

FIELD PILOT TRIAL WATER PERMIT FOR EMA PROJECT GRANTED

Highlights

- The Amazonas state Environmental Protection Institute (IPAAM) has granted BCM a water usage permit valid for a 2-year period
- Permit to support;
 - the commencement of a field pilot trial to assess the in-situ permeability of the clay profile hosting the rare earths
 - hydraulic modelling to assess the residual chemistry of the leached profile post rare earth extraction
- Service contract in place with WSP Brazil to set up and operate field pilot trial
- All wellfield drill holes have been successfully completed and final procurement of items is being finalised prior to field trial commencement
- Field pilot trial planned to commence in Q2 2025

Brazilian Critical Minerals Limited (**ASX: BCM**) ("**BCM**" or the "**Company**") is pleased to announce that the Environmental Protection Institute of Amazonas has granted Mineração BBX do Brazil (a 100% subsidiary of BCM) a permit to pump water over a 2-year period to conduct field pilot trials at the Ema project.

Andrew Reid, Managing Director, commented:

"We are very thankful to IPAAM and pleased to have received this permit which now allows us to fully test, in-situ, the permeability of the clays which will in course determine the rate of extraction of the rare earths that we can expect. 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."

The field pilot trial is an important next step in the evolution of the Ema rare earths project which will gather important information for 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)² 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 supervise the field trial and purchase all residual materials and equipment required for the field pilot trial. This entails the purchase of some technically specific equipment, field set-up, and independent operation of the in-situ trial.

It is expected that the trial will 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.

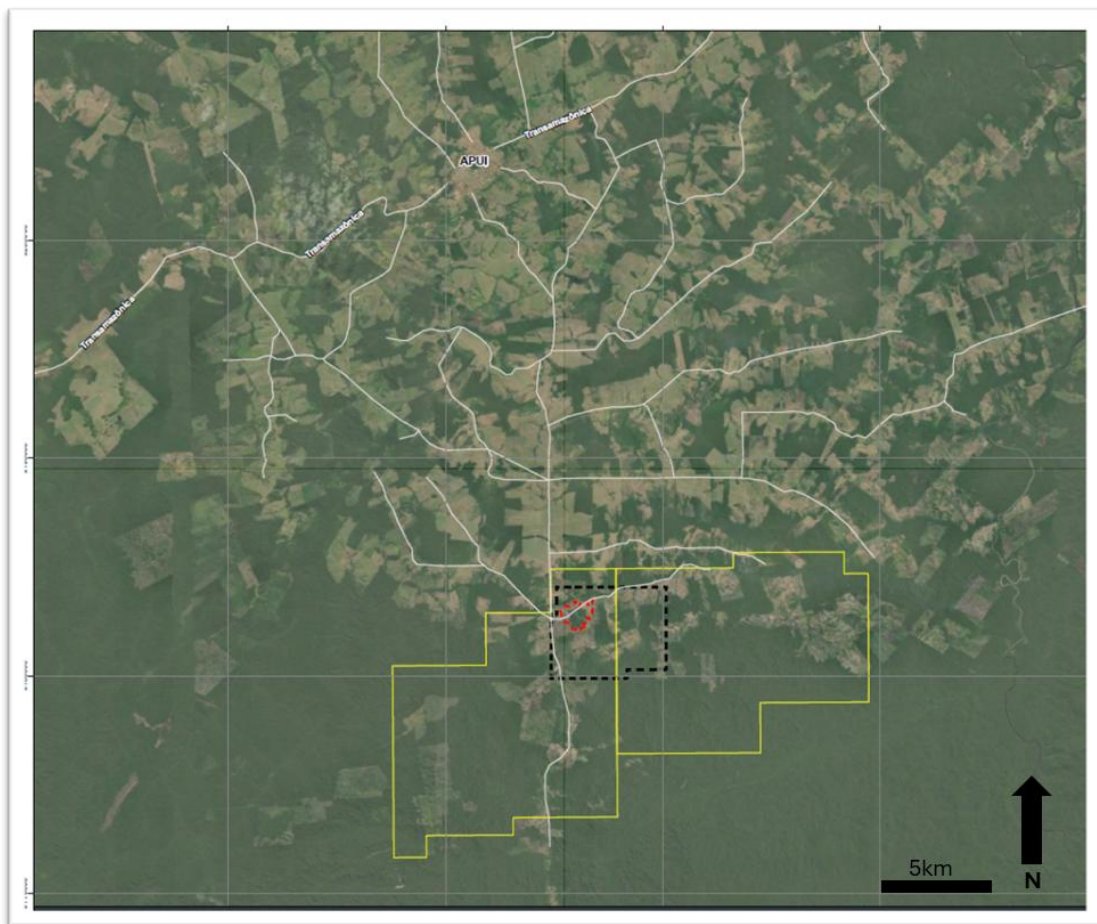


Figure 1. Town of Apui in relation to the Ema Project. Yellow lines are the Ema tenement boundaries, black dotted line is the central starter zone, and the red dotted line indicates the first years of production and location of field pilot trial (Figure2).

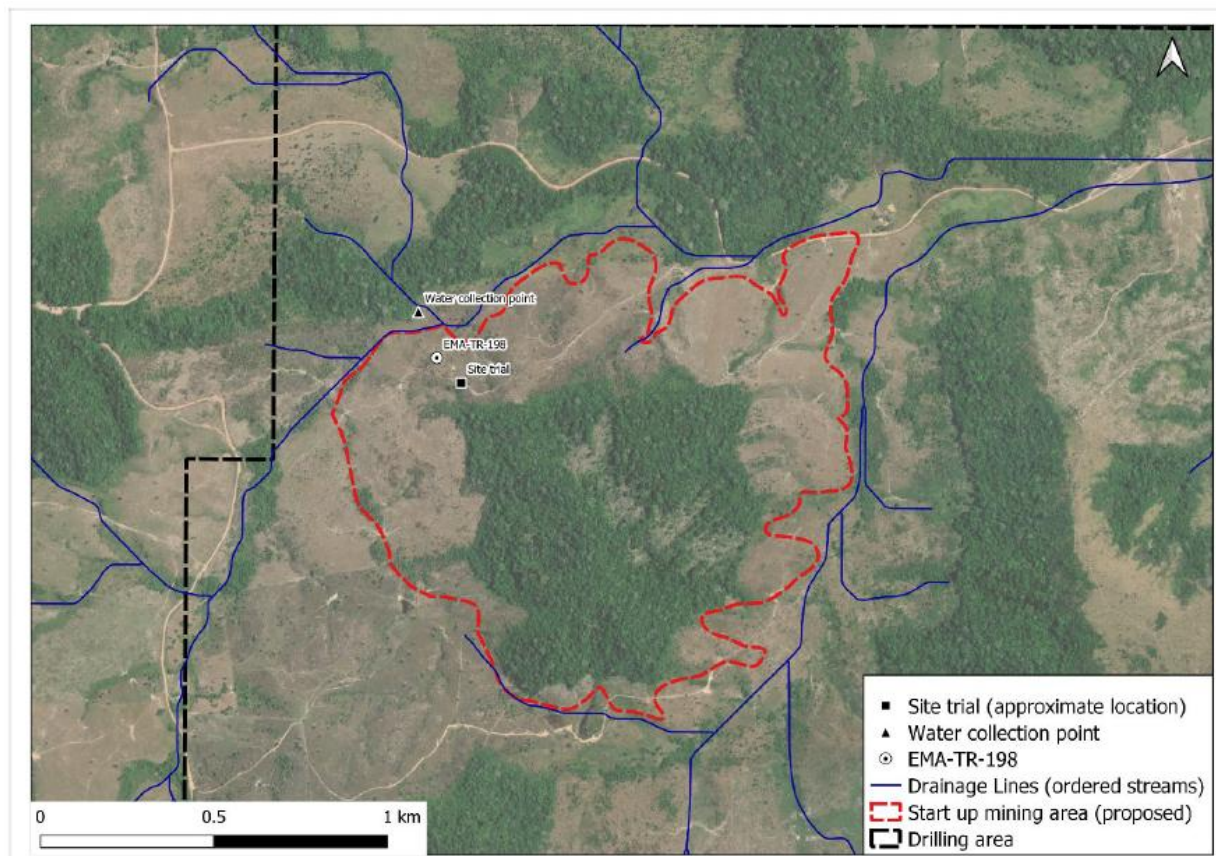


Figure 2. Location of the field pilot trial inside the proposed start-up mining area.

References

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

²Brazilian Critical Minerals (ASX:BCM) – ISR testwork from ANSTO achieves high recoveries 10th March 2025

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

Enquiries

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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 will inform the scoping study and economic analysis due for completion Q1 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 and 17th Feb 2025. The Company confirms that is not aware of any new information or data that materially affects the information included in the above-mentioned relevant market announcements, that all material assumptions and technical parameters underpinning the estimates in the relevant market announces continue to apply and have not materially changed, and the Competent Person Statement remains unchanged.