ANGLOGOLDASHANTI

Reporting geological confidence at AngloGold Ashanti's Mponeng Mine

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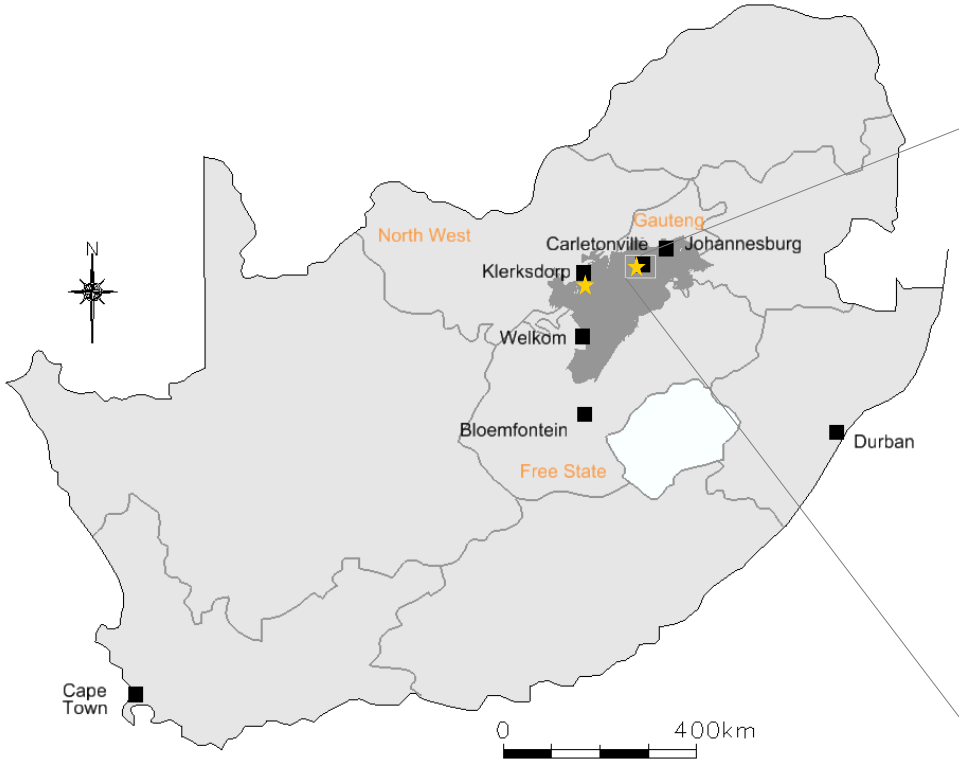
MPONENG MINE

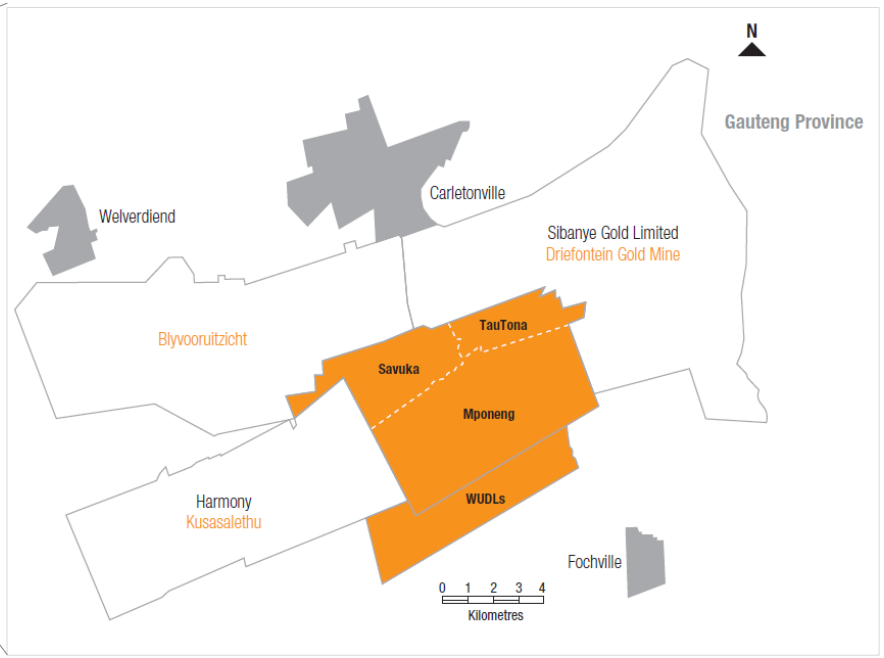
18 MAY 2016

LOCATION

LOCALITY OF AGA'S MPONENG MINE, SOUTH AFRICA

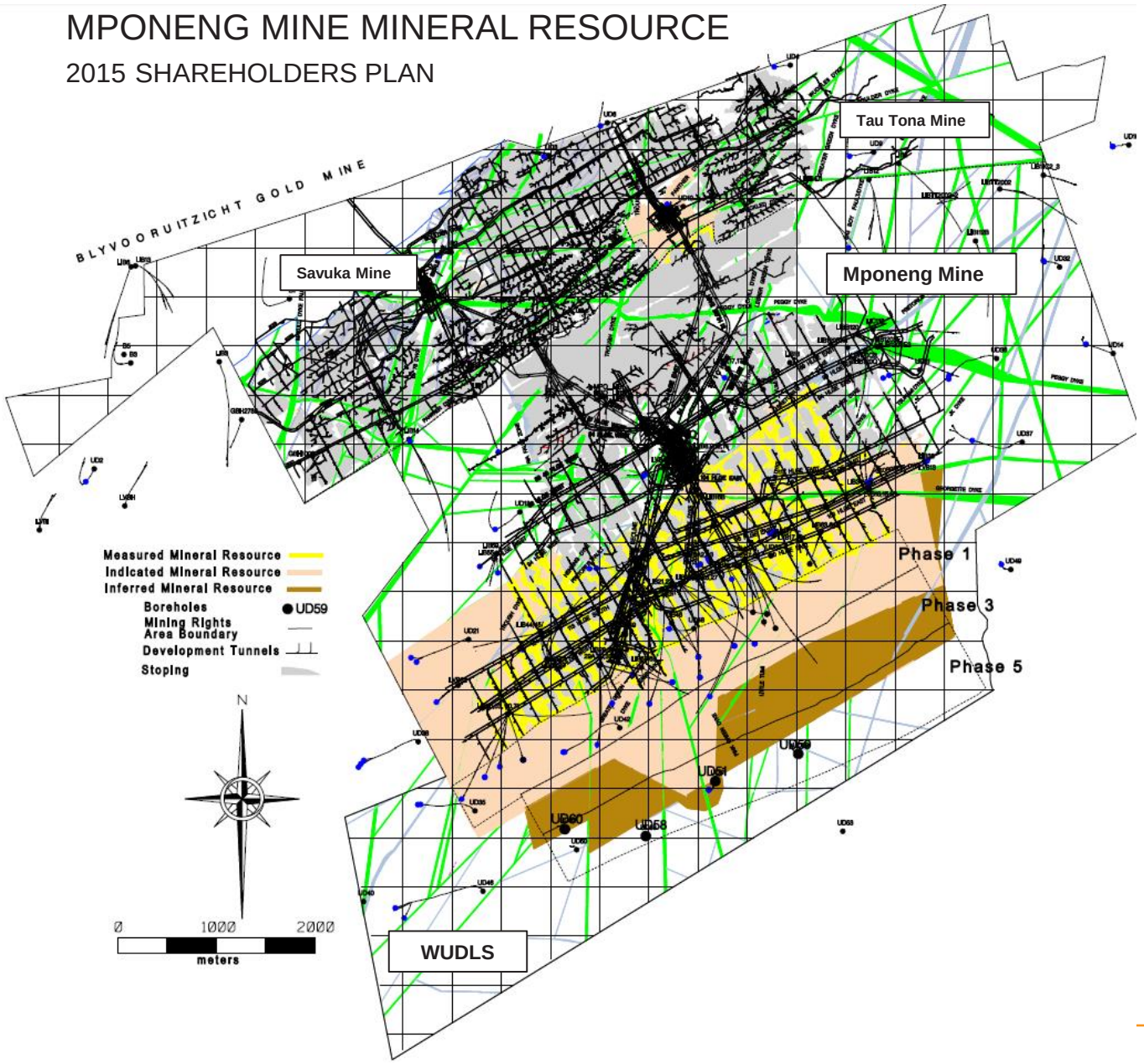


West Wits Operations



MPONENG MINE MINERAL RESOURCE

2015 SHAREHOLDERS PLAN



Ventersdorp Contact Reef

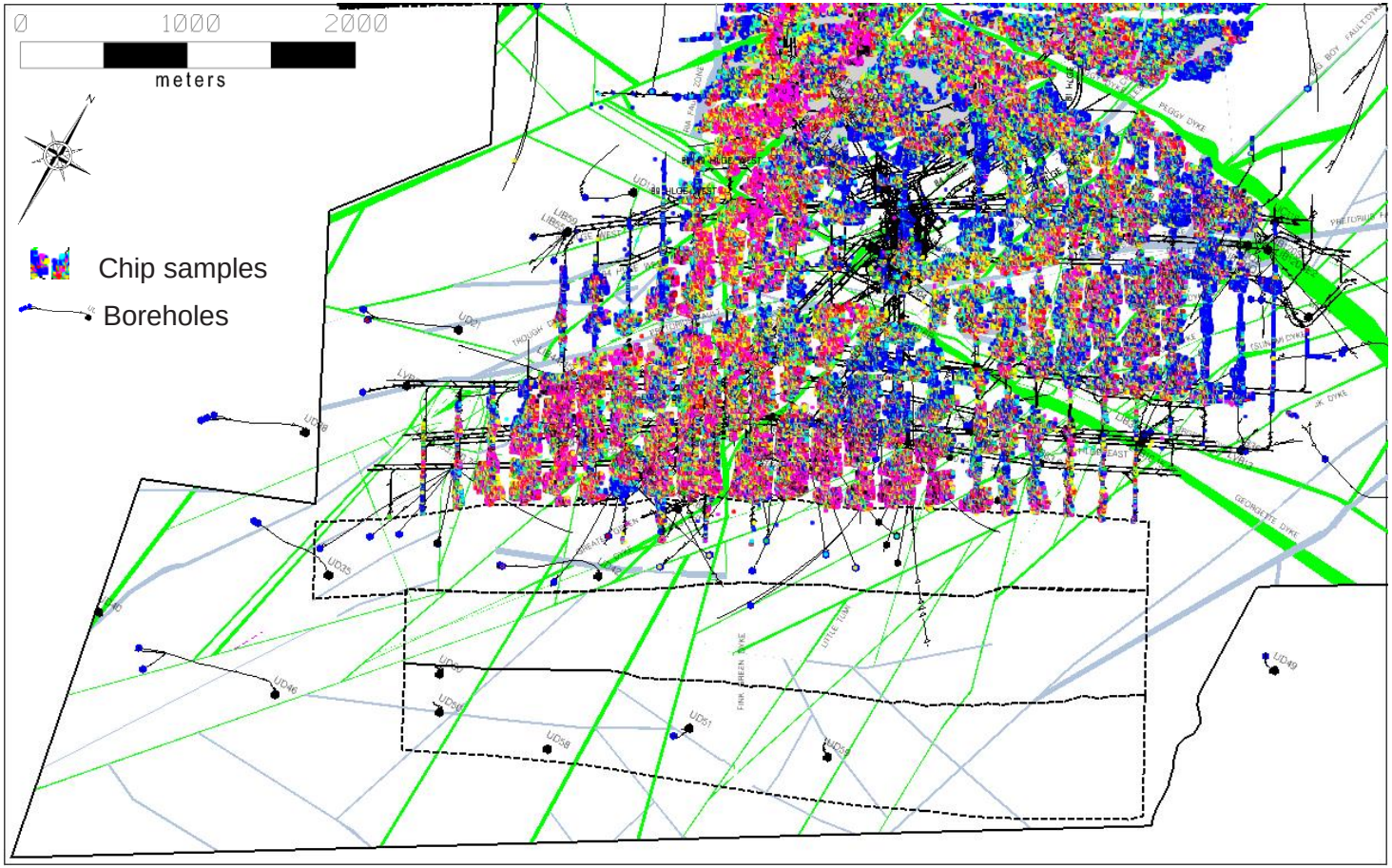
Unconformably overlies the Witwatersrand Supergroup.

Series of structurally bounded blocks into which ounce and tonnage estimates are calculated.

The published mineral resource is categorised according to the SAMREC Code confidence categories.

MPONENG MINE MINERAL RESOURCE

DATA AND GEOLOGICAL INTERPRETATION



Extensive database of channel chip samples within the mined out areas.

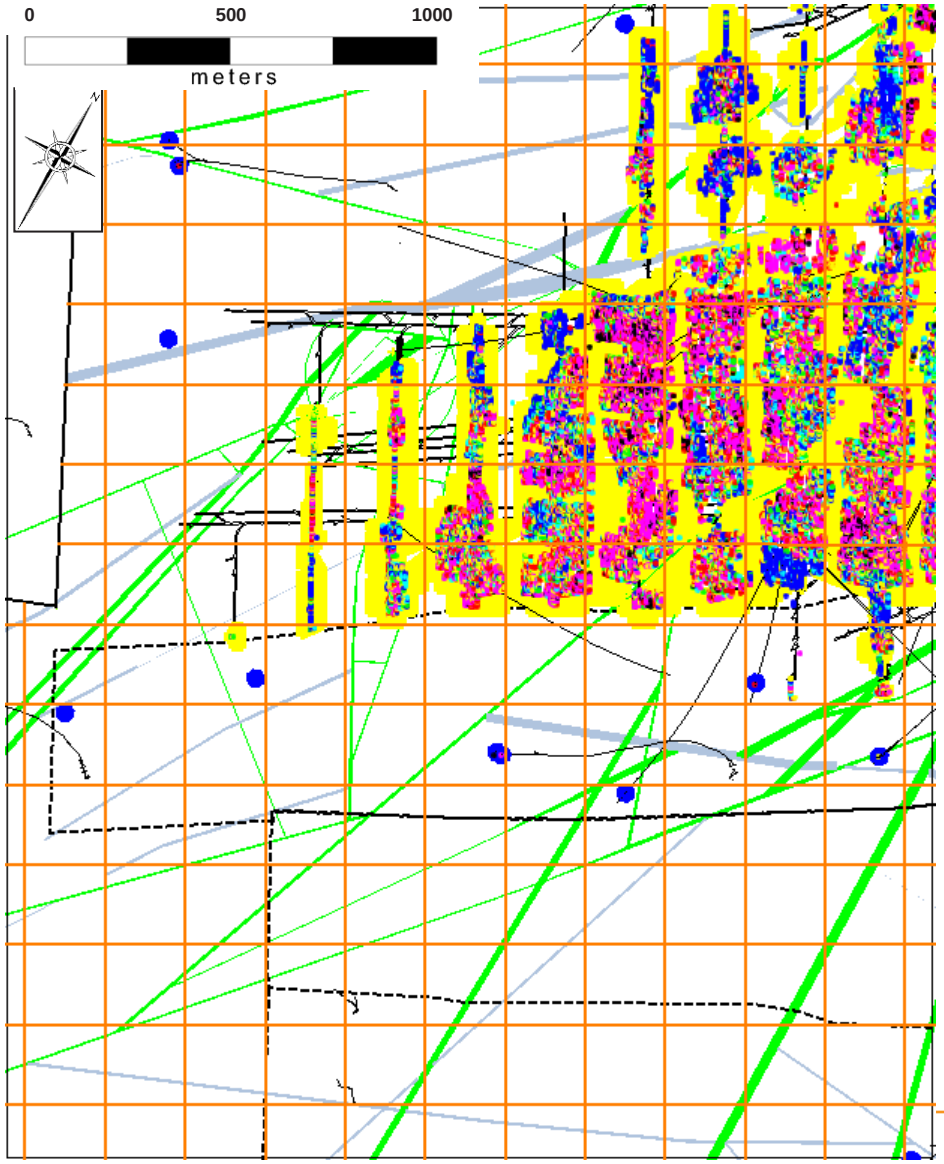
Model extrapolations are based on continuous data collation from geological drilling and interpretation.

Data density becomes limited over large parts of the orebody

The uncertainty is limited by information density and understanding of continuity within the orebody.

MPONENG MINE MINERAL RESOURCE

1ST PASS CONFIDENCE CALCULATION



The confidence is calculated for each block estimate within the evaluation block model.

1. Simple Kriging estimate done on a 30 x 30m grid size.

2. Macro (mixed support) Co-Kriging exercise done on a 210 x 210 grid size.

The calculated confidence is determined by determining the ratio of the 95% confidence interval's lower limit to the estimated value within each macro block.

MPONENG MINE MINERAL RESOURCE

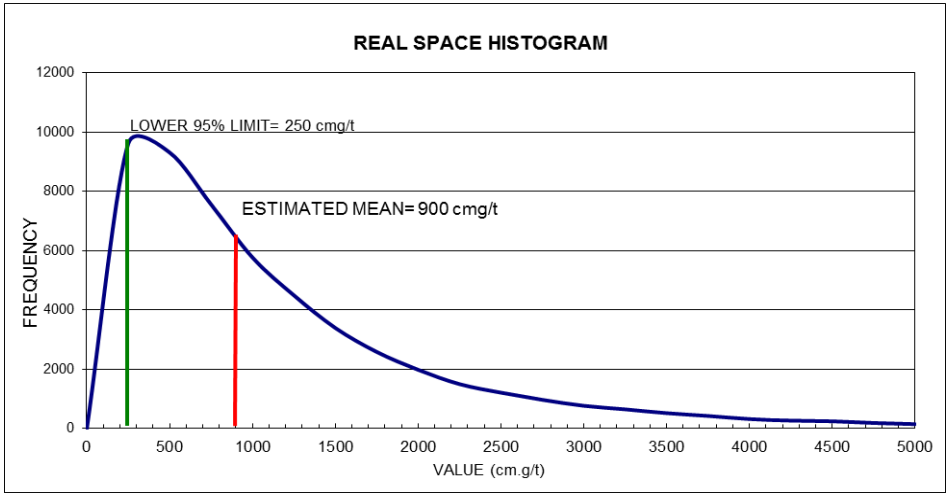
1ST PASS CONFIDENCE CALCULATION

$$\text{Confidence Ratio} = \frac{(95\%LL)}{(estimate)} \times 100$$

Example:

$$\text{Confidence Ratio} = \frac{(250\ cmg/t)}{(900\ cmg/t)} \times 100$$

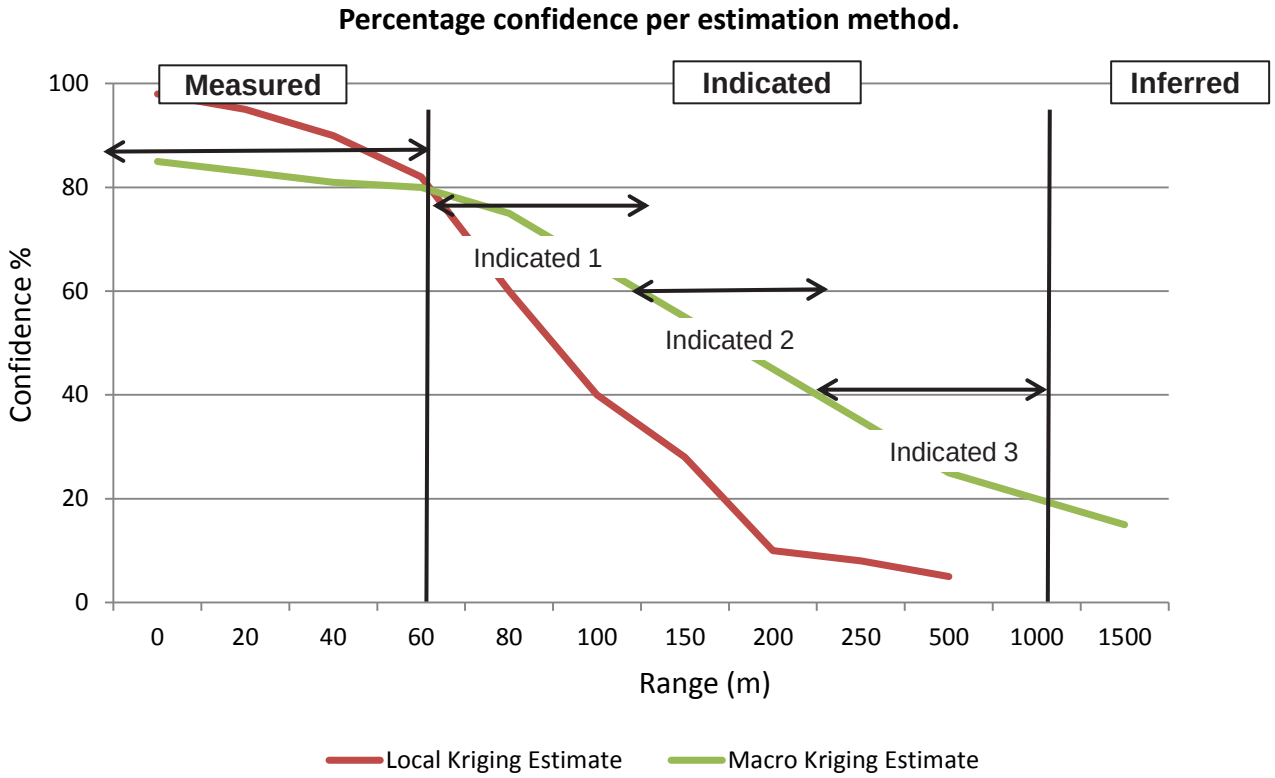
$$= 28\ \%$$



Category	AGA sub-division	Percentage confidence
Measured		Optimized simple Kriging
Indicated	Indicated 1	Greater than 60%
	Indicated 2	60 – 40%
	Indicated 3	40 – 20%
Inferred		20 – 0%

MINERAL RESOURCE CONFIDENCE

THE RELATIONSHIP BETWEEN ESTIMATION, RANGE AND RESOURCE CATEGORIES.



Mineral Resources are estimates based on numerous assumptions.

Data density becomes limited over large parts of the orebody.

The calculated confidence level of an estimate, is maximized through the use of different estimation processes.

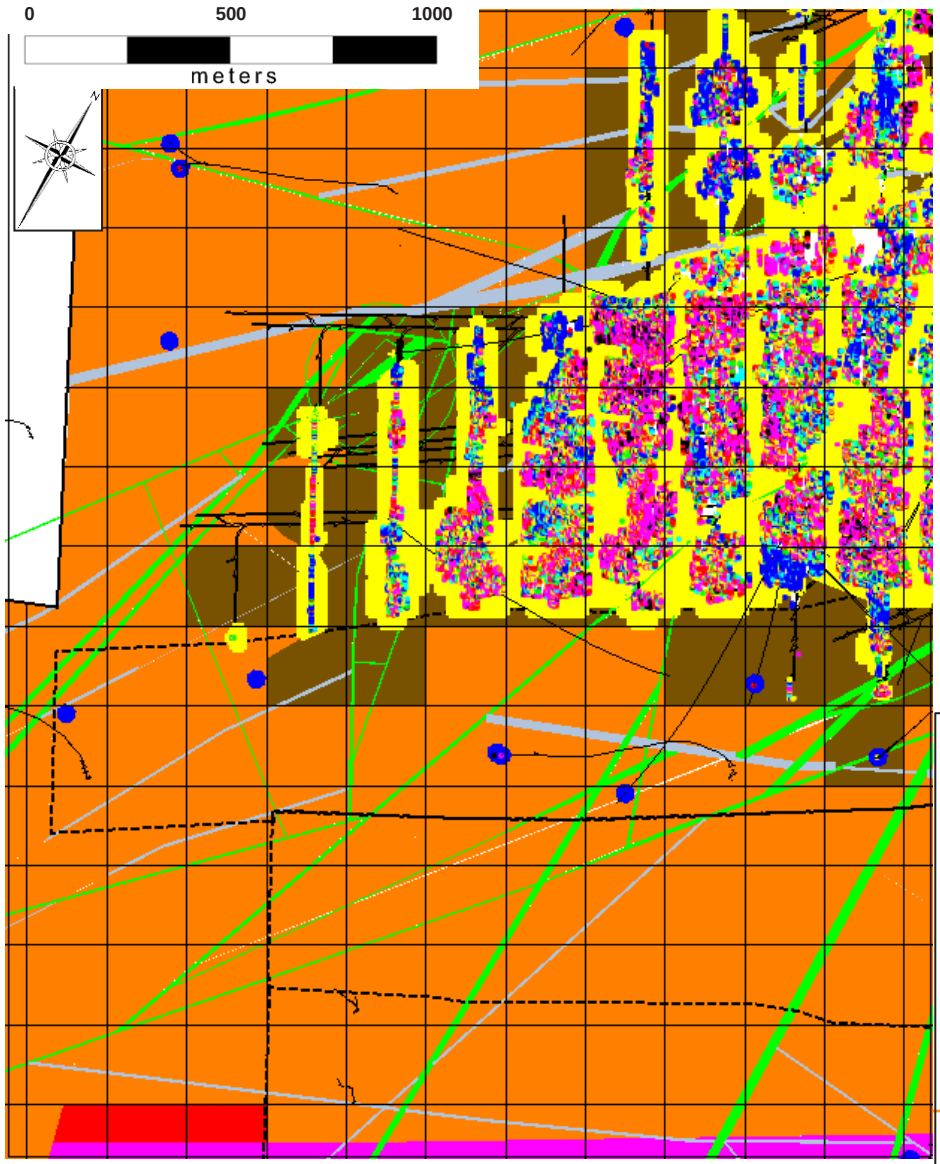
1st pass mineral resource categorization.

Confidence levels of grade estimates are calculated within a statistically homogenous population.

Confidence will decreases the further away from the data.

MPONENG MINE MINERAL RESOURCE

1ST PASS CONFIDENCE CALCULATION



Simple Kriging Estimate done on a 30 x 30m grid size.

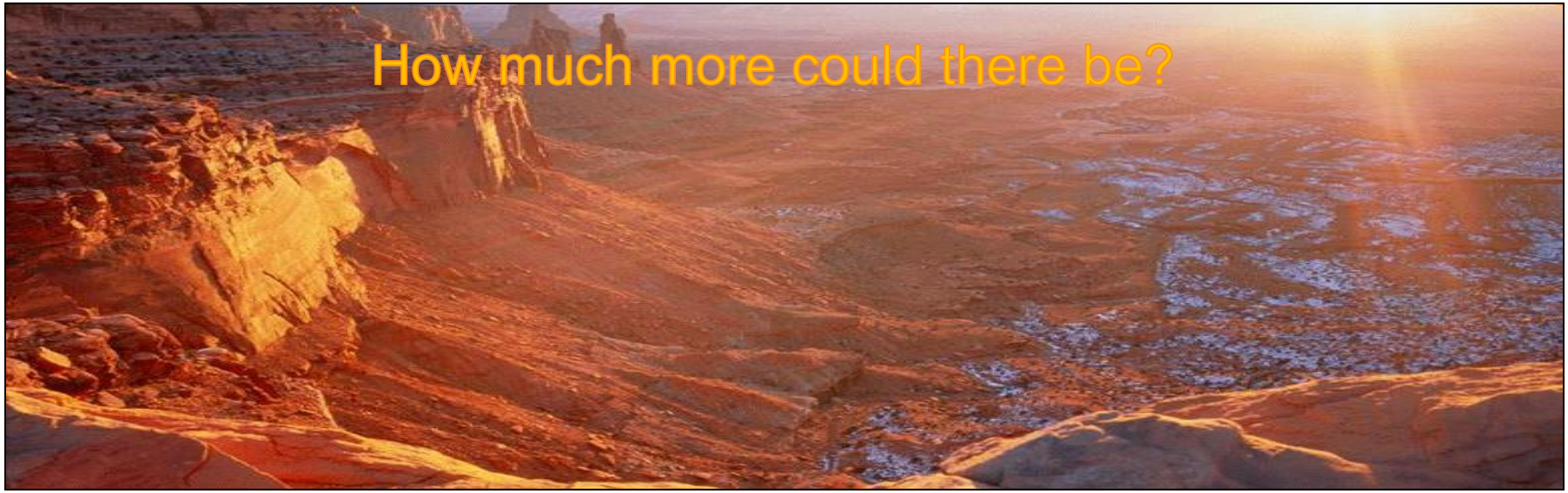
Macro- Co Kriging exercise done on a 210 x 210 grid size.

Kriging assumes that geological homogeneity is met, and that the geological model is perfect

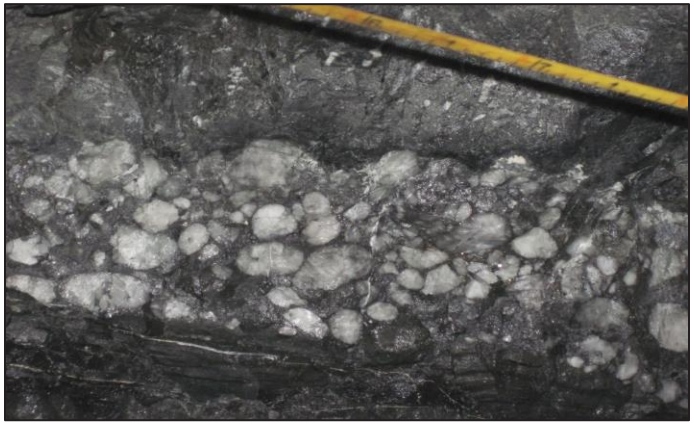
The calculated ratio to lower limit is used to determine the calculated confidence of each estimated macro block.

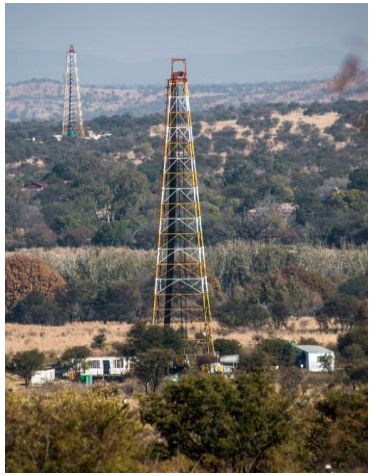
MINERAL RESOURCE CONFIDENCE

GEOLOGICAL CONTINUITY AND GEOLOGICAL DOWNGRADE



94-68 W3: VCR Thin Terrace reef





104-64: VCR Thick Terrace reef

MINERAL RESOURCE CONFIDENCE

GEOLOGICAL CONTINUITY AND GEOLOGICAL DOWNGRADE

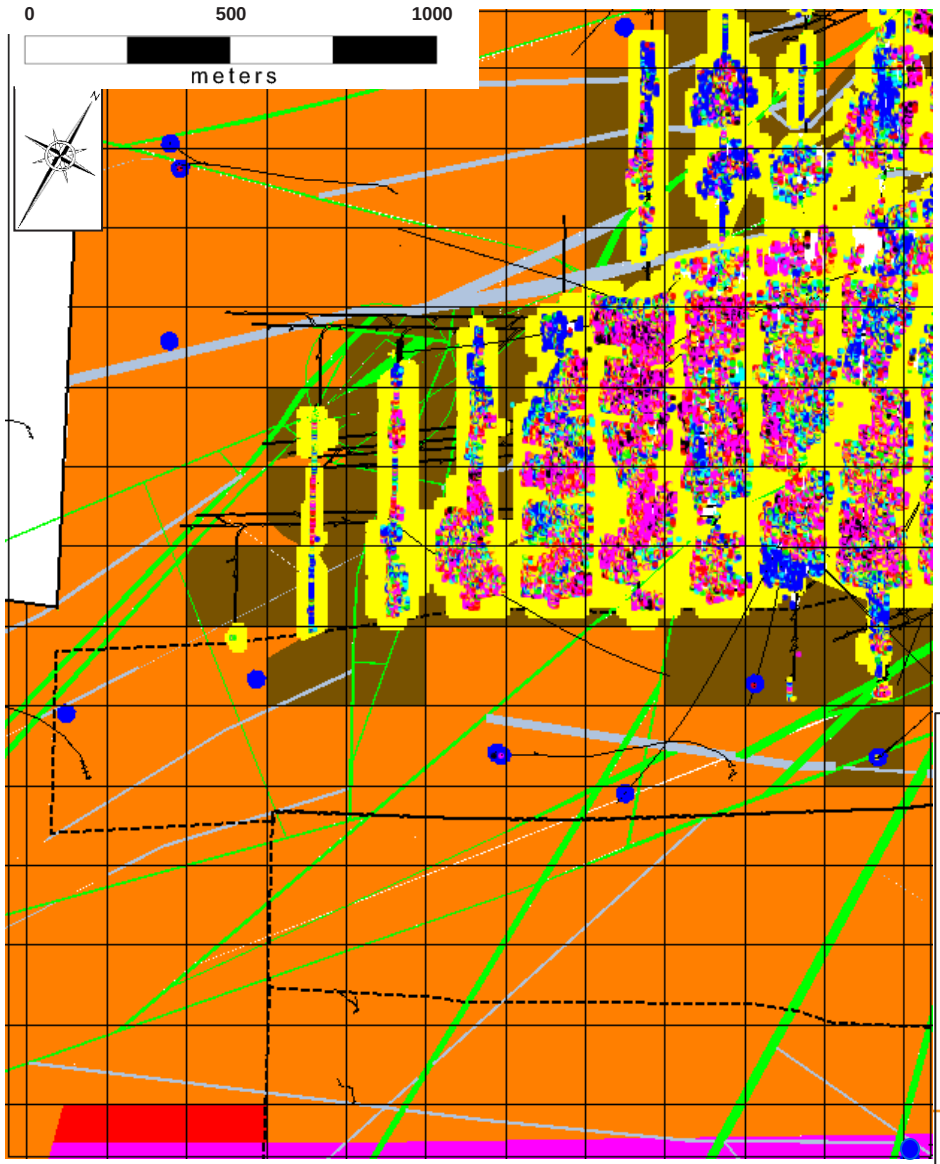
Geological confidence criteria used for the review of Mineral Resource classification downgrades			**SAMREC Code category based on geological data density**
CONFIDENCE	**Confidence in sedimentary facies and mineralization models**	**Confidence in structural model**	**SAMREC Code category**
Very low	Speculative models based on intuition, no data available	Speculative, no data available at resolution better than 1:250 000 scale	**INFERRED**
	Extrapolated from contiguous area, continuity suspected, no confirmatory surface reef intersections available	Major faults extrapolated from contiguous area, cut-offs not defined, no surface reef intersections available	
Low	Confirmed by one or more surface or LIB reef intersections, continuity not confirmed, but likely	Some of the major faults intersected in one or more surface or long inclined boreholes, cut-offs ill defined. 3D seismic data available and used.	
	Facies and mineralization continuity confirmed by routine GBH* or LIB drilling from leading haulages and reef intersections in scattered surface holes	Structural interpretation based on drilling from leading haulages and widely spaced surface drilling. 3D seismics. Major cut-offs defined	3
Medium	Facies and mineralization continuity confirmed by routine GBH or long inclined boreholes drilled from access haulages and crosscuts	Major cut-offs confirmed by routine GBH or long inclined boreholes drilled from access haulages and crosscuts	2 **INDICATED**
High	Confirmed by drilling from crosscut, mapped in box-hole	Structure based on drilling from haulages and crosscuts, most significant cut-offs defined by extrapolation from measured areas	1
	Mapped in reef development and/or stoping on one side of Resource	Faults and cut-offs extrapolated from mapping in reef development and/or stoping on one side of Resource	**MEASURED**
Very high	Mapped in raise and stopes flanking Resource	Faults and cut-offs interpolated from mapping in raise and stopes flanking Resource	
	Extensively mapped in detail in surrounding stopes	All faults >1 m and cut-offs interpolated from mapping in surrounding stoping	

Final mineral resource categorization.

- Confidence will decreases the further away from the data.

MPONENG MINE MINERAL RESOURCE

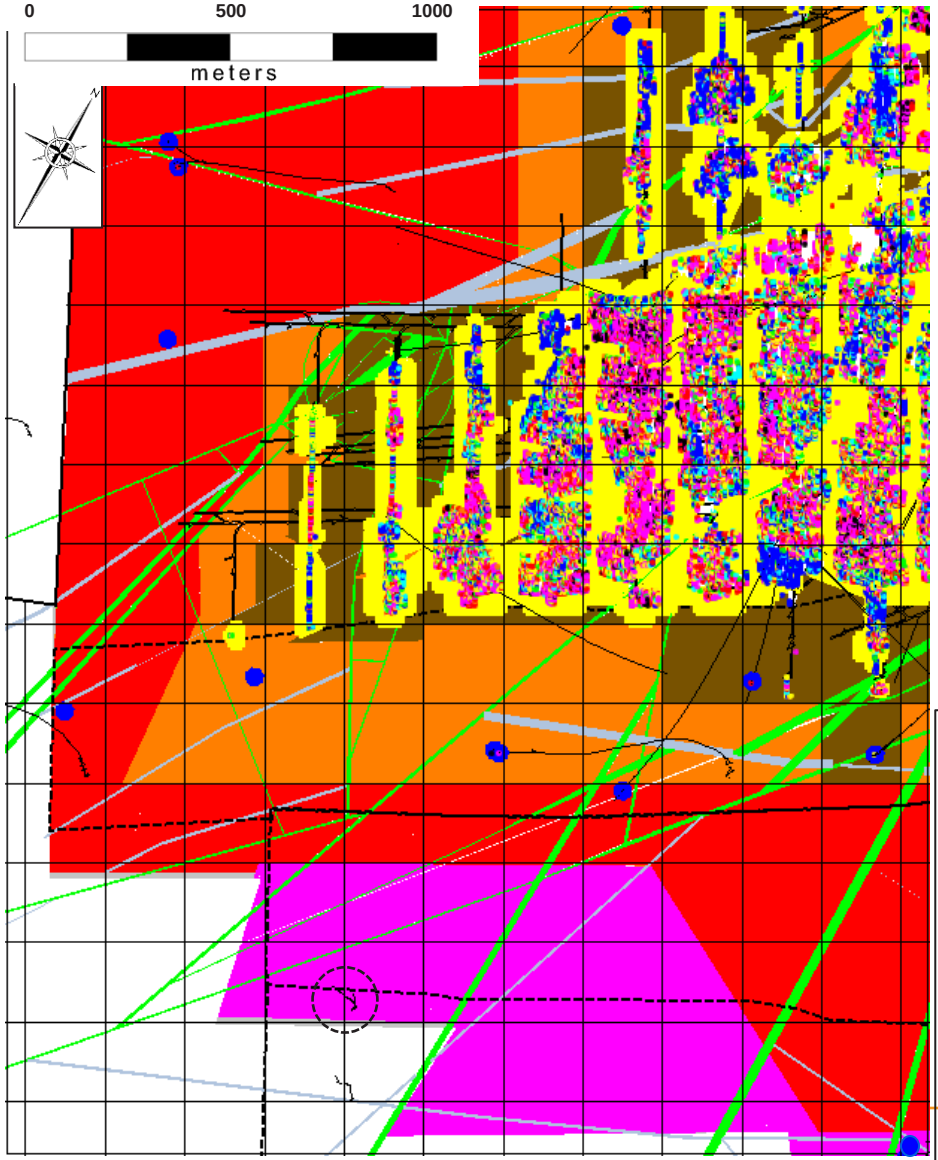
1ST PASS CONFIDENCE CALCULATION



Original calculated confidence categories.

MPONENG MINE MINERAL RESOURCE

FINAL SAMREC CODE CLASSIFICATION



Final catergorisations following review according to the AGA guidelines.

REPORTING MINERAL RESOURCE CONFIDENCE AT MPONENG MINE

- Mineral resource confidence is influenced by size and continuity of mineralization as well as data density and spacing.
- The confidence can be calculated from the existing data assuming that the geological models are perfect and that the areas are geostatistically homogenous.
- Geologists constantly attempt to generate more information and cannot rely on a calculated confidence classification method alone.
- The “downgrade” of the confidence is applied according to the clearly defined set of guidelines.
- ALL work reviewed annually to ensure impartiality on the part of the Competent Person.

Models are never the truth; they are approximations or predictions and cannot exactly represent the Mineral Resource.

Vann et al 2014, *Common sense and good communication. Mineral Resource and Ore Reserve Estimation – The AusIMM Guide to Good Practice.*

AngloGoldAshanti