

EMA FIELD TRIAL SOLUTIONS PRODUCE MREC CONTAINING 52.5% TREO

ANSTO testwork has produced a high grade mixed rare earth carbonate (MREC) grading 52.5% TREO containing exceptionally high levels of magnet oxides at 41.5%

Highlights

- **52.5% TREO in MREC** product produced from ANSTO flowsheet testwork in Sydney delivering a high-quality final product from Ema field trial solutions
- Within the TREO, **41.5%** are represented as **magnet rare earth oxides (MREO)** making the Ema composition one of the highest proportion magnet products produced in the western world
- Low impurities representing **<2% of MREC**
- MREC produced **without the need** for any complex flotation and/or hydrometallurgical processing, **eliminating the need of 80-90% of CAPEX** compared to most rare earth projects
- MREC samples have been **sent to prospective offtakers** for validation testing as part of ongoing discussions
- ANSTO to continue with **follow-up optimisation testwork** focused on impurity removal and MREC precipitation
- Results to be incorporated into upcoming Bankable Feasibility Study
- Company is fully engaged with all required State and Federal Government Departments in relation to the ongoing permitting process

Brazilian Critical Minerals Limited (**ASX: BCM**) (“**BCM**” or the “**Company**”) is pleased to report the successful generation of a mixed rare earth carbonate product from field trial solution recovered during the in-situ recovery (ISR) field trials at the Ema Project in Brazil and sent to the Australian Nuclear Science and Technology Organisation (ANSTO). The testwork produced a very high grade, export quality MREC within commercial specifications confirming the viability of the in-situ recovery processing route.

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Figure 1. ANSTO produced MREC product containing on average approximately 52% by volume TREO (total rare earth oxides). Oxide samples ready for shipment to potential offtakers.

To view the video of MD, Andrew Reid, discussing this announcement, click on the link below

<https://braziliancriticalminerals.com/link/Pwbdwr>

Andrew Reid, Managing Director, commented:

“BCM has again set the standard for ionic rare earth projects producing MREC containing 41.5% magnet oxides placing it within a select group of rare earth projects with this capability globally. The Company remains firmly focused on its path to achieve its goal of producing commercial quantities of rare earth oxides via in-situ recovery by developing the lowest capital-intensive rare-earth project in the western world.

These results are a key component in validating project economics and future cashflows for our bankable feasibility study as it is being completed in parallel with the key phases of project permitting and offtake discussions.

BCM has had an extremely productive and successful 2025 achieving multiple major technical milestones and we are now primed to leverage this success as we move through major change catalysts in 2026 prior to project financing.”

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Comments on Results

As previously announced (**ASX:BCM Oct 2025**), the Company sent 1,000 L of pregnant liquor solution to ANSTO in Sydney, which was recovered from its on-site field trials at the Ema Project completed during May – September 2025.

The raw solution averaged 877 ppm total rare earth oxides (TREO), with approximately 50% of the solution being processed through the steps of impurity removal and MREC precipitation to generate 650 grams of high value & high quality MREC containing 52.5% TREO.

Of the 15 rare earth oxides recovered within the MREC, the four economically critical oxides praseodymium, neodymium, dysprosium and terbium collectively (MREO) represented 41.5% (Table 1). This places the Ema MREC as one of the highest MREO products in the western world.

This result demonstrates the Ema Project's ability to produce a high-purity, magnet-rich rare earth product using low-cost ISR processing, reinforcing its strategic importance as a potential Western supply of critical rare earths. (Table 1).

Table 1. MREC basket price and composition on a 100% basis of REE elements collected from ANSTO testwork PLS from Ema field trials containing 877ppm TREO. (**REE Prices: Rare Earth Observer 14 Dec 2025 #190**)

SPOT MREC BASKET		BCM	
		Ema Project	
Oxide	Price (13.12.25) USD/kg	%	Basket \$
La2O3	\$ 0.64	36.02	0.23
CeO2	\$ 1.64	11.89	0.19
Pr6O11	\$ 84.23	8.99	7.57
Nd2O3	\$ 83.74	31.62	26.48
Sm2O3	\$ 2.34	3.94	0.09
Eu2O3	\$ 25.13	0.49	0.12
Gd2O3	\$ 22.65	1.89	0.43
Tb4O7	\$ 894.70	0.17	1.54
Dy2O3	\$ 195.36	0.70	1.38
Ho2O3	\$ 70.08	0.13	0.09
Er2O3	\$ 48.56	0.32	0.16
Tm2O3	\$ 115.52	0.04	0.05
Yb2O3	\$ 14.16	0.25	0.03
Lu2O3	\$ 729.07	0.03	0.25
Y2O3	\$ 8.49	3.52	0.30
Basket Price US\$/kg (TREO)		38.91	
Basket Price US\$/kg (NdPrDyTb)		36.96	
MREO %		41.48	
TREO %		100	

The basket value in Table 1 of USD\$38.91/kg TREO compares favourably to the value of USD\$30.93 used in the scoping study (**ASX: 26 Feb 25**) which defined a project with an NPV of USD\$498 and an IRR of 55%.

Impurity levels within the (MREC) were low, with non-rare earth elements effectively removed during ion exchange and downstream purification. Key deleterious impurities such as iron, aluminium, calcium magnesium, uranium and thorium were reduced to trace levels, producing a clean, high-purity MREC suitable for further separation and refining. The low impurity profile is expected to simplify downstream processing, reduce reagent consumption and enhance overall product value.

Table 2. MREC impurity results from ANSTO testwork on ISR field trial solutions.

Impurity	Oxide	Weight %
Aluminium	Al ₂ O ₃	0.08
Calcium	CaO	0.04
Cobalt	CoO	<0.001
Copper	CuO	<0.001
Iron	Fe ₂ O ₃	0.003
Potassium	K ₂ O	0.006
Magnesium	MgO	<0.02
Manganese	MnO	0.01
Sodium	Na ₂ O	<0.07
Lead	PbO	<0.001
Silica	SiO ₂	0.04
Sulphate	SO ₄	0.42
Zinc	ZnO	1.06
		ppm
Thorium	Th	<10*
Uranium	U	<10*

*Represents values below the detection limit of the analytical instrument.

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

Enquiries

For more information please contact:

Andrew Reid

Managing Director

Brazilian Critical Minerals Limited

Andrew.reid@braziliancriticalminerals.com

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 68% MREO, representing some of the highest for these types of deposits anywhere in the world.

The Company has commenced a bankable feasibility study due for completion in Q1 2026, is engaging with regulators regarding permitting approvals and has commenced a resource extension drilling program which will inform the BFS economic analysis.



Ema REE Global Mineral Resource Estimate @COG 500ppm TREO

JORC Category	cut-off ppm TREO	Tonnes Mt	TREO ppm	NdPr ppm	DyTb ppm	MREO ppm	MREO: TREO %
Indicated	500	248	759	176	16	192	25
Inferred	500	695	701	165	16	181	26
Total	500	943	716	168	16	184	26

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 20 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.

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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.

Appendix 1

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	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample 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. 	<ul style="list-style-type: none"> Exploration results are based on auger drilling conducted by BCM’s exploration team. The data presented is based on the assay of soils and saprolite by auger drilling at 1m sample intervals. Sampling was supervised by a GE21 geologist or a GE21 field assistant. 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.

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Item	JORC code explanation	Comments
Drilling Techniques	<ul style="list-style-type: none"> Drill type (eg core. reverse circulation. open-hole hammer. rotary air blast. auger. Bangka. sonic. etc) and details (eg core diameter. triple or standard tube. depth of diamond tails. face-sampling bit or other type. whether core is oriented and if so. by what method. etc). 	<ul style="list-style-type: none"> Auger drilling was completed by a hand held-mechanical auger with a 3" auger bit. The drilling is an open hole. meaning there is a significant chance of contamination from surface and other parts of the auger hole. Holes are vertical and not oriented.
Drill Sample Recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation. mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean. channel. etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All holes were logged by GE21 geologist. detailing the colour. weathering. alteration. texture and any geological observations. Care is taken to identify transported cover from in-situ saprolite/clay zones and the moisture content. Logging was done to a level that would support a Mineral Resource Estimate. Qualitative logging with systematic photography of the stored box. The entire auger hole is logged.
Sub-Sampling Techniques and Sampling Procedures	<ul style="list-style-type: none"> If core. whether cut or sawn and whether quarter. half or all core taken. If non-core. whether riffled. tube sampled. rotary split. etc and whether sampled wet or dry. For all sample types. the nature. quality and appropriateness of the sample preparation technique. 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. 	<ul style="list-style-type: none"> 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 100C. 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 send if required.

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Quality of Assay Data and Laboratory Tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc. the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established 	<p>ANSTO completed the assay data and laboratory tests for the Ema Project, with the aim to produce a Mixed Rare Earth Carbonate (MREC). The primary objective of the work was to develop a product utilising magnesium based reagents allowing for a final demonstration and marketing product to be developed.</p> <p>Specific tasks included;</p> <ul style="list-style-type: none"> Carrying out a large scale impurity removal test on liquor generated from field trials in Brazil; Carrying out processing through IX to remove primary uranium on the IR liquor; Carry out a large scale rare earth carbonate precipitation test on the IR liquor; Analyse the MREC product for a full suite of elements, including radionuclides; <p>Flowsheet for MREC Production: The process included the following key steps:</p> <ol style="list-style-type: none"> Impurity Removal: Using magnesium oxide and magnesium bicarbonate, a two-stage precipitation process increased the pH from 4.5 to 7.5 under ambient conditions. This also included uranium removal via ion exchange to remove residual uranium. MREC Precipitation: Magnesium bicarbonate was used as a precipitating agent to produce the final MREC product. <p>Final Product: MREC containing 52.5% TREO and 41.5% of MREO (100% basis) and impurity levels ~<2.0%. Residual liquids from the desorption and precipitation stages were analysed to assess impurity removal efficiency. Laboratories and Analytical Techniques: - ANSTO: Conducted most of the process tests and analyses using the following techniques: - XRF for major elements, including Al, Ca, Fe, K, Mg, Mn, Na, Si, and others. - ICP-OES for in-house analysis of gangue minerals. ICP-MS for rare earth elements, including Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sc, Sm, Tb, Th, Tm, U, Y, and Yb. At the ALS Geochemistry Laboratory: Performed external analysis of rare earths and radionuclides using lithium tetraborate fusion digest followed by ICPMS. These tests confirmed the quality of the MREC product, has low impurity levels, and complies with market specifications.</p> <p>Field Samples:</p> <ul style="list-style-type: none"> 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:

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Item	JORC code explanation	Comments																																																				
		<table border="1"> <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> <p>The sample preparation and assay techniques used are industry standard and provide total analysis.</p> <p>The ICP95A reports the major elements oxides used to calculate the Chemical Index of Alteration (CIA) at % levels included:</p> <table border="1"> <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> <ul style="list-style-type: none"> 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. 	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							Al2O3	CaO	Cr2O3	F2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	TiO2	
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Verification of Sampling and Assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data. data entry procedures. data verification. data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Apart from the routine QA/QC procedures by the Company and the laboratory. there was no other independent or alternative verification of sampling and assaying procedures. Analytical results for REE were supplied digitally. directly from the SGS laboratory in Vespasiano to the BCMs Exploration Manager in Rio de Janeiro. No twinned holes were used. Geological data was logged onto paper and transferred to Excel spreadsheets at end of the day and then transferred into the drill hole database. Microsoft Access is used for database storage and management and incorporates numerous data validation and data integrity checks. All assay data is imported directly into the Microsoft Access database. No adjustments were made to the data. All REE assay data received from the laboratory in element form is unadjusted for data entry. Conversion of elements analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors. (Source:https://www.jcu.edu.au/advanced-analytical- 																																																				

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		<p>centre/resources/element-to-stoichiometric-oxide-conversion-factors).</p> <table border="1"> <thead> <tr> <th>Element ppm</th> <th>Conversion Factor</th> <th>Oxide Form</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>1.2284</td><td>CeO2</td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy2O3</td></tr> <tr><td>Er</td><td>1.1435</td><td>Er2O3</td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu2O3</td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd2O3</td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho2O3</td></tr> <tr><td>La</td><td>1.1728</td><td>La2O3</td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu2O3</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd2O3</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr6O11</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm2O3</td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb4O7</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm2O3</td></tr> <tr><td>Y</td><td>1.2699</td><td>Y2O3</td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb2O3</td></tr> </tbody> </table> <p>Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups:</p> <p>TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3</p> <p>LREO (Light Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3</p> <p>HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3</p> <p>CREO (Critical Rare Earth Oxide) = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3</p> <p>(From U.S. Department of Energy. Critical Material Strategy. December 2011)</p> <p>MREO (Magnetic Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3</p> <p>NdPr = Nd2O3 + Pr6O11</p> <p>DyTb = Dy2O3 + Tb4O7</p> <p>In elemental from the classifications are:</p> <p>TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y</p> <p>HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y</p> <p>CREE: Nd+Eu+Tb+Dy+Y</p> <p>LREE: La+Ce+Pr+Nd</p>	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
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Location of Data Points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys). trenches. mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. 	<ul style="list-style-type: none"> 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. 																																																

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	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	
Data Spacing and Distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Auger holes were over 200m to 400m apart. 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	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known. considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias. this should be assessed and reported if material. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard.

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

Criteria	JORC code explanation	Commentary
Mineral Tenement and Land Tenure Status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> No exploration by other parties has been conducted in the region.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> Auger locations and diagrams are presented in this announcement. Details are tabulated in the announcement.

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Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Maps and tables of the soil auger holes location and target location are inserted.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Relevant REE mineralisation with grades higher than 500ppm TREO in auger holes was 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	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; 	<ul style="list-style-type: none"> No other significant exploration data has been acquired by the Company.

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	potential deleterious or contaminating substances.	
Further Work	<ul style="list-style-type: none">• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul style="list-style-type: none">• Specific Densities collection at Intermediate and Low weathered horizons for the upcoming MRE.• Additional metallurgical test work with magnesium sulphate leach.• Permeability test works under WSP co-ordination• SS in progress under Ausenco coordination

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