

## ANSTO & Minutech engaged to produce first MREC from Jupiter

**Composite concentrate from Jupiter – ~95% mass rejection, upgraded ~800% with TREO range of 10,000 ppm – 20,000 ppm - has been dispatched for independent hydrometallurgy testwork to optimise MREC routes and inform pilot-scale and scoping studies**

Critica Limited (ASX: CRI) (“Critica” or “the Company”) is pleased to advise that it has dispatched the first composite concentrate from the Jupiter Project in Western Australia to the **Australian Nuclear Science and Technology Organisation (ANSTO)** in Sydney for independent leach testwork to produce a Mixed Rare Earth Carbonate (MREC).

In parallel, specialist consultancy Minutech will run complementary hydrometallurgical programs to benchmark processing routes. Together, these programs will set the chemistry and operating conditions that feed pilot work and staged economic studies.

As previously announced, Jupiter mineralisation can be readily upgraded by more than 800% through two simple physical beneficiation steps. The composite sample dispatched to ANSTO represents this post-upgrade material, which assays at 10,000 ppm - 20,000 ppm Total Rare Earth Oxides (TREO) (refer Figure 1 and ASX announcement 16 July 2025). This concentrate will now undergo leach testing to produce a **Mixed Rare Earth Carbonate (MREC)** product. See Figure 2. The results will provide essential data to guide pilot work and the three stages of feasibility studies. Critica is focusing on the four key **Magnet Rare Earth Oxides (MREO) (Nd, Pr, Dy and Tb)**, critical inputs for high-performance magnets driving electric vehicles, wind turbines and other clean energy and advanced technologies.

### Announcement Highlights

- **Two independent workstreams now live:** ANSTO appointed to leach-test Jupiter concentrate and produce an MREC product; Minutech engaged to run complementary hydromet assessments. (Independent validation, more options, faster learning.)
- **Material advantage in plant size and costs:** Upfront physical beneficiation rejects ~95% of mass and lifts feed grade by 800%+ to 10,000 ppm – 20,000 ppm TREO - meaning a smaller leach plant and lower capex/opex intensity.
- **Low uranium and thorium content:** supports permitting and global distribution.
- **Value-driven focus:** Strong in Nd, Pr, Dy, Tb - elements that typically account for >85% of rare earth basket value.
- **Jupiter Scale:** Australia’s largest and highest-grade clay-hosted MREO inferred resource - 640 Mt @ 490 ppm MREO (400 ppm cut-off).

**Figure 1: Intermediate concentrate for hydrometallurgy and MREC <sup>1</sup>**



**Critica's CEO Jacob Deysel had these comments:**

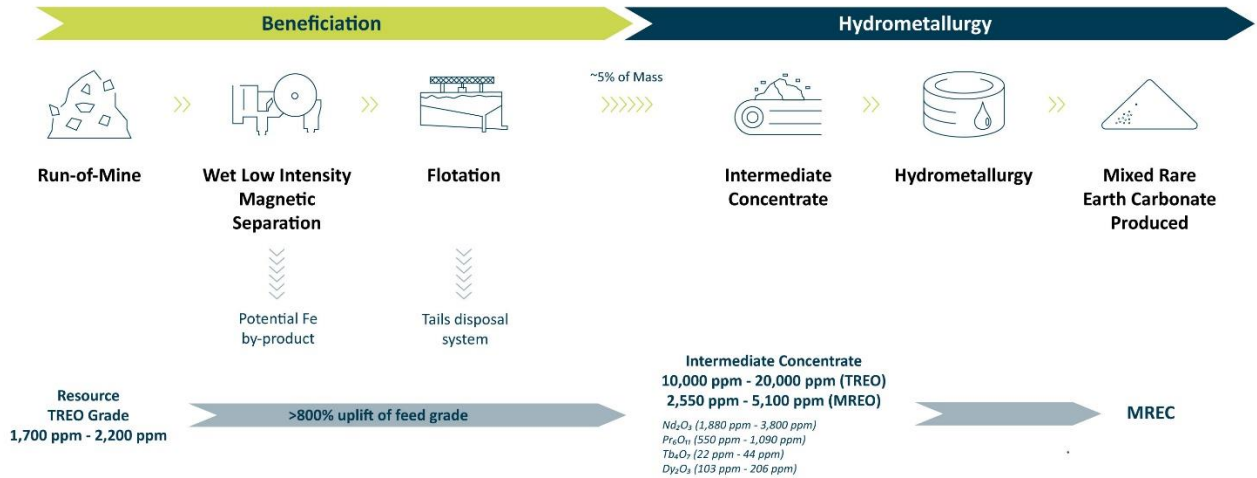
*"Jupiter already demonstrates a clear scale advantage over peer deposits, and with beneficiation delivering an 800%+ upgrade and ~95% mass reduction through simple physical processes, which points to a materially smaller wet plant and lower capital and operating intensity. ANSTO's independent leach program, alongside Minutech's, will define the most effective chemistry to produce Jupiter MREC and directly inform our pilot work and staged studies. With scale confirmed and a focus on the four magnet REOs (Nd, Pr, Dy, Tb), Jupiter is being advanced with clear line-of-sight from resource to revenue."*

*Critica is sharply focused on the four critical magnet rare earths, Nd, Pr, Dy and Tb, which underpin the global energy transition. From mine to magnet, our staged plan is designed to deliver scale, efficiency and strategic relevance. With infrastructure advantages and extensive additional targets across our tenure, Jupiter is shaping as a cornerstone of Australia's rare earth supply chain."*

1. Refer ASX announcement 16 July 2025

## ASX: CRI

**Figure 2: From Ore to MREC – Accelerating Critica’s Disciplined Development Pathway**



## From Resource to Revenue – Jupiter’s Staged Plan

The Jupiter Project is being advanced through two parallel de-risking streams: Geology and Metallurgy.

**Geology Stream** – Resource optimisation, infill drilling, assays and composite sample preparation are underway to underpin a stronger, better-defined MREO resource. The emphasis is on identifying in-ground value by modelling ore blocks with reference to the four key magnet elements (Nd, Pr, Dy, Tb). This work will support definition of resource blocks for mine planning and pit shell design.

**Metallurgy Stream** – Beneficiation test work across the resource is informing mine planning, building on the initial ~95% mass rejection and upgrade to 10,000 ppm – 20,000 ppm TREO. Concentrate composites are now available for ANSTO’s leach program, with complementary test work by Minutec. These results will guide pilot-scale validation and flowsheet optimisation.

Together, outcomes from the geology and metallurgy streams will feed into the upcoming Scoping Study and subsequently into Pre-Feasibility and Definitive Feasibility stages. See Figure 3.

**Figure 3: From Resource to Revenue – Jupiter’s Staged Development Pathway**



26 August 2025

## ASX: CRI

Authorised by the Board of Critica Limited.

**Jacob Deysel**  
CEO



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## ABOUT CRITICA

**Critica Limited (ASX: CRI)** is a critical minerals company focused on developing the Jupiter Rare Earths Project in Western Australia - Australia's largest and highest-grade clay-hosted REE deposit, rich in high-value magnet elements (Nd, Pr, Dy, Tb) and supported by clean metallurgy and low-impact development potential. With a clear path from resource to revenue, Critica is advancing Jupiter through targeted drilling, beneficiation and strategic alignment. The Company also holds the Mt Lindsay Project in Tasmania, a long-life tin-tungsten asset.

## CONTACT US

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## COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results including geology interpretation, data preparation and data quality is based on work compiled by Dr. Stuart Owen who is a Member of the Australian Institute of Geoscientists. Dr. Owen is a permanent employee of Critica Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (JORC code). Dr. Owen consents to the inclusion in the report of the matters based on his information in the form and context in which they appear.

**The Information in this announcement that relates to previous exploration results for the Projects is extracted from the following ASX announcements:**

- Jupiter Confirmed as Australia's Largest MREO Clay Resource – 13 August 2025
- Critica Advances Jupiter – Outstanding Magnet and HREO Grades – 16 July 2025
- Critica Commences Bulk Metallurgical Testwork – 28 May 2025
- First Pass Metallurgical Testwork Delivers 830% REE Upgrade – 23 January 2025

No new Mineral Resource information is contained in this report. Information in this report which refers to Mineral Resources for the Jupiter Project in Western Australia is taken from the company's initial ASX disclosure dated 11 February 2025 and 13 August 2025 at [www.critica.limited](http://www.critica.limited). The disclosure fairly represents information compiled by Mr Rodney Brown a Member of Australian Institute of Mining and Metallurgy and is an employee of SRK Consulting (Australia) Pty Ltd, independent of Critica Limited and has no conflict of interest.

The Company confirms that all material assumptions and technical parameters underpinning the Mineral Resources Estimates referred to within previous ASX announcements remain current and have not materially changed since last reported. The Company is not aware of any new information or data that materially affects the information included in this announcement.

The Company confirms that the form and context in which the Competent Person's findings are or were presented have not been materially modified.