
GLOSSARY OF TECHNICAL TERMS

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

“assay”	qualitative or quantitative analysis of a substance to determine its components; the result of such an analysis
“beneficiation”	the dressing or processing of coal or ores for the purpose of (i) regulating the size of a desired product, (ii) removing unwanted constituents, or (iii) improving the quality, purity, or assay grade of a desired product
“bituminous rank”	coal formed under high heat and pressure typically containing 45-86% carbon with two to three times the heating value of lignite. Its forms include thermal coal, which is used to generate electricity, and coking coal, which is an important fuel and raw material used in the steel and iron industries
“coke”	bituminous coal from which the volatile components have been removed
“coking coal”	coal used in the process of manufacturing steel. It is also known as metallurgical coal
“core drilling”	drilling with a hollow bit and a core barrel to obtain a rock core
“diamond drilling”	a drilling machine with a rotating, hollow, diamond-studded bit that cuts a circular channel around a core, which can be recovered to provide a more or less continuous and complete columnar sample of the rock penetrated
“fault”	a fracture in rock along which the adjacent rock surfaces are differentially displaced
“feasibility study”	as defined in NI 43-101, a comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production
“high volatile A”	high volatile A bituminous coal with heating value over 14,000 british thermal units per pound (equivalent to 7,778 kilocalorie per kilogram) as defined under the ASTM D388 Standard Classification of Coal by Rank
“high volatile B”	high volatile B bituminous coal with heating value between 13,000 and 14,000 british thermal units per pound (equivalent to 7,223 – 7,778 kilocalorie per kilogram) as defined under the ASTM D388 Standard Classification of Coal by Rank

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“indicated mineral resource”	as defined in NI 43-101, 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 grade and grade continuity to be reasonably assumed
“inferred mineral resource”	as deferred in NI 43-101, that part of a mineral resource for which the 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 technique from locations such as outcrops, trenches, pits, working and drill holes
“interburden”	a layer of sedimentary rock, of any composition and thickness, which separates two mineable coal beds
“JORC Code”	Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves
“lignite”	the lowest rank of coal with the lowest energy content, typically containing 25-35% carbon. Lignite tends to be found in relatively young coal deposits that were not subjected to extreme heat or pressure, is crumbly, has high moisture content and is mainly used as fuel at power plants to generate electricity
“measured mineral resource”	as defined in NI 43-101, that part of a mineral resource for which quantity, grade or quality, densities, shape and 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
“metallurgical coal”	see “coking coal”
“mineral reserve”	as defined in NI 43-101, 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

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	that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for losses that may occur when the material is mined
“mineral resource”	as defined in NI 43-101, a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilised 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 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
“NI 43-101”	National Instrument 43-101 Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators, as the same may be amended from time to time, being the instrument published by the Canadian Securities Administrators governing the reporting of exploration results, mineral resources and mineral reserves
“open pit”	the main type of mine designed to extract minerals close to the surface; also known as “open cut”
“overburden”	barren rock material, either loose or consolidated, overlying a mineral deposit, which must be removed prior to mining
“Permian”	a geological period from around 299 million years ago to around 251 million years ago
“preliminary feasibility study”	as defined in NI 43-101, a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the mineral resource may be classified as a mineral reserve
“premium coal”	coal that could potentially be used as pulverised coal injection (“PCI”) coal or a high-quality thermal coal
“probable reserve”	as defined in NI 43-101, 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

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“proven reserve”	as defined in NI 43-101, 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 can be justified
“qualified person”	as defined in NI 43-101, an individual who: (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these; (b) has experience relevant to the subject matter of the mineral project and the technical report; and (c) is a member or licensee in good standing of a professional association
“reverse circulation drilling”	also known as RC drilling, the drilling mechanism is a pneumatic reciprocating piston known as a hammer driving a tungsten-steel drill bit. Reverse circulation is achieved by blowing air down the rods; the differential pressure creating air lift of the water and cuttings up the inner tube which is inside each rod
“seam”	a stratum or bed of coal or other mineral; generally applied to large deposits of coal
“splits”	the division of a bed of coal into two or more horizontal sections by intervening rock strata
“strip ratio”	the ratio of the amount of waste removed (in bank cubic metres) to the amount of coal or minerals (in tonnes) extracted by open pit mining methods
“thermal coal”	also referred to as “steam coal” or “steaming coal”, thermal coal is used in combustion processes by power producers and industrial users to produce steam for power and heat. Thermal coal tends not to have the carbonisation properties possessed by metallurgical coals and generally has lower heat value and higher volatility than coking coal

Mineral Resource and Mineral Reserve — CIM Standards

Unless otherwise specified, all references in this prospectus to “mineral reserves”, “mineral resources”, “measured”, “indicated” or “inferred” resources or to “proven” or “probable” reserves are to these terms as defined in the CIM Standards.