

16 AUGUST 2023

## ARK ACQUIRES AUGUR DRILL RIG TO EXPEDITE SAMPLING PROCEDURES AT SANDY MITCHELL

### HIGHLIGHTS

- A hydraulic driven Augur Rig capable of being modified to drill sands has been acquired by Ark Mines to drill the Sandy Mitchell project.
- The Rig is mounted on a 4WD Landcruiser for quick movement between drill sites and low impact.
- Ark will utilise its on-site staff and geologists to operate the rig and to undertake sampling.
- The rig will reduce availability issues of contractors and significantly lower the cost of drilling, while also improving the quality of sampling.
- Ark will commence drilling as soon as some safety features are added to the rig. A full drilling program is planned for the rest of the year.
- Sandy Mitchell's Rare Earths are amenable to panning a concentrate yielding low-cost, fast start up, and straightforward beneficiation by gravity processing.
- All holes to date at Sandy Mitchell, from surface to the bottom of the sand profile have shown no overburden or clay layers.
- Reconnaissance bulk samples using an 81/2 inch Augur will be undertaken while awaiting the first phase assays and analysis, following the success of the Phase 1 drilling program and the size of the target mineralisation area.

**Ark Mines Limited** (ASX: AHK) is pleased to announce that it has acquired a specialised Augur rig to advance its drill program at the highly prospective Sandy Mitchell Rare Earths Project in North Queensland.

The procurement of an Augur rig was prioritised by management following the successful completion of Phase 1, 144-hole aircore drill program where preliminary assay results showed Rare Earth (REE) and Heavy Mineral (HM) mineralisation in every hole (*refer ASX Announcement 26 July 2023*).

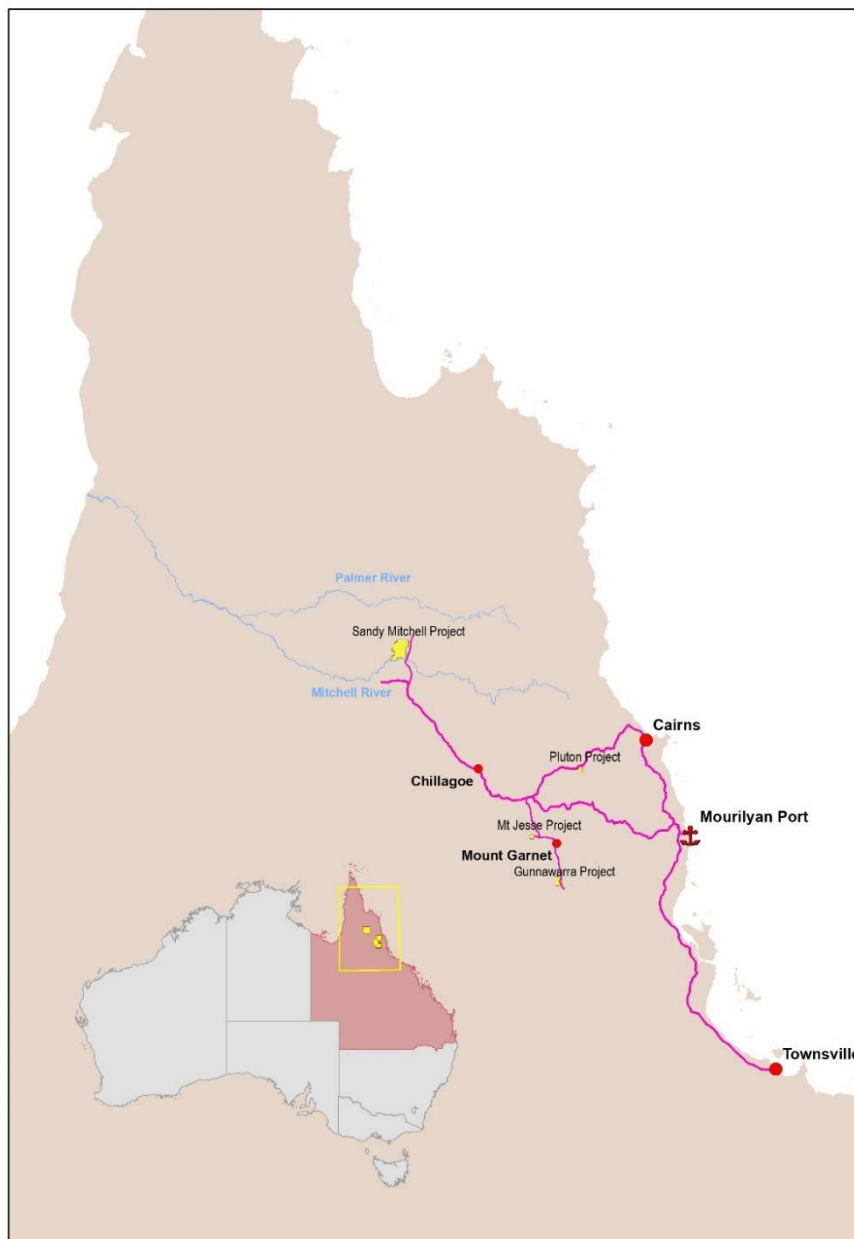
Ark will now commence the next phase of drilling with a hydraulic Augur Rig which has been purposely modified to drill sands. The rig has also been custom-mounted on a 4WD Toyota Landcruiser to facilitate quick and flexible movement between drill sites.

**Executive Director Ben Emery said:** *"In this market, the ability to deploy our own customised Augur rig provides so much more operational flexibility for the Ark technical team. Along with a much lower cost per meter to drill, the Augur rig will provide a better- quality sample for future lab analysis. Having a vehicle-mounted drill rig will also allows us to deliver targeted exploration programs much more rapidly. Given the expansive size of the project, this technology gives us a lot more optionality to appraise the scope of the resource in a timely manner and unlock value for shareholders. With an on-site technical team that resides locally, the rig will be fully-staffed as required and we are confident the results from the Augur drill program will quickly offset the acquisition cost over the coming months as the drill program progresses.*

The acquisition of a vehicle-mounted Augur drill rig will facilitate the next phase of drilling at Sandy Mitchell, which is unique compared to other Rare Earths projects due to its geological composition with material hosted in fine sands - known as a Terrestrial Placer deposit. These deposits are amenable to panning a concentrate which in turn facilitates a low-cost, fast start up, straightforward beneficiation by gravity processing. Hence, processing costs are anticipated to be significantly lower than hard rock and ionic clay hosted Rare Earths projects.

The considerable scale of Sandy Mitchell, based on the current 140 km<sup>2</sup> of tenements held and contiguous sub blocks of over 138km<sup>2</sup> currently under application, highlights the importance of a vehicle-mounted rig that can be transported quickly between drill sites, with targeted and flexible drilling operations as required.

Following the completion of some minor modifications in order to ensure compliance with the relevant safety standards, Ark is scheduled to commence the Augur drill program before the end of August. An extensive step-out drill program, including priority target areas and further exploration drilling to expand the mineralisation zone, has been planned for the remainder of 2023.



**Figure 1: Location of the Sandy Mitchell Project, near Chillagoe, Nth QLD.**

**For further information please contact:**

**Roger Jackson**  
Executive Chairman  
info@arkmines.com.au

**Ben Emery**  
Executive Director  
info@arkmines.com.au

**Released through:** Ben Jarvis, Six Degrees Investor Relations, +61 413 150 448

Or visit our website and social media [www.arkmines.com](http://www.arkmines.com) | [www.twitter.com/arkmineslimited](https://www.twitter.com/arkmineslimited)

## **About Ark Mines Limited**

Ark Mines is an ASX listed Australian mineral exploration company focused on developing its 100% owned projects located in the prolific Mt Garnet and Greenvale mineral fields of Northern Queensland. The Company's exploration portfolio consists of three high quality projects covering 200km<sup>2</sup> of tenure that are prospective for copper, iron ore, nickel-cobalt and porphyry gold:

### **Gunnawarra Nickel-Cobalt Project**

- Comprised of 11 sub-blocks covering 36km<sup>2</sup>
- Borders Australian Mines Limited Sconi project - most advanced Co-Ni-Sc project in Australia
- Potential synergies with local processing facilities with export DSO Nickel/Cobalt partnership options

### **Mt Jesse Copper-Iron Project**

- Project covers a tenure area of 12.4km<sup>2</sup> located ~25km west of Mt Garnet
- Centered on a copper rich magnetite skarn associated with porphyry style mineralization
- Three exposed historic iron formations
- Potential for near term production via toll treat and potential to direct ship

### **Pluton Porphyry Gold Project**

- Located ~90km SW of Cairns near Mareeba, QLD covering 18km<sup>2</sup>
- Prospective for gold and associated base metals (Ag, Cu, Mo)
- Porphyry outcrop discovered during initial field inspection coincides with regional scale geophysical interpretation

### **Sandy Mitchell Rare Earth and heavy Mineral Project**

- Ark has recently Acquired the 147km<sup>2</sup> EPM 28013 'Sandy Mitchell' – an advanced Rare Earths Project in North Queensland with additional 138km<sup>2</sup> of sub blocks under application
- Project contains all critical Light Rare Earths as well as Heavy Rare Earths including dysprosium (Dy), terbium (Tb), holmium (Ho), erbium (Er), thulium (Tm) ytterbium (Yb), yttrium (Y) and excluding only Lutetium
- Up to 25% of the TREO is Nd and Pr (magnet metals)

**Competent Persons Statement**

The Information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Roger Jackson, who is a Fellow of the Australian Institute of Mining and Metallurgy and a Fellow of the Australasian Institute of Geoscientists. Mr Jackson is a shareholder and director of the Company. Mr Jackson has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Jackson consents to the inclusion of this information in the form and context in which it appears in this report. Mr Jackson confirms information in this market announcement is an accurate representation of the available data for the exploration areas being acquired.

**Forward Looking Statements and Important Notice**

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Ark Mines' control.

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