

## GOLD IN THE UNITED STATES

(Exclusive of Alaska and Hawaii)

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The accompanying map shows the distribution of the principal gold mining districts in the United States (excluding Alaska and Hawaii). Only those districts that have produced 10,000 ounces of gold or more are shown. Gold ore reserves were not considered, and the types of deposits are not shown. Based on total output, the gold-producing districts have been classified into three categories on the map: (1) those that have an output of 10,000 to 100,000 ounces, (2) those with an output of 100,000 to 1,000,000 ounces, and (3) and those with an output of more than 1,000,000 ounces. Each category is represented by a particular map symbol, and the symbol is placed at the approximate center of the mining district.

All districts are numbered consecutively in each state, and are identified in the Locality Index; the names of some of the more prominent districts are shown on the map. A total of 459 districts are listed. Nearly all information used in compiling this map has come from published reports; principal published sources are given in the Locality Index and identified in the section References Cited.

### History and Production

Gold was first mined in the Southeastern States beginning about 1792 (Loughlin and others, 1929, table 1), but the bulk of the domestic production has come from the Western States following the discovery of placer gold in California in 1848. In the early years most of the gold was mined from placers; but after 1873, though placers were by no means depleted and continued to contribute significantly to our annual output, production came chiefly from lode mines (Loughlin and others, 1929, fig. 3). This early expansion of lode production began about the middle 1860's and was due primarily to development of the Mother Lode and Grass Valley veins in California and the Comstock Lode in Nevada. The search for gold in the West led to the discovery and development of many silver, lead, zinc, and copper deposits from which gold was extracted as a byproduct. As mining and metallurgical techniques were improved and large low grade base metal deposits were developed, byproduct gold became a significant fraction of the annual domestic gold output. Since 1951 production of byproduct gold has outranked production from placers.

The United States (exclusive of Alaska) had produced about 267,360,000 ounces of gold through 1958. The four leading states, in order of total output, are California (105,435,000 ounces), Colorado (40,425,000 ounces), South Dakota (27,120,000), and

Nevada (26,775,000 ounces). The eight leading districts are shown in the following table:

District	Total production in ounces (through 1958)
1. Lead, S. Dak.	23,875,000
2. Cripple Creek, Colo.	19,088,000
3. West Mountain (Bingham), Utah	10,184,000
4. Grass Valley-Nevada City, Calif.	9,822,000
5. Comstock, Nev.	8,620,000
6. Mother Lode-East Belt, Calif.	7,507,000
7. Columbia Basin, Calif.	7,500,000
8. Hammonton-Yuba River, Calif.	4,387,000

### Geology

Gold is generally derived from three types of ore deposits: (1) those containing dry and siliceous ores in which gold is essentially the only metal present in economically valuable amounts, (2) base metal deposits which yield gold as a byproduct, and (3) placers.

Gold most commonly occurs in its native state in combination with small amounts of silver. If the two metals are present in nearly equal amounts the pale yellow mineral is called electrum. The other important gold ore minerals are the tellurides-calaverite, krennerite, sylvanite, petzite. Gold does not form sulfides, but in primary deposits it is usually accompanied by sulfides in which small amounts of metallic gold are commonly present.

Most dry and siliceous ore occurs in lodes, mineralized shear zones, and stockworks. The ore consists mainly of quartz and pyrite accompanied by smaller amounts of galena, sphalerite, chalcopryrite, arsenopyrite, pyrrhotite, tetrahedrite, and tennantite. Gangue minerals, in addition to quartz, may be calcite, dolomite, ankerite, siderite, and locally adularia and barite. The gold in these deposits usually occurs in the quartz or pyrite, but it may also occur in the other sulfides. In base metal deposits gold is found in lodes, copper porphyry deposits, sulfide replacement deposits in limestones, and contact metamorphic deposits in which the accompanying sulfide minerals are essentially the same as in the lode deposits. In the oxidized portions of sulfide deposits, gold is more or less concentrated due to removal of soluble constituents. Its resistance to weathering and solution and its relatively high specific gravity have resulted in

gold being concentrated in economically important amounts in placers. Residual placers, beach placers, bench and terrace gravels, buried placers, and present stream gravels have all been successfully mined for placer gold.

Most of the principal gold districts are found in the mountainous areas of Western United States, where faulting and igneous intrusions have distributed and dislocated the rocks: the Pacific Coast intrusive belt, the Great Basin province, and the Rocky Mountain Cordillera. Gold has also been found in smaller amounts in the southern Appalachian states in the Appalachian Cordillera. Within the Western States there are large areas that are barren of gold deposits, notably the Colorado Plateau, most of Wyoming, and a large part of the Columbia Plateau.

Pacific Coast. - The Pacific Coast States constitute a mineralized province intruded by great batholiths and stocks of granitic composition ranging in age from Jurassic to Tertiary. During the closing stages of this igneous activity, hydrothermal solutions moved along faults and fissures, depositing the gold-quartz and base-metal ores. These veins supplied the gold in the fabulously rich placer deposits of California.

In California the most productive gold-bearing region is the west slope of the Sierra Nevada, which contains the complex vein system of the Mother Lode and Grass Valley-Nevada City districts, and the Tertiary and Quaternary placers at Folsom, Hammon-ton, Columbia Basin, Oroville, Magalia, La Porte, Trinity River, and Salmon River basins.

Gold deposits in Washington and Oregon are related to small Tertiary and Mesozoic granitic and dioritic intrusive bodies. The basaltic lavas of the Columbia Plateau are barren of gold deposits.

Great Basin. - Gold districts are numerous in the block-faulted mountain ranges of Nevada and parts of California, Arizona, Utah, and New Mexico. Most of the deposits, although occurring in many types of host rocks that represent a large span of geologic time, are genetically related to a series of intrusions ranging in age, with few exceptions, from Jurassic to Tertiary; the few exceptions are of Precambrian age.

In Nevada the huge Sierra Nevada batholith of Jurassic age lies along the western border, and numerous satellite bodies of granitic rock lie just east of it. Throughout the central part of Nevada there are numerous bodies of granite of uncertain age, and in the eastern part of the state a belt of rocks deformed by early Tertiary folding and thrusting has been intruded by granitic rocks. Ore deposits are found in these intrusive rocks and in the adjacent invaded rocks.

In Arizona the gold deposits are distributed in the southern and southwestern parts of the State. No commercial gold deposits have been found in the northeastern or Plateau portion, and, according to Wilson and others (1934, p. 137) nearly 80 percent of the States lode gold production (and much of the placer gold) has come from deposits that occur in a belt,

called the Mountain region (Ransome, 1919, p. 26-28) which is about 65-100 miles wide and borders the southwestern margin of the Plateau. Within this belt the rocks have been subjected to folding, intense faulting, and intrusion. In the Desert region, southwest of the Mountain region, the deposits are widely scattered. Most of Arizona's current gold production is derived as a byproduct from the large porphyry copper deposits.

In Utah most of the ore deposits are found in the western part of the State-in the mountain ranges in the Great Basin and in some of the mountain ranges that flank the Great Basin on the east. As in the other Western States, the ore deposits of Utah are intimately related to stocks and small batholiths, probably most, if not all, of Tertiary age. Much of Utah's current gold output is derived as a byproduct of base metal ores. The large porphyry copper deposit at Bingham, Utah, is the largest producer of byproduct gold in the United States.

Rocky Mountain Cordillera. - The map shows a wide distribution of deposits in the Rocky Mountain Cordillera, with the exception of Wyoming.

In Colorado and New Mexico the gold deposits occur in northeast-trending belts coincident with belts of intrusive porphyritic acidic igneous rocks of Late Cretaceous or Tertiary age.

The mineralized belt of Colorado trends oblique to the trend of the mountain ranges, crossing the San Juans in the southwestern part of the state, the Sawatch Mosquito, Gore-Tenmile, and Front Ranges in the central and northcentral parts of the state (Fischer and others, 1946, Koschmann, 1949a, p. 67-69). Gold, silver, and lead-zinc ores occur throughout this belt, in rocks of various types and ages. In the San Juans the ores are in volcanic rocks of Tertiary age; in the Mosquito, Tenmile, and Gore ranges in Paleozoic sedimentary rocks; and in the Front Range they are in rocks of Precambrian age. Cripple Creek, the largest gold producer in Colorado, lies in a caldera southeast of the mineral belt.

The New Mexico mineralized belt extends from Grant County on the southwest to Colfax County on the northeast. It is bounded on the east and southeast by the Great Plains and on the northwest by the Colorado Plateau. The host rocks of the gold deposits range in age from Precambrian to Tertiary; most of the ores, however, are genetically related to intrusive rocks of Cretaceous and Tertiary ages.

The Lead district in the Black Hills of South Dakota, the largest gold producer in the United States, may be considered an offshoot of the Rocky Mountain Cordillera. The Black Hills is a quaquaversal structure with a core of Precambrian rocks surrounded by Paleozoic and Mesozoic sedimentary rocks. The most productive gold deposits at Lead are Precambrian in age and are replacement deposits of calcareous Precambrian rocks folded into a plunging anticlinorium and synclinorium.

In Idaho and Montana the gold deposits are closely associated with igneous intrusives which are irregularly distributed throughout the mountainous areas. Most of the metal deposits of Idaho occur in

## Introduction (cont'd.)

and near the Idaho batholith, a granitic mass that was intruded in late Mesozoic or early Tertiary time. Some deposits are related to offshoots of the main granitic mass, and a few are associated with Tertiary granites considerably younger than the Idaho batholith. In Montana, extensive gold-silver-lead-copper mineralization followed the emplacement of the Boulder batholith and satellitic bodies at the end of the Cretaceous period or early in the Tertiary.

Appalachian Cordillera. - In the Southeastern States, gold deposits are found in metamorphic rocks and associated granitic intrusives that crop out in the Piedmont province, an area east of the mountain front about 700 miles long and 100 miles wide, extending from northern Virginia southwestward to Alabama. The gold deposits are distributed in well-defined zones, usually parallel to the northeast structural grain of the country rock. Most deposits are in metasedimentary rocks of Paleozoic and Precambrian age and are believed to be genetically related to granitic bodies that were intruded near the end of the orogeny that closed the Carboniferous period (Pardee and Park, 1948, p. 50).

## Locality Index

### District or region

#### ALABAMA

##### Cleburne County

1. Arbacoochee district. Brewer, 1896.

##### Tallapoosa County

2. Hog Mountain district. Park, 1935.

#### ARIZONA

##### Cochise County

1. Bisbee (Warren) district. Ransome, 1904; Trischka, 1938.
2. Turquoise (Courtland, Gleeson) district. Ransome, 1913.
3. Tombstone district. Butler and others, 1938.
4. Dos Cabezas district. Wilson and others, 1934.

##### Gila County

5. Banner (Christmas) district. Peterson and Swanson, 1956.
6. Globe--Miami district. Peterson and others, 1951; Ransome, 1919.

##### Greelee County

7. Ash Peak district. Lines, 1940.
8. Copper Mountain (Morenci) district. Lindgren, 1905.

##### Maricopa County

9. Cave Creek district. Wilson and others, 1934.
10. Vulture district. Wilson and others, 1934.

## ARIZONA (cont'd.)

##### Mohave County

11. San Francisco (Oatman, Katherine) district. Lauen, 1931; Ransome, 1923.
12. Wallapai (Chloride, Mineral Park, Cerbot, Stockton) district. Dings, 1951.
13. Weaver (Virginia, Mockingbird, Pilgrim, Pyramid) district. Schrader, 1909.
14. Gold Basin (Salt Springs) district. Wilson and others, 1934.

##### Pima County

15. Ajo district. Gilluly, 1946.
16. Greaterville district. Schrader, 1915.

##### Pinal County

17. Mammoth (Old Hat) district. Peterson, 1938.
18. Ray (Mineral Creek) district. Ransome, 1919.
19. Superior (Pioneer) district. Short and others, 1943.

##### Santa Cruz County

20. Oro Blanco district. Wilson and others, 1934.

##### Yavapai County

21. Tipton district. Lindgren, 1926.
22. Black Canyon district. Lindgren, 1926.
23. Pine Grove-Tiger district. Lindgren, 1926.
24. Peck district. Lindgren, 1926.
25. Black Rock district. Wilson and others, 1934.
26. Weaver-Rich Hill district. Wilson and others, 1934; Wilson, 1952.
27. Martinez district. Wilson and others, 1934.
28. Agua Fria district. Lindgren, 1926.
29. Bigbug district. Anderson and Creasey, 1958.
30. Lynx Creek-Walker district. Lindgren, 1926; Wilson, 1952.
31. Hassayampa-Groom Creek district. Lindgren, 1926.
32. Jerome (Verde) district. Anderson and Creasey, 1958.
33. Eureka (Bagdad) district. Anderson and others, 1955.

##### Yuma County

34. Cienega district. Wilson and others, 1934.
35. La Paz district. Wilson, 1952.
36. Plomosa district. Jones, 1916a; Wilson and others, 1934.
37. Ellsworth (Harquahala) district. Wilson and others, 1934.

Locality Index (cont'd.)

ARIZONA (cont'd.)

Yuma County (cont'd.)

38. Kofa district. Wilson, 1933.
39. Castle Dome district. Wilson, 1933.
40. Laguna district. Wilson, 1933.
41. Dome (Gila City) district. Wilson, 1952.
42. Fortuna district. Wilson, 1933.

CALIFORNIA

Amador County

1. Mother Lode district. Knopf, 1929; Carlson and Clark, 1954.
2. Fiddletown district (Placers in Tertiary gravels) Carlson and Clark, 1954.
3. Volcano district (Placers in Tertiary gravels) Carlson and Clark, 1954; Lindgren, 1911.
4. Cosumnes River placers. Carlson and Clark, 1954.

Butte County

5. Magalia (Placers in Tertiary gravels) Lindgren, 1911; O'Brien, 1949.
6. Oroville (Placers in Quaternary gravels) Lindgren, 1911; O'Brien, 1949.
7. Yankee Hill district.

Calaveras County

8. Mother Lode-East Belt-West Belt district. Julihn and Horton, 1938.
9. Placers in Tertiary gravels. Julihn and Horton, 1938.
10. Jenny Lind district (Placers in Quaternary gravels) Julihn and Horton, 1938.
11. Camanche district (Placers in Quaternary gravels) Julihn and Horton, 1938.
96. Campo Seco district. Julihn and Horton, 1938.

Del Norte County

12. Smith River placers (Placers in Quaternary gravels) O'Brien, 1952a.

El Dorado County

13. Mother Lode-East Belt-West Belt district. Clark and Carlson, 1956.
14. Georgia Slide district. Clark and Carlson, 1956.
15. Placers in Tertiary gravels (Placerville, Georgetown, Grizzly Flat) Clark and Carlson, 1956.

Fresno County

16. Friant district (Placers in Quaternary gravels) Logan and others, 1951.

Humboldt County

17. Klamath River placers (Quaternary gravels) Ave-

CALIFORNIA (cont'd.)

Humboldt County (cont'd.)

rill, 1941b.

Imperial County

18. Cargo Muchacho district. Henshaw, 1942.

Inyo County

19. Ballarat district. Norman and Stewart, 1951; Hewett and others, 1936.
20. Chloride Cliff district. Norman and Stewart, 1951; Hewett and others, 1936.
21. Inyo Range district. Knopf, 1918.
22. Skidoo mine. Hewett and others, 1936; Norman and Stewart, 1951.
23. Willshire-Bishop Creek district. Norman and Stewart, 1951.

Kern County

24. Amalie district. Tucker and Sampson, 1933.
25. Cove district. Tucker and Sampson, 1933.
26. Green Mountain district. Tucker and Sampson, 1933.
27. Keyes district. Tucker and Sampson, 1933.
28. Rand district. Tucker and Sampson, 1933.
29. Rosamond-Mojave district. Tucker and Sampson, 1933.
30. Joe Walker mine. Tucker and Sampson, 1933.
31. St. John mine. Tucker and Sampson, 1933.
95. Pine Tree mine. Tucker and Sampson, 1933.

Lassen County

32. Diamond Mountain district. Averill and Erwin, 1936.
33. Hayden Hill district. Hill, 1915.

Los Angeles County

34. Acton district. Gay and Hoffman, 1954.
35. Antelope Valley foothills district. Wiese, 1950.
36. San Gabriel district. Gay and Hoffman, 1954.

Madera County

37. Chowchilla River placers (Quaternary gravels) Logan, 1950.
38. Grub Gulch-Hildreth district. Logan, 1950.

Mariposa County

39. Mother Lode-East Belt district. Knopf, 1929; Julihn and Horton, 1940.
40. Mormon Bar district (Placers in Quaternary gravels) Julihn and Horton, 1940.
41. Hornitos district (Placers in Quaternary gravels and West Belt lode mines) Julihn and Horton, 1940.



Locality Index (cont'd.)

CALIFORNIA (cont'd.)

Mariposa County (cont'd.)

42. Merced River placers (Quaternary gravels) Julihn and Horton, 1940.
43. Placers in Tertiary gravels. Bowen and Gray, 1957.

Merced County

44. Snelling district. Davis and Carlson, 1952.

Modoc County

45. High Grade district. Averill, 1936; Hill, 1915.

Mono County

46. Bodie district. Sampson and Tucker, 1940.
47. Masonic district. Sampson and Tucker, 1940.

Napa County

48. Calistoga district. Davis, 1948.

Nevada County

49. Grass Valley-Nevada City district. Johnston, 1940.
50. Meadow Lake district. Wisker, 1936.
51. Placers in Tertiary gravels (San Juan Ridge, North Columbia, Sailor Flat, Blue Tent, Scotts Flat, Quaker Hill, Red Dog-You Bet). Logan, 1941.

Placer County

52. Forest Hill district (Placers in Tertiary gravels) Logan, 1936.
53. Dutch Flat-Gold Run district (Placers in Tertiary gravel). Logan, 1936.
54. Iowa Hill district (Placers in Tertiary gravels). Logan, 1936.
55. Ophir district. Logan, 1936.
56. Michigan Bluff district (Placers in Tertiary gravels). Logan, 1936.
57. Rising Sun Mine. Logan 1936.

Plumas County

58. Crescent Mills district. Averill, 1937.
59. Johnsville district. Averill, 1937.
60. La Porte district. Averill, 1937.

Riverside County

61. Pinacate district. Tucker and Sampson, 1945.
62. Pinon-Dale district. Tucker and Sampson, 1945.

Sacramento County

63. Folsom district (Placers in Tertiary and Quaternary gravels). Carlson, 1955.
64. Sloughhouse district (Placers in Quaternary gravels). Carlson, 1955.

CALIFORNIA (cont'd.)

San Bernardino County

65. Dale district. Wright and others, 1953.
66. Holcomb district. Wright and others, 1953.
67. Stedman district. Wright and others, 1953.

San Diego County

68. Julian district. Donnelly, 1934.

San Joaquin County

69. Clements district (Placers in Quaternary gravels). Clark, 1955.
70. Bellota district (Placers in Quaternary gravels) Clark, 1955.

Shasta County

71. Deadwood-French Gulch district. Ferguson, 1914.
72. Igo district.
73. Harrison Gulch district. Clark, 1957.
74. West Shasta Copper-Zinc district. Kinkel and others, 1956.
75. Whiskeytown district. Ferguson, 1914.

Sierra County

76. Alleghany-Downieville district. Ferguson and Gan-net, 1932.
77. Sierra Buttes district. Averill, 1942.

Siskiyou County

78. Humbug district. Averill, 1935.
79. Klamath River district. Averill, 1935.
80. Salmon River district. Averill, 1935.
81. Scott River district. Averill, 1935.
82. Cottonwood-Ft. Jones-Yreka district. Averill, 1935.

Stanislaus County

83. Oakdale-Knights Ferry district (Placers in Quaternary gravels). Charles, 1947.
84. Waterford district (Placers in Quaternary gravels). Charles, 1947.

Trinity County

85. Trinity River basin (Placers in Quaternary gravels). Averill, 1941a.
86. Carrville district. MacDonald, 1913.

Tulare County

87. White River district. Goodwin, 1958.

Tuolumne County

88. Mother Lode district. Julihn and Horton, 1940.
89. East Belt district. Julihn and Horton, 1940.

## Locality Index (cont'd.)

### CALIFORNIA (cont'd.)

#### Tuolumne County (cont'd.)

90. Pocket Belt district. Julihn and Horton, 1940.
91. Columbia Basin-Jamestown-Sonora district. (Placers in Tertiary gravels). Julihn and Horton, 1940.

#### Yuba County

92. Browns Valley-Smartville district. O'Brien, 1952b.
93. Brownsville-Challenge-Dobbins district. O'Brien, 1952b.
94. Hammonton district (Placers in Quaternary gravels). O'Brien, 1952b.

### COLORADO

#### Adams County

1. Clear Creek placers. Vanderwilt, 1947a.

#### Boulder County

2. Central (Jamestown) district. Lovering and Goddard, 1950.
3. Gold Hill-Sugarloaf district. Lovering and Goddard, 1950.
4. Ward district. Lovering and Goddard, 1950.
5. Magnolia district. Lovering and Goddard, 1950.
6. Grand Island-Caribou district. Lovering and Goddard, 1950.

#### Chaffee County

7. Chalk Creek district. Dings and Robinson, 1957.
8. Monarch district. Dings and Robinson, 1957.

#### Clear Creek County

9. Alice district. Lovering and Goddard, 1950; Bastin and Hill, 1917.
10. Empire district. Lovering and Goddard, 1950. Spurr and Garrey, 1908.
11. Idaho Springs district. Lovering and Goddard, 1950; Bastin and Hill, 1917; Spurr and Garrey, 1908.
12. Trail (Freeland, Lamartine) district. Harrison and Wells, 1956.
13. Griffith (Georgetown, Silver Plume) district. Spurr and Garrey, 1908; Lovering and Goddard, 1950.
14. Argentine district. Lovering, 1935; Lovering and Goddard, 1950.

#### Custer County

16. Rosita Hills (Bassick) district. Emmons, 1896.

#### Dolores County

17. Rico (Pioneer) district. Ransome, 1901a; Cross and Ransome, 1905.

### COLORADO (cont'd.)

#### Eagle County

18. Gilman (Battle Mtn.) district. Tweto and Lovering, 1947.

#### Gilpin County

19. Northern Gilpin district. Bastin and Hill, 1917; Lovering and Goddard, 1950.
20. Southern Gilpin district. Bastin and Hill, 1917; Lovering and Goddard, 1950.

#### Gunnison County

21. Gold Brick-Quartz Creek district. Crawford and Worcester, 1916; Hill, 1909.
22. Tin Cup district. Goddard, 1936.

#### Hinsdale County

24. Lake City (Lake Fork-Henson Creek) district. Irving and Bancroft, 1911; Burbank, 1947a.

#### Jefferson County

25. Golden placers. Vanderwilt, 1947b; Wantland, 1937.

#### Lake County

26. Leadville (Evans, Iowa, California, Empire) district. Emmons and others, 1927; Behre, 1953.
27. Arkansas placers. Henderson, 1926; Loughlin and Behre, 1947.

#### La Plata (and Montezuma) County

28. California (La Plata) district. Eckel, 1949.

#### Mineral County

29. Creede district. Emmons and Larsen, 1923.

#### Ouray County

30. Sneffels-Red Mountain district. Burbank, 1941.
31. Uncompahgre (Upper Uncompahgre, Ouray) district. Burbank, 1940; Kelley, 1946.

#### Park County

32. Alma district (includes Montgomery, Buckskin, and Mosquito Camps). Singewald and Butler, 1941; Singewald, 1947.
34. Tarryall district. Singewald, 1942; 1950.

#### Pitkin County

35. Independence district. Henderson, 1926; Vanderwilt, 1947c.

#### Rio Grande County

36. Summitville district. Steven and Ratte, 1960.

#### Routt County

37. Hahns Peak (Columbine) district. George and Crawford, 1909.

## Locality Index (cont'd.)

### COLORADO (cont'd.)

#### Saguache County

38. Bonanza (Kerber Creek) district. Burbank, 1932.

#### San Juan County

39. Animas (Silverton) district. Burbank, 1933; Cross and Howe, 1905.
40. Eureka (Cement Creek, Mineral Creek, Animas Forks) district. Ransome, 1901b; Burbank, 1947b.

#### San Miguel County

41. Ophir (Iron Springs) district. Cross, 1899; Varnes, 1947.
42. Telluride (Upper San Miguel) district. Burbank, 1941; 1947c.

#### Summit County

44. Breckenridge (Blue River) district. Lovering, 1934; Singewald, 1951.
45. Tenmile (Kokomo, Robinson) district. Emmons, 1898; Koschmann and Wells, 1946.

#### Teller County

46. Cripple Creek district. Lindgren and Ransome, 1906; Loughlin and Koschmann, 1935; Koschmann, 1949b.

## GEORGIA

#### Cherokee County

1. Creighton mine. Jones, 1909.

#### Lumpkin County

2. Dahlonga district. Eckel, 1903.

#### White County

3. Nacoochee district. Yeates and others, 1896.

## IDAHO

#### Ada County

1. Black Hornet-Boise-Shaw Mtn. district. Lindgren, 1898.

#### Bingham County

2. Snake River placers. Staley, 1946.

#### Blaine County

3. Camas (Hailey, Mineral Hill) district. Anderson and Wagner, 1946.
4. Warm Springs district. Umpleby, 1915.

#### Boise County

5. Boise Basin (Idaho City, Moore Creek, Gambrinus, Centerville) district. Anderson, 1947.
6. Pioneerville (Summit Flat, Grimes Pass) district. Jones, 1916b.

## IDAHO (cont'd.)

#### Boise County (cont'd.)

7. Quartzburg (Gold Hill, Granite, Placerville) district. Ross and Carr, 1941; Jones, 1916b.
8. Westview district. Ross and Carr, 1941; Anderson, 1934.

#### Camas County

9. Big and Little Smokey-Rosetta district. Ross, 1930.

#### Clearwater County

10. Pierce City district. Ross and Carr, 1941.

#### Custer County

11. Loon Creek district. Ross, 1934; Ross and Carr, 1941.
12. Yankee Fork district. Anderson, 1949.

#### Elmore County

13. Atlanta (Hardscrabble, Yuba, Middle Boise) district. Anderson, 1939.
14. Featherville district. Ballard, 1928.
15. Neal district. Lindgren, 1898; Ross and Carr, 1941.
16. Pine Grove district. Ross and Carr, 1941; Ballard, 1928.
17. Rocky Bar district. Anderson, 1943.

#### Idaho County

18. Buffalo Hump district. Beckwith, 1928.
19. Elk City district. Lorain, 1938; Shenon and Reed, 1942.
20. French Creek-Florence district. Thomson and Ballard, 1924; Lorain, 1938; Lorain and Metzger, 1938.
21. Orogrande district. Thomson and Ballard, 1924; Lorain, 1938; Lorain and Metzger, 1938.
22. Simpson, Camp Howard, Riggins district. Lorain and Metzger, 1938.
23. Tenmile district. Thomson and Ballard, 1924.
24. Warren-Marshall (Resort) district. Reed, 1937, 1942.
39. Dixie district. Thomson and Ballard, 1924.

#### Latah County

25. Hoodoo (Blackbird) district. Hubbard, 1957.

#### Lemhi County

26. Carmen Creek, Eldorado, Pratt Creek, Sandy Creek, Kirtley Creek districts. Umpleby, 1913.
27. Gibbonsville district. Umpleby, 1913.
28. Mackinaw district (Leesburg). Lorain and Metzger, 1939; Umpleby, 1913.
29. Mineral Hill and Indian Creek districts. Lorain and

## Locality Index (cont'd.)

### IDAHO (cont'd.)

Metzger, 1939; Umpleby, 1913.

30. Texas district. Ross and Carr, 1941; Umpleby, 1913.

31. Yellowjacket district. Anderson, 1953.

Jerome and Cassia Counties (formerly Lincoln County and production credited to Lincoln County).

32. Snake River Placers. Staley, 1946.

Power County (formerly Oneida County and production credited to Oneida County)

33. Snake River Placers, Staley, 1946.

### Owyhee County

34. Silver City region (includes DeLamar, Florida, War Eagle Mtn., Flint, Carson-French districts). Piper and Laney, 1926.

### Shoshone County

35. Coeur d'Alene district (includes Beaver, Eagle, Evolution, Hunter or Mullan, Lelande or Burke, Placer Center or Wallace, Summit, Yreka or Kellogg-Wardner, Murray districts). Ransome and Calkins, 1908; Ross and Carr, 1941.

### Valley County

36. Thunder Mountain district. Shenon and Ross, 1936.

37. Yellow Pine district. Cooper, 1951.

### Bonneville County

38. Mt. Pisgah district. Mansfield, 1927.

## MICHIGAN

### Marquette County

1. Ropes mine. Allen, 1912.

## MONTANA

### Beaverhead County

1. Bannack district (includes Blue Wing). Lyden, 1948; Shenon, 1931.

2. Argenta district. Shenon, 1931.

3. Bryant (Hecla) district. Winchell, 1914a.

### Broadwater County

4. Conferate Gulch district (includes Backer). Pardee and Schrader, 1933.

5. White Creek district. Pardee and Schrader, 1933.

6. Winston (Beaver Creek) district. Pardee and Schrader, 1933.

7. Park (Indian Creek, Hassel) district. Stone, 1911.

8. Radersburg (Cedar Plains) district. Winchell, 1914a.

### Cascade County

9. Montana (Neihart) district. Schafer, 1935.

## MONTANA (cont'd.)

### Deer Lodge County

10. French Creek district. Lyden, 1948.

11. Georgetown district (includes Cable). Emmons and Calkins, 1913.

### Fergus County

12. Warm Springs (Maiden-Gilt Edge) district. Corry, 1933.

13. North Moccasin (Kendall) district. Blixt, 1933.

### Granite County

14. First Chance (Garnet) district (includes Bear Creek placers). Pardee, 1918.

15. Henderson placers. Emmons and Calkins, 1913.

16. Boulder Creek district. Emmons and Calkins, 1913.

17. Flint Creek (Philipsburg) district (includes Red Lion district). Emmons and Calkins, 1913.

### Jefferson County

18. Clancy district (includes Prickly Pear Creek, Warm Springs Creek, Mitchell Creek, Clancy Creek, and Colorado). Knopf, 1913.

19. Basin and Boulder district (includes Basin Creek, Cataract Creek, Lowland Creek, and upper Boulder River). Knopf, 1913.

20. Elkhorn district. Knopf, 1913.

21. Whitehall district. Winchell, 1914a.

### Lewis and Clark County

22. Rimini (Vaughn) and Tenmile districts. Knopf, 1913.

23. Helena-Last Chance district. Knopf, 1913; Pardee and Schrader, 1933.

24. Missouri River-York district (includes Dry Gulch) Pardee and Schrader, 1933; Lyden, 1948.

25. Sevenmile-Scratchgravel district. Pardee and Schrader, 1933.

26. Marysville (Ottawa) and Silver Creek districts. Barrell, 1907; Knopf, 1913.

27. Stemple (Gould) and Virginia Creek districts. Pardee and Schrader, 1933.

28. McClellan district. Pardee and Schrader, 1933.

29. Lincoln district. Pardee and Schrader, 1933.

### Lincoln County

30. Libby (Snowshoe) district. Gibson, 1948.

31. Sylvanite (Yoak) district. Emmons, 1937.

### Madison County

32. Virginia City-Alder Gulch district. Lyden, 1948; Tansley and others, 1933.

33. Norris district (includes Norwegian, Lower Hot Springs, Washington). Winchell, 1914a; Tansley



Locality Index (cont'd.)

MONTANA (cont'd.)

Madison County (cont'd.)

and others, 1933.

34. Pony district (includes Mineral Hill). Winchell, 1914a; Tansley and others, 1933.

35. Renova district. Winchell, 1914a.

36. Silver Star district (includes Rochester). Sahinen, 1939; Winchell, 1914a.

37. Tidal Wave district. Winchell, 1914a; Tansley and others, 1933.

38. Sheridan district (includes Ramshorn). Winchell, 1914a; Tansley and others, 1933.

Mineral County

39. Cedar Creek district. Lyden, 1948.

40. Trout Creek district. Lyden, 1948.

Missoula County

41. Ninemile Creek district. Lyden, 1948.

42. Elk Creek-Coloma district. Pardee, 1918.

Park County

43. Emigrant Creek district. Reed, 1950.

44. Jardine (Sheepeater) district. Seager, 1944.

45. New World (Cooke) district. Lovering, 1930.

Phillips County

46. Little Rocky Mountains (Zortman-Landusky) district. Corry, 1933; Emmons, 1908.

Powell County

47. Finn district (includes Washington Gulch). Lyden, 1948.

48. Ophir district. Pardee and Schrader, 1933.

49. Pioneer district. Lyden, 1948.

50. Zosell (Emery) district. Pardee and Schrader, 1933.

Ravalli County

51. Hughes Creek district. Lindgren, 1904.

Silver Bow County

52. Butte (Summit Valley) district. Sales, 1914; Weed, 1912.

NEVADA

Churchill County

1. Fairview district. Greenan, 1914; Vanderburg, 1940.

2. Sand Springs district. Vanderburg, 1940.

3. Wonder district. Vanderburg, 1940.

NEVADA (cont'd.)

Clark County

4. Eldorado district. Vanderburg, 1937a; Ransome, 1907.

5. Goodsprings (Yellow Pine) district. Hewett, 1931.

6. Searchlight district. Callaghan, 1939.

Elko County

7. Edgemont district. Emmons, 1910.

8. Gold Circle district. Rott, 1931.

9. Jarbidge district. Schrader, 1923.

10. Tuscarora district. Nolan, 1936.

Esmeralda County

11. Divide (Gold Mountain) district. Knopf, 1921a.

12. Goldfield district. Ransome, 1909a.

13. Hornsilver district. Ransome, 1909b.

14. Lone Mountain district. Ball, 1906.

15. Silver Peak (Mineral Ridge) district. Spurr, 1906.

Eureka County

16. Buckhorn district. Vanderburg, 1938a.

17. Cortez district. Emmons, 1910; Vanderburg, 1938a.

18. Eureka district. Hague, 1892; Lincoln, 1923; Sharp, 1947.

19. Lynn district. Vanderburg, 1936a.

Humboldt County

20. Awakening district. Vanderburg, 1938b.

21. Dutch Flat district. Vanderburg, 1936a; 1938b.

22. Gold Run (Adelaide) district. Vanderburg, 1938b.

23. National district. Lindgren, 1915; Vanderburg, 1938b.

24. Paradise Valley district. Vanderburg, 1938b.

25. Warm Springs district. Lincoln, 1923; Vanderburg, 1938b.

26. Winnemucca. Ferguson and others, 1951; Vanderburg, 1938b.

Lander County

27. Battle Mountain district. Hill, 1915; Vanderburg, 1939.

28. Bullion district. Vanderburg, 1939.

29. Hilltop district. Vanderburg, 1939.

30. Lewis district. Emmons, 1910; Vanderburg, 1939.

31. New Pass district. Lincoln, 1923; Vanderburg, 1939.

Lincoln County

32. Delamar district. Callaghan, 1937.

Locality Index (cont'd.)

NEVADA (cont'd.)

Lincoln County (cont'd.)

33. Pioche district. Westgate and Knopf, 1932.

Lyon County

34. Como (Palmyra, Indian Springs) district. Stoddard and Carpenter, 1950.  
35. Silver City district. Gianella, 1936.  
36. Wilson (Pine Grove, Rockland, Cambridge) district. Hill, 1915; Stoddard and Carpenter, 1950.

Mineral County

37. Aurora district. Hill, 1915; Vanderburg, 1937b.  
38. Bell (Cedar Mtn.) district. Knopf, 1921b.  
39. Canadelaria district. Knopf, 1923.  
40. Garfield district. Vanderburg, 1937b.  
41. Gold Range district. Ferguson and others, 1954.  
42. Hawthorne district. Hill, 1915; Vanderburg, 1937b.  
43. Oneota and Mt. Montgomery districts. Vanderburg, 1937b.  
44. Pamlico-La Planta mines. Ferguson and others, 1954.  
45. Rawhide district. Vanderburg, 1936a; 1937b.

Nye County

46. Bruner (Phonolite) district. Kral, 1951.  
47. Bullfrog district. Kral, 1951; Ransome and others, 1910.  
48. Ellendale district. Ferguson, 1917; Kral, 1951.  
49. Gold Hill district. Ferguson and Cathcart, 1954.  
50. Jackson (Gold Park) district. Kral, 1951.  
51. Jefferson Canyon district. Kral, 1951.  
52. Johnnie district. Hewett and others, 1936; Kral, 1951.  
53. Lodi (Granite, Marble, Quartz Mountain) district. Kral, 1951.  
54. Manhattan district. Ferguson, 1924.  
55. Northumberland district. Kral, 1951.  
56. Round Mountain district. Ferguson, 1922; Ferguson and Cathcart, 1954.  
57. Tonopah district. Bastin and Laney, 1918; Nolan, 1935a; Spurr, 1905.  
58. Tybo (Hot Creek, Keystone, Empire) district. Ferguson, 1933; Kral, 1951.  
59. Union district. Kral, 1951; Lincoln, 1923.

Pershing County

60. Humboldt (Imlay, Eldorado) district. Ransome, 1909c; Vanderburg, 1936b.  
61. Rochester district. Knopf, 1924; Vanderburg, 1936b.

NEVADA (cont'd.)

Pershing County (cont'd.)

62. Rye Patch (Echo) district. Vanderburg, 1936b.  
63. Seven Troughs district. Ransome, 1909c; Vanderburg, 1936b.  
64. Sierra (Dun Glen, Chafey) district. Ransome, 1909c; Vanderburg, 1936b.  
65. Spring Valley district. Vanderburg, 1936a; 1936b.

Storey County

66. Comstock Lode district. Becker, 1882; Stoddard and Carpenter, 1950.

Washoe County

67. Olinghouse (White Horse) district. Hill, 1911; Overton, 1947.

White Pine County

68. Cherry Creek (Egan Canyon) district. Schrader, 1931.  
69. Ely, (Robinson) district. Spencer, 1917.  
70. Osceola district. Weeks, 1908.

NEW MEXICO

Bernalillo County

1. Tijeras Canyon district. Ellis, 1922.

Catron County

2. Mogollon (Cooney) district. Ferguson, 1927.

Colfax County

3. Elizabethtown district. Anderson, 1957.  
4. Baldy district. Lee, 1916.

Dona Ana County

5. Organ district. Dunham, 1935.

Grant County

6. Central district. Lasky, 1936; Spencer and Paige, 1935.  
7. Pinos Altos district. Paige, 1911.  
8. Steeple Rock. Lindgren and others, 1910.

Hidalgo County

9. Lordsburg district. Lasky, 1938.

Lincoln County

10. White Oaks district. Lindgren and others, 1910.  
11. Norgal district. Lindgren and others, 1910.

Otero County

12. Jarilla district. Lindgren and others, 1910.

Rio Arriba

13. Hopewell district. Lindgren and others, 1910.

Locality Index (cont'd.)

NEW MEXICO (cont'd.)

Sandoval County

14. Cochiti district. Lindgren and others, 1910.

San Miguel

15. Willow Creek (Pecos) district. Krieger, 1932.

Santa Fe

16. Old Placers (Ortiz, Dolores) district. Lindgren and others, 1910.
17. New Placers (San Pedro) district. Lindgren and others, 1910.

Sierra County

18. Hillsboro (Las Animas) district. Harley, 1934.

Socorro County

19. Rosedale district. Lasky, 1932.

NORTH CAROLINA

Burke County

1. Mills property (Brindletown placers). Pardee and Park, 1948.

Cabarrus County

2. Phoenix mine. Nitze and Hanna, 1896; Pardee and Park, 1948.
3. Reed (Reid) mine. Pardee and Park, 1948; Partz, 1854.

Davidson County

4. Conrad Hill mine (Cid district). Nitze and Hanna, 1896; Pogue, 1910.

Franklin County

5. Portis placers. Pardee and Park, 1948.

Gaston County

6. Kings Mountain mine. Keith and Sterritt, 1931.

Guilford County

7. Fentress and Gardner Hill mines. Nitze and Hanna, 1896; Pardee and Park, 1948; Pratt, 1907.

Mecklenburg County

8. Rudisil mine. Nitze and Hanna, 1896; Pardee and Park, 1948.

Montgomery County

9. Iola and Uwarra mines. Hafer, 1914; Pardee and Park, 1948.
10. Russell and Steel mines. Nitze and Hanna, 1896; Pardee and Park, 1948.

Randolph County

11. Hoover Hill mine. Nitze and Hanna, 1896; Pardee

NORTH CAROLINA (cont'd.)

and Park, 1948.

Rowan County

12. Gold Hill district. Laney, 1910; Pardee and Park, 1948.

Stanly County

13. Parker mine. Pardee and Park, 1948.

Transylvania County

14. Fairfield Valley placers. Bryson, 1936.

Union County

15. Howie mine. Pardee and Park, 1948.

OREGON

Baker County

1. Baker district. Grant and Cady, 1914; Gilluly, 1937.
  2. Connor Creek district. Gilluly and others, 1933.
  3. Cornucopia district. Goodspeed, 1941.
  4. Cracker Creek district. Parks and Swartley, 1916a.
  5. Eagle Creek district. Lindgren, 1901; Gilluly and others, 1933.
  6. Greenhorn district. Parks and Swartley, 1916b.
  7. Lower Burnt River Valley (Weatherby Gold Hill, Durkee, Chicken Creek, Pleasant Valley) district. Lindgren, 1901; Parks and Swartley, 1916c.
  8. Mormon Basin (Dixie Creek, Rye Valley, Malheur) district. Oregon Dept. Geology and Mineral Industries, 1939; Gilluly and others, 1933.
  9. Rock Creek (Elkhorn) district. Oregon Dept. Geology and Mineral Industries, 1939.
  10. Sparta district. Lindgren, 1901; Gilluly and others, 1933.
  11. Sumpter district. Lindgren, 1901.
  12. Upper Burnt River (Bridgeport, Bull Run, Unity, Hereford) district. Oregon Dept. Geology and Mineral Industries, 1939.
  13. Virtue district. Lindgren, 1901; Gilluly, 1937.
- Grant County
14. Canyon district. Oregon Dept. Geology and Mineral Industries, 1941.
  15. Granite district. Koch, 1959.
  16. Greenhorn district. Parks and Swartley, 1916b.
  17. Quartzburg district. Lindgren, 1901; Gilluly and others, 1933.
  18. Susanville district. Swartley, 1914; Gilluly and others, 1933.

## Locality Index (cont'd.)

### OREGON (cont'd.)

#### Jackson County

19. Ashland district. Winchell, 1914b.
20. Gold Hill district. Winchell, 1914b.
21. Jacksonville district. Winchell, 1914b; Wells, 1956.
22. Upper Applegate district. Diller and Kay, 1924; Winchell, 1914b.

#### Josephine County

23. Galice district. Wells and Walker, 1953.
24. Greenback district. Diller and Kay, 1924; Winchell, 1914b.
25. Grants Pass district. Diller and Kay, 1924; Winchell, 1914b.
26. Illinois River district. Wells and others, 1949.
27. Lower Applegate district. Shenon, 1933a; Winchell, 1914b.
28. Waldo district. Shenon, 1933b.

#### Lane County

29. Blue River district. Callaghan and Buddington, 1938.
30. Bohemia district. Callaghan and Buddington, 1938.

#### Malheur County

31. Mormon Basin district. Oregon Dept. Geology and Mineral Industries, 1939.
32. Malheur district. Lindgren, 1901.

### PENNSYLVANIA

#### Lebanon County

1. Cornwall district. Spencer, 1908.

### SOUTH CAROLINA

#### Chesterfield County

1. Brewer mine. Pardee and Park, 1948.

#### Lancaster County

2. Haile mine. Pardee and Park, 1948.

#### McCormick County

3. Dorn mine. Sloan, 1908; Pardee and Park, 1948.

### SOUTH DAKOTA

#### Lawrence County

1. Deadwood-Two Bit district. Irving and others, 1904; Darton and Paige, 1925.
2. Lead district. Irving and others, 1904; Darton and Paige, 1925; Noble and others, 1949.
3. Garden (Maitland) district. Irving and others, 1904; Darton and Paige, 1925.

## SOUTH DAKOTA (cont'd.)

### Lawrence County (cont'd.)

4. Bald Mountain district. Irving and others, 1904; Darton and Paige, 1925.
5. Squaw Creek district. Irving and others, 1904; Darton and Paige, 1925.

### Pennington County

6. Hill City district. Allsman, 1940.
7. Keystone district. Allsman, 1940.

### TENNESSEE

#### Polk County

1. Ducktown district. Emmons and Laney, 1926.

### UTAH

#### Beaver County

1. San Francisco district. Butler, 1913.

#### Iron County

2. Stateline district. Butler and others, 1920.

#### Juab County - (Utah County)

3. Tintic district. Lindgren and Loughlin, 1919.

#### Piute County

4. Gold Mountain district. Lindgren, 1906.
5. Mt. Baldy district. Butler and others, 1920.

#### Salt Lake County

6. Big and Little Cottonwood districts. Calkins and Butler, 1943.
7. West Mountain (Bingham) district. Boutwell, 1905; Butler and others, 1920.

#### Summit and Wasatch County

8. Park City district. Boutwell, 1912.

#### Tooele County

9. Camp Floyd (Mercur) district. Gilluly, 1932.
10. Ophir-Rush Valley district. Gilluly, 1932.
11. Clifton (Gold Hill) district. Nolan, 1935b.
12. Willow Springs district. Nolan, 1935b.

#### Utah County

13. American Fork district. Calkins and Butler, 1943.

### VIRGINIA

#### Fauquier County

1. Franklin mine. Pardee and Park, 1948.

#### Fluvanna and Goochland Counties

2. Tellurium, Moss, and Busby mines. Taber, 1913; Pardee and Park, 1948.



# Locality Index (cont'd.)

## VIRGINIA (cont'd.)

### Orange County

3. Vacluse mine. Bass, 1940.

### Spotsylvania County

4. Whitehall mine. Watson, 1907.

## WASHINGTON

### Chelan County

1. Blewett (Peshastin) district. Weaver, 1911.
2. Chelan Lake (Railroad Creek-Holden) district. Youngberg and Wilson, 1952.
3. Entiat district. Huntting, 1943.
4. Wenatchee district. Huntting, 1943; 1955.

### Ferry County

5. Republic district. Lindgren and Bancroft, 1914.

### Kittitas County

6. Swauk district. Smith, 1903.

### Okanogan County

7. Cascade district. Landes and others, 1902.
8. Methows (Squaw Creek) district. Hodges, 1897; Landes and others, 1902.
9. Myers Creek (Chewsaw, Mary Ann Creek) district. Umpleby, 1911a.
10. Oroville-Nighthawk district. Umpleby, 1911b.

### Snohomish County

11. Monte Cristo district. Spurr, 1901.
12. Silverton district. Thyng, 1902.

### Stevens County

13. Orient (Pierre Lake) district. Weaver, 1920.

### Whatcom County

14. Mt. Baker district. Patty, 1921; Huntting, 1955.
15. Slate Creek district. Lyon, 1902.

## WYOMING

### Albany County

1. Douglas Creek district. Osterwald and Osterwald, 1952; Henderson, 1914.

### Fremont County

2. Atlantic-South Pass district. Spencer, 1916.

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