16 Shaft

5 December 2013

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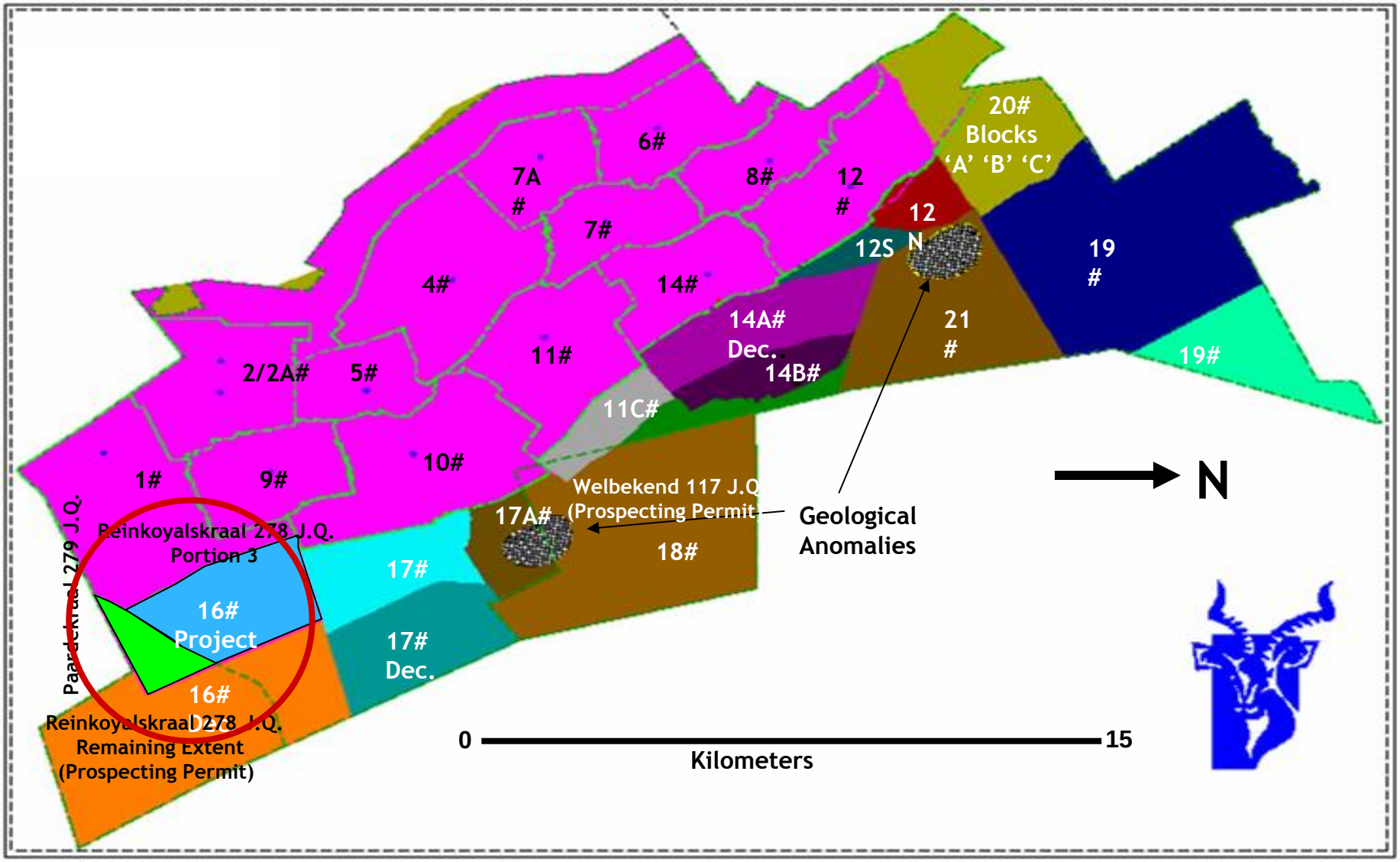
Impala Lease Area



No 16 Shaft History

- 1993 – The initial study started
- 2000 – The project (conceptual phase)
  Order of Magnitude Estimate (OME)
- 2004 – Complete the detailed feasibility with Control Budget Estimate (CBE)
- 2013 – 21 June Beneficial Hand Over – Cold Commissioning

24 September 2004: 16 Shaft site

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First Construction: 28 September 2004

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Box Cut
October 2004 – 17 March 2005

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Shaft Progress
January 2005 – 17 March 2007

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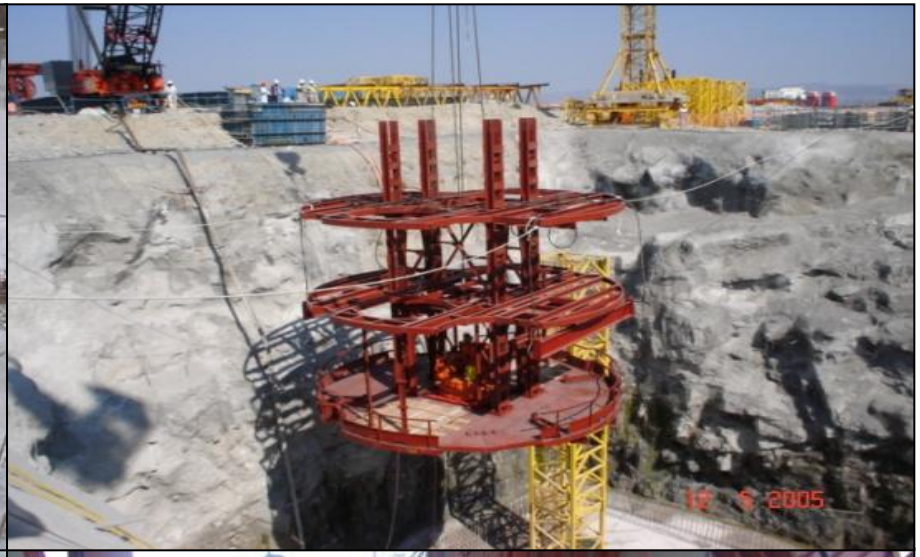

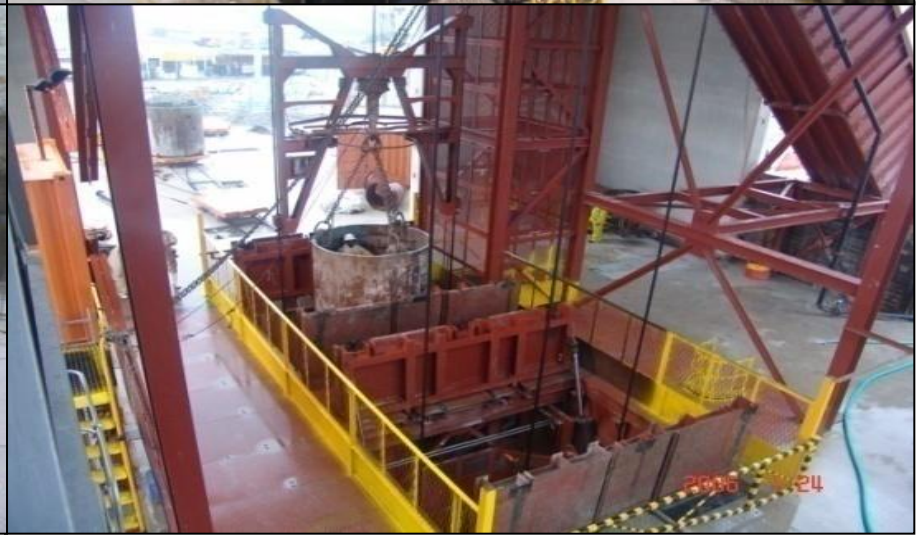

IPS Development
November 2006 – 26 October 2007

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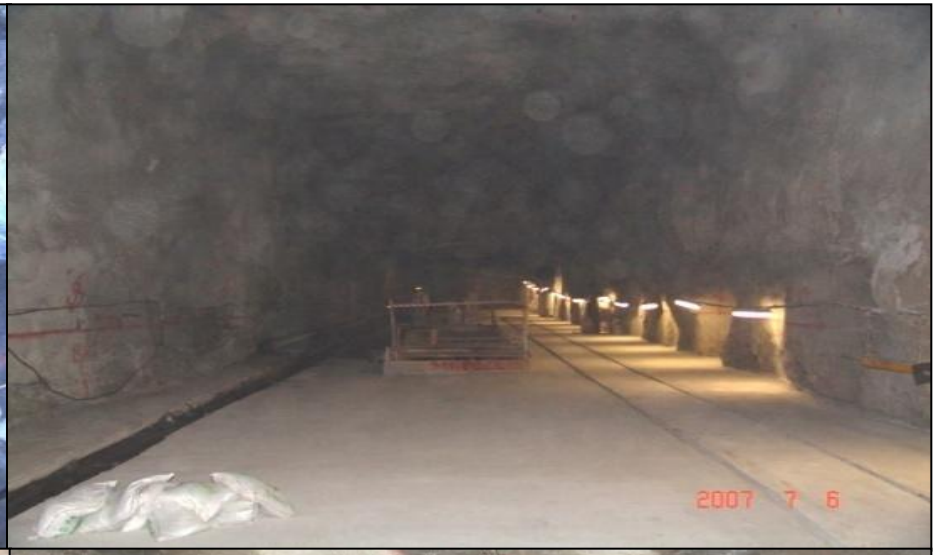

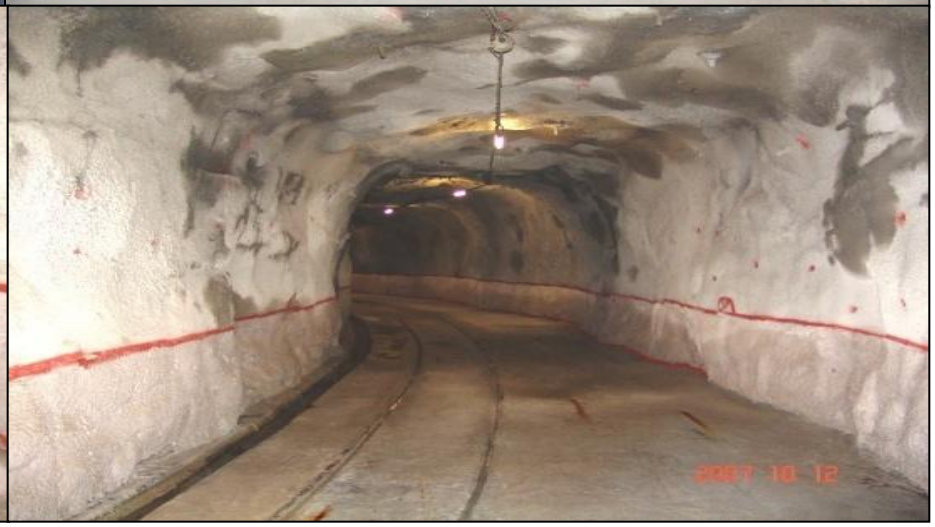

Station Cutting

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Compressors: 23 August 2007

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Refrigeration Plant: 16 April 2008

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Shaft Equipping: October 2011

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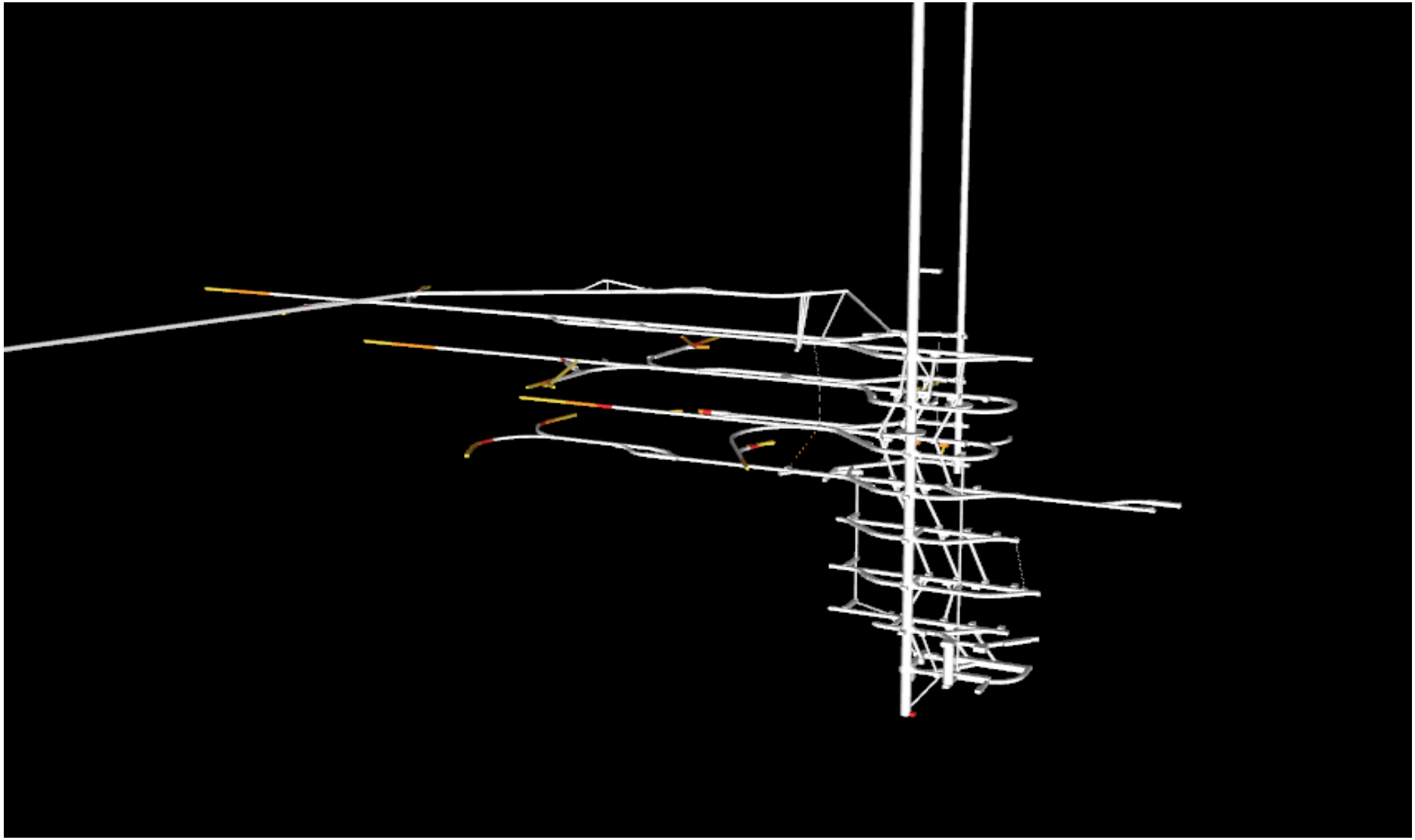
Development Vent shaft: October 2011



Beneficial Hand Over: 21 June 2013

Shaft Structure and Layout

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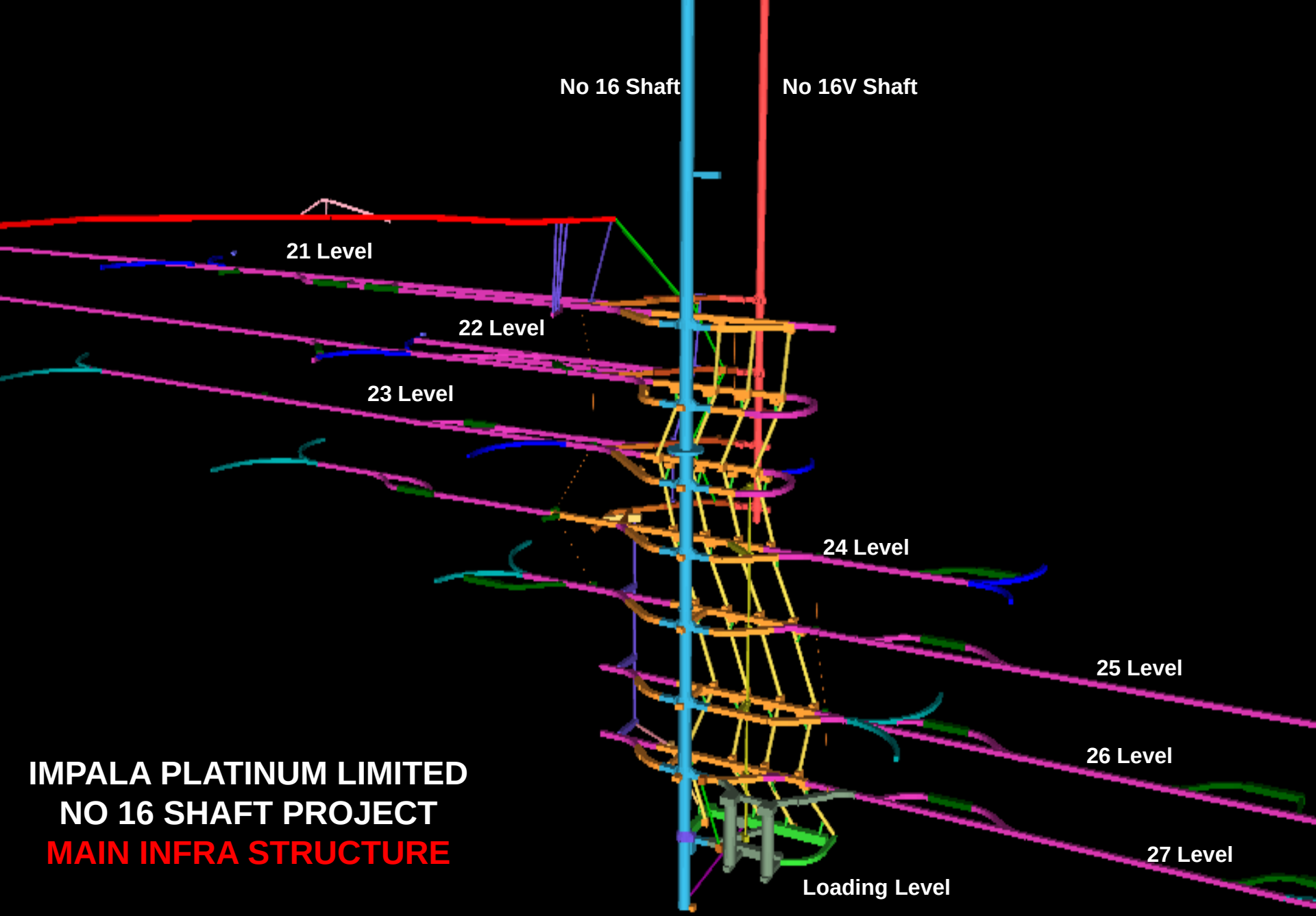
Head frame & Shaft Cross-Section

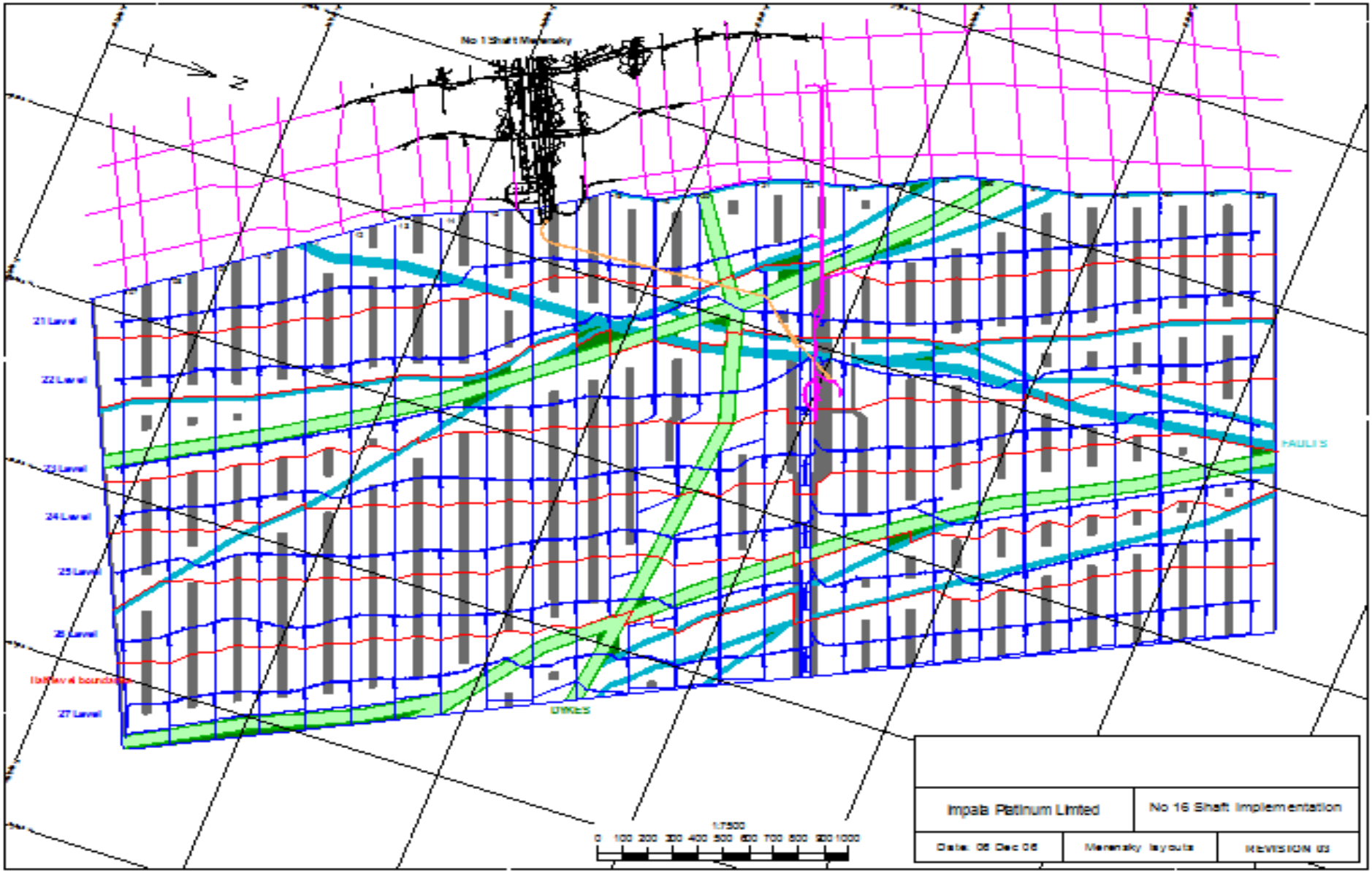
Technical specifications

	Rock Winder	Man Winder
– Pay load	25 000 kg	22 500 kg
– Conveyance mass	26 500 kg	31 000 kg
– Length of wind	1640 m	1601 m
– Rope speed	16 m/s	16 m/s
– Drum diameter.	6.5 m	6.5 m
– Number of head ropes	4	4
– Monthly production (dry tons)		262 829 t/m
– Shift capability		2488 persons/hr – 300 /trip



IMPALA PLATINUM LIMITED
NO 16 SHAFT PROJECT
MAIN INFRA STRUCTURE

No 16 Shaft Merensky



No 16 Shaft UG2

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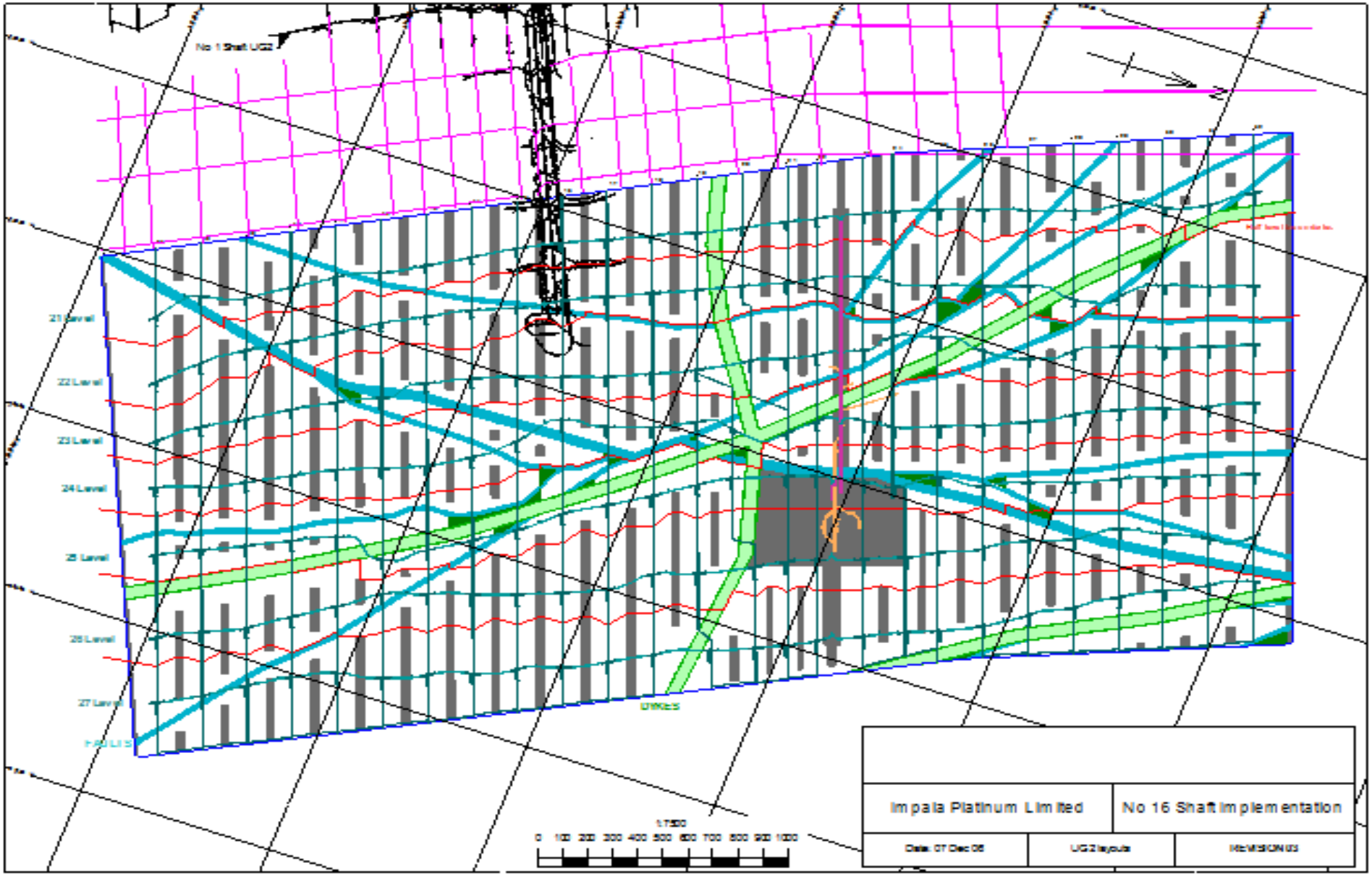

Impala production profile

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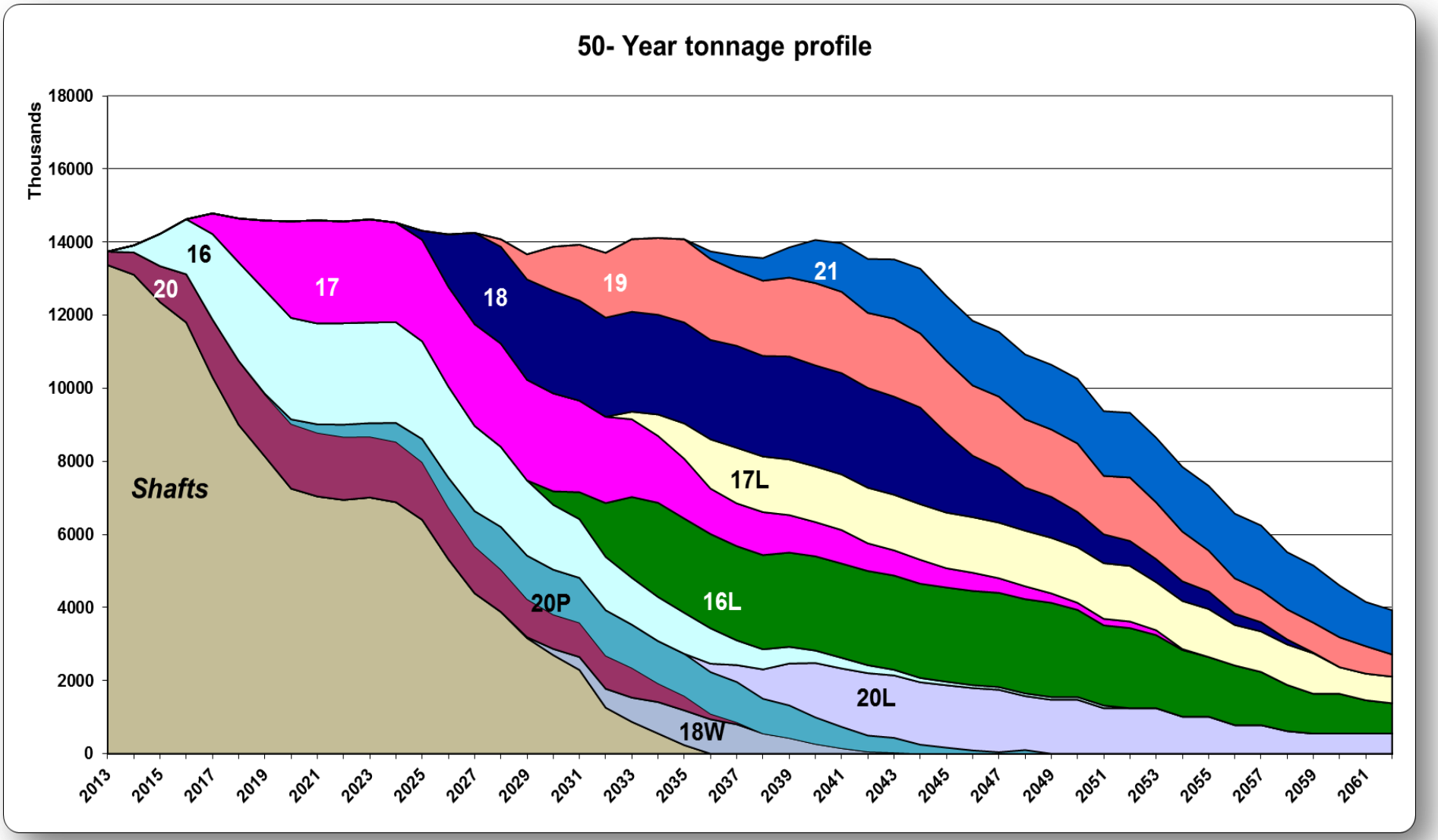

Project Challenges

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1) Rock Engineering – Shotcrete

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19 October 2007:

A shotcrete specification was issued to keep the shotcrete within 15m from the advancing face. This should take place concurrent.

26 June 2008:

A second shotcrete specification was issued to apply on the face shotcrete for all the development ends.

- Impact on both quantity and cycle time.

2) Hex River Fault

3) Accelerated Corrosion

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Current Status

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Safety Statistics

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Achievements:

- 1 Million Fatality free shifts on 1 August 2011
- 2 Million Fatality free shifts on 13 Mach 2013

	Quarter 4 - 2013	Quarter 1 - 2014	YTD	PTD
LTIFR	0.52	2.37	2.31	4.51
Reportable Frequency Rate	0.52	0.59	0.46	2.65

Key Dates

- 21 June 2013: Beneficial hand over: RSV to Impala
- 02 July 2013: Temporary licence: Man winder
- 10 July 2013: Shaft Sinkers handover 21 to 24 level to Impala
- 17 July 2013: The first development meter blasted by Impala
- 24 July 2013: The first stope ca blasted by impala
- 5 Aug 2013: Temporary licence: Rock winder
- 30 Sept 2013: Full licence: Man winder

Impala Development Teams: 03 July 2013

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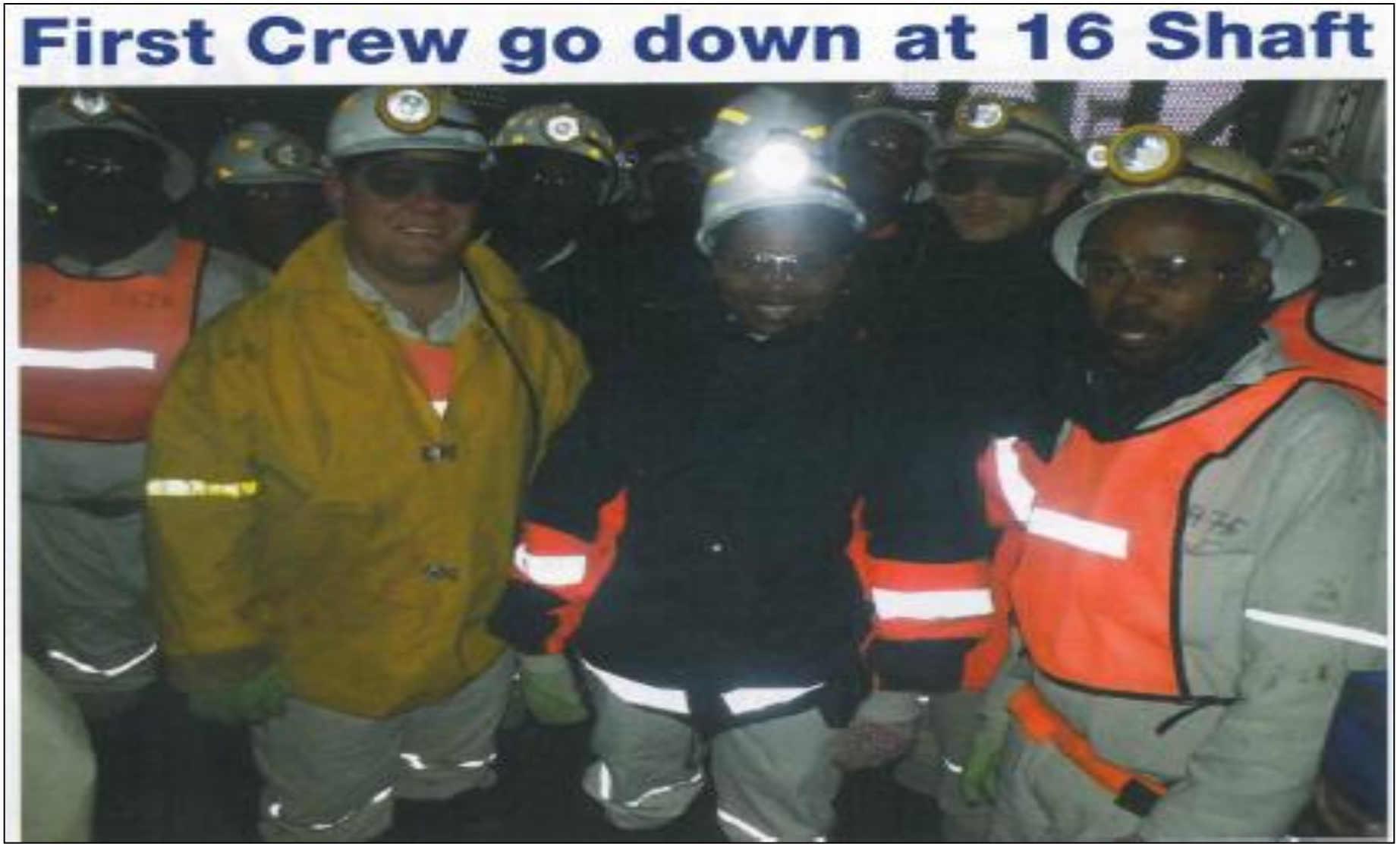
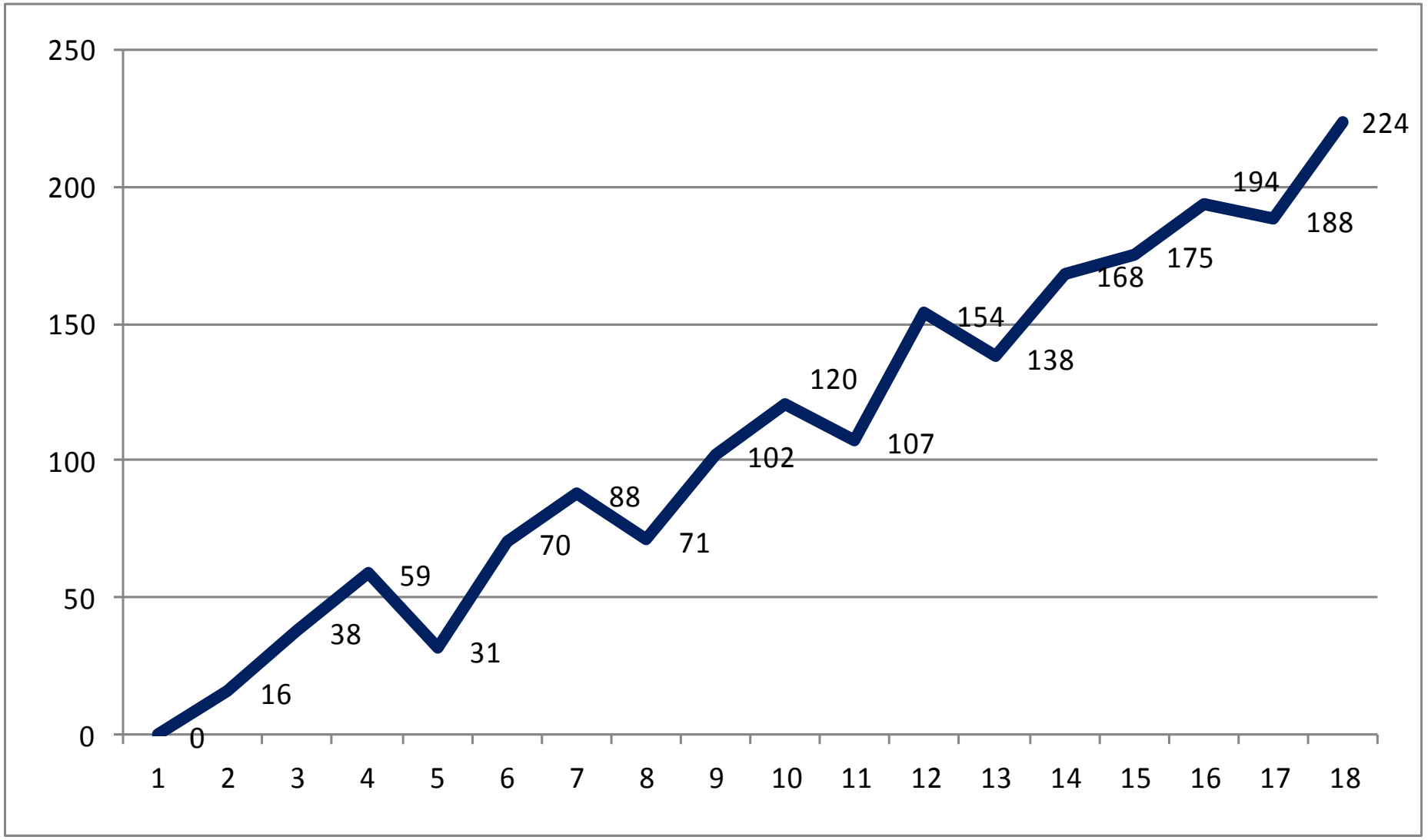
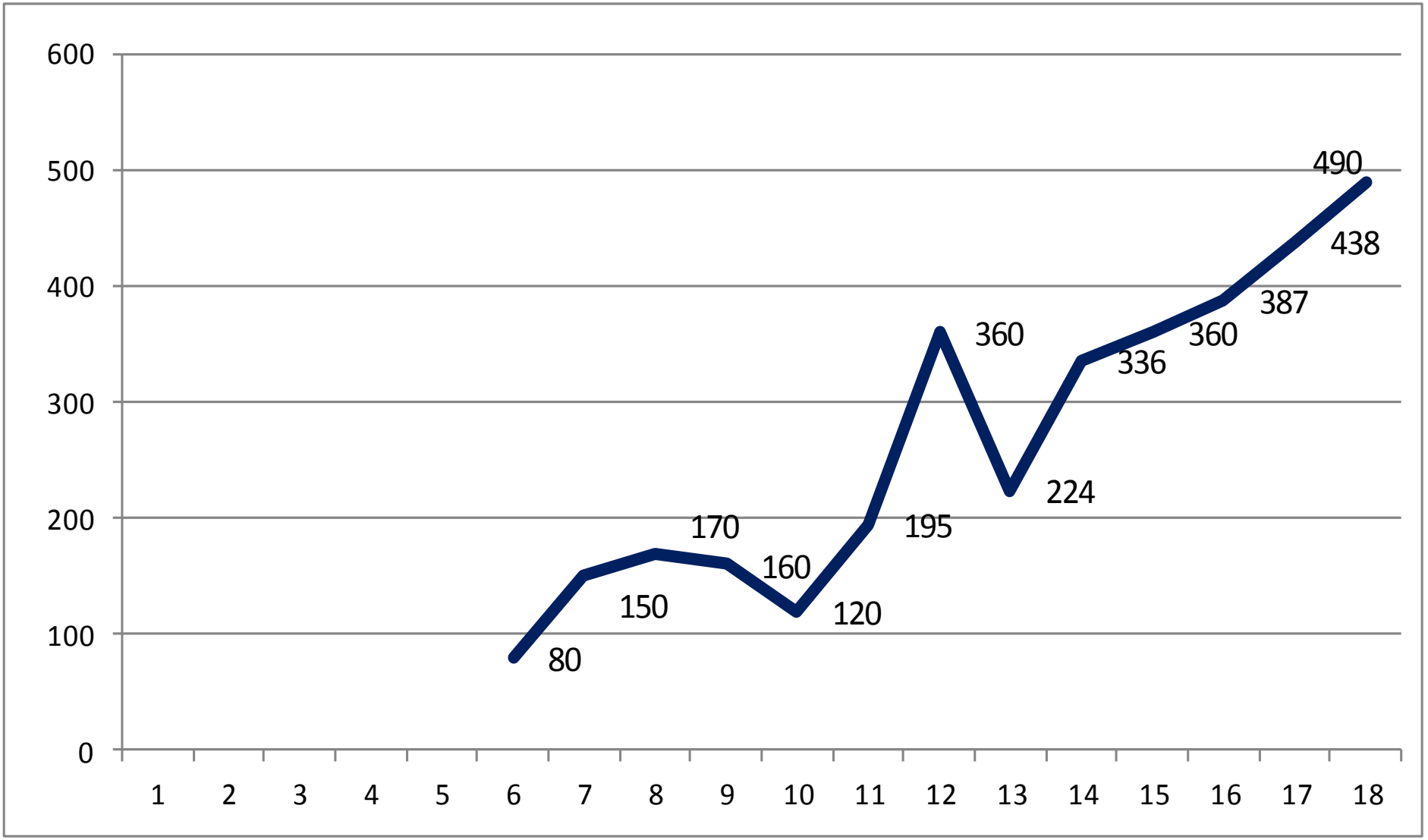


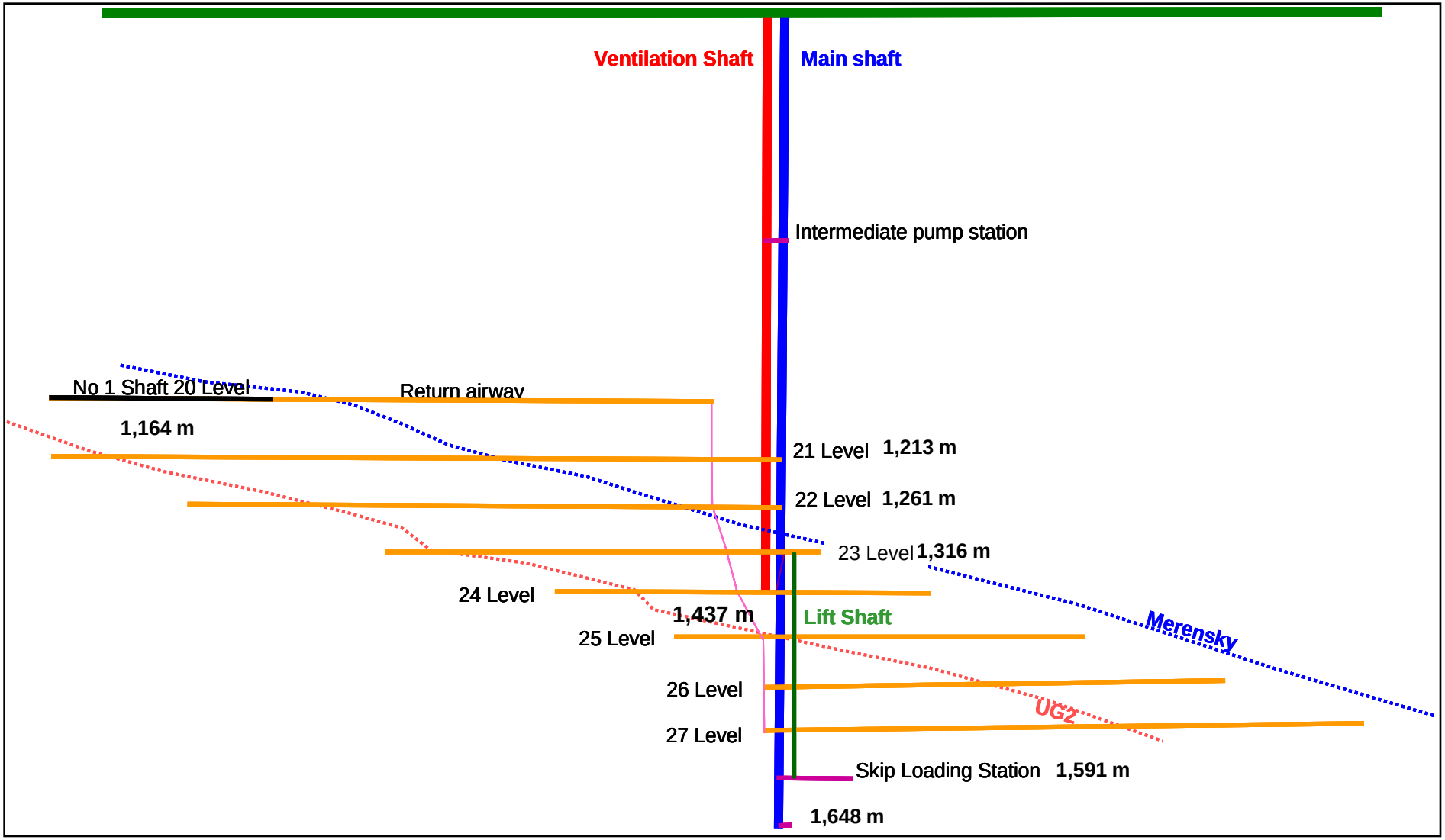
Build-up: Development meters



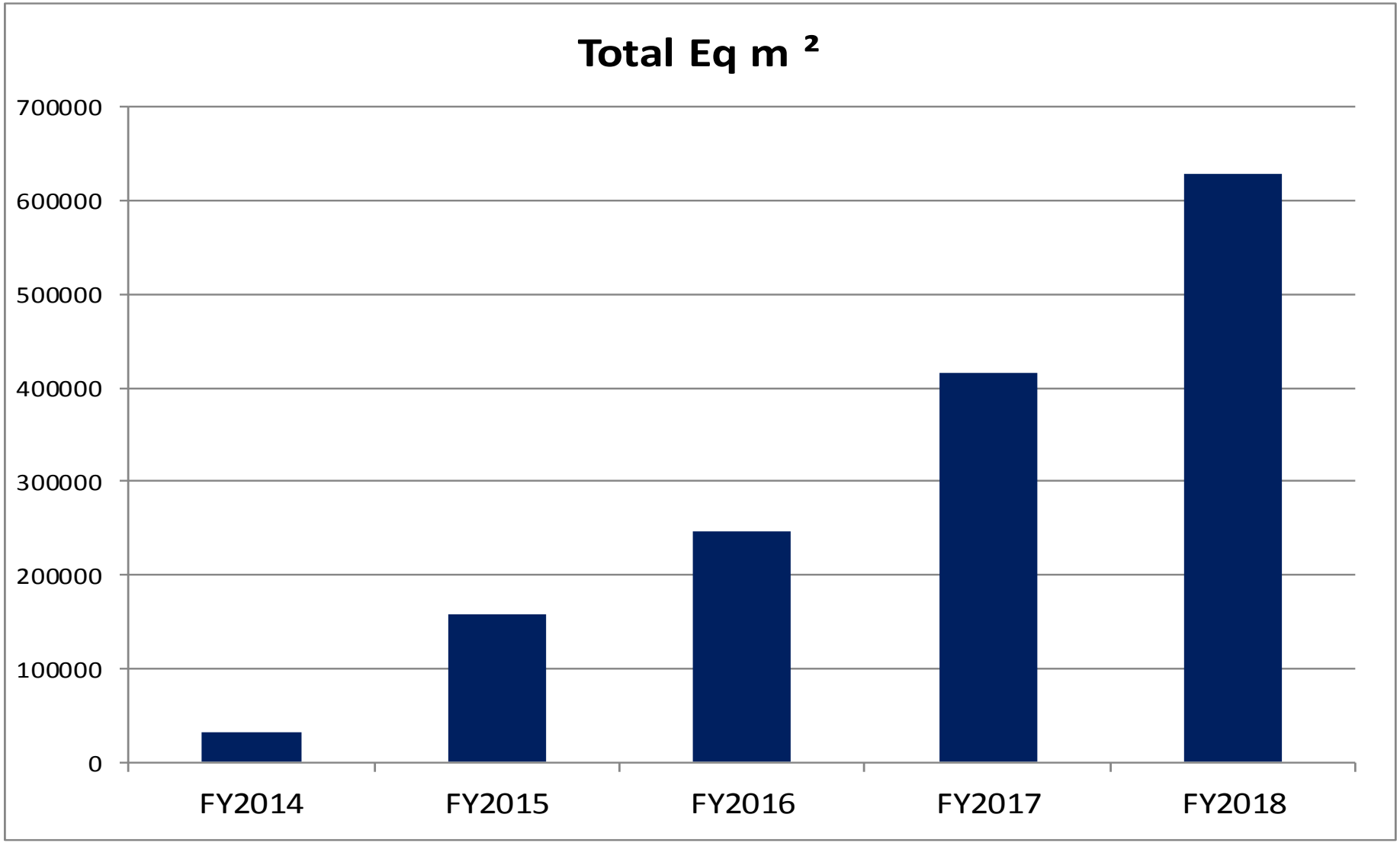
Build up: Stope ca



Impala 21 – 24 Level: Shaft Sinkers 25 – 27 level



Forecast 5 Year Build-up



Initiatives

- All rail bound development: Drill by Drill Rig
- All off reef ends: Shotcrete on the face
- All working places: 100% bolts and nets
- All underground employees: Rescue packs
- Surface control room: 65%
- Wi-Fi communication to be installed
  - Lamp tracking
  - Rolling stock tracking
  - Large equipment tracking
  - Telephone communication

Initiatives

- CCTV
  - Stations 50%
  - Loading areas
  - Conveyor belts
  - Any high risk areas

- Guard cars (20 Underground)

- Hagg Loader at the multi blast ends

GST SQD Drill Rigs

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Questions?

Thank You

16 Shaft Team