



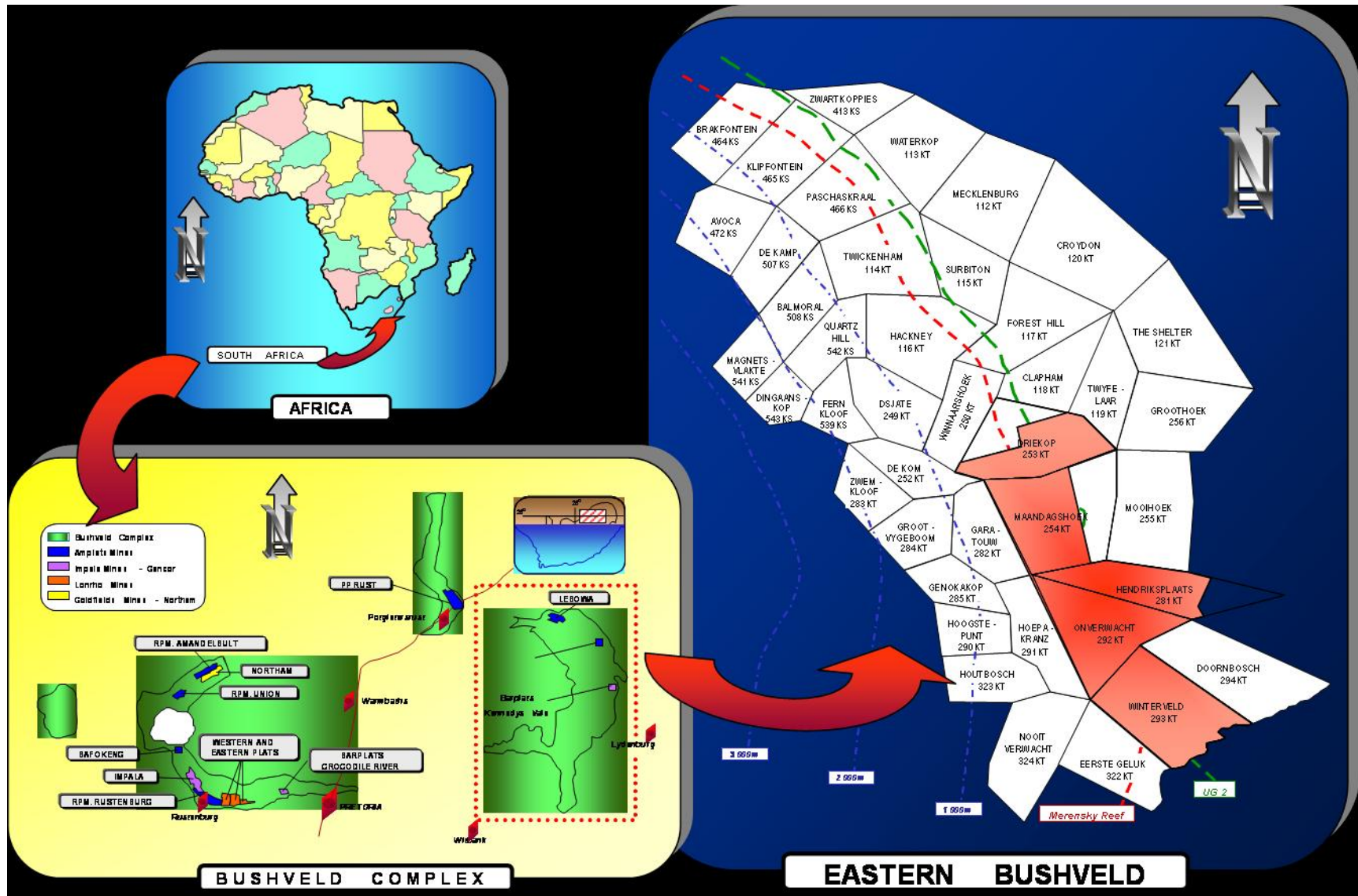
Facility visit

September 2007

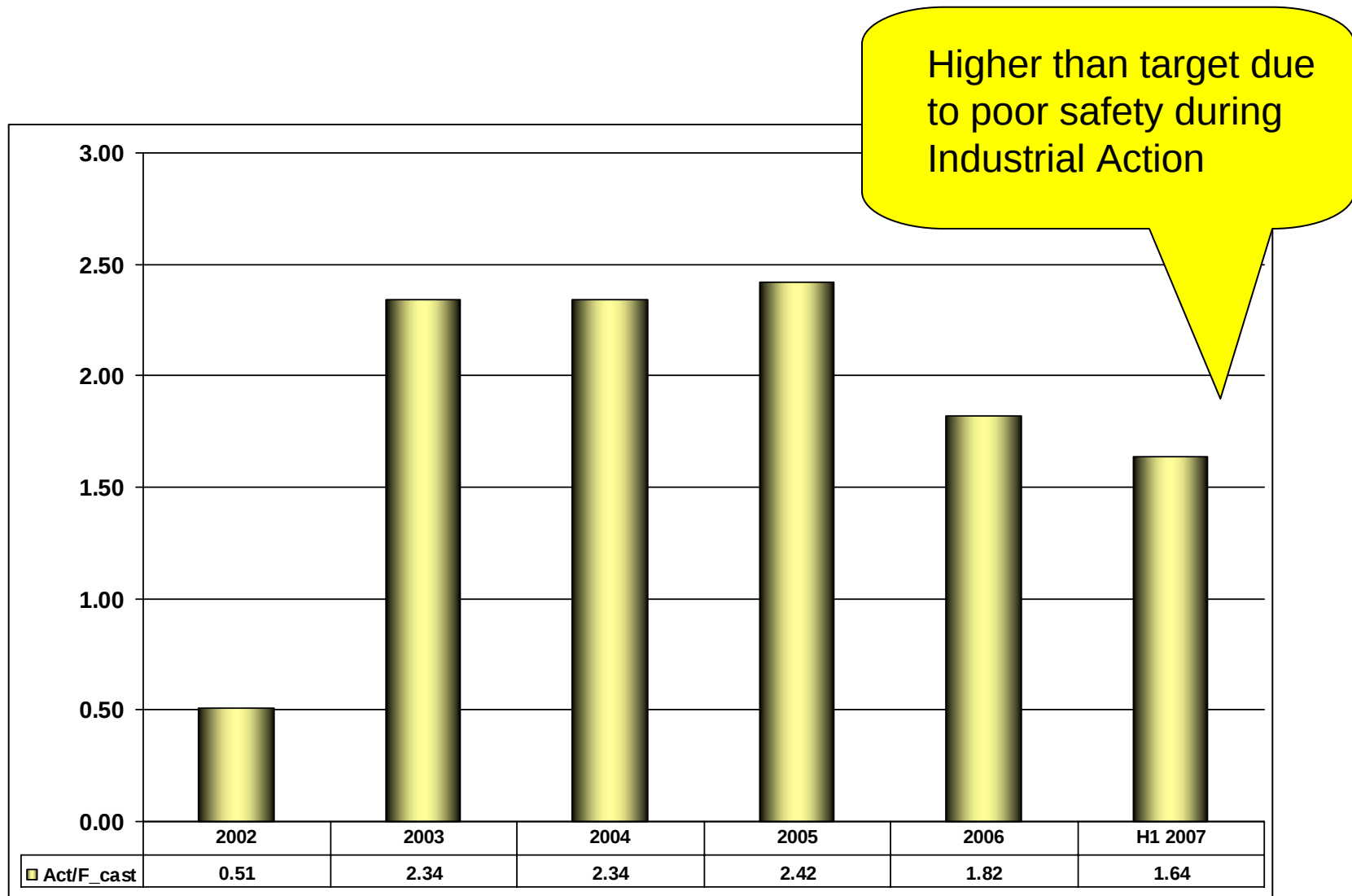
Agenda

- ❖ **Safety**
- ❖ **Ore body**
- ❖ **Mining methods**
- ❖ **Production**
- ❖ **Operating costs**
- ❖ **Capital expenditure**
- ❖ **Human resources**
- ❖ **Key business issues**

Locality – Modikwa Platinum Mine



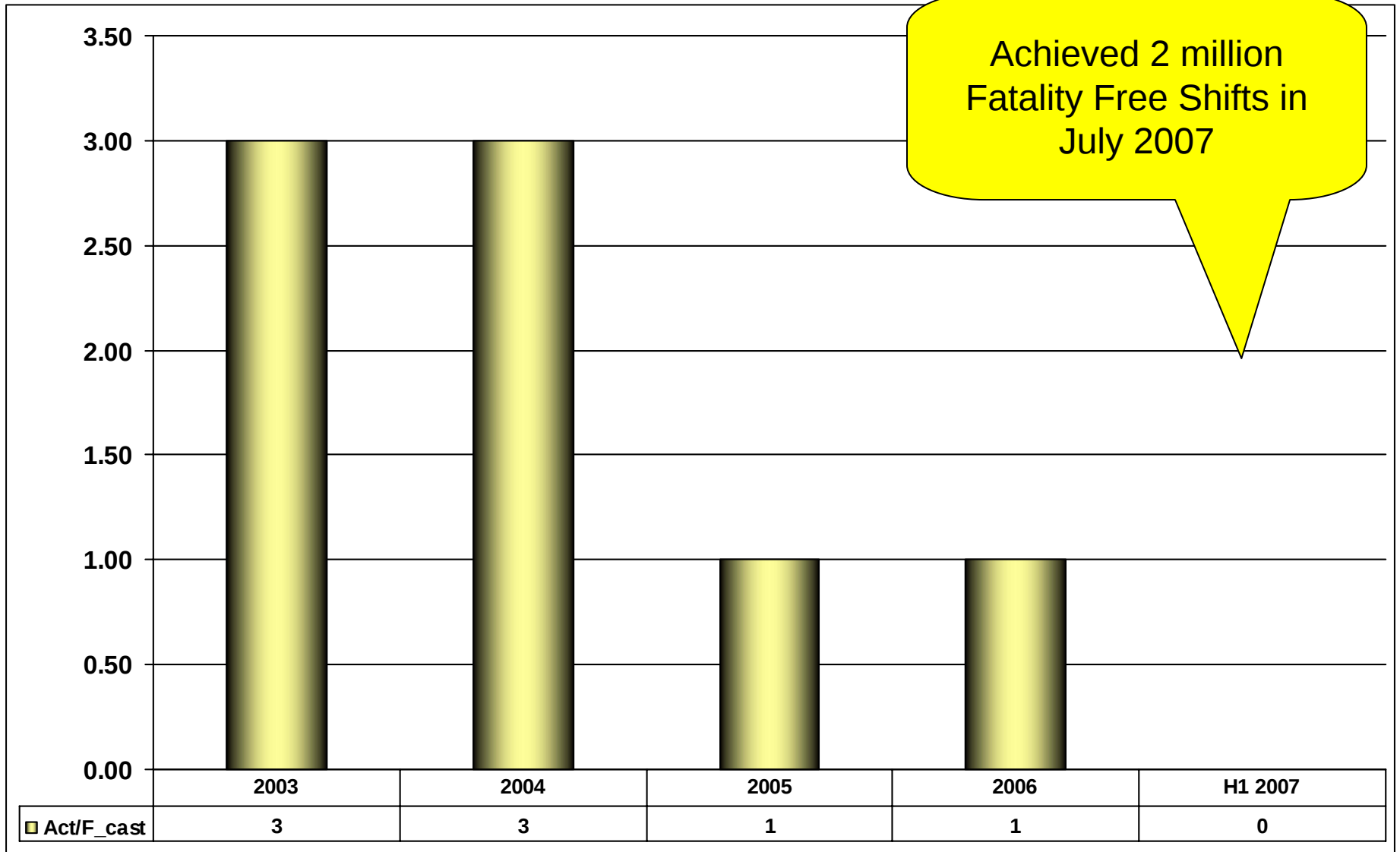
Lost time injury frequency rate



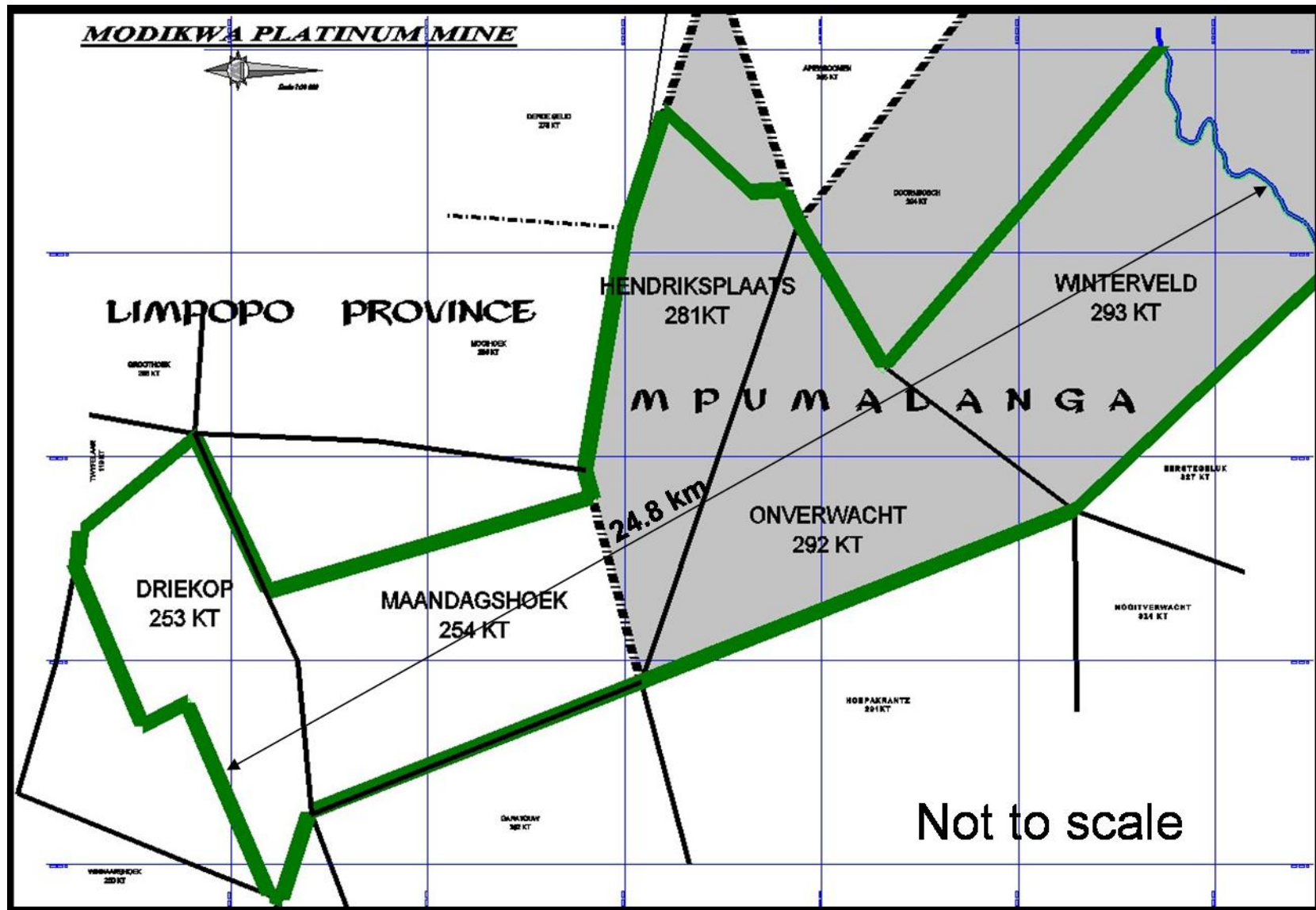
- Safety programs are aimed at continuous improvement to achieve zero accidents

Fatalities

Achieved 2 million
Fatality Free Shifts in
July 2007



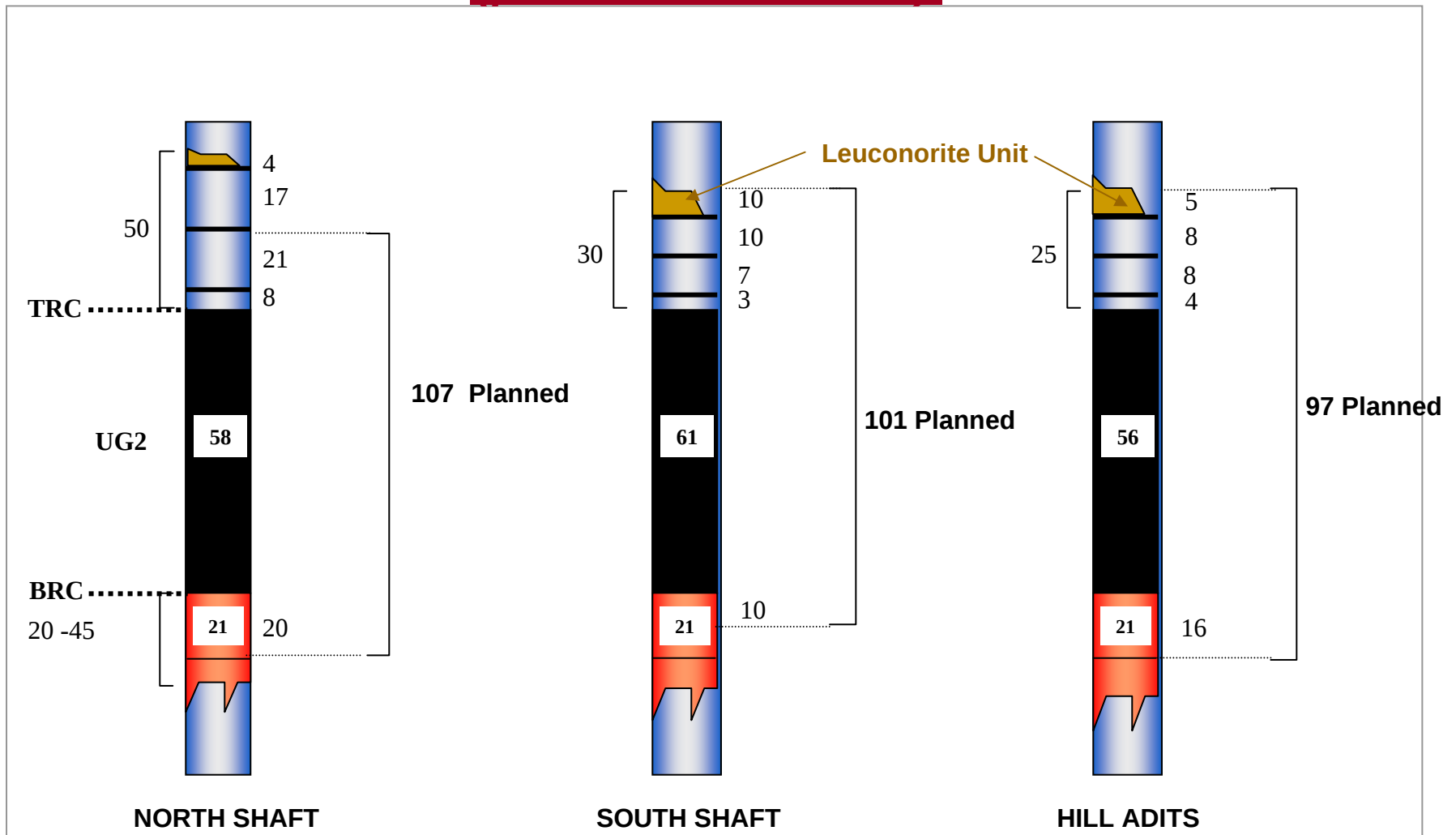
Modikwa Platinum Mine – lease area



■ Mpumalanga Province

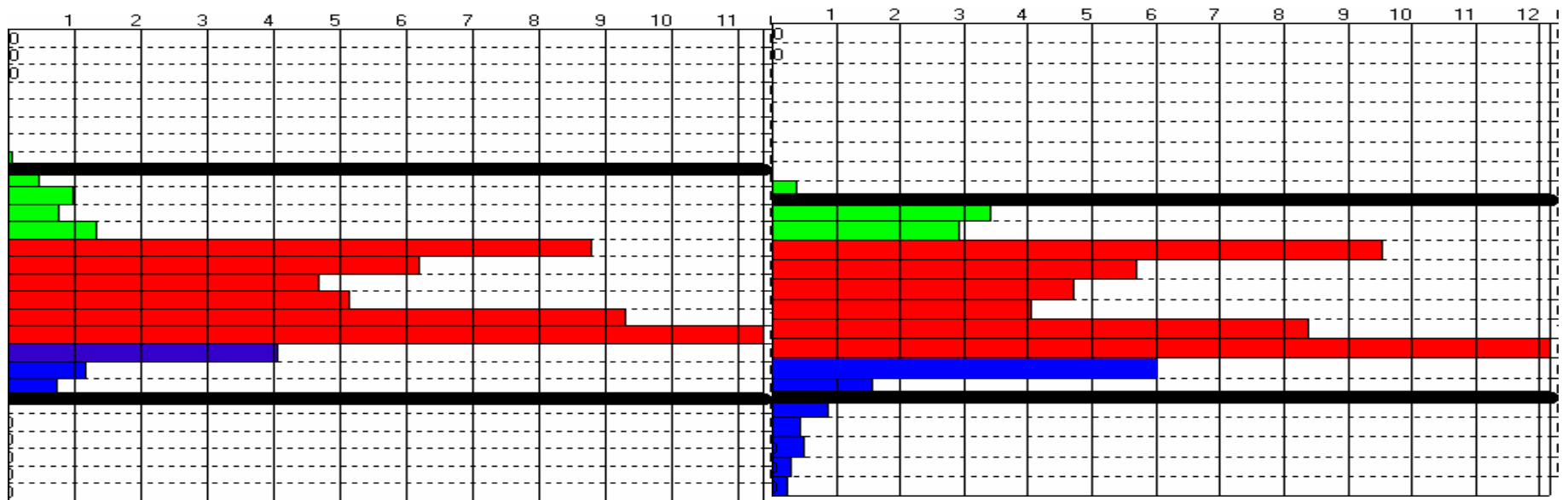
Total lease area 14 278 ha

Optimal Stopping Cut (per shaft area)



❖ Mine average planned at 102 cm – Currently 103cm

Vertical grade distribution in UG2



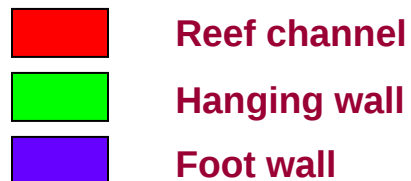
North Shaft

South Shaft

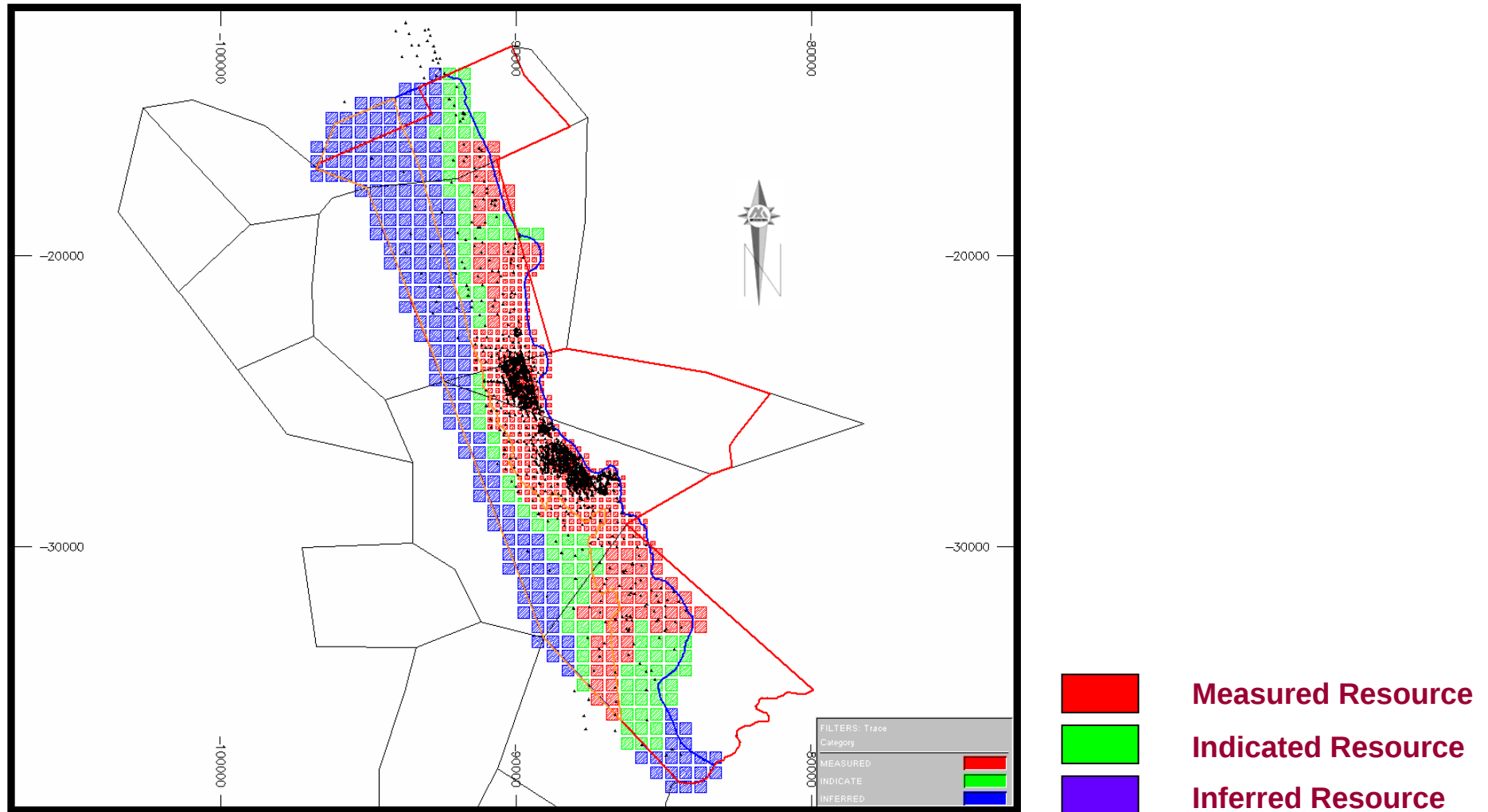
Average g/t 4E: North 5.91

South 5.86

Total 5.89



2006 UG2 resource categories (Data Mine model)

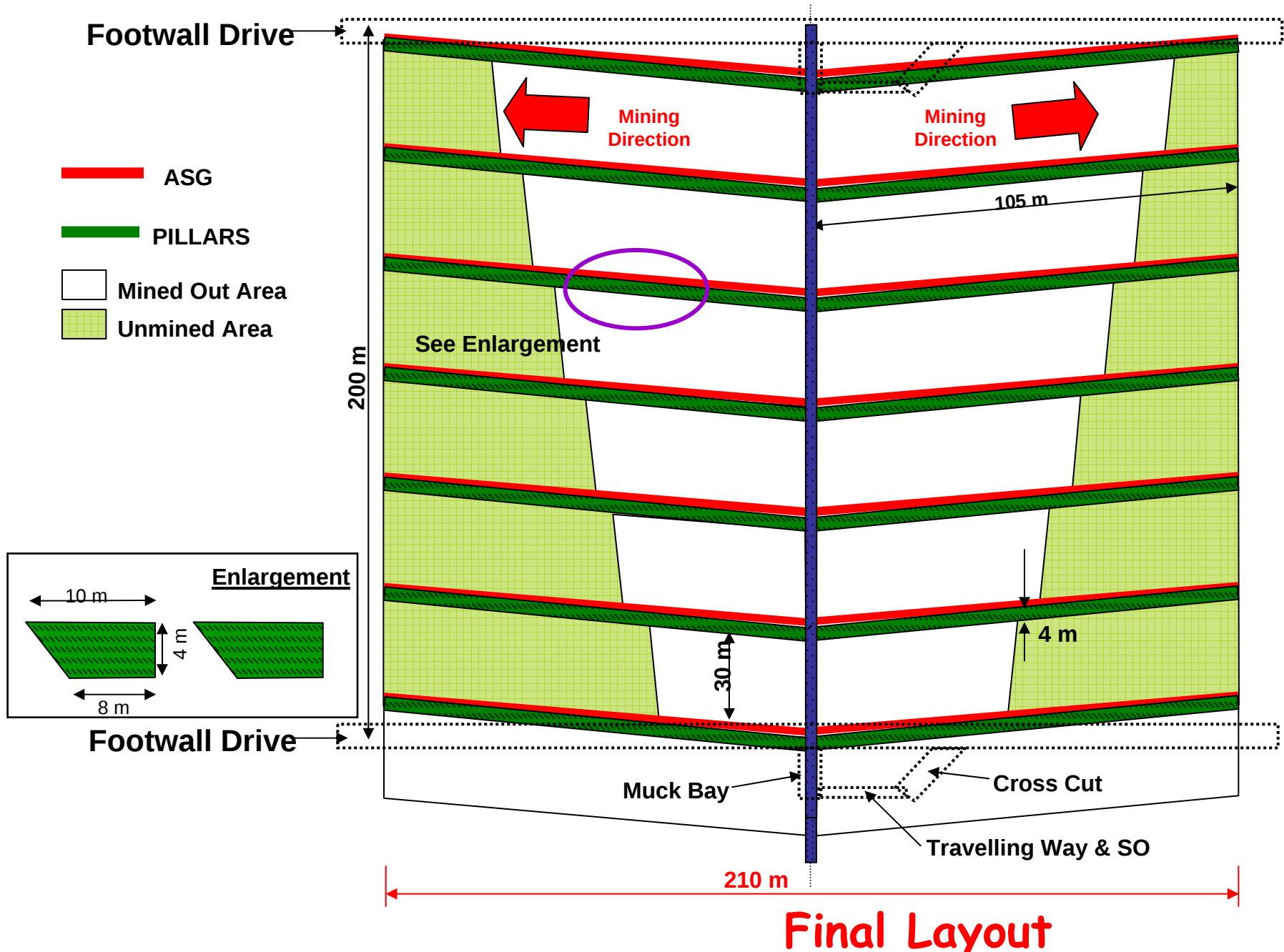


Resource Classification – Tonnage 100 % JV (Millions)

	Merensky	UG2	Total
Measured	18.7 (8.6%)	68.5 (30.1%)	87.2 (19.6%)
Indicated	46.8 (21.5%)	62.8 (27.6%)	109.6 (24.6%)
Inferred	152.0 (69.9%)	96.1 (42.3%)	248.1 (55.8%)
Total	217.5	227.4	444.9

- Excluding proved and probable ore reserves
- Resource discounted for Geological losses

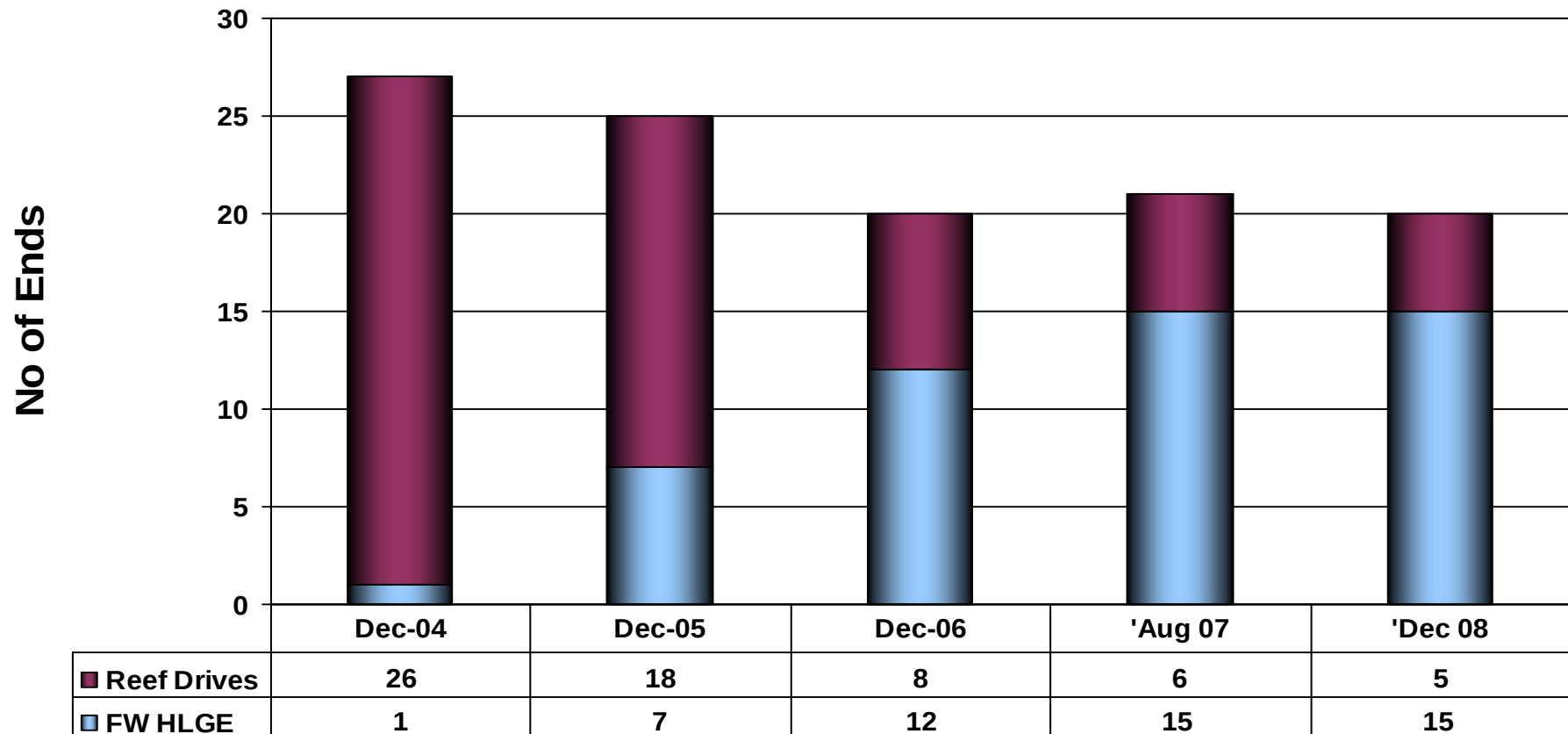
Breast stoping layout with footwall development



Modikwa Development Ends

Large Ends – Reef Drives vs Footwall Drives

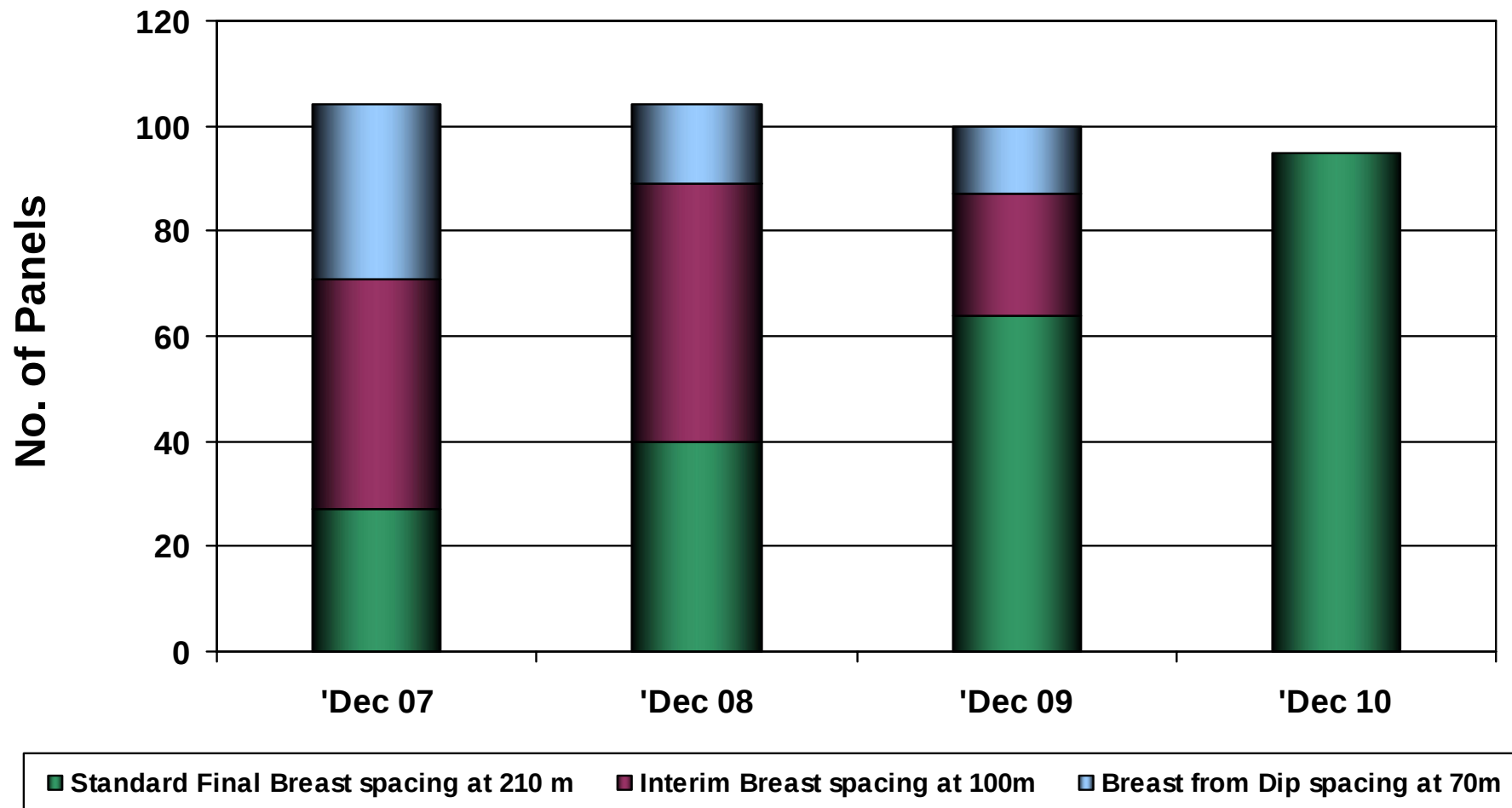
Move from Reef Drives to Footwall



- All large ends will be in footwall by 2010

Modikwa

Conversion from Dip to Breast Mining



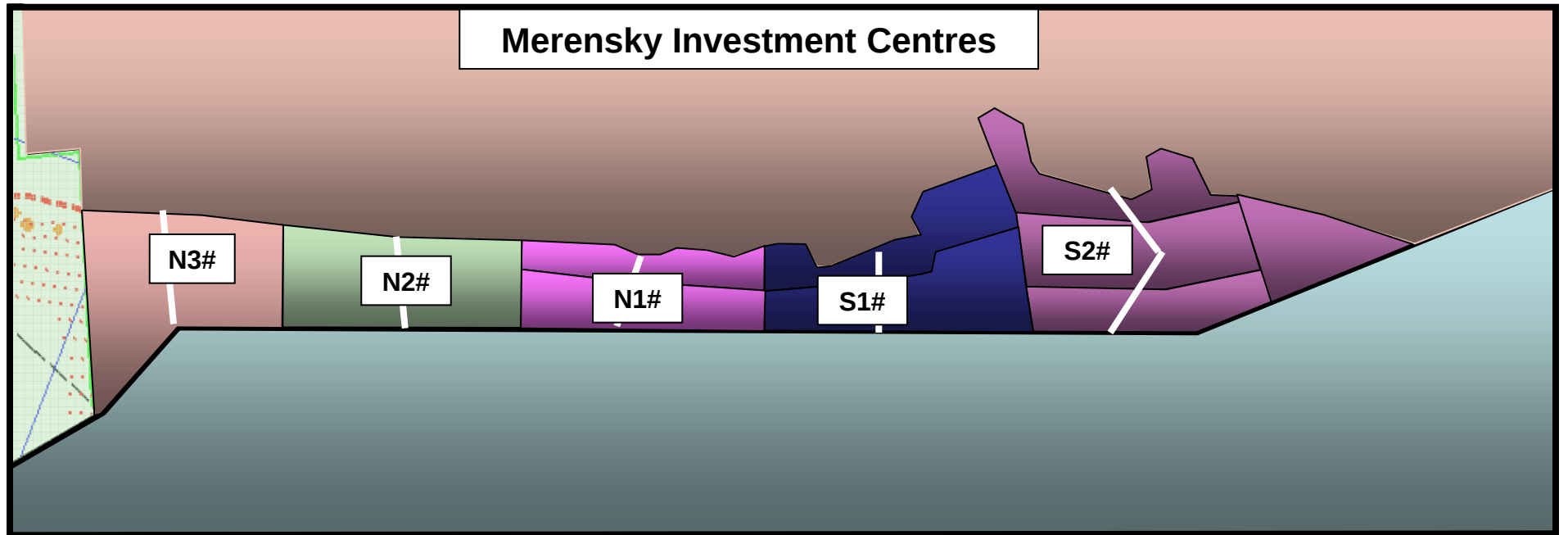
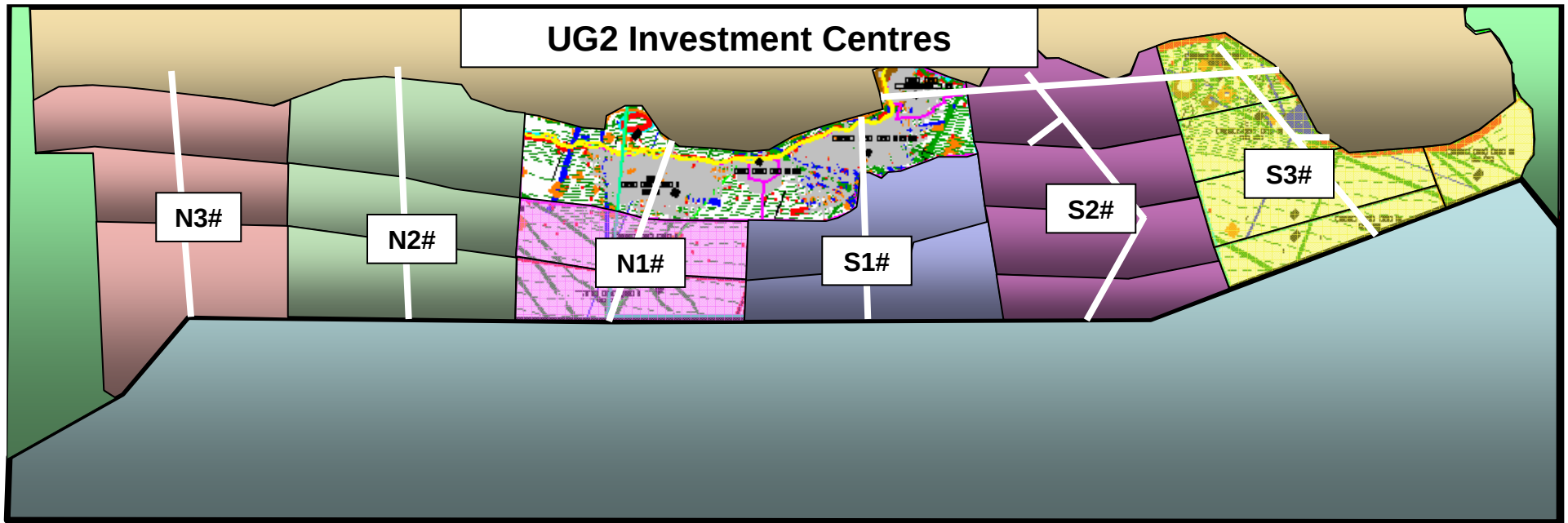
- Only breast mining is taking place (dip mining completely phased out)
- All panels are expected to be on the standard 210m breast spacing by 2010

Conversion to footwall strike development & breast stoping

Lower development profile required to generate ore reserves for breast mining

	Breast mining Footwall drives		Dip mining Twin raise & reef drives	
	m²/metre	Required to replace 50 000 m²	m²/metre	Required to replace 50 000 m²
m²/ Total Dev	53	943	17	2 941
m²/ Prim.- R/W, TW, BH & Diag	107	467	22	2 272
m²/ Prim.- Large Ends	106	472	83	602

Both Reefs under continuous evaluation



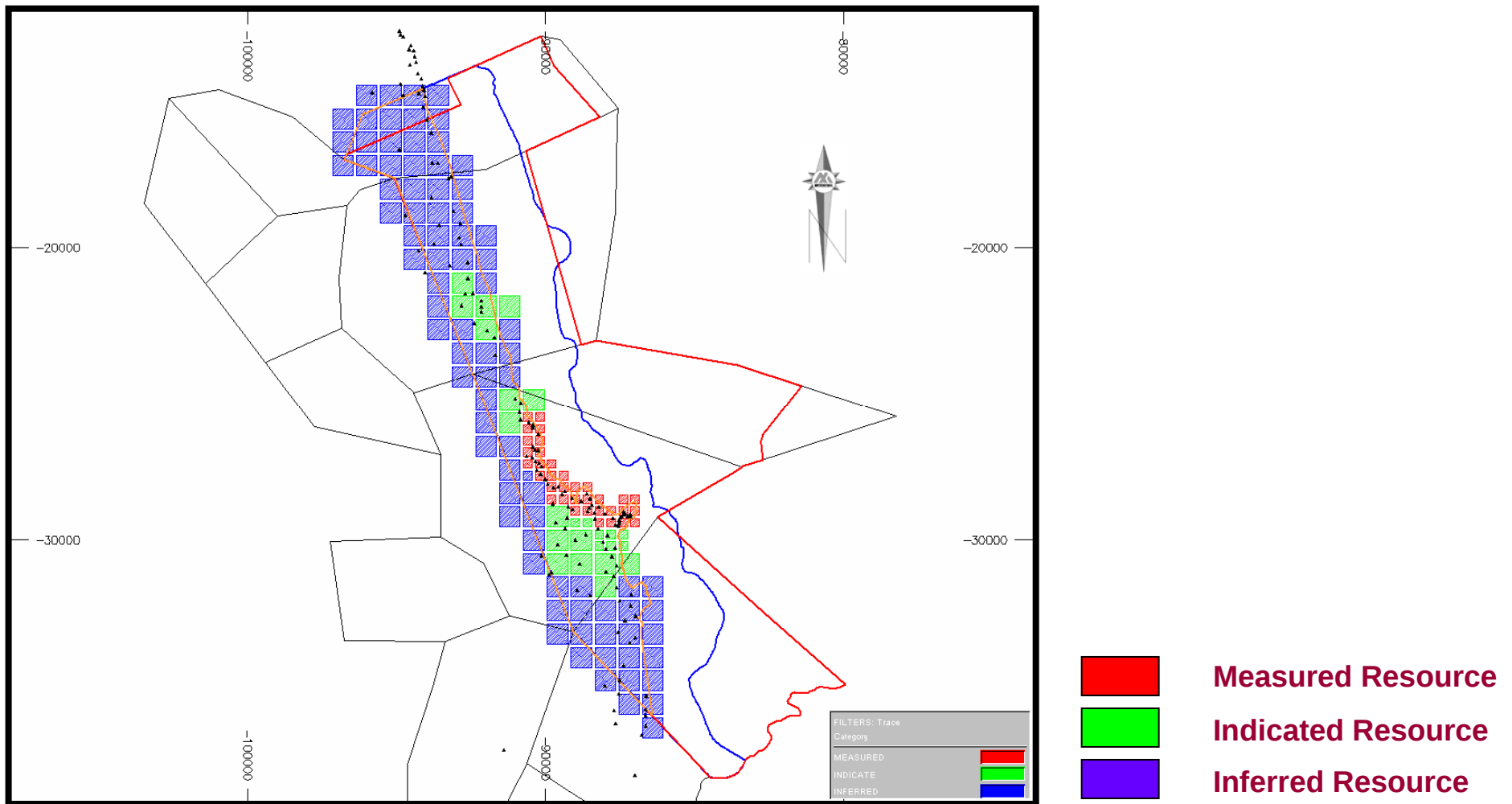
Production sources

(000's tons per month)

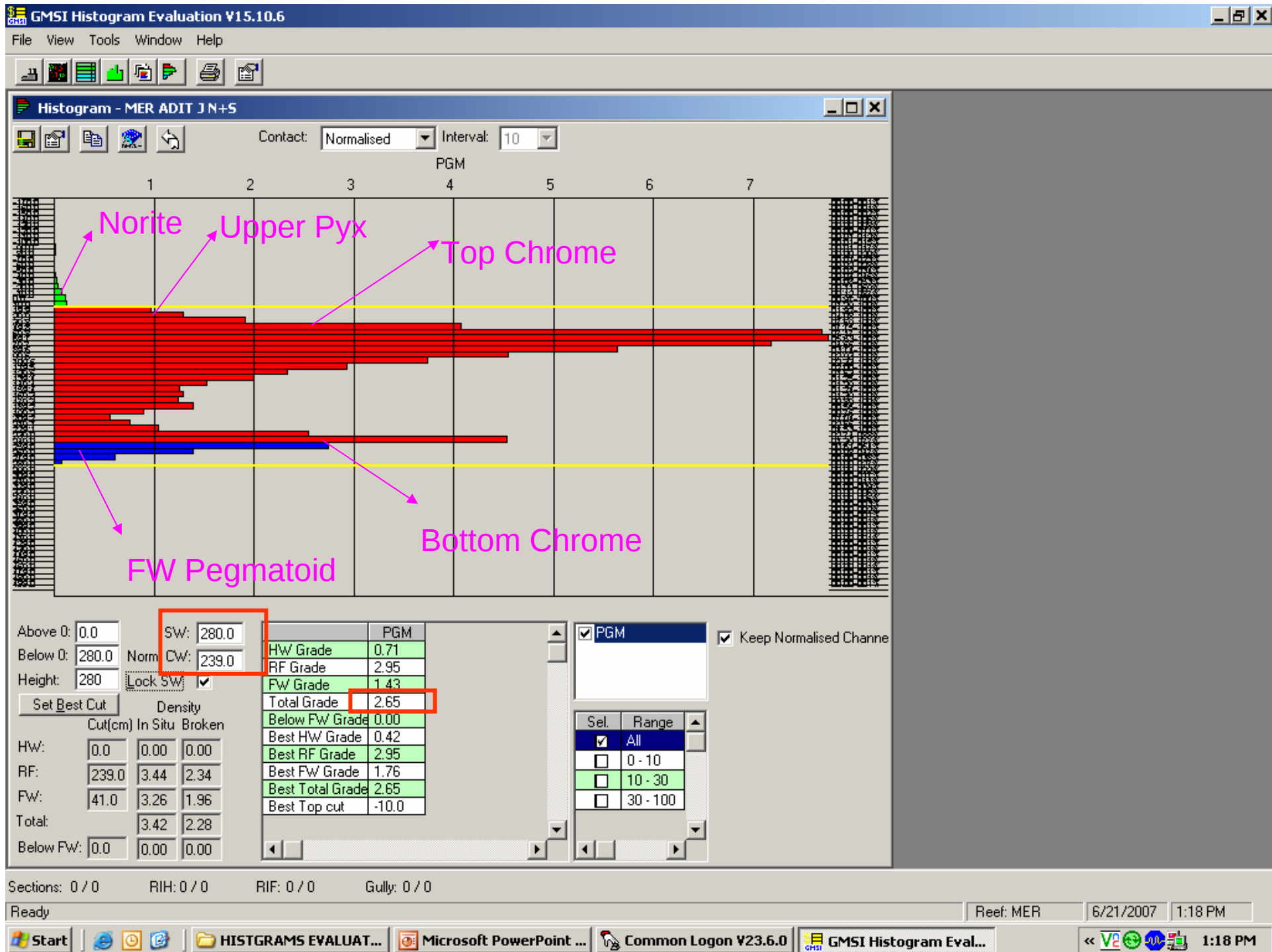
Production area	2005	2006	Steady state
North 1 Shaft	86	96	120
South 1 Shaft	63	75	120
Hill	32	27	-
Mid Shaft	9	10	-
South 2 & 3 Shaft			
North 2 & 3 Shaft			
TOTAL	190	207	240
Life in Years			90

- Evaluation of possible expansion underway
- Possible inclusion of Merensky

2006 Merensky resource categories (Data Mine model)

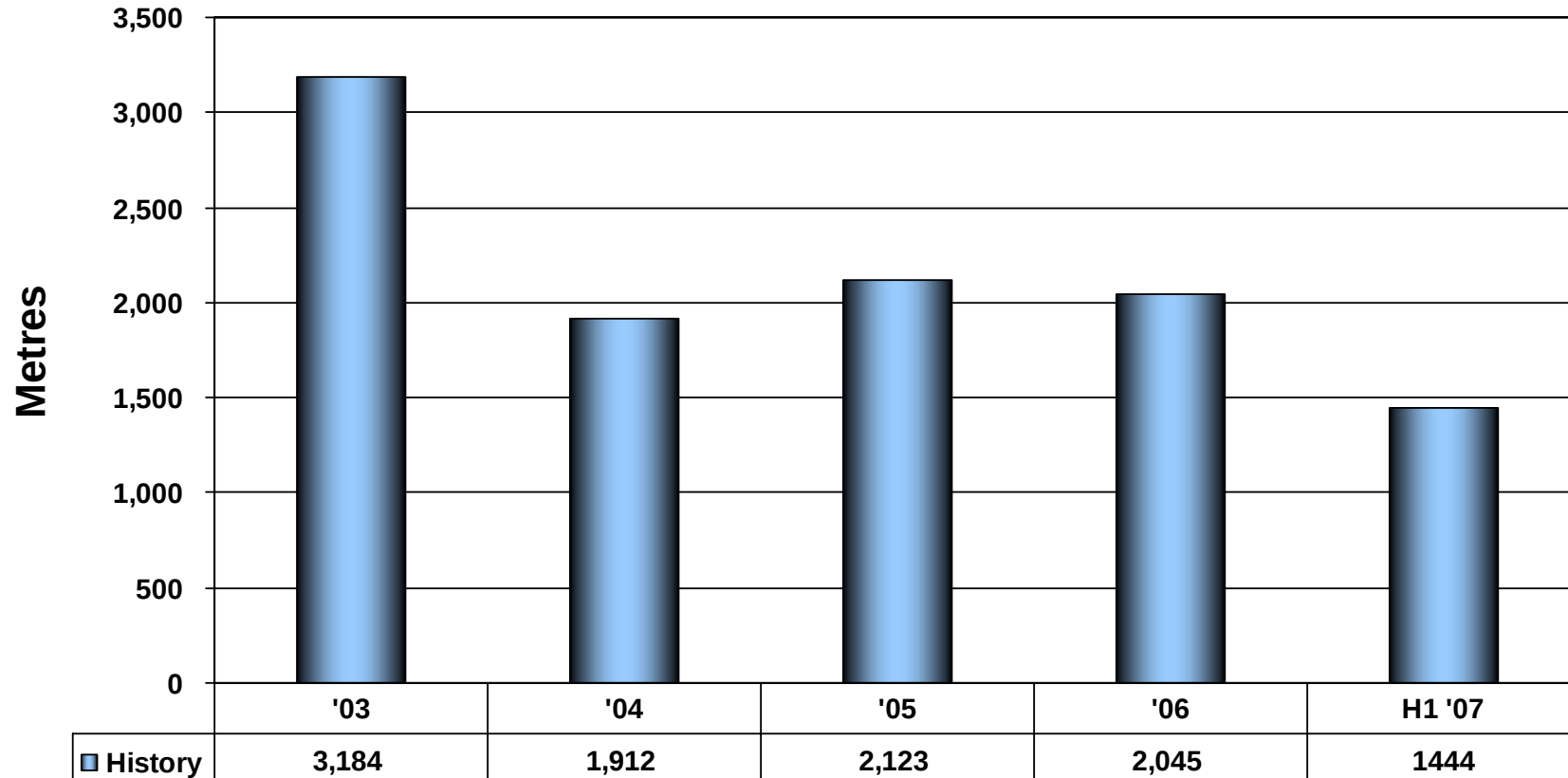


131 boreholes have been drilled with 242 reef intersections



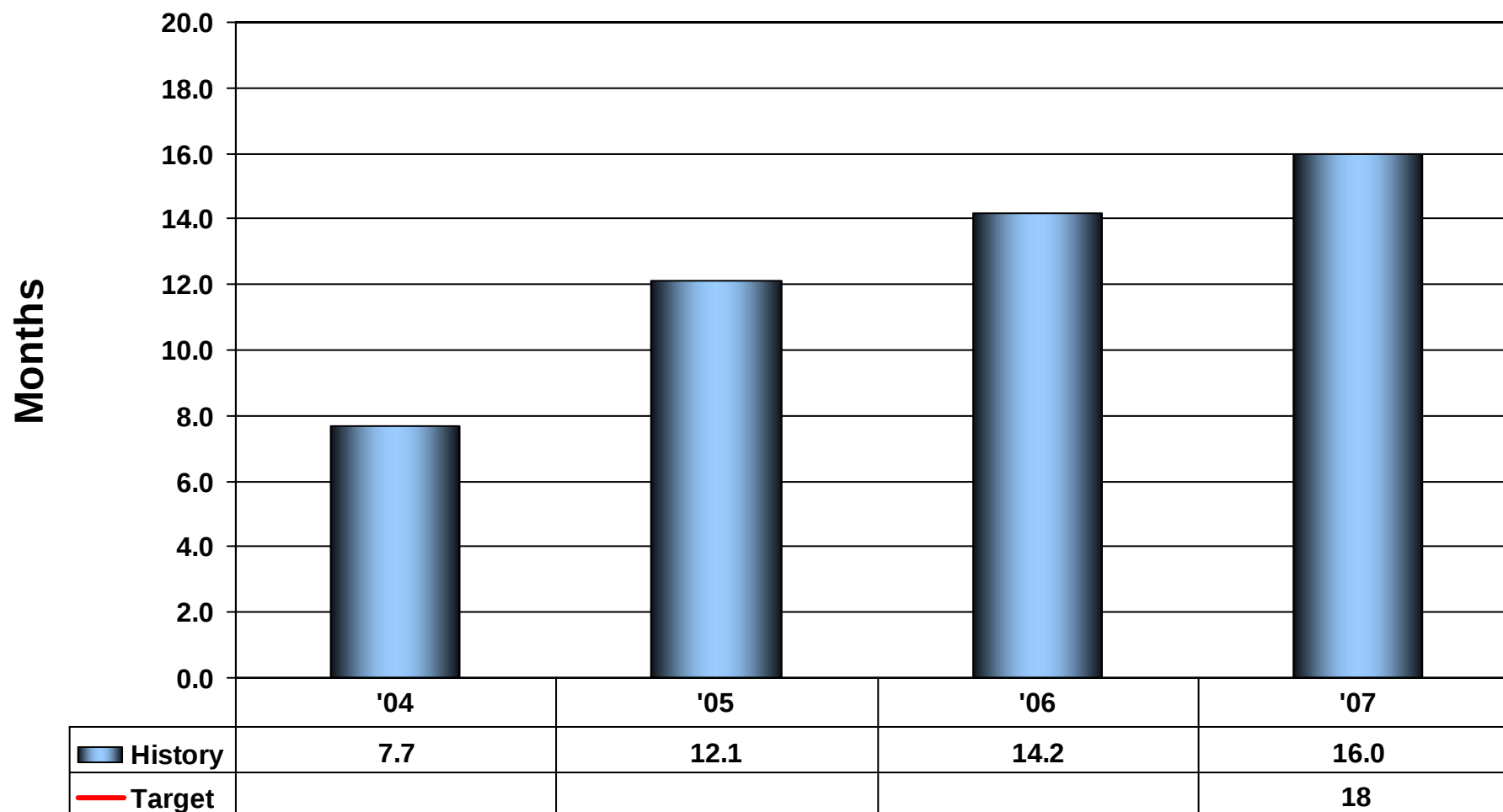
Production

Total primary development metres / month (Excludes # Sinking)



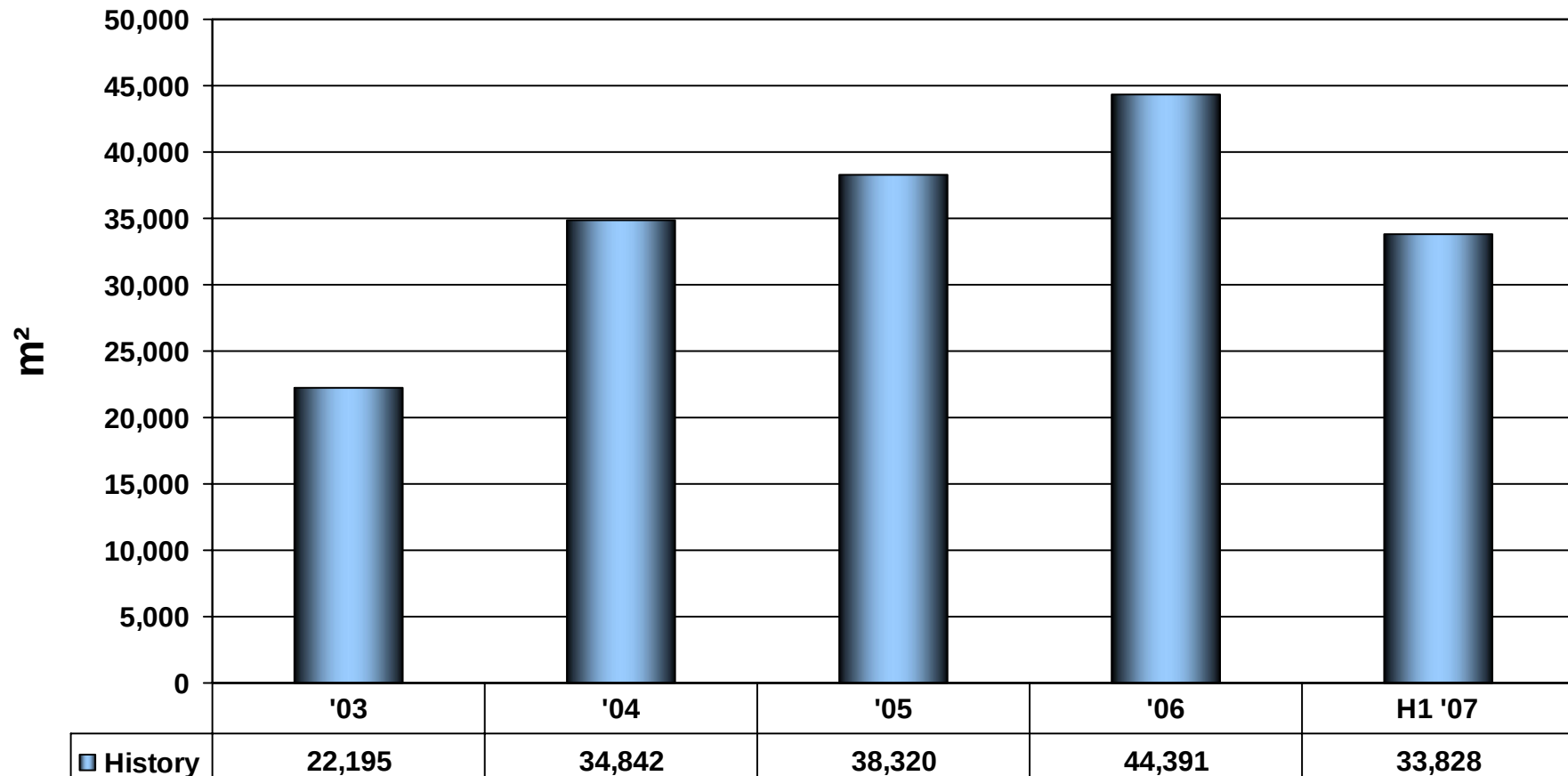
- ❖ At steady state breast requires less development than dip to generate the same ore reserves
- ❖ H1 2007 affected negatively due to strike
- ❖ Planned between 1 900 to 2 000 m per month into the future

Immediately Available Reserves



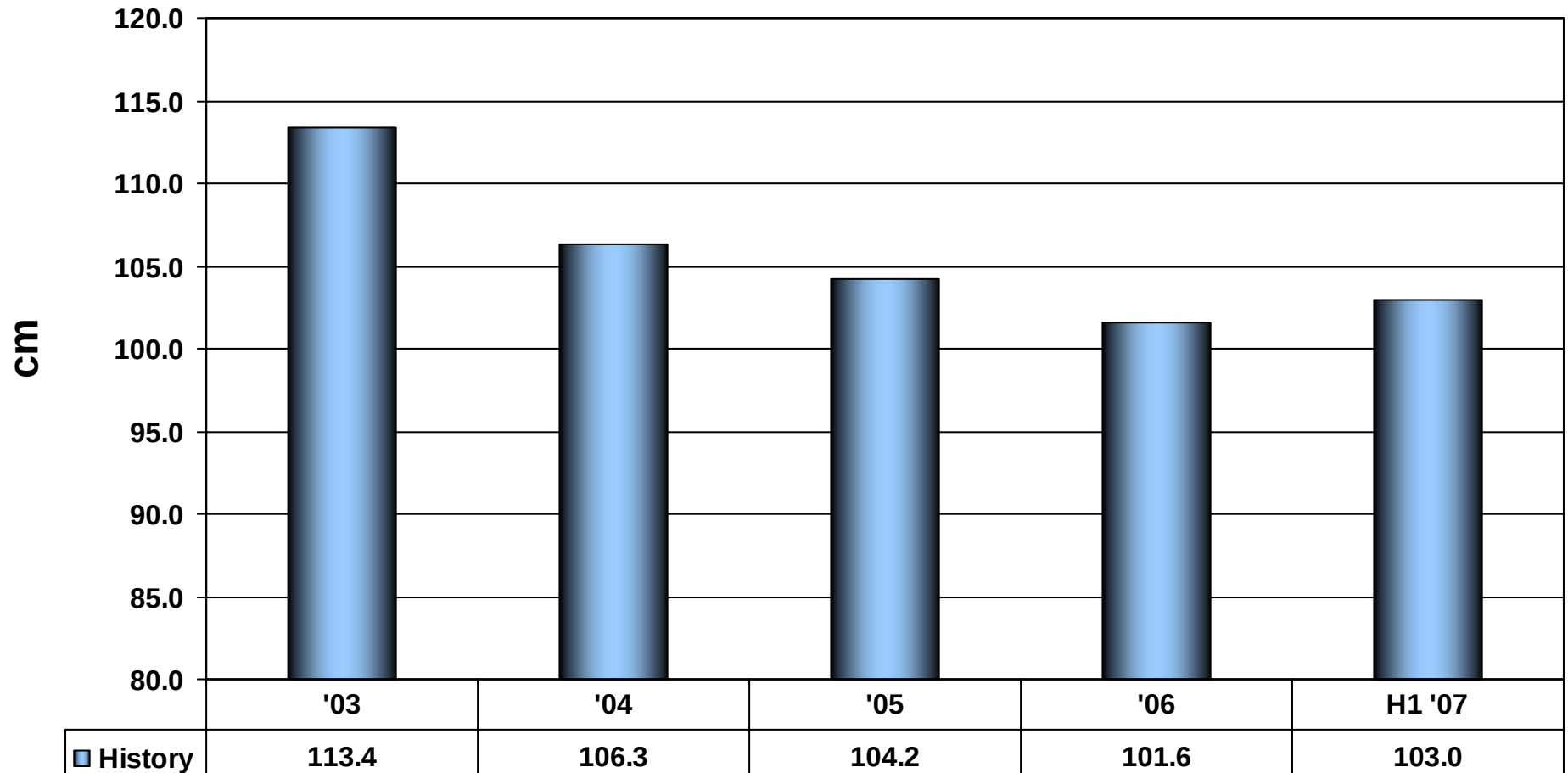
- ❖ 18 month reserve expected to be achieved in 2008
- ❖ Transition to 100% underground production
- ❖ Excludes Temporary Non Available Reserves

Monthly area mined (m²)



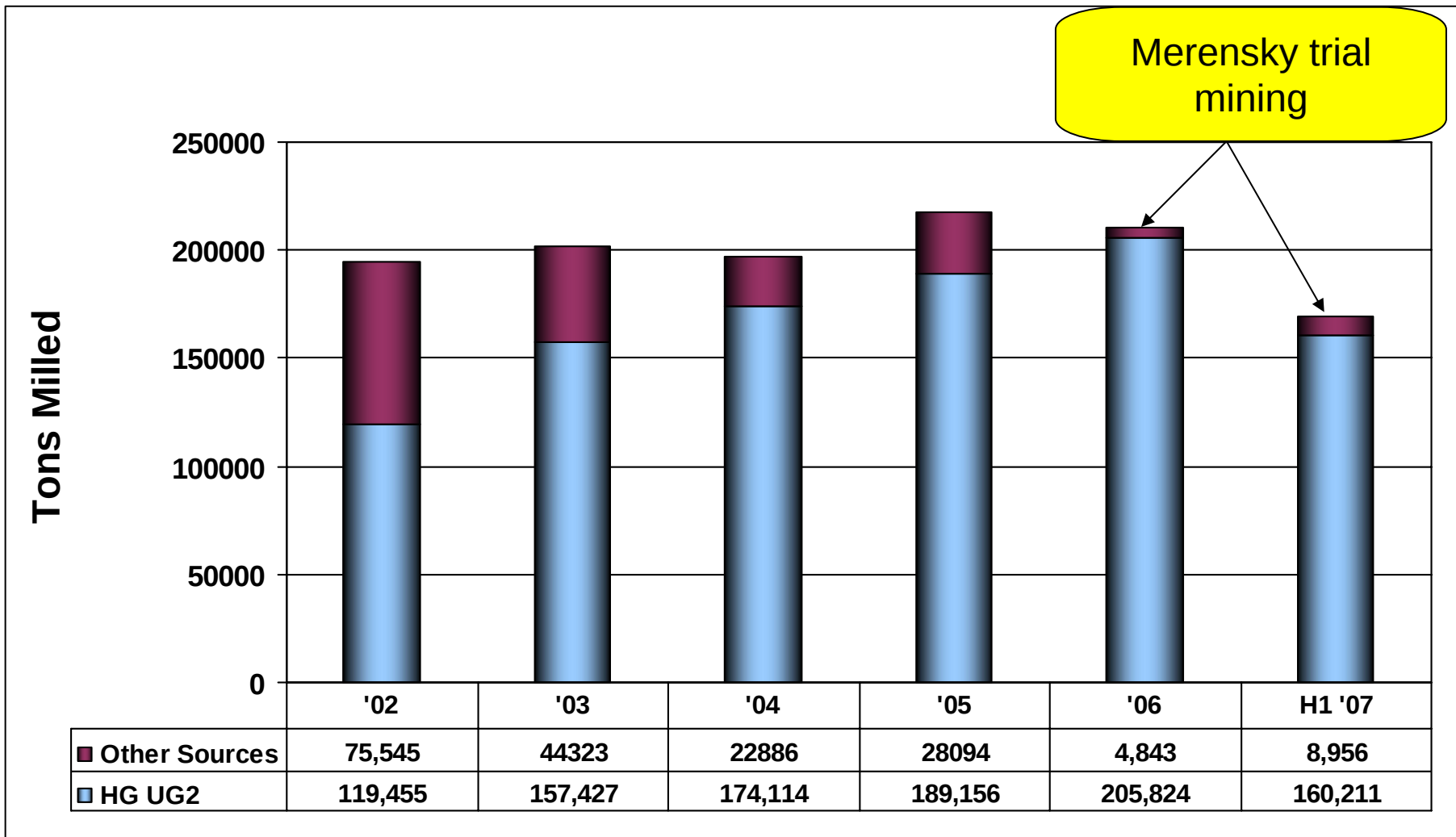
- ❖ H1 2007 affected negatively due to strike
- ❖ In steady state the production is planned at 50 000m² / month to be achieved in 2008

Stoping width



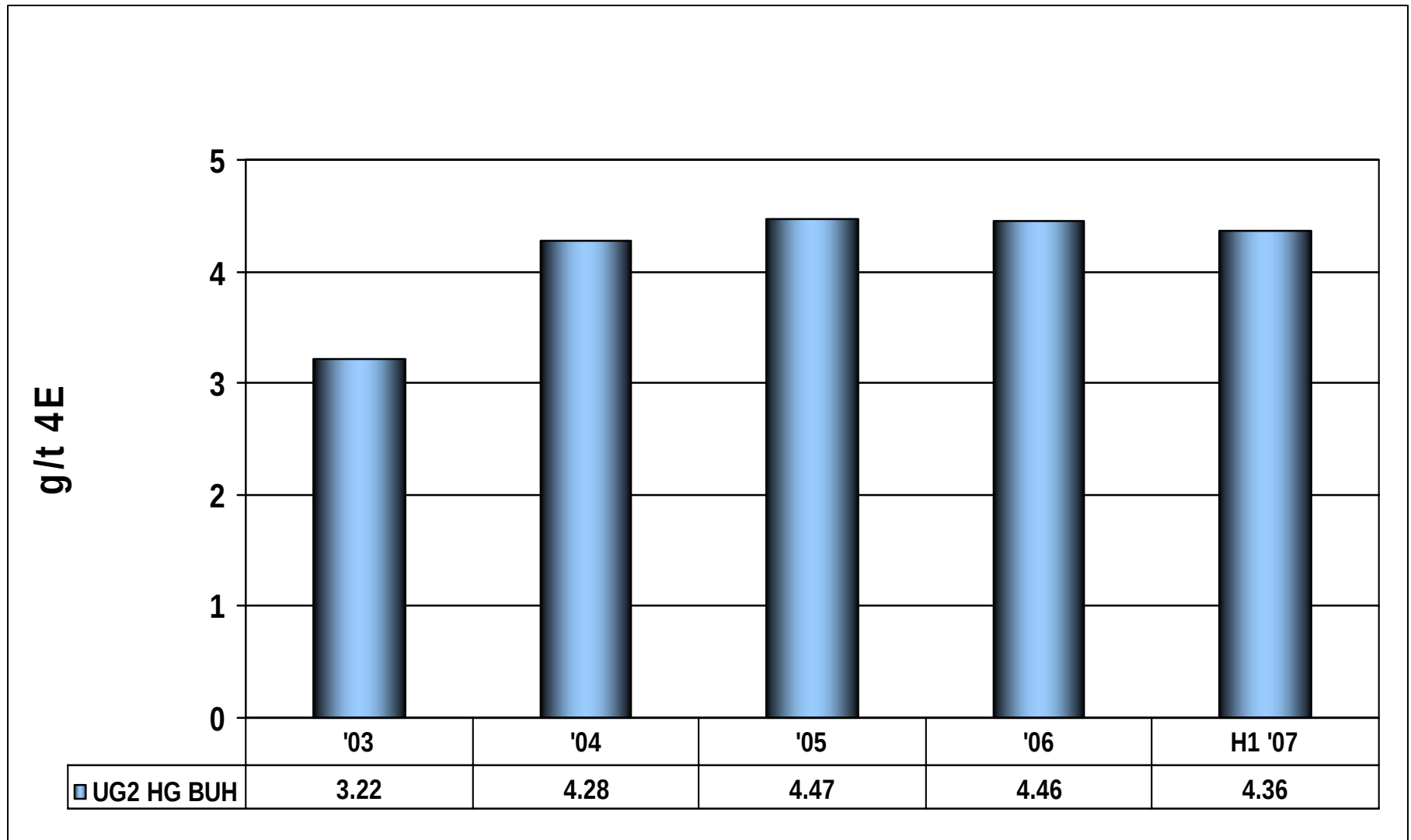
❖ **Steady state mine average planned at 103cm for 2008 and 2009**

Average Tons Milled per Month



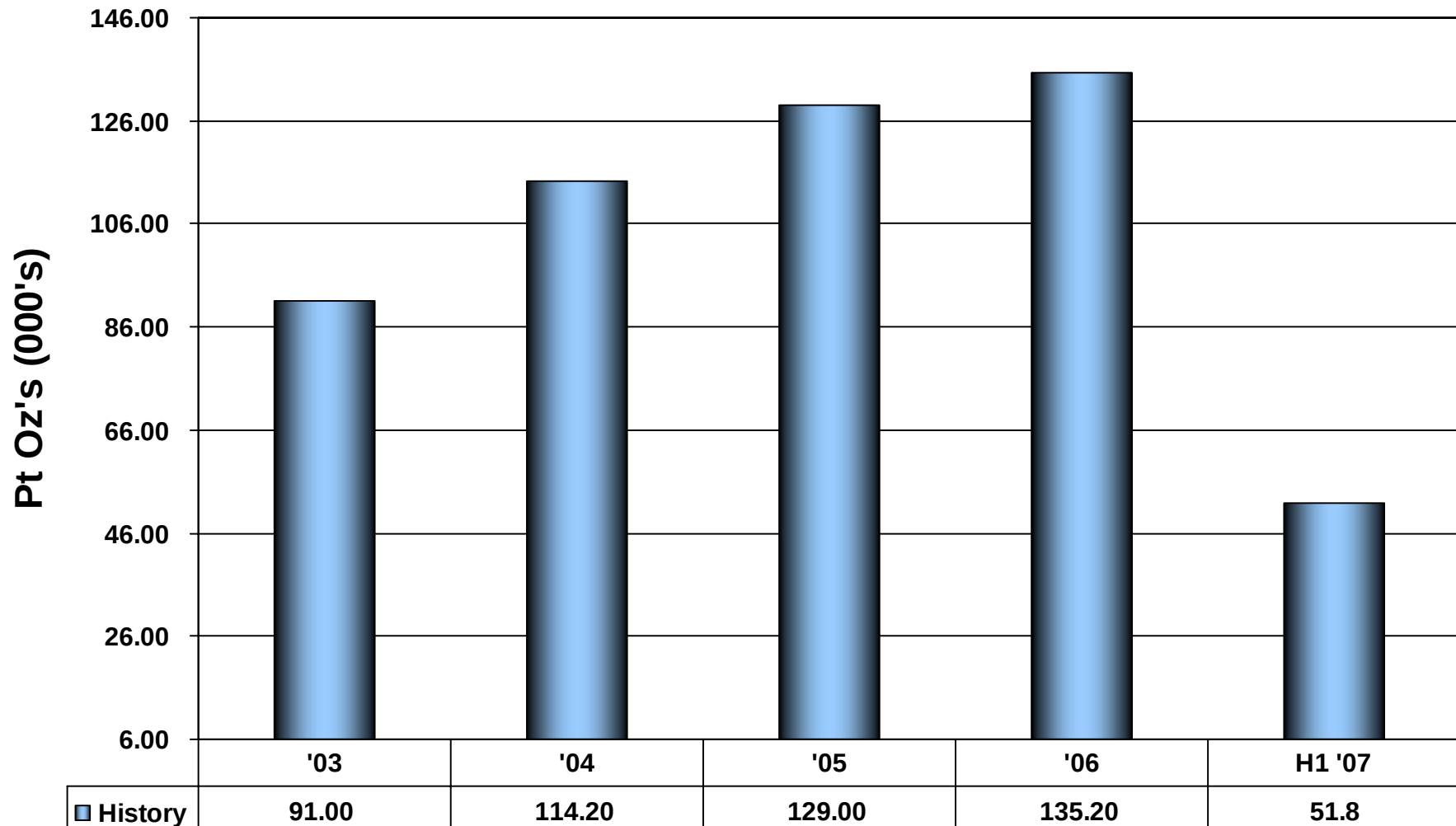
- ❖ H1 2007 affected negatively due to strike
- ❖ In steady state the production is planned at 240 kt/ month to be achieved in 2008

Built-up Headgrade



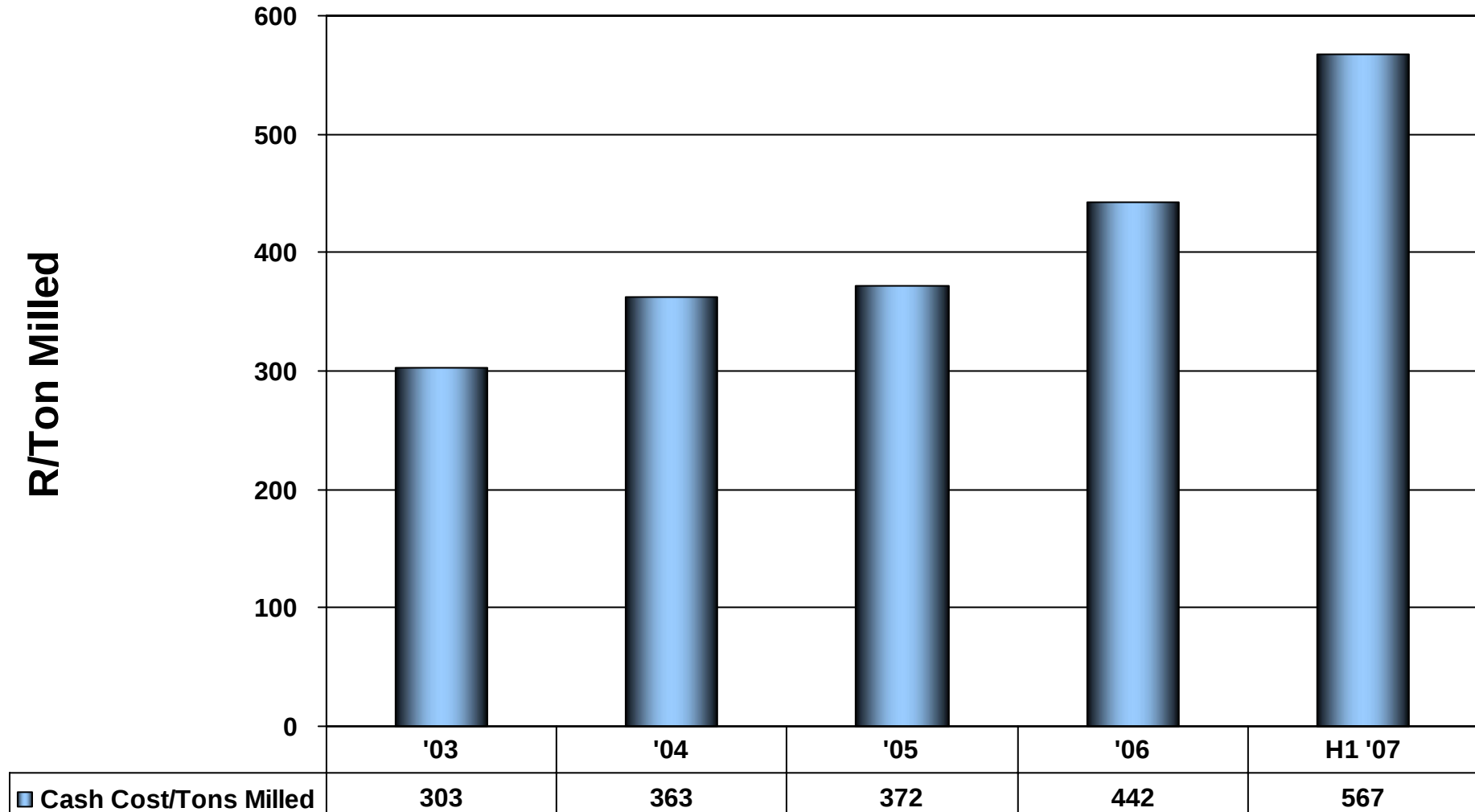
❖ Head grade at 4.5 g/t will be achieved when stoping reaches full production

Equivalent refined Pt oz / annum



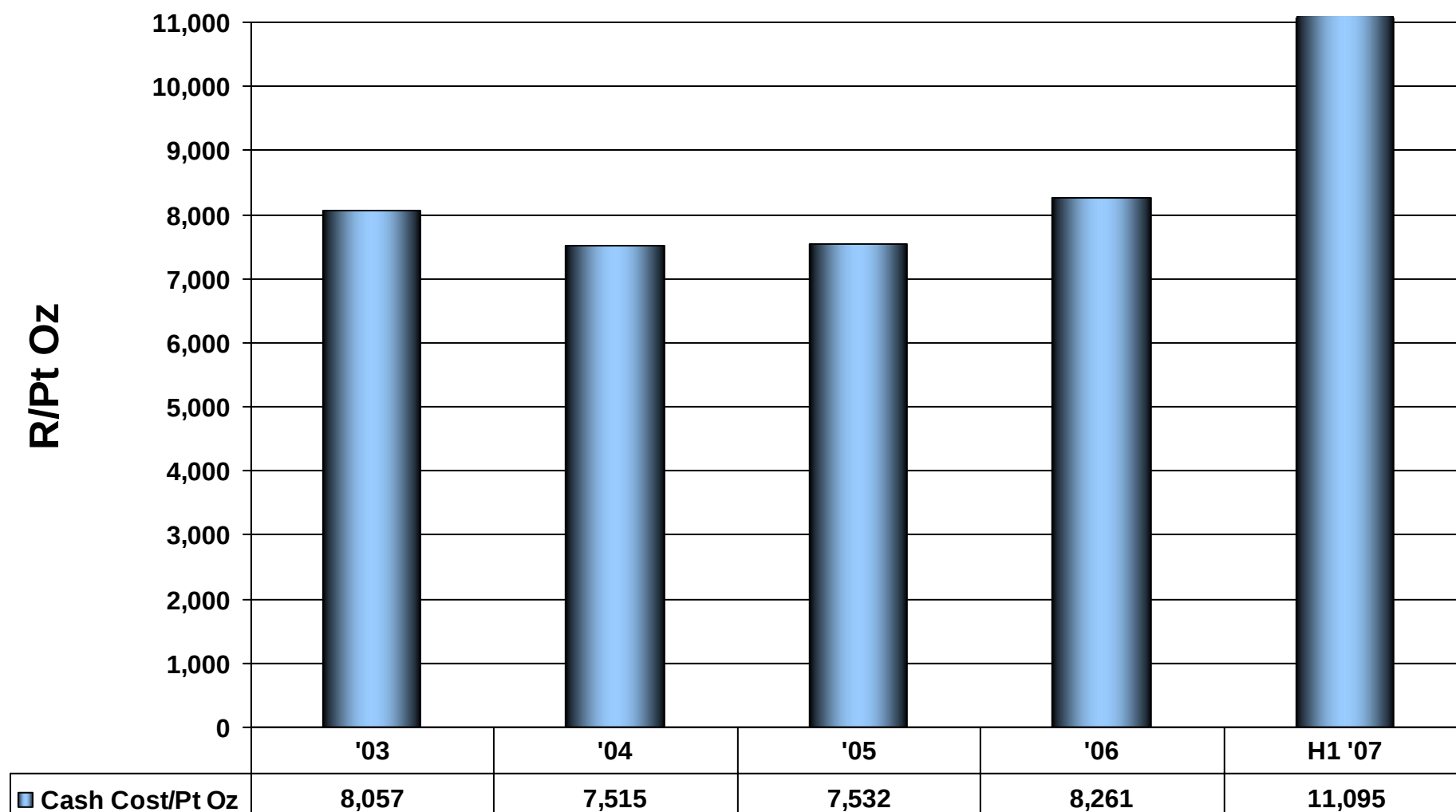
- ❖ H1 2007 affected negatively due to strike
- ❖ In steady state the Platinum profile is planned between 150 and 155 koz/annum

Cash cost / ton milled



❖ H1 2007 affected negatively due to strike

Cash cost / equivalent refined Pt oz

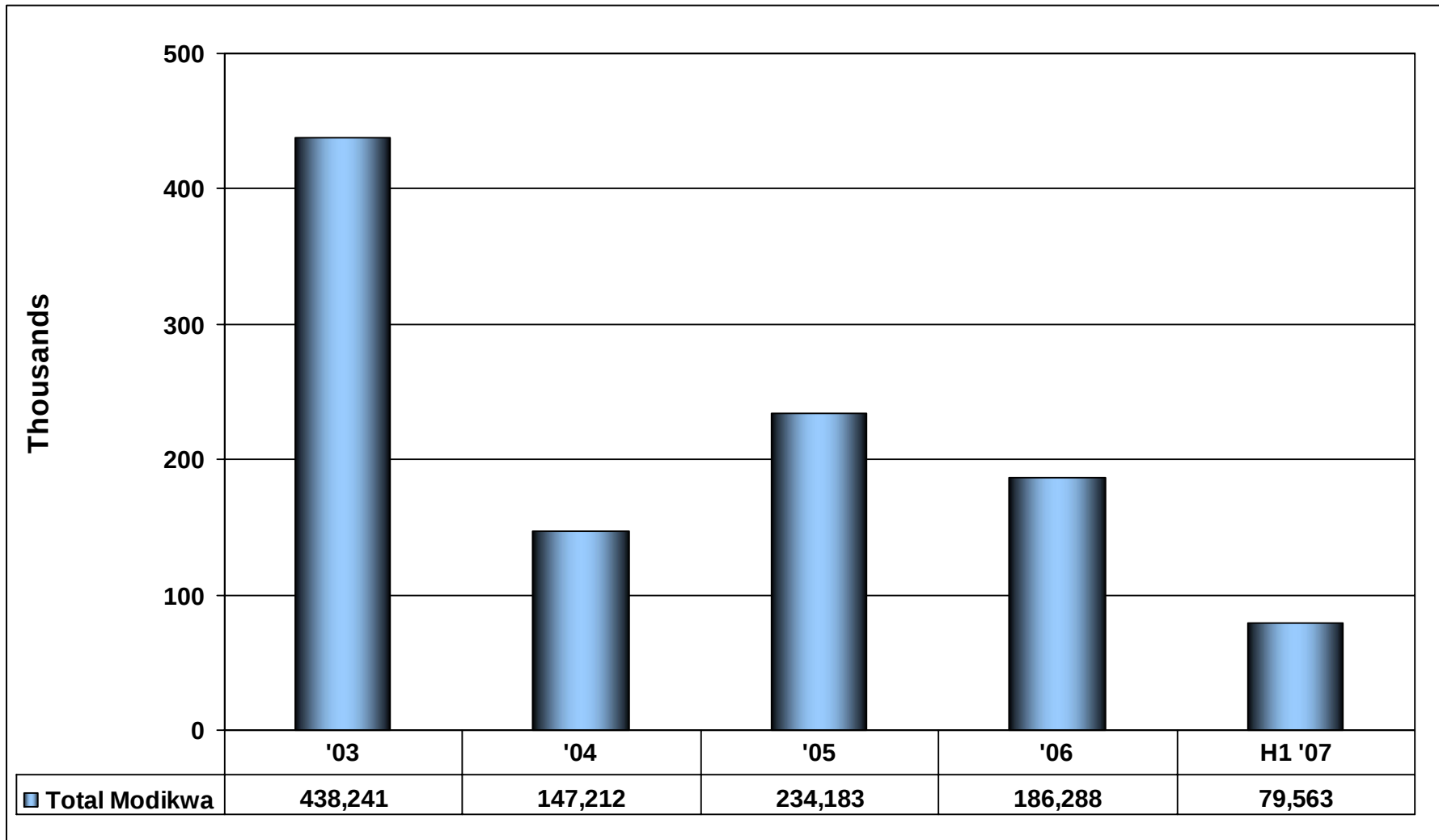


- ❖ Lower platinum content of Modikwa ore results in higher unit cost per Pt oz, comparable cost per PGM oz (44.46% Platinum)
- ❖ H1 2007 affected negatively due to strike

Operating costs

- ❖ Current cash costs per ton milled and Pt oz high as build up continues.
- ❖ Drivers of cost reduction
 - ❖ Volume increase
 - ❖ 4 mining areas to 2
 - ❖ 1,5m of equipped face per m face blasted
 - ❖ Novice workforce moving up learning curve
 - ❖ Less development required
 - ❖ Cost reduction initiatives

Capital expenditure (R000's)



- ❖ R100m/100koz of platinum production life of mine average.
- ❖ Approximately R200m/100koz per annum for the next 4 years as capex profile is 'lumpy' when deepening

Capital expenditure

- ❖ Main Items for 2007
 - ❖ Replacement or refurbishment of mechanised fleet – R89 million
 - ❖ Merensky Trial Mining – R31 million
 - ❖ North Shaft Deepening – R51 million
 - ❖ Ore Reserves – R27 million

Employee and Community Relations

- ❖ Community relations improving with more challenges in some community groupings than others
- ❖ The 25 day strike and delayed return to Sunday work around February 2007 heightened tensions but situation is back to normal
- ❖ Training programmes for learner miners and supervisors resulting in improved supervision
- ❖ Implemented and achieved 38% of the HDSA in management positions
- ❖ SED expenditure of approximately R 8m in 2007

Key business issues

- ❖ Improved safety performance
- ❖ Achieve planned volume increase
- ❖ Smooth transition from down dip to breast stoping and moving drives into footwall
- ❖ Further improve efficiency of the mechanised development and tramming
- ❖ Improve efficiencies of stoping teams
- ❖ Steady state production will be achieved in 2008

END