

Nevada Bureau of Mines and Geology

SPECIAL PUBLICATION P-22

Major Mines of Nevada 2010

Mineral Industries in Nevada's Economy

By Doug Driesner and Alan Coyner

The Nevada Division of Minerals

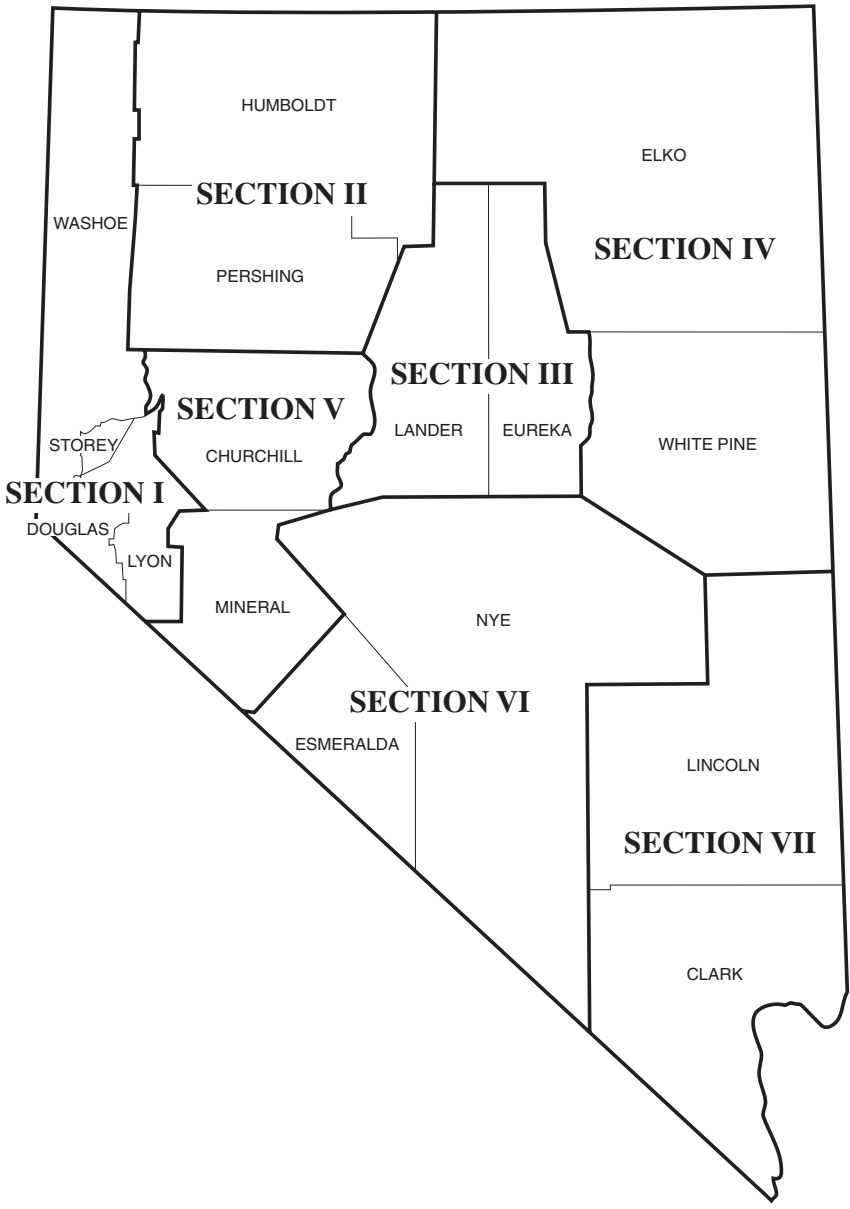
2011

This is the twenty-second 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 2010 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>.

College of Science
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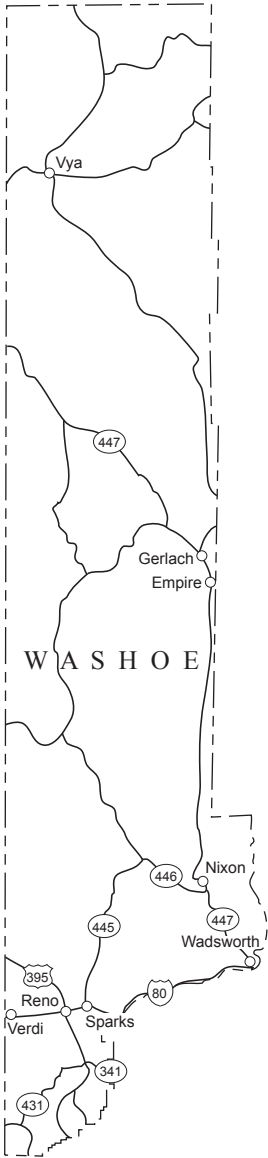
University of Nevada, Reno



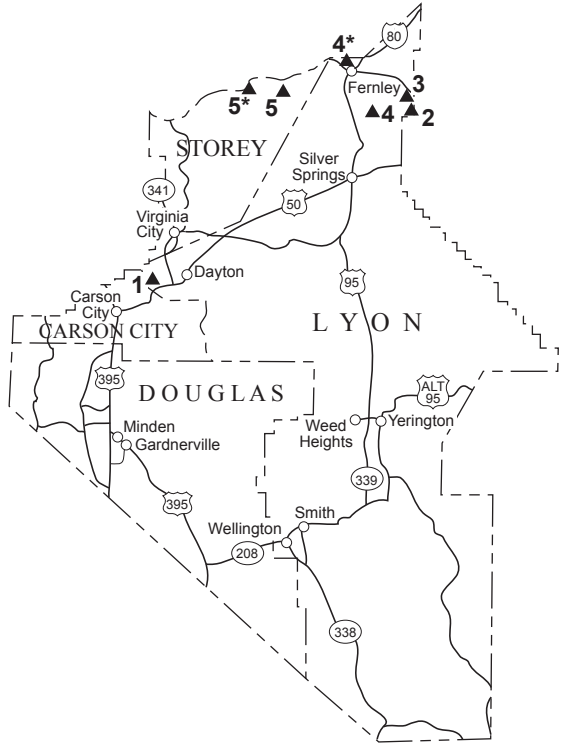
Contents

Major mines

Section I	
Lyon County	5
Storey County	5
Section II	
Humboldt County	6
Pershing County	8
Section III	
Eureka County	11
Lander County	12
Section IV	
Elko County	14
White Pine County	15
Section V	
Churchill County	17
Mineral County	17
Section VI	
Esmeralda County	19
Nye County	19
Section VII	
Clark County	21
Lincoln County	21
Summary of 2010 production	22
Economic impacts of mining in Nevada—2010	23
Major mines, oil fields, and geothermal plants, 2010 (map)	27
Index	28



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: 44

Production:

Gypsum - 148,000 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

Hazen Pit (3)

Operator:

EP Minerals, LLC
640 Clark Station Rd.
Sparks, NV 89434
775-824-7700 Fax: 824-7715
Company employees: 2
Contract employees: 4

Production:

Diatomite

NCC Limestone Quarry (4) and Mill (4*)

Operator:

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

Production:

Limestone/Clay

Storey County

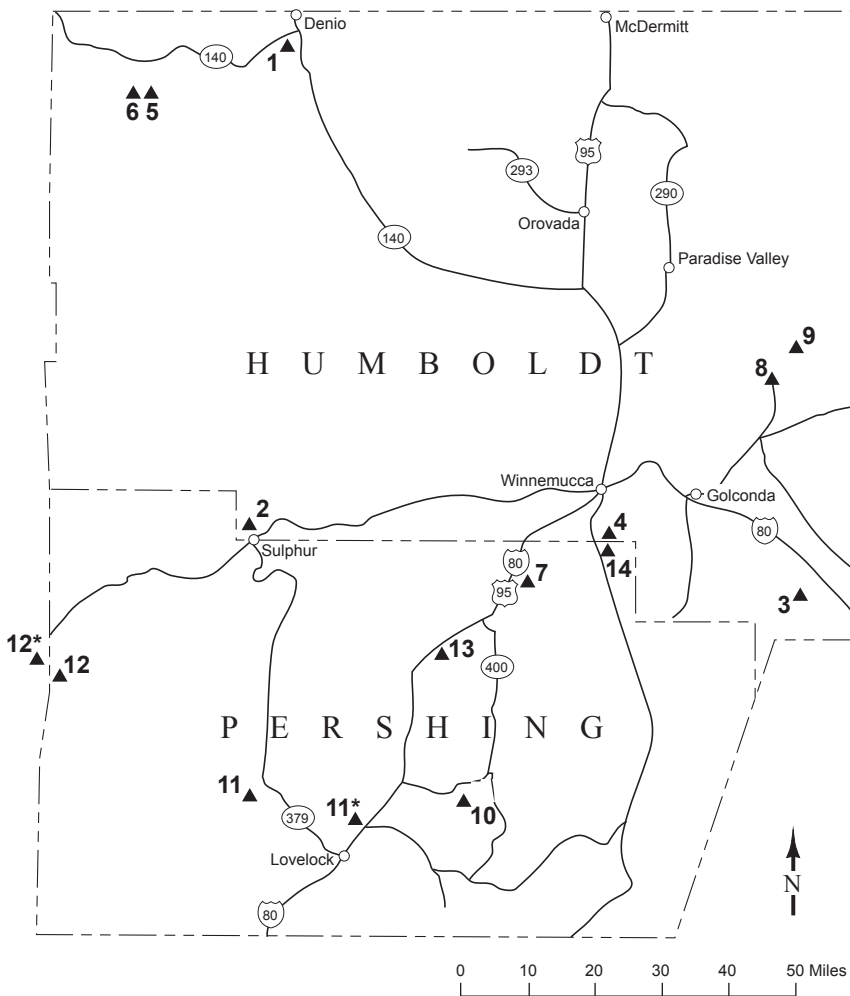
Clark Mine (5) and Mill (5*)

Operator:

EP Minerals, LLC
640 Clark Station Rd.
Sparks, NV 89434
775-824-7700 Fax: 824-7715
Company employees: 58
Contract employees: 9

Production:

Diatomite



Section II

Humboldt County

Ashdown Mine (1)

Operator:

Win-Eldrich Mines Ltd.

P.O. Box 210

Denio, NV 89404

Company employees: 35

Production:

Molybdenite - 212,490 pounds

Hycoft Mine (2)

Operator:

Hycoft Resources and Development

P.O. Box 3030

Winnemucca, NV 89446

775-623-5260 Fax: 623-0215

Company employees: 209

Contract employees: 150

Production:

Gold - 102,483 oz

Silver - 233,974 oz

Marigold Mine (3)

Operator:

Goldcorp, Inc.
P.O. Box 160
Valmy, NV 89438
775-635-2317 Fax: 635-2551
Company employees: 273
Contract employees: 39

Production:

Gold - 136,754 oz
Silver - 3,729 oz

MIN-AD Mine and Mill (4)

Operator:

MIN-AD, Inc.
P.O. Box 39
Winnemucca, NV 89446
775-623-5944 Fax: 623-9028
Company employees: 20
Contract employees: 4

Production:

Dolomite

Rainbow Ridge Opal Mines (5)

Operator:

Rainbow Ridge Opal Mines, Inc.
P.O. Box 97
Denio, NV 89404
775-941-0270 (summer)

Production:

Precious opal

Royal Peacock Opal Mine (6)

Operator:

Walter Wilson
P.O. Box 165
Denio, NV 89404
775-941-0374 (summer)
775-272-3201 (winter)

Production:

Precious opal

Sunrise Gold Placer Mine (7)

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 - 1,116 oz

Turquoise Ridge Joint Venture (8)

Operator:

Barrick Gold Corporation
2055 Getchell Mine Road
Golconda, NV 89414
775-529-5001 Fax: 529-0753
Company employees: 347
Contract employees: 165

Production:

Gold - 161,579 oz

Twin Creeks Mine (9)

Operator:

Newmont Mining Corp.
P.O. Box 69
Golconda, NV 89414
775-635-9400 Fax: 635-4602
Company employees: 589
Contract employees: 56

Production:

Gold - 452,744 oz
Silver - 211,935 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: 35
Contract employees: 10

Production:

Gold - 9,641 oz
Silver - 2,023,423 oz

Colado Mine and Plant (11), Mill (11*)

Operator:

EP Minerals, LLC
150 Coal Canyon Road
Lovelock, NV 89419
775-824-7540 Fax: 824-7582
Company employees: 117

Production:

Diatomite, Perlite

Empire Mine (12), Mill (12*)-in Washoe County

Operator:

United States Gypsum Co.
P.O. Box 130
Empire, NV 89405
775-557-2341 Fax: 557-2212
Company employees: 101

Production:

Gypsum - 162,636 tons

Florida Canyon Mine (13)

Operator:

Florida Canyon Mining, Inc.
P.O. Box 330
Imlay, NV 89418
775-538-7300 Fax: 538-7691
Company employees: 148
Contract employees: 35

Production:

Gold - 54,975 oz
Silver - 39,903 oz

W. Glen Sexton Family Trust (14)

Operator:

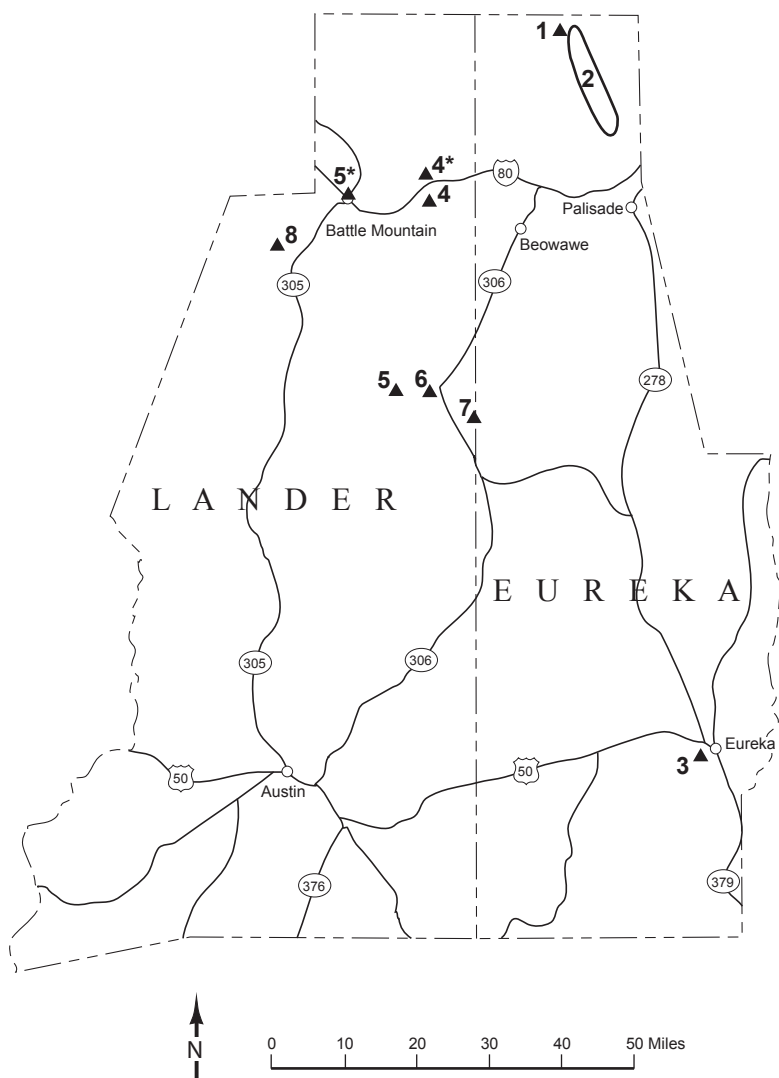
Nutritional Additives Corp.
415 Wellington Street
Winnemucca, NV 89445
775-623-1151 Fax: 623-1153
Company employees: 4

Production:

Dolomite



*Newmont, Twin Creeks Mine
(D.D. LaPointe 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: 1,003

Production:

Gold - 884,200 oz

Silver - 138,931 oz

Eastern Nevada Operations

(Carlin Operations) (2)

Carlin N, 19 Locations

Carlin S, 6 Locations

Operator:

Newmont Mining Corp.

1655 Mountain City Highway

Elko, NV 89801

775-778-4000 Fax: 778-4751

Company employees: 1,941

Contract employees: 611

Production:

Gold - 934,282 oz

Silver - 69,430 oz

Ruby Hill Mine (3)

Operator:

Barrick Gold Corporation

P.O. Box 676

Eureka, NV 89316

775-237-6060 Fax: 237-5408

Company employees: 128

Contract employees: 11

Production:

Gold - 81,382 oz.

Silver - 43,276 oz.

Lander County

Argenta Mine (4) and Mill (4*)

Operator:

Baker Hughes Oilfield Operations, Inc.
P.O. Box 277
Battle Mountain, NV 89820
775-635-5441 Fax: 635-5455
Company employees: 35
Contract employees: 31

Shipped:

Barite - 94,838 tons

Battle Mountain Grinding Plant (Greystone Mine) (5), Mill (5*)

Operator:

M-I Swaco
P.O. Box 370
Battle Mountain, NV 89820
775-635-5135 Fax: 635-2645
Company employees: 90

Shipped:

Barite - 314,177 tons

Pipeline Mine (6)

Operator:

Barrick Cortez, Inc.
HC66 Box 1250
Crescent Valley, NV 89821-1250
775-468-4400 Fax: 468-4496
Company employees: 1,048

Production:

(includes the Cortez Hills open-pit)

Gold - 791,978 oz
Silver - 45,477 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: 1,048

Production:

(underground only, excluding the open-pit)
Gold - 347,998 oz

Phoenix Project (8)

Operator:

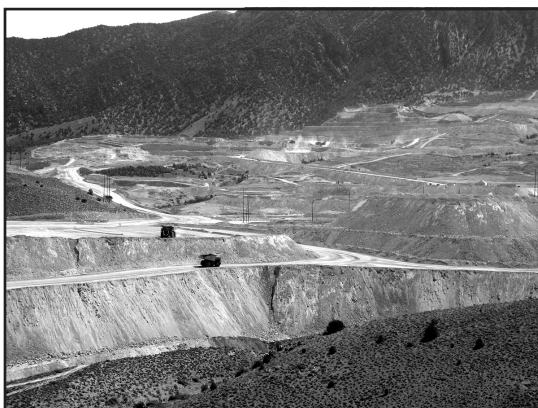
Newmont Mining Corp.
P.O. Box 1657
Battle Mountain, NV 89820
775-635-6423 Fax: 635-6460
Company employees: 458
Contract employees: 68

Production:

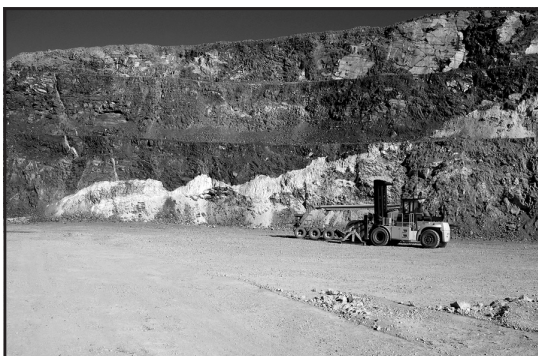
Gold - 214,142 oz
Silver - 921,350 oz
Copper - 19,008,818 pounds



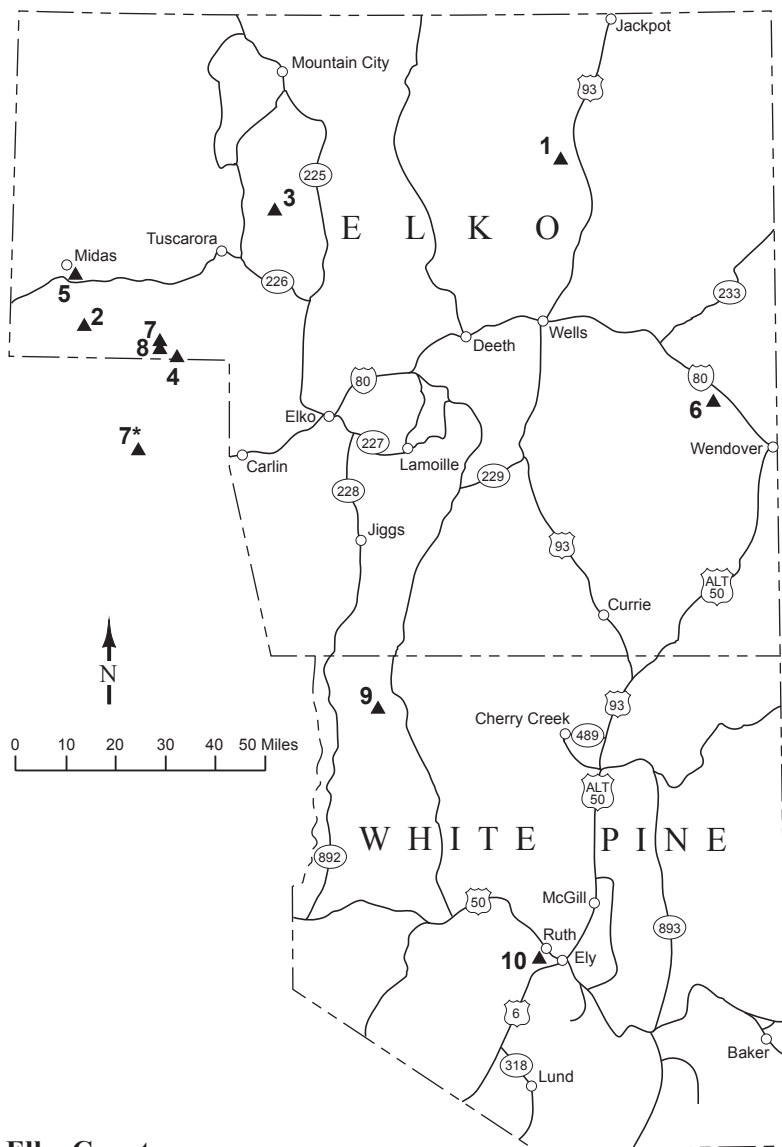
Cortez Hills Mine (Rachel Wearne photos).



Cortez Hills Mine (Chris Henry photo).



Cortez Hills Mine, 35.7 Ma rhyolite dikes intruded into Devonian Wenban Limestone, the major ore host. The dikes are intimately associated with Carlin-type gold mineralization at Cortez Hills (Chris Henry photos).



Elko County

Big Ledge Mine/Dry Creek Jig Plant (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 - 74,452 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: 192
Contract employees: 67

Production:

Gold - 105,144 oz
Silver - 578,855 oz

Jerritt Canyon Mine (3)

Operator:

Yukon-Nevada Gold Corp.
HC31 Box 78
Elko, NV 89801
775-738-5006 Fax: 758-9231
Company employees: 188

Production:

Gold - 65,104 oz

Meikle Mine (4)

Operator:

Barrick Goldstrike Mines, Inc.
P.O. Box 29
Elko, NV 89803
775-778-8858 Fax: 778-8865
Company employees: 568

Production:

Gold - 281,308 oz
Silver - 22,628 oz

Midas Mine (5)

Operator:

Newmont Mining Corp.
HC66 Box 125
Midas, NV 89414
775-635-6423 Fax: 635-6460
Company employees: 256
Contract employees: 47

Production:

Gold - 127,196 oz
Silver - 1,710,318 oz

Pilot Peak Lime Plant (6)

Operator:

Graymont Western U.S.
P.O. Box 2520
West Wendover, NV 89883
775-483-5463
Company employees: 54
Contract employees: 1

Production:

Limestone, quicklime,
hydrated lime

Rossi Mine (7), Dunphy Mill (7*) - in Eureka County

Operator:

Halliburton
912 Dunphy Ranch Rd.
Battle Mountain, NV 89820
775-468-0515 Fax: 468-2060
Company employees: 36
Contract employees: 58

Shipped: Barite - 173,700 tons

Storm Mine (8)

Operator:

Barrick Goldstrike Mines, Inc.
P.O. Box 29
Elko, NV 89803
775-748-1001 Fax: 748-1240
Company employees: 7

Production:

Gold - 74,429 oz
Silver - 63,309 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: 261
Contract employees: 200

Production:

Gold - 60,333 oz
Silver - 15,000 oz

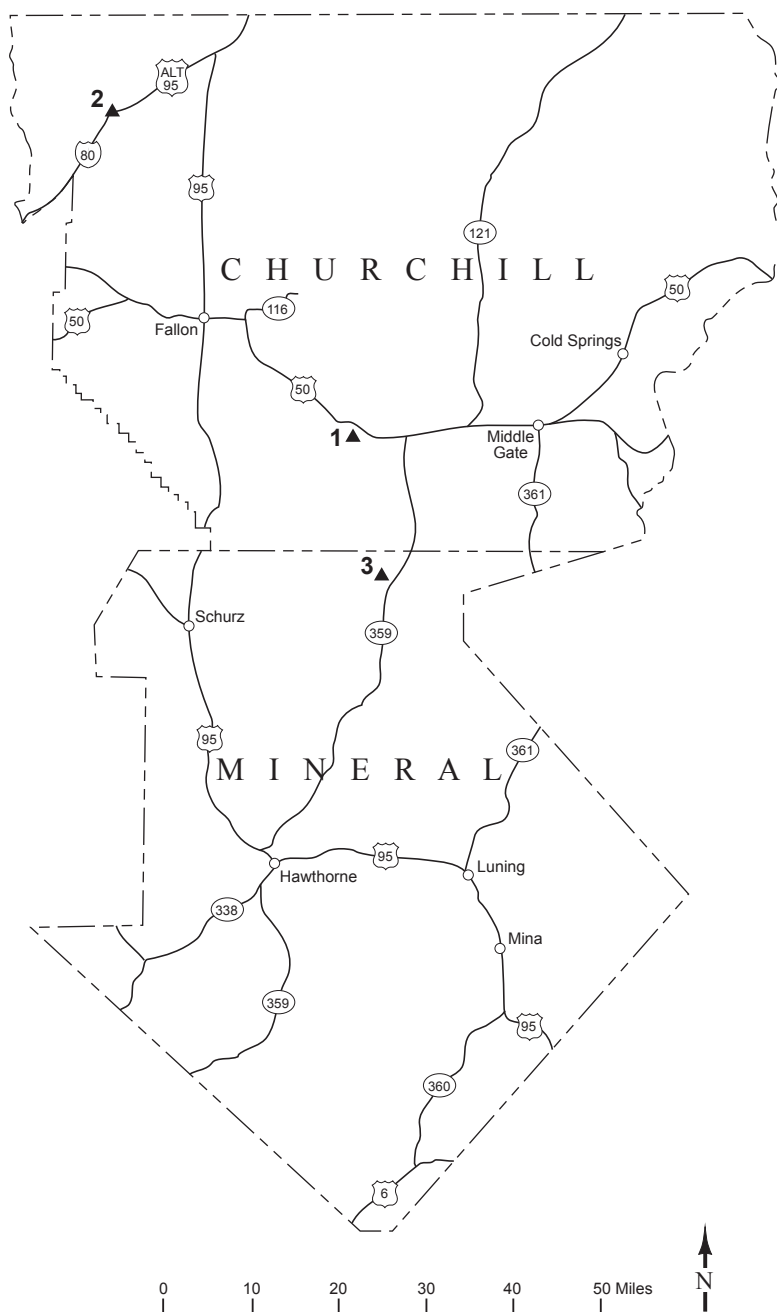
Robinson Mine (10)

Operator:

Robinson Nevada Mining Company
P.O. Box 382
Ruth, NV 89319
775-289-7000 Fax: 289-7349
Company employees: 544

Production:

Copper - 108,967,015 pounds
Gold - 72,998 oz
Silver - 245,746 oz
Molybdenite - 378,191 pounds



Section V

Churchill County

Huck Salt Company (1)

Operator:

Huck Salt Company
2900 Phritzie Ln.
Fallon, NV 89406
775-423-2055 Fax: 423-0467
Company employees: 9

Production:

Salt - 25,893 tons

Moltan Company (2)

Operator:

Moltan Company
P.O. Box 860
Fernley, NV 89408
775-423-6668 Fax: 423-6411
Company employees: 44

Production:

Diatomite

Mineral County

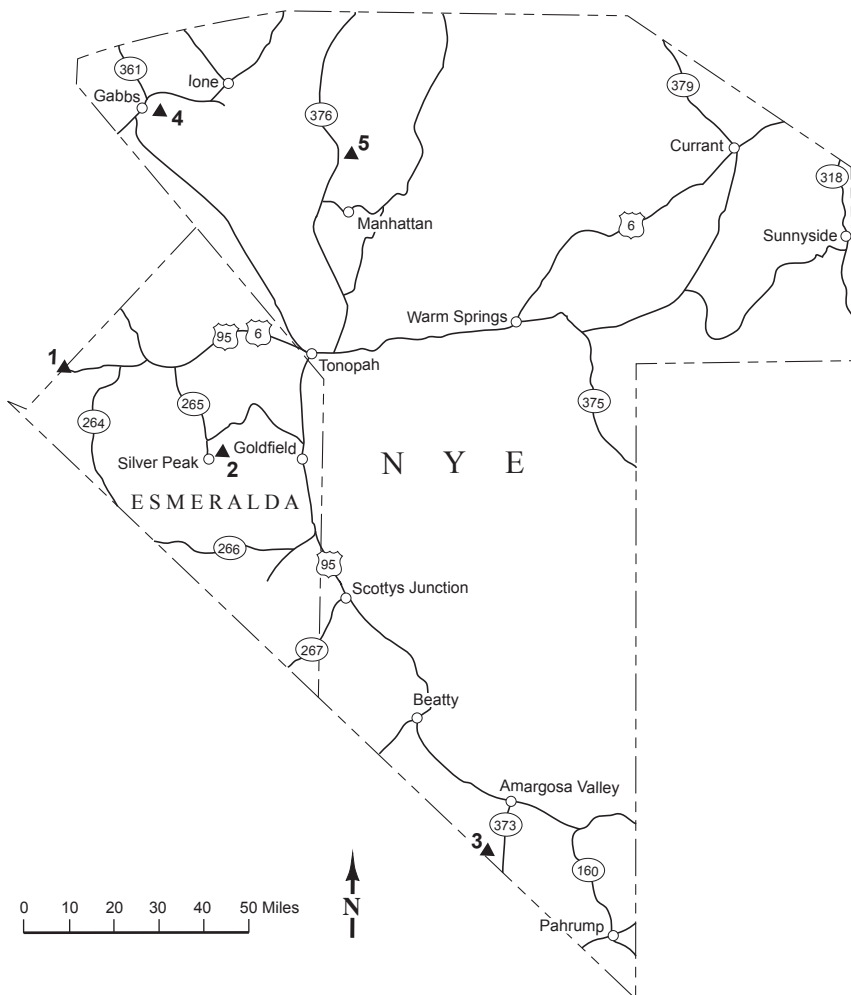
Denton-Rawhide Mine (3)

Operator:

Rawhide Mining, LLC
P.O. Box 2070
Fallon, NV 89407
775-945-1015 Fax: 945-1213
Company employees: 24

Production:

Gold - 20,159 oz
Silver - 342,382 oz



Section VI

Esmeralda County

Basalt Mine and Mill (1)

Operator:

Grefco Minerals, Inc.
P.O. Box 278
Dyer, NV 89010
775-573-2422 Fax: 573-2422
Company employees: 8

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: 50
Contract employees: 8

Production:

Lithium compounds

Nye County

IMV Nevada (3)

Operator:

Mud Camp Mining Co. LLC
HC 70 Route Box 549
Amargosa Valley, NV 89020
775-372-5341 Fax: 372-5640
Company employees: 25
Contract employees: 1

Production:

Specialty clays - 20,000 tons

Premier Magnesia (4)

Operator:

Premier Magnesia, LLC
P.O. Box 177
Gabbs, NV 89409
775-285-2601 Fax: 285-4021
Company employees: 92

Production:

Magnesium compounds

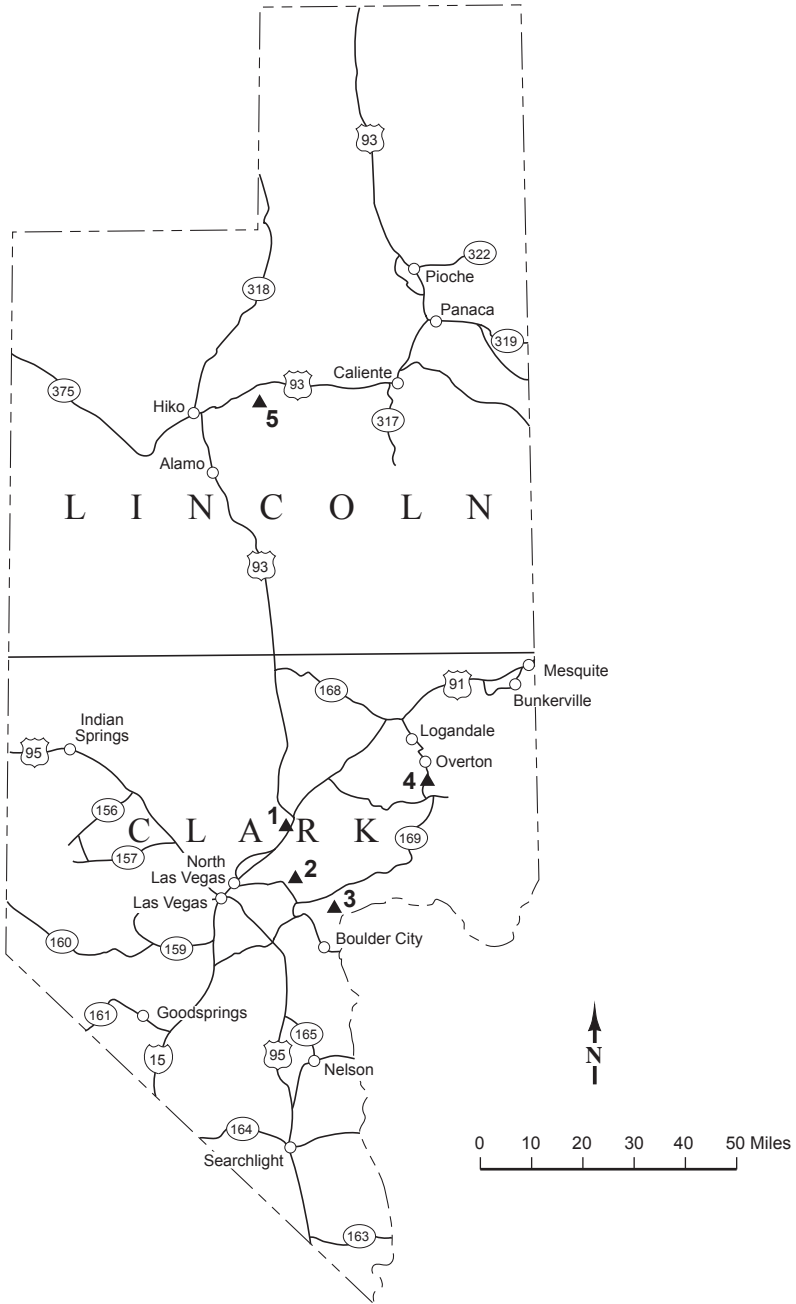
Smoky Valley Common Operation (5)

Operator:

Round Mountain Gold Corp.
P.O. Box 480
Round Mountain, NV 89045-0480
775-377-2366 Fax: 377-3224
Company employees: 708
Contract employees: 63

Production:

Gold - 358,614 oz
Silver - 651,457 oz



Section VII

Clark County

Apex Quarry and Plant (1)

Operator:

Lhoist North America
12101 U.S. Highway 91
Las Vegas, NV 89165
702-643-7702 Fax: 643-9517
Company employees: 119

Production:

Dolomite, lime

PABCO Gypsum (2)

Operator:

PABCO Building
Products, LLC
P.O. Box 364329
Las Vegas, NV 89036
702-407-3700 Fax: 643-6249
Company employees: 92
Contract employees: 2

Production:

Gypsum - 682,000 tons

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 - 62,992 tons

Simplot Silica Products (4)

Operator:

J.R. Simplot Company
P.O. Box 308
Overton, NV 89040
702-397-2667 Fax: 397-2798
Company employees: 35

Production:

Silica sand - 400,000 tons

Lincoln County

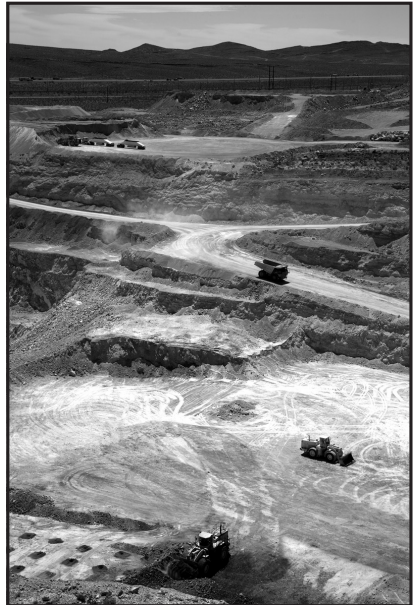
Tenacity Perlite Mine and Mill (5)

Operator:

Wilkin Mining & Trucking, Inc.
HC 34 Box 199
Caliente, NV 89008
775-728-4463 Fax: 728-4456
Company employees: 7

Production:

Perlite



**Apex Quarry, Lhoist North America
(Mike Visser photo).**

Summary of 2010 production

Aggregate	27,650,000	tons
Gold	5,339,000	ounces
Silver	7,361,000	ounces
Barite (shipped)	657,000	tons
Copper	127,976,000	pounds
Diatomite	N/A	
Dolomite	N/A	
Gypsum	1,056,000	tons
Limestone	N/A	
Lithium compounds	N/A	
Mercury	N/A	
Molybdenite	591,000	pounds
Perlite	N/A	
Precious opal	70	pounds
Salt	26,000	tons
Silica sand	400,000	tons
Specialty clay	20,000	tons

N/A Not available publicly



“Moonlight over Cortez” (Cortez Hills Mine, Chris Henry photo).

Economic impacts of mining in Nevada—2010

Nevada's mining industry set an all-time record in 2010 for total value of all mined commodities. The total value was about \$7.7 billion, a \$1.9 billion increase from 2009. The value was driven by gold, which contributed about \$6.54 billion, based on an average price of \$1,225 per troy ounce. Nevada led the nation in 2010 in the production of gold, barite, and lithium as it has for several years. Nevada's mines produced a wide variety of other mineral and energy commodities such as aggregates, copper, diatomite, dolomite, geothermal energy, lapidary and gemstones, lime and limestone, magnesium compounds, mercury, molybdenite, oil, perlite, potassium sulfate, salt, silica sand, silver, and specialty aggregates and clays.

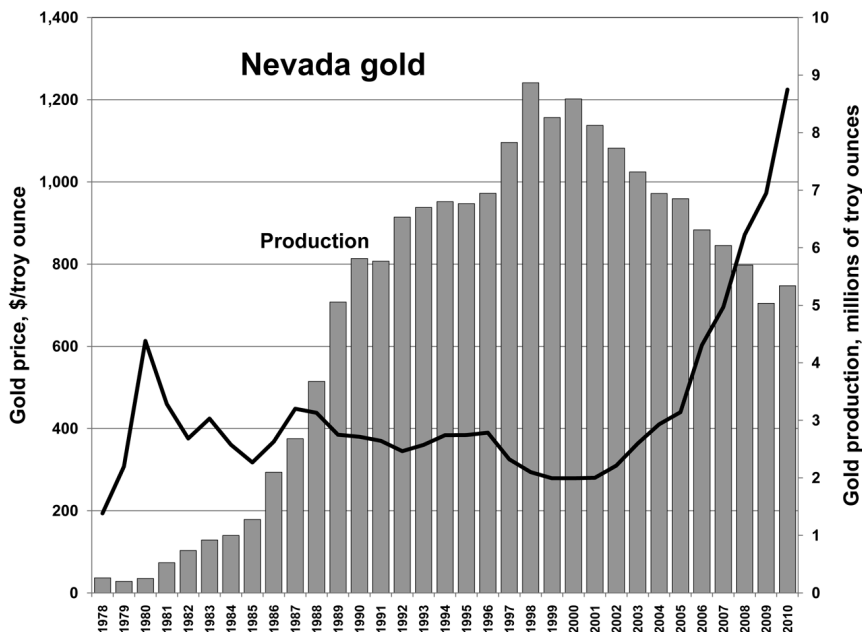
production level is up approximately 6% from 2009. Nevada remains the nation's top gold producer with about 72% of the U.S. total. Underground operations contributed about 26% of the total gold production in 2010. Silver production rose to 7,361,000 troy ounces in 2010 compared to 7,318,000 in 2009. Copper production decreased to 127,976,000 pounds in 2010 compared to 145,733,000 pounds in 2009. Barite production was up to 657,000 tons in 2010 compared to 476,000 tons in 2009. Gypsum production was down to 1,056,000 tons in 2010 compared to 1,198,000 tons in 2009. Molybdenite production was 591,000 pounds in 2010 compared to 148,000 pounds in 2009.

Production highlights

Nevada's gold production was 5,339,000 troy ounces in 2010. The

Employment

According to the Nevada Department of Employment, Training, and



Rehabilitation, the Nevada mining industry employed an average of 12,211 employees in 2010. The average pay for mineral industry employees during this time was \$83,172 per year, the highest average of any employment sector in the state. In addition, it is estimated there are about 51,000 jobs in the state related to providing goods and services needed by the mining industry. Mining employment has remained an important factor in Nevada.

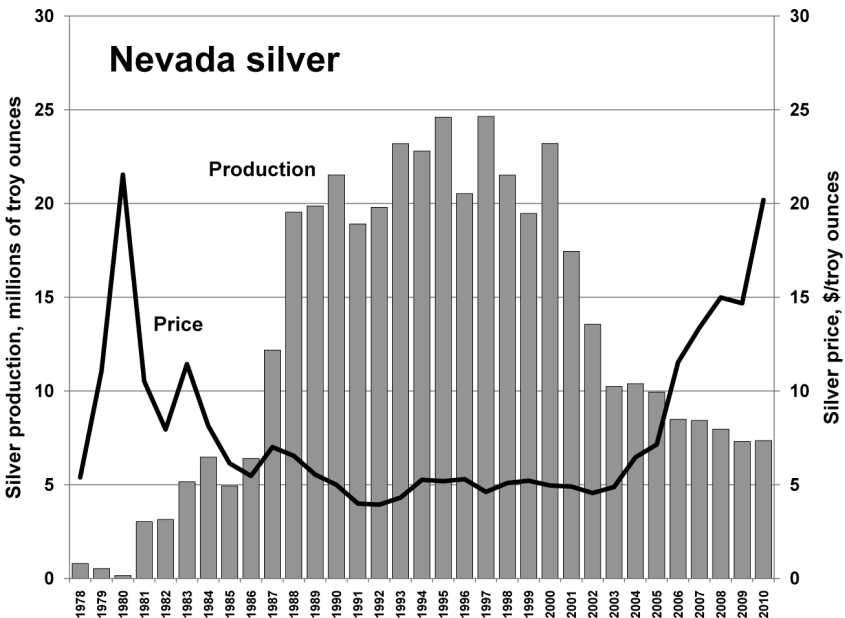
Permitting and reclamation

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 \$1,661 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

Nevada's reported gold reserves at or near currently operating mines that can be mined at a profit under current economic conditions stood at about 81.0 million troy ounces at the end of 2010. 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 operations. 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 proven reserves are sufficient to sustain gold production at current levels for about 15 years.

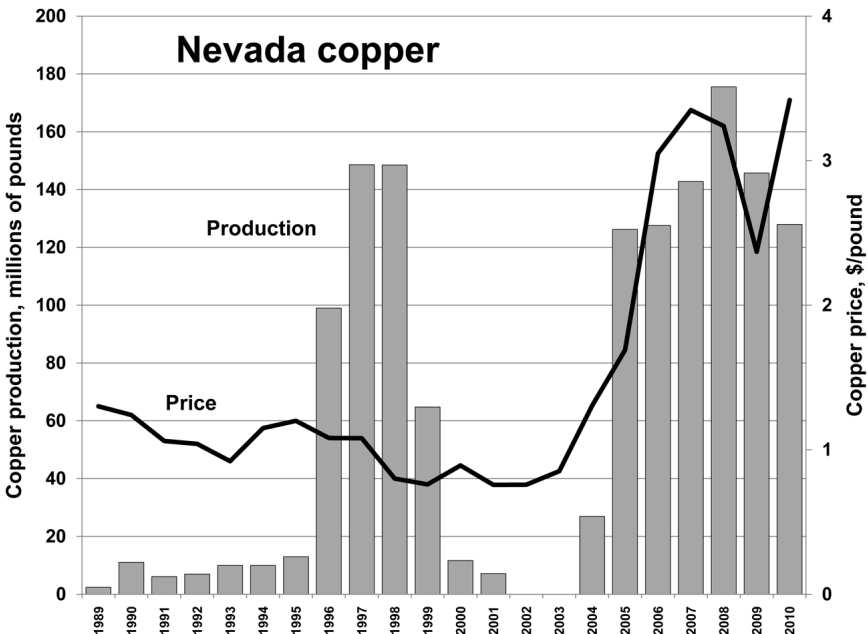
Exploration

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. The respondents to the latest survey indicated they spent \$214.1 million on exploration in Nevada in 2010, up from \$110.9 million in 2009. The respondents reported having 181 geologists on the payroll in 2010. Existence of favorable geology and commodity prices were cited as the most important factors influencing exploration levels. Exploration geologists and the drillers, assayers, and others who support their 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 2010. Industrial minerals such as aggregates, barite, diatomite, dolomite, gypsum, limestone,



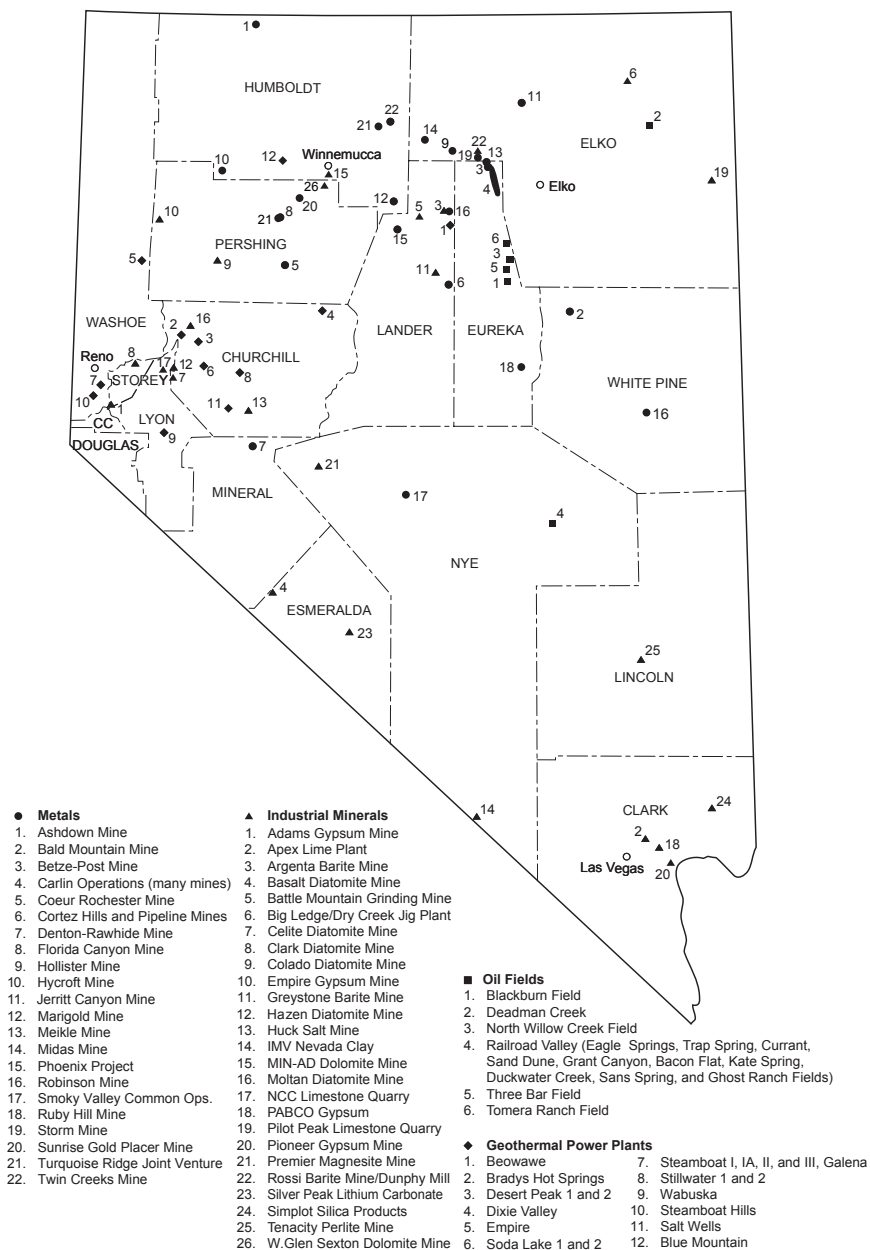
lithium compounds, magnesite, molybdenite, perlite, salt, and specialty clays are produced in this state.

Oil and gas exploration and production are relatively minor when compared to mining, but are nonetheless important to the economy of east-central Nevada. In oil field terms, Nevada is considered a frontier, meaning its potential is yet to be realized. Oil production in 2010 was about 427,000 barrels (42 gallons per barrel).

Nevada is rich in geothermal resources and is second only to California in the production of geothermal power. Currently, Nevada has 20 plants that sold approximately 2.1 million megawatt hours of electricity in 2010. This is enough to power about 110,000 typical homes. 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

With a calculated value of about \$7.7 billion, Nevada's mineral industry continued to be a major economic force in the state in 2010. This situation should continue for many years to come. Challenges will exist, as they always have, but Nevada's mineral reserves and the potential to add to them will spur the creativity of the mineral industry. Prices of many mineral commodities have improved in recent years, allowing companies to increase their exploration and development efforts. The continued development of new projects will assure that the mining industry will remain strong in the future.



Major mines, oil fields, and geothermal plants, 2010.

Index

Adams Claim Gypsum Mine	5	Marigold Mine	7
Apex Quarry and Plant	21	Meikle Mine	15
Argenta Mine and Mill	12	Midas Mine	15
Ashdown Mine	6	MIN-AD Mine and Mill	7
Bald Mountain Mine	15	Moltan Company	17
Basalt Mine and Mill	19	NCC Limestone Quarry and Mill	5
Battle Mountain Grinding Plant	12	PABCO Gypsum	21
Betze-Post Mine	11	Phoenix Project	12
Big Ledge Mine/Dry Creek Jig Plant	14	Pilot Peak Lime Plant	15
Carlin Operations	11	Pioneer Gypsum Mine	21
Celite Diatomite Mine	5	Pipeline Mine	12
Clark Mine and Mill	5	Premier Magnesia	19
Coeur Rochester Mine	8	Rainbow Ridge Opal Mines	7
Colado Mine, Plant, and Mill	8	Robinson Mine	15
Cortez Hills Mine	12	Rossi Mine	15
Denton-Rawhide Mine	17	Royal Peacock Opal Mine	7
Dunphy Mill	15	Ruby Hill Mine	11
Eastern Nevada Operations	11	Silver Peak Operations	19
Empire Mine and Mill	8	Simplot Silica Products	21
Florida Canyon Mine	8	Smoky Valley Common Operation	19
Greystone Mine	12	Storm Mine	15
Hazen Pit	5	Sunrise Gold Placer Mine	7
Hollister Mine	15	Tenacity Perlite Mine and Mill	21
Huck Salt	17	Turquoise Ridge Joint Venture	7
Hycroft Mine	6	Twin Creeks Mine	7
IMV Nevada	19	W. Glen Sexton Family Trust	8
Jerritt Canyon Mine	15		