

## **EMA and Ema East REE Exploration Update**

BBX Minerals Limited (ASX: BBX) ("BBX" or the "Company") is pleased to update investors on the status of its ongoing exploration activities at the Ema project (Appendix 1) in Brazil.

## Highlights:

- 26 auger drill holes completed for a total of 355m (averaging 13.6m.)
- Two drilling crews for a total of eight workers on site, increasing to three crews next week.
- The first batch containing the initial 13 of 26 auger holes arrived at SGS and assay results are expected within six weeks.
- Auger drill programme started on Plateau 9 with holes 200m apart.
  - Drilling follows previously announced results including:
    - o EMRC002: 8.0 m at 1,607 ppm TREO from surface
    - o EMRC011: **6.0 m at 376 ppm TREO** from 6 metres
    - o EMD013: **10.0 m at 458 ppm TREO** from 11 metres
    - o EMD017: **9.0 m at 890 ppm TREO** from 10 metres
    - o EMD019: **6.3 m at 394 ppm TREO** from 4 metres
    - o EMD022: **7.8 m at 776 ppm TREO** from 4 metres
    - o EMD025: **10.0 m at 633 TREO** ppm from 2 metres
- Agreement signed for ionic-clay metallurgical testing.

Drilling of the 26 holes (Figure 1) commenced following the assay results obtained from specific drill hole samples from the 2021 drilling campaign and subsequent definition of 14 high priority targets located within the Ema and Ema East leases where the Company is targeting Rare Earth Elements (REEs). The previously released assay results<sup>1</sup> revealed enriched horizons for rare earth mineralisation.

At present, BBX is drilling with two auger drilling crews, with a third crew expected to join the existing team within one week. The drilling crews operate from the Ema field camp. Additional technical support will be gradually incorporated over the course of the coming months.

Drilling activities focused initially on plateau 9, with drill holes placed at intervals of 200m along a cross section. Subsequently, drilling efforts changed to a 400m square grid surrounding EMD017 (Figure 1). This exploration programme aims to identify and delineate high-grade zones (> 800 ppm TREO) within the 189 km² area, which may potentially contain rare earth mineralisation of the Ionic Adsorbed Clay (IAC) type REE. The objective is to gather sufficient data to support the estimation of a potential inferred Mineral Resource Estimate (MRE) by the end of 2023.

The first batch of samples from the initial 13 auger holes was delivered to SGS on 7 July, with results expected to be received within six weeks. Results for the remaining DD and RC drill samples sent to SGS last month are expected by the end of July. Due to the high demand the average turnaround time for assay results for REEs in Brazil is currently approximately 6 weeks, which may extend further in certain cases.

In parallel with the drill programme, a contract has been signed with CETEM (Federal Research Institute for Mineral Beneficiation) in Rio de Janeiro for initial ionic-clay metallurgical testing on the Ema REE mineralisation.

<sup>&</sup>lt;sup>1</sup> ASX Announcement dated 22 May 2023 - Significant REE levels at Ema and new tenements applications



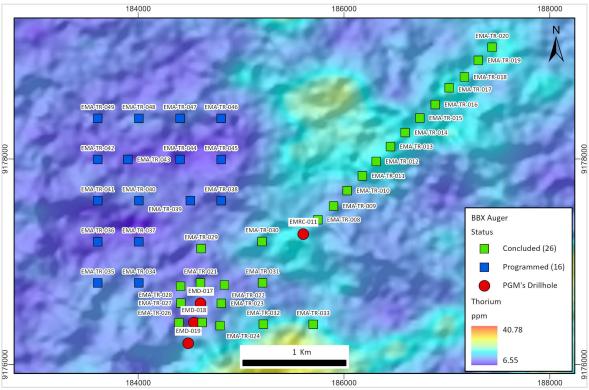


Figure 1: Auger drill location

Figure 2: BBX drilling crew



Based on recent exploration efforts and the latest results, the following features have been identified:

- The predominant rock types covering the 18,873 Ha area encompassed by the Ema and Ema East leases are felsic volcanics, including rhyolites and ignimbrites.
- The wide drill spacing of over 2km between holes indicates the extent of the potential mineralised area, extending over the 189 km<sup>2</sup> of felsic volcanics within the tenement area.



- Noteworthy similarities have been observed between deposits in the Guangxi region of southwest China and the identification of 6 to 10 meters of high-grade REEs near the surface within the regolith developed on top of felsic rocks at Ema. This resemblance is evident in drill holes EMRC002, EMD017, and EMD022.
- Based on the current drilling results, each sq km of high-grade mineralisation represents an
  enriched REE horizon of approximately 12 Mt, indicating a high potential for an economic deposit
  of around 200 mt at 800-1,200 ppm TREO.
- Among the ionic rare earth projects in Brazil the Ema and Ema East leases stand out as unique due to their strong similarity with the iREE deposits found in felsic volcanic rocks in southwest China.

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

For more information:

André Douchane Chief Executive Officer adouchane@bbxminerals.com

## **About BBX Minerals Ltd**

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

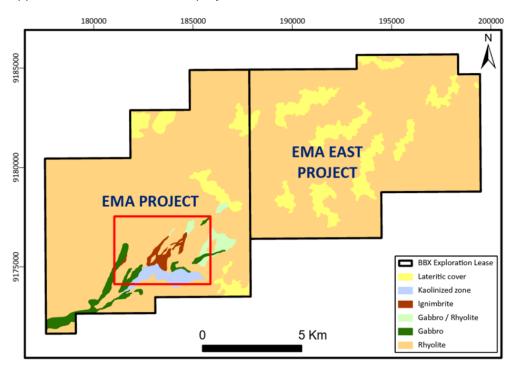
Its major exploration focus is Brazil, mainly in the southern Amazon, a region BBX believes is vastly underexplored with high potential for the discovery of world class gold-PGM, base metal and Ionic Adsorbed Clay (IAC) Rare Earth Element deposits. BBX's key assets are the Três Estados and Ema gold-PGM projects and the REE projects at Ema, Ema East and Apui. The company has 419.1km² of exploration tenements within the Colider Group and adjacent sediments, a prospective geological environment for gold, PGM, base metal and iREE deposits.

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



## **Appendices**

Appendix 1: Ema and Ema East projects



Appendix 2: REE plateau targets defined by Th/K ratio, and auger holes planned

