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THE SOUTH AFRICAN MINERAL REPORTING CODES

SAMREC
THE SOUTH AFRICAN CODE FOR THE REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES

Diamond Guidelines

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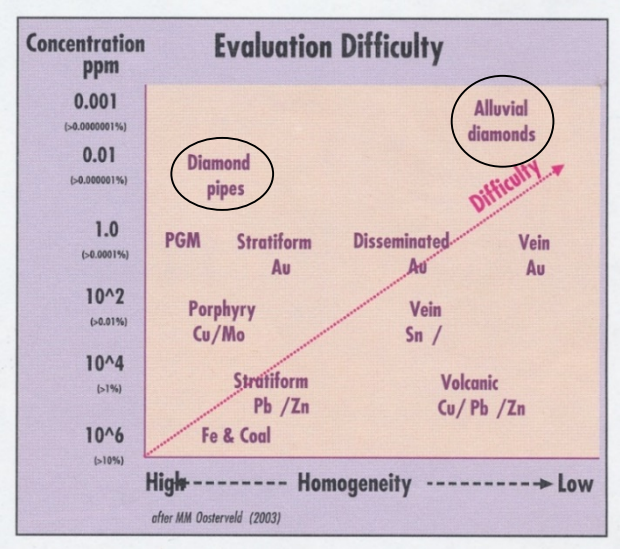

Diamonds are Different

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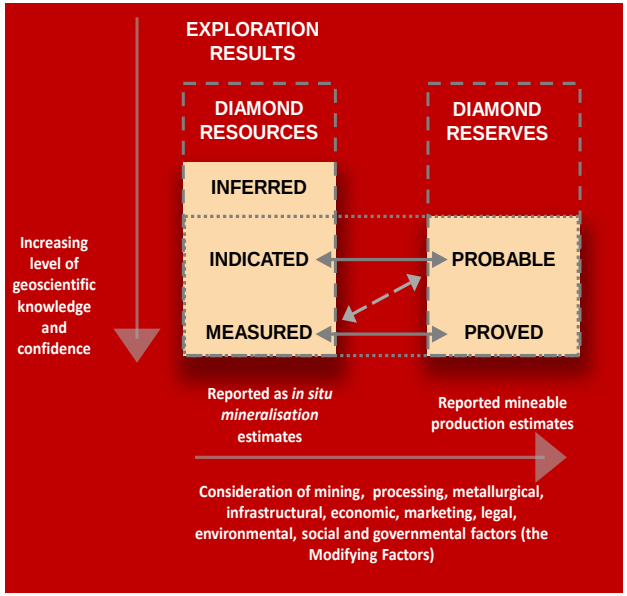
SAMREC Code

- 2000/2007/2009 SAMREC Code diamond specific clauses
- 2016 Samrec Code has expanded on diamond specific clauses
- Replaced generic Figure 1 with diamond specific Figure 3



- Supplementary section in Table 1

1. Project Outline
2. Geological Setting, Deposit Type, Mineralisation
3. Exploration and Drilling, Sampling Techniques and Data
4. Estimation and Reporting of Exploration Results and Mineral Resources
5. Technical Studies
6. Estimation and Reporting of Mineral Reserves
7. Audits and Reviews
8. Other Relevant Information
9. Qualifications of CP. Date and Signature page

11. Reporting of Diamonds and Gemstones

- Introduced Diamond Guidelines document

Guidelines Document for the Reporting of Diamond Exploration Results, Diamond Resources and Diamond Reserves (and other Gemstones, where relevant)

(*SAMREC Diamond Guidelines*)

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Draft Procedures

- First Draft
  - Small SAMREC sub-committee
  - Best of other Codes, guidelines, policy documents, etc.
- Second Draft
  - Moderated by third party diamond specialists
- Third Draft
  - Sent to industry for comment
    - Exploration and Mining Companies
    - Major and Junior Producers
    - Consulting Companies
    - Independent Consultants
- Final Draft (Nov, 2015)

- V1.0 (May, 2016) available on website, in Companion Volume

Guidelines Document

Definitions from the Code are highlighted in bold Arial 10pt.

SAMREC Code is presented in Arial 10pt typeface.

Policies, guidelines and explanations to assist in interpreting the Code as per this document are presented in Times New Roman 10pt font (normal and *italics*).

- *shall* is used where a provision is mandatory;
- *should* is used where a provision is preferred*;*
- *may* is used where alternatives are equally acceptable
  - All deviations, alternatives and exceptions shall be explained in a clear and transparent manner on an 'if not, why not' basis

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Table of Contents

- A carat (diamond) is defined as one fifth of a gram (0.2g) – often described as a metric carat ("ct").
- Sample grade is used in the context of carats per units of mass, area or volume above the specified bottom cut-off sieve size.
  - For primary deposits, the sample grade should be reported as carats per dry metric tonne (cpt) and/or carats per 100 dry metric tonnes (cpht).
  - For placer deposits, sample grades quoted in carats per tonne (ct/100 tonnes) or carats per m^3 (or carats per $100m^3$) are equally acceptable, as are stones/unit of area.
  - In the marine placer environment, diamond sample grades are, typically, reconciled per m^2 basis ('planar grades').
- Where carats per unit of mass is used, a discussion of volume to mass conversion shall be provided.
- All diamond values shall be reported in US$/ct (local exchange rates to be given)
  - The date of valuation shall be reported and should be less than six months old.
- 'Quality' is not the same as 'grade'; use 'grade' and 'value'

Kimberlitic Indicator Minerals (KIM's)

SAMREC Clause 60 (The Application of Kimberlitic Indicator Mineral Chemistry)

NEW

Kimberlitic indicator mineral chemistry does not provide direct grade or diamond value information, and shall not be used to infer these parameters for Diamond Resource estimation purposes.

- Provides indirect evidence for potential occurrence of diamonds in primary deposits
  - *Not applicable to alluvial/marine deposits*
- Used in early stage ranking of Exploration Targets only
  - *Shall not be used to infer grade/value for Diamond Resource estimation*
  - Reference relevant peer-reviewed published research articles

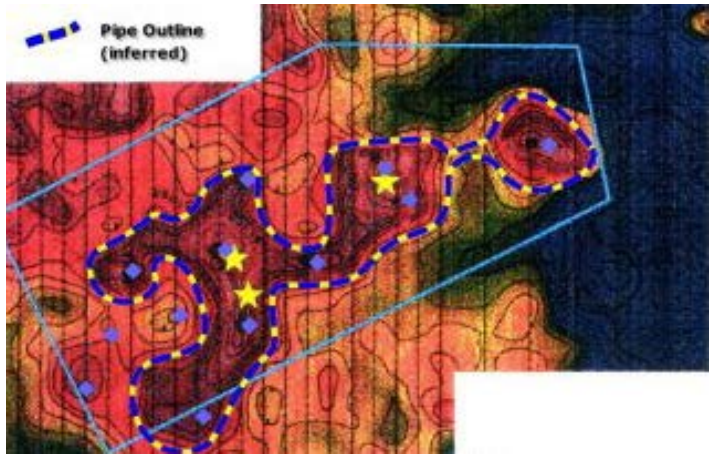
Diamond Mineralisation

SAMREC Clause 65 (Diamond Mineralisation)

NEW

Diamond 'Mineralisation' as used in the Code, is defined as a concentration (or occurrence) of diamonds of possible economic interest, in or on the earth's crust, for which quantity and quality cannot be estimated with sufficient confidence to be defined as a Diamond Resource. Portions of a Diamond Exploration Target or Diamond Mineralisation that have not demonstrated reasonable prospects for eventual economic extraction shall not be included in a Diamond Resource

- Exploration Target based on actual exploration data and/or information (but not quite at Resource classification level)
  - Insufficient data
  - Lack of confidence in data
  - RPEEE not yet demonstrated
  - PRE-RESOURCE



Exploration Targets
Diamond Mineralisation

- Statements of quantity, grade and value shall reflect the lack of reliable data:
  - Order of magnitude
  - Appropriate descriptive terms (such as “approximately”, “in the order of”, etc.)
  - Ranges. *The use of the term “Ranges” in this context has no statistical relevance.*

- Appropriate rounding:
  - approximately 10-20million tonnes at a grade of 15-20 carats per hundred tonnes and a value of USD100-200/ct
    - not 12±0.2million tonnes
  - Target statements to include of quantity, grade and value
  - Estimates of potential quantity should, preferably, be made in terms of volume (or area) and not tonnage.
    - If target tonnages are reported then the preliminary estimates, or basis of assumptions, made for bulk density shall be stated.

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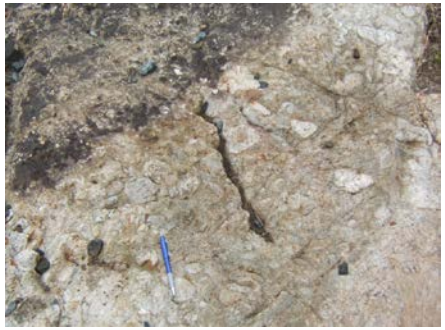
Reasonable Prospects for Eventual Economic Extraction

- Diamond Resource must have RPEEE
  - High-level, reasoned assessment and justification
  - Not a Scoping Study
  - Not used to estimate Reserves
- Geological and Resource (volume, grade, value) parameters
- Mining and processing issues
- Numerous other issues that could affect RPEEE
- What time frame could be reflected in “eventual” economic extraction



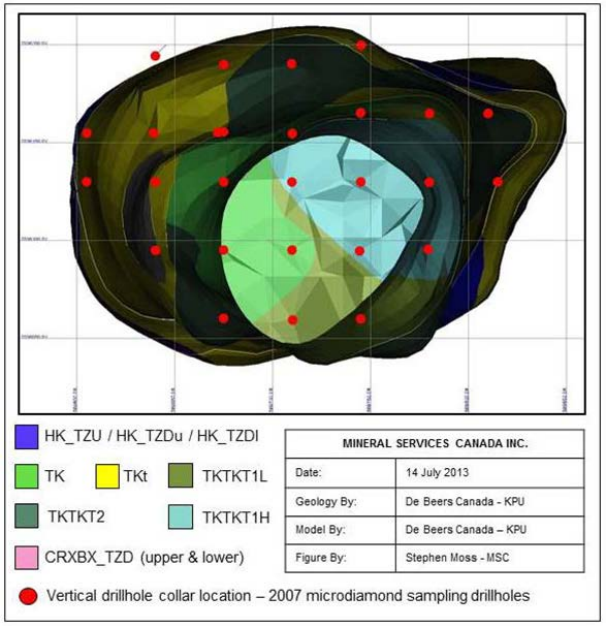
Diamond Resource Geological Domains

NEW

SAMREC Clause 60 (Sub-division of Diamond Resources into Appropriate Geological Domains)

A Diamond Resource estimate must identify separate geological domains where applicable

- Each domain should have, at least (however, preliminary):
  - Initial indication of area/volume,
  - Density (for primary deposits),
  - Diamond grade
  - Size frequency distribution,
  - Diamond value
  - RPEEE.
- Applicable to both primary and secondary deposits



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Diamond Resource
Diamond Value

SAMREC Clause 60 (Declaration of Bottom Cut-off Screen Size)

The average diamond grade and value shall not be reported without specifying the Bottom Cut-off Screen Size.

SAMREC Clause 60 (Average Diamond Value as a Component of the Diamond Resource)

A Diamond Resource or Diamond Reserve shall not be stated without an estimate of the average diamond value/revenue, which shall be based on a complete, run-of-mine, or representative bulk-sample, parcel of diamonds which has been recovered from the project property.

NEW

SAMREC Clause 61 (Diamond Valuation Methodology)

Any valuation of a parcel of diamonds shall be based on a sales docket or a report from a demonstrably reputable and qualified expert whose qualifications, credentials, affiliations and independence/non-independence must be presented.

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Diamond Resource Parcel Representivity

SAMREC Clause 62 (Diamond Parcel Representivity)

Where the valuation is used in the estimation of Diamond Resources or Diamond Reserves, the valuation shall be based on a parcel representative of the size distribution and assortment of the diamond populations in the deposit.

The CP shall explain the rationale behind the parcel size that has been used in the estimation of value for the Diamond Resource or Diamond Reserve and the level of confidence in the estimate.

For all valuations (irrespective of Resource classification), associated diamond size frequency distributions (SFD) shall be provided, along with a discussion of the relevant applicable parcel size.

The minimum representative size of the valuation parcel depends on the characteristic stone distribution and quality of stones in the deposit.

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Diamond Resource Parcel Representivity

- Inferred Resource
  - 100ct may give SFD
  - 500ct (low confidence valuation)

- Indicated Resource
  - Low variability deposit: 2,000ct
  - Highly variable: 2,500ct
  - Marine environment: 1,000ct

- Under certain circumstances, the number of carats or stones required to estimate the diamond value to a low, reasonable or high confidence may need to be significantly different from the numbers given here for guidance *(typically higher, seldom lower).*
  - The CP shall discuss the rationale behind the number of stones or carats selected and the level of confidence in the estimate.
  - Discuss (transparently) on “if not, why not” basis

Diamond Resource Microdiamonds

Microdiamond studies are not applicable for alluvial or marine deposits.

NEW

SAMREC Clause 62 (Application of Total Liberation Methods)

Diamond valuations should not be reported for samples of diamonds processed using total liberation methods which will be composed mainly of microdiamonds.

- Diamond Resource classification requires both diamond grade and diamond value:
  - Diamond grade can be estimated using microdiamonds
  - Diamond value requires macrodiamonds

SAMREC Clause 63 (Correlation of Micro- and Macro- diamond Size Frequencies)

Where Diamond Resource or Reserve grades are based on correlations between the frequency of occurrence of microdiamonds and of commercial size stones, this shall be stated, and the reliability of the procedure shall be discussed by the CP.

Diamond Resource Sampling Issues

NEW

SAMREC Clause 23

A Mineral Resource shall not be estimated in the absence of sampling information.

- A Diamond Resource cannot be estimated in the absence of sampling information (*from the project property or geological unit*).
  - Volume cannot be based on remote sensing (satellite image / aerial photograph) or geophysics alone
    - Must have corroborating drilling/pitting data
    - Realistic extrapolation around data points
    - Tonnage estimation requires density data
  - Grade/value cannot be based on production data from adjacent properties, even if they are in full production
    - Especially pertinent to alluvial properties
    - All kimberlites in the same field (or even adjacent pipes) don't have the same grade necessarily, nor do satellite pipes, associated dykes
  - Cannot be based on unverified (unverifiable) historical or artisanal results.

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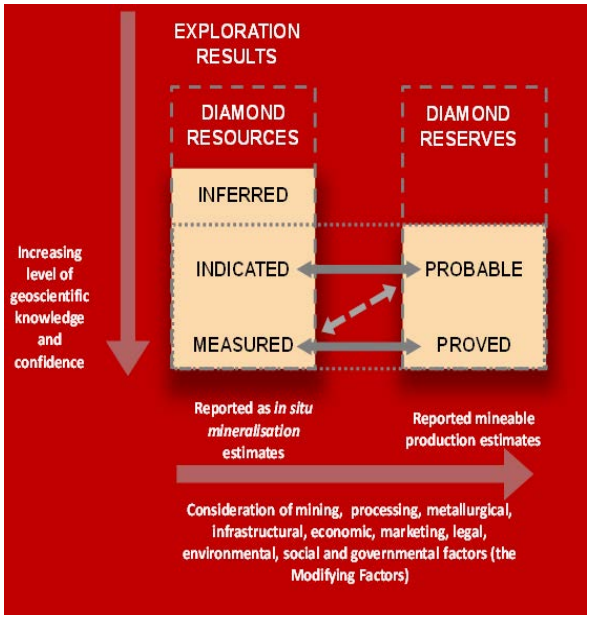
Diamond Resource Classification Criteria

Figure 3



- Standardised classification categories
  - Inferred, Indicated, Measured Diamond Resource
  - Probable, Proved Diamond Reserve

- Defined by increasing geoscientific knowledge *and* confidence in data
  - More sampling data does not necessarily equate to higher confidence

- Classification criteria must be disclosed and explained
  - No set drilling/sampling criteria
  - Programme should be optimised appropriate to the geology

- Criteria determined by the CP
  - Based on experience, competence, materiality and industry best practice
  - Systematic methodology with transparent criteria

Technical Studies

SAMREC Clause 43 (Technical Studies)

NEW

A mining project typically passes through exploration, resource definition and design phases; each of which involves rapidly escalating levels of investment. Each phase requires an increasing level of economic and technical assessment with increasing levels of confidence for the project design, scheduling, costs and risks; to justify progression of the project to the next investment level.

- SAMREC Table 2 provides guidance in terms of the content and level of Technical Studies (Scoping, Prefeasibility, Feasibility).
- There are no differences in the standard of PFS or FS required for placer or primary diamond deposits.
  - PFS/FS on alluvial diamond deposits are, typically, based on technical and economic data obtained from trial-mining which grows seamlessly out of bulk-sampling and need not, necessarily, be a separate exercise.
- Since conventional macrodiamond processing techniques are not designed to liberate or recover all contained diamonds, there is no such thing as an "*in-situ*" grade
  - Only a processed or recovered grade, which is dependent on the plant or process employed.
  - Change processing plants, need to reassess the Technical Study

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Economic Assessments

- For projects with defined Indicated Diamond Resources
  - DCF models based on Diamond Reserves determined through PFS/FS and the application of all Modifying Factors

- For projects with defined Inferred Diamond Resources

  - Scoping Study results in initial assessment of potential value (preliminary economic assessment)
    - Subject to various caveats and prescribed cautionary language, since no Diamond Reserves established

- Projects with no defined Diamond Resources
  - Historical Estimates, Exploration Results, Exploration Targets, Mineralisation cannot be included in Feasibility, Prefeasibility or Scoping Studies
  - *Any internal assessments shall not be put in the public domain*

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Miscellaneous

- When referring to sieve sizes, the CP should discuss the sizing definition used – DTC, Rubin/Antwerp, Christensen, grainers, square mesh, Tyler mesh, etc.
- Importance of density measurements in tailing deposits
- Familiarise yourself with papers in the Companion Volume
  - Guidelines and policies from other jurisdictions (useful, but do not override the provisions of the SAMREC Code/Guidelines
- Valuation to be done in accordance with SAMVAL
  - Based on SAMREC/CRISCO compliant report
  - Alluvial Diamond Projects
    - Same standard as for any other valuation document
    - Most projects will be pre-Reserve, so DCF models are not generally appropriate
- Applicable to other gemstones in terms of principles
  - Also use other commodity specific guidelines, where they exist
- Refer to Appendix 1 for *guide* to a Table of Contents for CPR

SAMVAL
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SAMREC Diamond Guidelines

- Diamond Guideline compliance is not designed to be onerous
  - Many examples of how public reporting can be done to international standards within a small company framework in a manner that doesn't bankrupt the project
  - CPRs can be signed off by Independent and/or Company (non-independent) CP's
    - Independence must be clearly stated
    - CP's must be registered
    - CPR's must be compiled in accordance with the SAMCODES
  - Buy into the fact that it safeguards the CP, the Company and the Shareholders
  - Make it a culture within the Company
    - Set up procedures early on
    - Use the correct terminology in everyday communication
    - Keep good records

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