

Nevada Bureau of Mines and Geology

SPECIAL PUBLICATION P-23

Major Mines of Nevada 2011

Mineral Industries in Nevada's Economy

By Mike Visser and Alan Coyner

The Nevada Division of Minerals

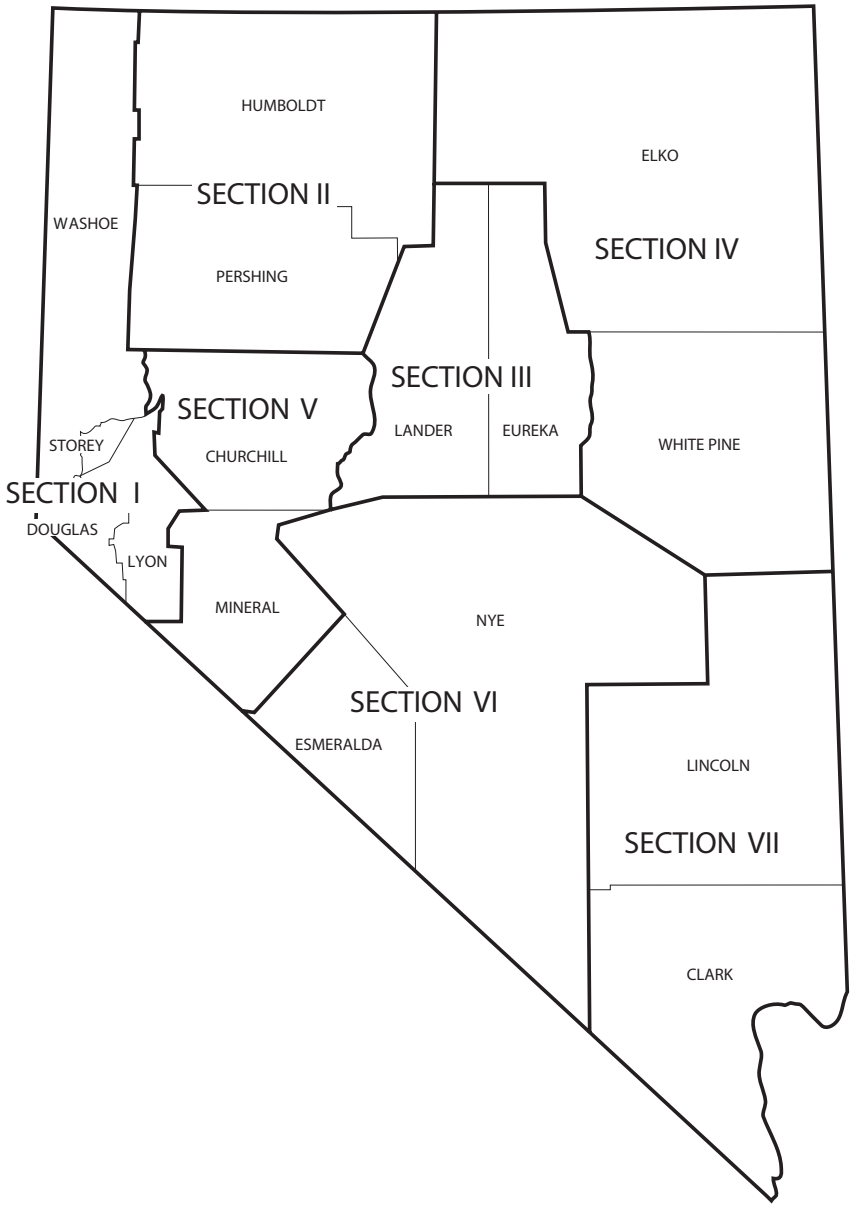
2012

This is the twenty-third of an annual series of summary reports on major mines of Nevada. Sand and gravel operations are not included. Information on employment and production for the calendar year 2011 was provided by the individual mine operators. The Nevada Division of Minerals maintains a complete register of Nevada mines. For further information, contact them at 400 W. King, Suite 106, Carson City, Nevada 89703 or call (775) 684-7040, fax (775) 684-7052, or visit their Web site at <http://minerals.state.nv.us>.

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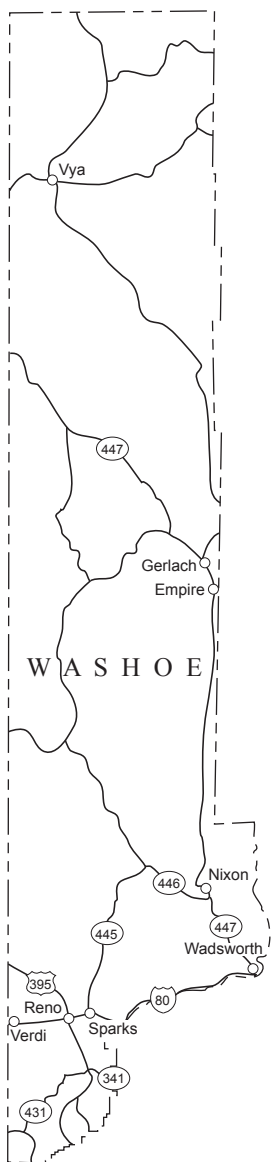
University of Nevada, Reno



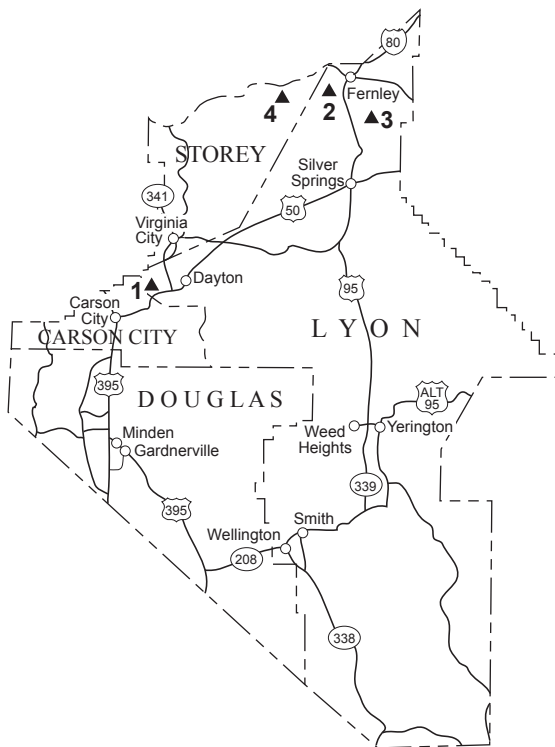
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0 10 20 30 40 50 Miles



0 5 10 15 20 25 Miles

Section I

Lyon County

Adams Claim Gypsum Mine (1)

Operator:

Art Wilson Co.
P.O. Box 20160
Carson City, NV 89721
775-882-0700 Fax: 882-0790
Company employees: 56

Production:

Gypsum - 238,802 tons
Limestone

Celite Diatomite Mine (2)

Operator:

World Minerals, Inc.
100 Front Street
Fernley, NV 89408
775-575-2536 Fax: 575-1570
Company employees: 14
Contract employees: 1

Production:

Diatomite

NCC Limestone Quarry (3)

Operator:

Nevada Cement Co.
P.O. Box 840
Fernley, NV 89408
775-575-2281 Fax: 575-4387
Company employees: 14

Production:

Limestone

Storey County

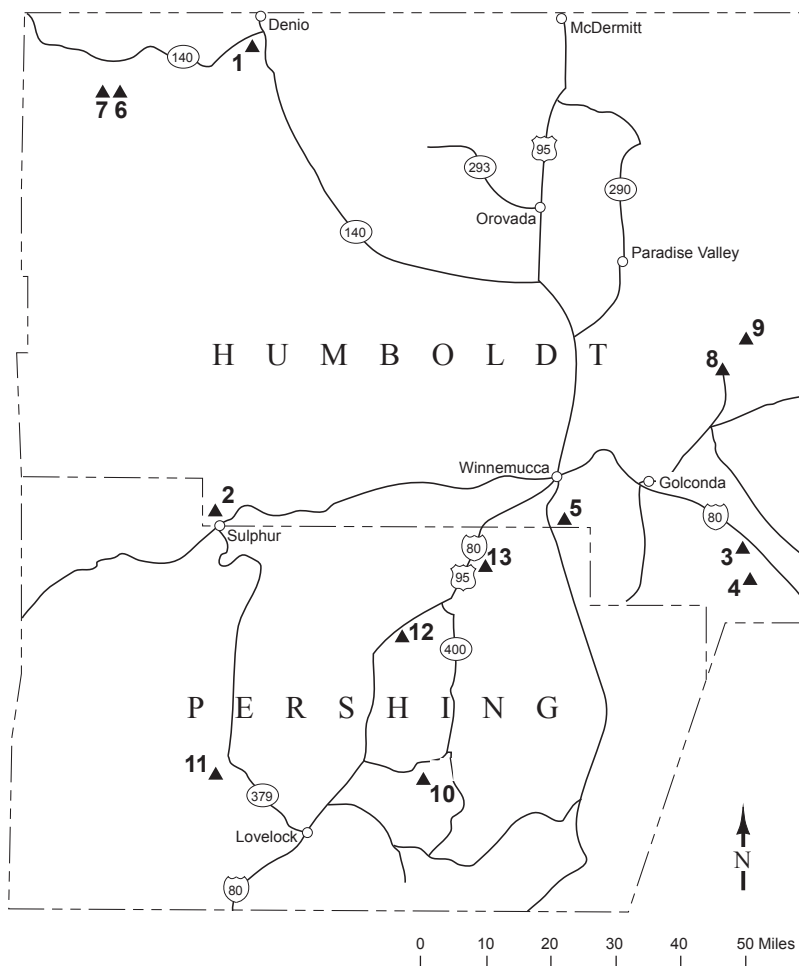
Clark Mine (4)

Operator:

EP Minerals, LLC
640 Clark Station Rd.
Sparks, NV 89434
775-824-7700 Fax: 824-7715
Company employees: 12
Contract employees: 9

Production:

Diatomite



Section II

Humboldt County

Ashdown Mine (1)

Operator:

Winn-Eldrich Mines Ltd.

P.O. Box 210

Denio, NV 89404

775-941-0273

Company employees: 35

Production:

Molybdenite - 648,853 pounds

Hycroft Mine (2)

Operator:

Hycroft Resources and Development

P.O. Box 3030

Winnemucca, NV 89446

775-623-5260 Fax: 623-0215

Company employees: 260

Contract employees: 1,700

Production:

Gold - 104,002 oz

Silver - 479,440 oz

Lone Tree Complex (3)

Operator:

Newmont Mining Corp.

P.O. Box 388

Valmy, NV 89438

775-635-6423

Company employees: 67

Contract employees: 32

Production:

Gold - 19,619 oz

Silver - 28 oz

Marigold Mine (4)

Operator:

Goldcorp, Inc.

P.O. Box 160

Valmy, NV 89438

775-635-2317 Fax: 635-2551

Company employees: 293

Contract employees: 20

Production:

Gold - 153,471 oz

Silver - 4,152 oz

MIN-AD Mine (5)

Operator:

MIN-AD, Inc.

P.O. Box 39

Winnemucca, NV 89446

775-623-5944 Fax: 623-9028

Company employees: 15

Contract employees: 3

Production:

Dolomite

Rainbow Ridge Opal Mines (6)

Operator:

Rainbow Ridge Opal Mines, Inc.

P.O. Box 97

Denio, NV 89404

775-941-0270 (summer)

Production:

Precious opal

Royal Peacock Opal Mine (7)

Operator:

Walter Wilson

P.O. Box 65

Denio, NV 89404

775-941-0374 (summer)

775-272-3201 (winter)

Production:

Precious opal

Turquoise Ridge Joint Venture (8)

Operator:

Barrick Gold Corporation

2055 Getchell Mine Road

Golconda, NV 89414

775-529-5001 Fax: 529-0753

Company employees: 371

Contract employees: 213

Production:

Gold - 178,283 oz

Twin Creeks Mine (9)

Operator:

Newmont Mining Corp.

P.O. Box 69

Golconda, NV 89414

775-635-9400 Fax: 635-4602

Company employees: 629

Contract employees: 131

Production:

Gold - 484,449 oz

Silver - 290,802 oz

Pershing County

Coeur Rochester Mine (10)

Operator:

Coeur Rochester, Inc.
P.O. Box 1057
Lovelock, NV 89419
775-273-7995 Fax: 273-7423
Company employees: 223
Contract employees: 68

Production:

Gold - 6,276 oz
Silver - 1,392,433 oz

Colado Mine (11)

Operator:

EP Minerals, LLC
150 Coal Canyon Road
Lovelock, NV 89419
775-824-7540 Fax: 824-7582
Company employees: 30

Production:

Diatomite

Florida Canyon Mine (12)

Operator:

Florida Canyon Mining, Inc.
P.O. Box 330
Imlay, NV 89418
775-538-7300 Fax: 538-7691
Company employees: 177
Contract employees: 6

Production:

Gold - 41,161 oz
Silver - 46,896 oz

Sunrise Gold Placer Mine (13)

Operator:

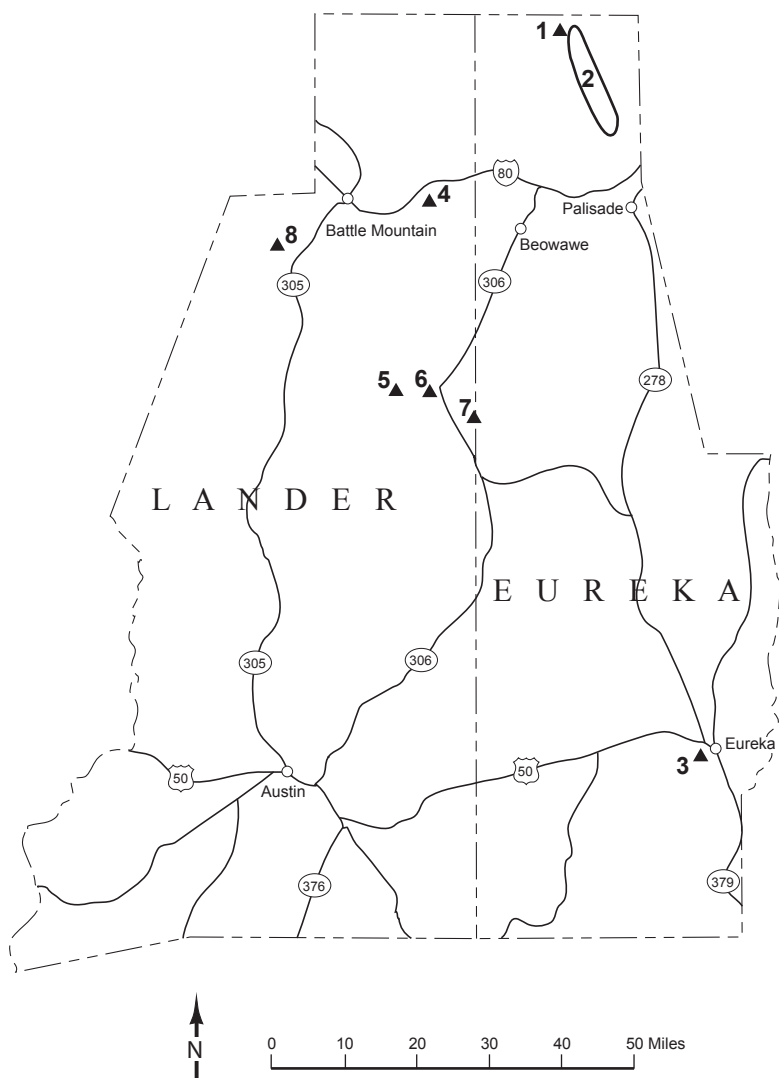
Sunrise Minerals, LLC
7343 S. Alton Way, Suite 100
Centennial, CO 80112
303-779-1800 Fax: 303-770-1995
Company employees: 5

Production:

Gold - 351 oz
Silver - 311 oz



***EP Minerals Clark Mine
(Mike Visser photo).***



Section III

Eureka County

Betze-Post Mine (1)

Operator:

Barrick Goldstrike Mines, Inc.
P.O. Box 29
Elko, NV 89803
775-748-1001 Fax: 748-1240
Company employees: 1,046

Production:

Gold - 721,534 oz
Silver - 94,572 oz

Eastern Nevada Operations (Carlin Operations) (2)

Operator:

Newmont Mining Corp.
1655 Mountain City Highway
Elko, NV 89801
775-778-4000 Fax: 778-4751
Company employees: 2,376
Contract employees: 748

Production:

Gold - 917,973 oz
Silver - 76,938 oz

Ruby Hill Mine (3)

Operator:

Homestake Mining Co.
P.O. Box 676
Eureka, NV 89316
775-237-6060 Fax: 237-5408
Company employees: 130
Contract employees: 15

Production:

Gold - 127,089 oz
Silver - 42,754 oz

Lander County

Argenta Mine (4)

Operator:

Baker Hughes Oilfield Operations, Inc.
P.O. Box 277
Battle Mountain, NV 89820
775-635-5441 Fax: 635-5455
Company employees: 41
Contract employees: 42

Shipped:

Barite - 113,869 tons

Greystone Mine (5)

Operator:

M-I Swaco
P.O. Box 370
Battle Mountain, NV 89820
775-635-5135 Fax: 635-2645
Company employees: 42

Shipped:

Barite - 294,961 tons

Pipeline Mine (6)

Operator:

Barrick Cortez, Inc.
HC66 Box 1250
Crescent Valley, NV 89821-1250
775-468-4400 Fax: 468-4496
Company employees: 848
Contract employees: 292

Production:

(includes the Cortez Hills open-pit)

Gold - 1,119,910 oz
Silver - 19,721 oz

Cortez Hills Mine (7)

Operator:

Barrick Cortez, Inc.
HC66 Box 1250
Crescent Valley, NV 89821-1250
775-468-4400 Fax: 468-4496
Company employees: 277
Contract employees: 49

Production:

(underground only, excluding the open-pit)

Gold - 301,129 oz
Silver - 4,775 oz

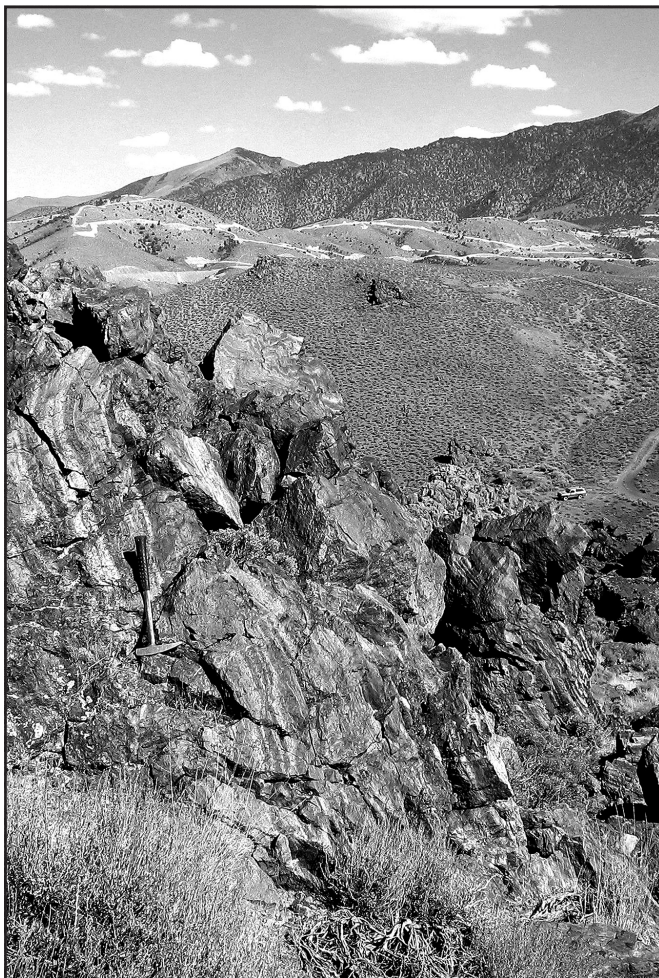
Phoenix Mine (8)

Operator:

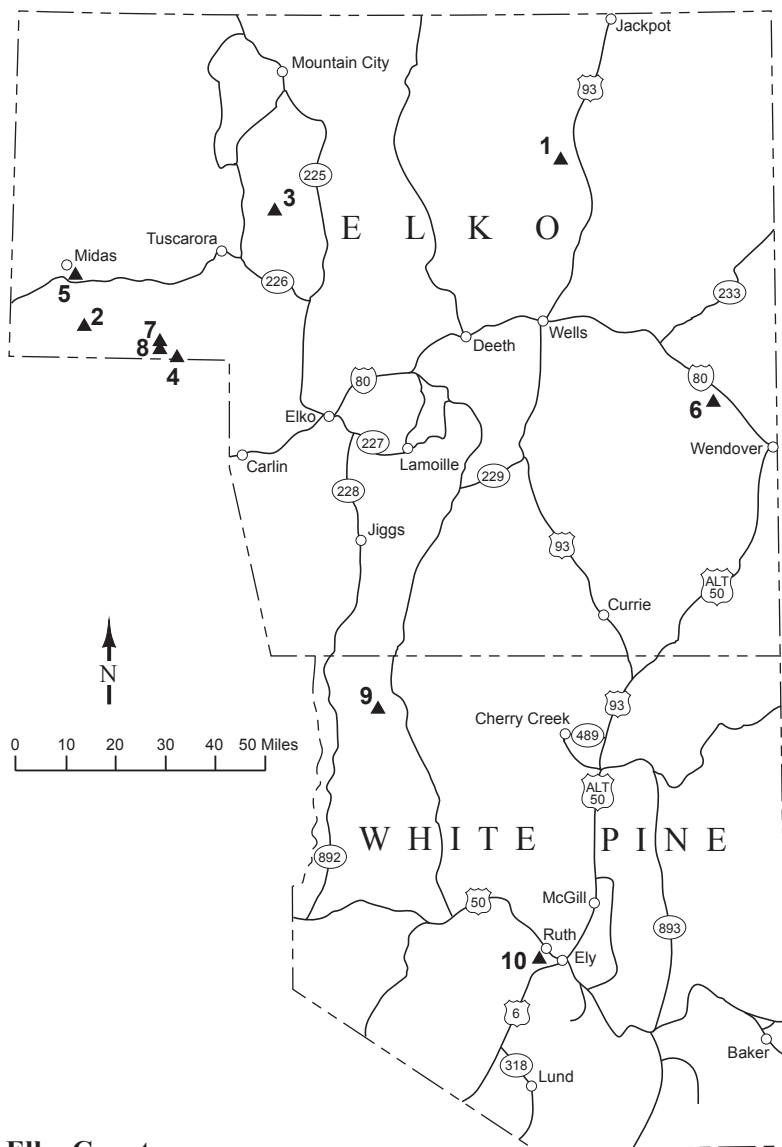
Newmont Mining Corp.
P.O. Box 1657
Battle Mountain, NV 89820
775-635-6423 Fax: 635-6460
Company employees: 506
Contract employees: 136

Production:

Gold - 205,658 oz
Silver - 1,152,312 oz
Copper - 23,897,865 pounds



Cortez Hills Mine area (Chris Henry photo).



Elko County

Big Ledge Mine (1)

Operator:

National Oilwell Varco
P.O. Box 900
Wells, NV 89835
775-752-2300 Fax: 775-752-2303
Company employees: 14
Contract employees: 15

Shipped:

Barite - 87,660 tons

Section IV

Hollister Mine (2)

Operator:

Rodeo Creek Gold, Inc. and
Great Basin Gold Ltd.
P.O. Box 2610
Winnemucca, NV 89446
775-623-5760 Fax: 623-5759
Company employees: 168
Contract employees: 66

Production:

Gold - 86,518 oz
Silver - 711,493 oz

Jerritt Canyon Mine (3)

Operator:

Yukon-Nevada Gold Corp.
HC31 Box 78
Elko, NV 89801
775-738-5006 Fax: 758-9231
Company employees: 295
Contract employees: 75

Production:

Gold - 67,453 oz

Meikle Mine (4)

Operator:

Barrick Goldstrike Mines, Inc.
P.O. Box 29
Elko, NV 89803
775-748-1001 Fax: 748-1240
Company employees: 587

Production:

Gold - 279,349 oz
Silver - 16,345 oz

Midas Mine (5)

Operator:

Newmont Mining Corp.
HC66 Box 125
Midas, NV 89414
775-635-6423 Fax: 635-6460
Company employees: 276
Contract employees: 58

Production:

Gold - 111,476 oz
Silver - 1,512,287 oz

Pilot Peak Quarry (6)

Operator:

Graymont Western U.S.
P.O. Box 2520
West Wendover, NV 89883
775-483-5463
Company employees: 60
Contract employees: 1

Production:

Limestone

Rossi Mine (7)

Operator:

Halliburton
912 Dunphy Ranch Rd.
Battle Mountain, NV 89820
775-468-0515 Fax: 468-2060
Company employees: 55
Contract employees: 98

Shipped: Barite - 201,456 tons

Storm Mine (8)

Operator:

Barrick Goldstrike Mines, Inc.
P.O. Box 29
Elko, NV 89803
775-748-1001 Fax: 748-1240
Company employees: 4

Production:

Gold - 86,508 oz
Silver - 73,579 oz

White Pine County

Bald Mountain Mine (9)

Operator:

Barrick Gold U.S., Inc.
P.O. Box 2706
Elko, NV 89803
775-237-7100 Fax: 237-7101
Company employees: 378
Contract employees: 200

Production:

Gold - 92,818 oz
Silver - 14,615 oz

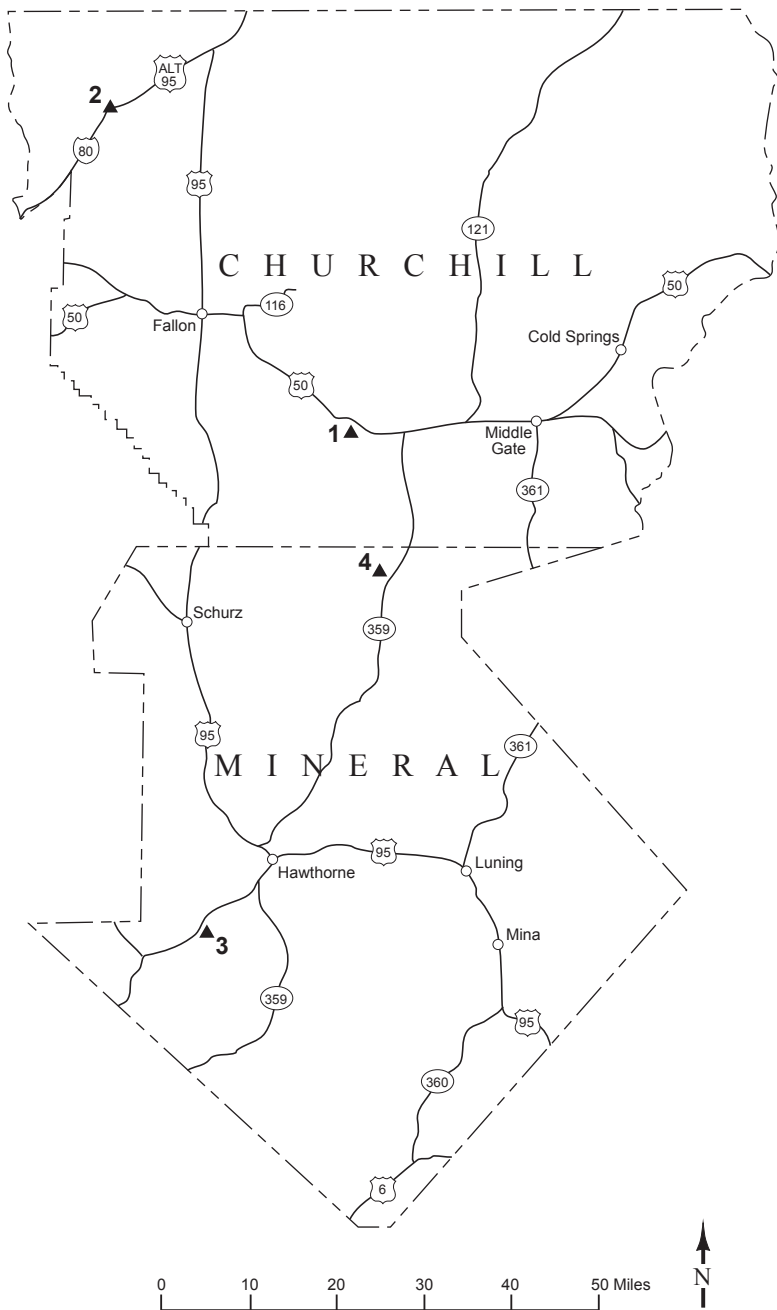
Robinson Mine (10)

Operator:

Robinson Nevada Mining Company
P.O. Box 382
Ruth, NV 89319
775-289-7000 Fax: 289-7349
Company employees: 608

Production:

Copper - 99,893,372 pounds
Gold - 31,969 oz
Silver - 116,774 oz
Molybdenite - 1,261,309 pounds



Section V

Churchill County

Huck Salt (1)

Operator:

Huck Salt Company
2900 Phritzie Ln.
Fallon, NV 89406
775-423-2055 Fax: 423-0467
Company employees: 7

Production:

Salt - 23,618 tons

Moltan Mine (2)

Operator:

Moltan Company
P.O. Box 860
Fernley, NV 89408
775-423-6668 Fax: 423-6411
Company employees: 43

Production:

Diatomite

Mineral County

Borealis Mine (3)

Operator:

Gryphon Gold Corp.
611 No. Nevada St.
Carson City, NV 89703
775-945-9876
Company employees: 37
Contract employees: 10

Production:

Gold - 3,171 oz
Silver - 1,992 oz

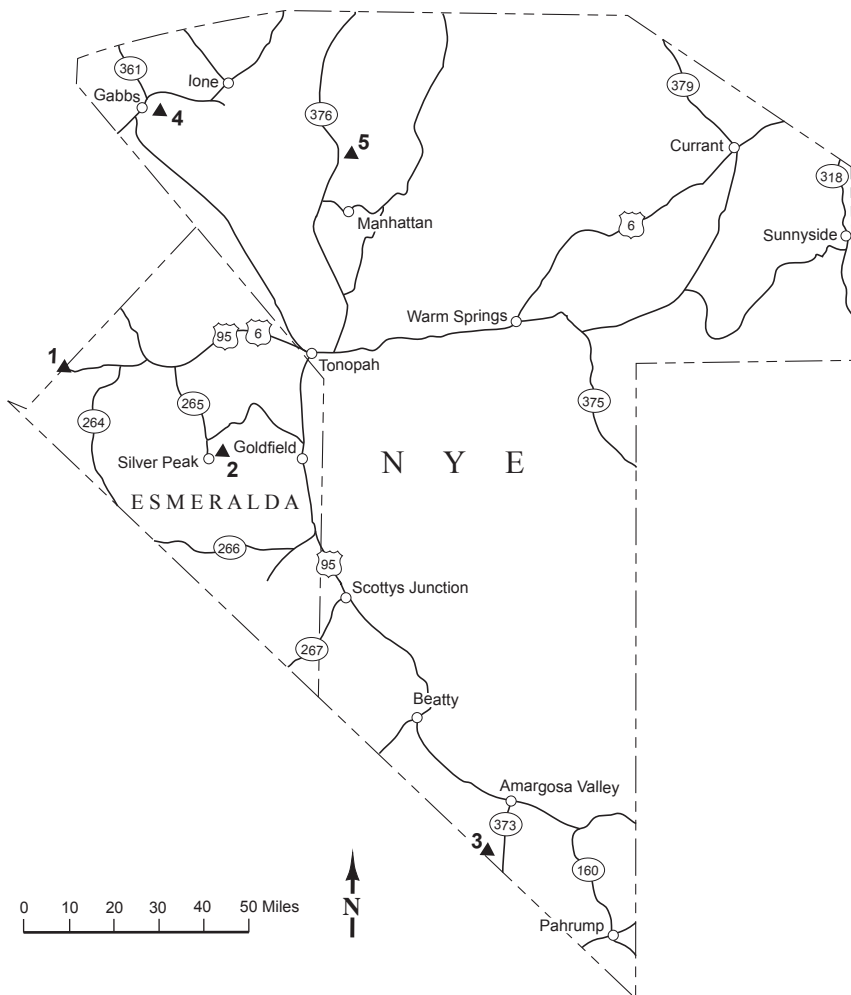
Denton-Rawhide Mine (4)

Operator:

Rawhide Mining, LLC
P.O. Box 2070
Fallon, NV 89407
775-945-1015 Fax: 945-1213
Company employees: 23
Contract employees: 2

Production:

Gold - 24,828 oz
Silver - 438,023 oz



Section VI

Esmeralda County

Basalt Mine (1)

Operator:

Grefco Minerals, Inc.
P.O. Box 278
Dyer, NV 89010
775-573-2422 Fax: 573-2422
Company employees: 13

Production:

Diatomite

Silver Peak Operations (2)

Operator:

Chemetall Foote Corp.
P.O. Box 98
Silver Peak, NV 89047
775-937-2222 Fax: 937-2250
Company employees: 55
Contract employees: 10

Production:

Lithium compounds

Nye County

IMV Nevada (3)

Operator:

Mud Camp Mining Co. LLC
HC 70 Box 549
Amargosa Valley, NV 89020
775-372-5341 Fax: 372-5640
Company employees: 27

Production:

Specialty clays

Premier Magnesia (4)

Operator:

Premier Magnesia, LLC
P.O. Box 177
Gabbs, NV 89409
775-285-2601 Fax: 285-4021
Company employees: 95

Production:

Magnesium compounds

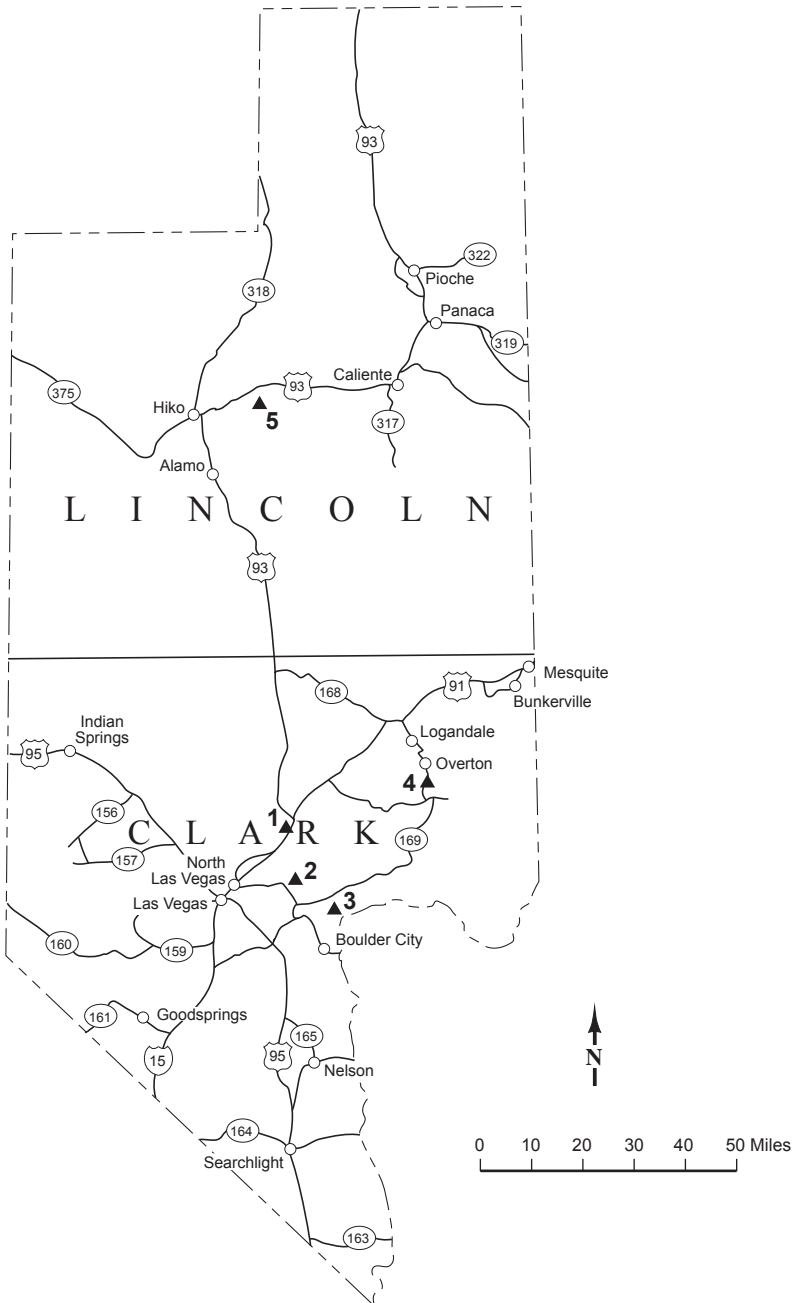
Smoky Valley Common Operation (5)

Operator:

Round Mountain Gold Corp.
P.O. Box 480
Round Mountain, NV 89045-0480
775-377-2366 Fax: 377-3224
Company employees: 733
Contract employees: 194

Production:

Gold - 360,020 oz
Silver - 644,329 oz



Section VII

Clark County

Apex Quarry (1)

Operator:

Lhoist North America
12101 U.S. Highway 93
Las Vegas, NV 89165
702-643-7702 Fax: 643-9517
Company employees: 135

Production:

Limestone

Simplot Silica Products (4)

Operator:

J.R. Simplot Company
P.O. Box 308
Overton, NV 89040
702-397-2667 Fax: 397-2798
Company employees: 40

Production:

Silica sand - 400,000 tons

PABCO Gypsum (2)

Operator:

PABCO Building
Products, LLC
P.O. Box 364329
Las Vegas, NV 89036
702-407-3700 Fax: 643-6249
Company employees: 108
Contract employees: 2

Production:

Gypsum - 710,033 tons

Lincoln County

Tenacity Perlite Mine (5)

Operator:

Wilkin Mining & Trucking, Inc.
HC 34 Box 199
Caliente, NV 89008
775-728-4463 Fax: 728-4456
Company employees: 8

Production:

Perlite

Pioneer Gypsum Mine (3)

Operator:

Pioneer Gypsum Mining, Inc.
4880 Donovan Way
North Las Vegas, NV 89081
702-399-5939 Fax: 399-8353
Company employees: 8
Contract employees: 1

Production:

Gypsum - 61,345 tons



PABCO Gypsum Mine (Mike Visser photo).

Summary of 2011 production

Gold	5,536,482	ounces
Silver	7,141,489	ounces
Barite (shipped)	697,946	tons
Copper	123,791,237	pounds
Diatomite (shipped)	253,379	tons
Dolomite	N/A	
Gypsum	1,010,180	tons
Limestone	6,676,991	tons
Lithium compounds	N/A	
Magnesium compounds	N/A	
Molybdenite	1,910,162	pounds
Perlite	N/A	
Salt	23,618	tons
Silica sand	463,195	tons
Specialty clay	N/A	

Economic impacts of mining in Nevada—2011

Nevada's mining industry set an all-time record in 2011 for total value of all mined commodities. The total value was about \$9.48 billion, a \$2.0 billion increase from 2010. The value was driven by gold, which contributed about \$8.51 billion, based on the actual gross proceeds reported to the Nevada Department of Taxation. The average price of gold in 2011 was \$1,572 per troy ounce according to Kitco. Nevada led the nation in 2011 in the production of gold, barite, lithium compounds and magnesium compounds. Nevada produced a wide variety of other mineral and energy commodities such as clays, copper, diatomite, dolomite, geothermal energy, gypsum, lapidary and gem stones, limestone, molybdenite, oil, perlite, salt, silica sand, silver, and specialty aggregates.

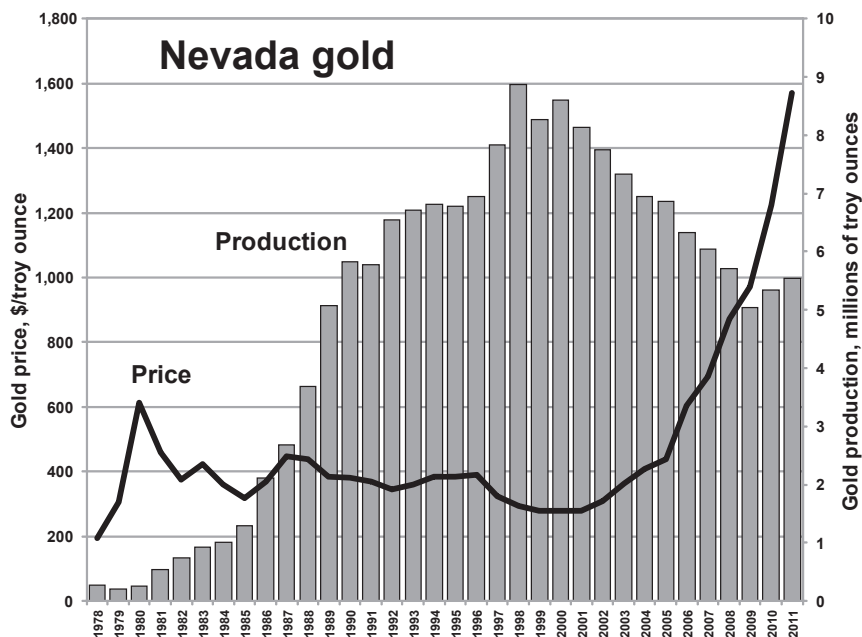
5,338,559 troy ounces in 2010, an increase of approximately 3.7%. According to the USGS, Nevada remains the nation's top gold producer with about 73.5% of the U.S. total. Underground operations contributed about 24% of the total gold production in 2011. Silver production fell slightly to 7,141,489 troy ounces in 2011 from 7,361,123 troy ounces in 2010. Copper production decreased to 123,791,237 pounds in 2011 compared to 127,975,833 pounds in 2010. Molybdenite production increased significantly to 1,910,162 pounds in 2011 compared to 590,681 pounds in 2010. Barite production was up significantly to 697,946 tons shipped in 2011 compared to 476,451 tons shipped in 2010. Gypsum production was down to 1,010,180 tons in 2011 compared to 1,055,737 tons in 2010.

Production Highlights

Nevada's gold production was 5,536,482 troy ounces in 2011 compared to

Employment

According to the Nevada Department of Employment, Training, and



Rehabilitation, the Nevada mining industry employed an average of 16,177 employees in 2011. The average pay for mineral industry employees during this time was \$77,321 per year, the highest average of any employment sector in the state. In addition, it is estimated there are about 65,000 jobs in the state related to providing goods and services needed by the mining industry. Mining employment has remained an important factor in Nevada.

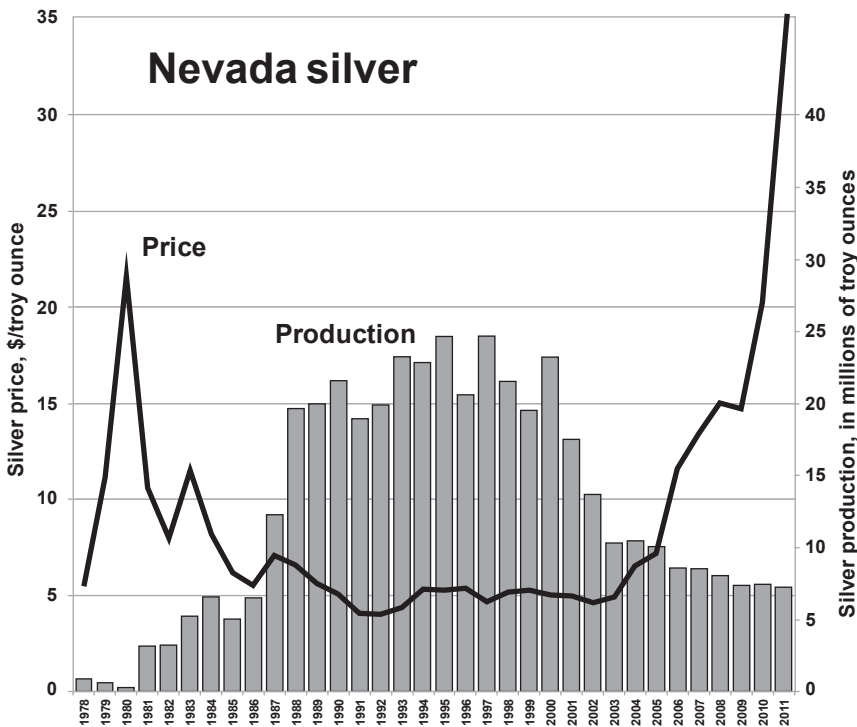
Permitting and Reclamation

Before mining can take place, plans of operation must be submitted and permits must be obtained from federal and state agencies to ensure that resources such as wildlife, air, and water are protected. Nevada and federal laws and regulations require that lands disturbed by mining activities must be rehabilitated so they can be used for other activities

once mining is completed. This process, called reclamation, returns mined areas to other productive uses such as livestock grazing, wildlife habitat, or other industrial applications. To ensure that reclamation is done, mine operators are required to post reclamation bonds that are held by government agencies. The bonds are released only after the mined area is stabilized and the reclamation goals have been met. According to the Nevada Division of Environmental Protection, approximately \$1,866 million in reclamation bonds are currently posted. Mine operators are proud of their efforts and are constantly seeking ways to enhance their reclamation technology.

Gold Reserves

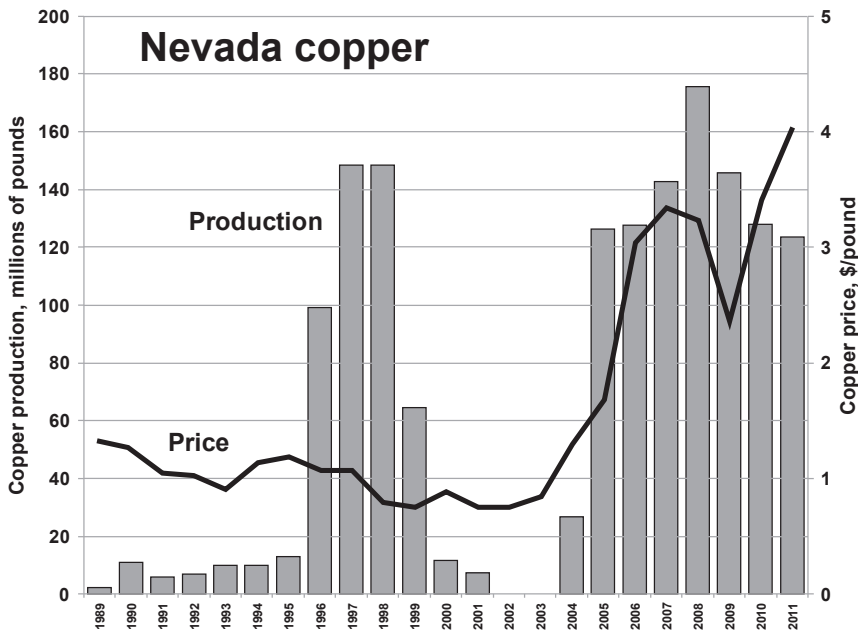
Gold reserves are defined as that portion of a gold ore deposit known to be economically feasible for extraction. The



amount of reserves is always in a state of flux, due to some reserves being lost to production, additions of new reserves through new discoveries, and changing economic conditions. The price of gold and the cost of production are the main factors in determining whether a reserve is really a reserve or just a sub-economic resource. Extensive gold resources, not currently economic, are known to exist at or near many mining operations in Nevada. An increase in the gold price with all else being equal would mean many companies would be able to reclassify their resources into a reserve category. An increase in the cost of regulatory compliance has the same effect as a lowering of the gold price, thus increasingly complex and expensive regulations can reduce reserves. Under current conditions, the existing publically reported reserves are sufficient to sustain gold production at current levels in Nevada for about 15 years.

Exploration

Exploration for new deposits, particularly gold, is an ongoing effort by both the operating companies and many others who do not operate mines in the state. Each year, the Division of Minerals conducts an exploration survey to determine the level of exploration activity and the factors that are responsible for those levels. For 2011, the Division expanded the scope of the survey and contracted the work to the Nevada Bureau of Mines and Geology. The 169 companies that responded to the latest survey indicated they spent \$674.7 million on exploration in Nevada in 2011. Gold exploration accounts for 80 to 90 percent of exploration spending. Two large companies accounted for 25 to 30 percent of the spending. Approximately 1,040 people are employed by companies doing exploration activities in Nevada in 2011. Exploration geologists, drillers, assayers, and others who



support exploration activities represent a significant positive economic impact, particularly in Nevada's rural areas.

Minerals Other Than Gold and Silver

Minerals other than gold and silver are also important to Nevada's economy. Copper ranked second behind gold in terms of value in 2011. Industrial minerals such as barite, diatomite, dolomite, gypsum, limestone, lithium compounds, magnesite, molybdenite, perlite, salt, and specialty clays are also produced in Nevada.

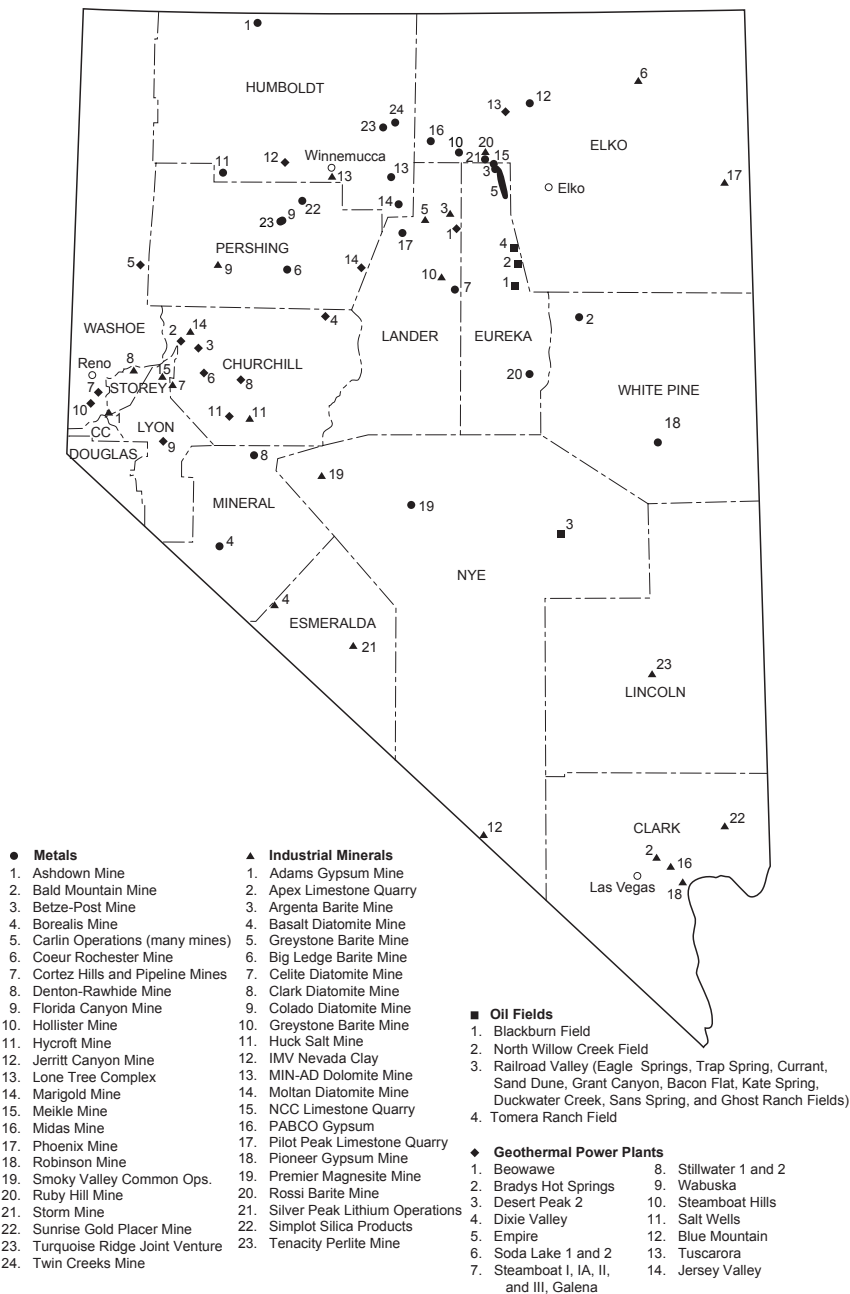
Economic activity from oil and gas exploration and production is relatively minor when compared to mining, but are locally important to the economy of east-central Nevada. In oil field terms, Nevada is considered a frontier state, meaning its potential is yet to be realized. Oil production in 2011 was about 408,000 barrels (42 gallons per barrel) worth \$28.8 million.

Nevada is rich in geothermal resources and is second only to California in the production of geothermal energy. Currently, Nevada has 20 plants at

14 sites that sold approximately 2.173 million megawatt hours of electricity in 2011. This is enough to power about 198,000 typical homes for a year. Geothermal heat is also used for a variety of commercial, domestic and public applications in Nevada. Schools in Elko County and homes in Lincoln and Washoe Counties are examples of public and private facilities using this renewable energy resource.

Conclusion

Nevada's mineral industry continued to be a major economic force in the state with a total value of about \$9.5 billion in 2011. Given a stable price and regulatory environment this situation should continue for many years to come. Prices of many mineral commodities have risen significantly in recent years, allowing companies to increase their exploration and development efforts. Nevada is a major natural resource producer and has significant mineral and energy resources that can provide strong economic development into the future.



Major mines, oil fields, and geothermal plants, 2011.

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