INVESTOR PRESENTATION

BRUCE GRIFFIN EXECUTIVE CHAIR

May 2025

ASX: SFX

www.sheffieldresources.com.au



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Summary information in relation to Sheffield

This document contains summary information about Sheffield Resources Limited (ACN 125 811 083) (Company or Sheffield), its subsidiaries and their activities which is current as at the date of this document, unless otherwise indicated. The information in this document remains subject to change without notice. The information in this document does not purport to be complete nor does it contain all the information that would be required in a disclosure statement or prospectus prepared in accordance with the Corporations Act 2001 (Cth). This presentation should be read in conjunction with Sheffield's periodic and continuous disclosure announcements lodged with the Australian Securities Exchange (ASX), which are available at http://www.sheffieldresources.com.au/irm/content/asx-announcements1.aspx?RID=398 or www.asx.com.au, including and in particular "\$30m Share Placement And Entitlement Issue To Advance Sheffield Growth Strategy".

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Information regarding the South Atlantic Project

All information in this presentation relating to the South Atlantic Project has been sourced from Rio Grande Mineração S/A (RGM). The information in this announcement that relates to the Retiro and Bujuru Exploration Targets is based on information compiled under the guidance of Mr Greg Jones, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AuslMM). Mr Jones is an employee of IHC Mining and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jones consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. This presentation should be read in conjunction with the Company's announcement "\$30m Share Placement And Entitlement Issue To Advance Sheffield Growth Strategy" dated 28 February 2023 which contains relevant exploration results for RGM reported in compliance with the Joint Ore Reserves Committee's Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). Nothing has come to the attention of Sheffield draw the accuracy or reliability of the information provided by RGM. Nothing in this presentation can be relied on as implying that there has been no change to any information relating to the South Atlantic Project since the date of this presentation, or as a representation to RGM and its projects.

Industry data

Certain market and industry data used in connection with or referenced in this document, including as published in industry-specific or general publications. Neither Sheffield or their respective representatives have independently verified any such market or industry data.

Compliance Statements

This presentation should be read in conjunction with the following announcements by the Company: "KMS Bankable Feasibility Study Presentation" dated 24 March 2022, "Thunderbird Ore Reserve Update" dated 24 March 2022, "Thunderbird Final Investment Decision" and "Final Investment Decisi

Estimates of Mineral Resources and Ore Reserves and Exploration Results

This document and the Primary Announcements contain estimates of Ore Reserves and Mineral Resources and information that relates to exploration results. The Company confirms that all material assumptions underpinning any production target and any forecast financial information derived from any production target that is disclosed in this presentation continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings are presented and have not been materially modified from the original market announcements. It is a requirement of the ASX Listing Rules that the reporting of ore reserves and mineral resources in Australia comply with the JORC Code. Investors outside Australia should note that while exploration results, mineral resources and ore reserves estimates of Sheffield in this presentation comply with the JORC Code, they may not comply with the relevant guidelines in other countries and, in particular, do not comply with (i) National Instrument 43-101 (Standards of Disclosure for Mineral Projects) of the Canadian Securities Administrators; or (ii) Industry Guide 7, which governs disclosures of mineral resources and exchange Commission (SEC). Information contained in this presentation describing mineral deposits may not be comparable to similar information made public by companies subject to the reporting and disclosure requirements of Canadian or US securities laws.

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Financial data

A number of figures, amounts, percentages, estimates, calculations of value and fractions in this document are subject to the effect of rounding. Accordingly, the actual calculation of these figures may differ from the figures set out in this document. All currency amounts are in Australian Dollars (\$ or A\$) unless otherwise stated.

Future performance, forward-looking statements and key risks

This document contains certain "forward-looking statements". Forward-looking statements can generally be identified by the use of forward looking words such as "forecast", "likely", "project", "opinion", "guidance", "should", "could", "target", "propose", "to be", "foresee", "aim", "may", "will", "expect", "intend", "plan", "estimate", "continue", "continue", "continue", "indicative" and "guidance", and other similar words and expressions, which may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production dates, expected costs or production outputs for the Company, based on (among other things) its estimates of future production of Sheffield and the Thunderbird Project.

To the extent that this document contains forward-looking information (including forward-looking statements, opinions or estimates), the forward-looking information is subject to a number of risk factors, including those generally associated with the mineral sands industry. Any such forward-looking statement also inherently involves known and unknown risks, uncertainties and other factors that may cause actual results, performance and achievements to be materially greater or less than estimated. These factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations, general economic and share market conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development (including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves), changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions, geological and geotechnical events, and environmental issues, and the recruitment and retention of key personnel.

CONTENTS

- 1. Corporate Overview
- 2. Thunderbird Mineral Sands Mine
- 3. South Atlantic Project





CORPORATE OVERVIEW

SHEFFIELD RESOURCES

- Mineral Sands production and development
- Targeting advanced projects with potential to unlock value by applying Sheffield's mineral sands and commercial experience
- Generating growing cash returns
- Corporate Management and Capital Allocation

50%

20% Option

10%

KIMBERLEY MINERAL SANDS

Production

- Thunderbird Mine
- Mining 10mtpa ore
- Producing ~900,000 tonnes per annum of ilmenite and zircon concentrates
- Operating cashflow positive
- ▶ 30⁺ year mine life

Growth

- Ramp mine up to 16mtpa ore mined
- Produce ~1,100,000 tonnes per annum of ilmenite and zircon concentrates¹
- Fully utilise the 750 million tonne reserve at Thunderbird
- Additional zones of mineralisation along a 120 km trend

SOUTH ATLANTIC

Growth

- ▶ Rio Grande Do Sul Brazil
- ► Exploration Target ranging between 500 to 720Mt at 3.2 to 4.0% HM²
- HM comprises sulfate ilmenite and zircon
- Option Agreement with US\$2.5m of US\$4m contributed to fund derisking activities

TAPROBANE MINERALS

Growth

► 10% interest in Capital Metals (AIM:CMET) the owner of the Taprobane Mineral Sands Project in Sri Lanka

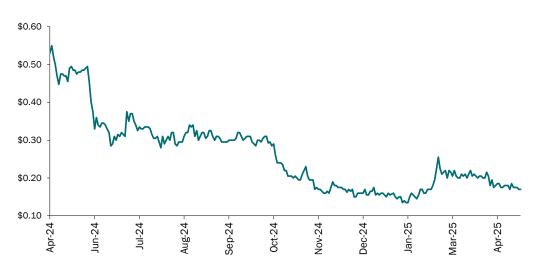
Reference:

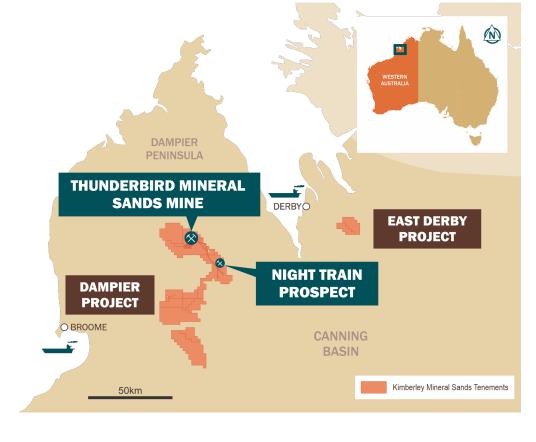
^{1.} The material assumptions and other matters required by LR 5.16 and 5.17 in respect of this financial forecast based on a production target are set out in the Primary Announcements. The Company confirms that all material assumptions underpinning any production target and any forecast financial information derived from any production target that is disclosed in this presentation continue to apply and have not materially changed. The Company confirms that the form and context of the Company confirms that the form and context of the Company confirms that the form and context of the Company confirms that all material assumptions underpinning any production target and any forecast financial information derived from any production target that is disclosed in this presentation continue to apply and have not materially modified from the Primary Announcements.

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CORPORATE OVERVIEW

SHARE PRICE INFORMATION





CAPITAL STRUCTURE¹

Item	Unit	Value	
Ordinary Shares	#m	395	
Share Price	A\$/sh	0.17	
Market Capitalisation	A\$m	67	
Cash Balance ²	A\$m	8	
Debt Balance	A\$m	-	
Enterprise Value	A\$m	59	

^{1.} Data quoted as of 30 April 2025. All other metrics as otherwise denoted.

MAJOR SHAREHOLDERS

	% Holding				
Name	1 Feb 2025	1 Nov 2024			
Yansteel	9.9%	9.9%			
Yovich & Clients	14.8%	14.7%			
BlackRock	6.3%	6.4%			
Other Institutions	11.5%	11.4%			
Top 20	56%	57%			
Board and Management	0.8%	0.8%			

BROKER COVERAGE & RESEARCH









^{2. 31} March 2025 (unaudited)

THUNDERBIRD

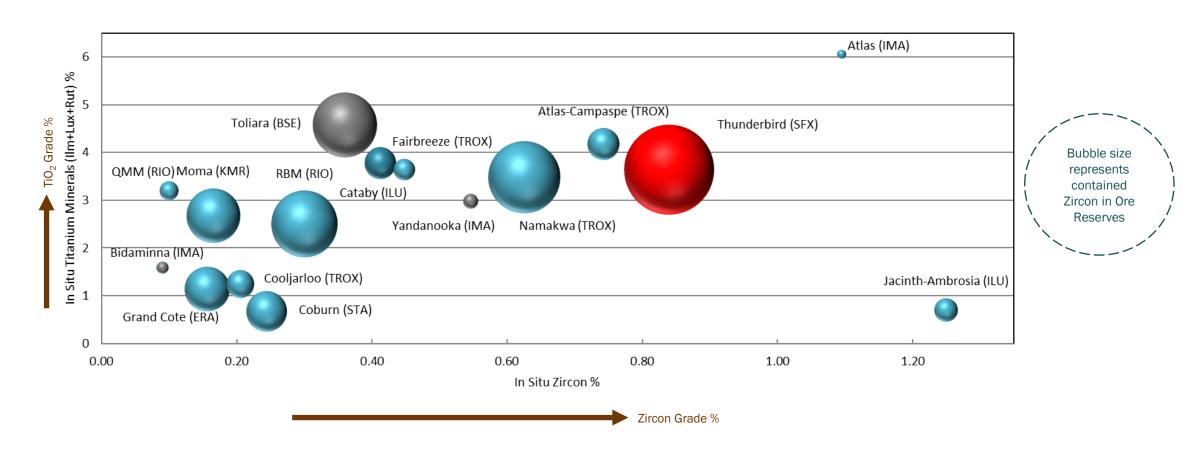
MINERAL SANDS MINE





THUNDERBIRD – THE WORLD'S LARGEST ZIRCON RESERVES ... STRATEGICALLY SIGNIFICANT ASSET IN A LOW-RISK JURISDICTION

CONTAINED ZIRCON IN ORE RESERVES AND GRADE FOR SELECTED MINERAL SANDS DEPOSITS 1,2,3



Note:

^{1.} Thunderbird Ore Reserve as published on the ASX on 14 Octboer 2024. Thunderbird Ore Reserves ranked against latest published Ore Reserves of current mineral sands operations and projects under investigation globally. Accordingly, for the operating projects, no account is made for any volumes of produced

Blue bubbles are operating mines, grey bubbles are Ore Reserves reported but the project is not operating

^{3.} Data compiled by Sheffield from public sources, refer to the Appendix on Page 23. This analysis does not illustrate the variance in product value between rutile, leucoxene and ilmenite

THUNDERBIRD MINE



MINE MARCH 2025

PROCESS PLANT AREA PRODUCT STOCKPILES MARCH 2025



THUNDERBIRD REVISED BUSINESS PLAN

- 75% lower RHF due to oversize
- Costs higher than expected at FID

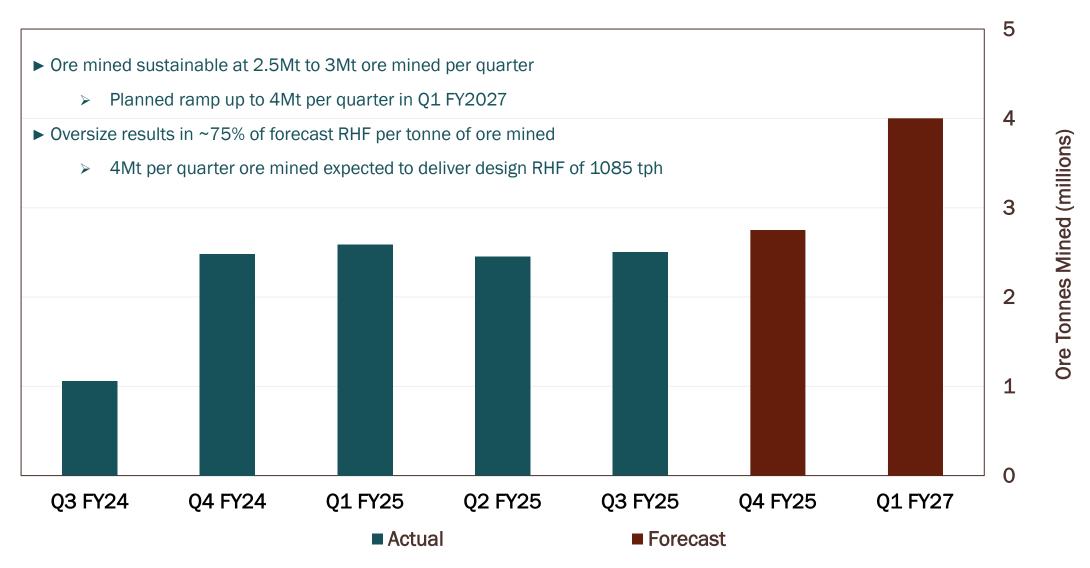
- + Process plant recoveries higher than design
- + Trials confirm dozer fleet and DMU can sustain 16mtpa
- + Limited VHM being lost in oversize



Increase mining rate to 16mtpa by Q1 FY27

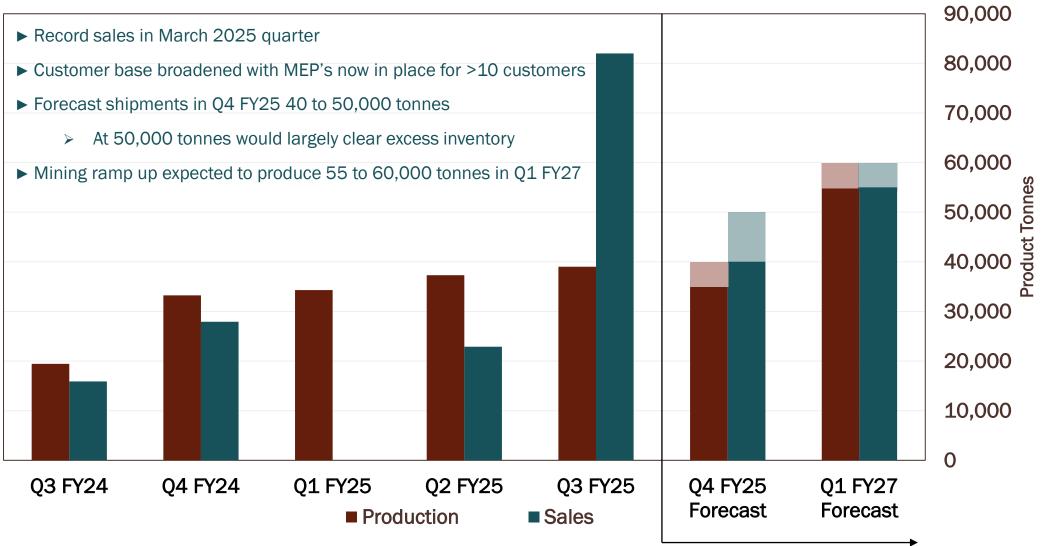
- Increase waste mining capacity by mid 2025
 - Drill and Blast, new larger excavator and truck fleet, new contractor
- Minor modifications to DMU screens and oversize handling
- Mining at 16mtpa should result in design RHF of 1,085 tpa
- > Given demonstrated process plant performance this should result in
 - 900,000 to 950,000 tpa of ilmenite concentrate
 - 220,000 to 240,000 tpa of zircon concentrate
- > Sufficient haulage and port capacity for this rate of production
- Expected to reduce unit cost of production
- No material Capex or working capital expected
- ➤ Given increase to ~10% above original Stage 1 design, Stage 2 deferred until later this decade

ORE PRODUCTION



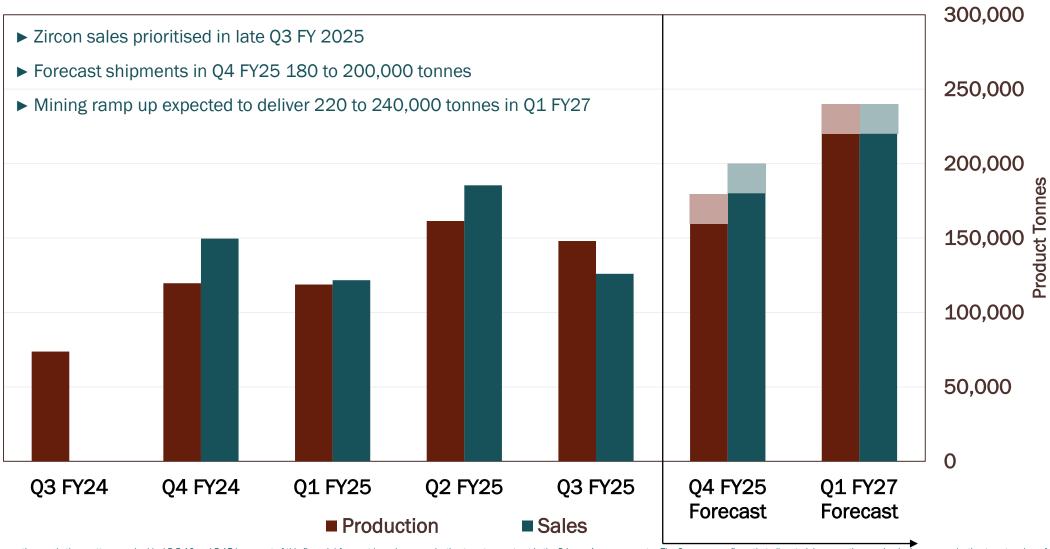
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ZIRCON CONCENTRATE PRODUCTION AND SALES



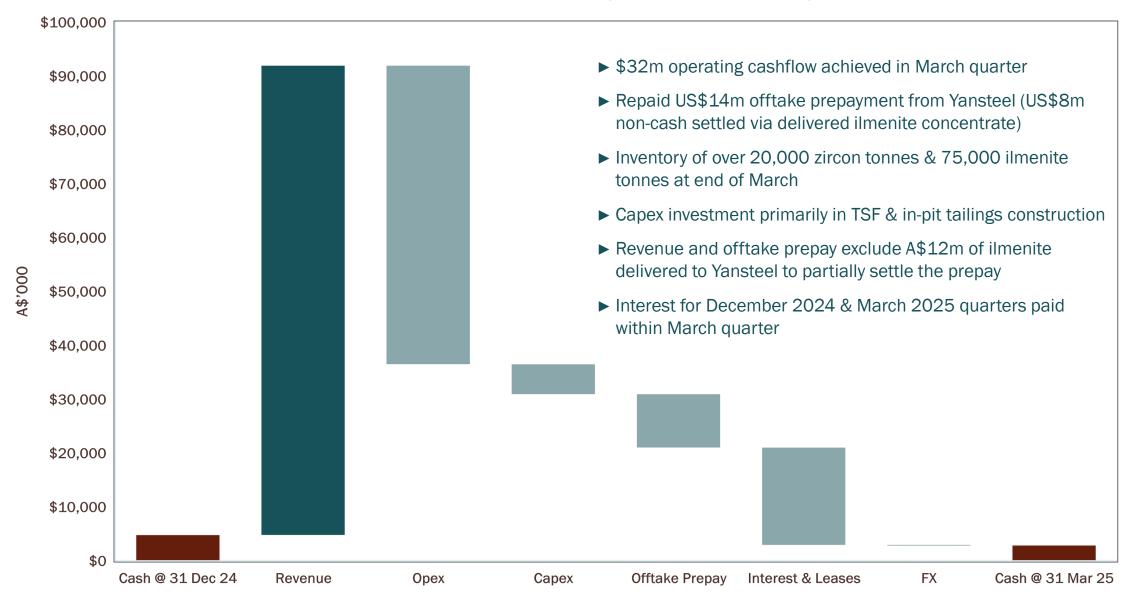
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ILMENITE CONCENTRATE PRODUCTION AND SALES



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THUNDERBIRD Q3 FY2025 CASHFLOW (100% BASIS)



FULLY UTILISE EXISTING RESERVE

Revised Business Plan

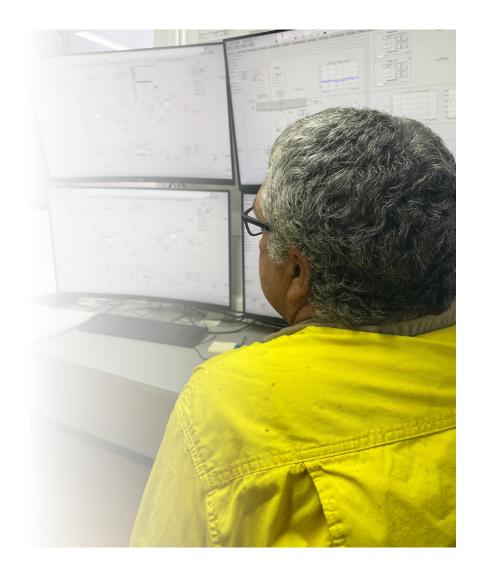
- Mining at 16mtpa by Q1 FY27
- Increase concentrate production to ~10% above original Stage 1 design
- No material Capex or working capital requirement expected

Stage 2 Expansion

- Fully utilise the 750 million tonne reserve at Thunderbird
- Given revised business plan deferred until later this decade at the earliest

Long Term

Additional zones of mineralisation along a 120 km trend



LEVERAGING YANSTEEL DOWNSTREAM CAPABILITY

- Thunderbird is a 50/50 JV with Yansteel, part of Tangshan Yanshan Iron & Steel, a privately owned Chinese steel manufacturer
- Yansteel's integrated smelter complex in China operational
- Yansteel designed the plant to process ilmenite feedstock from various global sources including Australia (Thunderbird)
- Feed preparation plant (FPP) includes fluidised bed roasters and magnetic separation



Yansteel Director Mr Cui (right) & Mr Griffin (July 2023 Yansteel site visit)

Source: Yansteel



KMS Directors Mr Mo (far left) and Mr Griffin (far right) visiting Yansteel operations

Source: Yansteel

OUR ESG APPROACH



ENVIRONMENTAL

- ► Full State and Federal environmental approvals
- ▶ Progressive mine rehabilitation throughout mine life
- ▶ Practices aligned with Equator Principles Addressing the Climate Change challenge





- ► Native Title Agreement with Traditional Owners in place
- **▶** 30% Aboriginal employee base as of March 2025
- **▶** >80% of the workforce are Kimberley residents
- ▶ Over \$80m in local expenditure to date with >A\$750m across mine life
- ► Tax contributions totalling >A\$1B over mine life



GOVERNANCE

- ▶ 17% female workforce extending across employees and contractors
- **▶** Committed to Board and management diversity
- ► Strong safety culture >1 million hours worked LTI free
- **▶ Compliance with ASX Corporate Governance Principles and Recommendations**



THUNDERBIRD MINERAL SANDS MINE

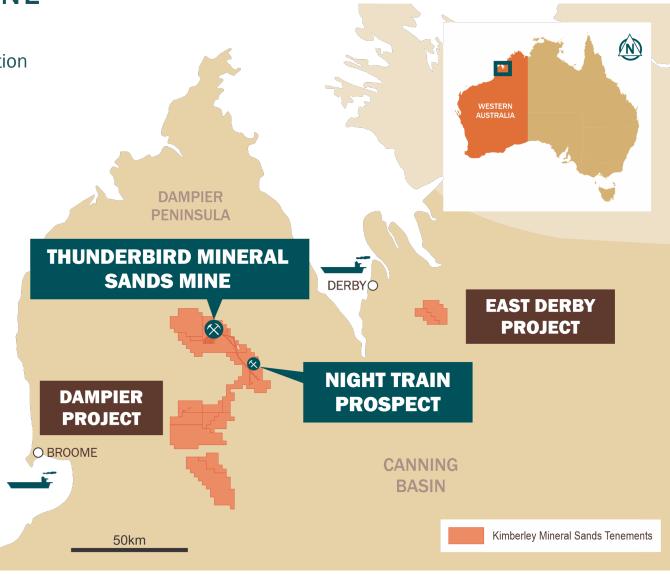
- World's largest high grade zircon reserve, in a low-risk jurisdiction
- 50/50 JV with Yansteel
- Mining 10 to 12 mtpa ore
- Producing 0.9mt zircon and ilmenite rich concentrates
- Operating cash flow positive in Q3 FY 25
- Low capital ramp up to 16mtpa ore and ~1.1mt concentrates
- JV Project Finance of ~A\$325m

Orion US\$110m

- First scheduled repayment June 2025
- Half yearly repayment profile
- Loan tenor through to Dec 2028

NAIF A\$160m

- First scheduled repayment Dec 2027
- Half yearly repayment profile
- Loan tenor through to Dec 2033



SOUTH ATLANTIC

PROJECT





SOUTH ATLANTIC PROJECT OVERVIEW

• Invested US\$2.5 million of US\$4m to earn an option to acquire a 20% interest by paying a further US\$11 million

Located Southeast Brazil (Rio Grande do Sul)

Continuous sequence of dunes and beach sands extending for 80km split into deposits

Exploration target for Retiro and Bujuru of 500 to 720Mt
 3.2 to 4.0% HM¹

- Heavy mineral grades of 3 10%, low slimes (<5%) and
 2 10m thick
- 10,000m drilling campaign completed Q3 2024
- Resource update expected in Q2 2025
- PFS commenced in Q4 2023 delivery in 2025
- Excellent existing infrastructure; ports, roads, power
- Established industrial area high quality workforce
- High quality local partner

Peference:

See ASX Announcement: "\$30m Share Placement and Entitlement Issue To Advance Sheffield Growth Strategy" of 28 February 202



PANNED HEAVY MINERAL FEBRUARY 2024

SUMMARY





SHEFFIELD RESOURCES

Assembling a portfolio of global mineral sands development and production assets to generate cash returns and growth

CORE ASSET

Thunderbird Mineral Sands Mine (50% interest)

- Producing ~900,000 tonnes per annum of ilmenite and zircon concentrates
- Operating cashflow positive
- ▶ 30⁺ year mine life

THUNDERBIRD GROWTH

Enhance Thunderbird through

- Ramp mine up to ~1,100,000 tonnes per annum of ilmenite and zircon concentrates¹
- Fully utilising the 750 million tonne reserve at Thunderbird
- Additional zones of mineralisation along a 120 km trend

SOUTH ATLANTIC

South Atlantic Option

- Exploration Target ranging between 500 to 720Mt at 3.2 to 4.0% HM²
- Exploration Targets comprising sulfate ilmenite and zircon
- Option Agreement with US\$2.5m of \$4m contributed to fund derisking activities

FUTURE GROWTH

Review of other quality mineral sands opportunities

- Targeting advanced projects with potential to unlock value by applying Sheffield's mineral sands and funding experience
- 10% interest in Capital Metals (AIM:CMET) the owner of the Taprobane Mineral Sands Project in Sri Lanka

Reference

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THANKYOU

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Sheffield Resources

in Sheffield Resources



ADDITIONAL PEER INFORMATION

Company Exchange Ticker & Company Material Date Mine/Project					Reserves					
	Reference			Proved		Probable		Total		
				Mt	% THM	Mt	% THM	Mt	% THM	
Sheffield Resources	(ASX:SFX) 2024 Annual Report	14 October 2024	Thunderbird	235	12.9%	515	10.1%	750	11.0%	
Kenmare Resources Plc	(LSE: KMR) 2024 Annual Report	14 April 2025	Moma	73	3.3%	1,317	3.1%	1,391	3.2%	
Strandline Resources Ltd	(ASX: STA) 2019 Reserve Statement	16 April 2019	Coburn	106	1.10%	417	1.12%	523	1.11%	
Eramet SA	(EPA: ERA) 2024 Universal Filing	3 April 2025	Grande Cote	898	1.46%	95	1.51%	992	1.46%	
Tronox Inc. (NYSE: TROX) 2024 Annual Report	19 February 2025	Namakwa	96	7.3%	550	5.7%	646	5.9%		
			Fairbreeze	175	5.6%	15	3.9%	190	5.5%	
			Cooljarloo	157	1.7%	134	2.0%	291	1.8%	
			Atlas-Campaspe	105	5.8%	-	-	105	5.8%	
Rio Tinto Ltd (ASX: RIO) 2024 Annual Report	19 February 2025	RBM	425	1.7%1	732	3.4%1	1,157	2.8%1		
			QMM	192	3.5%1	83	3.0%1	275	3.3%1	
Base Resources Ltd	(ASX: BSE) 2024 Reserve Statement	31 July 2024	Toliara	433	6.9%	472	5.3%	904	6.1%	
Iluka Resources Ltd (ASX: ILU) 2024 F	(ASX: ILU) 2024 Reserve Statement	19 February 2025	Jacinth Ambrosia	33	2.5%	0	1.4%	34	2.5%	
			Cataby	61	5.8%	18	4.7%	79	5.6%	
Image Resources NL	(ASX: IMA) December 2022 Atlas Ore Reserve Update	21 December 2022	Atlas	4.5	10.6%	0.9	2.1%	5.4	9.2%	
	(ASX: IMA) Pre-Feasibility Study Results – Bidaminna Mineral Sands Project	27 June 2023	Bidaminna			123	1.8%	123	1.8%	

Notes:

1 % Ti minerals + % Zircon