



# TauTona Mine

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**Analysts presentation  
20 November 2002**

# Agenda

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1. Background
2. TauTona – Approved capital project
3. Organic growth – Possible expansion projects
4. Further opportunities
5. Conclusion

# 1. Background - Mega Mine – 1996

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The “Mega Mine” concept was the original proposition in 1996. This involved:

- Sinking of the Mponeng Shaft system down to 132 level to extract VCR down to 123 level and Carbon leader to 132 level
- 2005 – TauTona LCL reserves revert to Mponeng
- 2008 – CL below 120 level mined via Mponeng
- Savuka reserves not included in project

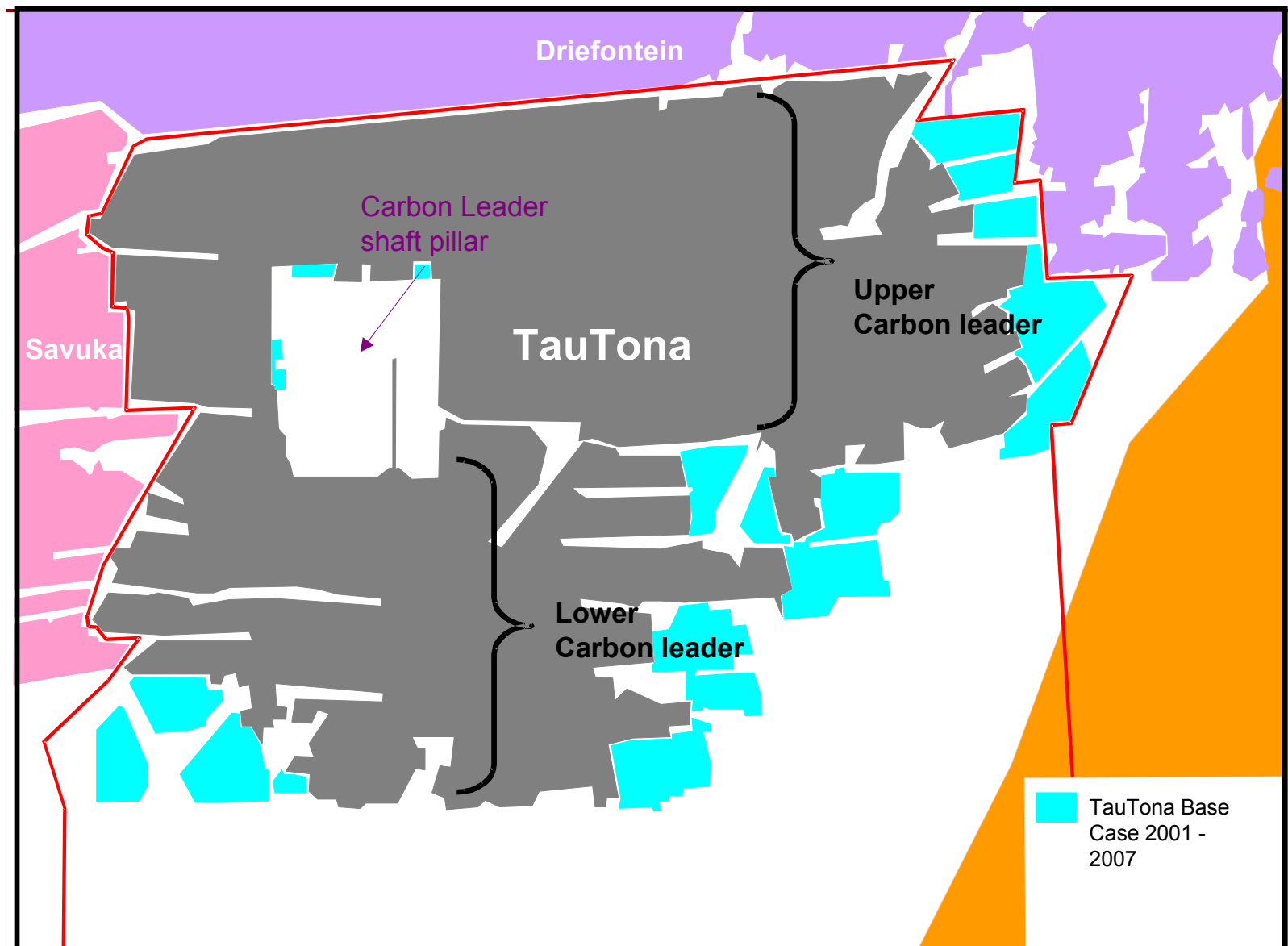
# Background - Reasons for the revised plan

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- Costly interconnections of haulages
- Movement of fridge plants
- TauTona main and sub-shafts required to remain open and serviceable for full duration of LOM
- Contiguous areas – Driefontein below 38 level
- Capital considerations

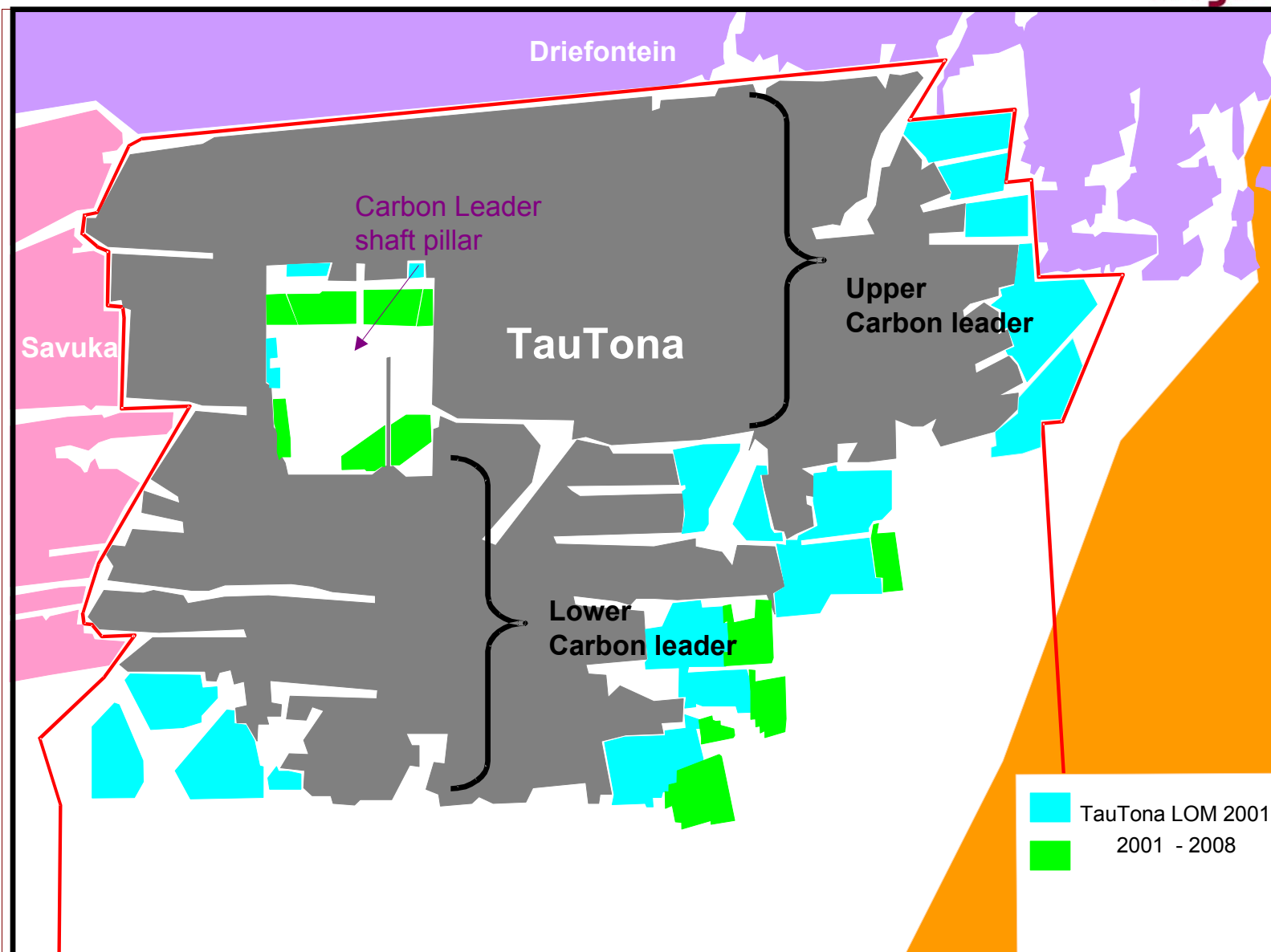
# Base Case – Carbon Leader



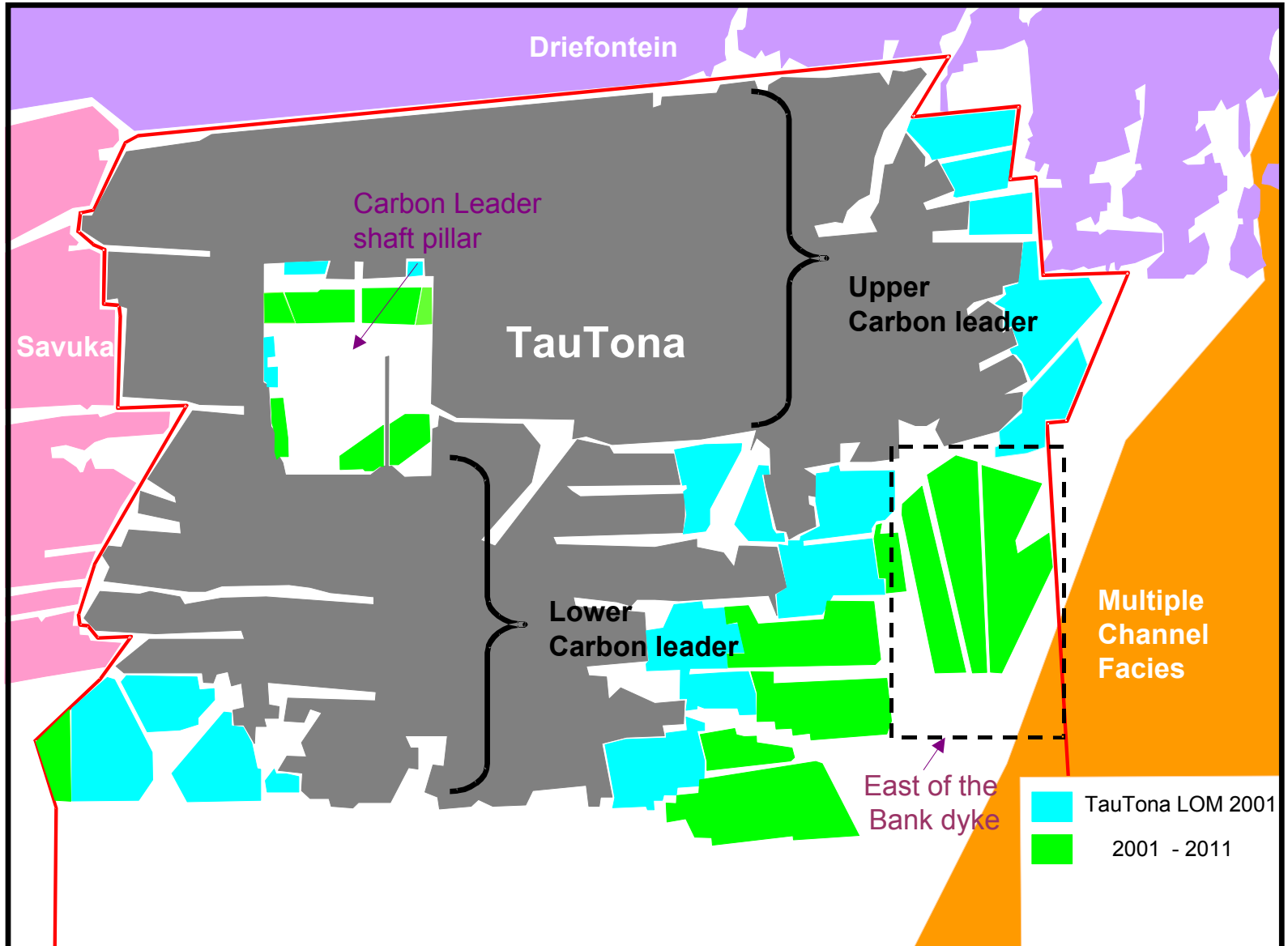
TauTona Base Case 2001 - 2007

# Base Case and limited CL pillar mining

and additional face areas



# Base Case and limited CL pillar mining and EOB



## 2. Approved capital project

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1. Carbon leader reef shaft pillar
2. East of the Bank Dyke



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# Approved capital project



## 1. Carbon leader pillar – key dates

<b>Stoping areas</b>	<b>Commence stoping</b>
94-97/66	January 2004
102-104/66 (RHI)	January 2005
97-104/60	January 2007

## **Scope of work required**

<b>Item</b>	<b>Requirement</b>	<b>Cost</b>
Development	2,565 m	R24 million
Rehabilitation	5,470 m	R30 million
Equipping (services)		R68 million
Raise Boring	1,483 m	R7 million

# Approved capital project



## 2. East of the Bank Dyke – key dates

### 100 x-cut south

Development	Commenced June 2001 <b>Completed May 2002</b>
Drilling programme	Commenced June 2001 <b>Completed November 2002</b>

<b>Stoping Areas</b>	<b>Commence Stopping</b>
109 level	January 2006
112 level	January 2007

### Scope of work required

Item	Requirement	Cost
Development	6,712m	R78 million
Equipping (services)		R55 million
Raise boring	797m	R4 million
Major items/ Project management		R121 million

# Capital status



Project	R 1000's	
	Approved	Exp. to Date
CL pillar extraction	132,033	31,223
EOB development	137,845	39,703
Other (Sunk, Major Items etc)	162,269	57,967
<b>Total</b>	<b>432,147</b>	<b>128,893</b>

+55 tons additional gold

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# Project considerations

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- **Hydrology – Area East of the Bank**
  - 22 boreholes drilled to date with Hazard Mgmt programme largely completed
- **Rock mechanics – Shaft pillar**
  - Risks minimised by restricted CL mining, sequencing based on 3D modelling and increased support. Modelled zone of influence (ZOI)
- **Development beneath abutment**
  - 3D modelling, 150m developed in footwall and additional support placed
- **Mineral Reserves**
  - Completed drilling EOB confirmed grade estimation and has firmed-up structure, grade and hydrology against Driefontein boundary

# 3. Organic growth

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*In South Africa, the dramatically higher rand gold price has contributed to a further 11 million additional ounces of gold to reserves, resulting in the possible development of six deep-level mining projects, currently being studied.*

AngloGold quarterly results

31 October, 2002



# Organic growth – South Africa



<b>Project</b>	<b>Additional gold production</b>
TauTona : VCR shaft pillar and 66 level, area "A"	0.3Moz
TauTona : CLR 120-125 Level and 116 Level (East of Bank Dyke)	1.4Moz
Tau Lekoa : Above 900 Level	0.2Moz
Moab Khotsong Phase 2 : below 101 level	4.6Moz
Mponeng VCR : 120 – 125 level	1.3Moz
Mponeng lower-grade VCR and CLR	3.2Moz

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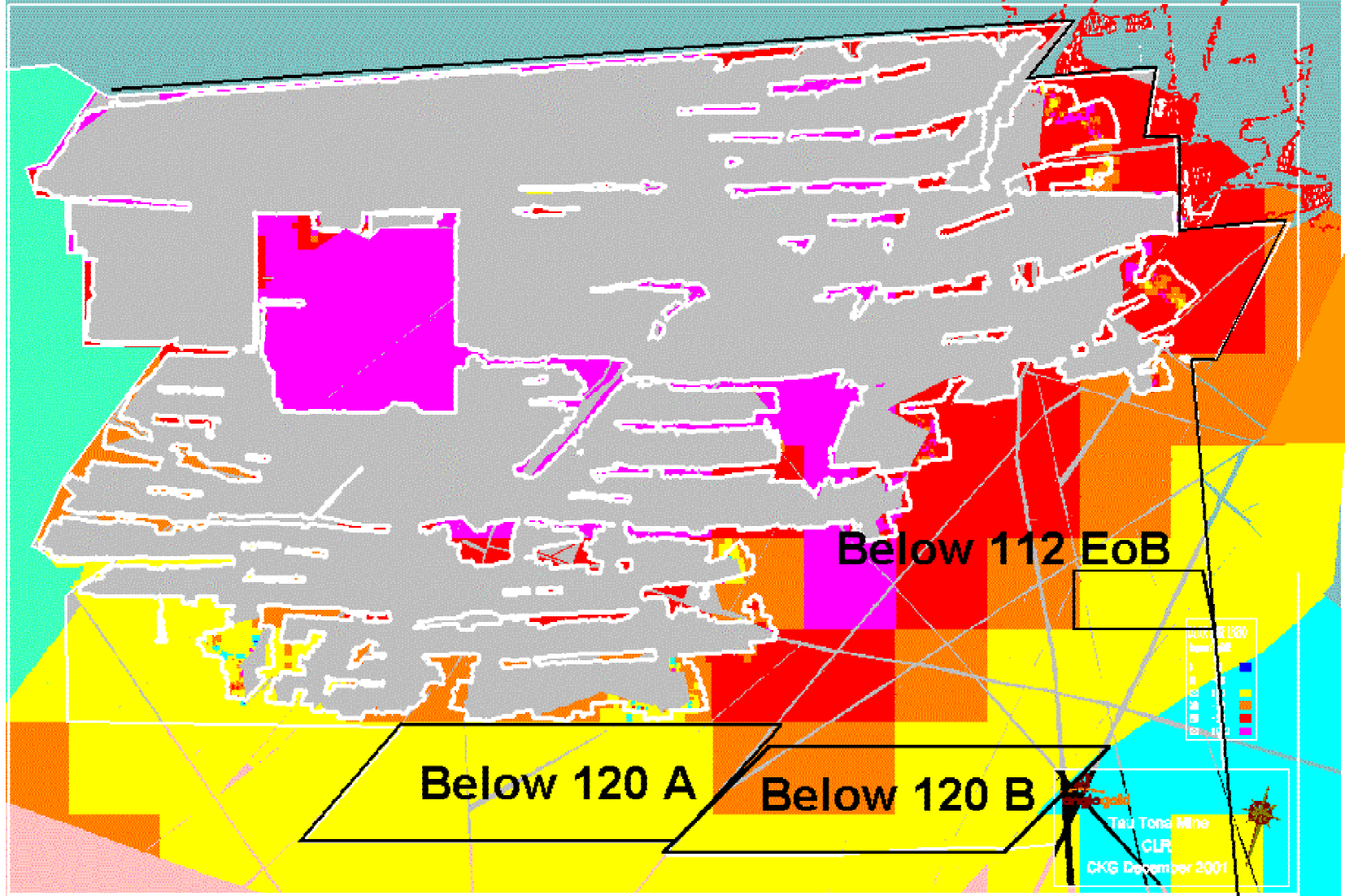
# Organic growth – TauTona

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- Below 120 level carbon leader
- EOB below 112 level
- Area “A” VCR
- VCR shaft pillar outside ZOI

# Carbon Leader Reef – Composite Kriged Value Grid



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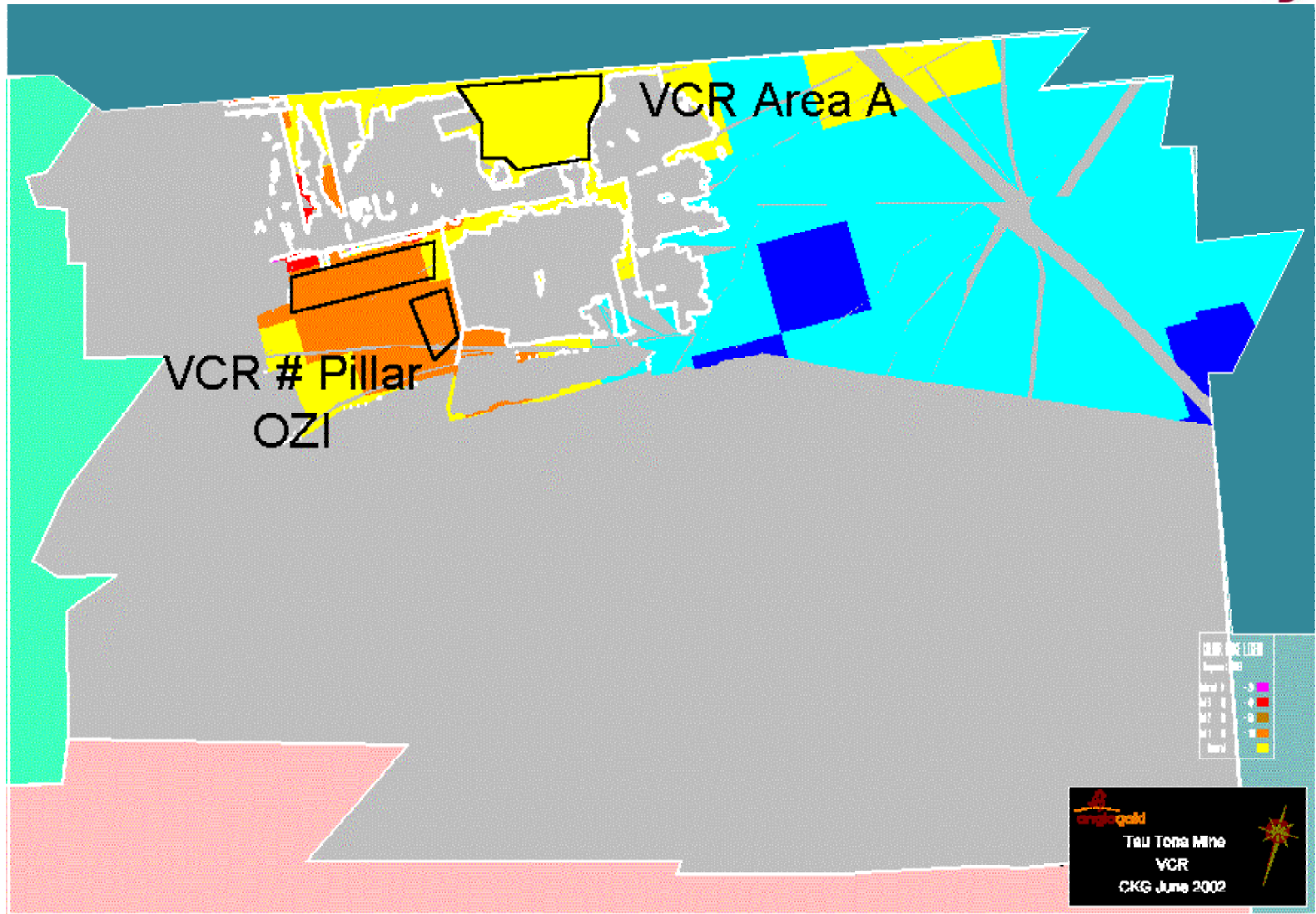
# EOB below 112 level

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- Mine 116 replacement haulage under abutment, and establish sequential grid stoping EOB 2011 onwards.

# VCR – Composite Kriged Value Grid



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# Organic growth – TauTona

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No	Project description	R1000's Total cost	Additional gold
1	CL below 120L development	720,982	41.8 tons
2	VCR Block A development	66,341	3.9 tons
3	VCR Pillar outside ZOI	78,602	5.2 tons
4	116 level EOB development	83,174	3.9 tons
	<b>Total</b>	<b>949,099</b>	<b>54.8 tons</b>

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# 4. Further opportunities

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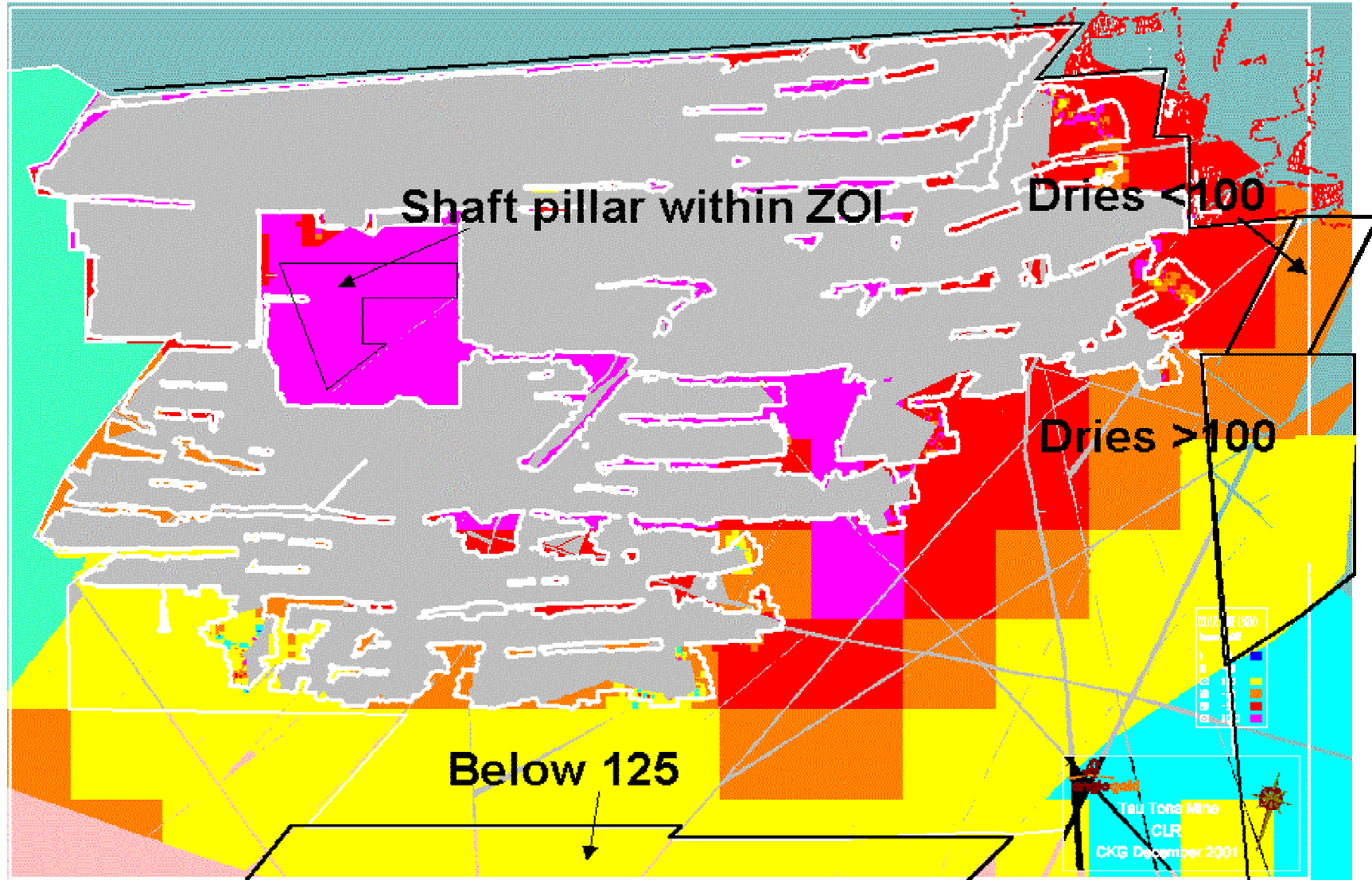


- Below 126 level carbon leader
- Area “B” VCR
- TauTona shaft pillars within the ZOI
- Driefontein ground swap

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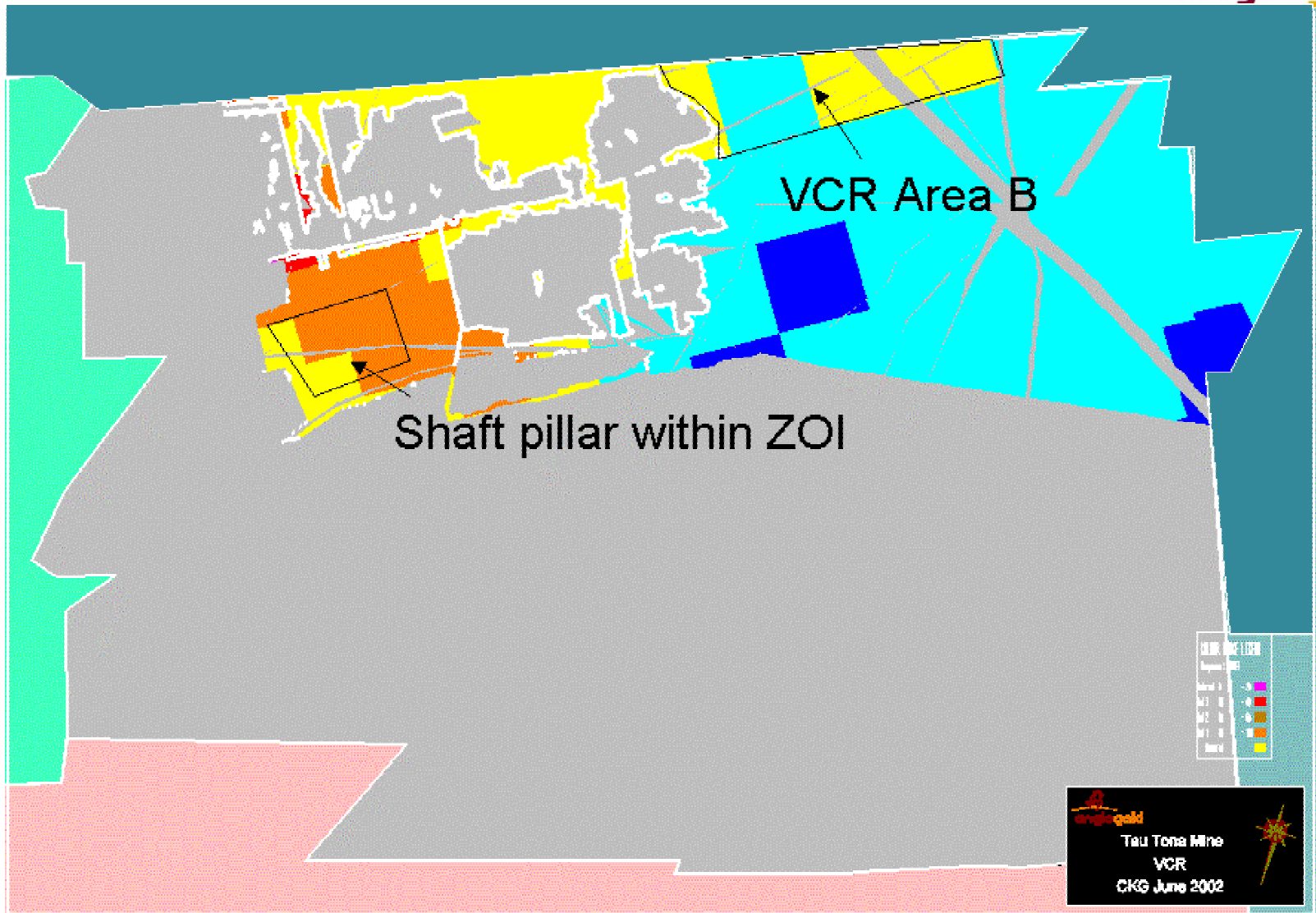
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# Carbon Leader Reef – Composite Kriged Value Grid



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# VCR – Composite Kriged Value Grid



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# 5. Conclusion

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- 2002 an excellent year with plans to maintain levels of excellence
- TauTona approved capital project ahead of schedule and within budget
- Exciting organic growth projects to fill the declining gold profile and extend LOM
- Further opportunities within and outside current lease area