

# **Nevada Bureau of Mines and Geology**

## **Special Publication MI-2005**

# **The Nevada Mineral Industry 2005**

This report, twenty-seventh of an annual series, describes mineral, oil and gas, and geothermal activities and accomplishments in Nevada in 2005: production statistics, exploration and development including drilling for petroleum and geothermal resources, discoveries of orebodies, new mines opened, and expansion and other activities of existing mines. Statistics of known gold and silver deposits, and directories of mines and mills are included.

**Metals**

**Industrial  
Minerals**

**Oil and Gas**

**Geothermal**

**Exploration**

**Development**

**Mining**

**Processing**

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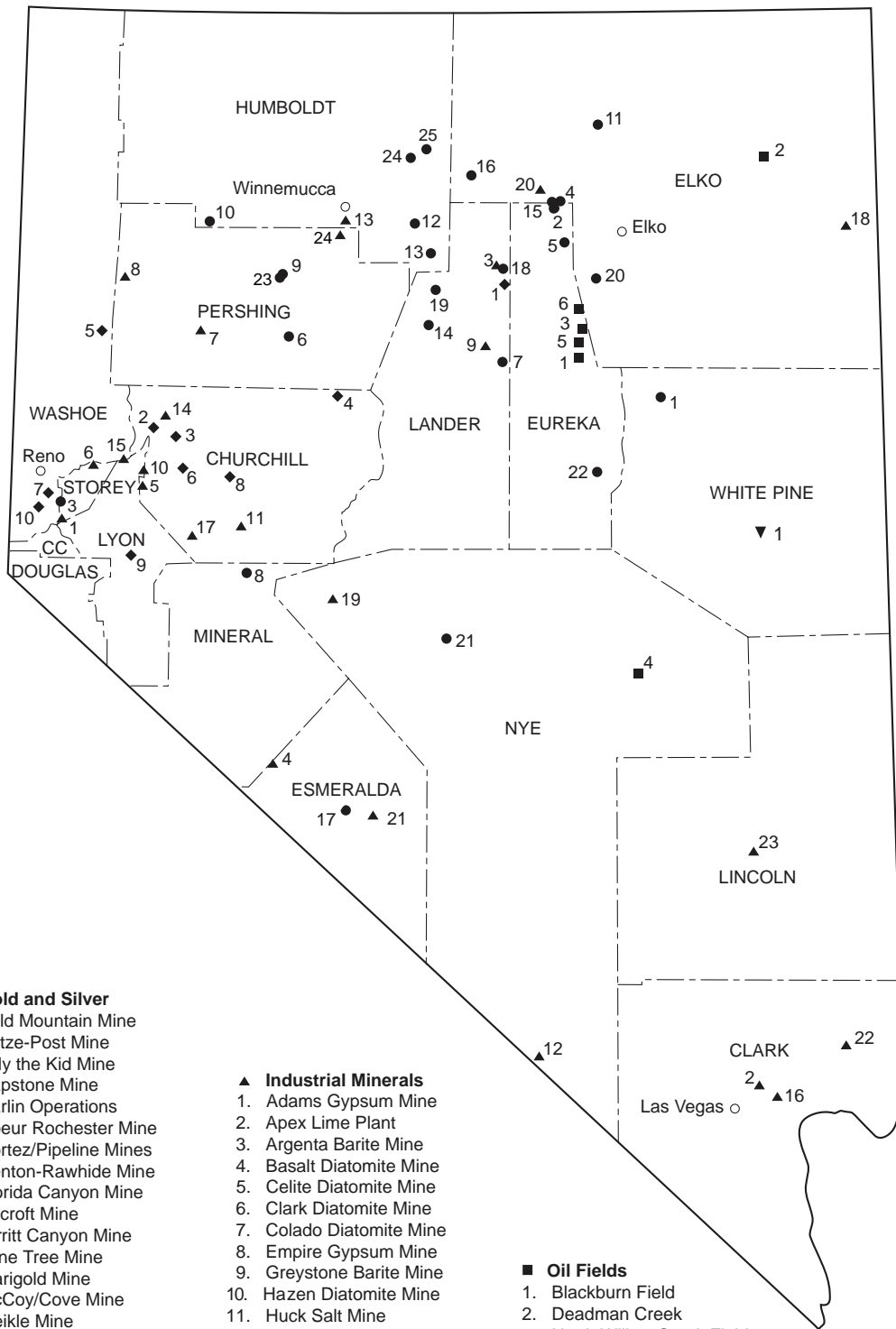
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● **Gold and Silver**

1. Bald Mountain Mine
2. Betze-Post Mine
3. Billy the Kid Mine
4. Capstone Mine
5. Carlin Operations
6. Coeur Rochester Mine
7. Cortez/Pipeline Mines
8. Denton-Rawhide Mine
9. Florida Canyon Mine
10. Hycroft Mine
11. Jerritt Canyon Mine
12. Lone Tree Mine
13. Marigold Mine
14. McCoy/Cove Mine
15. Meikle Mine
16. Midas Mine
17. Mineral Ridge Mine
18. Mule Canyon Mine
19. Phoenix Project
20. Rain Mine
21. Round Mountain Mine
22. Ruby Hill Mine
23. Standard Mine
24. Turquoise Ridge Joint Venture
25. Twin Creeks Mine

▼ **Copper**

1. Robinson Mine

▲ **Industrial Minerals**

1. Adams Gypsum Mine
2. Apex Lime Plant
3. Argenta Barite Mine
4. Basalt Diatomite Mine
5. Celite Diatomite Mine
6. Clark Diatomite Mine
7. Colado Diatomite Mine
8. Empire Gypsum Mine
9. Greystone Barite Mine
10. Hazen Diatomite Mine
11. Huck Salt Mine
12. IMV Nevada Clay
13. MIN-AD Dolomite Mine
14. Moltan Diatomite Mine
15. NCC Limestone Quarry
16. PABCO Gypsum
17. Popcorn Perlite Mine
18. Pilot Peak Limestone Quarry
19. Premier Magnesite Mine
20. Rossi Barite Mine
21. Silver Peak Lithium Carbonate
22. Simplot Silica Products
23. Tenacity Perlite Mine
24. W.Glen Sexton Dolomite Mine

■ **Oil Fields**

1. Blackburn Field
2. Deadman Creek
3. North Willow Creek Field
4. Railroad Valley (Eagle Springs, Trap Spring, Currant, Sand Dune, Grant Canyon, Bacon Flat, Kate Spring, Duckwater Creek, Sans Spring, and Ghost Ranch Fields)
5. Three Bar Field
6. Tomera Ranch Field

◆ **Geothermal Power Plants**

- |                       |                                 |
|-----------------------|---------------------------------|
| 1. Beowawe            | 6. Soda Lake No. 1 and No. 2    |
| 2. Bradys Hot Springs | 7. Steamboat I, IA, II, and III |
| 3. Desert Peak        | 8. Stillwater                   |
| 4. Dixie Valley       | 9. Wabuska                      |
| 5. Empire             | 10. Steamboat Hills             |

**Major mines, oil fields, and geothermal plants, 2005.**

# Overview

by Jonathan G. Price and Richard O. Meeuwig

This report highlights activities through 2005 in metals, industrial minerals, geothermal energy, and petroleum. Numerous graphs and charts are incorporated for rapid inspection of trends in production and price. The value of overall mineral and energy production in Nevada reached an all-time high of \$3.9 billion in 2005, primarily as a result of the increase in the prices of gold and nearly all other commodities. Gold production decreased from a high of 8.86 million ounces in 1998 to 6.85 million ounces in 2005, but 2005 was nonetheless the tenth highest production year in history. Nevada led the nation in the production of gold, barite, diatomite, and gypsum, and was the only state that produced magnesite, lithium, and the specialty clays, sepiolite and saponite. Other commodities produced in Nevada in 2005 included construction aggregate (sand, gravel, and crushed stone), geothermal energy, lime, cement, silica (industrial sand), silver, clays, dolomite, perlite, dimension stone, salt, zeolite, semiprecious gemstones, mercury (as a by-product of gold and silver processing), and petroleum.

Nevada ranked second in the United States in terms of value of overall nonfuel (excluding oil, gas, coal, and geothermal) mineral production in 2005 (according to the U.S. Geological Survey, Mineral Commodity Summaries 2006, <http://minerals.usgs.gov/minerals/pubs/mcs/2006/>). Arizona, the nation's leading copper producer, leapfrogged into first place because of dramatic increases in copper prices. California, with its large population and commensurate demands for construction raw materials, was third. Utah, a major producer of copper and molybdenum, primarily from

one mine near Salt Lake City, was fourth. Texas, another populous state and major producer of construction raw materials, was fifth. Florida, the leader in phosphate production, was sixth, and Minnesota, the leader in iron-ore production, was seventh.

Nevada's production of gold, valued at \$3.0 billion, was 83% of the U.S. total and helped make the U.S. the second leading gold producer in the world in 2005. Nevada alone accounted for 9% of world production of gold. Only the countries of South Africa, Australia, and China produced more gold than the State of Nevada in 2005. Second to gold in terms of Nevada's mineral value in 2005 was copper (\$213 million), followed closely by construction aggregate (\$207 million). Electrical power from geothermal energy production in Nevada in 2005 was valued at \$74 million. Silver, chiefly a by-product or co-product of gold production, ranked as the fifth leading mineral commodity in 2005, with a value of \$71 million.

The contributions that mining makes to the economies of Nevada and the U.S. are significant in terms of jobs, commerce, taxes, improvements to the infrastructure, and lowering of the U.S. trade deficit. Because of Nevada's production, the U.S. is a net exporter of gold, most of which is sold on the international market for jewelry and arts, and some of which is sold for its conductive and non-corrosive qualities in computers and other electronics and for use in dental work. The U.S. is a net exporter of few mined commodities and a net importer of many. Among the major mined products in Nevada, the U.S. relies upon imports for barite (82% of total U.S. consumption from imports in 2005,

## MINERAL, GEOTHERMAL POWER, AND PETROLEUM PRODUCTION IN NEVADA<sup>1</sup>

Minerals	2004		2005		% change from 2004 to 2005	
	Quantity	Value (millions)	Quantity	Value (millions)	Quantity	Value
<b>Gold</b> (thousand troy ounces)	6,942	\$2,846.0	6,852	\$3,014.4	-1.3	+5.9
<b>Silver</b> (thousand troy ounces)	10,398	67.2	9,946	71.1	-4.3	+5.8
<b>Copper</b> (thousand pounds)	26,900	35.1	126,225	213.3	+469.2	+607.7
<b>Aggregate</b> (thousand short tons)	40,000	180.0	46,000	207.0	+15.0	+15.0
<b>Gypsum</b> (thousand short tons)	2,083	31.2	1,775	24.9	-14.8	-20.2
<b>Barite</b> (thousand short tons)	560	16.8	511	17.9	-8.9	+6.5
<b>Geothermal energy</b> (thousand megawatt-hours)	1,285	73.0	1,269	73.5	-1.2	+0.7
<b>Petroleum</b> (thousand 42-gallon barrels)	462	14.8	447	19.2	-6.7	+29.7
<b>Other minerals<sup>2</sup></b>	—	243.7	—	259.2	—	+6.4
<b>Total</b>	—	\$3,507.8	—	\$3,900.5	—	+11.1

<sup>1</sup> Production as measured by mine shipments, sales, or marketable production (including consumption by producers); compiled by the Nevada Division of Minerals and the Nevada Bureau of Mines and Geology. Products milled or processed in Nevada but mined from deposits in California are excluded. Specifically, colemanite from a mill in Amargosa Valley in Nye County and zeolite from the Ash Meadows plant in Nye County are not included in these totals.

<sup>2</sup> Building stone, cement, clay, diatomite, lime, lithium carbonate, magnesite, mercury, perlite, salt, and silica sand.

























































































































































































