GLOSSARY OF TERMS

AE	Autorisation d'exploration;
Alteration	changes in the composition of a rock, generally chemical or mineralogical, brought about by weathering or hydrothermal activity;
Andesite	a volcanic rock of intermediate composition;
Archaean	the oldest of the two divisions of the pre-cambrian era, older than 2 500 million years ago;
Argillites	a fine grained sedimentary rock;
Arkose	a sedimentary rock with >25% feldspar content
Arsenopyrite	a sulphide mineral of arsenic and iron (Fe AsS);
Birrimian	geological time era, about 2.1 billion years ago in which a suite of rocks characteristic to West Africa formed;
Breccia/brecciation	rock type, formed from recrystallised fragments of other rocks;
Boudinage	a structure common in strongly deformed sedimentary and metamorphic rock, in which an original continuous competent layer or bed between less competent layers has been stretched, thinned and broken at regular intervals into bodies resembling boudius or sausages;
Carbon-in-leach (CIL)	a gold recovery process;
Conglomerate	a coarse-grained clastic sedimentary rock, composed of rounded to subangular fragments greater than 2mm in diameter, set in a matrix of sand or silt (consolidated equivalent of gravel);
Craton	a part of the earth's crust that has attained stability and has been little deformed for a long time;
Cut-off Grade	a grade level below which the ore is considered to be uneconomic;
Dextral	a structural geology term for the right hand movement of a fault;
Dilution	mixing of ore grade material with non-ore grade/waste material in the mining process;
Diorite	an intrusive igneous rock of intermediate composition;
Dip	inclination of a geological feature/rock from the horizontal;
Dipole	geophysical configuration;
DNGM	Direction Nationale de Géologie et des Mines;
EEP	Exclusive exploration permit;
EP	Exploitation permit;
Feldspar	a group of abundant rock-forming minerals;
Felsic	descriptive of a light-coloured rock containing an abundance of one or all of feldspar, quartz and felspathoids;
Footwall	the underlying side of an orebody;
GIS	Geographical information system - computer software capable of integrating spatially related data and querying the various relationships;
Gabbros	an intrusive igneous rock of basic composition;
Geothermal	the internal heat produced by the earth;
Gossans	surface weathering of sulphide minerals creating an iron rich cap;
Greywackes	a medium grained sedimentary rock;
g/t	grammes per metric tonne gold;
Granitoid	geological rock type;
Hangingwall	the overlying side of an orebody;
Hydrothermal	process of injection of heated or hot acqucous-rich solutions into existing rocks;
IP Survey	induced polarisation survey;
Indicated mineral resource	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 grade continuity but are spaced closely enough for geological continuity to be assumed;
Inferred mineral resource	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;
Intrusion	a rock produced by the emplacement and subsequent solidification of hot magma in pre-existing rock;
J.O.R.C. Code	the Australian code for reporting mineral resources and ore reserves;
Kriging	an interpolation method that minimises the estimation error in the determination of mineral resources;
Laminae	comprising of layers of minerals;
Lenticular	resembling in shape the cross section of a lens;

MDM	Metallurgical Design and Management;
Measured resource	that portion 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 workings and drill holes. The locations are spaced closely enough to confirm geological and/or grade continuity;
Metamorphism	alteration of rocks and minerals by a combination of heat, pressure and chemical processes over a long time period;
Metasediment	a sedimentary rock that has undergone metamorphism;
Metavolcanic	a volcanic rock that has undergone metamorphism;
Mineral resource	a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such a form 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 sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories;
Moz	million troy ounces;
Mt	million metric tonnes;
Ore reserve	the economically mineable part of a measured or indicated mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out and include consideration of and modification by realistically assumed, mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore reserves are sub-divided in order of increasing confidence into probable ore reserves and proved ore reserves;
Pegmatites	very coarse grained igneous rock usually granitic in composition;
PL	Prospecting licence;
PLR	Prospecting licence (reconnaissance);
Porphyry	a rock with conspicuous crystals in a fine-grained groundmass;
Probable ore reserve	the economically mineable part of an Indicated, and in some circumstances measured mineral resource, it includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out and include consideration of and modification by realistically assumed, mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified;
Proved ore reserve	the economically mineable part of a measured mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out and include consideration of and modification by realistically assumed, mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified;
Lower Proterozoic	era of geological time between 2.5 x 109 and 1.8 x 109 years before the present;
Regolith	fragmental and unconsolidated rock material overlying bedrock;
Resistivity	electrical property of rock;
ROM	Run of Mine - equivalent to normal feed ore from mining operations;
RP	Reconnaissance Permit;
Sedimentary	sourced from erosion of other rocks;
Shale	fine grained sedimentary rock;
Stripping ratio	ratio of waste material to ore material needed to be moved in an open pit mine;
Tailings	finely ground waste rock from which valuable minerals or metals have been extracted;
Tectonic	deformation within the earth's crust;
tpm	metric tonnes per month;
US$	United States dollar;
US$m	million United States dollars;
US$/oz	United States dollar per ounce;
Weathered	rock broken down by erosion;
Whittle 4D	an optimisation computer programme used for open pit mine design.