




**HARMONY™**

**SA North Operations**


**5 August 2008**



**HARMONY™**


**North Operations**

- **Continued operations**
  - Evander
  - Doornkop
  - Elandsrand
  - Kalgold
- **Discontinued operations**
  - Randfontein Cooke operations




## North Operations

- Quarter June'08 performance:
  - Safety
    - 20% improvement in LTIFR
    - Doornkop recorded 33 days incident and accident free
    - 3 Fatalities (Tramming and FOG)
  - Volume
    - Underground showed good improvement
    - Elandsrand, Doornkop and Evander 8 biggest contributors
  - Grade
    - Kalgold mining grade is declining, in line with plan

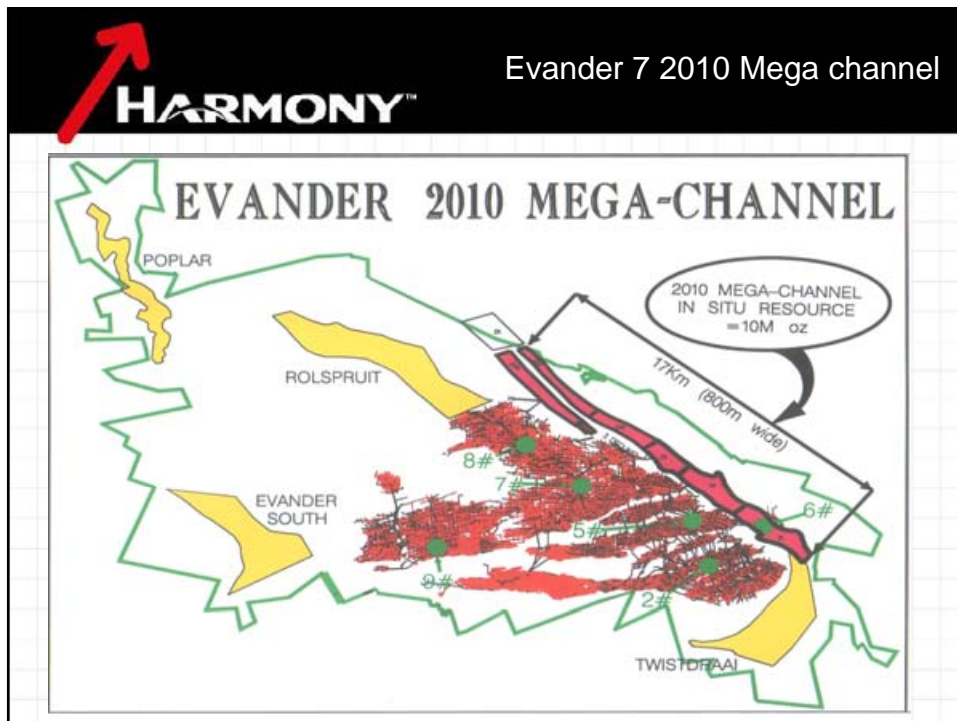


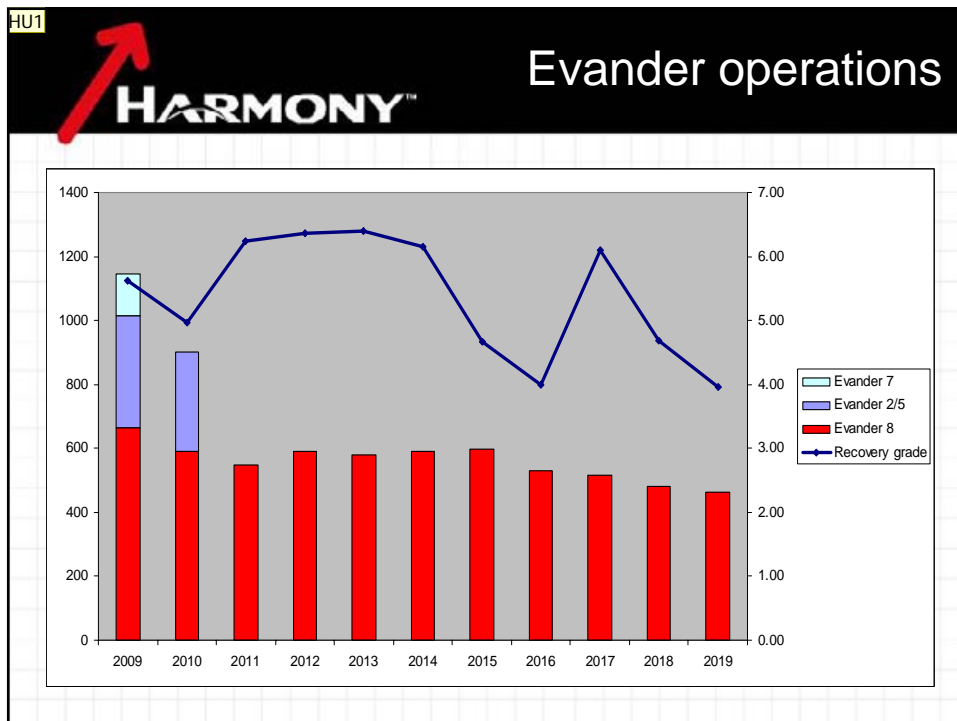
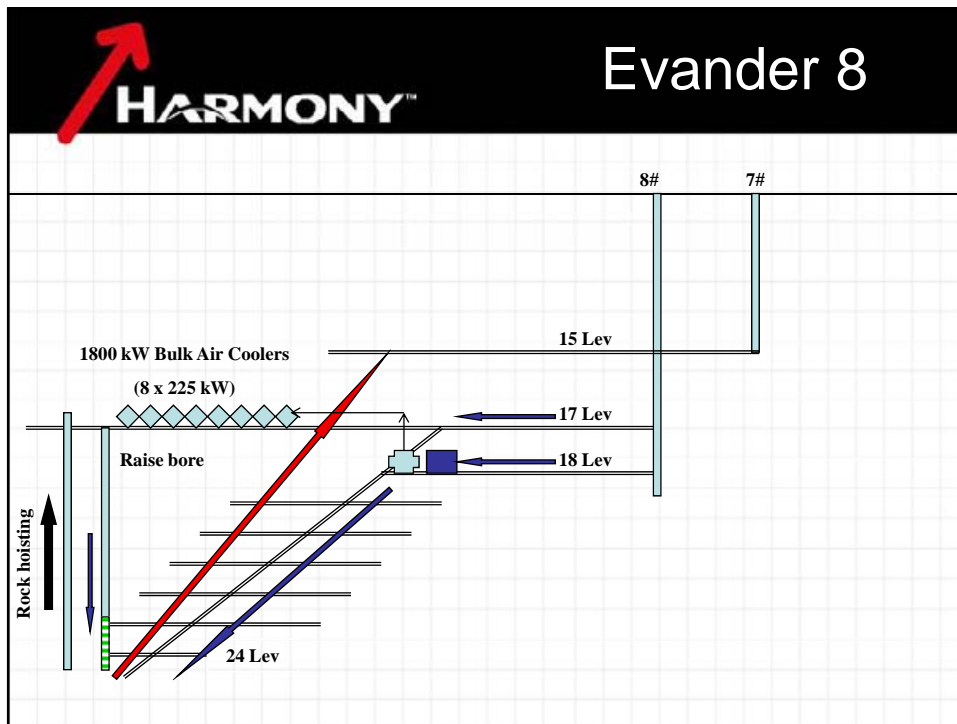
## Evander operations

- June 2008 quarter
- Conops stopped at Evander 2 and 5
  - Only Evander 8 no.2 decline on conops
- Labour Over compliment of 250 employees at Evander 7
  - Cleaning and vamping
  - Re training
  - Replacing contractors
- Evander 8 Ventilation improvement project is making good progress

 **HARMONY™** Evander operations

- Future planning
  - 2 year LOM at Evander 2 and 5
    - Pillar mining and opening up continue
    - Winkelhaak plant available for surface sources in future
  - 1 Year LOM at Evander 7
    - Infrastructure will still be utilized for 8#
    - Exploration drilling of 2010 Mega Channel
  - Evander 8
    - Raise borehole and cooling project completed by Jan 08
    - Feasibility for hoisting improvements underway
  - Other Evander project opportunities
    - Rolspruit
    - Poplar
    - Evander South






**Slide 8**

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**HU1**

Harmony User, 2008/08/03



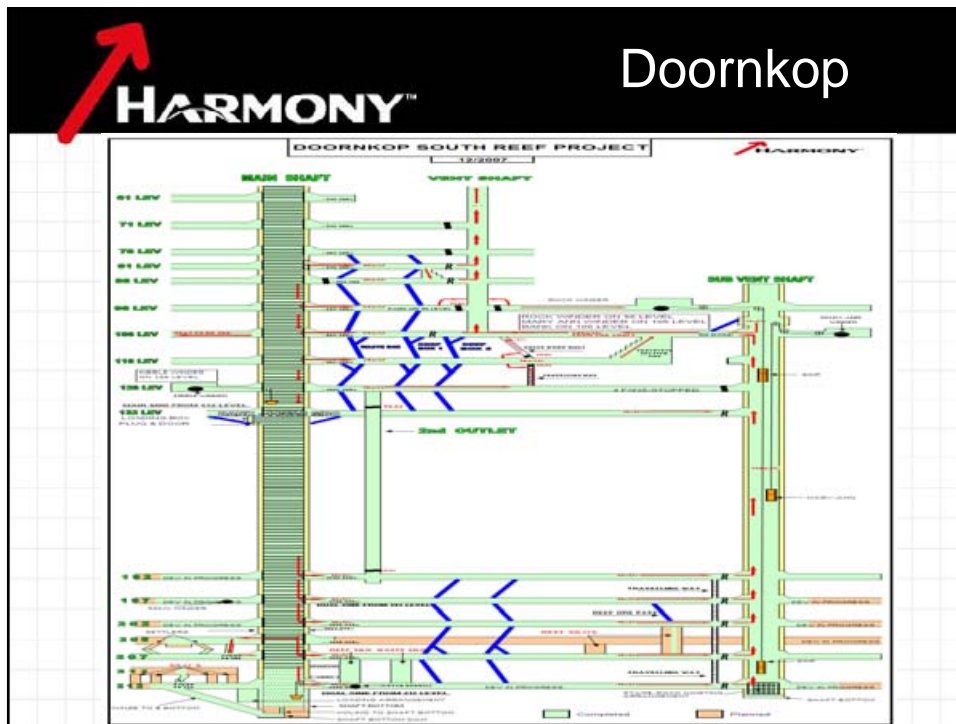
## Doornkop

- June 2008 quarter
  - Tons improved (previous quarter influenced by shaft equipping)
- Trackless mining on Kimberley reef
  - 2 year plan with further opportunity
- South reef mining build up slower than planned
  - Project delays
  - Geological changes

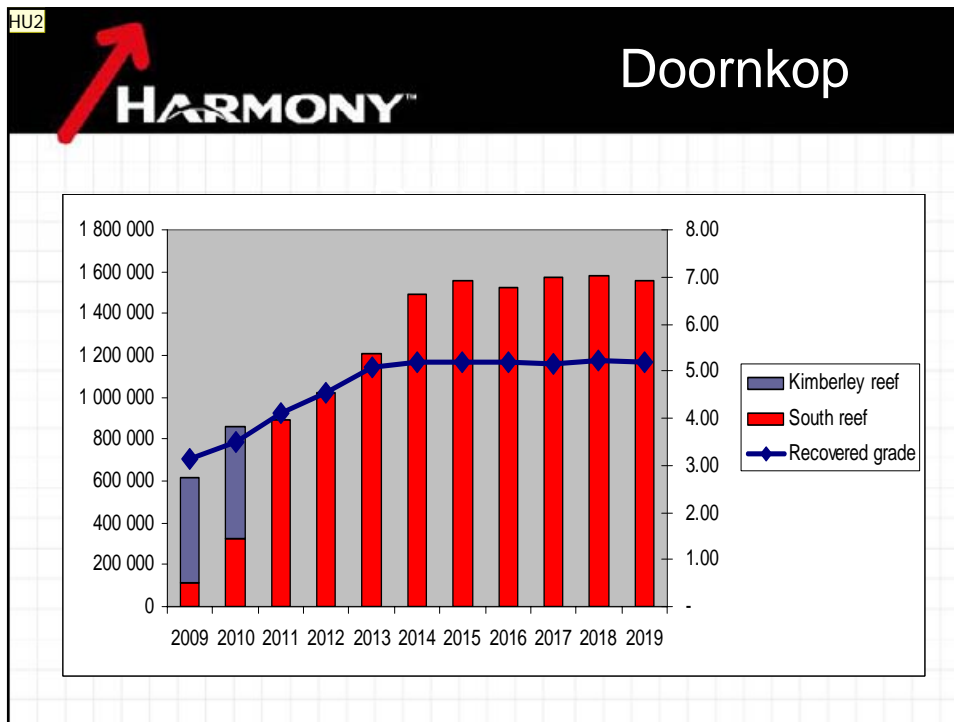



## Doornkop

- Project update
  - Sinking operations completed
  - Rock Winder commissioned on surface
  - Development on 192, 197 and 202 levels continue
  - Stope operations on 192 level
  - DP and man winder compartments are equipped to 212 level
- Future Milestones
  - Rock hoisting with DP winder from 212 level – Aug 08
  - Rock hoisting with Rock winder – Feb 09
  - Full production – Year 2014



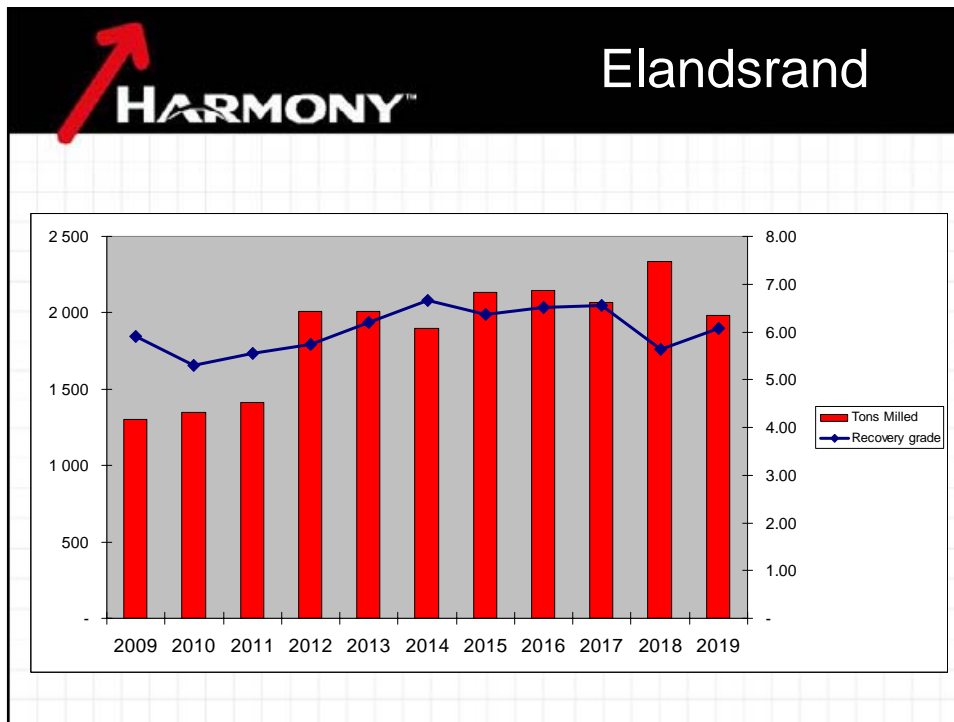
- HARMONY™** Doornkop
- Project changes
    - Grade and geology
      - Fundamental change in deposition model
    - Peak production
      - Moved out due to intersection of anticline on 192 level and project delays
      - Build up to 130 000 tons per month
    - Cost planned
      - Estimated at R121 463 including ongoing development
      - Estimated at R572/ton including ongoing development
    - Estimated total capital expenditure
      - 19% increase
        - cpi increases
        - Additional ventilation requirements
        - time delays
        - increase in capital development meters



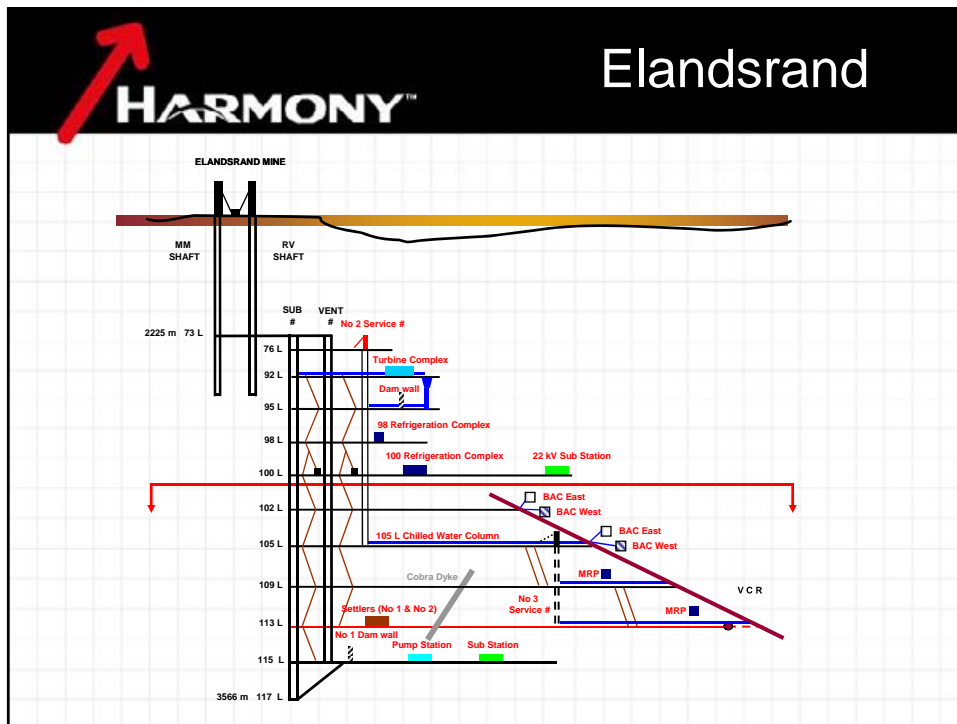
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- # Elandsrand
- June 2008 quarter
  - Development performance improved
  - Focus on improving MCF and labour efficiencies
  - Opportunity to mine Elsburg and VCR on western side of orebody



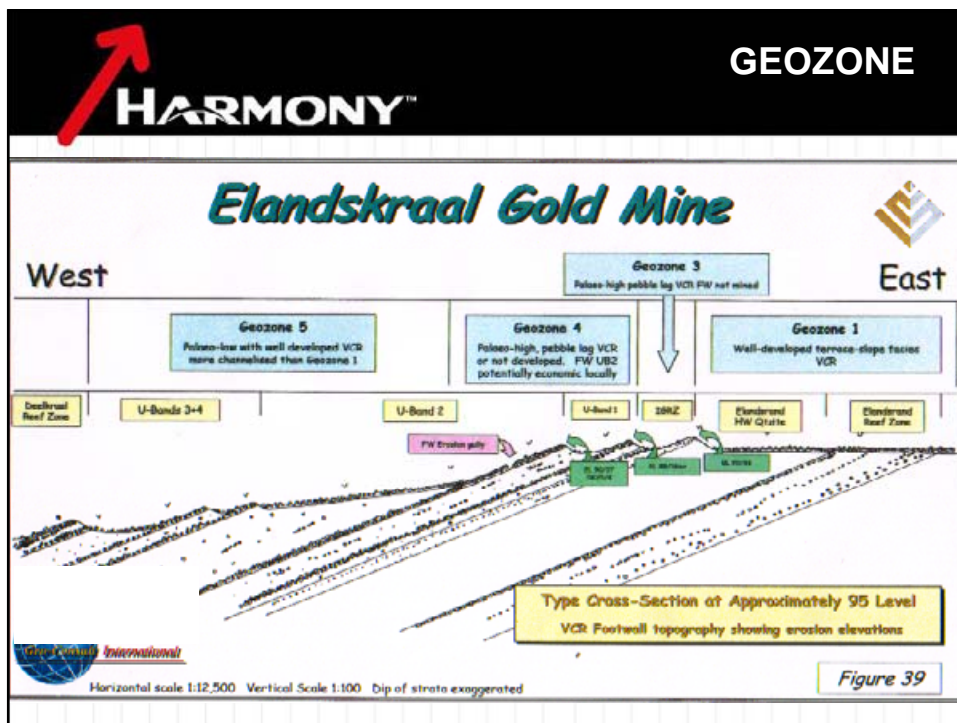
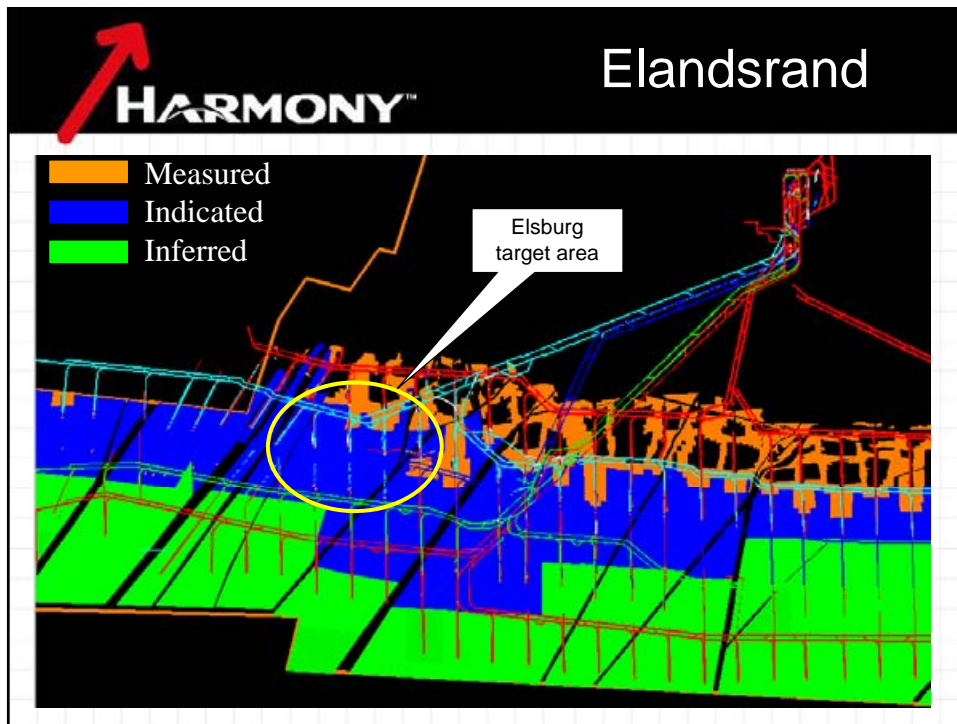





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- HARMONY™** Elandsrand
- **Project update**
    - Chilled water feed & return columns installed in No.2 backfill shaft (95 to 105 level)
    - 22kV electrical reticulation system completed to 100 level
    - 115 level substation installed and commissioned
    - 109 level on reef
    - 113 level past East/West breakaway. 1651m developed during 2007/08
  - **Future Milestones**
    - 115 level Pump Station commissioning – Sep 08
    - No1 settler on line – Sep 08, No2, Jan 08
    - No. 3 backfill shaft sinking complete to 109 level – Jun 09
    - 113 level on reef – Sep 2008
    - Peak production – Jun 2012




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- The diagram, titled 'ELANDSRAND MINE', illustrates the mine's layout on a grid. It features two main shafts: the MM SHAFT and the RV SHAFT. The MM SHAFT is located at a depth of 2225 m 73 L, while the RV SHAFT is at 3566 m 117 L. A central vertical line represents the SUB # and VENT # systems, with 'No 2 Service #' indicated. Key components include:
  - Turbine Complex at 76 L
  - Dam wall at 92 L
  - 98 Refrigeration Complex at 95 L
  - 100 Refrigeration Complex at 98 L
  - 22 KV Sub Station at 100 L
  - 105 L Chilled Water Column at 102 L
  - BAC East and BAC West units at 102 L and 105 L
  - MRP (Material Recovery Plant) units at 109 L
  - VCR (Vertical Circulation Road) at 109 L
  - No 3 Service # at 109 L
  - Settlers (No 1 & No 2) at 113 L
  - No 1 Dam wall at 113 L
  - Pump Station and Sub Station at 115 L
 A red arrow in the top left corner points towards the HARMONY logo. The title 'Elandsrand' is positioned in the top right corner of the diagram area.
- Project changes
    - Grade and geology
      - Mining of Elsburg with VCR on western side at higher s/width (avg. recovered grade = 6.51g/t)
      - Increase in reserve ounces
    - Cost planned
      - Estimated at R119,480 including ongoing development
      - Estimated at R776/ton including ongoing development
    - Estimated total capital expenditure
      - 5% increase





## Randfontein operations

- June 2008 quarter
- Conops stopped at all Cooke shafts
- Poor safety at the Cooke shafts, negatively impacted on production
- Cooke 2 and 3 shafts experienced low grades
  - Lower than expected grades at Cooke 3, 128 South project
  - Increased mining from the high carbon areas at Cooke 2, resulted in reduced MCF
  - Low grades at Cooke 3 is likely to continue into Sep quarter

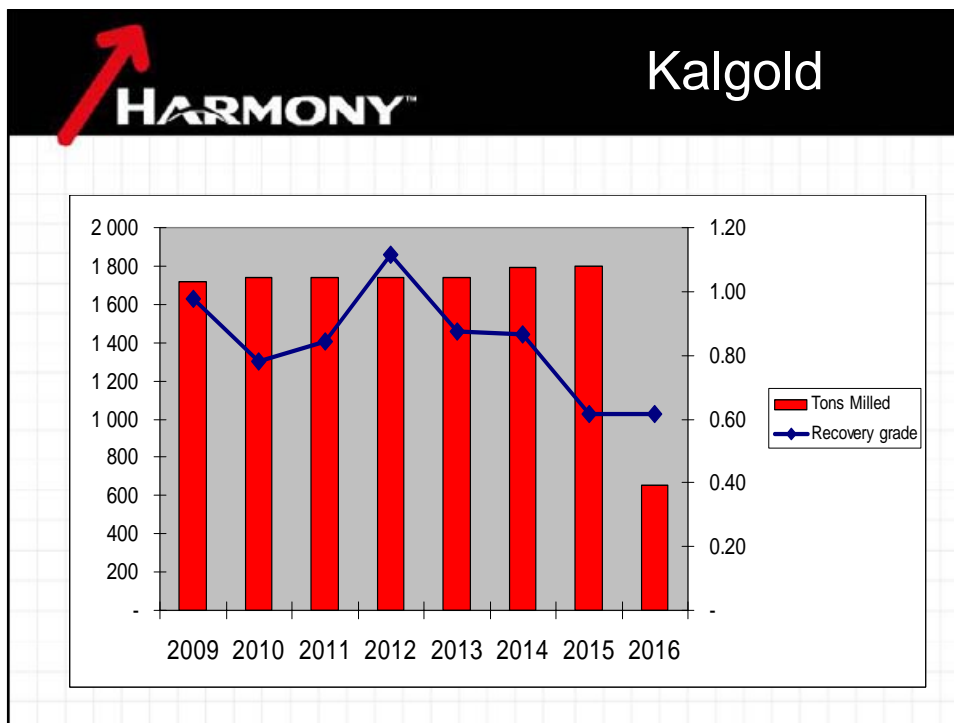



## Kalgold

- June 2008 quarter
- Breakdowns and Eskom load shedding caused delays in the plant
- Waste stripping and mining at satellite pits, progressing well
- D-zone pit will continue for another 2 months

 **Kalgold**

- Future planning
  - 8 year LOM at current gold price
  - Lower grade Watertank pit will be mined during the next 24 months
  - A – zone pit will start mining reef in 24 months
  - Milling of heap leach material during last 1.5 years of life
  - Opportunities at Kalgold
    - Exploration drilling will continue
    - Pre feasibility underway for underground mine at D-zone pit





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Questions