SAMREC Table 1

PRELUDE	
Table 1 is applicable to all declarations in terms of the guidelines of the SAMREC Code	
Table 1 is a high-level checklist of reporting and assessment criteria to be used as a reference by those preparing reports on Exploration Results, Mineral Resources and Mineral Reserves.	SAMREC 2009 - pg 28
In the context of complying with the principles of the Code, comment on the relevant sections of Table 1 must be provided on an 'if not, why not' basis within the Competent Person's Report and must be provided where required according to the specific requirements of Clauses 6, 31 and 34. This is to ensure that it is clear to the investor whether items have been considered and deemed of low consequence or have yet to be addressed or resolved. Material items that are not applied should be accompanied by clear explanation in the documentation as to why they have been excluded or that the work is incomplete.	JORC 2012
Transparency, competency and materiality are overriding principles that determine what information should be publicly reported. The Competent Person must provide sufficient comment on all matters that might materially affect a reader's understanding or interpretation of the results or estimates being reported.	SAMREC 2009 - pg 28 JORC 2012
Publicly reported information should be sufficient to enable an informed reader to make a reasonable and balanced assessment of the significance of this information. It is, however, important to report any matters that might materially affect a reader's understanding or interpretation of the results or estimates being reported. This is particularly important where inadequate or uncertain data affect the reliability of, or confidence in, a statement of Exploration Results or an estimate of Mineral Resources or Mineral Reserves.	SAMREC 2009 - pg 28
In some cases it will be appropriate for a public report to exclude some commercially sensitive information. A decision to exclude commercially sensitive information would be a decision for the entity issuing the public report, and such a decision should be made in accordance with any relevant corporation's regulations in that jurisdiction. In cases where commercially sensitive information is excluded from a public report, the report should provide summary information (for example the methodology used to determine economic assumptions where the numerical value of those assumptions are commercially sensitive) and context for the purpose of informing investors or potential investors and their advisors.	
The public report should include sufficient context and cautionary language to allow a reasonable investor to understand the nature, importance, and limitations of the data, interpretations, and conclusions summarized in the technical report.	duplication?
The evaluation and reporting of mineral projects and forward looking mine plans or statements from ongoing operations are expressions of judgment predicated on knowledge and experience. Such evaluations and reports are more than arbitrary determinations; they seek to facilitate valuations as a consequence of method. The methods employed should be scientifically valid, tested, using accepted scientific definitions of terms and procedures, and best suited to the making of reliable estimates for the project in question.	SAMREC 2009 - pg 28
The order and grouping of criteria in Table 1 reflect the normal systematic approach to exploration and evaluation. The table should be approached from left to right. In other words, criteria in the first column, Exploration Results, should be considered to apply also when reporting Mineral Resources and Mineral Reserves. Similarly, additional criteria in the Mineral Resources column apply also to Mineral Reserves reporting.	New

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
General					
	General	(i)	The Terms of reference or scope of work should be presented.		CIM
		(ii)	The Competent Person's relationship to the issuer of the report, if any, should be clearly defined.		SAMREC T1.1 A (ii)
		(iii)	State for whom the report was prepared, whether it was intended as a full or partial evaluation or other purpose, what work was conducted, effective date of report, and what work remains to be done.		CIM
		(iv)	List the sources of information and data contained in the report or used in its preparation, with citations if applicable. A list of references should be included in the report.		CIM
		(v)	The report must have a title page and a table of contents that includes figures and tables.		SAMREC T1.1 A (i)
		(vi)	Executive Summary: Briefly summarize important information in the public report, including property description and ownership, geology and mineralisation, the status of exploration, development and operations, Mineral Resource and Mineral Reserve estimates, and the CP's conclusions and recommendations. If Inferred Mineral Resources are used, show the summary valuation with and without inclusion of such Inferred Mineral Resources. The Executive Summary must be sufficiently detailed so as to allow the reader to understand the essentials of the project.		CIM
		(vii)	The Competent Person should state whether "the declaration has been made in terms of the guidelines of the SAMREC Code". If a reporting code other than SAMREC has been used, the Competent Person should include an explanation of the differences.		SAMREC T1.1 A (iii)
		(viii)	Diagrams, maps, plans, sections and illustrations in public reports must be legible and prepared at an appropriate scale to distinguish important features. Maps must be dated and include a legend, author or information source, coordinate system and datum, a scale in bar or grid form, and an arrow indicating north. Include and reference a location or index map and more detailed maps showing all important features described in the text, including all relevant cadastral and other infrastructure features.		SAMREC T1.4 A (ii)
		(ix)	Identify the units of measure, currency and relevant exchange rates		CIM
		(x)	Specify the details of the personal inspection on the property by each CP or, if applicable, the reason why a personal inspection has not been completed.		CIM
		(xi)	Reporting of low and high-grades and widths must be presented together with their spatial location to avoid misleading the reporting of Exploration Results.		T8 A (i)
		(xii)	Where announcements by companies reference the SAMREC Code, the announcement should be approved in writing in advance of publication by the relevant Competent Person		T8 A (ii)
		(xiii)	If grades are reported then it must be stated clearly whether these are regional averages or if they are selected individual samples taken from the property under discussion.		T8 A (iii)
		(xiv)	If the CP is relying on a report, opinion, or statement of another expert who is not a CP, then the CP must disclose the date, title, and author of the report, opinion, or statement, the qualifications of the other expert and why it is reasonable for the CP to rely on the other expert, any significant risks and any steps the CP took to verify the information provided.		CIM
		(xv)	Certificate of Competent Person : The public report must have a signature page and authors certificate, at either the beginning or end of the public report. The effective date of the public report and date of signing must be on the signature page.		CIM

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 1: Project Outline						
1.1	Property Description	(i)	Brief description of the scope of project (i.e. whether in preliminary sampling, advanced exploration, scoping, pre-feasibility, or feasibility phase, Life of Mine plan for an ongoing mining operation or closure).			SAMREC T1.2 A (i)
		(ii)	Describe (noting any conditions that may affect possible prospecting/mining activities) topography, elevation, drainage and vegetation, the means and ease of access to the property, the proximity of the property to a population centre, and the nature of transport, the climate, known associated climatic risks and the length of the operating season and to the extent relevant to the mineral project, the sufficiency of surface rights for mining operations including the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.			CIM
1.2	Location	(i)	Description of location and map (country, province, and closest town/city, coordinate systems and ranges, etc.).			SAMREC T1.5 A (i)
		(ii)	Country Profile: describe information pertaining to the project host country that is pertinent to the project, including relevant applicable legislation, environmental and social context etc. Assess, at a high level, relevant technical, environmental, social, economic, political and other key risks.			CIM
		(iii)	A general topocadastral map	Topo-cadastral map in sufficient detail to support the assessment of eventual economics. Known associated climatic risks should be stated.	Detailed topo-cadastral map. Where applicable aerial surveys should be checked with ground controls and surveys, particularly in areas of rugged terrain, dense vegetation or high altitude.	SAMREC T1.6 A (ii), B (i) and C (i)
1.3	Adjacent properties	(i)	Discuss details of relevant adjacent properties If adjacent or nearby properties have an important bearing on the report, then their location and common mineralized structures should be included on the maps. Reference all information used from other sources.			CIM
1.4	History	(i)	State historical background to the project and adjacent areas concerned, including known results of previous exploration and mining activities (type, amount, quantity and development work), previous ownership and changes thereto.			SAMREC T1.3 A (i)
		(ii)	Previous successes or failures should be referred to transparently with reasons why the project should now be considered potentially economic.			SAMREC T1.3 B (i)
		(iii)		Discuss known or existing historical Mineral Resource estimates and performance statistics to actual production for past and current operations.		SAMREC T1.3 B (ii)
		(iv)			Discuss known or existing historical Mineral Reserve estimates and performance statistics to actual production for past and current operations.	SAMREC T1.3 C (i)
1.5	Legal Aspects and Permitting		The legal tenure should be confirmed to the satisfaction of the Competent Person, including a description of:			SAMREC T1.7 A
		(i)	Discuss the nature of the issuer's rights (e.g. prospecting and/or mining) and the right to use the surface of the properties to which these rights relate. The date of expiry and other relevant details must be disclosed.			SAMREC T1.7 A (i)
		(ii)	The principal terms and conditions of all existing agreements, and details of those still to be obtained, (such as, but not limited to, concessions, partnerships, joint ventures, access rights, leases, historical and cultural sites, wilderness or national park and environmental settings, royalties, consents, permission, permits or authorisations), must be presented.			SAMREC T1.7 A (ii)
		(iii)	Present the security of the tenure held at the time of reporting or that is reasonably expected to be granted in the future along with any known impediments to obtaining the right to operate in the area. State details of applications that have been made.			SAMREC T1.7 A (iii)
		(iv)	Provide a statement of any legal proceedings for example; land claims, that may have an influence on the rights to prospect or mine for minerals, or an appropriate negative statement.			SAMREC T1.7 A (iv)
		(v)	Provide a statement should realting to governmental/statutory requirements and permits as may be required, have been applied for, approved or can be reasonably be expected to be obtained.			SAMREC T5.1 A (i)
1.6	Royalties	(i)	Describe the royalties that are payable in respect of each property.			CIM

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
1.7	Liabilities	(i)	Describe any liabilities, including rehabilitation guarantees that are pertinent to the project. Provide a description of the rehabilitation liabiity, including, but not limited to, legislative requirements, assumptions and limitations.			CIM

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 2: Geological Setting, Deposit, Mineralisation						
2.1	Geological Setting, Deposit, Mineralisation	(i)	Describe the regional geology.			SAMREC T4.1 A (i)
		(ii)	Describe the project geology including deposit type, geological setting and style of mineralisation.			JORC
		(iii)	Discuss the geological model or concepts being applied in the investigation and on the basis of which the exploration program is planned. Describe the inferences made from this model.			CIM
		(iv)	Discuss data density, distribution and reliability and whether the quality and quantity of information are sufficient to support statements, made or inferred, concerning the exploration target or deposit.			SAMREC T4.1 A (iii)
		(v)	Discuss the significant minerals present in the deposit, their frequency, size and other characteristics. Includes minor and gangue minerals where these will have an effect on the processing steps. Indicate the variability of each important mineral within the deposit.			
		(vi)	Describe the significant mineralised zones encountered on the property, including a summary of the surrounding rock types, relevant geological controls, and the length, width, depth, and continuity of the mineralisation, together with a description of the type, character, and distribution of the mineralisation			Ni43-101
		(vii)	Confirm that reliable geological models and / or maps and cross sections that support interpretations exist.			SAMREC T4.1 A (iv)
			Exploration Results	**Mineral Resources**	**Mineral Reserves**	
Section 3: Exploration and Drilling, Sampling Techniques and Data						
3.1	Exploration	(i)	Describe the data acquisition or exploration techniques and the nature, level of detail, and confidence in the geological data used (i.e. geological observations, remote sensing results, stratigraphy, lithology, structure, alteration, mineralisation, hydrology, geophysical, geochemical, petrography, mineralogy, geochronology, bulk density, potential deleterious or contaminating substances, geotechnical and rock characteristics, moisture content, bulk samples etc.). Data sets should include all relevant metadata, such as unique sample number, sample mass, collection date, spatial location etc.			SAMREC T2.3 A (i), SAMREC T2.1 A (i)
		(ii)	Identify and comment on the primary data elements (observation and measurements) used for the project and describe the management and verification of these data or the database. This should describe the following relevant processes: acquisition (capture or transfer), validation, integration, control, storage, retrieval and backup processes. It is assumed that data are stored digitally but hand-printed tables with well organized data and information may also constitute a database.			CIM
		(iii)	Acknowledge and appraise data from other parties and reference all data and information used from other sources.			SAMREC T2.3 A (ii)
		(iv)	Clearly distinguish between data / information from the property under discussion and that derived from surrounding properties			CIM
		(v)	Describe the survey methods, techniques and expected accuracies of data. Specify the grid system used.			SAMREC T2.2 A (i)
		(vi)	Discuss whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the estimation procedure(s) and classifications applied.			JORC
		(vii)	Present representative models and / or maps and cross sections or other two or three dimensional illustrations of results should exist, showing location of samples, accurate drill-hole collar positions, down-hole surveys, exploration pits, underground workings, relevant geological data, etc			SAMREC T2.2 A (if)
		(viii)	As the relationships between mineralisation widths and intercept lengths are particularly important, the geometry of the mineralisation with respect to the drill hole angle must be reported. If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (e.g. 'down-hole length, true width not known').			JORC and PERC
3.2	Drilling Techniques	(i)	Present the type of drilling undertaken (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Banka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).			JORC
		(ii)	Describe whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.			JORC
		(iii)	Describe whether logging is qualitative or quantitative in nature; indicate if core photography. (or costean, channel, etc) was undertaken			JORC

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
		(iv)	Present the total length and percentage of the relevant intersections logged.		
		(v)	Results of any downhole surveys of the drill hole to be discussed.		

JORC

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
3.3	Sample method, collection, capture and storage	(i)	Describe the nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.			JORC
		(ii)	Describe the sampling processes, including sub-sampling stages to maximize representivity of samples. This should include whether sample sizes are appropriate to the grain size of the material being sampled. Indicate whether sample compositing has been applied.			SAMREC T3.3 A (iv), JORC
		(iii)	Appropriately describe each data set (e.g. geology, grade, density, quality, diamond breakage, geo-metallurgical characteristics etc.), sample type, sample-size selection and collection methods			SAMREC T3.2 A (i)
		(iv)	If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported. State whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the intersection angle is not known and only the downhole lengths are reported, that should be stated.			SAMREC T3.2 A (iii), JORC
		(v)	Describe retention policy and storage of physical samples (e.g. core, sample reject, etc.)			SAMREC T3.2 A (v)
		(vi)	Describe the method of recording and assessing core and chip sample recoveries and results assessed, measures taken to maximise sample recovery and ensure representative nature of the samples and whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.			JORC
		(vii)	If a drill-core sample is taken, state whether it was split or sawn and whether quarter, half or full core was submitted for analysis. If a non-core sample, state whether the sample was riffled, tube sampled, rotary split etc. and whether it was sampled wet or dry.			SAMREC T3.3 A (iii)
3.4	Sample Preparation and Analysis	(i)	Identify the laboratory(s) and state the accreditation status and Registration Number of the laboratory. Laboratories should be appropriately accredited. If not, this fact should be disclosed.			SAMREC T3.4 A (ii)
		(ii)	Identify the analytical method. Discuss the nature, quality and appropriateness of the assaying and laboratory processes and procedures used and whether the technique is considered partial or total.			SAMREC T3.4 A (i), SAMREC T3.3 A (ii)
		(iii)	Describe the process and method used for sample preparation, sub-sampling and size reduction, and likelihood of inadequate or non representative samples (i.e. improper size reduction, contamination, screen sizes, granulometry, mass balance, etc.)			SAMREC T3.3 A (i)
3.5	Sampling Governance	(i)	Discuss the governance of the sampling campaign and process, to ensure quality and representivity of samples and data, such as sample recovery, high grading, selective losses or contamination, core/hole diameter, internal and external QA/QC, and any other factors that may have resulted in or identified sample bias.			SAMREC T3.1 A (i)
		(ii)	Describe the measures taken to ensure sample security and the Chain of Custody.			
		(iii)	Describe the validation procedures used to ensure the integrity of the data, e.g. transcription, input or other errors, between its initial collection and its future use for modelling (e.g. geology, grade, density, etc.)			SAMREC T3.2 A (iv)
		(iv)	Describe the audit process and frequency (including dates of these audits) and disclose any material risks identified.			SAMREC T3.4 A (iv), SAMREC T3.3 A (v).
3.6	Quality Control/Quality Assurance	(i)	Demonstrate that adequate field sampling process verification techniques (QA/QC) have been applied, e.g. the level of duplicates, blanks, reference material standards, process audits, analysis, etc. If indirect methods of measurement were used (e.g. geophysical methods), these should be described, with attention given to the confidence of interpretation.			SAMREC T3.2 A (ii), SAMREC T3.4 A (iii)
3.7	Bulk Density	(i)	Describe the method of bulk density determination with reference to the frequency of measurements, the size, nature and representativeness of the samples.			SAMREC T2.4 B (i)
		(ii)	If target tonnage ranges are reported then the preliminary estimates or basis of assumptions made for bulk density must be stated.			SAMREC T2.4 A (i)
		(iii)	Bulk density samples must be representative of the material for which a grade range is reported.			SAMREC T2.4 A (ii)
		(iv)	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity etc.), moisture and differences between rock and alteration zones within the deposit.			SAMREC T2.4 B (ii)
3.8	Bulk-Sampling and/or trial-mining	(i)	Indicate the location of individual samples (including map).			
		(ii)	The Size of samples, spacing/density of samples recovered should be described. Whether sample sizes and distribution are appropriate to the grain size of the material being sampled should be described.			

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
		(iii)	Describe the method of mining and treatment.		
		(iv)	Indicate the degree to which the samples are representative of the various types and styles of mineralisation and the mineral deposit as a whole.		

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 4: Estimation and Reporting of Exploration Results and Mineral Resources						
4.1	Geological model and interpretation	(i)	Describe the geological model, construction technique and assumptions that forms the basis for the Exploration Results or Mineral Resource estimate. Discuss the sufficiency of data density to assure continuity of mineralisation and geology and provide an adequate basis for the estimation and classification procedures applied.			SAMREC T4.1 B (i)
		(ii)	Describe the nature, detail and reliability of geological information with which lithological, structural, mineralogical, alteration or other geological, geotechnical and geo-metallurgical characteristics were recorded.			SAMREC T4.1 B (ii) expanded from PERC
		(iii)	Describe any obvious geological, mining, metallurgical, environmental, social, infrastructural, legal and economic factors that could have a significant effect on the prospects of any possible exploration target or deposit.			SAMREC 5.4 A (i) expanded SAMREC T5.7 A (i) SAMREC T 5.2 A (i), B (ii),
		(iv)		Discuss geological data that could materially influence the estimated quantity and quality of the Mineral Resource.		SAMREC T2.3 B (i)
		(v)		Discuss whether consideration was given to alternative interpretations or models and their possible effect (or potential risk) if any, on the Mineral Resource estimate.		SAMREC T4.1 B (iii)
		(vi)		Discuss geological discounts (e.g. magnitude, per reef, domain, etc.), applied in the model, whether applied to mineralized and / or un-mineralized material (e.g. potholes, faults, dykes, etc).		SAMREC T4.1 B (iv)
4.2	Estimation and modelling techniques	(i)	The estimation techniques and assumptions used to determine the grade and tonnage ranges must be described in detail.			SAMREC T4.2 A (i)
		(ii)		Discuss the nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values (cutting or capping), compositing (including by length and/or density), domaining, sample spacing, estimation unit size (block size), selective mining units, interpolation parameters and maximum distance of extrapolation from data points.		SAMREC T4.2 B (i) simplified and expanded from JORC
		(iii)		Describe assumptions and justification of correlations made between variables.		SAMREC T4.2 B (ii)
		(iv)		Any relevant specialized computer program (software) used should be named (with the version number) together with the parameters used.		SAMREC T4.2 B (iv) expanded JORC
		(v)		State the processes of checking and validation, the comparison of model information to sample data and use of reconciliation data, and whether the Mineral Resource estimate takes account of such information.		SAMREC T4.2 B (v)
		(vi)		Describe the assumptions made regarding the estimation of any co-products, by-products or deleterious elements.		SAMREC T4.2 B (vi) expanded
4.3	Reasonable and realistic prospects for eventual economic extraction	(i)		Discuss and justify the geological parameters. These would include (but not be limited to) volume / tonnage, grade and value / quality estimates, cut-off grades, strip ratios, upper- and lower- screen sizes.		
		(ii)		Discuss and justify the engineering parameters. These would include mining method, processing, geotechnical, geohydraulic and metallurgical) parameters.		
		(iii)		Discuss and justify the infrastructural including, but not limited to, power, water, site-access.		
		(iv)		Discuss and justify the legal, governmental, permitting, statuary parameters.		
		(v)		Discuss and justify the environmental and social (or community) parameters.		
		(vi)		Discuss and justify the marketing parameters.		
		(vii)		Discuss and justify the economic assumptions and parameters. These factors will include, but not limited to, commodity prices and potential capital and operating costs		

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
		(viii)		Discuss any material risks	
		(ix)		Discuss the parameters used to support the concept of "eventual"	

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
4.4	Classification Criteria	(i)		Describe and justify criteria and methods used as the basis for the classification of the Mineral Resources into varying confidence categories.		SAMREC T7 B (i)
4.5	Reporting	(i)	State assumptions regarding mining methods, infrastructure, metallurgy, environmental and social parameters. Where no mining realted assumptions have been made, this should be explained.			
		(ii)	Specific quantities and grades / qualities should be reported in ranges and/or widths, the basis of which should be explained to avoid misleading reporting.			SAMREC T7 A (i) expanded JORC and PERC
		(iii)		The Mineral Resource statement must include detail for example open pit, underground, residue stockpile, remnants, tailings, and existing pillars or other sources		SAMREC T8 B (ii)
		(iv)		The report must include a reconciliation with the previous Mineral Resource estimates. Where appropriate, report and comment on any historic trends (e.g. global bias).		SAMREC T8 B (iv) simplification
		(v)		The tonnages and grades reported as Mineral Resources must be to a defined reference point. Where the reference point is the point where the run of mine material is delivered to the processing plant, it must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.		
		(vi)	If applied, the basis of equivalent metal formulae should be reported.			

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 5: Technical Studies						
5.1	Introduction	(i)	Technical Studies are not applicable to Exploration Results	State the level of study – whether scoping, prefeasibility, feasibility or ongoing Life of Mine	State the level of study – whether prefeasibility, feasibility or ongoing Life of Mine. The Code requires that a study to at least a Pre-Feasibility level has been undertaken to convert Mineral Resource to Mineral Reserve. Such studies will have been carried out and will include a mine plan or production schedule that is technically achievable and economically viable, and that all Modifying Factors have been considered.	T5 SAMREC
		(ii)			For Pre-feasibility, Feasibility or on-going life-of-mine studies, the CP must provide a summary table (Table X) of the Modifying Factors used to convert the Mineral Resource to Mineral Reserve	
5.2	Mining Design	(i)	Technical Studies are not applicable to Exploration Results	State assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no mining assumptions have been made, this should be explained.		SAMREC T5.4 B (iii)
		(ii)			State and justify all modifying factors and assumptions made regarding mining methods, minimum mining dimensions (or pit shell) and internal and, if applicable, external) mining dilution and mining losses used for the techno-economic study and signed-off, such as mining method, mine design criteria, infrastructure, capacities, production schedule, mining efficiencies, grade control, geotechnical and hydrological considerations, closure plans, and personnel requirements.	SAMREC T5.4 B (i), SAMREC T5.4 C (i)
		(iii)			State what mineral resource models have been used in the study.	SAMREC T5.4 C (i)
		(iv)			The basis of (the adopted) cut-off grade(s) or quality parameters applied should be explained. Include metal equivalents if relevant	SAMREC T5.4 B (iii)
		(v)			Description and justification of mining method(s) to be used.	SME
		(vi)			For open-pit mines, include a discussion of pit slopes, slope stability, and strip ratio.	SME
		(vii)			For underground mines, discussion of mining method, geotechnical considerations, mine design characteristics, and ventilation/cooling requirements.	SME
		(viii)			Discussion of mining rate, equipment selected, grade control methods, geotechnical and hydrogeological considerations, health and safety of the workforce, staffing requirements, dilution, and recovery.	SME

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
		(ix)			State the optimisation methods used in planning, list of constraints (practicality, plant, access, exposed Mineral Reserves, stripped Mineral Reserves, bottlenecks, draw control).	SAMREC T5.4 C (iii)

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
5.3	Metallurgical and Testwork	(i)	Technical Studies are not applicable to Exploration Results		Discuss the source of the sample and the techniques to obtain the sample, laboratory and metallurgical testing techniques.	
		(ii)			The basis for assumptions or predictions regarding metallurgical amenability and any preliminary mineralogical test work should already be carried out.	SAMREC T5.5 B (ii)
		(iii)		Discuss the possible processing methods and any processing factors that could have a material effect on the likelihood of eventual economic extraction. Discuss the appropriateness of the processing methods to the style of mineralisation.	Describe and justify the processing method(s) to be used, equipment, plant capacity, efficiencies, and personnel requirements.	SAMREC T5.5 C (i), SAMREC 5.5 B(i) left out 'level of study'
		(iv)			Discuss the nature, amount and representativeness of metallurgical test work undertaken and the recovery factors used. A detailed flow sheet / diagram and a mass balance should exist ,especially for multi-product operations from which the saleable materials are priced for different chemical and physical characteristics.	SAMREC T5.5 C (ii)
		(v)			State what assumptions or allowances have been made for deleterious elements and the existence of any bulk-sample or pilot-scale test work and the degree to which such samples are representative of the ore body as a whole.	SAMREC T5.5 C (iii)
		(vi)			State whether the metallurgical process is well-tested technology or novel in nature.	
5.4	Infrastructure	(i)	Technical Studies are not applicable to Exploration Results	Comment regarding the current state of infrastructure or the ease with which the infrastructure can be provided or accessed		
		(ii)			Report in sufficient detail to demonstrate that the necessary facilities have been allowed for (which may include, but not be limited to, processing plant, tailings dam, leaching facilities, waste dumps, road, rail or port facilities, water and power supply, offices, housing, security, resource sterilisation testing etc.). Detailed maps showing locations of facilities should exist.	Jorc 2012 SAREC 5.6 C (i)
		(iii)			Statement showing that all necessary logistics have been considered.	SAMREC T5.6 C (iii)

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
5.5	Environmental and Social	(i)	Technical Studies are not applicable to Exploration Results	Confirm that the company holding the tenemant has addressed the host country environmental legal compliance requirements and any mandatory and/or voluntary standards or guidelines to which it subscribes		SAMREC T 5.2 A (i), B (ii),
		(ii)		Identify the necessary permits that will be required and their status and where not yet obtained make, confirm that there is a reasonable basis to believe that all permits required for the project will be obtained		SAMREC T 5.2 C (v)
		(iii)		Identify and discuss any sensitive areas that may affect the project as well as any other environmental factors including I&AP and/or studies that could have a material effect on the likelihood of eventual economic extraction. Discuss possible means of mitigation.		SAMREC T 5.2 C (ii)
		(iv)		Identify any legislated social management programmes that may be required and content and status of these.		
		(v)		Outline and quantify the material socio-economic and cultural impacts that need to be mitigated, and their mitigation measures and where appropraite the associated costs.		SAMREC T5.3 C (i)
5.6	Market Studies and Economic criteria	(i)			Describe the valuable and potentially valuable product(s) including suitability of products, co-products and by products to market.	SAMREC T5.8 A (i)
		(ii)			Describe product to be sold, customer specifications, testing, and acceptance requirements. Discuss whether there exists a ready market for the product and whether contracts for the sale of the product are in place or expected to be readily obtained. Price and volume forecasts and the basis for the forecast.	SAMREC T5.8 A (i) SAMREC T5.8 C (i)
		(iii)			State, describe and justify all economic criteria that have been used for the study such as capital and operating costs, exchange rates, revenue / price curves, royalties, cut-off grades, reserve pay limits.	SAMREC T5.7 C (ii)
		(iv)			Summary description, source and confidence of method used to estimate the commodity price/value profiles used for cut-off grade calculation, economic analysis and project valuation, including applicable taxes, inflation indices, discount rate and exchange rates.	SAMREC T5.7 C (iii)

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
		(v)	Technical Studies are not applicable to Exploration Results		The tonnages and grades reported as Mineral Reserves must be in respect of a point of reference (e.g. material delivered to the processing facility or saleable product(s)). It is important that, in any situation where the reference point is different, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.	SAMREC T5.5 C (iii) expanded detail

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
		(vi)			Justify assumptions made concerning production cost including transportation, treatment, penalties, exchange rates, marketing and other costs. Allowances should be made for the content of deleterious elements and the cost of penalties.	SAMREC T5.7 C (iv)
		(vii)			Allowances should be made for royalties payable, both to Government and private.	SAMREC T5.7 C (v)
		(viii)			State assessment of value, ownership, type, extent and condition of plant and equipment that is significant to the existing operation(s).	SAMREC T5.6 C (ii)
		(ix)			All environmental, social and labour costs should be considered	
5.7	Risk Analysis	(i)	Technical Studies are not applicable to Exploration Results	Report an assessment of technical, environmental, social, economic, political and other key risks to the project. Describe actions that will be taken to mitigate and/or manage the identified risks.		SAMREC T6 A, B, and C SAMREC T6 B (i) - T5.1 SAMREC included here
5.8	Economic Analysis		Technical Studies are not applicable to Exploration Results	At the relevant level (Scoping Study, Pre-feasibility, Feasibility or on-going Life-of Mine), provide an economic analysis for the project that includes:		
		(ii)		Cash Flow forecast on an annual basis using Mineral Reserves or Mineral Resources OR an annual production schedule for the life of the project		SAMREC T5.7 C (iii) NI43-101
		(iii)		A discussion of net present value (NPV), internal rate of return (IRR) and payback period of capital		SAMREC T5.7 C (iii) NI43-101
		(iv)		Sensitivity or other analysis using variants in commodity price, grade, capital and operating costs, or other significant parameters, as appropriate and discuss the impact of the results.		SAMREC T5.7 C (iii) NI43-101

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 6: Estimation and Reporting of Mineral Reserves						
6.1	Estimation and modelling techniques	(i)		Describe the Mineral Resource estimate used as a basis for the conversion to a Mineral Reserve.		SAMREC T8 C (i)
		(ii)		A comparison between the two possibilities, the one with inclusion and the one without inclusion, should be fully explained in the Public Report in such a way so as not to mislead the investors.		SAMREC T8 C (iii)
		(iii)		The Mineral Reserve Statement should be reported with sufficient detail indicating if the mining is open pit or underground plus the source and type of mineralisation, domain or ore body, surface dumps, stockpiles and all other sources.		SAMREC T8 C (iv)
		(Iv)			Reconciliation - Report historic reliability and reconciliation of the performance parameters, assumptions and modifying factors. This should include a comparison with the previous Reserve quantity and qualities, if available. Where appropriate, report and comment on any historic trends (e.g. global bias)	SAMREC T8 C (vi)
6.2	Classification Criteria	(i)			Describe and justify criteria and methods used as the basis for the classification of the Mineral Reserves into varying confidence categories, which should be based on the Mineral Resource category, and include consideration of the confidence in all the modifying factors.	SAMREC T7 C (i)

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
6.3	Reporting	(i)			Discuss the proportion of Probable Mineral Reserves, which have been derived from Measured Mineral Resources (if any), including the reason(s) therefore.	SAMREC T7 C (ii)
		(ii)			The Mineral Reserve statement must include detail for example open pit, underground, residue stockpile, remnants, tailings, and existing pillars or other sources	SAMREC T8 C (iv)
		(iii)			The tonnages and grades reported as Mineral Reserves must be to a defined reference point. Where the reference point is the point where the run of mine material is delivered to the processing plant, it must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The tonnages and grades reported for Mineral Reserves should state clearly whether these are in respect of material delivered to the plant or after recovery.	
		(iv)			The report must include a reconciliation with the previous Mineral Reserve estimates. Where appropriate, report and comment on any historic trends (e.g. global bias).	SAMREC T8 C (vi)
		(v)			Only Measured and Indicated Mineral Resources can be considered for inclusion in the Mineral Reserve.	SAMREC T7 C (iii)
		(vi)			Mineral Resources should be stated as inclusive or exclusive of Mineral Reserves.	SAMREC T8 B (i)

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 7: Audits and Reviews						
7.1	Audits and Reviews	(i)	State type of review/audit (e.g. independent, external), area (e.g. laboratory, drilling, data, environmental compliance etc), date and name of the reviewer(s) together with their recognized professional qualifications.			SAMREC T9 A (ii)
		(ii)	Disclose the conclusions of relevant audits or reviews. Note where significant deficiencies and remedial actions are required.			SAMREC T9 A (i)
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 8: Other Relevant Information						
8.1		(i)	Discuss all other relevant and material information not discussed elsewhere.			
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 9: Qualification of Competent Person(s) and other key technical staff. Date and Signature Page						
9.1		(i)	State the full name, registration number and name of the professional body or RPO, of which he or she is a member of all the Competent Person(s). State the relevant experience, of the Competent Person(s) and other key technical staff who prepared and are responsible for the Public Report.			SAMREC T11 A (i)
		(ii)	The Competent Person's relationship to the issuer of the report, if any, should be clearly defined.			SAMREC T11 A (ii)
		(iii)	The Public Report should include the Certificate of the Competent Person. Such page should include the date of sign-off and the effective date of the report.			

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
			Exploration Results	Mineral Resources	Mineral Reserves	
Section 10: Reporting of for Coal Resources and Reserves						
11.1	Specific Reporting for Coal	(i)	Reports on coal deposits must also take cognisance of sections 54-74 of the Code and Sections 1 - 9 of Table 1.			
		(ii)	Coal Exploration Results, Coal Inventory, Coal Resources and Coal Reserves must be reported using the South African National Standard 10320 : 2015 as the guideline			
11.2	Geological Setting, Deposit, Mineralisation	(i)	Describe the project geology including coal deposit type, geological setting and coal seams / zones present.			replaces 2.1 (ii)
		(ii)	Identify and discuss the structural complexity, physical continuity, coal rank, qualitative and quantitative properties of the significant coal seams or zones on the property.			replaces 2.1 (v) & (vi)
11.3	Drilling Techniques	(i)	Report core recoveries and method of calculation. Core recoveries in cored boreholes must be in excess of 95% by length within the coal seam intersection.			replaces 3.2 (iv)
	Relative Density to replace Bulk Density	(ii)	Describe the apparent relative density or true relative density of the coal seam(s) determined on coal samples from borehole cores using recognized standard laboratory methods or commonly used procedures. The moisture basis on which the relative density determination is based and the moisture basis on which the final density value is reported (in situ or air-dried basis), must be stated.			replaces 3.7 (i - iv)
	Bulk-Sampling and/or trial-mining	(iii)	Describe the purpose or aim of the bulk sampling programme, the size of samples, spacing/density of samples recovered. Describe the applicability of bulk sampling or large diameter core samples towards providing representative samples for tests. Compare and comment on results obtained from bulk sampling versus exploration sampling.			replaces 3.8 (ii)
11.4	Reasonable and realistic prospects for	(i)	The appropriate coal quality must be reported for all Coal Resource categories. The type of analysis (e.g. raw coal, washed coal at a specific cut-point density) and the basis of reporting of the coal quality parameters (e.g. air-dried basis, dry basis, etc.) must be reported.			adds to 4.3
11.5	Coal Resource Reporting	(i)		The appropriate coal quality must be reported for all Coal Resource categories. The type of analysis (e.g. raw coal, washed coal at a specific cut-point density) and the basis of reporting of the coal quality parameters (e.g. air-dried basis, dry basis, etc.) must be reported.		adds to 4.5
		(ii)		A Coal Resource only includes the coal seam(s) above the minimum thickness cut-off and the coal quality cut-off(s). The MTIS Coal Resource tonnage and quality must be reported.		adds to 4.5
		(iii)		State the reporting basis for the Coal Resource statement with particular reference to moisture and relative density.		adds to 4.5
		(i)			State the reporting basis for the Coal Reserve statement with particular reference to moisture and relative density.	Add to 6.3

SAMREC TABLE 1						
			Exploration Results	Mineral Resources	Mineral Reserves	
11.6	Coal Reserve Reporting	(ii)			The Reserves must be reported as ROM tonnages and coal quality, and also as Saleable product/s tonnages and coal quality. The reporting basis for the Coal Reserve statement must be stated with particular reference to moisture content and relative density.	Add to 6.3

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
			Exploration Results	Mineral Resources	Mineral Reserves
Section 11: Reporting of Diamonds and Gemstones					
10.1	Specific Reporting for Diamonds and Gemstones	(i)	Criteria applicable to diamond deposits are also applicable to other gemstone deposits.		
		(ii)	Reports of diamond and other gemstone properties must also take cognisance of sections 59-77 of the Code and Sections 1 - 9 of Table 1.		
10.2	Geological Setting, Deposit, Mineralisation	(i)	Discuss the nature of the source of the diamonds, including the rock type and geological environment.		
10.3	Sampling of Diamond Projects	(i)	Describe the type of sample (outcrop, boulder, drill-core, RC drill cuttings, gravel, stream sediment or soil) and purpose (for example: RC drilling to identify gravel thickness, large diameter drilling to establish stones per unit of volume, bulk-sample, etc.)		
		(ii)	Discuss sample size, distribution and representivity		
		(iii)	Identify the type of sample facility, treatment rate and accreditation		
		(iv)	Discuss sample size reduction, bottom and top screen sizes and any re-crush		
		(v)	Discuss the sample processes (e.g. DMS, grease, X-Ray, Hand-sorting, etc.)		
		(vi)	Discuss process efficiency, tailings auditing and granulometry		
		(vii)	Identify the laboratory used, type of process for micro-diamonds and accreditation. Reports of microdiamond recoveries should specify both the number of stones recovered and the top and bottom screen or crushing sizes used in the recovery process.		
		(viii)	Reports of kimberlitic indicator minerals (KIM's), such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory which must be identified.		
		(ix)	Reported recoveries of diamonds or KIM's from all samples must be accompanied by details of the sampling parameters used – type of sample (stream sediment, soil, bulk, rock, etc.) as well as sample size, sample frequency, representivity and screen parameters are required.		
		(x)	Discuss the relevant major and trace lement chemistry of any kimberlitic indicator minerals recovered. Relevant peer-reviewed published research articles should be referenced when reporting the interpretation of mineral chemistry data for diamond exploration projects. NOTE: Mineral chemistry does not provide direct grade or diamond value information, and may not be used to infer these parameters for Mineral Resource estimation purposes.		
		(xl)	Where diamonds have been recovered, provide details of the form, shape, colour and size of the diamonds and, where relevant, comments regarding the nature of the source of the diamonds		
10.4	Bulk-Sampling and/or trial-mining	(i)	Relevant results should be tabulated, including (but not limited to) volume of sample, number of individual diamonds, total number of carats, sample grade, diamond value (it is not possible to evaluate diamond quality from microdiamonds).		
		(ii)	Micro and macro diamond sample results per geological domain.		
		(iii)	Discuss stone-size and -number distribution.		
		(iv)	The lower cut-off size should be stated.		
		(v)	A carat (diamond) is defined as one fifth of a gram (0.2g) – often described as a metric carat. Any deviation from this standard must be explained in detail. Sample grade is used in the context of carats per units of mass, area or volume. The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metric tonnes. For placer deposits, sample grades quoted in carats per tonne or carats per m^3 are acceptable. In the marine placer environment Diamond Reserve grades are, typically, reconciled on a per m^2 basis.		

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
10.5	Estimation and Modelling Techniques	(i)	Estimation techniques (including geostatistical estimation, where relevant) used to determine the volume/tonnage, grade and value data should be described in detail, including their applicability to the deposit type.		
		(ii)	Applicable volumes, grades and values must be expressed in ranges (with appropriate clarifiers to denote lack of reliability of data).	Diamond Resource estimates are not precise calculations, and estimates of tonnage/volume, grade and value must be expressed so as to convey the order of accuracy of the estimates by rounding off to appropriately significant figures.	Diamond Reserve estimates are not precise calculations, and estimates of tonnages/volumes, grades and values must be expressed so as to convey the order of accuracy of the estimates by rounding off to appropriately significant figures.
		(iii)	If grades are reported then it should be stated clearly whether these are regional averages, based on microdiamond assessment, KIM analyses, or if they are selected individual samples taken from the property under discussion.	Grades for Diamond Resources must be estimated from bulk-sampling (or extrapolated from microdiamond data) derived from the property itself	Grades for Diamond Reserves must be estimated from bulk-sampling and/or trial-mining
		(iv)	If grades are reported then it should be stated clearly whether these are regional averages or if they are selected individual samples taken from the property under discussion.		
		(v)	The occurrence of individual diamonds or microdiamonds in surficial deposits or from inadequate samples (too small to be statistically valid) from a primary or secondary rock source would not typically qualify as an exploration target. This may not be true for marine deposits, in which case further explanation and discussion would be necessary.		
		(vi)	Details of the type and size of samples which produced the diamonds must also be specified including lower cut-off size in millimetres used in the recovery.		
		(vii)	Discuss volume, grade and value estimation (including geostatistical, where relevant) and interpolation techniques applied and their applicability to the deposit type		
		(viii)	Reports of diamond properties must specify the number and total weight (in carats) of diamonds recovered. The weight of diamonds recovered may only be omitted from the report when the diamonds are less than 0.5mm in size (i.e. when the diamonds recovered are microdiamonds).		

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
10.6	Resource/ Reserve Classification Criteria	(i)		A Diamond Resource / Reserve must be described in terms of volume/tonnage, grade and value. A Diamond Resource / Reserve must not be reported in terms of contained diamond content unless corresponding tonnages / volumes, grades and values are also reported. The average diamond grade and value must not be reported without specifying the applicable Bottom Cut-off Screen Size.	
		(ii)		In addition to general requirements to assess volume and density there may be a need to relate stone frequency (stones per cubic metre, per tonne, or per square metre) to stone size (carats per stone) to derive grade (carats per cubic metre, per tonne or per square metre). The elements of uncertainty in these estimates should be considered, and Diamond Resource classification developed accordingly.	
		(iii)		Present aspects of:- - Micro and macro diamond sample results per domain, - Global sample grade per geological domain and local block estimates in the case of Indicated Resources, - Spatial structure analysis and grade distribution, - Stone size and number distribution, - Effect on sample grade with change in bottom cut off screen size.	
		(iv)		<u>Sample grade</u> - The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metric tonnes. - For alluvial deposits, sample grades quoted in carats per (100) square metre or carats per (100) cubic metre are acceptable and should be accompanied by a volume to weight basis for calculation, where relevant. - Adjustments made to size distribution for sample plant performance and performance on a commercial scale, - The total number of diamonds and the total weight of diamonds greater than the specified and reported bottom cut-off sieve size must be reported. - The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. - This lower cut-off size should be stated.	

SAMREC TABLE 1					
			Exploration Results	Mineral Resources	Mineral Reserves
		(v)		Value - Diamond valuation is a highly specialized process and is only possible on parcels containing appropriate numbers of Macrodiamonds. - It is not possible to evaluate diamond quality from microdiamonds. - Classification of diamonds as, for example, gem, or near gem and industrial, should be made by recognized experts. - Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing kimberlite exploration samples. - The number of stones and the total number of carats used in the grade and value estimation should be disclosed and accompanied by a discussion of the validity of this data. - the accreditation of the Valuer should be disclosed. Valuations of partial parcels of diamonds should not be used as a basis for the estimation of average revenue from a diamond deposit - Details of parcel valued, number of stones, carats and size distribution using a standard progression of sieve sizes for each identified geological domain. - Average valuation per sieve size. - Estimation of value with size. - Assessment of diamond breakage. - Average USD/carat and/or USD/tonne value with change in bottom cut-off. - Minimum parcel size for representative valuation. - Has a strict bottom cut-off been applied or does the modelled value include incidental diamonds below the bottom cut-off? - The basis for the price (e.g. dealer buying price, dealer selling price, etc.) should also be stated	
10.7		(i)	Whether samples were sealed after excavation and the chain of custody from source to reporting of results		
		(ii)	Security standards in sampling plant and recovery sections of bulk-sampling/trial-mining programmes for macrodiamonds		
		(iii)	Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones;		
		(iv)	Core samples washed prior to treatment for micro-diamonds and use of diamond drill-bits		
		(v)	Audit samples treated at alternative facilities		
		(vi)	Results of tailings checks		
		(vii)	Recovery of tracer monitors used in sampling and treatment		
		(viii)	Geophysical (logged) density and particle density		
		(ix)	Cross-validation of sample weights, wet and dry, with hole volume and density, moisture factor		
			Exploration Results	**Mineral Resources**	**Mineral Reserves**
Section 12: Reporting of Industrial Minerals					
12.1	Specific for Reporting of Industrial Minerals	(i)	Reports on Industrial Mineral deposits must also take cognisance of Sections 80 of the Code and Sections 1 - 9 of Table 1.		
		(ii)	Describe the exploration or geologically specific specialised industry techniques appropriate to the minerals under investigation		
		(iii)	Describe the nature and quality of sampling or specific specialised industry standard measurement tools appropriate to the minerals under investigation		
		(iv)	Describe the appropriate saleable product qualities that must be reported. The basis for reporting (physical or chemcal paprametrs, air-dried basis, dry basis, etc.) must be reported. Reporting of delerious chemical elementes or physicxl parameters is required.		
		(v)	State assumptions regarding in particualr mining methods, infrastructure, metallurgy, environmental and social parameters. Where no mining realted assumptions have been made, this should be explained.		
		(vi)	Discuss and justify the marketing parameters, customer specifications, testing, and acceptance requirements.		

SAMREC TABLE 1				
		Exploration Results	Mineral Resources	Mineral Reserves
	(vii)	Discuss the nature, amount and representativeness of metallurgical studies completed which form the basis for the various saleable materials which may be priced for different chemical and physical characteristics.		
	(viii)	The tonnages and grades/qualities must be reported to a defined reference point. Where the reference point is the point is a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The tonnages and grades/qualities reported should state clearly whether these are in respect of material delivered to the plant or after recovery.		

			Exploration Results	Mineral Resources	Mineral Reserves
Section 13: Reporting using Metal Equivalents					
13.1	Specific for Metal Equivalents Reporting	(i)	Reports on all deposits must also take cognisance of Sections 81 of the Code and Sections 1 - 9 of Table 1.		
		(ii)		Discuss and describe the basis for the grade estimation for each metal relating to the metal equivalence	
		(iii)		Disclose all economic criteria that have been used for the calculation such as exchange rates, revenue / price curves, royalties, cut-off grades, pay limits.	
		(iv)		Discuss the basis for assumptions or predictions regarding metallurgical factors such as recovery used in the metal equivalents calculation.	
		(v)		Show the calculation formula used.	