
FIRST ORE PRODUCTION AT THUNDERBIRD

HIGHLIGHTS

- Ore processing at the Thunderbird Mineral Sands Project commenced ahead of schedule
- Management and control of processing plant transferred to Kimberley Mineral Sands team by EPC contractor GR Engineering Services
- First delivery of mineral sands products to customers remains on target for Q1 2024
- Process plant fine tuning and ramp up underway, with forecast total project expenditure remaining within the original \$484m FID budget and financing envelope

Sheffield Resources Limited (“Sheffield” or “the Company”) (ASX: SFX) is pleased to announce that ore production from its 50% owned Thunderbird Mineral Sands Project (**Thunderbird**) in the Kimberley region of northern Western Australia has now commenced, several weeks ahead of the original FID schedule.

The initial stages of ore processing will see a gradual ramp up through to steady state processing, production of concentrates, and building of concentrate product stockpiles on site and at the port of Broome in preparation for the first delivery of product to customers. Sheffield expects Kimberley Mineral Sands will load the first shipment of concentrate product early in Q1 2024.

Sheffield Resources Executive Chair, Mr Bruce Griffin said, “We wish to thank and congratulate the Kimberley Mineral Sands team, our partner Yansteel, the EPC contractor GR Engineering Services Limited and each of KMS’ contracting partners for their contribution to this tremendous achievement”.

“Delivery of a greenfield mining project in Australia can be a challenging experience, particularly for a junior miner. Overcoming these hurdles, especially in the current inflationary environment to deliver first ore production ahead of schedule and under budget and without a lost time injury is an outstanding achievement that each and every one associated with Thunderbird should be incredibly proud of.”

“With production activities now underway at Thunderbird, KMS are now focussed on accumulating concentrate stockpiles and to enable delivery of the forecast first shipment of product early in the new year.”

This ASX announcement has been authorised for release by the Company’s Board of Directors.

ENDS

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Image 1 & 2: Thunderbird Wet Concentrate Plant & Concentrate Upgrade Plant overview



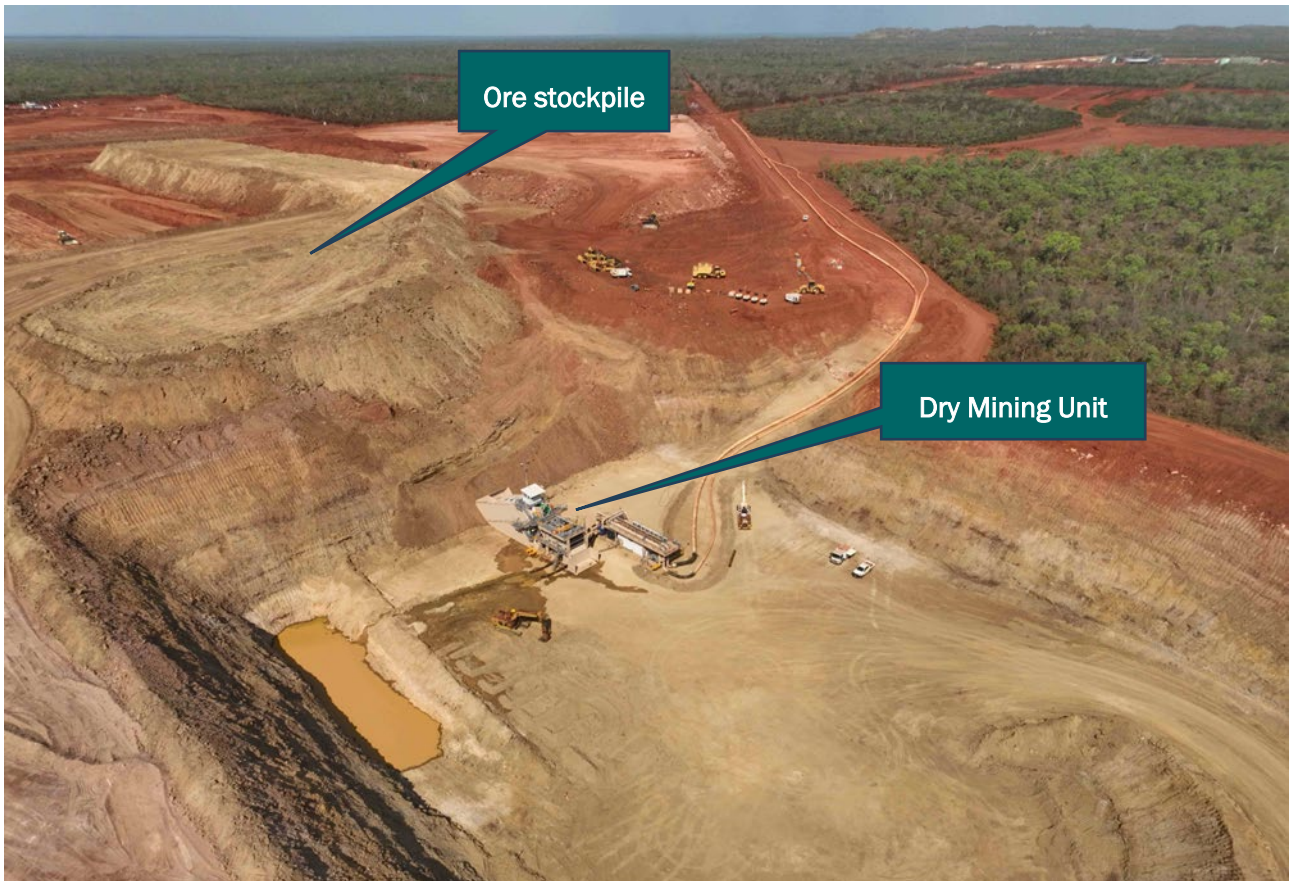


Image 3 & 4: Mining area with ore stockpile and DMU (above) & dozer push operations (below)





Image 5: First ore processing at Thunderbird – rougher spiral circuit



Image 6: Concentrate production at Thunderbird – cyclone discharge to stockpile

ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on assembling a portfolio of global mineral sands development and production assets to generate cash returns and growth.

Our core asset is our 50% investment in Kimberley Mineral Sands Pty Ltd (KMS), the owner of the world class Thunderbird Mineral Sands Project under development in north-west Western Australia.

Additionally, Sheffield executed a binding agreement in February 2023, providing the Company with an option to acquire up to an initial 20% interest in the South Atlantic Mineral Sands Project in Brazil.

KIMBERLEY MINERAL SANDS

Kimberley Mineral Sands Pty Ltd, (KMS) is a 50:50 Joint Venture between Sheffield and Yansteel. The joint venture owns and is developing the Thunderbird Mineral Sands Project and adjacent tenements on the Dampier Peninsula.

KMS is governed by a four person Board of Directors with Sheffield and Yansteel each nominating two directors. Key Joint Venture decisions require unanimous approval of both shareholders. KMS operates as a standalone entity with its own management and employees.

THUNDERBIRD MINERAL SANDS

The Thunderbird Mineral Sands Project ("Thunderbird") is one of the largest and highest grade mineral sands discoveries in the last 30 years. The 2022 KMS Bankable Feasibility Study shows Thunderbird is a technically low risk Project, that generates strong cash margins from globally significant levels of production over a decades long mine-life.

With operations forecast to commence in late 2023, Thunderbird is expected to generate a high-quality suite of mineral sands concentrate products suited to market requirements. These products include a zircon concentrate and a magnetic concentrate that contains a high quality ilmenite suitable smelting into chloride slag or for manufacturing titanium dioxide pigment.

Thunderbird is located in one of the world's most attractive mining investment jurisdictions and is well placed to deliver long term, secure supply of high quality products to a range of potential customers.

ABOUT YANSTEEL

Yansteel is a wholly-owned subsidiary of Tangshan Yanshan Iron & Steel Co., Ltd, a privately owned steel manufacturer headquartered in Hebei, China producing approximately 10mt per annum of steel products and has annual revenues of ~A\$6bn.

Construction of a 500ktpa integrated titanium dioxide processing facility including a titanium slag smelter has commenced by the company. This complex will consume the magnetic concentrate from Stage 1 of the Thunderbird Mineral Sands Project under a take or pay offtake agreement.

SOUTH ATLANTIC PROJECT

The South Atlantic Project is located in south east Brazil. Four main deposits have been identified within the project area: Retiro, Estreito, Capao do Meio and Bujuru with Exploration Targets developed for the Retiro and Bujuru deposits. The combined Exploration Target for Retiro and Bojuru is estimated between 500 and 720 Mt of material at an average grade of 4.0% to 3.2% HM.

The tenements are held by RGM. Sheffield entered into an option agreement with RGM in February 2023 with Sheffield to provide US\$2.5m to fund project related activities over an 18 month period and earn an option to acquire up to 20% of RGM with the payment of a further US\$12.5m (US\$15.0m in total) to acquire a 20% interest. Should Sheffield elect to exercise the option, subject to various conditions being satisfied, including project financing being obtained and all funds required for project construction being secured, Sheffield may exercise a further options to increase its interest in RGM up to 80%.