

# NEVADA COMMISSION ON MINERAL RESOURCES Division of Minerals

The Nevada Division of Minerals, a part of the Commission on Mineral Resources, is responsible for administering programs and activities to promote, advance, and protect mining and the development and production of petroleum and geothermal resources in Nevada. The Division's mission is to conduct activities to further the responsible development and production of the State's mineral resources to benefit and promote the welfare of the people of Nevada. The seven-member Commission on Mineral Resources is a public body appointed by the Governor that directs mineral-related policy for the Division and advises the Governor and Legislature on matters relating to mineral resources. The Division focuses its efforts on three main areas: industry relations and public affairs; regulation of oil, gas, and geothermal drilling activities and well operations; and abandoned mine lands.

The agency is involved in a wide array of activities relating to mineral development. Staff compiles annual data on all active mines in Nevada and maintains the State's mine registry. Information concerning mining operations and production is made available to the public through this yearly publication. Educational documents and materials concerning many aspects of the minerals industry are also produced. The Division participates in governmental activities affecting policies and laws concerning the minerals industry and resource development. The Division administers the State's reclamation bond pool.

The Division is responsible for permitting, inspecting, and monitoring all oil, gas, and geothermal drilling activities on both public and private lands in Nevada. Staff also monitors production of oil, gas, and geothermal resources to insure proper management and conservation. The Administrator is the Governor's official representative to the Interstate Oil and Gas Compact Commission.

The Division's abandoned mine lands program provides for public safety by identifying and ranking dangerous conditions at mines that are no longer operating, and by securing dangerous orphaned mine openings. The program continually urges the public to recognize and avoid hazardous abandoned mines.

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Cover photo: Turquoise Ridge Joint Venture (Mike Visher photo).

# The Nevada Bureau of Mines and Geology

The Nevada Bureau of Mines and Geology (NBMG) is a research and public service unit of the University of Nevada and is the State geological survey. NBMG is part of the Mackay School of Earth Sciences and Engineering at the University of Nevada, Reno.

NBMG scientists conduct research and publish reports on mineral resources, engineering geology, environmental geology, hydrogeology, and geologic mapping. Individuals interested in Nevada geology are encouraged to visit, call, write NBMG, or visit our homepage.

### http://www.nbmg.unr.edu

Most NBMG scientists (Director, research faculty, analytical laboratory) and cartographic and administrative staff are located on the **University of Nevada campus**, 775-794-6691.

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First edition, first printing, 2,075 copies, 2010 Printed by Allegra Print and Imaging, Reno, Nevada

# Nevada Bureau of Mines and Geology SPECIAL PUBLICATION P-21

# **Major Mines of Nevada 2009**

# Mineral Industries in Nevada's Economy

By Doug Driesner and Alan Coyner
The Nevada Division of Minerals

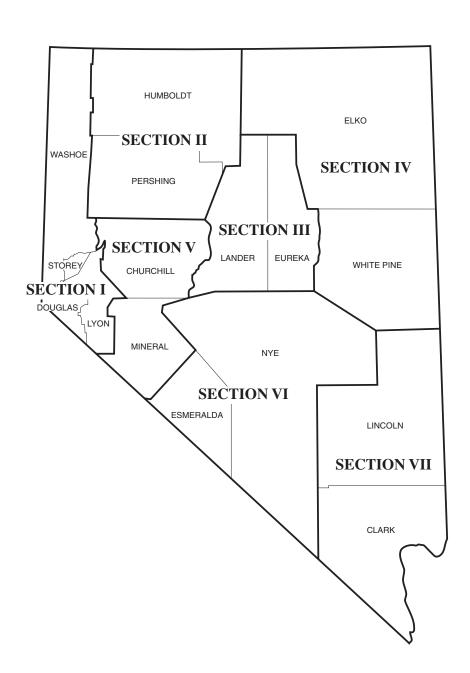
# 2010

This is the twenty-first 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 2009 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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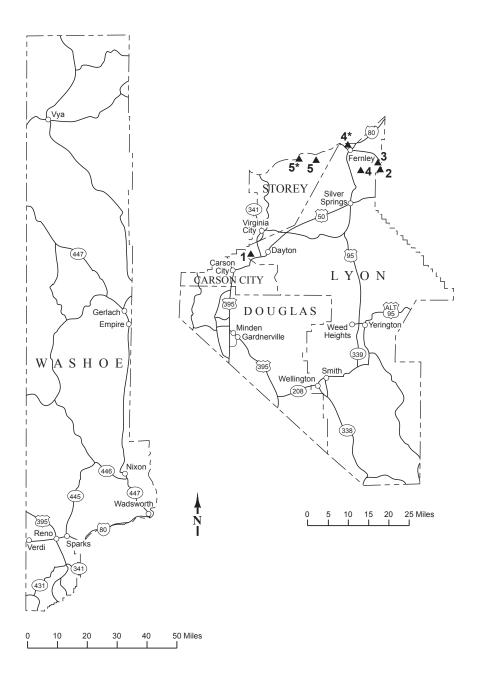
University of Nevada, Reno



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# 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: 45

Don't de la company employe

Production:

Gypsum - 121,593 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

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: 121

Production:

Limestone/Clay

# **Storey County**

### Clark Mine (5) and Mill (5\*)

Operator:

EP Minerals, LLC

640 Clark Station Rd.

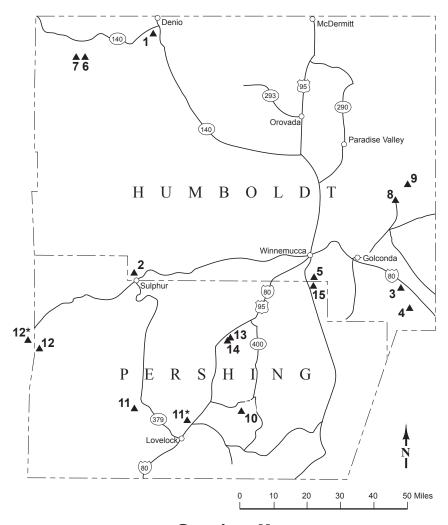
Sparks, NV 89434

775-824-7700 Fax: 824-7715

Company employees: 66

Production:

Diatomite



# **Section II**

# **Humboldt County**

### Ashdown Mine (1)

Operator:

Win-Eldrich Mines Ltd. Ashdown Project 202 North Avenue #102 Grand Junction, CO 81501

Production:

Molybdenum - 214,928 pounds

### Hycroft Mine (2)

Operator:

Allied Nevada Gold Corp. P.O. Box 3030 Winnemucca, NV 89446 775-623-5260 Fax: 623-0215 Company employees: 159

Production:

Gold - 53,189 oz Silver - 65,753 oz

### Lone Tree Mine (3)

Operator:

Newmont Mining Corp.

P.O. Box 388

Valmy, NV 89438

775-635-6423 Fax: 635-6460

Company employees: 54

Gold - 12,011 oz

Silver - 2,309 oz

### Marigold Mine (4)

Operator:

Goldcorp, Inc.

P.O. Box 160

Valmy, NV 89438

775-635-2317 Fax: 635-2551

Company employees: 262 Contract employees: 69

D 1 .:

Production:

Gold - 146,842 oz

Silver - 4,239 oz

### MIN-AD Mine and Mill (5)

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 (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 165

Denio, NV 89404

775-941-0374 (summer)

775-272-3201 (winter)

Production:

Precious opal

### **Turquoise Ridge Joint Venture (8)**

Operator:

Barrick Gold Corporation

HC66 Box 220

Golconda, NV 89414

775-529-5001 Fax: 529-0753 Company employees: 318

Contract employees: 74

Production:

Gold - 177,333 oz

### Twin Creeks Mine (9)

Operator:

Newmont Mining Corp.

P.O. Box 69

Golconda, NV 89414

775-635-9400 Fax: 635-4602

Company employees: 581

Production:

Gold - 437,830 oz

Silver - 84,159 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: 34

Production:

Gold - 12,663 oz

Silver - 2.181.788 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 - 201,894 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: 138 (included with Standard Mine)

Contract employees: 30

Production:

Gold - 44,814 oz

Silver - 39,760 oz

### **Standard Mine (14)**

Operator:

Standard Gold Mining, Inc.

P.O. Box 330

Imlay, NV 89418

775-538-7300 Fax: 538-7691

Company employees: 138 (included with Florida

Canyon Mine)

Production:

Gold - 1,510 oz

Silver - 3,270 oz

### W. Glen Sexton Family Trust (15)

Operator:

Nutritional Additives Corp. 415 Wellington Street

Winnemucca, NV 89445

williemucca, iv v 69443

775-623-1151 Fax: 623-1153 Company employees: 3

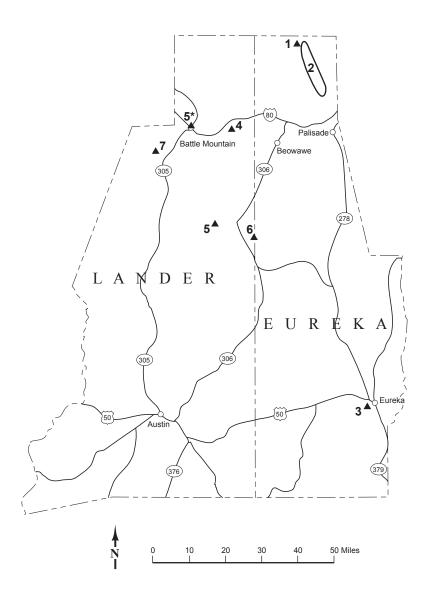
Production:

Dolomite



Turquoise Ridge Joint Venture (Mike Visher photos).





# **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: 1,008

Production:

Gold - 901,992 oz

Silver - 120,736 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: 2,175

Production:

Gold - 1,172,790 oz

Silver - 225,431 oz

### Ruby Hill Mine (3)

Operator:

Barrick Gold Corporation

P.O. Box 676

Eureka, NV 89316

775-237-6060 Fax: 237-5408

Company employees: 127

Production:

Gold - 103,523 oz.

Silver - 39,110 oz.

### **Lander County**

### **Argenta Mine and Mill (4)**

Operator:

Baker Hughes Drilling Fluids

P.O. Box 277

Battle Mountain, NV 89820 775-635-5441 Fax: 635-5455

> Company employees: 35 Contract employees: 8

Shipped:

Barite - 84,470 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: 67

Shipped:

Barite - 220,650 tons

### **Cortez Hills/Pipeline Mines (6)**

Operator:

Barrick Cortez, Inc.

HC66 Box 1250

Crescent Valley, NV 89821-1250

775-468-4400 Fax: 468-4496

Company employees: 799

Contract employees: 384

### Production:

Gold - 517,512 oz

Silver - 74,080 oz

### **Phoenix Project (7)**

Operator:

Newmont Mining Corp.

P.O. Box 1657

Battle Mountain, NV 89820

775-635-6423 Fax: 635-6460

Company Employees: 465

Production:

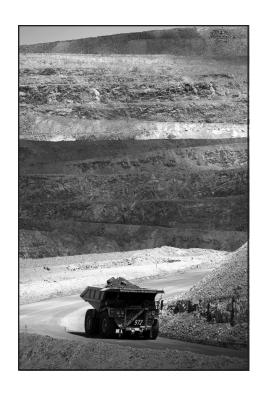
Gold - 218,732 oz

Silver - 1,212,153 oz

Copper - 23,733,389 pounds

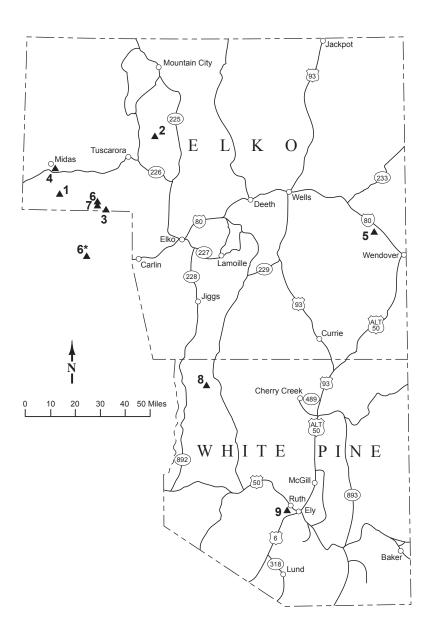


Cortez Hills Mine (Jon Price photo).



Phoenix Project (Mike Visher photos).





# **Section IV**

## **Elko County**

# Hollister Mine (1) Operator: Rodeo Creek Gold, Inc. and Great Basin Gold Inc. RO Por 2610

Great Basin Gold Inc. P.O. Box 2610 Winnemucca, NV 89446 775-623-5760 Fax: 623-5759 Company employees: 159 Contract employees: 46

Production:

Gold - 31,174 oz Silver - 243,148 oz

### **Jerritt Canyon Mine (2)**

Gold - 9.770 oz

Operator:

Queenstake Resources USA, Inc. HC31 Box 78 Elko, NV 89801 775-738-5006 Fax: 758-9231 Company employees: 120 Production:

### Meikle Mine (3)

Operator:

Barrick Goldstrike Mines, Inc. P.O. Box 29 Elko, NV 89803 775-778-8858 Fax: 778-8865 Company employees: 767 Production:

Gold - 388,548 oz Silver - 30,198 oz

### Midas Mine (4)

Operator:

Newmont Mining Corp.
HC66 Box 125
Midas, NV 89414
775-635-6423 Fax: 635-6460
Company employees: 262
Production:
Gold - 123,621 oz

Pilot Peak Lime Plant (5)

Silver - 1.634.601 oz

Operator:

Graymont Western U.S.
P.O. Box 2520
West Wendover, NV 89883
775-483-5463 Fax: 483-5149
Company employees: 54
Production:

Limestone, quicklime, hydrated lime

# Rossi Mine (6), Dunphy Mill (6\*)-in Eureka County

Operator:

Halliburton/Baroid 912 Dunphy Ranch Rd. Battle Mountain, NV 89820 775-468-0515 Fax: 468-2060 Company employees: 40

Contract employees: 22

Shipped: Barite - 171,331 tons

### Storm Mine (7)

Operator:

Barrick Goldstrike Mines, Inc. P.O. Box 29 Elko, NV 89803 775-748-1001 Fax: 748-1240 Company employees: 5

Contract employees: 80

Production:

Gold - 64,558 oz Silver - 50,069 oz

## **White Pine County**

### **Bald Mountain Mine (8)**

Operator:

P.O. Box 2706 Elko, NV 89803 775-237-7100 Fax: 237-7101

Barrick Gold U.S., Inc.

Company employees: 186 Contract employees: 20

Production:

Gold - 75,037 oz Silver - 12,389 oz

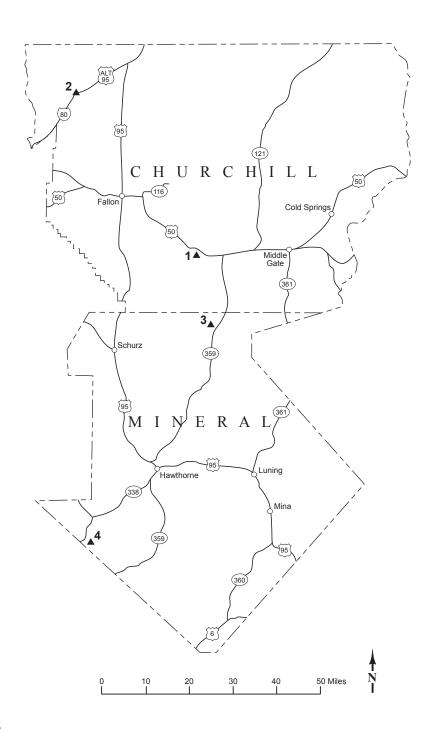
### Robinson Mine (9)

Operator:

Robinson Nevada Mining Company P.O. Box 382 Ruth, NV 89319 775-289-7000 Fax: 289-7349 Company employees: 525

Production:

Copper - 122,000,000 pounds Gold - 98,970 oz Silver - 200,819 oz Molybdenum - 89,000 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 - 25,053 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:

Kennecott Rawhide Mining Co. P.O. Box 2070 Fallon, NV 89407 775-945-1015 Fax: 945-1213 Company employees: 16 Contract employees: 6

Production:

Gold - 19.370 oz Silver - 209,528 oz

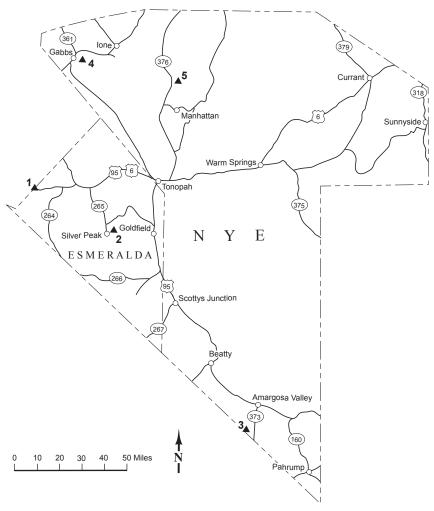
### Esmeralda Mine (4)

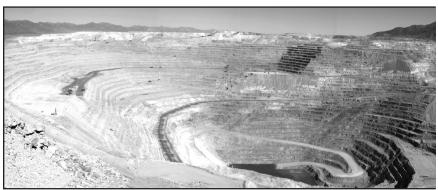
Operator:

Antler Peak Gold, Inc. P.O. Box 2570 Hawthorne, NV 89415 775-546-5010 Fax: N/A Company employees: 24 Contract employees: 20

Production:

Gold - 5,212 oz Silver - 24,980 oz





Smoky Valley Common Operation, Round Mountain (John Muntean photo).

# 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: 5

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: 27
Contract employees: 4

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: 28

Production:

Specialty clays - 20,000 tons

### **Premier Chemicals (4)**

Operator:

Premier Chemicals, LLC P.O. Box 177 Gabbs, NV 89409 775-285-2601 Fax: 285-4021 Company employees: 85

Production:

Magnesium compounds

## **Smoky Valley Common Operation (5)**

Operator:

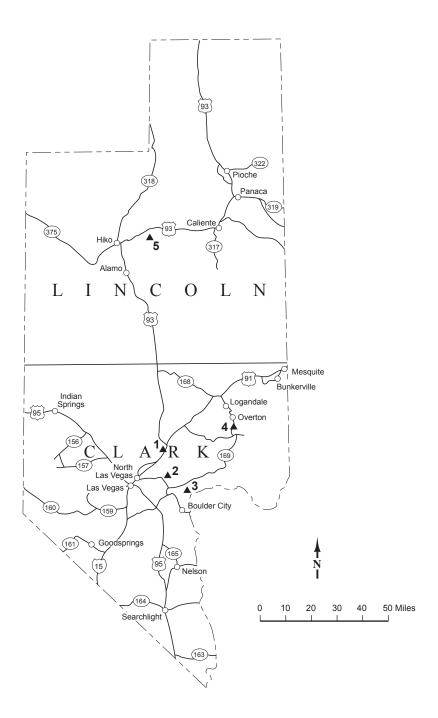
Round Mountain Gold Corp. P.O. Box 480 Round Mountain, NV 89045-0480 775-377-2366 Fax: 377-3224 Company employees: 678 Contract employees: 63

Production:

Gold - 414,941 oz Silver - 850,878 oz



Smoky Valley Common Operation, Round Mountain (John Muntean photo).



# Section VII

# **Clark County**

### Apex Quarry and Plant (1)

Operator:

Chemical Lime Co. P.O. Box 363068 North Las Vegas, NV 89036 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: 106 Contract employees: 2

Production:

Gypsum - 715,701 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

Production:

Gypsum - 158,605 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: 37

### Production:

Silica sand - 413,291 tons

## **Lincoln County**

### **Tenacity Perlite Mine and Mill (5)**

Operator:

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

Production:

Perlite

# **SUMMARY OF 2009 PRODUCTION**

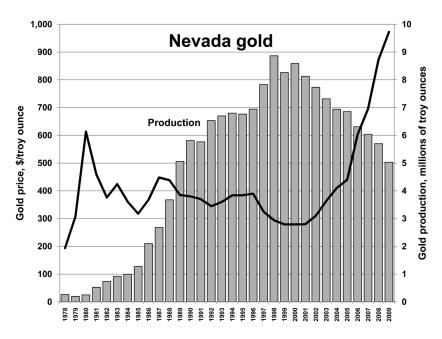
Gold	5,033,000	ounces	
Silver	7,310,000	ounces	
Barite (shipped)	476,500	tons	
Copper	145,733,000	pounds	
Diatomite	N/A		
Dolomite	N/A		
Gypsum	1,198,000	tons	
Limestone	N/A		
Lithium compounds	N/A		
Mercury	N/A		
Molybdenum	303,000	pounds	
Perlite	N/A	·	
Potassium sulfate	N/A		
Precious opal	70	pounds	
Quartzite	3,600	tons	
Salt	25,000	tons	
Silica sand	413,000	tons	
Specialty clay	25,000	tons	
Turquoise	N/A		
40.0.00			
N/A Not available	oublicly		

# **Economic Impacts of Mining in Nevada—2009**

In 2009 Nevada's mining industry saw a setback in its total value of production. The total value of all mineral commodities produced. including oil and gas and geothermal energy, was about \$5.8 billion, a \$0.3 billion decrease from 2008. The value was driven by gold, which contributed about \$4.9 billion, based on an average price of \$972 per troy ounce. Nevada led the nation in 2009 in the production of gold, barite, and lithium as it has for several Nevada's mines produced a wide variety of other mineral and energy such as commodities aggregates. copper, diatomite, dolomite, geothermal energy, iron, lapidary and gem stones, lime and limestone. magnesium compounds, mercury, molybdenite, oil, perlite, potassium sulfate, salt, silica sand, silver, and specialty aggregates and clays.

### **Production Highlights**

Nevada's gold production was 5,033,000 trov ounces in 2009. While the production level is down approximately 12% from 2008. Nevada remains the nation's top gold producer with about 75% of the U.S. total. Underground operations contributed about 24% of the total gold production in 2009. Silver production dropped to 7,310,000 troy ounces in 2009 compared to 7,965,000 in 2008. Copper production decreased 145,733,000 pounds in 2008 compared to 175,538,000 pounds in Barite production was down to 476,000 tons in 2009 compared to 595,000 tons in 2008. Gypsum production was down to 1,198,000 tons in 2009 compared to 1,401,000 tons in 2008. Molybdenum production was 303,000 pounds in 2009 compared to 495,000 pounds in 2008.



### **Employment**

According to the Nevada Department Employment, of Training. and Rehabilitation, the Nevada mining industry employed an average of 11,609 employees in 2009. The average pay for mineral industry emplovees during this time was \$78,727 per year, the highest average of any employment sector in the state. In addition, it is estimated there are about 49,000 jobs in the state related to providing goods and services needed the mining bγ industry. Mining employment has remained an important factor in Nevada.

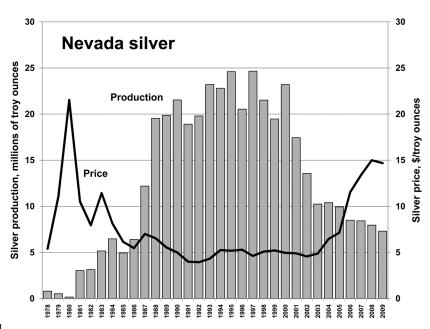
### **Permitting and Reclamation**

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, reclamation. called 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 \$1,555 million in reclamation bonds are currently 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 65.2 million troy ounces at the end of 2009. 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 the resource in a mineral deposit 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 13 years.

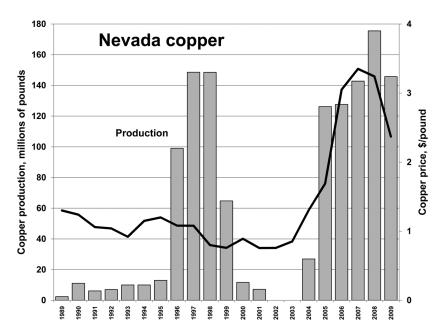
### **Exploration**

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 \$110.9 million on exploration in Nevada in 2009, down from \$158.1 million in 2008. The respondents reported having 154 geologists on the payroll in 2009. 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 2009. Industrial minerals such as aggregates, barite,



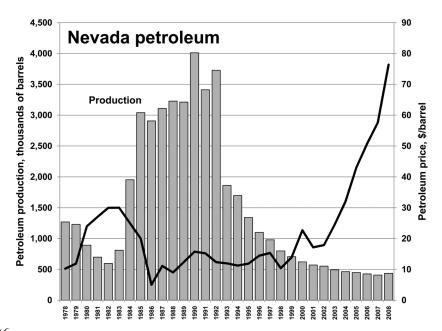
diatomite, dolomite, gypsum, limestone, lithium compounds, magnesite, molybdenite, perlite, salt, and specialty clays are produced in this state.

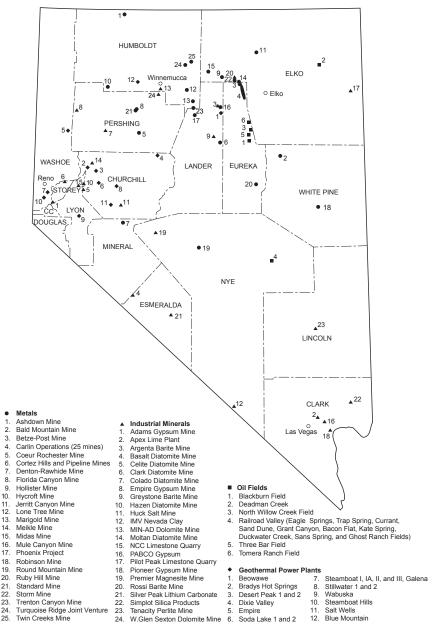
Oil and gas exploration and production are relatively minor when compared to mining, but are nonetheless important to the economy of east-central Nevada. In oil field terms, Nevada is considered a frontier, meaning its potential is yet to be realized. Oil production in 2009 was about 455,000 barrels (42 gallons per barrel).

Nevada is rich in geothermal resources and is second only California production in the of geothermal power. Currently, Nevada has 19 plants that sold approximately 1.7 million megawatt hours of electricity in 2009. This is enough to power about 85,000 typical homes. Geothermal heat is also directly 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 \$5.8 billion. Nevada's mineral industry continued to be a major economic force in the state in 2009. 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, 2009.

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