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TZMI Congress

Bruce Griffin – Executive Chair



November 2021

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IMPORTANT: You must read the following in conjunction with this document.

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, and Sheffield is not responsible for updating, nor does it undertake to update, it. This document 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.

Industry data

Certain market and industry data used in connection with or referenced in this document, including in relation to other companies in Sheffield's peer group, may have been obtained from public filings, research, surveys or studies made or conducted by third parties, 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

Information and documentation which forms the basis of the Thunderbird Bankable Feasibility Study (BFS) and Bankable Feasibility Study Update (BFSU) in relation to Mineral Resources, Ore Reserves and metallurgy and process design has previously been reported as detailed below. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of the July 2016 Thunderbird Mineral Resources and the July 2019 Thunderbird Ore Reserve, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. In the case of the announcement entitled "BFS Update Materially Improves Project Economics" dated 31 July 2019, 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 announcement 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.

Not financial product advice

This document does not constitute, and is not intended to constitute, investment or financial product advice (nor tax, accounting or legal advice). This document should not be relied upon as advice to investors or potential investors and has been prepared without taking account of any person's individual investment objectives, financial situation or particular needs. Any investment decision should be made based solely upon appropriate due diligence.

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", "believe", "future", "project", "opinion", "guidance", "should", "could", "target", "propose", "to be", "foresee", "aim", "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "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 the Thunderbird Project and the future operation 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), ch1anges to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, geological and geotechnical events, and environmental issues, and the recruitment and retention of key personnel.

Estimates of Mineral Resources and Ore Reserves and exploration results

This document contains estimates of Sheffield's Ore Reserve and Mineral Resources and information that relates to exploration results.

The Mineral Resources and Ore Reserves of Sheffield have been extracted from Sheffield's ASX releases;

"BFS UPDATE MATERIALLY IMPROVES PROJECT ECONOMICS" 31 July 2019

"HIGH GRADE MAIDEN MINERAL RESOURCE AT NIGHT TRAIN" 31 January 2019

"THUNDERBIRD ORE RESERVE UPDATE" 16 March 2017

"THUNDERBIRD ORE RESERVE UPDATE" 31 July 2019

"MINERAL RESOURCE AND ORE RESERVE STATEMENT" 3 October 2018

"SHEFFIELD DOUBLES MEASURED MINERAL RESOURCE AT THUNDERBIRD" 5 July 2016

The exploration results have been extracted from Sheffield's ASX releases;

"NEW LARGE HIGH GRADE DISCOVERY SOUTH OF THUNDERBIRD" 13 November 2018

"EXCEPTIONAL RESULTS CONFIRM MAJOR DISCOVERY AT NIGHT TRAIN" 9 October 2018

A copy of these announcements is available at http://www.sheffieldresources.com.au/irm/content/asx-announcements1.aspx?RID=398 or www.asx.com.au.

Bankable Feasibility Study ("BFS")

This document contains information that relates to a Bankable Feasibility Study. This information was extracted from the following ASX releases by Sheffield:

THUNDERBIRD BFS DELIVERS OUTSTANDING RESULTS" 24 March, 2017

Other Extracted Information

In addition to those ASX releases referred to above, this document contains information extracted from the following ASX releases:

"TRANSFORMATIONAL THUNDERBIRD JOINT VENTURE" 11 August 2020

"QUARTERLY ACTIVITIES REPORT" and "QUARTERLY CASHFLOW REPORT" 30 April 2021

"MINING LEASE GRANTED OVER THUNDERBIRD MINERAL SANDS PROJECT" 26 September 2018

"THUNDERBIRD PROJECT AND JOINT VENTURE UPDATE" 16 September 2020

"NATIVE TITLE AGREEMENT SIGNED BY TRADITIONAL OWNERS" 1 November 2018

"FEDERAL ENVIRONMENTAL APPROVAL GRANTED FOR THUNDERBIRD" 28 September 2018

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Sheffield Resources

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Thunderbird Project Update

- Large, high grade reserve in a low risk jurisdiction
- Flowsheet and products
- Yansteel titanium dioxide project update
- Early works
- Engineering and BFS
- Funding and financials
- Timeline to FID and Production

Mid West Project Update

Our ESG Approach

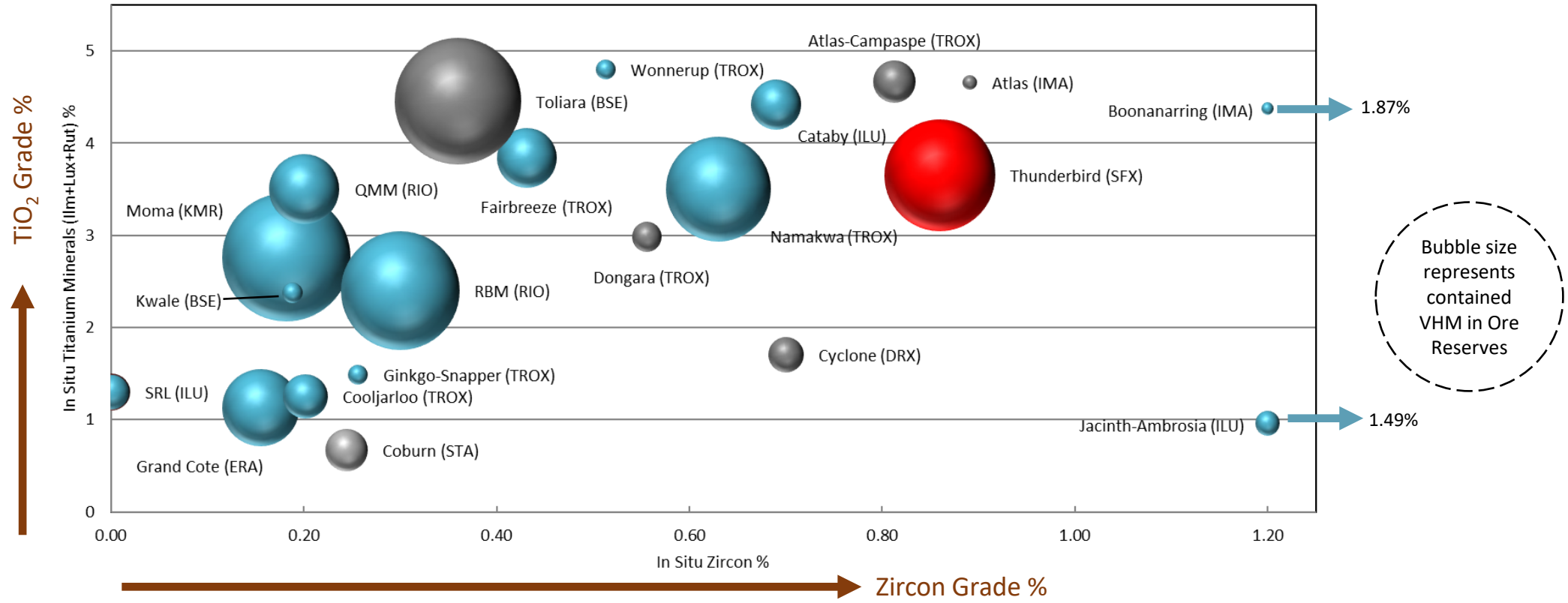


Aerial view of cleared process plant area and access road

Thunderbird – Large, high grade ore body … in a low risk jurisdiction

Ore Reserves and Grade for selected mineral sands deposits [1,2,3]

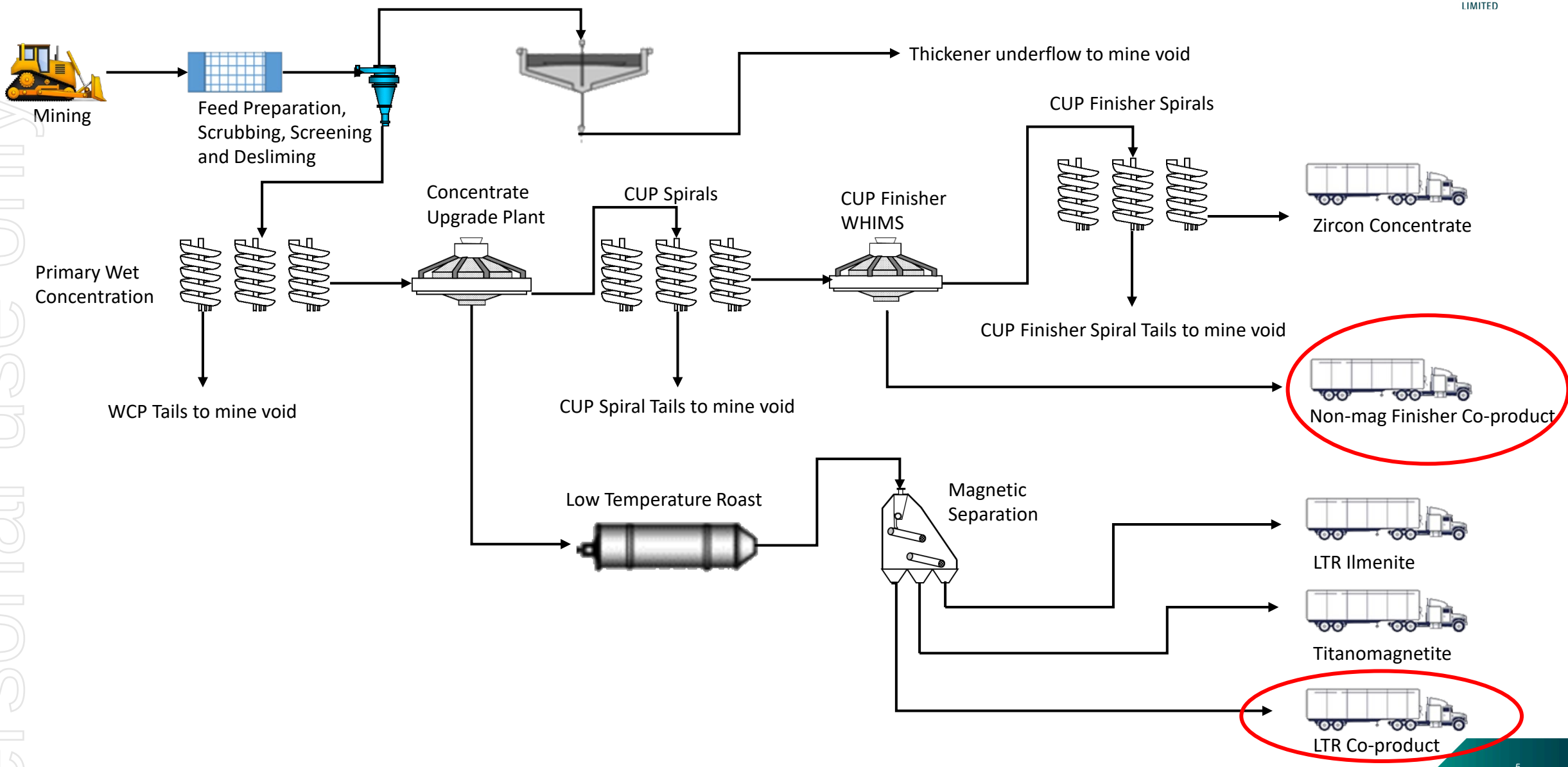
- Large, mature mineral sands deposits globally typically show accelerating grade depletion trend with each new published Ore Reserve update
- The highest grade and most significant zircon producing mine, Jacinth-Ambrosia (Iluka) is nearing the end of its mine life
- The Zulti-South Project (currently on hold) is required to sustain RBM in the medium term
- Increasing throughput and production rates at mature operations are accelerating the depletion of Ore Reserves and mine life



Notes:
1. Thunderbird Ore Reserve as published on the ASX on 31 July 2019. 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 product already produced
2. 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. This analysis does not illustrate the variance in product value between rutile, leucoxene and ilmenite

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Thunderbird – New concentrate products identified



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Thunderbird – Product Suite

LTR (Low Temperature Roast) Ilmenite (35% of revenue)

- 530,000[1] tonnes per annum in Phase 1
- 50% TiO_2 and low in key contaminants
- Suitable for chloride slag or sulphate pigment
- Binding offtake with Yansteel
  - Market price, life of mine, take or pay, 100% from Phase 1
  - First right of refusal, market price, 100% from expansions

Zircon concentrate (60% of revenue)

- 200,000[1] tonnes per annum in Phase 1
- 39% ZrO_2, 25% TiO_2, 1% monazite
- Binding with three customers
  - 5-year, take or pay, 170,000 tonnes per year
  - Price linked to market price for contained valuable minerals

Titano-magnetite (5% of revenue)

- 160,000[1] tonnes per annum in Phase 1
- Offtake under discussion with Yansteel

LTR co-product

- 20,000[1] tonnes of concentrate per annum in Phase 1
- Contains TiO_2 and monazite
- Strong interest from processors

Non-mag finisher co-product

- 70,000[1] tonnes concentrate per annum in Phase 1
- Contains ZrO_2, TiO_2 and monazite
- Strong interest from processors

Note:
1. Average annual tonnage of first 4 years of Phase 1 production

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Thunderbird – Yansteel Titanium Dioxide Project

KMS Joint Venture partner Yansteel facility to consume LTR ilmenite

- Smelter and chloride pigment plant in China
- Plant construction commenced in late 2020
- Civil works were completed in June 2021
- Process equipment and support systems installation commenced
- Expected completion in mid-2022
- Commissioning in 2H 2022 with ilmenite from other sources



Yansteel Titanium Dioxide Plant under construction

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Thunderbird – Early Works; Road and other infrastructure

Utilise 2021 dry season to prepare for process construction at the start of 2022 dry season

- Mine access road
  - Upgrade first 18km
  - Build remaining 12km
- Process plant site
  - Clearing underway
- Construction water
  - Drilling two wells
  - Will be used for production water in operation
- Accommodation Village
  - Recommissioned existing units
  - Tendered additional capacity



Aerial view of access road from the junction with the main highway

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Thunderbird – Early Works; Trial Mining

Second mining trial confirmed preferred mining method

- D11 dozer trialled vs D9 dozer in Trial 1
- Continuous miner also trialled
- Dozer mining (D11) confirmed as preferred mining method
- Samples taken to finalise in-pit separation and feed preparation circuits
- Operating cost estimates updated based upon measured productivity of rip and push



Second trial mining pit

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Thunderbird – Early Works; Engineering and Long lead items

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Engineering to EPC standard except LTR

- Simplified LTR to be at EPC level early in 2022

Critical path long lead items to maintain 2024 production start

- Tenders received
- First packages (Spirals and WHIMS) targeted for award in Q4 2021



Second mining trial



Thunderbird Village

Thunderbird – BFS Activities

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BFS to finalise capital and operating cost estimates

- Cost inflation pressure – affecting all capital projects in Western Australia
- Offset by change in scope; net reduction from removing zircon MSP, adding simplified LTR
- Focus on capital minimisation
  - Continue LTR engineering until EPC ready to reduce risk premium and contingency requirements
  - BOO opportunities for infrastructure
  - Other value improvement opportunities
- Targeting Stage 1 direct capital expenditure in line with the 2019 BFSU (A$392m)

Thunderbird – Project Funding and Financials

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Project Funding

- Kimberley Mineral Sands cash A$119.7m at 30 September 2021
- Sheffield Resources to contribute A$10m to Kimberley Mineral Sands 60 days after FID
- Progressing NAIF loan facility (not infrastructure specific)[1]
- Balance from commercial finance facility

Project Financials

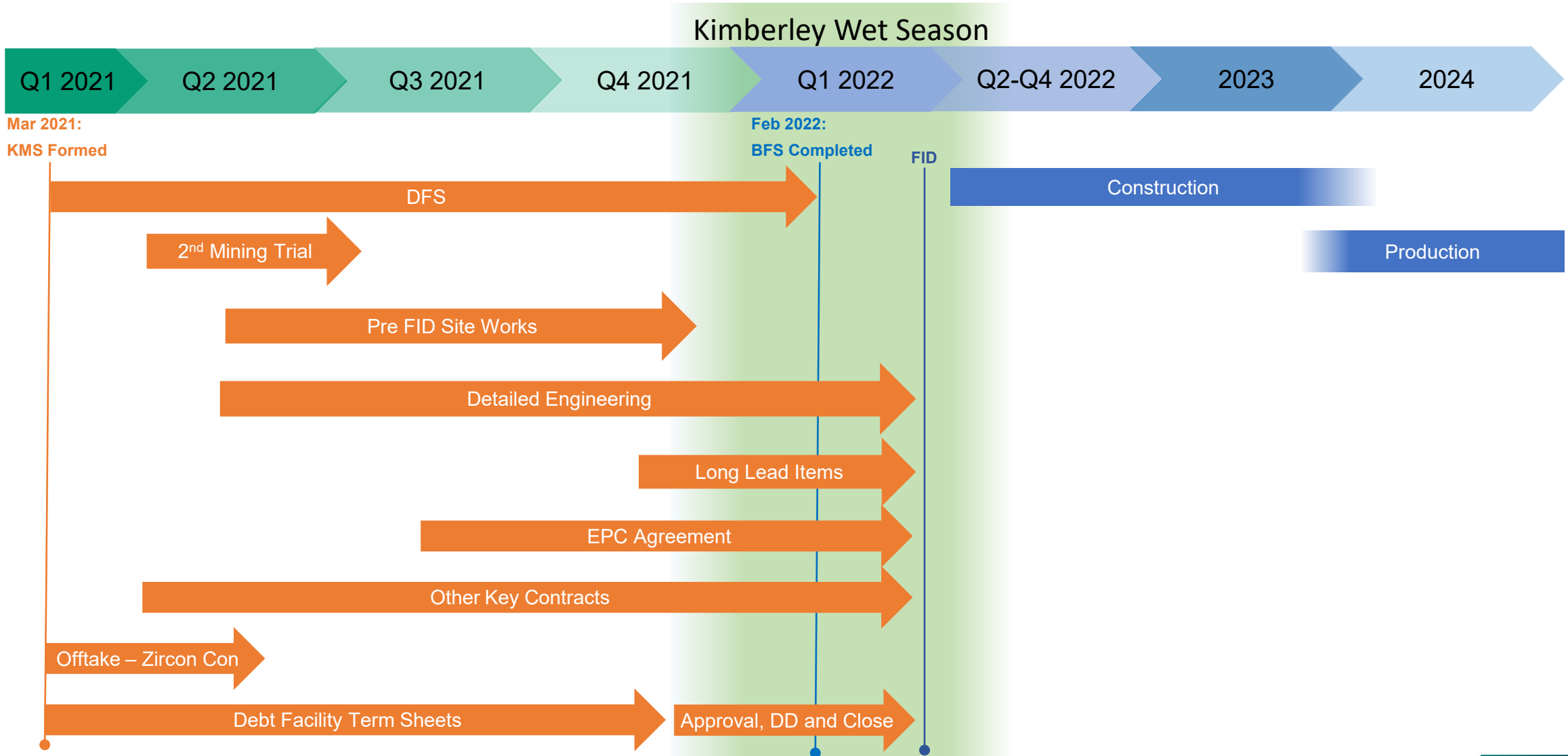
- Outcomes expected to be similar to the 2019 BFSU

Option		Project Capital A$m	Total Funding A$m	Ungeared	
				NPV_8 Post Tax A$m	IRR Post Tax
2017 BFS	LTR Ilmenite + Full MSP	463[2]	579[2]	620[2]	21%[2]
2019 BFSU	Ilmenite Concentrate + Full MSP	392[3]	478[3]	980[3]	30%[3]
2021 BFS	LTR Ilmenite + Zircon Concentrate	TBC	TBC	TBC	TBC

Reference:

1. ASX Announcement “Thunderbird BFS Delivers Outstanding Results” 24 March 2017
2. ASX Announcement “BFS Update Materially Improves Project Economics” 31 July 2019
3. ASX Announcement “Sheffield Signs Taurus Debt Facility and EPC Contract” 12 November 2018

Thunderbird – Pathway to FID, Construction and Production



Note:
1. All timelines are estimated and subject to further study and confirmation

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Mid West Project

Eneabba (Sheffield – 100%)

- Mineral Resource 211.4 million tonnes @ 3.0% HM containing 5.1 million tonnes of VHM
- 11 deposits, 140 km southeast of Geraldton
- 2021 scoping study update indicated 26 year, 190,000 tpa HMC as the preferred development concept
- Non-binding proposals to acquire the project received, Sheffield is currently assessing these proposals
- Should a transaction occur, the consideration will be used to fund Sheffield's A$10m post-FID KMS equity contribution

McCalls (Sheffield – 100%)

- Mineral Resource 5.8 billion tonnes @ 1.4% HM containing 5.1 million tonnes of VHM
- 2 deposits, 110 km northeast of Perth
- 2012 scoping study being updated
- Potential transaction to realise value will be considered once Eneabba process completed

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Our ESG Approach

Environmental

Full State and Federal environmental approvals granted following a detailed Public Environmental Review ("PER") process

- PER concluded all risks can be adequately managed
- Approvals contain standard industry conditions and controls
- Specific Greater Bilby management plans in place
- Environmental offset fund established
- Restrictions on speeds and travel times for haulage of products to Port of Derby

Rehabilitation throughout mine life – minimises disturbed area

Environmental practices & protocols mirror Equator Principles

Addressing the Climate Change challenge

- CO_2 baseline emissions estimated 11mt CO2e (40+ year life of project)*
- Opportunity to add renewable energy to gas generation
- Longer term initiatives to reduce emissions being identified (e.g. electric haul trucks)
- 2030 target and target date for net zero to be set prior to FID

Social

Co-existence Agreement (Native Title Agreement) in place

- Targeted 40% Aboriginal Employment by year 8 of operations
- Aboriginal Training Fund to support employment
- Aboriginal Business support via supply and contract opportunities
- Cash royalties to Traditional Owners over 37 year mine life

High standards in safeguarding the environment, water, diversity and Aboriginal heritage

Local Employment

- 300 regional jobs on a Drive In Drive Out basis

Intergenerational Employment over 37 year mine life

State and Federal Tax Contribution of >A$1B over 37 year mine life

Governance

Compliant with ASX recommended governance framework

Commitment to increase Board and management diversity

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*Emissions forecast based upon 2017 Public Environmental Review and 2017 (Stage 1 & Stage 2) Bankable Feasibility Study estimates

THANK YOU

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APPENDIX: Sheffield Resources Corporate Overview

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Sheffield Resources is an ASX listed mineral sands developer which owns 50% of the large scale shovel ready Thunderbird Mineral Sands Project

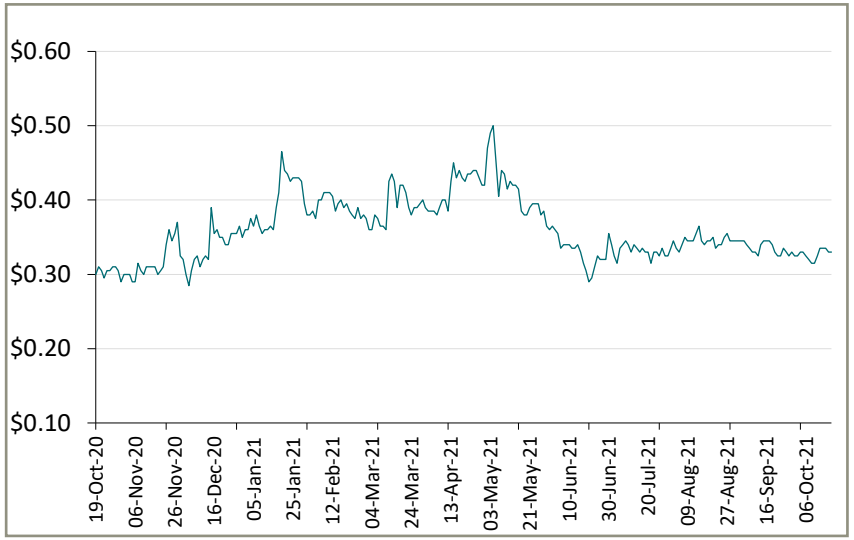
- Sheffield Resources Limited ("Sheffield" or the "Company") is an ASX listed mineral sands developer and explorer based in Perth, Western Australia (ASX:SFX)
- Sheffield is focused on the development of the 50% owned Thunderbird Mineral Sands Project ("Thunderbird" or the "Project") located on the Dampier Peninsula in Northern Western Australia.
- Thunderbird has been developed as a greenfield project since discovery in 2012 and is one of the largest and highest grade zircon rich discoveries in the last 30 years and is one of a few greenfield mineral sands deposits globally in a secure jurisdiction
- Experienced and skilled Board and management with strong in-house intellectual property and knowledge and capable of developing, delivering and operating Thunderbird
- Sheffield has a portfolio of mineral sands assets in Australia with a focus on zircon rich assemblages which includes:
  - Thunderbird with Ore Reserve of 748Mt @11.2%HM[2]
  - Night Train deposit, 20km to the east of Thunderbird and with an Inferred Mineral Resource[3] of 130Mt @ 3.3% HM, containing 3.6Mt of VHM
  - Dampier Project has delineated 12 zones of significant mineralisation along a 120km long highly mineralised trend[4]

Capital structure[1]

Item	Unit	Value
Ordinary Shares	#m	346.6
Share Price (as at 27 October 2021)[1]	A$/sh	0.34
Market Capitalisation	**A$m**	**117.8**
Cash Balance (30 September 2021)*	A$m	5.8
Debt	A$m	-
Enterprise Value	**A$m**	**112.0**

**Cash balance excludes joint venture proceeds of $119.7m as at 30 Sep 2021*

Share Price Information

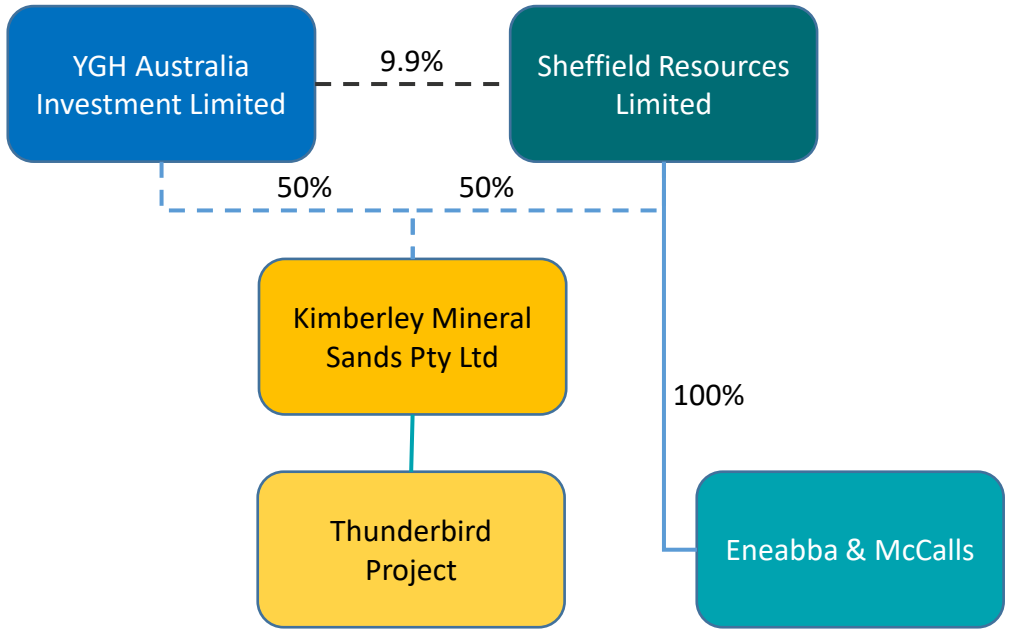


1. Market data as at 27 October 2021 and sourced from ASX
2. Refer to ASX announcement 31 July 2019 titled "Thunderbird Ore Reserve Update"
3. Refer to ASX announcement 31 January 2019 titled *"High Grade Maiden Mineral Resource at Night Train"*
4. Refer to ASX announcement 13 November 2018 titled *"New Large High Grade Discovery South of Thunderbird*

APPENDIX: Kimberley Mineral Sands

Kimberley Mineral Sands[1]

- Owns 100% of the Thunderbird Project
- Yansteel (via YGH Australia) contributed A$130.1m in equity to acquire 50%
- Sheffield retains 50%
- Four person Board with two Yansteel and two Sheffield directors
- Key decisions require unanimous approval of both Yansteel and Sheffield
- Operates as a standalone entity with its own management and employees



Kimberley Mineral Sands Executive Management

- Stuart Pether – CEO
- Geoff Williams – GM Operations
- Neil Patten-Williams – GM Marketing
- Robert Cicchini – Project Director
- Quentin Webb – CFO
- Trevor Wienert – GM People

Reference:

1. ASX Announcement "Joint Venture Completion and Board Restructure" 12 March 2021
2. ASX Announcement "Transformational Thunderbird Joint Venture" 11 August 2020

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APPENDIX: Thunderbird Ore Reserves

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Thunderbird Ore Reserves: Valuable Heavy Mineral in-situ grade[1]

Ore Reserve Category	Ore Tonnes (Mt)	In-situ HM Tonnes (Mt)	HM Grade (%)	Valuable Heavy Mineral Grade (In-situ)[2]				Oversize (%)	Slimes (%)
				Zircon (%)	HiTi Leucoxene (%)	Leucoxene (%)	Ilmenite (%)		
Proved	219	30.0	13.7	1.02	0.30	0.28	3.68	14.0	16.1
Probable	529	53.4	10.1	0.79	0.27	0.27	2.87	10.5	14.5
Total	**748**	**83.8**	**11.2**	**0.86**	**0.27**	**0.27**	**3.11**	**11.6**	**15.0**

Thunderbird Ore Reserves: Mineral assemblage as percentage of HM grade[1]

Ore Reserve Category	Ore Tonnes (Mt)	In-situ HM Tonnes (Mt)	HM Grade (%)	Mineral Assemblage[3]				Oversize (%)	Slimes (%)
				Zircon (%)	HiTi Leucoxene (%)	Leucoxene (%)	Ilmenite (%)		
Proved	219	30.0	13.7	7.4	2.2	2.0	26.9	14.0	16.1
Probable	529	53.4	10.1	7.8	2.6	2.7	28.4	10.5	14.5
Total	**748**	**838**	**11.2**	**7.7**	**2.4**	**2.4**	**27.8**	**11.6**	**15.0**

Notes:
1. Ore Reserves are presented both in terms of in-situ VHM grade, and HM mineral assemblage. Tonnes and grades have been rounded to reflect the relative accuracy and confidence level of the estimate, thus the sum of columns may not equal. Ore Reserves reported for the Dampier Project were prepared and first disclosed under the JORC Code (2012). Refer to Sheffield's ASX Announcement dated 31 July 2019 titled "Thunderbird Ore Reserve Update" for further detail. Ore Reserve is reported to a design overburden surface with appropriate consideration for modifying factors, costs, mineral assemblage, process recoveries and product pricing
2. The in-situ grade is determined by multiplying the HM Grade by the percentage of each valuable heavy mineral within the heavy mineral assemblage
3. Mineral Assemblage is reported as a percentage of HM Grade. It is derived by dividing the in-situ grade by the HM grade

APPENDIX: Thunderbird Mineral Resources

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Thunderbird Mineral Resources: Valuable Heavy Mineral in-situ grade[1]

Cut-off (HM%)	Mineral Resource Category	Ore Tonnes (Mt)	In-situ HM Tonnes (Mt)	HM Grade[2] (%)	Valuable Heavy Mineral Grade (In-situ)[3]				Slimes (%)	Oversize (%)
					Zircon (%)	HiTi Leucoxene (%)	Leucoxene (%)	Ilmenite (%)		
> 3% HM	Measured	510	45	8.9	0.71	0.20	0.19	2.4	18	12
	Indicated	2,120	140	6.6	0.55	0.18	0.20	1.8	16	9
	Inferred	600	38	6.3	0.53	0.17	0.20	1.7	15	8
	Total	3,230	223	6.9	0.57	0.18	0.20	1.9	16	9
>7.5% HM	Measured	220	32	14.5	1.07	0.31	0.27	3.9	16	15
	Indicated	640	76	11.8	0.90	0.28	0.25	3.3	14	11
	Inferred	180	20	10.8	0.87	0.27	0.26	3.0	13	9
	Total	1,050	127	12.2	0.93	0.28	0.26	3.3	15	11

Thunderbird Mineral Resources: Mineral assemblage as percentage of HM grade[1]

Cut-off (HM%)	Mineral Resource Category	Ore Tonnes (Mt)	In-situ HM Tonnes (Mt)	HM Grade[2] (%)	Mineral Assemblage[4]				Slimes (%)	Oversize (%)
					Zircon (%)	HiTi Leucoxene (%)	Leucoxene (%)	Ilmenite (%)		
> 3% HM	Measured	510	45	8.9	8.0	2.3	2.2	27	18	12
	Indicated	2,120	140	6.6	8.4	2.7	3.1	28	16	9
	Inferred	600	38	6.3	8.4	2.6	3.2	28	15	8
	Total	3,230	223	6.9	8.3	2.6	2.9	28	16	9
>7.5% HM	Measured	220	32	14.5	7.4	2.1	1.9	27	16	15
	Indicated	640	76	11.8	7.6	2.4	2.1	28	14	11
	Inferred	180	20	10.8	8.0	2.5	2.4	28	13	9
	Total	1,050	127	12.2	7.6	2.3	2.1	27	15	11

Notes:

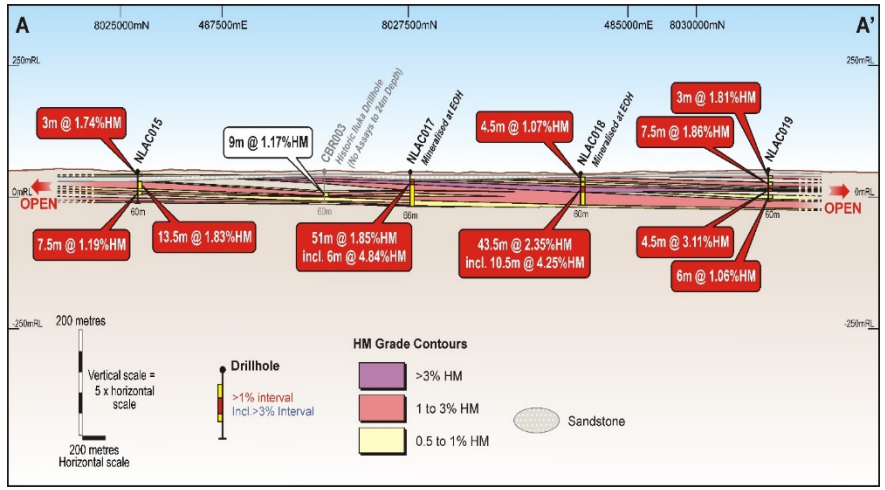
1. The Thunderbird Mineral Resources are reported inclusive of (not additional to) Ore Reserves. The Mineral Resource reported above 3% HM cut-off is inclusive of (not additional to) the Mineral Resource reported above 7.5% HM cut-off. All tonnages and grades have been rounded to reflect the relative accuracy and confidence level of the estimate and to maintain consistency throughout the table, therefore the sum of columns may not equal. The Mineral Resource estimate was prepared and first disclosed under the JORC Code (2012). Refer to Sheffield's ASX announcement dated 5 July 2016 titled *"Sheffield Doubles Thunderbird Measured Mineral Resource"* for further detail
2. Total heavy minerals (HM) is within the 38µm to 1mm size fraction and has been reported as a percentage of the total material quantity
3. The Valuable HM in-situ grade is reported as a percentage of the total material quantity and is determined by multiplying the percentage of total HM by the percentage of each valuable heavy mineral within the HM assemblage at the resource block model scale
4. The Mineral Assemblage is represented as the percentage of HM grade. Estimates of mineral assemblage are determined by screening and magnetic separation. Magnetic fractions were analysed by QEMSCAN for mineral determination as follows: >90% liberation; ilmenite 40-70% TiO_2; leucoxene 70-94% TiO_2; high titanium leucoxene (HiTi Leucoxene) >94% TiO_2 and zircon 66.7% ZrO_2+HfO_2. The non-magnetic fraction was analysed by XRF and minerals determined as follows: Zircon ZrO_2+HfO_2/0.667 and HiTi Leucoxene TiO_2/0.94

APPENDIX: Significant Regional Exploration Upside

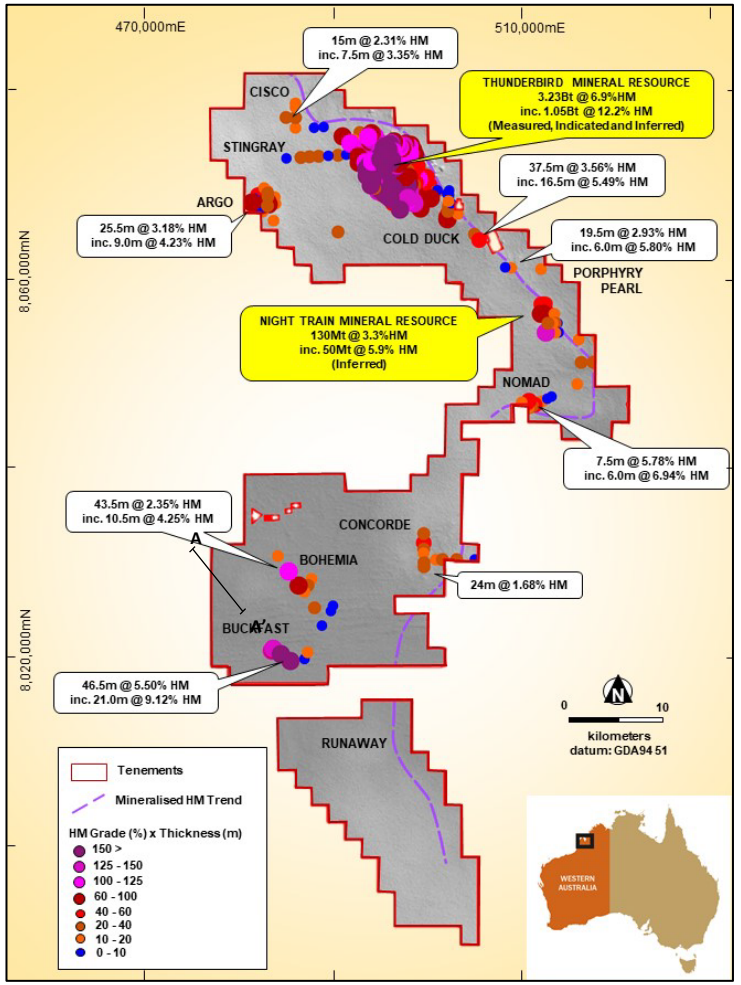
Strategic value demonstrated through multiple discoveries made along a 120km long trend

- Exploration has delineated 12 zones of significant mineralisation along a 120km long highly mineralised trend which extends from Cisco in the north to Runaway in the south[1]
- Maiden high grade Mineral Resource[1] outlined at Night Train
- Mineral sands discoveries include Argo, Buckfast, Bohemia, Cisco, Cold Duck, Concorde, Nomad, Night Train, Porpyry Pearl
  - Characterised by broad sheet-like geometries with varying thickness (ie exceptionally thick intervals at Thunderbird, thick intervals at Buckfast, moderate thicknesses at Bohemia and narrow thicknesses at Nomad)
  - Mineral assemblages domains where different TiO_2 minerals dominate (ie ilmenite at Thunderbird, Leucoxene at Night Train and Cisco Upper and altered ilmenite at Concorde to Buckfast regions)
- Thick high grade intervals[2] have been intersected, including;
  - 43.5m @ 2.35% HM from 16.5m (NLAC018), including 10.5m @ 4.25% HM from 25.5m (Bohemia)
- **Numerous zircon-rich targets identified for follow-up drilling**

Bohemia – Cross Section[2]



Dampier Project – Regional Plan[1]



Notes:
1. Refer to ASX announcement 31 January 2019 titled *"High Grade Maiden Mineral Resource at Night Train"*
2. Refer to ASX announcement 13 November 2018 titled *"New Large High Grade Discovery South of Thunderbird" page 2 note*

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Appendix ESG: Environment

All necessary State and Federal environmental approvals received

- Strong social licence to operate is supported by **full State and Federal environmental approvals** following an extensive Public Environmental Review ("PER")
- The PER process required full environmental impact assessment, with **detailed public consultation** and identification of key environmental concerns for the community. The key issues identified were:
  - Impact on the Greater Bilby
  - Impact on ground water resources
  - Haulage of mineral sands products through Derby
  - Impact of ocean going vessels on marine animals
- The **Environmental Protection Authority ("EPA") conducted a detailed review**, including a site visit by the EPA Board and two periods of public comment and consultation
- **All environmental approvals were received** on the following basis:
  - PER concluded all risks can be adequately managed
  - Approvals contain **standard industry conditions and controls**
  - Specific **Greater Bilby management plans** in place
  - **Environmental offset fund** established
  - **Restrictions on speeds and travel times** for haulage of products to Port of Derby
- **Practices to mirror Equator Principles**



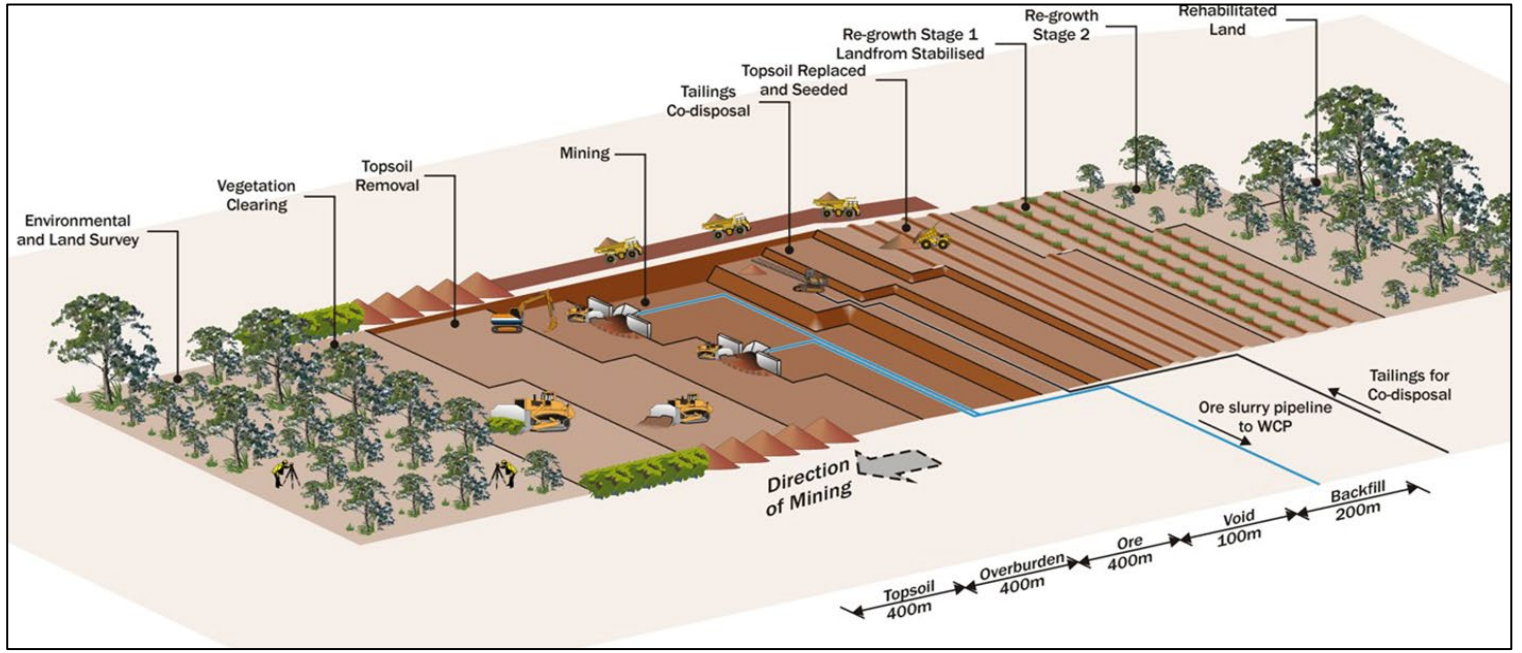
Thunderbird personnel receive training in Bilby management as part of our Bilby Management Program (2018)

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Appendix ESG: Environment

Continuous Rehabilitation

- Proposed dry mining via conventional dozer trap mineral sand mining
- Topsoil and overburden excavated and transported using truck and excavators
- Topsoil is deposited and seeded following completion of mining within each zone
- Active rehabilitation of mined areas occurs continuously throughout the mine life
- Progressive mining limits active mining to a maximum of 16km^2
- Continuous rehabilitation limits maximum disturbed area during mine life to 60km^2



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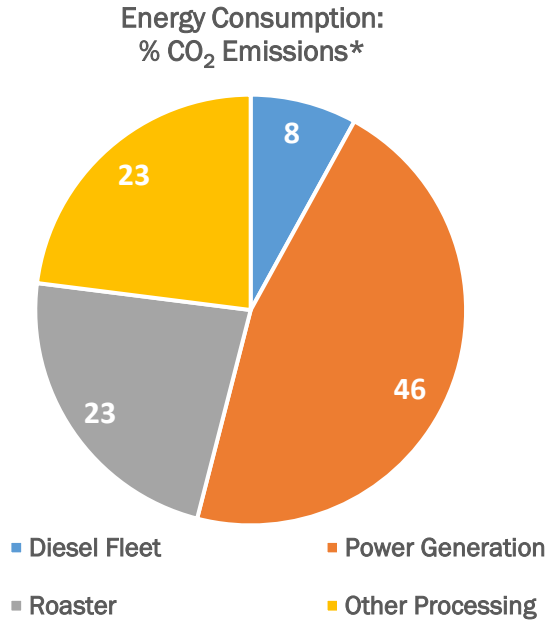
Appendix ESG: Environment

Embracing the Climate Change challenge

- CO_2 baseline Scope 1 emissions estimated: 11mt CO_2e (40+ year life of project)*

CO_2 reduction opportunities across a 37 year mine life

- ✓ Introduction of renewable electricity to complement LNG gas generation
- ✓ Innovation within the process plant value chain
- ✓ Logistics at the mine site and to port (eg electric fleet solutions)
- ✓ 2030 target and target date for net zero emission to set prior to FID



Our goals for a Sustainable future

Acceptance	Seek Low Carbon Technology	Invest in Climate Safe Practices	Promote Our Climate Policy
▪ Accept Climate change science ▪ Support net-zero global ambitions ▪ Support our community's goals	▪ Renewables for power generation ▪ Diesel substitution ▪ Partner with innovative suppliers	▪ Measure our climate performance ▪ Consider carbon offsets ▪ Climate Risk Assessments ▪ Low-carbon inputs	▪ Partner with our local community ▪ Determine net zero emissions pathway ▪ Engage with our peers, suppliers and customers

**Emissions forecast based upon 2017 Public Environmental Review and 2017 (Stage 1 & Stage 2) Bankable Feasibility Study estimates*

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Appendix ESG: Our Community Stakeholders

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Actively working with community stakeholders to create and maintain a robust relationship

- Central to the Kimberley regional strategy is our social licence to operate ("SLTO")
  - **Built over ten years** and based on formal and informal community relations practices alongside constant delivery of Sheffield's pledges
- Sheffield's strategy focuses on:
  - **Aboriginal engagement** and advancement
  - **Local content employment** and workforce on a **drive-in and drive-out** basis (as opposed to fly-in, fly-out)
  - Low environmental and Aboriginal Heritage impact
  - **Regional economic opportunities** and local business development
- Sheffield's community engagement practices to date are **built on strong stakeholder, social and community support for Thunderbird** and ensures a positive foundation for project development, land access, construction and project operation
- Achieved through **development and implementation of communication and consultation** strategies which ensure stakeholders to the ports, Traditional Owners, pastoralists, local shires, government authorities, local businesses and local communities are informed and engaged positively
- **Strongly supported by State and Federal Government**, Thunderbird has a 37-year mine life which will see opportunity flow within the Kimberley region for future generations



Sheffield Community Project February 2019 with the Sisters of St John of God



Environmental Advisor Gayle Williams speaks to local community members at Community Engagement workshops (Broome, September 2018)

Appendix ESG: Our Commitment to Traditional Owners

Native Title agreement signed and is irrevocably binding on both the Company and the Traditional Owners

- Signed the Co-existence Agreement (Native Title Agreement) for Thunderbird on 31 October 2018
- The Traditional Owners authorised the Named Applicants to sign the Co-existence Agreement for Thunderbird, making it binding on both the Company and the Traditional Owners
- Details of the Co-existence Agreement are confidential, however the final agreement is in line with the Company's commitment to the community and contains:
  - Royalty payments to the Traditional Owners
  - Local and Aboriginal employment and business commitments
  - Protection for Aboriginal heritage and the environment
  - Cash Royalties to Traditional Owners over 37 years
- The Co-existence Agreement establishes the framework by which the Company can work with the Traditional Owners to protect Aboriginal heritage and the environment while delivering sustainable employment and business outcomes for Traditional Owners and the wider Aboriginal community



Sheffield, Arma Legal and Traditional Owner representatives with signed Co-Existence Agreement (October 2018)

Indigenous Employment Strategy

- Previous success in building a strong locally based workforce to be replicated during 37-year operation, particularly in the area of Aboriginal employment
- Strong commitment to training and development which results in ongoing employment
- In addition, key strategy targets include:
  - To achieve 40% Aboriginal employment by year 8 of operations
  - To commit to Aboriginal businesses during construction and operations

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