



ANGLO PLATINUM

R P M UNION SECTION



Investment Analysts And Fund Managers Visit Union Platinum Mine

7 May 2004

Agenda

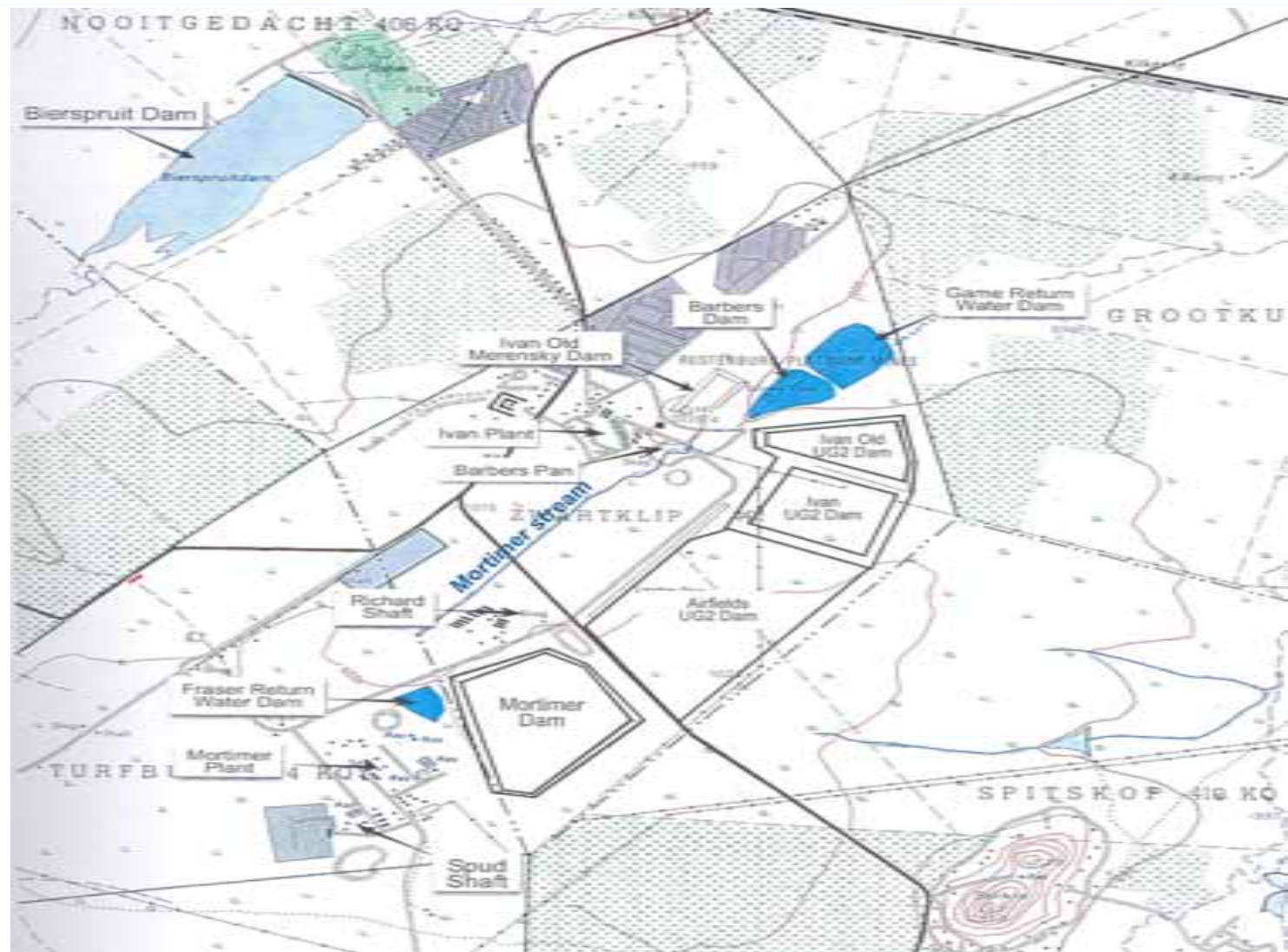
- **Location**
- **Safety and Environment**
- **Geology**
- **Resources and Reserves**
- **Mining Method**
- **Production**
- **Metallurgy**
- **Operating Cost**
- **Capital Program**
- **Human Resources**
- **Key Business Issues**

Location

UNION LOCATION



Plan of RPM Union



ANGLO
PLATINUM

SHE Strategy

Union Section's Vision

We at Union Section Support the Vision & Values of Anglo Platinum by:

- **Creating a culture of safety, participation, quality, excellence and being performance driven.**
- **By being focused on:-**
 - **Safe and sound mining practices**
 - **Employee development**
 - **Employee relations**
 - **Cost efficiency**
 - **Care for the environment**
- **Strategic management which will ensure ore body optimization, sustainable delivery and growth**

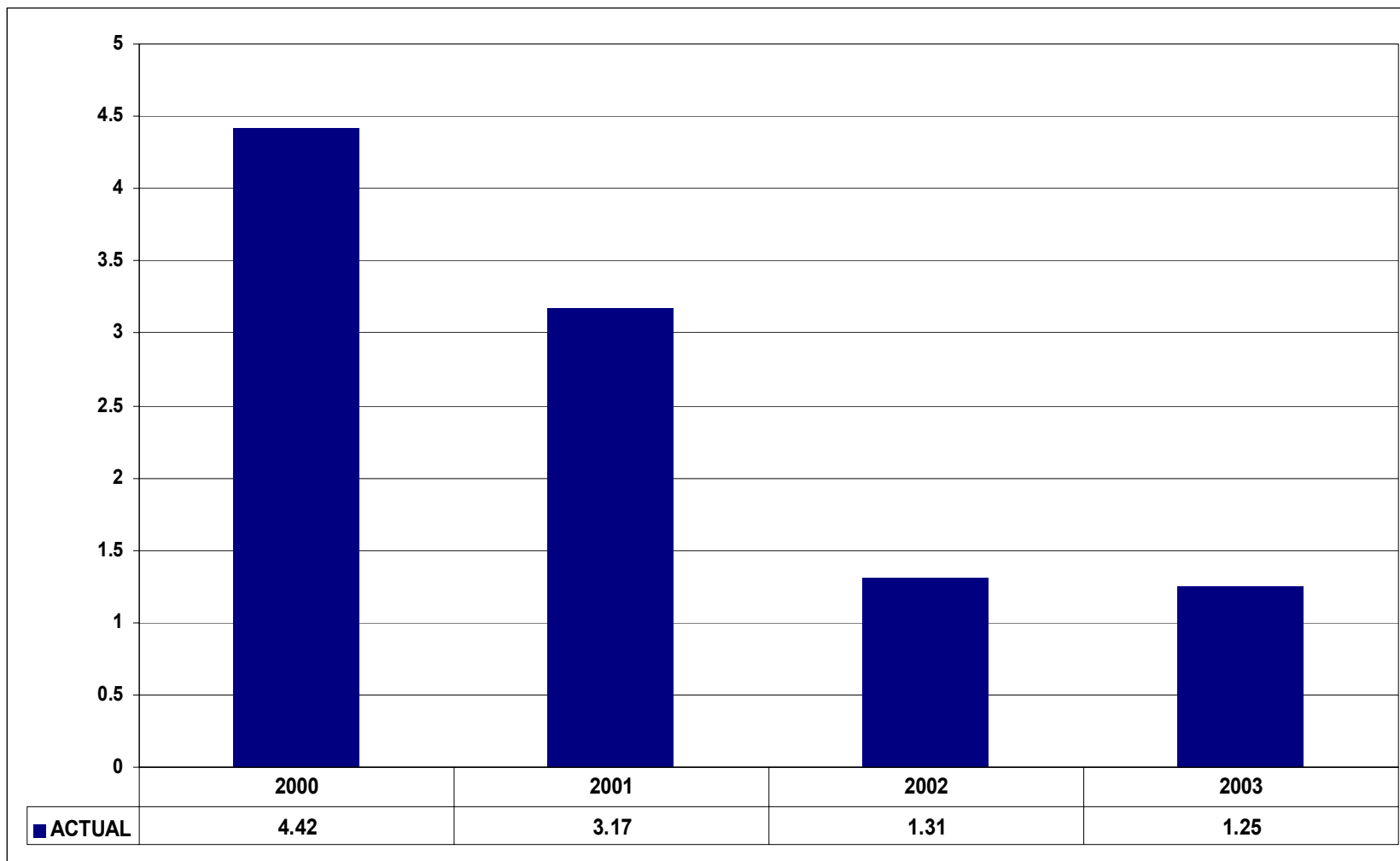
Union Section's Ethos

- **Care for our people**
- **Environmental care**
- **Consistent performance**
- **Continuous improvement**
- **Ensure sustainability**

RECENT SAFETY MILESTONES ON THE ROAD TO EXCELLENCE

- **1.4 Million underground fatality free shifts.**
- **Surface Section**
 - **6,5 million fatality free shifts**
 - **fatality free for more than 9 years.**
- **Achieved ISO 14001 accreditation.**

Union Section LTIFR– 2000 to 2003



Safety Strategy

Greater participation by all

Behaviour Based Safety

Restructuring of SHE resource

Safer methods and equipment

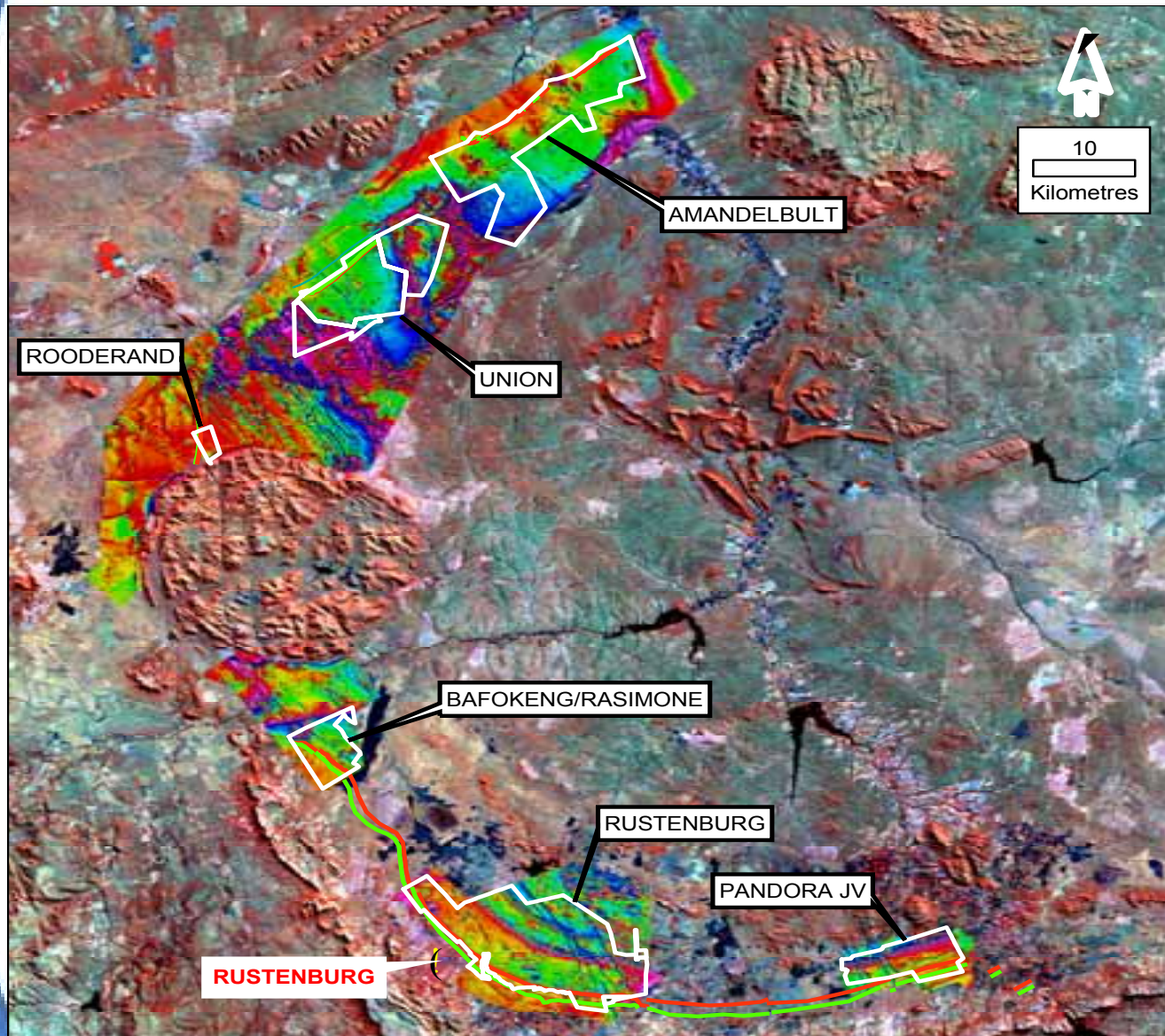
Permanent Engineering solutions

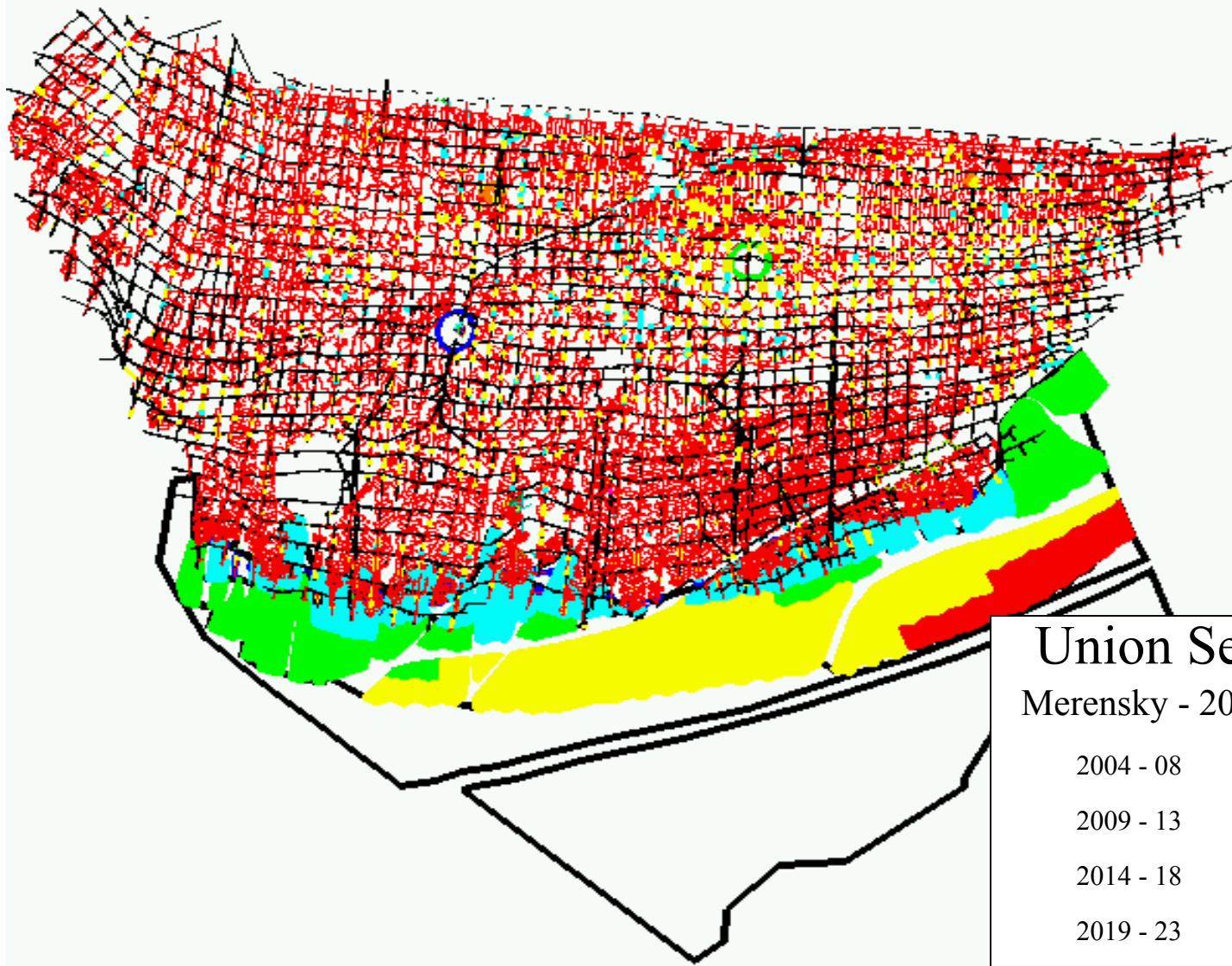
Contractor Management

Fall of Ground prevention strategy

Geology

UNION LOCATION ON LANDSAT IMAGE



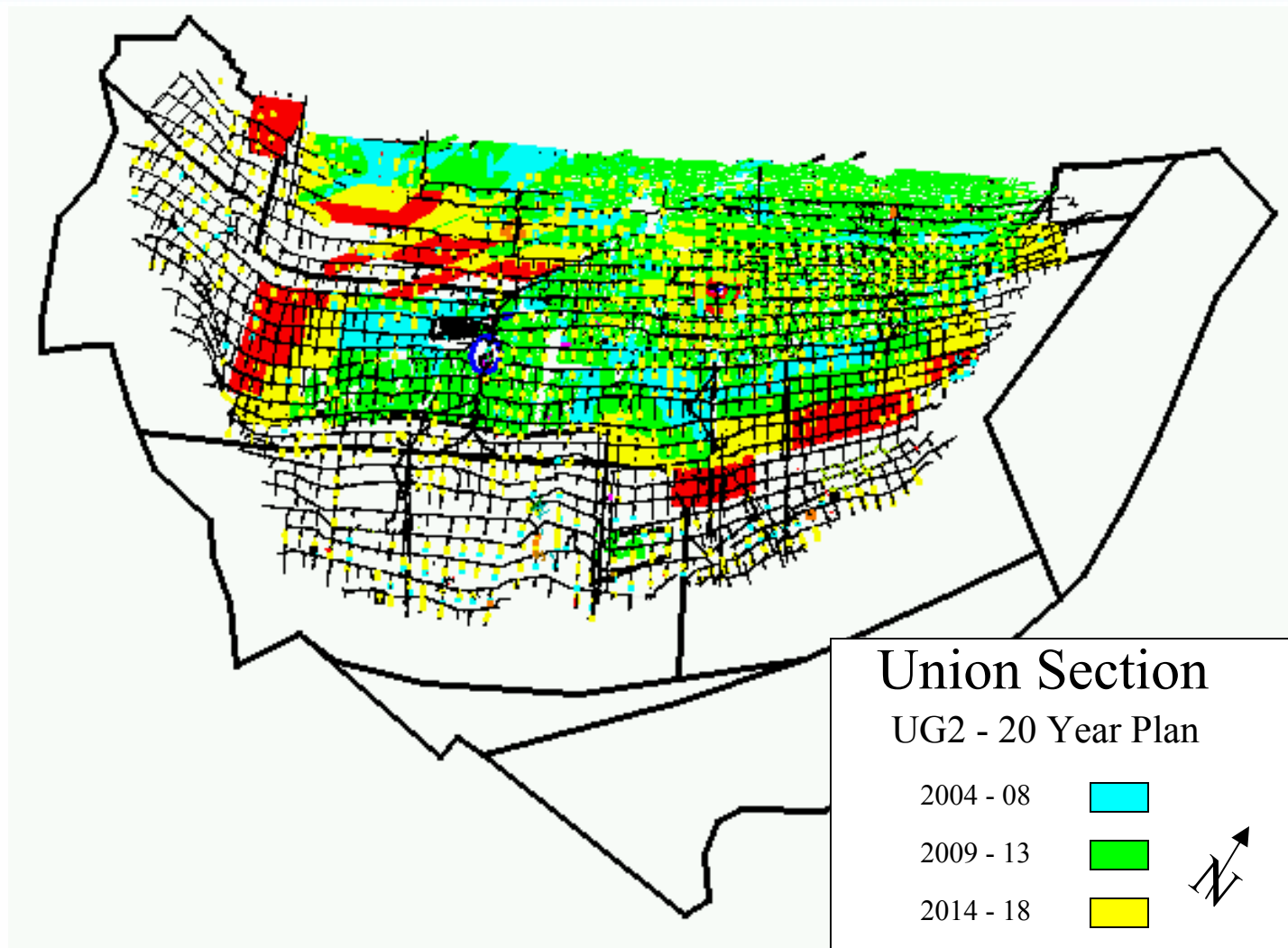


Union Section

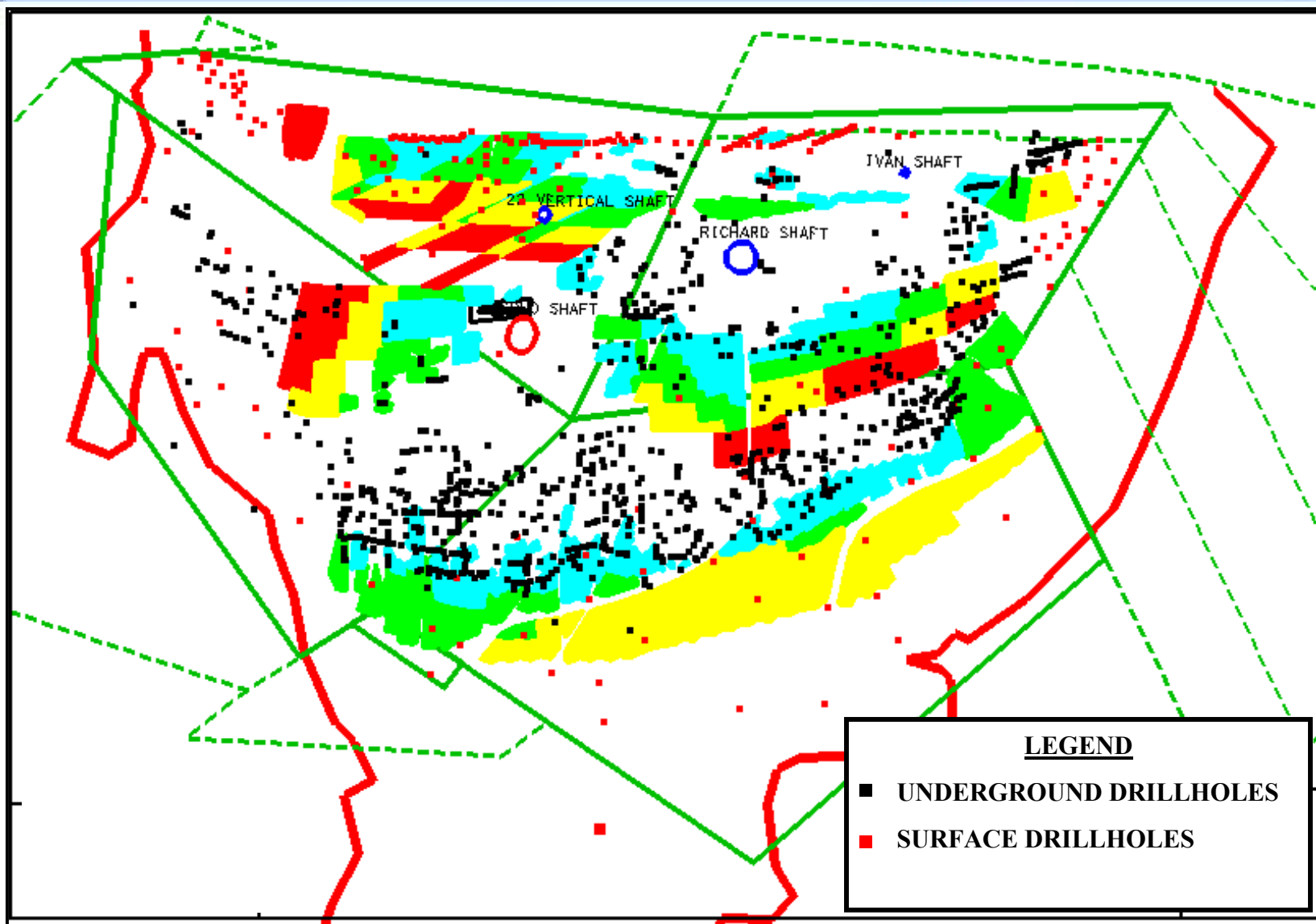
Merensky - 20 Year Plan

2004 - 08	
2009 - 13	
2014 - 18	
2019 - 23	

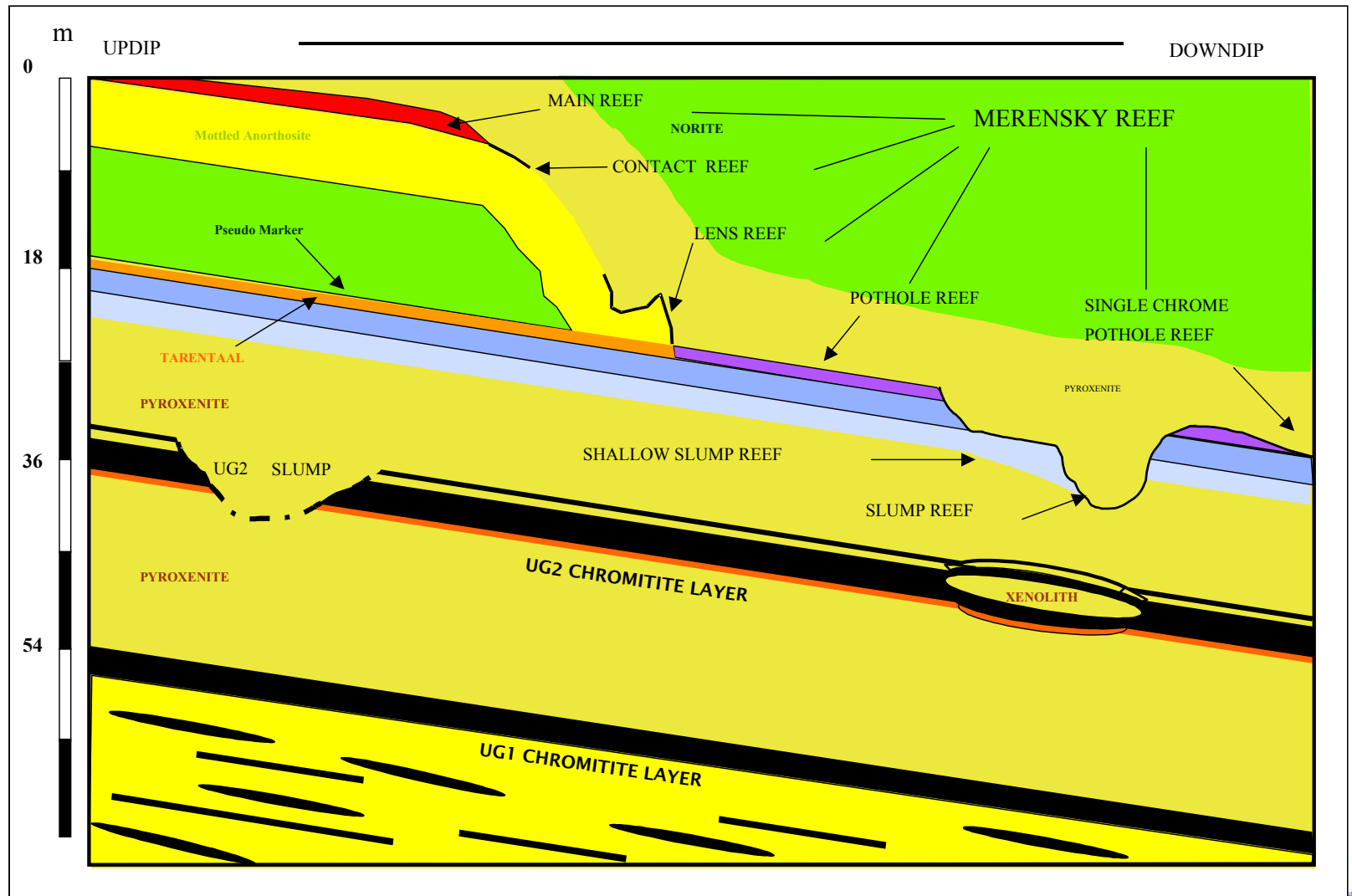




ALL DRILLING SPACING



UNION ECONOMIC STRATIGRAPHY



MINERALISATION

☐ Merensky Reef

Mining predominantly Regional Pothole Merensky Reef.

Consistent width and grade

Dip angle 18 degrees

☐ UG2 Reef

Consistent width and grade

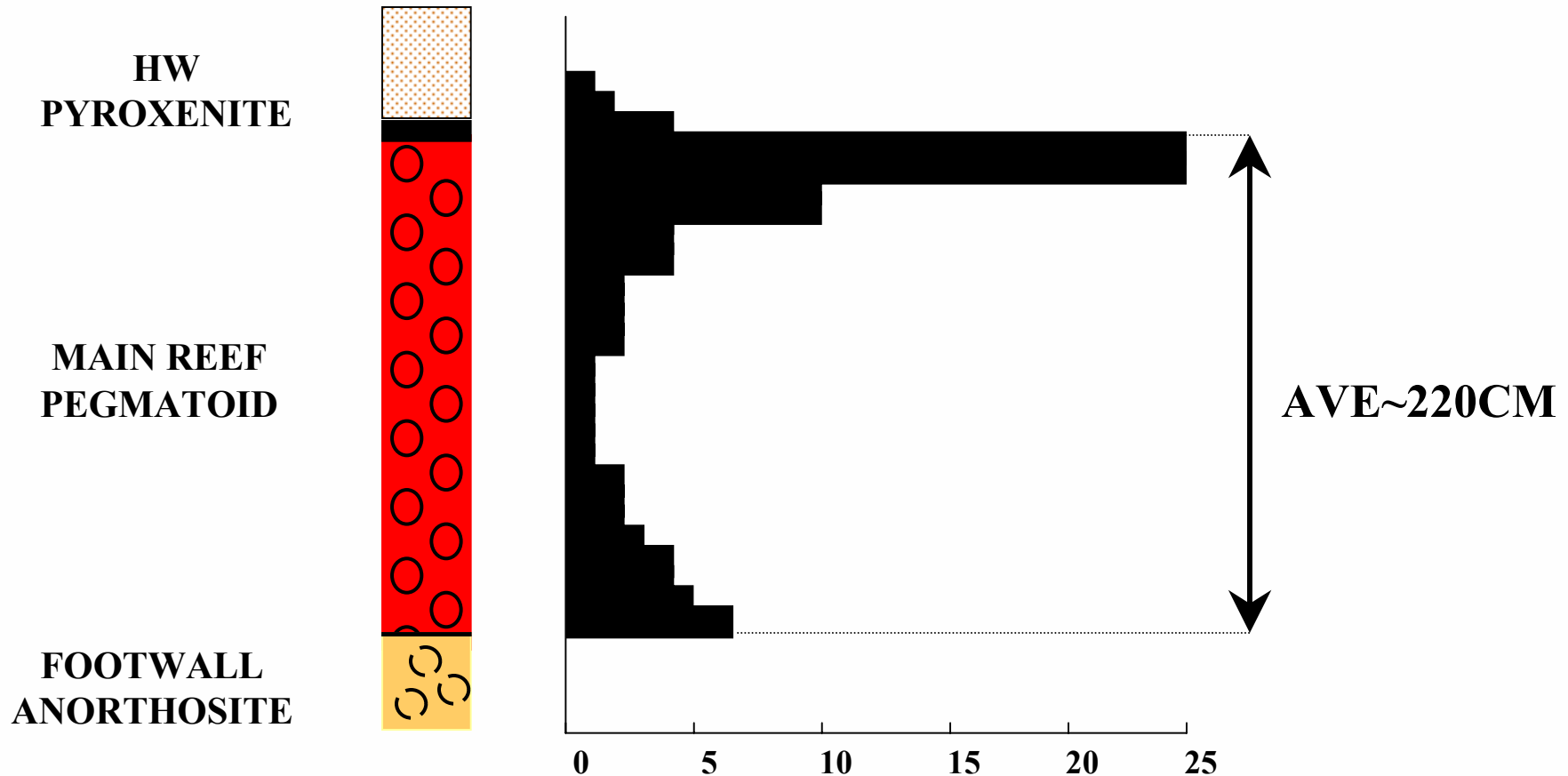
Leaders mined with main seam

The UG2 structure on the flanks is more complex than the central area.

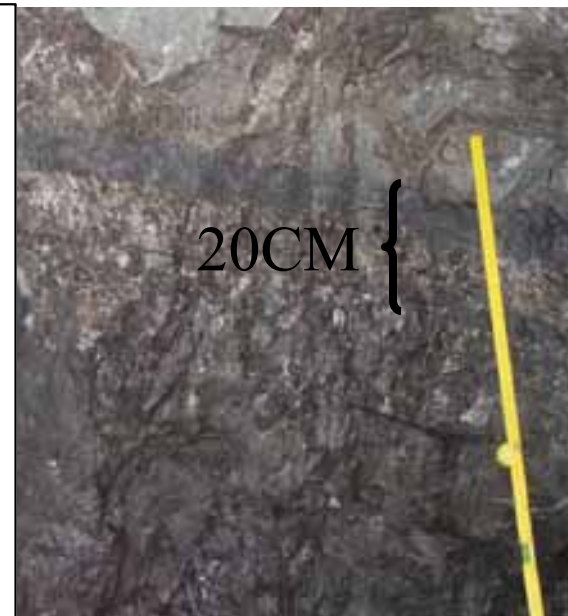
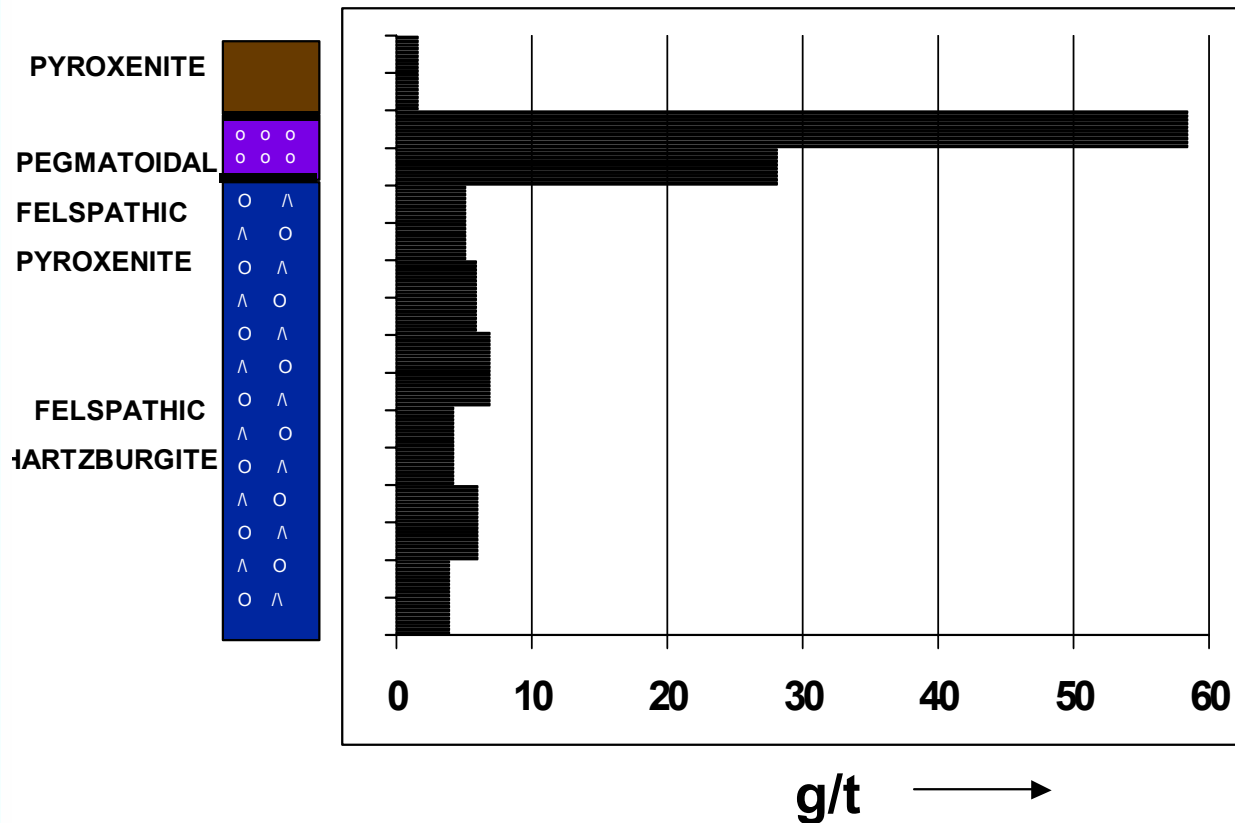
Minor slumping

Dip angle 18 degrees

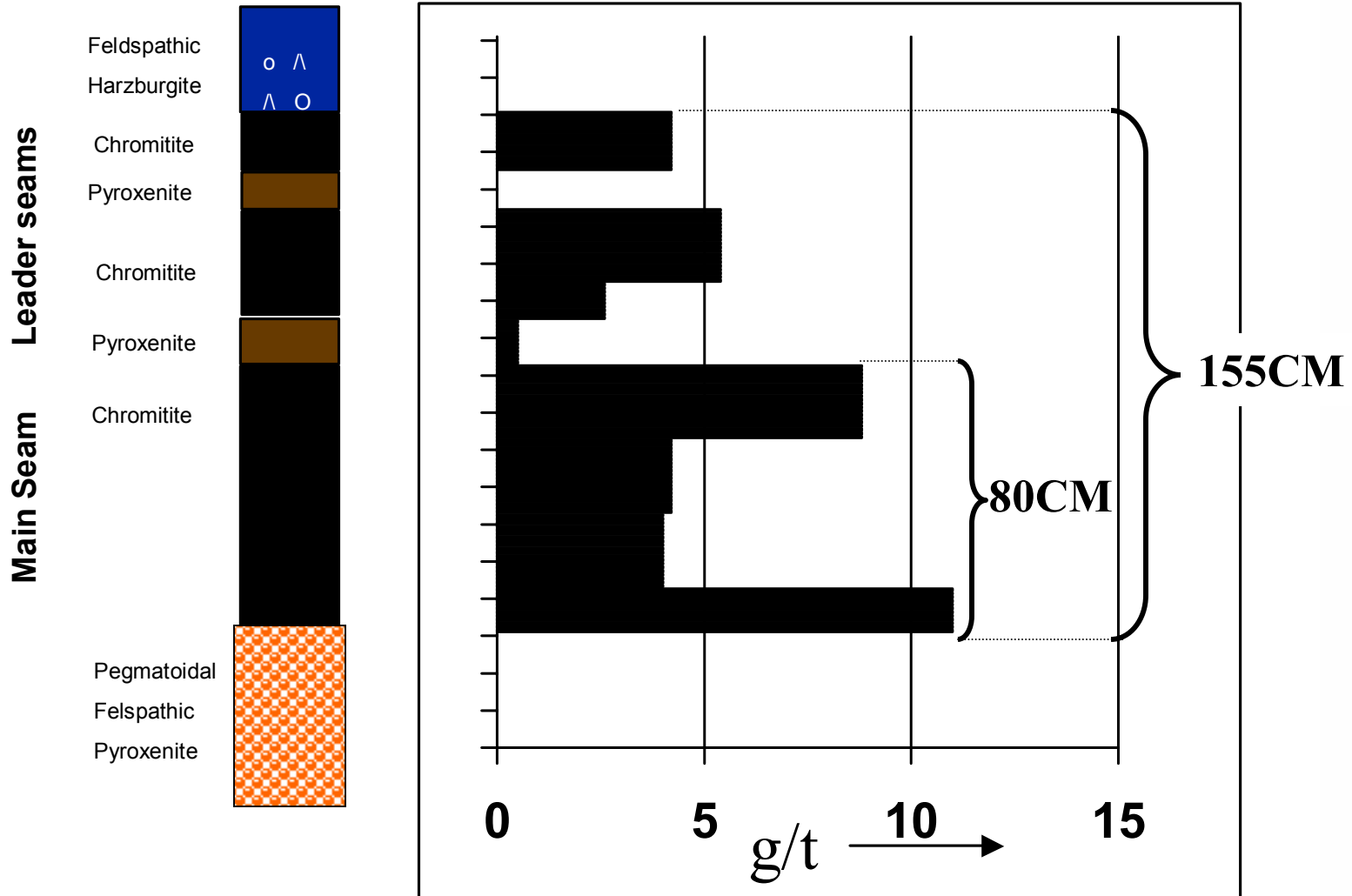
MAIN REEF CHARACTERISTICS



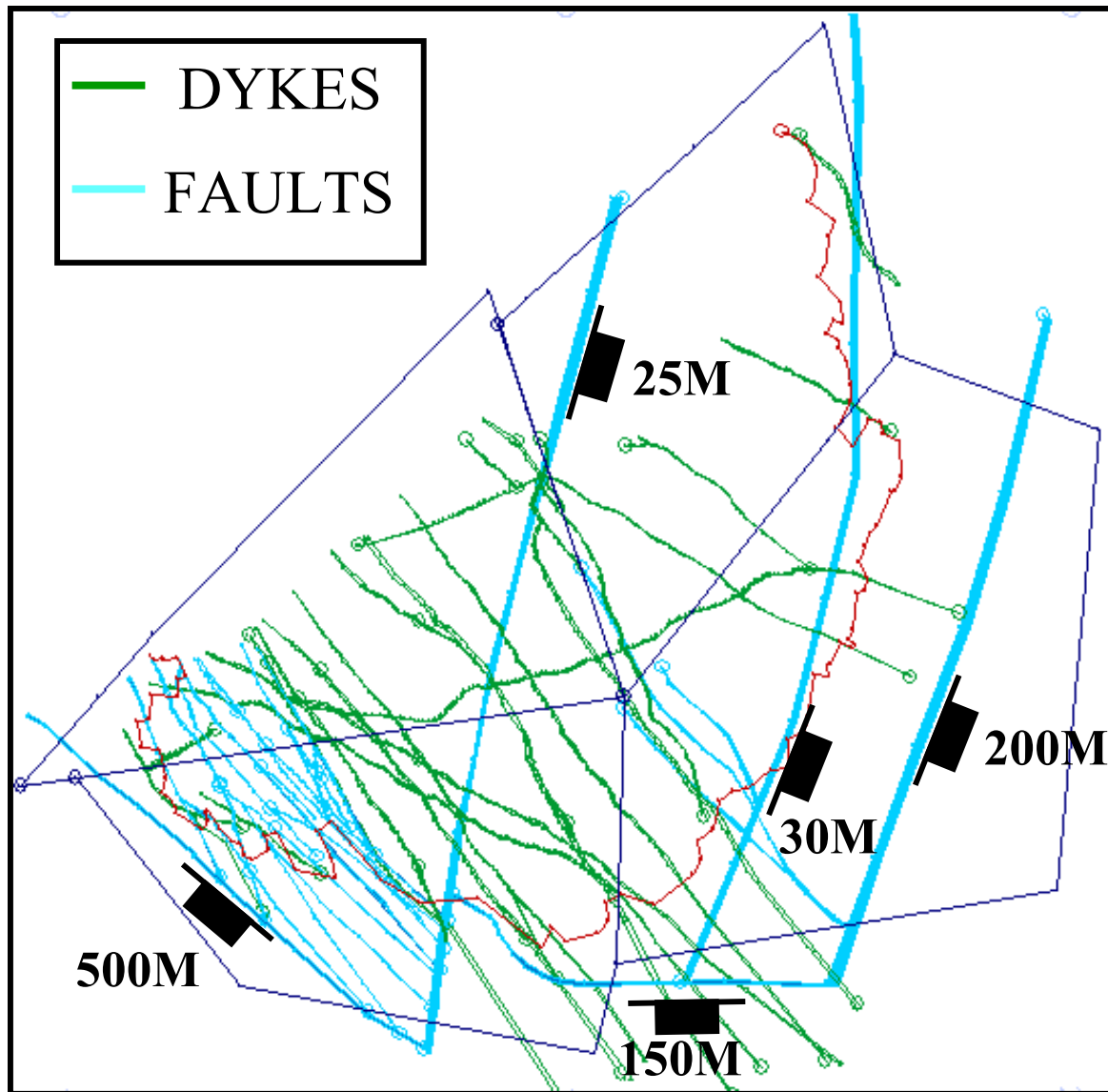
POTHOLE REEF CHARACTERISTICS



UG2 CHARACTERISTICS



MAJOR STRUCTURAL FEATURES



Resources and Reserves

RESOURCES

Ore Body	Category	Tonnage (Mt)	4E In situ Grade	4E Ounces
Merensky Reef	Inferred Resources	27.9	8.04	
	Indicated Resources	3.8	9.00	
	Total Resources	31.7	8.16	

Ore Body	Category	Tonnage (Mt)	4E In situ Grade	4E Ounces
UG2 Reef	Inferred Resources	153.6	4.64	
	Indicated Resources	5.8	4.38	
	Total Resources	159.4	4.63	

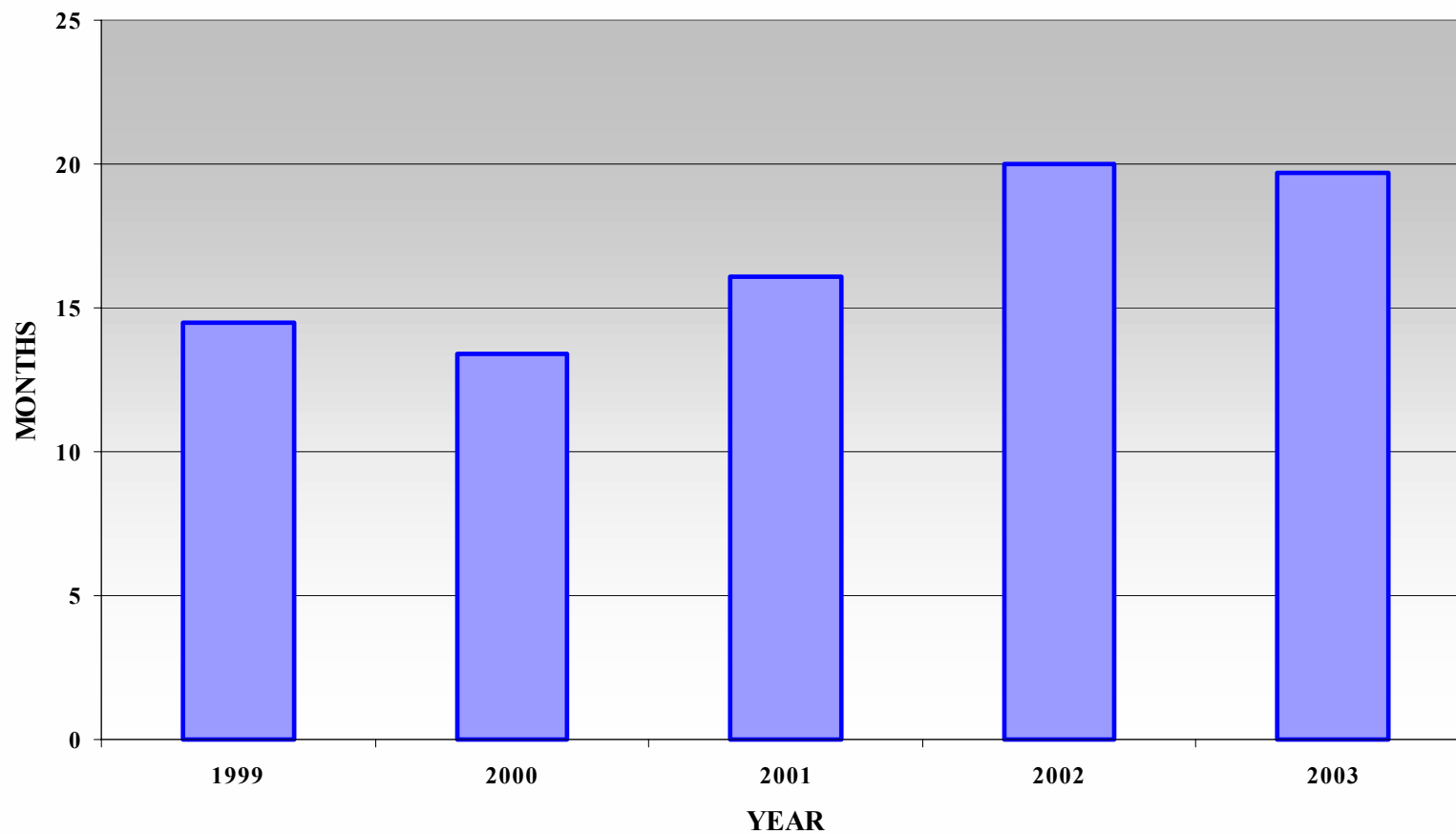
Ore Body	Category	Tonnage (Mt)	4E In situ Grade	4E Ounces
Tailings	Indicated Resources	78.4	1.16	

Reserves

Ore Body	Category	Tonnage (Mt)	4E Head Grade	4E Ounces
Merensky Reef	Proved Reserves	4.9	6.75	
	Probable Reserves	15.1	6.64	
	Total Reserves	20.0	6.67	

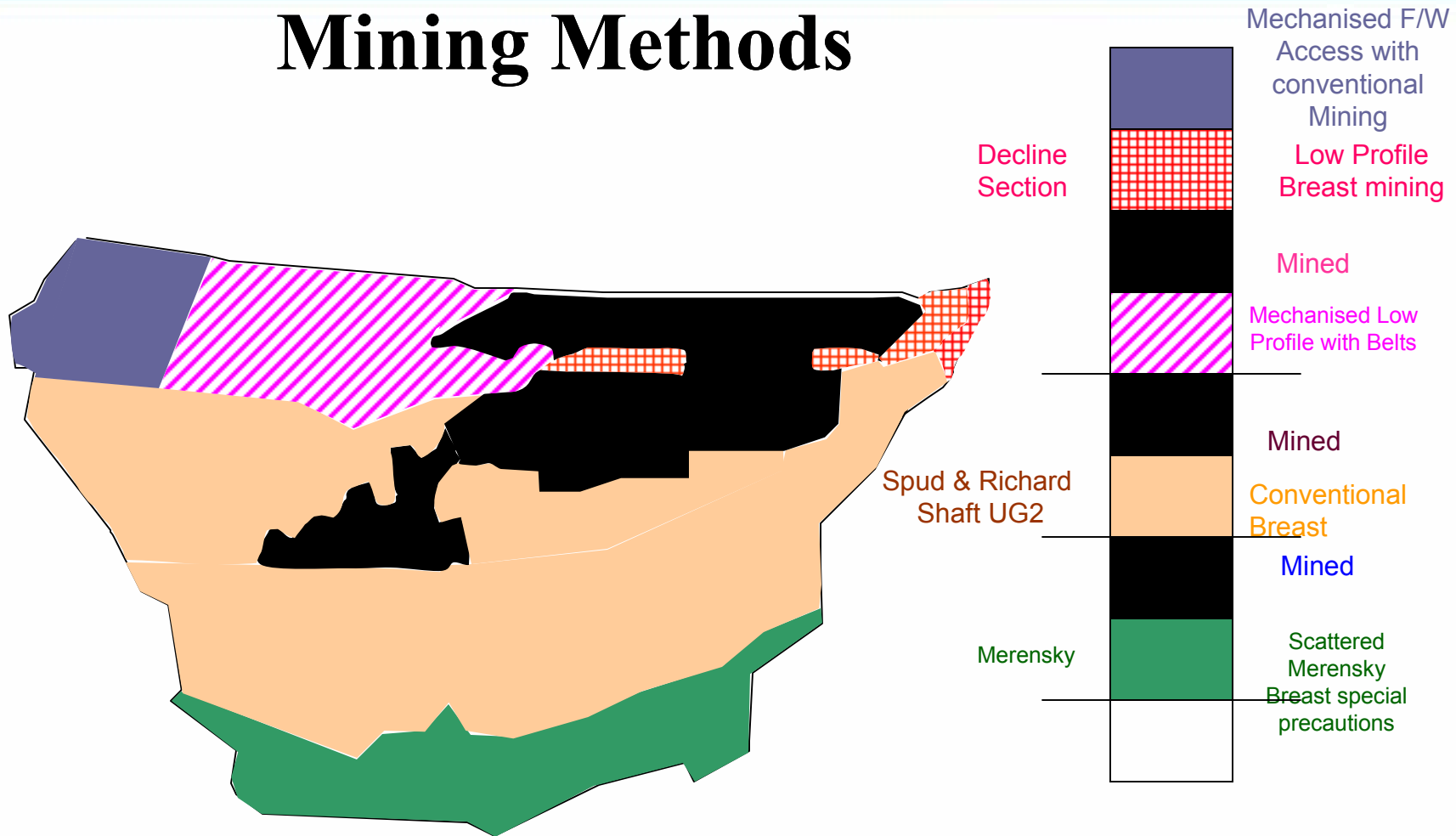
Ore Body	Category	Tonnage (Mt)	4E Head Grade	4E Ounces
UG2 Reef	Proved Reserves	13.1	4.01	
	Probable Reserves	34.1	3.90	
	Total Reserves	47.1	3.93	

MONTHS AVAILABLE ORE RESERVES



Mining Method

Mining Methods



Tamrock Low Profile Roof Bolter



Sulzer Rig



4 South Portal



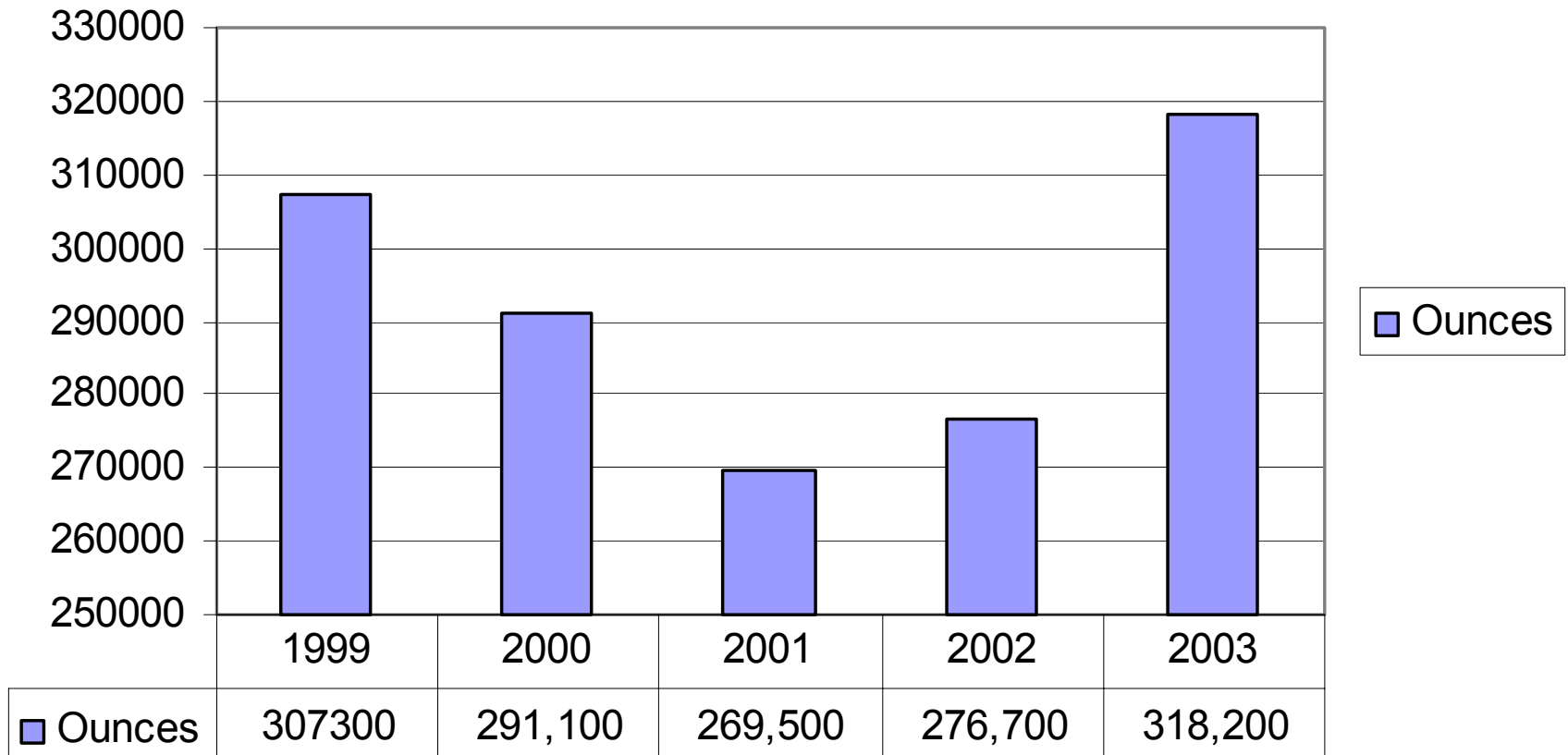
4 B Portal



Production

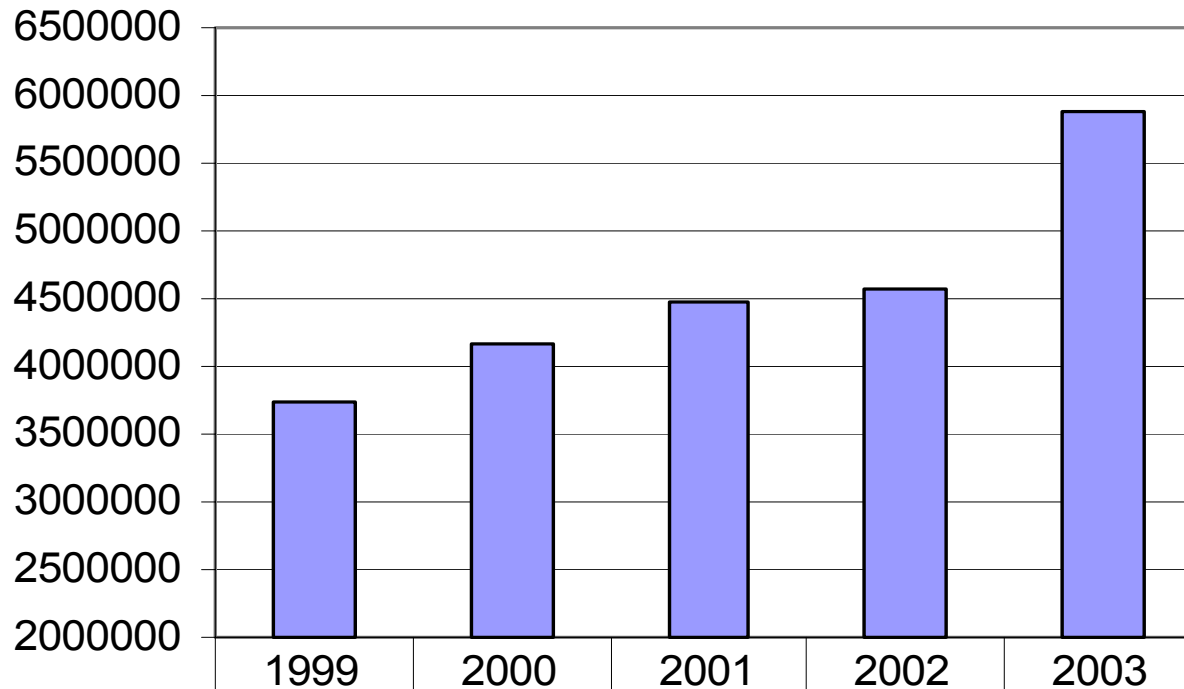
Union Section

Equivalent Refined Pt Ounces



History

Tons Milled



■ Tons Milled

■ Tons Milled	3749000	4159000	4466000	4562000	5882000
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Metallurgy

Metallurgical processing

Prill Splits			UG2	Mer
4E	% of 4E Total	%	100.00%	100.00%
4E	Platinum	(% of 4E split)	60.74%	61.73%
4E	Palladium	(% of 4E split)	27.52%	28.96%
4E	Rhodium	(% of 4E split)	11.18%	7.34%
4E	Gold	(% of 4E split)	0.56%	1.96%
Pt	Iridium	(% of Pt split)	6.37%	3.89%
Pt	Osmium	(% of Pt split)	-	-
Pt	Ruthenium	(% of Pt split)	24.24%	17.20%

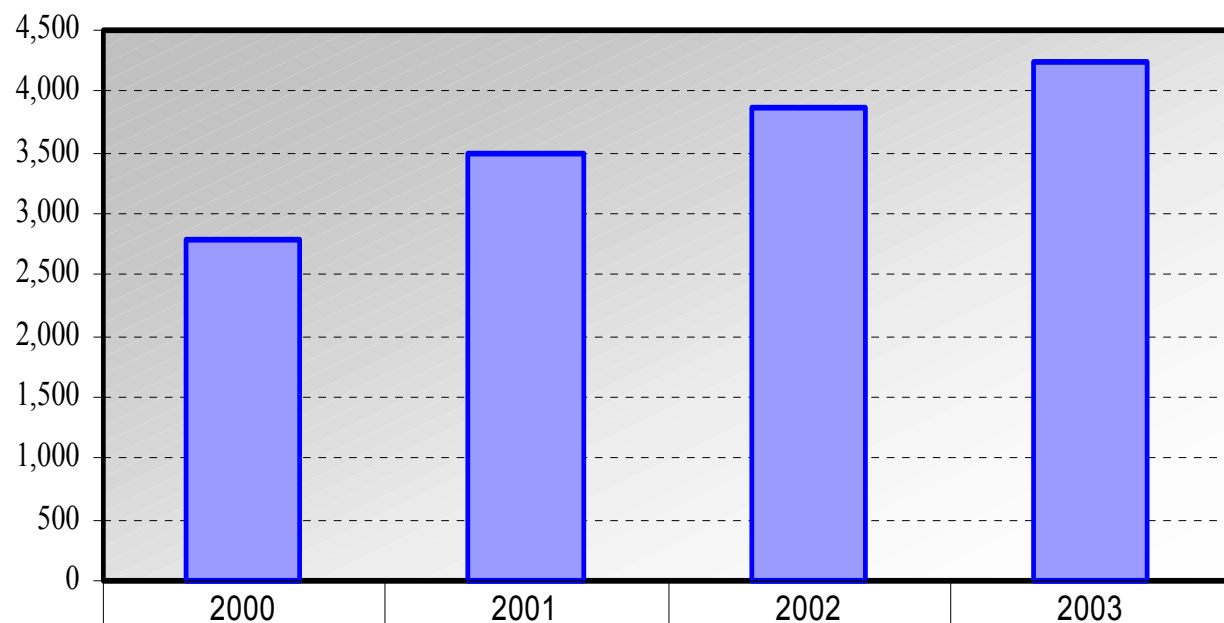
Ivan Plant Tailings Retreatment



Operating Costs

RPM Union Section

Cash on-mine cost per equivalent refined ounces



Cash on-mine cost per equivalent
refined ounce

2786

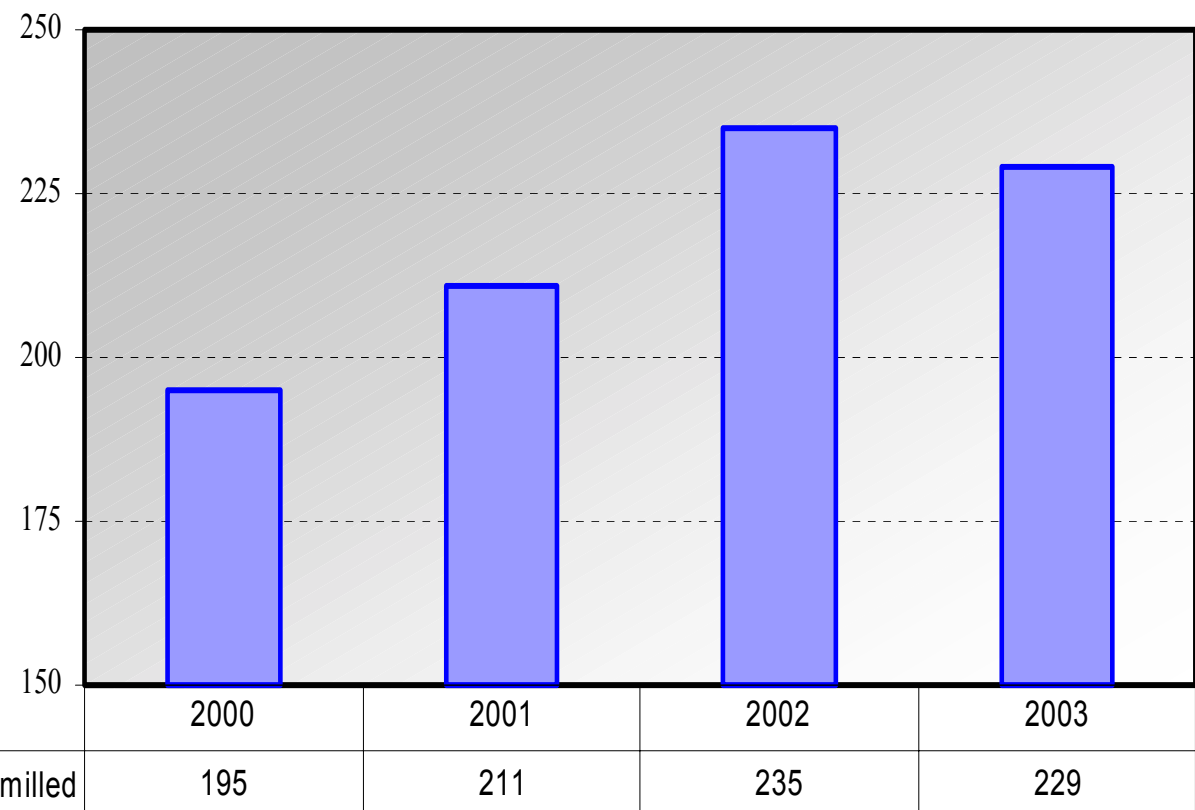
3489

3876

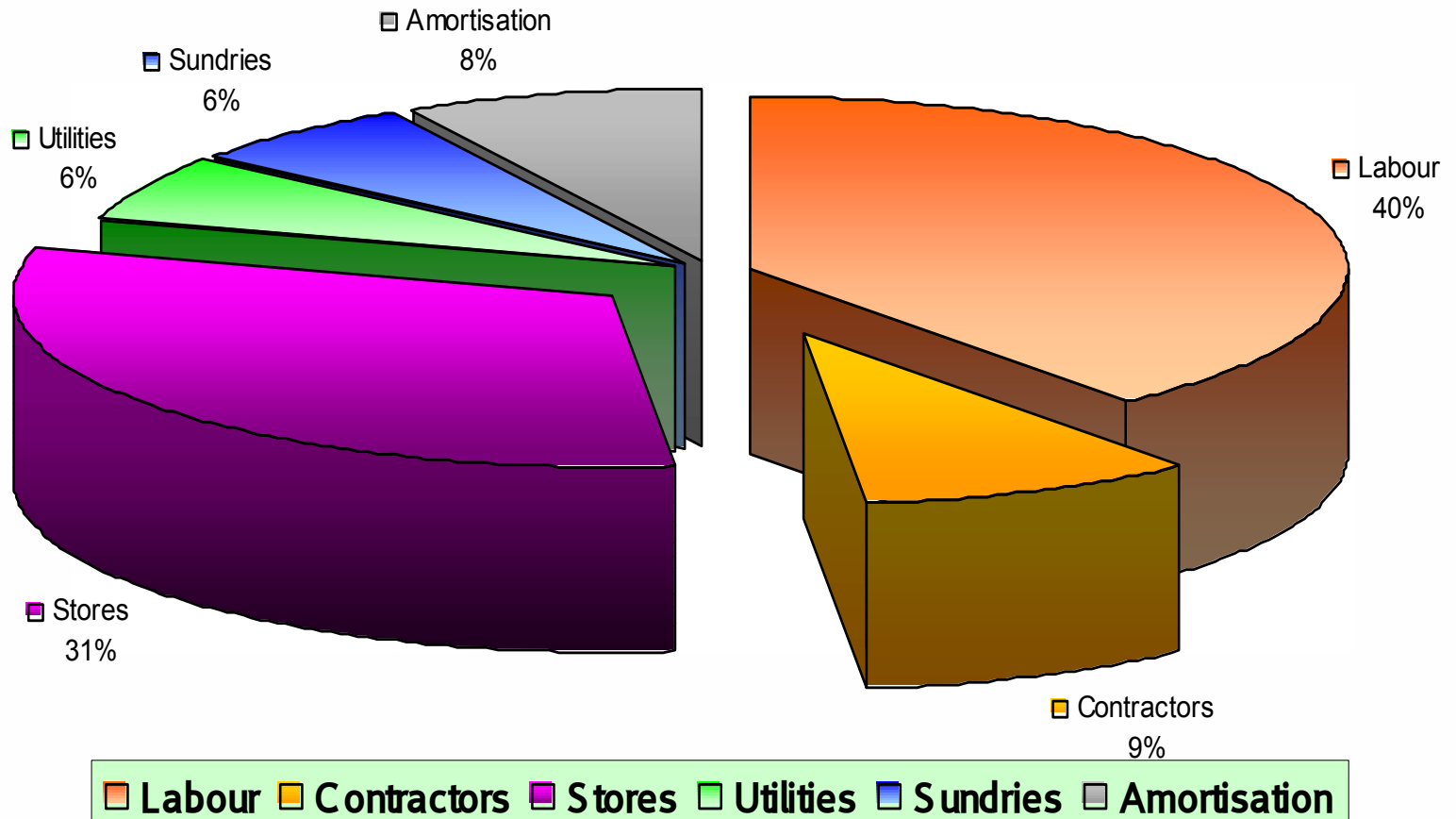
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RPM Union Section

Cash on-mine cost per ton milled



Pie Graph - Cost Comparison 2003



COST INITIATIVES

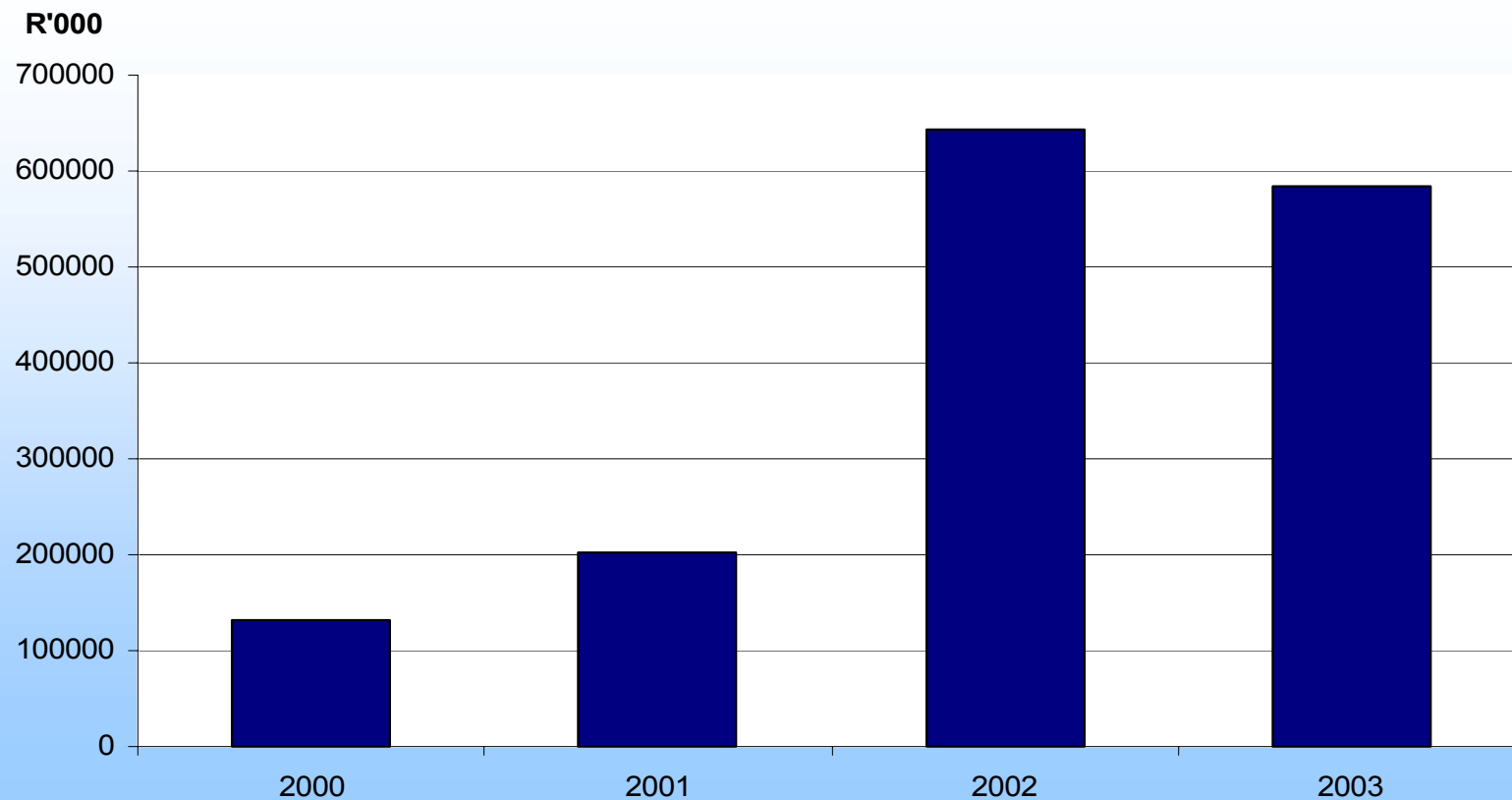
- **Concentration of Production**
- **Lower Cost Decline Production**
- **On-mine Cost Reduction**

STRATEGY

- Move from deep mining to shallow mining.
- Move from conventional mining to safer, mechanised mining where appropriate and cost effective.
- Convert current high profile mechanised to low profile mechanised.
- Increase UG2 M2 production at Spud shaft and Declines.
- Extra UG2 to be milled at Ivan plant.
- Mining, Metallurgical, People optimisation.

Capital Programmes

Capital Expenditure 2000 to 2003



Capital Programs

Main items 2002 and 2003

- 4B and 4South
- Mortimer plant
- Airfields tailings dam
- Infrastructure

4 South Portal





Fully Automatic Low Profile Roof Bolter



Tamrock EJC Low Profile Loader



Tip-point chain feeder



Mortimer UG2 Expansion to 230000 tpm



Slag Flotation Plant



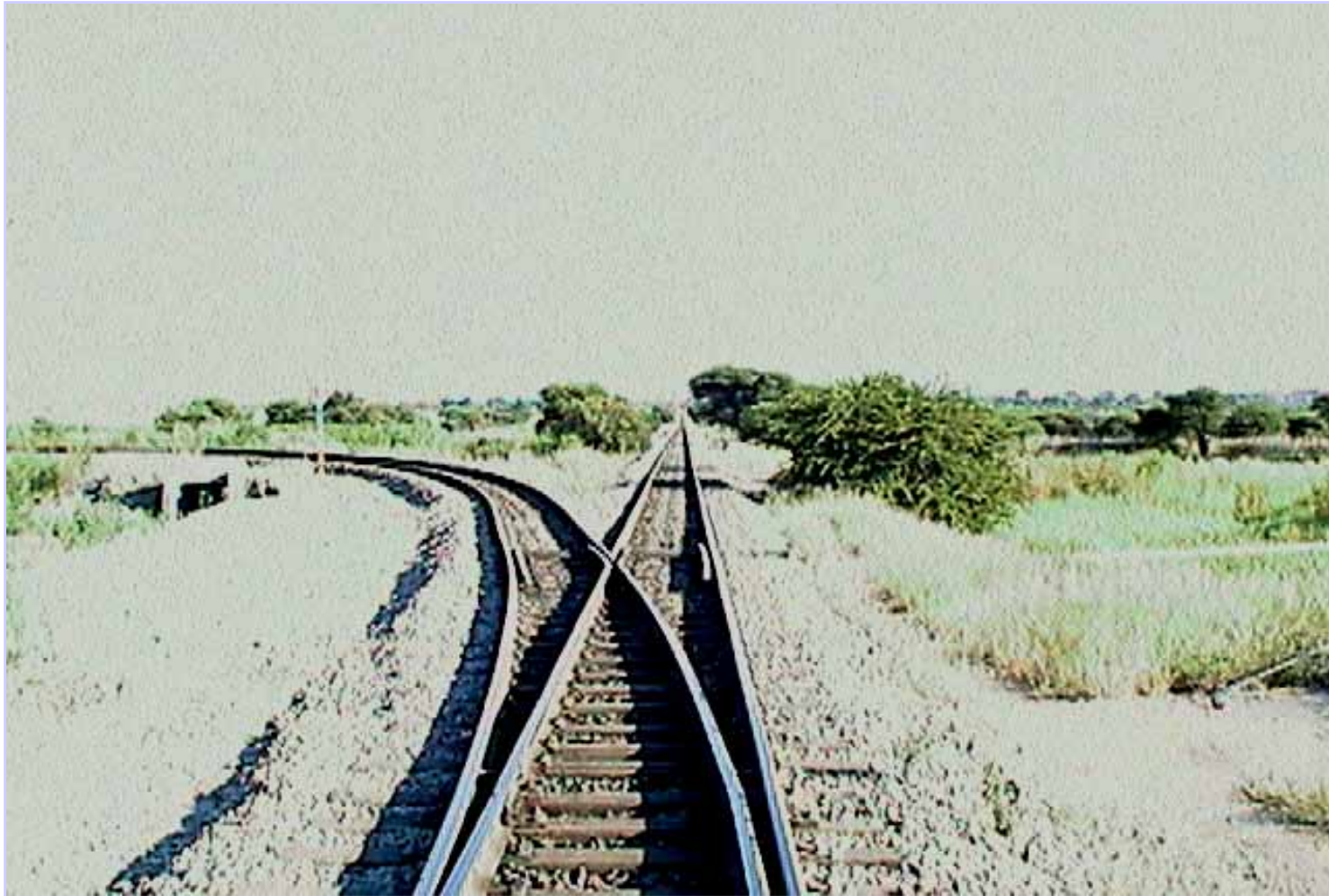
Airfields Tailings Dam & Tailings Thickener



Larox Filter



Surface Railway



Northam Road Upgrades



Human Resources

Human Resources strategy

Union HR Summary of Strategic Thrusts

- **Business Planning**
- **Performance Management**
- **Employee Communications**
- **Work Design**
- **Human Resources Development**
- **Recruitment Selection & Assessments**
 - **Employment Equity**
 - **Employee Relations**
 - **Socio-Economic Development**

Human Resources

- Employee Relations
 - Employee relations are sound and are guided by the employee relations policy which has been signed and accepted by all players.
- Employment of local employees.
 - 43.5 % of the UNION SECTION'S labour is from local communities
- Contractors
 - Contractors will be utilized in accordance with established policies and procedures when and where it can be done in the most cost effective way.
- Training
 - UNION SECTION has both underground and surface training centers.
 - Anglo Platinum training department is certified ISO9001 compliant. (The on mine facility compliance audit is scheduled for 13 May 2004.)
 - Focus for 2004 will be supervisory development, mentorship, implementation of FOG regulations, Strata Control and Rock Engineering training.

Key Business Issues

- Efficiency Improvements
- Cost Optimisation
- HIV/Aids
- Charter Compliance

