NEVADA BUREAU OF MINES AND GEOLOGY
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Division of Mineral Resources
Department of Conservation and Natural Resources

THE NEVADA MINERAL INDUSTRY

1980

Metals
Industrial Minerals
Geothermal
Oil and Gas

Exploration
Development
Mining
Processing

by
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INTRODUCTION

This report is the second of an annual series. Its purpose is to discuss 1979 activities in Nevada's mineral-resource industry. It describes the current mineral exploration and development programs in Nevada, oil and gas drilling and production, geothermal drilling and utilization, and the many recent discoveries of ore bodies and new mines that Governor Robert List has called Nevada's third mining renaissance.

Mining is the State's primary basic industry; that is, like agriculture, it is one on which all other economic pursuits are reliant. Mining is second in economic importance only to Nevada's tourism and gaming industry.

In nine of the State's 17 counties in 1980, mining was responsible for 10% or more of total employment and at least 12% of total payroll. In six of those counties, mining's contribution to the local payroll was 25% or more.

MINERALS

Exploration

To find (explore or prospect for) a mine is a complex, time-consuming, expensive undertaking. Exploration requires picking out geologically favorable areas to search, using all the geologic data available, adding to it with mapping and other studies to narrow down the search to a relatively small area (a "target"), followed by a more detailed examination including sampling and drilling to find the ore.

Exploration in Nevada, whether by the weekend prospector or highly-trained geologist, continued at an all-time high in terms of the number of individuals and companies involved, money being spent in the search, and variety of minerals—both metals and industrial minerals—being sought. Increased exploration is due in part to the higher prices received for mineral commodities, especially gold, but also to the rapidly increasing long-term demand.

Exploration, by its nature, is a rather secretive undertaking; for this reason much of what goes on is not public knowledge. Only a very few of the many exploration targets being examined in Nevada are mentioned below.

Industrial Minerals
by Keith G. Papke

Exploration for industrial minerals has almost always been an isolated search by individuals or companies, usually seeking a particular material, rather than a competitive search. Barite exploration in Nevada at the present time is an exception to this—exploration is at an all-time high and the intensity of this activity probably exceeds any previous search for an industrial mineral anywhere. An estimated 40 companies and many individuals are actively engaged in exploration and development of barite deposits. The material sought—bedded barite in Cambrian through Devonian siliceous rocks—oc-

100-ton front-end loader on way to Freeport Gold's Jerritt Canyon Mine. Scoop can hold 13.5 cubic yards of rock. *Elko Daily Free Press photo.*

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IMCO, Inc. barite grinding plant, Lander County. ***Keith Papke photo.***

curs in about 120 known deposits in a belt that crosses northeast-southwest through the middle of the State. Much of the exploration activity, however, is in Elko and Lander Counties. some significant discoveries were made in 1980, but none have been publicly announced.

Uranium
by Larry J. Garside

Uranium exploration in the State, as elsewhere in the U.S., was affected by falling uranium prices and uncertainty of future demand. Activity in the early part of 1980 was mainly on properties staked during the period of intense uranium exploration in 1978 and 1979. Uranium exploration was at a low level by year-end; however, promising properties have been retained in several area.

Metals
by Richard B. Jones

Molycorp Inc. is planning a six-year molybdenum exploration project in the Sixshooter Canyon area of the Lucin mining district, Elko County. The property is owned by AZL Minerals Inc. The agreement provides AZL with the option to retain 35% working interest in any mining project on the site.

Ruskin Development Ltd. is percussion drilling its Silver Centre property in the Sand Springs district, Churchill County; five areas drilled contain significant silver areas.

Brican Resources has acquired a large land position in the Santa Fe district, Mineral County. Called the Topeka project, it includes some of the older properties: the Atchison, Topeka, Wabash, Victor, Santa Fe, and Calvada. The target is disseminated gold/silver, open pitable, heap-leachable ore. Production was recorded for some of these properties between the years 1875 and 1920. Other members in this venture are Westley Mines and Ventures West Minerals, the operator. To date the Santa Fe property has been the focus of exploration. Previous drilling indicated reserves of 4.5 million tons averaging 0.055 oz per ton gold and 1.0 oz per ton silver, with good potential remaining for increasing reserves along strike as well as downdip. Over $600,000 worth of exploration was scheduled for this property in 1980. Assays from drilling during this program indicated gold values ranging from 0.76 to 0.02 oz per ton and silver values ranging from 14.8 to 0.19 oz per ton. Revised ore reserve calculations by Ventures West amounts to about 2.6 million tons grading 0.14 oz gold, with no announced silver values. This ore occurs in an area 1,400 ft long by approximately 350 ft wide by 63 ft thick. The ore is found in a black silicified argillite-shale horizon with the gold being disseminated in a massive pyritic-rich body of jasperoidal material found within the argillite-shale unit. A soil survey has indicated an anomalous belt 100-600 ft wide and over 8,000 ft long running through the central part of the property. This belt corresponds to a zone of faulting, brecciation, and alteration. The current ore reserves in one small portion of this zone, with the remainder of the zone awaiting exploration. During 1980 a major drilling program also was started on the Calvada property. 20,000 ft of rotary drilling was laid out to test several areas of gold/silver mineralization. This property lies approximately 1.5 miles east of the Santa Fe property and surface exploration has indicated that mineralization occurs in a similar setting to that on the Santa Fe property and is localized on or near the same major east-west structure as the Santa Fe ore body.

The Anaconda Co. is conducting detailed mapping and limited drilling on property owned by the Flowery Gold Mines Co. just east of Virginia City in Storey County. Anaconda has options on other claims in the area (Nevada State Journal, 19 Dec 80). Gold and silver are found along a structure paralleling the Comstock Lode, which is 3½ miles to the east.

United Mining Corp. is exploring the Comstock Lode, Storey County; 1392 ft of decline were driven as of February, and the hanging wall penetrated. UMC has 6369 ft of strike under lease including the Potosi, Cholar, Hale & Norcorss, Savage, Gould & Curry, Best & Belcher, and Consolidated Virginia claims. Exploration and development is budgeted at $4,000,000. UMC estimates 10 million tons of ore averaging 0.08 oz gold and 3.1 oz silver per ton are available at the 580-ft level (Nevada Mining Association Bulletin, Apr 80). UMC, which declined to exercise an option to buy the property for $4 million, is paying Siskin $10,000 per month to maintain its lease and will pay royalty fees of 8-10% on any production.

Landmark Resources explored the company's Nevada Spanish silver property consisting of 8 claims in the San Antone district, Nye County. The

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work during the year exposed the "main vein" by trenching over a strike length of 76 m. Chip samples averaged 3.58 oz silver per ton across 0.98 m; higher values were also reported—29.90 oz per ton across 1.58 m. Estimated cost for the 1980 program was $25,000 which consisted of establishing grid lines, soil and rock geochem, geophysical surveys, geological mapping, and prospecting as well as trenching and stripping. A similar program, costing $35,000, was scheduled for 1980 on Landmark's Silver Reef claims, closer to Tonopah, with an additional $75,000 being budgeted for rotary drilling and metallurgical work to assess the viability of the property for heap-leaching. A rotary drilling program in 1971 encountered silver values as high as 5.02 oz per ton.

Hawthorne Gold Corp. began percussion drilling at their Mindora property in the Fitting district, Mineral County. Late in 1980 the program was extendedc to allow for 2000 ft of additional drilling. Short holes (100-200 ft) are planned north and west of the Mindora shaft, and near a drill hole where assays of 0.057 oz per ton gold and 3.55 oz per ton silver were obtained when the hole was abandoned in mineralization due to technical difficulties. The program is being carried out by E & B Explorations and includes surface trenching and sampling over a 2000 ft section. E & B Explorations, acting for Geomex Development, has an option to earn 50% interest in the property by spending a minimum of $425,000 on exploration and development by the end of 1981.

Inspiration Development Co. reportedly is exploring and developing the Old Sanger Mine in the Silver Peak district, Esmeralda county. No information on tonnage or grade has been announced.

Pacific Gold & Uranium, Inc. reported that 151 holes have been drilled to depths of 100 ft in the main part of the Goldfield district in Esmeralda County; one-half million tons of ore containing 0.07 oz gold per ton have been found. This project is a joint venture with Noranda Exploration, Inc.

Freeport Gold is conducting exploration on ground held by Silver Standard Mines, Yukon Gold Placers, and Pine Bell Mines; the area is immediately south of Freeport's Jerritt Canyon gold property. Freeport has defined a substantial zone of shallow gold mineralization; there are several other targets that remain to be tested. Silver Standard staked the ground in 1973 and since that time 225 percussion holes have been drilled; drilling has been confined to a 1000- by 2000-foot area. Numerous faults disrupt the continuity of the gold mineralization and closer spaced drilling will have to be done before tonnage and grade can be calculated.

Klondex Gold and Silver Mining Co. (Vancouver, B.C.) has optioned the Fire Creek gold property in the Hilltop district, Lander County, from Bullion Monarch for 200,000 shares of Klondex stock and an overriding 5% royalty. In 1979 Klondex spent approximately $71,300 on trenching, geological mapping, sampling, assaying, and 3000 ft of rotary drilling.

Don Duncan, general manager, Pinson Mine, holds first gold ingot from the new facility north of Golconda. The bar which weighs 70 lbs is worth over ½ million dollars at current prices of $500 per troy oz. ***Humboldt Sun photo, 12 Feb.***

Prior drilling had indicated a mineralized zone 600 ft in length by 100 ft in width grading 0.05 oz per ton gold. The 1980 program consists of 5000 ft of down-the-hole drilling; $97,000 was scheduled to be spent in 1980.

Argus Resources, Inc. is opening, dewatering, and deepening a shaft near the gold mineralization at the White Caps Mine in the Manhatten district, northern Nye County. A drift will then be driven from the shaft to the old workings (Nevada Mining Association Bulletin, Dec 79-Jan 80).

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HUMBOLDT
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PERSHING
CHURCHILL
LANDER
EUREKA
ELKO
WHITE PINE
LYON
DOUGLAS
MINERAL
NYE
ESMERALDA
LINCOLN
CLARK
gold
barite
gold-silver
tungsten
gold
gold
barite
barite
gold
copper
gold
silver
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S*
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tungsten
gold
silver
gold-silver
molybdenum
silver
zeolite
Mines and oil fields — 1980
metal and industrial-mineral mines
metal mines
industrial-mineral mines
new mines — 1980
future mines
oil fields
* STOREY, CARSON CITY
Modified from Nevada Bureau of Mines and Geology Map 72 (1981)

Development/Future Mines
by John Schilling

Development is the second step in the long, expensive mine-finding process. Once mineralization is found, additional sampling including drilling is needed to outline the ore. This is done to determine if the mineralization is rich enough and the tonnage large enough to pay for the physical plant needed as well as for the preparation of the mine itself, and still allow for a reasonable profit.

Development, like exploration, has increased markedly in Nevada in recent years. A list of developing mines follows:

Cyprus Mines Corp. plans to bring the Northumberland gold mine, northern Nye County, back into production during 1981. Ore reserves are estimated to be 8 million tons. Daily production is planned at 3000 tons; mining is expected to last up to 10 years. The ore will be mined from two open pits, crushed and screened at the mine, hauled to the mouth of West Northumberland Canyon, and heap-leached. The operation will employ 50 persons. Exploration drilling has taken place over five seasons, and has resulted in the development of major gold-silver ore reserves in two distinct orebodies. Metallurgical testing began in 1977 when two heap-leach tests were washed away in a flash flood; the tests were completed in 1978, and an additional field test was run in 1979. (program, Geological Society of Nevada meeting, Jan 80.)

Anaconda Copper Co., a subsidiary of Atlantic Richfield, announced it will build a $200 million molybdenum mine and mill at the Hall property, about 25 miles north of Tonopah (Anaconda press release, Dec 79). Construction started late in 1979 and will be completed in 1981, during which time about 600 workers will be employed. When complete the operation will employ about 400 workers with an annual payroll of $8 million. The deposit contains 150 million tons of ore and could produce up to 15 million lbs of molybdenum yearly (5% of the Free World's present production) for at least the next 20 years. It is anticipated the open pit will grow to be about a mile long during the 20-year life of the operation. The company will have to strip about 20 million tons of overburden before it gets to the ore. The company also has a small sulfide copper deposit near the moly orebody containing about 40 million tons of 0.40% copper ore. The company has made no decision yet on development of that ore, but the moly mine will yield copper as a byproduct. The company is building a mobile home community on a 150-acre site near Tonopah, and has paved the 18-mile road from Tonopah to the mine and turned it over to Nye County.

Anaconda Copper Company's molybdenum operation north of Tonopah. The mill and other buildings were under construction, and stripping of overburden was underway at the mine. ***Anaconda photo, late 1980.***

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Seventy-three tons of transformer passing through Carson City on its way to Anaconda Mine at Tonopah. The 230,000-volt, 18-ft tall transformer had to be trucked at no more than 20 mph and took two days to reach Tonopah from Reno. ***(Nevada Appeal photo 15 Jan 81 by Andre Ney.)***

Anaconda Mining Co. announced plans to start construction of a large zeolite mill in Ash Meadows in southern Nye County. The company has been producing some zeolite for several years from an open pit several miles south of the state line.

Silver King Mines continued construction of a 1200 tons per day silver mill in the Taylor mining district, southeast of Ely, White Pine County (U.S. Bureau of Mines Mineral Industries Survey-1980). Total cost of exploration, mine development, and mill construction is estimated at $8 million. The ore will be mined by open-pit methods and is expected to be in operation by early 1981. The deposit contains reserves of more than six million tons of near-surface ore averaging 3.20 oz of silver per ton. The expected mine life is 15 years.

Argus Resources, Inc. is reopening old silver mines in Austin, Lander Co. The Hillside shaft and 200-ft level are being dewatered, and the True Blue adit 6 miles to the south is being reopened (Nevada Mining Association Bulletin, Dec 79-Jan 80). The New York shaft also is being rehabilitated. And "the new mill outside Austin will process approximately 150 tons of silver ore per day"; part of the mill feed will come from old mine dumps (Kellogg Evening News, 17 Dec 80).

Sunshine Mining Co. began development at the 16-1 Silver Mine near Silver Peak, Esmeralda County, at a cost of $18,000,000, two-thirds of which will be spent on a new mill and tailing dam complex. Ore reserves will allow operation for about 8 years at a rate of 1 million oz of silver per year. Production is planned for late 1982. Sunshine will provide all financing and is the sole operator; Mid-Continent Mining Corp. has a 33⅓% net interest in the mine, payable after Sunshine recovers its costs; previous mineral-rights owners are to receive a 22/9% royalty payment (Wall Street Journal, 10 Jun 80). Mining will be by inclined ramp and underground rubber-tired equipment. The mine will have an average depth of 650 ft with the ore zone being roughly 1000 ft on strike, about 500 ft in height and 30 ft wide. Over 750,000 tons of ore have been blocked out with an average grade of 11.5 oz of silver and 0.035 oz of gold per ton.

Universal Gas Co. of Montana is developing one of Bullion Monarch Co.'s gold properties; this one, adjacent to the Carlin Gold Mine in northern Eureka County. A 200 ton per day cyanide concentration plant has been completed at Carlin and it is hoped that gold production could begin early in 1981. More than 100,000 tons of ore have been mined and stockpiled—enough to provide continuous operation of the plant for over one year.

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Mining of a newly developed tungsten orebody will begin in mid-1981. ***Joe Tingley photos.***

Headframe of 1460-ft shaft being sunk at Utah International's Springer project near Mill City, Pershing County (at left).

Hoisting equipment being installed in new building at the new shaft (at right).

Utah International, Inc., a subsidiary of General Electric Co., is reopening the Springer Tungsten Mine in northern Pershing County at a cost of $55 million. A new 1430-ft shaft is being sunk, and an on-site concentrator and chemical plant built. At least 125 people will be employed during the construction/development stage. Mining is expected to begin in late 1982 at a rate of 1270 tons per day; 1.6 million lbs of tungsten (as ammonium paratungstate) will be produced per year. Over 13 years of reserves have been found; exploration continues (Mining Engineering, Nov 70, page 1542). At maximum operation the mine and mill will employ 200-300 workers, with an annual payroll of more than $3 million.

Pancana Resources, Ltd. and **Western States Minerals Co.** entered into a joint venture agreement, with Western States as operator, to explore, develop, and mine Pancana's mineral properties in the Lynn district of northern Elko County. Total area amounts to around 5000 acres, of which approximately 3000 acres belongs to Temple Mountain but is leased to Pancana. Pancana has expended some $1.6 million in the exploration and development of gold ore and it has been reported that they have in excess of three million tons of low-grade gold ore plus another 250,000 tons of probable ore with a grade of 0.10 oz per ton gold.

Newmont Mining Corp. announced the discovery of ore containing about 1 million oz of gold at Gold Quarry adjacent to its Maggie Creek orebody in northern Eureka County. Preliminary drilling indicated about 10 million tons of ore suitable for heap leaching, and about 2.5 million tons of high-grade ore which will be processed at the Carlin mill 14 miles to the north. Drilling will resume in the spring of 1981. Mining will be by open pit; a start-up date has not been set. (Wall Street Journal, 11 Dec 80.)

Pinson Mining Co., continued construction of mine and mill facilities at their Pinson/Preble gold property, 40 miles northeast of Winnemucca in Humboldt County. A 300,000 tons per year open-pit mine and conventional gold mill will begin production early in 1981, with reserves sufficient for more than 10 years of operation. Total employment is expected to be about 75 persons (Sacramento Bee, 28 Dec 80). The estimated cost to bring the property into production is over $17 million; production is estimated at 45,000 oz of gold per year.

Houston International Minerals has done extensive exploration (169 drilling holes) over the past two years at the old camp of Borealis south of Lucky Boy Pass in Mineral County. About 2.5 million tons of ore averaging 0.08 oz gold and 0.62 oz silver per ton have been found. Metallurgical studies are underway; an open-pit operation is planned to begin in late 1981 or early 1982. The life of the mine is expected to be at least 7 years with a work force of at least 50. (Nevada Mining Association Bulletin, Aug-Sept-Oct 80.)

T.R.V. Minerals Corp., Vancouver, B.C., announced that the Geddes Bertrand property near Eureka, Eureka County, would start production late in 1981. The ore contains about 5 oz silver per ton; an initial milling rate is planned at 200 tons per day. (Wall Street Journal, 15 Sept 80.)

Freeport Gold Co., a subsidiary of Freeport Minerals Co., began construction of facilities at their

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Jerritt Canyon Mine in May. The mine, which is located 50 miles north of Elko, will be the largest gold mine in the U.S. The $115 million project is scheduled for completion in the third quarter of 1981; the rated production of 200,000 oz of gold per year should be reached by mid-1982. The project is a joint venture between Freeport Gold and FMC Gold Corp., a subsidiary of FMC Corp. The venture was formed in 1976; FMC had been exploring the area since 1971 (Mining Congress Journal, Jul 80). Freeport doubled ore reserves to 11.9 million tons averaging 0.22 oz gold per ton (anticipated recovery is 87.5%). Because of the increased reserves the size of the mill will be increased to a capacity of 2750 tons per day (Nevada Mining Association Bulletin, Apr 80). Daily production from the open-pit mine is anticipated to be 12,000 tons. The estimated cost of the project, excluding exploration expenses, is $115 million. At full production, the mine and mill are expected to employ 200 people at an annual payroll of $6 million. (The Nevada Mining Association Bulletin, Apr 80 issue, contains a detailed description of the project.)

Pinson Gold Mine's new, computerized mill north of Golconda, in Humboldt County *(The Sacramento Bee photo, 28 Dec 80).*

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Mining

The estimated value of Nevada's mineral production for 1980 was more than $390,000,000 (based on preliminary, nonfuel estimates by the U.S. Bureau of Mines, and an estimated price of $24/bbl for oil). The value of mineral output increased almost 60% over 1979. Metals accounted for over half the State's output value. The increase is due mainly to added gold production and to price increases of most mineral commodities.

Mining in Nevada will expand markedly over the next few years. A number of new mines opened during the year and many others are being developed and are scheduled to open in future years. These, and new developments at existing mines, are described below:

NEVADA'S ROLE IN U.S. MINERAL SUPPLY IN 1980

Major commodity	Share of U.S. output percent	Rank in Nation
Barite	78	1
Diatomite	25*	2
Fluorspar	1*	3
Gemstones	20*	2
Gold	27	2
Gypsum	10*	6
Lithium	25*	2
Magnesite	100*	1
Mercury	99	1
Pumice & volcanic cinder	15*	4
Tungsten	20*	3

Data from U.S. Bureau of Mines.
*Estimated by Nevada Bureau of Mines and Geology.

NEW MINES

Metals
by John Schilling

Bullion Monarch Co. announced that gold, silver, and copper production began late in 1980 at the Adelaide Mine, 12 miles south of Golconda, on 6 patented mining claims owned by M & B Mining Co. Bullion has a 50% partnership interest in M & B. The ore will be milled at Monarch Milling Co.'s 200 ton per day flotation concentration plant in Austin. Bullion Monarch also holds a 50% partnership interest in Monarch Milling. One thousand tons of ore have been mined and stockpiled, but have not yet been trucked to Austin, and, another 1000 tons have been drilled and are ready for mining. Mining is expected to continue through the winter (1980-81) and to average about 100 tons per day.

Day Mines, Inc. is making shipments of copper concentrate from the Victoria Mine in southern Elko County to the Kennecott Minerals Co. smelter at McGill. The first shipment was made in May. One thousand tons of ore and 800 tons of waste will be

NEVADA'S MINERAL PRODUCTION[1]

Mineral		1979 Quantity	1979 Value (thousands)	1980[P] Quantity	1980[P] Value (thousands)
Barite	thousand short tons	1,734	$ 34,320	2,268	$ 61,920
Clays	thousand short tons	76	1,163	83	2,619
Gem stones			1,000		972
Gold	troy ounces	199,960	61,488	250,618	153,699
Gypsum	thousand short tons	1,075	6,771	889	6,273
Lead	metric tons	24	28	0	0
Lime	thousand short tons	W	W	227	10,589
Mercury	76-pound flasks	29,368	8,256	33,000	13,200
Molybdenum	pounds	39,826	242	0	0
Perlite	thousand short tons	5	71	5	77
Petroleum	thousand 42-gallon barrels	1,230	14,600	893	21,400
Sand and gravel	thousand short tons	10,498	21,387	7,000	23,900
Silver	thousand troy ounces	529	5,862	167	3,597
Stone, crushed	thousand short tons	1,601	6,439	1,330	5,000
Combined value of cement, diatomite, fluorspar, iron ore, lithium compounds, magnesite, pumice, salt, talc, tungsten, zinc, and items indicated by symbol W			90,870		87,552
TOTAL			$252,497		$390,798

[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers), as compiled by U.S. Bureau of Mines (Mineral Industry Survey, Nevada - 1979) except for petroleum.

[P]Preliminary.

W Withheld to avoid disclosing proprietary data; value included in "combined value" figure.

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STATE OF NEVADA'S REVENUE FROM MINERAL INDUSTRY

Source	1977	1978	1979	1980
Federal[1]	$2,903,049	$4,847,428	$6,637,190	$7,187,485
Net proceeds tax[2]	1,842,283	1,967,717	1,976,912	
Geothermal[3]	451,984	240,000	829,892	753,000
TOTAL	$5,197,316	$7,055,145	$9,443,994	

[1]royalties and rentals paid under Section 35 of the Mineral Leasing Act of 1920.
[2]on gross yield of mine less specified allowable deductions.
[3]bonus bid payments from geothermal leases sales.

mined daily. Current employment totals 73. (Nevada Mining Bulletin, May-Jul 80). Day acquired the copper-silver mine near Currie in Elko County from Anaconda in the spring of 1979. The property had previously operated from early 1975 until September 1977. Day announced reserves of 1.5 million tons averaging 2.1% copper and 0.3 oz of silver per ton (Nevada Bureau of Mines and Geology Special Publication MI-1979, page 11). The mine was rehabilitated and dewatered by Day during the year. In addition, development headings were advanced and crushing equipment was replaced. A sublevel caving method utilizing trackless, diesel-powered equipment will be used to mine the ore (Mining Engineering, Jul 80, page 752). The mine and mill will employ approximately 90 people when in full operation.

Newmont Mining Corp. announced that its subsidiary, the Carlin Gold Mining Co., has begun mining gold ore at Schroeder Mountain along Maggie Creek six miles north of the town of Carlin. Extensive drilling began in 1977. Reserves total 4.8 million tons of ore containing 440,000 oz of gold. About 2.3 million tons containing 0.15 oz of gold per ton will be treated at Carlin Mine's mill 12 miles to the northwest; 2.5 million tons averaging 0.038 oz per

VALUE OF NONFUEL MINERAL PRODUCTION IN NEVADA, BY COUNTY*
(Thousands)

County	1977	1978	1979	Minerals produced in 1979, in order of value
Carson City	358	252	W	Pumice, sand and gravel, stone
Churchill	1,460	W	1,903	Diatomite, sand and gravel, salt, tungsten, silver, gold, lead
Clark	32,453	38,199	36,779	Sand and gravel, lime, gypsum, stone
Douglas	W	W	1,488	Sand and gravel, stone
Elko	13,084	W	5,040	Barite, gold, tungsten, sand and gravel, silver, lead, copper, zinc
Esmeralda	12,556	15,836	17,917	Lithium, diatomite, sand and gravel, talc, clays, tungsten
Eureka	W	30,674	40,864	Gold, iron ore, barite, sand and gravel, silver, stone, mercury
Humboldt	4,344	4,075	8,526	Mercury, stone, sand and gravel, clays, gold
Lander	32,700	30,423	28,372	Barite, gold, copper, silver, sand and gravel
Lincoln	5,478	8,969	12,131	Tungsten, gold, lime, silver, sand and gravel, perlite, clays
Lyon	58,034	37,538	25,254	Cement, stone, sand and gravel, diatomite, copper
Mineral	56	W	40	Sand and gravel, stone
Nye	11,464	20,259	22,492	Gold, barite, magnesite, clay, sand and gravel, silver, fluorspar, pumice, iron ore, tungsten
Pershing	13,711	14,295	17,731	Diatomite, gypsum, iron ore, tungsten, sand and gravel, perlite, clays, gold, silver
Storey	6,168	7,924	12,389	Diatomite, silver, gold, sand and gravel
Washoe	W	W	4,659	Sand and gravel, pumice, clay, silver, gold
White Pine	W	W	W	Tungsten, molybdenum, sand and gravel
Undistributed[1]	71,952	28,965	2,567	
Total[2]	263,816	237,408	238,150	

*Data from U.S. Bureau of Mines.
W Withheld to avoid disclosing company proprietary data: included with "Undistributed."
[1]Includes some sand and gravel that cannot be assigned to specific counties, gem stones, and values indicated by symbol W.
[2]Data may not add to totals shown because of independent rounding.

85-ton haul truck being loaded with silver ore from Candelaria Partners Mt. Diablo pit. ***Occidental Minerals photo.***

ton will be heap leached. Production is projected to be 58,000 oz per year by 1981. (San Francisco Chronicle, 10 Sept 80.)

National Resources Development, Inc. is reopening the Nevada Scheelite Mine in northern Mineral County. The 200-level is being extended, and the mill is being re-equiped, at a total cost of about $1.5 million. Plans call for operation at a 125 tons-per-day capacity. The tungsten concentrate produced will be delivered under contract to the Kennametal facility north of Fallon, some 60 miles away (Nevada Mining Association Bulletin, May-Jul 80). The mill resumed operation in August. (Mining Congress Journal, Aug 80.)

Candelaria Partners, a limited partnership between Occidental Minerals Corp. (the general partner) and Congdon and Carey of Denver, began operations at its Candelaria silver mine and mill. The $30 million facility includes an open-pit mine, crushing facilities, cyanide leaching pads, a precipitation plant, and metal refinery. About 4 million tons of overburden and 2 million tons of ore will be removed yearly; a total of 45 million tons will eventually be removed. Ore-crushing began in August, leaching in September, and the first shipment of bullion in November. One hundred and forty-five persons are employed at the operation. (Reno Evening Gazette, 26 Nov 80.)

Heap-leaching operations at Candelaria Partners mill. Plant facilities in background at mouth of Pickhandle Gulch. ***Occidental Minerals photo.***

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Industrial Minerals
by Keith G. Papke

A number of new barite mines were opened in northern Elko County. **Chemical and Petroleum Corp. of America** started a small barite operation. **Unichem** opened a small mine in the Tuscarora Mountains, whereas **Petro-Chem** built a jig plant and started producing in the southern part of the Independence Range. **A.W. Arnold and Associates** was building a barite jig plant and developing mine areas in the Snake Mountains north of Wells. **Zane Hunt Mining Co.** completed a jig plant a short distance west of Beowawe in northern Eureka County. Three small operations commenced in Humboldt County on previous worked deposits northeast and east of Golconda: these are by **Milchem, Minerals Unlimited** and **Cougar Enterprises. Edgar and Morgan Mining Co.** started a small operation below the Greystone Mine, mining barite in talus, and planned to upgrade the material in a heavy-media plant in Crescent Valley.

ACTIVITIES/EXISTING MINES

Metals
by John Schilling

Smokey Valley Mining Co. announced the discovery of a new orebody adjacent to the present open-pit mine at Round Mountain, Nye County; $8 million will be spent for new equipment and $1 million to provide housing and expand the company grocery store. The expansion is expected to add 6 to 8 years to the life of the mine. Louisiana Land & Exploration Co., which holds a 50% interest in the property, estimates that the new orebody contains 36 million tons from which 600,000 oz of gold and 300,000 oz of silver will be produced by mid-1983. (Nevada Mining Association Bulletin Aug-Sept-Oct 80.) Over 90 holes were drilled (Engineering & Mining Journal, Oct 80).

Houston International Minerals Corp. announced discovery of additional gold reserves at their mine at Manhattan, Nye County (U.S. Bureau of Mines, Mineral Industry Survey, Nevada—1980).

EMPLOYMENT PROJECTIONS—NEW MINES

County	Project	Production Commencement Date	No. Employees	Anticipated Annual Payroll
Elko	Freeport JERRITT CANYON	1981	200	$6,000,000
Elko	Day Mines VICTORIA MINE	1980	90	$1,800,000*
Esmeralda	Sunshine 16-1	1982	25-50	$ 700,000*
Eureka	Bethex BUCKHORN	1980	30	$ 600,000*
Humboldt	Pinson Mine PINSON	1981	75	$1,500,000
Humboldt	Bullion Monarch ADELAIDE	1980	10	$ 200,000*
Lander	Milchem RIM ROCK	1980	14	$ 300,000
Mineral	Occidental Minerals CANDELARIA	1980	155	$2,500,000
Mineral	Houston International BOREALIS	1982	50	$1,000,000*
Nye	Cyprus NORTHUMBERLAND	1981	50-60	$1,100,000*
Pershing	Utah International SPRINGER	1982	125-140	$2,600,000*
Storey	Houston Oil & Minerals COMSTOCK OPERATION	1980	110	$1,500,000
White Pine	Silver King TAYLOR	1981	75	$1,500,000*
Nye	Anaconda HALL	1981	400	$8,000,000*

*Estimate—based on $20,000/employee

Number of Mines and Employees in Nevada's Mineral Industry

Veta Grande Companies, Inc. acquired the Mohawk Mine near Silver Peak, Esmeralda County, and plans to "substantially" expand production. Reserves are estimated at 200,000 tons containing 14 or more oz of silver per ton (American Gold News, Dec 80).

Amselco Minerals Inc. and Occidental Minerals Corp. began construction/development of their Alligator Ridge gold mine/mill in northwest White Pine County. Amselco, a wholly owned subsidiary of Selection Trust, is operator of the project; Oxy has a 50% interest in the venture. Estimated cost of bringing the property into production is $26 million. Becon Construction, a Houston-based firm, was contracted to build heap-leach pads, crushing facilities, and a gold recovery building; these structures will be located on the west side of Long Valley. Bechtel Corp. was contracted for actual mine construction. Mining and leaching began on a limited scale in late 1980. Full-scale production of 750,000 tons of ore per year is anticipated by early 1981. Total reserves have been estimated at 4.9 million tons with an average grade of 0.12 oz per ton of gold. Ore will be mined from three adjacent open pits and gold will be extracted by heap leaching. The project is a 50-50 joint venture of Amselco, a wholly owned subsidiary of Selection Trust Limited of London and Occidental Minerals, a subsidiary of Occidental Petroleum Corp. (Nevada State Journal, 12 Feb 80.)

Houston International Minerals Corp. planned to resume mining operations at their Con-Imperial open-pit gold mine at Gold Hill on December 1, 1980 (Sparks Tribune, 26 Nov 80). Late in the year work was underway—hydro-seeding/mulching—to restore vegetation in and around the pit (Yerington News, 28 Nov 80).

Industrial Minerals
by Keith G. Papke

Barite was produced at more than 27 mines operated by 22 companies (Nevada produced about 85% of the U.S. total). All the barite was produced by open-pit methods, and the tonnage of processed material—mostly from jigging plants—far exceeded the tonnage of direct-shipping material. In the Snake Mountains north of Wells, **Chromalloy American** mined barite in two areas to supply jig and heavy-media plants, and **Old Soldier Minerals** operated a mine and jig plant. In southwestern Elko County **Eisenman Chemical** started an extensive stripping program at its Lakes Mine and upgraded its crushing-screening plant to a jig plant. **NL Industries** produced a large tonnage from their two deposits and supplied their jig plant and their flotation plant at Dunphy. In the North Battle Mountain district in Lander County, **Milchem** completed its mining at the Rimrock property during the year but continued to process stockpiled ore by jigging. The company also continued mining jigging, and grinding at its Argenta properties and reopened the Miller Mine farther south in the Shoshones to supply the Crum Canyon jig plant. Also in the vicinity of the Miller Mine, Edgar and Morgan Mining Co. did work at the Beacon Mine and **Elquist Mining Co.** mined and jigged barite at the Slaven Canyon Mine. In central Lander County FMC Corp. continued to produce chemical-grade barite and to supply ore for IMCO Services' nearby jig-table-flotation plant. **Dresser Industries** continued operations at the Greystone Mine—the largest barite producer in the world—and completed a new jig plant. At the Clipper Mine near the east edge of the Shoshone Range, **IMCO Services** continued operation of their mine and jig plant. The company also operated a grinding plant east of Battle Mountain. **Peabody Calada** obtained control of the Bird Mine north of Austin, and **Tom Norris** continued his small operation at the Allen Mine northwest of Austin. **Lander Barite, Inc.** continued mining at the Elizando-Wildflower property in the Roberts Mountains in Eureka County and was constructing a plant to upgrade the barite. In the Northumberland district in northern Nye County, **Standard Slag** operated the Pond S Mine and produced chemical-grade barite at its flotation plant in Fallon. **All Minerals** continued to mine and jig barite in East Northumberland Canyon.

Bentonite and sepiolite clays were produced by **Industrial Minerals Ventures** in the Ash Meadows area in southern Nye County. Diatomite continued to be produced by three companies in western Nevada, and **Eagle-Picher Industires** completed its new processing plant in Storey County. Fluorspar production in Nevada came from the Daisy (Crowell) Mine near Beatty—the longest operated fluorspar mine in the U.S., with continuous production since 1928. Gypsum production continued at 4 places, 3 of which also manufacture sheetrock, but at a lower rate than in 1979. Lightweight aggregate production increased following the opening in 1979 of a new mine in Clark County. Production of limestone, lime, and dolomite were affected to some extent by decreased building activity, and a lime plant in eastern Nevada closed late in 1980. Lithium, salt, and magnesite each continued to be produced by single companies. In the Overton silica district, Clark County, **Simplot Silica Products** combined its two main pits into one, and made preparations for a slurry pipeline to replace truck haulage from pit to plant.

The magnesite operation at Gabbs was acquired by Combustion Engineering and now operates as **C-E Basic**; expansion of the Gabbs plant continued. The expansion, with a price tag of $5 million, will result in an additional 35,000 tons of magnesium oxide production annually. The plant modification, which will be completed in 1981, is in response to increased product demand by the animal feed, pulp, sugar and building materials industries (Nevada Bureau of Mines and Geology Special Publication MI-1979, page 8).

"Steamboat Springs, Washoe Valley, Nevada," photo by Timothy O'Sullivan, U.S. Geological Exploration of the Fortieth Parallel, 1867. This view of the main terrace looks north toward what is now Reno. O'Sullivan's portable darkroom is in the right foreground. *Photograph courtesy of the National Archives and Records Service and the USGS Photo Library, Denver.*

Sunoco Energy Development Co. S.W. Lamb No. 3 geothermal well during a flow test in 1980. *Bob Whitney photo.*

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GEOTHERMAL ENERGY
by Larry J. Garside

Interest in Nevada's geothermal resuorces remained high in 1980 as energy companies continued the search for geothermal reservoirs suitable for electric power generation. The total drilled footage of large-diameter geothermal exploration wells was down somewhat in 1980 (see bar graph, table), but exploration efforts remained high, with several wells drilling or planned at year end. Other exploration efforts (geophysics, temperature-gradient driling, etc.) also continued at a high level. Factors that have tended to suppress exploration efforts include the high cost and scarcity of venture capital and the federal limitation on the number of acres that can be leased by any one company or individual.

Numerous geophysical crews have been active in western and northern Nevada during 1980. Much of

LARGE-DIAMETER GEOTHERMAL WELLS DRILLED IN NEVADA IN 1980

CHURCHILL COUNTY		
Dixie Valley		
Republic Geothermal, Inc. No. 53-15 ST	S15,24N,36E	3010 ft
Sunoco Energy Development Co. No. 62-21	S21,24N,37E	12,461 ft
Sunoco Energy Development Co. USA No. 52-18	S18,24N,37E	9860 ft
Soda Lakes-Upsal Hogback		
Chevron Resources Co. Federal No. 58-34	S34,20N,28E	3500 ft
ELKO COUNTY		
Hot Sulphur Springs		
Amax Exploration Co. No. 66-5	S5,41N,52E	5400 ft
LANDER COUNTY		
Beowawe Geysers		
Chevron USA, Inc. Rossi No. 21-19	S19,31N,48E	*7215 ft
Chevron USA, Inc. No. 85-18	S18,31N,48E	5927 ft
WHITE PINE COUNTY		
Monte Neva Hot Springs		
W.H. Hunt Schellbourne No. 74-23	S23,22N,63E	11,017 ft

*Including deepening of 1535 ft in 1980.

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FEDERAL GEOTHERMAL LEASES IN EFFECT BY COUNTY*

COUNTY	NUMBER OF LEASES				ACREAGE			
	Non-Competitive		Competitive		Non-Competitive		Competitive	
	FY 79	FY 80	FY 79	FY 80	FY 79	FY 80	FY 79	FY 80
Churchill	146	154	34	37	241,319	278,232	52,796	67,640
Clark	0	0	0	0	0	0	0	0
Douglas	2	2	0	0	2,191	2,192	0	0
Elko	6	18	2	2	8,211	28,509	3,823	3,823
Esmeralda	16	16	1	1	29,928	35.069	2,546	2,547
Eureka	9	12	3	3	5,788	11,554	6,688	6,767
Humboldt	61	70	3	7	118,217	144,033	5,537	13,512
Lander	24	35	5	4	28,699	50,330	6,437	6,359
Lincoln	0	4	0	0	0	6,723	0	0
Lyon	10	7	10	3	7,846	5,850	13,282	3,631
Mineral	9	11	0	0	12,117	20,897	0	0
Nye	24	23	1	4	42,544	43,368	1,311	7,395
Pershing	81	139	15	14	136,246	248,690	29,343	29,897
Storey	1	1	0	0	591	640	0	0
Washoe	24	20	12	11	24.825	21.235	18,333	17,712
White Pine	25	42	0	0	59,171	994,626	0	0
	438	554	86	86	717,693	994,626	140,096	159,283
	26.5% increase				38.6% increase		13.7% increase	

*From the Nevada Division of Mineral Resources

the seismic work was done in the Beowawe and Dixie Valley geothermal areas. In addition, electrical surveys were conducted in several areas, including Beowawe, Dixie Valley, and Buena Vista Valley. Temperature gradient wells were drilled at numerous areas throughout the State.

There was also increased interest this year in Nevada's low- to moderate-temperature (<300°F) geothermal resources for projects such as alcohol production (for gasohol), food drying, commercial and residential district heating systems, as well as space heating in single-family residences.

There was increased interest in geothermal leases on federal lands in 1980 (see table). Over 600 geothermal leases were in force by the end of 1980 for more than 1 million acres of federal land in Nevada (this is about 1.5% of Nevada's total land, or approximately 1% of the public domain lands). These leases are held by individuals and companies; for non-competitive leases, the cost is $1 per acre per year. Only the largest energy-resource companies can afford the costs involved in the extensive exploration programs necessary to find and exploit geothermal energy for electric power production. In terms of money spent most of the geothermal exploration effort in the state was concentrated in the search for high-temperature (>300°F) geothermal reservoirs to be utilized for electric power. About a dozen of these major companies were involved in geothermal exploration in Nevada this year.

Tad's Enterprises (Oakland, CA) has completed construction of a plant at Wabuska Hot Springs near Yerington, which will use 220°F water from a geothermal well as process heat for a 400,000 gallon per year alcohol plant. The product, 198 proof alcohol, will be mixed with gasoline. This gasohol will be sold by Western Mountain Oil company service stations. Start-up testing, using corn shipped from the midwest, was being conducted in mid December.

A group of five western utilities is formulating plans to develop geothermal power generation and is considering sites in northern Nevada. The utilities, known as **Northern Nevada Geothermal Group**, or NORNEV, will share equally in the cost of buying and installing a 10-megawatt generator and associated equipment on the first proposed project. Estimated cost of the generator and equipment, which could go into commercial operation by 1982, is $12 million. Plans for a larger generating station of about 55 megawatts are also under review. NORNEV consists of the Sacramento (California) Municipal Utility District, Eugene Water And Electric Board, Pacific Power and Light and Portland General Electric in Oregon and the Sierra Pacific Power Co. of Nevada. (E G & G Idaho Newsletter, Sept 80.) As a first step, NORNEV plans to operate a test heat-exchanger module for extracting heat from geothermal waters during several 30-day test periods at selected geothermal wells in northern Nevada. The purpose of the tests is to determine the potential buildup of mineral deposits in the heat exchangers and to evaluate methods for controlling the deposits. (Nevada State Journal, 14 Dec 80.)

Lynch Communications Systems, Inc., in contract with White Pine County, plans to build a 52,000

Phillips Petroleum Co. Campbell E No. 1 geothermal well, Churchill County. Flow test Oct 79. ***Larry Garside photo.***

square-foot electronics manufacturing facility which, if the resource proves adequate will use geothermal energy primarily for space heating and cooling through a liquid heat pump system. The facility would be located on 11 acres acquired from White Pine County. (The Geyser, vol. 7, no.3.)

The **Pepper Mill**, a newly expanded restaurant/motel complex in Reno has drilled two wells, one to a depth of 600 ft with 112°F fluid and the other 750 ft with a temperature of 132°F. The existing restaurant geothermal heating system has been expanded to the motel. (E G & G Idaho Newsletter, Apr 80.)

The **Double Diamond Development Company** of Reno, Nevada has announced plans to construct 8000 individual dwelling units in an area just east of U.S. Highway 395 and two to three miles north of Steamboat Springs (approximately nine to ten miles south of Reno). When completed, the development will feature geothermal and passive solar heating systems. Construction on the project will be phased, with 1500 family units to be built in early 1981. (Geothermal Resources Council Bulletin, Oct 80.)

Joseph D. Reynolds of Wells, Nevada has received a $41,000 U.S. Department of Energy Appropriate Technology Grant for construction of a methane plant with geothermal temperature control. Reynolds plans to use water from his 550 ft, 120°F geothermal well located near the city's sewer plant for digester temperature controls as he turns sewer sludge into methane gas. No user for the methane has yet been contracted. (Geothermal Resources Council Bulletin, Sept 80.)

Geothermal Food Processors continued its second year of operation at the onion dehydration facility at Brady's Hot Springs. The company plans to construct an alcohol production facility utilizing geothermal energy. The $25 million plant would produce about 10 million gallons of alcohol per year, which would be used in gasohol. (Nevada State Journal, 9 Nov 80.) This plant would use an estimated 4.7 million bushels of barley annually in alcohol production. Other feedstocks could also be used. (Geothermal Resources Council Bulletin, Nov 80.)

The **Half Circle Ranch Development Corp.** has proposed a large geothermal gasohol plant near Beowawe.

Warren Properties, Inc. of Rancho Santa Fe, California, has announced plans to build approximately 160 single-family units (all of which will be heated with geothermal energy) in the Moana-Lakeside area of Reno. (Geothermal Resources Council Bulletin, Oct 80.)

A town meeting held on October 21, 1980, at the Reno Coliseum to discuss the use of geothermal resources for space heating drew approximately 150 interested Moana Hot Springs homeowners. The presentation on geothermal heating was made by the Oregon Institute of Technology, the Nevada Bureau of Mines and Geology, and the Nevada Department of Energy.

A Nevada Section of the Geothermal Resources Council was formed this year. Officers are Kelly Jackson, President; Joy Fiore, Vice-President; Martin Booth, Secretary; and Dick Benoit, Treasurer.

A well drilled 1 mile south of Hawthorne produced 210°F water at 750 gpm. It is being evaluated for possible district heating use.

The Mackay Mineral Research Institute (MMRI) published a report in 1980 entitled "Geothermal Resource Assessment, Dixie Valley, Nevada." The study was part of a U.S. Department of Energy contract for geothermal reservoir assessment in the northern Basin and Range Province. The work was performed by MMRI under subcontract to Southland Royalty Co., Fort Worth, Texas.

A report was published in 1980 describing the assessment of geothermal resources of Carson-Eagle Valleys and Big Smoky Valley, Nevada. The work was performed by the Nevada Bureau of Mines and Geology under contract to the U.S. Department of Energy as part of the state-coupled geothermal resource assessment program.

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WELLS DRILLED AND COMPLETED DURING 1980

Company	Well Name	Permit #	Total Depth	County
WEXPRO COMPANY	Jiggs No. 10-1	263	10,950'	Elko
NORTHWEST EXPLORATION COMPANY	Illipah No. 1	269	7,154'	White Pine
MOBIL OIL COMPANY	Virgin River U.S.A. No. 1-A	272	19,562'	Clark
CABANA OIL COMPANY	Federal No. 1-30	273	1,250'	Eureka
NORTHWEST EXPLORATION COMPANY	White River No. 2	274	7,588'	White Pine
SUPRON ENERGY CORP.	Fed. Lease F-28-8-61 No. 1	275	4,240'	Nye
SUPRON ENERGY CORP.	Fed. Lease F-27-6-55 No. 1	276	6,295'	Nye
SUPRON ENERGY CORP.	Fed. Lease F-2-4-55 No. 1	278	5,950'	Nye
SUPRON ENERGY CORP.	Fed. Lease F-18-5-55 No. 1	279	6,630'	Nye
SUPRON ENERGY CORP.	Fed. Lease F-30-4-55 No. 1	280	8,347'	Nye
HUNT OIL COMPANY OF NEVADA	W.L. Plaskett No. 1	282	10,600'	Eureka
DOME PETROLEUM CORP.	Yelland No. 1	283	6,555'	White Pine
AMOCO RPODUCTION CO.	Blackburn No. 1	284	4,893'	Eureka
HUNT OIL COMPANY OF NEVADA	Diamond Valley Fed. No. 1	285	8,900'	Eureka
SAMUEL GARY OIL PRODUCER	Federal No. 30-10	286	5,345'	White Pine
TEXACO, INC.*	Munson Ranch No. 14-34	287	4,025'	Nye
CONOCO, INC.	Federal 8 No. 1	288	6,156'	White Pine
SOHIO PETROLEUM COMPANY	Ruby Valley Unit No. 1	289	9,000'	Elko
NORTHWEST EXPLORATION COMPANY	Railroad Valley No. 1	291	3,659'	Nye
NORTHWEST EXPLORATION COMPANY	Railroad Valley No. 6	294	1,930'	Nye
NORTHWEST EXPLORATION COMPANY	Railroad Valley No. 7	295	6,454'	Nye

*Producing Well

Tank battery, pumping well and pipe line at the Trap Spring oil field, Nye Co. ***Ely Daily Times photo, Spring 1977.***

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OIL AND GAS

by Larry J. Garside and Becky S. Weimer

During 1980, 21 wells totaling 145,483 ft were drilled in the search for oil and gas in Nevada. This represents a remarkable increase from 1979, when 13 wells (82,808 ft) were drilled. A corresponding increase was also noted in the oil and gas leases in effect in the State (see table). Only one of these wells drilled in 1980, the **Texaco Inc.** Munson Ranch No. 14-34, is presently regarded as a producer. Twenty-eight drilling permits were issued in 1980, 12 more than in 1979. Some industry experts predict another considerable increase in drilling in 1981. Thirteen energy companies were involved in this effort. In 1980, over 20% of the total footage was drilled by **Supron Energy Corp.**

Nevada oil and gas drillers and producers operated under new regulations in 1980. These new rules and regulations of practice and procedure were adopted to bring the State's regulations in conformity with present drilling and production practices and regulations in other western states.

Nevada's deepest exploratry well, the **Mobile Oil Corp.** Virgin River USA No. 1-A, was drilled to a depth of 19,562 ft in mid-1980. This well, located in Clark County about 50 miles northeast of Las Vegas, was to test a postulated continuation of the Overthrust Belt from Wyoming and Utah to southern Nevada and Arizona. The well penetrated approximately 7700 ft of Tertiary rocks, 3300 ft of Mesozoic strata, 8000 ft of upper Paleozoic rocks, and entered basement at 19,146 ft. A core from 19,305-19,312 ft was monzonite cut by quartz and calcite veins.

In early 1980 **Wexpro Co.** recovered 558 ft of low pour-point oil on a drill-stem test below 9398 ft in their Jiggs No. 10-1 well in S10,T29,R55E in Elko County. The oil apparently was recovered from a Tertiary volcanic section. Small shows of gas were also recorded. A second well (Jiggs Unit No. 2) in adjacent S23 was drilling below 6000 feet in late December.

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Eagle Springs oil field, Nye County. *A.S. VanDenburgh photo.*

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FEDERAL OIL AND GAS LEASES IN EFFECT BY COUNTY*

COUNTY	NUMBER OF LEASES FY 79	NUMBER OF LEASES FY 80	ACRES FY 79	ACRES FY 80
Churchill	168	213	260,646	348,069
Clark	814	1067	1,541,911	2,000,812
Elko	1071	1286	1,999,286	2,422,385
Esmeralda	4	8	2,559	6,906
Eureka	482	561	882,169	1,040,969
Humboldt	9	44	10,032	79,063
Lander	203	238	374,177	442,803
Lincoln	831	1077	1,677,332	2,277,207
Lyon	0	5	0	8,384
Mineral	7	11	5,881	13,207
Nye	1883	1966	2,093,203	2,246,284
Pershing	16	58	31,718	107,735
Washoe	0	1	0	1,155
	5488	6535	8,878,914	10,994,979
	19.1% increase		23.8% increase	

*From the Nevada Division of Mineral Resources

The beginning of modern oil exploration in Nevada. Standard-Conoco Meridan Unit No. 1, during drilling in 1950.
Robert C. Horton photo.

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DIRECTORY OF NEVADA MINE OPERATIONS
(excluding sand and gravel)
ACTIVE DURING 1980

Compiled from information supplied by the Office of State Inspector of Mines (Nevada Industrial Commission). ML = mill; UG = underground mine; OP = open-pit mine. At upper right of each operation-listing is the primary mineral commodity produced; below the commodity is the average number of workers during the year.

CARSON CITY

Savage Construction, Inc. — volcanic cinder
Cinderlite Aggregate Pit — 3
S21,T16N,R20E
Sid Grant, General Manager
P.O. Box 970, Carson City, NV 89701

Heritage Mining Co. — gold & silver
Oristimba Placer (OP) — 2
S14,T15N,R20E
Ray Connors, Owner
No. 4 Kimberly Circle, Carson City, NV 89701

CHURCHILL COUNTY

Huck Salt Co. — salt
Huck Salt Plant — 3
S12,T16N,R31E
Elmer and John Huckaby, Partners
895 Harrigan Road, Fallon, NV 89406
(solar evaporation)

Art Wilson Co. — magnetite (iron ore)
Iron Mine (OP) — 2
S4,T24N,R33E
Art Wilson, Owner
P.O. Box 1160, Carson City, NV 89701

Cyprus Mines Corp. — diatomite
Brady Pit (OP) — 2
S28,T23N,R27E
Section 17 Mine (OP) — 3
S17,T19N,R26E
Alan Stanley, General Manager
P.O. Box 455, Fernley, NV 89408

Bernice Milling Co. — antimony
Vandenburg Group (UG) — 2
S24,T22N,R37E
Howard Turley, Owner
1221 Settlement Road, Dixie Valley, Fallon, NV 89406

Standard Slag Co. — barite
Fallon Plant (ML) — 15
S27,T19N,R28E
Cliff McLaughlin, Resident Manager
P.O. Box 10477, Reno, NV 89510
(flotation)

Kelrex Gold Corp. — gold & silver
Tungsten Mountain Mine (UG) & Mill — 5
S21,T21N,R38E
J.R. Standley, Agent
P.O. Box 1107, Fallon, NV 89406
(construction)

Desert Star Mining — gold & silver
Desert Star Mine (OP) — 2
S21,T21N,R34E
Stan Korph/Gilbert Ward
P.O. Box 1431, Fallon, NV 89406

Fisk & Robertson Mining — gold
Gold Hill Mine — 3
S6,T22N,R34E
Richard Fisk, Owner
3995 Alcorn Road, Fallon, NV 89406
(heap leach)

John Young — tungsten
John Young Mill — 1
S28,T19N,R28E
4740 Alcorn Road, Fallon, NV 89406
(gravity concentration)

Jess Wheeler
Shamrock Mine (OP) — gold & silver
S18,T16N,R35E — 1
Wheeler Mill (gravity concentration) — gold
S28,T19N,R28E — 1
Jess Wheeler, Owner
P.O. Box 218, Fallon, NV 89406

Varga Mining Co. — gold & silver
Bell Mountain Mine (UG) — 3
S10,T15N,R34E
Billy Varga, Contractor
P.O. Box 678, Virginia City, NV 89440

Pacific Exploration, Inc. — precious metals
Fallon Test Facility (ML) — 6
S31,T19N,R29E
Eric Anderson, President
P.O. Box 1418, Fallon, NV 89406
(flotation separation)

Chalk Mountain Associates — silver
Chalk Mountain Mill — 2
S25,T17N,R34E
J.L. Green, General Manager
P.O. Box 3232, Reno, NV 89504
(construction)

CLARK COUNTY

The Flintkote Lime Company — lime
Apex Plant & Quarry — 34
S26,T18S,R63E
Glenn House, Manager
107 Water Street, Suite C, Henderson, NV 89015
(crushing, screening)

The Flintkote Lime Company — lime
Henderson Plant — 49
S18,T22S,R63E
Ken Coaker, Manager
107 Water Street, Suite C, Henderson, NV 89015
(calcining)

The Flintkote Lime Company — limestone
Sloan Quarry & Mill — 15
S13,T23S,R60E
Earl Gillian, Superintendent
Star Route, Box 2300, Las Vegas, NV 89031
(crushing, screening)

Pabco Gypsum — gypsum
Las Vegas Gypsum Plant (OP,ML) — 28
S5,T20S,R64E
Howard Pearson, Plant Manager
P.O. Box 43327, Las Vegas, NV 89104
(calcining)

Flintkote Co., Gypsum Products Division — gypsum
Blue Diamond Quarry & Plant (OP,ML) — 60
S32,T21S,R59E
Evert Barnes, Manager
Star Route 89031, Box 2900, Las Vegas, NV 89101
(crushing, screening, calcining)

Simplot Silica Products — silica sand
Mill No.1 (drying) — 18
S30,T16S,R68E
Pit No. 1 — 6
S2,T17S,R67E
Mill No. 2 (drying) — 16
S11,T16S,R68E
Pit No. 2 — 7
S12,T17S,R67E
Red Sand Quarry — 2
S36,T16S,R67E
W.J. Sandoval, Manager
P.O. Box 308, Overton, NV 89040

P.G. Harrison & James Harris — gold & silver
Mockingbird Mill — 2
S11,T26S,R64E
P.G. Harrison & James Harris, Owners
P.O. Box 9-B, Nelson, NV 89046
(gravity concentration)

Eddie Bounsall — gold
Treasure Hawk Mine (OP) & Mill — 2
S34,T19S,R70E
P.O. Box 37, Logandale, NV 89021
(gravity concentration)

World Oil Specialties, Inc. — copper, chrome, nickel
Shenandoah Mill — 3
S3,T25S,R57E
William C. Walker, President
Box 50, Star Route 89070, Jean, NV 89017
(electrowinning)

Intermountain Exploration Co. — gold & silver
Eldorado Mine — 4
S5,T26S,R64E
Richard Wyman, President
P.O. Box 6, Boulder City, NV 89005
(heap leach)

Johns-Manville Products Corp. — silica sand
West Coast Silica Pit & Mill — 2
S25,T16S,R67E
R.K. Comann, Production Manager
P.O. Box 33, Overton, NV 89040

Crescent Mining, Ltd. — gold & silver
Rest Mine — 5
S31,T29S,R61E
Dudley Hardin, Manager
P.O. Box 296, Searchlight, NV 89046
(heap leach)

Padden Gray Mining Co. — silver
Hart Mine — 2
S28,T28S,R61E
Pat McMillan, Partner
P.O. Box 3, Nipton, CA 92364
(heap leach)

Tri-Delta Mining & Crushing of Nevada, Inc. — pumice
Rilite Mine & Plant — 5
S9,T25S,R61E
James Richards, President
4675 Wynn Road, Las Vegas, NV 89103
(crushing, screening)

Searchlight Exploration, Inc. — gold & silver
Searchlight Plant & Mine (OP, ML) — 31
S33,34,35,T28S,R62E
Virgil Barker, Manager
301 South 11th Street, Suite 200, Las Vegas, NV 89101
(crushing, screening, heap leach)

Hardy Mining Co. — silver
Hardy Mine (UG) — 2
S14,15,16,T26S,R64E
Ronald W. Hardy/Ronald L. Hardy, Owner/Operator
Star Route Box 8, Searchlight, NV 89046

Kerry Gold — gold & silver
Kerry Milling — 3
S12,T22S,R62E
Bill Fuller, President
P.O. Box 5, Henderson, NV 89015
(flotation)

John A. Yeager — gold & silver
Yeager Mining & Milling — 2
S20,T28S,R61E
John Yeager, Owner
340 East Delamar Drive, Henderson, NV 89015
(gravity concentration)

DOUGLAS COUNTY

Veta Grande Companies, Inc. silver
Veta Grande Mine (OP) & Mill 20
S10,T11N,R21E
Terry Remley, Mine Manager
P.O. Box 880, Minden, NV 89423
(concentration flotation)

ELKO COUNTY

Tom Norris barite
Rossi Mine (OP,ML) (screening) 15
S15,T37N,R49E
Queen Lode Barite Mine (OP) 10
S27,T37N,R49E
Tom Norris, Contractor
P.O. Box 231, Battle Mountain, NV 89820

Carlin Gold Mining Co. gold
Bootstrap Mine (OP) 2
S8,T36N,R50E
J.D. McBeth, Resident Manager
P.O. Box 979, Carlin, NV 89822

Eisenman Chemical Co. barite
Lakes Barite Pit 16
S6,T38N,R52E
Robert Bruner, Resident Manager
P.O. Box 457, Carlin, NV 89822

Henry Cagle tungsten
Montello Scheelite Mill 2
S34,T40N,R69E
Montello, NV 89830
(flotation, gravity concentration)

Frontier Mining Co. tungsten
Wells Tungsten Mine (UG) 4
S31,T37N,R62E
Gary Lee, Partner
P.O. Box 604, Wells, NV 89835

E.B. Mining Co. barite
Jungle Mine (OP) 10
S8,17,T42N,R62E
Consolation Barite Mine (OP) 10
S17,T42N,R62E
Hunch Mine (OP) 2
S16,T42N,R62E
Loomis Mine (OP) 4
S21,T41N,R62E
Snoose Creek Mine (OP) 5
S4,T40N,R62E
John Ala
P.O. Box 487, Wells, NV 89835

Day Mines, Inc. copper
Victoria Mine (UG) & Mill 89
S5,T28N,R66E
Joseph Suveg, Manager
P.O. Box 65, Wendover, UT 84083
(flotation)

Phil Heater gold & silver
Big 4 Mine & Mill 3
S25,T44N,R52E
Phil Heater, Owner
3445 Alpine View Court, Carson City, NV 89701
(cyanidation)

Dale Aslett barite
Aslett Barite Mill 10
S26,T43N,R63E
Dale Aslett, President
P.O. Box 802, Twin Falls, ID 83301
(gravity concentration)

H.E. Hunewill Construction Co. barite
Independence Valley Mill (gravity concentration, crushing, screening) 2
S4,T39N,R52E
Fantastic Mine (OP) 5
S9,T39N,R53E
Jack Steinheimer, General Superintendent
Tuscarora, NV 89834

Pischel Mining Co., Inc. copper & molybdenum
Vivian Mine (UG) 2
S18,T45N,R64E
Harold Pischel, Contractor
P.O. Box 652, Lone Pine, CA 93545

Chromalloy Mining & Minerals barite
Dry Creek Mill 15
S26,T43N,R63E
Dennis Duewell, Manager
P.O. Box 1003, Elko, NV 89801
(gravity concentration)

Rocky Pass Mines, Ltd. tungsten
Rocky Pass Mill 8
S4,T39N,R59E
R.F. Snoogress, Superintendent
P.O. Box 92, Montello, NV 89830
(gravity concentration)

Tuscarora Associates silver
Tuscarora Associates Plant 3
S34,3, T39,40N,R51E
Earl Craig, Manager
P.O. Box 44, Tuscarora, NV 89834
(heap leach)

Gold Creek Silver Mines, Inc. gold & silver
Diamond Jim Mine (OP) 2
S29,T45N,R56E
Stephen Carlquist, President
Mountain City Highway, Elko, NV 89801

St. Elmo Gold & Silver, Inc. gold & silver
St. Elmo Mine (UG) 4
S33,T45N,R56E
Harvey R. Hatcher, President
P.O. Box 78, Mountain City, NV 89831

GeoWest Services, Inc. barite
Stormy Creek Mine (OP) & Plant (ML) 49
S22,T42N,R61E
Jeff Long, General Manager
Suite 405, Henderson Bank Bldg., Elko, NV 89801
(screening, gravity concentration)

Ludwig Mining Co. tungsten
South Wells Mine (OP,UG) 5
S31,T37N,R62E
Gary Lee, General Manager
P.O. Box 511, Elko, NV 89801

Freeport Gold Company gold
Freeport Gold Mine (OP) 80
S34,35,T41N,R53E
Freeport Gold Mill (concentration, cyanidation) 120
S33,T41N,R54E
Joseph Farrell, President
P.O. Box 1132, Elko, NV 89801

AgAu Ventures, Ltd. silver
Falcon Mine (UG) 5
S13,T40N,R49E
Larry Trease, Manager
2034 Golf Drive, Elko, NV 89801

M & K, Inc. gold & silver
Esmeralda Mine (UG) 3
S34,T39N,R46E
Merrill Nelson & Jim Wilking, Partners
Midas, via Golconda, NV 89414

R.W. Johnson Mining barite
Coyote Mine (OP) 10
S17,T36N,R51E
P.O. Box 384, Battle Mountain, NV 89820

McDermett & Sons barite
Pine Mountain Barium (OP) 3
S36,T31N,R52E
Andy McDermett, Sr., Owner
P.O. Box 4, Montello, NV 89830

Petro-Chem, Inc. barite
Longshot Mine (OP,ML) 8
S28,T35N,R52E
Richard K. Mulvaney, Manager
P.O. Box 23, Crescent Valley, NV 89821
(gravity concentration)

Brown & Root Western, Inc. gold
Jerritt Canyon Mine (OP) 35
S34,T41N,R53E
Larry Jensen, Project Manager
P.O. Box 88, Elko, NV 89801

Jarbidge Gold & Silver Mining Corp. gold & silver
Bluster Mine (UG) 2
S21,T46N,R58E
Mike McDonnell, Secretary-Treasurer
General Delivery, Jarbidge, NV 89826

Bailey & Sons, Inc. barite
Double "O" Barite Mine (OP) 2
S13,T39N,R52E
Mel Bailey, Owner
General Delivery, Elko, NV 89801

Davy McKee Corp. gold
Freeport Gold Mill 500
S34,35,T41N,R53E
C.H. Grove, Project Manager
P.O. Box 2100, Elko, NV 89801
(construction)

Joe DeFaria lead & silver
Silver King Mine (UG) 2
S29,30,T45N,R53E
Joe DeFaria & Frank Hottal, Partners
P.O. Box 80, Mountain City, NV 89831

Megali Mines, Ltd. sand, gravel, gold
Megali Mine (OP) 5
S19,T43N,R55E
Clifford Porter, Project Manager
P.O. Box 166, Elko, NV 89801

A.W. Arnold & Associates barite
Easy Miner Mine (OP) & Mill 14
S11,T40N,R63E
Richard H. Clark, Manager of Nevada Operations
606 Commercial Street, Elko, NV 89801
(construction)

San Rafael Exploration Co. gold & silver
Prunty Mine (UG) 3
S12,T45N,R56E
Louis Koncher, Lessee
P.O. Box 101, Elko, NV 89801

Peabody Calada barite
Becon Barite Mine (OP) 6
S9,T36N,R52E
Roy Winder, Manager
1150 Lamoille Highway, Elko, NV 89801

Duck Valley Ltd. lead & silver
BFB Enterprises (UG,ML) 2
S19,T44N,R52E
Jesse R. Wilson, Contractor
P.O. Box 596, Sparks, NV 89431
(concentration)

Mineral Unlimited barite
76 Creek Mine (OP) 3
S24,T44N,R57E
John Torok, Superintendent
390 Freeport Blvd., Suite 1, Sparks, NV 89431

O.M. Lyman lead & silver
Battle Creek Mine (OP) 5
Oscar M. Lyman, Owner/Operator
c/o Stone House Post Office, Elko, NV 89801

Nevada Milling, Inc. tungsten
Wells Tungsten Mill 6
S11,T36N,R62E
Sheldon Lee, President
P.O. Box 43, Wells, NV 89835
(flotation)

ESMERALDA COUNTY

Grefco, Inc. diatomite
Dicalite Division (OP,ML) 24
S20,T2N,R34E
Robert Mannon, Plant Manager
P.O. Box 288, Mina, NV 89422
(drying, classification)

Rock Hill Tungsten, Inc. tungsten
Rock Hill Mine (OP) & Mill 4
S2,T3N,R36E
Judd Hull, General Manager
Coaldale Junction via Tonopah, NV 89049
(gravity concentration)

Lloyd Rosenberg talc
Oasis Claims (OP) 1
S5,T6S,R38E
P.O. Box 127, Olancha, CA 93549

Lone Mountain Turquoise Mining Co. turquoise
Blue Jay Mine (OP) 3
S18,T1N,R41E
Warren Hendrix & Stanley Remick, Owners
P.O. Box 1026, Tonopah, NV 89049

Earl Nesser gem stone
Gemfield Mine (OP) 2
S29,T2S,R42E
P.O. Box 495, Goldfield, NV 89013

Crossroads Milling & Minerals Co. gold
Crossroads Mill 2
S28,T5S,R38E
Dan Walker, Manager
609 Fairway Road, Henderson, NV 89015
(gravity concentration)

KEMCO gold
Buster Mine (OP) & Mill 3
S25,T5S,R39E
Fernand Lemieux, President
P.O. Box 464, Goldfield, NV 89013
(cyanidation)

Margaret Hills, Inc. silver
Tonopah West Mill 24
S7,T3N,R31E
David Hamilton
P.O. Box 404, Tonopah, NV 89049
(cyanidation)

Falcon Explorations Co. gold & silver
Tonopah Divide Mine (OP) 8
S26,T2N,R42E
Everett Berg, Owner
P.O. Box 847, Tonopah, NV 89049

Apex 76 Deep Mines Co. gold & silver
Black Warrior Mine (OP) 4
S29,T1S,R39E
Homestake Mine (OP) 2
S14,T2S,R38E
John F. Path, Jr., President/Owner
P.O. Box 170, Dayton, NV 89403

Sunshine Mining Co. gold & silver
16 to 1 Mine (UG) 13
S32,T2S,R38E
Allan Young, Project Manager
P.O. Box 97, Silverpeak, NV 89047
(development)

Spring Creek Mines silver
Mohawk Mine (UG) 11
S36,T2S,R37E
Mark Gavard, Ray Christian, John Zane, Partners
P.O. Box 258, Mina, NV 89422

Candelaria Metals, Inc. gold & silver
Indian Queen Mine (OP,UG) 5
S4,T1S,R33E
Melvin G. Gordy, President
P.O. Box 276, Mina, NV 89422

Mineral Management, Inc.
Argentum Mill (cyanidation) gold & silver
S5,T3N,R36E 11
Black Horse Mine (OP) tungsten
S20,T2N,R35E 2
L.T. Atkinson, President
P.O. Box 86, Dyer, NV 89010

Don Goeken gem stone
Chipmunk Mine (OP) 1
S14,T3N,R35E
Don Goeken, Lessee
P.O. Box 161, Mina, NV 89422

Sundance Stone Co. building stone
Gap Springs Pit 2
S29,T2N,R36E
Gordon LaVigne, Project Supervisor
P.O. Box 1509, Crystal Bay, NV 89402

Mineralex Corp. gold & silver
Weepah Mine (OP) 3
S20,T1N,R40E
H. Scott, R. Pollard, G. Roosa, Vice Presidents
P.O. Box 2658, Silverpeak, NV 89047

Robert A. Mangum gold
Maggie Research & Development (OP,ML) 1
S21,T6S,R39E
Robert A. Mangum, Owner/Operator
Lida Star Route Box 53, via Goldfield, NV 89013
(gravity concentration)

J.W. Hurlbert gold
Midway Mines (OP,ML) 3
S21,T6S,R39E
J.W. Hurlbert, Manager
General Delivery, Goldfield, NV 89013
(gravity concentration)

International Precious Metals gold
International Precious Metals Mine (OP,ML) 6
S6,T6S,R39E
Bill Franke, President
P.O. Box 17, Dyer, NV 89010
(gravity concentration)

Richfield Resources, Inc. silver
South Klondyke Mine (OP,UG) 6
Frank C. Griblin, President
3100 Mill Street, Suite 217, Reno, NV 89502

Charles Pelton gold
Pelton Placer 2
S21,T6S,R39E
Charles Pelton/Dennis Pelton, Owners
Box 55 Star Route, via Goldfield, NV 89013
(gravity concentration)

Goldfield Milling, Inc. gold
Goldfield Milling Mill 3
S1,T3S,R42E
Bob Rogers, President
P.O. Box 535, Goldfield, NV 89013
(gravity concentration)

A.M.S. Inc. of Nevada, Contractor gold & silver
16-to-1 Mine (UG) 6
S32,T2S,R38E
Donald Romain, Superintendent
P.O. Box 2596, Silverpeak, NV 89047
(development)

Trafalgar Mines Partnership gold
Goldfield Project 4
S35,T2S,R42E
W. Bruce Brogoitti, V.P. DBI Engineering Group
P.O. Box 753, Goldfield, NV 89013
(heap leach)

EUREKA COUNTY

Nevada Barth Corporation magnetite (iron ore)
Nevada Barth Mine (OP) & Mill 9
S7,8,T31N,R51E
Charles Rowe, Manager
P.O. Box 425, Carlin, NV 89822
(crushing, screening)

Carlin Gold Mining Co. gold
Carlin Pit 105
S15,T35N,R50E
Blue Star Mine (OP) 2
S4,T35N,R50E
Carlin Mill (cyanidation) 106
S15,T35N,R50E
Maggie Creek Pit 5
S29,T34N,R51E
J.D. McBeth, Resident Manager
P.O. Box 979, Carlin, NV 89822

N.L. Industries barite
Baroid Division, Dunphy Mill 37
S23,T33N,R48E
Jim Kaiser, Superintendent
P.O. Box 414, Battle Mountain, NV 89820
(flotation)

Bethex Corp. gold
Buckhorn Mine (OP) & Mill 11
S30,31,T27N,R49E
Don Smith, Mine Superintendent
P.O. Box 976, Carlin, NV 89822

Windfall Venture gold
Windfall Mine 43
S2,T18N,R53E
Clifford Purdy, Mine Manager
P.O. Box 328, Eureka, NV 89316
(heap leach)

Western States Minerals Corp. gold
Gold Strike Mine 15
S30,T36N,R50E
A.B. Morrow, President
P.O. Box 29, Elko, NV 89801
(heap leach)

Mt. Hope Mines silver
Mt. Hope Mill (flotation) 8
S18,T22N,R52E
Mineral Hill Mine (OP) 4
S3,10,T26N,R51E
Hal Jensen, Manager
P.O. Box 218, Eureka, NV 89316

Universal Gas (Montana), Inc. gold
Bullion Monarch Mine (OP) & Mill 16
S10,T35N,R50E
Joseph Mercier, President
1070 Silver Street, Elko, NV 89801
(cyanidation)

IMCO Services, Inc. barite
Beowawe Loading Facility 2
S6,T31N,R49E
David Brown, General Manager
P.O. Box 861, Battle Mountain, NV 89820

Eisenman Chemical Co. barite
Eisenman Mill 14
S3,T34N,R51E
Robert Bruner, Manager
P.O. Box 457, Carlin, NV 89822
(crushing, screening)

Zane Hunt Mining Co. barite
Sansinena Jig Plant 6
S12,T31N,R48E
Zane Hunt, Owner
P.O. Box 1252, Elko, NV 89801
(crushing, screening)

Gold Creek Corp. gold & silver
Diamond Mine (UG) 24
S3,T18N,R53E
Ronald J. Perry, Superintendent
P.O. Box 303, Eureka, NV 89316

Lander Barite, Inc. barite
Elizondo & Wildflower Mines (OP,ML) 3
S23,T23N,R49E
James Johnson, President
P.O. Box 157, Battle Mountain, NV 89820
(screening)

Lloyd C. Evans Construction Co. gold
Bullion Monarch Mine (OP) 12
S10,T35N,R50E
Lloyd C. Evans, Contractor
P.O. Box 732, Winnemucca, NV 89445

Silver Connor Mines, Inc. silver
Silver Connor Mine (OP,UG) 17
S3,T18N,R53E
Ron Perry, Project Superintendent
P.O. Box 303, Eureka, NV 89316

Bud Barrows, Contractor barite
Firecracker Barite Mine (OP) 4
S18,19,T23N,R50E
P.O. Box 334, Carlin, NV 89822

Petro-Chem, Inc. barite
Queen Anne Mine (OP) 6
S18,T34N,R51E
Richard K. Mulvaney, Manager
P.O. Box 23, Crescent Valley, NV 89821

Britton & Gerish Exploration, Ltd. barite
Bear Barite Mine (OP) 2
S19,T26N,R53E
Lee Britton/Dick Gerish, Owners
P.O. Box 945, Eureka, NV 89316

TRV Exploration (Nevada) Inc. gold & silver
Geddes Mine 4
S28,T18N,R53E
Robert G. Pate, Mine Manager
P.O. Box 442, Eureka, NV 89316
(heap leach)

HUMBOLDT COUNTY

Nevada Mineral Development, Inc. gold
Ashdown Mine (UG) 3
S13,T45N,R29E
Pat Gould, President
P.O. Box 468, Fallon, NV 89406
(rehabilitation)

McDermitt Mine mercury
(OP,ML) 56
S33,T47N,R37E
Victor V. Botts, Jr., Mine Manager
P.O. Box 497, McDermitt, NV 89421
(flotation, distillation)

Harry Wilson opals
Royal Peacock No. 2 Opal Mine (OP) 2
S25,T45N,R25E
General Delivery, Denio, NV 89404

Nutritional Additives Corporation limestone
Sexton Mill 7
S20,T36N,R38E
Glen W. Sexton, General Manager
P.O. Box 802, Winnemucca, NV 89445
(crushing, screening)

Walt Wilson, Owner gem stones
Little Pebble Mine (OP) 2
S18,T45N,R25E
General Delivery, Denio, NV 89404

Charles Eddie, Owner opals
Lorrie Lee Mine (OP) 2
S5,T45N,R26E
P.O. Box 1072, Sunland, CA 91040

Milchem, Inc. barite
National Lead Claims 1–5 (OP) 2
S12,T37N,R41E
Elmer Kessler, General Manager
P.O. Box 272, Battle Mountain, NV 89820

K.W. Minerals Corp. bentonite
High Hopes Mine (OP) 2
S19,T37N,R36E
K.W. Snyder, Owner
P.O. Box 1007, Winnemucca, NV 89445

W.A. Bowes, Inc. gold & silver
Silver Cloud Mine (UG) 4
S9,T36N,R36E
Fuller Russell, Mine Superintendent
Winnemucca Arms Apartments No. 9,
Winnemucca, NV 89445

G. Keith Hodson opals
Bonanza Opal Mine (OP) 2
S13,T45N,R25E
Rainbow Ridge Mine (OP) 2
S34,T45N,R26E
G. Keith Hodson, Owner
General Delivery, Denio, NV 89404

Min-Ad, Inc. limestone
Min-Ad Mill (crushing, screening) 2
S24,T36N,R37E
Dun Glen Mine (OP) 3
S28,T35N,R38E
Charles J. Evans, Superintendent
4210 Jungo Road, Winnemucca, NV 89445

Cougar Enterprises, Inc. barite
Golconda Mine (OP) 4
S31,T36N,R41E
Robert L. Patrie, President
722 Boston Bldg., 9 Exchange Place
Salt Lake City, UT 84111

Pinson Mining Co. gold
Pinson Mine (OP) & Mill 80
S28,T38N,R42E
Donald M. Duncan, General Manager
P O. Box 587, Winnemucca, NV 89445
(cyanidation)

Canyon Placer Company, Inc. gold
Canyon Placer 6
S33,T40N,R41E
J.E. Boyle, Jr., President
P.O. Box 899, Battle Mountain, NV 89820
(gravity concentration)

Rock Valley Milling Corp. gold
Ten Mile Mill 3
S22,T36N,R36E
Bill M. Clem, Manager
1080 Linda Way, No. 3, Sparks, NV 89431
(construction)

Chemical & Petroleum Corp. of America barite
Horton Barite Mine (OP) 5
S30,T36N,R41E
John Torok, President
390 Freeport Blvd., Suite 1, Sparks, NV 89431

MB Mining Corp. copper, gold, silver
Adelaide Mine (OP) 2
S20,T34N,R40E
R.D. Norris, Manager
P.O. Box 93, Austin, NV 89310

C. George Hewitt opal
Cecilie Anne Mine (OP) 1
S8,9,T45N,R26E
Kelley Mine (OP) 1
S30,T45N,R26E
C. George Hewitt
c/o Virgin Valley Ranch, Denio, NV 89404

Bauer Metals, Inc. silver
Martin Creek Mine (ML) 2
S11,T42N,R45E
James O. Jones, Superintendent
P.O. Box 45, Paradise Valley, NV 89426
(cyanidation)

Lloyd Woolstenhulme & Sons Construction & Mining gold & silver
Dyke Springs Mine (UG) 2
S36,T43N,R36E
Lloyd Woolstenhulme, Owner
Star Route 395, Winnemucca, NV 89445

A.D.D.E.M. barite
Loadie Mine (OP,ML) 4
S14,T36N,R40E
Marion Itza, Lessee
100 West Third Street, Battle Mountain, NV 89820
(screening)

Little Red's Excavation tungsten
Carl Segerstrom Pilot Mill 2
S29,T36N,R41E
Gerald Conklin, Owner
P.O. Box 3, Golconda, NV 89414
(gravity concentration)

ADDESHA, Inc.
Pronto Mill (gravity concentration) gold & silver
S8,T36N,R35E 2
Auburn Mine (UG) silver & lead
S1,T33N,R36E 6
Oscar Adkins, President
P.O. Box 1147, Winnemucca, NV 89445

Dale Aslett, Owner gold
Placer (OP,ML) 2
S17,18,19,20,T34N,R40E
P.O. Box 105, Jackpot, NV 89805
(gravity concentration)

Nika Leasing Limited gold & silver
T Mine (OP) 7
S5,T41N,R28E
Robert Wilkinson, General Manager
146 W. Second, Winnemucca, NV 89445

Porter & Meissner Mining barite
Redhouse Mine (OP) 7
S12,T37N,R41E
Donald Meissner & Duane Porter, Partners
P.O. Box 1072, Battle Mountain, NV 89820

International Trade & Investments gold
Maryann Placer (OP,ML) 3
S25,T37N,R31E
Dan Southwick, President
1815 South State Street, Suite 440, Orem, UT 84057
(gravity concentration)

LANDER COUNTY

Monarch Milling silver
Bullion Monarch Mill 3
S13,T19N,R43E
Robert Morris, General Manager
P.O. Box 176, Austin, NV 89310
(flotation)

F.M.C. Corporation — barite
Mountain Springs Mine (OP) — 15
S8,9,T28N,R44E
R. Dale Taylor, Superintendent
P.O. Box 531, Battle Mountain, NV 89820

Milchem, Inc. — barite
Bateman Canyon Mill (gravity concentration) — 13
S6,T30N,R46E
Miller Mine (OP) — 7
S25,T31N,R46E
Argenta Mine (OP) — 16
S19,T32N,R47E
Argenta Barite Mill (gravity concentration) — 65
S12,T32N,R46E
Portable Jig Plant (gravity concentration) — 17
S26,T33N,R45E
Elmer Kessler, Manager
P.O. Box 272, Battle Mountain, NV 89820

Duval Corporation — gold
Copper Canyon Mine (OP) — 230
S23,24,T31N,R43E
Copper Canyon Mill (cyanidation) — 146
S23,24,T31N,R43E
Copper Basin Mine (OP) & Electrolytic Unit (leaching) — copper
S32,T32N,R44E — 40
James McCarty, Manager
P.O. Box 451, Battle Mountain, NV 89820

Dresser Minerals — barite
Greystone Mine (OP) & Mill (gravity concentration) — 85
S16,T28N,R46E
Dresser Mill (crushing, screening) — 23
S16,T32N,R45E
Marvin B. Seldin, General Manager
P.O. Box 375, Battle Mountain, NV 89820

Major Barite Co. — barite
Bradshaw Pit — 2
S8,T29N,R47E
Major Barite Milling Plant (gravity concentration) — 6
S8,T29N,R47E
John Uhalde, Superintendent
1975 Palisade Drive, Reno, NV 89509

IMCO Services, Inc. — barite
Mountain Springs Plant (ML) (gravity concentration, flotation) — 84
S4,T28N,R44E
Clipper Plant (ML) (crushing, screening, jigging) — 17
S6,T27N,R46E
Battle Mountain Grinding Plant (grinding, classification) — 36
S27,T32N,R45E
IMCO Mining Department (OP) — 9
S6,T27N,R46E
Ralph Gronning, General Manager
P.O. Box 861, Battle Mountain, NV 89820

New Pass Resources, Inc. — gold & silver
New Pass Mill (amalgamation, heap leach, gravity concentration) — 1
S16,T20N,R40E
Thomas "W" Mine (UG) — 2
S9,T20N,R40E
Donald Jung, General Manager
P.O. Box 69, Austin, NV 89310

Silver King Mines, Inc. — silver
Independence Mine (UG,ML) — 9
S28,T31N,R43E
William O'Neal, Manager-Mine Development
P.O. Box 741, Battle Mountain, NV 89820
(rehabilitation)

Cortez Gold Mines — gold
Cortez Leach Operation — 38
S13,T27N,R47E
Art Walsh, General Manager
Cortez, NV 89821
(heap leach)

Elquist Mining, Inc. — barite
Slavin Canyon Mine & Plant (OP,ML) — 7
S11,T30N,R46E
James Elquist/William Elquist, Partners
P.O. Box 488, Battle Mountain, NV 89820
(gravity concentration)

H.M.S. Company — barite
H.M.S. Mill — 6
S6,T29N,R47E
Dale Aslett, President
P.O. Box 26, Crescent Valley, NV 89821
(crushing, screening, gravity concentration)

Peabody Calada, Inc. — barite
Bird Mine (OP) — 15
S22,T22N,R44E
Roy Winder, Superintendent
1150 Lamoille Highway, Elko, NV 89801

Grey Eagle Mines Ltd. — gold & silver
Grey Eagle Mine (UG,OP) & Mill — 15
S6,T28N,R47E
Edworth Wright, Superintendent
495 Idaho Street, Suite 208, Elko, NV 89801
(construction, cyanidation)

Argus Resources, Inc. — gold & silver
Argus Mill — 5
S5,T19N,R44E
Fred Ware, Manager
P.O. Box 56, Austin, NV 89310
(construction, gravity concentration)

Cascade Silver Associates, Ltd. — silver
Betty O'Neal Mine — 6
S22,T30N,R45E
Douglas R. Ketron, Project Engineer
General Delivery, Battle Mountain, NV 89820
(heap leach)

Allen Schindler & Rick Gibson turquoise
Red Mountain Turquoise Mine (OP) 2
S11,T25N,R45E
Allen Schindler, Operator/Lessee
General Delivery, Elko, NV 89801

Tenabo Venture gold & silver
Tenabo Test Site (ML) 4
S9,T28N,R47E
J.H. Schaeffer, Superintendent
General Delivery, Crescent Valley, NV 89821
(gravity concentration)

Del & Terry Summers gold & silver
Valley Gold Mine (OP,ML) 2
S10,11,T28N,R47E
Terry Summers/Del Summers, Partners
P.O. Box 29, Crescent Valley, NV 89821
(gravity concentration, construction)

Pony Canyon Mining & Milling silver
Pony Canyon Mine (OP) 4
S24,T19N,R43E
A. Conrad Stewart & Kevin Stewart, Co-owners
P.O. Box 8, Austin, NV 89310

Lombardo Turquoise Milling & Mining Co. turquoise
Shoshone Mine (UG) 1
S21,T21N,R40E
Al Lombardo, Owner
P.O. Box 148, Austin, NV 89310

H.M.S. Company barite
Grass Valley Mine (OP) 2
S11,T21N,R47E
Artell Aslett/Dale Aslett, Partners
P.O. Box 26, Crescent Valley, NV 89821

Manhattan Consolidated Gold Mines, Inc. gold & silver
Hillside Shaft (UG) 4
S19,T19N,R44E
True Blue Mine (UG) gold
S5,T19N,R44E 6
W.R. Noack, President
P.O. Box 56, Austin, NV 89310

Edgar & Morgan Mining Co. barite
Becon Mine (OP) 5
S12,T31N,R46E
CBM Mine (OP) 5
S26,T28N,R45E
Ord Mine (OP) 6
S18,T31N,R47E
James Edgar, President
P.O. Box 899, Battle Mountain, NV 89820

Morgan & Associates barite
Tungsten Barite Claims (OP) 3
S20,T29N,R47E
Thomas Morgan, Owner
P.O. Box 938, Battle Mountain, NV 89820

Aaron Mining, Inc. gold & silver
Gold Quartz Mine 10
S9,T28N,R47E
D.S. Ashe, President
P.O. Box 8, Crescent Valley, NV 89821
(heap leach)

Brazos Metals, Inc. gold & silver
Klondike Mine (UG) 18
S27,T16N,R43E
Jim Patterson, President
340 East Taylor Street, Reno, NV 89502

Brown & Root, Inc. barite
Fillipini Strip Mine (OP) 40
S6,T27N,R46E
Kenneth Snyder, Project Manager
P.O. Box 74, Crescent Valley, NV 89821

Porter & Meissner Mining barite
Rim Rock Mine (OP) 11
S24,T33N,R45E
Duane Porter & Donald Meissner, Partners
P.O. Box 1072, Battle Mountain, NV 89820

Tom Norris Mining Co. barite
Allen Barite Mine (OP) 2
S21,T21N,R42E
Tom Norris, Lessee
P.O. Box 231, Battle Mountain, NV 89820

LINCOLN COUNTY

Delaperlite Partnership Lease perlite
Mackie Perlite Mine (UG) 2
S11,T5S,R62E
Joe Wilkin, Partner
P.O. Box 217, Pioche, NV 89043

Union Carbide Corporation tungsten
Emerson Mine (UG) 135
S36,T3S,R56E
Emerson Mill (flotation) 38
S36,T3N,R56E
Jerry Schierman, Manager
P.O. Box 307, Alamo, NV 89001

R.J. Dalton & Sons soil additives
Agricultural Minerals Plant (ML) 9
S33,T1N,R67E
Richard Donohue, Superintendent
P.O. Box 131, Star Route, Pioche, NV 89043
(flotation)

Wilkin Mining & Trucking Co. perlite
Caliente Perlite Mill 2
S7,T4S,R67E
Robert D. Wilkin, Owner
P.O. Box 217, Pioche, NV 89043
(crushing, screening)

Hollingshead Mining Contracting gold & silver
Pioche Mill 2
S23,T1N,R67E
LaVar Hollingshead, Owner
Panaca, NV 89042
(flotation, gravity concentration)

Standard Slag Company gold & silver
Atlanta Mine (OP) & Mill 42
S14,T7N,R68E
Don Koza, Manager
P.O. Box 97, Pioche, NV 89043
(cyanidation)

Kerr McGee Corp. gold, silver, lead, zinc, manganese
Caselton Mine (UG) 25
S28,T1N,R67E
M.T. Worley, General Manager-New Mines
P.O. Box 87, Pioche, NV 89043
(rehabilitation)

Sierra Chemical Co. lime
Sierra Chemical Lime Pit & Kiln (ML) 31
S29,T1N,R67E
Kim Lee, Manager
P.O. Box 67, Pioche, NV 89043
(crushing, screening, calcining)

Willow Creek Exploration, Inc. silver
Freiberg Mine 5
S20,T1N,R57E
Virgil Barker, Project Supervisor
301 South 11th Street, Las Vegas, NV 89101
(heap leach)

Silver Park Ltd. silver
Silver Park Mine (OP) & Mill 6
S16,T7N,R68E
Lee Wagner, Superintendent
1601 Shadow Mountain Place, Las Vegas, NV 89108
(cyanidation)

LYON COUNTY

Nevada Cement Company cement
Nevada Cement Plant 135
(crushing,screening, calcining)
S10,T20N,R24E
Limestone Mine (OP) limestone
S4,T19N,R25E 3
David Dalton, President
P.O. Box 895, Fernley, NV 89408

Art Wilson Company gypsum
Adams Claims (OP,ML) 14
S25,T16N,R20E
Art Wilson, Owner
P.O. Box 1160, Carson City, NV 89701
(crushing, screening)

Cyprus Mines Corp.,
United Sierra Division diatomite
Section 8 Mine (OP) 2
S8,T19N,R26E
Cyprus Mill (drying, classification) 14
S12,T20N,R24E
Vern Alltus, Plant Manager
P.O. Box 455, Fernley, NV 89408

Eagle-Picher Industries, Inc. diatomite
Hazen Pit 2
S9,T19N,R25E
M.M. Moezzi, Mine Manager
P.O. Box 959, Lovelock, NV 89419

Gold Canyon Placers, Inc. gold & silver
Trio Claims (OP,ML) 2
S23,T16N,R21E
Robert W. Craig/George W. Craig, Managers
P.O. Box 333, Dayton, NV 89403
(cyanidation)

Natural Minerals Co. montmorillonite
Billy Boy T & E Mine (OP) 3
S20,T7N,R27E
Neal Lonneker, President
4912 Rockway Beach Road, NE,
Bainbridge Island, WA 98110

Ida Mines, Inc. gold
Ida Mine (UG) 2
S9,T16N,R21E
Art Wilson, Vice President & Manager
P.O. Box 1160, Carson City, NV 89701

Hans N. Lund gold
South Comstock Mill 2
S21,T16N,R21E
Hans Lund, Owner-Operator
P.O. Box 1657, Carson City, NV 89701
(gravity)

Anaconda Copper Company zeolite
Pilot Plant 10
S21,T13N,R35E
W.C. Norem, Project Manager
P.O. Box 1000, Weed Heights, NV 89443
(crushing, screening)

Marshall Earth Resources, Inc. silver
Shamrock Claims (UG) 5
S22,T13N,R39E
Bill McKenzie, Mine Superintendent
P.O. Box 113–1, Gabbs, NV 89409

MINERAL COUNTY

Monarch Mining Corp. gold & silver
Stanmore Mine (OP) 2
S22,T8N,R28E
Harry O. Nylene, President
P.O. Box HH, Yerington, NV 89447
(development)

National Resources Development, Inc. tungsten
Nevada Scheelite Mine (UG) & Mill 38
S1,12,T13N,R32E
Norm Dircks, Manager
P.O. Box 1567, Fallon, NV 89406
(gravity concentration, flotation)

Richfield Resources, Inc. silver
Ladd Mill 18
S9,T6N,R35E
Frank Griblin, President
P.O. Box 417, Mina, NV 89422
(flotation)

Basic, Inc. magnesite
Luning Plant (ML) 10
S28,T8N,R34E
Gary Judd, Works Manager
P.O. Box 4, Gabbs, NV 89409
(screening)

Nelson O. Smith turquoise
Pilot Mountain Claims (UG,OP) 2
S35,T6N,R37E
P.O. Box 1083, Tonopah, NV 89049

Kinkead Mining & Construction gold & barite
Kinkead Mill 3
S15,T8N,R32E
Dick Merritt, Owner
P.O. Box 32, Luning, NV 89420
(flotation, gravity concentration, heap leach)

Paul Medlock gold, silver, tungsten
Paul Medlock Mill 2
S15,T8N,R32E
Paul Medlock, Operator
P.O. Box 481, Hawthorne, NV 89415
(gravity concentration)

F.W. Lewis Co. gold
Mina Gold Mine (OP) & Mill 2
S8,T8N,R37E
Frank W. Lewis, Owner
120 Greenridge Drive, Reno, NV 89502
(cyanidation)

Ladd Enterprises, Inc. tungsten
Isabell Mine (UG) 3
S14,T7N,R34E
G.G. Gressman, Manager
70 Linden Street, Suite 6, Reno, NV 89502

Candelaria Partners gold & silver
Candelaria Mine (OP) 103
S5,T3N,R35E
Gordon Steele, Manager
P.O. Box 1246, Hawthorne, NV 89415
(heap leach)

Hugh C. Ingle, Jr. gold
Ashby Mine (OP) & Mill 2
S27,T7N,R32E
Hugh C. Ingle, Jr., Lessee
P.O. Box 2123, Hawthorne, NV 89415
(heap leach)

Marietta Mines, Inc. gold & silver
Moho Mine (UG) 1
S26,T5N,R33E
L.T. Atkinson, President
P.O. Box 86, Dyer, NV 89010

U.S. Gold Corporation gold
U.S. Gold Mine (OP) 3
Wes Brown, President
P.O. Box 1508, Fallon, NV 89406

Nevada Barite & Minerals Corp.
Aden Mill (gravity concentration, flotation) tungsten
S8,T6N,R35E 3
Mina Heap Leach gold
S8,T6N,R35E 4
Bob Schofield, President
P.O. Box 408, Mina, NV 89422

Armada Corporation gold
Belleville Mine (OP) & Mill 12
S30,T6N,R36E
Jody Albert, Manager
P.O. Box 397, Hawthorne, NV 89415
(gravity concentration, amalgamation)

Houston International Minerals Corp. gold & silver
Borealis Project (OP) 10
S16,T6N,R29E
Donald E. Hopkins, Staff Advisor
777 E. William, Suite 211, Carson City, NV 89701

Keith McGinnis turquoise
Lucky Lynn Mine (OP) 4
S13,T3N,R33E
P.O. Box 342, Mina, NV 89422

International Micro Nutrients montmorillonite
Parmont Mine (OP) 4
S14,T6N,R31E
Eugene G. McClintock, President
P.O. Box 1021, Hawthorne, NV 89415

Erwin Barlow turquoise
Blue Jay Mine (OP) 2
S24,T6N,R36E
Erwin Barlow, Owner
P.O. Box 255, Mina, NV 89422

Canyon Milling, Inc. gold
Pamlico Placer Plant (ML) 3
S13,T8N,R31E
Richard Carlstrom/Donald Carlstrom, Partners
832 Benita Place, Boulder City, NV 89005
(gravity concentration)

Dick Merritt — barite
Bell Mine (UG) — 2
S22,T3N,R34E
Dick Merritt, Owner
P.O. Box 32, Luning, NV 89420

Continental Minerals, Inc. — gold
Continental Bullion Placer — 4
S30,T6N,R36E
Alan Chambers, General Manager
P.O. Box 343, Mina, NV 89422

RAT Barite Company — barite
RAT Barite Mine (OP) — 3
S3,T13N,R33E
R. Nailan, A. Christopher, T. Farrell, Partners
P.O. Box 414, Eureka, NV 89316

Joe Morris — gold & silver
Shooting Star Mine (UG,OP) — 2
S23,T6N,R35E
Joe Morris/Ray Conard, Owners
P.O. Box 138, Mina, NV 89422

Powder River Mining Co. — gold & silver
Golden Ten Mine (OP) — 3
S33,T11N,R32E
Dwayne Cross/Vickie Pope, Partners
P.O. Box 1803, Hawthorne, NV 89415

Dolin Corp., Contractor — silver
Lakeview Claims 1–4 (OP) — 3
S3,10,T10N,R30E
Melbert P. Molyneux, Owner
P.O. Box 1131, Hawthorne, NV 89415

Joe C. Morris — gold & silver
Isabella Mine (OP) — 6
S34,T9N,R34E
Joe C. Morris, Manager
P.O. Box 138, Mina, NV 89422

NYE COUNTY

Basic, Inc. — magnesite
Nevada Works Plant (ML)
(calcining, flotation, heavy media separation) — 228
S34,T12N,R36E
Nevada Works Pit — 40
S34,T12N,R36E
Gary Judd, Works Manager
P.O. Box 4, Gabbs, NV 89409

Vanderbilt Minerals, Co. — bentonite
White Caps Mine (UG) — 5
S19,T12S,R46E
Jerry Lease, Vice President & General Manager
P.O. Box 398, Beatty, NV 89003

J. Irving Crowell, Jr. & Son — fluorspar
Crowell Fluorspar Mine (UG) — 5
S23,T12S,R47E
Jack Crowell, Owner
P.O. Box 96, Beatty, NV 89003

Cind-R-Lite Block Co. — pumice
Cinder Cone Mine (OP) — 4
S28,T14N,R49E
Earnest Selman, Superintendent
3333 Cinder Lane, Las Vegas, NV 89103

Smoky Valley Mining Co. — gold
Round Mountain Operation — 220
S18,T10N,R44E
Don L. Simpson, General Manager
P.O. Box 480, Round Mountain, NV 89045
(heap leach)

BML Mining Company — silver
Barcelona Mine (UG) — 4
S36,T9N,R44E
Fred Masters, President and General Manager
P.O. Box 127, Manhattan, NV 89022

American Borate Corp. — colemanite
American Borate Plant (ML) — 98
S36,T17S,R49E
Landon Lockhart, General Manager
Star Route 15, Box 610, Lathrop Wells, NV 89020
(calcining, drying, flotation)

Standard Slag Co.
Old Soldier Mine (OP) — barite
S10,T13N,R45E — 3
Stokes Iron Mine (OP) — iron
S21,T12N,R37E — 4
Cliffton McLaughlin, Resident Manager
P.O. Box 10477, Reno, NV 89510

All Minerals, Inc. — barite
Barite Mine (OP) & Mill — 28
S9,T12N,R46E
S.R. Mahoney, President
5510 South 300 West, Murray, UT 84107
(gravity concentration)

Industrial Mineral Ventures, Inc. — clay
Armagosa Pit & Mill — 92
S29,T17S,R49E
Forest Hansen, Resident Manager
RFD Box 549, Lathrop Wells, NV 89020
(crushing, screening)

West Reveille Mining Co., Inc. — silver
West Reveille Mine — 18
S22,T2N,R48E
Robert Johnston, Manager
301 South 11th Street, Las Vegas, NV 89101
(heap leach)

James Pauley gold
Nellie Gray Patent (UG) 2
S20,T8N,R44E
P.O. Box 111, Manhattan, NV 89022

Anaconda Copper Co. molybdenum
Nevada Moly Project (OP,ML) 260
S6,T5N,R42E
L.E. Wilkes, Project Manager
P.O. Box 1268, Tonopah, NV 89049
(development, construction)

Jesse R. Wilson gold & silver
Paymaster Mine (OP) & Mill 3
S14,T14N,R37E
P.O. Box 596, Sparks, NV 89431
(cyanidation)

Saga Exploration Co. gold & silver
Sterling Mine (UG) 17
S8,T13S,R48E
Greg Austin, President
P.O. Box 572, Beatty, NV 89003

Golden Arrow Mining Co. gold & silver
Golden Arrow Mine & Mill 6
S22,T2N,R48E
Einar Erickson, President
301 S. 11th Street, Las Vegas, NV 89101
(heap leach)

Houston International Minerals Corp. gold
Manhattan Mill (OP) 50
S20,T8N,R44E
Anthony Sutich, Project Manager
P.O. Box 56, Manhattan, NV 89022
(cyanidation, gravity concentration, flotation)

Common Port Minerals, Inc. barite
Bas & Valley View Mine (OP) 4
S25,T4N,R49½,49E
William L. McAlvain, President
1600 Duke Way, Reno, NV 89502

Richfield Resources, Inc. silver
Currie Mine (UG) 5
Frank Griblin, President
3100 Mill Street, Suite 217, Reno, NV 89502

Parsons Construction Co., Contractor for GeoWest Services, Inc. silver
(UG) 12
S27,T3N,R42E
R.E. Hendrickson, President (GeoWest)
1545 South Wells, Suite 202, Reno, NV 89502
(development)

Marshall Earth Resources, Inc. barite
Sky Claims (OP,ML) 15
S34,T13N,R39E
Bus Hedgcorth, Mine Superintendent
P.O. Box 113–1, Gabbs, NV 89049
(crushing, gravity concentration)

Cyprus Mines Corp. gold
Northumberland Mine (OP) 55
S18,T13,14N,R44,45E
Alan A. Bakewell, Vice President
55 North Edison Way, No. 2, Reno, NV 89502
(construction)

Warm Springs Turquoise Co. turquoise
Warm Springs No. 3 (OP) 2
S30,T4N,R50E
William Manzini & Daniel McClenaghan, Partners
P.O. Box 462, Tonopah, NV 89049

Great Basin Mines, Ltd. tungsten
Gabbs Tungsten Mine (OP) 3
S28,T13N,R36E
H. Gene Sawyer, General Partner
P.O. Box 247, Gabbs, NV 89409

Manhattan Milling, Inc. gold & silver
Manhattan Mill 5
S20,T8N,R44E
Anthony Selig, President
P.O. Box 64, Manhattan, NV 89022
(cyanidation)

Beatty Group Mining Corp. gold & silver
Beatty Group Mining Corp. Mill 8
S14,T12S,R46E
Robert Phillips, President
P.O. Box 625, Beatty, NV 89003
(cyanidation)

Zeno Mining Company gold
Zeno Placer Mine (ML) 11
S33,T13N,R39E
A.J. Hubbard, Manager
El Capitan Lodge No. 107, Hawthorne, NV 89415
(gravity concentration)

Gold Center Corp. gold & silver
Gold Center Corp. Mill 5
S30,T12S,R47E
Nardi Whipple, Vice President
P.O. Box 382, Beatty, NV 89003
(gravity concentration)

Gila Mining Corp. gold & silver
Gila Mine 19
S24,T2N,R51½E
Bob Nichols, Superintendent
P.O. Box 210, Tonopah, NV 89049
(heap leach)

Minerals Company gold & silver
Tramp Mine 3
S16,T12S,R46E
Clifford Ridley, Partner
P.O. Box 501, Beatty, NV 89003
(heap leach)

Stewart-Kelly Mines gold & silver
Stewart Kelly Mine (OP) & Mill 6
S15,T12S,R46E
Nick Carousso, Mining Engineer
P.O. Box 458, Beatty, NV 89003
(cyanidation)

Argus Resources, Inc. silver
Ione Silver Mine (UG) 3
S34,T13N,R39E
Fred Ware, Production Manager
P.O. Box 56, Austin, NV 89310

South Reveille Mining, Inc. silver
South Reveille Mine (OP) 10
S23,24,T2N,R51½E
Robert D. Johnston, Project Superintendent
301 South 11th Street, Suite 200, Las Vegas, NV 89101

E.R. Fegert gold & silver
Bullfrog Mine & Mill 10
S20,T12S,R46E
E.R. Fegert, President
P.O. Box 32, Beatty, NV 89003
(construction, heap leach)

PERSHING COUNTY

U.S. Gypsum Company
Empire Quarry gypsum
S31,T31N,R24E 2
Lovelock Perlite Plant (ML) (screening) perlite
S8,T27N,R32E 2
Larry Zeich, Works Manager
Empire, NV 89405

Cooney Mining Co. magnetite
Cooney Iron Mine (OP,ML) 5
S29,T26N,R34E
John Cooney, President
P.O. Box 568, Lovelock, NV 89419
(magnetic separation)

Coronado Oil & Minerals Co. silver
Oreana Mill 3
S36,T29N,R32E
Jess Darnell, Superintendent
Oreana Star Route, Lovelock, NV 89419
(flotation, gravity concentration)

Eagle-Picher Industries, Inc. diatomite
Colado Mine (OP) 18
S8,T28N,R29E
M.M. Moezzi, Mine Manager
P.O. Box 959, Lovelock, NV 89419

Eagle-Picher Industries, Inc. diatomite
Colado Plant (ML) 105
S6,T27N,R32E
V.J. Eisinger, Plant Manager
P.O. Drawer A, Lovelock, NV 89419
(calcining)

Nutritional Additives, Corp. limestone
Sexton Mine (OP) 2
S21,T34N,R38E
Glen W. Sexton, General Manager
P.O. Box 802, Winnemucca, NV 89445

Utah International, Inc. tungsten
Sutton No. 2 Mine (UG) 105
S35,T34N,R34E
A.F. Metcalfe, Manager
P.O. Box 325, Imlay, NV 89418
(development)

Circle A Construction gold
Little Jupiter Mine (UG) 3
S17,T33N,R37E
Jupiter Gold Mill (cyanidation) 2
S1,T33N,R37E
Marvin Aslett, President
Trails End Estates No. 21, Winnemucca, NV 89445

Varga Mining Co. silver
Silver Smith Mine (OP,UG) 4
S35,T29N,R34E
Billy Varga, Contractor
P.O. Box 678, Virginia City, NV 89440

F.M. Wright Mining Co. gold
Wright Mill 3
S6,T28N,R33E
F.M. Wright, President
P.O. Box 643, Lovelock, NV 89419
(flotation, gravity concentration)

Flying J Mines gold
Florida Canyon Mine & Mill 4
S2,T31N,R33E
James T. Denholm, Partner
P.O. Box 1027, Lovelock, NV 89419
(heap leach)

Silver Minerals silver & lead
Nightmare Mine (UG) 2
S2,3,T32N,R31E
Bob Chittenden and Jack Wilson, Partners
P.O. Box 38, Imlay, NV 89418

D & Z Exploration Co. gold
Packard Mine 3
S28,29,32,33,T29N,R34E
Dale Scholz, Manager
P.O. Box 1007, Lovelock, NV 89419
(heap Leach)

International Trade & Investments, Ltd. gold
Imlay Canyon Placer (OP,ML) 8
S30,T32N,R34E
Michael Ostler, Operations Manager
P.O. Box 366, Imlay, NV 89418
(gravity concentration)

Phillip Geertson gold
Star Creek Mine (OP) & Mill 3
S24,T31N,R34E
Phillip Geertson, Lessee/Operator
Route 2, Box 29, Homedale, ID 83628
(gravity concentration)

Black Cloud Ltd. gold
Horseshoe Mine (OP,ML) 3
S36,T29N,R34E
Leroy Houts, Mine Foreman
P.O. Box 1034, Lovelock, NV 89419
(gravity concentration)

Silver Bell Mining & Developing, Inc. antimony
Fencemaker Mine (UG) 2
S31,T25N,R37E
Walter Gertz, Mine Superintendent
P.O. Box 221, Lovelock, NV 89419

Atolia Minerals, Inc. gold
Spring Valley Mill (OP,ML) 11
S35,T29N,R34E
Irving Jacobson, General Superintendent
P.O. Box 1068, Lovelock, NV 89419
(gravity concentration)

Ramhed Mining Co. gold
American Canyon Placer (OP,ML) 3
S18,T28N,R35E
William W. Lanning, Engineer
P.O. Box 801, Lovelock, NV 89419
(gravity concentration)

Pacific Exploration gold
Barrel Springs Placer (OP) 4
S31,T34N,R29E
Eric Anderson, President
P.O. Box 1418, Fallon, NV 89406

Inland Resources gold
Twin Buttes Mine 2
S1,T30N,R26E
Ted Saylor, President
910 South Main, Salt Lake City, UT 84101
(heap leach)

Mineral Management, Inc. gold
Thomsen Placer (OP,ML) 3
S16,T34N,R31E
John R. Shelburne, President
Star Route Box 75, Winnemucca, NV 89445
(gravity concentration)

Centennial Development Co. tungsten
Springer Shaft (UG) 35
S35,T34N,R34E
John W. Schear, Superintendent
P.O. Box 1118, Winnemucca, NV 89445
(rehabilitation)

Kennedy Mines, Inc. gold & silver
Kennedy Mine (UG) 4
S25,T28N,R37E
Charles Cobb/Woody Cox, Owners
P.O. Box 874, Carson City, NV 89701

Ro-Mac Gold, Ltd. gold
Willow Creek Mine (OP) & Mill 5
S11,T31N,R36E
Ross Feraco, President
57 West South Temple, Suite 358,
Salt Lake City, UT 84111
(gravity concentration)

Gibralter Metals & Mining Corp. gold
Cedar Hill Mine (OP,ML) 2
S7,T34N,R29E
Thompson Pit (ML) 4
S28,T34N,R29E
Gordon LaVigne, Manager
530 East Plumb Lane, Reno, NV 89502
(gravity concentration)

Powers Family Trust gold
Mellow Mine (OP,ML) 7
S35,T29N,R34E
Carl W. Powers, Manager/Lessee
P.O. Box 1227, Lovelock, NV 89419
(gravity concentration)

Sanstead Mining Co. gold
Johnson Canal Placer (OP) 3
S35,T32N,R36E
Stanley Johnson/Harlowe Sanstead, Partners
P.O. Box 105, Imlay, NV 89418

Cole Reed & Associates gold
Rabbit Hole Mine (OP,ML) 5
S23,T34N,R29E
Bud Moyer, Manager
P.O. Box 1035, Lovelock, NV 89419
(gravity concentration)

UMC, Inc., Contractor tungsten
Springer Mill 60
S35,T34N,R34E
Donald Pruett, Superintendent
P.O. Box 354, Imlay, NV 89418
(construction)

Wilmar J. Helric Co., Inc. gold
Star Canyon Mine (OP,ML) 4
S24,T31N,R34E
Gordon LaVigne, Manager
385 Freeport Blvd., No. 9, Sparks, NV 89431
(gravity concentration)

B & L Reeder Brothers Corp. tungsten
Eagle Group (OP,ML) 2
S14,T25N,R26E
Bill Reeder & Legrand Reeder, Owners
P.O. Box 358, Fernley, NV 89408
(construction)

Brooks, Bues & Hamil — gold
Bonita Mine (OP,ML) — 3
S23,T34N,R33E
Glen Brooks, Spencer Bues, Fern Hamil, Partners
P.O. Box 37, Imlay, NV 89418
(gravity concentration)

Basic Mining & Underground Development Co. — lead & silver
Silver King Mine (UG) — 2
S25,T33N,R30E
John W. Pearce, Project Manager
Star Route Box 31, Imlay, NV 89418

B & H Mining — gold
Oreana Mill — 2
S31,T29N,R33E
Dave Bloyed, Manager
P.O. Box 1051, Lovelock, NV 89419
(gravity concentration)

STOREY COUNTY

Westcoast Oil & Gas Corp. — gold & silver
Gooseberry Mine (UG) & Mill — 180
S25,T19N,R22E
James Delaney, General Manager
395 Freeport Blvd., Sparks, NV 89431
(cyanidation)

Eagle-Picher Industries, Inc. — diatomite
Clark Plant (ML) — 55
S35,T20N,R22E
C.A. Chadwell, General Works Manager
P.O. Box 1869, Reno, NV 89505
(drying, classification)

Eagle-Picher Industries, Inc. — diatomite
Clark Mine (OP) — 5
S28,T20N,R23E
M.M. Moezzi, Mine Manager
P.O. Box 959, Lovelock, NV 89419

Glass Mountain Block — pumice
Lower Naturalite Pit & Plant (ML) — 4
S16,T17N,R22E
Richard Wideriksen, Vice President
355 Greg Street, Sparks, NV 89431
(crushing, screening)

Houston International Minerals Corp. — gold & silver
New York Mine (UG) — 8
S5,T16N,R21E
Alex Aldrich, Project Manager
P.O. Box B, Virginia City, NV 89440
(development)

W.E. Vining Co., Contractor for Houston International Minerals Corp. — gold & silver
Consolidated Imperial Pit (OP) — 12
S32,T17N,R21E
P.O. Box 557, Virginia City, NV 89440
(development)

Houston International Minerals Corp. — gold & silver
American Flat II Mine (OP) & Mill — 113
S32,R17N,R21E
Ken Wright, Manager
P.O. Box B, Virginia City, NV 89440
(cyanidation)

Raynham Hall Contracting, Inc. — gold & silver
New Savage Mine (UG) — 17
S27,T17N,R21E
Earl Haldeman, General Manager
P.O. Box 320, Virginia City, NV 89440
(development)

WASHOE COUNTY

Rilite Aggregate Co. — pumice
Rilite Aggregate Pit & Mill — 8
S12,T18N,R20E
Bruno Benna, Owner
P.O. Box 11767, Reno, NV 89510

Art Wilson Company — clay
Clay Mine (OP) — 4
S14,T27N,R19E
Art Wilson, Owner
P.O. Box 1160, Carson City, NV 89701

Lakeshore Minerals — copper & silver
Blue Bird Mine (UG) — 3
S15,T23N,R21E
Larry Whitton, General Manager
820 Stoker Avenue, Reno, NV 89503

Jack Wilcox — gold
Babe Mine (UG) & Mill — 3
S29,T21N,R23E
Jack Wilcox, Manager
P.O. Box 1928, Grass Valley, CA 95945
(gravity concentration)

WHITE PINE COUNTY

Silver King Mines, Inc.
Ward Mountain Mine (UG) (development) — copper, zinc, silver — 10
S14,T14N,R63E
Taylor Mine (OP) & Mill (development, construction) — silver — 49
S16,T14N,R65E
William O'Neal, Manager-Mine Development
P.O. Box 324, East Ely, NV 89315

Egan Milling Co., Inc. — lead, zinc, gold, silver
Egan Mill — 17
S2,T16N,R63E
E.C. Erickson, President
P.O. Box 628, Ely, NV 89301
(flotation, cyanidation)

IBEX Mining Corp. gold & silver
Taylor Shaft (UG) 8
S16,T14N,R65E
Star Mine (UG) 3
S19,T24N,R63E
E.C. Erickson, President
P.O. Box 628, Ely, NV 89301

Gold Creek Corp. gold & silver
Silverado Mill 10
S19,T18N,R55E
Ronald J. Perry, Superintendent
P.O. Box 303, Eureka, NV 89316
(heap leach)

Gold Creek Corp. silver
Treasure Hill Mine (heap leach) 29
S19,T16N,R58E
Commodore Mine (OP) 6
S1,T15N,R57E
Virgil Barker, General Superintendent
301 South 11th Street, Las Vegas, NV 89101

Cherry Creek Mining & Milling silver
Ticup Mine (OP) 3
S24,T24N,R62E
Earl Harrison, Superintendent
P.O. Box 1107, Ely, NV 89301

Kennecott Minerals Co. copper
Sunshine-Puritan Precipitation Plant 3
S10,T16N,R62E
R.W. Banghart, General Manager
Ruth, NV 89319

Amselco Minerals, Inc. gold
Alligator Ridge Gold Mine 115
S2,T22N,R57E
Gene Clayton, Project Manager
P.O. Box 511, Ely, NV 89301
(heap leach)

Wallace Diamond Drill Co., Contractor for Myriad Mineral Resources gold & silver
White Pine Mine (UG) 7
S13,T16N,R62E
Lavon Fausett, Sr., President
P.O. Box 393, Ely, NV 89301
(development)

Becon Construction Co., Inc., Contractor gold
Alligator Ridge Gold Mine (ML) 70
S2,T22N,R57E
Tony Doherty, Project Manager
P.O. Box 307, Ely, NV 89301
(construction)

D.J. Mining gold
D.J. Mine (UG) 2
S25,26,T14N,R67E
Donald J. Budreau, Owner
P.O. Box 485, Caliente, NV 89008

Harrison & Lawrence, Lessees gold
Joanna Mine (UG) 4
S23,T23N,R62E
c/o J. MacKenzie, Owner
901 South 1100 West, Provo, UT 84601

Huckaley Mining Co. gold
Huckaley Placer (OP) 1
S7,T14N,R68E
L.V. Huckaley, Owner
Baker Stage, Spring Valley via Ely, NV 89301

Normac Exploration Mining & Milling silver
Mary Ann Mine (UG) 8
S36,T24N,R62E
Ted Bustos, Superintendent
P.O. Box 343, Ely, NV 89301

Desert Edge Mining, Inc. gold
Last Chance Claim (OP,ML) 3
S12,T14N,R67E
W.B. Pierce, President
General Delivery, Baker, NV 89311
(gravity concentration)

Mars Mining lead
High Point Mine (OP) 20
S30,T18N,R55E
Bruce D. Carlsen, Manager
P.O. Box 422, Eureka, NV 89316

For more information contact:
Nevada Bureau of Mines and Geology
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Web: http://www.nbmg.unr.edu/

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