

## MoU Signed for Rare Earths Processing Trial

### HIGHLIGHTS

- Memorandum of Understanding (**MoU**) executed to undertake a processing trial of monazite ore from the Sandy Mitchell Rare Earths Project in Queensland.
- The trial will commence in February 2026, with the aim of recovering Thorium and other Rare Earth Elements (**REEs**) from the Company's monazite ore using existing low-cost cracking technology.
- MoU covers a comprehensive processing scope, from initial monazite cracking into other rare earth oxides and refined Thorium.
- Sandy Mitchell is positioned to potentially supply long-life Thorium and Rare Earths including Neodymium and Praseodymium from its already announced resource to global markets and will provide its feed material for the trial program.
- Thorium, Neodymium and Praseodymium are growing in importance as minerals critical to energy security, advanced technologies and defence.

**Ark Mines Limited (ASX: AHK) (AHK or the 'Company')** is pleased to announce it has signed a Memorandum of Understanding (**MoU**) with an existing processing technology provider to partner in a processing trial to crack its monazite ore from the Sandy Mitchell Rare Earths Project in Queensland to recover Thorium and other Rare Earth Elements (**REEs**).

The MoU establishes a framework for the parties to collaborate on the cracking of monazite ore using a proven, low-cost process to recover both Thorium and REEs.

The terms of the agreement are, at this stage, subject to commercial confidentiality.

Under the agreement, the parties will work together from initial monazite cracking through to the production of further rare earth oxides and refined Thorium.

**Managing Director Ben Emery commented:** *"The Sandy Mitchell Project is a unique asset in the Australian rare earths sector and this MoU will enable Ark to assess a processing pathway for recovering REEs and Thorium. This trial has the potential to further de-risk Sandy Mitchell by establishing processing options that we can apply to development of the project."*

*"This MoU has been executed at a pivotal time for the rare earths and critical minerals sector, with western governments and the mining industry focused on securing new, credible supply chains. Subject to the successful outcomes of this trial and other activities we are running in parallel, the Sandy Mitchell Project is well positioned to contribute to the future supply of these strategic metals."*

### MOU OVERVIEW

Under the MoU, the processing trial will commence in February 2026, comprising a small-scale program targeting the recovery of Thorium, Neodymium and Praseodymium. The program will deliver an integrated Phase 1 chemical analysis and separation chemistry proving campaign across all three target materials.

This work program will include comprehensive analytical characterisation, radionuclide profiling, reagent

optimisation and separation chemistry proving, delivered as a single program. The objective of is to support Ark's processing readiness and to de-risk downstream development.

The program will include up to three chemical process variations for each target material, with any additional process variations to be undertaken subject to further agreement.

Subject to the successful completion of these test programs, the MoU partners intend to jointly progress the development of a scaled pilot plant program. The objective of this work is to support downstream process validation and to facilitate engagement with potential end-users and offtake partners.

## SECTOR OUTLOOK

Thorium, Neodymium and Praseodymium are increasingly viewed as strategic critical minerals due to their roles in energy security, manufacturing and defence. Neodymium and Praseodymium are vital ingredients for permanent magnets used in wind turbines, electric vehicles and military systems. Thorium, a by-product of rare earth processing particularly from monazite, has gained renewed interest as a potential future nuclear fuel.

This announcement has been approved for release to the ASX by the Board of Ark Mines Limited.

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