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## THUNDERBIRD CONSTRUCTION APPROACHING 90% COMPLETE

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### HIGHLIGHTS

- Construction activities are rapidly approaching 90% complete, with expected cost outcomes within the original planned \$484m budget
- Installation of major equipment including spirals, WHIMS, piping and electrical progressing well
- Clearing and grubbing activities commenced by waste mining contractor, ahead of expected commencement of waste mining in Q3 2023
- Operational readiness well advanced with progressive recruitment of key leadership personnel across all operational disciplines
- Over 750,000 project labour hours completed LTI free
- First delivery of mineral sands products to customers remains on target for Q1 2024

Sheffield Resources Limited (“Sheffield” or “the Company”) (ASX: SFX) is pleased to announce that construction of its 50% owned Thunderbird Mineral Sands Project (**Thunderbird**) in northern Western Australia is rapidly approaching 90% complete, and on track to commence commissioning during the second half of 2023.

The major Wet Concentrate Plant and Concentrate Upgrade Plant components including spirals, wet high intensity magnet separators (WHIMS), piping, electrical and mechanical systems have been progressively installed and the process plant is on track for completion in line with planned schedule. The tailing storage facility and stormwater storage pond is substantively complete and sealing of the 30km mine access road has commenced and is scheduled for completion within the coming weeks.

Waste mining activities have commenced with initial clearing and grubbing and removal of topsoil for the waste stockpiles. Continued waste mining will enable mining contractor Piacentini & Son to access the starter pit location during Q3 2023. Construction of the Dry Mining Unit (DMU) by Piacentini & Son is progressing as scheduled ahead of transport to site during the next quarter.

Sheffield Resources Executive Chair, Mr Bruce Griffin said, “We are extremely pleased by the efforts of the Kimberley Mineral Sands team, supported by their contractors, to maintain Thunderbird construction on schedule. As construction approaches 90% complete, KMS construction expenditures remain within the planned funding envelope \$484m, which is an outstanding achievement. KMS are well positioned to start commissioning during the second half of 2023, and we look forward to the forecast first shipment of product in Q1 2024.”

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: Final set of spirals installed at Wet Concentrator Plant





Image 5 & 6: Overview of Power Station & LNG Storage Tanks





Image 7: Tailings storage facility (foreground) and stormwater storage pond (background)



Image 8: Commencement of clearing & grubbing for overburden stockpile area



Image 9 & 10: Dry Mining Unit manufacture and assembly (Piacentini & Son)



## 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%.