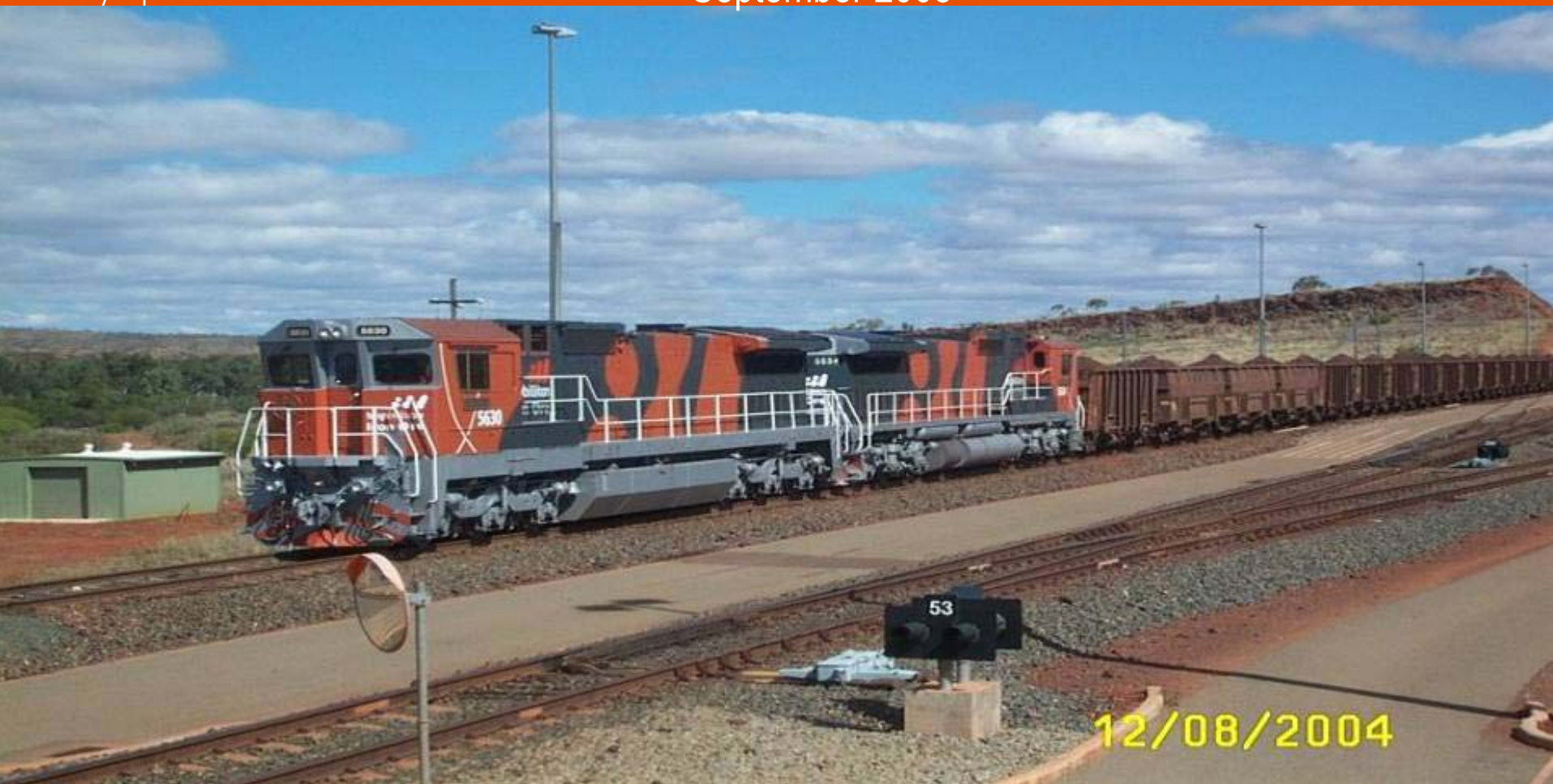
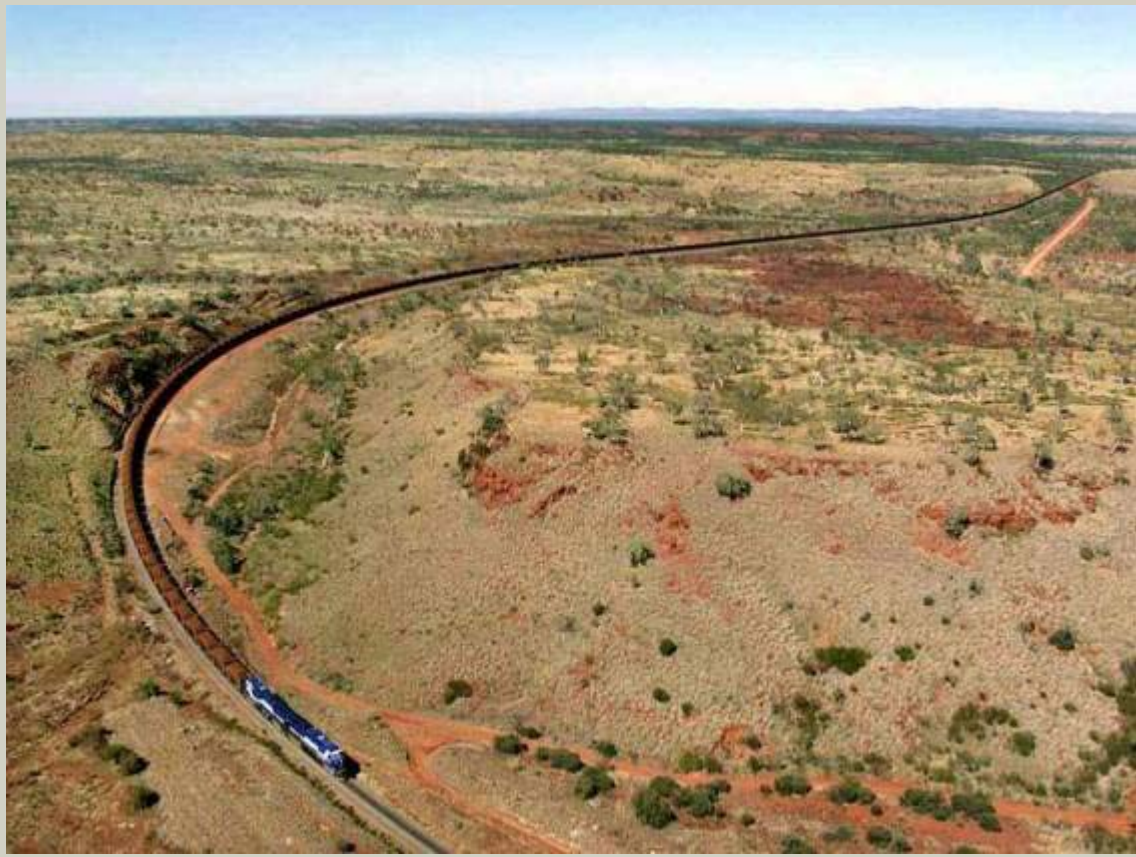
BHP Iron Ore Railroad Overview

September 2003



World Class Heavy Haul Railway

- ✓Best Practice
- ✓Innovation
- ✓High Technology
- ✓Cost Minimisation



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Operational Excellence

Safety

"Good Safety is Good Business"

Behavioural Focused

People

motivated and "can do"

majority of staff AWA

Technology

leading edge

drives efficiency

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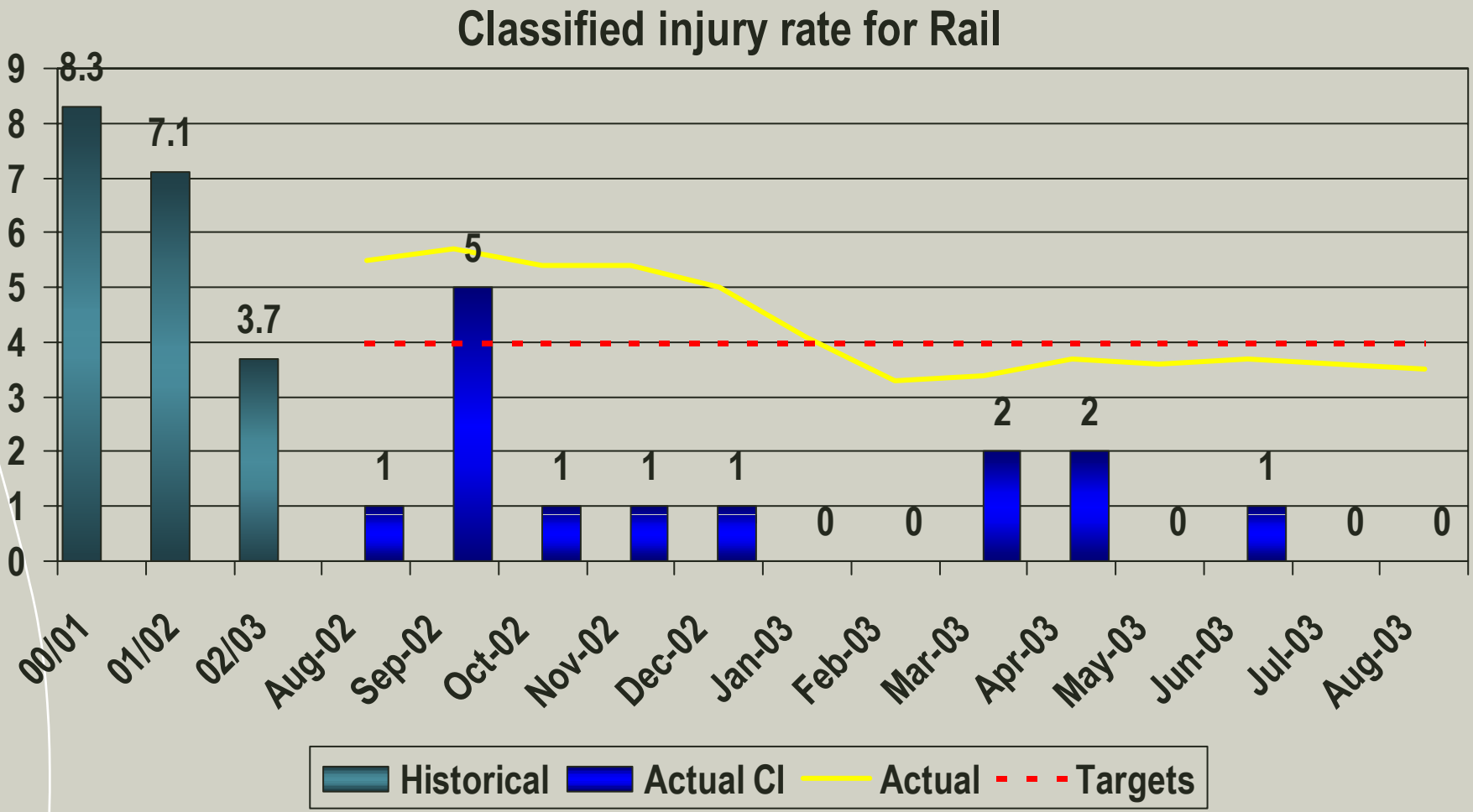
Rail Classified Injuries



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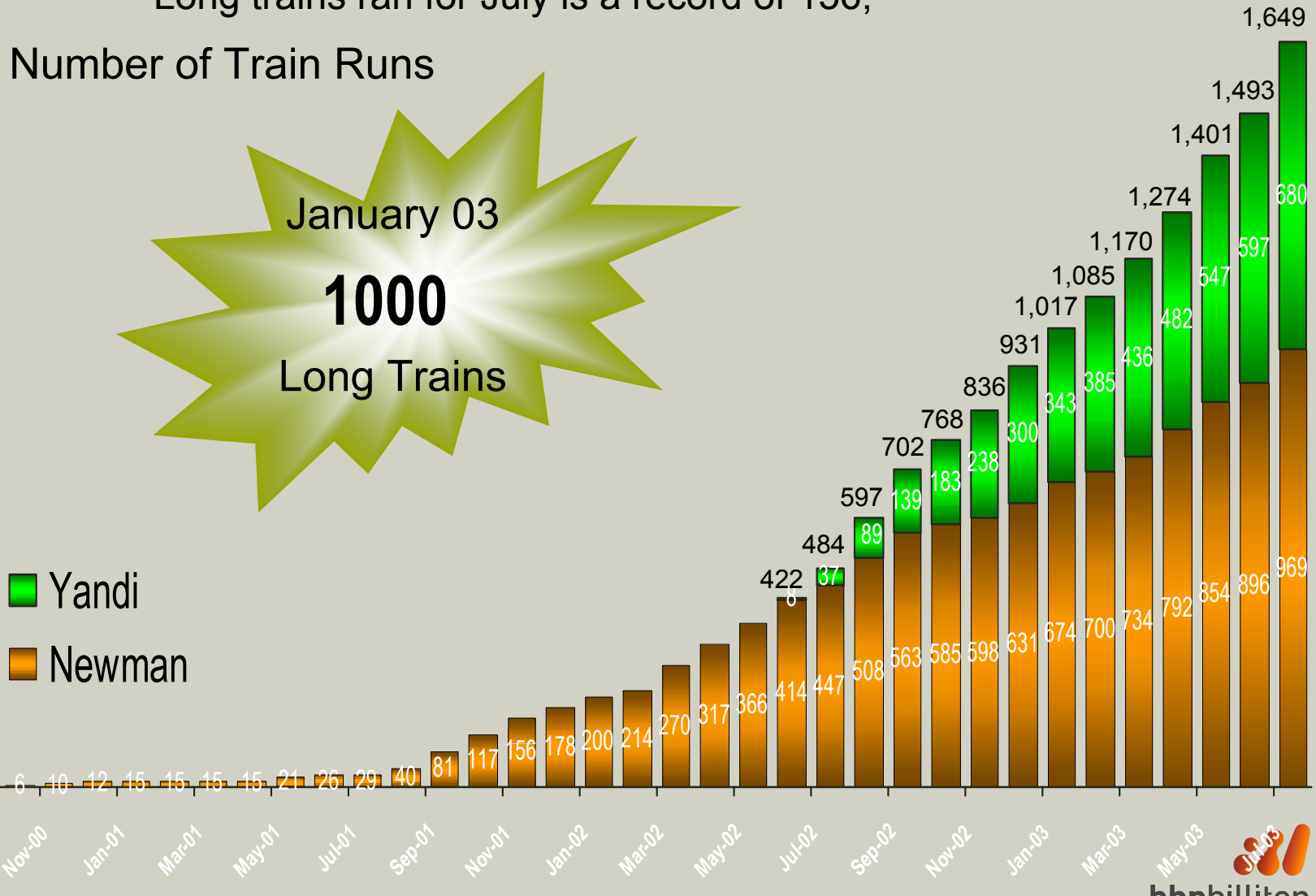
Three Rake Trains (312-336 Cars)

- Long trains ran for July is a record of 156,



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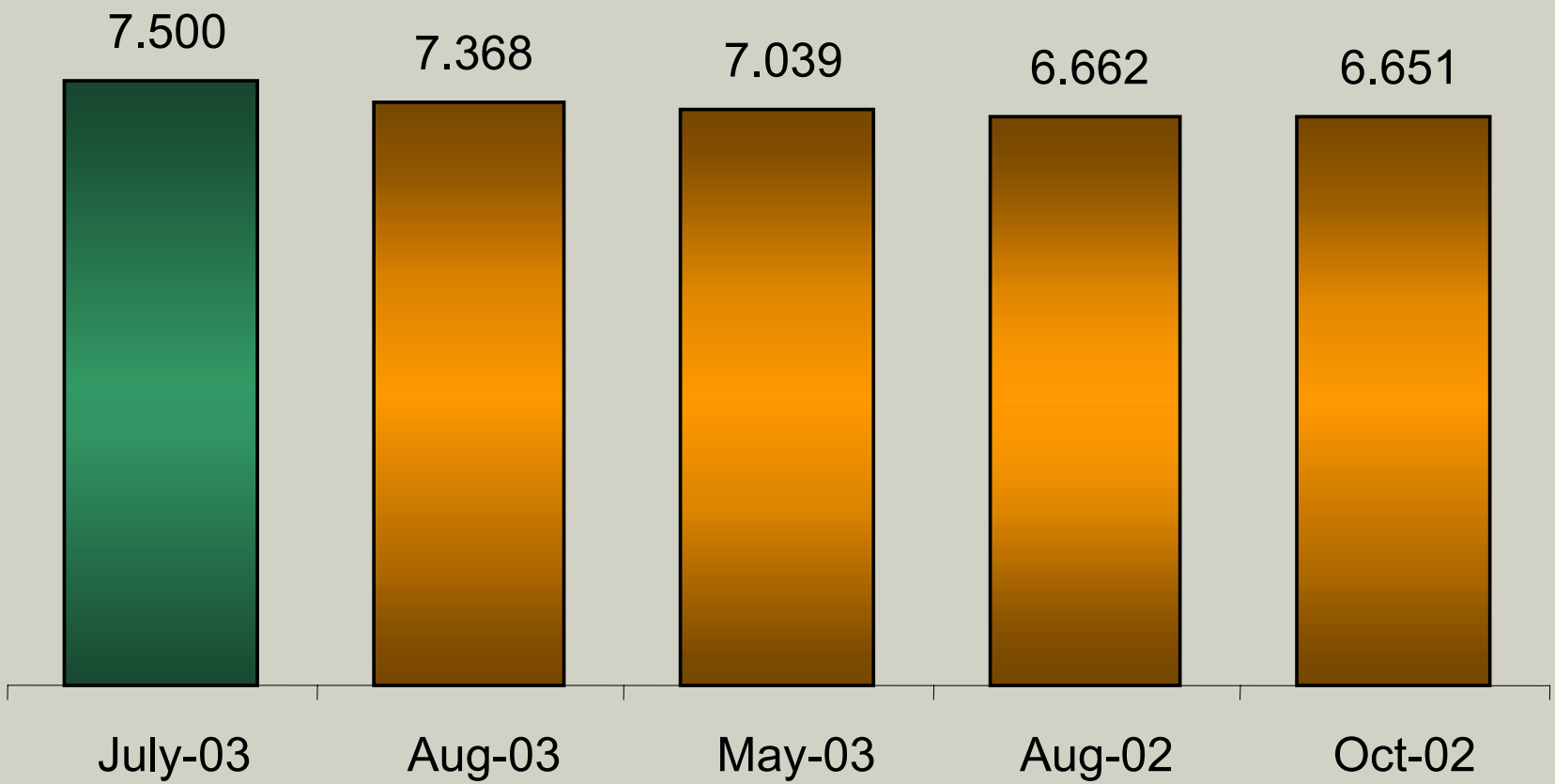
Top 5 Railing Months



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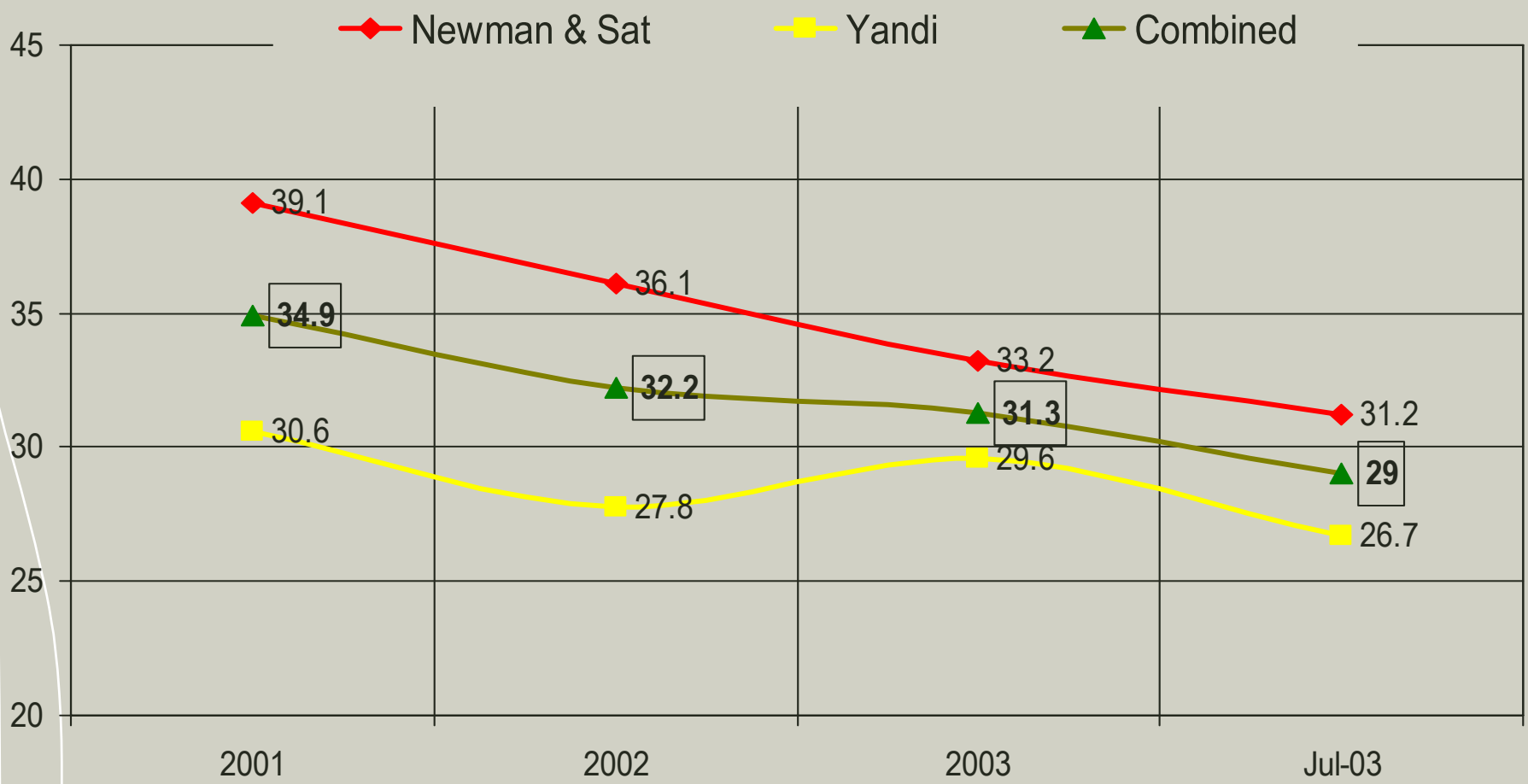
Train Cycle Time Improvement



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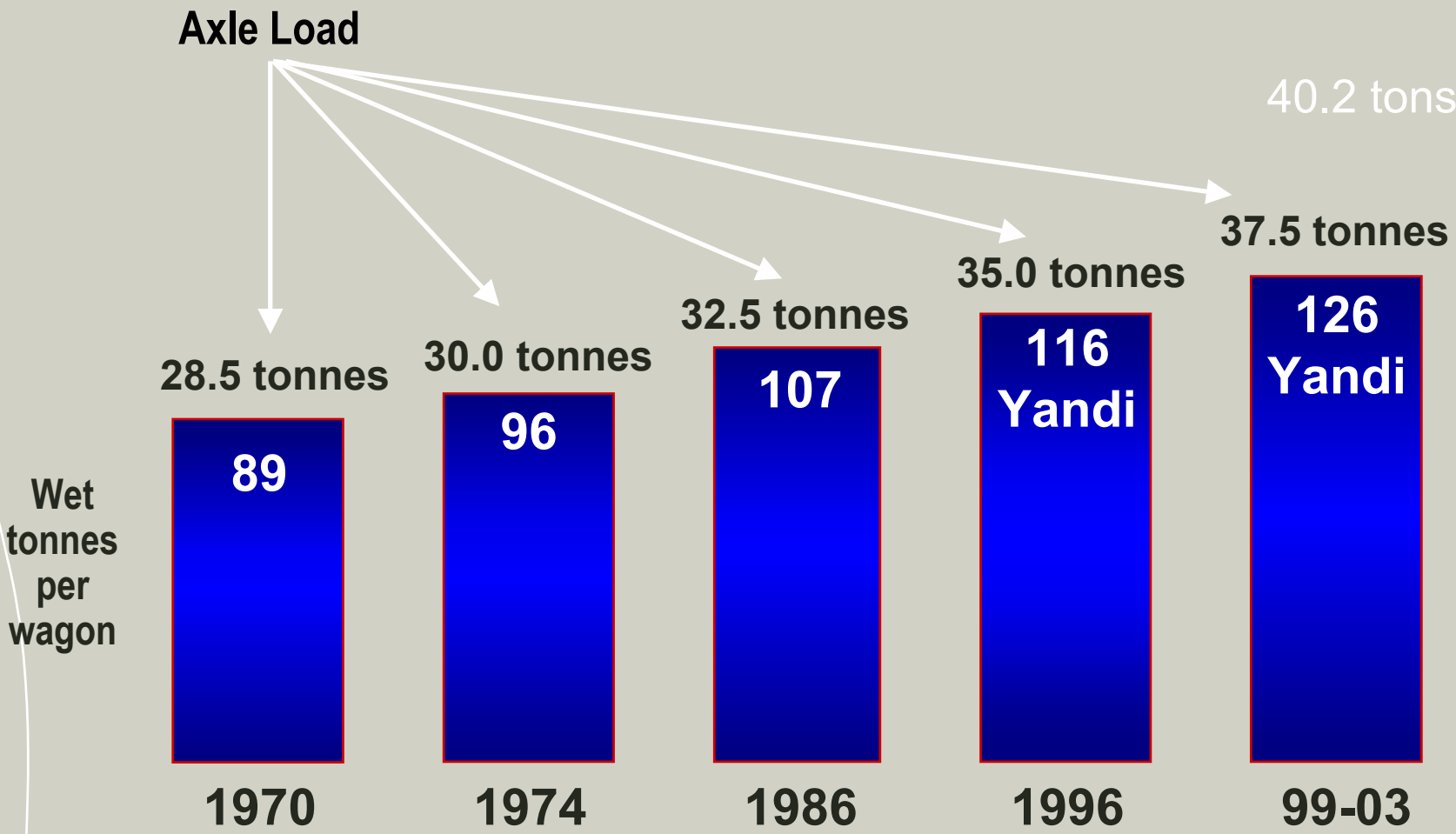
Higher Axle Load

Operating Improvements



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In Track Flash Butt Welder

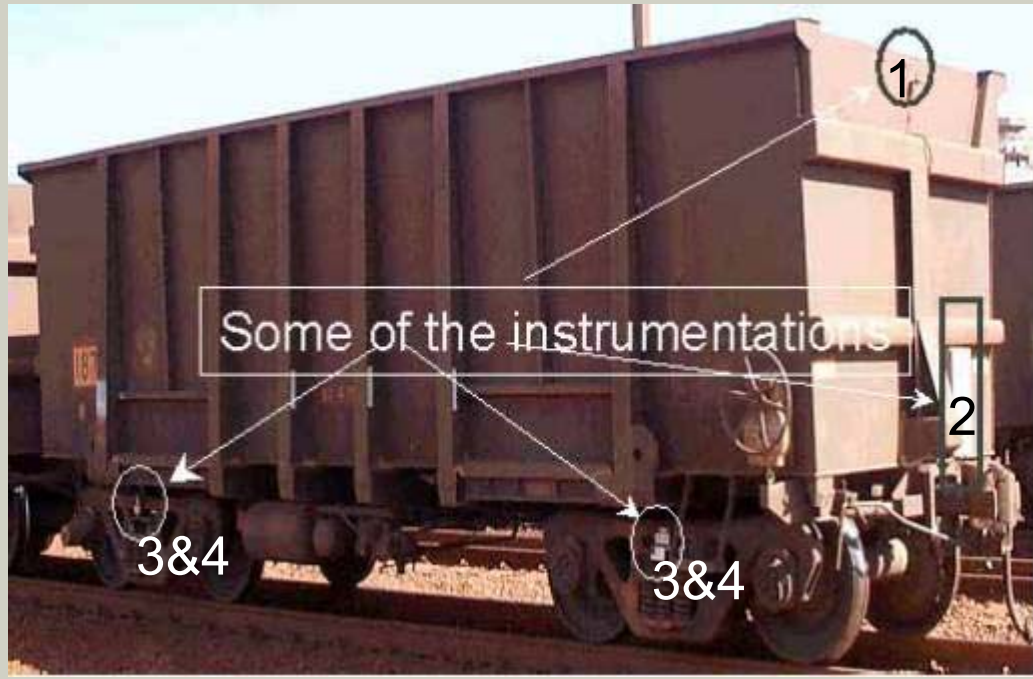
Instrumented Ore Car

1- Onboard GPS & Cell Phone
- Track Location & Train Speed

2- Instrumented Couplers
- In-train Forces

3- Side Frame Accelerometer
- Car Body Acceleration Levels
- Indication of Rail Impact Load (Wheel-rail Interaction)

4- Spring Nests Instrument
- Spring Nests Deflection (Vehicle- Track Interaction)



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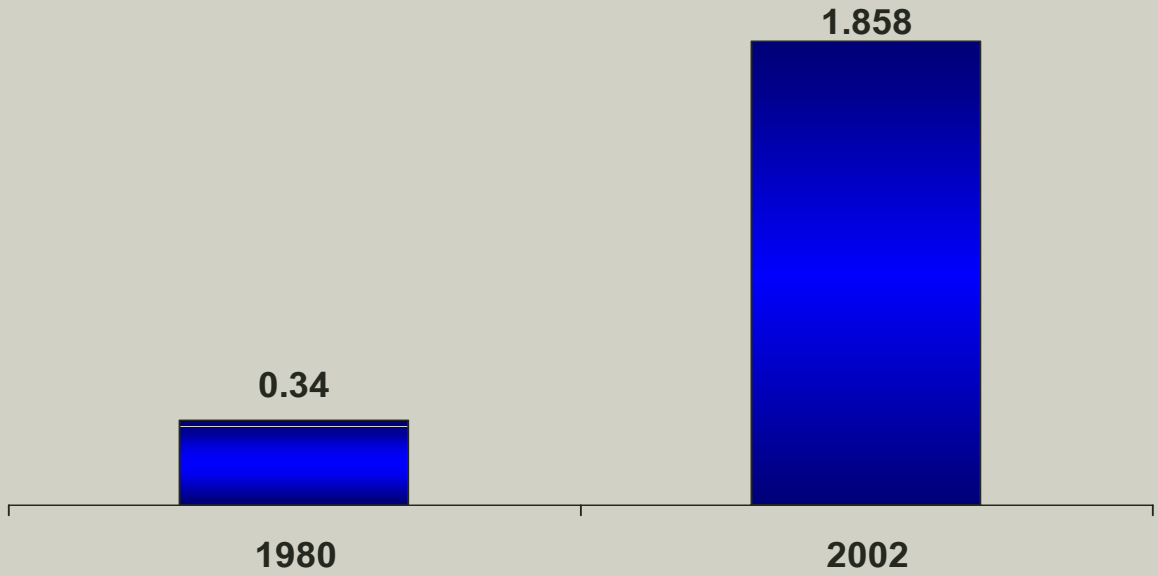
Rail / Wheel Interface

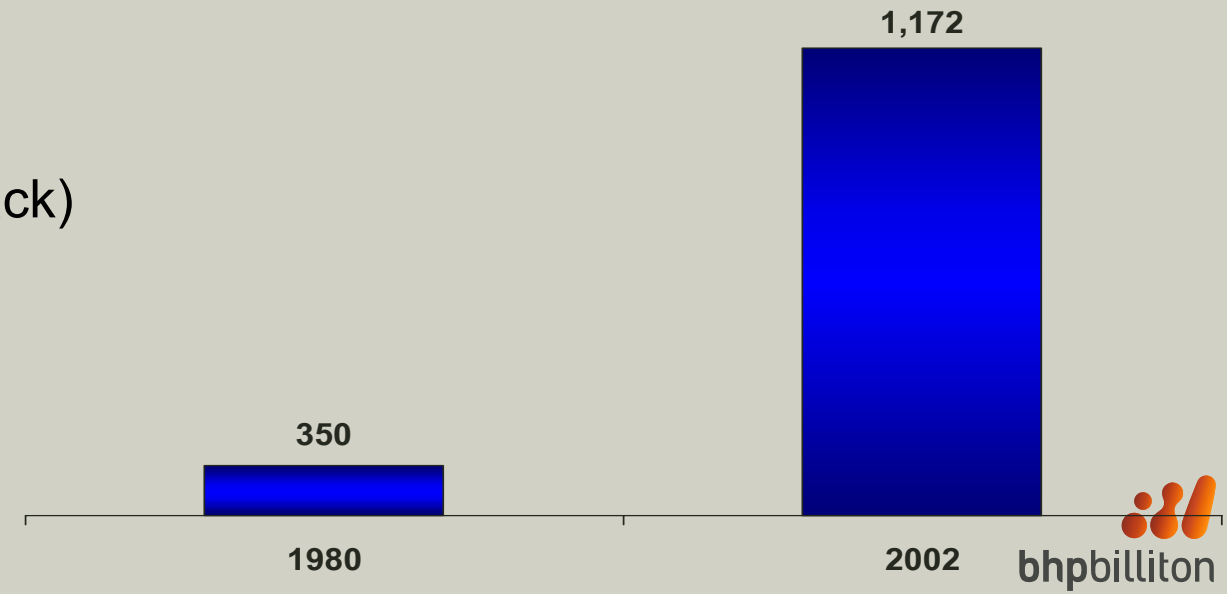
Ore Car Wheel Life

Million Tonne Kms



Rail Life (Tangent Track)

Million Gross Tonnes



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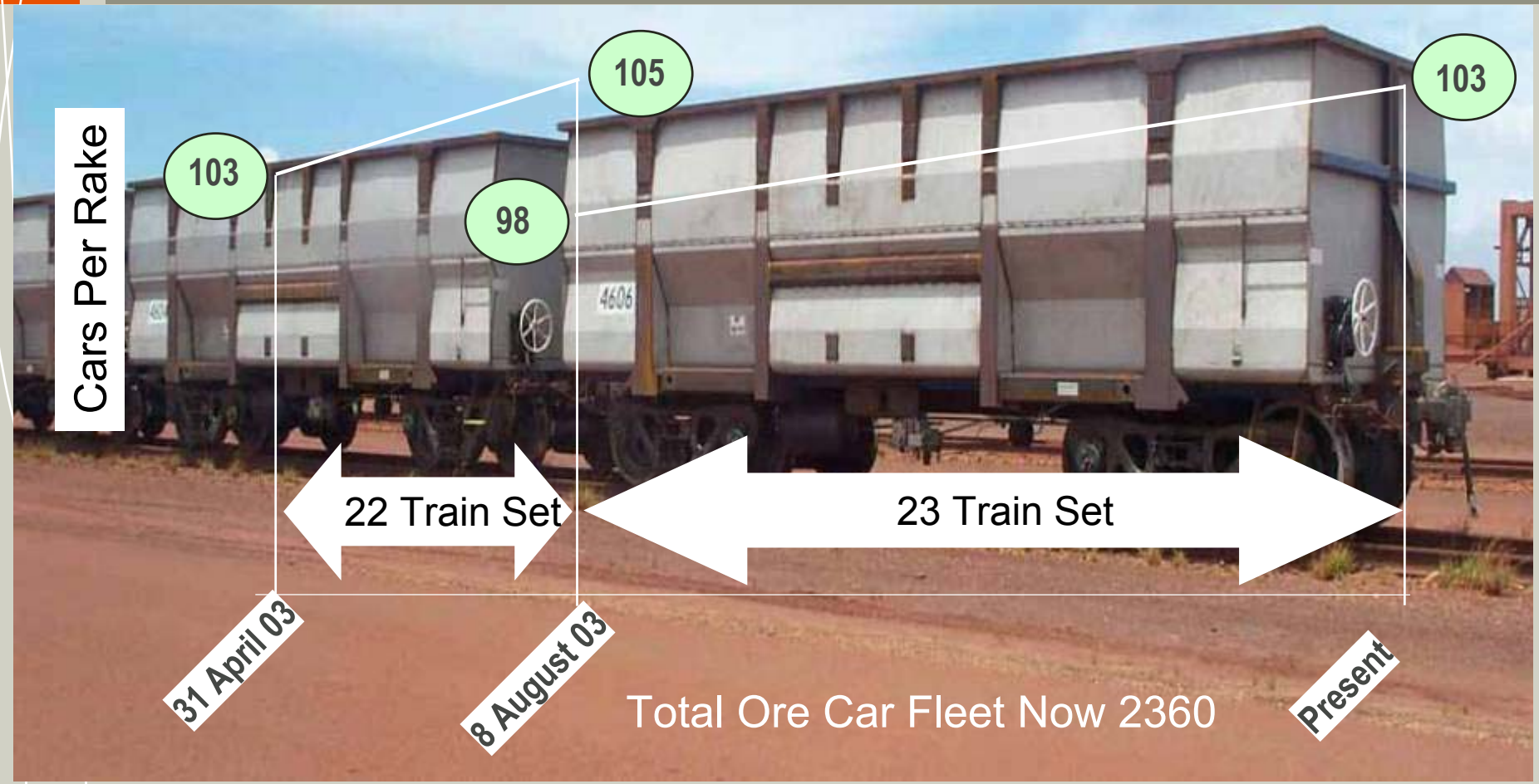
Ore Car Fleet



- Second Set of 120 Cars to be added by November 03
- Third Set of 120 cars ordered

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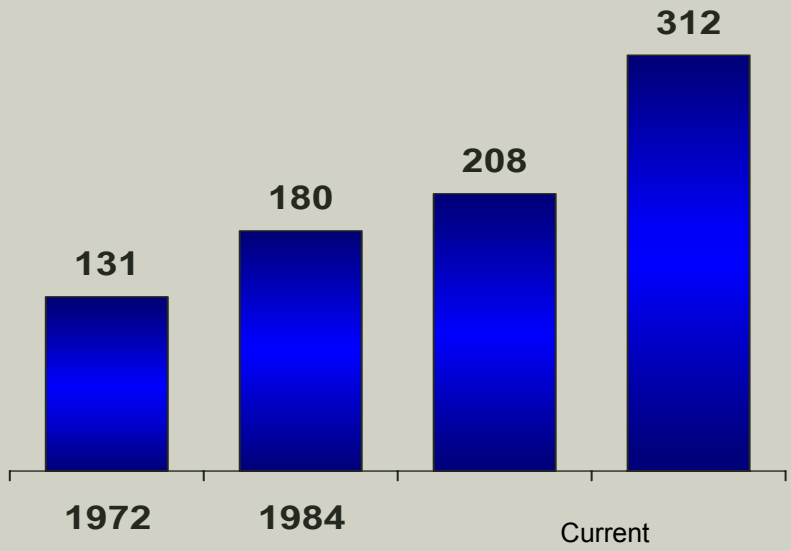
Train Lengths / Cycle Time

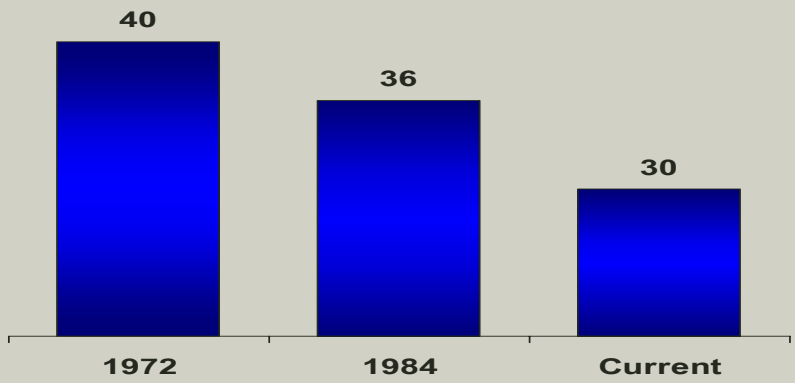
Train Lengths

Cars per Train



Train Cycle Time

Hours



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Current Train Operations

Newman Line

- 9 ore trains per day
- Flexibility of One / Two / Three Rake Trains
- Train configuration:

  1 rake = 104 ore cars = 12,480 tonnes of ore

  2 rakes = 208 ore cars = 24,960 tonnes of ore

  3 rakes = 312 ore cars = 37,440 tonnes of ore

Goldsworthy Line

- 4 ore trains per day
- Train configuration:

  90 ore cars = 7,650 tonne of ore

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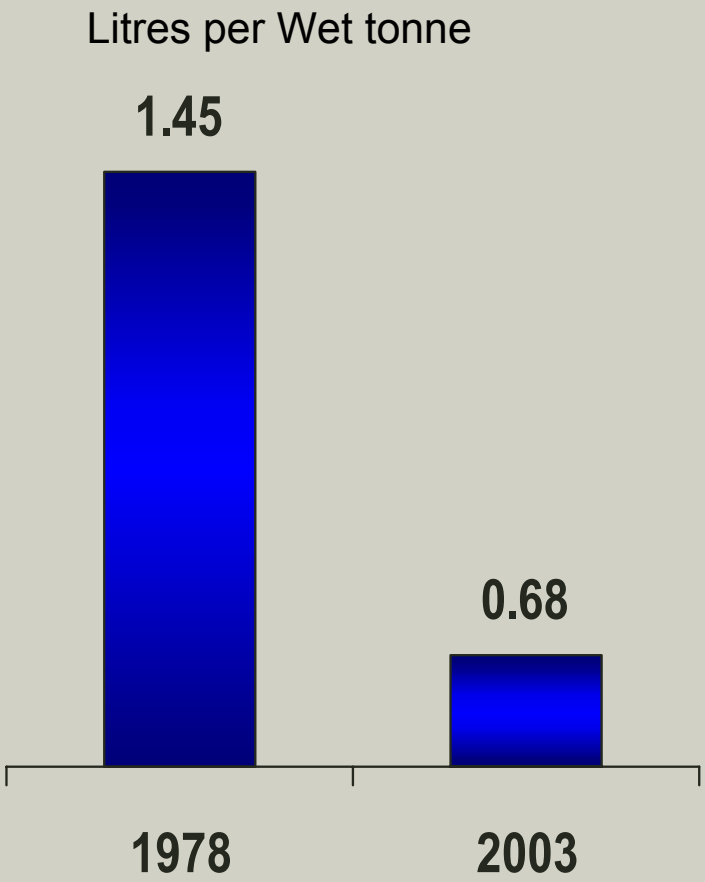
Environmental & Efficiency

Locomotive Fuel Consumption



Contributing Factors

Fuel Savings

- Rail / Wheel profile
- Aerodynamic Ore Cars
- Efficient Locomotives
- Distributed Power
- Higher Axle Load
- Longer Trains

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Motive Power Requirements

Short Term

Purchased 8 used SD-40 locomotives

Medium Term Term

Tendering for 10 – 30 additional locomotives

Long Term

Fleet Replacement beyon

What's in the Future

- Continued Safety Focus
- Human Resource Efficiency
- Higher Axle Loads
- Moving to Automated Trains (software nearing completion)
  - Driver assist
  - Meet Pass Planning
  - "Cruise Control"
  - Full Automation
- Increased Tonnage Customer Demand

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