ARK MINES LTD.

Australian Rare Earths on the fast track to production

NON-DEAL INVESTOR PRESENTATION
AUGUST 2025
ASX: AHK OTCQB: AHKMF

The ONLY Inland Surface Expressed Placer Deposit (in sands) to host rare earths on the ASX

- *'Nature has already done our crushing and grinding'*
- *Simple metallurgy; gravity and magnetic in-situ processing, no water, continuous rehabilitation*
- *High-value Heavy Minerals, including Monazite, Zircon, Rutile, Xenotime, and Ilmenite*
- *QLD Government funding support through QIC*

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CORPORATE SNAPSHOT

AHK
ASX Code

66m
Shares on Issue

~$0.50
Share Price

5,267,317
Options on Issue

ca. $33.0M
Market Capitalisation

$1.6M
Cash as at 30 June 2025

AN EXPERIENCED TEAM

Roger Jackson
Executive Chairman

Geologist with 30+ years in exploration, development and mining operations

Benjamin Emery
Executive Director

25+ years in Metals marketing, metals trading, exploration, development and mining operations

Ian Mitchell
Non-Executive Director

30+ years in Legal and Corporate in the IPO and Mining and Exploration public company space.

SHARE PRICE

SANDY MITCHELL: AUSTRALIA'S NEXT LARGE-SCALE RARE EARTHS PROJECT
Favourable location in North Queensland

MULTIPLE INVESTMENT ATTRACTIONS AND VALUE DRIVERS

Major resource with scale and commercial grades

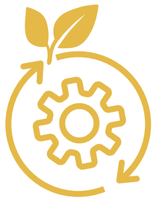
Measured Mineral Resource Estimate (MRE) of 71.8 Mt @ 1,732.7 ppm Monazite Equivalent (700ppm MzEq cut-off grade)

Huge exploration upside

MRE based on only 4.5% of Sandy Mitchell's current Exploration Target estimate of 1.3bn to 1.5bn tonnes @ 1250ppm - 1490ppm MzEq

Government funding secured

$4.5m investment from the Queensland Investment Corporation (QIC) to fast-track development



Advantages over clay-based & hard-rock REE deposits

Rare earth elements at Sandy Mitchell are contained in a large sand pit. Mother Nature has done the crushing and grinding – simple extraction via gravity processing

Low capex and opex

Enabling fast start-up to produce and sell critical REE concentrate to processing refineries; Potential off-takers for high-quality monazite concentrate in Australia, Korea and USA now assessing Sandy Mitchell

Multiple near-term value drivers

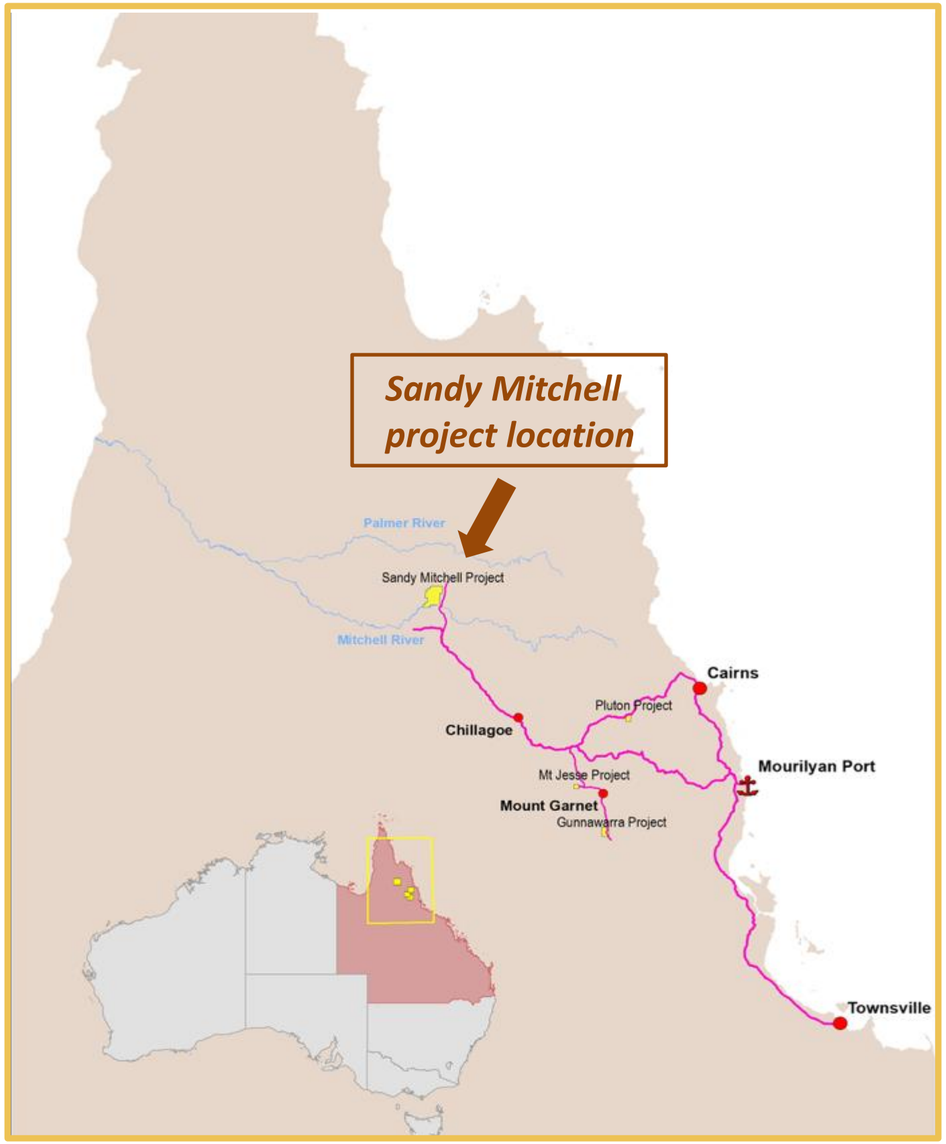
Infill drill results expected to result in a significant expansion to existing Measured resource; comprehensive PFS in Q1 2026; Off-take discussions underway

Leveraged to the upside

~$50m market cap with only ~60m shares on issue. A very tight cap structure. 100% project ownership

$4.5M INVESTMENT BY THE QUEENSLAND INVESTMENT CORPORATION (QIC)
Under Queensland's growing status as a leading resources jurisdiction

- $4.5m investment by the Queensland Investment Corporation (QIC) to support development at Sandy Mitchell
- Comprises $4m in up-front funding tied to royalties based on future sales from Sandy Mitchell, and a $500,000 equity investment subject to ASX Listing Rules
- Investment made through the $170m Queensland Critical Minerals and Battery Technology Fund, part of QIC, following extensive collaboration and due diligence
- In line with the QIC's strategy to support Queensland-based resources companies which meet the relevant investment criteria and strengthen domestic supply chains for critical minerals
- QIC's investment facilitates the rapid acceleration of project development at Sandy Mitchell; Stage-3 infill drilling underway with results to be incorporated into upcoming Pre-Feasibility Study. Now targeting production in late-2027



REE's HOSTED IN MINERAL SANDS DELIVER MAJOR PROCESSING ADVANTAGES

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PLACER DEPOSITS HAVE DISTINCT GRADE ADVANTAGES AS NATURE HAS ALREADY DONE THE CRUSHING & GRINDING

	Placer Deposit (Sandy Mitchell)	Ionic Clay Deposits	Hard-Rock Deposits
CAPEX	Capex lite and using low-cost skid-mounted gravity plant to deliver a concentrate. Mining cost and operating cost are negligible	Reasonable	Heavy, Overburden/strip development costs, Mining costs high
SCALE	Massive tonnage as per MRE and Exploration Target	Typically smaller tonnage	Typically require significant scale for economic viability
EXPLORATION	Resources can be defined inexpensively and rapidly given shallow drilling using air-core, auger, push-tube core	Resources can be defined inexpensively and rapidly given shallow drilling using aircore, auger, push-tube core	Similar to other hard rock base metals requiring substantial drilling, geochemistry, geophysics etc
MINING	Stripping and progressive rehabilitation, no overburden, zero strip ratio. Mined with a wheeled loader – Ability to produce commercially viable concentrate based on much lower head grade	Stripping and progressive rehabilitation. Many have overburden and some strip ratio	Drill and blast with significant mining fleet. Higher strip ratios or expensive underground mining and development
PERMITTING	Simple in-situ gravity processing with the sand put back from where it was moved	Due to water processing and chemicals Environmental challenges will need to be met	Significant environmental impact
PROCESSING	Simple metallurgy; gravity and magnetic in-situ processing, no water, continuous rehabilitation. Nature has already done the crushing and grinding. Includes heavy mineral credits	Simple metallurgy; clay is washed with a desorption agent to recover REEs	Strong acids and salts with high temperature +/- pressure. Radioactive tailings

ROBUST STAGE 1 MEASURED MINERAL RESOURCE ESTIMATE

POTENTIAL FOR SIGNIFICANT RESOURCE EXPANSION

Measured Mineral Resource Estimate (MRE) of 71.8 Mt @ 1,732.7 ppm Monazite Equivalent calculated using a 700ppm MzEq lower cut-off grade

Resource includes a basket of high value Heavy Minerals (HM), comprised of:

- **Monazite**
- **Xenotime**
- **Zircon**
- **Garnet**
- **Ti Minerals including Rutile and Ilmenite**

Reported MzEq and HM grades are expected to support strong project economics through simple low-cost downstream processing, with reference to current market prices for monazite concentrate[1]

High magnetic REO (Nd, Pr, Dy, Tb) element proportion of 25 % of the TREO basket, positioning Sandy Mitchell as one of Australia's most enriched MREO deposits

MRE developed from only 4.5 % of the available anomaly area at Sandy Mitchell, based on an Exploration Target estimated for Sandy Mitchell of 1.3Bt to 1.5Bt @ 1250 to 1490 ppm monazite equivalent. Real and substantial potential for Mineral Resource expansion[1]

1. (Potential quantity and grade of the Exploration Target is conceptual in nature and it is uncertain if further exploration will result in estimation of a mineral resource). See https://arkmines.com/asx-announcement-sandy-mitchell-mine-020724/

EXPLORATION TARGET CONFIRMS WORLD-CLASS PLACER REE DEPOSIT
REE deposit in a sand pit[1]

1.3 BILLION TONS TO 1.5 BILLION TONS @ 1,286 TO 1,903 PPM MONAZITE EQUIVALENT[1]

Exploration Target Range	Exploration Target	MzEq	Monazite	Xenotime	Zircon	Rutile	High Ti Leucoxene	Low Ti Leucoxene	Altered Ilmenite	Ilmenite
From Grade ppm		1,285.8	976.0	36.3	520.7	60.6	174.6	111.1	180.7	195.6
From Dry Tonnes	1,316,705,000	1,693,000	1,285,000	48,000	686,000	80,000	230,000	146,000	238,000	258,000
To Grade ppm		1,903.6	1,444.9	53.7	770.9	89.7	258.5	164.5	267.5	289.6
To Dry Tonnes	1,580,046,000	3,008,000	2,283,000	85,000	1,218,000	142,000	408,000	260,000	423,000	458,000

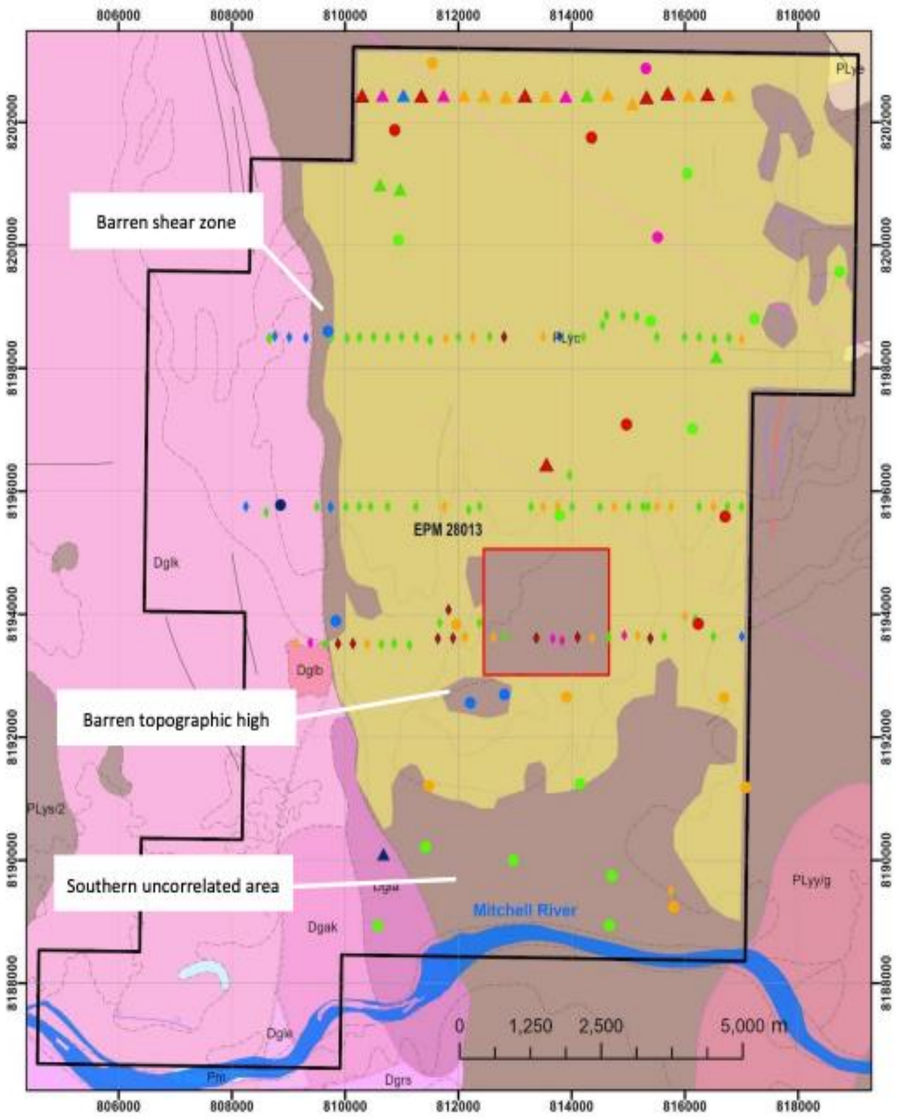
Exploration Target Range	Exploration Target	TREO	TREO+Y	LREO	HREO	CREO	MagREO
From Grade ppm		315.4	338.1	305.2	10.2	85.1	77.6
From Dry Tonnes	1,316,705,000	415,000	445,000	402,000	13,000	112,000	102,000
To Grade ppm		466.9	500.6	451.9	15.1	125.9	114.9
To Dry Tonnes	1,580,046,000	738,000	791,000	714,000	24,000	199,000	182,000

Exploration Target Area Map (refer image to the right):

- The JORC Exploration Target is highlighted in yellow
- Red square represents area covering the current Measured Resource
- Exploration Target area is 86.6 km² excluding the 4.5 km² resource area

Expansion drill program well advanced, targeting a resource increase of approximately 260Mt MzEq, bringing the total Measured resource to 330Mt, which still represents just ~11% of the JORC Exploration Target.

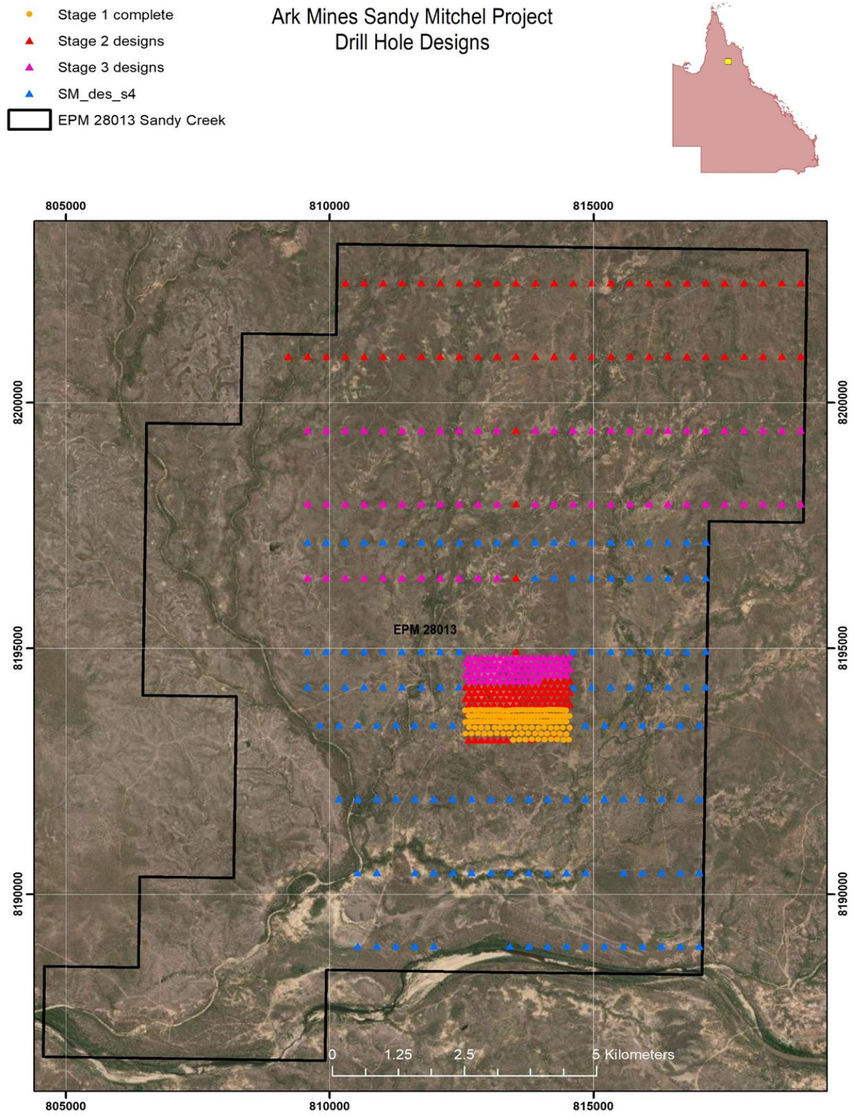
Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature; it is uncertain if further exploration will result in an expansion of the Mineral Resource.



1. Refer to AHK ASX Announcement 6th November 2024.

SANDY MITCHELL SITS ON A SINGLE LAND HOLDING

- 100%-owned EPM 28013 covering ~90km^2
- 105 km northwest of Chillagoe and 203 km west northwest of Cairns, on Mount Mulgrave Station
- Comprises 49 sub-blocks with permit name. Only one landowner



PHASE 1 GRAVITY BENEFICIATION DELIVERS EXCELLENT CONCENTRATE + RECOVERIES

CONCENTRATE ASSAYS RETURNED 52% TREO AND RECOVERIES OF ~72% (EST.)

- First pass un-optimised beneficiation test work of Sandy Mitchell's REE sands produced a high-grade rare earth concentrate
- 50% waste rejection by screening +2mm sand prior to processing and before beneficiation
- Beneficiation test work has shown the greatest upgrade is by simple gravity separation, confirming the material is amenable to straightforward beneficiation by gravity processing
- Final concentrate assays returned 51.9% TREO and contained mostly La, Ce, Pr and Nd, plus Heavy Rare Earths Dy and Tb - collectively represents a very high-value, saleable product [2]
- Direct cerium oxide (CeO_2) recovery from gravity feed to REM concentrate estimated to be 71.7%, with indications that >83% may be achievable [2]
- Similar upgrade trends are observed for zirconium dioxide (ZrO_2)

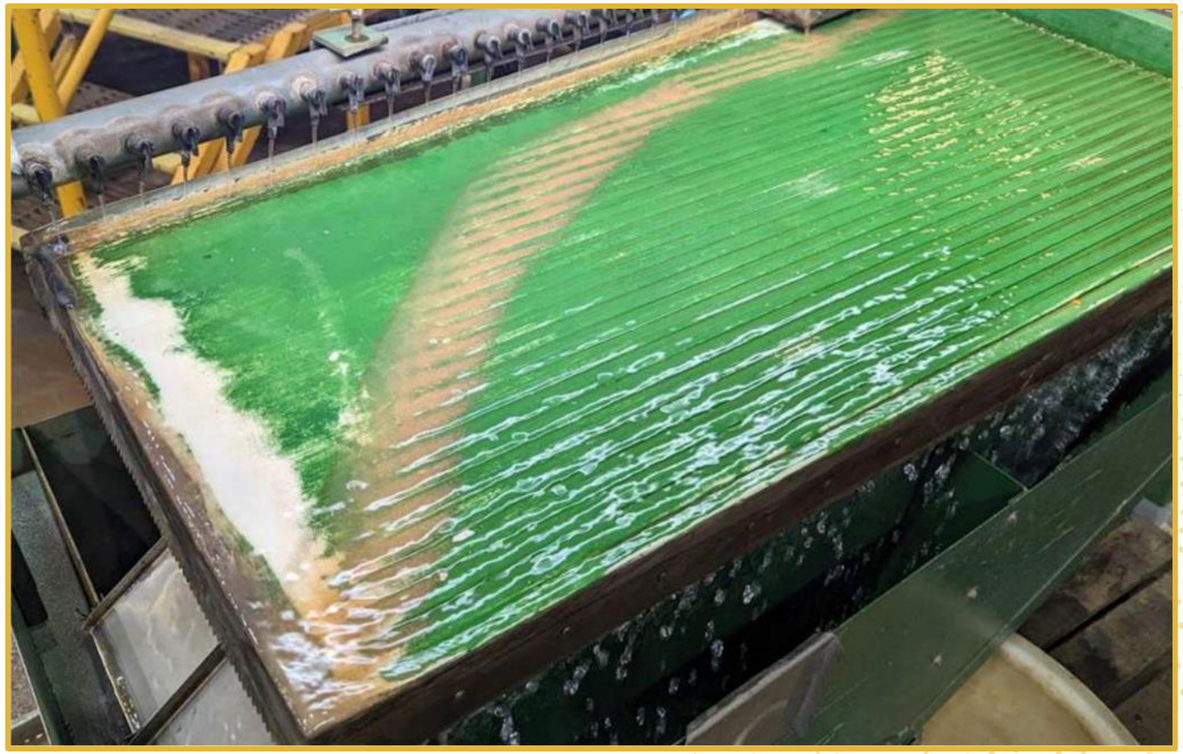
Heavy Minerals Concentrate is a very sought-after input feed in global markets

2. Refer to AHK ASX Announcement 24th November 2023

METALLURGICAL IMPROVEMENTS UNDERWAY

ADVANCED METALLURGY WORK EXPECTED TO FURTHER STRENGTHEN COMMERCIAL DEVELOPMENT STRATEGY

- Specialist consultants IHC Mining have commenced a detailed metallurgical testing program to improve both the beneficiation and mineral separation process for rare earths and heavy minerals
- Process flow sheet designed to produce the following products from the surface sand:
  - Rare Earth Oxides including magnet rare earths and critical rare earths
  - Zircon with accessory hafnium
  - Accessory titanium oxides
  - Garnet
- Initial work will deliver improved characterisation and preparation of feed for beneficiation. This will flow into an improved flowsheet design through enhanced processes choices
- Results from the IHC metallurgical analysis will be incorporated into the works program for the detailed Pre-Feasibility Study (PFS) – underway and scheduled for completion in early 2026



CONTINUOUS REHABILITATION AND PRODUCTION OF A HIGH VALUE CONCENTRATE

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OFFSITE Mineral Separation Plant

Wet Spiral beneficiation plant – either mobile or semi mobile

LOW IMPACT MINING

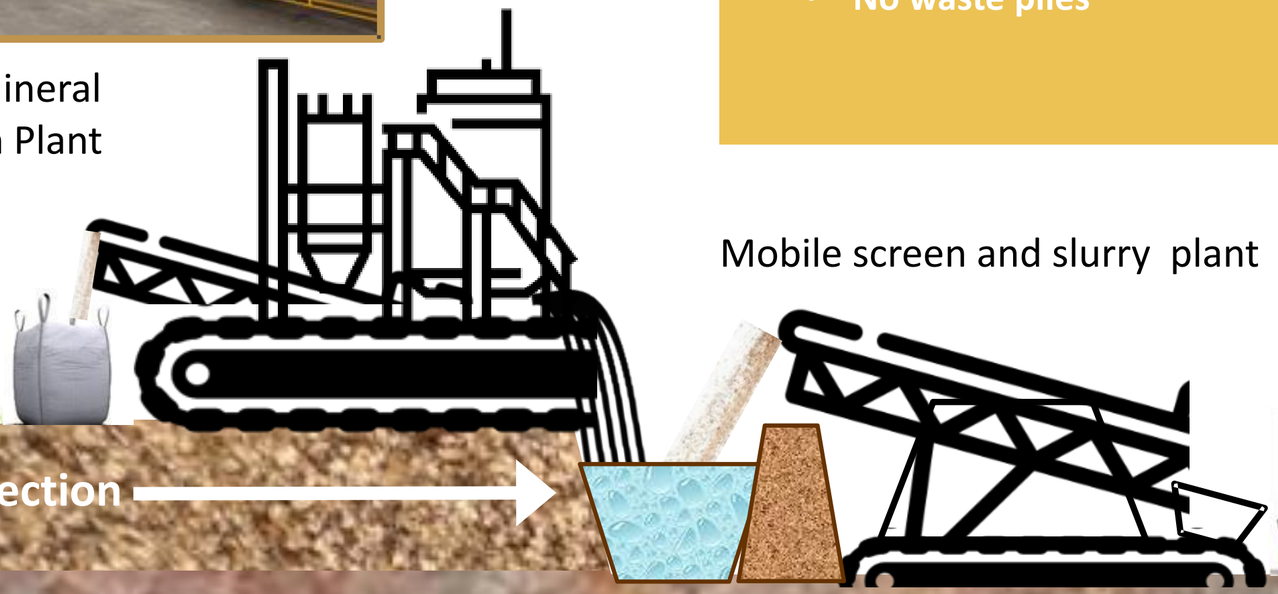
- No Drill and Blast
- No overburden
- No clay to deal with
- Only 12m deep
- At 10m – you can selectively mine
- No tails dam
- No waste piles

LOW ENVIRONMENTAL IMPACT

- No Chemicals
- No Salts and Acids
- Simple digging
- In situ processing with gravity only
- No impact on farm country – subsidence
- The landform will be the same as before after mining
- Rehab to the Landholder's liking by only seeding the ground down

Sparse grass with some small trees

Mobile screen and slurry plant



Mining Direction

Sand – average 12m from surface

50% screened and re placed in mined trench

Metamorphic Basement

SCOPING STUDY OUTCOMES
‘Base Case’ to confirm project is commercial with significant potential upside

Highlights

- Completed December 2024; Potential for a large source of Australian zircon and a monazite and xenotime REMC (Rare Earth Mineral Concentrate)
- ‘Base Case’ report which confirmed commerciality of the project; Supports continued progression of mining and processing methods in line with stated development strategy
- Low capex and opex, enabling fast start-up to produce critical a REE concentrate to sell to processing refineries
- Proven simple concentration and separation technology
- Input metallurgy and processing will be optimised with further metallurgical test work now underway
- Provides strong platform for additional project developments, with Resource upgrade drill program and additional metallurgical improvement works expected to underpin significant enhancements to project economics, ahead of comprehensive Pre-Feasibility Study in Q1 2026.

ESTIMATED DEVELOPMENT TIMELINE
Subject to third-party completion dates

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	2025		2026				2027			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Stage-3 infill drill program										
Metallurgy – Stage 1 & 2										
All metallurgical improvements										
Measured resource upgrade										
Receipt of Mining License										
Updated Scoping Study										
Pre-Feasibility Study										
Equipment selection / Mine plan										
DFS / FID										
Equipment procurement										
Production commences										

DRILLING AT SANDY MITCHELL

ARK MINES LTD.

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