

is processed to molybdenite concentrate. The sulfide concentrator at the Henderson mill can treat 29 kt/d (32,000 stpd) of ore. The mine ships most of its high-purity, chemical grade molybdenite concentrate to Fort Madison, IA for further processing. Henderson has produced more than 145 Mt (160 million st) of ore and 349 kt (770 million lbs) of molybdenum metal since opening in 1976. It continues to be North America's largest primary producer of molybdenum.

Henderson is currently developing the new 2,200-m (7,210-ft) production level. It is expected to produce at a rate of 18 kt/a (40 million lbs/year) of molybdenum by mid-2006. The 2,350-m (7,700-ft) level is being depleted. It has been the source of most ore production since 1991. Reserves at the end of 2004 were 144 Mt (158.7 million st) grading 0.21 percent molybdenum.

The Climax Mine is also owned by Phelps Dodge. It was the first major molybdenum mine in the U.S. Located between Leadville and Copper Mountain, the mine has been on care-and-maintenance since 1995. Climax still has contained millable reserves of 144 Mt (158.7 million st) of ore grading 0.19 percent molybdenum. High molybdenum prices and projections has Phelps Dodge evaluating the economic viability of starting up mining operations at Climax for short- and mid-term production.

## Precious metals

AngloGold (Colorado), a subsidiary of South Africa's AngloGold Ashanti, operates the largest precious metals mine in Colorado. The Cripple Creek & Victor (CC&V) Mine produced 10.2 t (329,030 oz) of gold during 2004, up 16 percent from the 8.8 t (283,000 oz) produced in 2003. The average grade of ore mined was 0.86 g/t (0.025 oz/st) gold. Its value in 2004 was \$105 million. In addition, the mine produced 6.2 t (199,000 oz) of silver, valued at \$1.3 million. AngloGold expects the mine to produce about the same amount of gold in 2005.

In 2004, CC&V received county and state approval for an extension of the East Cresson mining area. This extension will provide 5 Mt (5.5 million st) of additional ore.

LKA International owns the Golden Wonder, a small, high-grade underground gold mine near Lake City in the San Juan Mountains. Since beginning operations in 1998, the mine has produced more than 2.9 t (95,000 oz) of gold. Production in 2004 was 445 kg (14,320 oz) of gold.

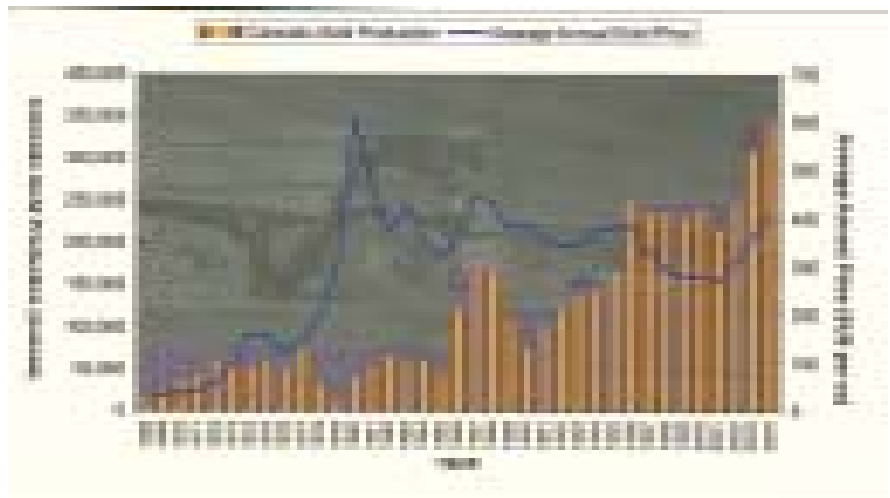
In January 2005, LKA announced that it is planning to permit and develop a new adit and drift below the current workings. The proposed drift will be located about 305 vertical m (1,000 vertical ft) below the deepest current workings. The drift is intended to intersect the high-grade vein structure at the deeper level. This would increase the production potential of the mine. High-grade crushed ore from the mine is trucked to a milling facility in Nevada.

## Vanadium

Colorado is the only state currently producing vanadium ore. Vanadium, a metal used to harden steel, is a coproduct of uranium at the mines recently opened by Cotter in Montrose County. Although these mines are known mainly for their uranium production, they actually produce more vanadium by volume than uranium.

In 2004, Cotter's mines produced 13.4 kt (15,210 st) of ore containing at least 128 t (281,900 lbs) of vanadium. The USGS reported that the average price for vanadium more than doubled in 2004, averaging \$5.28/lb compared with \$2.21/lb in 2003 and \$1.34/lb in 2002. Cotter expects to produce 72 kt (80,000 st) of ore in 2005 and 127 kt (140,000 st) in 2006. Ore grades are expected to be 1.84 percent vanadium oxide ( $V_2O_5$ ).

Colorado gold production and the average annual gold price, 1968-2004.



## Uranium

Increased uranium demand for electrical generation at nuclear power plants worldwide has tightened the supply and driven prices higher during the past two years. In Colorado, several uranium mines opened and several more are expected to begin operating soon. The average yearly spot price for  $U_3O_8$  was \$18.55/lb in 2004, its highest since before 1987.

Cotter opened three dormant uranium-vanadium mines during 2004 near Nucla and Naturita in Montrose County — the JD-6, JD-8 and SM-18 mines. Cotter now operates four mines, including the JD-9, which opened in 2003. The company expects to open three more mines in 2005 — the LP-21, JD-7 and SR-11. The mines employ 45 to 50 workers with more hiring expected as new mines open.

In 2004, the mines produced 51 t (112,803 lbs) of uranium from 13.8 kt (15,210 st) of ore mined. The Colorado Geological Survey (CGS) estimates that the contained uranium has a value of \$2.1 million. Cotter expects to produce 72.5 kt (80,000 st) of ore in 2005 and 127 kt (140,000 st) in 2006. Ore grades are expected to be 0.34 percent  $U_3O_8$  and 1.84 percent  $V_2O_5$ . By the end of 2005, Cotter expects to be mining at a rate of 476 t/d (525 stpd). The uranium-vanadium ore is trucked from