Pilbara Iron Ore Project
Prefeasibility on track

Kevin Wills
Managing Director

Right commodity
Iron ore

Right address
Pilbara

Right project
Potential for 113Mt DSO ore and low-cost mining

Right timing
Option for fast track start 2012
Location of projects

**Pilbara**
- 175km south of Dampier
- 550Mt Inferred Resource
- CID and BID hematite
- Prefeasibility in progress

**Canegrass**
- 370km E of Geraldton
- Exploration Target of 1.7 to 3.0Bt of 20-40% magnetite
- Soft gabbro host rock – low energy costs
Development highlights

- Two significant iron ore projects
  - **Pilbara** (Blacksmith hematite) and
  - **Mid West** (Canegrow magnetite)

*Company making potential*

- Non iron assets moving to Flinders Exploration Limited (FEX) IPO
- $59.0M cash in bank at 15 March 2010
- WorleyParsons undertaking Prefeasibility Study (PFS)
  - on track
- Bankable Feasibility (BFS) planned to start Q4 2010
Project highlights

- Pilbara 550Mt iron ore Inferred Resource at 55.6% iron
- Delta 113Mt Indicated and Inferred Resource of lower CID and BID at 58.5% iron – potential direct shipping ore
- Metallurgical and beneficiation testwork underway
- Mining studies underway suggesting low cost mining
- Several short and long-term infrastructure options due to location and Pilbara developments eg WA Government recently backed new multiuser port at Anketell
Corporate

Shares on issue 1,819 million
Shareholders 13,503
Now included in S & P/ASX 300 Metals and Mining Index
ASX Emerging Companies Index

Recent trading 15.3.2010
Shares 12.5 cents

Market capitalisation $227 million

Cash in hand $59.3 million

Top 20 shareholders 482M shares 26.5%
Executive team

Kevin Wills - Managing Director
Gary Sutherland - General Manager-Projects
Nick Corlis - Exploration Manager
David Godfrey - Chief Financial Officer
Mick Anstey - Manager HSE & Risk

Appointed
Appointment in progress
Manager Project Services
Mining Manager
Pilbara Iron Ore Project (PIOP)

Blacksmith
- E47/882 – 108 sq km
- Five deposits 550Mt
  - Ajax, Blackjack, Champion, Delta, Eagle
- Scoping Study suggests focus on Delta – highest grade/lowest stripping ratios
- 19km from Dampier – Paraburdoo railway
- Additional resource expected

Anvil
- E47/1560 – 44 sq km
- Resources in new Global resource – expected April 2010
Delta Valley perspective view to southwest

Delta Valley resource area
Key rock types

Overburden (OBD)

Channel iron deposit (CID)

Bedded iron deposit (BID)

Banded Iron Formation (BIF) – Basement

Waste

Ore

Ore

Waste
Outcropping Bedded Iron Deposits

Delta Deposit

Outcropping BIF – basement

Area of outcropping BIF

Cover overlying CID
Global Resource

<table>
<thead>
<tr>
<th>JORC Classification</th>
<th>Iron Grade Cut-off</th>
<th>Tonnage Mt</th>
<th>Fe %</th>
<th>SiO₂ %</th>
<th>Al₂O₃ %</th>
<th>P %</th>
<th>LOI %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated and Inferred</td>
<td>+50%</td>
<td>550.1</td>
<td>55.6</td>
<td>9.6</td>
<td>4.6</td>
<td>0.07</td>
<td>5.7</td>
</tr>
</tbody>
</table>

**2009 Drilling**
- 721 RC holes / 35,480m
- 32 metallurgical drill holes

**Total drilling to date**
- 1022 holes / 50,519m

Resource estimates by Golder Associates Pty Ltd
Delta activities

RC drilling
Diamond drilling
Geophysical logging
RC chip logging
Core logging
Blacksmith camp
### Delta Indicated and Inferred Resource

<table>
<thead>
<tr>
<th>Mt</th>
<th>Fe %</th>
<th>Si %</th>
<th>Al %</th>
<th>P %</th>
<th>LOI %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>50% cutoff – Indicated and Inferred</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower CID</td>
<td>54.7</td>
<td>59.7</td>
<td>6.2</td>
<td>4.4</td>
<td>0.06</td>
</tr>
<tr>
<td>BID</td>
<td>58.3</td>
<td>57.4</td>
<td>4.7</td>
<td>2.9</td>
<td>0.13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>113.0</strong></td>
<td><strong>58.5</strong></td>
<td><strong>5.4</strong></td>
<td><strong>3.6</strong></td>
<td><strong>0.10</strong></td>
</tr>
<tr>
<td><strong>57% cutoff – Indicated and Inferred</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower CID</td>
<td>50.5</td>
<td>59.9</td>
<td>6.1</td>
<td>4.3</td>
<td>0.06</td>
</tr>
<tr>
<td>BID</td>
<td>33.1</td>
<td>58.5</td>
<td>3.9</td>
<td>2.7</td>
<td>0.13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83.6</strong></td>
<td><strong>59.3</strong></td>
<td><strong>5.2</strong></td>
<td><strong>3.7</strong></td>
<td><strong>0.09</strong></td>
</tr>
</tbody>
</table>

- Inferred resource hole spacing 500 x 100m
- Indicated resource hole spacing 125 x 100m
- 381 RC drillholes for 21,577m
Delta Orebody

Cross sections

Line 25
Line 24
Line 23

Note: Vertical Exaggeration x 4

0  100 m

Plan view of block model

Distribution – Lower CID

Distribution – BID

Resource estimation
Block model has 44,576 mineralised blocks of 25 x 25m N & E, 2, 4 or 6m RL slices.
Metallurgical testwork

**Current Status**

- Drilling completed, 32 holes
- Logging completed
  - Photographic
  - Geophysical
- Geotechnical
- Phase 1: results available
- Phase 2: assessment being prepared

1. UCS = a measurement of the true rock strength.
2. CWI = measures the relative resistance of the rock to the impact of a crusher.
3. BAI = determines the abrasiveness of the ore.
Delta – Mining benefits

- Open cut low cost mining possible
- Majority of mining above water table ie dry
- Potential for low waste/ore ratios
- Early testwork indicates most of orebody is free dig
- Proximity to existing infrastructure
- Multiple infrastructure options available
- Additional high-grade DSO/BID expected
- Fast track option under consideration for production in 2012
## Conceptual development timetable options

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scoping study complete</strong></td>
<td></td>
<td>🟡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prefeasibility study (PFS)</strong></td>
<td>🟡</td>
<td>🟡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Potential fast track decision</strong></td>
<td></td>
<td></td>
<td>🟡</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bankable feasibility study (BFS)</strong></td>
<td>🟡</td>
<td>🟡</td>
<td>🟡</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Design and construct</strong></td>
<td>🟡</td>
<td>🟡</td>
<td>🟡</td>
<td>🟡</td>
<td>🟡</td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>🟡</td>
</tr>
</tbody>
</table>

**DSO (Direct shipping ore) path**
- Commence production late 2012

**Beneficiation and infrastructure path**
- Commence production late 2013
## 2010 program

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilbara Iron Ore Project - PFS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefeasibility study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta Indicated Resource</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 1 metallurgy program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 2 metallurgy program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta Indicated Resource drilling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration extension drilling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual mining studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native title negotiations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish preferred base case</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering &amp; estimate preferred base case</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commence bankable feasibility study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Caneglass Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review, drilling, metallurgical and Scoping Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Feasibility Studies by WorleyParsons
Infrastructure options

- Well located with respect to existing infrastructure
- PFS considering seven potential infrastructure options
- Ideally located for numerous long term proposed infrastructure development solutions, both rail and port
## Project milestones

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Targeted</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commence exploration</td>
<td>November 2007</td>
<td>✓</td>
</tr>
<tr>
<td>Orebody discovery</td>
<td>August 2008</td>
<td>✓</td>
</tr>
<tr>
<td>First Inferred Resource</td>
<td>April 2009</td>
<td>✓</td>
</tr>
<tr>
<td>Scoping study</td>
<td>August 2009</td>
<td>✓</td>
</tr>
<tr>
<td>First Indicated Resource</td>
<td>February 2010</td>
<td>✓</td>
</tr>
<tr>
<td>First mining plan</td>
<td>April 2010</td>
<td></td>
</tr>
<tr>
<td>Complete PFS</td>
<td>Q4 2010</td>
<td></td>
</tr>
</tbody>
</table>

**Fast Track Option (FT)**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Targeted</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete FT BFS</td>
<td>June 2011</td>
<td></td>
</tr>
<tr>
<td>FT Ministerial approval</td>
<td>June 2012</td>
<td></td>
</tr>
<tr>
<td>Complete FT design and construction</td>
<td>October 2012</td>
<td></td>
</tr>
<tr>
<td>FT operation</td>
<td>December 2012</td>
<td></td>
</tr>
</tbody>
</table>

**Beneficiation and Infrastructure Option (B&I)**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Targeted</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete B&amp;I BFS</td>
<td>September 2011</td>
<td></td>
</tr>
<tr>
<td>B&amp;I Ministerial Approval</td>
<td>September 2011</td>
<td></td>
</tr>
<tr>
<td>Complete B&amp;I design and construction</td>
<td>September 2013</td>
<td></td>
</tr>
<tr>
<td>B&amp;I operation</td>
<td>December 2013</td>
<td></td>
</tr>
</tbody>
</table>
Project standouts

- Part of Pilbara Iron ore province
- WorleyParsons undertaking PFS – on track – BFS to commence Q4 2010
- Large Global resource of 550Mt part requires beneficiation
- 113Mt of Potential DSO Resource at Delta
- Dry mining, free diggable ore and low waste leads to low mining costs
- Infrastructure options available – WA Government recently backed new multiuser port at Anketell
- Fast track option – potential production in 2012
Disclaimer
This presentation is designed as a general overview of Flinders Mines Limited's (FMS) activities. You should not make an investment decision with respect to FMS based solely on this presentation.

The presentation contains forward looking statements that are subject to risk factors associated with the exploration and mining industry.

It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a variety of variables which could cause actual results or trends to differ materially.

JORC Compliance

Exploration Targets
Exploration Targets are reported according to Clause 18 of the JORC Code. This means that the potential quantity and grade is conceptual in nature and that considerable further exploration, particularly drilling, is necessary before any Identified Mineral Resource can be reported. It is uncertain if further exploration will lead to a larger, smaller or any Mineral Resource.

Competent Person
The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Dr K J A Wills (who is a Fellow of the Australasian Institute of Mining and Metallurgy) and Mr N Corlis (who is a member of the Australian Institute of Geoscientists). Dr Wills and Mr Corlis are employees of Flinders Mines Limited. Both have sufficient experience that is relevant to the style of mineralisation and types of deposit under consideration and consent to inclusion of the information in this report in the form and context in which it appears. Dr Wills and Mr Corlis qualify as Competent Persons as defined in the 2004 Edition of the “Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves”.
Finale

Right commodity  Iron ore
Right address   Pilbara
Right project  Potential for 113Mt DSO ore and low-cost mining
Right timing   Option for fast track start 2012

For further information please visit our website at www.flindersmines.com or contact:
Kevin Wills on 08 8132 7950 or 0419 850 997
Email: kwills@flindersmines.com
62 Beulah Road Norwood South Australia 5067
Telephone 08 8132 7950
Duncan Gordon - Investor relations on 08 8232 8800 or 0404 006 444
Email: dgordon@adelaideequity.com.au