



# Carpentaria Exploration Ltd Investor Update

March 6-13<sup>th</sup> 2012

We find it. We prove it. ***We make it possible.***



# Carpentaria



We Find It



We Prove It



We Make It Possible

## Aim :

Discover, Develop and Mine mineral resources to grow shareholder value and fund further discoveries

## Abilities :

Strong geoscientific and engineering team

## Track Record :

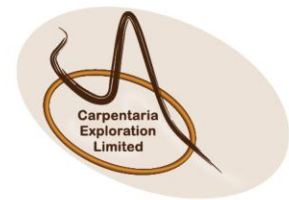
- Established Resource at Hawsons
  - ✓ Positive PFS released
- Tin / Tungsten near Broken Hill
- Gold – Lachlan Fold Belt
- Nickel – North of Broken Hill

**Carpentaria Exploration**

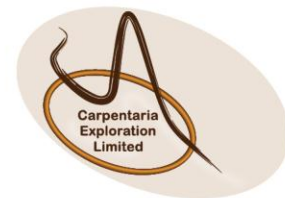
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# Company Snapshot

**ASX : CAP**

**FINANCIAL 5<sup>th</sup> March 2012**

Cash A\$8.2 million

## QUOTED SECURITIES

99.2 m shares

## LARGEST SHAREHOLDERS

Aust' Conglin Int' Inv' : 10.6%

Conglin Yue : 3.7%

Atlas Iron Ltd : 8.7%

Directors & Management  
(inc' unlisted Options) : 12.6%

## INVESTMENTS

2.2 m Guildford Coal Ltd fully paid  
shares ~ value \$1.7m 5<sup>th</sup> March

## Carpentaria Exploration

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### Share Price and Volume 12 months

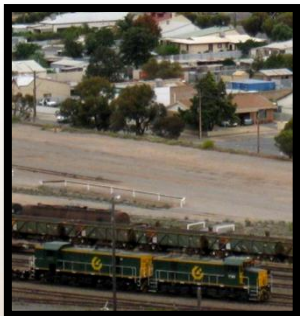
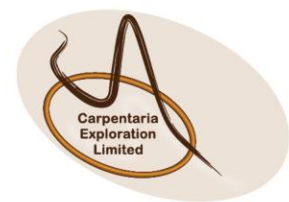


### KEY ASSET

**Hawsons Iron Project JV – Carpentaria 60%**

# HAWSONS IRON PROJECT

## Largest Magnetite Project in NSW



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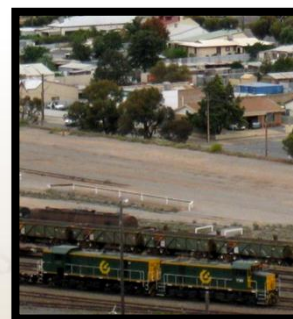
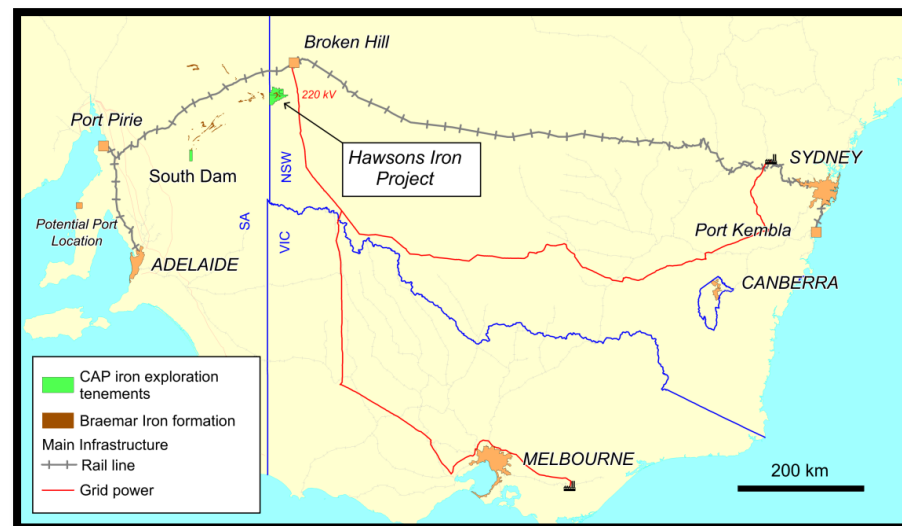




# HAWSONS IRON PROJECT - SUMMARY

- **Prefeasibility Study** – 20 mtpa concentrate production NPV 3.2 billion, IRR 23% (November 2011) Estimated FOB costs \$49/t
- **Resource** – 1.4 Billion tonnes for 220 million tonnes concentrate, exploration target to sustain plus 50yr mine life
- **Infrastructure** – Port and rail capacity confirmed, water, power all available for start up
- **Mining and Processing** – very low unit costs because low strip ratio, wide mining widths and soft ore
- **Marketing** - Saleable concentrate low silica, no impurities
- **Community Engagement** – Positive consultations with all levels of Government

**Native Title has been extinguished**

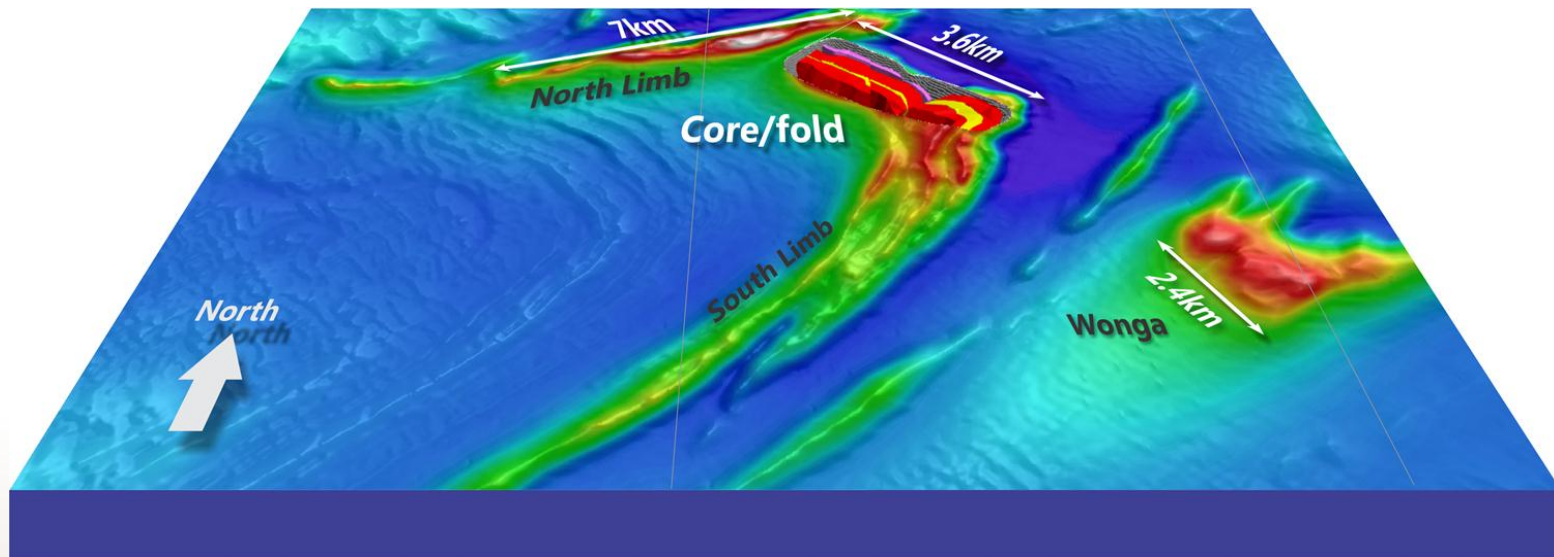


# HAWSONS IRON PROJECT

## Exploration Target

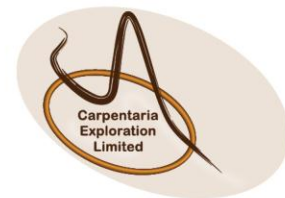


- Exploration Target<sup>1</sup> **6 to 11 Billion Tonnes**
- DTR 14-17% magnetite
- Concentrate Grade of 69-71% Fe
- Contained Iron : 800 - 1,900 million tonnes



# HAWSONS IRON PROJECT

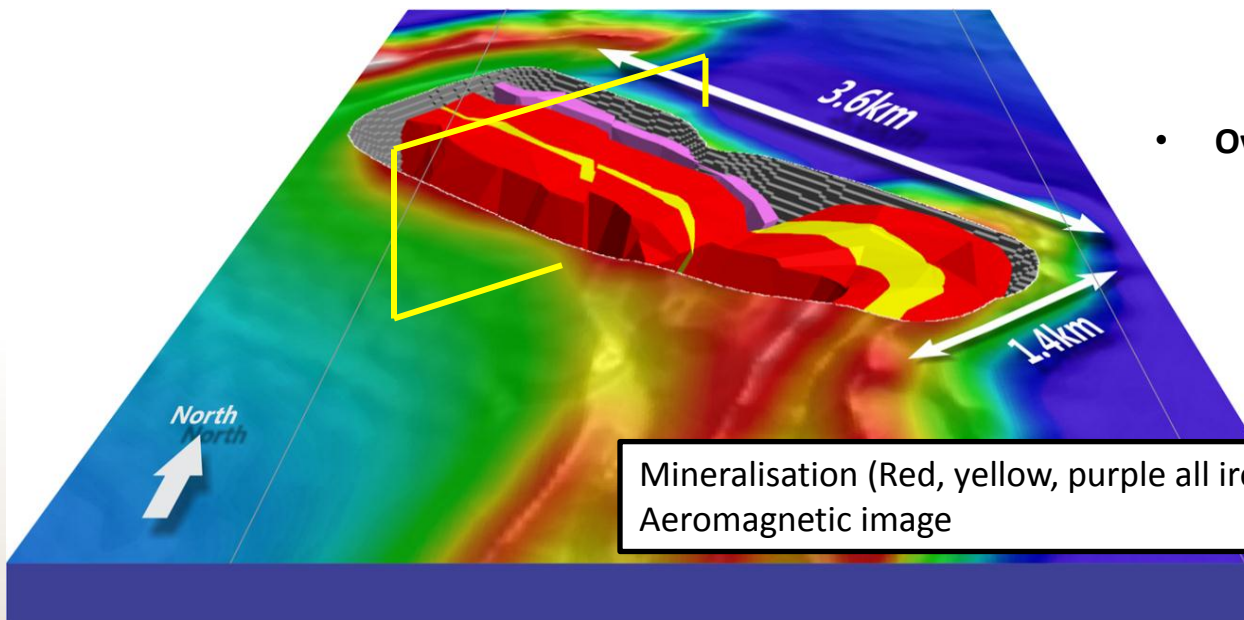
## Inferred Resource and Exploration Target



*Inferred Iron Resource (Dec 2010)*

**1.4 Billion Tonnes**

- Davis Tube Recovered Grade (DTR) 15.5% (cut off grade 12%)
- Concentrate Grade – 69.9% Fe, 2.50% SiO<sub>2</sub>, no other impurities
- Contained Iron concentrate: 220 million tonnes



- Over 400Mt concentrate in PIT 1 (PFS)

Mineralisation (Red, yellow, purple all iron units) and PFS PIT 1 over the Aeromagnetic image

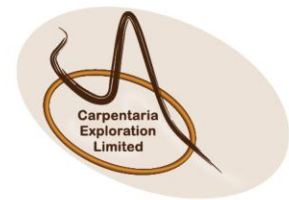
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# HAWSONS IRON PROJECT

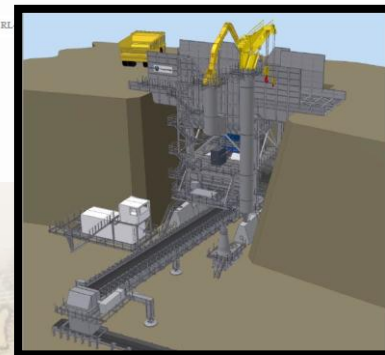
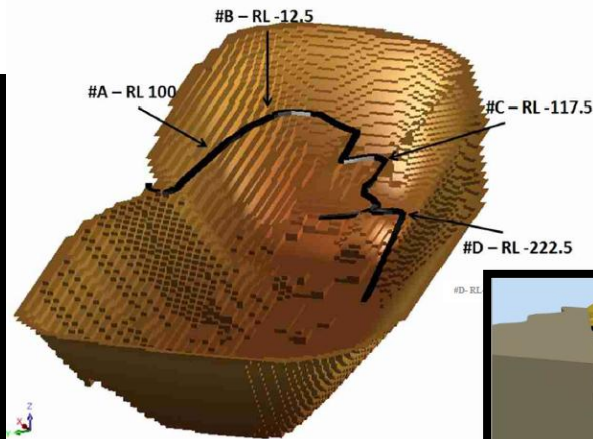
## Simple Open Cut - large mining widths



- Low cost mining operation
  - Waste to ore ratio – 0.3 : 1
  - Pre strip – start mining east end
  - In Pit Crushing and Conveying

Large scale – good economies of scale over others

Pit Area

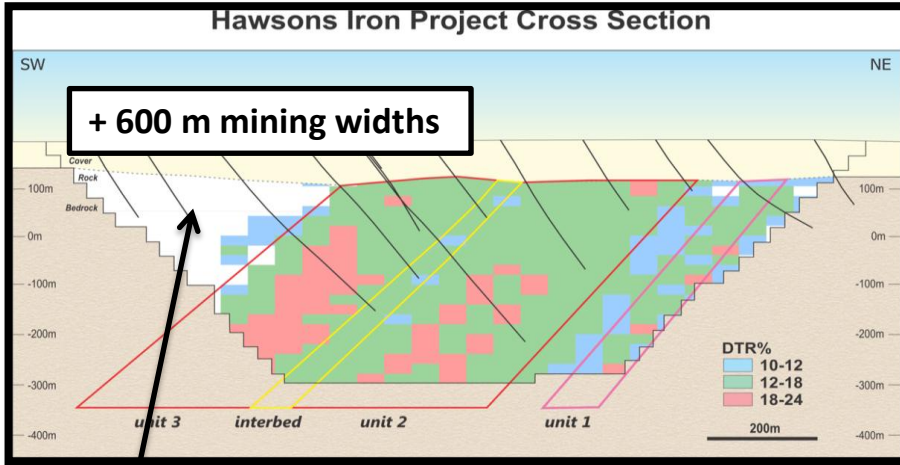


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# HAWSONS IRON PROJECT

## Value of low Waste : Ore

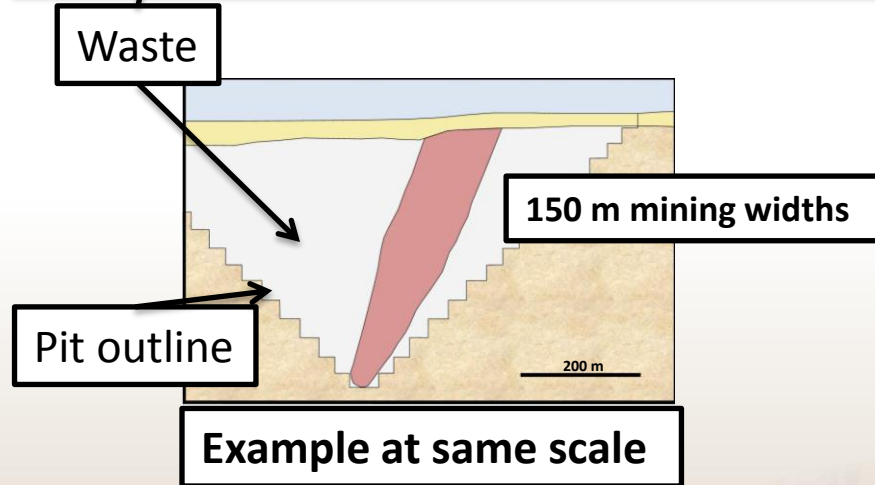


**Waste to ore 0.3 : 1, 15.5% DTR**

**Mine 130t material to produce 100t of ore**

**100t ore gives 15.5t of concentrate**

**8.4 t material moved**  
**produces 1 tonne concentrate**



**Waste to ore 2.3: 1, 36% DTR**

**Mine 330t material to produce 100t of ore**

**100t ore gives 36t of concentrate**

**9.2 t material moved**  
**produces 1 tonne concentrate**

# HAWSONS IRON PROJECT

## Value of Soft Ore



### Hawsons

Grinding costs

Bond Work index :6 kw hr/tonne

At 15.5% DTR :

1 tonne con' is produced from 6.45 t ore

38.7 kw hrs to produce 1 tonne con'

### Example of a WA BIF

Grinding costs

Bond Work index :~ 20 kw hr/tonne

At 36% DTR requires

1 tonne con' is produced from 2.78 t ore

55.6 kw hrs to produce 1 tonne con'

*In this example the WA BIF would require 1.4 times the power to produce 1 tonne*

*Grid Power is approx. 25-80% the cost of non-grid power*

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# HAWSONS IRON PROJECT

## Transport Options



### Start Up (5-10Mtpa)

- 13Mtpa available using existing rail to Port Pirie
- 20Mtpa Port Capacity available at Port Pirie\*

### Full Production 20mtpa options

- Rail upgrade
- Slurry Pipeline
  - Port Pirie or
  - Myponie Point
  - Govt. infrastructure corridor or direct route
- Port Options
  - Port Pirie – Barge to Capesize /Panamax
  - Port Adelaide – Panamax
  - Myponie Point – Capesize
  - Others – (Portland, Port Kembla)

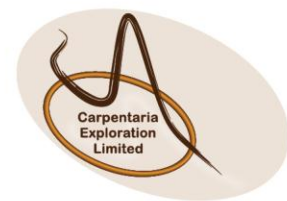
**\*Port Pirie bottleneck solved  
Two spare berths  
Out of town stock pile and  
conveyor**



Port Pirie common berth facility

# HAWSONS IRON PROJECT

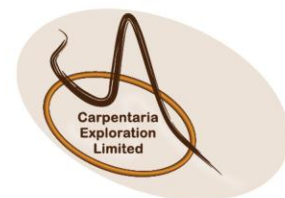
## Port Pirie plus 20 mtpa capacity





# HAWSONS IRON PROJECT

## Free On Board (FOB) Cost Summary



Costs per tonne concentrate	AUD
Mining Costs	\$15
Processing Costs	\$11
Other (incl Royalties)	\$8
Transport On Ship	\$13 <sup>a</sup> - 19 <sup>b</sup>
<b>Total FOB</b>	<b>\$47-53</b>

<sup>a</sup> Long term pipeline estimate

<sup>b</sup> rail to Port Pirie estimate

- **FOB costs highly competitive (av. Closer to \$60)**
- **Well placed on cost curve**
- **Average operating costs drop over life of mine after Pre Strip**
- **Development CAPEX \$2.9 Bn**
- **Capital intensity low at \$140 per t capacity (av. Approx \$200)**

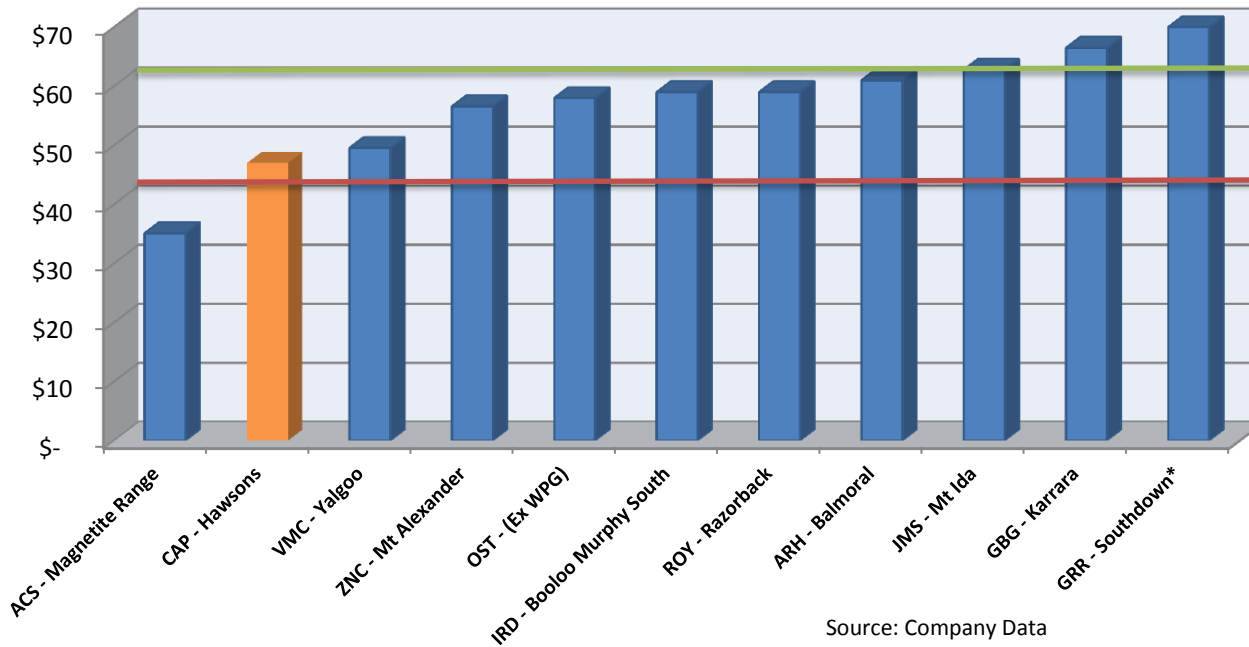


# HAWSONS IRON PROJECT

## FOB Cost Comparison



**Free On Board Estimates (AUD)  
Australian Magnetite Projects**



Source: Company Data

**75<sup>th</sup> percentile  
cash costs\***

**50<sup>th</sup> percentile  
cash costs\***

**\*Approx. using  
2011 Q2 FOB  
cash cost curve  
UBS/Metalytics**

Note Southdown \$60 at gate plus  
est.\$10 transport costs

# HAWSONS IRON PROJECT

## Capital Cost Comparison

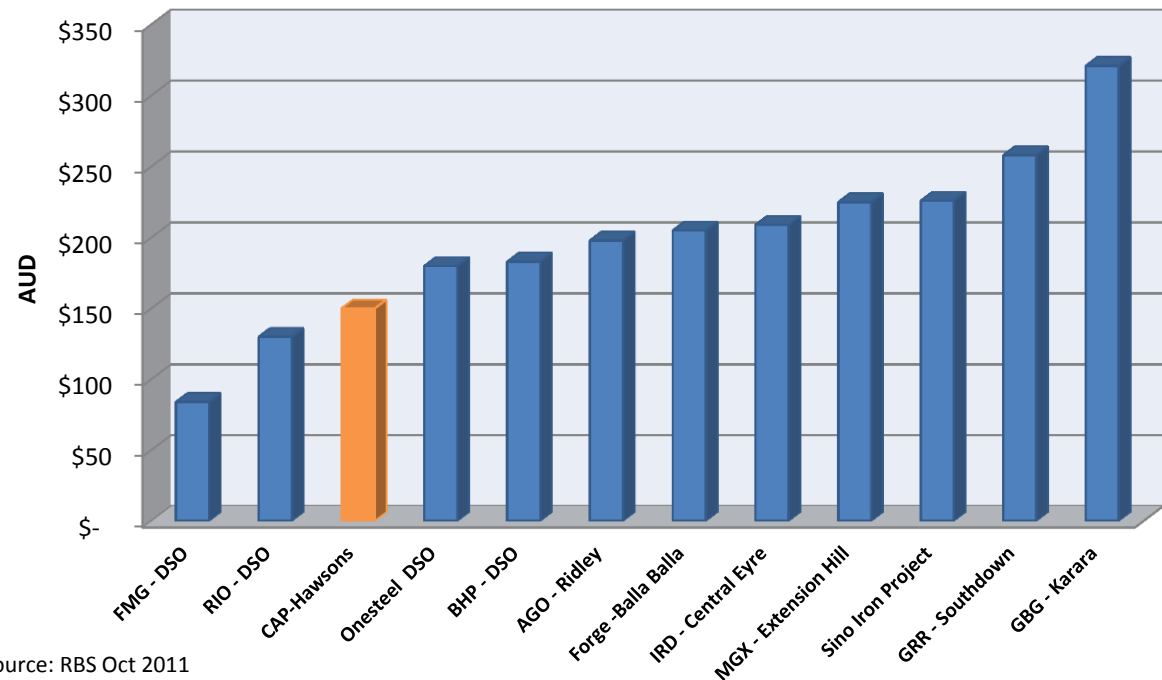


### Low Capital Intensity

Benefits of location close to infrastructure

- Power
- Water
- Rail
- Workforce

### Capital Expenditure per tonne capacity Hematite and Magnetite Projects



Source: RBS Oct 2011

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# HAWSONS IRON PROJECT

## Ownership



- **Carpentaria 60%, BMG 40%**
- **BMG ordered to be wound up, stayed until 19<sup>th</sup> March to allow an appeal to be heard**

### Options

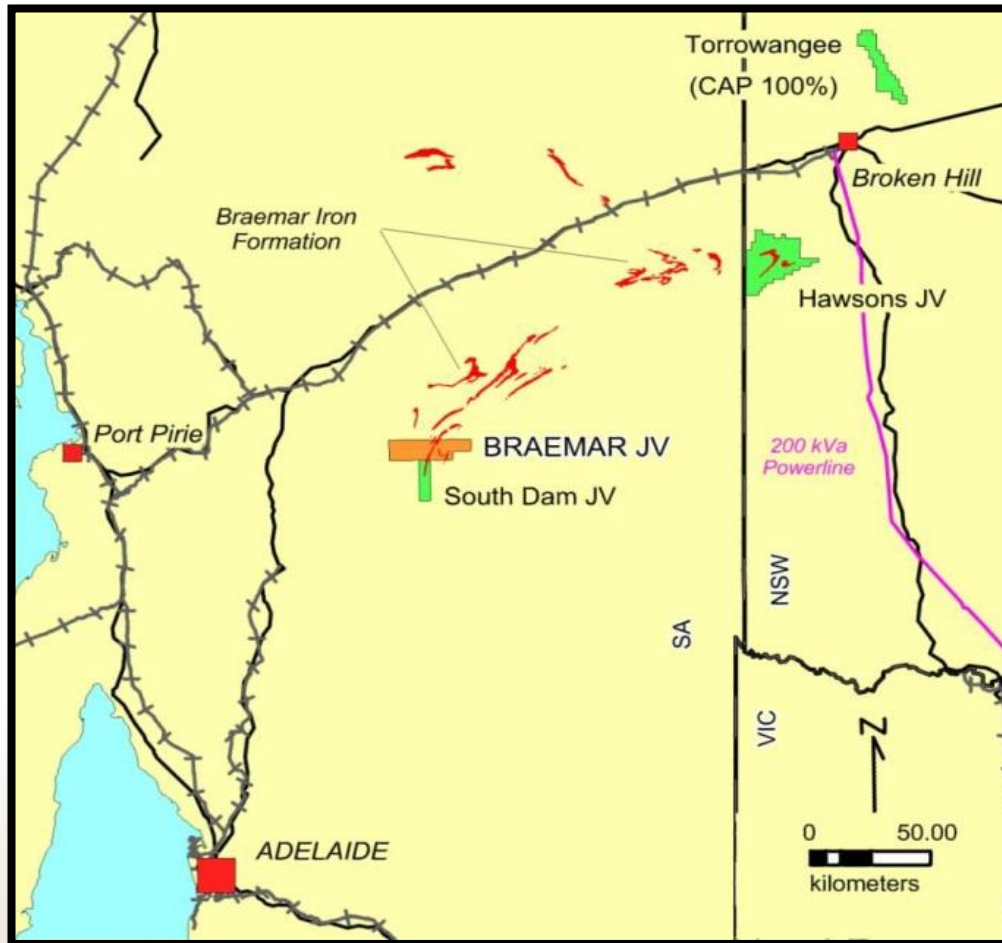
- **Liquidator sells BMG**
  - **CAP gets new partner and existing favourable terms**
- **No sale by May 15<sup>th</sup>, 2012**
  - **CAP right to regain 100% of project on favourable terms (\$13m)**





# HAWSONS IRON PROJECT

## Other Iron Projects



### Torrowangee NSW :

- 100% CAP
- Previous intersections
- To be drilled

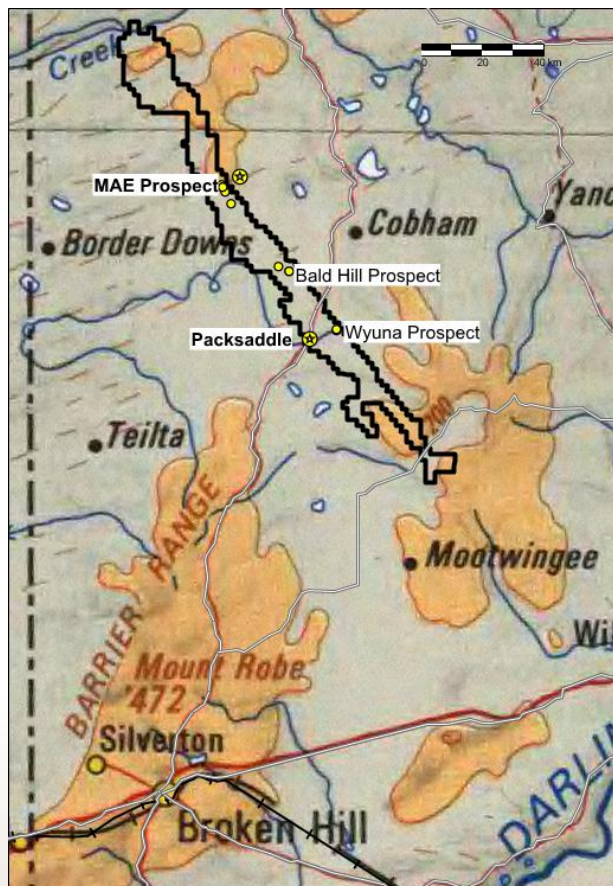
### Braemar SA :

- Farm in
- Can earn 100%
- Recon' work

### South Dam :

- Farm out
- Potential revert 100% CAP

## Other Projects – KOONENBERRY (100% CAP)



**Drilling currently in progress**

**Program completed**

**Total RC – 11 holes 1545m**

**To date (1225m)**

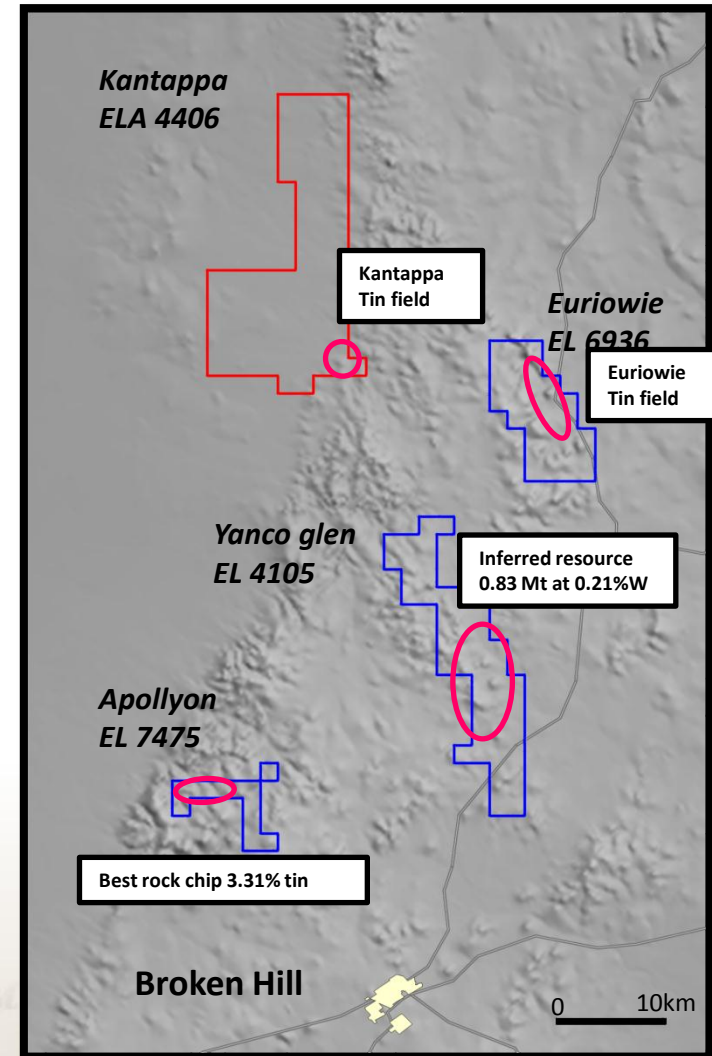
- **Bald Hill – intersected favourable horizons, awaiting results, drilling difficulties**
- **Mt Arrowsmith – poor results, downgrade**
- **Wyuna – weak nickel / copper intersected**



# BROKEN HILL TIN - TUNGSTEN PROJECT (100% CAP)



- 3 EL's North of Broken Hill + 1 ELA
- Target : Tin and tungsten
- Aim : locate targets in 4 EL's to build an inventory that will be economic to mine :
  - small open pits
  - mobile crushing / gravity separator
  - export to processing facilities
- Addition Potential – Ag / Pb / Zn





# BROKEN HILL TIN - TUNGSTEN PROJECT (100% CAP)



## Broken Hill Tin Tungsten Project :

### ➤ Concept study to test economic viability of tin and / or tungsten

#### ➤ Result :

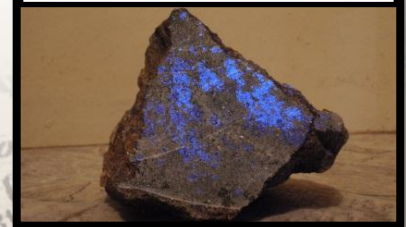
- 800,000t @ .21% W
- Positive NPV
- Approx' 4 yr mine life
- Scheelite con - \$24,000/t

#### ➤ Updated Plan :

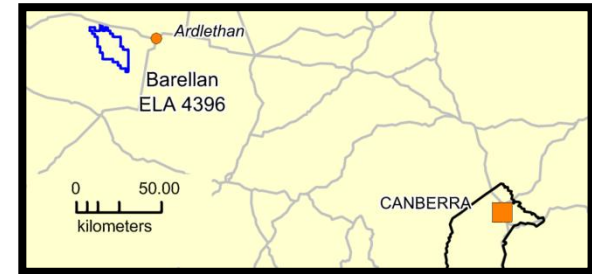
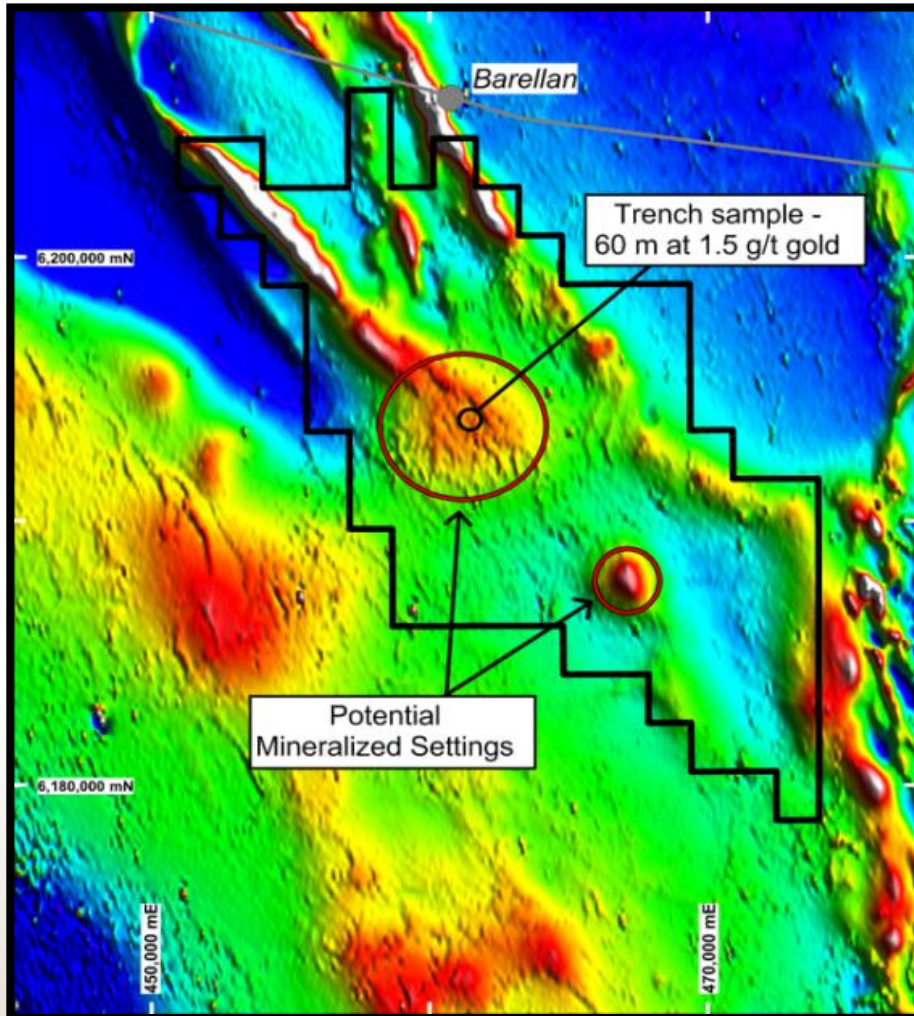
- Reconcile resource
- Extend tungsten resource
- Short term cash flow possibility
- Investigating contract mining option
- Processing test work



Scheelite UV light



# BARELLAN – GOLD PROJECT (100% CAP)



**Tenement Granted  
Awaiting access agreement**

# Carpentaria Exploration

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[www.capex.net.au](http://www.capex.net.au)



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