

# **Major Mines of Nevada 2013**

## **Mineral Industries in Nevada's Economy**



University of Nevada, Reno

# NEVADA COMMISSION ON MINERAL RESOURCES

## Division of Minerals

The seven-member Commission on Mineral Resources is a public body appointed by the Governor that directs mineral related policy for the Nevada Division of Minerals and advises the Governor and Legislature on matters relating to mineral resources. The Division's mission is to encourage and assist in the responsible exploration for, and the production of, minerals, oil, gas, and geothermal energy which are economically beneficial to the State.

The Division 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. Nevada is a member of 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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Rich Perry - Administrator, Division of Minerals  
George Bishop - Field Specialist, Abandoned Mine Lands Program  
Bill Durbin - Chief, Southern Nevada Operations  
Robert Ghiglieri - Chief, Abandoned Mine Lands Program  
Valerie Kneefel - Program Assistant, Oil, Gas, and Geothermal  
Erik Langenfeld - Field Specialist, Minerals  
Lowell Price - Program Manager, Oil, Gas, and Geothermal  
Deborah Selig - Program Assistant, Las Vegas Office  
Mike Visser - Deputy Administrator  
Rachel Wearne - Field Specialist, Abandoned Mine Lands  
Linda Wells - Program Officer II

Nevada Bureau of Mines and Geology

SPECIAL PUBLICATION P-25

# Major Mines of Nevada 2013

## Mineral Industries in Nevada's Economy

By Rich Perry and Mike Visser

The Nevada Division of Minerals

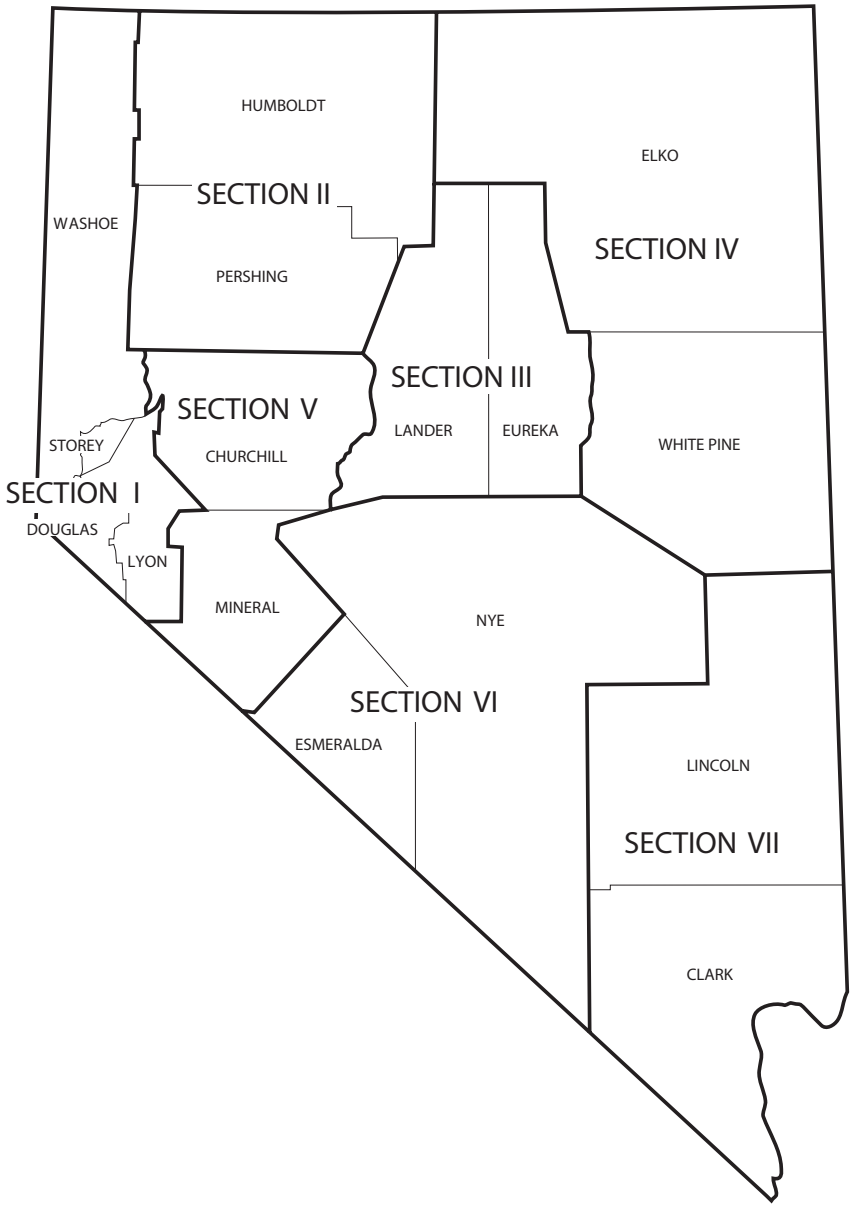
# 2014

This is the twenty-fifth 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 2013 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.nv.gov>.

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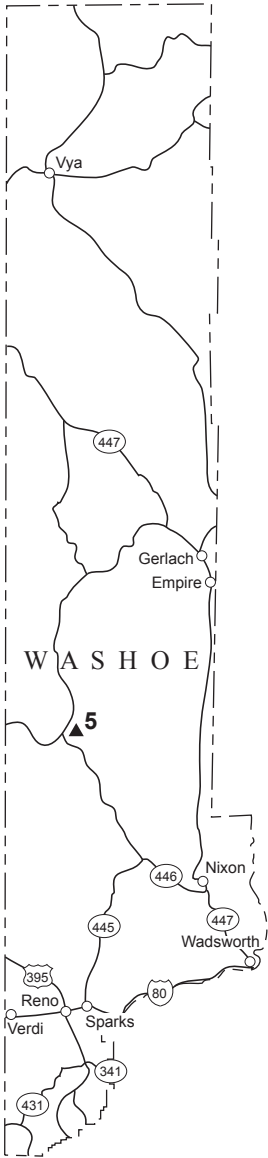




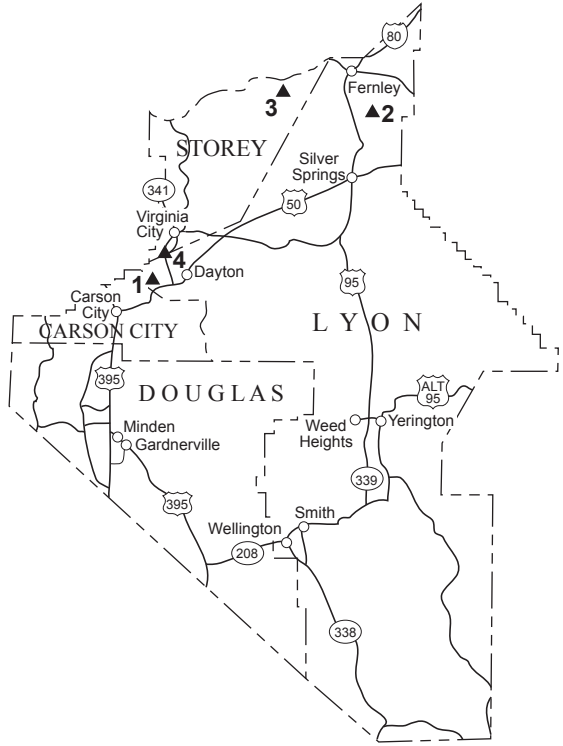
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0 10 20 30 40 50 Miles



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: 70  
Contract employees: 1

**Production:**

Gypsum - 441,129 tons  
Limestone

### **NCC Fernley Operations (2)**

**Operator:**

Nevada Cement Co.  
P.O. Box 840  
Fernley, NV 89408  
775-575-2281 Fax: 575-4387  
Company employees: 117

**Production:**

Limestone

## **Storey County**

### **Clark Mine (3)**

**Operator:**

EP Minerals, LLC  
640 Clark Station Rd.  
Sparks, NV 89434  
775-824-7700 Fax: 824-7715  
Company employees: 4  
Contract employees: 9

**Production:**

Diatomite

### **Lucerne Mine (4)**

**Operator:**

Comstock Mining, Inc.  
P.O. Box 1118  
Virginia City, NV 89440  
775-847-5272 Fax: 800-750-5740  
Company employees: 118  
Contract employees: 15

**Production:**

Gold - 17,739 ounces  
Silver - 186,482 ounces

## **Washoe County**

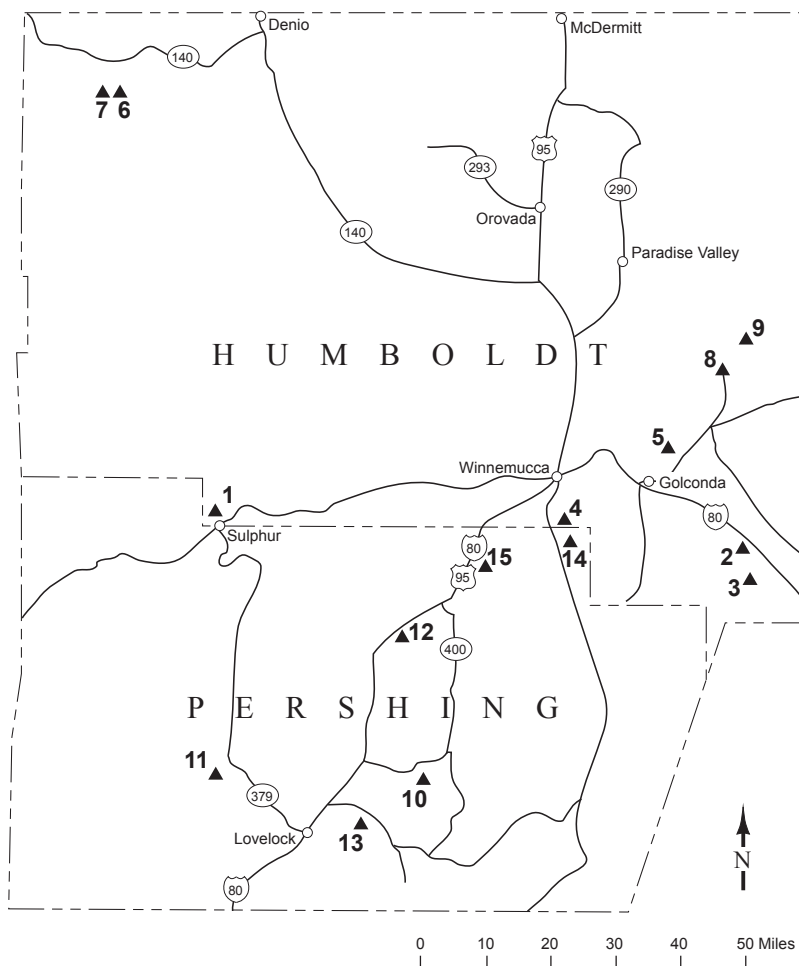
### **NCC Flanigan Mine (5)**

**Operator:**

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

**Production:**

Specialty Clays



## Section II

### Humboldt County

#### **Hycroft Mine (1)**

Operator:

Allied Nevada Gold

P.O. Box 3030

Winnemucca, NV 89446

775-623-5260 Fax: 623-0215

Company employees: 472

Contract employees: 165

Production:

Gold - 181,941 oz

Silver - 858,073 oz

#### **Lone Tree Complex (2)**

Operator:

Newmont Mining Corp.

P.O. Box 388

Valmy, NV 89438

775-738-4000

Company employees: 56

Contract employees: 55

Production:

Gold - 22,931 oz

Silver - 4,970 oz

**Marigold Mine (3)**

## Operator:

Goldcorp, Inc.  
P.O. Box 160  
Valmy, NV 89438  
775-635-2317 Fax: 635-2551  
Company employees: 343  
Contract employees: 17

## Production:

Gold - 161,062 oz  
Silver - 3,394 oz

**MIN-AD Mine (4)**

## Operator:

MIN-AD, Inc.  
P.O. Box 39  
Winnemucca, NV 89446  
775-623-5944 Fax: 623-9028  
Company employees: 13  
Contract employees: 2

## Production:

Dolomite

**Pinson Mine (5)**

## Operator:

Atna Resources, Inc.  
P.O. Box 969  
Winnemucca, NV 89446  
775-529-5026 Fax: 529-5030  
Company employees: 2

## Production:

Gold - 5,183 oz

**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:

Royal Peacock Opal Mine  
P.O. Box 165  
Denio, NV 89404  
775-941-0364 (summer)

## Production:

Precious opal

**Turquoise Ridge Joint Venture (8)**

## Operator:

Barrick Gold Corporation  
2055 Getchell Mine Road  
Golconda, NV 89414  
775-529-5001 Fax: 529-0752  
Company employees: 417  
Contract employees: 112

## Production:

Gold - 223,189 oz

**Twin Creeks Mine (9)**

## Operator:

Newmont Mining Corp.  
P.O. Box 69  
Golconda, NV 89414  
775-635-9400 Fax: 635-4602  
Company employees: 558  
Contract employees: 259

## Production:

Gold - 406,847 oz  
Silver - 88,184 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: 275  
Contract employees: 44

**Production:**

Gold - 30,860 oz  
Silver - 2,798,937 oz

### **Colado Mine (11)**

**Operator:**

EP Minerals, LLC  
P.O. Box 959  
Lovelock, NV 89419  
775-824-7591 Fax: 824-7595  
Company employees: 30

**Production:**

Diatomite

### **Florida Canyon Mine (12)**

**Operator:**

Jipangu Florida Canyon Mining, Inc.  
P.O. Box 330  
Imlay, NV 89418  
775-538-7300 Fax: 538-7691  
Company employees: 168  
Contract employees: 56

**Production:**

Gold - 46,152 oz  
Silver - 58,333 oz

### **Nassau Mine (13)**

**Operator:**

American Colloid Company  
P.O. Box 428  
Lovell, WY 82431  
307-548-5135 Fax: 548-6449  
Contract employees: 1

**Production:**

Bentonite

### **Sexton Mine (14)**

**Operator:**

Nutritional Additives Corp.  
415 Wellington St.  
Winnemucca, NV 89445  
775-623-1151 Fax: 623-1153  
Company employees: 2

**Production:**

Dolomite

### **Sunrise Gold Placer Mine (15)**

**Operator:**

Sunrise Minerals, LLC  
7343 S. Alton Way, Suite 100  
Centennial, CO 80112  
303-779-1800 Fax: 303-770-1995  
Company employees: 3

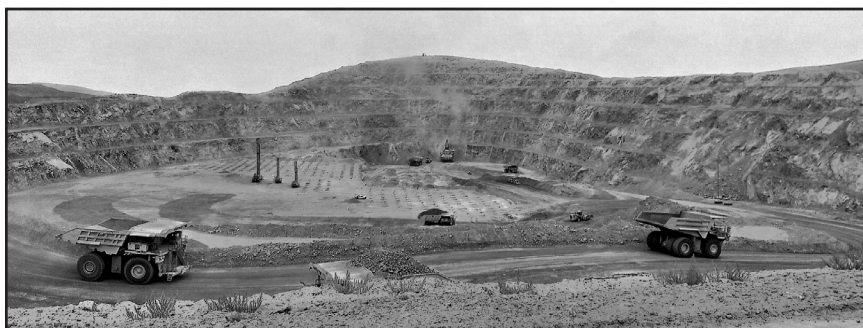
**Production:**

Gold - 133 oz  
Silver - 36 oz





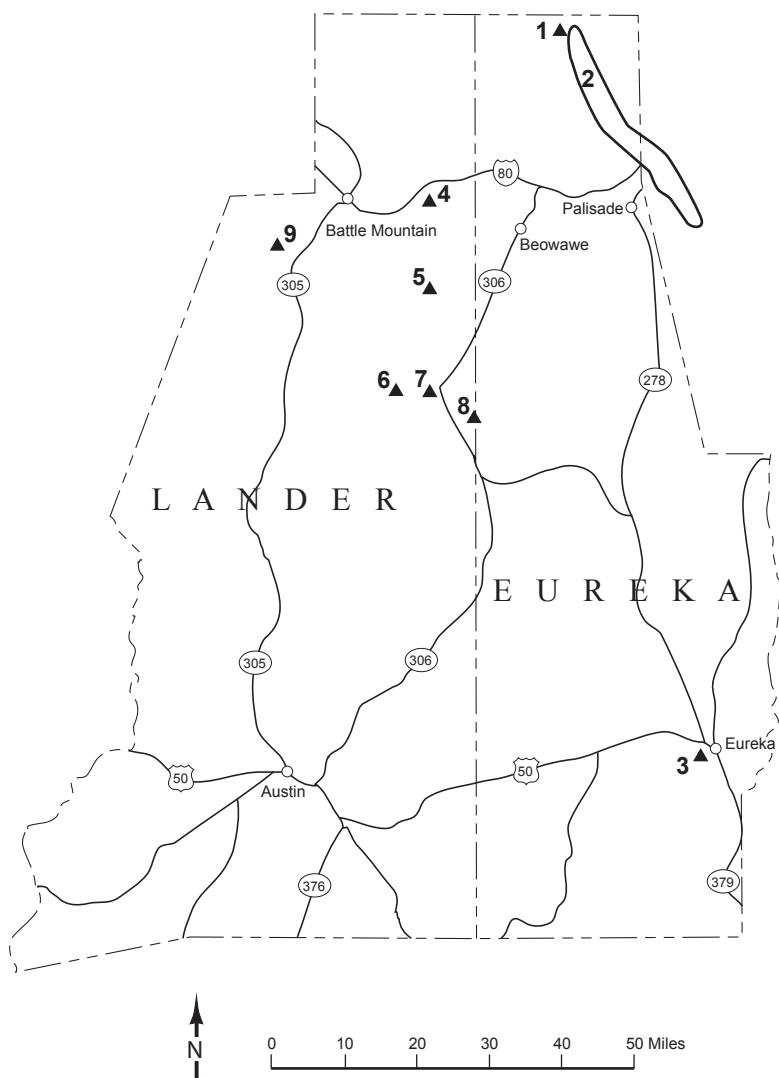
***Marigold Mine  
(Rachel Wearne photo).***



***Marigold Mine  
(Rachel Wearne photo).***



***Marigold Mine  
(Rachel Wearne 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: 1,036

Production:

Gold - 521,489 oz  
Silver - 86,124 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: 2,335  
Contract employees: 710

Production:

Gold - 1,020,791 oz  
Silver - 221,256 oz

#### **Ruby Hill Mine (3)**

Operator:

Homestake Mining Co.  
P.O. Box 676  
Eureka, NV 89316  
775-237-6060 Fax: 237-5408  
Company employees: 136  
Contract employees: 6

Production:

Gold - 91,074 oz  
Silver - 76,283 oz



*Remotely operated mucker at Newmont's Leeville Mine  
(Mike Visser photo).*

## **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: 27  
Contract employees: 47

#### **Shipped:**

Barite - 150,802 tons

### **Fire Creek Mine (5)**

#### **Operator:**

Klondex Gold and Silver Mining Co.  
360 Western Mine Rd., Suite 1  
Reno, NV 89506  
775-284-5757  
Company employees: 43  
Contract employees: 41

#### **Production:**

Gold - 6,208 oz

### **Greystone Mine (6)**

#### **Operator:**

M-I Swaco  
P.O. Box 370  
Battle Mountain, NV 89820  
775-635-5135 Fax: 635-2645  
Company employees: 43

#### **Shipped:**

Barite - 317,241 tons

### **Pipeline Mine (7)**

#### **Operator:**

Barrick Cortez, Inc.  
HC66 Box 1250  
Crescent Valley, NV 89821  
775-468-4400 Fax: 468-4496  
Company employees: 1,017  
Contract employees: 124

#### **Production:**

(includes the Cortez Hills open-pit)

Gold - 825,196 oz

Silver - 22,187 oz

### **Cortez Hills Mine (8)**

#### **Operator:**

Barrick Cortez, Inc.  
HC66 Box 1250  
Crescent Valley, NV 89821  
775-468-4400 Fax: 468-4496  
Company employees: 297  
Contract employees: 66

#### **Production:**

(underground only, excluding the open-pit)

Gold - 545,852 oz

Silver - 13,666 oz

### **Phoenix Mine (9)**

#### **Operator:**

Newmont Mining Corp.  
P.O. Box 1657  
Battle Mountain, NV 89820  
775-635-6423 Fax: 635-6460  
Company employees: 486  
Contract employees: 312

#### **Production:**

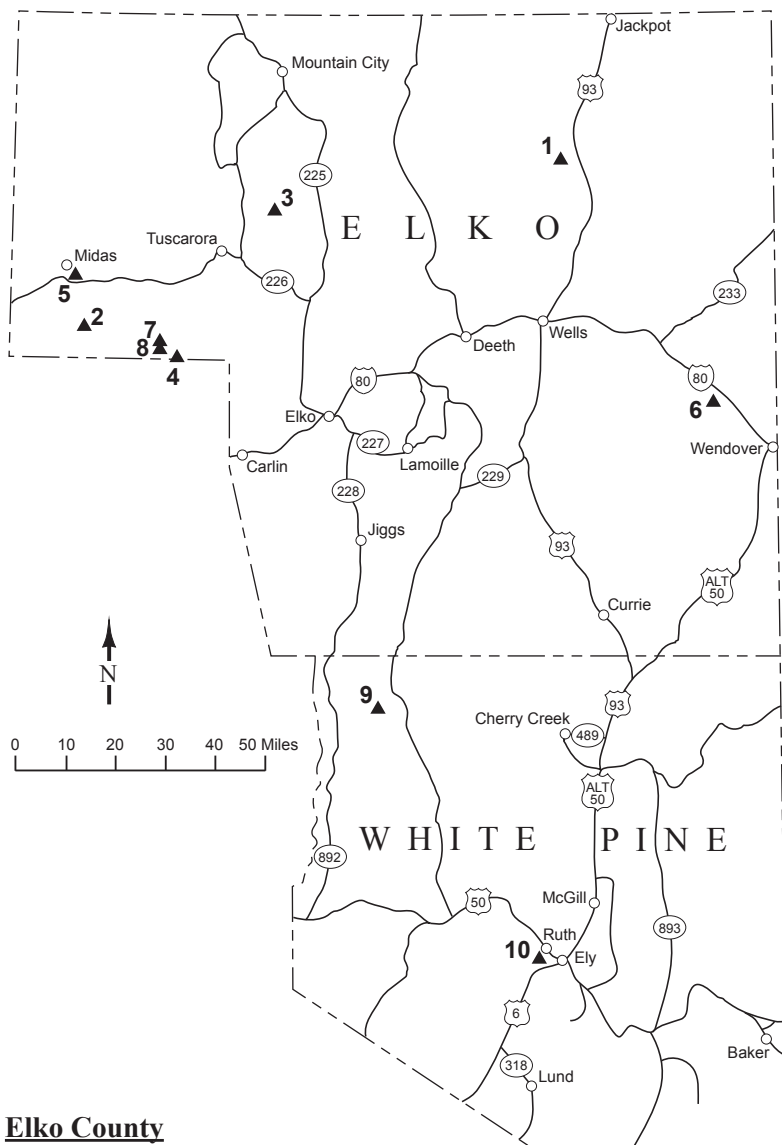
Gold - 202,055 oz

Silver - 1,550,346 oz

Copper - 29,815,908 pounds



***Drilling rig at Ormat's McGinness Hills geothermal complex,  
Lander County (Mike Visser photo).***



## Elko County

### **Big Ledge Mine (1)**

Operator:

National Oilwell Varco  
247 Bluffs Ave., Suite 101  
Elko, NV 89801  
775-738-7171 Fax: 738-7196  
Company employees: 30  
Contract employees: 4

Shipped:

Barite - 91,962 tons

### **Hollister Mine (2)**

Operator:

Waterton Global Mining Co., LLC  
4000 W. Winnemucca Blvd.  
Winnemucca, NV 89446  
775-623-5760 Fax: 623-5767  
Company employees: 90  
Contract employees: 10

Production:

Gold - 26,641 oz  
Silver - 88,628 oz



## Section IV

### **Jerritt Canyon Mine (3)**

#### **Operator:**

Veris Gold USA, Inc.  
HC31 Box 78  
Elko, NV 89801  
775-738-5600 Fax: 758-9233  
Company employees: 360  
Contract employees: 130

#### **Production:**

Gold - 139,556 oz

### **Meikle Mine (4)**

#### **Operator:**

Barrick Goldstrike Mines, Inc.  
P.O. Box 29  
Elko, NV 89803  
775-748-1001 Fax: 748-1240  
Company employees: 629

#### **Production:**

Gold - 360,578 oz  
Silver - 58,352 oz

### **Midas Mine (5)**

#### **Operator:**

Newmont Mining Corp.  
HC66 Box 125  
Midas, NV 89414  
775-635-6423 Fax: 635-6460  
Company employees: 198  
Contract employees: 61

#### **Production:**

Gold - 52,195 oz  
Silver - 1,368,896 oz

### **Pilot Peak Quarry (6)**

#### **Operator:**

Graymont Western U.S.  
P.O. Box 2520  
West Wendover, NV 89883  
775-483-5463  
Company employees: 55

#### **Production:**

Limestone

### **Rossi Mine (7)**

#### **Operator:**

Halliburton  
912 Dunphy Ranch Rd.  
Battle Mountain, NV 89820  
775-468-0515 Fax: 468-2060  
Company employees: 16  
Contract employees: 65

Shipped: Barite - 251,329 tons

### **Storm Mine (8)**

#### **Operator:**

Barrick Goldstrike Mines, Inc.  
P.O. Box 29  
Elko, NV 89803  
775-748-1001 Fax: 748-1240  
Company employees: 3

#### **Production:**

Gold - 9,503 oz  
Silver - 15,575 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: 425  
Contract employees: 13

#### **Production:**

Gold - 95,497 oz  
Silver - 29,479 oz

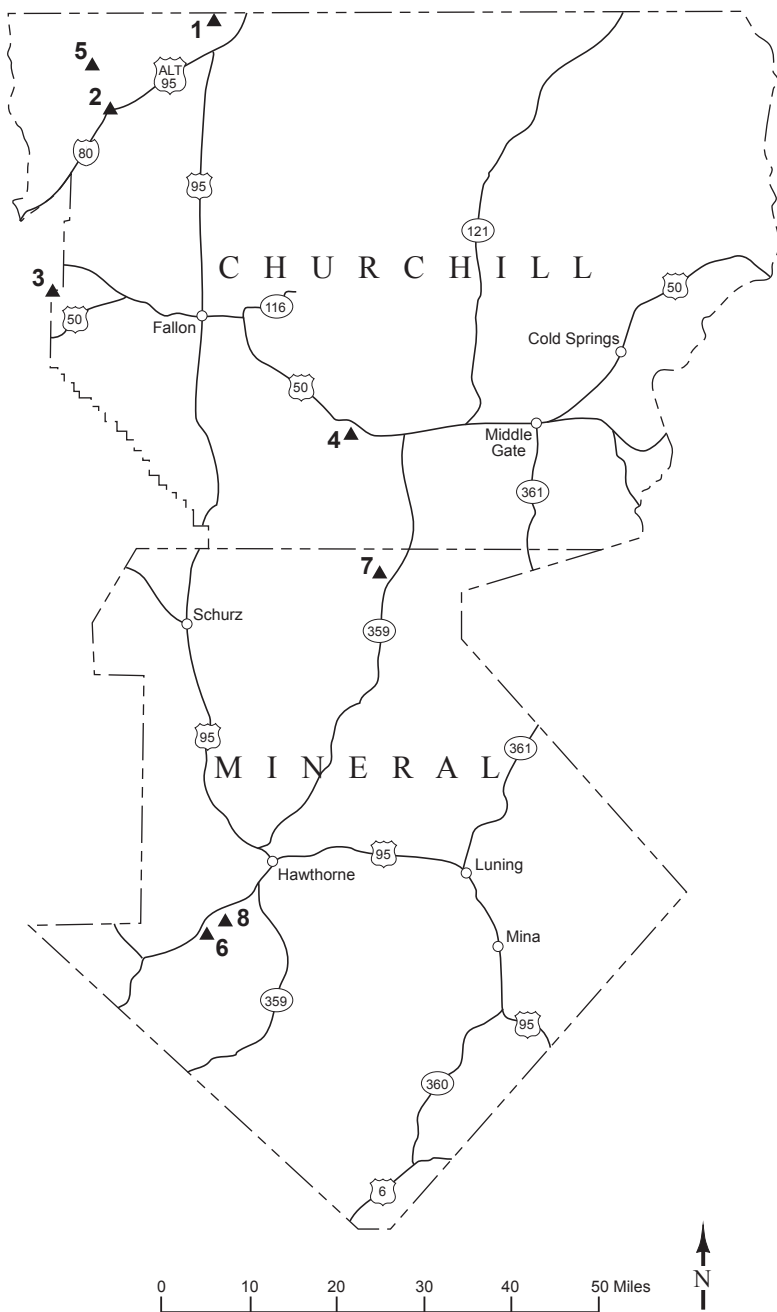
### **Robinson Mine (10)**

#### **Operator:**

KGHM International, Ltd.  
P.O. Box 382  
Ruth, NV 89319  
775-289-7000 Fax: 289-7349  
Company employees: 608  
Contract employees: 40

#### **Production:**

Copper - 107,898,857 pounds  
Gold - 47,452 oz  
Silver - 161,638 oz  
Molybdenite - 1,384,649 pounds



# Section V

## **Churchill County**

### **Churchill Mine (1)**

#### Operator:

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

#### Production:

Limestone

### **Fernley Operations (2)**

#### Operator:

EP Minerals, LLC  
P.O. Box 860  
Fernley, NV 89408  
775-423-6668 Fax: 423-6411  
Company employees: 36

#### Production:

Diatomite

### **Hazen Mine (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

### **Huck Salt (4)**

#### Operator:

Huck Salt Company  
2900 Phritzie Ln.  
Fallon, NV 89406  
775-423-2055 Fax: 423-0467  
Company employees: 10

#### Production:

Salt - 19,564 tons

### **Nightingale Mine (5)**

#### Operator:

Imerys Minerals California, Inc.  
100 Front Street  
Fernley, NV 89408  
775-575-2536 Fax: 575-1570  
Company employees: 14  
Contract employees: 5

#### Production:

Diatomite

## **Mineral County**

### **Borealis Mine (6)**

#### Operator:

Borealis Mining Company, LLC  
P.O. Box 549  
Hawthorne, NV 89415  
775-341-0042  
Company employees: 39  
Contract employees: 2

#### Production:

Gold - 10,556 oz  
Silver - 21,187 oz

### **Denton-Rawhide Mine (7)**

#### Operator:

Rawhide Mining, LLC  
P.O. Box 2070  
Fallon, NV 89407  
775-945-1015 Fax: 945-1213  
Company employees: 64  
Contract employees: 42

#### Production:

Gold - 23,900 oz  
Silver - 305,000 oz

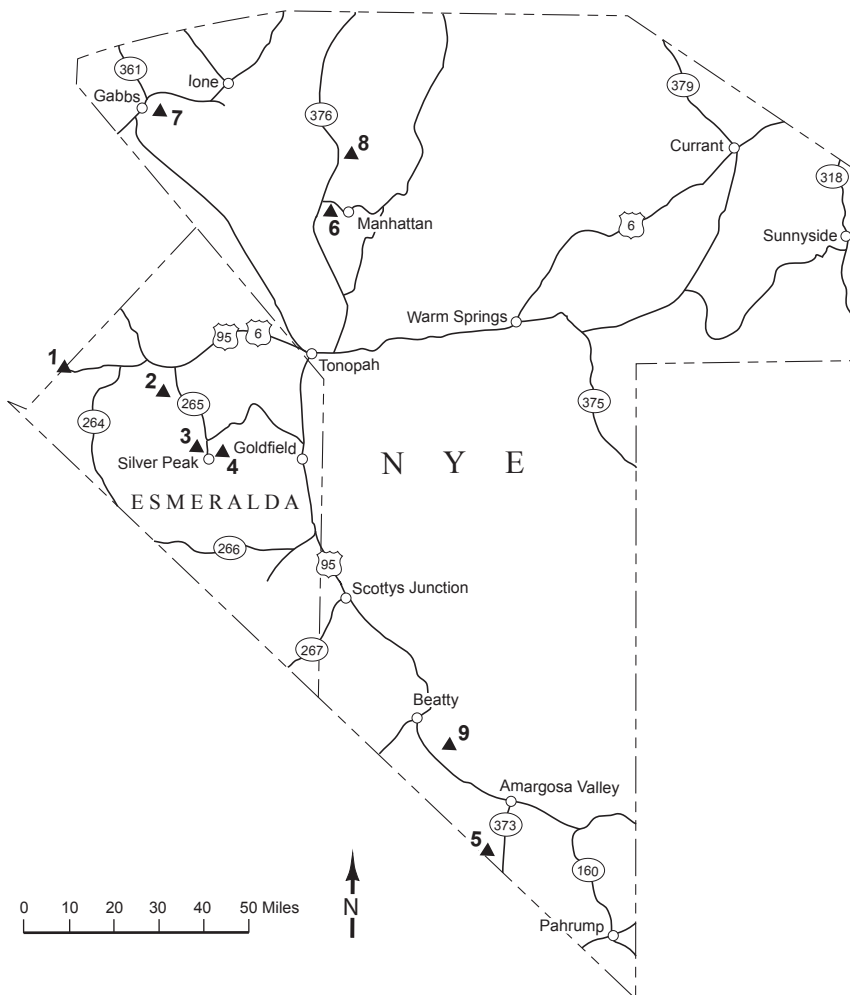
### **Lucky Boy Quarry (8)**

#### Operator:

James Hardie Building Products, Inc.  
P.O. Box 295  
Goldfield, NV 89013  
775-482-1176  
Company employees: 1  
Contract employees: 6

#### Production:

Silica sand - 38,521 tons



## Esmeralda County

### **Basalt Mine (1)**

Operator:

Grefco Minerals, Inc.

P.O. Box 278

Dyer, NV 89010

775-573-2422

Company employees: 14

Production:

Diatomite

### **Blanco Mine (2)**

Operator:

Vanderbilt Minerals, LLC

P.O. Box 6660

Pahrump, NV 89041

775-537-6976 Fax: 537-6879

Company employees: 7

Production:

Specialty clays

## Section VI

### **Mineral Ridge Mine (3)**

**Operator:**

Scorpio Gold (US) Corp.  
#1 Coyote Summit  
Silver Peak, NV 89047  
702-799-9273 Fax: 775-753-4780  
Company employees: 82  
Contract employees: 22

**Production:**

Gold - 39,160 oz  
Silver - 14,975 oz

### **Silver Peak Operations (4)**

**Operator:**

Rockwood Lithium, Inc.  
P.O. Box 98  
Silver Peak, NV 89047  
775-937-2222 Fax: 937-2250  
Company employees: 75  
Contract employees: 10

**Production:**

Lithium compounds

## **Nye County**

### **IMV Nevada (5)**

**Operator:**

Lhoist North America of Arizona  
P.O. Box 86  
Amargosa Valley, NV 89020  
775-372-5341 Fax: 372-5230  
Company employees: 30

**Production:**

Specialty clays

### **Manhattan Gulch Mine (6)**

**Operator:**

A.U. Mines, Inc.  
P.O. Box 72  
Manhattan, NV 89022  
775-487-2465 Fax: 487-2467  
Company employees: 32  
Contract employees: 2

**Production:**

Gold - 93 oz  
Silver - 31 oz

### **Premier Magnesia (7)**

**Operator:**

Premier Magnesia, LLC  
P.O. Box 177  
Gabbs, NV 89409  
775-285-2601 Fax: 285-4021  
Company employees: 98  
Contract employees: 5

**Production:**

Magnesium compounds

### **Smoky Valley Common Operation (8)**

**Operator:**

Round Mountain Gold Corp.  
P.O. Box 480  
Round Mountain, NV 89045  
775-377-2366 Fax: 377-3224  
Company employees: 830  
Contract employees: 150

**Production:**

Gold - 314,886 oz  
Silver - 636,564 oz

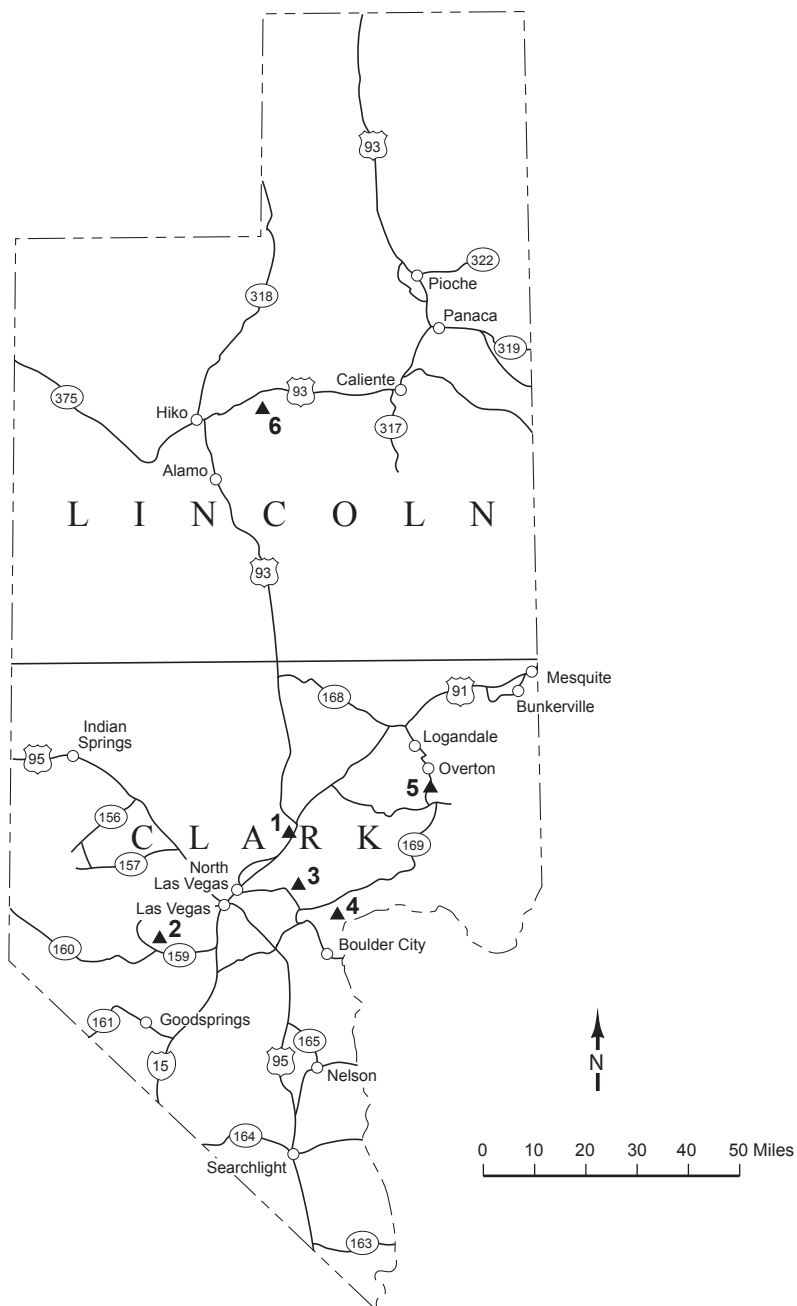
### **Sterling Mine (9)**

**Operator:**

Sterling Gold Mining Corp.  
P.O. Box 549  
Beatty, NV 89003  
866-608-4381 Fax: 775-981-9044  
Company employees: 42

**Production:**

Gold - 7,500 oz





## Section VII

### **Clark County**

#### **Apex Quarry (1)**

Operator:

Lhoist North America  
P.O. Box 363068  
North Las Vegas, NV 89156  
702-643-7702 Fax: 643-9517  
Company employees: 140  
Contract employees: 20

Production:

Limestone

#### **Blue Diamond Mine (2)**

Operator:

Gypsum Resource Materials, LLC  
8912 Spanish Ridge Ave., Ste. 200  
Las Vegas, NV 89143  
702-343-0795 Fax: 441-7148  
Company employees: 40  
Contract employees: 6

Production:

Gypsum - 30,000 tons  
Limestone

#### **PABCO Gypsum Mine (3)**

Operator:

PABCO Building  
Products, LLC  
P.O. Box 364329  
North Las Vegas, NV 89036  
702-407-3700 Fax: 643-6249  
Company employees: 145  
Contract employees: 3

Production:

Gypsum - 1,177,633 tons

#### **Pioneer Gypsum Mine (4)**

Operator:

Pioneer Gypsum Mining, Inc.  
4880 Donovan Way  
North Las Vegas, NV 89081  
702-399-5939 Fax: 399-8353  
Company employees: 101  
Contract employees: 1

Production:

Gypsum - 155,535 tons

#### **Simplot Silica Products (5)**

Operator:

J.R. Simplot Company  
P.O. Box 308  
Overton, NV 89040  
702-397-2667 Fax: 397-2798  
Company employees: 44

Production:

Silica sand - 600,936 tons

### **Lincoln County**

#### **Tenacity Perlite Mine (6)**

Operator:

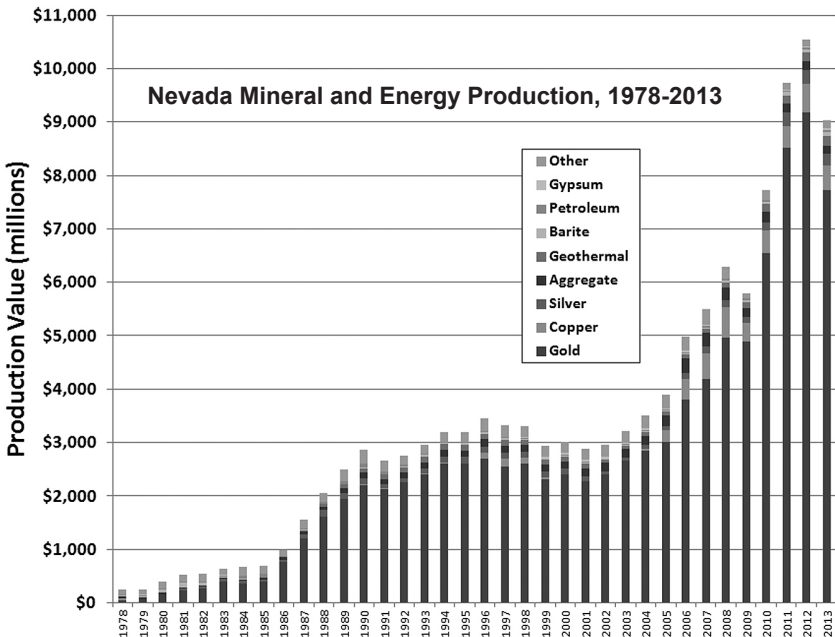
Wilkin Mining & Trucking, Inc.  
HC 34 Box 199  
Caliente, NV 89008  
775-728-4463 Fax: 728-4456  
Company employees: 8

Production:

Perlite

## Summary of 2013 production

Gold	5,436,430	ounces
Silver	8,668,596	ounces
Barite (shipped)	811,334	tons
Copper	137,714,765	pounds
Diatomite (shipped)	262,551	tons
Dolomite	44,445	tons
Gypsum	1,834,297	tons
Limestone	4,105,921	tons
Lithium compounds	N/A	
Magnesium compounds	N/A	
Molybdenite	1,384,649	pounds
Perlite	N/A	
Salt	19,564	tons
Silica sand	639,457	tons
Specialty clay	47,967	tons

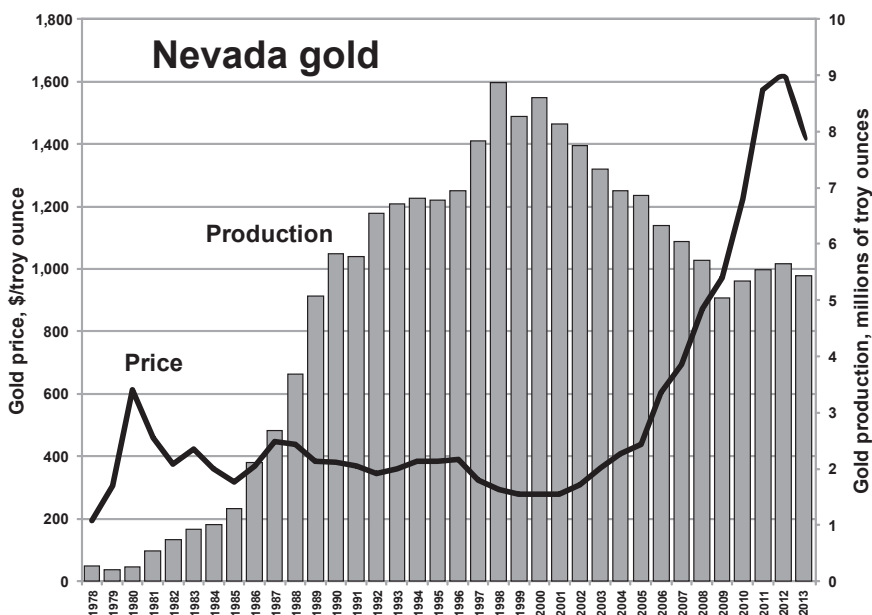


# Economic Impacts of Mining in Nevada—2013

Nevada's mining industry recorded approximately \$9.036 billion in total value of all mined commodities in 2013, representing a 13% decrease from the \$10.437 billion value in 2012. Nearly 90% of the value was driven by gold and silver, which contributed about \$8.1 billion, based on the actual gross proceeds reported to the Nevada Department of Taxation. According to Kitco Metals Inc. ([www.kitco.com](http://www.kitco.com)), the average prices for gold and silver in 2013 were \$1,411.23 and \$23.79 per troy ounce, respectively. Nevada led the nation in 2013 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.

## Production Highlights

Nevada's gold production was 5,436,430 troy ounces in 2013 compared to 5,615,255 troy ounces in 2012, a decrease of approximately 3%. According to the USGS, Nevada remains the nation's top gold producer with about 75% of the U.S. total. Silver production increased slightly to 8,668,596 troy ounces in 2013 from 8,525,104 troy ounces in 2012. Copper production decreased to 137,714,765 pounds in 2013 compared to 145,318,737 pounds in 2012. Molybdenite production increased significantly to 1,384,649 pounds in 2013 compared to 493,093 pounds in 2012. Barite production increased slightly to 811,334 tons shipped in 2013 compared to 744,764 tons shipped in 2012. Gypsum production increased significantly to 1,834,297 tons in 2013 compared to 1,481,716 tons in 2012.



## Employment

According to the Nevada Department of Employment, Training, and Rehabilitation, the Nevada mining industry employed an average of 15,323 employees in 2013. The average pay for mineral industry employees during this time was \$87,335 per year, the highest average of any employment sector in the state. Mining employment has remained an important factor in Nevada.

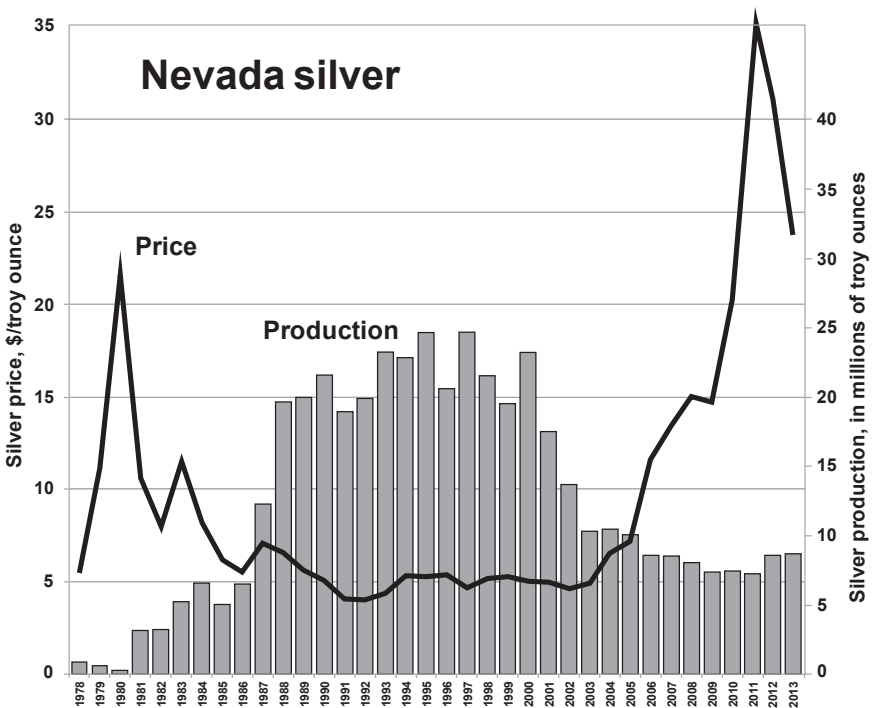
## Permitting and Reclamation

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 \$2.35 billion in reclamation financial assurance is currently in place. 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. Total reserves are always in a state

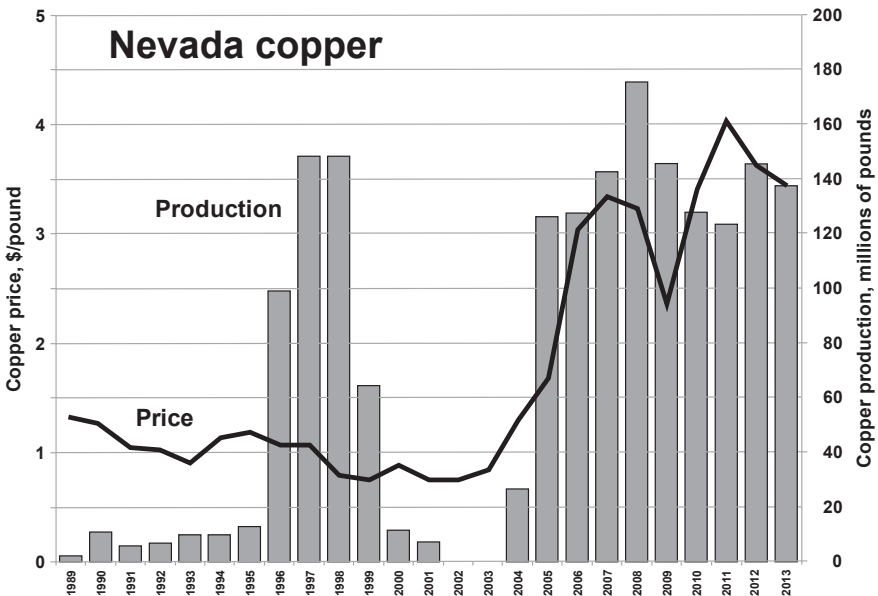


of flux, due to some reserves being mined and additions of new reserves through near mine exploration and new discoveries, and changes in commodity prices and operating costs. The ore grade, price of gold, and cost of production are the main factors in determining a reserve or resource. Extensive gold 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 taxes or the cost of regulatory compliance has the same effect as increasing operating cost, which reduces reserves. Under current conditions, the existing publically-reported reserves are sufficient to sustain gold production at current levels in Nevada for about 12-15 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. Periodically, the Division of Minerals conducts an exploration survey to determine the level of exploration activity and the factors that are responsible for those levels. In 2012, the Division expanded the scope of the survey and contracted the work to the Nevada Bureau of Mines and Geology, who released the results of their survey in early 2013 using 2011 data. This informative report, which can be downloaded at <http://www.nbmng.unr.edu/dox/es2011.pdf>, revealed that gold exploration accounted for 80 to 90 percent of total exploration spending. Two large companies accounted for 25 to 30 percent of the spending. Approximately 1,040 people were 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.



Exploration activity and funding, like gold reserves, are closely tied to economic conditions and commodity prices. The amount of exploration activity in 2013 decreased from 2012, largely due to declining gold prices, which ranged from a high of \$1,791.50 in 2012 to a low of \$1,192.00 in 2013.

### **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 2013. Important industrial minerals such as barite, diatomite, dolomite, gypsum, limestone, lithium compounds, magnesite, molybdenite, perlite, salt, and specialty clays are also produced in Nevada. There was renewed exploration activity in a variety of industrial minerals and base metals, including, barite, copper, fluor spar, iron, lithium, molybdenum, and vanadium.

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. Although oil has been produced since 1954, Nevada is still considered a frontier exploration state. Several companies have leased land positions in eastern and central Nevada, targeting unconventional shale oil plays which would require the use of hydraulic

fracturing. At the end of 2013, there were nine permits for oil exploration which included the potential use of hydraulic fracturing. Total production in 2013 was 336,672 barrels (42 gallons per barrel) worth approximately \$31.5 million.

Nevada is rich in geothermal resources and is second only to California in the production of geothermal energy. For 2013, Nevada had 22 plants at 17 sites that sold approximately 2.6 million megawatt hours of electricity. This is enough to power about 240,000 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, a casino in Washoe County and homes in Lincoln and Washoe counties are examples of public and private facilities using this renewable energy resource.

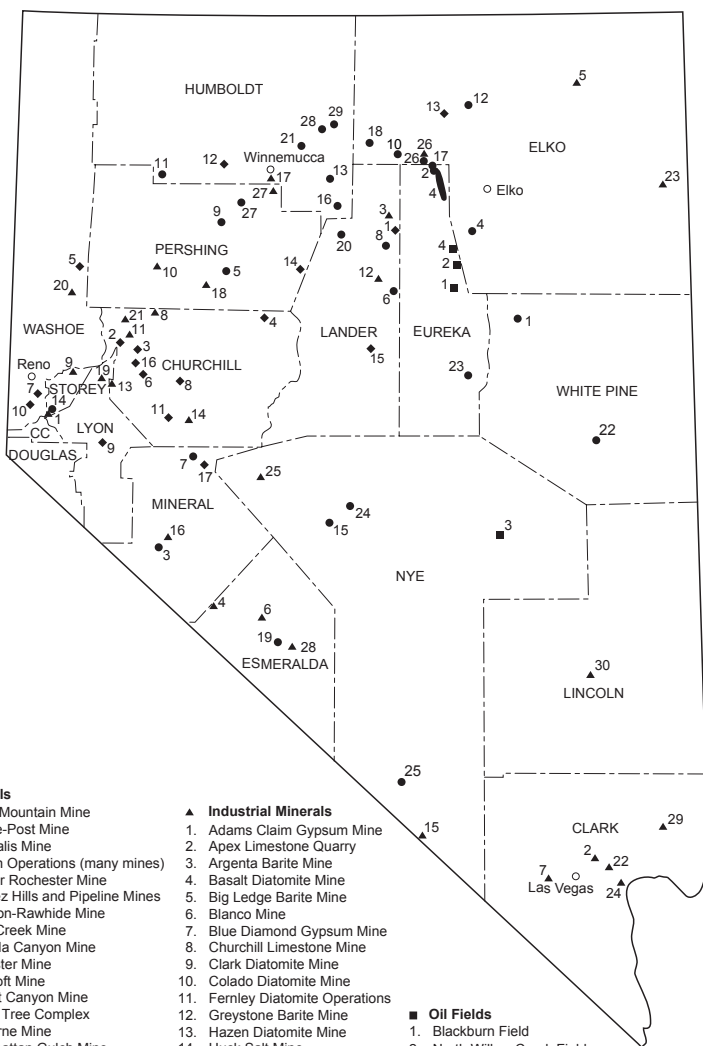
### **Conclusion**

Nevada's mineral industry continued to be a major economic contributor with gross production of over \$9 billion in 2013 and directly employing over 15,000 workers. Nevada's favorable geology, availability of federal lands for exploration, stable regulatory and tax climate, trained workforce, and natural resources infrastructure will continue to attract investment and should provide economic development into the future.



***Round Mountain Gold Corporation,  
Nye County (Robert Ghiglieri photo).***





#### ● Metals

1. Bald Mountain Mine
2. Betze-Post Mine
3. Borealis Mine
4. Carlin Operations (many mines)
5. Coeur Rochester Mine
6. Cortez Hills and Pipeline Mines
7. Denton-Rawhide Mine
8. Fire Creek Mine
9. Florida Canyon Mine
10. Hollister Mine
11. Hycroft Mine
12. Jerritt Canyon Mine
13. Lone Tree Complex
14. Manhattan Gulch Mine
15. Marigold Mine
16. Midas Mine
17. Meikle Mine
18. Sunrise Gold Placer Mine
19. Mineral Ridge Mine
20. Phoenix Mine
21. Pinson Mine
22. Robinson Mine
23. Ruby Hill Mine
24. Smoky Valley Common Ops.
25. Sterling Mine
26. Storm Mine
27. Sunrise Gold Placer Mine
28. Turquoise Ridge Joint Venture
29. Twin Creeks Mine

#### ▲ Industrial Minerals

1. Adams Claim Gypsum Mine
2. Apex Limestone Quarry
3. Argenta Barite Mine
4. Basalt Diatomite Mine
5. Big Ledge Barite Mine
6. Blanco Mine
7. Blue Diamond Gypsum Mine
8. Churchill Limestone Mine
9. Clark Diatomite Mine
10. Colado Diatomite Mine
11. Fernley Diatomite Operations
12. Greystone Barite Mine
13. Hazen Diatomite Mine
14. Huck Salt Mine
15. IMV Nevada Clay
16. Lucky Boy Quarry
17. MIN-AD Dolomite Mine
18. Nassau Mine
19. NCC Fernley Limestone Ops.
20. NCC Flanigan Clay Mine
21. Nightingale Diatomite Mine
22. PABCO Gypsum
23. Pilot Peak Limestone Quarry
24. Pioneer Gypsum Mine
25. Premier Magnesite Mine
26. Rossi Barite Mine
27. Sexton Diatomite Mine
28. Silver Peak Lithium Ops.
29. Simplot Silica Products
30. Tenacity Perlite Mine

#### ■ Oil Fields

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

#### ◆ Geothermal Power Plants

- |                                         |                     |
|-----------------------------------------|---------------------|
| 1. Beowawe                              | 9. Wabuska          |
| 2. Bradys Hot Springs                   | 10. Steamboat Hills |
| 3. Desert Peak 2                        | 11. Salt Wells      |
| 4. Dixie Valley                         | 12. Blue Mountain   |
| 5. San Emidio                           | 13. Tuscarora       |
| 6. Soda Lake 1 and 2                    | 14. Jersey Valley   |
| 7. Steamboat I, IA, II, and III, Galena | 15. McGinness Hills |
| 8. Stillwater 1 and 2                   | 16. Patua           |
|                                         | 17. Wild Rose       |

**Major mines, oil fields, and geothermal plants, 2013.**

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# The Nevada Bureau of Mines and Geology

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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 home page.

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## **U.S. Mail:**

Nevada Bureau of Mines and Geology  
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