
GLOSSARY AND TECHNICAL TERMS

This glossary contains definitions of certain terms used in this Prospectus in connection with us and our business. Some of these may not correspond to standard industry definitions.

“°”	degree
“adit”	a type of entrance to an underground mine which is horizontal or nearly horizontal, usually built into the side of a hill or mountain
“Ag”	the chemical symbol for silver
“Au”	the chemical symbol for gold
“beneficiation”	a process of crushing and separating ore into valuable substances or waste
“ball mill”	a rotating cylindrical mill that uses heavy iron balls to grind ore into fine particle powder
“category 332”	a term defined under the PRC Resources/Reserves Categories (中國固體礦產資源/儲量分類) (1999), a three-digit code system. Category 332 means the deposit is intrinsically economically viable, has had geological studies carried out and is reasonably understood geologically
“concentrate”	a powdery product containing an upgraded mineral content resulting from initial processing of mined ore to remove some waste materials. A concentrate is an intermediary product, which is subject to further processing, such as smelting, to effect recovery of metal
“crusher”	a machine for crushing solids to smaller grain sizes
“deposit” or “mineral deposit”	a body of mineralization containing a sufficient average grade of metal or metals to warrant further exploration and/or development expenditure. A deposit may not have a realistic expectation of being mined, therefore it may not be classified as a resource or a reserve
“dilution”	the reduction of grade for mined ore due to the inclusion of waste material in the mined ore
“drilling”	a technique or process of making a circular hole in the ground with a drilling machine, which is typically used to obtain a cylindrical sample of ore. Alternatively, blast hole drilling is where the drilling technique is used to create a hole to house an explosive charge in preparation for blasting a zone of rock
“exploration”	activity to prove the location, volume and quality of an ore body
“flotation”	a process by which some mineral particles are induced to become attached to bubbles of froth and float, and others to sink, so that the valuable minerals are concentrated and separated from the remaining rock or mineral material

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“gangue”	waste rock
“grade”	the concentration, commonly expressed as percentage or grams per tonne, of useful elements, minerals or their components in any ore or concentrate
“gravity-selection” or “gravity (tabling) separation”	a mineral process using shaking tables to separate useful mineral from gangue in crushed or ground ore based on differences in their density
“g/t”	grams per tonne
“indicated resources”	mineral resource that has been sampled by drill holes or other sampling procedures at locations too widely spaced to ensure continuity, but close enough to give a reasonable indication of continuity and where geoscientific data are known with a reasonable level of reliability, as defined by the JORC Code
“inferred resources”	mineral resource that has geoscientific evidence from drill holes or other sampling procedures such that continuity cannot be predicted with confidence and where geoscientific data may not be known with a reasonable level of reliability, as defined by the JORC Code
“in-situ”	in its natural position
“JORC”	the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy
“JORC Code”	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the JORC, Australian Institute of Geoscientists and Minerals Council of Australia in September 1999 and revised in December 2004, a widely used and internationally recognized code setting out the minimum standards, recommendations and guidelines for public reporting of exploration results, mineral resources and ore reserves
“km”	kilometer(s)
“km ² ” or “sq. km”	square kilometer(s)
“kt”	thousand tonne(s), a metric unit of weight
“ktpa”	kt per annum, except as otherwise indicated, is calculated based on 330 production days per annum, taking into account holidays and equipment maintenance
“kV”	kilovolt
“kW”	kilowatt

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“kYAh”	kilovolt ampere hour
“m”	meter(s)
“m ² ” or “sq. m.”	square meter(s)
“m ³ ”	cubic meter(s)
“mineral resource(s)” or “resource(s)”	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, as defined in the JORC Code. 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
“mineralization”	an area with discontinuous distribution belts of mineralization, including the occurrence of deposits, mine sites and alteration of waste rock, as exploration indicators and under control of same geology conditions. It is a key zone for estimation and further planning of exploration of minerals
“mining dilution”	the waste material that is taken in the process of ore extraction
“mining loss”	that part of an ore reserve which is not recovered during the mining process
“mining rights”	the rights to mine mineral resources and obtain mineral products in areas where mining activities are licensed
“mm”	millimeter(s)
“Mt”	megatonne(s)
“Mtpa”	Mt per annum
“non-ferrous metals”	metals other than iron, manganese and chromium and alloys that do not contain appreciable amounts of iron, manganese or chromium
“ore”	mineral bearing rock which can be mined and treated profitably under current or immediate foreseeable economic conditions
“ore body” or “lode”	natural mineral accumulations which can be extracted for use under existing economic conditions and using existing extraction techniques

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“ore processing” or “processing”	the process which in general refers to the extraction of usable portions of ore by using physical and chemical methods
“ore reserve(s)” or “reserve(s)”	the economically mineable part of a measured and/or indicated mineral resource, as defined by the JORC Code. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and 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 subdivided, in order of increasing geological confidence, into probable reserves and proved reserves
“ounce(s)”, “troy ounce(s)” or “oz”	troy ounce(s), a unit of weight. One troy ounce equals 31.10348 grams
“panel ramp”	an inclined shaft used to transport workers, materials and ore to and from the underground working area in a mine
“Pb”	the chemical symbol for lead
“PPE”	personal protection equipment
“probable reserves”	the economically mineable part of an indicated, and in some circumstances, a measured mineral resource, as defined by the JORC Code. It includes diluting materials and allowances for losses which may occur when the material is mined
“proved reserves”	the economically mineable part of a measured mineral resource, as defined by the JORC Code. It includes diluting materials and allowances for losses which may occur when the material is mined
“pure mining company”	the mining company which only conducts upstream operations in exploration, mining and primary processing of mineral resources with no downstream operations in smelting, refining and others
“recovery rate”	the percentage of valuable mineral resource that is able to be recovered from mining and processing activities
“smelting”	a pyro-metallurgical process of separating metal by fusion from those impurities with which it is chemically combined or physically mixed
“Sn”	the chemical symbol for tin
“strike”	the direction of the line of intersection of a bed or vein with the horizontal plane. The strike of a bed is the direction of a straight line that connects two points of equal elevation on the bed

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“t”	tonne(s), a metric unit of weight
“tailings” or “tail”	waste materials that are produced after processing of ore for extracting target minerals
“TSF”	tailings storage facility
“tpa”	tonnes per annum
“tpd”	tonnes per day
“underground mine”	openings in the earth accessed via shafts and adits below the land surface to extract minerals
“vein”	a tabular mass of minerals formed by fracture filling or replacement of host rock
“W”	the chemical symbol for tungsten
“Zn”	the chemical symbol for zinc