Colorado MINERALS 2006 SHEET FACT

he total value of non-energy minerals and uranium mined in Colorado in 2006 is estimated to be \$1.76 billion. This is a 5% decrease over the 2005 value of \$1.79 billion. Metals, which include molybdenum, gold, silver, vanadium, and the energy mineral uranium were valued at \$1.17 billion. Industrial minerals, which include sand, gravel, stone, clay, gypsum, cement, and nahcolite, were valued at \$593 million. Colorado ranks 12th among U.S. states for nonfuel mineral production value.



Aerial view of the Cripple Creek & Victor Mining Co. operations in Teller County (photo Anglo Ashanti Gold).

URANIUM and VANADIUM

- In 2006, no uranium or vanadium was mined in Colorado, but 5,700 new mineral claims were filed in 2006; the Colorado Geological Survey estimates that >60% of those (3,500) were filed for uranium.
- Uranium is considered an energy mineral since it is used primarily to fuel nuclear power plants.
- Colorado is uranium deposits are also rich in vanadium ore. Vanadium is an additive used to help prevent rust and to strengthen steel.

GOLD

- Colorado ranks 4th in the U.S. in gold gold production - Nevada is the leading gold-producing state.
- The Cripple Creek and Victor Mine in Teller County is the top Colorado producer of gold and silver.
- Gold is used mainly in jewelry, coins, and bullion. However, 10 to 20 percent of gold is used in electronics, dentistry, and industrial applications.

MOLYBDENUM

- Colorado is the leading producer of molybdenum metal in the U.S.
- The Henderson Mine in Clear Creek County is the nation's largest primary molybdenum mine; the mine produced 37 million pounds of molybdenum in 2006.
- The Climax Mine near Leadville is tentatively scheduled to undergo a major reconstruction and reopen in 2009.
- The spot price of molybdenum rose from around \$8 per pound in 2003 to nearly \$27 per pound at the end of 2006.
- Molybdenum is used primarily as an alloy agent in stainless steel, other specialty steels, and cast iron. It increases the hardness, toughness, corrosion resistance, and weldability of steel.



INDUSTRIAL MINERALS



Precambrian metamorphic and granitic rocks are quarried at Aggregate Industries' crushed stone operation near the town of Morrison; view looking south (photo Aggregate Industries).

- Colorado produced 63.6 million tons of sand, gravel, and crushed stone in 2006 valued at \$388.7 million.
- More than 400 tons of sand, gravel, and crushed stone are utilized in construction of a typical home.
- Roughly 1.4 million clay bricks were used in the construction of Coors Field.
- Most Colorado gypsum is mined near the town of Gypsum and is used to make wallboard (drywall).
- Nahcolite is dissolved from the ground using hot water. The resulting slurry is pumped to the surface where the water is evaporated leaving behind the recrystallized nahcolite, otherwise known as baking soda.



For more information on minerals and mineral resources visit:

- Colorado Geological Survey Mineral Resources, http://geosurvey.state.co.us/Default.aspx?tabid=228
- U.S. Geological Survey Mineral Commodity Summaries, http://minerals.usgs.gov/minerals/pubs/mcs/
- Colorado Division of Mining Reclamation and Safety, http://mining.state.co.us/
- Mineral Information Institute, http://www.mii.org
- The Mineral Database, http://www.mindat.org
- Colorado Mining Association, http://www.coloradomining.org

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