sectors was assessed using historical consumption, relevant activity drivers and the derived material intensity. Neodymium demand is used as indicative for rare earth elements. STEPS = Stated Policies Scenario, an indication of where the energy system is heading based on a sector-by-sector analysis of today's policies and policy announcements; SDS = Sustainable Development Scenario, indicating what would be required in a trajectory consistent with meeting the Paris Agreement goals.

Source: (International Energy Agency, 2022).

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

For more information:

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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 and precious metal deposits. BBX's key assets are the Três Estados and Ema Gold Projects. The company has 270.5km² of exploration tenements within the Colider Group, a prospective geological environment for gold, PGM and base metal deposits.

BBX is also developing an environment compatible and sustainable beneficiation process that extracts 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 Tres 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 toward a carbon neutral economy.

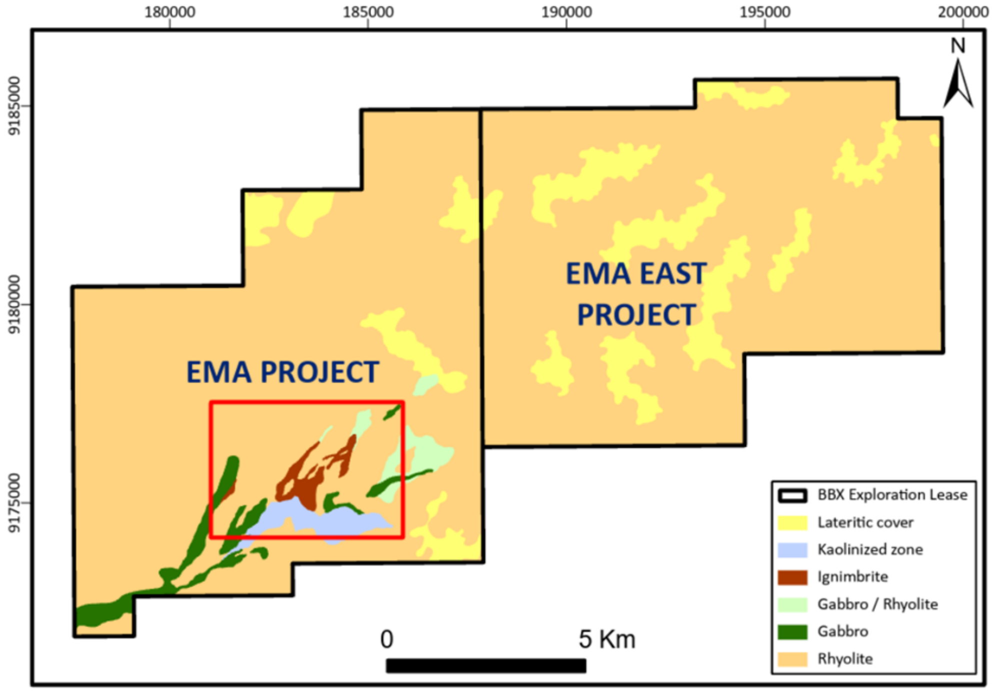
Competent Person Statement

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.

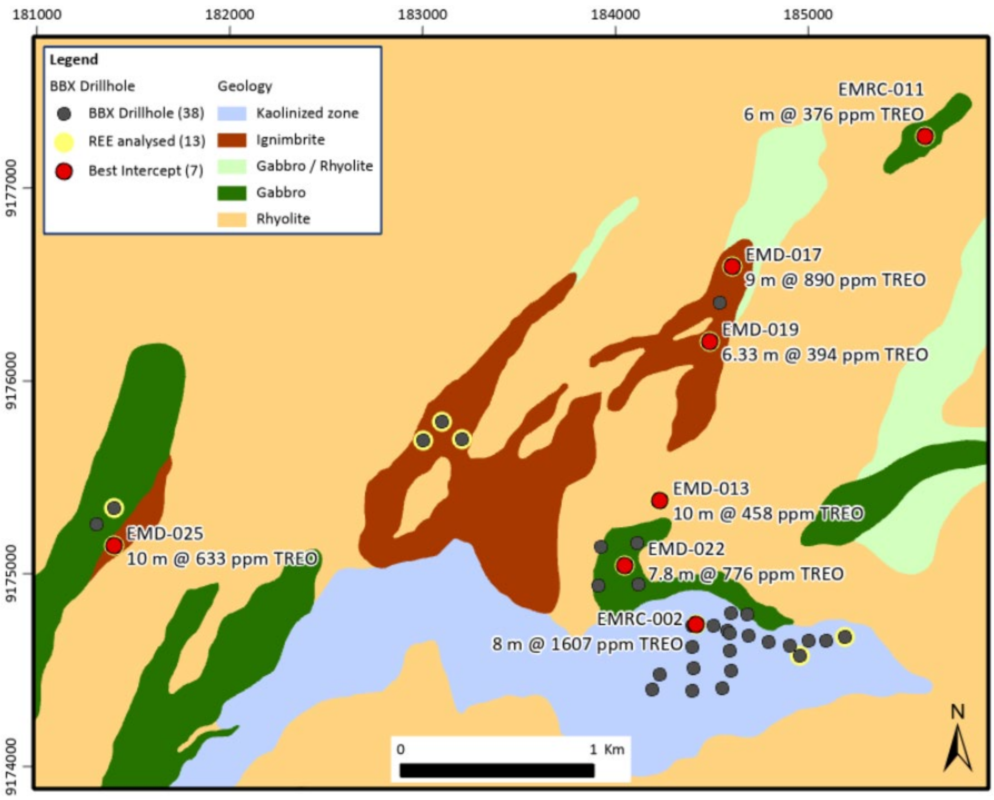
CREA/RJ:02526-6D
AusIMM:230624

Appendices

Appendix 1: Ema and Ema East projects



Appendix 2: Ema drill collar location



Appendix 3: Drillhole Locations

Hole ID	East	North	RL (m)	Azimuth	DIP	Depth (m)	Tenement	Method
EMRC002	184419.00	9174739.00	221.00	0	-90	42.00	880.107/2008	RC
EMRC009	185189.00	9174674.00	261.00	0	-90	40.00	880.107/2008	RC
EMRC011	185605.00	9177268.00	198.00	0	-90	32.00	880.107/2008	RC
EMD012	184953.00	9174586.00	237.00	0	-90	93.94	880.107/2008	DD
EMD-013	184231.00	9175383.00	198.00	0	-90	51.01	880.107/2008	DD
EMD-014	183202.00	9175698.00	236.00	0	-90	51.06	880.107/2008	DD
EMD-015	183104.00	9175790.00	192.00	0	-90	52.11	880.107/2008	DD
EMD-016	183006.00	9175692.00	148.00	0	-90	51.68	880.107/2008	DD
EMD-017	184607.00	9176595.00	154.00	0	-90	51.45	880.107/2008	DD
EMD-018	184543.00	9176409.00	141.00	0	-90	51.08	880.107/2008	DD
EMD-019	184487.00	9176207.00	145.00	0	-90	51.09	880.107/2008	DD
EMD-020	184118.00	9174948.00	210.00	0	-90	70.20	880.107/2008	DD
EMD-021	183910.00	9174943.00	152.00	0	-90	51.44	880.107/2008	DD
EMD-022	180046.00	9175044.00	183.00	0	-90	70.38	880.107/2008	DD
EMD-023	184116.00	9175161.00	161.00	0	-90	81.44	880.107/2008	DD
EMD-024	183924.00	9175146.00	217.00	0	-90	55.26	880.107/2008	DD
EMD-025	181395.00	9175129.00	156.00	0	-90	51.68	880.107/2008	DD
EMD-026	181403.00	9175343.00	182.00	0	-90	76.00	880.107/2008	DD
EMD-027	181311.00	9175258.00	181.00	0	-90	71.00	880.107/2008	DD

Appendix 4: REE oxide assay results

HOLEID	FROM	TO	$La^{2}O^{3}$ ppm	CeO^{2} ppm	$Pr^{6}O^{11}$ ppm	$Nd^{2}O^{3}$ ppm	$Sm^{2}O^{3}$ ppm	$Eu^{2}O^{3}$ ppm	$Gd^{2}O^{3}$ ppm	$Tb^{4}O^{7}$ ppm	$Dy^{2}O^{3}$ ppm	$Ho^{2}O^{3}$ ppm	$Er^{2}O^{3}$ ppm	$Tm^{2}O^{3}$ ppm	$Yb^{2}O^{3}$ ppm	$Lu^{2}O^{3}$ ppm	$Y^{2}O^{3}$ ppm	TREO ppm	Regolith Zone	Length	TREO ppm
EMD-012	0.00	2.00	19.4	23.8	2.5	8.7	2	2.8	2.4	0.5	3.8	0.9	2.8	0.5	3.4	0.5	25.7	100	Saprolite		
EMD-012	2.00	4.00	33	32.8	2.9	9.1	2	4.9	3.6	0.8	6.2	1.3	4.8	0.8	5.5	0.9	43.1	152	Saprolite		
EMD-012	4.00	6.00	24.4	42.3	3.6	11.5	2	5.4	4.2	1	7.1	1.6	5.4	0.9	6.5	1	51.6	169	Saprolite		
EMD-012	6.00	8.00	15.6	35.1	1.8	5.5	0.5	5.2	3.9	0.9	6.7	1.5	5.1	0.9	5.8	1	48.6	138	Saprolite		
EMD-012	8.00	10.00	20.2	26.2	2.2	5.5	0.8	5.2	3.8	0.9	6.9	1.5	5.1	0.9	6.3	1	49.1	136	Saprolite		
EMD-012	10.00	12.00	17.7	74.7	2.5	8.9	2.2	4.7	3.8	0.8	6.1	1.4	4.7	0.8	5.6	0.9	43	178	Saprolite		
EMD-012	12.00	14.00	25.2	74.3	4.9	16	3.5	4.7	4.3	0.9	6.3	1.4	4.7	0.8	5.2	0.8	40.8	194	Saprolite		
EMD-012	14.00	16.00	21	130.6	3.8	11.8	1.6	3.5	3.2	0.7	4.8	1	3.5	0.5	3.8	0.6	30.8	221	Saprolite		
EMD-013	0.00	1.60	18.9	83.5	2.4	7.9	1	3.4	3.3	0.7	5	1.1	3.4	0.6	3.5	0.5	32.5	168	Saprolite		
EMD-013	1.60	3.00	16.5	161.3	2.6	8.7	2.3	3.3	3.3	0.7	4.8	1	3.3	0.5	3.4	0.5	31	243	Saprolite		
EMD-013	3.00	5.00	23.5	127.5	4.5	16	3.7	3.6	4.1	0.8	5.6	1.1	3.6	0.5	3.5	0.6	34.8	233	Saprolite		
EMD-013	5.00	7.00	27.2	214.1	5.8	20.9	4.4	3.5	4.1	0.8	5	1	3.4	0.5	3.5	0.5	30.7	325	Saprolite		
EMD-013	7.00	9.00	49.5	194.2	10.5	36.4	6.7	4	6	1	6.4	1.3	3.9	0.6	3.8	0.6	35.8	361	Saprolite		
EMD-013	9.00	11.00	52.7	189.8	11.1	37.9	7	4.1	6	1	6.3	1.3	4	0.6	3.9	0.6	38	364	Saprolite		
EMD-013	11.00	13.00	87.8	228.2	20	68.9	10.6	5.2	8.7	1.4	8.1	1.7	5.2	0.8	4.9	0.8	48.2	500	Saprolite		
EMD-013	13.00	15.00	96.4	196.4	22	76.5	11.9	4.1	8.1	1.2	6.8	1.4	4	0.6	4.2	0.6	40.2	474	Saprolite		
EMD-013	15.00	17.00	94.2	159.7	22.2	76.3	12.4	5.4	9.1	1.4	8.8	1.7	5.3	0.7	4.9	0.7	48.2	451	Saprolite	**10**	**458**
EMD-013	17.00	19.00	91.6	160.3	21.2	75.9	10.7	3.6	7.2	1	5.9	1.2	3.6	0.5	3.9	0.6	32.4	420	Saprolite		
EMD-013	19.00	21.00	102.9	153.9	23.8	85.4	13.2	3.6	8	1.1	5.9	1.1	3.6	0.6	3.9	0.6	36.1	444	Saprolite		
EMD-014	0.00	2.00	19	45	3	11.3	1.9	1.3	1.9	0.3	1.8	0.4	1.3	0.2	1.6	0.3	10.1	99	Saprolite		
EMD-014	2.00	4.00	17.6	91.1	3	11	1.7	1.2	1.6	0.3	1.7	0.3	1.2	0.2	1.5	0.2	10.1	143	Saprolite		
EMD-014	4.00	6.00	9.4	281.7	1.7	6.4	0.2	1.2	1.3	0.3	1.8	0.4	1.2	0.2	1.4	0.2	8.3	316	Saprolite		
EMD-014	6.00	8.00	12.2	93.7	1.8	6.8	1.3	1.3	1.6	0.3	2	0.5	1.3	0.2	1.7	0.3	9.8	135	Saprolite		
EMD-014	8.00	10.00	8	99.5	1.4	5.9	1.6	1.7	1.7	0.4	2.3	0.5	1.6	0.3	1.8	0.3	11.8	139	Saprolite		
EMD-014	10.00	12.00	12.3	48.3	2	7.8	1.6	1.4	1.9	0.3	2.2	0.5	1.4	0.2	1.6	0.2	10.6	92	Saprolite		

HOLEID	FROM	TO	La^2O^3 ppm	CeO^2 ppm	Pr^6O^{11} ppm	Nd^2O^3 ppm	Sm^2O^3 ppm	Eu^2O^3 ppm	Gd^2O^3 ppm	Tb^4O^7 ppm	Dy^2O^3 ppm	Ho^2O^3 ppm	Er^2O^3 ppm	Tm^2O^3 ppm	Yb^2O^3 ppm	Lu^2O^3 ppm	Y^2O^3 ppm	TREO ppm	Regolith Zone	Length	TREO ppm
EMD-015	0.00	2.00	14.3	28.6	2.5	8.7	2	1.2	1.9	0.3	1.7	0.5	1.2	0.3	1.8	0.3	13	78	Saprolite		
EMD-015	2.00	4.00	13.5	184.6	28.2	93.3	1.7	1.2	5.8	0.5	4.3	1.8	1.2	0.3	1.8	0.3	10.8	349	Saprolite		
EMD-015	4.00	6.00	11.3	54.9	2	7.7	1.5	1	1.7	0.3	1.4	0.4	1	0.2	1.7	0.3	10.9	96	Saprolite		
EMD-015	6.00	8.00	6.8	39.2	1.3	5.2	1.4	1	1.5	0.3	1.3	0.4	1	0.3	1.7	0.3	10.8	72	Saprolite		
EMD-015	8.00	10.00	8.6	78.5	1.5	6.3	1.3	1.3	1.6	0.3	1.7	0.5	1.2	0.3	2	0.3	12.6	118	Saprolite		
EMD-015	10.00	12.00	7.3	63.3	1.4	5.5	1.3	0.7	1.5	0.3	1.3	0.3	0.7	0.2	1.4	0.3	10.3	96	Saprolite		
EMD-015	12.00	14.00	5.2	90.5	1	4.4	1	0.6	1.3	0.2	0.9	0.3	0.6	0.2	1.3	0.2	8.2	116	Saprolite		
EMD-015	14.00	16.00	6.8	79.4	1.6	5.5	1.2	0.8	1.4	0.3	1.4	0.4	0.8	0.2	1.6	0.3	9.2	111	Saprolite		
EMD-016	0.00	2.00	23.6	26.4	4.7	16.4	3.2	0.8	2.8	0.4	1.8	0.4	0.8	0.2	1.4	0.2	10.1	93	Saprolite		
EMD-016	2.00	4.00	25.6	31.1	5.5	20.1	4.1	0.9	3.3	0.5	2.2	0.5	0.9	0.2	1.5	0.2	12.4	109	Saprolite		
EMD-016	4.00	6.00	29.8	35.1	6.6	26.4	5.1	0.9	4.2	0.6	2.9	0.5	0.9	0.2	1.3	0.2	11.4	126	Saprolite		
EMD-016	6.00	8.00	22	31.4	4.7	18.3	3.2	0.7	3	0.4	1.8	0.4	0.7	0.1	1.1	0.2	9.5	98	Saprolite		
EMD-016	8.00	10.00	7.2	27.8	1.2	5	0.8	0.4	1	0.2	0.7	0.2	0.4	0.1	1.1	0.2	5.9	52	Saprolite		
EMD-017	0.00	2.00	22.2	35.1	3.6	12	2.8	4.2	4.3	1	6.3	1.5	4.2	0.7	4.8	0.7	45.4	149	Saprolite		
EMD-017	2.00	4.00	24.9	36.6	4.4	14.3	3.4	4.2	4.7	1	6.4	1.5	4.2	0.7	4.7	0.7	44.1	156	Saprolite		
EMD-017	4.00	6.00	21.1	50.9	4	13.5	2.9	3.6	4.2	0.9	6	1.3	3.6	0.7	4.7	0.7	41	159	Saprolite		
EMD-017	6.00	8.00	19.4	46.8	3.6	12	2.7	3	3.5	0.7	4.6	1.1	3	0.6	4	0.6	36.2	142	Saprolite		
EMD-017	8.00	10.00	57.5	73.9	9.7	29.4	5	3.1	4.7	0.9	5.3	1.2	3.1	0.5	4	0.6	34.7	234	Saprolite		
EMD-017	10.00	12.00	171.5	320	71.9	242.3	23	6.9	20.2	2.5	15.5	4.2	6.8	1.1	7.2	1.1	73	967	Saprolite	**9**	**890**
EMD-017	12.00	14.00	229.4	213.3	60.7	222.7	35.3	10.1	22.8	3	16.9	3.4	9.9	1.5	10.1	1.5	107.3	948	Saprolite		
EMD-017	14.00	16.00	264.1	186.3	72.3	266.8	44.2	12.7	30.2	3.8	20.9	4.3	12.5	1.9	12.5	1.9	136.6	1071	Saprolite		
EMD-017	16.00	17.50	159	144.5	42	155.8	26	8.2	18.1	2.4	13.7	2.8	8.1	1.3	8	1.2	91.5	683	Saprolite		
EMD-017	17.50	19.00	149.3	162.6	39.9	148.7	25.5	8	17.6	2.3	13.4	2.7	7.9	1.2	7.7	1.2	86.8	675	Altered rock		
EMD-019	0.00	2.00	33.3	57.9	6.9	24.4	4.3	2.2	3.8	0.7	3.8	0.9	2.2	0.4	2.8	0.4	26.7	171	Saprolite		
EMD-019	2.00	4.00	48	88.8	10.7	37.2	6.3	3.4	5.7	0.9	5.1	1.2	3.3	0.5	3.6	0.5	38.4	254	Saprolite		
EMD-019	4.00	6.00	82.9	158.2	19	67.1	11.6	5.8	10.1	1.5	8.9	1.9	5.7	0.9	5.8	0.9	60.1	440	Saprolite	**6.33**	**394**

HOLEID	FROM	TO	La^2O^3 ppm	CeO^2 ppm	Pr^6O^{11} ppm	Nd^2O^3 ppm	Sm^2O^3 ppm	Eu^2O^3 ppm	Gd^2O^3 ppm	Tb^4O^7 ppm	Dy^2O^3 ppm	Ho^2O^3 ppm	Er^2O^3 ppm	Tm^2O^3 ppm	Yb^2O^3 ppm	Lu^2O^3 ppm	Y^2O^3 ppm	TREO ppm	Regolith Zone	Length	TREO ppm
EMD-019	6.00	8.00	66.4	130.3	14.8	51.7	8.8	4.4	7.9	1.2	6.9	1.5	4.4	0.7	4.8	0.7	49.7	354	Saprolite		
EMD-019	8.00	10.33	72.5	142.9	16.4	56.3	10.1	4.8	8.6	1.4	7.8	1.7	4.7	0.8	5.5	0.8	54.8	389	Saprolite		
EMD-022	0.00	2.00	12.9	54.2	2.9	11.8	2.3	1.1	2	0.3	1.5	0.4	1.1	0.2	1.8	0.3	12.9	106	Saprolite		
EMD-022	2.00	4.00	42.5	119.3	9.1	34.1	6.7	1.7	5.1	0.7	3.6	0.7	1.7	0.3	2.4	0.4	17.7	246	Saprolite		
EMD-022	4.00	6.00	386.7	316.3	91.4	325.5	61.8	9.6	43.8	6.1	29.8	4.4	9.5	1.2	6.7	0.8	87.6	1381	Saprolite	**7.80**	**776**
EMD-022	6.00	8.00	83.3	125.9	23.3	94.8	19.1	6.9	17	2.5	14.4	2.7	6.8	1	6.4	0.9	74.9	480	Saprolite		
EMD-022	8.00	10.00	118.8	137.1	34.6	148.9	31.5	14.6	31.5	4.7	27.6	5.4	14.4	2.1	12.3	1.7	163.2	748	Saprolite		
EMD-022	10.00	11.80	50.8	60.4	15.7	73.5	18.2	12.4	24.4	3.7	23	4.6	12.3	1.7	9.6	1.3	150.1	462	Saprolite		
EMD-022	11.80	13.00	17.6	34.4	4.3	19.5	4.1	2	4.7	0.7	3.9	0.8	2	0.3	2.2	0.3	25.4	122	Rock		
EMD-022	13.00	15.00	17.7	35	4.6	20.1	4.5	2.2	4.9	0.8	3.9	0.9	2.1	0.3	2.3	0.3	26.7	126	Rock		
EMD-022	15.00	17.00	18.9	39.9	5	21.2	4.5	2.4	5.3	0.8	4.3	1	2.4	0.4	2.5	0.4	29.7	139	Rock		
EMD-022	17.00	19.00	16.7	35.1	4.5	20.5	4.4	2.2	4.9	0.7	3.9	0.8	2.2	0.3	2.2	0.3	25.7	124	Rock		
EMD-025	0.00	2.00	43.3	93.7	7.5	24.1	3.8	3.2	4.7	0.8	5.1	1.2	3.2	0.6	4.2	0.7	35.1	231	Saprolite		
EMD-025	2.00	4.00	80.9	306.4	16.4	52.8	8.8	3.2	7.3	1.1	6	1.3	3.1	0.5	3.8	0.6	32.5	525	Saprolite	**10.06**	**632**
EMD-025	4.00	6.00	66	270.4	12.6	39.2	7.2	3.5	5.5	0.9	5.5	1.2	3.4	0.6	4.1	0.6	33	454	Saprolite		
EMD-025	6.00	8.00	133.7	358	28.5	93.1	15.1	4.7	11.2	1.7	9.3	1.8	4.7	0.7	4.8	0.7	44.9	713	Saprolite		
EMD-025	8.00	10.00	86.2	469.1	18	59.1	9.7	4.4	7.8	1.3	7.4	1.5	4.3	0.7	4.9	0.7	44.8	720	Saprolite		
EMD-025	10.00	12.06	149.2	301.9	34.2	115.7	19.7	7.4	14.8	2.2	12.6	2.7	7.3	1.1	7.3	1.1	72.8	750	Saprolite		
EMD-026	0.00	2.00	12.5	51.3	2.8	10.6	2.4	0.8	2.1	0.3	1.4	0.3	0.8	0.2	1.3	0.2	8.9	96	Saprolite		
EMD-026	2.00	4.00	11.1	46.7	2.9	11	2.3	0.5	1.8	0.3	1.2	0.4	0.5	0.2	1	0.2	6.9	87	Saprolite		
EMD-026	4.00	6.00	12	50.6	2.7	10.5	2.1	0.5	1.6	0.3	1.2	0.3	0.5	0.1	0.9	0.1	7	90	Saprolite		
EMD-026	6.00	8.00	22.2	70	5.1	19.8	3.6	0.9	3	0.5	2	0.4	0.8	0.2	1.3	0.2	12.8	143	Saprolite		
EMRC-002	0.00	2.00	186.4	214.8	39.7	106.4	10.8	1.4	6.5	0.7	3.2	0.5	1.4	0.2	1.5	0.2	11.5	585	Soil	**8**	**1607**
EMRC-002	2.00	4.00	1267.1	709.2	371.8	1069.7	110.4	5.4	68	5.7	22.1	2.8	5.4	0.5	2.5	0.3	54.9	3696	Soil		
EMRC-002	4.00	6.00	583.4	299.1	145.6	410.3	48.1	3.1	27.8	2.9	12.1	1.6	3	0.3	1.7	0.3	26.5	1566	Soil		
EMRC-002	6.00	8.00	179.2	146.2	43.2	123.8	16.4	4.1	10.7	1.3	6.8	1.4	4.1	0.7	4.8	0.8	36.3	580	Soil		

HOLEID	FROM	TO	$La^{2}O^{3}$ ppm	CeO^{2} ppm	$Pr^{6}O^{11}$ ppm	$Nd^{2}O^{3}$ ppm	$Sm^{2}O^{3}$ ppm	$Eu^{2}O^{3}$ ppm	$Gd^{2}O^{3}$ ppm	$Tb^{4}O^{7}$ ppm	$Dy^{2}O^{3}$ ppm	$Ho^{2}O^{3}$ ppm	$Er^{2}O^{3}$ ppm	$Tm^{2}O^{3}$ ppm	$Yb^{2}O^{3}$ ppm	$Lu^{2}O^{3}$ ppm	$Y^{2}O^{3}$ ppm	TREO ppm	Regolith Zone	Length	TREO ppm
EMRC-002	8.00	10.00	61.3	155.1	12.3	38.3	5.8	5.1	4.5	0.8	6.1	1.4	5	0.9	6.6	1	47.2	351	Soil		
EMRC-009	0.00	2.00	23.8	38.6	3	9.6	1.7	3.2	2.8	0.6	3.9	0.9	3.2	0.6	3.9	0.6	28.6	125	Lateritic soil		
EMRC-009	2.00	4.00	46.7	68.7	5.7	17	3	3.3	3.3	0.6	3.9	0.9	3.2	0.5	4.2	0.6	27.3	189	Lateritic soil		
EMRC-009	4.00	6.00	39.6	60.1	4.3	12.5	2.2	3.5	3.3	0.6	4.1	1	3.5	0.6	4.8	0.7	30.1	171	Saprolite		
EMRC-009	6.00	8.00	22	44	2.8	9.3	2.3	4	3.8	0.8	5.2	1.2	4	0.7	4.7	0.8	37.5	143	Saprolite		
EMRC-009	8.00	10.00	12.1	47.5	1.8	6.6	2	6.2	4.9	1	8	1.8	6.1	1	6.9	1	65.3	172	Saprolite		
EMRC-009	10.00	12.00	12.8	88.8	1.9	6.8	2.2	6.6	5.3	1.1	8.3	2	6.5	1.1	7.9	1.2	68.4	221	Saprolite		
EMRC-009	12.00	14.00	9.4	86	1.4	5.7	2.3	4.5	4.4	0.8	6.5	1.3	4.4	0.7	4.7	0.7	44.4	177	Saprolite		
EMRC-009	14.00	16.00	21.1	108.5	2.9	8.9	2.6	3.6	3.4	0.6	4.6	1	3.5	0.6	4.3	0.7	31.8	198	Saprolite		
EMRC-009	16.00	18.00	25.8	72.6	4.4	15.4	3.5	4	3.7	0.8	5.2	1.2	4	0.7	4.9	0.8	35	182	Saprolite		
EMRC-009	18.00	20.00	26.3	83.4	5.8	14.2	1.7	3.3	3	0.8	4	1.1	3.3	0.8	3.8	0.8	28	180	Saprolite		
EMRC-011	0.00	2.00	35.7	277.9	7.9	29.7	5.6	2.7	4.9	0.8	4.5	0.8	2.7	0.4	3	0.5	20.4	397	Lateritic soil		
EMRC-011	2.00	4.00	49.8	115.6	12.3	46.1	7	3.1	5.6	0.9	4.9	0.9	3	0.5	3.4	0.5	25.2	279	Lateritic soil		
EMRC-011	4.00	6.00	63.9	151	13.6	44.8	6.5	3.9	5.8	1	6.4	1.3	3.8	0.6	3.8	0.6	35.8	343	Saprolite		
EMRC-011	6.00	8.00	81.7	131.6	16.8	52.3	7	5.1	6.4	1.2	7.6	1.6	5	0.7	4.8	0.7	46.4	369	Saprolite		
EMRC-011	8.00	10.00	76.5	137.6	17.1	55.6	7.3	4.7	6.3	1.1	7.1	1.5	4.6	0.7	4.7	0.7	42.1	368	Saprolite	**6**	**376**
EMRC-011	10.00	12.00	81.7	153.4	18.4	61.4	7.7	4.3	5.8	1.1	6.7	1.4	4.2	0.6	4.2	0.7	39.9	392	Saprolite		

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 the DD 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 the diamond drilling completed during 2021 and RC drilling completed in 2017. **Samples for the BBX`s proprietary nickel fusion assay technique** • Diamond core was cut and sampled at intervals, generally of 1m to 2m, with half core retained in BBX´s core storage facility and the other half sent to SGS for preparation. Sample representativity was ensured by close supervision of the drilling and sampling process by a BBX geologist or field technician. Core recoveries were logged and recorded in the database. To date overall recoveries for the diamond holes were >98% and there were no core loss issue or significant sample recovery problems. • Diamond drill sample: diamond core was half split and sampled typically at 2m intervals, although sampling was adjusted to geological contacts, and hence sample length ranged from 1m - 3m. Samples were placed in plastic sample bags and immediately sealed with cable ties. Half core was retained on site in Apui for future reference. • The diamond drill samples were submitted to the SGS laboratory in Vespasiano, greater Belo Horizonte for crushing and pulverisation and subsequently freighted to the BBX´s laboratory in Catalão, Goiás. • 2 certified blank samples, 6 certified reference material (standard) samples and 2 duplicate samples were inserted into the sample sequence, in each run of 100 samples. **Samples for total rock analyses at SGS**

Item	JORC code explanation	Comments

		• The data presented is based on the sampling and logging of reverse circulation and diamond drilling by company staff.
		• The RC drilling was completed during September 2017.
		• The RC drilling and sampling procedures followed industry best practice, utilising an on-site riffle splitter to ensure representativity.
		• Sample lengths are 1m with 2m composite samples along the entire hole.
		• The entire 1m sample was collected in a raffia bag and split down to 1kg. Almost all the samples were dry.
		  • The 2m composite was generated by mixing the 1kg sample from each 1m interval forming a 2kg sample which was subsequently riffle split with 50% sent to SGS for preparation and 50% stored.
		  • 2 certified blank samples, 6 certified reference material (standard) samples and 2 duplicate samples were inserted into the sample sequence, in each run of 100 samples.
		• Pulverized pulps of the RC and DD stored at Catalão were shipped back to SGS in Vespasiano for total rock analyses.
		• The Certified reference material (standard) were replaced by Certified reference material (standard) for REE.

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).	• The diamond drilling was conducted using an EDG S11 mobile rig supplied by Energold Ltd. Drilling diameter was all in NTW which is equivalent to NQ. Core was not oriented, and it was not directionally surveyed. • The RC drilling was conducted using a Reverse Circulation (RC) percussion drill. Penetration rates were quite rapid down to the fresh

Item	JORC code explanation	Comments
		rock, slowing thereafter. Average daily production was approximately 25m.
Drill Sample Recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Diamond recovery was logged by the on-site geologist by carefully comparing the length of core recovered with the length of the drilling run, as part of the routine core logging process • Drilling was conducted slowly in the soil profile to maximize recovery and ensure sample representativity. The upper section of the hole was cased. • No relationship was perceived between sample recovery and assay results. • Sample recovery for the RC drilling was generally above 90% with almost all sample collected dry in fresh rock.
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.	• Detail geological logging of the DD drilling has been conducted by an experienced geologist to a high level of detail recording various qualitative parameters such as rock type, mineralogy, colour, texture and oxidation. • The DD core was geologically logged using predefined lithological, mineralogical, and physical characteristics (colour, weathering, fracture density and type, etc). Logging was predominantly qualitative in nature. • 100% of the recovered intervals were geologically logged. • All diamond core has been photographed, prior to cutting, wet and dry. • Geological logging for the RC drilling has been completed by an experienced geologist to a high level of detail. • Logging is qualitative in nature.

Item	JORC code explanation	Comments
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.	• Diamond core was half core sampled, at all times sampling the same side of the core, with the exception of the ¼ core submitted for whole rock analysis. • Sample preparation for the DD drilling 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# • The <3mm rejects and the 250-300 grams pulverised sample were returned to BBX for storage and assay with a proprietary analytical technique. • The RC samples were collected on a standard 1m interval. • Raffia big bags were used to collect the entire sample from each 1m interval. • A 1kg sample was split off for subsequent composition of 2m intervals, 1kg from each metre. • The 2kg, 2m composite sample was split in two, with 1kg sent to the lab and 1kg stored on site. • Almost all the samples were dry. • Sample preparation 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# • The <3mm rejects and the 250-300 grams pulverized sample were returned to BBX for storage and assay with a proprietary analytical technique.

Item	JORC code explanation	Comments
Quality of Assay Data and Laboratory Tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established	• The analytical laboratory used for the Au, Pt, Pd, Ir and Rh analyses was the BBX´s analytical laboratory in the town of Catalão in Goiás state, Brazil. • The proprietary assay methodology is a nickel smelt at 1500C using 25g of sample, producing a nickel bead which is subsequently digested in HCl, and the residue dissolved in 4 acids. The solution is fire assayed with Pb and Ag collectors, producing a silver bead after cupellation which is then digested in aqua regia, and the solution read by AA. • Based on previous experience, it is believed that this method may represent a partial extraction. • Assay results obtained in some DD holes in the Ema Project differ significantly from the results of bulk metallurgical tests previously released. These latter tests were conducted on 5kg samples using a complex alkaline flux and a copper collector, strongly favouring the recovery of gold, in contrast to the nickel collection and subsequent fire assay method on 25g samples reported in this announcement. BBX conducted extensive research in an endeavour to develop a reliable assay method based on the metallurgical test methodology but was unable to perfect a method which produced consistent, reliable and repeatable results. The nickel collection analytical technique presented in this announcement, following extensive testing and fine-tuning has proved to yield consistent and reliable results. For the complex style of mineralisation encountered at Ema this method strongly favours the unlocking and recovery of platinum, iridium and rhodium in preference to gold and palladium. • 2 certified blank samples, 6 certified reference material (standard) samples and 2 duplicate samples were inserted by BBX into the sample sequence, in each run of 100 samples.

Item	JORC code explanation	Comments
		• Standard laboratory QA/QC procedures were followed, including inclusion of standard, duplicate and blank samples. • The assay results of the pulp standards show most of the results fall within acceptable tolerance limits and no material bias is evident. • The pulps for the RC and DD stored at Catalão were returned to SGS Vespasiano to assay for REE. • 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: Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga Gd, Hf, Ho, La, Lu, Nb, Nd, Pr Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm U, V, W, Y, Yb, Zr, Zn, Co Cu, Ni 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. • Analytical Standards 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. • Blanks The blanks used contain some REE, with critical elements Ce, Nd, Dy and Y present in small quantities.

Item	JORC code explanation	Comments
		• Duplicates 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 practise. 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 were supplied digitally, directly from the BBX´s laboratory facility in Catalão and from SGS to BBX´s Exploration Manager in Rio de Janeiro. • Analytical results for REE were supplied digitally, directly from SGS laboratory facility in Vespasiano to the BBX´s Exploration Manager in Rio de Janeiro. • No twinned holes were used. • Geological data was logged into paper and transferred to Excel spreadsheets at end of the day and then transfer into the drill hole database. Microsoft Access is used for database storage and management and incorporates numerous data validation and data validation and integrity checks. All assay data is imported directly into the Microsoft Access database. • No adjustments were made to the data.

Item	JORC code explanation	Comments
		• 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	CeO_2
Dy	1.1477	Dy_2O_3
Er	1.1435	Er_2O_3
Eu	1.1579	Eu_2O_3
Gd	1.1526	Gd_2O_3
Ho	1.1455	Ho_2O_3
La	1.1728	La_2O_3
Lu	1.1371	Lu_2O_3
Nd	1.1664	Nd_2O_3
Pr	1.2082	Pr_6O_{11}
Sm	1.1596	Sm_2O_3
Tb	1.1762	Tb_4O_7
Tm	1.1421	Tm_2O_3
Y	1.2699	Y_2O_3
Yb	1.1387	Yb_2O_3

Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups:

Item	JORC code explanation	Comments
		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 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
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.

Item	JORC code explanation	Comments
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.	• Drilling in this target is typically with holes 200m apart, over the mapped unit in targets a few kilometres apart. • This announcement refers to assays of exploration diamond holes for the nickel collector method and exploration RC and diamond holes for Rare Earth Elements. • The DD samples are from intervals of 1.00m up to 4.00m, but nominal length of 2.00m; no compositing was applied. • All RC samples are 2m composites from original 1m samples. • This announcement refers to RC and DD hole assays and no representation of extensions, extrapolations or otherwise continuity of grade are made. • All samples are 2m composites from original 1m samples. drill holes and no representation of extensions, extrapolations or otherwise continuity of grade are made.
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 orientation of the RC and DD drilling in the Ema project is appropriate given the strike and morphology of the mapped felsic and gabbro units. • No relevant mineralisation was intercepted for PGMs. • Relevant REE mineralisation intersected is interpreted to be in a flat-lying weathered profile including cover soil, clay transition to saprolite and saprock. • Below the saprock are fresh rhyolites, ignimbrites and mafic rocks. • All drill holes are vertical which is appropriate for horizontal mineralised zones in the regolith profile.
Sample security	• The measures taken to ensure sample security.	• The RC and DD pulps as received from SGS, in sealed plastic bags, were kept in a locked room until shipped to BBX´s laboratory facility in

Item	JORC code explanation	Comments
		Catalão. 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 lease is 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 is contained within the tropical lateritic weathering profile developed on top of rhyolites, ignimbrites and mafic rocks potentially derived from the underlying rocks as described for the Chinese iREE deposits. • The REE mineralization is concentrated in the weathered profile where it has dissolved from the primary mineral form, such as monazite and xenotime, then adsorbed on to the neo-forming fine particles of aluminosilicates clays (e.g. kaolinite, illite, smectite). • This adsorbed REE is the target for extraction and production of REO.
Drill Hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar	• Drillhole locations and diagrams are presented in this announcement. • All drill-holes are vertical. The cores were not oriented and did not have a down-hole survey. • 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.	• Aggregate intercepts were not calculated for the PGMs assays. • Aggregate intercepts were calculated for the REO (Rare Earth Oxides) based on a cut of grade above 200ppm TREO (Total Rare Earth Oxides) minus Ce2O, with maximum 2 meters for internal dilution., which was used as a cut-off grade in the Makuutu project DFS. • Significant intervals were tabulated downhole for reporting. All individual samples were included in length-weighted averaging over the entire tabulated range. • No metal equivalent values have been 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.	• No relevant mineralisation was intercepted for PGMs. • Relevant mineralisation of REE was intercepted as reported with thicknesses approximating true width due to the flat geometry.

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.	• Drillhole locations and diagrams are presented in this announcement.
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 is reported pending confirmation of IAC (Ionic Adsorbed Clay) type mineralisation.
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	• Submit holes EMD020 to 025 for bioleaching tests for precious metals. • Submit the weathered portions of the remaining drill holes from EMA for REE assays.

Criteria	JORC code explanation	Commentary
	future drilling areas, provided this information is not commercially sensitive.	• Submit the significant REE intersections to ammonium hydroxide assays at SGS to determine the percentage of ionic rare earths present. • Follow up the holes which reported significant REE elements with auger drilling. • Define by mapping and detailed topography (with a Drone) zones with preserved regolith profile amenable to auger drill testing for enriched REE zones.