Carpentaria Exploration Ltd
Perth June 26 – 27 2012

Developing the Hawsons Iron Project

2nd Annual Iron Ore Project Development and Logistics

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 in Eastern Australia

Abilities :

Strong geoscientific and engineering team

Track Record :

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

Disclaimer

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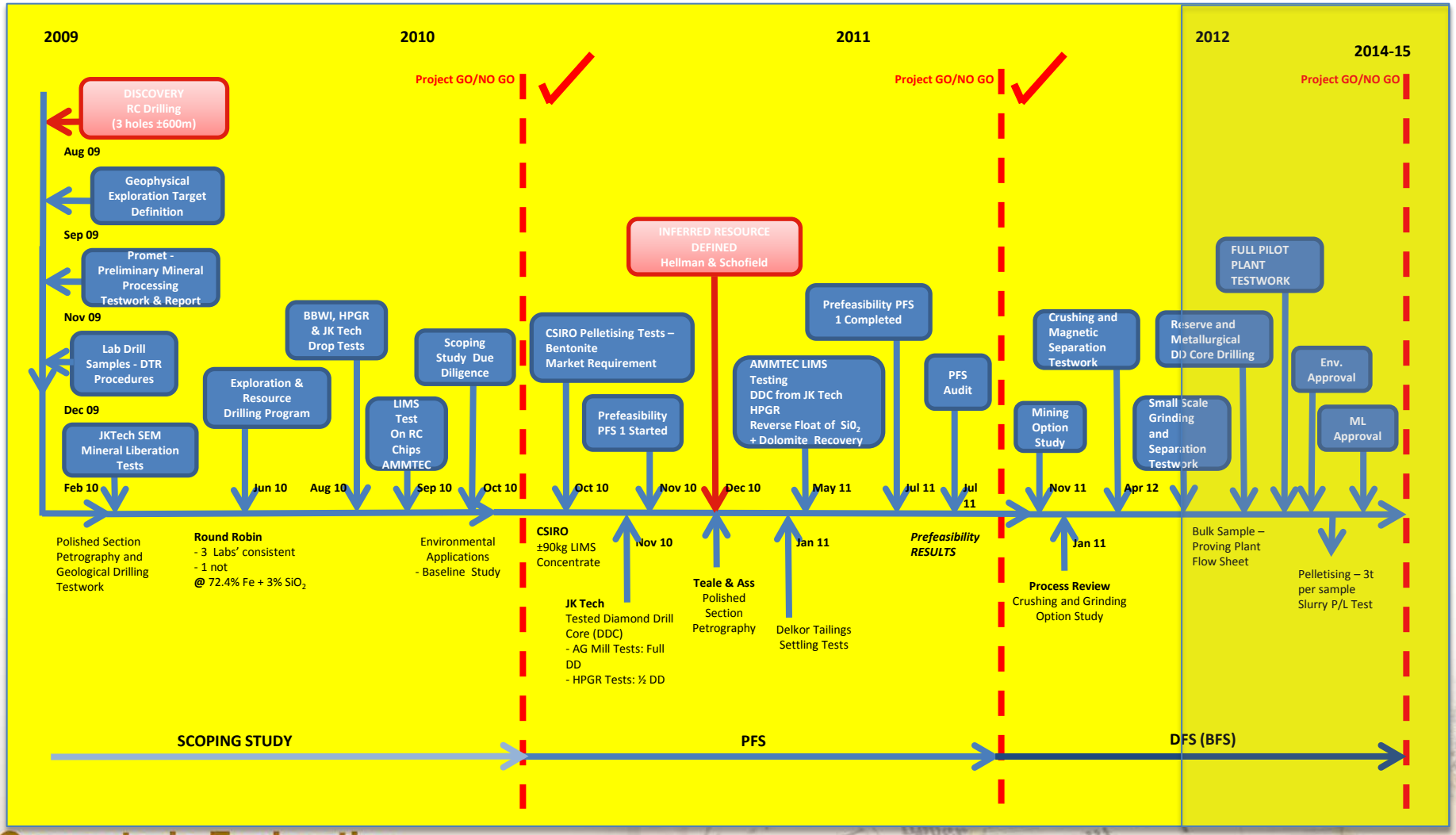
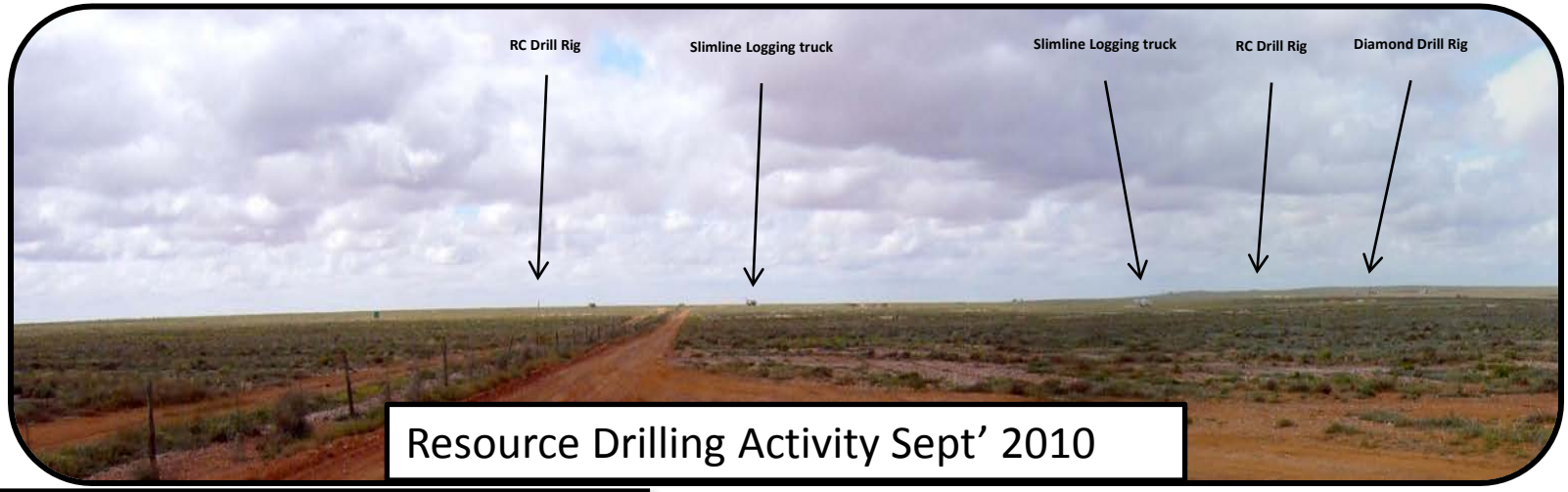
HAWSONS IRON PROJECT
Structure of the Talk

- Progress to date
  - Time Line
  - Location
  - Geology and resources
  - PFS
  - Mining
  - Processing Flow Sheet
- Export and Logistic Solutions
  - Water
  - Power
  - Rail
  - Port
- Summary

HAWSONS IRON PROJECT
Project and Test Work Flow Diagram



HAWSONS IRON PROJECT
Pre-feasibility Study

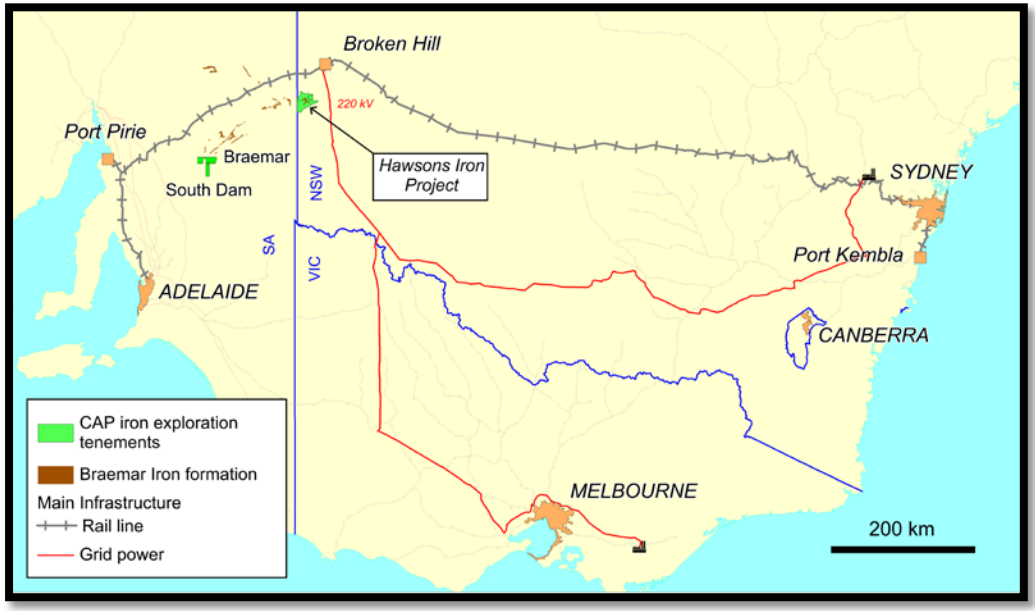


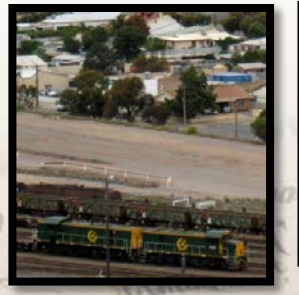
Resource Drilling Activity Sept' 2010

HAWSONS IRON PROJECT
Largest Magnetite Project in NSW

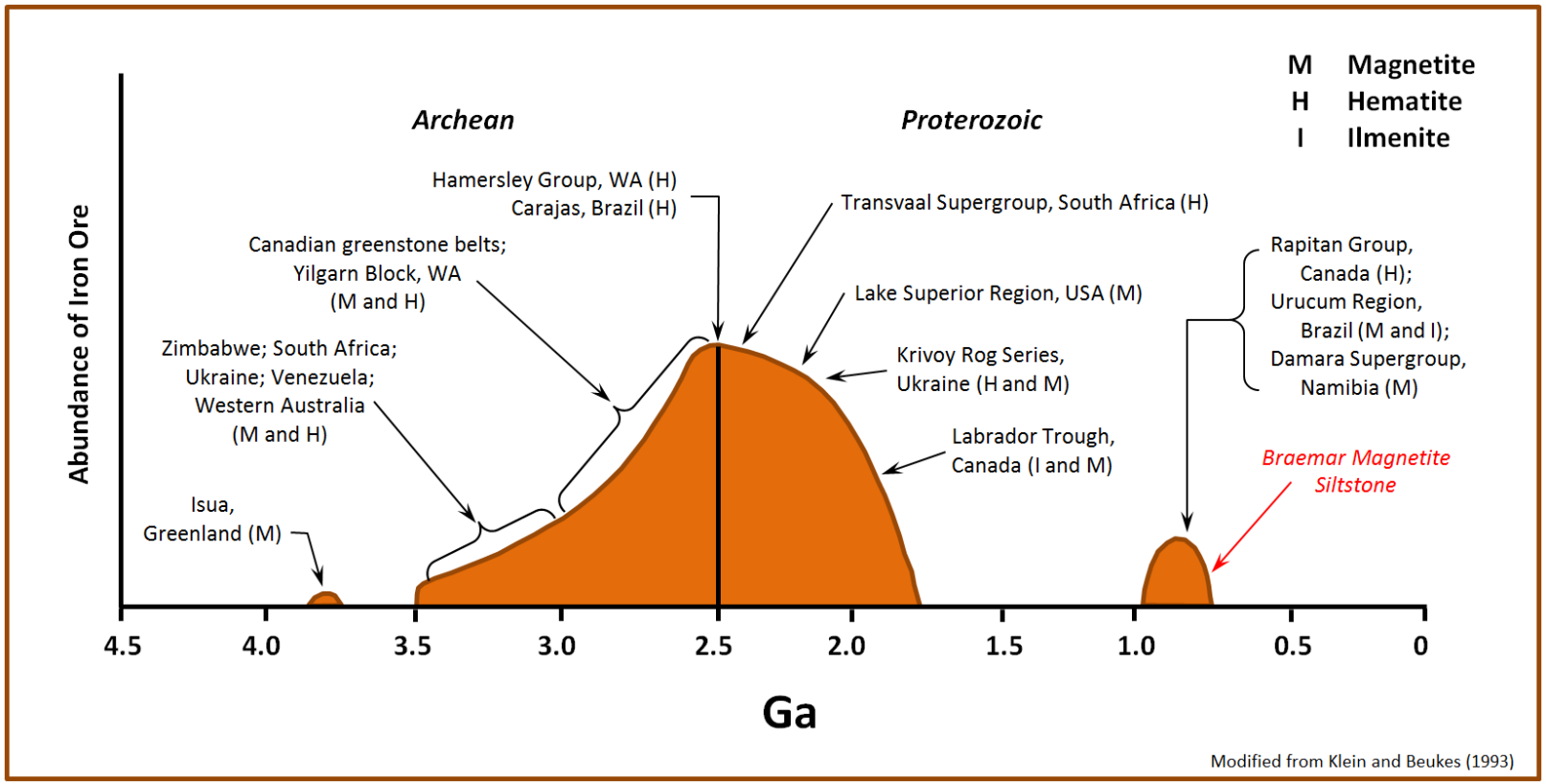
- *Resource* – very large with potential for 50 year plus mine life
- *Mining* – very low unit costs because low strip ratio, very wide mining widths, low abrasion index and single pit
- *Processing* - comparatively very low cost because of very soft mineralised rock
- *Infrastructure* – water, power, transport and port all available for start up
- *Approvals* – low hurdles compared with other projects

Native Title has been extinguished





GLOBAL IRON
Geological Time



HAWSONS IRON PROJECT
Geology and Resources

Five magnetic anomalies as target

- Very limited outcrop
- 20,000m drilling
- 70 holes

Results

- Consistent magnetite siltstone in all anomalies

Exploration Target[1]

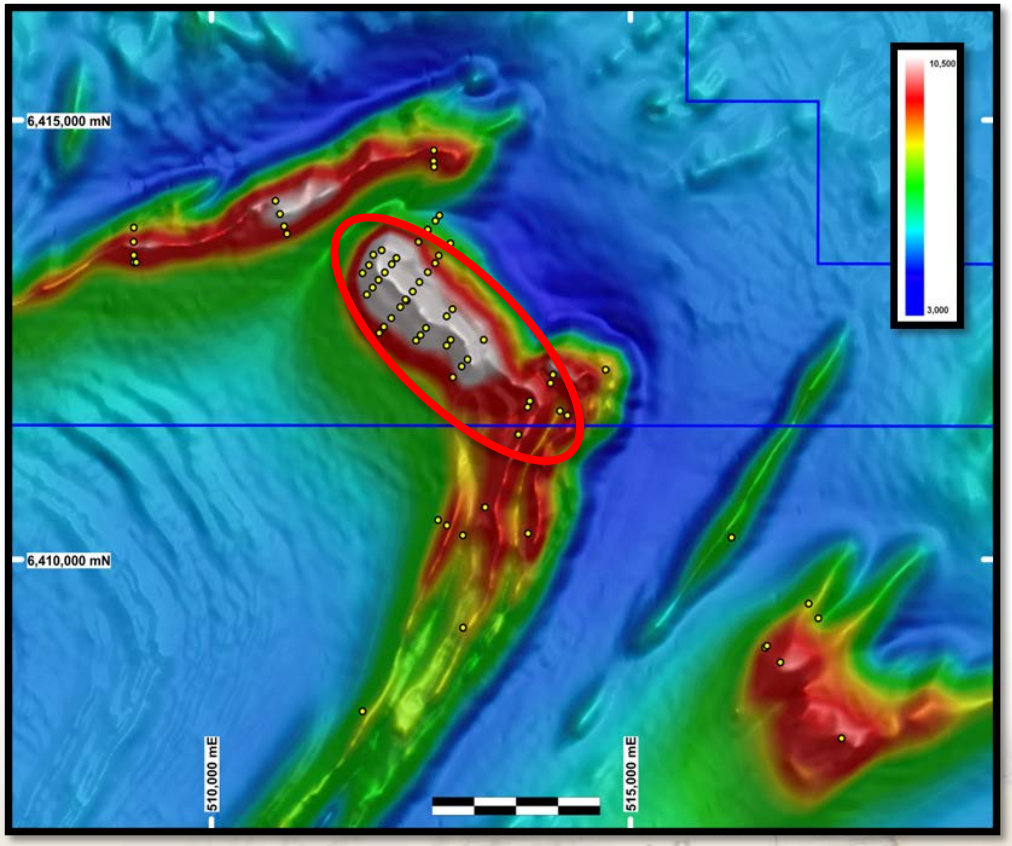
6 to 11 billion tonnes

900-1,900 million tonnes of concentrate

Mass Recovery (DTR) 14-17%

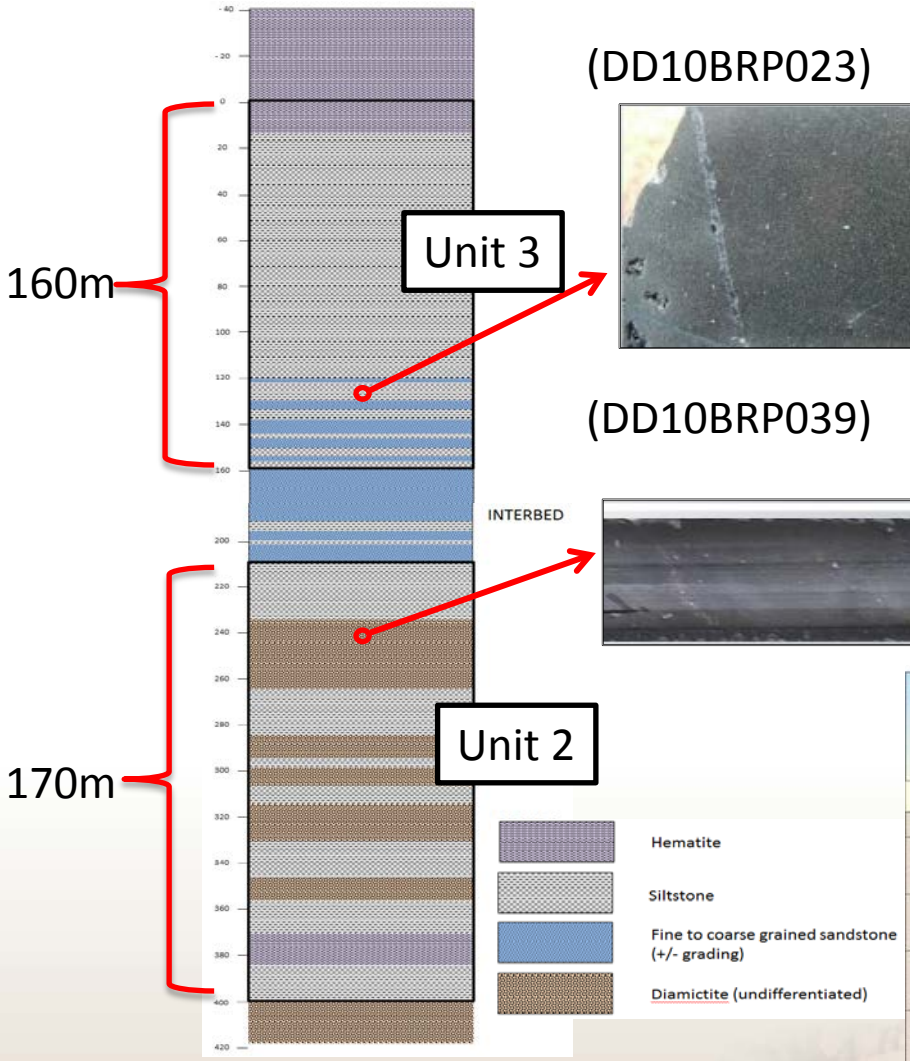
Concentrate Grade of 69-71% Fe

And a Maiden Resource



[1] *The potential quantity and grade of the exploration targets is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource. (DTR is Davis Tube Recovery)*

HAWSONS IRON PROJECT
Geologically Consistent

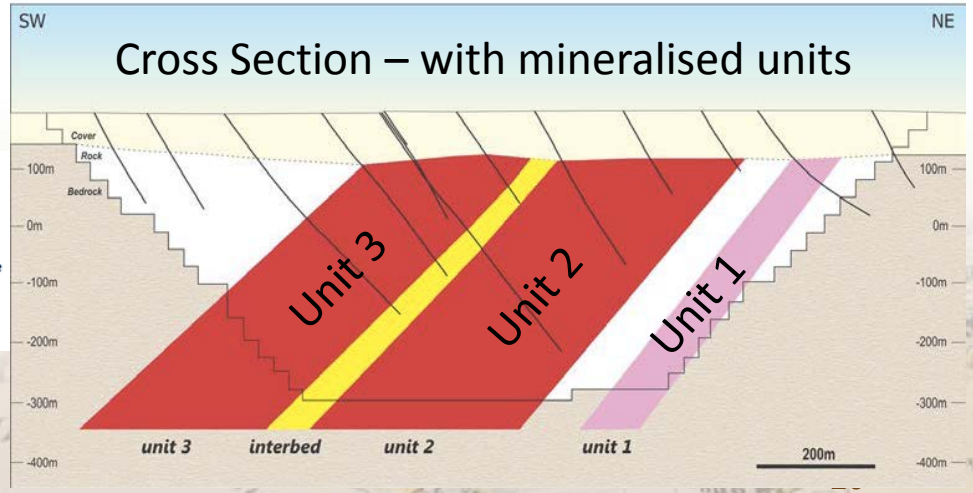


(DD10BRP023)

(DD10BRP039)

True Thickness 400-500m

Composition
- **Magnetite**
- **Quartz**
- **Carbonate**
- **Chlorite/biotite**
- **Hematite**



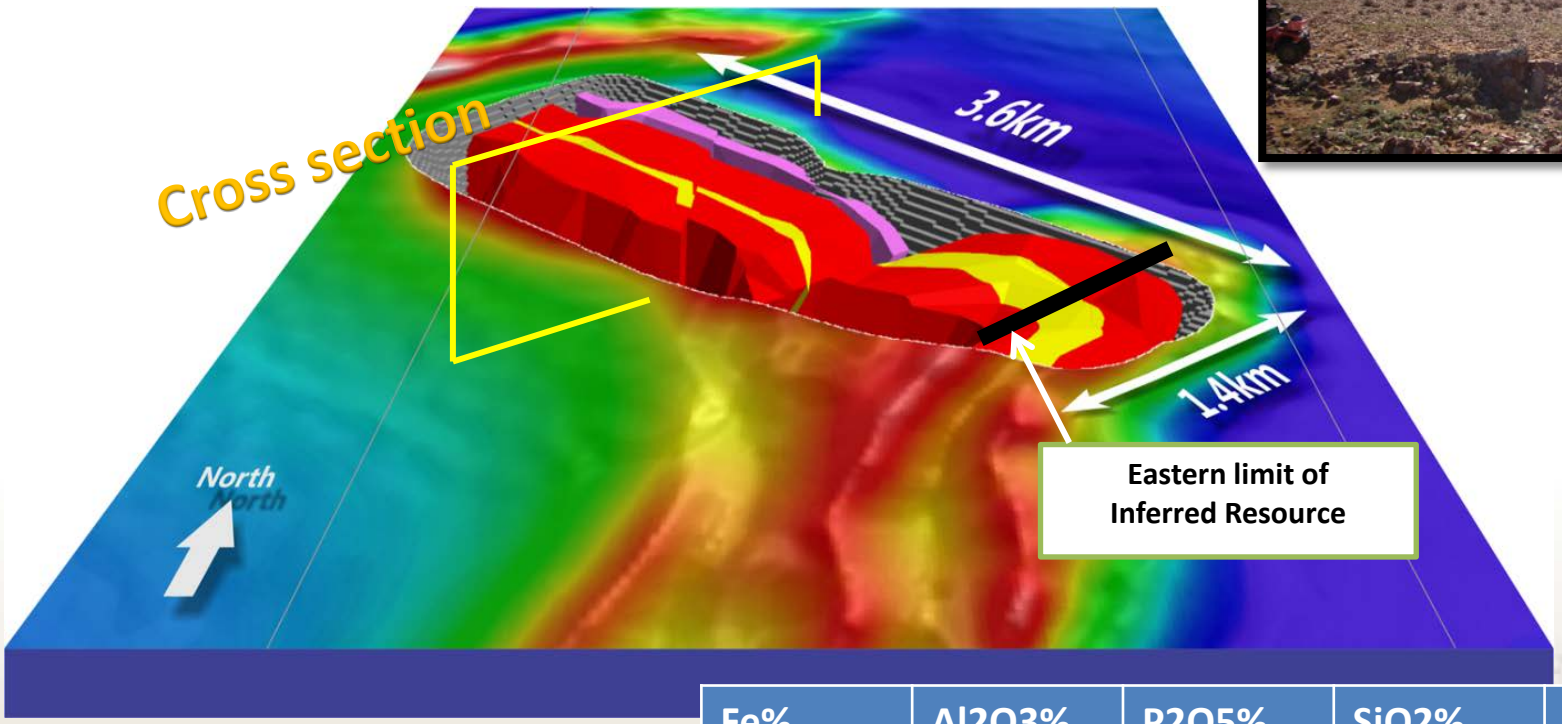
HAWSONS IRON PROJECT
Maiden Resource

JORC Inferred Resource (12% DTR cut off)

1.4 billion tonnes at 15.5% mass rec.

220 million tonnes of concentrate

69.9% Fe, 2.50% SiO_2, no other impurities

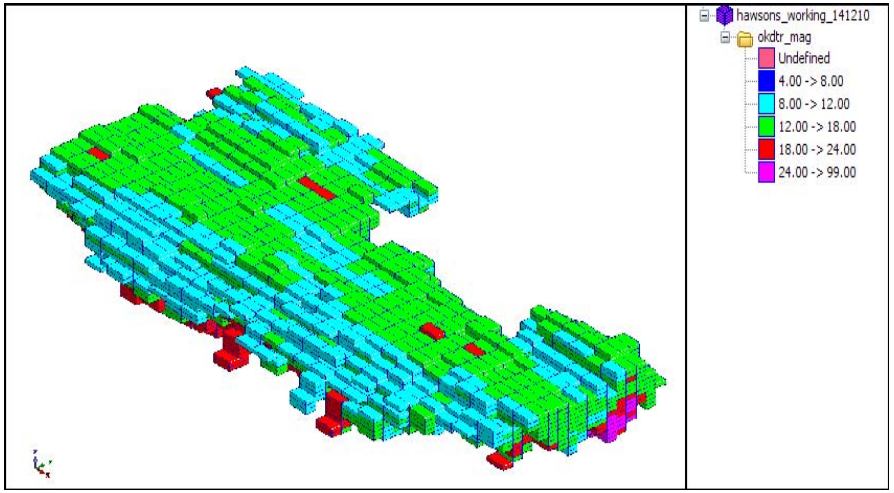


Fe%	Al2O3%	P2O5%	SiO2%	S%
69.9	0.22	0.002	2.50	0.003

HAWSONS IRON PROJECT
PFS November 2011

Improvements to PFS base case :

- **In pit crushing and conveying (IPCC) shows significant improvement**
- **Standard magnetite processing techniques**



	Capex	NPV	IRR	Annual ave. Gross Profit	Payback
Nov 2011 PFS Update (incl in pit crushing option)	**$2.9Bn**	**$3.2 Bn**	**23%**	**$735 m**	**6.3yrs**
July 2011 PFS Base Case	$2.8Bn	$2.8 Bn	21%	$688 m	6.7yrs

Assumptions	Discount rate	AUD:USD	Life of Mine 69% Concentrate price*	Life of Mine equivalent 62% fines price*
	9%	1.00:0.85	US$88	US$79

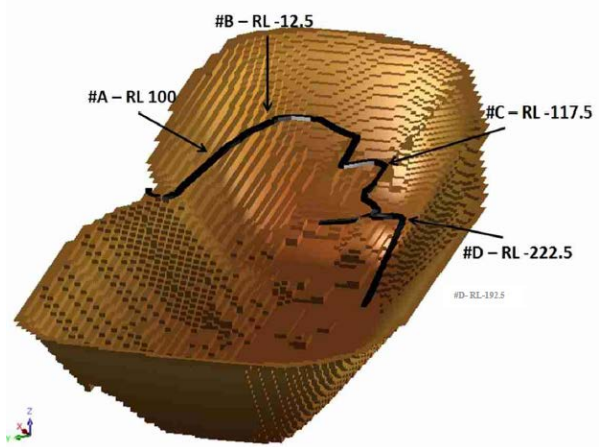
HAWSONS IRON PROJECT
Lower Mining Costs – In Pit Crushing and Conveying

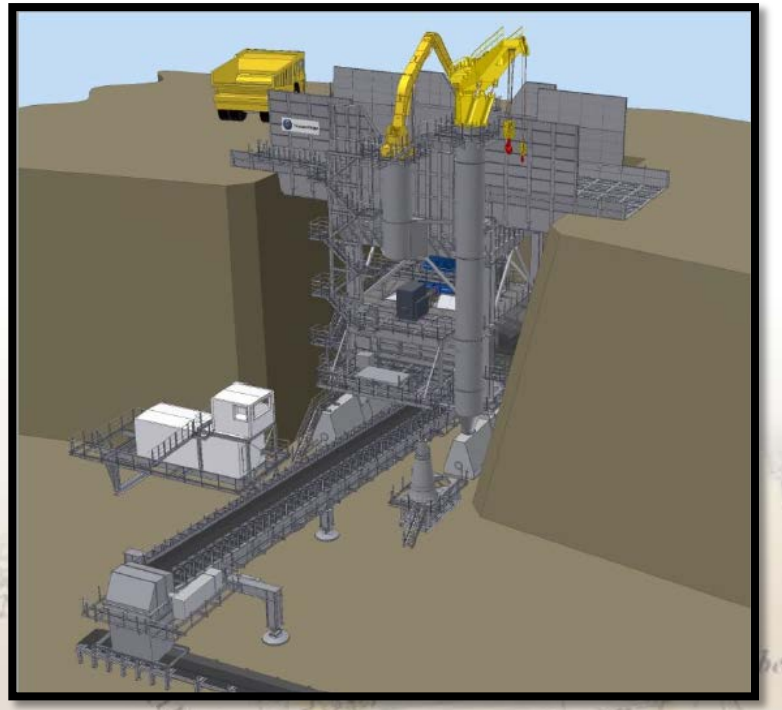
Existing and Proposed IPCC operations e.g. :

- **Bingham Canyon**
  - **– ~165Mtpa linked to the Copperton Concentrator by an 8km conveyor system**
- **Escondida – Over 320Mtpa**

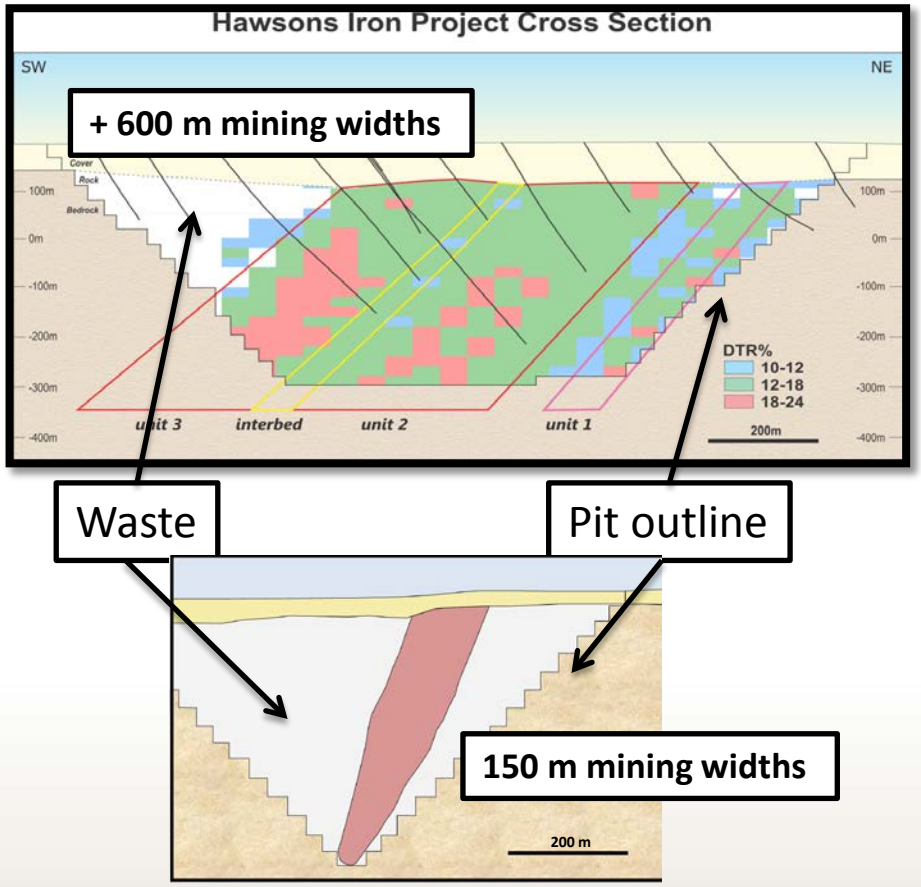
Benefits :

- **Lower fuel usage (fuel and transport ~50% of mining costs)**
- **Truck utilisation increase by up to 15% - less long up hill hauls**
- **Uses Electrical power – lower cost**
- **Better operational safety**
- **Deeper mine – maximise resource**





HAWSONS IRON PROJECT
Value of low Waste : Ore



Example at same scale

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

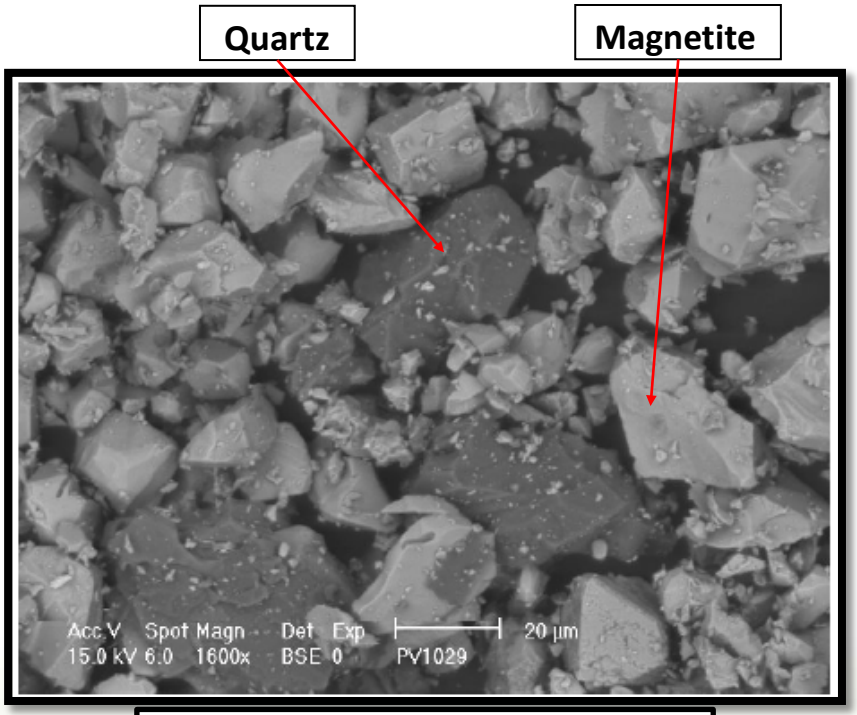
100t ore gives 36t of concentrate

9.2 t material moved produces 1 tonne concentrate

HAWSONS IRON PROJECT
Optimization Studies – Processing

Unique Metallurgical Characteristics :

- Low bond work index of 6 - 8 kWh/t
  (BIF's ~ 15 – 30 kWh/t)
- Low abrasion index ~ 0.09
  (BIF's ~0.3 – 0.7)
- Rock Strength (UCS) 50 – 90 Mpa
  (BIF's ~ 355 Mpa)
- Grain size 30 – 50 µm
- Ideal for pellet production
- Ideal for slurry pipe operation
- Lab' trials indicate :
  - suitable for impact crushing
  - impact crushing generates more fines than conventional crushing



Rock breaks into grain size

HAWSONS IRON PROJECT
Low Cost Front End Crushing

PRIMARY CRUSHING - IMPACT CRUSHERS

Preliminary testwork - Positive

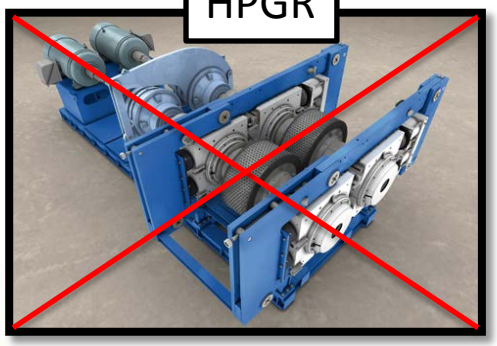
- **Utilizing soft ore characteristic**

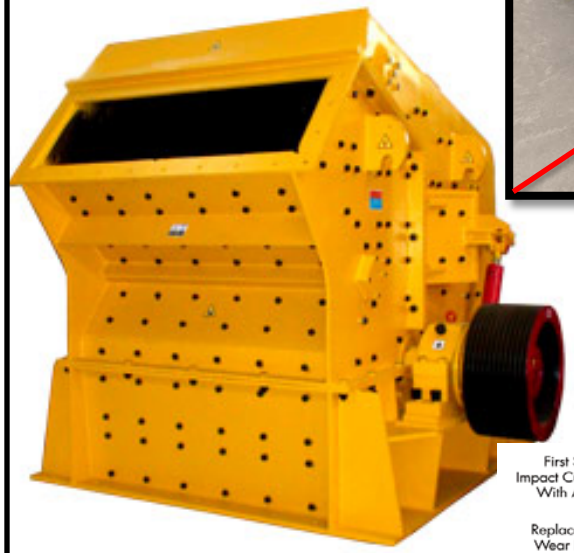
(Low bond work and abrasion indices)

Value compared to HPGR :

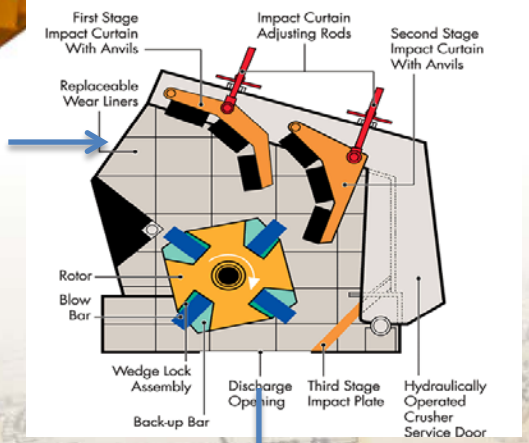
- **Lower capital cost**
- **Low energy consumption**
- **Large feed reduction ratio (12 : 1)**
  - **Norm is 3 or 4 : 1**
  - **Fewer crushing stages**
- **Off the shelf units**

HPGR





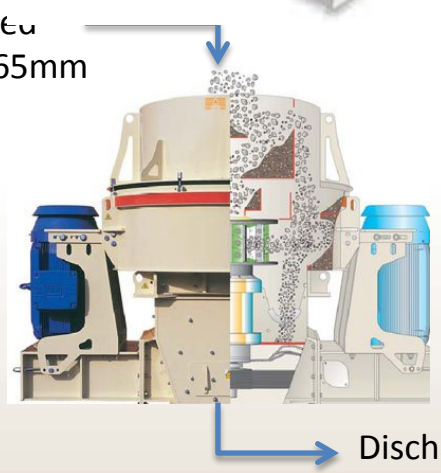
Feed
<800mm



Discharge
<65mm

HAWSONS IRON PROJECT
Low Cost Front End Crushing

Barmac Crusher



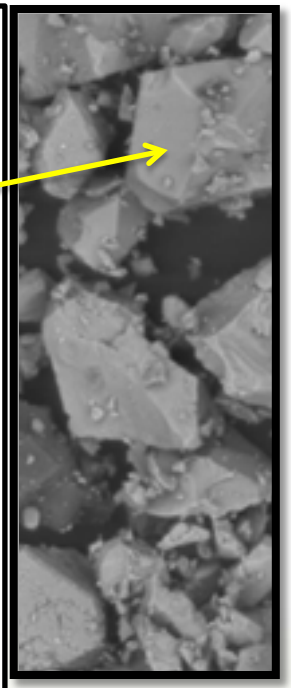
SECONDARY CRUSHING - IMPACT CRUSHERS

Laboratory scaled crushing tests indicate:

- Liberates crystalline magnetite
- Secondary Crushing
  - Feed ~ 65mm
  - Discharge ~70% less than 1mm
  - Total Fines Production ~35% less than 53µm

Value :

- Off the shelf low cost units
- Low energy consumption
- Produces 35% final products
- Eliminates tertiary crushing



~40µm

HAWSONS IRON PROJECT
Optimization Studies - Processing

Preliminary Costings for a 5mtpa Crushing Module

Equipment	5Mtpa (equivalent)		Installed Power kW	Estimated Costs M AUD	Option Study 5Mtpa (Anticipated)		Installed Power kW	Estimated Costs M AUD
Primary Crushers	Gyratory	1	1,200	4.5	Impact Crusher	2	2,400	2.0
Secondary Crushers	Cone	2	1,900	7.0	Barmac	5	3,000	2.5
Tertiary Crushers	HPGR	4	16,000	31.2	-	-	-	
Total			19,100	42.7			*5,400*	*4.5*

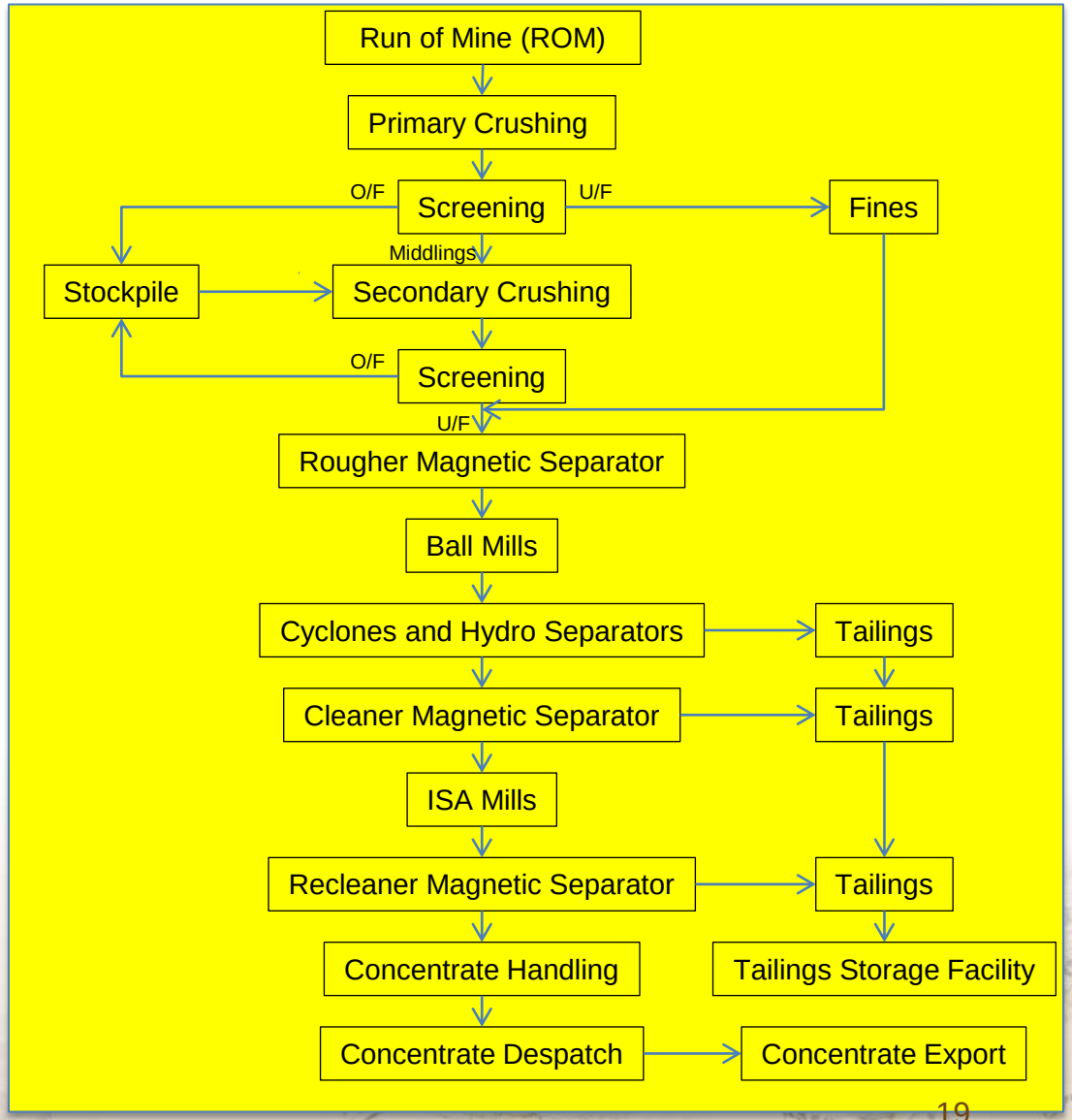
Total Installed Power consumption estimated to be reduced from 173 MW to ~ 143 MW

Estimated Power Reduction of 15 – 20% *

* *Reduction not put into PFS, power for entire on site operation at 20Mtpa con. production*

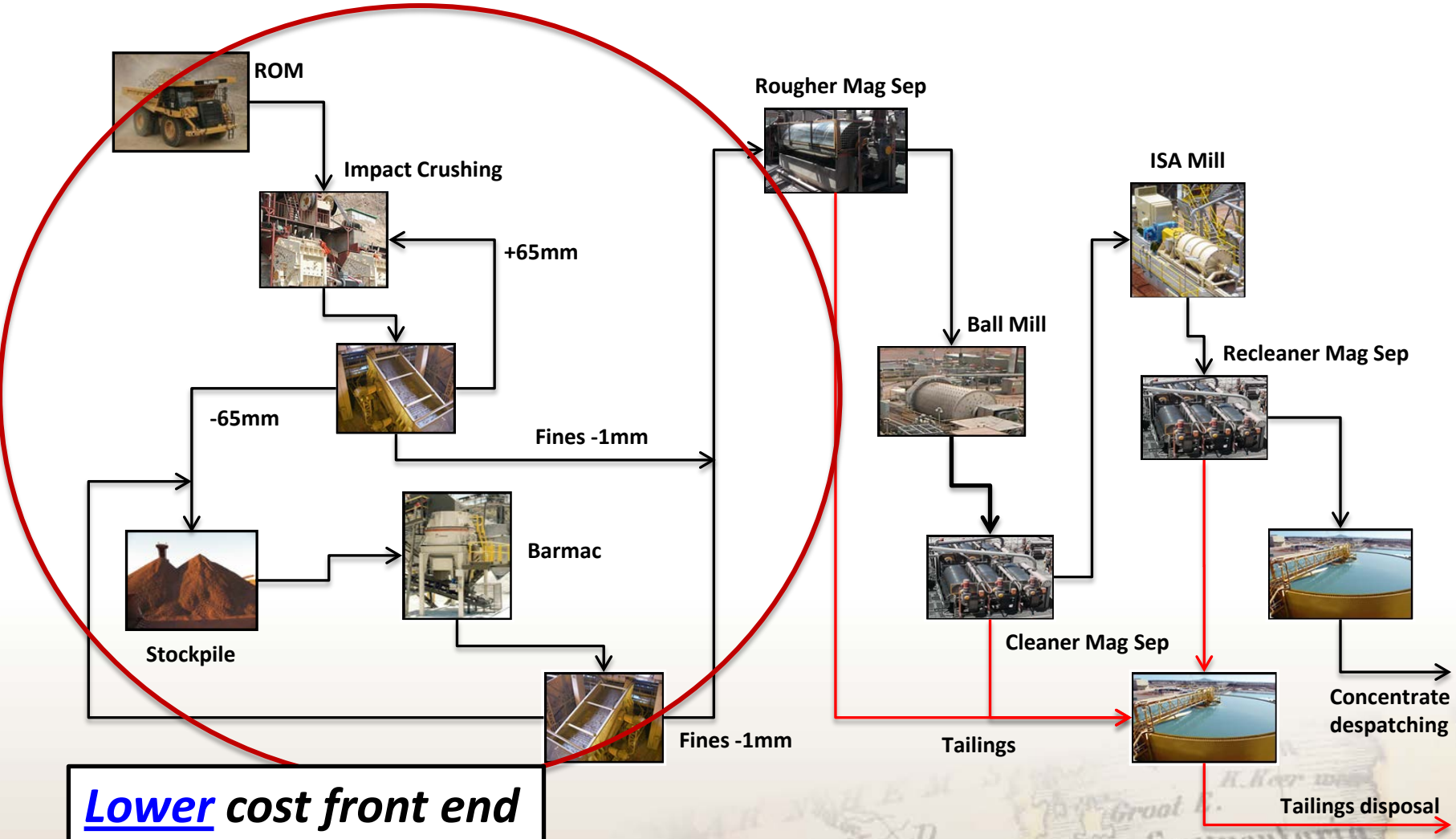
HAWSONS IRON PROJECT
Low Processing Costs - Summary

- **Processing Costs $11/t concentrate – very low compared to others**
- **Produces premium pellet feed concentrate at 30-50 microns**
- **Very soft ore – est' 30% less energy per tonne concentrate than typical WA deposits**
- **Grid Power – up to 50% cheaper than self generated diesel power**



HAWSONS IRON PROJECT

Optimization Studies – Simplified Flow Diagram



***Lower* cost front end**

HAWSONS IRON PROJECT
Value of Soft Ore – power per tonne concentrate

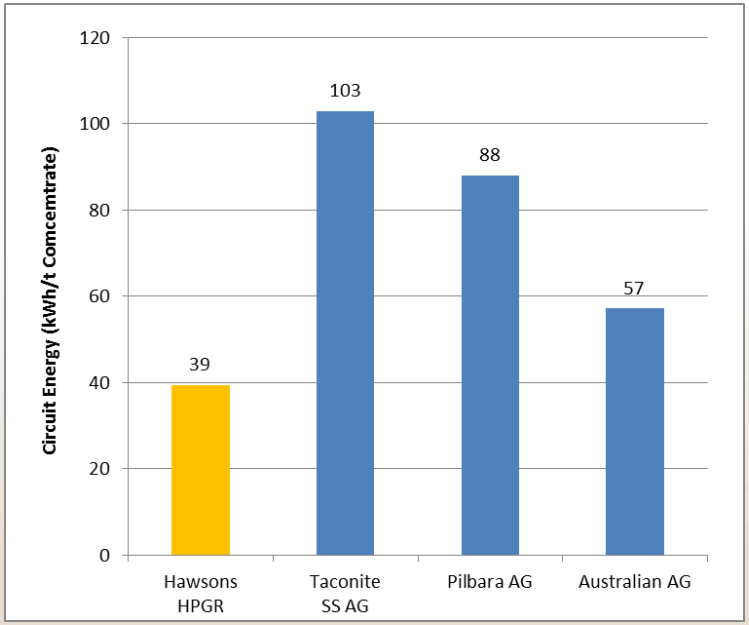
Hawsons

Grinding costs

Bond Work index : 6 kWh/t

At 15.5% DTR :

39 kWh to produce 1 tonne con'



Example of a WA BIF

Grinding costs

Bond Work index :~ 20 kWh/t

At 36% DTR :

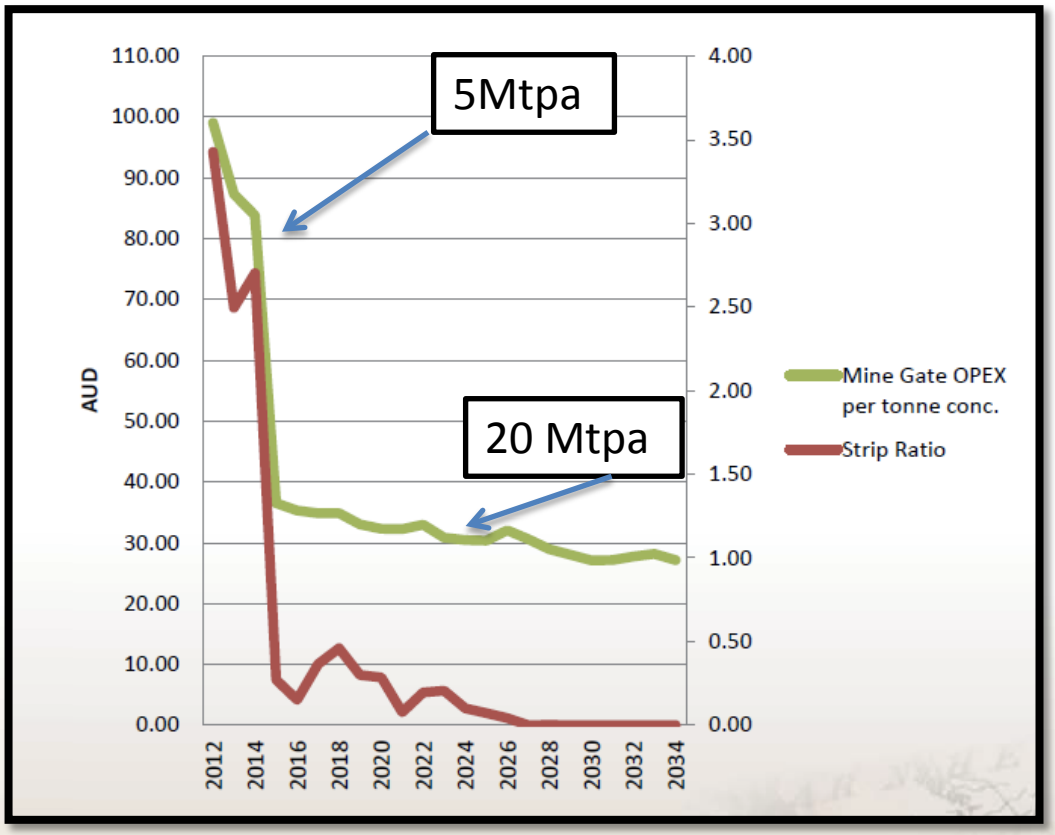
57 kWh to produce 1 tonne con'

Note :

- **Power calculations based on public information**
- **Hawsons costs assuming HPGR / Ball Mill circuit**
- **Anticipate lower power with impact crushers**

HAWSONS IRON PROJECT
Operating Cost Summary

Operating Costs and Strip Ratio



Over Life of Mine :

- **Operating costs : Fall from $36 to $27**
- **Waste to ore Strip Ratio : Reduce at start of mine from ~ 0.4 :1 to 0 in 10 years**

HAWSONS IRON PROJECT
Cost Summary – Start Up

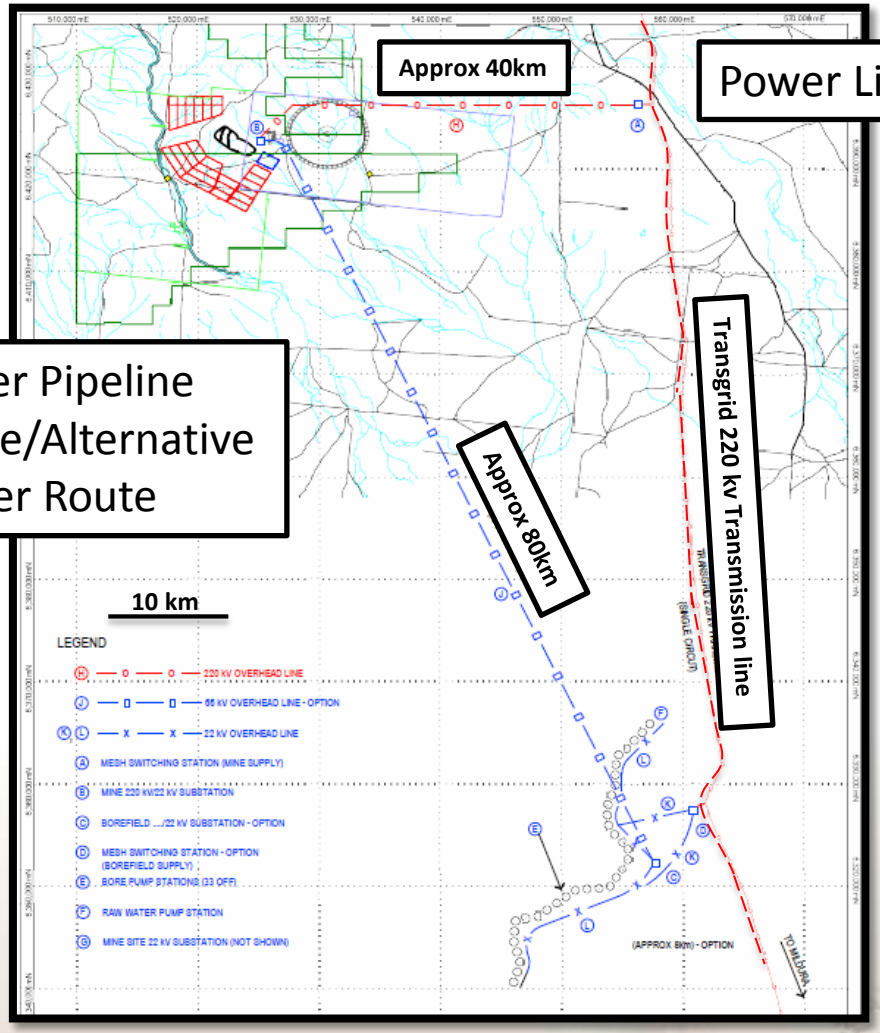
Costs per tonne concentrate	AUD
Mining Costs	$15
Processing Costs	$11*
Other (incl' Royalties)	$8
Total to Mine Gate	**$34 ****

- **FOB costs highly competitive (av. Closer to $60)**
- **Average operating costs drop over life of mine after Pre Strip**

** Does not include processing optimisation*
*** Long term total is estimated to be $27*

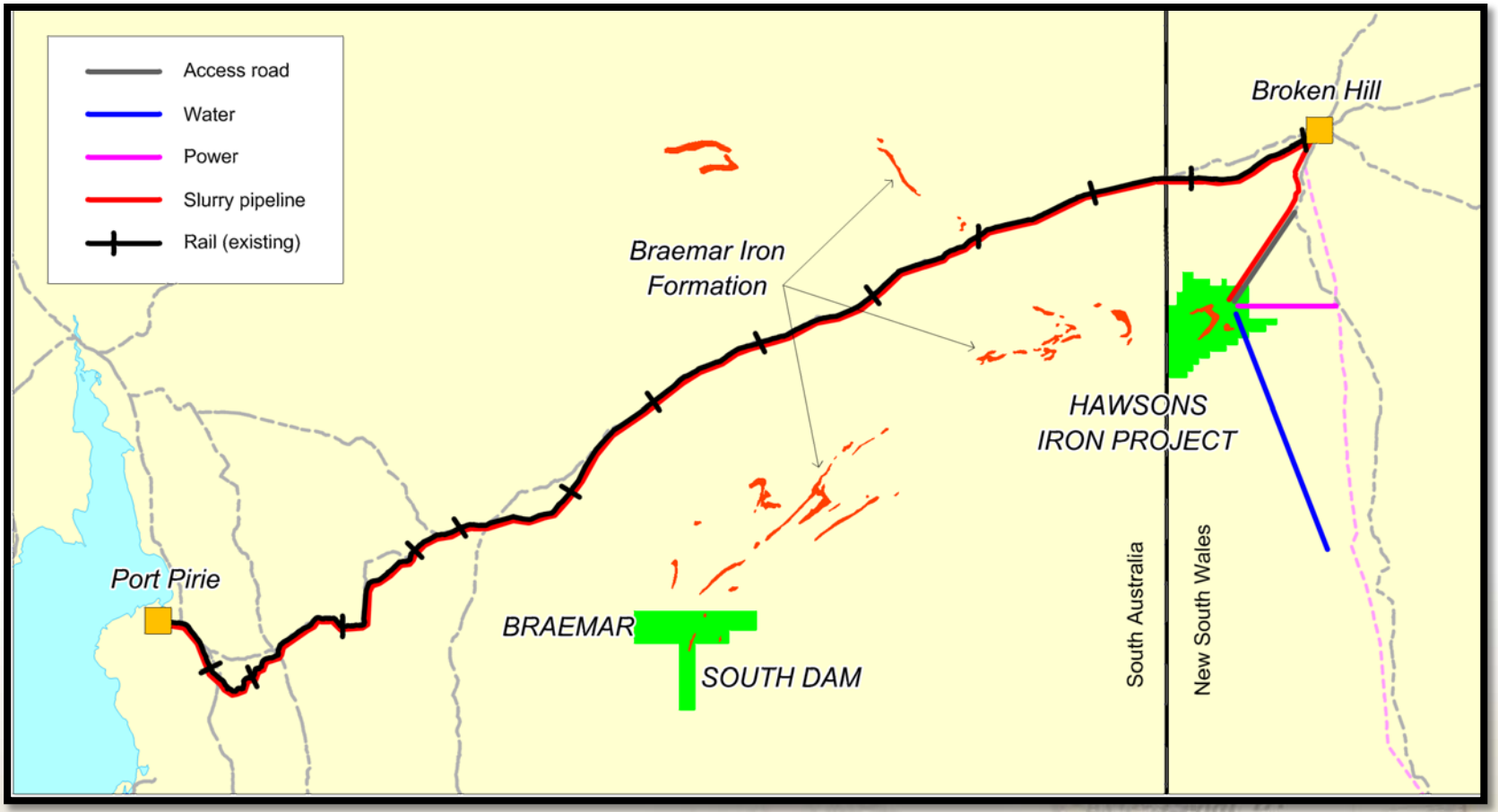
FOB – Free on board

HAWSONS IRON PROJECT
Power and Water - Concept



Water :
Borefield – saline and deep
Close to power

HAWSONS IRON PROJECT
Transport Options From Site to Port



HAWSONS IRON PROJECT
Transport Options – Great Optionality

Recent Developments – March 21, 2012

- **MOU signed with Flinders Ports to determine long term handling, storage and loading solution at Port Pirie, South Australia**
- **Common User Facility for potential to export 20 – 30Mtpa of iron concentrates**

Start Up Preference

- **Year 1 – 5MT**
  - **slurry to Broken Hill , rail to Port Pirie**
- **Ramp up to yr 4 - 20MT**
  - **slurry to Broken Hill , slurry / rail to Port Pirie**
- **13Mtpa available using existing rail to Port Pirie**
- **Port Capacity available at Port Pirie pending upgrade**

HAWSONS IRON PROJECT
Transport Options – Concept Plan

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

Availability of long-term handling and storage facility - great advantage over many other proposed magnetite projects

Port Pirie common berth facility

HAWSONS IRON PROJECT
Cost Summary

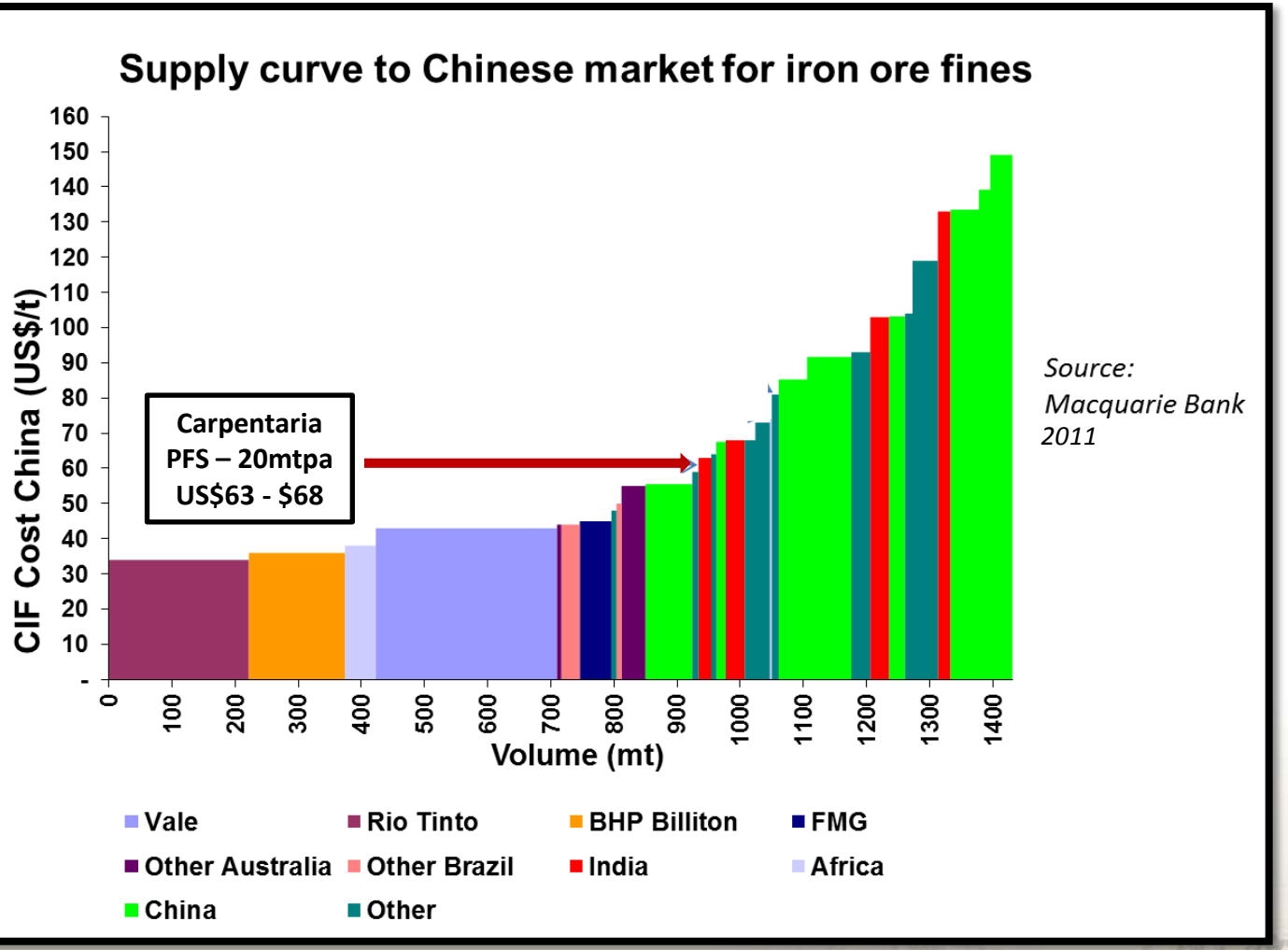
Costs per tonne concentrate	AUD
Mining Costs	$15
Processing Costs	$11*
Other (incl' Royalties)	$8
Transport to and onto Ship	$13[a]- 19[b]
Total FOB Port Pirie	**$47-53**

- **FOB costs highly competitive (av. Closer to $60)**
- **Average operating costs drop over life of mine after Pre Strip**

[a] Long term pipeline estimate
[b] Rail to Port Pirie estimate
** Not including processing optimization*

FOB – Free on board

HAWSONS IRON PROJECT
CIF China Comparison June 2011



Source: Macquarie Bank 2011

Note :
The CIF costs are at production grade eg hematite producers est. at 60% Fe

High grade concentrate producers – magnetite will attract 10 – 20% premium.

This offsets processing and transport costs *not reflected in graph*

Makes magnetite attractive

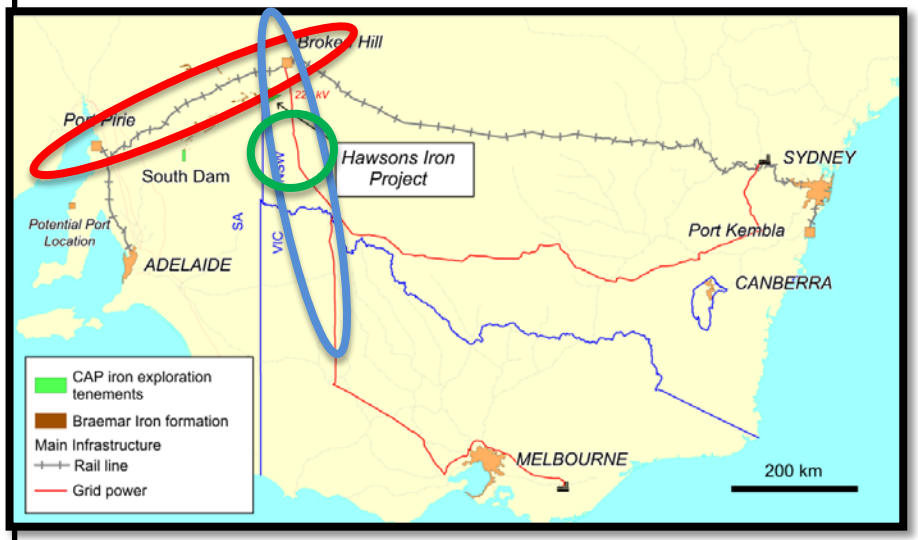
HAWSONS IRON PROJECT
Work Program - Summary

- *Port Pirie Expansion*
  - Flinders Port to complete
- *Metallurgical Testwork*
  - Bench scale and pilot scale
- *Project Sizing Study*
  - Determine optimum capacity and production rates
  - Include recent optimisation studies
- *Transport Studies*
  - Maximise option utility (Slurry/rail)
- *Drilling*
  - Improve resource category
  - Geotechnical testing
  - Metallurgical sampling
- *Statutory Approvals*

HAWSONS IRON PROJECT SUMMARY

- *Prefeasibility Study* – Start up at 5mtpa ramp to 20 mtpa concentrate production, 20 year mine life
  - NPV $3.2 billion, IRR 23% (November 2011)
  - CAPEX of $2.9b
  - Life of mine 69%Fe price US$87/t
  - Est. cost in China US$63 – 68 /t
  - PFS Audited Sept 2011 – all ok
- *Infrastructure* – Port, rail capacity, water, and power all available for start up
- *Mining and Processing* –low unit costs because low strip ratio, wide mining widths and soft ore
- *Marketing* - Saleable concentrate low silica, no impurities
- *Ownership* – CAP 60%, BMG (in Liquidation) 40%

  CAP potential to increase



Native Title has been extinguished

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Carpentaria Exploration

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