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## THUNDERBIRD COMMENCES COMMISSIONING ACTIVITIES

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### HIGHLIGHTS

- Construction activities are approaching completion, within the \$484m FID budget
- Commissioning of key service areas is underway, with plant commissioning to follow shortly
- Waste stripping & movement progressing and ahead of planned initial mining activities
- Recruitment of Kimberley based personnel remains on track, with operational readiness activities underway across all disciplines
- 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 now approaching completion, commissioning of services areas has commenced, and plant commissioning is scheduled to commence during the current September quarter.

Construction of the Wet Concentrate Plant and Concentrate Upgrade Plant is substantively complete. Commissioning of the borefields, water and flocculant services, in conjunction with commissioning of air services, is now underway. Tailings storage facility earthworks are complete, and water is successfully being pumped from the borefields to the stormwater storage pond.

Waste mining activities are progressing well, ahead of planned mobilisation of mining contractor Piacentini & Son during this quarter. Construction of the Dry Mining Unit (DMU) by Piacentini & Son is well advanced, with mobilisation and site assembly scheduled late this quarter. Commencement of ore mining and sequential commissioning of the DMU and process plant is expected to occur during the December quarter with first customer shipment remaining on track for Q1 2024.

More recently, Executive Chair, Mr Bruce Griffin was hosted on a tour of joint venture partner Yansteel’s operations in China. This included a visit to the facilities that Yansteel will use to process the Thunderbird magnetic concentrate product and recover high quality ilmenite for further processing into titanium slag and ultimately chloride pigment by Yansteel.

Sheffield Resources Executive Chair, Mr Bruce Griffin said, “*We’re excited by the commencement of commissioning activities at Thunderbird. The Kimberley Mineral Sands team and their contractors have done an excellent job with construction, maintaining expenditures within the planned funding envelope \$484m, which is a superb achievement. With commissioning now underway, 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**

For further information please contact:

Bruce Griffin  
Executive Chair  
Tel: 08 6555 8777  
[info@sheffieldresources.com.au](mailto:info@sheffieldresources.com.au)  
Website:  
[www.sheffieldresources.com.au](http://www.sheffieldresources.com.au)



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





Image 3: Tailings storage facility & stormwater storage pond (foreground)



Image 4: Overview of Power Station & LNG Storage Tanks (foreground)



Image 5: Dry Mining Unit Screen Assembly



Image 6: Installation of Dry Mining Unit Drive Assembly



Image 7: KMS Directors Mr Mo (far left) and Mr Griffin (far right) visiting the Yansteel Ilmenite Roaster Plant



Image 8: Mr Griffin with Mr Cui, CEO of Yansteel

### 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 Bujuru 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%.