

APPROVAL RECEIVED FOR USE OF MAGNESIUM SULPHATE EMA FIELD PILOT TRIAL TESTING IMMINENT

Highlights

- The Amazonas state Environmental Protection Institute (IPAAM) has approved the use of magnesium sulphate for the Ema field pilot trial
- Commencement of permeability field pilot trials to begin, immediately post site setup
- Personnel and all required materials and equipment have been mobilised to site, with electrical and mechanical installation in progress
- Permit to support testing;
 - to assess the in-situ permeability and leachability of the clay profile hosting the rare earths, and
 - to conduct hydraulic modelling of resultant data to determine residual chemistry of the leached profile post-rare earth extraction
- WSP Brazil will coordinate the field pilot trial, accompanied by environmental consultant CERN

To watch an accompanying video of this announcement from the MD, please visit <https://braziliancriticalminerals.com/link/lejd7P>

Brazilian Critical Minerals Limited (**ASX: BCM**) (“**BCM**” or the “**Company**”) is pleased to announce that the Environmental Protection Institute of Amazonas has approved the use of magnesium sulfate as the tracer for the field pilot trials at the Ema project. This will enable the Company to not only validate its hydrogeological model and laboratory results but also obtain valuable additional information on the leach characteristics of the rare earths and provide data to be used in the environmental permitting process.

Andrew Reid, Managing Director, commented:

“We are now one step closer, and within site of the finishing line towards our goal of rapidly developing the lowest CAPEX and OPEX and only ISR rare earth project outside of Asia. We are very thankful to IPAAM and pleased to have received this vitally important permit which now allows us to inject and fully test, in-situ, the permeability and leach characteristics of the clays utilising MgSO₄ which will assist in determining the expected rate of extraction of the rare earths.

This test is to validate all of the current laboratory work completed to date and to fine tune the extraction sequence developed for the drilling and injection of reagents.

This phase of work is hugely important to inform our next study phase, in being able to design the detailed rare earth extraction system based on clay conditions and in-situ data.

On the back of the expected positive results, the Company plans to produce a Mixed Rare Earth Carbonate (MREC) from the collected residue. This MREC will then be provided to strategic partners for quality control testing and to progress the execution of offtake agreements."

The field pilot trial is an important next step in the evolution of the Ema rare earths project which will gather important information to assist in completing the next study phase. To date, the Company has completed numerous field slug tests¹ and laboratory column tests both within Brazil and at Australian Nuclear Science & Technology Organisation (ANSTO) in Sydney. To date, all tests show there is a degree of permeability within the weathered clays that allows solution flow and the ability to ionically recover rare earths into solution.

As part of the field trial programme, BCM has engaged and contracted WSP Brazil to set up and supervise the field trial, involving the purchase of technically specific equipment, field set-up and independent operation of the in-situ trial.

It is expected that the trial could take several months, in order to fully test the various scenarios, the Company intends to evaluate. The trial will include extensive final water washing of the weathered profile to provide key information for the environmental permitting process.

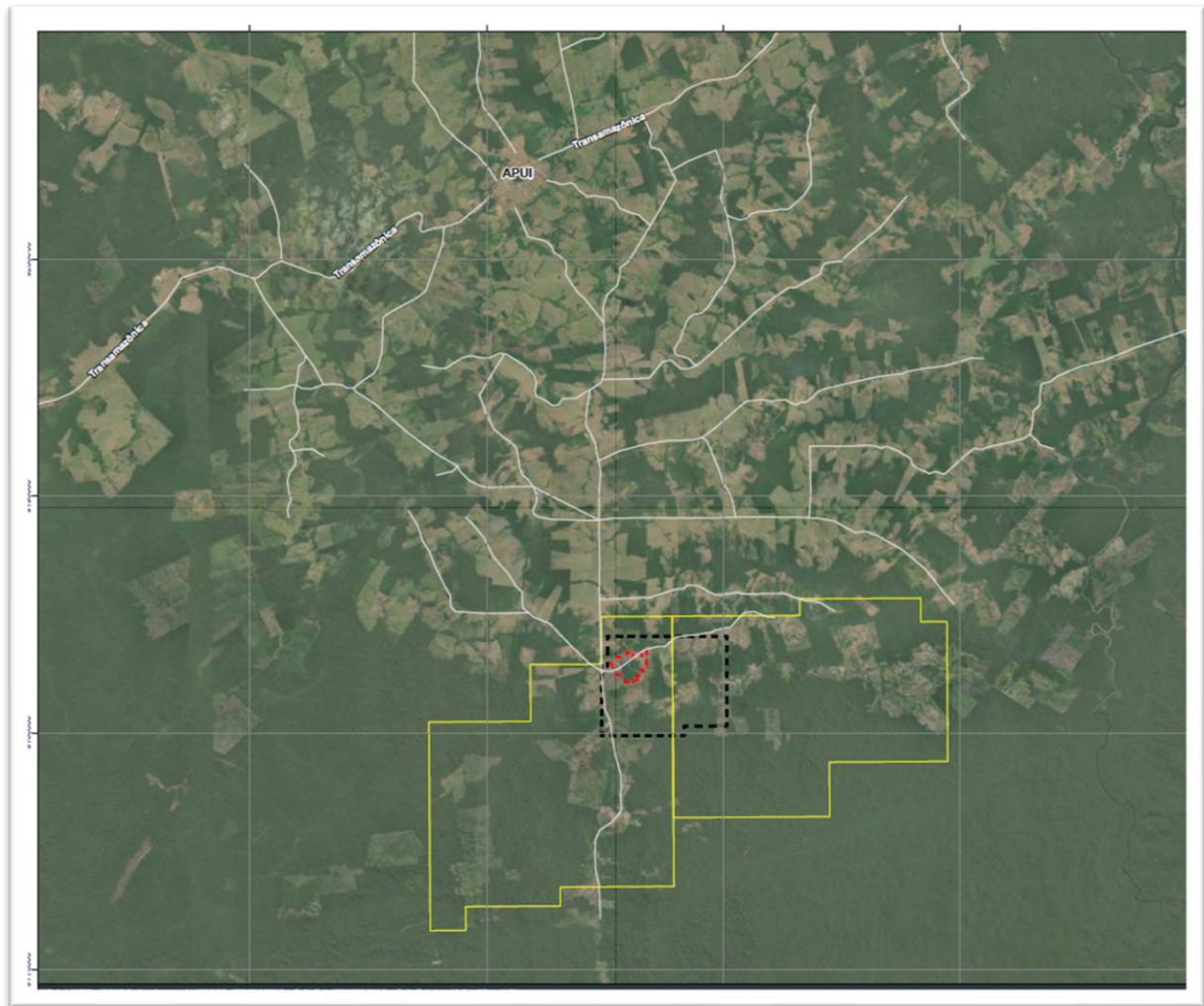


Figure 1. Town of Apui in relation to the Ema Project. Yellow lines are the Ema tenement boundaries, black dotted line is the central starter zone, and the red dotted line indicates the first years of production and location of field pilot trial (Figure2).

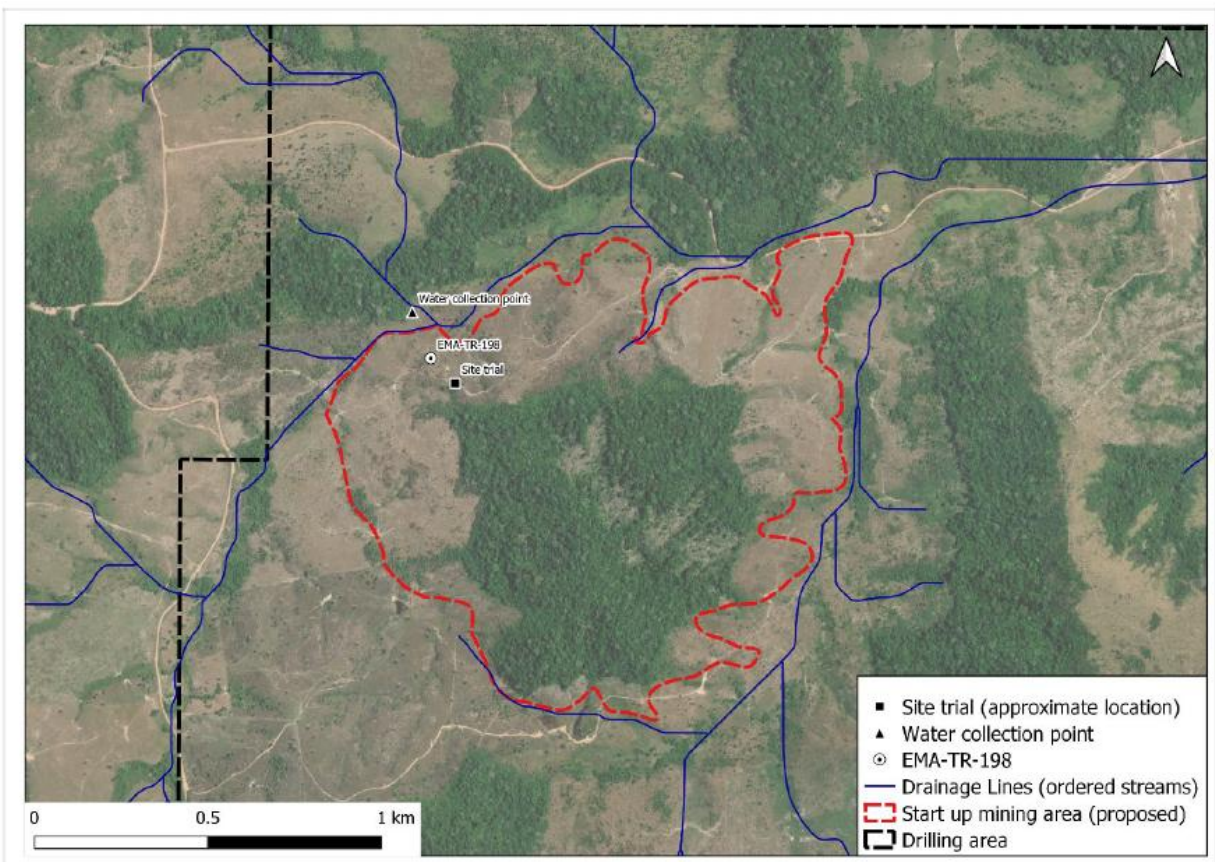


Figure 2. Location of the field pilot trial inside the proposed start-up mining area.

References

¹Brazilian Critical Minerals (ASX:BCM) – Ema Field Permeability Testing Successful 20th August 2024

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 converted the MRE central portion from Inferred into the Indicated category with an extensive drill program during 2024 which has underpinned the scoping study and economic analysis released in February 2025.



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 and 13th March 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.