

SHEFFIELD RESOURCES LTD ASX:SFX

DELIVERING ON RESOURCES GROWTH



**Investor Presentation
8 November 2011**

COMPETENT PERSONS & FORWARD LOOKING STATEMENTS

COMPETENT PERSONS' STATEMENT – EXPLORATION RESULTS

The information in this presentation that relates to exploration results has been compiled by Bruce McQuitty and David Archer. Each of Mr McQuitty and Mr Archer has consented to the inclusion of this information in this Section of this Web Site in the form and context in which it is included. Mr McQuitty and Mr Archer are geologists with over 20 years experience. Both Mr McQuitty and Mr Archer is a Member of the Australasian Institute of Geoscientists and has the appropriate relevant qualifications, experience, competence and independence to be considered as an “Expert” and “Competent Person” as defined in the 2004 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (“JORC Code”)’.

COMPETENT PERSONS' STATEMENT – RESOURCE ESTIMATES

The information in this presentation that relates to resource estimation is based on information compiled under the guidance of John Vann. Mr Vann is a Principal of Quantitative Group and acts as a consultant to the Company. Mr Vann is a Fellow of the Australasian Institute of Mining and Metallurgy and a Fellow of the Australasian Institute of Geoscientists 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 Vann consents to the inclusion in the report 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 consultant to 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 the report 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.

CORPORATE SNAPSHOT

Cash Position \$3.3m (at 30/9/2011)

Capital Structure

Market Cap \$15.8m (undiluted, at 27cps)
 Shares 58.7m
 Options 27.2m (20c, 30/06/13)
 4.6m (30c, 30/11/13 & 13/12/15)
 1.3m (44c, 6/9/14, 20/03/16, 30/6/16)

Cash Backing ~ 6cps

Major Shareholders

Directors 26%
 Cappig Finance 3%
 Top 20 45%

Board & Management

Will Burbury	Chairman
Bruce McQuitty	Managing Director
David Archer	Technical Director
David Boyd	Exploration Manager



SUMMARY

HEAVY MINERAL SANDS (HMS)	<ul style="list-style-type: none"> • Resource inventory totals 4.1Mt HM¹ • Exploration Target² of 1.5Bt-2.5Bt @ 1.1-1.3% HM (McCalls) • Exploration Target² of 450-850Mt @ 5-10% HM (Dampier) • Scoping work commenced, drilling continues
IRON ORE	<ul style="list-style-type: none"> • East Pilbara focus for exploration and consolidation • Exploration Target² of 20-60Mt @ 58-64% Fe (Three Pools)
TALC	<ul style="list-style-type: none"> • High purity talc confirmed at 6 prospects • “Dig & Deliver” opportunity

¹Refer to Sheffield’s Mineral Resources Tabulation in Appendix 1. Previous releases by Sheffield on 16/8/2011, 25/10/2011 and 7/11/2011 fully report the Mineral Resource Estimates for the Yandanooka, Ellengail and West Mine North deposits.

²Sheffield Resources has not yet reported Mineral Resources at McCalls, Dampier and Three Pools and any discussion in relation to targets and Mineral Resources is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. For further details refer to ASX releases of 17 January 2011, 27 July 2011 and 8 November 2011.

NEAR-TERM STRATEGY

HEAVY MINERAL SANDS (HMS)	<ul style="list-style-type: none">• Discover and develop a series of mineral sand deposits capable of supporting 100,000-150,000tpa heavy mineral concentrate production• Discover a Tier 1 high TiO_2 ilmenite deposit, e.g. McCalls• Discover a Tier 1 zircon deposit, e.g. Dampier
IRON ORE	<ul style="list-style-type: none">• Discover and consolidate 200 Mt of direct shipping iron ore in the Eastern Pilbara
TALC	<ul style="list-style-type: none">• Discover and develop a deposit of premium talc capable of supporting a 100,000tpa mining operation

DELIVERING ON THE STRATEGY

Sheffield's contained Valuable HM (VHM)* Resource inventory (0.9% HM cutoff)

Deposit	Resource Category	Zircon ('000t)	Rutile ('000t)	Leuc. ('000t)	Ilmenite ('000t)	Total VHM ('000t)
Yandanooka	Indicated	201	117	168	1,072	1,558
Yandanooka	Inferred	12	8.5	15	73	108
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
Total	Measured	18	33	42	200	293
Total	Indicated	272	204	214	1,577	2,268
Total	Inferred	104	99	35	730	968
Total	All	394	336	291	2,508	3,529

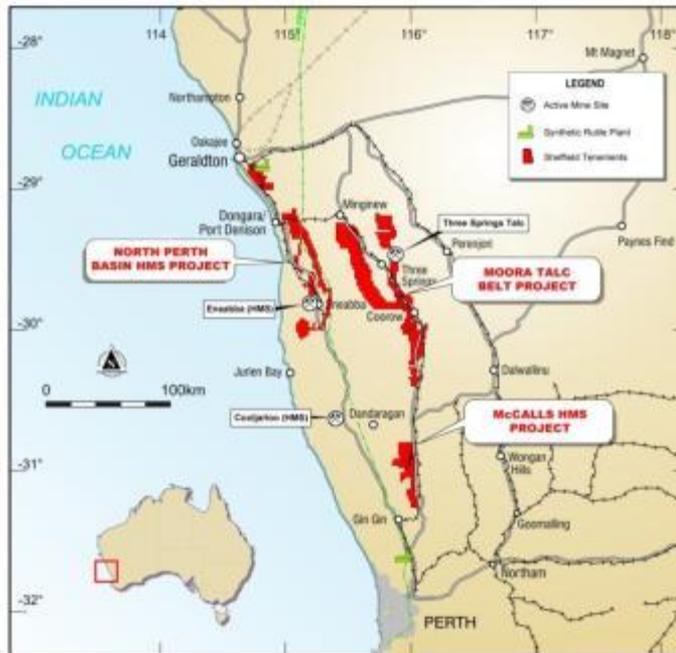
The contained HM tonnages in the above table are derived from Mineral Resource Estimates for the Yandanooka, Ellengail and West Mine North deposits, previously fully reported in ASX releases by Sheffield on 16 August 2011, 25 October 2011 and 7 November 2011. Appendix 1 summarises the estimated tonnes and grades for these deposits.

* Valuable Heavy Minerals are zircon, rutile, leucoxene and ilmenite. Non-valuable "trash" HM species include iron oxides, garnet, kyanite and staurolite. Monazite and Xenotime, which are potentially valuable as sources of Rare Earth Elements are also excluded from the VHM inventory.



PROJECT LOCATIONS

- Over 6,000km² of tenure in WA
- Large consolidated tenement holdings
- Focus on Mid West region due to infrastructure advantages

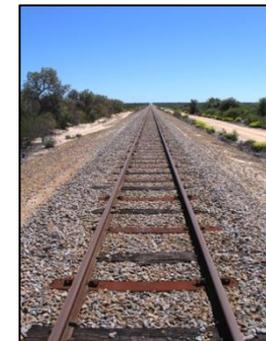




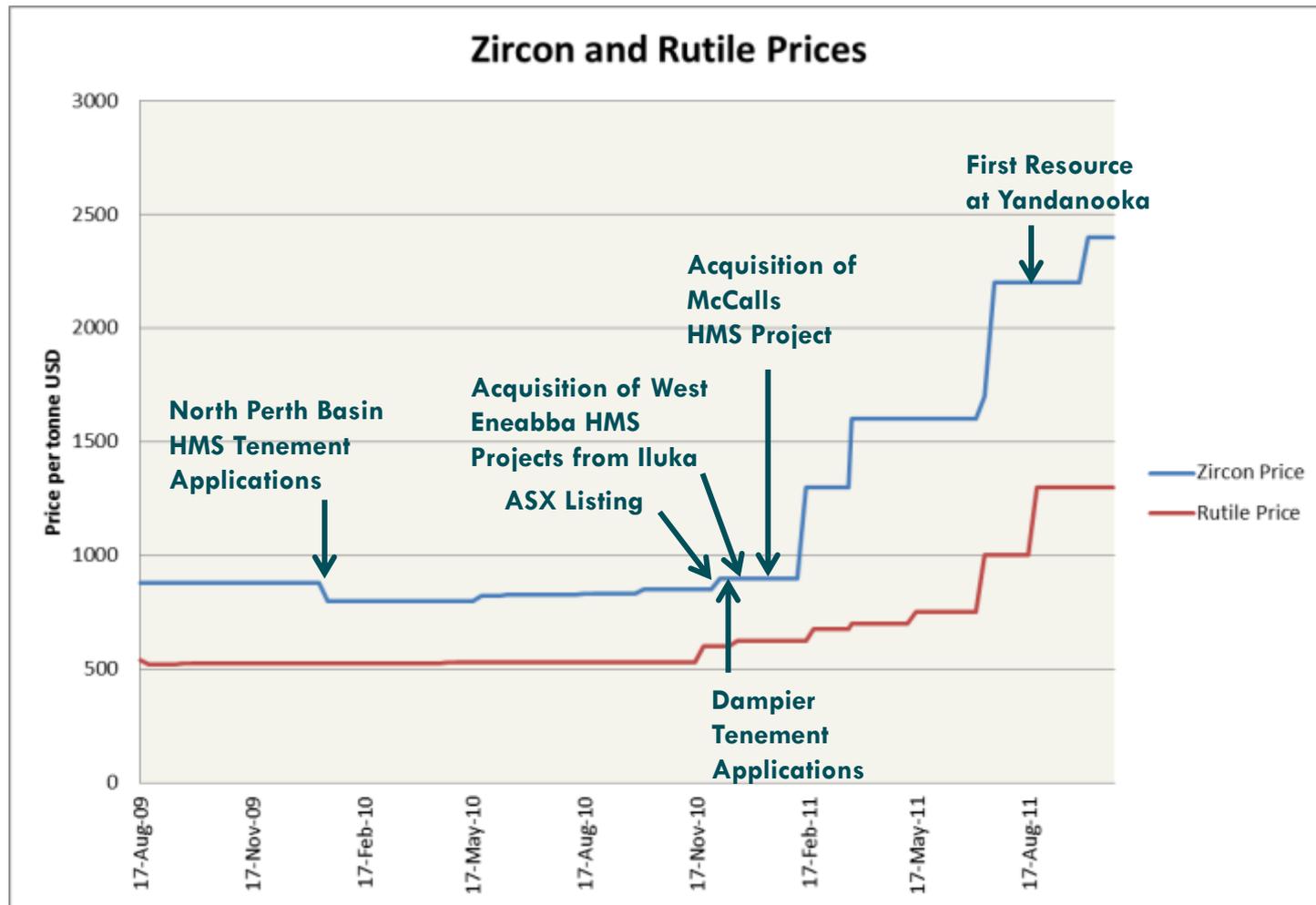
RIGHT PLACE...

Competitive Advantages of Mid West Region

- ❑ Mostly broadacre farmland
- ❑ Proximity to roads & rail
- ❑ “Open” ports
- ❑ Close to Asian markets
- ❑ Available energy sources
- ❑ Abundant groundwater
- ❑ Proximity to SR plants



...RIGHT TIME



(Pricing data compiled by Sheffield from various open file sources)

MINERAL SANDS USES & MARKETS

Two distinct product streams:

Zircon (\$2,400-\$2,600/t)

- Main use in the manufacture of ceramics and refractory linings
- Global market 1.4Mtpa
- Acute shortage of supply

Titanium Minerals

- Rutile: >95% TiO_2 (\$1,300-\$1,400/t)
- Leucoxene: 85-95% TiO_2 (current spot ~\$700/t)
- Altered ilmenite: 55-85% TiO_2 (~\$140-\$200/t)
- Ilmenite <55% TiO_2
- Main use in pigment production for paint, coatings, plastics, titanium metal
- Global market ~6Mtpa also experiencing shortage of supply



MINERAL SANDS PROJECT STATUS

Resources

Yandanooka

Ellengail

West Mine North

Resource Estimation Underway

McCalls

Assays Awaited

Drummond Crossing

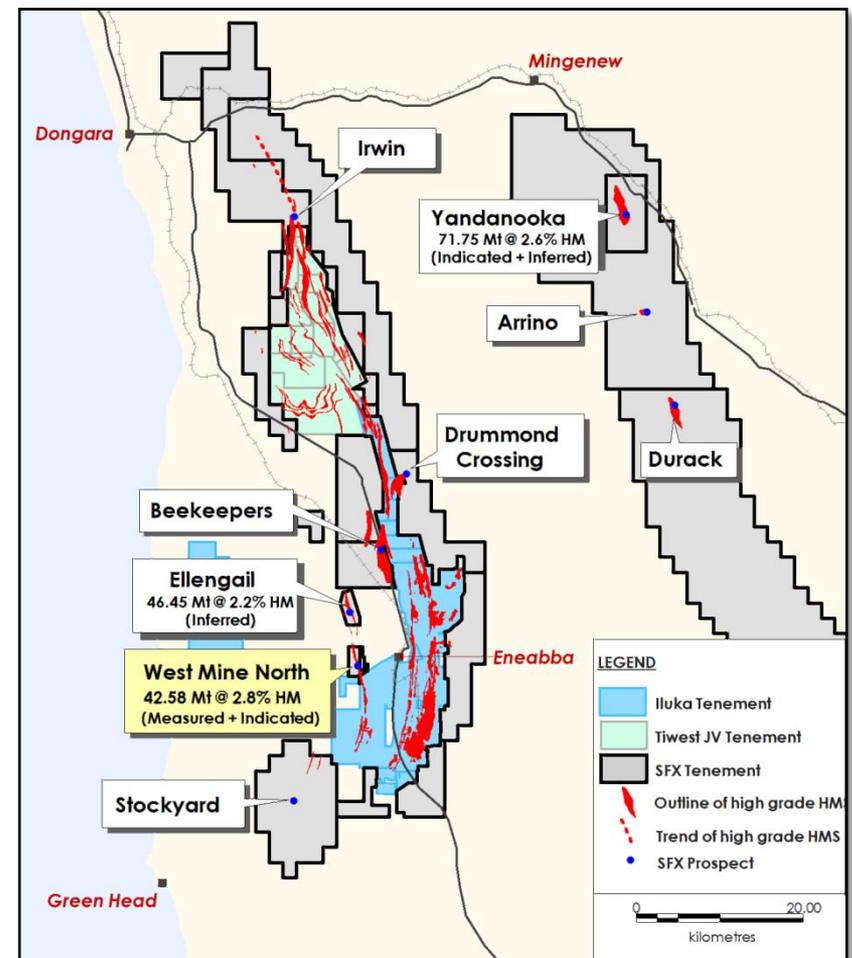
Next Drilling

Durack

Irwin

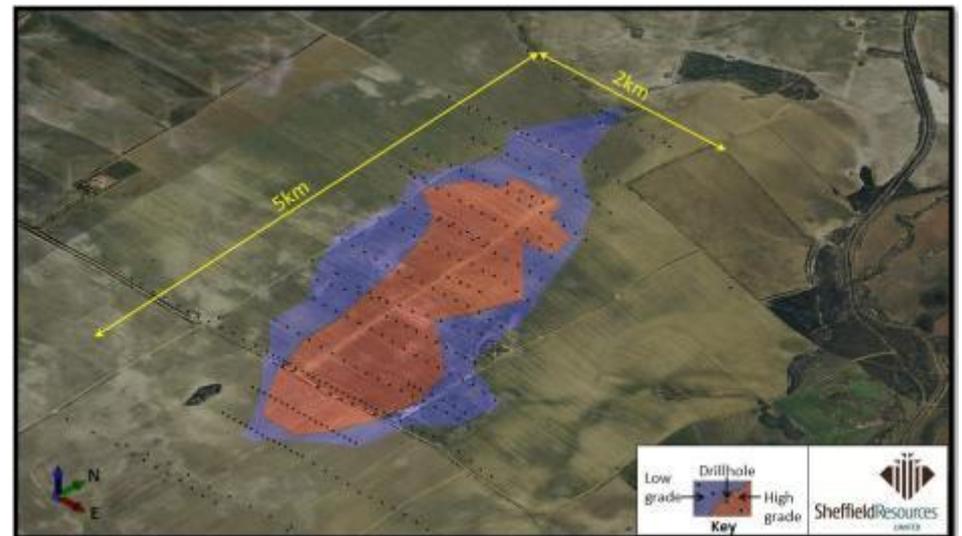
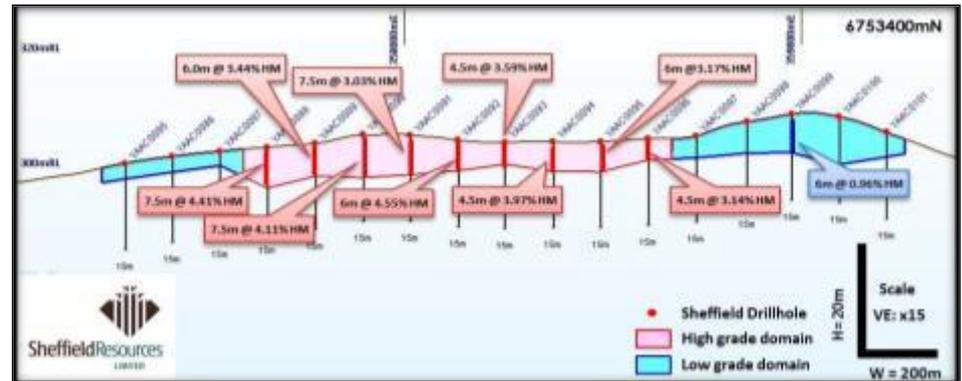
Stockyard

Dampier



YANDANOOKA

- Total resource of **71.75 million tonnes @ 2.6% HM¹** for 1.84Mt contained HM comprising:
 - 61Mt @ 2.8% HM (Indicated)
 - 10.75Mt @ 1.1% HM (Inferred)
- Includes High Grade core of **37.5Mt @ 3.8% HM** (Indicated)
- High value mineral assemblage: 11.5% zircon, 6.9% rutile, 10.2% leucoxene, 61.9% ilmenite
- At surface, above water table
- 140km by road or rail to Geraldton Port

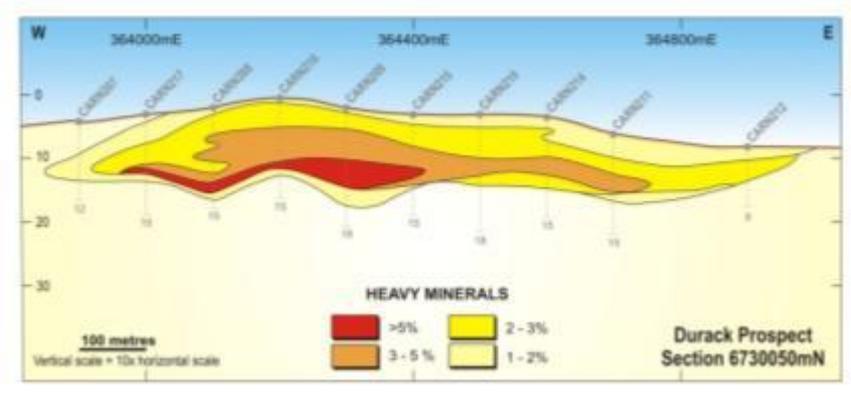
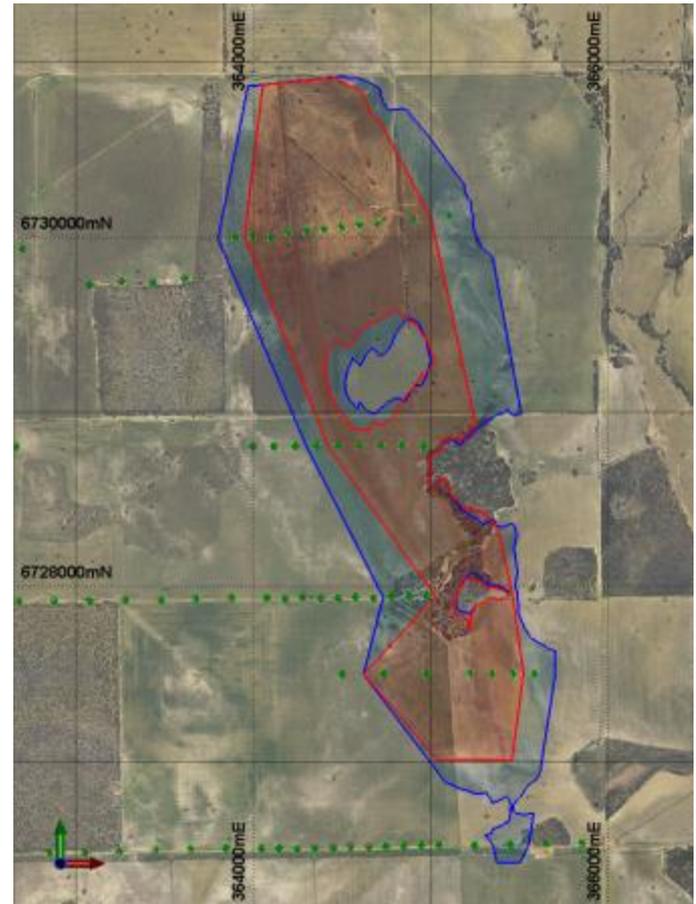


¹ Refer to Appendix 1 for Resource Tabulation and to ASX release dated 16 August 2011



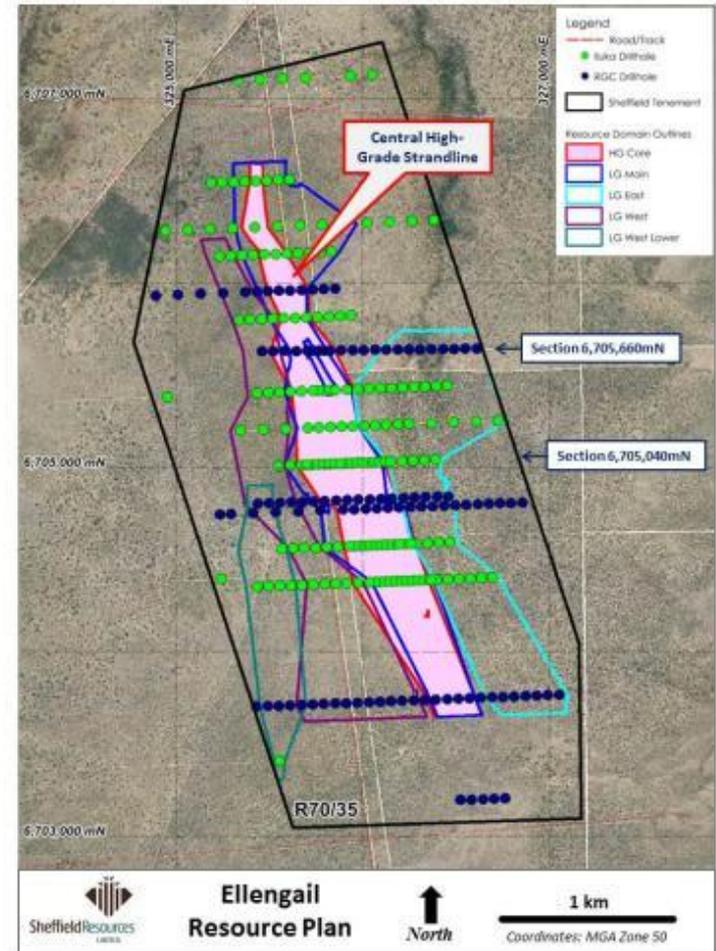
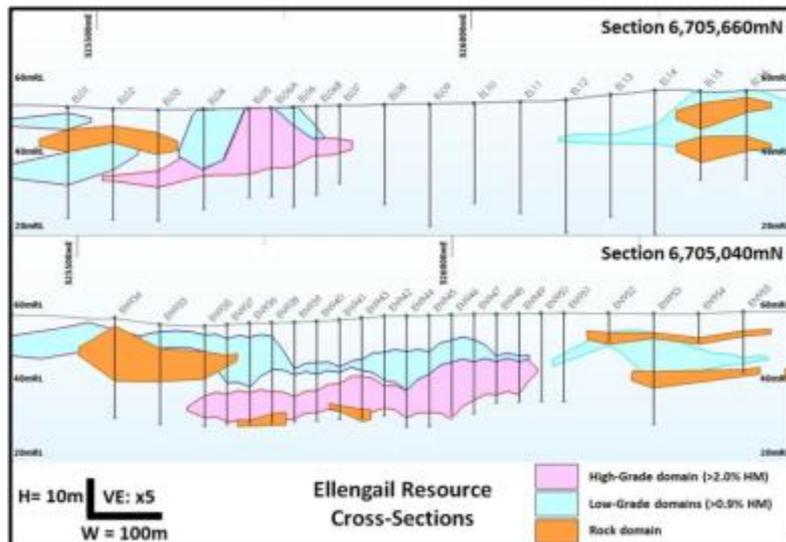
DURACK

- Similar dimensions to Yandanooka deposit
- 25km south of Yandanooka
- Limited prior drilling by Iluka
- Mineralised at or near surface
- Drilling planned Q1 2012



ELLENGAIL

- Inferred Resource^{1,2} of **46.45 million tonnes (Mt) @ 2.2% HM**, containing 1.04Mt HM
- High value assemblage: 8.9% zircon, 8.7% rutile, 63.5% ilmenite and 1.9% leucoxene
- 3km north of West Mine North



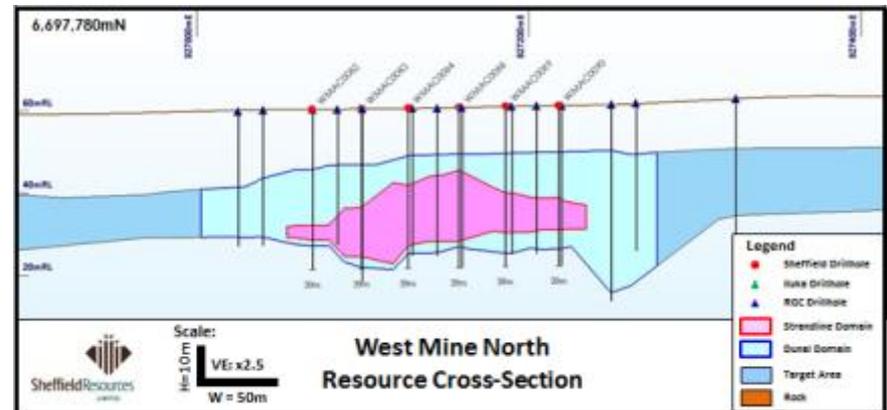
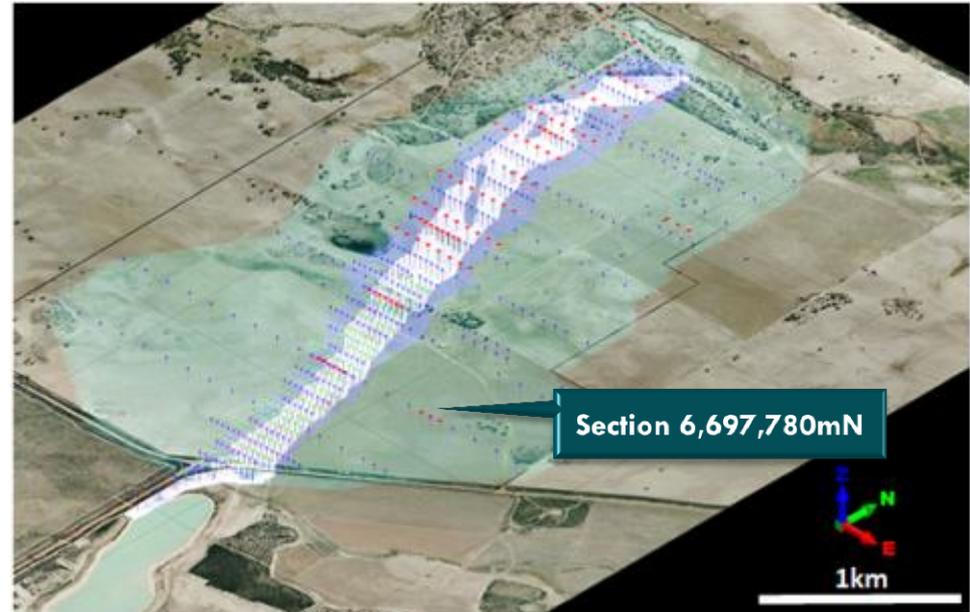
¹Refer to Appendix 1 for Resource Tabulation and ASX release dated 25 October 2011 for full details

²Iluka Resources Ltd (ASX:ILU) retain a 1.5% royalty



WEST MINE NORTH

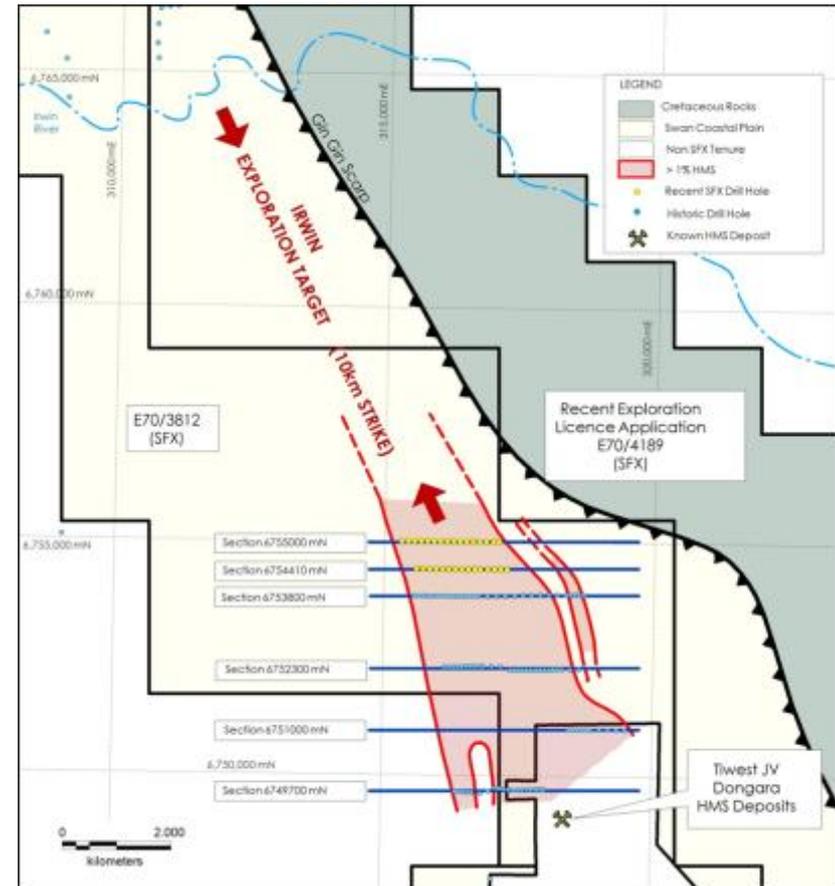
- Total Resource^{1,2} of **42.58Mt @ 2.8% HM** for **1.2Mt contained HM** comprising:
 - 6.47Mt @ 5.6% HM (Measured)
 - 36.11Mt @ 2.3% HM (Indicated)
- Includes high-grade core of 10.09Mt @ 7.7% HM (Measured and Indicated)
- High value mineral assemblage: 7.9% zircon, 10.1% rutile, 59.2% ilmenite and 6.4% leucoxene
- 3.5km extension of Eneabba West deposit, dredge mined by Iluka/RGC in 1990's
- Scoping work has commenced



¹Refer to ASX release dated 7 November 2011 for full details

²Iluka Resources Ltd (ASX:ILU) retain a 1.5% royalty

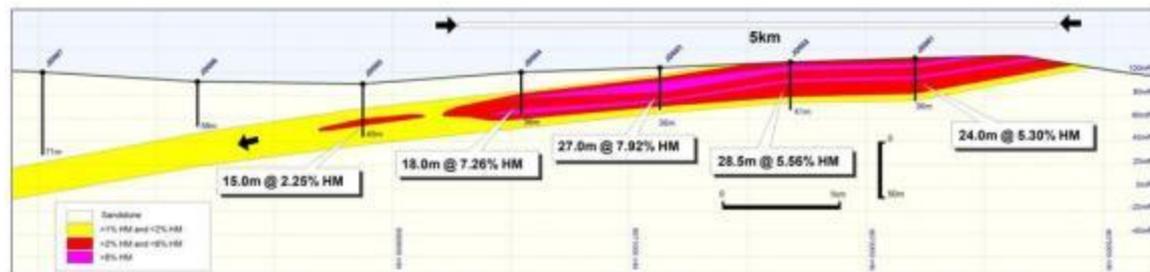
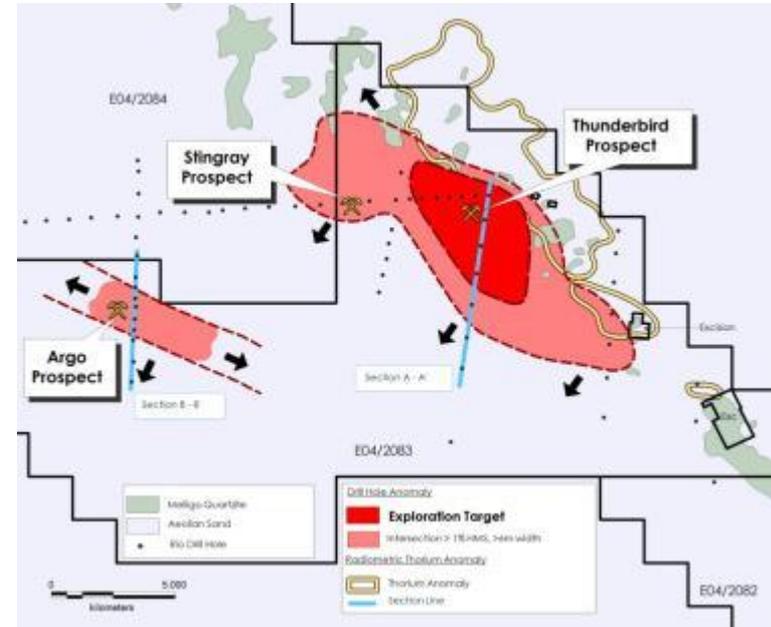
- Located 80km south of Geraldton
- Sheffield's initial drilling confirmed 5km long x 2-3km wide, av. 10m thick zone of mineralisation >1% HM¹
- Open for another 10km along strike
- Mineralisation is dunal style – low slimes
- Awaiting mineral assemblage results
- Further drilling 1H 2011



¹Refer to ASX release of 13 September 2011 for further details.

DAMPIER

- 60km west of Derby port
- Ex Rio Tinto project, dropped during GFC
- Exploration Target¹ of **450-850Mt @ 5.0-10.0% HM** (Thunderbird prospect)
- Potentially open along strike, supported by thorium anomaly
- Argo prospect thinner and deeper but open in all directions
- Drilling planned for mid-2012



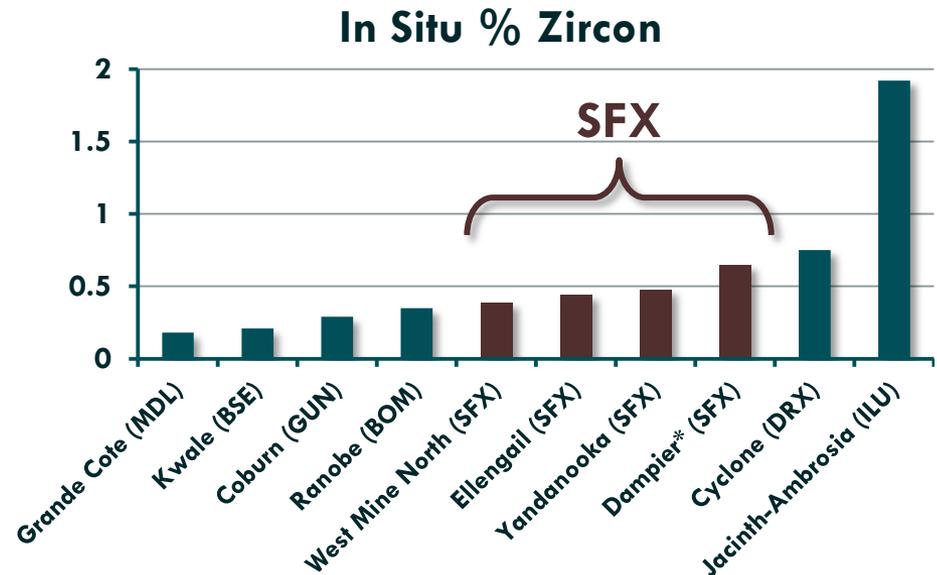
²Sheffield Resources has not yet reported Mineral Resources for the Dampier project and any discussion in relation to targets and Mineral Resources is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. For further details refer to ASX release of 8 November 2011.

DAMPIER

- High average in situ zircon content of 0.63% from RIO drilling*
- Mineralisation hosted by deeply weathered Cretaceous sediments
- Fine grain size of mineralisation and iron cementation may present some recovery issues
- However high zircon content should offset recovery losses



Cleaner stage gravity separation of HM on bulk sample from the Argo prospect. Source: Combined Annual Report (C96/2003 Mt Jowlaenga) for the Period 21 July 2007 to 20 July 2008 Rio Tinto Exploration Pty Ltd.



*The Dampier in situ zircon content is derived by multiplying the weighted average HM content (7.9%) of 8 RIO drill hole intersections by the average zircon content (8%) of the mineral assemblage. RIO's bulk sample metallurgical testwork indicates the zircon content of the HM assemblage could be higher at 11.7%. Refer to ASX release of 7 September 2001 for further details.

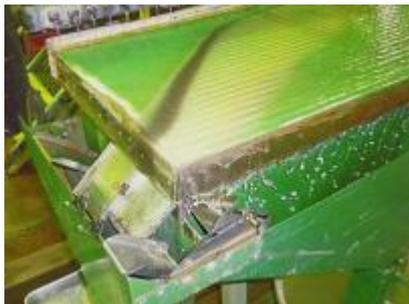
The West Mine North in situ zircon content relates to the Measured & Indicated Resource for the high grade strand of 10.09Mt @ 7.7% HM for 779,000t of contained HM (ASX release 7 November 2011).

The Ellengail in situ zircon content relates to the Inferred Resource for the high grade core of 11.25Mt @ 5.0% HM for 560,000t contained HM (ASX release 25 October 2011).

The Yandanooka in situ zircon content relates to the Indicated Resource for the high grade core of 37.5Mt @ 3.8% HM for 1.41Mt of contained HM (ASX release 16 August 2011).

HIGH TiO₂ ILMENITE

- Preliminary metallurgical testwork shows ilmenite from Yandanooka, West Mine North and McCalls contains 60-66% TiO₂
- Higher value ilmenite, potentially suitable for chloride route / synthetic rutile processing
- Sources of chloride ilmenite are relatively scarce globally
- Current spot prices for chloride ilmenite are ~US\$200/t



Wet table testwork on bulk samples from left: Yandanooka, West Mine North and McCalls deposits

MINERAL SANDS EXPLORERS & MINERS

Sheffield amongst leaders of the next wave of mineral sands players

Active Explorers/PFS	Mkt Cap
Sheffield (SFX)	\$16m
Image (IMA)	\$30m
Diatreme (DRX)	\$27m
Bondi (BOM)	\$10m
Forge (FRG)	\$9m
Metallica (MLM)(diversified)	\$46m
Astro (ARO)	\$5m
DFS/Development	Mkt Cap
Astron (ATR) (diversified)	\$180m
Base (BSE)	\$216m
Mineral Deposits (MDL)	\$541m
Gunson (GUN)	\$29m

Small-Medium Producers	Mkt Cap
Matilda Zircon (MZI)	\$14m
Mineral Commodities (MRC)	\$23m
Doral (private)	
Sierra Rutile	GBP225m
Large Producers	
Iluka (ILU)	\$7.15b
RBM (RIO 37%, BHP 37%, 26% BEE)	
QIT, QMM (100% RIO)	
TiWest/Exxaro/Tronox	
Bemax (private)	
Kenmare	GBP 967m
Sibelco (private)	

MINERAL SANDS EXPLORERS & MINERS

Peer Comparison – Established Australian HMS Explorers

Company	Mkt Cap	Total Resources Contained HM (Mt)	Exploration targets ²
Sheffield (SFX)	\$16m	4.1 ¹	McCalls: 1.5-2.5Bt @ 1.1-1.3% HM Dampier: 450-850Mt @ 5-10% HM
Image (IMA)	\$30m	9.5 ³	
Diatreme (DRX)	\$27m	4.6 ⁴	
Gunson (GUN)	\$29m	12.3 ⁵	

¹Refer to Sheffield's Resources Tabulation in Appendix 1. Previous releases by Sheffield on 16/8/2011, 25/10/2011 and 7/11/2011 fully report the Mineral Resource Estimates for the Yandanooka, Ellengail and West Mine North deposits.

²Sheffield Resources has not yet reported Mineral Resources at McCalls and Dampier and any discussion in relation to targets and Mineral Resources is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. For further details refer to ASX releases of 17 January 2011 and 8 November 2011.

³Source: Image Resources ASX release 22 July 2011, includes North Perth Basin & Cyclone South.

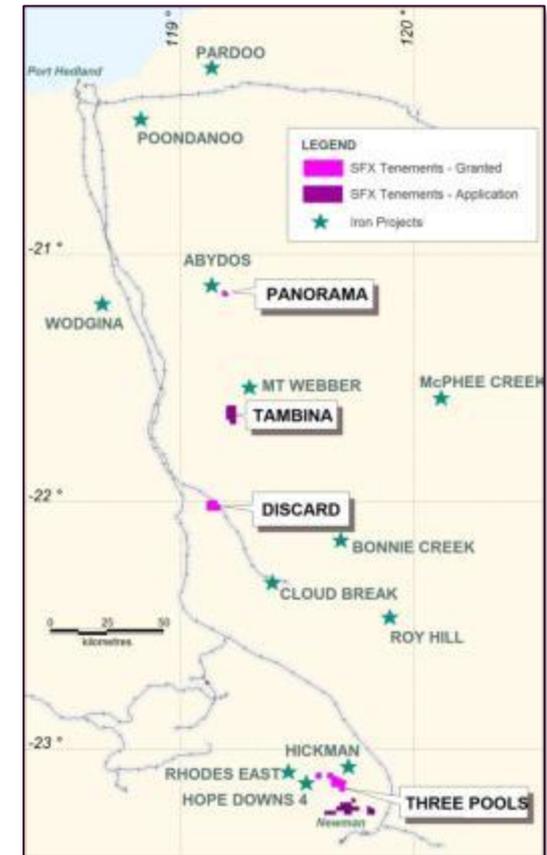
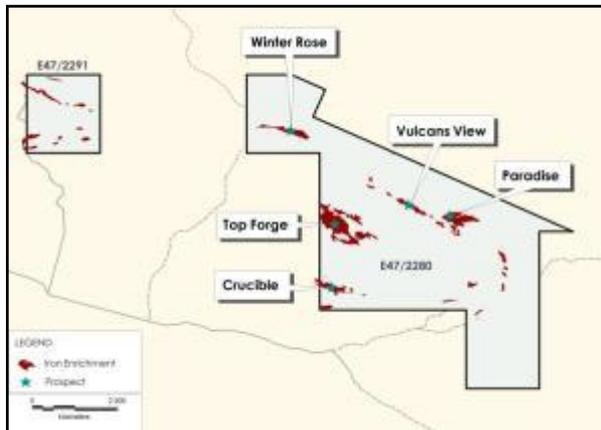
⁴Source: Diatreme Resources ASX release 21 June 2011, includes Zephyr deposit.

⁵Source: Gunson Resources presentation, ASX release 10 October 2011.



PILBARA IRON PROJECT

- East Pilbara focus
- Significant hematite mineralisation discovered at Three Pools and Panorama during 1H 2011¹
- Exploration Target² of **20-60Mt @ 58-64% Fe** outlined at Three Pools
- 1st pass drilling completed, assays awaited



¹Refer to ASX release of 27 July for further details.

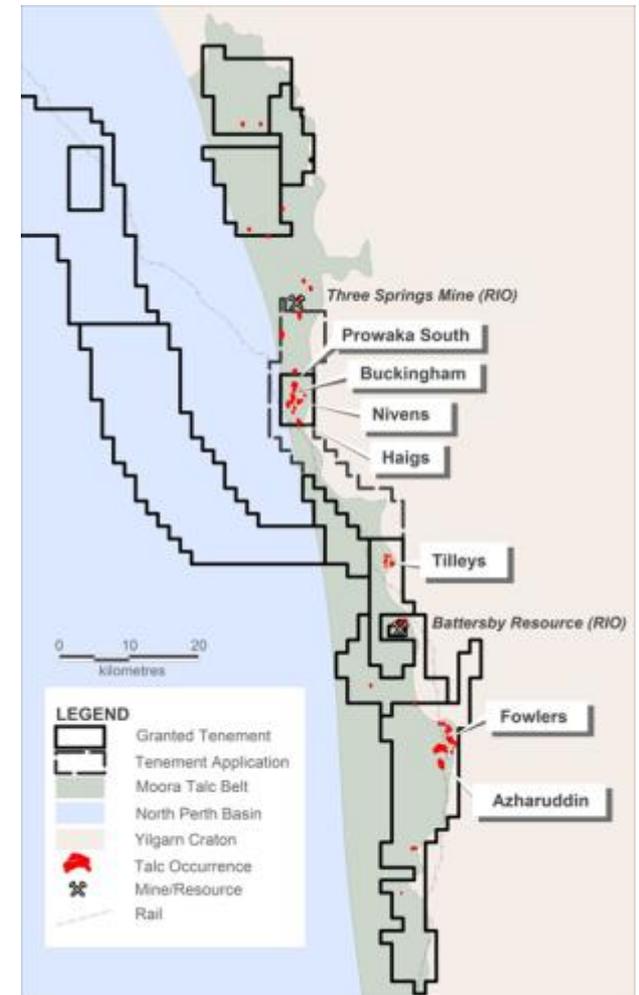
²Sheffield has not yet reported Mineral Resources at the Three Pools project and any discussion in relation to targets and Mineral Resources is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

TALC

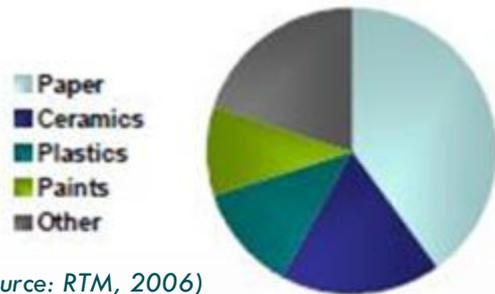
- Simple “Dig and Deliver” commodity, e.g. Three Springs
- Targeting premium grade talc to gain market penetration
- Drilling has demonstrated high purity talc at 6 prospects
- Definition drilling planned 2012



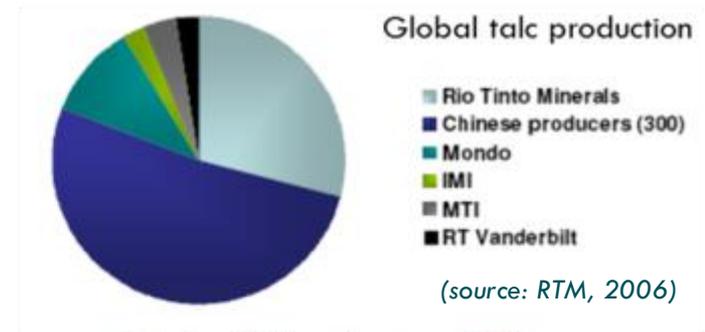
Luzenac's Three Springs mine and new talc beneficiation plant. Source – Rio Tinto Minerals media release 16 November 2010



TALC USES & MARKET

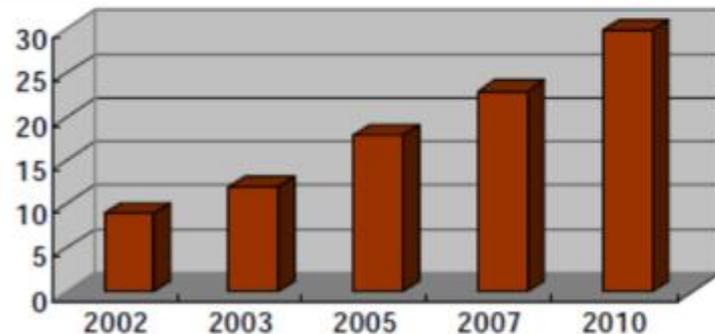


(source: RTM, 2006)



(source: RTM, 2006)

“Talc production was up 18 per cent compared with the first half of 2009 driven by strong polymers demand from the auto sector..” – Rio Tinto Half Yearly Results to 30 June 2010



Amount of plastics products consumed by China's automobile industry in 2002-2010 (x100,000 tons)
(Source: China Talc Association)

Global Market: ~6Mtpa

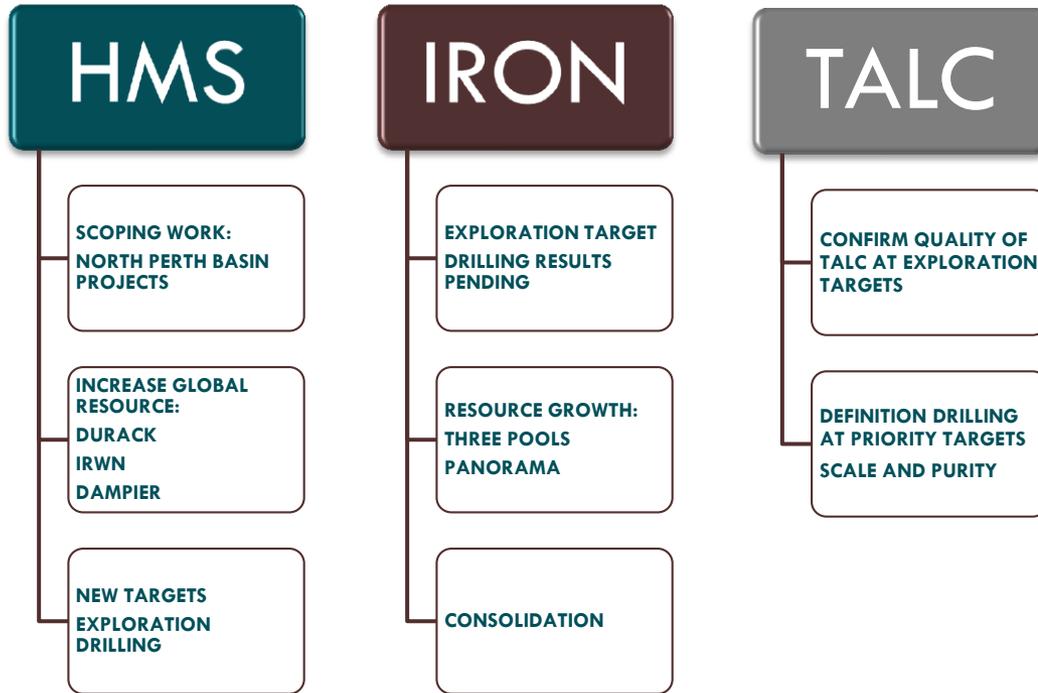
“(Chinese) output of high quality talc powder and lump is considered insufficient to meet the needs of either Chinese domestic market or export” – Mike O’Driscoll, Industrial Minerals, 2008



Price: US\$260-460/t depending on grade



EXPLORATION FOCUS



CONCLUSIONS

- Small Company with successful track record
- Rapidly emerging player in resurgent Mineral Sands sector
- Creating a significant DSO presence in the Pilbara
- “Dig and Deliver” opportunity in Moora Talc Belt
- 2012 to be a breakthrough year



For further information please visit the company's web site: www.sheffieldresources.com.au

APPENDIX 1

HMS MINERAL RESOURCES TABULATION

Sheffield Resources' Mineral Resource¹ inventory at a 0.9% HM cutoff as at 7 November 2011.

Deposit	Resource Category	Material (Mt)*	Bulk Density	HM %	Slimes %	Osize %	In-situ HM (Mt)*	Zircon %	Rutile %	Leuc. %	Ilmenite %
Yandanooka	Indicated	61.00	2.0	2.8	14.7	9.4	1.72	11.7	6.8	9.8	62.3
Yandanooka	Inferred	10.75	1.9	1.1	12.9	9.0	0.12	10.1	7.0	12.5	59.8
Yandanooka	Total	71.75	2.0	2.6	14.4	9.3	1.84	11.5	6.9	10.2	61.9
Ellengail	Inferred	46.45	2.0	2.2	15.6	2.1	1.040	8.9	8.7	1.9	63.5
Ellengail	Total	46.45	2.0	2.2	15.6	2.1	1.040	8.9	8.7	1.9	63.5
West Mine North	Measured	6.47	2.0	5.6	14.8	1.2	0.36	4.9	9.1	11.6	54.9
West Mine North	Indicated	36.11	1.9	2.3	13.1	2.8	0.84	8.4	10.3	5.4	60.0
West Mine North	Total	42.58	1.9	2.8	13.4	2.5	1.21	7.9	10.1	6.4	59.2
Total	Measured	6.47	2.0	5.6	14.8	1.2	0.36	4.9	9.1	11.6	54.9
Total	Indicated	97.13	2.0	2.6	14.1	6.9	2.56	10.5	8.1	8.2	61.5
Total	Inferred	57.21	2.0	2.0	15.1	3.4	1.16	9.1	8.4	3.9	62.8
Total	All	160.81	2.0	2.5	14.5	5.4	4.08	9.8	8.2	6.8	61.7

*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. TiO₂ minerals defined according to the following ranges: Rutile >95% TiO₂; Leucosene 85-95% TiO₂; Ilmenite <55-85% TiO₂.