## SUMMARY OF THE JORC CODE AND CIM STANDARDS

The mineral resource and reserve statements in this prospectus have been prepared in accordance with the JORC Code, while reconciliations under the CIM Standards are also set forth in the Independent Technical Reports. The following summarizes the JORC Code and CIM Standards. There is no material difference between the two classification systems other than that under the CIM Standards, the inferred mineral resource cannot be combined with measured and indicated resources, whereas under the JORC Code, the measured, indicated and inferred resources may be combined in resource statement.

### THE JORC CODE

The JORC Code is an internationally accepted mineral resource/ore reserve classification system established in Australia. It was first published in February 1989 and most recently revised in December 2004. The JORC Code is commonly used in independent technical reports for mineral resource and ore reserve statements of public companies reporting to the Stock Exchange.

The JORC Code defines "mineral resource" as a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are subdivided, in order of decreasing geological confidence, into measured, indicated and inferred categories, which are further described as follows:

- measured mineral resource. This category is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity;
- indicated mineral resource. This category is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed; and
- inferred mineral resource. This category is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed, but not verified, geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

The JORC Code defines "ore reserve" as the economically mineable part of a measured and/or indicated mineral resource. The JORC Code deems inferred mineral resources to be too poorly delineated to be transferred into an ore reserve category. Reserves must account for diluting materials and losses which may occur when the material is mined. In order to declare reserves an issuer must also complete relevant assessments and studies, including consideration of and modification by

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realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and government factors. This includes an assessment of mining dilution, mining losses and a comprehensive level of mine planning, design and scheduling. These assessments need to demonstrate at the time of reporting that extraction of the applicable measured and indicated resources that form the basis of the reserves could reasonably be justified. Ore reserves are sub-divided in order of decreasing confidence into proven ore reserves and probable ore reserves, which are further described as follows:

- proved ore reserve. This category is the economically mineable part of a measured mineral resource which has the highest confidence category of reserve estimates. The style of mineralization or other factors could mean proved ore reserves are not achievable in some deposits; and
- probable ore reserve. This category is the economically mineable part of an indicated mineral resource, and in some circumstances, a measured mineral resource which has a lower level of confidence than proved ore reserves, but is of sufficient quality to serve as the basis for a decision on the development of the deposit.

The following diagram summarises the general relationship between exploration results, mineral resources and ore reserves under the JORC Code:



Ore reserves are generally quoted as comprising a portion of the total mineral resource rather than the mineral resources being additional to the ore reserves quoted. Under the JORC Code either procedure is acceptable, provided the method adopted is clearly identified.

#### THE CIM STANDARDS

NI 43-101 was initially enacted in February 2001, and most recently revised in December 2005. NI 43-101 is the primary rule governing mineral property disclosure under Canadian securities laws. NI 43-101, in turn, adopts the CIM Standards for the reporting of resource and reserve disclosure under NI 43-101. Accordingly, mineral resource and reserve reporting by public companies in Canada needs to conform to CIM Standards.

The resource and reserve classification system of CIM Standards is very similar to that of the JORC Code. Under CIM Standards, a "mineral resource" is defined as a concentration or occurrence of diamonds, natural, solid, inorganic or fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or

# SUMMARY OF THE JORC CODE AND CIM STANDARDS

quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Under CIM Standards, mineral resources are subdivided, in order of decreasing geological confidence, into measured, indicated and inferred categories, which are further described as follows:

- measured mineral resource. This category is that part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
- indicated mineral resource. This category is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
- inferred mineral resource. This category is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

A mineral reserve is the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve must also include diluting materials and allowances for losses that may occur when the material is mined. Ore reserves are subdivided in order of decreasing confidence into proven reserves and probable reserves, which are further described as follows:

- probable mineral reserve. This category is the economically mineable part of an indicated, and in some circumstances a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.
- proven mineral reserve. This category is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.