Sheffield Resources LIMITED

PRE FEASIBILITY STUDY and BEYOND

Thunderbird

World's Best Undeveloped Mineral Sands Project

Mineral Sands Conference - Melbourne
15-16 March 2016
ASX : SFX

sheffieldresources.com.au

DISCLAIMER

PREVIOUSLY REPORTED INFORMATION

This report includes information that relates to Exploration Results, Mineral Resources, Ore Reserves and results of Pre-Feasibility studies which were prepared and first disclosed under the JORC Code 2012. The information was extracted from the Company's previous ASX announcements as follows:

"SHEFFIELD APPOINTS HATCH TO DELIVER BFS FOR THUNDERBIRD PROJECT", 2 March 2016
"MAIDEN ORE RESERVE – THUNDERBIRD PROJECT", 22 January, 2016
"PRE-FEASIBILITY STUDY UPDATE CONFIRMS THUNDERBIRD AS THE WORLD'S BEST UNDEVELOPED MINERAL SANDS PROJECT", 14 October 2015
"OUTSTANDING RESULTS FROM ILMENITE UPGRADE TESTWORK", 9 September 2015
"CONVENTIAL DOZER TRAP MINING CONFIRMED AS PREFERRED MINING METHOD AT THUNDERBIRD", 17 September 2015
"THUNDERBIRD HIGH GRADE RESOURCE UPDATE", 31 July 2015
"QUARTERLY REPORT FOR PERIOD ENDING 30 JUNE 2015", 27 July 2015
"QUARTERLY REPORT FOR THE PERIOD ENDING 31 DECEMBER 2015, 27 January 2016
"THREE NEW MINERAL SANDS DISCOVERIES IN CANNING BASIN", 25 February 2015
"NEW MINERAL SANDS DISCOVERY AT NIGHT TRAIN", 22 September 2015
"PRE-FEASIBILITY STUDY CONFIRMS THUNDERBIRD AS NEXT MAJOR MINERAL SANDS PROJECT IN GLOBAL DEVELOPMENT PIPELINE", 14 May 2015
These announcements are available to view on Sheffield Resources Ltd's website www.sheffieldresources.com.au

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, Ore Reserves and Pre-feasibility studies, 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 announcement

FORWARD LOOKING STATEMENTS

Some statements in this report regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected" "estimated" "may", "scheduled", "intends", "potential", "could" "nominal" "conceptual" and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results.

MINERAL RESOURCES CONSIDERED IN THE PFS

In this report that part of the Thunderbird Measured and Indicated Mineral Resource, considering the results of pit optimisations, preliminary mine designs and economic factors, that has been evaluated in the Pre-feasibility Study is stated as 685Mt at 11.3% HM. These considerations for the PFS are not sufficient to meet the requirements of an Ore Reserve as defined under the 2012 edition of the JORC Code and therefore should not be considered as such. Subsequent to the PFS Sheffield announced a maiden Ore Reserve for Thunderbird meeting the requirements of the JORC Code 2012, totalling 682.7Mt @ 11.3% HM (Proved and Probable), based on that portion of the July, 2015 Thunderbird deposit Measured and Indicated Mineral Resources within mine designs that may be economically extracted with appropriate consideration of modifying factors, costs, mineral assemblage, process recoveries and product pricing. See Appendix 1 for further details. A maiden Ore Reserve supporting the BFS Mineral Resource was released on 22 January 2016.

KEY PFS OUTCOMES

FINANCIALS

- **A$297M[1] (US$220M) capital**
- 3.4 year payback
- A$11.8B gross rev
- A$6.0B[2] op cash flow
- A$135B EBITDA (LOM avg)
- A$566/t rev (LOM avg)
- A$258/t net rev (LOM avg)
- Revenue 59% Zircon, 32% ilmenite & 9% HiTi

PHYSICALS

- **40 year mine life**
- Strip ratio 0.7:1.0 LOM
- Strip ratio 0.2:1.0 yrs 1-7
- 80% Zircon premium grade
- Ilmenite LTR >56% TiO_2
- 12-18Mt processing rate
- Annualised Life of Mine
  - ~100,000t/yr zircon
  - ~ 396,000t/yr LTR ilmenite
  - ~ 26,000t/yr HiTi

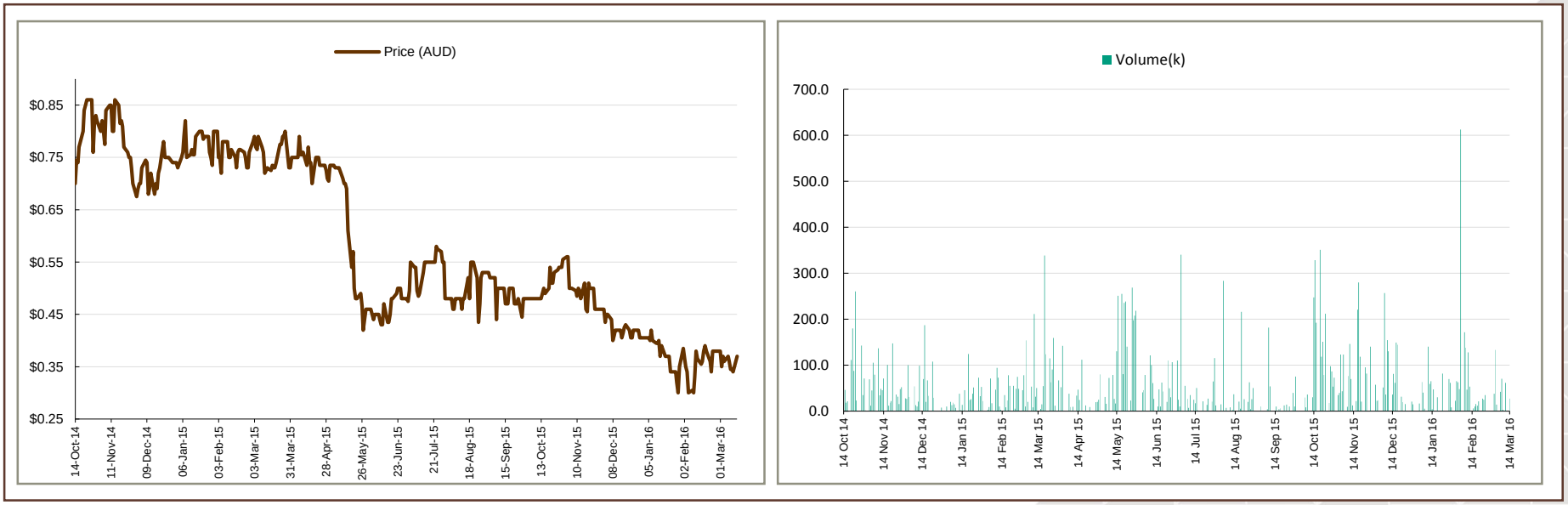
COST & PRICE

- **A$308/t C1 cost[3]**
- LOM Zircon price US$1371/t
- LOM Ilmenite price US$185/t
- LOM HiTi88 price US$700/t

[1] Includes contingency.
[2] Undiscounted and before taxes and royalties
[3] Including government royalties

CORPORATE SNAPSHOT

ASX CODE	ISSUED SHARES[1]	EMPLOYEE OPTIONS	SHARE PRICE (10 March 2016)	MARKET CAP	CASH (UNAUDITED)[2]	ENTERPRISE VALUE	TOP TWENTY SHAREHOLDERS[2]
SFX	150.3M	(AVE.EX PRICE 68c) 7.4M	A$0.37	A$55.6M	A$7.9M	A$47.7M	~43%



[1]post capital raising in February 2016
[2]audited as at 31 December 2015

DIRECTORS, MANAGEMENT & REGISTER

Will Burbury
Non-executive Chairman

Bruce McFadzean
Managing Director

David Archer
Technical Director

Bruce McQuitty
Non-executive Director

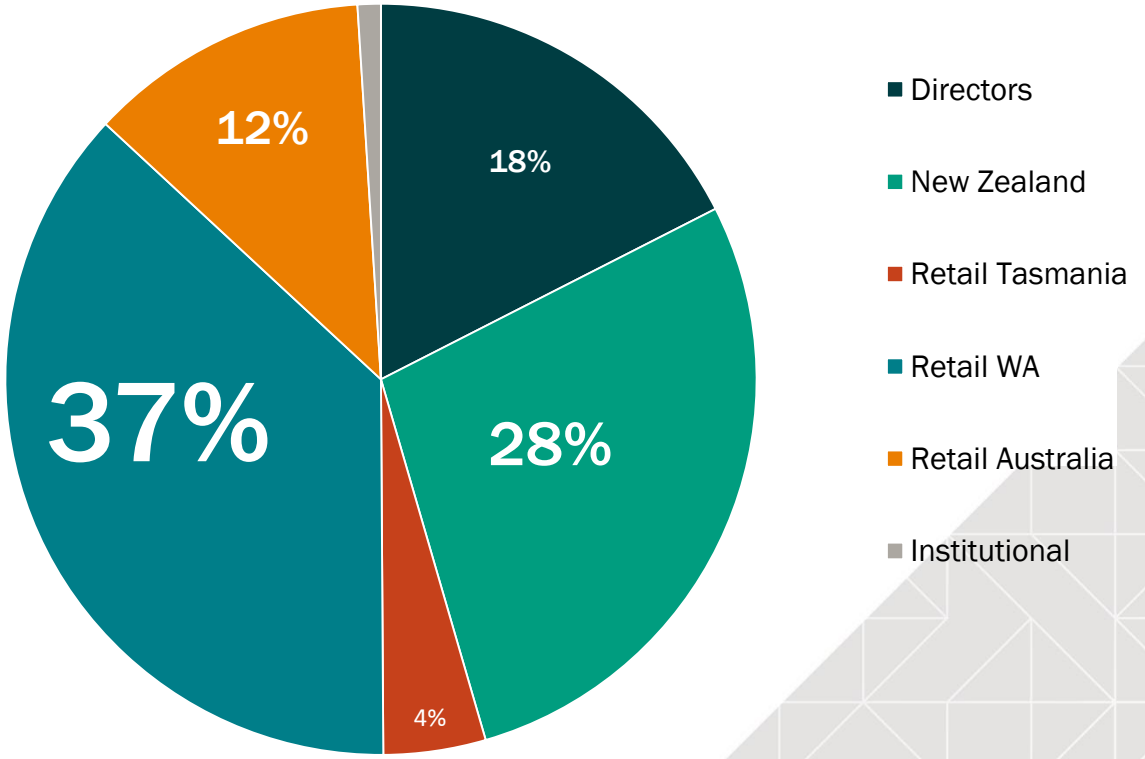
Mark Di Silvio
CFO/Company Secretary

Jim Netterfield
BFS Project Manager

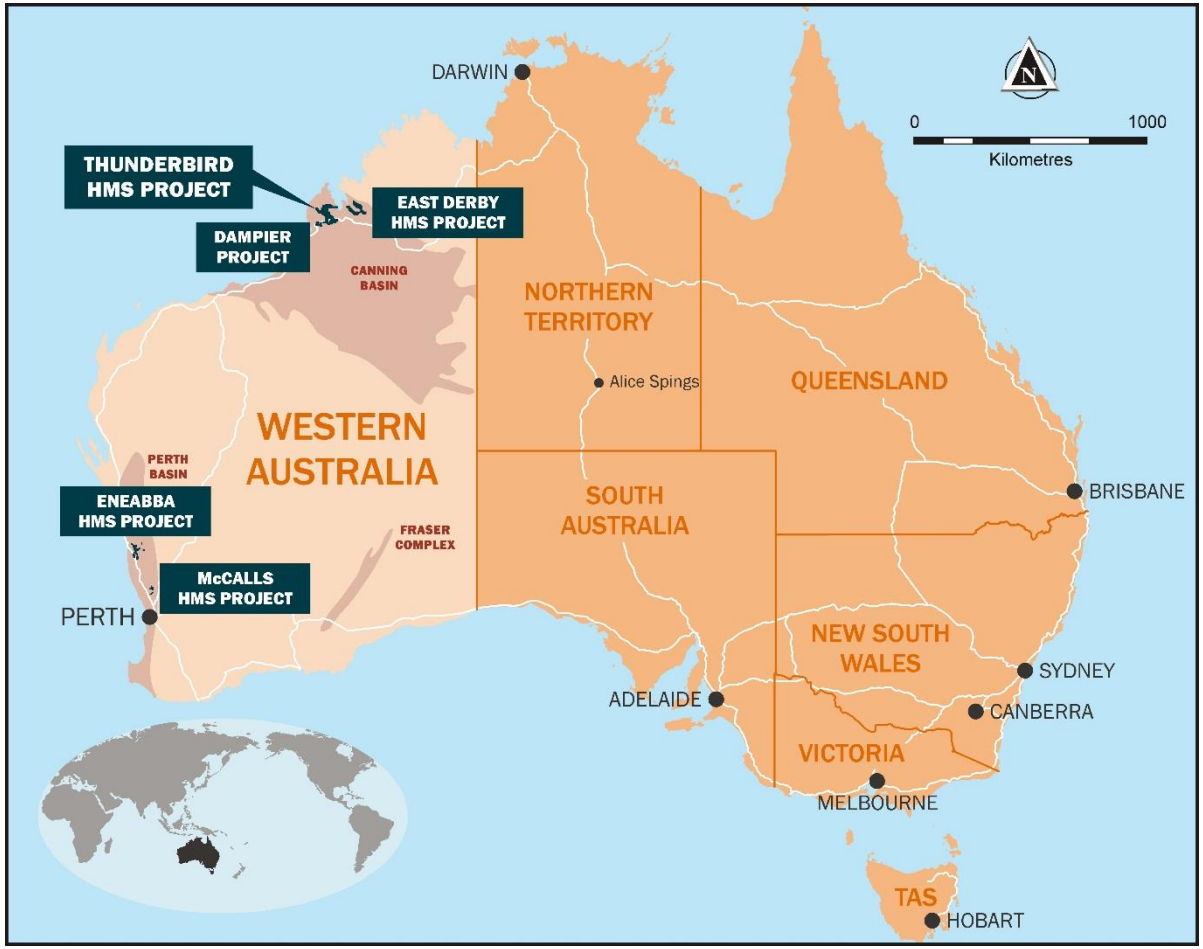
Mark Teakle
Development Manager

David Boyd
Exploration Manager

Wayne Groeneveld
Sustainability Manager



DISCOVERY TO PRODUCTION

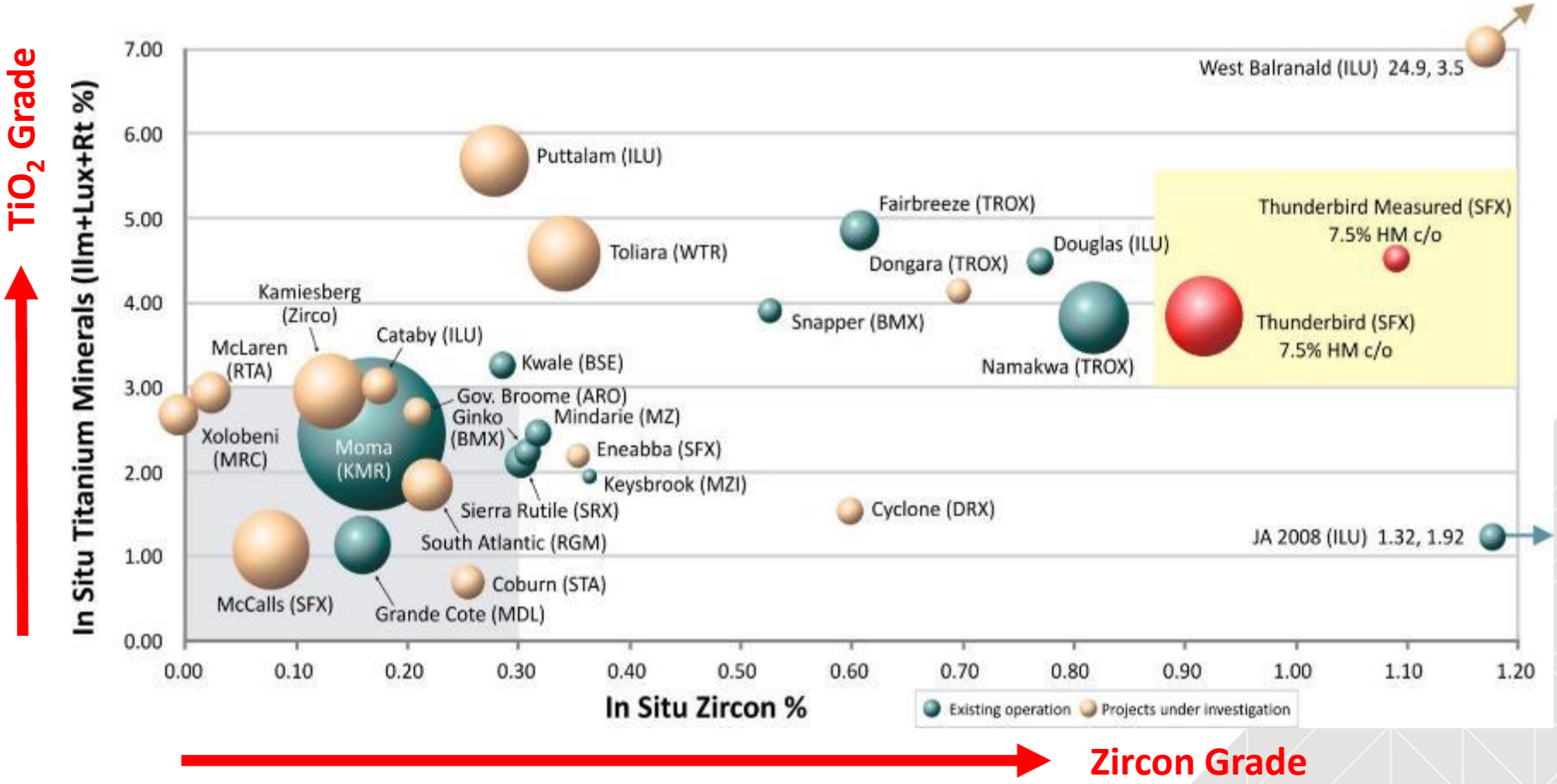


- **ASX listed**
  December 2010
- Thunderbird Mineral Sands – **Tier 1 project**
- From initial drill hole to BFS in **3 Years**
- Targeting first production from Thunderbird **early 2019**
- **First mover status** in Canning Basin mineral sands province
- **+40 year mine life**
- Lead Agency status with Department of Mines and Petroleum

PROSPECT AWARDS WINNER 2013 Explorer of the Year

2013 Diggers & Dealers Mining Forum Winner of The Best Emerging Company Award

THUNDERBIRD TIER 1 PROJECT



Amongst the world's **largest and highest grade zircon rich deposits**

Thunderbird's high zircon and titanium mineral grades set it apart **globally**

Thunderbird Mineral Resource ranked against current mineral sands operations and projects under investigation globally.
Data compiled by Sheffield from open file sources.
Excludes Rio Tinto Mineral Resources, Ore Reserves and operations

BFS Strategy

KEY DELIVERABLES

- BFS Completion late 2016
- Production ramp-up[1]
  - 7.5Mt years 1-3
  - 15Mt year 4 onward
- Further improvements from LTR ilmenite roasting
- Simplification of product process flow sheet
- Product transport options
- Export opportunities from Derby
- Targeting further reductions in capital

COMMUNITY/EMPLOYMENT

- Predominantly local workforce
- Promotion of Aboriginal employment and business opportunities
- Positive community engagement and support
- Promotion of local business participation
- Long mine life opportunity for local communities

PERMITTING

- Government support via “Lead Agency Status” from Department of Mining and Petroleum (DMP)
- Public Environmental Review process commenced
- Native Title approvals targeted in 2016
- Local government approval processes commenced

[1] final ramp up profile subject to BFS outcomes

KEY TARGETS 2016

BFS

- Tier 1 BFS Manager **HATCH** engaged
- Maiden Ore Reserve released January 2016
- BFS scheduled for completion late 2016
- Native title agreements being negotiated
- Environmental approvals process commended

OFF-TAKE PARTNERS

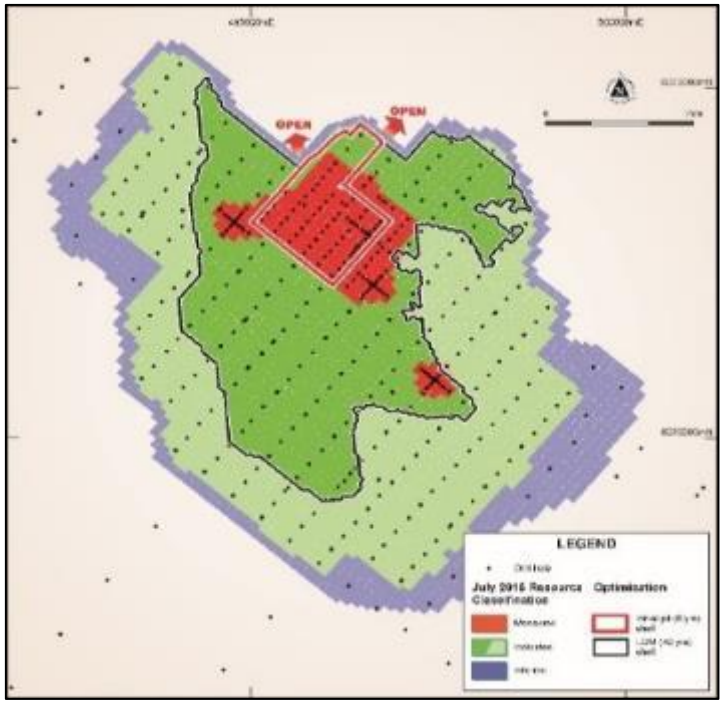
- Engaged Marketing consultants/personnel
- Commencing introductions
- Distribute product samples Q2 2016
- Secure off-take agreements and MOU's late 2016

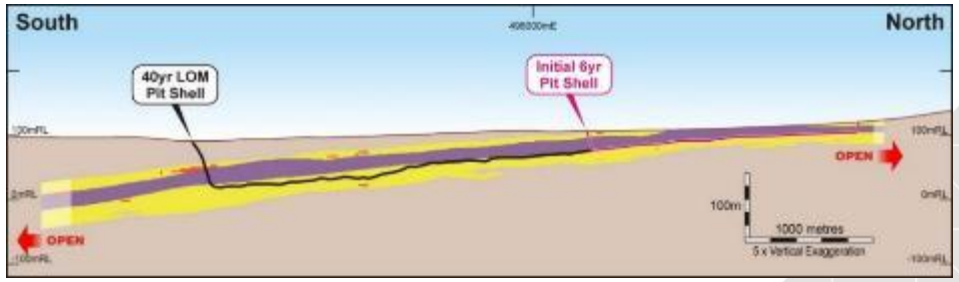
FUNDING

- Debt sizing and option analysis commenced
- JV/partner options being considered
- Off-take partner funding options being assessed

THUNDERBIRD MINERAL SANDS DEPOSIT

- Key to Thunderbird is the **thick, continuous high Grade Zone**
- **This zone is surface outcropping** in the northern part of the deposit
- Deposit geometry **favours large scale mining**
- Low strip Ratio **0.22:1.0 year 1-7 0.67:1.0 life of mine**





LEGEND

Block Model Grade >3% HM >7.5% HM >10% HM

MINERAL RESOURCE

THUNDERBIRD HIGH GRADE MINERAL RESOURCE AT 7.5% HM CUT-OFF 31 JULY 2015

Resource	Mineral Resources [1]		Valuable HM Grade (in situ) [2]			
	Material Mt	HM %	Zircon %	HiTi Leuc %	Leucoxene %	Ilmenite %
Measured	110	14.9	1.09	0.31	0.28	4.0
Indicated	850	11.8	0.90	0.28	0.25	3.3
Inferred	130	10.7	0.82	0.25	0.23	3.0
Total	**1,090**	**11.9**	**0.91**	**0.28**	**0.25**	**3.3**

Globally Significant > 1Bt at 11.9% HM

Measured + Indicated > 85% of Resource

1. Refer to Appendices 1 for full Resources Tabulation. Tonnes have been rounded to reflect the relative uncertainty of the estimate.
2. The in situ grade is determined by multiplying the percentage of HM by the percentage of each valuable heavy mineral within the heavy mineral assemblage.

PFS PHYSICALS

PHYSICALS	YEARS 1-7	LOM
Average ore mined (Mtpa)	12.2	17.1
Average head grade (%HM)	15.4	11.5
Strip ratio (waste:ore)	0.20:1	0.66:1
HMC PRODUCED (MT)	13.2	52.0
PRODUCTION	**YEARS 1-7**	**LOM**
Zircon (tpa)	88,000	100,000
HiTi88 (tpa)	21,000	26,000
LTR Ilmenite (tpa)	311,000	382,000
Primary Ilmenite (tpa)	58,000	14,000
Total Products	**478,000**	**522,000**

Mineral Resources used for the PFS Update comprises **685Mt at 11.3% HM**[1,2]

With in-situ grades of **0.87% zircon, 0.27% HiTi leucoxene, 0.28% leucoxene and 3.13% ilmenite**[1,2]

Equates to **+40 years** of scheduled production with initial production at a 12Mtpa mining rate, ramping up to 18Mtpa from Year 8 for the remainder of the mine life

Mineral Resources for the **six year starter pit** comprises **68Mt at 15.7% HM**[1]

With high in-situ grades of **1.12% zircon, 0.32% HiTi leucoxene, 0.31% leucoxene and 4.18% ilmenite**[1]

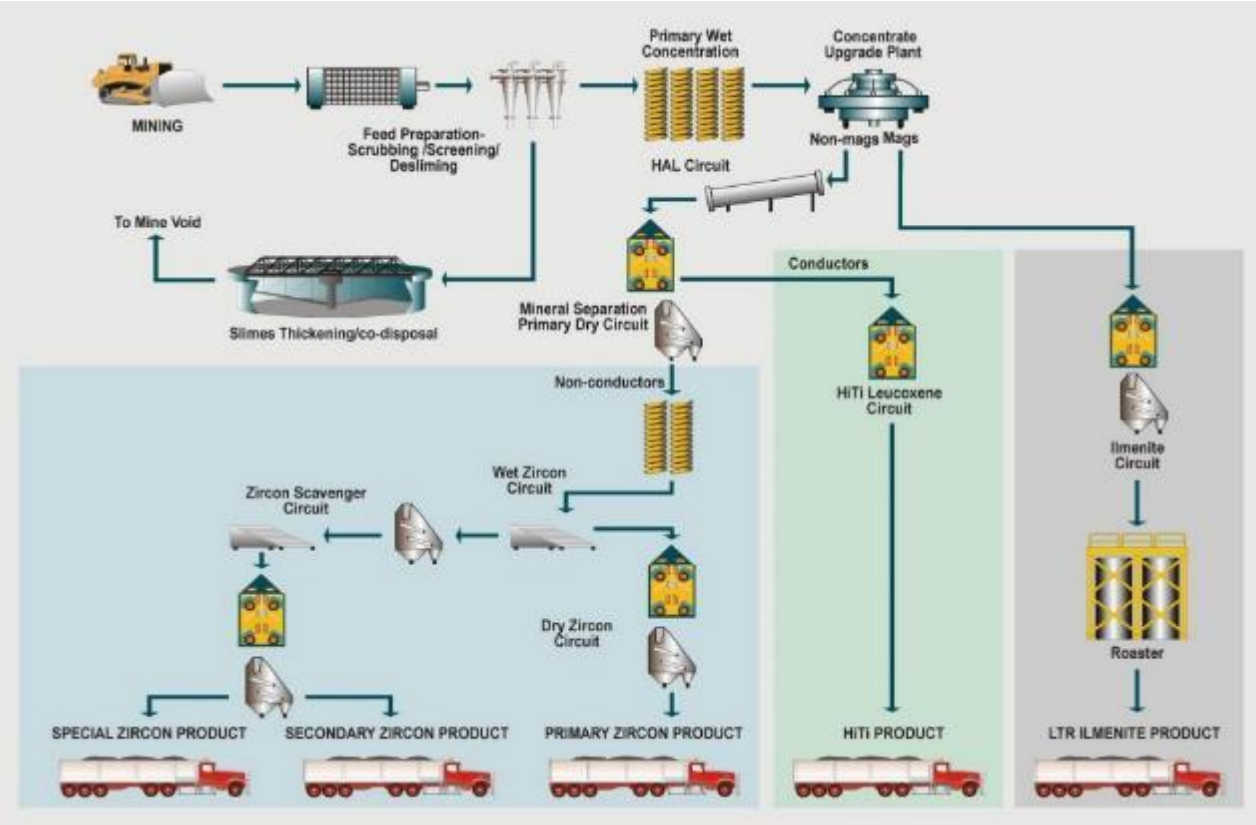
Note 1: That part of the Thunderbird Measured and Indicated Mineral Resource, considering the results of pit optimisations, preliminary mine designs and economic factors that has been evaluated in the Pre-feasibility Study. These considerations are not sufficient to meet the requirements of an Ore Reserve and should not be considered as such. Subsequent to the PFS Sheffield has announced a maiden Ore Reserve for Thunderbird totalling 682.7Mt @ 11.3% HM (Proved and Probable), see Appendix 1 for further details.
Note 2: An Ore Reserve statement supporting the PFS has since being released on January 2016, see ASX release dated 22 January 2016

CONVENTIONAL PROCESSING

Conventional heavy mineral sands processing circuit to deliver a suite of zircon, ilmenite, and HiTi88 products[1]

The process includes an ilmenite upgrade step using **a low temperature** (450º for 15 mins) roast ("LTR")

LTR upgrades the primary ilmenite by 22% to produce a **high grade (56.1%) sulphate ilmenite**



[1] Process design by Robbins Engineering, based on metallurgical testwork carried out on a 12.5t bulk sample using full scale & scalable equipment

PFS INFRASTRUCTURE & LOGISTICS

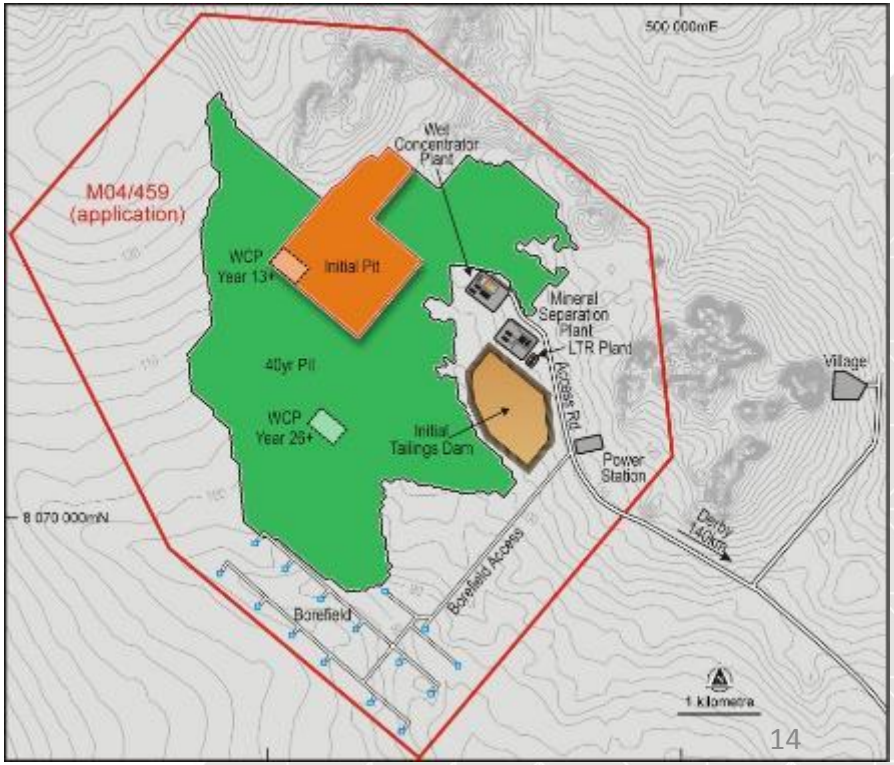
MINING & SITE INFRASTRUCTURE

- Dry mining rate of 12mtpa, ramping up to 18Mtpa by Year 8
- Conventional dozer trap mining
- Mining commences in shallow northern sector of deposit
- WCP, MSP, & initial tailings dam adjacent to deposit
- Only 2 WCP moves in 40 year LOM
- BOO camp and power station

PRODUCT HANDLING & EXPORT

- Products trucked 150km from mine to Derby
- Access agreement over bulk handling facility at Derby
- Product storage & loading at Derby Port
- Barging & transhipment of bulk products
- Close proximity to potential markets

THUNDERBIRD SITE LAYOUT PLAN



PFS CAPITAL COSTS

Total pre-production capital required to develop the project is estimated to be **A$296.6 million**

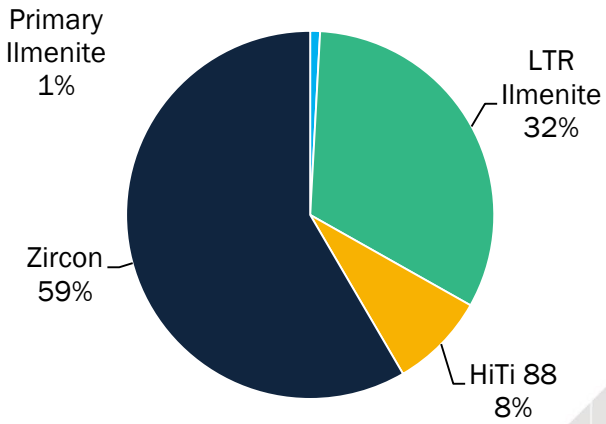
COST AREA	A$M
Pre-production owners cost	
Sub-total pre-production owners cost	**19.7**
Project direct costs	
Mining[1]	6.8
Process Water System	9.0
Wet Concentrator Plant	42.0
Mineral Separation Plant	93.0
LTR Plant	27.7
Site Infrastructure[2]	16.6
Power Infrastructure[2]	6.0
Roads	10.1
Borefield	6.5
Port	9.4
Sub-total direct costs	227.1
Project indirect costs	
EPCM	24.5
Contingency 10%	25.3
Sub-total indirect costs	49.8
GRAND TOTAL	**296.6**

[1]MUPs, mobile equipment, lease-purchased over 5 years. [2]Camp and power station are build own operate (BOO). Numbers have been rounded to one decimal place.

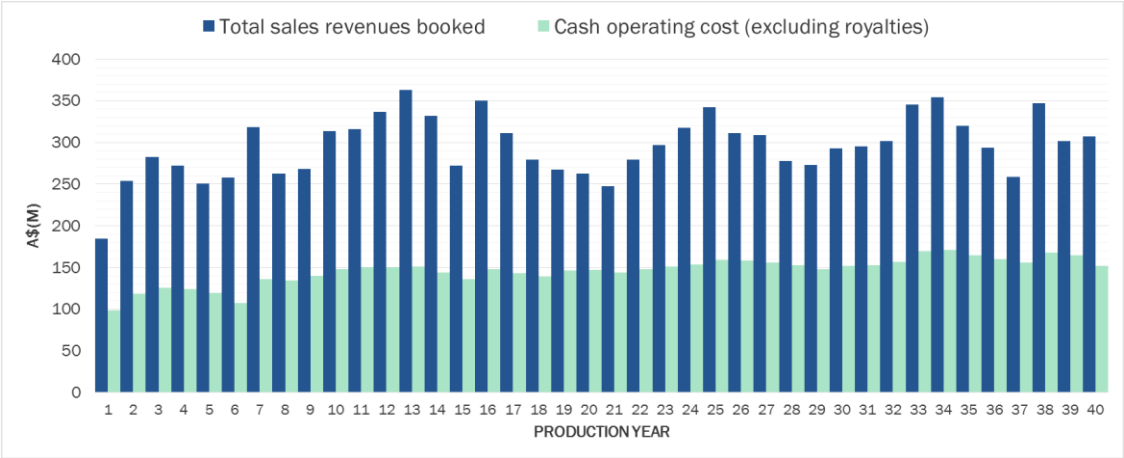
REVENUES

PRODUCTION AND REVENUE TOTALS LOM

PRODUCT	LOM TONNES	LOM REVENUE (A$M)
Zircon	4,006,000	6,910
HiTi88	1,052,000	995
LTR Ilmenite	15,283,000	3,821
Primary Ilmenite	559,000	103
TOTAL PRODUCTS	**20,900,000**	**11,829**



FORECAST ANNUAL REVENUES AND COSTS



KEY FINANCIAL OUTCOMES & ASSUMPTIONS

FINANCIALS		
Key Item	**A$M**	**LOM**
Revenue (LOM total)	A$M	11,829
Operating Cash Flow (LOM Average)	A$M pa	149
EBITDA (LOM Average)	A$M pa	135
EBIT (LOM Average)	A$M pa	122
Key Item	**A$/tonne of**	**LOM**
Unit Revenue	product	566
Unit Revenue	MUP feed	17.32
Cash operating costs (C1 costs)	product	280
Cash operating costs (C1 costs)	MUP feed	8.57
Royalties	product	28.30
Revenue:Cost ratio (excluding royalties)		2.02
Key Assumptions	**US$ (FOB bulk)**	**LOM**
A$:US$ Exchange rate		0.74
Zircon Price	US$/tonne	1,371
LTR Ilmenite Price	US$/tonne	185
Primary Ilmenite Price	US$/tonne	136
HiTi88 leucoxene Price	US$/tonne	700

PRODUCT ASSESSMENT STUDY BY TZMI

ZIRCON (59% OF REVENUE)

- Primary zircon product meets the requirements for premium classification for use in the ceramic sector

LTR ILMENITE (32% OF REVENUE)

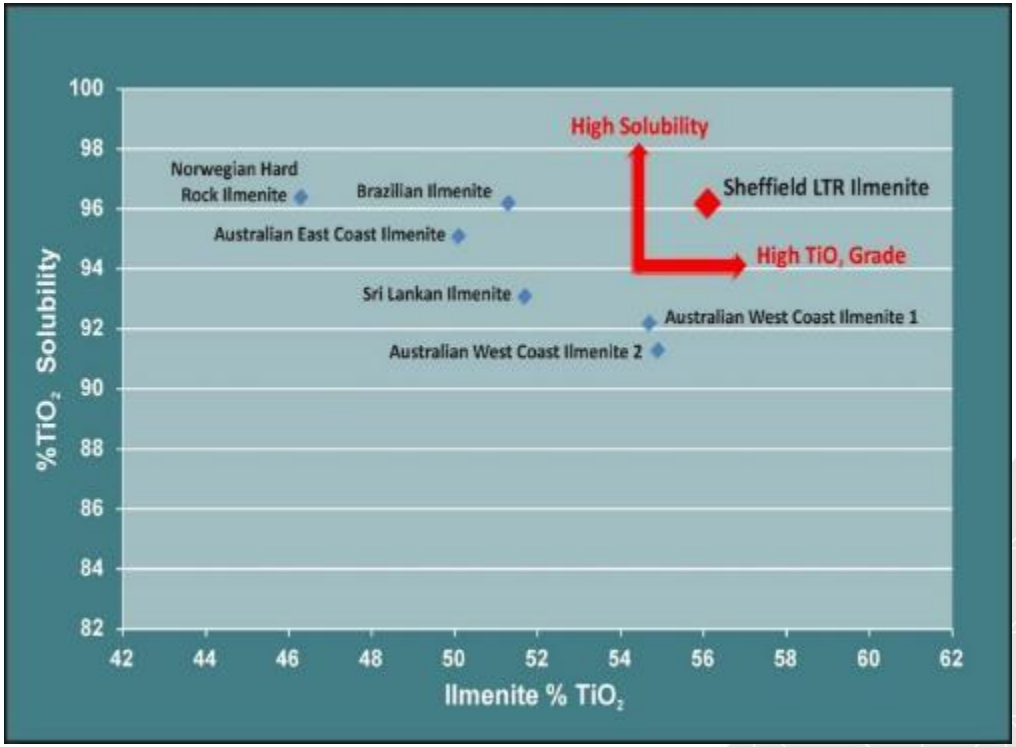
- LTR ilmenite (56.1% TiO_2) is suitable feedstock for sulphate pigment manufacture and, due to low impurities, could be a preferential blend feed
- Smelter modelling showed TiO_2 content of the simulated slag product exceeded levels of typical chloride grade slags available from western ilmenite smelters

HITI88 (8% OF REVENUE)

- HiTi88 product (87.7% TiO_2 content) is suitable for welding electrode application, particularly for flux core wires

PRIMARY ILMENITE (1% OF REVENUE)

- Primary ilmenite (45.8% TiO_2) is a suitable feedstock for the sulphate-route TiO_2 pigment process



THUNDERBIRD ANALOGY

TRONOX'S NAMAKWA PROJECT[1]

- Commenced mining in 1994 (+30 year life)
- Reserves (2012) 432Mt @ 8.8% HM
- In situ grades: 0.80% zircon, 0.22% rutile, 0.48% leucoxene, 3.09% ilmenite
- 21Mtpa mining rate (truck & shovel)
- Annual production approximately 125kt zircon, 300kt ilmenite, 27kt rutile
- Ilmenite production feeds a large titanium smelter (250ktpa Ti slag, 120ktpa pig iron)

THUNDERBIRD PFS METRICS

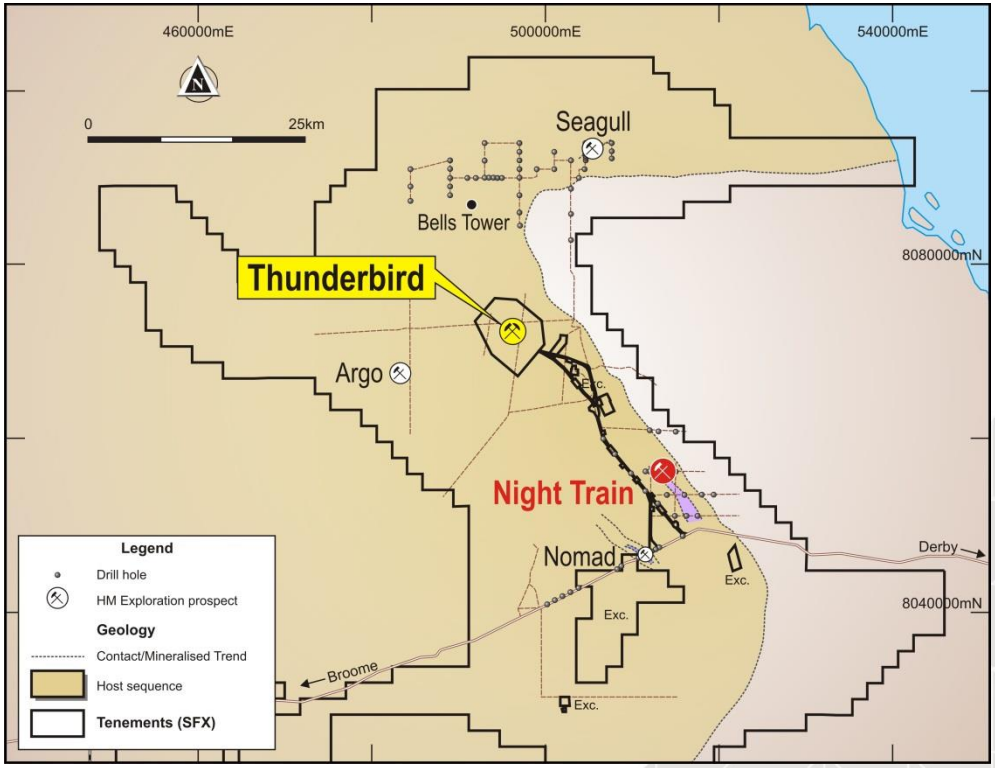
- +40 year mine life
- Mineral Resources[2] 685Mt @ 11.3% HM (Maiden Ore Reserve ASX release 22 Jan 2016)
- In situ grades: 0.87% zircon, 0.55% HiTi+leucoxene, 3.13% ilmenite
- 12-18Mtpa mining rate (dozer trap)
- Forecast annual production approximately 100kt zircon, 396kt ilmenite, 26kt HiTi88
- Ilmenite production could underpin a large titanium smelter or pigment plant

[1] Source Exxaro Resources Ltd 2012 Annual Report
[2] That part of the Thunderbird Measured and Indicated Mineral Resource, considering the results of pit optimisations, preliminary mine designs and economic factors that has been evaluated in the Pre-feasibility Study. These considerations are not sufficient to meet the requirements of an Ore Reserve and should not be considered as such. Subsequent to the PFS Sheffield has announced a maiden Ore Reserve for Thunderbird totalling 682.7Mt @ 11.3% HM (Proved and Probable), see Appendix 1 for further details.

REGIONAL EXPLORATION POTENTIAL

NEW PROVINCE – MULTIPLE DISCOVERIES

- Discoveries from limited scout drilling:
  - Night Train – best 7.5m @ 8.2% HM
  - Nomad – best 13.5m @ 3.0% HM
  - Seagull/Bells - best 6m @ 5.2% HM
- Night Train has high value mineral assemblage: 92% VHM, including 15% zircon, 61% leucoxene + HiTi
- New fertile province => high rate of discovery
- Large, strategic tenement holding over most prospective formations
- Further drilling planned during 2H 2016



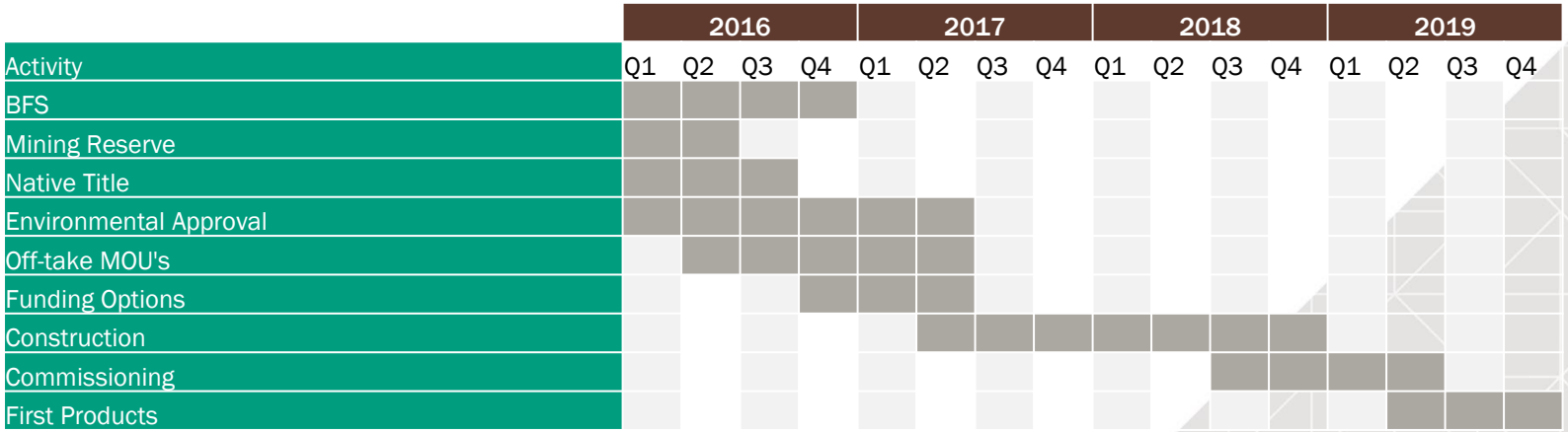
THUNDERBIRD KEY POINTS

TARGETS

- Further reductions in capital
- BFS – complete in 2016
- Native title agreement
- Environmental permitting
- Off-take partners sought in 2016
- Funding options assessed
- Exploration upside – shallow, high grade deposits e.g. Night Train within 20km of Thunderbird

NEXT STEPS

- Secure exclusive port access – **completed**
- Appointment of BFS Study Manager – **completed**
- 20t bulk sample met testwork and flow sheet optimisation – **commenced test work**
- Mining Reserve – **completed**
- Environmental – **commenced**
- Native Title agreement and Permitting – **commenced**



APPENDIX 1

THUNDERBIRD DEPOSIT ORE RESERVES[1,2]

Valuable Heavy Mineral (VHM) in-situ grade

Ore Reserve Category	Ore Tonnes (millions)	In-situ HM Tonnes (millions)	HM Grade (%)	Valuable HM Grade (In-situ)[2]				Slimes (%)	Osize (%)
				Zircon %	HiTi Leuc %	Leuc %	Ilmenite %		
Proved	115.1	15.8	13.7	1.01	0.29	0.28	3.67	17.3	12.7
Probable	567.6	61.9	10.9	0.85	0.27	0.29	3.03	16.1	10.2
Total	**682.7**	77.1	**11.3**	**0.88**	**0.27**	**0.29**	**3.14**	**16.3**	**10.6**

Mineral assemblage as percentage of HM grade

Ore Reserve Category	Ore Tonnes (millions)	In-situ HM Tonnes (millions)	HM Grade (%)	Mineral Assemblage[3]				Slimes (%)	Osize (%)
				Zircon (%)	HiTi Leuc (%)	Leuc (%)	Ilmenite (%)		
Proved	115.1	15.8	13.7	7.4	2.1	2.1	26.8	17.3	12.7
Probable	567.6	61.9	10.9	7.8	2.5	2.6	27.9	16.1	10.2
Total	**682.7**	77.1	**11.3**	**7.7**	**2.4**	**2.5**	**27.7**	**16.3**	**10.6**

[1] Calculations have been rounded to the nearest 100,000 t, 0.1 % grade. Differences may occur due to rounding. Ore Reserves are reported by economic cut-off with appropriate consideration of 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 for each mineral by the HM grade.

APPENDIX 1

THUNDERBIRD DEPOSIT MINERAL RESOURCE[1,2]

Cut-off (HM%)	Mineral Resource Category	Material Tonnes (millions)	In-situ HM Tonnes (millions)	HM Grade (%)	Valuable HM Grade (In-situ)[3]				Slimes (%)	Osize (%)
					Zircon (%)	HiTi Leuc (%)	Leuc (%)	Ilmenite (%)		
> 3% HM	Measured	230	21	9.4	0.74	0.21	0.20	2.5	19	10
	Indicated	2,410	167	6.9	0.58	0.19	0.22	1.9	16	8
	Inferred	600	33	5.6	0.47	0.16	0.20	1.5	16	9
	Total	**3,240**	**222**	**6.9**	**0.57**	**0.18**	**0.21**	**1.9**	**16**	**9**
>7.5% HM	Measured	110	16	14.9	1.09	0.31	0.28	4.0	17	13
	Indicated	850	100	11.8	0.90	0.28	0.25	3.3	15	10
	Inferred	130	14	10.7	0.82	0.25	0.23	3.0	14	9
	Total	**1,090**	**131**	**11.9**	**0.91**	**0.28**	**0.25**	**3.3**	**15**	**10**

Cut-off (HM%)	Mineral Resource Category	Material Tonnes (millions)	In-situ HM Tonnes (millions)	HM Grade (%)	Mineral Assemblage[4]				Slimes (%)	Osize (%)
					Zircon (%)	HiTi Leuc (%)	Leuc (%)	Ilmenite (%)		
> 3% HM	Measured	230	21	9.4	7.9	2.2	2.1	27	19	10
	Indicated	2,410	167	6.9	8.4	2.7	3.1	28	16	8
	Inferred	600	33	5.6	8.4	2.8	3.5	28	16	9
	Total	**3,240**	**222**	**6.9**	**8.3**	**2.7**	**3.1**	**28**	**16**	**9**
>7.5% HM	Measured	110	16	14.9	7.3	2.1	1.9	27	17	13
	Indicated	850	100	11.8	7.6	2.4	2.2	28	15	10
	Inferred	130	14	10.7	7.6	2.3	2.2	28	14	9
	Total	**1,090**	**131**	**11.9**	**7.6**	**2.3**	**2.1**	**28**	**15**	**10**

THUNDERBIRD DEPOSIT CONTAINED VALUABLE HM (VHM) IN MINERAL RESOURCES[1,2,5]

Cut-off (HM%)	Mineral Resource Category	Zircon Tonnes (thousands)	HiTi Leucoxene Tonnes (thousands)	Leucoxene Tonnes (thousands)	Ilmenite Tonnes (thousands)	**Total VHM Tonnes (thousands)**
>3% HM	Measured	1,700	500	500	5,800	**8,400**
	Indicated	14,000	4,500	5,300	46,700	**70,500**
	Inferred	2,800	900	1,200	9,300	**14,200**
	Total	**18,500**	**5,900**	**6,900**	**61,800**	**93,100**
>7.5% HM	Measured	1,200	300	300	4,300	**6,100**
	Indicated	7,700	2,400	2,200	27,800	**40,000**
	Inferred	1,100	300	300	3,900	**5,700**
	Total	**9,900**	**3,000**	**2,800**	**36,000**	**51,700**

[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. Mineral Resources for the Dampier Project were prepared and first disclosed under the JORC Code 2012. [2]All tonnages and grades have been rounded to reflect the relative accuracy and confidence level of each estimate and to maintain consistency throughout the table, therefore the sum of columns may not equal. [3]The in-situ grade is determined by multiplying the HM Grade by the percentage of each valuable heavy mineral within the heavy mineral assemblage. [4]The Mineral Assemblage is represented as the percentage of HM grade. For Dampier the mineral assemblage was determined by screening and magnetic separation. Magnetic fractions were analysed by QEMSCAN for mineral determination as follows: >90% liberation and; 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. [5]The VHM resource inventory is derived from information in the Mineral Resource table.