

**Curragh Operational Tour** 

**Analyst Briefing** 

Wednesday 17 May 2006



Overview

Stewart Butel
Director Coal Operations

Wesfarmers Energy



## Mine Location









FY 2004/05

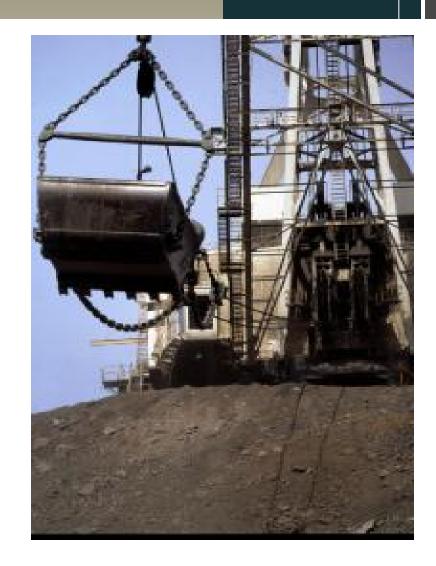
Production Volume mt 7.0

Sales Volume

Export mt 4.6

Domestic mt 2.5

Customers 14



## Curragh - a brief history



Mine opened 1983

Wesfarmers purchase of Curragh June 2000

Lease granted for Curragh East (+60Mt) October 2000

Mining commenced at Curragh East July 2002

• CHPP Upgrades Aug 2002/Oct 2004

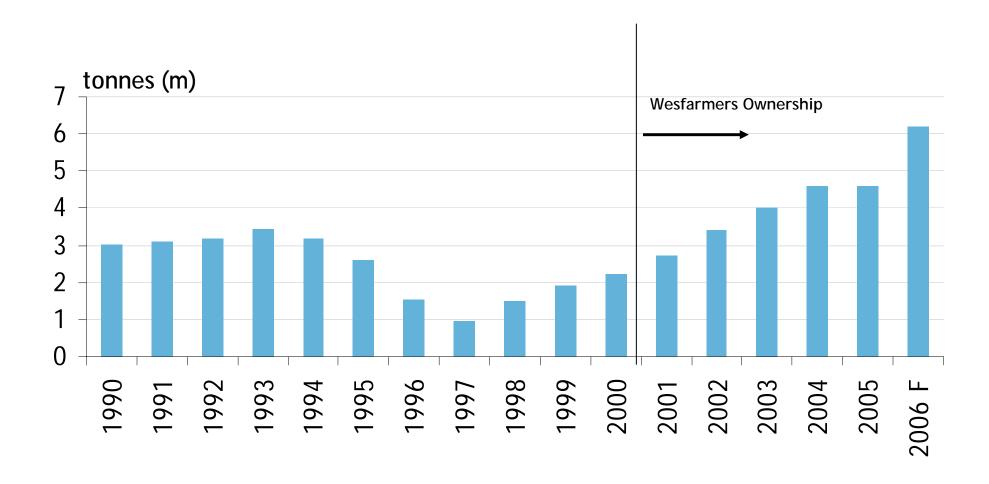
Awarded rights to Curragh North ('CN') December 2002

New mining lease granted CN (+130Mt) August 2004

Curragh North Development 2004 - 2006

## Curragh Export Sales Growth





## Resources Growth Challenge



- Availability and cost of key inputs
- Global shortage of earthmover tyres
- Availability and cost of skilled labour
- Industry-wide capital over-runs and delays

## Curragh's Complexity Challenge



Activity	Metric	Pre Curragh North	Post Curragh North
Area Disturbed by Mining	ha	3,860	5,945
Deposit Strike Length	km	13	30
Total Overburden Removal	mbcm	97.3	131.7
Tonnes Mined	mt	8.7	12.1
CHPP Capacity	t/hr	1,200	1,600
Resource Complexity - raw coal types	no.	3	6
Average Workforce (FTE incl contractors)	no.	544	789
Activity Man-hours (FTE incl contractors)	m hrs	1.1	1.9

## **Coal Production**



Mine	Beneficial Interest	Coal Type	9 mon Mar-05 ('000 toi	Mar-06
Premier, WA	100%	Steaming	2,550	2,842
Curragh, QLD	100%	Metallurgical	3,198	4,509
		Steaming	1,695	2,052
Bengalla, NSW	40%	Steaming	1,656	1,739
Total			9,099	11,142

Market Update

Rob Brenchley Director Coal Marketing and Development

Wesfarmers Energy



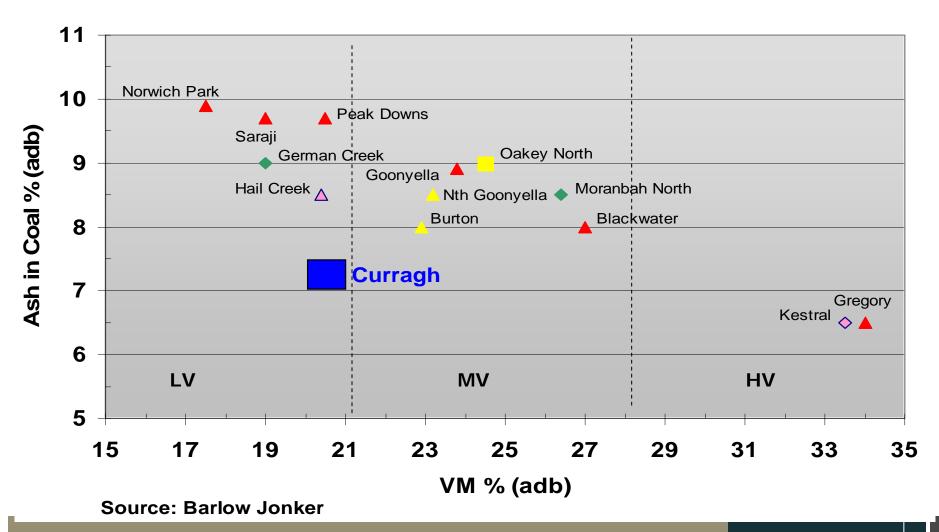
## Curragh Export Sales



- Established Curragh brand and quality
- Positioned as "independent" supplier
- Diversified product range
- World leading steel makers as key customers
- Positioned for future growth

# Queensland Hard Coking Coal Indicative Quality Comparison

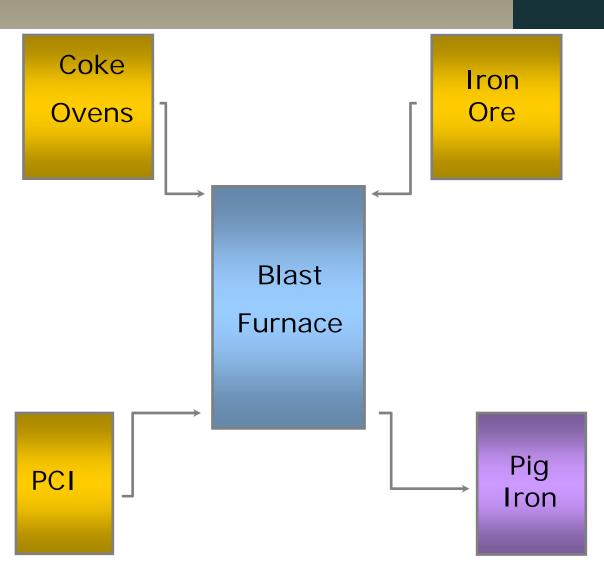




## Blast Furnace Steel Making

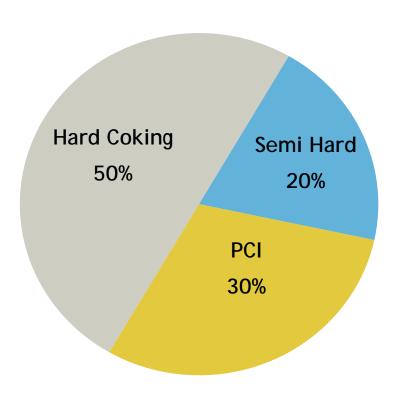


LV Coking Coal
MV Coking Coal
HV Coking Coal
Semi Coking Coal



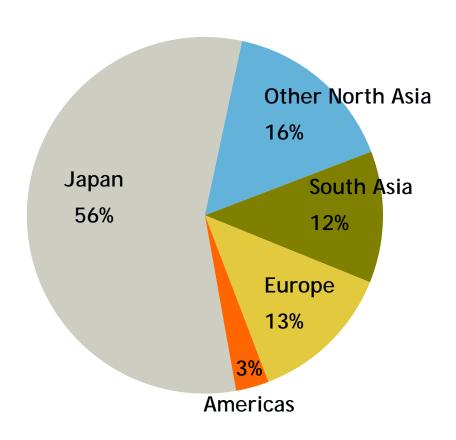
## Curragh Export Sales Sales Mix Estimate 2006/07





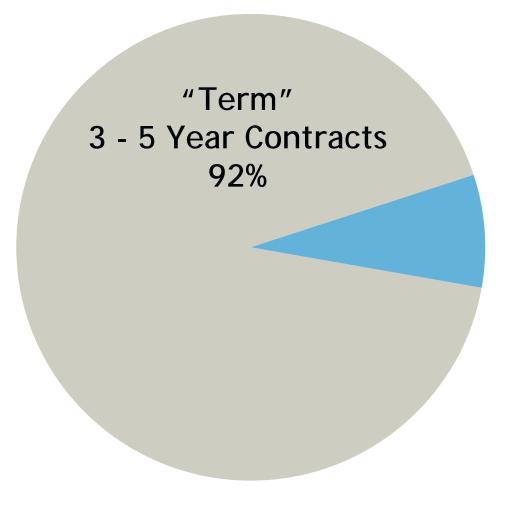
## Curragh Export Sales Customer Mix 2006/07





## Curragh Export Sales Contract Duration 2006/07





"Annual"
1 Year Contracts
8%

## Gladstone Coal Delivery System Export Capacity Upgrade Delays



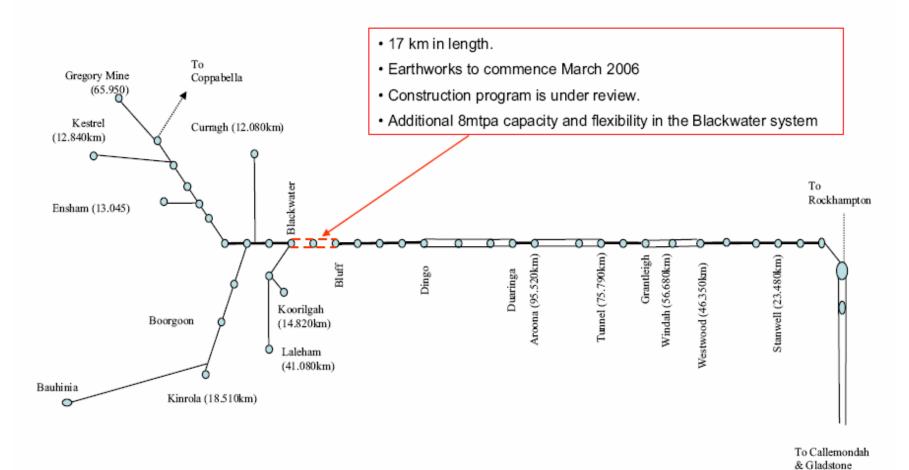
	Original Completion Date	Revised Completion Date (as at May 2006)
QR (Rail) Blackwater to Bluff Duplication	September 2006	July 2007
CQPA (Gladstone Port) 3rd Train Dump Station	July 2006	November 2006

- Curragh's expected GCDS capacity in 2006/07 7.5mt
- 2006/07 capacity now uncertain

## **QR** Rail Duplication



### **Bluff to Blackwater Duplication**



## Port Upgrade





Target Completion Date - November 2006

**Curragh North Development** 

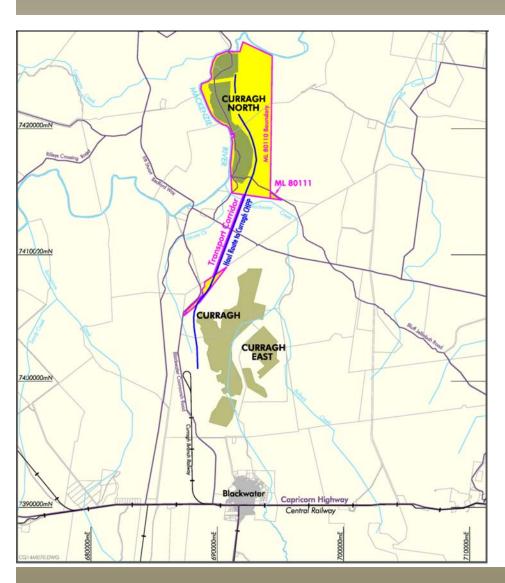
Murray Bailey Executive General Manager

Curragh Queensland Mining Pty Ltd



## Curragh North Project





- 20km north of Curragh
- +130mt of mineable reserves
- 40 year mining lease
- linked by private road to Curragh
- limited site facilities
- developed as a remote pit
- all coal processed at Curragh

## Curragh North Summary



- Increased coal reserve base
- Extended open cut mine life to 2025
- Capital Expenditure \$360M
- Increased export volumes
- New "PCI" product
- Supporting current customers

## **Development and Mining**



- 3 pits North (Pit U), Central (Pit T) and South (Pit S)
- Mine Lease area 4800ha
- Adjacent to the MacKenzie River
- Mining west to east
- 2 draglines from Curragh for overburden removal
- Truck and shovel pre-strip
- Coal to Curragh for processing and rail

## Mine Plan

**MINING BLOCKS** 

**FLOOD PROTECTION LEVEE** 

**MacKENZIE RIVER** 

**MINING LEASE BOUNDARY** 



PIT S

PIT U

PIT T

#### **COAL DUMP HOPPER**

as practical.

- > Coal crushed at CN
- > Conveyor to Curragh.

#### MINE INFRASTRUCTURE

- ➤ Minimised by utilising Curragh Mine facilities.
- ➤ Limited On site facilities

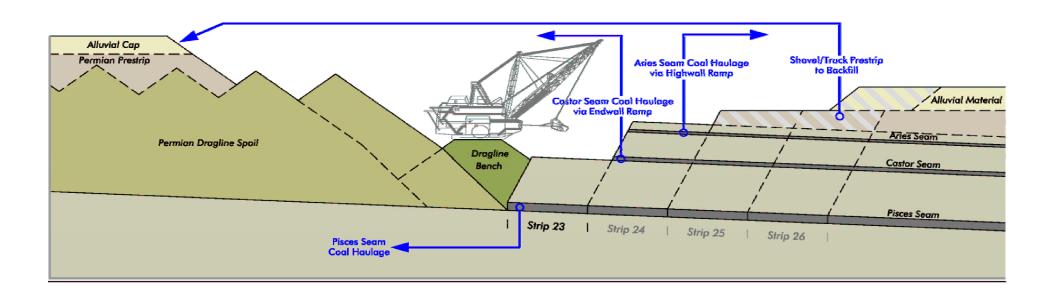
#### TRANSPORT CORRIDOR

- > Private road
- > Conveyor.

Curragh Operational Tour - 17 May 2006

## Mining Methods





## Mining



- Contractor boxcut and pre-strip for first 5 years
- Curragh infrastructure utilised for:
  - Coal handling and crushing
  - Coal processing
  - Stockpiling
  - Rail load-out
- Dragline relocations to CN in 2006 & 2007

## Run-of-Mine Coal Transport



### Initial Development Phase:

- Contractor road train
- Up to 500,000 tonnes per month

### Long Term:

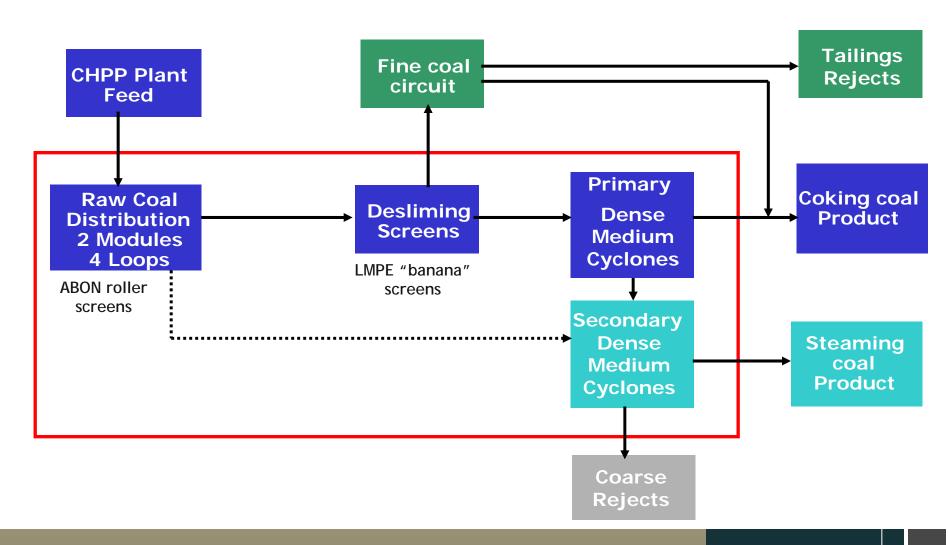
- 20.3km single flight conveyor

#### Benefits:

- Avoids extensive upgrade of existing handling system
- Lowest cost
- Lowest operating risk
- Sized for future growth

## Coal Handling & Preparation Plant Processing Flow Chart (general arrangement)





## Coal Handling & Preparation Plant





- 4,320 sq m area
- 27m high
- built 1982/3
- 2 parallel modules
- 24 screens
- 43 pumps
- 444 electric motors
- 26,000m piping

## CHPP - the value driver "throttle"



#### **Mining Activities**

- topsoil removal
  - drilling
  - blasting
- overburden removal
  - mining
  - hauling
  - stockpiling

Coal Handling & Processing



#### **Logistics Activities**

- customer demand
- train scheduling
  - TLO & railing
- port stockpiling
  - shipping

## Curragh North



### Curragh North - civil construction

- Civil Contract signed Oct 2004
- Civil works commenced Nov 2004
- Completed Dec 2005
- On time and within budget; Lost time injury free
- Materials handling system due for completion in Q4 CY 2006

### Curragh North - mining

- Mining lease granted July 2004
- Mining Contract signed Oct 2004
- Overburden removal commenced Nov 2004
- First coal exposed Feb 2005
- First coal mined & processed April 2005
- 3.3Mt mined to date

# For all the latest news visit www.wesfarmers.com.au

