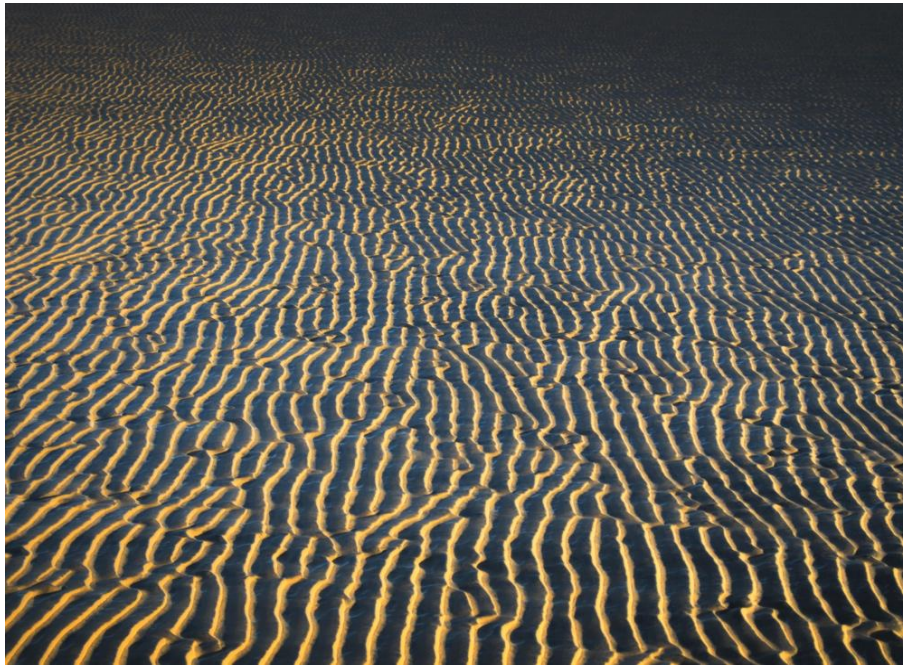


Sheffield Resources LIMITED

SFX

Diggers&Dealers2013

DAMPIER MINERAL SANDS PROJECT

LARGE SCALE HIGH GRADE PREMIUM PRODUCT WORLD CLASS

Disclaimer

COMPETENT PERSONS' STATEMENT – EXPLORATION RESULTS

The information in this presentation that relates to exploration results is based on information compiled by David Archer and David Boyd. Both Mr Archer and Mr Boyd are full time employees of the Company and are Members of the Australasian Institute of Geoscientists. Mr Archer and Mr Boyd have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity to which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code")'. Each of Mr Archer and Mr Boyd consents to the inclusion in the presentation of the matters based on their information in the form and context in which it appears.

COMPETENT PERSONS' STATEMENT – RESOURCE ESTIMATES

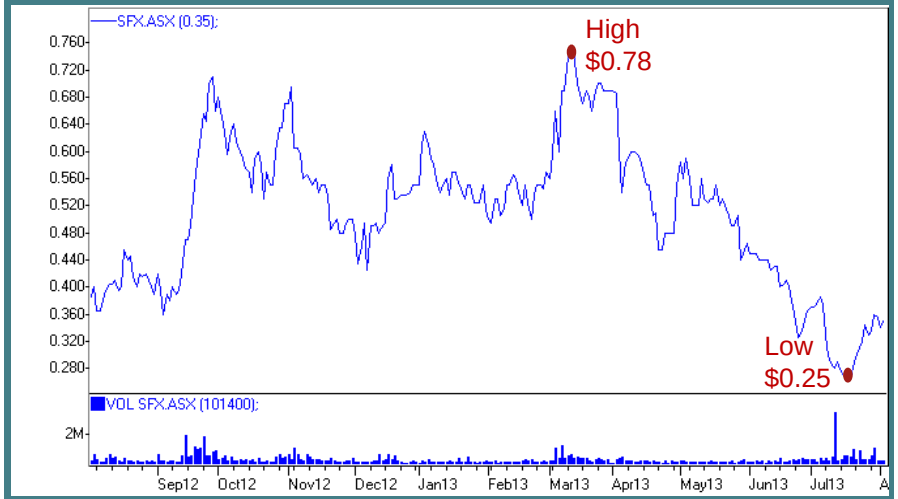
The information in this presentation that relates to resource estimation is based on information compiled by Mr Trent Strickland. Mr Strickland is a full time employee of Quantitative Group (QG) and a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Strickland has sufficient experience in the minerals industry to satisfy the requirements to act as the competent person for these resource estimates as defined in the 2004 Edition of the Australasian Code for Reporting of Mineral Resources and Ore Reserves. Mr Strickland consents to the inclusion in this presentation of the matters based on their information in the form and context in which it appears.

The information in this presentation that relates to reporting of resource and exploration results is based on information compiled under the guidance of Mark Teakle. Mr Teakle is a full time employee of the Company. Mr Teakle is a Member of the Australasian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity to which they are undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code")'. Mr Teakle consents to the inclusion in this presentation of the matters based on their information in the form and context in which it appears.

FORWARD LOOKING AND EXPLORATION TARGET STATEMENTS

Some statements in this announcement regarding estimates or future events are forward-looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include, but are not limited to, statements concerning the Company's exploration programme, outlook, target sizes and mineralised material estimates. They include statements preceded by words such as "expected", "planned", "target", "scheduled", "intends", "potential", "prospective" and similar expressions.

Company Snapshot



SHAREHOLDER SPLIT	
Top 20 Shareholders	**37%**
Directors	**19.5%**

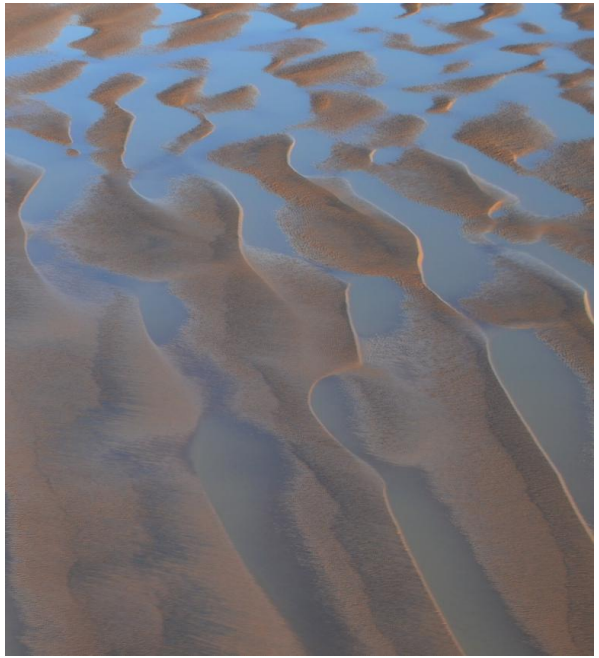
No industry major on register

CAPITAL STRUCTURE	
Share price	**$0.33**
Shares on issue	**118.3m**
Options (Ex Price 30c, expiry 30 Nov 2013)	**3.0m**
Employee Options (Ave. Ex Price 45.7c)	**4.6m**
Market Cap (Undiluted)	**$39m**
Cash at hand (no debt)	**$7.5m**
Enterprise Value	**$31.5m**

Company Snapshot

INVESTMENT SUMMARY

- World Class HMS deposit
  Thunderbird
  - 1.37Bt @ 6.1% HM[1] (open)
  - including 517Mt @ 10.1% HM
  - High quality zircon and titanium mineral products
- Pipeline of Other Projects
  - McCalls & Eneabba HMS
  - Red Bull Nickel
  - Oxley Potash, North Pilbara Iron, Moora Talc
- Well Funded
  - $7.5m cash at hand, no debt



[1] Refer to Appendices 2 & 3

Company Snapshot

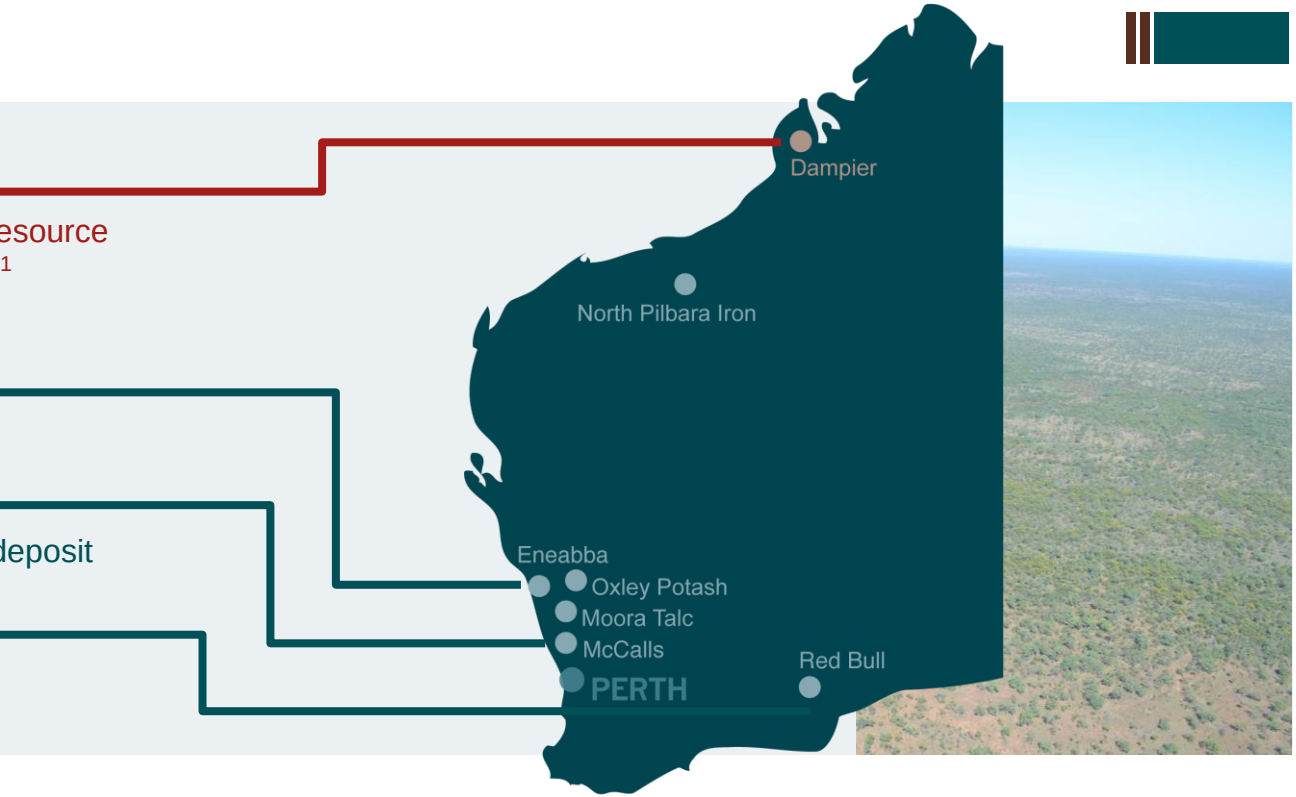
PROJECTS

Dampier - HMS
Flagship - Thunderbird Total Resource
1.37Bt @ 6.1% HM (83Mt HM)[1]
including 517Mt @ 10.1% HM

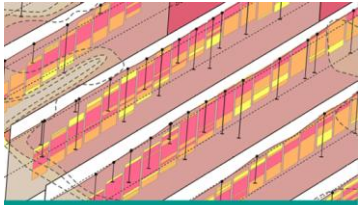
Eneabba - HMS
Strategic resource base

McCalls - HMS
Global scale chloride ilmenite deposit

Red Bull - Nickel
Fraser Range Ni-Cu

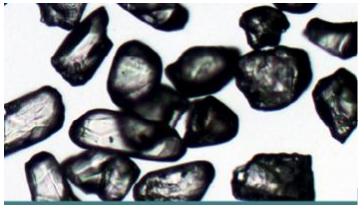


[1] Refer to Appendices 2 & 3



Large Scale

High Grade



Premium Product

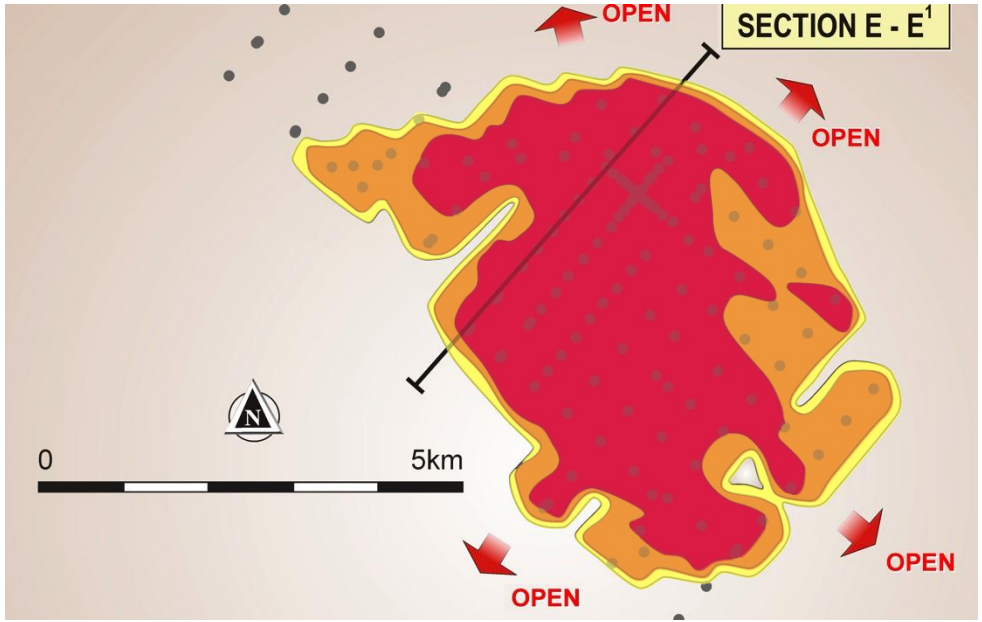
World Class

Key Messages

THUNDERBIRD MINERAL SANDS

Large Scale

THUNDERBIRD MINERAL SANDS



>7.5% HM
>2 - 7.5%HM
<2% HM

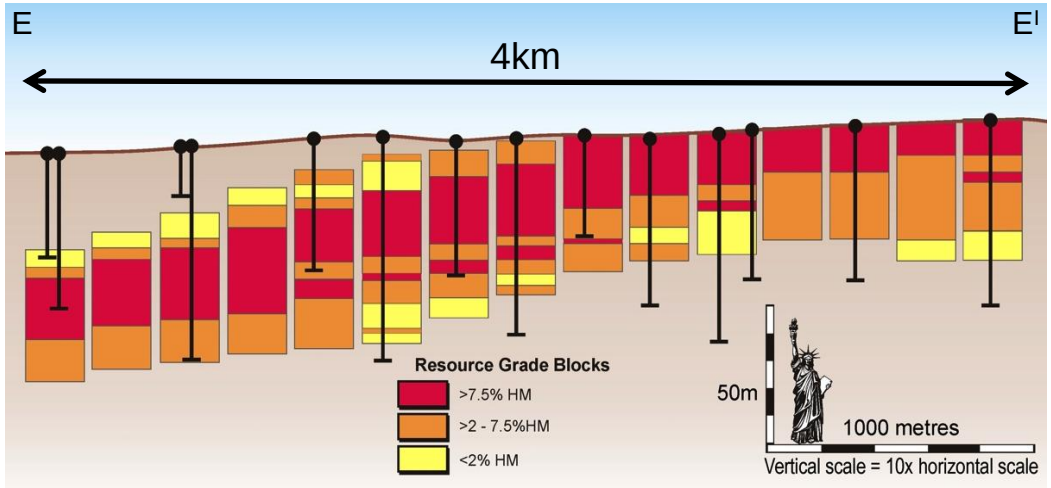
- **Maiden Mineral Resource**
  - **1.37Bt @ 6.1% HM** (Indicated & Inferred)[1]
  - **Heavy Mineral assemblage**:
    6.9% zircon
    1.6% rutile
    4.3% leucoxene
    29% ilmenite

[1] At 2% HM cut-off
Refer to Appendices 2 & 3

Large Scale

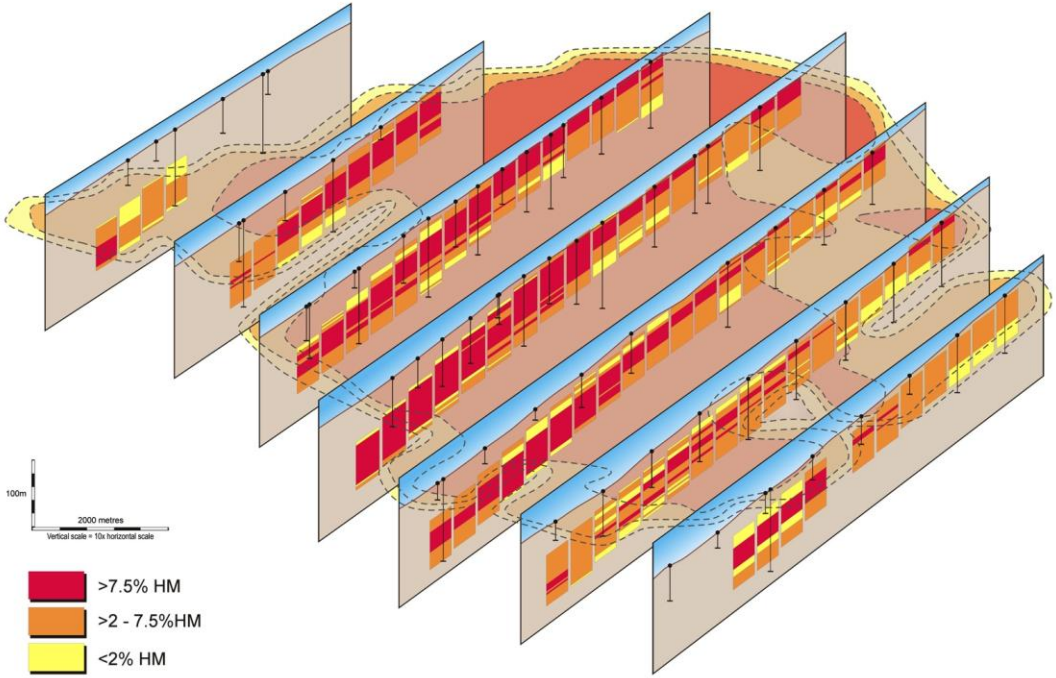
THUNDERBIRD MINERAL SANDS

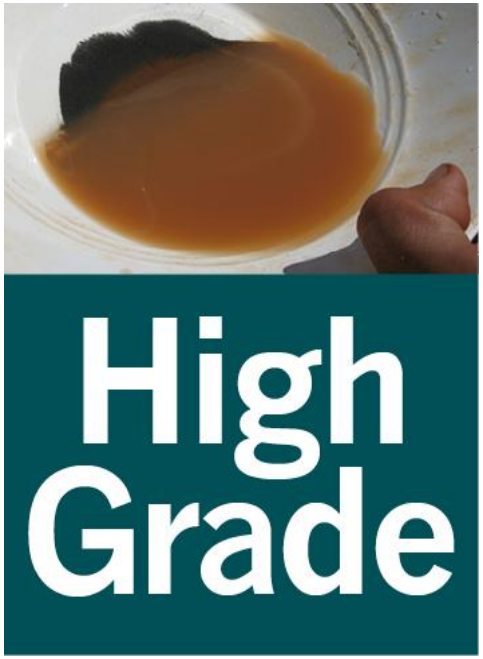
- **Favourable Geometry**
  - Area 4km x 5km
  - Thickness up to 52m, average 38m
  - Strong grade continuity
  - 40% of deposit has <3m overburden
  - Mostly above water table
  - Deposit open in most directions – exploration upside
  - Extensions to be targeted in current drill programme



High Grade

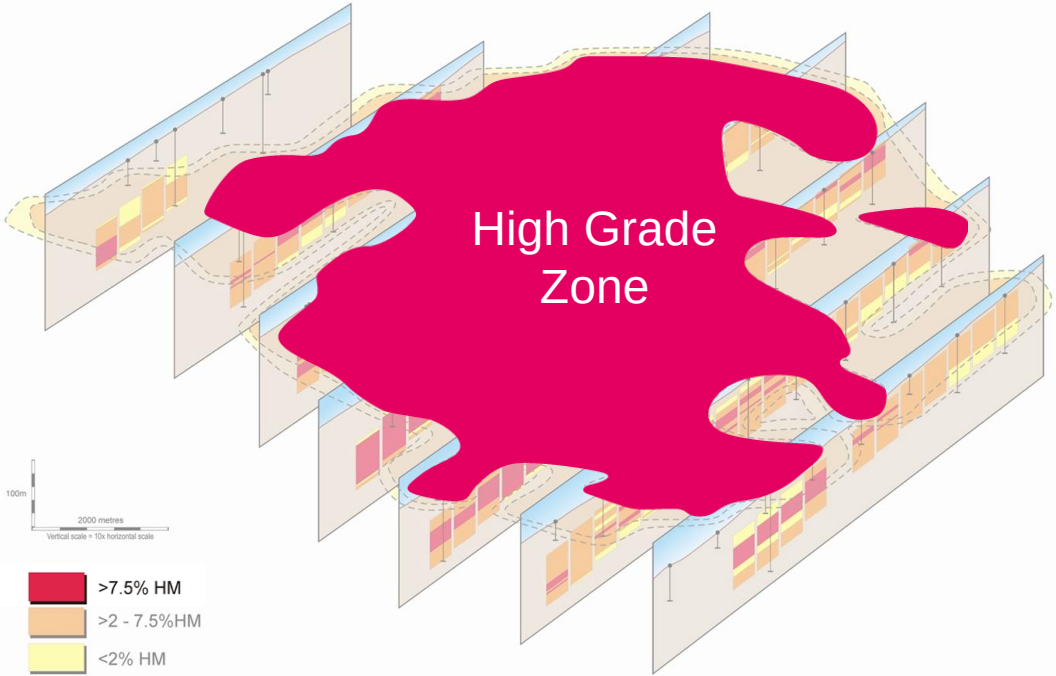
THUNDERBIRD MINERAL SANDS





High Grade

THUNDERBIRD MINERAL SANDS

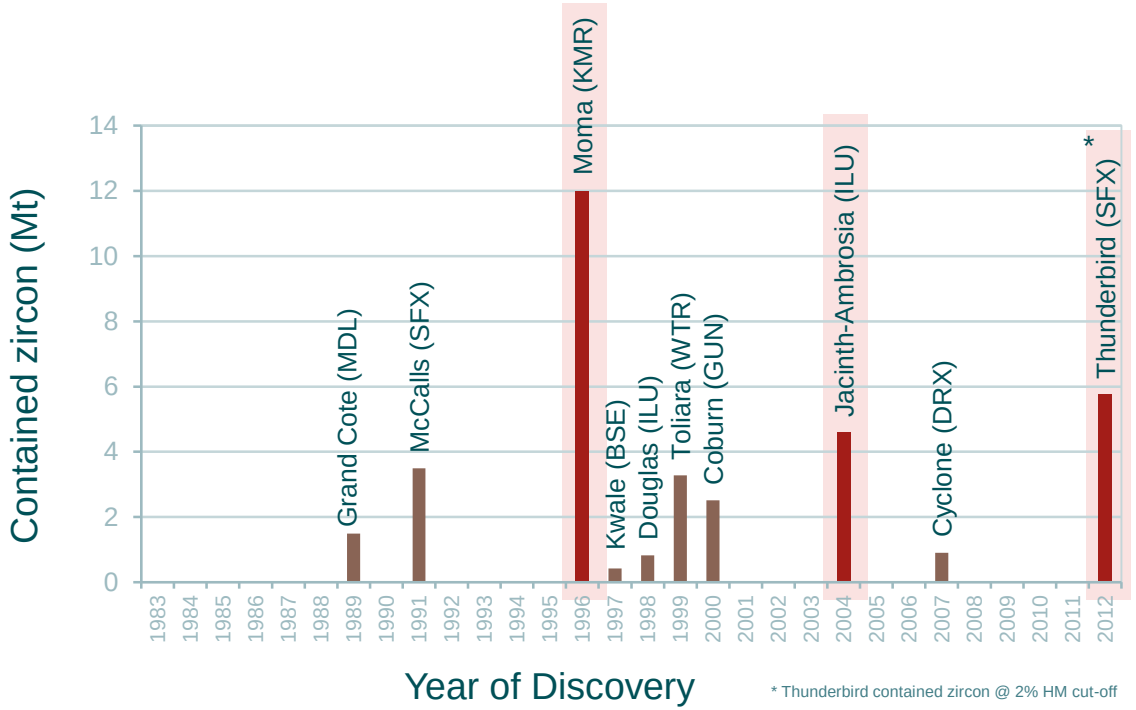


- High Grade Zone
  - **Coherent High Grade Zone** of 517Mt @ 10.1% HM, (Indicated & Inferred)[2]
  - **Containing:** 3.6Mt zircon, 0.8Mt rutile, 2.2Mt leucoxene and 15.2Mt ilmenite
  - **High in-situ VHM grades:** 0.7% zircon, 0.16% rutile, 0.44% leucoxene and 2.9% ilmenite
  - **Average 20m** thickness
  - **Focus of initial development studies**

[2] At 7.5% HM cut-off. Refer to Appendices 2 & 3

World Class

THUNDERBIRD MINERAL SANDS

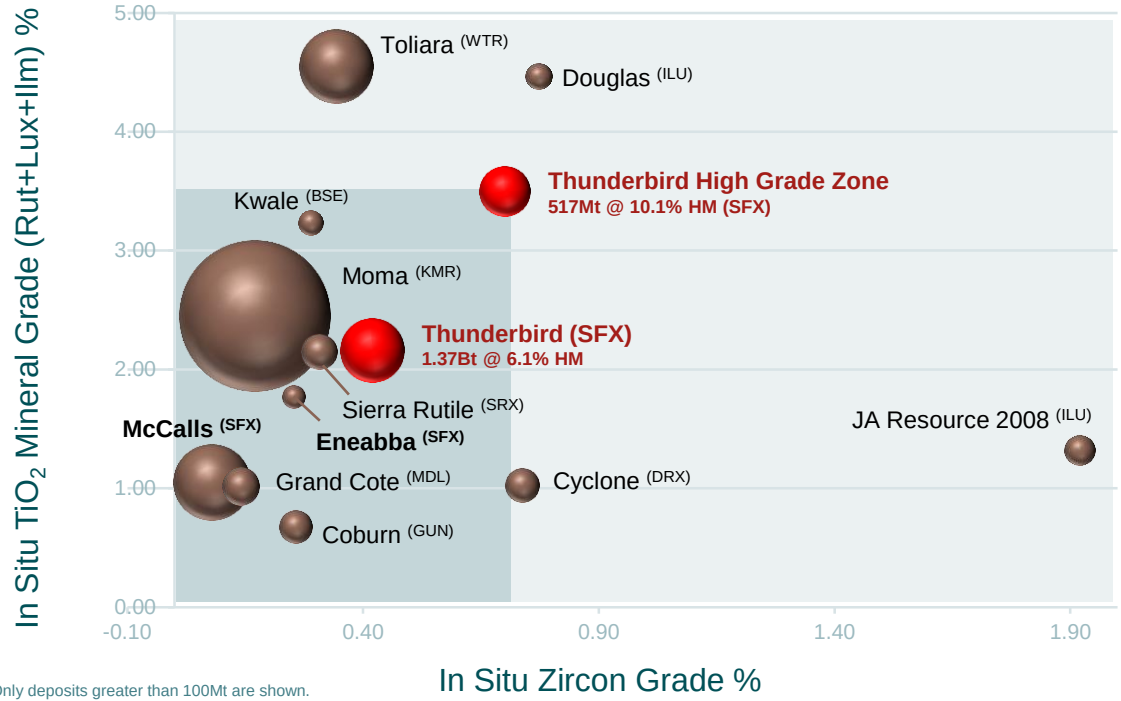


* Thunderbird contained zircon @ 2% HM cut-off

Projects of this scale and grade only come along once a decade

World Class

THUNDERBIRD MINERAL SANDS

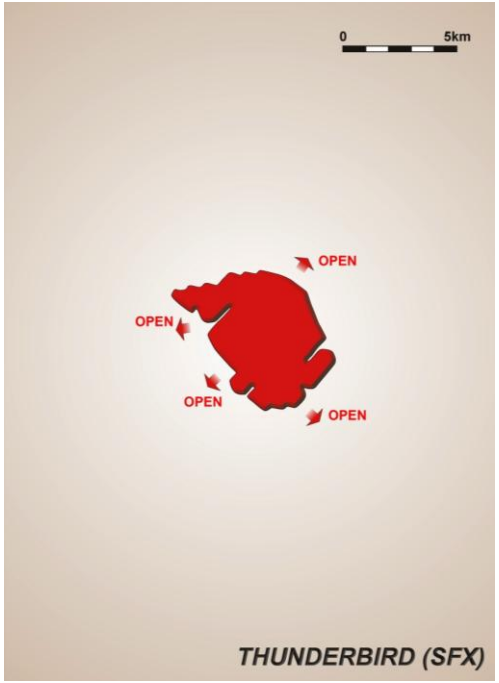


Only deposits greater than 100Mt are shown.
Bubble size proportional to contained VHM tonnes.
Data compiled by SFX from open file sources.
Rio Tinto's deposits excluded (unable to be sourced).

Amongst the world's largest and highest grade deposits

Eneabba (ILU) vs Thunderbird (SFX)

- **Eneabba**
  - 20-30Mt VHM[2] mined 1974-2013
  - Complex geometry
  - Multiple deposits

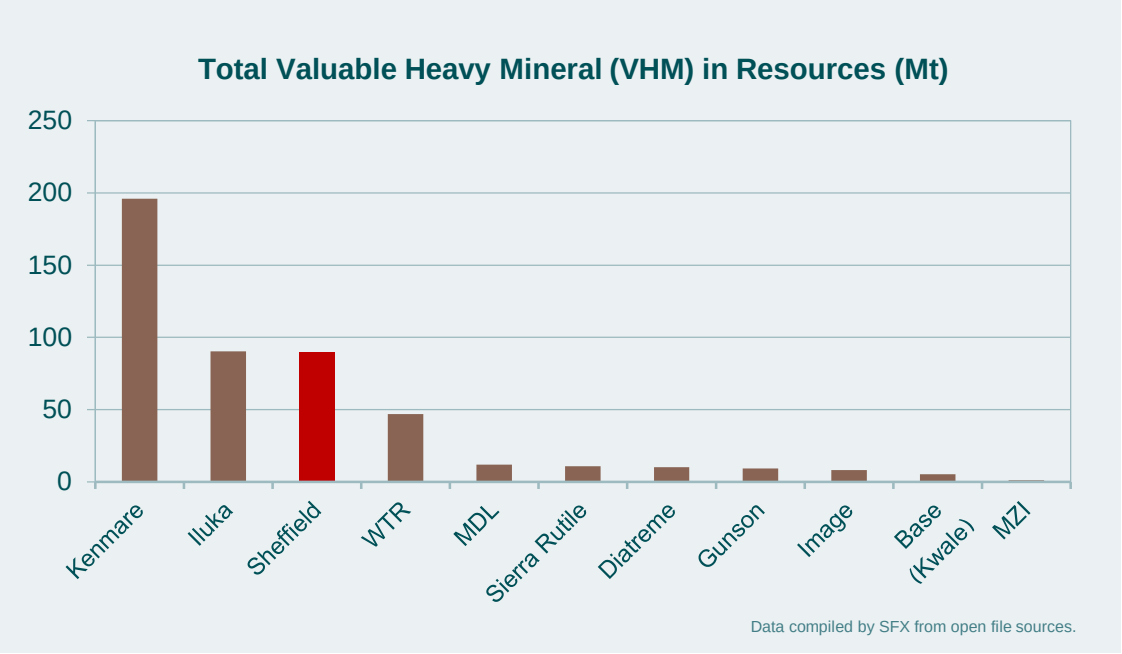


- **Thunderbird**
  - 35Mt VHM after 1 drilling programme
  - Simple geometry
  - More mineral, less area

[2] Shepherd, M.S. 1990 . Eneabba heavy mineral sand placers, in *Geology of the Mineral Deposits of Papua New Guinea* (AusIMM)

World Class

THUNDERBIRD MINERAL SANDS



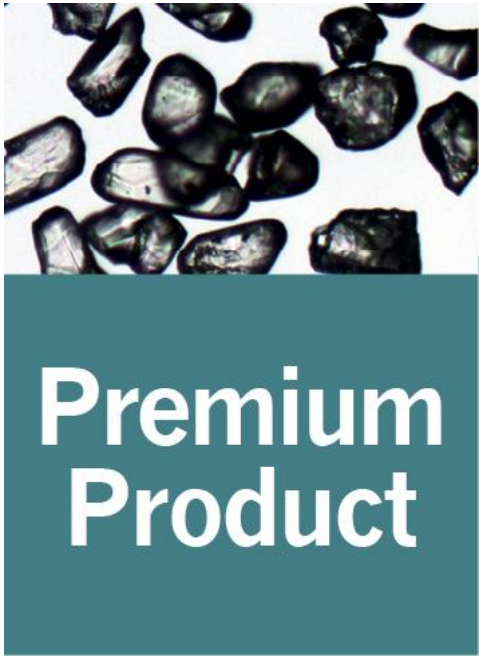
The Thunderbird discovery has boosted Sheffield's resource inventory to 90Mt VHM[1]

[1] Refer to Appendices 1 & 2

Premium Product

THUNDERBIRD MINERAL SANDS

- Highly Marketable Products as assessed by TZMI
  - Premium grade zircon suitable for ceramics (largest sector of zircon market)
  - Primary ilmenite suitable for sulphate pigment process or sulphate or chloride slag (broad customer base)
  - Primary ilmenite has low Cr_2O_3 and low alkalis – ideal blending feed
  - Secondary ilmenite, HiTi & rutile products suitable for welding rod market

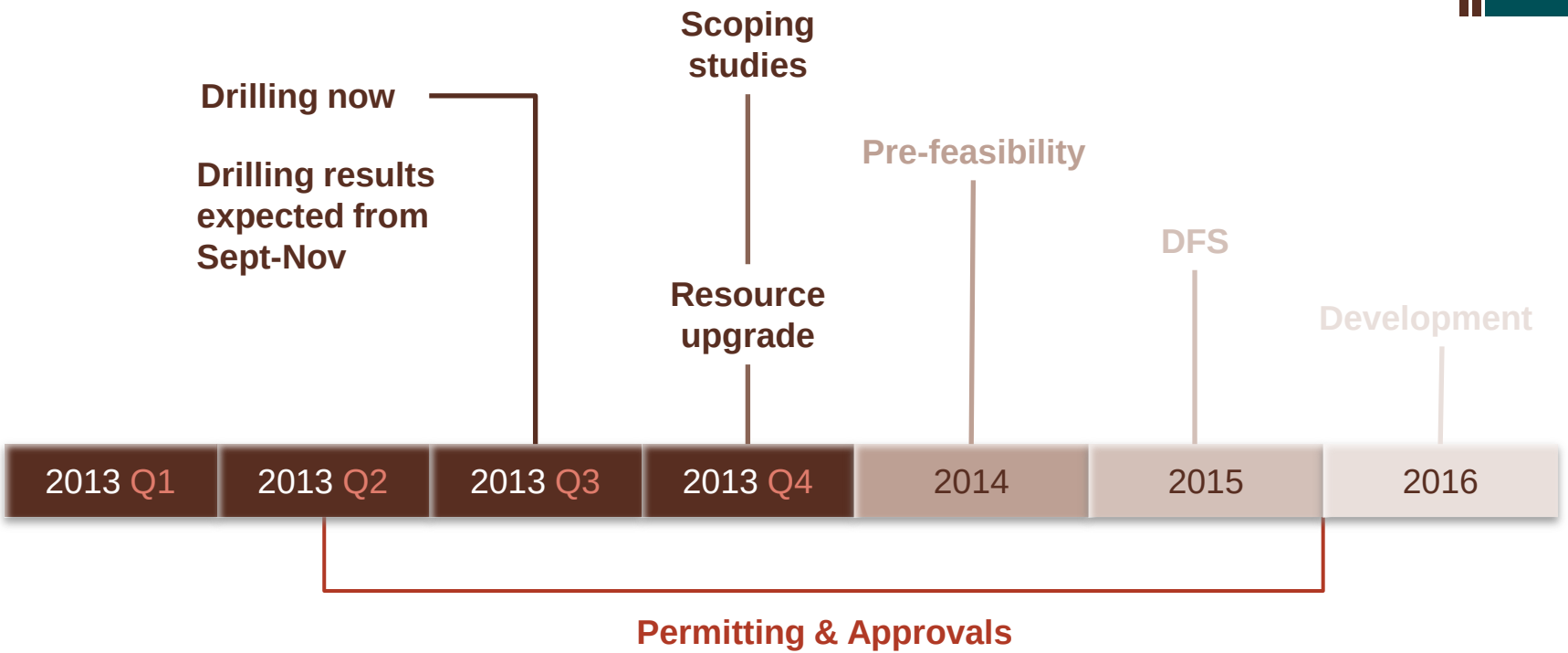


Quality Management

THUNDERBIRD MINERAL SANDS

	Board & Management	
	**Will Burbury**	Executive Chairman
	**Bruce McQuitty**	Managing Director
	**David Archer**	Technical Director
	**David Boyd**	Exploration Manager
	**Mark Teakle**	Project Development Manager

Timeline Next Steps



Large Scale

High Grade

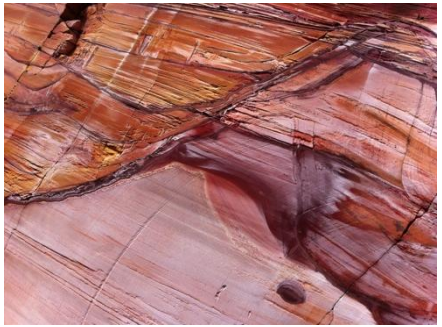
Premium Product

World Class

Conclusion

- Thunderbird
  - a World Class HMS deposit
- Once in a decade discovery
- High quality zircon & ilmenite products
- 100% owned by Sheffield, market cap $40m
- Financing/partnering/offtake optionality retained
- Drilling now

Thank you



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www.sheffieldresources.com.au

Sheffield Resources LIMITED

Appendices

Appendix 1 Location & Infrastructure

DAMPIER MINERAL SANDS PROJECT

- 30km north of sealed Broome-Derby Hwy
- 140km by road to either Derby or Broome ports
- Outside National Heritage Estate areas
- Abundant groundwater suitable for processing
- Close to Yulleroo Gas Field
- Close to Asian markets

Appendix 2 Resource Inventory

Sheffield's contained Valuable HM (VHM)* Resource Inventory at 30 Jan 2013

Deposit	Resource Category	Zircon ('000t)	Rutile ('000t)	Leuc. ('000t)	Ilmenite ('000t)	Total VHM ('000t)
Thunderbird	Indicated	1,483	344	924	6,256	9,007
Thunderbird	Inferred	4,270	990	2,661	18,007	25,927
Yandanooka	Measured	13	2	3	87	105
Yandanooka	Indicated	240	81	83	1,439	1,843
Yandanooka	Inferred	4	1.3	2	23	29
Durack	Indicated	144	29	52	703	928
Durack	Inferred	26	4.6	13	121	164
Ellengail	Inferred	92	90	20	658	860
West Mine North	Measured	18	33	42	200	293
West Mine North	Indicated	71	87	46	506	709
McCalls	Inferred	3,491	1,063	2,576	42,911	50,041
Total	Measured	31	35	45	287	398
Total	Indicated	1,938	540	1,104	8,904	12,487
Total	Inferred	7,882	2,149	5,271	61,718	77,021
Total	**All**	**9,851**	**2,725**	**6,421**	**70,910**	**89,906**

The contained VHM tonnages in the above table are derived from Mineral Resource Estimates for the Yandanooka, Ellengail , West Mine North, McCalls, Durack deposits (estimated using a 0.9% HM cut-off) and the Thunderbird deposit (estimated using a 2% HM cut-off) . These Mineral Resources have previously been fully reported in ASX releases by Sheffield on 25 October 2011, 7 November 2011, 20 February 2012, 28 August 2012, 18 December 2012 and 30 January 2013. Appendix 2 summarises the estimated tonnes and grades for these deposits.

* Valuable Heavy Minerals are classified as zircon, rutile, leucoxene and ilmenite.

Appendix 3 HMS Mineral Resource[1] Inventory 30 Jan 2013

Project	Deposit	Resource Category	Cut-off (% HM)	Material (Mt)*	Bulk Density	HM %	Slimes %	Osize %	In-situ HM (Mt)*	Zircon %	Rutile %	Leuc. %	Ilmenite %
DAMPIER	Thunderbird	Indicated	2.0	299	2.1	7.2	19	14	21.5	6.9	1.6	4.3	29
	Thunderbird	Inferred	2.0	1,075	2.1	5.8	17	16	61.9	6.9	1.6	4.3	29
	Total Dampier	**All**	**2.0**	**1,374**	**2.1**	**6.1**	**17**	**15**	**83.4**	**6.9**	**1.6**	**4.3**	**29**
ENEABBA	Yandanooka	Measured	0.9	2.9	2.0	4.1	15	14	0.12	10.6	1.9	2.2	72
	Yandanooka	Indicated	0.9	90.1	2.0	2.3	16	15	2.09	11.5	3.9	3.9	69
	Yandanooka	Inferred	0.9	2.8	2.0	1.2	18	21	0.03	11.2	3.9	4.6	68
	Yandanooka	Total	0.9	95.9	2.0	2.3	16	15	2.24	11.4	3.8	3.9	69
	Durack	Indicated	0.9	50.3	2.0	2.0	15	21	1.02	14	2.8	5.1	69
	Durack	Inferred	0.9	15	1.9	1.2	14	17	0.18	14	2.5	7.2	66
	Durack	Total	0.9	65.3	2.0	1.8	15	20	1.20	14	2.8	5.6	68
	Ellengail	Inferred	0.9	46.45	2.0	2.2	15.6	2.1	1.04	8.9	8.7	1.9	63.5
	Ellengail	Total	0.9	46.45	2.0	2.2	15.6	2.1	1.04	8.9	8.7	1.9	63.5
	West Mine North	Measured	0.9	6.47	2.0	5.6	14.8	1.2	0.36	4.9	9.1	11.6	54.9
	West Mine North	Indicated	0.9	36.11	1.9	2.3	13.1	2.8	0.84	8.4	10.3	5.4	60.0
	West Mine North	Total	0.9	42.58	1.9	2.8	13.4	2.5	1.21	7.9	10.1	6.4	59.2
	Total	Measured	0.9	9.4	2.0	5.2	15	5	0.48	6.7	6.8	8.7	60
	Total	Indicated	0.9	176.6	2.0	2.2	15	14	3.96	11.6	4.9	4.6	67
	Total	Inferred	0.9	64.2	2.0	1.9	15	6	1.25	10.2	7.1	3.3	64
	Total Eneabba	**All**	**0.9**	**250**	**2.0**	**2.3**	**15**	**12**	**5.69**	**11.1**	**5.5**	**4.4**	**66**
MCCALLS	McCalls	Inferred	0.9	4,431	2.3	1.2	26.5	1.4	53	6.6	2.0	4.9	80.8
	Total McCalls	**All**	**0.9**	**4,431**	**2.3**	**1.2**	**26.5**	**1.4**	**53**	**6.6**	**2.0**	**4.9**	**80.8**

*Tonnes have been rounded to reflect the relative uncertainty of the estimate. [1] This estimate is classified and reported in a manner compliant with the JORC code and guidelines (JORC, 2004). [2] The Mineral Assemblage is represented as the percentage of the Heavy Mineral (HM) component of the deposit, as determined by QEMSCAN. TiO_2 minerals defined according to the following ranges: Dampier: Rutile >95% TiO_2; Leucoxene 70-95% TiO_2; Ilmenite 40-70% TiO_2, Eneabba & McCalls: Rutile >95% TiO_2; Leucoxene 85-95% TiO_2; Ilmenite <55-85% TiO_2. West Mine North and McCalls deposits are reported below 35% slimes cut-off.

Appendix 4 Thunderbird Product Specifications

Sheffield Resources LIMITED

Primary Zircon Specifications

ZrO_2 %	Fe_2O_3 %	TiO_2%	Al_2O_3%	P_2O_5%
66.2	0.05	0.09	0.10	0.14

Primary Ilmenite Specifications

TiO_2 %	FeO %	Fe_2O_3 %	SiO_2 %	Al_2O_3%	Cr_2O_3 %	ZrO_2 %
50.1	8.0	36.4	1.6	0.3	0.05	0.00