

21 Glossary

21.1 Mineral Resources and Reserves

21.1.1 Mineral Resources

The mineral resources and mineral reserves have been classified according to the “CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines” (December 2005). Accordingly, Resources are classified as Measured, Indicated or Inferred and “Reserves” are classified as Proven, and Probable based on the Measured and Indicated Resources as defined below.

A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material 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.

An ‘Inferred Mineral Resource’ 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 drillholes.

An ‘Indicated Mineral Resource’ 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 drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

A ‘Measured Mineral Resource’ 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 drillholes that are spaced closely enough to confirm both geological and grade continuity.

21.1.2 Mineral Reserves

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 includes diluting materials and allowances for losses that may occur when the material is mined.

A ‘Probable Mineral Reserve’ 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.

A ‘Proven Mineral Reserve’ 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.

21.2 Glossary

The following abbreviations are typical mining terms that may be used in this report.

Term	Definition
Assay:	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure:	All other expenditures not classified as operating costs.
Composite:	Combining more than one sample result to give an average result over a larger distance.
Concentrate:	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing:	Initial process of reducing ore particle size to render it more amenable for further processing.
Cut-off Grade (CoG):	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dip:	Angle of inclination of a geological feature/rock from the horizontal.
Fault:	The surface of a fracture along which movement has occurred.
Footwall:	The underlying side of an orebody or stope.
Gangue:	Non-valuable components of the ore.
Grade:	The measure of concentration of a target metal within mineralized rock.
Hangingwall:	The overlying side of an orebody or slope.
Hydrocyclone:	A process whereby material is graded according to size by exploiting centrifugal forces of particulate materials.
Igneous:	Primary crystalline rock formed by the solidification of magma.
Kriging:	An interpolation method of assigning values from samples to blocks that minimizes the estimation error.
Level:	Horizontal tunnel the primary purpose is the transportation of personnel and materials.
Lithological:	Geological description pertaining to different rock types.
LoM Plans:	Life-of-Mine plans.
Milling:	A general term used to describe the process in which the ore is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product.
Mineral/Mining Lease:	A lease area for which mineral rights are held.
Mining Assets:	The Material Properties and Significant Exploration Properties.
Ongoing Capital:	Capital estimates of a routine nature, which is necessary for sustaining operations.
Ore Reserve:	See Mineral Reserve.
RoM:	Run-of-Mine.
Sedimentary:	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Stratigraphy:	The study of stratified rocks in terms of time and space.
Strike:	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.
Total Expenditure:	All expenditures including those of an operating and capital nature.
Variogram:	A statistical representation of the characteristics (usually grade).

21.3 Abbreviations

The Imperial system (American system) has been used throughout this report unless otherwise stated. All currency is in U.S. dollars. Market prices are reported in USD per pound of U₃O₈. Tons are short tons of 2,000lbs. The following abbreviations are used in this report.

Abbreviation	Unit or Term
AEC/DOE	Atomic Energy Commission/Department of Energy
CBT	Colorado-Big Thompson
CDPHE	Colorado Department of Public Health and Environment
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	centimeter
cm ²	square centimeter
cm ³	cubic centimeter
COC	Chain of Custody
CPP	Central Processing Plant
CPS	Counts per second
CS	Composite solutions
DEF	Disequilibrium Factor
°F	degree (degrees) Fahrenheit
DRMS	Colorado Division of Reclamation, Mining and Safety
DWR	Colorado Division of Water Resources
ELI	Energy Laboratories, Inc.
EPA	U.S. Environmental Protection Agency
eU ₃ O ₈	Equivalent triuranium octoxide
ft	foot (feet)
ft ²	square foot (feet)
ft ³	cubic foot (feet)
gal	gallon
gpm	gallons per minute
GT	Grade-thickness product
ICP	Inductively coupled plasma
ICPMS	Inductively coupled argon plasma/mass spectrometer
in	inch
IRR	Internal Rate of Return
ISR	In situ recovery
IX	Ion exchange
kg	kilograms
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hour
kWh/t	kilowatt-hour per short ton
L	liter
L/s	liters per second
lb	pound
LoM	Life of Mine
m	meter
m ²	square meter
mD	Milli-darcy
MeV	Million electron volt or 1.602 x 10 ⁻¹³ Joules
mg/L	milligrams/liter
MIT	Mechanical integrity test
mL	milliliter
mm	millimeter
mm ²	square millimeter
mm ³	cubic millimeter
NELAP	National Environmental Laboratory Accreditation Program
NI 43-101	Canadian National Instrument 43-101
NOI	Notice of Intent
NPV	Net present value
NRC	U.S. Nuclear Regulatory Commission
OSC	Ontario Securities Commission

Abbreviation	Unit or Term
%	percent
ppb	parts per billion
ppm	parts per million
PC	production composite (composite leach solutions from ISR well field)
PFN	Prompt Fission Neutron
PGT	Princeton Gamma Tech
psi	Pounds per square inch
PV	Pore volume
QA/QC	Quality Assurance/Quality Control
QP	Qualified Person
RME	Rocky Mountain Energy Company
RO	Reverse Osmosis
RoM	Run-of-Mine
s	second
SF	Satellite Facility
SG	specific gravity
TDS	Total dissolved Solids
U ₃ O ₈	Triuranium octoxide
UIC	Underground Injection Control
USD	US Dollar
XRF	X-Ray Fluorescence