Welcome to BHP Billiton Iron Ore Mining Operations

Business Analysts visit
11 – 12 September 2003
Visitor Safety Induction

Welcome to Newman

1. Stay with your BHP Billiton escort at all times.
2. Reflective vests, gloves and safety helmets are provided and you will be advised when to wear them.
3. Safety glasses are provided. You will be advised when it is necessary to wear them. Safety glasses will fit over prescription glasses.
4. Use handrails when using stairs.
5. Keep clear of all machinery.
6. In the event of an evacuation or emergency stay with your BHP Billiton escort.
7. BHP Billiton has a NO-SMOKING policy inside buildings and vehicles.
8. You are most welcome to use cameras.

Enjoy your visit with us today
LTIFR – Whaleback and Contract Mines

- NSCA
- SMP
- D&A
- SAO
- PPS
- Detailed
- Investigation
- ICAM

Whaleback
Contract Mines

Years:
- YEM97
- YEM98
- YEM99
- YEJ00
- YEJ01
- YEJ02
- YEJ03
- YEJO4
to date

Values:
- YEM97: 13
- YEM98: 8
- YEM99: 8
- YEJ00: 5
- YEJ01: 5
- YEJ02: 3
- YEJ03: 1.2
- YEJO4 to date: 0.6

Business Analysts Visit September 2003

Whaleback
Contract Mines
Behavourial Safety

Upper Management Commitment

Current Learning Exposure
- Statutory Obligations
- Safety Systems
- Improved Practices

Potential knowledge

30 X incident reports to injuries

BEHAVIOUR
- Training
- Values
- Recognition

30 X incident reports to injuries

Potential knowledge

BEHAVIOUR
- Training
- Values
- Recognition
Mining Strategic Focus: 2003 - 2008

Key Points

• Achieve / exceed goals through good planning
• Think beyond short term / regional horizons
• Gain strategic benefits
• People management – become employer of choice
• Organisation consistency
• Secure support for business decisions
• Pace of restructuring
• Keep it simple
• Growth
## YEJ04 Mining Group Roadmap

<table>
<thead>
<tr>
<th>Health &amp; Safety</th>
<th>Environment</th>
<th>Community Relations</th>
<th>People Management</th>
<th>Cost</th>
<th>Efficiency</th>
<th>Planning</th>
<th>Product Quality</th>
<th>Tonnage</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Hygiene</td>
<td>Health &amp; Safety Environment Community Relations</td>
<td></td>
<td></td>
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### HSEC Integration

- Contractor HSEC Management
- Information Business Systems - HSEC
- Integrate HSEC Standards and Corporate Initiatives
- Integrate Area C into Business
- Mine Product Management Process
- Progress Close Planning Process
- Upgrade Newman JV Product
Navigator – Business Planning Alignment & Involvement

• Strengthening business planning through greater input from all work groups and OE processes

• 54 sessions across all workgroups
• 460 participants
• 1834 comments collected and analysed
Navigator - Results

- Efficiency
  - Communication
  - Systems & Processes
  - Maintenance & Equipment Availability

- People Management
  - Working Arrangements & Workload
  - Skills Development

- Operating Excellence projects are under way with workgroups

77% of all comments
Newman to Nelson Point - 426km
  • Jimblebar spur line is 32km

Yandi to Nelson Point - 310 km
  • Yandi spur line is 30km
  • Area C proposed spur line extension from Yandi is 38km

Yarrie to Finucane Island - 208km
Yandi Mining Lease
Goldsworthy Mining Leases
Mt. Whaleback Pit

Current Pit Dimensions
- Length: 5km
- Width: 1.2km
- Depth: 400m
Mt. Whaleback

PUSHBACK OPTIMISATION ...

- Better ore availability
- Lower waste movement
- Improved control over chemical and physical quality

- Maximises
  - Ore Recovery
  - Resources

- Optimises
  - Production Control
  - Quality Control
  - Reconciliation Practices

Global Positioning System

Smarter use of equipment
Mt. Whaleback Ultimate Pit Design

- Core ore source for the next 30 years
- Controls chemical and physical properties of the blend

<table>
<thead>
<tr>
<th>Feature</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>Pit Control Office</td>
<td>690 mRL</td>
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<tr>
<td>Lowest Point</td>
<td>190 mRL</td>
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<tr>
<td>Total Depth</td>
<td>≈ 500 m</td>
</tr>
<tr>
<td>Length</td>
<td>5 kms</td>
</tr>
<tr>
<td>Width</td>
<td>2 kms</td>
</tr>
</tbody>
</table>
Beneficiation Plant

• Feed System Modification
  – April 1999
• Drum Capacity Increased – 340 to 550 tph/drum, 3.2 to 3.5 SG
  – May 1999
• Cyclone Circuit Upgrade
  – June 1999
• Replaced Cones Plant with Spiral Plant
  – March 2000
• Modified Chutes for Wet Feed Handling
  – November 2000
• Waste System Upgrade – higher tonnage/reduce spillage
  – June 2001
• Tailings System Upgrade
  – October 2001

YEJ 1998 : 4.8Mwt
YEJ 2001 : 5.8Mwt
YEJ 2002 : 7.1Mwt
YEJ 2003 : 8.0Mwt
Orebody 25 & 23

**Satellite Orebodies Offer Blending Flexibility**

**Orebody 25**
- Flexible contractor mining operation
- Operational flexibility – crushing/screening options
- All ore reserves above water table

**Orebody 23**
- Maintained as standby HGO source
- Advanced pit development
- Dewatering system designed to allow rapid start up
Jimblebar – Wheelarra 4 Pit

- Flexible contractor mining operation
- Ore handling plant capacity 8Mtpa
- Ore reserves in excess of 100Mt
- All ore reserves above water table
- Low Phosphorus ore reserves
Yandi Central 1 Central 5

- Overland Conveyor
- New Primary Crusher
- Central 1
- Central 2
- Central 5
- 522mRL Bench
- Yandi Rail Loop
Yandi OHP2 to Central 1

Overland conveyor 5.3km
Primary crusher

Business Analysts Visit September 2003
Area C Progress

• Mining Contract awarded 1 April 2003
• HWE mobilisation commenced 24 April 2003
• First Mining 15 May 2003
• First Ore crushed 21 July 2003
• Commissioning of reclaimer and train loading system began 8 August
• 1st loaded train departed 14 August 2003
• Providing feed from the Bulk Sample Stockpiles and direct from the pit to the Processing Plant as part of Load Commissioning
• Transfer of responsibilities from ADP to Mining Operations on 1 September 2003
Area C
Stacker & Reclaimer at Area C
Bulk Ore Conditioning Sprays used to increase moisture and reduce overall dust levels.

Overall moisture conditioning levels of 3% for fines and 4% lump ores

Additional moisture controls are via train loadout, rail and port.
MAC™ Fines

- Fines moisture targets based on dust extinction and flow studies
  - Initially will target 7.5-8.0% moisture
  - Will be reviewed with customers based on operational experience
- On-line low frequency microwave moisture analysers in new processing plant will automate process for moisture control of fines
Yarrie Sunrise Hill West

Northern pushback

100mrl

1st June 2003
Mining Operations Improvement Initiatives
Business Improvement YEJ04

Number Of Improvement Projects

- Operating Excellence
  - 9 Full Time, 3 Part Time, Black Belt Coaches
  - 109 Attended OE Basics training
  - 28 OE Champions
Operating Excellence Project
CAT 994 Loader Operator Driven Reliability

Improved Operating Techniques & Teamwork between Maintenance and Production Departments:

- Increased availability from 72% to 85%.
- Increased Mean Time Between Failure from 22 hours to 46 hours.

Next step is to roll out to our Shovel and Truck fleets.
• Onboard Load System critical to achieving truck tonnage targets – only effective measure for Shovel operators.

• Inaccuracies meant systematically underloading 793 trucks.

• Improvement in calibration technique achieved increased accuracy and therefore higher actual loads.

• Increased set point simultaneously.
Operating Excellence
Gross Loading Rate

Gross Loading Rate
01 January 00 to 7-Apr-2003

- Target Level - 5,500 tph
- Minimum Level - 4,500 tph

25 Vessel Moving Average

- Target Level - 5,850 wtph
- Minimum Level - 4,785 wtph

- Target Level - 6,000 wtph
- Minimum Level - 5,500 wtph

GLR (tph)
New Technology - Slope Stability Radar
Leadership Excellence

• Leadership Excellence is a customised BHP Billiton Iron Ore leadership development program

• Objectives
  – Develop a common leadership framework
    – “Attaining organisational goals through the development of people”
  – Assess current competence levels and implement improvement plans
  – All BHPBIO leaders meet competency benchmarks
  – Nationally accredited Frontline Management qualifications
  – 25 Managers and Superintendents completed 2002 program
    – 23 achieved Diploma (92% of target group)
  – 52 Supervisors completing 2003 program
Leadership Excellence 360° Feedback
Start of Program