

8 SEPTEMBER 2023

SANDY MITCHELL OPERATIONS UPDATE

HIGHLIGHTS

- Lab assays pending; first batch of 1m-interval assays for Ark's 144-hole Stage 1 drill program are due for release from the lab on the 17th September - JORC Geologist engaged.
- Stage 2 to Stage 4 drill planning is now completed. Stage 2 Augur Drill Program confirmed – targeted extension program for the purpose of bolstering potential JORC-compliant resource tonnes.
- Previous drilling covers an area of 1.3 km² which is 1.2% of the peak radiometric reading on the lease. Stage 2 to 4 will ultimately cover the full anomaly.
- Upgraded sampling system on the Augur drill rig, designed and installed specifically for sands, along with a new safety system. On-site drill team engaged and ready to commence. Rig due to be completed by late this month.
- Ark's geology team have taken receipt of a state-of-the-art Scintillometer, which will complement the forthcoming Augur drill program by facilitating immediate analysis of results on-site.
- Aerial reconnaissance completed over the whole Sandy Mitchell EPM with encouraging results; new EPM ground (Applications) visited by directors and geologist via land-owners helicopter air inspection only over radiometric high ground.
- Metallurgical test work advancing; Mineral Technologies confirm samples received, with first phase deliverables expected in Q4 including:
 - Ore characterisation;
 - Metallurgical characterisation and balances including REE mineral beneficiation; and
 - HMC production evaluation including suitability of beneficiation by gravity.
- Proof of mineral and concept study inclusive of REE mineral beneficial evaluation by floatation and conventional techniques (electrostatic magnetic separation). These studies could be used in a class 5 FEL1AACE engineering design study (concept).
- Final product (Mineral) set to be evaluated for multiple potential commercial markets and build initial business case.

Ark Mines Limited (ASX:AHK) is pleased to provide an update on exploration initiatives at the Company's 100%-owned Sandy Mitchell Rare Earth and Heavy Mineral Project in North Queensland.

An extensive forward drill-planning program has been completed, commencing with a Stage 2 Augur drill program that will target resource extension across a broader area of the lease.

Stage 2 Augur drilling follows the completion of Ark's Stage 1, 144-hole drill program where preliminary composite assay results have been lodged and analysis is being carried out by a third-party laboratory for 1m interval samples. Plans for Stage 3 and Stage 4 drill programs have also been finalised, which upon completion will ultimately cover the full anomaly.

A summary of the forward-works drill program is set out below:

	Total Collars	Total Metres	Total Samples
Stage 2	141	1,480.5	1,810
Stage 3	143	1,501.5	1,540
Stage 4	134	1,407.0	1,443
Total	418	4,389.0	4,793

The Augur drill rig is mounted on a 4WD Landcruiser for quick movement between drill sites (*refer ASX Announcement 16 August 2023*). Since acquiring the Augur rig, the on-site team has installed an upgraded safety system along with new sampling features which have been specifically designed for the hosting sands that are a defining feature of the Sandy Mitchell placer deposit.

Ark has also acquired a new Scintillometer that will allow the Company to take on-site measurements for more rapid analysis of near-term drill results.

Third-party laboratory analysis of the assay results (1m intervals) for Ark’s 144-hole Stage 1 drill program is progressing on-schedule, with results due for release by the end of September.

Concurrently, specialist consultant Mineral Technologies is also advancing metallurgical test to characterise the REE’s and Heavy Minerals identified within the sands at Sandy Mitchell (*refer ASX Announcement 22 August 2023*).

The Company expects to report further updates on the metallurgy before the end of CY2023, including ore characterisation and HMC production evaluation (including suitability of beneficiation by gravity).

Ark has also commenced studies to evaluation REE mineral beneficiation processes, including floatation and conventional techniques.

Executive Director Ben Emery said: *“We are pleased with the latest developments at Sandy Mitchell, which are the result of focused execution by the Board and management team to fast-track key works programs and advance exploration in order to unlock the inherent value we believe the project holds. With preparations for the Augur drill program now complete, the initiation of the Stage 2 drill program will add valuable insights about the broader scope of the project. Given that the Stage 1 program covered just 1.2% of the peak radiometric reading on the lease, we think there is significant exploration upside still remaining and have planned the forward-works program (Stage 2 to 4) to ultimately cover the full anomaly. With first assays scheduled for receipt before the end of the month and a busy period of operations in Q4, we look forward to providing more updates as exploration at Sandy Mitchell progresses.*

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 | www.twitter.com/arkmineslimited

- Stage 1 complete
- ▲ Stage 2 designs
- ▲ Stage 3 designs
- ▲ SM_des_s4
- EPM 28013 Sandy Creek

Ark Mines Sandy Mitchel Project
Drill Hole Designs

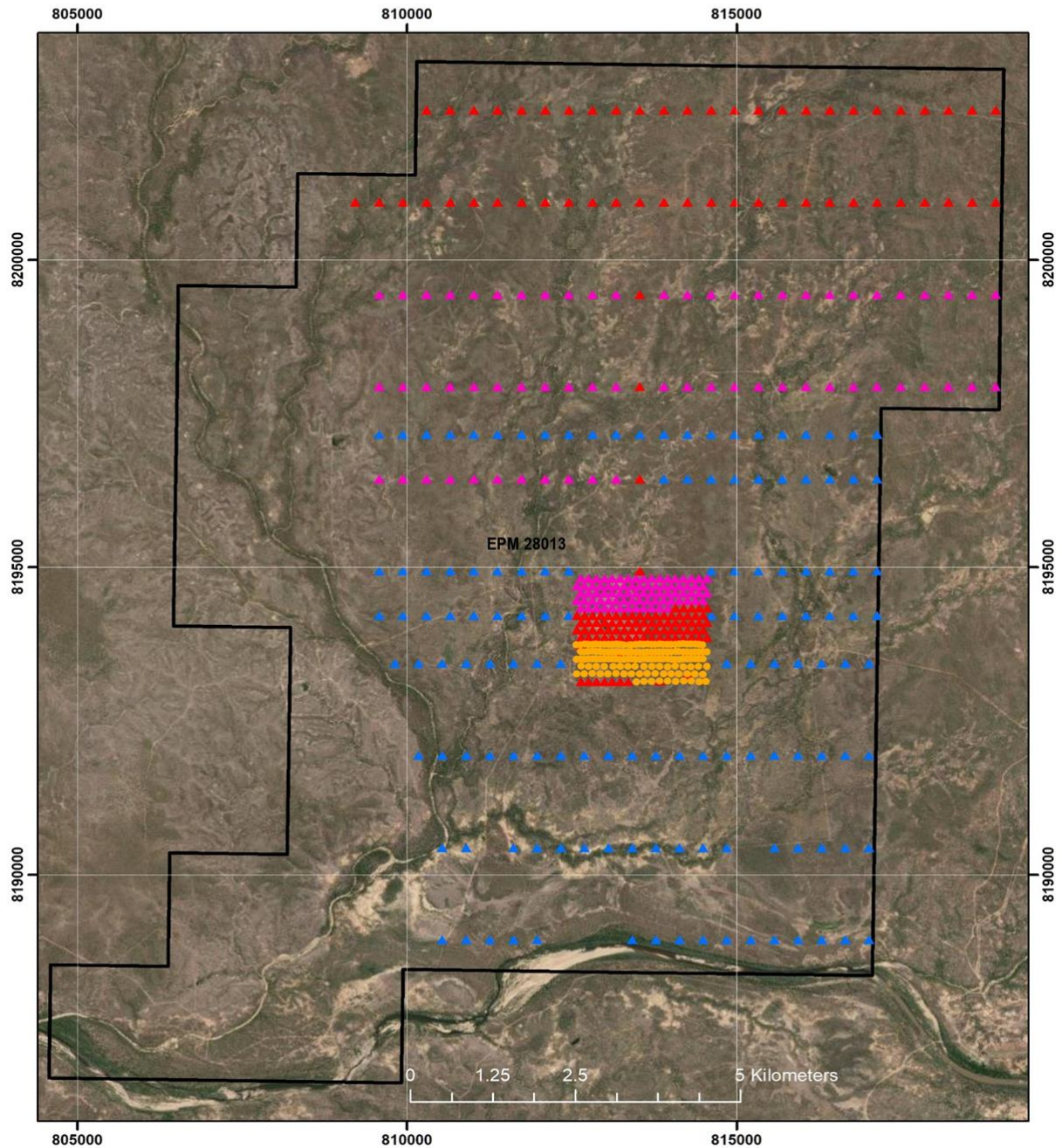


Figure 1: Drill hole locations at the Sandy Mitchell Rare Earth and Heavy Mineral project

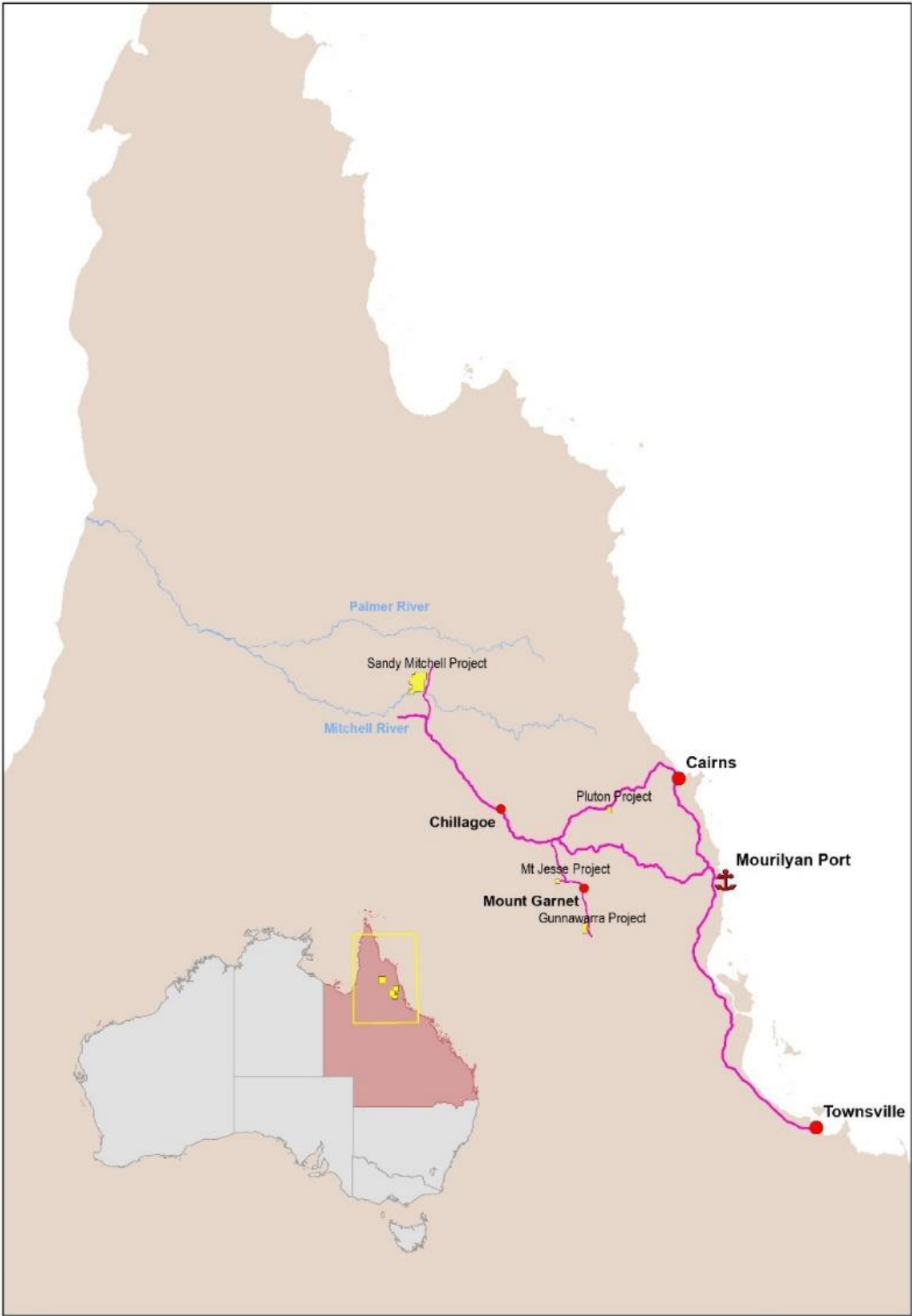


Figure 2 Sandy Mitchell Rare Earth and Heavy Mineral project location

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 and includes:

The Sandy Mitchell Rare Earth and Heavy Mineral Project

- Ark has recently acquired the 147km² EPM 28013 ‘Sandy Mitchell’ tenement – an advanced Rare Earths Project in North Queensland with additional 138km² of sub blocks under application
- Very high historical TREO grades including high grade pan concentrates of all critical Light 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)
- Rare Earths at ‘Sandy Mitchell’ are amenable to panning a concentrate
- Planned low-cost, fast start up, straightforward beneficiation by gravity processing

Ark’s exploration portfolio also consists of three high quality projects covering 200km² of tenure that are prospective for copper, iron ore, nickel-cobalt and porphyry gold:

Gunnawarra Nickel-Cobalt Project

- Comprised of 11 sub-blocks covering 36km²
- 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 12.4km² located ~25km west of Mt Garnet
- Centred 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 18km²
- Prospective for gold and associated base metals (Ag, Cu, Mo)
 - Porphyry outcrop discovered during initial field inspection coincides with regional scale geophysical interpretation.

Reliance on historic data

All sample data reported in this release, as disclosed in the body of the release, in the tables in the Appendix and in the JORC table is based on data compiled by the Competent Person from other sources and quoted in their original context. These sources have been referenced in the text and the original Competent Persons statements may be found with the relevant documents. Some of this information is publicly available but has not been reported in accordance with the provisions of the JORC Code and a completed Table 1 of the JORC Code and Competent Persons statement is attached to this Release. Whilst every effort has been made to validate and check the data, these results should be considered in the context in which they appear and are subject to field verification by the Company.

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 Vertex Minerals' control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Vertex Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Ark Mines makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.