

PEND OREILLE COUNTY

O. K. (2)
(see under silver)

Pend Oreille Mines & Metals Co. (1)
(see under zinc)

STEVENS COUNTY

Advance (2)
(see under zinc)

Black Rock (3)
(see under zinc)

Farmer (4)
(see under zinc)

Lucile (1)
(see under zinc)

New England (5)
(see under zinc)

Old Dominion (6)
(see under silver)

GERMANIUM

Properties—Germanium is a rare metal allied to tin. It is grayish white, lustrous, crystalline, light in weight, hard, and brittle. It is a semiconductor of electricity, a property which is utilized in the manufacture of electronic devices. Germanium expands upon solidification. It amalgamates with mercury and is known to form alloys with aluminum, copper, silver, magnesium, and some other metals. It is resistant to corrosion and is stable in air at temperatures up to 600° C. It has valences of 2 and 4 and forms two corresponding series of compounds. Other properties are shown in the table on page 12.

Uses—Germanium had very few uses for many years, having only minor use in medicine and as magnesium germanate for a phosphor in fluorescent lights. It has been used as a catalyst in the hydrogenation of coal, and as a substitute for silica in making a highly refractive optical glass. It has been used also in making a new type of photoelectric cell. In 1950 the principal use was in the metallic form in diode rectifiers for high-frequency electrical currents in radar and television circuits. Probably the greatest potential use for germanium, and certainly the use in which the greatest interest was being shown in 1952, is in transistors, the three-element electronic devices which act like triode radio tubes for amplifiers. The transistors have advantages over radio tubes in being much smaller, lighter in weight, and longer lived, and in requiring no filament current.

Production—Commercial production of germanium began in this country about in 1941. In 1950 the principal production was as a byproduct of zinc refining at Joplin,

Missouri, but small production was coming from at least two other plants in Pennsylvania and New York. Production was at the rate of 1,000 pounds per year in 1948 but had increased to 6,000 pounds in 1951 and was expanding rapidly. Germanium is recovered from flue dusts in England. Zinc concentrates from the Metaline district in Washington are germaniferous, hence have been shipped to Mississippi Valley smelters, where the germanium is recoverable in horizontal-retort smelters.

Prices—Germanium metal was quoted in 1936 at \$5.50 per gram, and in 1940 at \$4,500 per pound, but by 1946 it had dropped to \$180 per pound. The price then rose until it reached \$340 per pound in 1952. In June 1955 the price was \$295 per pound.

Ore minerals—Germanium occurs in amounts up to 10 percent in germanite, $\text{Cu}_3(\text{Ge,Ga,Fe,Zn})(\text{As,S})_4$. Renierite, similar to germanite except that it contains tin, carries from 6 to 8 percent germanium. Argyrodite, $4\text{Ag}_2\text{S}\cdot\text{GeS}_2$, contains about 7 percent germanium but is very rare, as are all germanium minerals.

Geology—Germanium is widely distributed in nature as a very minor constituent in many common minerals, but rarely is it naturally concentrated enough to be recoverable. It is found in some coals to the extent of about 0.001 percent, and flue dusts from the burning of such coals contain up to 9 percent germanium. The metal is found in some zinc ores, and in the Tri-State district it occurs in amounts from 0.01 to 0.1 percent. It is found in like amounts in some ores of silver, tin, copper, and iron.

OCCURRENCES

The map showing the numbered germanium occurrences is plate 3, on page 11 in volume 2.

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STEVENS COUNTY

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GOLD

Properties—Gold is bright yellow when pure, but the color intensity varies to lighter or darker with the amount of silver or copper present. Gold powder produced by precipitation or volatilization is violet, purple, or ruby

colored. Gold is very heavy and soft and is the most ductile and malleable of metals. It is a good conductor of heat and electricity, its electrical conductivity being exceeded only by silver and copper. The element is not

attacked by air or oxygen and is extremely inactive. It is insoluble in all acids except aqua regia and selenic acid. It is bivalent and tetravalent but combines with only a few other elements to form compounds. Other properties are shown in the table on page 12.

Uses—Gold has little use other than monetary and decorative. Since earliest historical time gold has been used for currency or as a monetary standard, and at the present time these are the principal uses of the metal. In the arts it is used in the manufacture of jewelry, watches, and gold foil for lettering and decorative purposes. Lesser amounts are used in dental work and in the electrical and chemical industries, and small quantities are used in medicine and photography. Most of the industrial uses stem largely from its resistance to corrosion and its excellent ductility and malleability, but because of its extreme softness as the pure metal, it is often alloyed with silver or copper.

Production—Gold production forms an important part of the total mineral output of the state of Washington. Every year prior to 1916 gold outranked in value all other metals produced, and it has ranked first in many of the years since that date, but in 1952 gold accounted for only 13 percent of the value of metallic production in the state. In general, gold mining has fared relatively well during economic recessions and has been at a disadvantage during periods of general prosperity and high prices. Although placer gold was reported along the Yakima River as early as 1853, and small production was reported from near Colville as early as 1855, the first notable production dates from 1859, and this was from the Similkameen River, in what is now Okanogan County. Lode gold mining began in this area, near the base of Mount Chopaka, in about 1871. The Blewett district was an early producer of both placer and lode gold, and by the end of the nineteenth century most of the presently known gold properties in the state had been prospected. The total gold production of the state from 1860 through 1952 has been 2,570,002 ounces, valued at \$68,705,393, which ranks Washington eleventh among the states as a gold producer. The greatest production in any single year since 1900 was 92,117 ounces, valued at \$3,224,095, in 1950. In that year 97 percent of the Washington gold production came from three mines: the Holden, Gold King, and Knob Hill, which ranked in production twelfth, fourteenth, and eighteenth, respectively, among the gold mines in the United States. Prior to 1900 most of the gold produced in the state was

from placers, but since that time less than 3 percent of the production has been from placers. Twenty-seven counties have reported placer production.

Prices—The value of gold has generally increased for more than 2,000 years. The price was a little over \$20 per fine troy ounce for more than 200 years until January 1934, when the President set the United States Mint price at \$35 per ounce, at which figure it has remained. Since that date, gold which has been smelted, retorted, or cyanided may be sold only to the U. S. Mint, either directly or through a licensed gold buyer. However, gold in its "natural state"—native gold and unretorted amalgam—may be legally sold on the domestic market. In the past few years gold has been quoted at from \$35 to more than \$50 per ounce on the free market in various countries.

Ore minerals—Gold occurs most commonly as the native metal, which usually is alloyed with varying amounts of silver, generally 10 to 20 percent. Native gold may occur as irregular masses, ranging in size from nuggets weighing several ounces, or even pounds, down to sub-microscopic particles. Also, and more rarely, it occurs as well-formed crystals, as in some of the lode deposits in the Swauk district in Kittitas County. Less commonly, gold occurs as one of the tellurides: calaverite, AuTe_2 ; sylvanite, $(\text{Au,Ag})\text{Te}_2$; or petzite, $(\text{Au,Ag})_3\text{Te}$, containing 43.5, 35.1, and 53.4 percent gold, respectively. Other gold minerals are very rare. In most ores the gold is so finely disseminated as to be invisible to the naked eye.

Geology—Gold occurs in minute quantities in almost all rocks, and sea water has been variously reported to contain from 0.2 to 65 milligrams of gold per metric ton. It occurs in recoverable quantities in most ores of silver, copper, bismuth, and antimony and in many ores of lead and zinc, as well as in many deposits where gold is the only value. It occurs in deposits of various origins but most commonly in quartz veins and usually closely associated with granitic or volcanic rocks of acidic or intermediate composition. Pyrite is the most common associated metallic mineral, and quartz is the most common gangue mineral, but carbonates, fluor spar, tourmaline, barite, and other nonmetallic minerals are not uncommon as gangue. The high specific gravity and resistance to weathering of gold account for the fact that it concentrates in placer deposits, where it commonly is found associated with magnetite, ilmenite, chromite, monazite, rutile, zircon, garnet, and other heavy minerals. Both stream and beach placers are found in Washington.

OCCURRENCES

The maps showing the numbered lode gold occurrences are plates 8 and 9, on pages 25 and 27 in volume 2.

The numbered placer gold occurrences are shown on plate 10, on page 29, also in volume 2.

GOLD, LODGE

BENTON COUNTY

Prosser (1)

Loc: SW $\frac{1}{4}$ sec. 33, (9-25E), about 3 mi. E. of Prosser on S. side of the highway. **Access:** Highway. **Owner:** R. W. Wilson, Grandview, Wash. (1934). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** Mineralized zone along contact of basalt with interbasalt sediments. **Dev:** Shaft 50 ft. deep and open cut 100 ft. long. **Assays:** 26¢ to \$1.60 Au and about the same values

in Ag. One assay showed \$13.00 Au. (1934). **Ref:** 104, 6/30/36, p. 24. 158.

CHELAN COUNTY

Allen Magnesium (60)

Loc: On headwaters of Roaring (Raging) Cr., about 10 mi. W. of mouth of Chikamin Cr. **Elev:** 3,400 to 4,200 ft. **Access:** Trail. **Prop:** 6 claims. **Owner:** C. F. Allen, Peshastin, Wash.

(1934). **Ore:** Gold, silver. **Deposit:** Quartz-cemented breccia in talc and soapstone. **Dev:** 2 adits. **Assays:** Tr. to 0.44 oz. Au, 0.20 to 0.26 oz. Ag. **Ref:** 158.

Alta Vista (Pole Pick No. 2) (83)

Loc: SW $\frac{1}{4}$ sec. 2, (22-17E), on S. side of Culver Gulch. **Elev:** 3,700 ft. **Access:** Road and trail. **Prop:** 1 claim: Pole Pick No. 2. **Owner:** Alta Vista Mining Co. (1911). **Ore:** Gold. **Ore min:** Arsenopyrite, pyrite. **Gangue:** Quartz, calcite, talc. **Deposit:** 4-ft. quartz-calcite vein in peridotite. The vein is heavily impregnated with ore minerals. **Dev:** Total of about 1,190 ft. of crosscuts and drifts. **Assays:** Ranged from 0.04 to 1.6 oz. Au. Main vein ranged from \$8 to \$200 Au. **Prod:** Amount not known. **Ref:** 63, p. 73. 161, pp. 89-91.

Amigo (123)

Loc: Sec. 9, (22-17E), across Bear Cr. from the Union and Dominion property, Nigger Cr. area. **Prop:** 1 claim. **Ore:** Gold, silver. **Ore min:** Sulfides. **Deposit:** 5-ft. ledge. **Assays:** \$2.75 to \$5.40 Au, Ag. **Ref:** 63, p. 75. 67, p. 14.

Apex

Loc: Blewett dist. **Ore:** Gold. **Prod:** Small amounts 1939 and 1940. **Ref:** 67, p. 9. 97, 1940, p. 476; 1941, p. 472.

Apple Queen (84)

Loc: Sec. 1, (22-17E), Blewett dist. **Owner:** Thad Neubauer, Blewett, Wash. (1943). **Ore:** Gold. **Ref:** 67, p. 14. 158.

April Fool (85)

Loc: Sec. 1, (22-17E), Blewett dist. **Ore:** Gold, silver. **Ref:** 67, p. 14.

Arizona (32)

(see under copper)

Belcher (13)

(see under lead)

Big Chief

(see under lead)

Big Elephant

Loc: On Fall Cr., a tributary to Chiwawa R. **Prop:** 6 claims. **Owner:** A. W. Purdy (1897). **Ore:** Gold, silver, copper. **Dev:** Open cut. **Assays:** \$3 to \$9 Au, \$4.75 Ag. **Ref:** 63, p. 79. 67, p. 22.

Black Jack (Blewett, La Rica) (87)

(see also Gold Bond)

Loc: SW $\frac{1}{4}$ sec. 1, (22-17E), near Peshastin Cr., Blewett dist. **Elev:** 2,340 ft. **Prop:** 1 claim: Black Jack. **Owner:** Gold Bond Mining Co. (1951—). La Rica Consolidated Mining Co. (1906). Washington Meteor Mining Co. (1908-1911). Blewett Mine Leasing Co. (1910). **Ore:** Gold, mercury. **Ore min:** Free gold, native mercury, arsenopyrite, pyrite. **Deposit:** Quartz vein cutting serpentine. **Dev:** 1,300-ft. adit, a shorter adit, several winzes and raises. **Assays:** 3,000 tons of ore av. \$10 Au. **Prod:** 3,000 tons of ore about 1900, \$4,000 in 1940. **Ref:** 63, p. 73. 67, p. 10. 88, p. 60. 97, 1906, p. 366. 129, p. 275. 161, pp. 84-89.

Black Warrior (1)

(see under copper)

Black and White (Diamond Dick) (86)

Loc: SW $\frac{1}{4}$ sec. 12, (22-17E), on E. side of Peshastin Cr. several hundred yards S. of Blewett. **Access:** 50 ft. above highway U. S. 97. **Prop:** 2 claims (1953). **Owner:** Wm. Johnson, Wenatchee, Wash. (1953—). H. Whitely and John White (1938). **Ore:** Gold, silver. **Ore min:** Free gold, pyrite, chalcopryrite, arsenopyrite. **Gangue:** Quartz, calcite. **Deposit:** Small

ore-bearing stringers of quartz and calcite in a shear zone in serpentine. **Dev:** A shaft and 3 adits with raises and stopes, totaling at least 850 ft. of workings. **Improv:** 40-ton mill in good condition (1942). **Assays:** Reported \$8 Au, 80¢ Ag. **Prod:** Small amounts in 1934 and 1939. **Ref:** 67, p. 9. 97, 1935, p. 352; 1940, p. 476. 158.

Blewett (88)

(see also Black Jack, Peshastin, Gold Bond)

Loc: SE $\frac{1}{4}$ sec. 2, (22-17E), Blewett dist. **Owner:** Gold Bond Mining Co., Spokane, Wash. (1952—). Amalgamated Gold Mines Co. (1918-1926). United States Mines & Metals Corp. (1932). Washington Gold Mines Corp. (1932). **Ore:** Gold. **Prod:** Amount of early shipments not known. Shipped 1939-1940. **Ref:** 97, 1910, p. 603; 1931, p. 476; 1940, p. 476; 1941, p. 472. 98, 1920-1926. 104, 6/15/32, p. 27. 106, 5/19/32; 8/18/32, p. 6.

Blind Lead

Loc: On a fork of Jack Cr., a tributary of Icicle Cr., Leavenworth dist. **Prop:** 3 claims. **Owner:** John Bjork, A. Van Epps, H. L. Farley, and Camille Massey (1897). **Ore:** Gold. **Ore min:** Arsenopyrite. **Assays:** \$13.80 Au. **Ref:** 63, p. 66. 67, p. 28.

Blinn (124)

(see also Gold Bond)

Loc: NE $\frac{1}{4}$ sec. 3, (22-17E). Claims extend from the head of Culver Gulch westward to and across Nigger Cr. **Access:** Road up Nigger Cr. **Prop:** 5 patented claims: Shafer, Olympia, Pole Pick No. 3, Seattle, Vancouver. **Owner:** Gold Bond Mining Co. (1936—). Cascade Mining Co. (1911). Bonanza Gold Mine Co. (1934). **Ore:** Gold. **Ore min:** Pyrite, chalcopryrite. **Gangue:** Quartz, calcite. **Deposit:** A 1- to 5-ft. quartz-calcite vein cuts serpentine and greenstone. **Dev:** 1 long adit and 1,000 ft. of shorter ones. **Prod:** In 1880 ore was milled in a 2-stamp Harrington mill. Produced 1936, 1937. **Ref:** 67, p. 10. 104, 11/15/36, p. 27; 1/15/37, p. 28. 113, 7/1/37, p. 16. 158. 161, pp. 92-93.

Blue Bell (I. X. L.) (89)

Loc: SW $\frac{1}{4}$ sec. 1, (22-17E), on E. side of Peshastin Cr. $\frac{1}{4}$ mi. N. of Blewett. **Access:** Road. **Owner:** Thad Neubauer, Blewett, Wash. (1934). **Ore:** Gold. **Ore min:** Pyrite, free gold. **Gangue:** Quartz, calcite. **Deposit:** No well-defined veins. Seams in serpentine are filled with vein and ore minerals. **Dev:** 450 ft. of adits. **Prod:** Some small pockets yielded high values. **Ref:** 63, p. 74. 67, p. 10. 158. 161, p. 99.

Blue Jay (33)

(see under copper)

Blue Jay Extension (34)

(see under copper)

Bobtail (Wye) (90)

Loc: SW $\frac{1}{4}$ sec. 2, (22-17E), in Culver Gulch, Blewett dist. **Elev:** 3,100 ft. **Access:** Road and trail. **Prop:** 1 claim. **Owner:** Washington Meteor Mining Co. (1908-1911). Blewett Mine Leasing Co. (1910). **Ore:** Gold. **Deposit:** Lenticular quartz vein in serpentine. Small ore body of medium grade. **Dev:** Two short adits, one 50 ft. long. **Prod:** Has produced. **Ref:** 67, p. 14. 129, p. 272. 143, pp. 78-79. 144, p. 4. 161, pp. 84-89.

Bonanza and Deadwood (79)

Loc: Near head of Falls Cr., a tributary to Ingalls Cr. **Ore:** Gold, nickel. **Ref:** 63, p. 77.

Bryan (52)

(see under copper)

Budge (136)

Loc: SW¼ sec. 13, (22-17E), on S. bank of Shaser Cr. near its mouth. **Access:** A short distance W. of highway U. S. 97. **Prop:** 4 claims. **Owner:** Murray Budge and C. C. Golding, Leavenworth, Wash. (1942). **Ore:** Gold, silver. **Dev:** More than 200 ft. of adit. **Assays:** \$3.50 to \$12 Au, Ag. **Ref:** 67, p. 15.

Buster (26)

Loc: Sec. 36, (32-18E), near head of Fish Cr. **Prop:** 3 claims. **Owner:** H. H. Hunt and Ole Olsen (1897). **Ore:** Gold, silver. **Ore min:** Pyrite, native silver. **Ref:** 63, p. 81. 67, p. 31.

Butte (65)

Loc: Secs. 25 and 26, (27-22E), Chelan Butte dist. **Owner:** Chelan Butte Gold Mining Co. (1909-1915). **Ore:** Gold. **Prod:** Amount not known. **Ref:** 67, p. 20. 105, 1898, p. 311; 1907, pp. 584, 807. 114, no. 5, 1909, p. 84. 116, no. 10, 1907, p. 18.

Butte

(see under copper)

Byron (91)

Loc: Sec. 2, (22-17E), Blewett dist. **Owner:** Blewett Pass Mining Co. (1934). **Ore:** Gold. **Ref:** 67, p. 15. 158.

Caledonia (92)

Loc: Sec. 1, (22-17E), Blewett dist. **Prop:** 4 claims. **Ore:** Gold, silver, copper. **Ore min:** Pyrite, free gold, tetrahedrite. **Gangue:** Quartz. **Deposit:** 3 parallel veins. **Dev:** 2 shafts and 2 adits. **Assays:** Some assays ran more than \$100 per ton. **Ref:** 63, p. 74. 67, p. 15.

Canada (35)

(see under copper)

Cascade (36)

Loc: SW¼ sec. 12, (31-18E), on both sides of Cascade Cr. **Access:** Trail from mouth of creek at Lk. Chelan. **Prop:** 3 claims. **Owner:** J. R. Moore (1897). **Ore:** Gold, lead. **Ore min:** Galena and other sulfides. **Deposit:** Paystreak 2 ft. wide. **Dev:** Two 10-ft. adits. **Ref:** 63, p. 81. 67, p. 31.

Cascade Consolidated (2)

(see under silver)

Champion (58)

Loc: Sec. 10, (29-16E), near mouth of Maple Cr., Chiwawa dist. **Prop:** 5 claims. **Owner:** Charles Allen (1897). **Ore:** Gold. **Ore min:** Pyrite. **Dev:** 2 tunnels, each 300 ft. long. **Assays:** \$4 to \$7 Au. **Ref:** 63, p. 79. 67, p. 22.

Charlotte (138)

Loc: Sec. 22, (22-20E), adjoining the Golden King property on the S., Wenatchee dist. **Prop:** 1 claim. **Owner:** D. P. Bigelow, Thomas Groves, and F. M. Scheble (1897). **Ore:** Gold, silver. **Gangue:** Quartz. **Deposit:** Described as a wide porphyritic dike veined with quartz, but probably silicified sandstone such as that in the Golden King. **Assays:** \$6 to \$8 Au, Ag. **Ref:** 63, p. 71. 67, p. 46.

Chub (37)

(see under silver)

Cinnabar King

Loc: On Nigger Cr. **Ore:** Gold, nickel, mercury. **Assays:** \$3.50 Au. **Ref:** 63, p. 76.

Clagstone (3)

(see under lead)

Cook (66)

Loc: Sec. 25, (27-22E). **Ore:** Gold. **Prod:** Bullion was shipped in 1909 (?) and 1919. **Ref:** 67, p. 20. 97, 1919, p. 492.

Cook-Galbraith (73)

Loc: T. 25 N., R. 20 E, about 3 mi. up Entiat R. from its mouth. Near top of ridge N. of Entiat R. **Elev:** 2,160 ft. **Access:** Road. **Prop:** 80 acres deeded land. **Ore:** Gold. **Ore min:** Free gold. **Gangue:** Quartz. **Deposit:** A 7- to 18-in. quartz vein in granodiorite. **Dev:** Open cuts. **Assays:** 2 assays gave values of \$23.80 and \$68.60 per ton (1935). **Ref:** 67, p. 25. 158.

Copper King (Pickwick)

(see Pickwick under copper)

Copper King (Robischaud)

(see Robischaud under molybdenum)

Crown Prince and Free Coinage

(see under copper)

Culver (93)

Loc: SW¼ sec. 2, (22-17E), Blewett dist. **Elev:** 3,250 to 4,100 ft. **Access:** Road and trail. **Prop:** 1 claim. **Owner:** Washington Meteor Mining Co. (1911). Culver Gold Mining Co. (1891). Blewett Gold Mining Co. (1892-1894). Blewett Mining & Milling Co. (1895). Warrior General Co. (1896). Chelan Mining & Milling Co. (1902). Washington Meteor Mining Co. (1908-1909). Blewett Mining & Leasing Co. (1910). **Ore:** Gold, silver. **Ore min:** Free gold, arsenopyrite, pyrite. **Gangue:** Quartz, calcite, talc. **Deposit:** Ore occurs as lenses in a quartz-calcite vein enclosed in serpentine. **Dev:** 14 adits aggregating more than 4,500 ft. of length, and numerous raises and stopes. **Assays:** \$5 to \$500 Au. **Prod:** About \$300,000 by 1902. Since then production has been listed with that for Washington Meteor Mining Co. **Ref:** 12, pp. 11-12. 63, p. 72. 67, p. 10. 88, p. 58. 143, pp. 78-79. 144, p. 9. 161, pp. 84-89.

Daisy Dean (125)

Loc: NE¼ sec. 3, (22-17E), on Nigger Cr., upstream from Eagle and Iowa prospect. **Access:** Road. **Prop:** 1 claim. **Ore:** Gold, silver, lead. **Deposit:** 2 veins cut serpentine and diorite. **Dev:** 2 short adits. **Assays:** \$32.30 Au, \$8 Ag, 60% Pb. **Ref:** 63, p. 75. 67, p. 15.

Davenport (4)

(see under copper)

Deadwood

(see Bonanza and Deadwood)

Diamond Dick

(see Black and White)

Dominion

(see Union and Dominion)

Donahue

(May be same as North Star)

Loc: Peshastin dist. **Owner:** Mr. O'Donahue (1890). **Ore:** Gold. **Ore min:** Free gold. **Improv:** Ore treated by arrastre in 1890. **Prod:** \$17,000 reportedly produced in 1890. **Ref:** 12, p. 92.

Donaldson (94)

Loc: Sec. 1, (22-17E), Blewett dist. **Ore:** Gold, silver. **Ref:** 67, p. 15.

Doubtful (5)

(see under lead)

Drummer Boy (57)

Loc: Sec. 9, (29-16E), on Maple Cr., Chiwawa dist. **Prop:** 2 claims. **Owner:** Philip Hatch (1897). **Ore:** Gold, silver. **Assays:** \$5.80 Au, Ag. **Ref:** 63, p. 79. 67, p. 23.

Eagle and Iowa (126)

Loc: NE¼ sec. 3, (22-17E), on N. side of Nigger Cr. **Access:** Road. **Prop:** 2 claims. **Owner:** Henry Blinn, Leavenworth,

Wash. (1897). **Ore:** Gold, copper. **Ore min:** Pyrite, chalcopyrite. **Deposit:** Quartz vein 3½ ft. wide. **Dev:** A shaft. **Assays:** \$7 Au. **Ref:** 63, p. 75. 67, p. 15.

Eastern Star
(see Olden)

Ellen
(see Van Epps under antimony)

Emma Lee (38)

Loc: Near Blue Jay property, Meadow Cr. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 81.

Esmeralda

Loc: On Red Mtn., Chiwawa dist. **Owner:** George N. Watson (1897). **Ore:** Gold, copper, silver. **Ore min:** Arsenopyrite, copper sulfides. **Ref:** 63, p. 78.

Eureka (Golden Cherry, Golden Chariot) (95)

Loc: SW¼ sec. 1, (22-17E), on E. side of Peshastin Cr., 2,000 ft. S. of Blewett. **Elev:** 2,400 ft. **Prop:** 1 claim. **Owner:** Tip Top Mining Co. (1910). Phoenix Mining & Milling Co. (1902). **Ore:** Gold. **Deposit:** A 12- to 18-in. vein in serpentine. **Dev:** 970 ft. of underground work. **Assays:** Much of the ore assays as high as \$30 Au. **Prod:** Amount not known. **Ref:** 63, p. 73. 67, pp. 10-11. 88, p. 57. 161, p. 96.

Excelsior
(see Nevada and Excelsior)

Falls (6)
(see under lead)

Flamingo (20)
(see under copper)

Flora
(see Lake and Flora)

Fraction (96)
Loc: SW¼ sec. 1, (22-17E), Blewett dist. **Ore:** Gold. **Prod:** Amount not known. **Ref:** 67, p. 11. 116, no. 4, 1908, p. 74. 143, p. 79. 144, p. 9. 158.

Francis L.
(see Golden Guinea)

Free Coinage
(see Crown Prince and Free Coinage under copper)

Galbraith
(see Cook-Galbraith)

Galena (7)
(see under lead)

Gem (97)
Loc: Sec. 11, (22-17E). **Ore:** Gold, silver. **Deposit:** 5-ft. vein. **Dev:** 60-ft. crosscut, 20-ft. adit. **Assays:** \$8 to \$16 Au, 75¢ to 54 oz. Ag (1897). **Ref:** 63, p. 73. 67, p. 16.

Gem (39)
(see under copper)

Georgie Smith (61)
Loc: Sec. 17, (27-18E), at head of Deep Cr., Chiwawa dist. **Access:** Road and trail. **Prop:** 9 claims. **Owner:** Monterey Gold Mining & Milling Co. (1897). **Ore:** Gold. **Dev:** 35-ft. crosscut. **Assays:** Very high values reported. **Ref:** 63, p. 79. 67, p. 23.

Goericke
Loc: At head of Agnes Cr., Stehekin dist. **Prop:** 13 claims. **Owner:** J. M. Scheueyaulle, J. W. Horton, Gus Anderson, and J. E. Merritt (1897). **Ore:** Gold. **Ore min:** Pyrite. **Assays:** Av. \$7 Au. **Ref:** 63, p. 84. 67, p. 40.

Gold Bond
(see also Black Jack, Blinn, Olympia, Phipps, Pole Pick, Wilder, Blewett, La Rica)

Loc: Blewett dist. **Prop:** 7 patented claims: Seattle, Vancouver, Shafer Extension No. 2, Olympia, Pole Pick No. 1, Pole Pick No. 2, Davidson; 17 unpatented claims. **Owner:** Gold Bond Mining Co., Spokane, Wash. (1937—). **Ore:** Gold. **Ore min:** Free gold. **Gangue:** Quartz, calcite. **Prod:** 1936-1937, 1941-1942, 1946-1951. **Ref:** 97, 1938, p. 458. 104, 11/15/36, p. 27; 1/15/37, p. 28. 133, p. 34.

Gold King
(see Golden King)

Gold Knob (137)
Loc: Secs. 16 and 21, (22-20E), Squaw Saddle area, Wenatchee dist. **Access:** Road. **Prop:** All of sec. 16, approx. 20 acres of sec. 21. **Owner:** Leased from State by J. J. Keegan, Wenatchee, Wash. (1951—) and subleased by Anaconda Copper Mining Co. (1952). **Ore:** Gold, silver. **Deposit:** Gold- and silver-bearing quartz stockwork in Swauk sandstone. **Dev:** Several diamond drill holes, approx. 800 ft. of crosscutting through silicified zones, an approx. 90-ft. winze. **Assays:** Up to 1952 all assays have been far below ore grade. **Ref:** 133, p. 34. 150, p. 32. 158.

Golden Chariot
(see Eureka)

Golden Cherry
(see Eureka)

Golden Eagle (Lucky King) (98)
Loc: SE¼ sec. 2, (22-17E), on N. side of Culver Gulch ½ mi. above its junction with Peshastin Cr. **Prop:** 6 claims: Golden Eagle, Golden Eagle Fraction, Lone Jack, Lucky King, Leroy, Golden Eagle millsite. **Owner:** Golden Eagle Mining Co. (1911-1915). **Ore:** Gold. **Ore min:** Pyrite, free gold. **Gangue:** Quartz, calcite, talc. **Deposit:** A 1- to 3-ft. vein composed of quartz, calcite, and talc is impregnated with pyrite. **Dev:** Upper crosscut and drift total 175 ft. There is a raise to the surface. A lower crosscut totals 650 ft. **Assays:** 2 assays across the vein from upper adit near the raise gave \$3.75 and \$4.10 per ton. **Prod:** \$2,000 reported. **Ref:** 67, p. 11. 88, p. 59. 97, 1910, p. 603; 1914, p. 647; 1915, p. 568. 105, 1913, p. 909. 158, 161, pp. 94-95.

Golden Guinea (Francis L.) (127)
Loc: NE¼ sec. 3, (22-17E), on N. and S. banks of Nigger Cr. about 2 mi. above its mouth. **Access:** Road up Nigger Cr. **Prop:** 8 claims: Golden Guinea, Golden Guinea No. 1 East, No. 1 South, No. 2 South, Brown, Lillian, Copper Queen. **Owner:** R. F. Brown and F. W. Losecamp, Leavenworth, Wash. (1911). **Ore:** Gold, silver. **Deposit:** A 10- to 50-ft. iron-stained belt in the Hawkins formation contains discontinuous stringers of rusty broken quartz in a zone about 2 ft. wide. **Dev:** 2 adits totaling 283 ft., 43-ft. shaft, and numerous other short adits and open cuts. **Assays:** Several assays ran less than \$1 Au, but higher returns are claimed to have been obtained. **Ref:** 67, p. 16. 161, p. 97.

Golden King (Wenatchee, Squillechuck, Gold King) (139)
Loc: Near center sec. 22, (22-20E), on W. side of Squillechuck Cr. **Elev:** 1,000 ft. **Access:** Good road to property. **Prop:** 2 claims. **Owner:** Lovitt Mining Co., Inc., Wenatchee, Wash. (1949—). V. Carkeek (1885). Golden King Mining Co. (1894). Wenatchee Mining Co. (1910-1928). J. J. Keegan (1928-1949). American Smelting & Refining Co. (1938-1939). Knob Hill Mines, Inc. (1944-1946). **Ore:** Gold, silver. **Ore min:**

Pyrite. Gangue: Quartz, calcite, siderite. **Deposit:** Quartz gash veins in a 200- to 800-ft.-wide silicified zone in sandstone of the Swauk formation. **Dev:** A quarry, 2 main adits, and a level from a 500-ft. inclined shaft, total about 2 mi. of workings. **Improv:** Offices, dries, warehouses, compressor houses, machine shop, and equipment for 200-ton operation (1955). **Assays:** 3 years' production (1944-1946) av. \$2.39 Au, Ag. 1950 shipments av. 0.74 oz. Au, 0.66 oz. Ag. 1949-1953 shipments av. 0.506 oz. Au, 0.59 oz. Ag. Highest monthly av. shipments ran 1.27 oz. Au. **Prod:** 240 tons yielded \$1,600 in 1894; 170 tons 1910; 20,000 tons 1938-1939; 6,216 tons 1944-1946; 135,000 tons Aug. 1, 1949-Aug. 1, 1952. 5½ years' production through 1954 was valued at \$4,432,884. A total of 57,689 tons of ore valued at \$836,782 in 1953 yielded 23,136 oz. Au, 32,242 oz. Ag. **Ref:** 23-A. 63, p. 71. 67, p. 46. 97, 1950, p. 1610; 1951, p. 1614; 1952. 101, 5/55, pp. 52-53. 105, vol. 68, 1894, p. 382; vol. 101, 1910, p. 63. 158.

Golden Wedge (99)

Loc: Sec. 11, (22-17E), on N. side of Culver Springs Gulch, ¼ mi. from Blewett Pass highway. **Elev:** Creek level. **Prop:** 2 claims: Golden Wedge Nos. 1 and 2. **Owner:** H. A. Searles and Ernie Ruhm (1948). **Ore:** Gold, copper. **Ore min:** Pyrite, chalcopryrite. **Gangue:** Quartz, calcite. **Deposit:** Quartz stringers 3 to 4 in. wide in serpentine contain disseminated ore minerals. **Dev:** 40-ft. adit, 37-ft. adit. **Assays:** Said to assay \$11.20. **Ref:** 158.

Gordon (128)

Loc: Sec. 9, (22-17E), on Bear Cr. **Ore:** Gold, nickel, silver. **Dev:** 55-ft. adit. **Ref:** 63, pp. 75-76. 67, p. 16.

Grace (40)

(see under copper)

Grand View

(see under copper)

Gray Eagle

(see under silver)

Great Republic

(see under lead)

Hawk's Nest (62)

Loc: Sec. 17, (27-18E), at head of Deep Cr., Entiat dist. **Access:** Road and trail. **Prop:** 2 claims. **Ore:** Gold. **Ref:** 63, p. 79. 67, p. 23.

Hazel (100)

Loc: Sec. 1, (22-17E), Blewett dist. **Owner:** Blewett Pass Mining Co. (1934). **Ore:** Gold. **Ref:** 67, p. 16. 158.

Hidden Treasure (56A)

Loc: NW¼SW¼ sec. 17, (30-21E), just W. of Chelan-Methow summit. **Prop:** 3 unpatented claims. **Owner:** J. H. Baker, Joe Baker, and Norman Lindsley, Chelan, Wash. (1946). **Ore:** Gold, silver. **Gangue:** Talc, chlorite. **Deposit:** Hydrothermally altered rock along contact of granitic rock with hornblendite. **Dev:** 20-ft. shaft. **Assays:** Surface samples assay \$5 Au, Ag. **Ref:** 51, p. 6. 158.

Holden (51)

(see under copper)

Homestake (101)

Loc: Sec. 1, (22-17E), on W. side of Peshastin Cr. near mouth of Culver Springs Gulch, Blewett dist. **Prop:** 1 claim. **Owner:** John Olden, Blewett, Wash. (1911). **Ore:** Gold, silver. **Deposit:** Quartz vein in serpentine. **Dev:** 165-ft. adit. **Assays:** General sample from mouth to face of adit assayed 0.04 oz. Au, 0.2 oz. Ag. **Prod:** Unknown amount. **Ref:** 67, p. 16. 161, p. 100.

Homestake and Star (18)

(see under silver)

Horseshoe Basin (8)

(see under lead)

Howe Sound

(see Holden under copper)

Humbug

(see under lead)

Hummingbird (102)

Loc: SE¼ sec. 2, (22-17E), in Culver Gulch, Blewett dist. **Elev:** 2,900 ft. **Access:** Road and trail. **Prop:** 1 claim. **Owner:** Washington Meteor Mining Co. (1908-1911). **Ore:** Gold, copper, silver. **Ore min:** Free gold, arsenopyrite, pyrite, chalcopryrite. **Gangue:** Quartz, calcite, talc. **Deposit:** Quartz-calcite vein cutting serpentine. **Dev:** 650-ft. crosscut and drift with stopes. **Prod:** Amount not known. **Ref:** 13, p. 137. 67, p. 11. 129, p. 272. 143, pp. 78-79. 144, p. 9. 161, pp. 84-89.

Hunter (41)

(see under silver)

I. X. L.

(see Blue Bell)

Idaho (42)

(see under copper)

Iowa

(see Eagle and Iowa)

Iowa (43)

Loc: Sec. 12, (31-18E), near Cascade Cr., Meadow Cr. dist. **Access:** Trail from mouth of creek on Lk. Chelan. **Prop:** 1 claim. **Owner:** W. H. Phelps (1897). **Ore:** Gold, silver. **Deposit:** 12-in. paystreak. **Dev:** 40-ft. adit. **Assays:** As high as \$60 Au, 200 oz. Ag reported. **Ref:** 63, p. 81. 67, p. 33.

Irene

(see Holden under copper)

Isoletta (19)

(see under silver)

Ivanhoe

(see Wilder)

Johnson (103)

Loc: SE¼ sec. 1, (22-17E). ¾ mi. N. of Blewett and extending from Peshastin Cr. eastward. **Prop:** 3 claims: April Fool, Venus, Donaldson. **Owner:** Mr. Johnson (1911). **Ore:** Gold. **Gangue:** Talc. **Deposit:** Broken indistinct veins cut through serpentine, diabase, and Peshastin formation near their contact with Swauk formation. **Dev:** 4 drifts and adits comprise 490 ft. of workings. **Assays:** One sample assayed 0.02 oz. Au, no Ag. **Ref:** 67, p. 16. 161, p. 101.

Jumbo (67)

Loc: On Chelan Butte. **Owner:** S. Fournier. **Ore:** Gold. **Ref:** 67, p. 20.

Keefer Brothers

(see under molybdenum)

King Solomon (27)

(see under copper)

King Solomon (Pickwick)

(see Pickwick under copper)

King Solomon (Van Epps)

(see Van Epps under antimony)

Kingman

(see Galena under lead)

Kingman and Pershall (68)

Loc: On Chelan Butte. **Ore:** Gold. **Ore min:** Free gold. **Deposit:** 4-ft. vein. **Assays:** One assay as high as \$2,000 per ton. **Prod:** \$15,000 reported in the 1890's. **Ref:** 67, p. 20. 158.

Lake and Flora

Loc: In Doubtful Basin. **Prop:** 2 claims. **Owner:** G. L. Rouse and J. C. Rouse (1897). **Ore:** Gold, silver. **Assays:** \$28 Au, 40 oz. Ag. **Ref:** 67, p. 41.

Lake Shyall (25)

(see under copper)

La Rica (104)

(see also Black Jack, Peshastin, Gold Bond)

Loc: Sec. 2, (22-17E), Blewett dist. **Prop:** 3 claims: Peshastin, Keynote, Black Jack. **Ore:** Gold. **Ref:** 97, 1916, p. 610; 1921, p. 462. 98, 1925, p. 1801. 161, p. 89.

Last Chance

Loc: On Nigger Cr. **Prop:** 4 lode claims and 1 placer claim. **Owner:** Alpine Mining & Milling Co. (1918-1924). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Well-defined quartz vein 20 to 42 in. wide. **Dev:** 162-ft. crosscut. **Assays:** \$3.60 to \$72.80 per ton. **Ref:** 67, pp. 16-17. 98, 1922, p. 1631; 1925, p. 1801. 112, p. 164.

Last Chance (77)

Loc: T. 23 N., R. 15 E., in Solomon Cr. Gulch, E. of the Silver Fiend prospect. **Owner:** James Grieve, August Sasse, and Mrs. Churchill (1897). **Ore:** Gold, lead. **Dev:** 30-ft. crosscut, 25-ft. shaft. **Assays:** \$4.30 Au. **Ref:** 63, p. 62. 67, p. 28.

Leo

(see under copper)

Little Jap (30)

(see under silver)

Logan (16)

(see under lead)

Lone Rock (105)

Loc: SW $\frac{1}{4}$ sec. 1, (22-17E), on E. side of Peshastin Cr., Blewett dist. **Prop:** 1 claim. **Owner:** John Olden, Blewett, Wash. (1911). **Ore:** Gold, silver. **Gangue:** Calcite. **Deposit:** Narrow belt of iron-stained serpentine with stringers of calcite. **Dev:** 88-ft. adit. **Assays:** General sample assayed 0.02 oz. Au, 0.2 oz. Ag. **Ref:** 67, p. 17. 161, p. 100.

Lucky King

(see Golden Eagle)

Lucky Queen (106)

Loc: SW $\frac{1}{4}$ sec. 1, (22-17E), about $\frac{1}{4}$ mi. N. of Blewett on E. side of Peshastin Cr. **Access:** On Highway U. S. 97. **Prop:** 2 claims: Lucky Queen, Bee Queen. **Owner:** A. Neubauer, Blewett, Wash. (1938). Lucky Queen Mining Co. (1915). **Ore:** Gold, silver. **Ore min:** Free gold, chromite. **Gangue:** Talc, calcite, quartz. **Deposit:** Shear zone in serpentine from a stringer to 3 ft. in width. One small segregation of chromite encountered. **Dev:** 545-ft. adit, 412-ft. adit. **Prod:** About \$1,000 by 1901. **Ref:** 67, p. 11. 88, p. 58. 116, no. 4, 1908, p. 74. 143, p. 79. 144, p. 9. 161, pp. 97-99.

Lulu

Loc: In Maple Cr. Basin, Stehekin dist. **Owner:** Gilkey & Co. (1897). **Ore:** Gold, silver. **Assays:** \$180 Au, Ag. **Ref:** 63, p. 84. 67, p. 41.

Manistee (107)

Loc: SW $\frac{1}{4}$ sec. 2, (22-17E), in Culver Gulch, Blewett dist. **Prop:** 1 claim. **Ore:** Gold, silver. **Dev:** 140-ft. drift. **Assays:**

\$16 per ton. **Prod:** 80 tons of ore in 1890. **Ref:** 63, pp. 73-74. 67, p. 12.

Marcus Stein (49)

(see under silver)

Marion

Loc: Blewett dist. **Prop:** 1 claim. **Owner:** Charles Donohue (1897). **Ore:** Gold, silver. **Deposit:** Three veins, one of which is 8 ft. wide. **Dev:** 375 ft. of drifts and crosscuts. **Assays:** \$6 to \$9 Au, Ag. **Prod:** Amount not known. **Ref:** 63, p. 73. 67, p. 12.

Marlin (14)

(see under copper)

Maryland

(see under lead)

Meadow Creek Strike (44)

(see under copper)

Meridian (129)

Loc: Sec. 4, (22-17E), on S. side of Nigger Cr. **Ore:** Gold, silver, copper, nickel. **Deposit:** Quartz vein cutting serpentine. **Assays:** \$10.50 Au, \$5 Ag, \$2.50 Cu, 2% Ni. **Ref:** 63, p. 76. 67, p. 17.

Michigan

(see under lead)

Minneapolis (21)

Loc: Sec. 32, (35-16E). **Prop:** 1 claim. **Owner:** William Keho and Joseph Lathrop (1897). **Ore:** Gold, silver, copper. **Ore min:** Sulfides. **Dev:** 40-ft. crosscut. **Assays:** \$18, Au, Ag, Cu. **Ref:** 63, p. 84. 67, p. 42.

Monarch (80)

Loc: Sec. 36, (23-17E), on W. side of Peshastin Cr. **Prop:** 2 claims. **Ore:** Gold, nickel, cobalt. **Deposit:** "Nickel ledge." **Dev:** 90-ft. adit. **Assays:** \$4 to \$5 Au, 2 $\frac{1}{2}$ % Ni, 1 $\frac{1}{2}$ % to 2 $\frac{1}{2}$ % Co. **Ref:** 63, p. 76. 67, p. 17.

Moscow (28)

(see under copper)

Mother Lode (63)

Loc: Sec. 17, (27-18E), at head of Deep Cr., Chiwawa dist. **Access:** Road and trail. **Prop:** 4 claims. **Ore:** Gold. **Dev:** 16-ft. adit. **Ref:** 63, p. 79. 67, p. 23.

Nebraska (29)

(see under copper)

Nelson

(see Pickwick under copper)

Nevada and Excelsior

Loc: On a fork of Jack Cr., a tributary to Icicle Cr., Leavenworth dist. **Owner:** John Bjork and A. Van Epps (1897). **Ore:** Gold, silver, nickel. **Deposit:** Vein of dolomite and quartz slightly mineralized. **Dev:** 26-ft. adit. **Ref:** 63, p. 66. 67, p. 28.

New York (81)

Loc: Center sec. 35, (23-17E), on divide between Nigger and Ingalls Creeks. **Prop:** 13 claims. **Ore:** Gold, silver, copper. **Dev:** Open pits and short adits. **Assays:** One sample assayed \$4.60 Au, 3 $\frac{1}{2}$ % Cu, tr. Ag; another sample assayed \$4 Au, \$30 Ag, and some Ni. **Ref:** 63, p. 75. 67, p. 17.

Nickel Plate

Loc: On headwaters of Nigger Cr. **Access:** Trail. **Prop:** 12 claims. **Owner:** John and William Lynch (1897). **Ore:** Gold, nickel. **Ref:** 63, p. 77.

North Pole (130)

Loc: Sec. 4, (22-17E), on Nigger Cr. **Prop:** 10 claims. **Ore:** Gold, silver, copper, nickel, mercury. **Dev:** A number of short adits. **Ref:** 63, p. 76. 67, p. 17.

North Star (108)

Loc: SE¼ sec. 2, (22-17E), on S. side and near upper end of Culver Gulch, Blewett dist. **Prop:** 1 claim. **Owner:** Golden Eagle Mining Co. (1911-1915). **Ore:** Gold. **Ore min:** Pyrite, arsenopyrite. **Gangue:** Quartz, calcite. **Deposit:** A 1- to 8-ft. fissure vein cutting serpentine. **Dev:** 125-ft. adit with stopes and raises, and 2 other adits totaling 320 ft. of length. **Assays:** Assays at various intervals across the vein av. \$1 to \$15 per ton. Av. of 1,000 tons shipped was \$20 per ton. **Prod:** 1,000 tons ore prior to 1907. Produced 1915. **Ref:** 67, p. 12. 97, 1915, p. 568. 161, pp. 93-94.

Ohio

(see under lead)

Olden (Eastern Star) (109)

Loc: SE¼ sec. 2, (22-17E), W. of the Black Jack and immediately S. of Peshastin mine, Blewett dist. **Owner:** John Olden (1902). **Ore:** Gold. **Deposit:** 2 veins varying in width from 1 to 6 ft. **Dev:** 350 ft. of underground work. **Assays:** 500 tons av. about \$5 Au. **Prod:** 500 tons of ore by 1902. **Ref:** 67, p. 12. 88, p. 59. 116, no. 4, 1908, p. 74. 143, p. 79. 144, p. 9.

Olympia (110)

(see also Gold Bond)

Loc: NW¼ sec. 2, (22-17E), about 600 ft. below and due W. of U. S. Mineral Monument at head of Culver Gulch, Blewett dist. **Prop:** 1 claim (part of Blinn property). **Owner:** Gold Bond Mining Co., Spokane, Wash. (1951—). **Ore:** Gold. **Ore min:** Pyrite, arsenopyrite, chalcopryrite. **Gangue:** Quartz, calcite. **Deposit:** Small quartz lenses in a shear zone in serpentine. **Dev:** 910 ft. of crosscut and drifts. **Ref:** 63, pp. 72-73. 67, p. 17.

Ombompo (15)

Loc: E½ sec. 36, (35-14E), high on the divide between Doubtful and Boston Basins. **Access:** About 4 mi. of trail from the Stehekin road. **Prop:** 1 patented claim. **Ore:** Gold, silver, lead. **Deposit:** Vein 3 ft. wide. **Assays:** \$30 Au, Ag, Pb. **Ref:** 67, p. 42.

Ontario (131)

Loc: Sec. 4, (22-17E), N. of Nigger Cr. **Ore:** Gold, nickel, cobalt, copper. **Ore min:** Sulfides. **Deposit:** A wide mineralized zone in serpentine. **Dev:** 2 short adits and a shaft. **Assays:** \$7 to \$8 Au, 3% Ni, 3½% Cu. **Ref:** 43, 1895, p. 184. 63, p. 76. 67, pp. 17-18, 29. 105, 1895, p. 399. 141, p. 63.

Orphan Boy (45)

(see under silver)

P. I. (59)

Loc: Sec. 36, (29-16E), on Rock Cr. ½ mi. from its mouth, Chiwawa dist. **Prop:** 2 claims. **Owner:** Frank Schuenemann, Pasco, Wash. (1897). **Ore:** Gold, silver. **Dev:** 60-ft. adit. **Ref:** 63, p. 79. 67, p. 23.

P. P. Nickel (132)

Loc: Sec. 4, (22-17E), on Nigger Cr. **Owner:** Tony Preston, Leavenworth, Wash. (1897). **Ore:** Gold, nickel. **Deposit:** 3- to 4-ft. quartz vein. **Dev:** A shaft. **Assays:** \$4.50 Au, and a good percentage of Ni. **Ref:** 63, p. 76. 67, p. 18.

Palmer (64)

Loc: Sec. 17, (27-18E), at head of Deep Cr., Chiwawa dist. **Access:** Road and trail. **Prop:** 5 claims. **Owner:** Cable Mining Co., Seattle, Wash. (1897). **Ore:** Gold. **Dev:** Open cuts and a short adit. **Assays:** \$186 Au reported. **Ref:** 63, p. 79. 67, p. 23.

Panama No. 2 (9)

(see under lead)

Pangborn (69)

Loc: SW¼ sec. 25, (26-20E), 1½ mi. E. of the Rex mine, Entiat dist. **Access:** Good road to mine. **Prop:** 80 acres. **Owner:** Leased from State by P. C. Pangborn, Wenatchee, Wash. (1938). **Ore:** Gold, silver. **Ore min:** Free gold. **Deposit:** Several quartz veins from 3 in. to 3 ft. wide cut decomposed gneiss. **Dev:** 180-ft. adit, 60-ft. shaft, 40-ft. shaft, numerous open cuts and short adits. **Assays:** Ore that was milled ran about ½ oz. Au. **Prod:** Amount not known. **Ref:** 67, p. 25. 158.

Pershall

(see Kingman and Pershall)

Peshastin (Blewett, La Rica) (111)

(see also Blewett, La Rica, Gold Bond)

Loc: SE¼ sec. 2, (22-17E), in lower Culver Gulch 1,200 ft. W. of old town of Blewett. **Elev:** 2,400 to 2,480 ft. **Access:** Road. **Prop:** 8 claims. **Owner:** Gold Bond Mining Co., Spokane, Wash. (1952—). Amalgamated Gold Mines Co. (1918-1925). La Rica Consolidated Mining Co. (1906). Washington Meteor Mining Co. (1908-1911). **Ore:** Gold. **Ore min:** Free gold, arsenopyrite, chalcopryrite, pyrite, galena, stibnite. **Gangue:** Quartz, calcite. **Deposit:** Lenticular lenses filling a shear zone in serpentine. Some lenses were 100 ft. long and as much as 8 ft. thick. **Dev:** 3 adits, the Meteor with 700 ft. of drifts, the Peshastin with 1,300 ft. of drifts and crosscuts, and the Draw with 480 ft. of workings. Many stopes in the adits. **Assays:** 22 tons shipped in 1940 returned 0.81 oz. Au, 0.13 oz. Ag, 0.09% Cu. **Prod:** About \$60,000 by 1902, 22 tons in 1940. **Ref:** 63, p. 73. 67, p. 12. 88, p. 58. 97, 1906, p. 366; 1921, p. 426. 98, 1920-1926. 112, 1918, p. 164. 116, no. 4, 1908, p. 74. 129, pp. 271-275. 143, p. 79. 144, p. 9. 158. 159, p. 128. 161, pp. 84-89.

Phipps (112)

(see also Gold Bond)

Loc: SW¼ sec. 2, (22-17E), on Nigger Cr. drainage just over the ridge from head of Culver Gulch, Blewett dist. **Access:** Tractor road up Culver Gulch. **Owner:** Gold Bond Mining Co., Spokane, Wash. (1938—). **Ore:** Gold. **Ore min:** Free gold, chalcopryrite, arsenopyrite, pyrite. **Deposit:** Quartz vein varying from a thin seam to 5 ft. in width cuts serpentine. **Dev:** Several hundred feet of crosscuts, drifts, and stopes. **Prod:** Amount not known. **Ref:** 67, p. 12.

Phoenix (113)

Loc: Sec. 2, (22-17E), in Culver Gulch, Blewett dist. **Ore:** Gold. **Gangue:** Quartz. **Dev:** 3 drifts with stopes. **Assays:** Av. \$20 Au on a large tonnage. **Prod:** 1,000 tons of ore prior to 1897. **Ref:** 63, p. 73. 67, p. 13.

Phyllis (46)

(see under copper)

Pickwick

Loc: Blewett dist. **Ore:** Gold, silver. **Ref:** 67, p. 18.

Pickwick (76)

(see under copper)

Pole Pick (114)

(see also Gold Bond)

Loc: SW¼ sec. 2, (22-17E), on S. side of Culver Gulch about ½ mi. W. of Blewett. **Access:** Tractor road. **Prop:** 1 patented claim: Pole Pick No. 1. **Owner:** Gold Bond Mining Co. (1943—) leasing to Calton Mining Co. (1949-1952). Ellinor Mining Co. (1911). **Ore:** Gold. **Ore min:** Free gold, pyrite. **Gangue:** Quartz. **Deposit:** Main vein is 1 to 4 ft. wide. 2 subsidiary veins also occur. All 3 are in serpentine. **Dev:**

2 crosscuts with raises, drifts, and stopes total about 2,000 ft. of length. **Assays:** Ore extracted before 1901 is said to av. \$10 to \$132 Au. Ore mined 1942-1947 av. \$35.82 Au. **Prod:** Est. production by 1901 was 8,000 tons of ore valued at \$70,000. 1937, 1941, 1942 (291 tons), 1946 (90 tons), 1947 (81 tons), 1948 (19 tons), 1949 (20 tons), 1950 (20 tons), 1951 (20 tons). **Ref:** 13, p. 137. 63, p. 73. 67, p. 13. 68, p. 6. 88, p. 59. 97, 1935, p. 352. 133, p. 31. 143, p. 79. 144, p. 9. 158. 161, p. 92.

Pole Pick No. 2

(see Alta Vista)

Prairie Dog

Loc: Entiat dist. **Ore:** Gold, silver. **Prod:** Unknown amount in 1910. **Ref:** 67, p. 25.

Prospect (115)

Loc: SW¼ sec. 2, (22-17E), on N. slope of ridge leading down to Culver Springs Gulch, Blewett dist. **Prop:** 5 claims: Sunset, Sunset Extension, Redjacket, Katy, Lone Star. **Owner:** Prospect Mining & Milling Co. (1911). **Ore:** Gold, silver. **Gangue:** Quartz, calcite, talc. **Deposit:** Oxidized vein in serpentine. **Dev:** Small openings on all of the claims. **Prod:** Ore was treated in an arrastre in "early days." **Ref:** 67, p. 13. 161, pp. 99-100.

Quien Sabe (10)

(see under lead)

Rainbow Nos. 2 and 3 (116)

Loc: Sec. 2, (17-22E), Blewett dist. **Owner:** Blewett Pass Mining Co. (1934). **Ore:** Gold. **Ref:** 67, p. 18. 158.

Rainier (133)

Loc: Secs. 3 and 4, (22-17E), on Nigger Cr. **Access:** Road. **Prop:** 13 claims. **Owner:** Negro Creek Nickel & Copper Mining Co. (1897). **Ore:** Gold, silver, copper, nickel. **Deposit:** Quartz veins and "nickel ledges." **Dev:** Several adits. **Assays:** \$5.20 to \$8.20 Au, 2½% to 3½% Ni. **Ref:** 63, p. 75. 67, p. 18. 105, 1895, p. 415.

Ray

(see Roy and Ray)

Raymond (50)

(see under silver)

Red Butte (82)

Loc: Sec. 36, (23-17E), on E. side of Peshastin Cr. **Prop:** 3 claims. **Ore:** Gold, nickel, cobalt. **Deposit:** "Nickel ledge." **Dev:** An adit. **Ref:** 63, p. 76. 67, p. 18.

Red Cap (53)

Loc: Sec. 9, (30-16E), on Phelps Ridge, Chiwawa dist. **Prop:** 20 claims. Probably part of the property held by the Royal Development Co. (1941). **Owner:** Una Mining & Milling Co., Seattle, Wash. (1897). **Ore:** Gold, silver, copper. **Ore min:** Chalcopryrite, pyrite, arsenopyrite. **Dev:** 52-ft. crosscut. **Assays:** \$3.50 to \$72 Au. **Ref:** 63, p. 78. 67, p. 23.

Red Cloud and Tralee

(see under copper)

Red Hill (54)

Loc: Sec. 15, (30-16E), on Phelps Ridge, Chiwawa dist. **Prop:** 10 claims. Probably part of the property held by the Royal Development Co. (1941). **Owner:** Red Hill Mining Co. (1897). **Ore:** Gold, silver, copper. **Ore min:** Copper and iron sulfides, arsenopyrite. **Dev:** 2 short adits. **Assays:** \$2.50 to \$29 Au, Ag. **Ref:** 63, p. 78. 67, p. 23.

Red Mountain (55)

(see under copper)

Rex (Rogers) (71)

Loc: N½ sec. 36, (26-20E), in Crum Canyon, tributary to Entiat R. **Access:** 12 mi. by road to railroad at Entiat. **Prop:** 80 acres. **Owner:** State land leased to Bert Rogers, Entiat, Wash. (1943). Wenatchee Gold Mining Co. (1906-1922). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 2 oxidized quartz veins 3 to 12 in. wide in decomposed gneiss. **Dev:** 3 adits totaling about 500 ft. of length. **Improv:** A 2-stamp mill (1938). **Assays:** Most of the ore milled av. about 1 oz. Au. **Prod:** More than \$170,000 by 1930. Small amounts in 1933, 1934, and 1940. **Ref:** 43, 3/13, p. 592. 67, p. 25. 97, 1907-1908, 1911-1915, 1917, 1934, 1935, 1940. 98, 1920-1925. 104, 6/15/32, p. 27. 105, 1906, p. 115. 106, 5/19/32. 112, p. 211. 158.

Robischaud (56)

(see under molybdenum)

Rogers

(see Rex)

Roscoe Conkling

(see under lead)

Rouse (11)

(see under lead)

Roy and Ray (117)

Loc: Sec. 2, (22-17E), Blewett dist. **Owner:** Blewett Pass Mining Co. (1934). **Ore:** Gold. **Ref:** 67, p. 18. 158.

Royal

(see Red Mountain under copper)

Safety Harbor Creek

(see Robischaud under molybdenum)

Sailor Boy

Loc: Bridge Cr. area, Stehekin dist. **Owner:** Gilkey & Co. (1897). **Ore:** Gold, silver. **Assays:** \$25 Au, 18 oz. Ag. **Ref:** 63, p. 84. 67, p. 43.

Sandell (118)

Loc: SE¼ sec. 2, (22-17E), in Culver Gulch, Blewett dist. **Elev:** 2,660 ft. **Prop:** 1 claim, part of Washington Meteor holdings. **Owner:** Washington Meteor Mining Co. (1908-1911). Blewett Mine Leasing Co. (1910). **Ore:** Gold. **Ore min:** Free gold, arsenopyrite, pyrite. **Gangue:** Quartz, calcite, talc. **Deposit:** Quartz-calcite vein cutting serpentine. 1 ore shoot mined av. 2 to 6 ft. thick. **Dev:** 300 ft. of crosscut and a large amount of drifting on the vein. **Prod:** Amount not known. **Ref:** 67, p. 13. 129, p. 274. 161, pp. 84-89.

Savage

Loc: T. 26 N., R. 20 E., 10 mi. up Entiat R. from town of Entiat. **Prop:** 4 claims, and State land held under 30-yr. lease. **Owner:** G. S. Savage, Entiat, Wash. (1918). **Ore:** Gold, silver. **Ore min:** Free gold. **Dev:** 100-ft. shaft, short adits. **Ref:** 67, p. 26.

Silver Fiend (75)

(see under lead)

Silver Jack (22)

(see under lead)

Silver King (47)

(see under copper)

Silver Trail (48)

(see under copper)

Snook and Ellen

(see Van Epps under antimony)

Snowflake

Loc: Blewett dist. **Owner:** John Kendle and Henry Weinmann (1897). **Ore:** Gold. **Deposit:** 6-ft. quartz vein. **Assays:** \$7 Au (1897). **Ref:** 63, p. 74. 67, p. 18.

Spokane Boy and Girl (12)

(see under copper)

Squillchuck

(see Golden King)

Star

(see Homestake and Star under silver)

Stehekin Mining Co.

(see under copper)

Summit (17)

(see under lead)

Sunday Morning (31)

(see under silver)

Sunset (122)

Loc: Sec. 6, (22-18E), Blewett dist. **Prop:** 1 claim. **Ore:** Gold, copper. **Ore min:** Sulfides. **Deposit:** 6-ft. mineralized zone. **Dev:** 60-ft. adit, 30-ft. adit. **Assays:** \$10 to \$15 Au (1897). **Ref:** 63, p. 74. 67, p. 19.

Sunset (72)

Loc: Sec. 30, (26-21E), Entiat dist. **Owner:** Wenatchee Gold Mining Co. (1906-1922). **Ore:** Gold. **Ref:** 67, p. 26. 97, 1912, p. 920.

Sunset

Loc: On Flat Cr., Stehekin dist. **Prop:** 3 claims. **Owner:** J. M. Scheueyaulle and others (1897). **Ore:** Gold. **Assays:** As high as \$60 Au. **Ref:** 63, p. 83. 67, p. 44.

Sunshine (70)

Loc: Sec. 36, (26-20E), Entiat dist. **Access:** 12 mi. by road to railroad at Entiat. **Prop:** 40-acre State lease. **Owner:** Leased by P. C. Pangborn, Wenatchee, Wash. (1935). **Ore:** Gold. **Ore min:** Free gold. **Dev:** 100-ft. shaft, 730-ft. adit. **Assays:** \$14.96 to \$306.00 Au. **Ref:** 158.

Tiger

(see Galena under lead)

Tiger (24)

Loc: Sec. 4, (34-16E), on N. Fk. Bridge Cr. **Access:** Road and trail from Stehekin. **Prop:** 7 claims. **Owner:** E. S. Ingraham, H. O. Hollenbeck, Van Smith, Prof. Piper, George Young, and H. W. Carr (1897). **Ore:** Gold, lead, copper, silver. **Ore min:** Sulfides. **Gangue:** Quartz. **Dev:** Several open cuts and a shallow shaft. **Assays:** \$6 to \$24 Au, \$8 Ag. **Ref:** 63, p. 84. 67, p. 44.

Tip Top (119)

Loc: SE¼ sec. 1, (22-17E), E. of the Eureka mine, Blewett dist. **Prop:** 1 claim. **Owner:** Tip Top Mining Co. (1911). **Ore:** Gold. **Ore min:** Free gold. **Gangue:** Quartz. **Deposit:** Vein av. 2½ ft. in width cuts serpentine and brecciated rock of the Hawkins formation. **Dev:** 500 to 600 ft. of adit. Ore treated in an arrastre in 1901. **Assays:** Oxidized ore near surface av. \$40 per ton; deeper ore av. \$25 per ton. **Prod:** About \$10,000 by 1901, small amount in 1940. **Ref:** 63, p. 74. 67, p. 13. 88, pp. 57-58. 97, 1941, p. 472. 116, no. 4, 1908, p. 74. 143, p. 79. 144, p. 9. 161, pp. 95-96.

Tommy Jack (23)

Loc: SE¼ sec. 30, (35-16E), a few hundred feet S. of N. Fk. of Bridge Cr. **Elev:** 4,450 ft. **Access:** About 11 mi. of trail from road at mouth of Bridge Cr. **Owner:** E. O. Blankenship,

Stehekin, Wash. (1940). **Ore:** Gold. **Ore min:** Pyrite. **Dev:** 85-ft. adit. **Ref:** 67, p. 44.

Tralee

(see Red Cloud and Tralee under copper)

Union and Dominion (134)

Loc: Sec. 9, (22-17E), ¾ mi. up Bear Cr. from Nigger Cr. **Prop:** 2 claims. **Ore:** Gold, silver. **Dev:** 100-ft. adit. **Assays:** A shipment av. \$11.30 Au, Ag. **Prod:** 8 tons before 1897. **Ref:** 63, p. 75. 67, pp. 13-14.

Van Epps (Snook and Ellen) (74)

(see under antimony)

Van Epps Copper

(see Pickwick under copper)

Velma (78)

(see under mercury)

Venus (120)

Loc: Sec. 1, (22-17E), Blewett dist. **Ore:** Gold, silver. **Ref:** 67, p. 19.

War Eagle (135)

Loc: NE¼ sec. 3, (22-17E), on both sides of Nigger Cr. about a mile from its mouth. **Access:** Road. **Prop:** 4 claims. **Ore:** Gold, nickel. **Deposit:** Quartz veins cutting granite, slate, and serpentine. **Dev:** Several shafts and adits. **Assays:** \$4.60 to \$60 Au, some Ni. **Ref:** 63, p. 75. 67, p. 19.

Warrior General

Loc: Blewett dist. **Ore:** Gold. **Prod:** Has produced. **Ref:** 116, no. 4, 1908, p. 74.

Well Known

Loc: On Company Cr., Stehekin dist. **Owner:** Dennis McDonald and William Stillwell (1897). **Ore:** Gold. **Deposit:** Wide zone mineralized with pyrite. **Ref:** 63, p. 84. 67, p. 44.

Wenatchee

(see Golden King)

White Elephant

(see Wilder)

White Star

(see under lead)

Wilder, (Ivanhoe, White Elephant) (121)

(see also Gold Bond)

Loc: SW¼ sec. 2, (22-17E), on N. side of Culver Gulch and S. side of Nigger Cr., Blewett dist. **Prop:** 3 claims: Kennilworth, Amber Glee, Ivanhoe. **Owner:** Gold Bond Mining Co., Spokane, Wash. (1937—). **Ore:** Gold, silver, copper. **Deposit:** A 2- to 6-ft. vein. **Dev:** Several crosscuts and drifts total about 500 ft. of length. **Assays:** Tr. to \$72 Au, with a very little Ag and Cu. Av. assay is \$4.50 per ton. **Prod:** Est. 150 tons of ore prior to 1911. 1915, 1917, 1937. **Ref:** 63, p. 73. 67, p. 14. 88, p. 59. 97, 1915, p. 568; 1916, p. 610; 1917, p. 500. 104, 11/15/36, p. 27; 1/15/37, p. 28. 106, 6/18/31, p. 19. 113, 7/1/37, p. 16. 158. 161, pp. 96-97.

Wright

Loc: Blewett dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 352.

Wye

(see Bobtail)

Yankee Doodle

Loc: Blewett dist. **Ore:** Gold. **Assays:** \$4 Au. **Ref:** 63, p. 74.

CLALLAM COUNTY

Angeles Star (1)

(see under zinc)

Deer Park

(see under copper)

Gregory-Savage

(see Angeles Star under zinc)

Port Angeles (2)

Loc: On Melick farm, between Ennis Cr. and head of White Cr., probably in sec. 23, (30-6W). **Access:** Road. **Prop:** 43 acres of deeded farm land. **Owner:** Mrs. Grace Melick, Port Angeles, Wash. (1950). **Ore:** Gold and silver reported. **Ore min:** Pyrite. **Gangue:** Quartz. **Assays:** One assay showed about \$1 Ag, \$123 Au, but two other assays showed only \$1.50 and \$2.10 Au. **Ref:** 158.

Winter

(see Angeles Star under zinc)

CLARK COUNTY

Golden Wonder (1)

(see under mercury)

Silver Star (2)

(see under copper)

Washington

Loc: Washougal dist. **Ore:** Gold. **Ref:** 105, vol. 105, 1912, p. 811.

COLUMBIA COUNTY

Hoffeditz (1)

Loc: SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, (9-41E), near N. end of Hoffeditz farm. **Elev:** 100 to 200 ft. above river. **Ore:** Gold. **Deposit:** Schistose rocks intruded by diorite which reportedly carries good gold values. **Dev:** Open cut. **Ref:** 158.

COWLITZ COUNTY

Green Mountain (1)

Loc: Sec. 6, (5-1E), near Woodland. **Prop:** Deeded land. **Owner:** Margaret Hurtienne, Kelso, Wash. **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Pyrite. **Deposit:** Fault in andesite, with weak hydrothermal alteration along the walls. Gouge and altered walls contain finely crystalline pyrite. **Dev:** Small open cut. **Assays:** 2 samples showed only traces of gold and very low values in silver, lead, zinc, copper. **Ref:** 157, 158.

FERRY COUNTY

Ada

(see Laura S. under lead)

Addison (153)

(see under copper)

Admiral (43)

Loc: Sec. 35, (37-32E), Republic dist. **Ore:** Gold. **Ref:** 58, p. 2, 63, p. 109.

Advance (50)

(see also Consolidated Mines and Smelting Co., Ltd., under copper)

Loc: Secs. 12 and 13, (36-32E), just S. of Old Republic mine, Republic dist. **Prop:** Patented. Part of Consolidated Mines and Smelting Co., Ltd. property. **Owner:** Consolidated Mines and Smelting Co., Ltd., Wenatchee, Wash. (1940). **Ore:** Gold, silver. **Ref:** 57, p. 2, 158.

Advance (Cabin) (86)

(see under silver)

Algonkian (74)

(see under silver)

Alpine (20)

Loc: Sec. 27, (37-32E), Republic dist. **Owner:** Knob Hill Mines, Inc., Republic, Wash. **Ore:** Gold, silver. **Assays:** \$5 Au, Ag. **Ref:** 158.

Anchor

(see under silver)

Anecia (21)

Loc: Sec. 33, (37-32E), Republic dist. **Owner:** Dr. May, Republic, Wash. (1940). **Ore:** Gold, silver. **Prod:** Unknown amount in 1940 and 1941. **Ref:** 97, 1940, p. 477; 1941, p. 473.

Apollo

(see California)

Aurum

(see Day Mines)

Belcher (14)

(see under iron)

Belcher (154)

(see under copper)

Ben Hur (22)

(see also Day Mines)

Loc: Center of line between secs. 34 and 27, (37-32E). **Elev:** 2,800 ft. **Access:** About 2 mi. NW. of Republic by road on W. side of Eureka Gulch. **Prop:** 1 claim adjoining the Trade Dollar on south. **Owner:** Day Mines, Inc. (1951—). Ben Hur Gold Mining Co. (1907-1908). Ben Hur Mining & Milling Co. (1908). Ben Hur Leasing Co. (1909-1924). Aurum Mining Co. (1935-1950). **Ore:** Gold, silver. **Ore min:** Pyrite. **Gangue:** Quartz, calcite. **Deposit:** 4-ft. quartz vein in propylitic latite porphyry. Composed of fine-grained banded quartz and 10% to 30% calcite. Vein said to extend the length of the claim. **Dev:** 300-ft. shaft, winze, and drifts on 3 levels. **Assays:** Smelter assays of ore shipped show \$15 Au, 4.5 oz. Ag. In 1910, \$6 to \$10 per ton. **Prod:** \$65,000 up to 1910, 1909-1915, 1918, 1933, 1949, 1950. **Ref:** 7, p. 163. 88, pp. 20-21. 97, 1910-1919, 1932-1934. 98, 1918, 1920, 1925. 104, 1/30/33, p. 19. 106, 2/18/32. 114, no. 5, 1909. 153, pp. 50-52. 158.

Big Bug (87)

(see under silver)

Big Lake (68)

(see under lead)

Black Hawk (88)

(see under lead)

Black Tail (Hope) (23)

(see also Day Mines)

Loc: Near E. $\frac{1}{4}$ cor. sec. 34, (37-32E), S. of the Lone Pine and N. of the Quilp. **Access:** 1 mi. NW. of Republic by road. **Prop:** 1 claim. **Owner:** Day Mines, Inc. (1951—). Hope Mining Co. (1910-1915). The Hope Co. (1918). Northport Smelting & Refining Co. (1920-1926). Surprise Mining Co. (1924-1926). **Ore:** Gold, silver. **Deposit:** Several quartz veins 2 to 6 ft. wide in quartz latite porphyry and propylitic andesite. **Dev:** Crosscut adit 300 ft. long, drifts, and 600-ft. inclined shaft. **Workings** total about 2,000 ft. **Assays:** 300 tons produced prior to 1902 ranged from \$13 to \$20 per ton. **Prod:** 1909-1910, 1912-1920, 300 tons prior to 1902. **Ref:** 7, p. 159. 88, p. 20. 97, 1910-1921, 1935. 98, 1922-1926. 112, p. 206. 114, no. 5, 1909. 129, pp. 186-187. 153, pp. 56-57.

- Black Thorn (111)**
(see under lead)
- Blaine Republic**
(see Republic)
- Blevins**
(see Meadow Creek under copper)
- Blue Bell-Belcher**
(see Belcher under iron)
- Blue Horse (63)**
(see under silver)
- Blue Jacket (64)**
(see under silver)
- Blue Mountain**
(see Jennie)
- Bodie (24)**
Loc: Sec. 34, (37-32E), Republic dist. **Owner:** Zwang, Ivan and Co. (1933). **Ore:** Gold, silver. **Ref:** 106, 4/6/33.
- Boston and Butte**
(see Butte and Boston)
- Brimstone**
(see Paul and Brimstone)
- Buffalo (139)**
(see under silver)
- Burlington and Delaware (143)**
(see under lead)
- Butte and Boston (Boston and Butte) (51)**
Loc: SW¼ sec. 12, (36-32E), Republic dist. **Owner:** Blaine-Republic Co. (1932). Anaconda Gold Mining & Reduction Co. (1914). Alliance Mining Co. (1918-1926). **Ore:** Gold, silver. **Deposit:** 2½- to 5-ft. quartz vein cuts andesite porphyry. Same vein as on Princess Maude property. **Dev:** 265-ft. shaft, 75-ft. shaft, 285-ft. adit, 35-ft. adit, and 400 ft. of drifts (1902). **Assays:** Av. \$16 per ton, \$14 of which is in gold. **Ref:** 88, p. 22.
- Butterfly (89)**
(see under lead)
- Byrne (147)**
(see under silver)
- Cabin**
(see Advance under silver)
- California (Apollo) (61)**
Loc: SW¼SW¼ sec. 20, (36-34E), on Wabash Cr., Republic dist. **Elev:** 4,200 ft. **Access:** 11 mi. E. of Republic by road. **Prop:** 2 claims: Colorado, Shonneen. **Owner:** New California Mining Co., Wenatchee, Wash. (1949). Apollo Consolidated Gold Mining Co. (1903-1925). **Ore:** Gold, silver. **Ore min:** Galena, chalcocopyrite, sphalerite, malachite, azurite. **Deposit:** Quartz vein along fracture zone in greenstone and argillite. **Dev:** 525-ft. shaft, 80-ft. adit. **Assays:** \$60 Au, Ag. **Prod:** 1901-1902, 1908, 1914-1916, 1927-1929, 1938-1939. **Ref:** 7, p. 201. 33, 1907, p. 316. 68, p. 14. 97, 1908, 1915-1917, 1928-1930, 1939, 1940. 98, 1922, p. 1633; 1925, p. 1803. 100, 1901, pp. 18, 50, 88; 1902, pp. 14, 132; 1903, pp. 14, 35. 112, 1918, p. 166. 158.
- Chance (90)**
(see under silver)
- Cherokee Strip (79)**
(see under silver)
- Chico (52)**
Loc: Near center E½ sec. 12, (36-32E). **Access:** 1 mi. by road S. of Republic. **Prop:** 1 claim. **Owner:** Blaine-Republic Co. (1932). Anaconda Gold Mining & Reduction Co. (1914). Alliance Mining Co. (1918-1926). Chico Mining Co. (1932). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 18-in. quartz-calcite vein cutting andesite. Probably an extension of the Princess Maude vein. **Dev:** Adit. **Ref:** 7, p. 154. 98, 1918-1926. 106, 7/21/32, p. 7. 112, p. 164.
- Clay (145)**
(see under copper)
- Colorado (91)**
(see under lead)
- Congress (141)**
(see under nickel)
- Consolidated Mines and Smelting Co., Ltd.**
(see under copper)
- Cook (53)**
Loc: NW¼ sec. 12, (36-32E), Republic dist. **Ore:** Gold. **Ref:** 106, 4/6/33.
- Copper Key (12)**
(see under copper)
- Cougar (158)**
(see under copper)
- Cuba**
(see Big Lake under lead)
- Cyprus**
Loc: 3 mi. S. of Danville. **Access:** Railroad. **Prop:** 4 claims, 2 fractions. **Owner:** Cyprus Mining Co. (1924-1926). **Ore:** Gold, silver, lead. **Improv:** 500-ft. crosscut. **Ref:** 98, 1925, p. 1813; 1926, p. 1577. 112, p. 175.
- Dan Patch (72)**
(see under silver)
- Danville**
Loc: Danville dist. **Ore:** Gold, copper. **Prod:** 4 cars, 1934. **Ref:** 97, 1935, p. 352.
- Day Mines (Aurum)**
(see also Surprise, Little Cove, Last Chance, San Poil, Ben Hur, Insurgent, Lone Pine, Tom Thumb, Trade Dollar, Black Tail, Pearl, Quilp, South Penn)
Loc: Republic dist. **Prop:** At least 92 patented claims. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Formerly operated through a subsidiary: Aurum Mining Co. (1935-1950). **Ore:** Gold, silver. **Ore min:** Tellurides, free gold. **Gangue:** Quartz, calcite. **Deposit:** Veins in andesite porphyry. **Dev:** Deepest workings 900 ft. (1939). **Assays:** Av. 0.15 oz. Au, 1 oz. Ag. **Prod:** Considerable. See individual mines for details. **Ref:** 107, 11/39.
- Delaware**
(see Burlington and Delaware under lead)
- Dixie Queen (112)**
Loc: Near center sec. 33, (32-36E), Covada dist. **Prop:** 1 claim. **Ore:** Gold (?). **Ore min:** Pyrite. **Gangue:** Quartz. **Deposit:** 2-ft. vein cutting quartzite. **Dev:** 2 shafts, one 10 ft. deep. **Ref:** 122, p. 156. 163, p. 75.
- Drummond (92)**
(see under lead)
- East San Poil (25)**
Loc: Sec. 34, (37-32E), Republic dist. **Owner:** Zwang, Ivan and Co. (1933). **Ore:** Gold, silver. **Ref:** 106, 4/6/33.

El Caliph (26)

Loc: SW¼ sec. 34, (37-32E), just E. of the Morning Glory property, Republic dist. **Access:** 2 mi. by road to railroad. **Prop:** 1 patented claim: El Caliph. **Owner:** E. D. Hougland, Republic, Wash. (1941). **Ore:** Gold, silver. **Ore min:** Free gold, pyrite. **Gangue:** Quartz, calcite. **Deposit:** ½- to 18-in. vein cutting quartz latite and shales. Vein displaced by minor faults. **Dev:** Adit and shaft totaling 450 ft. (1902). **Assays:** 85 tons of ore produced prior to 1902 yielded \$9,000. **Prod:** Est. \$15,000 to \$20,000 to end of 1936. Produced 1916, 1933, 1934, 1937-1939. **Ref:** 88, p. 21. 97, 1916, 1934, 1935, 1938-1940. 153, p. 65. 158.

Emma

(see Standard and Emma)

Etta (110)

(see under lead)

Eureka

(see Quilp)

Faithful Surprise

(see Morning Star)

Five Hundred (127)

(see under silver)

Flag Hill (54)

Loc: Secs. 1 and 2, (36-32E). **Access:** 1½ mi. from Republic by road. **Prop:** 8 unpatented claims. **Owner:** Flag Hill Mines, Inc. (1949—). **Ore:** Gold, silver, selenium. **Gangue:** Quartz, calcite. **Deposit:** Said to be a 5-ft. vein with an est. length of 1,500 ft. **Dev:** 1,500 ft. of adit, three 50-ft. shafts, and a 100-ft. shaft. Total length of workings about 4,000 ft. **Assays:** Typical assay said to be 0.21 oz. Au, 0.61 oz. Ag. **Prod:** Said to be 400 tons prior to 1940. 1941. **Ref:** 28, pp. 62-66. 69, p. 7. 97, 1939, p. 490; 1940, p. 477. 113, no. 13, 1937, p. 7. 158.

Galena (69)

(see under silver)

Gold Cord

(see Byrne under silver)

Gold Crown

(see under silver)

Gold Dust

Loc: On headwaters of Toroda Cr. **Ore:** Gold. **Ref:** 63, p. 109.

Gold Twenty (78)

Loc: NW¼ sec. 5, (32-36E), 3 mi. N. of Meteor, Covada dist. **Ore:** Gold, silver, lead, zinc. **Ore min:** Galena, sphalerite, pyrite. **Gangue:** Quartz, calcite. **Deposit:** Black argillite crisscrossed by sulfide-bearing quartz veinlets. **Dev:** 175-ft. crosscut. **Ref:** 58, p. 26. 122, p. 175.

Golden Chariot (148)

Loc: Near W. line of sec. 30, (30-33E), Keller dist. **Ore:** Gold. **Ore min:** Limonite. **Gangue:** Quartz. **Deposit:** Oxidized portion of a 5-ft. vein consisting of porous quartz and limonite is exposed in a pit. **Dev:** Pit. **Ref:** 122, p. 125.

Golden Eagle (44)

Loc: SE¼ sec. 35, (37-32E), Republic dist. **Prop:** 4 claims: Admiral, Peacemaker, Eureka, Battle Axe. **Owner:** Hermes Mining Co. (1925). **Ore:** Gold, silver. **Ref:** 97, 1925, p. 558. 114, no. 5, 1909, p. 67.

Golden Harvest (62)

Loc: Sec. 36, (36-32E). **Access:** 7 mi. from Republic by road. **Prop:** 7 patented claims. **Owner:** Otto Harrison, Wenatchee, Wash. (1941). Golden Harvest Mining Co. (1932-1937). **Ore:**

Gold, silver. **Deposit:** Said to be a 2½-ft. vein with an est. length of 150 ft. **Dev:** 1,600-ft. adit and several shafts. **Assays:** Typical assay said to be 0.12 oz. Au, 2.0 oz. Ag. **Prod:** 800 tons in 1937-1938. **Ref:** 28, pp. 112-116. 97, 1939, p. 490. 104, 6/15/35, p. 27; 2/15/35, p. 30; 9/30/36, p. 29; 1/30/37, p. 30. 106, 1/21/32. 158.

Golden Rule (149)

Loc: Near center W½ sec. 30, (30-33E). **Ore:** Gold (?). **Ore min:** Pyrite. **Gangue:** Quartz. **Deposit:** Open cut exposes a 12-in. vein consisting of quartz banded with finely divided pyrite and an unidentified sulfide mineral. **Dev:** Open cut. **Ref:** 122, p. 125.

Golden Valley

(see Valley)

Good Ore (105)

(see under silver)

Grandview (126)

(see under lead)

Gray (155)

(see under silver)

Greasy Run (129)

(see under lead)

Great Republic

Loc: Republic dist. **Ore:** Gold. **Ref:** 63, p. 109. 134.

Great Scott (73)

(see under lead)

Gwin (70)

(see under silver)

Hall Creek

(see Gwin under silver)

Hawkeye (13)

Loc: NE¼ sec. 6, (37-34E), Belcher dist. **Prop:** 8 claims: Hawkeye, Hawkeye No. 3, Struck Luck, Eagle, Governor Rogers, Laughing Water, St. Barnard, Waterloo. **Owner:** Winnipeg Mining Co. (1907-1918). **Ore:** Gold, silver, copper, iron. **Prod:** 1907. **Ref:** 33, 1907, p. 1164; 1908, p. 1431. 98, 1918, p. 148. 116, no. 11, 1907, p. 27.

High Line

Loc: Republic dist. **Ore:** Gold, silver. **Prod:** 1934. **Ref:** 97, 1935, p. 352.

Hines (140)

(see under lead)

Hope

(see Black Tail)

I. X. L. (130)

(see under lead)

Iconoclast (160)

(see under copper)

Ida May (27)

Loc: SW¼ sec. 34, (37-32E), Republic dist. **Access:** 2 mi. by road to railroad. **Prop:** 1 patented claim: Ida May. **Owner:** E. D. Hougland, Republic, Wash. (1941). **Ore:** Gold, silver. **Deposit:** Small vein. **Dev:** 50-ft. adit. **Prod:** 1914. **Ref:** 97, 1914, p. 649. 158.

Idora (128)

(see under lead)

Illinois (161)

(see under copper)

Imperator

(see Quilp)

Insurgent (45)

(see also Day Mines)

Loc: Near W. line NW¼ sec. 35, (37-32E). **Access:** 1 mi. NW. of Republic by road. **Prop:** 1 fractional claim adjoining the Lone Pine on the east. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Insurgent Gold Mining Co. (1908-1924). Aurum Mining Co. (1935-1950). **Ore:** Gold, silver. **Ore min:** Pyrite, gold. **Gangue:** Quartz. **Deposit:** Vein believed to be an offshoot of the Lone Pine vein cuts propylitic andesite. Ore shoot 30 ft. long and 2½ ft. wide now stoped out. **Dev:** Opened by adits on Lone Pine claim. **Prod:** 1908-1912, 1927. **Ref:** 7, p. 162. 97, 1908-1912, 1927. 98, 1920-1925. 104, 10/30/35, p. 25; 2/29/36, p. 27. 112, p. 184.

Iron Creek

(see Shamrock under nickel)

Iron Mask (28)

Loc: SE¼ sec. 34, (37-32E). **Access:** 1 mi. from Republic by road. **Prop:** 1 patented claim. **Owner:** P. B. Chapman, Republic, Wash. (1941). **Ore:** Gold, silver. **Deposit:** Said to be an 8-ft. vein with an est. length of 400 ft. **Dev:** 49-ft. adit and other workings total 150 ft. **Assays:** Typical assay said to be 0.12 oz. Au, 0.12 oz. Ag. **Ref:** 28, pp. 92-96.

Iron Monitor (55)

Loc: Sec. 12, (36-32E). **Access:** ½ mi. by road to railroad at Republic. **Prop:** 1 patented claim: Iron Monitor. **Owner:** C. M. Trevitt and E. Hougland, Republic, Wash. (1941). **Ore:** Gold, silver. **Gangue:** Quartz. **Dev:** 15-ft. shaft, 400-ft. adit. **Ref:** 158.

Iron Mountain (65)

(see under silver)

Jaybird (80)

(see under lead)

Jennie (Blue Mountain, Patterson) (6)

Loc: S½ sec. 34, (40-36E), Orient dist. **Elev:** 2,100 to 2,175 ft. **Access:** About 2 mi. NW. of Rockcut by road. **Prop:** 5 patented claims. **Owner:** Carroll Olsen, Orient, Wash. (1950). **Ore:** Gold, silver, copper, lead, zinc. **Ore min:** Pyrite, galena, sphalerite. **Gangue:** Quartz, gypsum. **Deposit:** Schists, limestone, and quartzite intruded by lamprophyre dikes are traversed by a shear zone 35 ft. wide filled with brecciated country rock, gouge, quartz, and ore. **Dev:** 2 adits, one comprising 500 ft. of workings, the other 250 ft. of workings. **Assays:** Total value of the ore in Au, Ag, Cu, and Pb only \$3 to \$15 per ton. **Prod:** No large shipments reported. **Ref:** 7, pp. 202-203. 98, 1918, p. 105. 158.

Jim Blaine Fraction (56)

Loc: Sec. 12, (36-32E), Republic dist. **Owner:** Blaine-Republic Co. (1932). Anaconda Gold Mining & Reduction Co. (1914). Alliance Mining Co. (1918-1926). **Ore:** Gold, silver. **Ref:** 98, 1920, p. 1477. 112, p. 164.

Juliet (113)

(see under lead)

Juno (66)

(see under silver)

Kangaroo (29)

Loc: Sec. 34, (37-32E), Republic dist. **Owner:** Zwang, Ivan and Co. (1933). **Ore:** Gold, silver. **Ref:** 106, 4/6/33.

Kentucky Bell (93)

(see under lead)

Keystone (114)

(see under silver)

King Richard

(see Meadow Creek under copper)

King Solomon (131)

(see under lead)

Klepinger

Loc: Republic dist. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 477.

Knob Hill (30)

(see also Mountain Lion, Rebate)

Loc: W½SE¼ sec. 27, (37-32E), at head of Eureka Gulch. **Elev:** 2,700 ft. **Access:** About 2½ mi. by road from railroad at Republic. **Prop:** 13 patented claims, including Knob Hill, Mud Lake, Alpine, Lone Hand, Rebate, Mountain Lion. **Owner:** Knob Hill Mines, Inc., San Francisco, Calif. (1936—). Knob Hill Mining Co. (1910-1924). Balaklala Consolidated Copper Co. (1925). Balaklala Central Mining & Smelting Co. (1935). Mountain City Copper Co. (1935-1936). **Ore:** Gold, silver. **Ore min:** Free gold, electrum, tellurides, pyrite, arsenopyrite, chalcocopyrite, stibnite, realgar, marcasite, tetrahedrite, polybasite, pyrargyrite, argentite, umangite, naumannite. **Gangue:** Quartz, chalcedony, adularia, sericite, calcite, barite, graphite. **Deposit:** 4 parallel veins and a cross vein with mining widths of 5 to 15 ft. (1952). **Dev:** A 2-hoisting-compartment inclined 1,200-ft. shaft with 9 levels at 110-ft. vertical intervals. Abandoned open pits. **Improv:** 400-ton flotation-cyanidation mill, camp and office buildings (1955). **Assays:** 7,192 tons of ore av. 1.5 oz. Au, 4.5 oz. Ag. **Prod:** More than \$10,000,000 by end of 1951. Produced 1937-1955. **Ref:** 7, p. 164. 28, pp. 57-61. 31. 43, 11/53, pp. 96-99. 63, p. 109. 97, 1910-1925, 1931, 1934-1952. 98, 1918-1925. 104, 8/15/35, p. 26; 10/30/35, p. 25; 1/30/36, p. 21; 11/30/36, p. 29. 107, 12/39, p. 10; 1/40; 8/41, pp. 29-31. 112, p. 187. 113, 10/15/36, p. 11. 129, pp. 175-180. 133, p. 36. 141, pp. 22, 34. 158. 159, p. 130. 173, pp. 51-63. 174, pp. 264-282.

La Fleur

(see Walla Walla under copper)

Lakeview Fraction (94)

(see under lead)

Lame Foot (Valley)

(see Valley)

Lamefoot

(see under iron)

Lancaster (7)

(see under copper)

Last Chance (159)

(see under copper)

Last Chance (46)

(see also Day Mines)

Loc: W½NW¼ sec. 35, (37-32E), on E. side of Eureka Gulch. **Access:** 1 mi. NW. of Republic by road. **Prop:** 1 claim: Last Chance. **Owner:** Day Mines, Inc., Wallace Idaho (1951—). Lone Pine Surprise Consolidated Mining Co. (1918-1935). Aurum Mining Co. (1950). **Ore:** Gold, silver. **Ore min:** Free gold, tetrahedrite, pyrite. **Gangue:** Quartz, calcite. **Deposit:** Vein in andesite flow breccia av. 8 ft. in width. Vein filling consists of chalcedonic banded quartz, calcite, and fragments of country rock. Ore is largely removed above the 500-ft. level. **Dev:** 2-compartment vertical shaft 690 ft. deep, from which 1,200 ft. of drifts and crosscuts have been driven. Also extensive stoping. **Assays:** 24,000 tons of ore av. about \$13.00 per ton. Ratio of precious metals av. 7.85 oz. Ag to 1 oz. Au.

Prod: \$3,000,000 by the end of 1923. 1940. **Ref:** 97, 1914, 1915, 1918, 1919, 1922-1924, 1928, 1931, 1934, 1935. 98, 1918-1926. 104, 10/30/35, p. 25. 112, p. 189. 129, pp. 182-184. 158.

Laura S. (125)

(see under lead)

Little Cove (31)

(see also Day Mines)

Loc: NE¼ sec. 34, (37-32E). Adjoins the Pearl on the N., Republic dist. **Access:** Road. **Prop:** 1 claim. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Little Cove Mining Co. (1918-1924). Aurum Mining Co. (1950). **Ore:** Gold, silver. **Gangue:** Chalcedonic quartz, calcite. **Prod:** 2 carloads valued at \$1,450 prior to 1934. Produced 1934, 1939-1940. **Ref:** 58, p. 39. 97, 1935, p. 352. 98, 1922, p. 1653; 1925, p. 1822. 112, p. 189. 158.

Little Jay (95)

(see under lead)

Little Tom

(see Juliet under lead)

Lone Pine (32)

(see also Day Mines)

Loc: E½NE¼ sec. 34, (37-32E), on E. side of Eureka Gulch. **Access:** 1 mi. NW. of Republic by road. **Prop:** 1 claim: Lone Pine. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Syndicated Deep Mines (1907-1908). Western Union Mines Co. (1914-1915). West Virginia Mining Co. (1915-1918). Republic Consolidated Mines Corp. (1915-1922). Northport Smelting & Refining Co. (1916-1926). Surprise Mining Co. (1924-1926). Aurum Mining Co. (1935-1950). **Ore:** Gold, silver. **Gangue:** Quartz, calcite. **Deposit:** 5 veins in propylitic andesite are from 2 to 14 ft. wide and consist of chalcedonic quartz traversed by narrow black crenulated ribbons. Most of the ore above the 500-ft. level stoped out. **Dev:** More than 2,500 lineal ft. of underground workings, principally on 2 adits and a shaft. **Assays:** Ore av. \$10 to \$15 per ton. **Prod:** \$137,000 to 1910, 1935. **Ref:** 7, pp. 160-162. 33, 1908, p. 1294. 63, p. 109. 77, vol. 19, p. 93. 88, pp. 19-20. 97, 1910-1922, 1935. 98, 1918-1926. 104, 10/30/35, p. 25; 2/29/36, p. 27. 112, p. 211. 116, no. 11, 1907, p. 27; no. 12, 1907, p. 15; no. 5, 1908, p. 117; no. 6, 1908, p. 139. 129, pp. 185, 187. 141, p. 22. 153, pp. 59-63. 158.

Lone Star and Washington (1)

(see under copper)

Longstreet (96)

(see under silver)

Lucile Dreyfus

(see Morning Star)

Mammoth (47)

Loc: SW¼ sec. 26, (37-32E), Republic dist. **Owner:** Little Cove Mining Co. (1918-1924). **Ore:** Gold, silver. **Ref:** 98, 1922, p. 1653; 1925, p. 1822. 112, p. 189.

Manila (157)

(see under copper)

Mayflower (132)

(see under lead)

Meadow Creek (146)

(see under copper)

Meteor (115)

(see under silver)

Midnight

(see under silver)

Mineral Hill

(see Morning Star)

Montana (116)

(see under silver)

Morning

Loc: Republic dist. **Ore:** Gold, silver. **Prod:** 1934. **Ref:** 97, 1935, p. 352.

Morning Glory (Old Gold) (33)

Loc: S½SW¼ sec. 34, (37-32E), on Flag Hill. **Elev:** 3,000 ft. **Access:** ½ mi. by road from railroad near Republic. **Prop:** 1 patented claim and a fraction. **Owner:** C. E. Grove, R. R. Pence, R. M. Skidmore, Spokane, Wash. (1941). Morning Glory Mining Co. (1910-1915). **Ore:** Gold, silver. **Ore min:** Gold, pyrite, tellurides. **Gangue:** Quartz, calcite. **Deposit:** Vein of drusy banded quartz from a few inches to 2 or 3 ft. wide in quartz latite porphyry. Several rich pay shoots have been mined. **Dev:** Adit and air shaft with drifts said to aggregate 1,700 ft. **Assays:** Ore shipped carried values up to \$400 Au, Ag, mostly Au. Tellurium is reported. **Prod:** \$100,000 to 1936, 1937-1939. **Ref:** 7, p. 165. 28, pp. 97-101. 88, p. 21. 97, 1914-1916, 1932-1935, 1938-1940. 153, p. 52. 158.

Morning Star (Lucile Dreyfus, Faithful Surprise, Mineral Hill, Virginia) (3)

(see also Surprise)

Loc: SW¼ sec. 16, (40-34E). **Elev:** 2,300 ft. **Access:** 3 mi. by road S. of Danville on E. side of Kettle R. Railroad crosses property. **Prop:** 10 claims, 9 of which are patented: Mondamin, Tycoon, Minnehaha, Morning Star, Copper Bullion, Old Virginia, Alabama, Alabama Fraction, Copper Lady. **Owner:** Morning Star Mining Co. (1936—). Lucile Dreyfus Mining Co. (1908-1916). Mineral Hill Tunnel & Copper Mining Co. (1908-1918). Kettle River Mining & Lumber Co. (1918). Virginia Mining Co. (1918-1922). Chatterboy Mining Co. (1920-1926). **Ore:** Gold, silver, copper. **Ore min:** Free gold, pyrite, scheelite, chalcopryrite, pyrrhotite. **Deposit:** Quartz vein cutting serpentine is said to av. 2 ft. in width. **Dev:** 3,000-ft. haulage adit, 2 shafts 220 and 325 ft. Total workings 12,000 ft. **Assays:** Av. 0.66 oz. Au, 1 oz. Ag, 2% Cu. **Prod:** \$15,000 to 1910, \$27,000 in 1917, about \$15,000 in 1935. Produced 1936-1939, 790 tons 1940-1943. **Ref:** 7, p. 200. 28, pp. 82-86. 33, 1908, p. 892. 37, pp. 25-26. 97, 1913, 1916-1919, 1921, 1930, 1937-1941. 98, 1920-1926. 104, 10/30/36, p. 32. 112, pp. 186, 191, 208. 113, 10/15/36, p. 11; 2/18/37, p. 8. 129, p. 202. 158.

Mount Tolman (150)

(see under copper)

Mountain Boy

Loc: Republic dist. **Ore:** Gold. **Ref:** 63, p. 109.

Mountain Lion (34)

(see also Knob Hill)

Loc: W½ sec. 27, (37-32E), on E. side of the N. Fk. of Granite Cr. **Elev:** 3,000 ft. **Access:** 3 mi. NW. of Republic by road. **Prop:** 2 claims: Mountain Lion, Willamette. **Owner:** Knob Hill Mines, Inc., Republic, Wash. (1938—). Mountain Lion Gold Mining Co. (1898-1915). Mountain Lion Consolidated Co. (1934-1938). **Ore:** Gold, silver. **Ore min:** Gold, pyrite. **Deposit:** 3 parallel veins of banded quartz in andesite flow breccia. Productive vein is 10 to 12 ft. wide. **Dev:** 1,260-ft. adit and 700-ft. vertical shaft. Open pit mining methods began in 1941. **Assays:** Smelter assays of ore in 1904 and 1905 show \$5 Au, 2 oz. Ag. **Prod:** \$200,000 to 1910, 1936-1938. Production after 1938 is included with Knob Hill mine. **Ref:** 7, pp. 164-165. 43, vol. 68, pp. 725-726. 88, p. 18. 97, 1916, 1932-1949. 104, 1/30/33, p. 19; 4/15/34; 11/30/34, p. 23; 1/30/37, p. 28. 106,

9/15/32. **113**, 10/15/36, p. 11. **133**, p. 36. **153**, pp. 63-64. **158**, **159**, p. 130.

Muldoon

Loc: E. of Malo, Belcher dist. **Ore:** Gold, silver, copper. **Prod:** 1914. **Ref:** **97**, 1914, p. 649.

New York (117)

(see under lead)

North San Poil Fraction (35)

Loc: Sec. 34, (37-32E), Republic dist. **Owner:** San Poil Consolidated Mining Co. (1910-1918). **Ore:** Gold, silver. **Prod:** 1911. **Ref:** **97**, 1911, p. 786. **112**, p. 201. **114**, no. 5, 1909, p. 68.

Northern Light (81)

(see under silver)

Number Seven

(see under silver)

Old Gold

(see Morning Glory)

Old Hickory (57)

Loc: NE¼ sec. 12, (36-32E), Republic dist. **Ore:** Gold. **Prod:** 1918, 1931. **Ref:** **97**, 1918, p. 505; 1931, p. 476.

Old Nell (97)

(see under antimony)

Ophir (151)

(see under lead)

Oregon

(see Illinois under copper)

Orion (82)

(see under silver)

Oversight (15)

(see under iron)

Pacific Mutual

(see Addison under copper)

Panama (8)

Loc: Near N. ¼ cor. sec. 6, (39-34E), Curlew area. **Owner:** Boston-New York Mines Co. (1924-1926). Phoenix Gold & Copper Mining & Milling Co. (1911-1918). National Lead-Silver Co. (1918-1922). **Ore:** Gold, silver, copper, lead, zinc. **Assays:** 22 samples showed nil to 4.6% Cu, 0.25 to 7.12 oz. Au, 1.22 to 89.7 oz. Ag. The av. was 1.71% Cu, 0.98 oz. Au, 24.80 oz. Ag. **Ref:** **98**, 1918-1925. **116**, no. 2, 1911, pp. 40-41.

Patterson

(see Jennie)

Paul and Brimstone

Loc: Republic dist. **Ore:** Gold, silver, copper. **Ref:** **63**, p. 109.

Pearl (36)

(see also Day Mines)

Loc: Near center NE¼ sec. 34, (37-32E), adjoining Surprise claim on the N. **Access:** 1 mi. NW. of Republic by road. **Prop:** 1 claim. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Syndicated Deep Mines (1907-1908). Pearl Consolidated Mining Co. (1909-1918). Republic Mines Corp. (1910-1912). Western Union Mines Co. (1914-1915). West Virginia Mining Co. (1915-1918). Republic Consolidated Mines Corp. (1915-1922). Northport Smelting & Refining Co. (1916-1926). Surprise Mining Co. (1924-1926). Aurum Mining Co. (1949-1951). **Ore:** Gold, silver. **Gangue:** Quartz. **Deposit:** 12-ft. vein (Surprise) continues through the claim its entire length of 1,500 ft. Wall rock is propylitic quartz latite porphyry. **Dev:** Diamond drilling. **Assays:** Said to assay \$4.60 per ton. **Prod:** 1909-1922. **Ref:** **7**,

p. 159. **33**, 1908, p. 1294. **97**, 1909-1922. **98**, 1918-1926. **112**, p. 211. **113**, 12/15/36, p. 11. **116**, no. 11, 1907, p. 27; no. 12, 1907, p. 15; no. 5, 1908, p. 117; no. 6, 1908, p. 139. **129**, pp. 185, 188. **158**.

Perry (98)

Loc: Sec. 36, (32-36E), Covada dist. **Ore:** Gold, silver. **Ref:** **58**, p. 53.

Pilgrim (133)

(see under lead)

Pin Money (16)

(see also Oversight under iron)

Loc: Near center E½ sec. 18, (37-34E), Belcher dist. **Elev:** 4,800 ft. **Access:** 13 mi. by road NE. of Republic. **Prop:** 1 claim of the Oversight group. **Owner:** Oversight Mining & Milling Co. (1906-1918). **Ore:** Gold, silver, copper, nickel, cobalt. **Ore min:** Arsenopyrite, pyrrhotite, pyrite, tetrahedrite, smaltite (?). **Deposit:** Quartz vein with 6-in. av. width has hanging wall of impure limestone and footwall of slate or phyllite. **Dev:** 80-ft. inclined shaft. **Ref:** **7**, p. 173. **33**, 1907, p. 904. **98**, 1918, p. 118. **105**, 1906, p. 313; 1907, p. 264. **116**, no. 2, 1908, p. 30; no. 5, 1908, p. 117. **141**, p. 62.

Plymouth Rock (134)

(see under lead)

Polaris (99)

(see under lead)

Princess Maude (Southern Republic) (58)

Loc: Near center sec. 12, (36-32E), near base of the E. slope of Copper Mtn. **Access:** 1 mi. SW. of Republic by road. **Prop:** 1 claim. **Owner:** Blaine-Republic Co. (1932). Southern Republic Mining Co. (1910). Anaconda Gold Mining & Reduction Co. (1914). Alliance Mining Co. (1915-1926). **Ore:** Gold, silver. **Ore min:** Pyrite. **Gangue:** Quartz, calcite, laumontite. **Deposit:** 2- to 4-ft. vein in propylitic andesite. Vein consists of vitreous white quartz showing lines of crustification parallel to the walls. **Dev:** 70-ft. incline and 200-ft. adit from which a 200-ft. and a 300-ft. drift have been driven. **Assays:** Ore shipped said to av. \$25 per ton. **Prod:** Has produced. **Ref:** **7**, pp. 153-154. **88**, pp. 21-22. **98**, 1918-1926. **106**, 7/21/32, p. 7. **112**, pp. 164, 166. **114**, no. 5, 1909. **153**, pp. 52-53.

Quilp (Imperator, Eureka) (48)

(see also Day Mines)

Loc: Near W. line SW¼ sec. 35, (37-32E), on E. side of Eureka Gulch. **Elev:** 2,800 ft. **Access:** 1 mi. NW. of Republic by road. **Prop:** 1 patented claim: Quilp, originally located as the San Poil. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Imperator Quilp Mining Co. (1909-1912). Quilp Gold Mining Co. (1915-1941). Eureka Mining & Milling Co. (1936). Aurum Mining Co. (1943-1951). **Ore:** Gold, silver. **Ore min:** Gold, pyrite, chalcopyrite, native silver. **Deposit:** Vein of chalcidonic banded quartz 7 to 8 ft. wide cuts propylitic andesite. **Dev:** 400-ft. shaft with several drifts and stopes. Winze sunk from 400-ft. to 500-ft. level. **Assays:** 20,000 tons of ore in 1906 had av. assay of 0.4 oz. Au, 5 oz. Ag. Av. assay on shipments in 1909 was 0.5 oz. Au, 4 oz. Ag. **Prod:** Total \$720,938.70 to end of 1920; 1936; 22,402 tons 1937; 9,828 tons 1938; 1939-1940. **Ref:** **7**, pp. 157-158. **28**, pp. 107-111. **88**, p. 19. **97**, 1909-1914, 1918-1920, 1922-1924, 1927, 1937-1940. **98**, 1918-1926. **104**, 6/30/36, p. 22; 11/20/36, p. 29; 12/15/36, pp. 26-27. **112**, p. 198. **113**, 10/15/36, p. 11. **114**, no. 5, 1909. **129**, pp. 180-182. **141**, pp. 20, 22, 34. **153**, pp. 53-54. **158**, **159**, p. 130.

Railroad (5)

(see under copper)

Rattler (75)

(see under silver)

Rattlesnake (83)

(see under lead)

Rebate (18)

(see also Knob Hill)

Loc: NE¼ sec. 22, (37-32E), Republic dist. **Owner:** Knob Hill Mines, Inc. (1943—). **Rebate Mining Co.** (1918). **Ore:** Gold, silver. **Ref:** 68, p. 11. 112, p. 199.

Red Chief (118)

(see under lead)

Reliance (100)

(see under silver)

Relief (104)

Loc: SE¼ sec. 15, (32-37E), Republic dist. **Owner:** Rebate Mining Co. (1918). **Ore:** Gold. **Ref:** 112, p. 199.

Ren Rice (76)

(see under lead)

Republic (Blaine Republic) (59)

Loc: NE¼ sec. 12, (36-32E). **Elev:** 3,300 to 3,900 ft. **Access:** ½ mi. SW. of Republic by road. **Prop:** 13 patented claims. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Republic Gold Mining & Milling Co. (1898). Republic Consolidated Gold Mining Co. (1902). New Republic Co. (1909). Rathfon Reduction Works (1914-1926). Blaine-Republic Co. (1932-1936). Eureka Mining & Milling Co. (1937-1940). Aurum Mining Co. (1950). **Ore:** Gold, silver, selenium. **Ore min:** Pyrite, free gold. **Gangue:** Quartz, calcite. **Deposit:** Vein as much as 8 or 10 ft. wide, but av. 2 or 3 ft. Vein is composed principally of chalcidonic quartz. Concentrically crustified. Crustifications marked by dark crenulated bands. **Dev:** About 2 mi. of adits, drifts, winzes, raises, and crosscuts. **Assays:** Some hand picked ore assays \$100, but most av. 0.14 oz. Au, 0.56 oz. Ag. **Prod:** Est. at \$1,400,000 to 1910; 2,757 tons of ore to smelter 1937; shipped 1933-1946. **Ref:** 1-A, 1900, p. 419. 7, pp. 154-157. 28, pp. 87-91. 43, vol. 68, pp. 725-726. 76, 88, pp. 1618. 97, 1908-1918, 1921-1924, 1929, 1931, 1934, 1935, 1938-1941. 98, 1918-1926. 99, 11/27/34. 104, 4/30/34; 6/30/36, p. 22; 12/15/36, pp. 26-27. 106, 7/21/32, p. 7; 11/3/32, p. 9; 9/7/33; 10/5/33. 112, pp. 164, 166, 198. 113, 10/15/36, p. 11. 141, p. 22. 153, pp. 44-50. 158, 159, p. 130.

Reserve (107)

(see under silver)

Robert E. Lee (101)

(see under antimony)

Romulus (119)

(see under lead)

Rosario (84)

Loc: Sec. 31, (32-37E) and sec. 36, (32-36E), Covada dist. **Access:** 28 mi. by road to railroad at Kettle Falls. **Prop:** 2 unpatented claims. **Owner:** F. V. Messenger, Inchelium, Wash. (1941). **Ore:** Gold, silver. **Deposit:** Crushed and mineralized country rock. **Dev:** 300-ft. adit, 50-ft. adit. **Ref:** 158, 163, p. 81.

Rover Bonanza (152)

(see under silver)

Royal Ann (102)

(see under lead)

Ruby (109)

Loc: Near NE. cor. sec. 5, (31-36E), Covada dist. **Prop:** 1 claim. **Owner:** L. G. Curry (1912). **Ore:** Gold (?). **Ore min:** Pyrite. **Dev:** 12-ft. shaft. **Ref:** 122, p. 156. 163, p. 76.

St. Patrick (120)

(see under lead)

St. Paul (77)

(see under silver)

San Poil (37)

(see also Day Mines)

Loc: SW¼NE¼ sec. 34, (37-32E), Republic dist., on W. side of Eureka Gulch. **Access:** 1 mi. by road from Republic. **Prop:** 1 claim, S. of the Ben Hur. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). San Poil Consolidated Mining Co. (1910-1918). Western Union Mines Co. (1914-1915). West Hill Mining Co. (1915-1922). Western Silica & Sand Co. (1918). Traill Mining & Smelting Co. (1919). Zwang, Ivan and Co. (1933). Aurum Mining Co. (1950). **Ore:** Gold, silver. **Deposit:** Latite porphyry cut by a quartz-calcite vein thought to be the southward extension of the Ben Hur vein. Vein is cut by several faults. Ore in lenses up to 8 ft. thick. **Dev:** 2,500 ft. of adits which expose the vein for 1,000 ft. **Assays:** Some of the ore shipped av. 0.7 oz. Au, 4 oz. Ag. **Prod:** 1909-1921, 1931, 1935. 200 tons prior to 1902. **Ref:** 7, pp. 162-163. 33, 1908, p. 1215. 97, 1910-1921, 1931, 1935. 98, 1918-1925. 104, 12/15/34, p. 24. 106, 11/5/31; 4/6/33. 112, p. 201. 129, p. 188. 153, pp. 62-63. 158, 159, p. 130.

San Poil Fraction (38)

Loc: NE¼ sec. 34, (37-32E), Republic dist. **Owner:** Zwang, Ivan and Co. (1933). **Ore:** Gold, silver. **Ref:** 106, 4/6/33.

San Poil Monitor

(see Meadow Creek under copper)

Santa Claus (108)

Loc: S½ sec. 32, (32-36E), Covada dist. **Prop:** 1 claim. **Ore:** Gold (?). **Ore min:** Pyrite. **Deposit:** 3-ft. quartz vein. **Dev:** 40-ft. shaft. **Ref:** 122, p. 156. 163, p. 76.

Schminski (164)

(see under molybdenum)

Seattle (39)

Loc: W½NW¼ sec. 34, (37-32E), Republic dist. **Prop:** 1 patented claim: Seattle. **Owner:** J. A. Wiseman, Republic, Wash. (1939). **Ore:** Gold, silver. **Dev:** 60-ft. shaft. **Prod:** 1938, 1939. **Ref:** 58, p. 61. 97, 1939, p. 490; 1940, p. 477. 158.

Several (121)

(see under lead)

Shamrock (144)

(see under nickel)

Shonee

(see under copper)

Silver Bell (85)

(see under lead)

Silver Crown

(see under silver)

Silver Crown No. 2 (135)

(see under silver)

Silver Crown No. 3 (136)

(see under lead)

Silver Hill (156)

(see under copper)

Silver Pick

(see under silver)

Silver Spar (122)

Loc: NE. cor. sec. 27, (32-36E), Covada dist. **Ore:** Gold (?). **Ore min:** Pyrite. **Gangue:** Calcite. **Deposit:** A 1-ft. vein in

granodiorite composed mainly of coarse calcite. Sparse disseminations of pyrite and finely divided unidentified sulfide. **Dev:** 15-ft. shaft and several pits distributed along a length of 200 ft. **Ref:** 122, p. 159.

Silver Tip (67)

(see under silver)

Snowstorm (40)

Loc: NE $\frac{1}{4}$ sec. 34, (37-32E), Republic dist. **Owner:** Zwang, Ivan and Co. (1933). **Ore:** Gold, silver. **Ref:** 106, 4/6/33.

Snowstorm (White Swan) (123)

(see under lead)

South Penn (19)

(see also Day Mines)

Loc: Sec. 22, (37-32E), Republic dist. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). C. Trevitt and E. Pierce, Republic, Wash., leasing from Aurum Mining Co. (1949). **Ore:** Gold, silver. **Gangue:** Quartz. **Assays:** 1945 production of 172 tons yielded \$2,168. **Prod:** 1941-1949. **Ref:** 22, p. 11. 68, p. 16.

Southern Republic

(see Princess Maude)

Standard and Emma (60)

Loc: SE $\frac{1}{4}$ sec. 12, (36-32E), Republic dist. **Owner:** Alliance Mining Co. (1918-1926). Anaconda Gold Mining & Reduction Co. (1914). **Ore:** Gold, silver. **Ref:** 98, 1918-1926. 112, pp. 164, 166.

Stray Dog (124)

(see under silver)

Sunset (137)

(see under lead)

Surprise (4)

(see also Morning Star)

Loc: Near N. line NW $\frac{1}{4}$ sec. 16, (40-34E). **Access:** 1 $\frac{1}{2}$ mi. S. of Danville by road on S. side of Lone Ranch Cr. **Owner:** Morning Star Mining Co., Spokane, Wash. (1936-1952). Faithful Surprise Mining Co. (1915). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** 2-ft. quartz vein in serpentine with some black slate and diorite. Coarse yellow gold in the quartz. **Dev:** Adit more than 300 ft. long. **Assays:** Ore shipped av. \$17 per ton. **Prod:** Has produced. **Ref:** 7, p. 200.

Surprise (41)

(see also Day Mines)

Loc: E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, (37-32E), on E. side of Eureka Gulch. **Access:** 1 mi. NW. of Republic by road. Lies between Quilp on S. and Pearl on N. **Prop:** 1 claim. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). Syndicated Deep Mines (1907-1908). Republic Mines Corp. (1910-1912). Western Union Mines Co. (1914-1915). West Virginia Mining Co. (1915-1918). Republic Consolidated Mines Corp. (1915-1922). Northport Smelting & Refining Co. (1916-1926). Surprise Mining Co. (1924-1926). Aurum Mining Co. (1950). **Ore:** Gold, silver. **Ore min:** Gold, pyrite. **Gangue:** Quartz. **Deposit:** 4- to 8-ft. vein in propylitic quartz latite. Vein consists of banded quartz and included fragments of country rock. **Dev:** 1,100 ft. of drifts and crosscuts (1909). 700-ft. inclined shaft. **Assays:** 2,400 tons av. \$21.65 per ton. **Prod:** Over \$1,000,000. 1910-1923, 1934, 1938, 1947-1950. **Ref:** 7, pp. 159-160. 33, 1908, p. 1294. 43, 1900, p. 617. 68, p. 5. 88, pp. 19-20. 97, 1910-1923, 1934. 98, 1918-1926. 112, p. 211. 114, no. 5, 1909. 116, no. 11, 1907, p. 27; no. 12, 1907, p. 15; no. 5, 1908, p. 117; no. 6, 1908, p. 139. 129, pp. 185, 186. 141, pp. 22, 34. 153, pp. 54-56. 158.

Syracuse (138)

(see under silver)

Tom Thumb (17)

(see also Day Mines)

Loc: S $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 15, (37-32E), at head of Granite Cr. **Elev:** 3,200 ft. **Access:** 4 mi. N. of Republic by road. **Prop:** 6 patented claims. **Owner:** Day Mines, Inc., Wallace, Idaho (1951—). New Republic Mining Co. (1908-1910). Midget Gold Mining & Milling Co. (1909-1918). Aurum Mining Co. (1939-1950). **Ore:** Gold, silver. **Deposit:** Quartz spread widely through shale. Lodes not well defined. One 8-ft. vein in andesite. **Dev:** Said to be about 1,600 ft. of underground development, including a 375-ft. shaft. **Assays:** Ore said to range from \$10 to \$15 per ton, though some shipments yielded \$23 per ton. 8 or 9 oz. Ag per oz. Au. **Prod:** 1908-1910, 1915, 1916, 1934, 1938. **Ref:** 7, p. 166. 68, p. 5. 88, p. 19. 97, 1908-1910, 1915, 1916, 1935. 106, 6/4/31. 112, p. 191. 114, no. 5, 1909. 153, pp. 64-65. 158. 159, p. 130.

Trade Dollar (42)

Loc: E $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 27, (37-32E). **Access:** About 2 mi. by road NW. of Republic. **Prop:** 1 claim adjoining Silver Dollar on the S. **Owner:** Day Mines, Inc., Wallace, Idaho. (1951—). San Poil Consolidated Mining Co. (1910-1918). Curlew Mining Co. (1915). Mountain Lion Consolidated Co. (1934). Aurum Mining Co. (1950). **Ore:** Gold, silver. **Deposit:** Quartz vein from 20 in. to 13 ft. wide. **Dev:** 300-ft. shaft with short drifts on 2 levels. **Assays:** 1,000 tons of ore av. \$17 per ton with 10 to 12 oz. Ag per ton. **Prod:** About \$25,000 by 1934. **Ref:** 7, p. 163. 68, p. 5. 97, 1915, p. 569. 104, 1/30/33, p. 19. 158.

Truax (106)

Loc: SW $\frac{1}{4}$ sec. 22, (32-36E), 2 $\frac{1}{2}$ mi. from Covada post office. **Prop:** 1 claim. **Owner:** M. H. O'Connell (1912). **Ore:** Gold, silver. **Deposit:** 2 veins in granodiorite. **Dev:** 143-ft. adit, shaft, open cuts. **Ref:** 163, p. 77.

U. S. (142)

(see under lead)

Umatilla (162)

(see under copper)

V Fraction (49)

Loc: NE $\frac{1}{4}$ sec. 35, (37-32E), Republic dist. **Owner:** Insurgent Gold Mining Co. (1918-1924). **Ore:** Gold, silver. **Ref:** 98, 1922, p. 1649; 1925, p. 1819. 112, p. 184.

Valley (Golden Valley, Lame Foot) (10)

Loc: Sec. 6, (37-33E). **Access:** 5 mi. from Republic by road. **Prop:** 3 patented claims: Valley, Valley No. 1, Valley No. 2. **Owner:** I. G. and Everett Hougland, Republic, Wash. (1939—). **Ore:** Gold, silver, selenium. **Ore min:** Aurous selenide, pyrite, tetrahydrite. **Gangue:** Quartz, calcite. **Deposit:** Vein est. to av. 7 ft. wide and 1,200 ft. in length in andesite. **Dev:** 400-ft. incline and other workings on 3 levels total 2,500 ft. **Assays:** Typical assay shows 0.28 oz. Au, 1.0 oz. Ag. Analysis shows 0.0027% to 0.0061% Se. **Prod:** 1,994 tons prior to 1941, 5,800 tons 1942, 1,302 tons 1943, 1950. **Ref:** 28, pp. 77-81. 76. 97, 1940, p. 477; 1941, p. 473. 108, 7/39, p. 22; 2/42, pp. 13-16. 158.

Veda W.

(see under silver)

Victor (71)

(see under silver)

Virginia

(see Morning Star)

Walla Walla (163)

(see under copper)

Walla Walla (La Fleur) (2)

(see under copper)

Washington

(see Lone Star and Washington under copper)

White Horse

(see under silver)

White Swan

(see Snowstorm under lead)

White Tail (103)

(see under lead)

Willmot

(see under copper)

Wilmont Divide

Loc: S. part T. 30 N., R. 35 E., on divide between Ninemile and Wilmont Creeks. **Ore:** Gold. **Deposit:** Small veins of iron-stained quartz. **Dev:** Several prospect pits. **Assay:** Said to assay a few dollars in gold. **Ref:** 122, p. 140.

Winnipeg (Yaki) (11)

Loc: Sec. 31, (38-34E), about 1 mi. W. of Belcher mine, Belcher dist. **Ore:** Gold, copper, iron. **Ore min:** Pyrite, pyrrhotite, magnetite, some chalcopyrite. **Deposit:** Replacement body in limestone surrounded by granite. **Dev:** 600-ft. adit connecting with bottom of 200-ft. shaft. **Ref:** 116, no. 4, 1907, p. 3; no. 5, 1909, p. 72. 157.

Yaki

(see Winnipeg)

Zalla M (9)

(see under silver)

GARFIELD COUNTY

Alberta

Loc: Marshall Lk. dist. near Pomeroy. This appears to be erroneous. Perhaps this refers to Marshall Lk. near Newport, Pend Oreille County. **Ore:** Gold. **Prod:** Small amount in 1929. **Ref:** 97, 1929, p. 425.

GRANT COUNTY

Big Four

(see Electric City under molybdenum)

Black-Rosauer (1)

(see under silver)

Daniels

(see Electric City under molybdenum)

Electric City (2)

(see under molybdenum)

Hope No. 1 (3)

(see under silver)

JEFFERSON COUNTY

Rustler Creek (1)

Loc: On Rustler Cr., in T. 25 N., R. 7 W. Possibly in sec. 31. **Access:** 1½ mi. by trail, 2½ mi. by road to U. S. 101 at Quinault Lk. **Prop:** 5 claims. **Owner:** M. H. and P. A. Mulkey, C. Slough, and M. and V. Oberg. **Deposit:** Quartz vein in slate. **Dev:** Open cut. **Assays:** \$7.00 to \$22.40 Au. **Ref:** 158.

KING COUNTY

Aaron (13)

Loc: Secs. 29, 30, and 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Aces Up (61)

(see under silver)

Anderson (3)

(see under iron)

Annie (78)

(see under copper)

Apex (Bondholders Syndicate) (7)

Loc: SW¼ sec. 34, (26-10E), near headwaters of Money Cr., Miller R. dist. **Elev:** 3,150 ft. **Prop:** 16 unpatented claims: Apex, Big Dyke, Campbell, Floe, Floe No. 2, Jumbo, Jumbo No. 2, May, Milwaukee, LaPorte No. 2, and others. **Owner:** Apex Gold Mines, Inc. (1905-1922, 1934-1943). Bondholders Syndicate Mining Co. (1923-1926). National Gold Corp. (1928). **Ore:** Gold, silver, copper, lead. **Ore min:** Arsenopyrite, pyrite, chalcopyrite, galena, arsenolite. **Deposit:** Quartz vein 2 to 6 ft. wide fills a continuous fissure in granodiorite. High-grade ore occurs in narrow streaks in the vein. **Dev:** Adits on 5 levels total 2,500 lineal ft. **Assays:** High-grade ore \$20 to \$80 Au. Low-grade \$5 to \$7 Au. 237 tons av. \$41.07 per ton, the values chiefly in Au. Ore and conc. shipped in 1920 av. 21% to 26% As, 18 to 20 oz. Ag. 1½ to 2½ oz. Au, 4½% to 6% Pb. **Prod:** 300 tons valued at \$80,000 prior to 1901. Produced 1905, 1908, 1910, 1912, 1913, 1916-1920, 1926, 1928, 1936-1943. \$300,000 total. **Ref:** 24, 33, 1907, 63, p. 39. 88, p. 85. 97, 1905, 1908, 1910, 1912, 1913, 1916-1920, 1923, 1926, 1928, 1938-1941. 98, 1922, 1925, 1926. 99, 1/29/35. 104, 7/15/34, p. 26; 12/30/36, p. 28; 4/30/32, pp. 3-4; 9/30/33, p. 17; 12/15/34, p. 22. 114, no. 6, 1906, p. 79; 1907, pp. 61-62; no. 5, 1909. 116, no. 4, 1908, p. 91. 117, no. 8, 1922, p. 5. 129, pp. 301-305. 130, p. 59. 141, p. 22. 158. 159, p. 135.

Arizona and Washington

Loc: 1 mi. from Mastodon property, Buena Vista dist. **Ore:** Gold, copper. **Ref:** 63, p. 43.

Baring

(see Anderson under iron)

Bear Basin (57)

(see under silver)

Bear Creek

(see Robinson)

Beatrice (14)

Loc: Secs. 31 and 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Beaverdale (43)

Loc: Secs. 8 and 9, (25-10E), ½ mi. up Illinois Cr. from N. Fk. of Snoqualmie R. Vein crops out in canyon which enters Illinois Cr. from the W. **Elev:** 3,000 to 3,720 ft. **Access:** Trail. **Prop:** 6 patented claims. **Owner:** A. S. Ryland, Seattle, Wash. (1947). **Ore:** Gold. **Ore min:** Pyrite, arsenopyrite. **Gangue:** Quartz, gouge. **Deposit:** Altered and brecciated granodiorite along narrow zone of faulting in which are seams of quartz and sulfides up to 20 in. thick. **Dev:** 3 adits, one at 3,370 ft. is caved at portal, another at 3,610 ft. is 55 ft. long, and the other at 3,720 ft. follows vein for 140 ft. **Assays:** Said to run as high as \$161 Au. **Ref:** 11-A, pp. 210-213. 158.

Belle of Tennessee (44)

Loc: Sec. 8, (25-10E), Buena Vista dist. **Ore:** Gold, silver. **Ref:** 58, p. 6. 63, p. 43.

Bergeson (Normandie) (15)

Loc: Sec. 30, (26-11E), Miller R. dist. **Elev:** 700 ft. above Miller R. **Owner:** Arthur de Soucy, Norman, Wash. (1941). Bergeson Mining & Smelting Co. (1915-1918). **Ore:** Gold, silver.

Ore min: Arsenopyrite. **Gangue:** Quartz. **Deposit:** Large body of ore. **Dev:** 1,200-ft. adit. **Ref:** 58, p. 6. 158.

Big Chief

Loc: Snoqualmie area. **Owner:** A. O. Larsen, Seattle, Wash. (1938). **Ore:** Gold, copper. **Ref:** 104, 7/30/38.

Black Bear (16)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** James Campbell. **Ore:** Gold. **Ref:** 158.

Black Jack

Loc: T. 24 N., R. 8 E. **Ore:** Gold, silver, copper. **Ref:** 58, p. 7. 63, p. 213.

Bobtail (62)

(see under copper)

Bonanza Queen

Loc: Left bank of Money Cr. **Ore:** Gold, copper. **Ref:** 63, p. 39.

Bondholders Syndicate

(see Apex)

Bridal Veil

Loc: Cedar R. dist. **Ore:** Gold, copper, silver. **Ref:** 63, p. 48.

Brooklyn (47)

(see under copper)

Carmack (85)

Loc: Secs. 7 and 8, (22-11E), on S. Fk. of Snoqualmie R. near Snoqualmie Pass. **Prop:** 5 claims. **Owner:** Carmack Gold & Copper Mining Co. (1902-1918). **Ore:** Gold, silver, lead, copper. **Deposit:** 3 veins 12, 2½, and 1 ft. wide. **Dev:** 375 ft. of tunnel and shafts. **Assays:** 1 to 1½ oz. Au. **Prod:** 20 tons shipped prior to 1901. **Ref:** 33, 1907, p. 447. 88, p. 86. 98, p. 66. 158.

Cascade Gold

Loc: King County. **Owner:** Cascade Gold Mining & Milling Co. (1890). **Ore:** Gold. **Ref:** 105, no. 6, 1890, p. 91.

Charles (17)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Christina

(see under copper)

Clara (18)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Cleopatra (58)

(see under silver)

Cleveland (75)

(see under copper)

Clipper (81)

(see under copper)

Commonwealth (83)

(see under copper)

Coney Basin (48)

Loc: Sec. 13, (25-10E) and sec. 19, (25-11E). **Elev:** 2,100 to 5,800 ft. **Access:** 8 mi. up Miller R. from its mouth by road and 2 mi. by trail. **Prop:** 14 claims: Coney Nos. 1 to 3, Jeanette Nos. 1 to 3, Black Bear, Black Bear Nos. 1 and 2, Jake Nos. 1 and 2, Leona Nos. 1 and 2, Gold Chest, Gold Chest No. 1. **Owner:** Coney Basin Gold Mines, Inc. leasing to John Whitham, Seattle, Wash. (1950-1952). **Ore:** Gold, silver, copper, zinc, lead. **Ore min:** Chalcopryrite, galena, sphalerite, pyrite, tetrahedrite.

Gangue: Quartz. **Deposit:** Small persistent quartz veinlets along joint planes in granodiorite. Also 1 silicified mineralized zone 4 ft. wide. **Dev:** 1,650-ft. adit, another shorter adit, and some open cuts total about 3,000 ft. **Assays:** Av. of 22 samples gave 0.38 oz. Au, 11.97 oz. Ag. 3 other assays showed 0.24% to 1.30% Cu, 2.6% to 6.9% Pb, 2.9% to 9.1% Zn. 8 tons shipped to smelter in 1941 had 0.86 oz. Au, 19.71 oz. Ag, 0.82% Cu, 6.0% Pb, 6.0% Zn, 1.52% As, 0.26% Sb. **Prod:** 40 tons in 1895, produced in 1934, 1937-1939, 1941. **Ref:** 46, pp. 159-160. 63, p. 36. 97, 1935, 1936, 1939, 1940. 104, 9/31/34, p. 22; 6/15/35, p. 28. 114, no. 5, 1909. 132, p. 87. 147, pp. 154-185. 158. 159, p. 135.

Cooper (19)

Loc: Secs. 31 and 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Copper Bell

Loc: 2½ mi. from Sallal Prairie. **Ore:** Gold, silver, copper. **Ref:** 63, p. 42.

Copper Chief (82)

(see under copper)

Copper Duke (8)

Loc: Sec. 25, (26-10E), on Money Cr. **Ore:** Gold, silver, copper. **Ref:** 158.

Copper Plate

(see Seattle-Cascade under silver)

Damon and Pythias (6)

Loc: Sec. 33, (26-10E), at head of Money Cr., adjoining Apex property. **Elev:** 3,000 ft. **Access:** 1 mi. from end of Apex road, by which it is 6 mi. to railroad at Miller R. **Prop:** 18 unpatented claims. **Owner:** W. J. Priestley, Skykomish, Wash. (1939-1944). National Gold Corp. (1928-1932). **Ore:** Gold, silver, lead. **Ore min:** Arsenopyrite, pyrite, chalcopryrite, galena. **Gangue:** Quartz. **Deposit:** 2 veins, one of which is said to av. 3 ft. in width over distance of more than 900 ft. in granodiorite. **Dev:** 3,000 ft. of crosscut and drifts expose the veins for about 1,500 ft. of length and from 800 to 1,400 ft. of depth. **Improv.** Cookhouse and bunkhouse, 2,300 ft. of track. **Assays:** 23 tons shipped said to run 0.87 oz. Au, 9 oz. Ag, 4% Pb. Mine-run ore said to carry 7.86% As, 0.245 oz. Au, 2.2 oz. Ag. **Prod:** 23-ton shipment reported prior to 1940. **Ref:** 63, p. 39. 97, 1928, p. 700. 104, 4/30/32, pp. 3-4. 106, 9/17/28, pp. 29-30; 5/1/30, p. 20. 157. 158.

Dawson (52)

(see under lead)

De La Mar (20)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Della Jane (87)

Loc: Sec. 5, (22-9E), on Profile Mtn., Snoqualmie dist. **Ore:** Gold. **Ref:** 58, p. 18. 63, p. 42.

Dudley (21)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Dutch Miller (80)

(see under copper)

Eureka (94)

(see under copper)

Eureka

(see under copper)

Extra (22)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ore min:** Arsenopyrite. **Deposit:** Porphyritic dike heavily mineralized with arsenopyrite. **Ref:** 158.

Favorite Gulch (9)

Loc: Sec. 25, (26-10E), on Money Cr. **Ore:** Gold, silver. **Ref:** 158.

Fletcher Webster

Loc: 1 mi. above the mouth of the middle prong of N. Fk. of Snoqualmie R., Buena Vista dist. **Ore:** Gold, silver. **Ref:** 63, p. 43

Florence (23)

Loc: Sec. 31, (26-11E), Money Cr. dist **Prop:** 1 patented claim. **Owner:** Lake Valley Stone & Shingle Co. **Ore:** Gold. **Ref:** 158.

Foss River (63)

(see under copper)

Goat Mountain (71)

(see under lead)

Gold Mountain (24)

(see under silver)

Golden Tunnel (5)

(see under copper)

Grand Central (64)

(see under antimony)

Great Republic (38)

(see under antimony)

Guye (84)

(see under iron)

Happy Thought

(see Great Republic under antimony)

Hawkeye

Loc: Miller R. dist. **Ore:** Gold, silver, copper, lead. **Ref:** 63, p. 38.

Highlander (69)

Loc: SE $\frac{1}{4}$ sec. 25, (25-10E), Miller R. dist. **Ore:** Gold. **Ref:** 63, pp. 37-38.

Jack Pot (70)

(see under zinc)

Jay (25)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Joamco (40)

(see under copper)

John Stevens

(see Una under copper)

Judge (26)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Kimball (27)

Loc: Secs. 31 and 32, (26-11E) and secs. 5 and 6, (25-11E), on Kimball Cr. 2 mi. from Money Cr. **Access:** Trail. **Prop:** 29 patented claims. **Owner:** A. F. Brennan, Seattle, Wash. (1939). Kimball Creek Mining Co. (1903). **Ore:** Gold, silver, antimony. **Deposit:** Sparsely mineralized porphyry dike 200 ft. wide cuts granodiorite. **Dev:** 750-ft. adit. **Ref:** 58, p. 37. 158.

King and Kinney (53)

(see under copper)

Kinney

(see King and Kinney under copper)

Klondike (86)

Loc: Secs. 7 and 8, (22-11E). **Ore:** Gold. **Ref:** 158.

Last Chance (88)

Loc: Sec. 11, (22-9E), Snoqualmie dist. **Ore:** Gold, silver. **Ref:** 58, p. 38. 63, p. 42.

Last Chance (90)

Loc: SE $\frac{1}{4}$ sec. 15, (22-10E), Cedar R. dist. **Ore:** Gold, copper. **Ref:** 63, p. 48.

Last Chance (Sockless Jerry) (49)

Loc: Sec. 1, (25-10E), 1 mi. S. of Money Cr. **Access:** Trail. **Owner:** John Maloney, Skykomish, Wash. (1941). **Ore:** Gold, silver, lead, zinc, antimony. **Ore min:** Arsenopyrite, pyrite. **Dev:** 100-ft. drift. **Ref:** 58, p. 38. 63, p. 39. 158.

Laura Lindsay

Loc: Snoqualmie area. **Ore:** Gold, silver. **Ref:** 58, p. 39. 63, p. 42.

Legal Tender (76)

Loc: SE $\frac{1}{4}$ sec. 25, (24-8E), Snoqualmie dist. **Ore:** Gold, copper. **Ref:** 63, p. 42.

Lennox (51)

Loc: Secs. 7 and 18, (25-10E) and sec. 13, (25-9E), Buena Vista dist. **Elev:** 1,830 to 2,870 ft. **Access:** 23 mi. by road from railroad at North Bend. **Prop:** 45 claims held by possessory title. **Owner:** Priestley Mining & Milling Co. (1940—), leasing from Lennox Mining & Development Co., Seattle, Wash. **Ore:** Gold, silver, zinc, lead, copper, arsenic, antimony. **Ore min:** Sphalerite, chalcopyrite, pyrite, arsenopyrite, galena. **Gangue:** Quartz, calcite. **Deposit:** Shear zones in granodiorite are persistent to depths and lengths of several hundred feet, but mineralization is irregular. **Dev:** 5 adits and 2 open cuts. Lower crosscut 670 ft. long. 3 diamond drill holes totaling 1,240 ft., 120-ft. drift, 20-ft. drift. **Improv:** 4 bunkhouses, mess hall, sawmill, 2 machine shops, a pelton water wheel, and an 80-KW. generator (1950). **Assays:** A 1-ton lot of picked ore (1938): 1.14 oz. Au, 10.42 oz. Ag, 1.5% Cu, 1.2% Pb, 8.3% Zn, 6.18% As, 0.67% Sb. 8 samples assayed in 1947 ranged from \$7.51 to \$63.91 Au, Ag, Pb, Zn, Cu. **Prod:** 1-ton test shipment in 1947. **Ref:** 11-A, pp. 213-222. 133, p. 38. 157. 158.

Le Roi (66)

Loc: SW $\frac{1}{4}$ sec. 30, (25-11E), Miller R. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 38.

Leta (77)

Loc: SE $\frac{1}{4}$ sec. 26, (24-8E), Snoqualmie dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 42.

Lillian Leone (28)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Little Una

Loc: Adjoining Lone Star, Miller R. dist. **Ore:** Gold, copper. **Ref:** 63, p. 38.

Lone Star (50)

Loc: Sec. 1, (25-10E), on Money Cr. Claims cross Falls Cr. **Ore:** Gold, silver, lead. **Ref:** 63, p. 38. 158.

Lost Lode (72)

(see under molybdenum)

Lucky Strike (45)

Loc: Secs. 9 and 10, (25-10E), Buena Vista dist. **Elev:** 3,000 to 4,000 ft. **Access:** 2-mi. trail from N. Fk. road about 3½ mi. above mouth of Lennox R. **Prop:** 3 unpatented claims. **Owner:** George and Gary Rutherford, Seattle, Wash. (1947-1951). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, arsenopyrite, chalcopyrite. **Gangue:** Quartz. **Deposit:** Said to be an 8-ft. ledge traceable for 500 ft. 2 parallel faults about 6 ft. apart in granodiorite containing quartz-sulfide seams as much as 12 in. thick. **Dev:** 30-ft. shaft. **Assays:** Reportedly assays \$20 to \$30 Au, Ag, Cu. **Ref:** 11-A, pp. 207-210. 158.

Mastodon

(see under silver)

May Earhart

(see Robinson)

Metropolitan (67)

Loc: On W. side of Miller R. 9 mi. from its mouth. Adjoins Cleopatra property in sec. 30, (25-11E). **Ore:** Gold, silver. **Deposit:** 16-ft. mineralized zone. **Ref:** 88, p. 84.

Mitchell (29)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Mona

(see Mono under copper)

Monarch (10)

Loc: Sec. 25, (26-10E), on Money Cr. **Ore:** Gold, silver. **Ref:** 158.

Mono (39)

(see under copper)

Monte Carlo (46)

Loc: NW¼ sec. 4, (25-10E), near head of N. Fk. of Snoqualmie R. **Elev:** 3,440 ft. **Access:** 4 mi. by trail from road at Lennox camp. **Prop:** 13 unpatented claims. **Owner:** E. P. Courtney and Morton Van Nuys, Seattle, Wash. (1947). **Ore:** Gold, silver. **Ore min:** Pyrite, malachite, arsenopyrite, molybdenite. **Gangue:** Quartz, tourmaline. **Deposit:** Quartz vein along a shear zone in granite varies from 1 to 20 in. wide. **Dev:** 340-ft. drift and a crosscut. 2 other adits reported. **Improv:** Cabin (1947). **Assays:** Said to assay \$25 to \$55 Au, Ag. **Ref:** 58, p. 45. 158.

Mt. Logan

(see Guye under iron)

Mount Phelps (41)

(see under zinc)

Mountain Gem

Loc: Cleopatra Basin, Miller R. dist. **Ore:** Gold, silver. **Ref:** 63, p. 38.

Napoleon (30)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Neptune (11)

Loc: Secs. 25 and 26, (26-10E), on Money Cr. **Ore:** Gold, silver, lead. **Ref:** 158.

Normandie

(see Bergeson)

Norwood (31)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Oliver (1)

Loc: Secs. 5 and 6, (26-10E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Online (96)

Loc: NE¼ sec. 35, (22-10E), Cedar R. dist. **Ore:** Gold, copper. **Ref:** 63, p. 47.

Ophir (91)

Loc: NE¼ sec. 21, (22-10E), Cedar R. dist. **Ore:** Gold, silver. **Ref:** 63, p. 48.

Oriole (98)

Loc: NW¼ sec. 13, (21-10E), Cedar R. dist. **Ore:** Gold. **Ref:** 63, p. 48.

Owen (32)

Loc: Secs. 31 and 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Paradise (33)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Paymaster

Loc: Parallel to San Francisco property, Money Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 39.

Pedro

(see under copper)

Pythias

(see Damon and Pythias)

Quartz Creek (73)

(see under copper)

Rainy (Western States Copper) (74)

(see also Quartz Creek under copper)

Loc: Sec. 16, (24-10E), Taylor R. dist. **Access:** Road. **Prop:** This may be the same property which is described under the name "Quartz Creek" under copper. **Owner:** M. F. Gilbreath, Seattle, Wash. (1951—), leasing to Western States Copper Corp., Seattle, Wash. (1952—). **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite, brannerite, pyrite, pyrrhotite, molybdenite, arsenopyrite. **Gangue:** Quartz, tourmaline. **Deposit:** Quartz diorite breccia with ore minerals irregularly exposed throughout the shaft. **Dev:** Shaft 106 ft. deep, 3 short adits (1953). **Improv:** 50-ton flotation mill (1953). **Assays:** Slight radioactivity in one place. **Prod:** 1 load of conc. shipped to Tacoma smelter in 1952. 1953-1955. **Ref:** 108, 2/53, p. 103. 133, p. 41. 157.

Ray (34)

Loc: Sec. 32, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Robinson (May Earhart, Bear Creek) (95)

Loc: Sec. 4, (21-10E), Cedar R. dist. **Access:** Trail. **Prop:** 2 patented claims: Robinson, Robinson Extension. **Owner:** Robinson Mines Co. (1935). **Ore:** Gold, silver, copper. **Dev:** 60-ft. shaft, 600-ft. adit. **Ref:** 58, p. 59. 63, p. 47. 158.

Romeo

Loc: Summit of Cleopatra Basin and extending down both the Snoqualmie and Miller R. sides of ridge. **Ore:** Gold, silver, copper. **Ref:** 63, p. 37.

Rushing (42)

Loc: Secs. 8 and 9, (25-10E), on Illinois Cr. **Access:** Trail and 24 mi. by road to railroad at North Bend. **Prop:** 6 patented claims: Olympia, Ainsworth, Blakely, Lenark, Bell of Washington, Cameo. **Owner:** James Campbell, Seattle, Wash. (1935).

Ore: Gold. **Deposit:** Said to be a vein 8 ft. wide. **Dev:** 3 adits 300, 400, and 500 ft. long. **Assays:** As high as \$161 Au reported. **Ref:** 158.

Salmon Creek (4)

Loc: S½ sec. 10, (26-10E), about 1 mi. S. of Baring. **Owner:** W. R. Anderson, Baring, Wash. **Ore:** Gold, silver, lead, zinc. **Ref:** 158.

San Francisco (12)

Loc: Secs. 25 and 36, (26-10E), Miller R. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 39. 158.

San Jose (93)

Loc: SE¼ sec. 27, (22-10E), Cedar R. dist. **Ore:** Gold, copper. **Assays:** 10 tons shipped in 1894 av. \$12 per ton. **Ref:** 63, pp. 47-48.

Sara (35)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Sara Williams (36)

Loc: Sec. 31, (26-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Seattle (89)

Loc: SW¼ sec. 15, (22-10E), Cedar R. dist. **Ore:** Gold, silver. **Ref:** 63, p. 48.

Seattle-Cascade (54)

(see under silver)

Silver Dollar and Copper Plate

(see Seattle-Cascade under silver)

Silver Star (59)

(see under silver)

Sockless Jerry

(see Last Chance)

Solomon (37)

Loc: Sec. 31, (23-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold, silver, lead. **Ref:** 63, p. 39. 158.

Square Deal

Loc: Snoqualmie area. **Owner:** A. O. Larsen, Seattle, Wash. (1938). **Ore:** Gold, copper. **Ref:** 58, p. 64. 104, 7/30/38.

Stemwinder (92)

Loc: SE¼ sec. 21, (22-10E), Cedar R. dist. **Ore:** gold, silver. **Ref:** 63, p. 48.

Stevens

(see Una under copper)

Summit

(see Guye under iron)

Sunday

(see under silver)

Surprise

(see under copper)

Teddy R. (68)

Loc: Sec. 32, (25-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Triple S

(see Seattle-Cascade under silver)

Triune

Loc: Miller R. dist. **Ore:** Gold, silver, lead. **Ref:** 63, p. 38.

Twin Lakes

Loc: 8 mi. from mouth of Miller R. **Ore:** Gold, copper. **Ref:** 63, p. 38.

Una (55)

(see under copper)

Valley Queen (60)

Loc: Sec. 33, (25-11E), Summit dist. **Prop:** 1 patented placer claim. **Owner:** Monte Cristo Mining Co. **Ore:** Gold. **Ref:** 158.

Vandalia

Loc: E. Fk. of Money Cr. **Ore:** Gold, silver. **Ref:** 63, p. 40.

Ventura (79)

Loc: Secs. 31 and 32, (24-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Victoria

Loc: Cedar R. dist. **Ore:** Gold, copper. **Ref:** 63, p. 48.

War Eagle (56)

Loc: Sec. 19, (25-11E), Miller R. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 38.

Washington

(see Arizona and Washington)

Western States Copper

(see Rainy)

White River (99)

Loc: Approx. sec. 6, (19-8E), on S. side of Quartz Mtn. **Ore:** Gold. **Deposit:** Silicified and altered volcanic rocks associated with the alunite deposits. **Dev:** 2 adits, one 300 ft. long. **Improv:** About 1890 a stamp mill was erected to mill the ore but was soon abandoned. **Assays:** Said to range from 54¢ to \$1.40 Au. **Ref:** 158.

Woodline (97)

Loc: Center sec. 35, (22-10E), Cedar R. dist. **Ore:** Gold, copper. **Ref:** 63, p. 47.

J. Taylor Wright (65)

Loc: Sec. 31, (25-11E), Money Cr. dist. **Prop:** 1 patented claim. **Owner:** King County. **Ore:** Gold. **Ref:** 158.

Yellow Jacket (2)

Loc: Sec. 15, (26-10E), on W. side of E. Fk. of Salmon (Index) Cr. **Access:** 3½ mi. by road and trail from Baring. **Prop:** 10 claims. **Ore:** Gold, silver. **Deposit:** Vein contains some free-milling and some sulfide ore. **Dev:** 540 ft. of underground workings. **Assays:** Av. assay value is about \$16, mostly in gold but some silver. **Ref:** 88, p. 85.

KITTITAS COUNTY

American Eagle (1)

Loc: On Eagle Mtn. W. of the Aurora property, T. 24 N., R. 14 E., Cle Elum dist. **Prop:** 1 claim. **Owner:** E. P. Gassman and Harry Hodges (1892). **Ore:** Gold, silver. **Ore min:** Arsenopyrite. **Deposit:** 6-ft. vein with a 1½-ft. paystreak. **Assays:** \$30 Au, \$15.30 Ag. **Ref:** 13, p. 133. 63, p. 62.

Aurora (Lynch, Paramount) (3)

Loc: Secs. 26 and 27, (24-14E), on E. side of Cle Elum R. **Access:** 24 mi. by road and trail from railroad at Roslyn. **Prop:** 16 patented claims. **Owner:** John Lynch, Yakima, Wash., leasing to Paramount Mines, Inc. (1940). **Ore:** Gold, silver, copper. **Ore min:** Free gold, arsenopyrite. **Deposit:** 4-ft. quartz vein. **Dev:** 2,000-ft. haulage adit and 2 shafts, each more than 200 ft.

deep. **Assays:** Ore said to assay 1 oz. Au, 14 oz. Ag, 6% Cu, 28% As, probably on a picked sample. **Prod:** Has produced. **Ref:** 13, p. 133. 63, pp. 61-62. 111, p. 7. 158.

B & B (34)

Loc: Sec. 34, (21-17E), Swauk dist. **Owner:** B & B Gold Mines, Inc., Seattle, Wash. (1947). **Ore:** Gold. **Prod:** Unknown amount prior to 1947. **Ref:** 51, p. 4.

Bear Creek Gold

(see under silver)

Beaver (10)

Loc: Secs. 23 and 26, (23-14E), Cle Elum dist. **Ore:** Gold, silver, copper. **Ref:** 58, p. 5. 63, p. 64.

Bertha

Loc: On gulch entering Boulder Cr. **Ore:** Gold. **Ref:** 63, p. 70.

Big Bear and Little Bear

Loc: Swauk dist. **Ore:** Gold. **Ref:** 63, p. 70.

Big Z

(see Zerwekh)

Bloomquist Bros. (32)

Loc: Sec. 22, (21-17E), at mouth of Blue Cr., Swauk dist. **Ore:** Gold. **Ref:** 158.

Blue Bonnet (16)

(see under copper)

Bonanza

(see Dolphin under copper)

Boss (2)

Loc: On Eagle Mtn. near American Eagle property, Cle Elum dist. **Owner:** Col. C. Bell (1892). **Ore:** Gold, silver. **Ore min:** Arsenopyrite. **Deposit:** 6-ft. vein with 18-in. paystreak. An extension of the American Eagle. **Assays:** \$25 Au, 22 oz. Ag. **Ref:** 13, p. 134.

Boyles (21)

(see under copper)

Broncho

Loc: On Mammoth Mtn., Cle Elum dist. **Owner:** James Greeve and Philip Stanton (1892). **Ore:** Gold. **Deposit:** 4-ft. vein of free-milling ore carrying sulfides. **Dev:** 80 ft. of workings. **Assays:** \$40 Au. **Ref:** 13, p. 134.

Brown Bear

Loc: On ridge between Cougar and Lyons Gulches, Swauk dist. **Owner:** F. W. Fowler, Seattle, Wash. **Ore:** Gold. **Ref:** 63, p. 69. 158.

Brown Bear

Loc: On Goat Mtn., W. of Cle Elum R. **Ore:** Gold, silver, lead. **Ref:** 63, p. 65.

Camp Creek (17)

(see under silver)

Cascade

Loc: On Mt. Hawkins, Cle Elum dist. **Ore:** Gold, silver, lead. **Ref:** 63, p. 65.

Cascade Chief (Morrison, First of August, Gladstone) (40)

Loc: SE¼SW¼ sec. 26, (21-17E), 4 mi. up Cougar Gulch from Liberty post office. **Elev:** 3,400 ft. **Access:** Road. **Prop:** 5 lode claims: First of July, First of August, Fourth of July, The Gladstone, Uncle Sam. Also one placer claim: Cougar. **Owner:** Cascade Chief, Inc. (1934-1936). State of Washington Mining Co. (1915). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** 3 shear

zones in sandstone av. 4 ft. in width and carry stringers of mineralized quartz. **Dev:** Crosscut and some old workings total several hundred ft. of workings. **Assays:** Channel sample across the vein assayed \$7.24 Au. One assay showed \$129.35 Au. **Prod:** 1911, 1938, 1939. **Ref:** 97, 1911, p. 786. 104, 4/30/34, p. 22; 11/30/36, p. 30. 158.

Cascade Mining (26)

(see under copper)

Chesapeake

Loc: At head of Boulder Cr., Cle Elum dist. **Ore:** Gold. **Ref:** 63, p. 65.

Clarence Jordin (37)

Loc: Sec. 2, (20-17E), on Snowshoe Ridge, Swauk dist. **Prop:** 3 unpatented claims, including Ace of Diamonds. **Owner:** W. L. Palmer, Electric City, Wash. (1941). **Ore:** Gold, silver. **Ore min:** Free gold. **Gangue:** Quartz, calcite. **Prod:** \$35,000 reported. Produced from Ace of Diamonds claim in 1952. **Ref:** 58, p. 35. 106, 4/21/32, p. 13. 108, 1/53, p. 90. 158.

Cle Elum (11)

(see under silver)

Cougar (41)

Loc: Sec. 36, (21-17E), Swauk dist. **Elev:** 3,500 ft. **Owner:** Washington Gold Co., Inc., Tieton, Wash. (1938). State of Washington Mining Co. (1915). Cougar Gulch Mining Co. (1934). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Quartz vein in a decomposed basaltic dike. **Prod:** Test shipment in 1938. **Ref:** 143, p. 80. 144, p. 9. 158.

Denney (18)

(see under chromium)

Dolphin

(see under copper)

Don Tom

Loc: At head of Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 63.

Durrwachter

(see Mineral Creek under copper)

Edna R. (12)

Loc: SE¼ sec. 24, (23-14E). **Ore:** Gold. **Ore min:** Pyrite, arsenopyrite. **Deposit:** Mineralized quartz vein in granodiorite near its contact with serpentine. Vein irregular. **Ref:** 139, p. 14.

Elkhorn

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Epha

Loc: On Mt. Hawkins, Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 64.

Esther and Louisa (27)

(see under silver)

Ewell (Flag Mountain) (36)

Loc: N½ sec. 1, (20-17E), Liberty area. **Owner:** Ellery Lamb et al., Seattle, Wash. (1953—). William L. Ewell, Cle Elum, Wash. (1952). **Ore:** Gold. **Improv:** 10-ton mill (1953). **Ref:** 108, 1/53, p. 90. 133, p. 32.

Family

Loc: At head of Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 63.

Fanny Edell

Loc: Swauk dist. **Owner:** Dover Mining Co. (1915), Hellan Mining Syndicate (1905-1908). **Prod:** 1905. **Ref:** 97, 1905, p. 336; 1907, p. 474; 1908, p. 579. **116**, no. 6, 1907, p. 30.

First of August

(see Cascade Chief)

Flag Mountain

(see Ewell)

Flodine (42)

Loc: Sec. 25, (21-17E) and sec. 30, (21-18E). **Prop:** 12 unpatented lode claims: Ohio, Cougar, Red Rust Nos. 1 to 3, Gold King, Comet, Venus, Meteor, Jupiter, Mars, North Star; and 2 placer claims: Bull Moose, Morning Star. **Owner:** True Fissure Gold Mines (1928). **Ore:** Gold. **Ore min:** Free gold, pyrite. **Gangue:** Quartz. **Deposit:** Fissured zone. **Dev:** 260-ft. shaft, 288-ft. adit, 140-ft. crosscut with 159-ft. drift. **Assays:** \$6.00 to \$17.20 Au. **Prod:** Several thousand dollars from oxidized zone prior to 1928. **Ref:** 158.

Gambler's Dream

Loc: Cle Elum dist. **Ore:** Gold. **Ref:** 63, p. 64.

Gladstone

(see Cascade Chief)

Gold Bug

Loc: Near head of Fortune Cr., Cle Elum R. area. **Ore:** Gold. **Ref:** 63, p. 63.

Gold Hill

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1911. **Ref:** 158.

Gold Leaf

Loc: On E. Fk. of Williams Cr., Swauk dist. **Owner:** G. W. Seaton (1892). **Ore:** Gold, silver. **Ore min:** Free gold, some in perfect octahedral crystals. **Gangue:** Quartz. **Deposit:** Vein approx. 6 ft. thick occurs in sandstone and shale. Another occurs in a large diabase dike. **Assays:** 6 tons av. \$40 Au. Gold is high in silver. **Prod:** 6 tons of ore. **Ref:** 13, p. 136. **143**, p. 80. **144**, p. 9.

Gold Mountain

Loc: Near mouth of Fortune Cr., Cle Elum R. area. **Ore:** Gold. **Ref:** 63, p. 63.

Gold Reef

Loc: Swauk area, near Blewett Pass highway. **Owner:** A. E. Locke, Seattle, Wash. (1941). **Ore:** Gold, silver. **Deposit:** Quartz vein in Swauk sedimentary rocks. **Ref:** 58, p. 26. **108**, 1/40, p. 29.

Golden

Loc: Liberty. **Ore:** Gold. **Ref:** 141, p. 22.

Golden Eagle

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1933, 1937. **Ref:** 97, 1934, p. 296; 1937.

Golden Fleece (Mercer, T-Bone) (31)

Loc: NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, (21-17E), Swauk dist. **Prop:** 3 claims and a 5-acre millsite. **Owner:** Oren F. Fry, Mukilteo, Wash. (1941). Liberty Mines, Inc. (1934-1935). **Ore:** Gold, silver. **Ore min:** Pyrite, free gold. **Gangue:** Quartz, calcite. **Deposit:** Mineralized shear zone about 4 in. wide cuts carbonaceous shales. **Dev:** 100-ft. adit and open cut. **Assays:** Tr. to 0.34 oz. Au. **Prod:** \$30,000 reported. **Ref:** 58, pp. 25, 43. **104**, 10/15/35, p. 24; 11/15/35, p. 24. **158**.

Golden Stair

(see under silver)

Grandview (23)

(see under copper)

Granite King (25)

(see under silver)

Great Western

Loc: Swauk area. **Ore:** Gold, silver. **Ref:** 58, p. 28.

Great Wonder

Loc: Swauk area. **Ore:** Gold. **Prod:** Amount not known. **Ref:** 58, p. 28.

Grizzly Bear

Loc: Cle Elum dist. **Owner:** Dover Mining Co. (1914). **Ore:** Gold, silver, copper, lead, antimony. **Ref:** 105, no. 14, 1914, p. 592.

Hans Wagner

(see under silver)

Huckleberry (9)

(see under copper)

Hurley Creek (Nairn) (30)

Loc: Center N $\frac{1}{2}$ sec. 18, (21-18E). **Owner:** Mr. Nairn. Mukilteo, Wash. (1938). **Ore:** Gold. **Ore min:** Pyrite. **Gangue:** Quartz, calcite. **Deposit:** 2 shear zones in carbonaceous shale and sandstone av. about 4 ft. in width and contain mineralized quartz stringers. **Dev:** 170-ft. adit, 2 shafts about 40 ft. deep. and some open cuts. **Assays:** \$4 Au. **Ref:** 158.

Ida Elmore (19)

Loc: S $\frac{1}{2}$ sec. 24 and NE $\frac{1}{4}$ sec. 25, (23-14E), Cle Elum dist. **Prop:** 2 patented claims: Ida Elmore, Apex. **Owner:** Meleo S. Pechet, Seattle, Wash. (1949-1952). **Ore:** Gold, silver. **Deposit:** Quartz vein about 12 to 18 in. wide in serpentine. **Dev:** 235 ft of crosscut and about 100 ft. of drift, also some open cuts. **Assays:** Av. $\frac{3}{4}$ to 1 oz. Au. **Ref:** 13, p. 134. **63**, p. 64. **146**, p. 14. **158**.

Iias (22)

(see under copper)

Just In Time

Loc: On Fortune Cr., Cle Elum dist. **Ore:** Gold, silver. **Ref:** 63, p. 63.

Keystone (24)

(see under mercury)

King Solomon (7)

(see under copper)

Last Chance

Loc: Cle Elum dist. **Owner:** Cle Elum River Mining Co., Inc. Seattle, Wash. (1952—). Gallaher Mining & Milling Co (1907-1908). **Ore:** Gold, silver, copper. **Ref:** 33, 1907, p. 617. 1908, pp. 706-707. **97**, 1905, p. 336.

Legal Tender

(see under copper)

Liberty (43)

Loc: NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, (21-17E) and sec. 19, (21-18E), in Lyons Gulch. **Access:** Road. **Prop:** 12 claims: Contact No. 1 Orogrande, Orogrande No. 1, Big Boy Nos. 1 and 2, Big Chie Nos. 1 and 2, Golden Eagle, Sunset Nos. 2 and 3; and 2 fractions. **Owner:** A. C. Pellard, Mount Vernon, Wash. (1941). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Shear zone about 4 ft. wide in carbonaceous shale contains discontinuous mineralized stringer of quartz and calcite. **Dev:** 1,200-ft adit with a 145-ft. drift and another 200-ft. adit. **Improv:** 2 log cabins (1952). **Assays:** Test run on 33 tons of ore returned 10 oz. Au, or 0.3 oz. per ton. **Prod:** (1935-1936). **Ref:** 58, p. 39. **97**, 1937, p. 551. **158**.

Liberty Lode

(see Mineral Creek under copper)

Little Bear

(see Big Bear and Little Bear)

Little York

Loc: Swauk dist. **Ore:** Gold, silver. **Ore min:** Free gold. **Deposit:** Quartz veins in sheared and silicified sandstone. **Assays:** Silver content of the gold reportedly amounts to 20%. **Ref:** 143, p. 80.

Lost

(see Grandview under copper)

Lynch

(see Aurora)

Magpie Canyon (47)

Loc: NE¼ sec. 34, (19-17E). **Access:** On highway 8½ mi. NW. of Ellensburg. **Ore:** Gold. **Ref:** 158.

Majestic

Loc: Cle Elum dist. **Owner:** Dover Mining Co. (1914). **Ore:** Gold, silver, copper, lead, antimony. **Ref:** 105, no. 14, 1914, p. 593.

Mammoth

Loc: On Mammoth Mtn., E. of Eagle Mtn., Cle Elum dist. **Owner:** James Greeve and Philip Stanton (1892). **Ore:** Gold, silver, copper. **Deposit:** 6-ft. vein. **Dev:** 75-ft. crosscut. **Ref:** 13, p. 134.

Mary

Loc: On Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver, copper. **Ref:** 63, p. 63.

Maud O. (20)

Loc: NW¼ sec. 25, (23-14E), Cle Elum dist. **Ore:** Gold. **Ore min:** Pyrite, arsenopyrite. **Deposit:** Mineralized quartz vein in a zone of crushed greenstone into which serpentine has been intruded. Vein irregular. **Prod:** 1930. **Ref:** 58, p. 42. 63, p. 64. 100, 1897, pp. 97, 132, 158. 146, p. 14.

Mayflower

Loc: On Fortune Cr., Cle Elum R. area. **Ore:** Gold. **Ref:** 63, p. 63.

Mercer

(see Golden Fleece)

Mildred

(see under copper)

Mineral Creek (28)

(see under copper)

Morning

Loc: Swauk area. **Ore:** Gold, silver. **Ref:** 58, p. 46.

Morning Star (13)

(see under copper)

Morris

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1935-1937. **Ref:** 97, 1937, p. 551; 1938, p. 459.

Morrison

(see Cascade Chief)

Mountain Belle

(see under copper)

Mountain Chief

(see under copper)

Mountain Daisy (38)

Loc: Sec. 1, (20-17E) and sec. 6, (20-18E), Swauk dist. **Owner:** Ollie Jordin, lessor, Rt. 2, Cle Elum, Wash. (1952). **Ore:** Gold. **Prod:** 1934-1938. **Ref:** 97, 1937, p. 551; 1938, p. 459; 1939, p. 490. 133, p. 37.

Mountain Whistler

Loc: At head of Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 63.

Nairn

(see Hurley Creek)

Navidad

(see under copper)

Nellie

Loc: Kittitas County. **Ore:** Gold. **Prod:** 1940. **Ref:** 97, 1941, p. 474.

Ollie Jordin (39)

Loc: Sec. 2, (20-17E), ¾ mi. up Williams Cr. from Liberty, Swauk dist. **Owner:** Ollie Jordin and Miss Ollie Blissett (1938). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Silicified zone 4 ft. wide in Swauk sandstone contains small quartz-calcite stringers in which "wire" gold occurs. **Dev:** 170-ft. adit. **Assays:** Gold occurs in rich pockets, hence assays erratic. Ore av. \$40 per ton on 500 tons mined. **Prod:** About \$20,000 in gold during 2 years prior to 1934. **Ref:** 158.

Paramount

(see Aurora)

Queen of the Hills

Loc: Fortune Cr., Cle Elum R. area. **Ore:** Gold. **Ref:** 63, p. 63.

Red

Loc: Swauk area. **Ore:** Gold. **Ref:** 58, p. 57.

Rocky Point (6)

Loc: Sec. 12, (23-14E), Cle Elum dist. **Ore:** Gold. **Ref:** 63, p. 62.

Ruby (8)

Loc: Sec. 20, (23-14E), Cle Elum dist. **Ore:** Gold, silver. **Ref:** 63, p. 64.

Ruby King

Loc: On Fortune Cr., Cle Elum R. area. **Owner:** Dover Mining Co. (1914). **Ore:** Gold, silver, copper, lead, antimony. **Ref:** 63, p. 63. 105, 1914, p. 592.

Rushing Water

Loc: Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 63.

Silver Bow

(see under copper)

Silver Bull (4)

Loc: Contiguous to Fish Lk. in Stevenson Gulch, Cle Elum dist. **Prop:** 1 claim. **Owner:** James Greeve, E. P. Cassman, and August Sassi (1892). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 5-ft. vein of white quartz carrying pyrite and free-milling ore. **Dev:** 4 adits 40, 70, 90, and 130 ft. long. **Assays:** \$100 Au, Ag. **Ref:** 13, p. 134.

Silver Creek (5)

Loc: Sec. 12, (23-14E), Fish Lk. area. **Access:** 24 mi. by road to railroad at Ronald. **Owner:** Cle Elum River Mining Co., Inc., Seattle, Wash. (1952—). Silver Creek Mining Co., Tacoma, Wash. (1939). **Ore:** Gold, silver. **Deposit:** Quartz vein 15 to

20 ft. wide reported, but av. values are too low to mine whole width, although some assays show good values in gold and silver. **Dev:** 5 adits, 1 shaft. **Assays:** A 5-ton shipment gave \$12 per ton. **Prod:** 1937, 1939. **Ref:** 58, p. 52. 97, 1938, p. 459; 1940, p. 478. 158.

Silver Dump (14)
(see under silver)

Silver Queen (15)
(see under silver)

Sonny Brown (44)

Loc: Sec. 30, (21-18E), on Nelson Hill. **Elev:** 3,800 to 4,600 ft. **Access:** 4 miles of truck road to main highway. **Prop:** 5 claims. **Owner:** E. K. Brown, Ellensburg, Wash., and A. R. Jordin, Liberty, Wash. **Ore:** Gold, silver. **Ore min:** Free gold. **Deposit:** 11 veins, 20 in. to 8 ft. wide. **Dev:** 300-ft. shaft. **Ref:** 158.

Standard

Loc: On Fortune Cr., Cle Elum R. area. **Ore:** Gold, lead. **Ref:** 63, p. 63.

Sunrise

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1929, 1930, 1933, 1934. **Ref:** 97, 1930, 1931, 1934, 1935.

Sunshine

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1940. **Ref:** 97, 1941, p. 474.

Sylvanite (33)

Loc: NE¼ sec. 15, (21-17E), Swauk dist. **Access:** 17 mi. by good road from railroad at Cle Elum. **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Hydrothermally altered zone in fractured Swauk sedimentary rocks. **Assays:** 0.04 oz. Au. **Prod:** Probably has produced. **Ref:** 158.

T-Bone

(see Golden Fleece)

Thorp

Loc: On Red Mtn., Cle Elum R. area. **Ore:** Gold, silver, copper. **Ref:** 63, p. 65.

Tip Top

Loc: On divide between Fortune Cr. and Teanaway Cr. **Ore:** Gold, silver, copper. **Ref:** 63, p. 63.

Tip Top No. 1

Loc: Head of N. Fk. Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver, copper. **Ref:** 63, p. 63.

Topping

Loc: Mammoth Mtn., Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 62.

True Fissure Gold (45)

Loc: Sec. 30, (21-18E), Swauk dist. **Ore:** Gold. **Ref:** 58, p. 69.

Twin

Loc: On Fortune Cr., Cle Elum R. area. **Ore:** Gold, silver, copper, lead. **Ref:** 63, p. 63.

Valinia

Loc: Cle Elum dist. **Ore:** Gold, silver. **Ref:** 13, p. 134.

Vidette

Loc: On Mammoth Mtn., Cle Elum R. area. **Ore:** Gold. **Ref:** 63, p. 62.

Wall Street (46)

Loc: Sec. 30, (21-18E), 5½ mi. up Cougar Gulch from Liberty. **Access:** 1½ mi. trail. **Prop:** 3 unpatented claims. **Owner:** Wm. Newstrum, Ellensburg, and R. J. Jordin, Liberty, Wash. (1934). Wall Street Mining Co. (1909-1915). **Ore:** Gold. **Gangue:** Quartz. **Deposit:** Silicified fracture zones in sand-

stone. **Dev:** 900-ft. adit connected by a raise with a 306-ft. adit 260 ft. above the lower adit. A 54-ft. winze in the upper adit. **Assays:** \$5.60 to \$10.50 Au. **Prod:** \$50,000 reported prior to 1935. 1938. **Ref:** 58, p. 71. 97, 1939, p. 490. 104, 4/30/34, p. 22. 158.

War Eagle

Loc: On Goat Mtn., Cle Elum R. area. **Ore:** Gold, silver. **Ref:** 63, p. 65.

Washington (35)

Loc: Sec. 10, (20-17E), Swauk dist. **Owner:** Washington Gold Co., Inc., Yakima, Wash. (1941). **Ore:** Gold. **Ref:** 58, p. 72.

Whippoowill

Loc: On Fortune Cr., Cle Elum R. area. **Ore:** Gold, copper. **Ref:** 63, p. 63.

Williams

(see Iias under copper)

Zerwekh (Big Z) (29)

Loc: Sec. 8, (21-18E), near head of Swauk Cr. **Elev:** 3,500 ft. **Access:** Road. **Prop:** 1 unpatented claim. **Owner:** Vernon J. Zerwekh, Chehalis, Wash. (1950). **Ore:** Gold, silver. Molybdenum, vanadium, and titanium are reported, but their occurrence here is doubtful. **Ore min:** Pyrite, free gold. **Deposit:** A 7-ft. vein of chalcedonic quartz in Swauk sediments near a 40-ft. diabase dike. **Dev:** 207-ft. adit. **Improv:** Cabin, compressor, drill, ore car (1950). **Assays:** Av. about \$8.00 Au, Ag. **Ref:** 69, p. 15. 158.

LEWIS COUNTY

Eagle Peak (1)

(see under copper)

Tacoma (2)

Loc: On S. Fk. Mineral Cr. **Owner:** Davis & Evans Mining Co. (1897). **Ore:** Gold. **Ref:** 63, p. 116.

Waterfall (3)

Loc: On Mineral Cr. **Prop:** 14 claims. **Owner:** Davis & Evans Mining Co. (1897). **Ore:** Gold, silver, lead. **Ore min:** Galena, limonite. **Dev:** 30- and 70-ft. shafts, and 4 adits, 20, 40, 100, and 140 ft. long. **Ref:** 63, p. 116.

LINCOLN COUNTY

Egypt

(see Pitney Butte under molybdenum)

Fouress (1)

(see under zinc)

Iron Crown (2)

Loc: In Mill Canyon, about 9 mi. SE. of Pitney Butte and 10 mi. from Davenport. **Prop:** 5 claims. **Owner:** C. G. Snyder, H. A. P. Myers, Dr. J. P. Turney, H. H. McMillan, Charles L. Young, Davenport, Wash. (1897). **Ore:** Gold, copper. **Dev:** 30-ft. shaft with 30-ft. crosscut. **Ref:** 63, p. 116.

Pitney Butte (Fouress)

(see Fouress under zinc)

Pitney Butte

(see under molybdenum)

Spokane Molybdenum

(see Pitney Butte under molybdenum)

United Workman

(see under silver)

OKANOGAN COUNTY

Abernathy (161)

(see under copper)

Adams

(see Moncosilgo under copper)

Adelia (60)

Loc: On Palmer Mtn. E. of Ivanhoe property. **Prop:** 1 claim of a group of 27. **Owner:** Wehe brothers. **Ore:** Gold, silver. **Deposit:** Vein about 5 ft. wide in slate said to carry good values in gold and silver. **Prod:** Several shipments prior to 1902. **Ref:** 13, p. 105.

Adirondack

Loc: T. 40 N., R. 26 E. **Owner:** Adirondack Mining Co. (1915-1918). **Ore:** Gold. **Deposit:** Quartz vein in porphyry. A 40-ft. ledge. **Assays:** \$4.00 Au. **Ref:** 112, 1918, p. 163. 158.

Alder (173)

Loc: Secs. 25, 26, 35, and 36, (33-21E). **Elev:** 3,000 to 3,800 ft. **Access:** 5 mi. SW. of Twisp by road. **Prop:** 3 patented and 17 unpatented claims. **Owner:** Alder Gold-Copper Co., Spokane, Wash. (1949—). **Ore:** Gold, copper, zinc, silver. **Ore min:** Chalcopyrite, pyrite, sphalerite, native copper, pyrrhotite. **Deposit:** Silicified zone 15 to 75 ft. wide in sheared argillite. **Dev:** 3 adits total several hundred ft. Large open pit. **Improv:** 300-ton flotation mill (1955). **Assays:** 6,831 tons shipped in 1939 av. 0.55 oz. Au, about 0.50 oz. Ag, 0.16% to 0.55% Cu. 1,546 tons of Cu conc. in 1951 yielded 268,202 lb. Cu, 1,359 oz. Au, 2,072 oz. Ag. **Prod:** 1937; 1939, 13,000 tons of ore; 1940, 9,000 tons of ore; 1941; 1942 about 4,000 tons; 1950, 1,899 tons of Cu conc.; 1951, 1,546 tons of Cu conc.; 1952-1953. **Ref:** 33, 1918, p. 1454. 97, 1928, p. 700; 1950, p. 1612; 1951, p. 1615. 104, 8/15/32, p. 29; 1/15/37, p. 28. 106, 12/19/29; 10/2/30. 108, 11/39, p. 2; 9/41, p. 36. 133, p. 29. 158.

Alice (78)

(see also Summit, Black Bear, War Eagle)

Loc: Sec. 36, (39-25E) and sec. 31, (39-26E), Palmer Mtn. dist. **Prop:** 3 claims: Black Bear, Summit, War Eagle. **Owner:** R. D. Heffernan, Tonasket, Wash. (1949). **Ore:** Gold. **Ref:** 52, p. 5.

Allison

(see Okanogan Free Gold)

Alta

(see Chilson under lead)

American Flag (Oriental and Central) (150)

Loc: SE¼ sec. 30, (36-20E), on a cliff about 1 mi. NE. of Mazama. **Elev:** 2,600 to 3,000 ft. **Access:** ½ mi. by trail and 1½ mi. by road from Mazama. **Prop:** 2 patented claims, 1 unpatented claim. **Owner:** Mahlon McCain and associates (1946). **Ore:** Gold, copper, zinc, silver. **Ore min:** Pyrite, arsenopyrite, chalcopyrite, sphalerite. **Gangue:** Quartz, calcite. **Deposit:** 2 mineralized fault zones 2 to 40 in. wide in diorite contain small quartz stringers and sulfides. **Dev:** 2 adits and a sublevel together with a raise and winze total about 1,400 ft. **Assays:** 0.16 to 3.08 oz. Au across widths of 2 in. to 2 ft. **Prod:** A few hundred tons produced before 1910, and small production in 1940. **Ref:** 40, p. 14. 88, p. 35. 97, 1941, p. 474. 106, 3/19/31, 4/2/31. 108, 10/39, p. 32; 7/40, p. 38. 157. 158.

American Flag (139)

(see under copper)

American Girl (130)

Loc: NW¼ sec. 25, (40-30E), Myers Cr. dist. **Ore:** Gold. **Prod:** 1 car of ore in 1916. **Ref:** 158.

American Graphite (236)

Loc: Mine in sec. 27, (34-29E). Mill in sec. 29, (34-27E). **Access:** Road. **Prop:** 70 claims and 179 acres of land. **Owner:** American Graphite & Metals Corp. (1948). **Ore:** Graphite with some gold and molybdenum. **Ore min:** Graphite, molybdenite. **Deposit:** Graphite schists and graphite-bearing crystalline limestone. **Dev:** Adit, shaft. **Improv:** Mill, cabins, bunker (1949). **Assays:** Assays indicate \$2.00 Au in some samples. Spectrographic analysis shows the presence of 0.31% MoS. **Note:** This property, originally thought to be a molybdenum prospect, was proven to have values principally in graphite, and to have little or no molybdenum. **Ref:** 158.

American Rand

(see Spokane)

Anaconda (66)

Loc: Sec. 14, (39-26E), 200 yd. from E. shore of Wannacut Lk. **Elev:** 2,000 ft. **Prop:** 1 claim. **Owner:** Plant and Callahan Mining Co. (1907-1918). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite. **Gangue:** Quartz. **Deposit:** 4-ft. vein. **Dev:** 40-ft. incline. **Assays:** Samples from dump assayed \$30 Au, \$8 Ag. **Ref:** 13, p. 102.

Anchor (256)

(see under silver)

Andruss

Loc: 15 mi. NE. of Oroville, 1½ mi. S. of Canadian boundary, Myers Cr. dist. **Ore:** Gold. **Ref:** 63, p. 110.

Anna B.

(see Ironsides and Anna B. under copper)

Antimony Gold

(see Abernathy under copper)

Antimony Queen (176)

(see under antimony)

Apache (257)

(see under silver)

Apex (109)

(see under copper)

Arizona

(see under silver)

Arizona

(see Horn Silver under silver)

Arlington (229)

(see under silver)

Atkins (237)

(see under lead)

Aurora

Loc: Park City dist. **Prop:** 8 claims. **Owner:** Aurora Mining Co., Seattle, Wash. (1941). **Ore:** Gold. **Ref:** 58, p. 5.

Aztec (120)

(see under iron)

Baltimore (72)

Loc: Sec. 28, (39-26E), Palmer Mtn. dist. **Ore:** Gold, copper. **Ore min:** Chalcopyrite, pyrite. **Deposit:** 12-in. vein. **Assays:** \$10 Au. **Ref:** 58, p. 5. 63, p. 101.

Bambino (Little Flower) (179)

Loc: Secs. 7 and 8, (30-22E), Squaw Cr. dist. **Owner:** Holden Gold Mining Co. (1933). **Ore:** Gold. **Ref:** 104, 7/15/33, p. 19; 12/30/33, p. 19.

Beaver (133)

Loc: Secs. 21 and 28, (39-31E), Wauconda dist. **Owner:** Mrs. Ida Ollason, Republic, Wash. (1941). **Ore:** Gold, silver. **Ref:** 58, p. 5.

Bellevue (52)

Loc: NW¼ sec. 4, (39-26E), Wannacut Lk. dist. **Prop:** 5 claims. **Ore:** Gold, silver, copper. **Ore min:** Arsenopyrite, pyrite, chalcopyrite, pyrargyrite, stephanite, a little native silver, free gold, and possibly gold-silver telluride. **Deposit:** Quartz vein from 10 in. to 3 ft. wide enclosed in slate. Vein av. 15 in. wide. **Dev:** Small shaft and several open cuts. **Assays:** A test shipment of 1,000 lb. returned \$75 Au, Ag, more than half of which was Au. **Prod:** Several tons. **Ref:** 63, p. 100. 154, p. 101.

Ben Butler (83)

Loc: NE¼ sec. 19, (39-26E), Palmer Mtn. dist. **Ore:** Gold. **Deposit:** 15-in. vein. **Assays:** \$7.80 Au (1897). **Ref:** 63, p. 101.

Ben Harrison

(see Apex under copper)

Ben Lummon

Loc: Squaw Cr. dist. **Ore:** Gold. **Deposit:** 2 parallel veins along a slate-porphphy contact. **Assays:** \$15 to \$18 Au (1897). **Ref:** 63, p. 88.

Bergman

(see Shaw-Bergman under copper)

Big Boy (151)

Loc: Secs. 23, 24, and 30, (36-20E), Mazama dist. **Prop:** 2 claims: Big Boy Nos. 1 and 2. **Owner:** Mazama Gold Mines Consolidated, Inc., Seattle, Wash. (1938). **Ore:** Gold, silver. **Ref:** 158.

Big Eight (164)

Loc: Sec. 3, (34-18E). **Ore:** Gold. **Ref:** 58, p. 7. 63, p. 90.

Big Hole

Loc: At forks of Mary Ann Cr., Myers Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 110.

Billy Goat (6)

(see under copper)

Bi-Metallic (135)

(see under molybdenum)

Black Bear (79)

(see also Alice)

Loc: NE¼ sec. 36, (39-25E), on Palmer Mtn. **Elev:** 2,500 ft. **Prop:** Part of Alice property. **Owner:** R. D. Heffernan, Tonasket, Wash. (1949). **Ore:** Gold, silver, copper. **Ore min:** Free gold, pyrite. **Deposit:** A 4-ft. quartz vein along contact of chlorite schist and serpentine. Vein carries a 3-ft. paystreak. **Dev:** 2,500 ft. of underground workings. **Assays:** Av. \$18 Au, Ag, Cu. **Prod:** \$150,000 prior to 1902; 77 tons in 1947. **Ref:** 12, p. 62. 13, p. 99. 63, p. 98. 88, p. 31.

Black Huzzar

(see under silver)

Black Jack (184)

Loc: Sec. 32, (31-22E), Squaw Cr. dist. **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite. **Deposit:** 4-ft. quartz vein. **Ref:** 58, p. 8. 63, p. 89.

Black Warrior

Loc: T. 40 N., R. 27 E., Oroville dist. **Ore:** Gold, silver, copper, lead. **Ore min:** Pyrite, galena, chalcopyrite. **Deposit:** 2 parallel veins, one rich in pyrite and chalcopyrite, the other in galena. **Ref:** 63, p. 102.

Blanche (35)

Loc: Sec. 10, (40-26E), Similkameen area. **Access:** 7 mi. by road from Oroville. **Prop:** 1 claim. **Owner:** Jumbo Gold Mining Co., Inc. (1938). **Ore:** Gold, silver. **Dev:** An 80-ft. adit, a 100-ft. adit, and two 10-ft. shafts. **Assays:** \$56 Au, Ag across widths of 42 in. to 4 ft. reported. **Ref:** 158.

Blue Lake (105)

(see under copper)

Bodie (Northern Gold) (137)

Loc: SW¼ sec. 3, (38-31E) and sec. 34, (39-31E), on Toroda Cr., N. of Wauconda. **Elev:** 3,000 ft. **Access:** 22 mi. by road to railroad at Republic. **Prop:** 5 patented, 10 unpatented claims. **Owner:** Toroda Gold Mines Corp. subleasing from Northern Gold Corp. (1939-1941). Bodie Transportation & Mining Co. (1907). B and F Mining Co. (1908-1909). Duluth-Toroda Mining Co. (1910-1912). Toroda Development Co. (1915-1916). Northern Gold Corp. (1934-1941). **Ore:** Gold, silver. **Ore min:** Free gold, pyrite. **Deposit:** Finely disseminated ore in quartz-calcite vein. Vein is much altered and leached near surface. Vein is similar to those in Republic dist. Veins are in tuff and andesite. One vein av. 4 ft. wide. **Dev:** Several thousand ft. of workings on 4 levels. **Assays:** 302 tons produced 1940-1944 returned \$9,770 or \$32.35 per ton. Ore said to av. about \$10.00 Au. **Prod:** 1906, 1907, 1909-1911, 1914, 1915, 1934-1944. 66,032 tons 1935-1944. **Ref:** 58, pp. 9, 68. 97, 1907-1912, 1915, 1916, 1934-1944. 99, 11/27/34, 1/8/35, 1/29/35, 2/12/35. 104, 1/30/35, p. 23; 1/30/36, p. 22; 12/30/36, p. 29. 106, 10/34. 116, no. 3, 1909, p. 230. 117, no. 24, 1919, p. 12. 158.

Bolinger (178)

Loc: Sec. 25, (31-21E), on S. Fk. of Gold Cr. **Prop:** 5 claims. **Ore:** Gold, silver. **Ore min:** Arsenopyrite, galena, chalcopyrite, pyrite. **Gangue:** Quartz. **Deposit:** 2 parallel veins 200 ft. apart in gneiss. The larger vein is 4½ to 7 ft. thick. **Dev:** 450-ft. adit cutting both veins. **Assays:** \$5 to \$54 Au. Av. \$12 Au, Ag. **Ref:** 88, pp. 39-40.

Bonanza Chief

(see Brown Bear)

Bornite

(see Peacock under copper)

Boundary

(see Sheep Mountain under molybdenum)

Brother Jack

Loc: Twisp dist. **Ore:** Gold. **Assays:** \$20 Au (1897). **Ref:** 63, p. 86.

Brown Bear (Bonanza Chief) (3)

Loc: NW¼ sec. 24, (37-17E), 1½ mi. S. of Harts Pass and 1 mi. E. of Tatie Peak. **Elev:** 6,200 ft. **Access:** Trail from Harts Pass. **Prop:** 2 claims. **Owner:** Charles Willman, Winthrop, Wash. (1951). **Ore:** Gold. **Gangue:** Quartz, gouge. **Deposit:** Hydrothermally altered shear zone in arkosic sandstone carries a little mineralized quartz. **Dev:** 40-ft. adit and a winding adit several hundred ft. long. **Assays:** Samples from the widest part of the vein assayed \$8 to \$22 Au. **Ref:** 158.

Buckeye

(see under silver)

Buckeye (69)

(see under copper)

Buckhorn

(see Magnetic under iron)

Bullfrog (46)

Loc: SW. part sec. 33, (40-26E), Palmer Mtn. dist. **Prop:** 18 claims. **Owner:** Bullfrog Gold Mining Co. (1902). **Ore:** Gold, silver. **Ore min:** Pyrite, black metallic sulfide mineral. **Deposit:** Reportedly a 7-ft. quartz vein in quartzite and sericitic schist traceable for 3,000 ft. **Dev:** Adit, 160-ft. shaft, 140-ft. shaft. **Assays:** 10-ton test yielded \$17 per ton, of which \$12 was in gold and \$5 in silver (1902). **Prod:** 4,600 lb. shipped. **Ref:** 63, p. 100. 88, pp. 30-31. 154, p. 101.

Bunker Hill

Loc: On W. slope of Palmer Mtn. **Elev:** 3,500 ft. **Prop:** 1 claim. **Owner:** William Nelson and Thomas Ryan (1892). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** A 20-in. vertical vein is exposed on the surface for more than 300 ft. **Dev:** 60-ft. adit, 40-ft. adit, 40-ft. crosscut, 30-ft. drift. **Assays:** Ore from dump assayed \$300 Au. **Prod:** 5 tons of high-grade gold ore prior to 1890. **Ref:** 12, pp. 64-65. 13, p. 100.

Butcher Boy (112)

Loc: SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, (40-30E), Myers Cr. dist. **Access:** Road from Chesaw. **Prop:** 2 claims. **Owner:** Leased by James Miller, Chesaw, Wash. (1938). Butcher Boy Gold Mining Co. (1908-1915). **Ore:** Gold, silver, lead, zinc. **Ore min:** Pyrite, pyrrhotite, sphalerite, galena. **Gangue:** Quartz, calcite. **Deposit:** Quartz vein in argillite from 1 in. to 6 ft. wide. Argillite has been intruded by granite. **Dev:** 326-ft. adit, shaft, stope. **Assays:** Vein in adit said to assay \$7 to \$17 Au, 70¢ Ag. Some ore said to carry as much as 7 oz. Au. **Prod:** 11 carloads of ore 1907. **Ref:** 46, p. 175. 154, pp. 49-50.

Caaba

(see Kaaba under lead)

Cabin (258)

(see under lead)

Calumet

Loc: On Kruger Mtn., Oroville dist. **Owner:** James Anderson and E. D. Beeing (1897). **Ore:** Gold, silver. **Ore min:** Petzite. **Assays:** Av. \$40 per ton. **Ref:** 63, p. 103.

Campbell

(see Holden-Campbell)

Caribou (121)

Loc: SE $\frac{1}{4}$ sec. 14, (40-30E), Myers Cr. dist. **Owner:** British Columbia Copper Co. (1908-1916). **Ore:** Gold, silver, copper. **Prod:** 8 carloads of ore in 1916. **Ref:** 33, 1908, p. 413. 97, 1916, p. 613; 1917, p. 503.

Caroline (53)

Loc: Adjoins Triune property, Oroville dist. **Owner:** Dell Hart & Sons, Oroville, Wash. (1938). **Ore:** Gold. **Ref:** 158.

Carr (7)

(see under copper)

Castle Creek (242)

(see under lead)

Central (Trinidad) (107)

(see under silver)

Central (American Flag)

(see American Flag)

Chelan (Pennington) (182)

Loc: Near NE. cor. sec. 17, (30-22E), near head of Squaw Cr. on N. side of the valley. **Elev:** 3,000 ft. **Access:** Road up Squaw Cr. **Prop:** At least 7 claims. **Owner:** Roy Pennington (1943). **Ore:** Gold, tungsten. **Ore min:** Scheelite, pyrite, free gold. **Deposit:** Several mineralized quartz veins from 6 to 24 in.

wide along shear zones in diorite. **Dev:** Caved adit on No. 7 vein and 40-ft. adit on No. 4 vein, also some open cuts. **Assays:** Gold values of \$21 and \$161 are reported. Scheelite content less than $\frac{1}{4}$ %. **Ref:** 37, p. 49.

Chesaw (113)

Loc: Secs. 21 and 22 (or sec. 16), (40-30E), 1 mi. E. of Chesaw. **Owner:** C. N. Bagwell and Homer B. Splawn, Yakima, Wash. (1952—). **Ore:** Gold, silver. **Ore min:** Pyrite, arsenopyrite. **Deposit:** Granitic rocks in which disseminated sulfides constitute 3% to 10% of the whole. **Dev:** Open cuts. **Assays:** Assay samples at various places across the granitic lenses show from \$1.55 to \$7.80 Au. **Ref:** 54, pp. 10-11. 133, p. 31.

Chicago (67)

Loc: SE $\frac{1}{4}$ sec. 23, (39-26E), Wannacut Lk. dist. **Ore:** Gold, silver, lead. **Deposit:** Several veins over 2 ft. wide. **Assays:** \$64 Au, \$16.40 Ag, \$3.60 Pb (1897). **Ref:** 58, p. 13. 63, pp. 100-101.

Chicago (187)

Loc: Sec. 10, (30-22E), Squaw Cr. dist. **Ore:** Gold, copper. **Deposit:** 18-in. vein traceable for 300 ft. **Prod:** 3 tons prior to 1897. **Ref:** 63, p. 88.

Chicago and New York

Loc: Myers Cr. dist. **Ore:** Gold, copper. **Ref:** 63, p. 110.

Chickamun (174)

(see under copper)

Chief Sunshine (212)

(see under silver)

Chilson

(see under lead)

Chloride

(see under silver)

Chloride Queen (19)

Loc: SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, (40-25E), on SW. slope of Ellemeham Mtn., Nighthawk dist. **Owner:** Mr. Everett, Nighthawk, Wash. (1939). **Ore:** Gold, **Ore min:** Pyrite, free gold. **Deposit:** A 1- to 4-ft. iron-stained quartz vein in argillite is sparsely mineralized with pyrite and reportedly free gold. **Dev:** 50-ft. inclined shaft and a drift. **Prod:** 1936, 1937. **Ref:** 97, 1937, p. 552; 1938, p. 459. 158.

Chopaka (12)

(see under silver)

Cleopatra

Loc: Myers Cr. dist. **Ore:** Gold, silver, lead. **Ref:** 63, p. 110.

Columbia (193)

Loc: Sec. 12, (30-22E), Squaw Cr. dist. **Ore:** Gold. **Deposit:** 14-ft. vein. **Ref:** 63, p. 88.

Columbia

Loc: Near Canadian boundary, Myers Cr. dist. **Ore:** Gold. **Ref:** 63, p. 110.

Combination (70)

Loc: SW $\frac{1}{4}$ sec. 25, (39-26E), Wannacut Lk. dist. **Prop:** 1 claim. **Owner:** Mr. Hall (1892). **Ore:** Gold, silver. **Deposit:** 4-ft. vein. **Dev:** 25-ft. shaft. **Assays:** Ore from dump assayed \$21.50 Au, \$3 Ag. **Ref:** 13, p. 102. 63, p. 101.

Contention (61)

Loc: SE. cor. sec. 22, (39-26E), Wannacut Lk. dist. **Ore:** Gold. **Deposit:** 2 veins crossing one another. **Ref:** 58, p. 15. 63, p. 100.

Continental

(see Mazama Queen)

Copper Glance (10)

(see under copper)

Copper King (84)

(see under copper)

Copper World (87)

(see under copper)

Copper World Extension (88)

(see under copper)

Cornucopia

Loc: Wannacut Lk. dist. **Owner:** Oscar Nelson (1892). **Ore:** Gold, silver. **Gangue:** Quartz. **Deposit:** Large vein. **Dev:** 15-ft. shaft. **Assays:** \$80 Au, Ag. **Ref:** 13, p. 104.

Crescent

(see Triune)

Crown Point

(see Imperial)

Crystal Butte (Mother Lode) (131)

Loc: Center W $\frac{1}{2}$ sec. 35, (40-30E), Myers Cr. dist. **Access:** Road from Chesaw. **Prop:** 6 claims. **Owner:** Being purchased on lease and option by R. C. Hirst from Arthur and Joseph Little, Chesaw, Wash. (1938). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Galena, chalcopyrite, sphalerite, pyrite, arsenopyrite. **Deposit:** A mineralized quartz vein av. 1 ft. in width occurs along the contact of limestone and argillite. **Dev:** Inclined shaft, adit, open cuts, some old caved workings. **Assays:** A carload and truckload shipped in 1937 netted \$40 per ton in gold and silver. **Prod:** A carload and truckload in 1937. Produced 1938-1941. **Ref:** 97, 1938-1941. 154, pp. 48-49. 158.

Crystalite

Loc: 5 mi. up Gold Cr. from its mouth. **Prop:** 2 claims: Crystalite, Gold Creek. **Owner:** John Runnels and Thomas Deaver (1892). **Ore:** Gold, silver, antimony, copper. **Deposit:** 2-ft. vein. **Dev:** Short crosscut. **Assays:** Said to assay 50 to 350 oz. Au, Ag. **Ref:** 13, p. 115.

Curlew (25)

Loc: SE $\frac{1}{4}$ sec. 23, (40-25E), Nighthawk dist. **Prop:** 5 claims. **Owner:** Otto Hausing, Theodore Wilken, Joseph Linton (1897). **Ore:** Gold, silver, lead. **Ore min:** Galena. **Deposit:** 3 parallel veins in granite. **Assays:** \$40 to \$80 Au (1897). **Ref:** 63, p. 102.

Daisy (143)

Loc: Secs. 11, 12, and 14, (36-19E), Mazama dist. **Owner:** Continental Gold-Silver Mining Co., Mazama, Wash. **Ore:** Gold, silver, copper, lead, zinc. **Ref:** 158.

Damfino (186)

Loc: Secs. 28 and 33, (31-22E), Methow dist. **Ore:** Gold, silver, copper. **Deposit:** 40-in. wide. **Dev:** 60-ft. adit. **Ref:** 58, p. 17. 63, p. 89.

Defiance (74)

Loc: Sec. 29, (39-26E), Palmer Mtn. dist. **Ore:** Gold, silver. **Ref:** 58, p. 18. 63, p. 101.

Delaware

(see under silver)

Denver City

(see Leadville)

Derby

Loc: Near the Oregonian property, Twisp dist. **Ore:** Gold. **Ref:** 63, p. 90.

Detroit-Windsor (98)

Loc: NE $\frac{1}{4}$ sec. 24, (38-25E), Palmer Mtn. dist. **Ore:** Gold, copper. **Ref:** 58, p. 18. 63, pp. 104-105.

Dexter

(see under silver)

Diamond (226)

(see under silver)

Diamond Queen (206)

Loc: Sec. 20, (30-23E), Squaw Cr. dist. **Ore:** Gold, silver. **Ref:** 58, p. 19.

Dividend (38)

(see under copper)

Dixie Queen

(see Antimony Queen under antimony)

Dodd

(see Sheep Mountain under molybdenum)

Dorian

(see No Monicker)

Double Eagle

(see Dry Bone under lead)

Double Header

(see Little Chief under silver)

Dry Bone

(see under lead)

Duke of Windsor

(see Dry Bone under lead)

E Pluribus (91)

Loc: SE $\frac{1}{4}$ sec. 33, (39-25E), Palmer Mtn. dist. **Ore:** Gold. **Ref:** 63, p. 104.

Eagle (114)

Loc: Near center NW $\frac{1}{4}$ sec. 21, (40-30E). **Owner:** Leased by M. L. Pierce, Chesaw, Wash., from the Patrick Welch estate (1938). **Ore:** Gold. **Ore min:** Pyrite, free gold, molybdenite. **Deposit:** Chalcedonic quartz veinlets from $\frac{1}{2}$ in. to 6 in. wide in altered granite carry values in gold. Portions of the granite near the veins also carry gold. **Dev:** Several short adits and old open cuts. **Assays:** Said to run from a few cents to several hundred dollars per ton in gold. **Ref:** 158.

Eclipse (90)

Loc: SW $\frac{1}{4}$ sec. 28, (39-25E), Palmer Mtn. dist. **Ore:** Gold. **Ref:** 63, p. 104.

El Dorado

Loc: Palmer Mtn. dist. **Ore:** Gold. **Ref:** 63, p. 104.

Eloise (26)

(see under silver)

Emerald (198)

Loc: Sec. 7, (30-23E), Squaw Cr. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 87.

Empire (82)

Loc: N $\frac{1}{2}$ sec. 6, (39-26E), N. end of Palmer Mtn., $\frac{1}{2}$ mi. E. of Palmer Lk. **Prop:** 4 claims. **Owner:** Messrs. Hall and George Pascall (1892). **Ore:** Gold, silver, copper, lead. **Ore min:** Galena, iron and copper sulfides. **Dev:** 10-ft. shaft. **Assays:** \$18 Au. **Ref:** 13, p. 102. 58, p. 20. 63, p. 101.

- Empress**
Loc: On NW. side of Palmer Mtn., near Kodak claim. **Prop:** 1 claim. **Owner:** F. W. Brown, J. Finn, and J. E. Waters. **Ore:** Gold, silver. **Gangue:** Quartz. **Deposit:** NW. extension of the Kodak vein. **Ref:** 13, p. 100.
- Eureka (32)**
 (see under lead)
- Eureka (145A)**
Loc: Sec. 9, (30-32E), at head of McFarland Cr. **Access:** Road. **Owner:** Mack Toutsch (1953). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Small amount of quartz in an altered shear zone in granite gneiss. **Dev:** Open cut and 30-ft. adit about 75 ft. below open cut. **Ref:** 158.
- Eureka**
 (see under silver)
- Evening (254)**
 (see under silver)
- Excelsior (200)**
Loc: NE $\frac{1}{4}$ sec. 22, (30-22E), Squaw Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 89.
- Fairview**
Loc: Wannacut Lk. dist. **Prop:** 3 claims: Fairview, Grubstake, Kingbird. **Owner:** George Dance, John Shannon, Seattle, Wash. (1892). **Ore:** Gold, silver. **Ore min:** Sulfides. **Deposit:** 3 parallel quartz veins. **Dev:** 3 shafts, 30, 10, and 20 ft. deep. **Assays:** \$10 to \$12 Au, 2 to 5 oz. Ag. **Ref:** 13, p. 105.
- Fairview**
 (see under lead)
- Fairview**
Loc: Mazama dist. **Owner:** Danlee Mining Co. (1931). **Ore:** Gold. **Ref:** 106, 5/7/31, p. 17.
- Favorite (27)**
 (see under lead)
- Floyd (167)**
 (see under copper)
- 49th Parallel (39)**
 (see under copper)
- Four Aces (203)**
Loc: NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, (30-22E), Squaw Cr. dist. **Prop:** 3 unpatented claims. **Ore:** Gold, copper. **Ore min:** Pyrite, chalcopyrite. **Deposit:** Quartz vein along a shear zone in quartz diorite porphyry. **Dev:** Shaft 12 by 12 ft. **Assays:** Av. \$4 to \$5 Au. **Ref:** 158.
- Fourth of July (230)**
 (see under silver)
- Frankie Girl (17)**
Loc: SE $\frac{1}{4}$ sec. 33, (39-25E), Palmer Mtn. dist. **Ore:** Gold. **Ref:** 63, p. 104.
- Friday (Tom Hal) (207)**
Loc: SW $\frac{1}{4}$ sec. 20, (30-23E), Squaw Cr. dist. **Access:** Paved highway from Pateros and cable car across Methow R. **Prop:** 5 claims. **Owner:** J. J. Sullivan, Pateros, Wash. (1942). **Ore:** Gold, silver. **Ore min:** Pyrite, chalcopyrite, arsenopyrite, bornite, malachite. **Deposit:** 1-ft. quartz vein in gneissic diorite. **Dev:** 110-ft. crosscut, 100-ft. winze, 240 ft. of drifts (1902). **Assays:** 10 tons selected ore yielded \$70 per ton prior to 1902. Other assays showed 0.56 oz. Au, 1.3 oz. Ag. **Prod:** \$5,000 prior to 1897, 1 carload in 1940. **Ref:** 58, p. 68. 63, p. 86. 88, p. 39. 158.
- Frosty**
Loc: Oroville dist. **Ore:** Gold, copper. **Ref:** 63, p. 103.
- Gladstone (75)**
Loc: Sec. 31, (39-26E), Palmer Mtn. dist. **Prop:** 3 claims. **Ore:** Gold. **Dev:** 500 ft. of workings. **Ref:** 58, p. 24. 63, p. 100.
- Goat Creek**
 (see under copper)
- Golconda**
Loc: Wauconda dist. **Ore:** Gold. **Prod:** 1936, 1938. **Ref:** 97, 1937, p. 552; 1939, p. 490.
- Gold Axe (122)**
Loc: SW $\frac{1}{4}$ sec. 24, (40-30E), Myers Cr. dist. **Owner:** W. C. Carpenter, Grand Coulee, Wash. (1938). Buckhorn Mining Co. (1935). **Ore:** Gold, silver, copper. **Prod:** 16 or 17 carloads (1914-1915). **Ref:** 58, p. 24. 97, 1911, 1915, 1916, 1928, 1934, 1935. 104, 10/15/35, p. 25; 11/15/35, p. 24; 3/30/38. 106, 12/1/32.
- Gold Bar (165)**
Loc: Sec. 30, (34-18E), on South Cr., Twisp dist. **Access:** 4 to 8 mi. from Twisp R. road. **Ore:** Gold. **Ref:** 58, p. 24. 63, p. 91. 158.
- Gold Coin (180)**
Loc: E $\frac{1}{2}$ sec. 5, (30-22E), Squaw Cr. dist. **Prop:** 2 patented claims: The Billy, Gold Coin No. 1. **Owner:** Joe Douglas, Methow, Wash. (1949). Gold Coin Mining Co. (1932). **Ore:** Gold. **Prod:** 1934, 1941. **Ref:** 97, 1935, p. 354. 104, 2/29/32, p. 30. 158.
- Gold Coin (152)**
Loc: Sec. 31, (39-26E), Palmer Mtn. dist. **Ore:** Gold. **Gangue:** above valley. **Access:** Road. **Prop:** 6 unpatented claims. **Owner:** Alva R. Sharp and Jim Lewis, Mazama, Wash. (1946). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** Shear zone 12 in. wide in andesite is heavily oxidized and carries a little pyrite. **Dev:** 100-ft. adit and an open cut. **Assays:** Ore reportedly av. \$10 Au, Ag. **Ref:** 158.
- Gold Creek**
Loc: Squaw Cr. dist. **Ore:** Gold. **Ref:** 13, p. 115.
- Gold Crown (76)**
Loc: Sec. 31, (39-26E), Palmer Mtn. dist. **Ore:** Gold. **Gangue:** Quartz. **Deposit:** 10-ft. vein. **Assays:** Dump sample showed \$105 Au. **Prod:** Amount not known. **Ref:** 12, p. 61. 13, p. 100.
- Gold Crown (16)**
Loc: SW $\frac{1}{4}$ sec. 32, (40-25E), Chopaka area. **Access:** 8 mi. by road to Loomis. **Prop:** 3 claims. **Owner:** Victor Byrski, Vern C. Anderson, Tacoma, Wash., and Perry O. Luce, Coulee Dam, Wash. (1951). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite. **Gangue:** Quartz. **Deposit:** Veins a few inches to 4 ft. thick in granite. **Dev:** 60-ft. shaft and shallow pits. **Assays:** Av. 2 oz. Au, 4 oz. Ag, 4% Cu reported. **Ref:** 150, p. 32. 158.
- Gold Crown**
 (see Golden Crown)
- Gold Crown**
 (see Spokane)
- Gold Cup**
 (see under silver)
- Gold Dust (40)**
 (see under copper)
- Gold Eagle**
 (see under silver)

Gold Hill (92)

Loc: Sec. 5, (38-25E), 3 mi. W. of Loomis, Palmer Mtn. dist. **Prop:** 86 claims. **Owner:** Gold Hill Mining Co., Seattle, Wash. (1941). **Ore:** Gold, silver, copper, lead, zinc. **Ore min:** Pyrite, chalcopryrite, galena, sphalerite, malachite. **Deposit:** Quartz vein av. 4 ft. thick in granite. **Dev:** 4,000 ft. of crosscuts and drifts. **Ref:** 58, p. 25. 88, p. 30.

Gold Key (153)

Loc: Near NW. cor. sec. 30, (36-20E), about 1,000 ft. NW. of upper workings of Mazama Pride, Mazama dist. **Elev:** 2,500 ft. **Prop:** Part of Mazama Pride group (?). **Owner:** Alva Sharp, Mazama, Wash. (1946). **Ore:** Gold, copper. **Ore min:** Pyrite, arsenopyrite, and some chalcopryrite. **Deposit:** Quartz stringer in diorite mineralized to some extent. **Dev:** 110-ft. adit with a 15-ft. winze. **Assays:** 37 tons shipped av. 0.7 oz. Au. **Prod:** 37 tons of ore shipped in 1931. **Ref:** 158.

Gold Quarry (103)

Loc: Near SW. cor. sec. 20, (37-25E), on both sides of Sinlahekin Cr., W. of the Okanogan Copper Co. property, Conconully dist. **Elev:** 2,500 ft. **Prop:** 20 claims. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Metamorphosed shales are sparsely mineralized with pyrite along planes of lamination. **Dev:** Open cuts, short adits, shallow shafts. **Assays:** Said to carry gold. **Ref:** 75, p. 36.

Golden Chariot (41)

(see under copper)

Golden Crown (Gold Crown)

Loc: On road E. of War Eagle property, Wannacut Lk. dist. **Owner:** S. I. Silverman, Helena, Mont. (1892). **Ore:** Gold. **Deposit:** 10-ft. quartz vein. **Dev:** 34-ft. shaft. **Assays:** Samples from dump said to assay \$105 Au. **Ref:** 12, p. 63. 13, p. 100.

Golden Fleece (93)

Loc: NE $\frac{1}{4}$ sec. 4, (38-25E), Palmer Mtn. dist. **Ore:** Gold. **Ref:** 63, p. 104.

Golden Triangle

Loc: On Clark's Mtn., Twisp dist. **Prop:** 9 claims. **Owner:** Golden Triangle Mining Co. (1897). **Ore:** Gold. **Ore min:** Arsenopyrite. **Ref:** 63, p. 92.

Golden Zone (11)

Loc: Near SE. cor. sec. 7, (40-25E), at base of Mt. Chopaka, Nighthawk dist., 2 mi. S. of the international boundary. **Elev:** 1,500 ft. **Prop:** 5 patented claims. **Ore:** Gold, silver, lead, copper, reportedly molybdenum. **Ore min:** Pyrite, chalcopryrite, free gold, argentiferous galena, occasionally sphalerite and arsenopyrite. **Gangue:** Quartz. **Deposit:** Vein up to 4 ft. thick in granite a short distance from its contact with metamorphic rocks. **Dev:** 5,000 ft. of adits and drifts. **Assays:** Up to \$10 Pb, \$25 Au, 4 oz. Ag. **Prod:** Prior to 1911, 1939. **Ref:** 63, p. 103. 88, p. 30. 97, 1915, p. 572; 1940, p. 478. 145, p. 95. 154, p. 95.

Goodenuf (248)

(see under silver)

Gould & Curry (259)

(see under lead)

Gove (238)

Loc: SW $\frac{1}{4}$ sec. 26, (34-31E), Park City dist. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 10-ft. shear zone conformable to bedding of enclosing schist is silicified and contains a little disseminated pyrite. **Ref:** 122, p. 101.

Grand Coulee

(see Little Chief under silver)

Grand Summit

(see Palmer Summit)

Grandview

Loc: On Mt. Chopaka, Nighthawk dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 103.

Grandview (Leadville)

(see Leadville)

Granite Quartz

Loc: Palmer Mtn. dist. **Ore:** Gold. **Prod:** 1931. **Ref:** 97, 1931, p. 477.

Grant

(see Roosevelt under iron)

Gray Eagle (116)

Loc: Sec. 16, (40-30E), Myers Cr. dist. **Access:** Road from Chesaw. **Owner:** C. N. Bagwell, M. L. Pierce, Chas. Atchison, lessees, Loomis, Wash. (1941). Patrick Welch estate, Spokane, Wash. (1937). **Ore:** Gold. **Ore min:** Pyrite, free gold. **Deposit:** Small quartz veinlets filling fractures in altered granite rock. **Prod:** \$8,000 in 1916. 1936-1939. **Ref:** 58, p. 27. 97, 1916, 1921, 1923, 1924, 1935, 1937-1940. 104, 10/30/34, p. 22. 113, 4/15/37, p. 7. 158.

Gray Eagle (204)

Loc: NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, (30-22E), Squaw Cr. dist. **Access:** Road from Pateros, and $\frac{3}{4}$ mi. trail. **Ore:** Gold, copper. **Ore min:** Pyrite. **Deposit:** Lens of quartz 15 ft. long and 3 ft. wide at the center occurs in a shear zone in quartz diorite porphyry. **Dev:** Short adit and 2 open cuts. **Prod:** Amount not known. **Ref:** 58, p. 27. 63, p. 87. 158.

Great Divide (255)

(see under silver)

Great Metals

(see Anchor under silver)

Grubscher

(see Gubser under lead)

Grubstake (188)

(see also Holden-Campbell)

Loc: NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, (30-22E), Squaw Cr. dist. **Access:** 1 $\frac{1}{2}$ mi up Vinegar Lk. trail from Squaw Cr. road. **Prop:** Part of Holden-Campbell group. **Owner:** S. J. Holden and A. C. Campbell, Chelan, Wash. (1943). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Quartz vein in gneissic granitic rock. **Dev:** Adit, caved (1938). **Ref:** 158.

Gubser (216)

(see under lead)

Hanks (9)

(see under copper)

Harris

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** Amount not known. **Ref:** 58, p. 29.

Hart Stone

(see Kelsey under copper)

Harts Pass (Willman) (4)

Loc: Approx. sec. 13, (37-17E), on cirque wall at head of talus 3 mi. SW. of Harts Pass. **Owner:** Charles Willman, Winthrop, Wash. (1943). **Ore:** Gold. **Deposit:** An 8-in. quartz vein along a hydrothermally altered shear zone in arkose and shale. **Dev:** 35-ft. adit. **Assays:** Said to run \$8 to \$22 Au. **Ref:** 158.

Hattie

Loc: On Elmer Mtn., Twisp dist. **Prop:** 3 claims. **Owner:** Twisp River Mining & Milling Co. (1897). **Ore:** Gold, silver. **Ref:** 63, p. 92.

Hehe

Loc: Myers Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 110.

Henrietta (194)

Loc: Sec. 11, (30-22E), Squaw Cr. dist. **Prop:** 4 claims. **Owner:** J. M. Woollery (1902). **Ore:** Gold, silver, copper. **Deposit:** Vein from 3 to 5 ft. wide. **Dev:** 120-ft. adit, 40-ft. shaft. **Assays:** Av. \$24 Au, Ag, Cu. **Ref:** 88, p. 38.

Hercules (94)

Loc: NW¼ sec. 15, (38-25E), Palmer Mtn. dist. **Ore:** Gold, copper, silver. **Ref:** 63, p. 104.

Hiawatha (Josie) (54)

Loc: Near center N½ sec. 10, (39-26E), ¼ mi. NW. of and 300 ft. above the Triune mine, Wannacut Lk. dist. **Elev:** 3,200 ft. **Access:** Good road from Oroville. **Prop:** 6 claims, 3 of which are patented. **Owner:** Dell Hart & Sons, Oroville, Wash. (1938). Hiawatha Mining Co. (1934). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Auriferous galena, chalcocopyrite, pyrite, sphalerite. **Deposit:** 4 quartz veins in argillite. The Hiawatha vein has been most developed. It av. 3 ft. in width and is traceable for 2,500 ft. Mineralization sparse. **Dev:** Two 80-ft. adits 80 ft. apart and connected by drift near the face. **Assays:** Av. of 22 assays was \$26 Au, 1 oz. Ag. One sample showed 9.5% Pb, 61.7 oz. Ag, 0.32 oz. Au. **Prod:** 1938. **Ref:** 46, p. 226. 54, p. 3. 97, 1934, p. 297; 1935, p. 353; 1939, p. 490. 154, p. 99. 158.

Hidden Treasure (246)

(see under copper)

Hidden Treasure (217)

(see under silver)

Hidden Treasure (Sunshine, Triangle) (196)

(see also Highland)

Loc: SE¼ sec. 11, (30-22E), Squaw Cr. dist. **Access:** 2 mi. of steep truck road from Squaw Cr. road. **Prop:** 6 claims. **Owner:** Part of the property owned by the Highland Mining & Milling Co. (1949). Hidden Treasure Mining & Milling Co. (1902-1909). Hidden Treasure Gold Mining Co. (1910). Triangle Gold Mining Co. (1931-1932). **Ore:** Gold, silver, copper. **Ore min:** Chalcocopyrite, galena, sphalerite, pyrite, malachite. **Gangue:** Quartz, calcite. **Deposit:** 2- to 4-ft. vein in gneiss. **Dev:** 200-ft. adit, 260-ft. adit, 50-ft. winze, 80-ft. drift. **Assays:** 90 tons shipped prior to 1902 returned \$67 per ton. **Prod:** 90 tons prior to 1902. Produced 1939-1942. **Ref:** 33, 1907, p. 674; 1908, p. 788. 63, p. 86. 88, pp. 37-38. 97, 1907, 1908, 1910, 1924, 1930, 1934, 1935, 1940-1943. 106, 7/16/31, 2/18/32, 5/19/32. 116, no. 1, 1907, p. 17. 158.

Highland (Highland Light) (197)

Loc: E½ sec. 11 and W½ sec. 12, (30-22E), Squaw Cr. dist. **Access:** 2 mi. of steep truck road from the Squaw Cr. road. **Prop:** 7 claims: Highland Light, Hidden Treasure, Buckhorn, Lookout, Sailor Boy, V. O. B., California, Millsite. **Owner:** Highland Mining & Milling Co. (1948). **Ore:** Gold, copper, tungsten, zinc. **Ore min:** Pyrite, chalcocopyrite, scheelite, sphalerite. **Deposit:** Several quartz veins; one, the Sailor Boy, has an av. width of 6 ft. and is exposed for length of 3,000 ft. **Dev:** Several old adits and shafts totaling 2,000 ft. **Assays:** 2 to 5 oz. Au, 1% to 9% Zn, and very small percentage of W. **Prod:** \$13,000 during 1938 to 1941 in gold and zinc. **Ref:** 37, p. 47. 63, p. 86. 88, p. 38. 97, 1940, p. 478; 1941, p. 474.

Highland Light

(see Highland)

Hill-Thomas

(see under silver)

Hilo

(see St. Paul under silver)

Holden-Campbell (189)

(see also Grubstake, Hunter, Okanogan)

Loc: Mainly secs. 10 and 11, (30-22E). Also along S. edge of secs. 2, 3, and 4, and N½ sec. 14. **Elev:** 3,000 ft. **Access:** Easily accessible from Methow highway by 4 mi. of road up Squaw and Grubstake Creeks. **Prop:** 29 claims. **Owner:** S. J. Holden and A. C. Campbell, Chelan, Wash. (1943). **Ore:** Gold, copper, tungsten. **Ore min:** Pyrite, chalcocopyrite, molybdenite, scheelite. **Deposit:** Quartz veins in gneissoid diorite, among them the Hunter, the Okanogan, the Doris Barbara, the Bay Horse, the Ace of Diamonds, and the Esther veins. **Dev:** More than 1,100 ft. of underground workings and several surface cuts. **Assays:** Est. ¼% scheelite. **Prod:** Considerable gold ore. **Ref:** 37, pp. 45-47. 63, p. 87. 158.

Home Run (249)

(see under silver)

Homestake (218)

(see under lead)

Hoot Owl (235)

(see under molybdenum)

Horn Silver (34)

(see under silver)

Hotchkiss

(see Mazama Pride)

Hudnut (Hudnutt) (253)

(see under zinc)

Hunter (192)

(see also Holden-Campbell)

Loc: NW¼ sec. 11, (30-22E), Squaw Cr. dist. **Prop:** 1 claim. Part of present Holden-Campbell property (1949). **Owner:** S. J. Holden and A. C. Campbell (1949). **Ore:** Gold, silver, copper, tungsten. **Ore min:** Chalcocopyrite, pyrite, scheelite. **Deposit:** Quartz vein a few inches to 5 ft. wide adjacent to basalt dike in diorite. **Dev:** 660-ft. adit, 135-ft. adit, and a caved adit. Also some open cuts. **Assays:** Av. reported in 1902 as \$32 Au, Ag, Cu. Also 0.4% to 0.6% WO₃. **Prod:** Small amount in 1940. **Ref:** 63, p. 87. 88, p. 39. 97, 1941, p. 474. 158.

Ida (134)

Loc: Secs. 21 and 28, (39-31E). **Prop:** 7 claims. **Owner:** Ole Aavestrud, Republic, Wash. (1938). **Ore:** Gold, silver. **Ref:** 158.

Idaho

(see under silver)

Imperial (Crown Point) (148)

Loc: NW¼ sec. 16, (36-20E). **Elev:** 3,700 ft. **Access:** About 5 mi. from Mazama on Goat Cr. road. **Prop:** 3 unpatented claims: Imperial, Calumet, Red Jacket. **Owner:** Mahlon McCain, Winthrop, Wash. (1946-1951). **Ore:** Gold, silver, copper. **Ore min:** Chalcocopyrite, arsenopyrite, pyrite, pyrrhotite. **Deposit:** A silicified zone 20 to 25 ft. wide in quartzite is cut by a 1- to 3-ft. mineralized quartz vein. **Dev:** Inaccessible shaft 130 to 150 ft. deep, 25-ft. drift at collar of shaft, 400-ft. crosscut, 50-ft. shaft, 150-ft. drift, 2 other crosscuts, and a 10-ft. shaft. **Assays:** 1 ore shoot 100 ft. long shows from 0.16 to 0.95 oz. Au. Cu is est. at 3% to 4%. **Ref:** 150, p. 33. 158.

Independence (185)

Loc: SW¼ sec. 29, (31-22E), on divide between McFarland Cr. and S. Fk. Gold Cr. **Elev:** 2,550 ft. **Access:** 17 mi. by road and 1 mi. by trail from Pateros. **Prop:** At least 2 claims. **Owner:** Methow Mining & Milling Co. (1943). **Ore:** Gold, copper, molybdenum. **Ore min:** Pyrite, chalcopyrite, molybdenite. **Deposit:** 3-ft. quartz vein in gneissic diorite. **Dev:** Inclined shaft, 380-ft. adit. **Assays:** \$5 to \$10 per ton (1902). **Prod:** 1940, 1942. **Ref:** 88, p. 40. 97, 1941, p. 474. 158.

International

(see under copper)

Iron Cap

Loc: Wannacut Lk. dist. **Prop:** 1 claim. **Owner:** Oscar Nelson (1892). **Ore:** Gold, silver. **Ore min:** Hematite. **Gangue:** Quartz. **Deposit:** 7-ft. vein with slate hanging wall and limestone footwall. **Dev:** 55-ft. inclined shaft. **Assays:** Ore on dump assayed \$20 Au, Ag. **Ref:** 13, p. 103.

Iron Cap and Snow Cap (158)

Loc: Sec. 34, (35-18E), on cliffs S. of North Lk. and in the small basin ¼ mi. W. of the lake. **Elev:** 6,500 ft. **Access:** 5 mi. by trail up North Cr. from Gilbert. **Prop:** 2 claims. **Ore:** Gold, silver, copper. **Ore min:** Pyrite, arsenopyrite, pyrrhotite, chalcopyrite, sphalerite. **Deposit:** Quartz veins in diorite near its contact with greenstone. The Iron Cap vein is about 10 ft. wide and extends from North Lk. to the top of the sheer cliffs S. of the lake, a vertical distance of 500 ft. **Dev:** Adits. **Assays:** 3 shipments to the Tacoma smelter av. 1.27 oz. Au, 1.81 oz. Ag, 0.24% Cu. **Prod:** 3 shipments to the Tacoma smelter in 1940. **Ref:** 158.

Iron Crown

Loc: Twisp area. **Ore:** Gold, silver. **Ref:** 58, p. 33.

Iron Dike (240)

(see under zinc)

Iron Mask

(see Copper World Extension under copper)

Iron Master (86)

Loc: NW¼ sec. 17, (39-26E), Palmer Mtn. dist. **Ore:** Gold, silver. **Ref:** 63, p. 101.

Ironsides and Anna B. (123)

(see under copper)

Ivanhoe (62)

(see under silver)

Jackpot (124)

Loc: SE¼ sec. 23, (40-30E), Myers Cr. dist. **Owner:** Myers Creek Mining Co. (1911-1918). **Ore:** Gold, copper, silver. **Ore min:** Pyrite, pyrrhotite, chalcopyrite, magnetite. **Deposit:** 40-ft.-wide sulfide body in quartzite. **Ref:** 112, p. 193. 154, p. 47.

Japan

(see under copper)

Jessie (51)

(see also Triune)

Loc: Sec. 10, (39-26E), Wannacut Lk. dist. **Prop:** Part of Triune property. **Ore:** Gold. **Ref:** 12, p. 65. 13, p. 103. 63, p. 98.

Jim Dodd

(see Sheep Mountain under molybdenum)

John Arthur (213)

(see under silver)

John Judge

(see Leadville)

Jones (157)

(see under copper)

Josie

(see Hiawatha)

Juanita

Loc: Nighthawk dist. **Ore:** Gold, silver. **Ref:** 63, p. 102.

Judy

Loc: Palmer Mountain dist. **Ore:** Gold. **Prod:** 1937. **Ref:** 58, p. 35. 97, 1938, p. 459. 158.

Julia (20)

(see under lead)

Jumbo

Loc: Oroville area. **Owner:** Jumbo Gold Mining Co., Inc., Spokane, Wash. (1941). **Ore:** Gold, silver. **Ref:** 58, p. 35.

Junction

Loc: 2½ mi. W. of Nespelem. **Prop:** 1 claim. **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** Quartz vein in granite. **Dev:** Short adits. **Assays:** One sample showed 0.04 oz. Au, 1.40 oz. Ag. **Ref:** 158.

Just In Time (191)

Loc: Sec. 11, (30-22E), Squaw Cr. dist. **Ore:** Gold. **Ref:** 58, p. 35. 63, pp. 88-89.

Kaaba (28)

(see under lead)

Kaaba-Texas

(see Kaaba under lead)

Kelsey (42)

(see under copper)

Key (222)

(see under silver)

Keystone (219)

(see under silver)

Kimberly (59)

(see under lead)

King Solomon (29)

Loc: Sec. 13, (40-25E), Nighthawk dist. **Prop:** 3 claims: King Solomon Nos. 1, 2, and 5. **Owner:** Fred Davis, Spokane, Wash. (1938). **Ore:** Gold, silver, copper. **Ref:** 58, p. 37. 158.

Kodak

Loc: On NW. side of Palmer Mtn. **Prop:** 1 claim. **Owner:** F. W. Brown, J. Finn, and J. E. Waters (1892). **Ore:** Gold, silver. **Ore min:** Sulfides. **Gangue:** Quartz. **Deposit:** Vein said to be 45 ft. wide at surface with gneiss hanging wall and mica schist footwall. **Dev:** 20-ft. drift. **Assays:** Assays from dump and outcrop show 10 to 11 oz. Au, 80 to 90 oz. Ag. **Ref:** 13, p. 100.

Kyota (234)

(see under silver)

Lady of the Lake (225)

(see under silver)

Lacuna

(see Leuena under silver)

Lake

Loc: Myers Cr. dist. **Owner:** E. Kromer, Spokane, Wash. (1932). **Ore:** Gold. **Prod:** Small amount 1910. **Ref:** 104, 6/30/32, p. 28. 106, 6/2/32, p. 8.

Lakeview

(see Prize under lead)

Lakeview (43)

Loc: ½ mi. W. of the Dividend property, Oroville dist. **Ore:** Gold. **Deposit:** Said to be a thick blanket-like body of ore parallel to slope of the hill. **Dev:** 2 adits. **Assays:** Reportedly 80,000 tons of \$6 to \$10 ore developed in 1916. **Prod:** 2 cars prior to 1916. **Ref:** 54, p. 9. 63, p. 103.

Lancashire Lass (73)

Loc: SE¼ sec. 27, (39-26E), Wannacut Lk. dist. **Ore:** Gold. **Ref:** 63, p. 100.

Last Chance (205)

Loc: Sec. 24, (30-22E), Squaw Cr. dist. **Ore:** Gold, silver. **Assays:** 3 carloads av. \$39 per ton (1897). **Prod:** 3 carloads ore prior to 1897. **Ref:** 63, pp. 87-88.

Launa

(see Leuena under silver)

Leadville (John Judge, Denver City, Grandview) (89)

Loc: Near SW. cor. sec. 19, (39-26E), on W. face of Palmer Mtn. **Elev:** 2,500 to 3,000 ft. **Access:** Road from Loomis. **Prop:** 13 patented claims, including: Leadville, Denver City. **Owner:** Grandview Gold Mining Co. (1941). John Judge Mining Ass'n. (1938). **Ore:** Gold, copper, lead, silver. **Ore min:** Galena, pyrite, chalcopryrite, free gold. **Gangue:** Quartz, calcite. **Deposit:** Veins of quartz 6 in. to 3 ft. wide along the contact of argillite and gabbro. Leadville vein traceable for 200 ft. in lower adit. Denver City vein is traceable for 1,000 ft. on the surface. Mineralization is sparse. **Dev:** 2,500 ft. of adits and shafts. **Prod:** 1937 (15 tons), 1938, 1939. **Ref:** 63, p. 100. 97, 1939, p. 490; 1940, p. 478. 114, no. 5, 1909, p. 80. 154, pp. 104-105. 158.

Leuena (214)

(see under silver)

Lilman (264)

(see under silver)

Little Chief (265)

(see under silver)

Little Chopaka (30)

(see under lead)

Little Falls (95)

Loc: NE¼ sec. 15, (38-25E), Palmer Mtn. dist. **Ore:** gold. **Ref:** 63, p. 104.

Little Flower

(see Bambino)

Little Johnnie (260)

(see under silver)

London

(see Methow)

Lone Pine (36)

(see under silver)

Lone Star (144)

Loc: NW¼ sec. 19, (36-20E), in Spokane Gulch. **Access:** 5 mi. from Mazama by way of Goat Cr. road. **Prop:** 6 or more claims. **Owner:** Tom Luke, Mazama, Wash. (1946). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** A silicified and oxidized shear zone 5 ft. in width. **Dev:** 15-ft. shaft, 2 open cuts, pit. **Assays:** 3 samples across the shear zone showed \$13 to \$17 Au. **Ref:** 51, p. 7. 158.

Lone Star (Star) (215)

(see under lead)

Louisa

(see Standard and Lousia)

Lucky Jim (156)

(see under copper)

Lucky Lady (101)

(see under silver)

Luke

(see Molly under copper)

Lulu

(see under silver)

McClure**Loc:** Twisp dist. **Ore:** Gold. **Ref:** 106, 7/31.**MacLean**

(see Roosevelt under iron)

Magnetic (125)

(see under iron)

Majestic**Loc:** Palmer Mtn. dist. **Ore:** Gold, silver. **Ref:** 63, p. 104.**Mammoth (22)**

Loc: NW¼ sec. 26, (40-25E), Nighthawk dist. **Ore:** Gold. **Ref:** 63, p. 102.

Mammoth (220)

(see under silver)

Manuel

(see under copper)

Maquae

Loc: Oroville dist., T. 39 N., R. 26 E. **Prop:** 12 claims. **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Pyrite, galena, sphalerite, chalcopryrite, manganese stain. **Gangue:** Quartz, calcite. **Deposit:** 3 or 4 quartz-calcite veins. **Dev:** Minor amount. **Ref:** 46, p. 222. 154, p. 100.

Marshal Ney

Loc: On Bear Cr., foot of Gilbert Mtn., Twisp dist. **Ore:** Gold, copper. **Ref:** 63, p. 91.

Mazama Pride (Hotchkiss) (154)

Loc: N½ sec. 30, (36-20E). **Elev:** 2,000 to 2,800 ft. **Access:** About ½ mi. N. of Mazama, 56 mi. by road from railroad at Pateros. **Prop:** 9 unpatented claims. **Owner:** H. A. and Edgar Hotchkiss, Winthrop, Wash., and D. W. Tomlinson, Mansfield, Wash. (1946). Danlee Mining Co. (1931). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, arsenopyrite, chalcopryrite. **Deposit:** 2 or 3 quartz veins 1 to 3 ft. thick in diorite. **Dev:** 525-ft. cross-cut, 80-ft. drift, 30-ft. drift, 15-ft. shaft, several open cuts. **Assays:** 37 tons shipped reportedly assayed 0.7 oz. Au. Other assays show 1.08 oz. Au, 1.50 oz. Ag. **Prod:** About 37 tons in 1931 and reportedly another shipment in 1939. **Ref:** 52, p. 11. 58, p. 42. 97, 1931, p. 477; 1940, p. 478. 106, 5/7/31; 5/21/31, p. 17; 7/2/31, p. 18. 158.

Mazama Queen (Continental) (149A)

Loc: SE¼ sec. 14, (36-19E). **Elev:** 2,600 ft. **Access:** 3 mi. NW. of Mazama by road. **Prop:** 3 unpatented claims: Mazama Queen, K. D., Daisy; and 1 millsite. **Owner:** Leybold-Scales, Inc., Tacoma, Wash. (1946). Mazama Queen Mining Co. (1932). Continental Gold Silver Mining Co. (1932-1936). **Ore:** Gold, silver, copper, lead, zinc. **Ore min:** Pyrite, sphalerite, chalcopryrite, galena. **Deposit:** An 8- to 10-in. quartz-calcite vein in altered andesite. **Dev:** 1,000-ft. adit. **Improv:** 50-ton flotation

plant, assay office, camp facilities for 15 to 20 men (1939). **Assays:** Ore said to range from \$10 to \$47 per ton. 4 samples showed 0.32 to 0.44 oz. Au, 1.74 to 4.30 oz. Ag, 8.5% to 10.0% Zn. **Prod:** Test shipments in 1938 and 1939. **Ref:** 97, 1939, p. 490; 1940, p. 478. 104, 5/30/32, p. 26; 4/30/35, p. 29; 12/15/35, p. 26; 2/15/36, p. 31. 106, 5/19/32; 7/7/32, p. 11. 158.

Methow (London, New London) (199)

(see also Roosevelt under gold, and Mineralite, Homestake under tungsten)

Loc: E $\frac{1}{2}$ secs. 12 and 13, (30-22E) and W $\frac{1}{2}$ secs. 7 and 18, (30-23E), on NE. slope of Hunter Mtn., Squaw Cr. dist. **Access:** Methow highway crosses E. end of property and is connected with W. end by truck road. **Prop:** At least 4 claims E. of Hunter Mtn. on W. side of Methow R. and at least 3 claims E. of the river. **Owner:** Methow Mining & Milling Co., Seattle, Wash. (1943-1946). Methow Gold & Copper Co. (1902-1924). **Ore:** Gold, silver, copper, tungsten. **Ore min:** Pyrite, chalcopryrite, scheelite. **Deposit:** Mineralized quartz veins from 3 in. to 15 ft. wide; among them the New London, Homestake, Mineralite, Roosevelt, Tungstic, Milwauke. **Dev:** More than 2,200 ft. of underground workings, of which more than half are W. of the river, also numerous trenches and open cuts. **Assays:** Av. 0.44 oz. Au, 0.8 oz. Ag, 1% Cu, and a small amount of W. **Prod:** \$40,000 in gold in 1940-1941. **Ref:** 22, p. 8. 33, 1907, p. 784. 37, pp. 47-49. 63, p. 88. 88, p. 35. 98, 1918-1925. 158.

Mid Range (159)

Loc: Sec. 34, (35-18E), at head of North Cr. **Elev:** 6,000 to 7,760 ft. **Access:** About 5 mi. by trail N. of Gilbert, terminus of the Twisp R. road. **Prop:** 8 unpatented claims. **Owner:** Bill Johnson and Corvin Johnson, Winthrop, Wash. (1946). **Ore:** Gold, silver, copper, zinc. **Ore min:** Pyrite, arsenopyrite, pyrrhotite, chalcopryrite, sphalerite. **Deposit:** 2 mineralized quartz veins in diorite. **Dev:** Several adits and open cuts. **Assays:** Ore shipped in 1940 av. 1.27 oz. Au, 1.81 oz. Ag, 0.24% Cu. **Prod:** 10 tons shipped to Tacoma smelter in 1939 and 22 tons in 1940. **Ref:** 58, p. 44. 97, 1940, p. 478. 158.

Mills

Loc: Squaw Cr. dist. **Ore:** Gold, silver. **Prod:** Unknown amount prior to 1897. **Ref:** 63, p. 88.

Mineral Hill (Washington Consolidated, Seven Devils) (223)

(see under silver)

Minnehaha (221)

(see under silver)

Minnie (175)

Loc: NW $\frac{1}{4}$ sec. 23, (32-22E), Twisp dist. **Elev:** 2,400 ft. **Access:** Road up Leecher Cr., 3 $\frac{1}{2}$ mi. NE. of Carlton. **Prop:** 4 unpatented claims. **Owner:** Franklin C. Blocksom, Twisp, Wash. (1949—). **Ore:** Gold, silver, zinc. **Ore min:** Pyrite, sphalerite, chalcopryrite, scheelite, marcasite. **Gangue:** Quartz, gypsum, native sulfur. **Deposit:** Leached and honeycombed quartz vein av. 3 ft. wide in metamorphic rocks. **Dev:** 160-ft. adit on which is 55-ft. winze, 25-ft. drift, and 30-ft. slope, also several open cuts. **Improv:** House (1951). **Assays:** Carload of ore shipped in Nov. 1945: 0.46 oz. Au, 7.75 oz. Ag, net \$667.56. **Prod:** 2 carloads, one in 1941, one in 1945. **Ref:** 37, pp. 52-53. 43, 1918, p. 309. 68, p. 14. 97, 1918, p. 42. 158.

Minnie (68)

Loc: Eastern extension of the Anaconda claim in sec. 14, (39-26E), Wannacut Lk. dist. **Prop:** 1 claim. **Owner:** Messrs. Hall and George Pascall (1892). **Ore:** Gold. **Deposit:** 2-ft. vein. **Dev:** Shaft. **Assays:** \$22 Au. **Ref:** 13, p. 102.

Modoc (250)

(see under copper)

Molly (Sheep Mountain)

(see Sheep Mountain under molybdenum)

Molly (145)

(see under copper)

Molson

(see Poland China)

Moncosilgo (48)

(see under copper)

Moneymaker (239)

(see under silver)

Montana (266)

(see under silver)

Montana (147)

(see under copper)

Monterey (126)

(see under copper)

Morning Glory

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1940. **Ref:** 97, 1941, p. 474.

Mother Lode

(see Crystal Butte)

Mountain Beaver (8)

Loc: NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, (38-20E), on Isabella Ridge adjacent to Billy Goat prospect. **Elev:** 4,400 to 4,800 ft. **Access:** 27 mi. by road from Winthrop. **Prop:** 3 unpatented claims: Mountain Beaver, Buckhorn Nos. 1 and 2. **Owner:** H. A. and Edgar Hotchkiss, Winthrop, Wash., and D. W. Tomlinson, Mansfield, Wash. (1946). **Ore:** Gold, copper, silver, bismuth. **Ore min:** Pyrite, chalcopryrite. **Deposit:** Mineralized andesite agglomerate. **Dev:** 4 adits; one 275 ft. long, another with 200 ft. of work, 2 shorter ones. **Improv:** Cabin and small flotation mill (1949). **Assays:** Crude ore shipped av. 1.53 oz. Au, 1.13 oz. Ag, 1.81% Cu. Minor amount of bismuth reported. **Prod:** Small shipments in 1922, 1931, 1934, 1935. **Ref:** 97, 1931, p. 477; 1935, p. 354. 158.

Mountain Goat

Loc: On Gilbert Mtn., Twisp dist. **Ore:** Gold. **Ref:** 63, p. 90.

Mountain Lily

Loc: Squaw Cr. dist. **Ore:** Gold. **Ref:** 58, p. 46.

Mountain Sheep (15)

(see under silver)

Mule Deer

Loc: Conconully dist. **Ore:** Gold, silver. **Ref:** 113, 7/1/37, p. 16.

Multnomah (251)

(see under copper)

Myrtle

(see St. Paul under silver)

Neutral

(see Magnetic under iron)

New Deal

(see Antimony Queen under antimony)

New Hope (2)

(see under copper)

New London

(see Methow)

New York

(see Chicago and New York)

New York**Loc:** On Kruger Mtn., Oroville dist. **Ore:** Gold, copper. **Dev:** 12-ft. shaft. **Ref:** 63, p. 103.**Newport (270)****Loc:** Sec. 17, (30-31E), 1,200 ft. S. of Silver Cliff mine. **Owner:** Mr. Newport (1912). **Ore:** Gold. **Ore min:** Pyrite. **Gangue:** Quartz. **Deposit:** Mineralized fracture planes in sericitized granite similar to Silver Cliff mine. Max. 2½ ft. wide. **Dev:** Shaft, 175-ft. adit. **Ref:** 122, p. 76.**Nina Lu (267)**

(see under silver)

Ninety-Two (63)**Loc:** Sec. 21, (39-26E), Palmer Mtn. dist. **Ore:** Gold. **Ref:** 58, p. 48. 63, p. 100.**Nip and Tuck (201)****Loc:** Sec. 22, (30-22E). **Ore:** Gold. **Prod:** About \$480 by 1897. **Ref:** 58, p. 48. 63, p. 89.**Nip and Tuck (127)**

(see under copper)

No Monicker (Dorian) (228)**Loc:** Sec. 34, (35-25E), Ruby dist. **Owner:** Chas. McLean, Okanogan, Wash. (1941). **Ore:** Gold. **Ref:** 58, p. 48.**North Star (171)****Loc:** Sec. 24, (33-21E), Twisp dist. **Owner:** George Gibson, Twisp, Wash. (1941). **Ore:** Gold, silver. **Ref:** 58. 63, p. 89.**Northern Gold**

(see Bodie)

Number One (24)

(see under lead)

O. K. (44)

(see under copper)

Occident (55)

(see also Triune)

Loc: Sec. 10, (39-26E), Wannacut Lk. dist. **Prop:** Part of Triune property. **Ore:** Gold, silver. **Ref:** 12, p. 65. 13, p. 104.**Oceanic****Loc:** Palmer Mtn. dist. **Ore:** Gold, silver. **Ref:** 63, p. 104.**Okanogan (190)**

(see also Holden-Campbell)

Loc: W. of Hunter adit, secs. 10 and 11, (30-22E), Squaw Cr. dist. **Prop:** 1 claim of Holden-Campbell group. **Owner:** Holden-Campbell Mining Co. (1942). **Ore:** Gold, tungsten. **Ore min:** Scheelite. **Deposit:** Quartz vein as much as 8 ft. wide in granodiorite. Vein exposed on surface for at least 300-ft. length and 142-ft. depth. **Dev:** 160-ft. adit (caved 1942). **Assays:** Est. ¼% scheelite. **Ref:** 37, pp. 45-47. 158.**Okanogan Copper (104)****Loc:** Near NE. cor. sec. 20, (37-25E), on N. side of Sinlahekin Cr., Conconully dist. **Elev:** 2,100 ft. **Access:** Trail up Sinlahekin Cr. **Prop:** Group of claims. **Owner:** Okanogan Copper Co. (1917). **Ore:** Gold, copper. **Ore min:** Pyrite. **Gangue:** Quartz, gouge. **Deposit:** Shear zones in metamorphosed shales contain quartz stringers. Metamorphosed shales are heavily pyritized. Stringers and shales both said to carry gold. **Dev:** 500-ft. adit, 2 shorter adits. **Assays:** Said to carry gold and copper. **Ref:** 75, p. 35.**Okanogan Free Gold (Owasco, Allison) (49)****Loc:** SE¼NW¼ sec. 19, (40-27E), on N. side of Similkameen R. **Elev:** 1,200 ft. **Access:** 3 mi. N. of Oroville by road. **Prop:** 5 patented claims. **Owner:** Roy S. Meader, Oroville, Wash., and H. N. North, Omak, Wash. (1938-1941). United Mines Co. (1914). Owasco Gold Mining Co. (1915-1918). **Ore:** Gold, silver. **Ore min:** Pyrite, sphalerite, galena, free gold. **Deposit:** A quartz vein 0 to 12 ft. wide occurs in country rock of limestone, quartzite, and schist. Ore minerals are disseminated in the quartz. **Dev:** 3 adits, glory hole. **Assays:** 2 assays show \$3.92 and \$5.37 Au, Ag. **Prod:** 1914, 1918, 1936, 1938-1939. **Ref:** 54, pp. 4-5. 58, pp. 3, 52. 63, p. 102. 97, 1914, 1918, 1937, 1939-1940. 100, 1899, p. 80. 112, p. 196. 154, p. 87. 158.**Old Glory (244)**

(see under copper)

Olentangy (110)**Loc:** W. part of secs. 8 and 17, (40-30E), Myers Cr. dist. **Prop:** 4 patented claims. **Owner:** Olentangy Mining Co. (1907-1915). **Ore:** Gold, copper, lead, zinc. **Ore min:** Chalcopyrite, pyrite, traces of tetrahedrite, some arsenopyrite, sphalerite, galena. **Deposit:** Fault zone in calcareous quartzite consists of breccia cemented by ore-bearing quartz stringers. **Dev:** 160-ft. shaft with drifts on 100- and 150-ft. levels. **Assays:** Gold varies from traces to high grade. **Ref:** 46, p. 174. 97, 1907, p. 474. 98, 1918, p. 117. 154, pp. 51-52.**Opal (111)****Loc:** Sec. 20, (40-30E), Myers Cr. dist. **Ore:** Gold, copper, lead. **Ref:** 116, no. 4, 1907, p. 18.**Oregon**

(see also Washington)

Loc: Squaw Cr. dist. **Ore:** Gold. **Ref:** 63, p. 89.**Oregonian****Loc:** At head of North Cr., Twisp dist. **Ore:** Gold. **Ref:** 63, p. 90.**Orient****Loc:** Gilbert Mtn., Twisp dist. **Prop:** 4 claims. **Owner:** Orient Gold Mining & Milling Co. (1897). **Ore:** Gold, copper. **Ore min:** Free gold, sulfides. **Assays:** Mill test showed \$15 Au. **Ref:** 63, p. 91.**Oriental and Central**

(see American Flag)

Oro Fino (99)**Loc:** SE¼ sec. 23, (38-25E), Palmer Mtn. dist. **Ore:** Gold. **Ref:** 63, p. 104.**Oro Fino****Loc:** Wannacut Lk. dist. **Ore:** Gold, silver, platinum. **Ref:** 63, p. 101.**Osiola**

(see under copper)

Oversight (261)

(see under lead)

Overtop

(see Poland China)

Owasco

(see Okanogan Free Gold)

Palmer Lake (50)

(see under copper)

Palmer Mountain Tunnel (97)

Loc: NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, (38-25E), Palmer Mtn. dist., $\frac{1}{2}$ mi. N. of Loomis. **Elev:** 1,610 ft. **Prop:** 56 unpatented claims. **Owner:** Tillicum Development Co. (1912-1924). Palmer Mountain Gold Mining & Tunnel Co. (1902-1918). Palmer Mountain Tunnel Co. (1903-1918). Palmer Mountain Tunnel & Power Co. (1905-1908). Palmer Mountain Gold & Copper Co. (1908). Palmer Mountain Mining & Milling Co. (1908-1918). **Ore:** Gold, silver, copper, lead. **Ore min:** Malachite, pyrite, chalcopryrite, galena. **Deposit:** Quartz veins as much as 3 ft. wide in diorite and greenstone. Smaller veins contain much calcite. **Dev:** 6,610-ft. adit, and drifts aggregating 2,000 ft. An 800-ft. diamond-drill hole extends beyond face of main adit. **Assays:** 20-ft. sample from 3-ft. vein in tunnel 1,300 ft. from portal assayed 0.56 oz. Au, 0.28 oz. Ag. Other assays from \$1.80 to \$40 per ton. **Ref:** 33, 1908, p. 1099. 88, pp. 29-30. 98, 1918-1925. 100, 1903, p. 56. 104, 3/30/34, p. 25. 145, p. 95. 154, pp. 106-107. 158.

Palmer Summit (Grand Summit) (64)

Loc: SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, (39-26E), Palmer Mtn. dist. **Owner:** Dr. L. E. Eastman and F. C. Barber, Wenatchee, Wash. (1939-1941). **Ore:** Gold, copper, lead. **Ore min:** Pyrite, chalcopryrite, galena. **Deposit:** Narrow and sparsely mineralized quartz veins in gabbro. **Dev:** 50-ft. adit, a second adit, and a 40-ft. shaft. **Assays:** 50 tons av. \$20 Au. **Prod:** \$1,000 prior to 1897. 1937, 1939. **Ref:** 58, p. 52. 63, p. 100. 97, 1938, p. 459; 1940, p. 478. 158.

Panama (262)

(see under silver)

Parallel

Loc: Squaw Cr. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 89.

Pateros

(see Sullivan)

Pay Day (163)

Loc: Sec. 11, (34-18E). **Elev:** 4,000 ft. **Access:** Just N. of Gilbert, terminus of Twisp R. road. **Prop:** 5 unpatented claims. **Owner:** F. C. Blocksom, Twisp, Wash., and Frank R. Reath, Seattle, Wash. (1946). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, pyrrhotite, chalcopryrite. **Deposit:** Shattered metamorphic rocks near a granitic intrusive rock are somewhat silicified and mineralized. **Dev:** 20- to 25-ft. shaft, several short adits, some open cuts. **Assays:** Assays over adit width show tr. to 0.03 oz. Au and a little Cu. **Ref:** 158.

Paymaster (202)

Loc: SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, (30-22E), Squaw Cr. dist. **Owner:** S. J. Holden and A. C. Campbell, Chelan, Wash. (1942). **Ore:** Gold. **Ore min:** Free gold, scheelite. **Deposit:** A vein 3 ft. wide composed of sheared granitic rock and quartz. Iron oxide bands from 1 to 3 in. wide on each wall of the vein carry free gold. **Dev:** 150-ft. shaft, 175-ft. adit. **Prod:** Some gold ore produced from the oxidized ore. **Ref:** 58, p. 53. 63, p. 88. 158.

Peacock (Bornite) (5)

(see under copper)

Peacock (227)

(see under silver)

Pendennis (117)

Loc: Sec. 16, (40-30E), Myers Cr. dist. **Owner:** Reco Mining & Milling Co. (1918). **Ore:** Gold, silver. **Ref:** 112, p. 200.

Pennington

(see Chelan)

Pennsylvania

(see under silver)

Peoria (169)

Loc: Sec. 22, (33-22E). **Access:** 32 mi. by road from railroad at Pateros. **Prop:** 32 acres deeded land. **Owner:** Julius C. Ramm, Nevada City, Calif. (1943). **Ore:** Gold, silver, copper, zinc. **Ore min:** Pyrite. **Deposit:** Sulfides impregnating argillite. **Dev:** 250 ft. of underground workings reported (caved 1943). **Ref:** 157.

Peterson

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1936-1938. **Ref:** 58, p. 54. 97, 1937-1939.

Phil Sheridan

(see Sheridan under silver)

Pingston

Loc: On Myers Cr., $1\frac{1}{2}$ mi. from Canadian boundary. **Ore:** Gold. **Ref:** 63, p. 110.

Pinnacle (85)

Loc: SW $\frac{1}{4}$ sec. 19, (39-26E) and sec. 25, (39-25E). **Elev:** 2,000 ft. **Access:** 3 mi. N. of Loomis on Palmer Lk. road. **Prop:** 6 claims. **Owner:** Pinnacle Mines, Inc., Renton, Wash. (1951). Pinnacle Gold Mine Co. (1909-1915). Silver-Lead Mining & Reduction Co. (1929). Sinlahakin Mining Co. (1931). Mary M. Mining Co. (1935). **Ore:** Gold, copper, lead, zinc, silver. **Ore min:** Free gold, pyrite, chalcopryrite, sphalerite. **Gangue:** Quartz, some calcite. **Deposit:** Quartz vein 4 to 10 ft. wide in altered gabbro and disseminated ore minerals in sheared gabbro. **Dev:** Approx. 2,000 ft. of workings in 3 adits. **Assays:** \$11 Au across the vein 4 to 10 ft. wide. **Prod:** \$200,000 prior to 1910 (gold). **Ref:** 99, 3/26/35. 106, 8/2/28, 10/1/31. 114, no. 5, 1909, p. 80. 150, p. 38. 154, p. 105. 158.

Poland China (Molson, Overtop) (108)

Loc: SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, (40-29E), Myers Cr. dist. **Elev:** 3,850 ft. **Access:** About 4 mi. NW. of Chesaw. 10 mi. to railroad at Manchester. **Prop:** 11 patented claims, including the Charles F. and Kismet. Also 160 acres on which deed to mineral rights is held. **Owner:** Overtop Mining Corp., Molson, Wash. (1932-1940). Molson Mining Co. (1907-1918). Mary Ann Creek Mining Co. (1922). **Ore:** Gold, silver, lead. **Ore min:** Pyrite, marcasite, galena. **Deposit:** Quartz vein from a stringer to 14 ft. wide enclosed in graphitic argillite. Av. width 6 ft. **Dev:** 1,500 ft., consisting of a 436-ft. adit, various shafts, and crosscuts. **Assays:** Ore worked in 1911 av. about \$4.75 Au, 1 oz. Ag. 2 cars shipped in 1938 assayed \$13 Au. **Prod:** More than \$100,000 by 1936, 1937, at least 2 cars in 1938, 1939. **Ref:** 63, p. 110. 97, 1907, 1913, 1914, 1923, 1934, 1935, 1938-1940. 98, 1925, p. 1823. 104, 7/30/36, p. 25. 106, 7/30/32; 5/19/32; 7/21/32, p. 1; 7/30/32, pp. 28-29. 112, p. 192. 113, 4/15/37, p. 7. 116, no. 6, 1907, p. 33. 154, pp. 50-51. 158.

Poorman

(see under lead)

Porphyry

Loc: Due N. of Mt. Bonaparte, Myers Cr. dist. **Ore:** Gold. **Ref:** 63, p. 110.

Portland

Loc: Sec. 11, (34-18E), on Gilbert Mtn. **Prop:** 7 claims. **Owner:** Consolidated Twisp Mining & Milling Co. (1897). **Ore:** Gold. **Deposit:** 6-ft. quartz vein. **Dev:** 50-ft. adit, 10-ft. adit. **Assays:** High values reported. **Ref:** 58, p. 55. 63, p. 91.

Premier

Loc: Palmer Mtn. dist. **Ore:** Gold, lead. **Prod:** 1933. **Ref:** 97, 1934, p. 297.

Pride of the Hills

Loc: Twisp dist. **Ore:** Gold. **Ref:** 63, p. 86.

Prize (23)

(see under lead)

Pthomigan

(see under cobalt)

Pyrargyrite

(see Ruby under silver)

Q. S. (106)

(see under copper)

Rainbow (142)

Loc: Sec. 10, (36-19E). **Access:** 5 mi. NW. of Mazama by Goat Cr. road. **Prop:** 1 claim. **Owner:** Tom C. Luke, Mazama, Wash. (1946). **Ore:** Reportedly gold. **Ore min:** Pyrite. **Deposit:** Mineralized quartz along a narrow contact zone between conglomerate and a felsite dike. **Dev:** 40-ft. drift. **Ref:** 158.

Rainbow (65)

Loc: NE¼ sec. 22, (39-26E), between Palmer Mtn. and Wannacut Lk. **Elev:** 2,600 ft. **Access:** Road from Loomis or Golden. **Prop:** 5 claims: Rainbow, Mayflower, Coyote, Cottonwood, June Bug. **Owner:** Wannacut-Rainbow Mining Co. (1930). Washington Mining & Development Co. (1892). **Ore:** Gold, silver, copper, lead. **Ore min:** Pyrite, arsenopyrite, chalcopyrite, galena, malachite, limonite, free gold. **Deposit:** Vein consists of quartz lenses enclosed in limestone, quartzite, and schist. The lenses pinch and swell within short distances. **Dev:** 3 adits. **Assays:** Rich free gold samples assayed 50 to 60 oz. Au, 18 to 20 oz. Ag, 2% Cu, 2.9% to 3.5% Pb. **Prod:** Has produced. **Ref:** 12, p. 66. 13, p. 101. 54, p. 3. 63, p. 100. 106, 10/2/30. 154, p. 102.

Ramore (245)

(see under lead)

Ramsey (247)

(see under copper)

Rattlesnake (168)

Loc: SE¼ sec. 18, (33-22E), about ½ mi. S. of Twisp. **Elev:** 2,000 ft. **Prop:** Deeded land. **Owner:** A. T. Scott, Twisp, Wash. (1943-1946). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Pyrite, arsenopyrite, galena, sphalerite, chalcopyrite. **Deposit:** Narrow mineralized quartz veins in a fracture zone in altered volcanic rock. Fracture zone is 8 ft. wide and traceable for 250 ft. **Dev:** 22-ft. shaft, 20-ft. adit, several open cuts. **Assays:** A 2-in. section of vein assayed 0.89 oz. Au, 7.1 oz. Ag, 4.1% Pb, 4.9% Zn, 0.3% Cu. Movable widths show low gold-silver content. **Ref:** 158.

Reckless (132)

Loc: W. ¼ cor. sec. 35, (40-30E), Myers Cr. dist. **Owner:** Crystal Butte Co. (1916). **Ore:** Gold. **Ref:** 158.

Reco (118)

Loc: SW¼ sec. 16, (40-30E), ½ mi. N. of Chesaw, Myers Cr. dist. **Access:** Road. **Prop:** 2 claims: Reco, Pendennis. **Owner:** Reco Gold Mining Co., Bremerton, Wash. (1915-1938). Reco Mining & Milling Co. (1918). **Ore:** Gold, silver, copper. **Ore min:** Arsenopyrite, free gold, chalcopyrite, pyrite, marcasite, bornite. **Gangue:** Quartz, some calcite. **Deposit:** Veins 1 to 2 ft. wide in granitic rock. **Dev:** About 1,100 ft. in 3 adits, also some open cuts. **Assays:** Ore shipped said to av. \$20 per ton. **Prod:** 150 tons shipped to Northport smelter in 1916 and 1917. **Ref:** 58, p. 57. 97, 1914-1916, 1924. 106, 12/1/32. 112, p. 200. 158.

Red Jacket (100)

Loc: SE¼ sec. 14, (38-25E), Palmer Mtn. dist. **Ore:** Gold, silver. **Assays:** 2 tons returned \$80 (1892). **Ref:** 63, p. 104.

Red Shirt (170)

Loc: SE¼ sec. 18, (33-23E), on lower W. slope of Pole Pick Hill. **Elev:** 3,800 ft. **Access:** Road from Twisp. **Prop:** 1 patented claim: Red Shirt; 4 unpatented claims. **Owner:** John Russell and George M. Gibson, Winthrop, Wash., lessees, (1952). Red Shirt Mining Co. (1936-1938). Mahlon McCain, Winthrop, Wash. (1949). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite, arsenopyrite. **Deposit:** Quartz vein, with a width of 1 to 5 ft., in schist. **Dev:** 100 ft. of drift from a 425-ft. crosscut and 375 ft. of drift from a 200-ft. crosscut. **Assays:** 35 oz. Ag, ½ oz. Au. Ore av. about \$10 per ton. **Prod:** Credited with more than \$100,000. Produced intermittently for 50 yr. Latest work in 1936 to 1938. **Ref:** 12, p. 69. 13, p. 113. 63, p. 85. 97, 1937-1939. 104, 9/30/36, p. 30. 158.

Reedy

(see Antimony Queen under antimony)

Review (119)

Loc: NW¼ sec. 16, (40-30E), Myers Cr. dist. **Owner:** Review Gold Mining Co. (1902). **Ore:** Gold, copper. **Ore min:** Pyrite, chalcopyrite. **Gangue:** Quartz, calcite. **Deposit:** Ore at contact of granite and slate. **Dev:** 360-ft. adit, 813-ft. adit. **Assays:** 50 tons shipped prior to 1902 av. \$17.50 per ton, largely in gold. **Prod:** 50 tons prior to 1902. **Ref:** 88, p. 27.

Riverside

Loc: Squaw Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 88.

Riverview (21)

Loc: NE¼ sec. 26, (40-25E), Nighthawk dist. **Ore:** Gold. **Ref:** 63, p. 102.

Rock House

Loc: 7 mi. S. of Nespelem. **Owner:** Joseph C. Cross, Nespelem, Wash. (1939). **Ore:** Gold, silver, copper. **Ref:** 158.

Roosevelt (208)

(see also Methow)

Loc: SW¼NW¼ sec. 18, (30-23E), ¼ mi. E. of the Methow R., Squaw Cr. dist. **Elev:** 75 ft. above Methow R. **Owner:** Methow Mining & Smelting Co. (1930-1945). **Ore:** Gold, copper, tungsten. **Ore min:** Pyrite, chalcopyrite, scheelite. **Deposit:** Quartz vein associated with basaltic dike in gneissic granitic rock. It varies from less than 1 in. to 6 ft. thick and av. 2½ to 3 ft. Sulfides occur in pods on walls of the vein. Scheelite is in pockets and stringers throughout the vein. The vein is exposed in adits and on the surface for length of more than 700 ft. and depth of 400 ft. **Dev:** 665-ft. drift, a lower 240-ft. drift, both caved in 1938. **Assays:** Less than ¼% scheelite. Assays for the back 180 ft. of the lower adit av. 0.50% to 0.75% WO₃ over an av. width of 2 ft. Lower scheelite values in the upper adit. **Ref:** 37, p. 49. 40, p. 15. 97, 1929, p. 426; 1930, p. 673. 106, 4/3/30. 158.

Roosevelt (128)

(see under iron)

Rosalind (146)

Loc: N½ sec. 17, (36-20E). **Elev:** 3,500 ft. **Access:** About 5 mi. from Mazama by the Goat Cr. road. **Prop:** 2 unpatented claims. **Owner:** Tom C. Luke, Mazama, Wash. (1946). **Ore:** Gold, copper. **Ore min:** Pyrite, arsenopyrite, chalcopyrite. **Deposit:** A number of narrow fracture zones in diorite, some as much as 2 ft. wide, are mineralized in places. **Dev:** 1 adit with 400 ft. of drifts and crosscuts, and a 95-ft. adit. **Ref:** 158.

- Ruby**
(see under silver)
- Ruby (Pyrargyrite) (18)**
(see under silver)
- Ruby Silver**
(see under silver)
- Rush (13)**
Loc: Sec. 21, (40-25E), on steep face of Mt. Chopaka, Nighthawk dist. **Ore:** Gold, silver. **Ref:** 58, p. 60. 63, p. 103.
- Russia**
(see under copper)
- Rustler (233)**
Loc: S $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 22, (32-25E), 3 mi. E. of Malott. **Ore:** Gold, molybdenum. **Ref:** 104, 4/30/33, p. 19. 106, 4/6/33, p. 7.
- Safe Deposit**
(see under copper)
- Saint (37)**
Loc: Sec. 2, (40-26E), Nighthawk dist. **Ore:** Gold, silver, arsenic. **Ref:** 40, p. 15.
- St. Anthony (181)**
Loc: SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, (30-22E), Squaw Cr. dist. **Access:** McFarland Cr. road, 12 mi. to railroad. **Prop:** 9 unpatented claims. **Owner:** Holden Gold Mines, Inc., Chelan, Wash. (1934). Squaw Creek Mining Co. (1931). **Ore:** Gold, silver, copper. **Ore min:** Free gold. **Gangue:** Quartz. **Deposit:** Vein in gneissic diorite is 5 ft. wide. **Dev:** Adit consisting of 90 ft. of crosscut and 125 ft. of drift, a shaft of unknown depth, and several open cuts. **Assays:** Ore from surface to 35-ft. depth said to run \$50 Au. **Prod:** 1934. **Ref:** 58, p. 64. 98, 1935, p. 354. 104, 7/15/33, p. 19; 12/30/33, p. 19. 106, 4/16/31. 158.
- St. Lawrence (160)**
Loc: Sec. 34, (35-18E), at head of North Cr., a tributary of Twisp R. **Prop:** 4 claims. **Ore:** Gold, silver, copper. **Deposit:** A 7 $\frac{1}{2}$ -ft. vein and a 30-ft. vein. **Dev:** A shaft, adit, and incline. **Assays:** Av. \$20 Au, Ag, Cu. **Ref:** 88, pp. 36-37.
- St. Patrick (183)**
Loc: Sec. 14, (30-22E), Squaw Cr. dist. **Ore:** Gold. **Ref:** 63, p. 88.
- St. Paul (263)**
(see under silver)
- Salmon River (224)**
(see under silver)
- San Francisco**
(see under lead)
- San Francisco (33)**
Loc: Secs. 18 and 19, (40-26E), Wannacut Lk. dist. **Ore:** Gold. **Ref:** 58, p. 60.
- San Marino (268)**
Loc: NW $\frac{1}{4}$ sec. 35, (31-30E), Nespelem dist. **Owner:** San Marino Mining & Milling Co. (1909). **Ore:** Gold, silver. **Ref:** 114, no. 5, 1909, p. 78.
- Satellite**
Loc: On Kruger Mtn., Oroville dist. **Ore:** Gold. **Dev:** 50-ft. drift. **Assays:** Av. \$10 Au. **Ref:** 63, p. 103.
- Schoenfeld**
(see Floyd under copper)
- Schulz and Chesney (211)**
Loc: Secs. 29 and 30, (30-23E), Squaw Cr. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 89.
- Second Prize**
Loc: Oroville dist. **Prop:** 9 unpatented claims, including: Columbia, Second Prize. **Owner:** Charles Gerhart, Loomis, Wash. (1911). **Ore:** Gold. **Ore min:** Auriferous pyrite, arsenopyrite. **Deposit:** Quartz veins in schist, slate, and quartzite. One vein is 3 to 4 ft. wide with 10 in. of good ore on the footwall. Another vein is good at the surface but pinches out at depth of 35 ft. **Dev:** Several adits and shafts. **Ref:** 154, p. 104.
- Security (80)**
(see under copper)
- Seven Devils**
(see Mineral Hill under silver)
- Sharp**
(see Silver King under copper)
- Shaw-Bergman**
(see under copper)
- Sheep Mountain (1)**
(see under molybdenum)
- Shelby**
(see under silver)
- Sheridan (138)**
(see under silver)
- Sherman (232)**
(see under lead)
- Sidewinder**
Loc: On opposite side of Gold Cr. from the Crystalite property. **Prop:** 1 claim. **Owner:** John Runnels and Thomas Deaver (1892). **Ore:** Gold, silver, antimony, copper. **Deposit:** 4 $\frac{1}{2}$ -ft. vein said to be similar to the Crystalite but not as rich. **Ref:** 13, p. 115.
- Silent Friend (56)**
(see under silver)
- Silver Bell (140)**
Loc: Secs. 25 and 36, (38-31E) and sec. 30 and 31, (38-32E), 12 mi. NW. of Republic. **Prop:** 80 acres patented land and 8 claims: Silver Bell, Silver Bell No. 2, Uncle Sam No. 1, Uncle Sam Extension, Valley, Valley Extension. **Owner:** New Silver Bell Mining Co., Inc., Almira, Wash. (1949—). **Ore:** Gold, silver. **Deposit:** 2 ore shoots reported. **Dev:** 340-ft. adit. **Assays:** \$3.28 to \$28 per ton reported from one ore shoot. **Prod:** High-grade ore reported shipped from surface pit prior to 1907. In 1940 a 28-ton shipment gave net smelter returns of \$244.03. **Ref:** 58. 68, p. 14. 158.
- Silver Bluff**
(see under silver)
- Silver King (155)**
(see under copper)
- Silver Ledge (177)**
Loc: Near center sec. 11, (31-21E), $\frac{1}{4}$ mi. downstream from Antimony Queen mine. **Elev:** 300 ft. above Gold Cr. **Access:** 4 mi. by road up Gold Cr. from Methow highway. **Prop:** 3 claims: North Star, Truax, Seattle. **Owner:** Silver Ledge Mining Co. (1920-1931). **Ore:** Gold, silver. **Ore min:** Pyrite, arsenopyrite, silver sulfide, cerargyrite, bromyrite. **Deposit:** Quartz veins in sandstone and shale. Vein at collar of shaft is in a 5-ft shear zone and consists of 2 parts, one 1 $\frac{1}{2}$ ft. wide at footwall and the other 4 in. wide on hanging wall. **Dev:**

150-ft. inclined shaft, 1,500-ft. crosscut. **Assays:** 2 tons shipped av. \$20 per ton. **Prod:** 2 tons of unsorted ore prior to 1921. **Ref:** 98, 1922-1926. 104, 12/15/31, p. 29. 113, 7/34. 129, p. 259. 158.

Silver Mountain (102)

(see under silver)

Silver Queen

(see Lucky Lady under silver)

Silver Seal

(see Antimony Queen under antimony)

Silver Star

(see Silver Mountain under silver)

Silver Star

(see under silver)

Six Eagles

(see Little Chopaka under lead)

Snow Cap

(see Iron Cap and Snow Cap)

Sonny Boy (231)

(see under silver)

Spokane (American Rand) (57)

Loc: Near center E½ sec. 10, (39-26E), above NW. shore of Wannacut Lk. **Access:** Good road from Oroville. **Prop:** 13 patented and 3 unpatented claims. **Owner:** American Rand Corp. (1935-1938). Morgan Mines Co. (1916-1918). Oroville Gold Mining Co. (1934). **Ore:** Gold, silver, lead, copper, molybdenum. **Ore min:** Pyrite, galena, chalcopryrite, molybdenite, reportedly free gold. **Deposit:** Quartz vein 15 in. wide in argillite a short distance above a granite contact. Ore minerals occur in fractures in the quartz. Pyrite disseminated in the wall rock. **Dev:** 100-ft. inclined shaft from which short drifts have been driven. **Assays:** Ore from adit: 8 oz. Au, 2 oz. Ag. From shaft: 7.5 oz. Au, 2 oz. Ag. From dump: 7.5 oz. Au, 2.5 oz. Ag. 1.05% molybdenum reported. **Prod:** 1916-1918, 1935-1938. **Ref:** 12, p. 66. 13, p. 104. 63, pp. 99-100. 97, 1916-1918, 1935, 1937, 1939. 104, 2/15/35, p. 23; 6/30/36, p. 25. 154, p. 98. 158.

Spokane (Gold Crown) (166)

Loc: Sec. 12, (33-21E). **Access:** On Twisp R. road, 2 mi. W. of Twisp. **Prop:** 2 unpatented claims. **Owner:** Monterey Mining & Milling Co., Twisp, Wash. (1954—). S. J. Sherwood, Twisp, Wash. (1946). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Sphalerite, arsenopyrite, chalcopryrite, pyrite, galena. **Deposit:** Irregular quartz-calcite vein from few inches to 3 ft. thick in andesite. Ore minerals occur in bunches in vein. **Dev:** Several hundred ft. of crosscuts and drifts and some stopes. **Assays:** 6 tons shipped in 1941 assayed 0.40 oz. Au, 20.25 oz. Ag, 4.5% Zn, 3.8% Pb. **Prod:** Small amount in 1939, 1941, and 1954. **Ref:** 1, no. 2, 1917, p. 29. 58, pp. 24, 64. 88, p. 36. 97, 1940, p. 478. 105, no. 3, 1906, p. 46. 158.

Standard

Loc: Conconully dist. **Ore:** Gold. **Ref:** 13, p. 97. 63, p. 100.

Standard (Sherman)

(see Sherman under lead)

Standard and Louisa (195)

Loc: Sec. 12, (30-22E), Squaw Cr. dist. **Ore:** Gold, silver, copper. **Deposit:** 3½- to 5-ft. vein. **Dev:** Small amount. **Assays:** Av. \$24 per ton. **Ref:** 63, p. 88. 88, p. 38.

Star

(see Lone Star under lead)

Stone

(see Kelsey under copper)

Submarine

(see Lone Pine under silver)

Sullivan (Pateros)

Loc: 5 mi. NW. of Pateros, on E. side of Methow R. **Access:** Mine is across Methow R. from highway, by which it is 5 mi. to railroad at Pateros. **Prop:** 5 claims: Friday, Saturday, Key, Lone Pine, Prince of Paris. **Owner:** J. J. Sullivan, Pateros, Wash. (1947), leasing to Dr. Roy W. Key (1940-1947). Pateros Mining Co. (1943). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopryrite. **Gangue:** Quartz, carbonate minerals. **Deposit:** Sheared zones up to 6 ft. thick but av. less than 3 ft. in granite along margins of "andesite" dikes contain small scattered pods of shipping-grade ore. **Dev:** 1,200 ft. of underground workings on 3 levels. A block of ore 75 ft. long, 30 ft. high, and up to 6 ft. thick was stoped above the upper adit in early days. **Assays:** \$6 to \$30 per ton, mostly in gold. 7 tons shipped in 1940 showed 0.63 oz. Au, 0.80 oz. Ag, 0.17% Cu. **Prod:** Reported 60 carloads of ore prior to 1897 valued at \$72,000. 1940, 1941. **Ref:** 157. 158.

Summit (77)

(see also Alice)

Loc: Sec. 30, (39-26E), on summit of Palmer Mtn. **Access:** 12 mi. by road to railroad at Tonasket. **Prop:** 1 patented claim: Summit; 7 unpatented claims: Edgeworth, Latakin, Copenhagen, Nicotine, Velvet, Half-and-Half, Tuxedo. **Owner:** R. D. Heffernan, Tonasket, Wash. (1949). Grand Summit Mining Co. (1936-1939). **Ore:** Gold, silver. **Ore min:** Free gold. **Gangue:** Quartz. **Deposit:** 2 veins. **Dev:** 3 shafts totaling 420 ft., 5 adits totaling 1,200 ft. **Assays:** Av. about \$20. Mill recovered \$1,538 from 85 tons in 1937. **Prod:** 1937 (\$1,900), 1938. **Ref:** 52, p. 5. 104, 11/15/36, p. 27. 113, 11/25/36, p. 18. 158.

Summit (31)

(see under silver)

Summit (243)

(see under lead)

Sunnyside

Loc: Palmer Mtn. dist. **Ore:** Gold, silver. **Ref:** 63, p. 104.

Sunshine

(see Hidden Treasure)

Sunshine Chief

(see Chief Sunshine under silver)

Surprise (269)

(see under silver)

Teddy Roosevelt

(see Roosevelt under iron)

Thomas

(see Hill-Thomas under silver)

Three Links

Loc: Summit of Twisp Pass, Twisp dist. **Prop:** 3 claims. **Owner:** Three Links Gold Mining Co. (1897). **Ore:** Gold, silver, copper. **Ore min:** Sulfides. **Assays:** \$4 to \$12 Au, 2½ oz. Ag, 4% Cu. **Ref:** 63, p. 91.

Tom Hal

(see Friday)

Treasury

Loc: On Aeneas Mtn. **Ore:** Gold. **Ref:** 58, p. 69. 63, p. 105.

Triangle

(see Hidden Treasure)

Trinidad

(see Central under silver)

Trinity (47)

Loc: NE¼ sec. 28, (40-26E), Wannacut Lk. dist. **Prop:** 4 claims. **Owner:** Trinity Gold & Silver Mining Co. (1907-1911). **Ore:** Gold, silver. **Deposit:** Irregular lenses of somewhat mineralized quartz occur in calcareous shale. **Dev:** 200-ft. adit, 40-ft. shaft. **Ref:** 116, no. 6, 1907, pp. 16, 32. 154, p. 99.

Triune (Crescent) (58)

(see also Jessie, Occident)

Loc: NE¼ sec. 10, (39-26E), ½ mi. NW. of the Kimberly property, Wannacut Lk. dist., ½ mi. W. of the old post office at Golden. **Elev:** 2,300 ft. **Prop:** 5 claims including Triune, Jessie, Occident. **Owner:** Dell Hart, Oroville, Wash. (1947—). Washington Consolidated Mining Co. (1905). Triune Power & Reduction Co. (1911). Dell Hart & Sons Mining Co. (1938). G. O. F. Triune Mining Co. (1939). **Ore:** Gold, silver, lead, copper. **Ore min:** Pyrite, galena, chalcocopyrite, molybdenite, free gold, malachite, azurite. **Deposit:** At least 4 quartz veins varying in width from a stringer to 10 ft. occur in argillite a short distance above intrusive granite. The granite is sericitized and kaolinized. **Dev:** 140-ft. shaft with adit on lower level together with drifts total more than 2,000 ft. **Assays:** Early assays \$10 to \$40 per ton. An av. of 4,000 tons of tailings gave 0.01 oz. Au, 0.3 oz. Ag. Sample of 3 ledges on S. side of gulch (veins from 4 to 10 ft. wide) assayed 0.32 oz. Au, 0.4 oz. Ag. 5 ft. of ore on N. side of gulch assayed 0.03 oz. Au, 0.5 oz. Ag. **Prod:** More than \$300,000 prior to 1938, 1939. **Ref:** 12, p. 65. 13, p. 104. 51, p. 11. 63, p. 99. 88, p. 31. 98, 1905, p. 336; 1934, p. 297; 1939, p. 490. 106, 11/3/32, p. 9. 108, 10/39, p. 31. 154, pp. 97-98. 158.

Tuesday (209)

Loc: Sec. 20, (30-23E), Squaw Cr. dist. **Ore:** Gold. **Ref:** 63, p. 88.

Twin Pine (252)

(see under zinc)

Twisp View (172)

Loc: S½ sec. 13 and N½ sec. 24, (33-21E). **Elev:** 2,800 to 2,900 ft. **Access:** 4 mi. from Twisp by road. **Prop:** 2 unpatented claims. **Owner:** George Gibson, Twisp, Wash. (1951). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Pyrite, sphalerite, galena, a little chalcocopyrite. **Deposit:** A 1- to 3-ft. quartz vein in altered volcanic rock. **Dev:** 250-ft. drift caved at the portal, 35-ft. shaft. **Assays:** 0.09 to 0.18 oz. Au, 1.5 to 17.3 oz. Ag over minable widths. **Ref:** 150, p. 41. 158.

Uncle Sam

(see under silver)

Utica (96)

Loc: NW¼ sec. 26, (38-25E), Palmer Mtn. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 104.

Valley View (149)

Loc: Secs. 23 and 24, (36-20E), Mazama dist. **Owner:** Mazama Gold Mines Consolidated, Inc. (1938). **Ore:** Gold, silver. **Ref:** 158.

Virginia

Loc: Galena area, adjacent to Black Huzzar group, Conconully dist. **Prop:** 1 claim. **Owner:** Isaac H. Durboraw, Tacoma, Wash. (1892). **Ore:** Gold, silver. **Assays:** \$30 Au, 5 oz. Ag. **Ref:** 13, p. 112.

Wannacut Lake (45)

Loc: Sec. 31, (40-26E), Wannacut Lk. dist. **Prop:** 13 claims. **Ore:** Gold. **Deposit:** 5 ft. of ore. **Dev:** At least 900 ft. **Ref:** 158.

War Eagle (81)

(see also Alice)

Loc: SE¼ sec. 36, (39-25E), on Palmer Mtn. **Prop:** 1 claim. **Owner:** R. D. Heffernan, Tonasket, Wash. (1949). **Ore:** Gold, copper, silver. **Ore min:** Free gold. **Deposit:** 5-ft. quartz vein. **Dev:** 100-ft. adit, two 70-ft. drifts. **Assays:** Ore av. about \$18 Au, Cu, Ag. Values chiefly in Au. **Prod:** Has produced. **Ref:** 12, p. 63. 13, p. 99. 52, p. 5. 63, p. 98. 88, p. 31.

War Eagle

(see under silver)

Warsaw

Loc: Oroville dist. **Ore:** Gold, silver. **Ref:** 63, p. 102.

Wasco (241)

(see under silver)

Washington (210)

(see also Oregon)

Loc: Center N½ sec. 18, (30-23E), on E. side of the Methow R., Squaw Cr. dist. **Elev:** 1,500 ft. **Prop:** 3 claims: Washington, Idaho, Oregon. **Owner:** Washington Homestake Mining Co., Seattle, Wash. (1943). **Ore:** Gold, copper, tungsten. **Ore min:** Pyrite, chalcocopyrite, scheelite. **Deposit:** Quartz vein from 1 to 3 ft. wide and av. 1½ to 2 ft. wide. Scheelite is pockety. **Dev:** 360-ft. adit caved about 120 ft. from face, and a caved shaft. **Assays:** Scheelite about ¼%. **Ref:** 22, p. 12. 37, p. 50. 63, p. 87. 158.

Washington Consolidated

(see Mineral Hill under silver)

Wauconda (141)

Loc: SE¼ sec. 7, (37-31E), Wauconda dist. **Prop:** 32 claims, 22 of which are near the old town of Wauconda, and 10 are 3 miles distant. **Owner:** Wauconda Gold Mining Co. (1901). **Ore:** Gold. **Deposit:** 5 ledges as much as 152 ft. wide with quartz veins up to 40 ft. wide in argillite. **Dev:** Crosscuts and drifts aggregating more than 1,450 ft. (1902). **Assays:** Av. \$12 per ton prior to 1902. **Prod:** Probably has produced. **Ref:** 88, pp. 25-26, 116-118.

Wehe (71)

Loc: NE¼ sec. 26, (39-26E), Palmer Mtn. dist. **Ore:** Gold, silver. **Ref:** 58, p. 72. 63, p. 101.

Western Star (129)

(see under copper)

Whiskey Hill

Loc: Eastern foot of Palmer Mtn., 9 mi. from Loomis, near Wannacut Lk. **Prop:** 21 claims. **Ore:** Gold. **Dev:** 170-ft. shaft, 730-ft. adit. **Assays:** Av. \$7.50 Au. **Ref:** 63, p. 98. 88, pp. 31-32.

Whitestone (136)

Loc: Sec. 34, (39-30E), on S. slope of Strawberry Mtn., Wauconda dist. **Owner:** Whitestone Mining Co. (1938). **Ore:** Gold, silver, lead, zinc, antimony. **Ore min:** Galena, sphalerite, tetrahedrite. **Deposit:** Limestone beds with low dips are mineralized on tops and bottoms and along stringers cutting the beds. **Prod:** 1938. Produced intermittently 1918-1938. **Ref:** 58, p. 73. 97, 1939, p. 490. 158.

Willman

(see Harts Pass)

Windfall

(see under silver)

Windsor

(see Detroit-Windsor)

Wolverine (162)

Loc: Secs. 2 and 11, (34-18E), on S. side of Gilbert Mtn. **Elev:** 3,500 ft. **Access:** 1 to 2 mi. NW. of the end of the Twisp R. road. **Prop:** 8 unpatented claims. **Owner:** W. L. La Motte, Twisp, Wash. (1946). Wolverine Mining Co. (1931). **Ore:** Gold, silver, copper, nickel. **Ore min:** Pyrite, nickeliferous pyrrhotite, sylvanite (?), chalcopyrite. **Deposit:** Granitic rock laced by a number of quartz veins from 1 to as much as 60 in. thick but mostly less than 12 in. Parts of the veins are mineralized. **Dev:** 3 or 4 drifts 20 to 50 ft. long and several open cuts. **Assays:** Assays show erratic gold content from a tr. to as much as several oz. over narrow widths. **Ref:** 106, 5/21/31, p. 17. 158.

Wyandotte (14)

Loc: SW¼ sec. 15, (40-25E), Nighthawk dist. **Ore:** Gold, silver. **Prod:** Crushed a few tons in an arrastre and shipped 1 ton of ore. **Ref:** 63, p. 102.

Yakima (115)

(see under copper)

Yellow Girl

(see under copper)

ACIFIC COUNTY**Chetlo Harbor (1)**

(see also Chetlo Harbor under iron)

Loc: ½ mi. from highway, on beach along Chetlo Harbor peninsula at mouth of Naselle R. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Vein 3 ft. wide extends about 300 ft. along beach. **Ref:** 158.

END OREILLE COUNTY**Ace High (8)**

(see under silver)

Best Chance

(see Rainbow under copper)

Blazing Star

Loc: Summit dist. **Ore:** Gold, silver. **Deposit:** 36-in. pay-streak in 8-ft. vein. **Assays:** \$190 Au, 10 oz. Ag (1897). **Ref:** 63, p. 45.

Blue Jim (15)

(see under silver)

Bornite (30)

(see under copper)

Bromide

(see La Sota under silver)

Calispell (25)

(see under copper)

Campbell (27)

(see under copper)

Champagne-Hoosier

(see Hoosier under copper)

Cliff (2)

(see under zinc)

Copper Queen (1)

(see under copper)

Cougar (7)

(see under copper)

Deemer (5)

Loc: Sec. 2, (39-45E), Metaline dist. **Access:** Road. **Prop:** 5 unpatented claims. **Owner:** Jack Doyle, Metaline Falls, Wash. (1941). **Ore:** Gold, silver. **Deposit:** Quartz vein from a few

in. to 4 ft. in width is said to carry gold and silver. **Dev:** 200 ft. of adits and numerous open cuts, mostly caved. **Ref:** 29, p. 38.

Eagle

(see Ries under lead)

Fairview Copper

(see Skippy and Queen Bess under lead)

Farmer Jones

Loc: In Pine Canyon, 4 mi. from Newport. **Access:** 15 mi. by road to railroad at Newport. **Owner:** F. L. Minnick, Spokane, Wash. (1940). **Ore:** Gold. **Dev:** 40-ft. adit. **Improv:** 15-ton amalgamation mill (1940). **Prod:** 1940. **Ref:** 158.

Fissure

(see under silver)

General MacArthur (31)

(see under lead)

Gilbert (33)

Loc: Sec. 24, (31-44E), Newport dist. **Prop:** 160 acres of deeded land. **Owner:** Gilbert Fellen, Newport, Wash. (1941). **Ore:** Gold. **Deposit:** Said to be a gold-bearing quartz vein 6 in. wide which has been traced for 200 ft. on the surface. **Dev:** Caved open cuts. **Ref:** 29, p. 73.

Glass

(see General MacArthur under lead)

Gold Arrow

(see Ries under lead)

Gold Coin-Hardtack (26)

(see under silver)

Golden Anchor

(see Ries under lead)

Grandview (Reuther) (4)

(see under silver)

Gray Eagle

(see Hawkeye-Gray Eagle-Last Chance under copper)

Gypsy (6)

(see under copper)

Hansen (36)

Loc: Sec. 14, (30-43E), Newport dist. **Access:** 1 mi. from road. **Prop:** 160 acres of deeded land. **Owner:** Mr. Hansen, Elk, Wash. (1941). **Ore:** Gold, lead, zinc, copper. **Deposit:** Fracture zone said to be impregnated with narrow mineralized quartz stringers. Zone is 20 ft. wide. **Dev:** Inclined shaft, caved. **Ref:** 29, pp. 74-75.

Hardrock Thomas (20)

(see under copper)

Hardtack

(see Gold Coin-Hardtack under silver)

Hawkeye-Gray Eagle-Last Chance (28)

(see under copper)

Holneck

(see Bornite under copper)

Hoosier (12)

(see under copper)

Huffman

(see Mule Deer under lead)

Independence (29)

(see under silver)

Isabelle (19)

Loc: SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, (34-44E), Newport dist. **Access:** Road. **Prop:** 1 unpatented claim. **Owner:** Axel E. Walgren, Newport, Wash. (1941). **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite, azurite, pyrite, polybasite. **Deposit:** Said to be a mineralized quartz vein which varies from a few in. to 4 ft. in width. Vein has been exposed for 70 ft. in one adit. **Dev:** 65-ft. adit, 75-ft. adit, both caved. **Assays:** High-grade ore assayed in 1921 showed \$15.00 Cu, \$3.00 Au, \$2.00 Ag. Representative sample showed 0.4% Pb, 0.6% Zn, 0.2 oz. Ag. **Ref:** 29, p. 68. 139, p. 45.

Katydid

(see Ries under lead)

La Sota (16)

(see under silver)

Last Chance

(see Hawkeye-Gray Eagle-Last Chance under copper)

Little Noisy (11)

(see under zinc)

McCann (21)

(see under copper)

Midas

(see Ries under lead)

Mule Deer (17)

(see under lead)

Nevell (37)

Loc: Sec. 24, (30-43E), Newport dist. **Access:** On main highway. **Prop:** 160 acres of deeded land. **Owner:** George Nevell, Locke, Wash. (1941). **Ore:** Gold, silver, tungsten. **Deposit:** Said to be a mineralized quartz vein with an av. width of 18 in. **Dev:** 15-ft. shaft. **Ref:** 29, p. 73.

O. K. (14)

(see under silver)

Oriole (13)

(see under zinc)

Pat (9)

(see under lead)

Prouty (10)

(see under silver)

Queen Bess

(see Skippy and Queen Bess under lead)

Rainbow (22)

(see under copper)

Reidt (34)

(see under copper)

Reuther

(see Grandview under silver)

Ries (32)

(see under lead)

Rocky Creek (16A)

(see under silver)

Silver Crest

(see La Sota under silver)

Silverado

(see Z Canyon under lead)

Skippy and Queen Bess (18)

(see under lead)

Snyder (23)

(see under copper)

Star (Independence)

(see Independence under silver)

Star (Campbell)

(see Campbell under copper)

Sunrise (35)

Loc: Sec. 22, (30-44E), Newport dist. **Access:** Road. **Prop:** 160 acres of deeded land. **Owner:** C. A. Vanderholm, Camden, Wash. (1941). **Ore:** Gold, silver. **Deposit:** Quartz vein from a few in. to 3 ft. in width is said to carry values in gold and silver. **Dev:** 250 ft. of adit and shaft, caved (1941). **Improv:** Several buildings (1941). **Assays:** Handpicked sample assayed \$10.50 per ton. **Ref:** 29, p. 72.

Victory (24)

(see under copper)

West

(see Blue Jim under silver)

Wold (38)

Loc: NE $\frac{1}{4}$ sec. 24, (30-43E), Newport dist. **Access:** $\frac{1}{4}$ mi. from road. **Prop:** 80 acres of deeded land. **Owner:** I. Wold, Elk, Wash. (1941). **Ore:** Gold. **Deposit:** Said to be a 10-in. quartz vein which carries values in gold. **Dev:** Open cut. **Ref:** 29, p. 75.

Z Canyon (3)

(see under lead)

PIERCE COUNTY

Bear Gap

(see Fife under Yakima County)

Black Hawk (10)

Loc: SE $\frac{1}{4}$ sec. 34, (17-10E), Summit dist. **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Vein. **Ref:** 63, p. 46.

Blazing Star

Loc: Summit dist. **Owner:** Alexander McNicol and M. B. Compton. **Ore:** Gold, silver. **Ref:** 63, p. 45. 158.

Blue Bell

(see Fife under Yakima County)

Blue Grouse and Sure Thing (5)

Loc: NE $\frac{1}{4}$ sec. 36, (17-10E), Summit dist. **Ore:** Gold, silver. **Deposit:** Series of parallel veins. **Assays:** \$3 to \$51 Au, 31 oz. Ag. **Ref:** 63, p. 45.

Blue Star

(see under copper)

Boston

Loc: On Gold Hill, Summit dist. **Ore:** Gold, silver. **Assays:** \$13.20 Au, \$1.20 Ag. **Ref:** 158.

Campbell (6)

Loc: Sec. 36, (17-10E), on S. end of Crystal Mtn. at the head of Silver Cr. **Elev:** 5,500 to 6,000 ft. **Access:** 3 mi. by trail from end of Morse Cr. road. **Prop:** 5 unpatented claims. **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Small quartz veins in volcanic rock. Both veins and volcanics reputedly carry gold values. **Assays:** Gold values from 20¢ to a few dollars per ton. **Ref:** 158.

Cascade

Loc: Near glaciers at head of E. branch of White R. **Ore:** Gold. **Ref:** 158.

- Chicago**
(see under copper)
- Crown Point**
Loc: On Gold Hill, Summit dist. **Owner:** George Brown. **Ore:** Gold. **Ref:** 158.
- Crystal Mountain**
Loc: Along Silver Cr., Summit dist. **Prop:** 5 claims. **Ore:** Gold. **Assays:** \$10.00 Au. **Ref:** 158.
- Current (7)**
Loc: Center sec. 35, (17-10E), Summit dist. **Prop:** 9 claims (1897). **Owner:** J. B. Current, Buckley, Wash. (1897). **Ore:** Gold, silver. **Dev:** 20-ft. adit, 85-ft. shaft, 40-ft. adit, 65-ft. adit, 25-ft. adit. **Assays:** 3 mill tests av. \$13 Au (1897). **Ref:** 63, p. 45. 158.
- Dry Spring**
Loc: Naches area. **Ore:** Gold. **Ref:** 158.
- Fife**
(see under Yakima County)
- Frater (4)**
Loc: SE $\frac{1}{4}$ sec. 27, (17-10E), Summit dist. **Ore:** Gold, silver. **Ref:** 63, p. 45.
- Gold Bell**
Loc: 2 mi. W. of Bear Gap. **Ore:** Gold. **Ref:** 158.
- Jessie Harper**
Loc: On Mashel R. **Owner:** Cooperative Mining Syndicate of Seattle (1897). **Ore:** Gold. **Gangue:** Quartz. **Dev:** 20-ft. shaft, 165-ft. crosscut. **Ref:** 63, p. 116.
- King**
Loc: Mt. Rainier area. **Ore:** Gold, silver. **Ref:** 63, p. 45.
- Lone Star**
(see under copper)
- Lorraine**
(see under copper)
- McKinley**
Loc: Summit dist. **Ore:** Gold. **Ref:** 63, p. 46.
- New Deal**
(see Washington Cascade)
- Pick Handle**
(see Fife under Yakima County)
- Seigmund Ranch (1)**
Loc: Sec. 30, (17-5E), 1 mi. from Clay City. **Owner:** E. J. Cowan, Tacoma, Wash. (1952—). Seigmund Gold Mining Co. (1920). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Vein 20 to 40 ft. wide of free-milling gold-bearing quartz. **Assays:** Gold values are very low. **Ref:** 130, pp. 112-113. 158.
- Silver Creek (8)**
Loc: Sec. 25, (17-10E), at headwaters of Silver Cr. and its tributaries, Summit dist. **Access:** Trail from end of road at head of Silver Cr. **Owner:** J. B. Garrard and H. H. Lentz (1945). **Ore:** Gold, silver, copper, zinc, lead. **Ore min:** Pyrite, chalcopryrite, pyrrhotite, some marcasite, sphalerite, and arsenopyrite. **Gangue:** Quartz, calcite. **Deposit:** Altered and silicified andesite is mineralized along narrow joints and in places heavily impregnated with pyrite. **Dev:** 42-ft. shaft, 28-ft. drift, 300-ft. crosscut, 25-ft. adit, 38-ft. adit, 70-ft. adit, several open cuts. **Assays:** 100 tons shipped reportedly ran more than \$50 per ton. **Prod:** 100 tons of ore prior to 1945; 3 oz. Au, 14 oz. Ag, 100 lb. Pb in 1941. **Ref:** 97, 1941, pp. 484, 487. 104, 8/15/34, p. 23. 158.
- Silver Creek Gold & Lead (3)**
Loc: Sec. 12, (17-10E), Summit dist. **Access:** 35 mi. by road to railroad at Enumclaw. 60 mi. by road to copper smelter at Tacoma. **Prop:** 6 unpatented claims and a millsite. **Owner:** Silver Creek Gold & Lead Corp., Seattle, Wash. (1951—). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Arsenopyrite, pyrite, chalcopryrite, galena, sphalerite. **Deposit:** Rhyolite cut by fault zone 1 to 4 ft. wide containing limy gouge and bands of quartz with sulfides. **Dev:** 100-ft. crosscut with 100-ft. drift. **Improv:** Small cabin, rails, mine car, 10-ton ore bin (1951). **Prod:** 20 tons (1945) reported to have contained \$89.75 per ton in gold, silver, lead, copper. Unknown amount of placer gold has been produced from stream gravels. **Ref:** 133, p. 39. 157.
- Star (11)**
Loc: SW $\frac{1}{4}$ sec. 2, (16-10E), Summit dist. **Ore:** Gold. **Ref:** 63, p. 46.
- Sure Thing**
(see Blue Grouse and Sure Thing)
- Surprise (2)**
(see under copper)
- Tacoma**
(see under copper)
- Washington Cascade (New Deal) (9)**
(see also Tacoma under copper)
Loc: Sec. 25, (17-10E), on Silver Cr., Summit dist. **Access:** 7-mi. road from Chinook Pass highway. **Prop:** 2 claims: New Deal, Tacoma. **Owner:** Blue Bell Gold Mining Co., Tacoma, Wash. (1940). **Ore:** Gold, silver, copper. **Deposit:** 5-ft. vein in andesite. **Dev:** 755-ft. adit. **Assays:** 30 tons returned \$180. **Prod:** 1936 (5 tons), 1938 (30 tons). **Ref:** 158.
- Welcome**
Loc: Summit dist. **Ore:** Gold. **Ref:** 63, p. 46.
- SKAGIT COUNTY
- Anacopper (2)**
(see under copper)
- Bald Mountain (6)**
(see under copper)
- Big Shot**
Loc: Skagit County. **Prop:** 5 claims. **Owner:** Walter E. Woodrich, Rockport, Wash. **Ore:** Gold. **Ref:** 158.
- Bornite**
(see North Coast)
- Boston (16)**
(see under lead)
- British**
(see Skagit Queen under silver)
- Cascade (24)**
(see under lead)
- Chicago (17)**
(see under lead)
- Denver**
(see under silver)
- Devils Mountain**
(see Mount Vernon under nickel)
- Dispassi**
(see under copper)

Dorothy

(see Thunder Creek under lead)

Eldorado (12)

(see under silver)

Epoch (25)

(see under lead)

Everett

(see Willis and Everett under silver)

Everett Extension

(see under silver)

Fidalgo

(see Stephens under copper)

Fidalgo Island (3)

(see under copper)

Fourth of July (26)

(see under silver)

Friend (19)

(see under silver)

Gold Run (20)

Loc: SW $\frac{1}{4}$ sec. 25, (35-13E), Boston Basin. **Access:** Trail. **Owner:** Wm. Soren, Sedro Woolley, Wash. (1951). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 2-in. quartz stringer in 1-ft. altered zone in diorite. **Dev:** Open cut and short adit. **Ref:** 158.

Great Northern

Loc: In Silver Basin adjoining the Lakeside property, Thunder Cr. dist. **Prop:** Several claims. **Ore:** Gold, silver, zinc. **Deposit:** Mineralized zone 26 ft. wide in granite and metamorphic rocks. **Ref:** 46, p. 228. 88, p. 52.

Hartford (15)

(see under lead)

Johnsburg (23)

(see under lead)

Lakeside

(see under lead)

Logan No. 2 (10)

(see under silver)

Marine

Loc: On Burnt Mtn., Mt. Baker dist. **Ore:** Gold, silver, lead, copper. **Ref:** 63, p. 60.

Matrix (4)

(see under copper)

Midas (21)

(see under silver)

Mount Vernon (5)

(see under nickel)

North Coast (Bornite) (7)

Loc: About $\frac{1}{2}$ mi. up the hill toward Park Cr. Pass from the flat on E. side of Thunder Cr. Approx. in sec. 29, (36-14E). **Access:** Trail. **Owner:** North Coast Mining & Milling Co. **Ore:** Gold, silver, copper, molybdenum. **Ore min:** Iron and copper sulfides. **Assays:** As much as 16% Cu. **Ref:** 158.

Ontario (13)

(see under lead)

Pacific

(see Mount Vernon under nickel)

Sierra Grande (14)

(see under lead)

Silver Tip (9)

(see under lead)

Skagit Queen (8)

(see under silver)

Soldier Boy (18)

Loc: SE $\frac{1}{4}$ sec. 25 and NW $\frac{1}{4}$ sec. 36, (35-13E), SE. of Midas group. **Access:** Trail. **Prop:** 5 patented claims: Soldier Boy, Gold Run, Golden Eagle, Mountain Chief, North Star. **Owner:** A. G. Mosier, Sedro Woolley, Wash. (1951). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Pyrite, chalcopyrite, sphalerite. **Gangue:** Quartz. **Deposit:** Said to be several veins 1 to 3 ft. wide. **Dev:** Adit. **Assays:** \$27 to \$100 per ton in all values reported. **Ref:** 63, p. 55. 158.

Stephens (1)

(see under copper)

Thunder Creek

(see under lead)

Ventura (22)

(see under silver)

Willis and Everett (11)

(see under silver)

SKAMANIA COUNTY

Athens

(see under copper)

Bronze Monarch (9)

(see under copper)

Brown and Livingston (21)

Loc: On Granite Cr., a tributary of McCoy Cr., 3 mi. above the mouth of McCoy Cr., probably in sec. 15, (10-8E). **Ore:** Gold, silver. **Assays:** \$6.00 to \$30.00 Au, Ag. **Ref:** 158.

Bruhn (16)

Loc: Sec. 10, (10-8E), adjacent to property of Camp Creek Metals Mining Co., McCoy Cr. dist. **Ore:** Gold. **Ore min:** Sulfides. **Deposit:** 2-ft. gouge seam. **Ref:** 158.

Camp Creek (17)

Loc: Center sec. 10, (10-8E), on Camp Cr., a tributary to McCoy Cr. **Owner:** Camp Creek Metals Mining Co. (1934). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Quartz stringers in an oxidized zone 300 ft. wide. **Prod:** \$75,000 prior to 1934. **Ref:** 58, p. 12. 97, 1935, p. 354. 158.

Chicago (13)

(see under copper)

Chief

(see Ripper and Chief under copper)

Coe

(see Sweden under copper)

Copper Dyke

(see under copper)

Earl

(see Samson under copper)

Fisher**Loc:** McCoy Cr. dist. **Ore:** Gold. **Ref:** 158.**Germania (3)**

Loc: Secs. 8 and 17, (10-6E), adjoining Polar Star property on the E., Mt. St. Helens dist. **Prop:** 12 patented claims. **Ore:** Gold, copper. **Dev:** 2 adits. **Ref:** 58, p. 23. 158.

Golconda (5)

Loc: Near W. $\frac{1}{4}$ cor. sec. 16, (10-6E), Mt. St. Helens dist. **Access:** $\frac{1}{2}$ mi. up the Ryan Lk. trail from the Green R. trail. **Ore:** Gold, zinc, copper. **Ore min:** Pyrite, some chalcopyrite and sphalerite, a little galena. **Deposit:** Quartz veinlets along a fracture zone in granite. **Dev:** Adit. **Assays:** Reportedly \$4.00 Au. **Prod:** An 18-ton shipment in 1933 reported. **Ref:** 63, p. 49. 158.

Gold Creek

(see Zinc Creek under zinc)

Grizzly Creek (6)

Loc: Near Grizzly Cr. on Black Mtn., probably in sec. 20, (10-6E). **Access:** Trail. **Prop:** 4 claims. **Ore:** Gold, silver, lead, copper. **Deposit:** Vein av. 4 ft. wide in granite. **Dev:** 2 adits and a winze. **Assays:** \$50.00 to \$60.00 per ton reported from bottom of winze. **Ref:** 63, p. 50. 158.

Independence (1)

(see under copper)

Index (7)

(see under copper)

Johnson (18)

Loc: Sec. 10, (10-8E), a short distance above the Bruhn property on McCoy Cr. **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Gold in a seam 2 or 3 in. wide. **Ref:** 158.

Juanita

(see under copper)

Knudson and Myers

Loc: McCoy Cr. area. **Ore:** Gold. **Ref:** 158.

Last Chance (24)

(see under copper)

Livingston

(see Brown and Livingston)

Martha Washington

(see Bronze Monarch under copper)

Maybee (27)

(see under copper)

Minnie Lee (2)

(see under copper)

Mount Fairy (14)

Loc: SW $\frac{1}{4}$ sec. 32, (10-6E), Mt. St. Helens dist. **Ore:** Gold, silver, lead, copper. **Ref:** 58, p. 47. 63, p. 50.

Mountain King

(see under copper)

Myers

(see Knudson and Myers)

Norway (12)

(see under copper)

P. F. R.

Loc: Niggerhead area. **Owner:** Lee Perry, Randle, Wash. (1941). **Ore:** Gold. **Ref:** 58, p. 52.

Perry (19)

Loc: Above the Johnson property on McCoy Cr., probably in sec. 10, (10-8E). **Ore:** Gold. **Ore min:** Arsenopyrite. **Ref:** 158.

Plamondon (22)

Loc: SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, (8-8E), on N. side of Quartz Cr. **Elev:** 2,800 ft. **Access:** $3\frac{1}{2}$ mi. by trail from end of road. **Prop:** 26 unpatented claims (1943). 3 unpatented claims (1954). **Owner:** Plamondon Brothers Mining Co. (1939—). Plam-

ondon Indian Mines, Inc. (1940-1944). **Ore:** Gold, silver. **Gangue:** Chalcadonic quartz. **Deposit:** Chalcadonic quartz in iron-stained tuff is reportedly mineralized. **Dev:** Short adit, open cut. **Assays:** As high as \$68 reported. **Ref:** 158.

Polar Star (8)

(see under copper)

Primary Gold (20)

Loc: Sec. 10, (10-8E), on both sides of Camp Cr. **Access:** 4 mi. by trail from the end of Niggerhead road. **Prop:** 18 unpatented claims: Jim Nos. 1 to 6; Inez Nos. 1 to 4; Eva Nos. 1, 2, and 5; Jim No. 8; Ialine; O Bill; Orell. **Owner:** Primary Gold Co., Yakima, Wash. (1938). **Ore:** Gold, silver, and platinum reported. **Deposit:** 30-ft. ledge of coarsely crystalline pyrite in quartz gangue. This carries only traces of gold, but narrow stringers of free gold in quartz cut the pyrite. **Dev:** Numerous open cuts, some placering. **Assays:** Said to range from \$2.10 to \$1,500.00 per ton. **Prod:** Has produced (probably small amount). **Ref:** 58, p. 55. 158.

Rainbow (25)

(see under vanadium)

Ripper and Chief

(see under copper)

St. Helens

(see Sweden under copper)

Samson (4)

(see under copper)

Skamania (23)

(see under copper)

Sweden (10)

(see under copper)

Yellow Metals (15)

(see under copper)

Young America (11)

(see under copper)

Zinc Creek (26)

(see under zinc)

SNOHOMISH COUNTY

Ajax (111)

Loc: Sec. 26, (29-11E), at the headwaters of Glacier Cr. **Access:** 2 mi. from Monte Cristo by trail. **Ore:** Gold, silver. **Ref:** 14, p. 22. 114, no. 5, 1909, p. 104.

Ala-Dickson (68)

(see under copper)

Alleghany

(see Foggy under copper)

Alpha

Loc: 2 mi. S. of Index. **Prop:** 3 claims. **Owner:** Alpha Gold & Copper Mining Co. (1897). **Ore:** Gold, copper. **Ref:** 63, p. 35.

Alta (142)

Loc: Sec. 6, (28-11E), Silver Cr. dist. **Owner:** Clara Thompson, Index, Wash. **Ore:** Gold, silver, lead, copper. **Ref:** 158.

Anaconda (176)

Loc: SW $\frac{1}{4}$ sec. 19, (28-11E), on the mountain above Michigan Gulch. **Ore:** Gold. **Deposit:** 4 parallel veins and 1 cross vein ranging in width from 3 to 30 ft. with ore bodies from $1\frac{1}{2}$ to 15 ft. **Dev:** 20-ft. adit and numerous open cuts. **Ref:** 14, p. 29. 63, p. 31.

- Annie**
Loc: Silver Cr. dist. **Prop:** 1 claim. **Owner:** J. T. Hubbard and Co. (1892). **Ore:** Gold, silver. **Deposit:** 4-ft. quartz vein. **Assays:** As high as \$100 Au, Ag. **Ref:** 12, p. 89. 13, p. 164. 14, p. 29.
- Annie Laurie and Ethel (114)**
Loc: NW¼ sec. 28, (29-11E), ½ mi. SE. of Monte Cristo. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Sparsely mineralized fracture zone in andesite. **Dev:** 80-ft. adit and several open cuts. **Assays:** \$5 to \$21 Au. **Ref:** 14, p. 22. 63, p. 14.
- Argonaut and Typo (115)**
Loc: NW¼ sec. 27, (29-11E), on the W. side of Wilmon Peak, Monte Cristo dist. **Ore:** Gold. **Ore min:** Arsenopyrite. **Deposit:** Slightly mineralized shear zone 75 ft. wide in andesite. **Assays:** \$8 to \$12 Au. **Ref:** 14, p. 22. 63, p. 14.
- Arlington (32)**
 (see under copper)
- Bald Mountain (33)**
 (see under copper)
- Baltimore (91)**
Loc: SW¼ sec. 12, (29-11E), ½ mi. SE. of Goat Lk., Monte Cristo dist. **Ore:** Gold, silver, lead. **Ore min:** Pyrite, galena. **Deposit:** 3- to 5-ft. mineralized fracture zone carrying 6 to 18 in. of ore. **Assays:** \$6 Au, \$3 Ag. **Ref:** 14, p. 22. 63, p. 16.
- Bangor Creek (45)**
 (see under copper)
- Bear (143)**
Loc: Sec. 6, (28-11E), Silver Cr. dist. **Owner:** Clara Thompson, Index, Wash. **Ore:** Gold, silver, lead, copper. **Ref:** 158.
- Beatrice**
 (see Sunset and Beatrice under lead)
- Beckler River**
 (see under copper)
- Bell and Crown (65)**
 (see under copper)
- Ben Butler (144)**
Loc: NE¼ sec. 6, (28-11E), on W. side of Silver Cr. **Owner:** David Ferguson, Parkville, B. C. (1911). **Ore:** Gold. **Deposit:** 12- to 15-ft. vein carrying 12 to 30 in. of ore. **Dev:** 60-ft. adit. **Ref:** 14, p. 29. 63, p. 32.
- Ben Lomond**
 (see Rainy)
- Bergensen**
 (see Taylor & Nunn)
- Big Bear and Butte (31)**
Loc: Sec. 33, (31-9E), on divide between Clear and Canyon Creeks, Silvertown dist. **Access:** 4 mi. by trail from Sauk R. **Ore:** Gold, silver, copper. **Ore min:** Bornite, chalcopyrite, pyrite. **Deposit:** Mineralized zone 100 ft. wide carries streaks of sulfide minerals 4 to 10 in. wide. **Dev:** Several 50-ft. adits. **Assays:** \$9 Au, \$7 Ag. **Ref:** 14, p. 41. 63, p. 22.
- Big Copper (84)**
 (see under copper)
- Big Raymond (210)**
Loc: Sec. 29, (29-11E), Silver Cr. dist. **Prop:** 4 claims. **Ore:** Gold, silver, copper. **Deposit:** Mineralized quartz stringers. **Dev:** Adits aggregating 500 ft. in length. **Assays:** \$2 to \$56 per ton. **Ref:** 14, p. 29. 63, p. 29.
- Billy Lee (145)**
 (see under lead)
- Black Hawk (193)**
Loc: On W. slope of Iron Mtn., Index dist. Possibly in sec. 29, (28-11E). **Prop:** 4 claims. **Owner:** Black Hawk Mining & Concentrating Co. (1897). **Ore:** Gold, copper. **Ore min:** Iron and copper sulfides. **Ref:** 14, p. 34. 58, p. 7.
- Blomquist (43)**
 (see under copper)
- Blue Bird (4)**
Loc: Sec. 24, (32-9E) and sec. 19, (32-10E), Darrington dist. **Prop:** Several claims. **Owner:** Pacific Nickel Co., Mount Vernon, Wash., leasing from Earl Scott, Bellingham, Wash. (1943-1944). Sauk River Mining Co. (1907). Albert Hawkinson (1908). **Ore:** Gold, copper, silver, nickel. **Ore min:** Chalcopyrite, pyrrhotite. **Deposit:** Vein av. 8 ft. in width. **Dev:** 200 to 300 ft. of adits. **Assays:** High-grade ore runs \$30 per ton. **Prod:** Small amount reported about 1940. **Ref:** 14, p. 8. 22, p. 9. 33, 1907, p. 1011. 49, p. 10. 88, p. 62. 159, p. 134.
- Blue Bird (177)**
Loc: Sec. 18, (28-11E), on the W. side of Silver Cr. 2 mi. N. of Galena. **Access:** Truck road. **Owner:** Silver Creek Mining Co., Index, Wash. (1907-1935). L. F. Leslie, Tacoma, Wash. (1890). **Ore:** Gold, silver, lead. **Ore min:** Galena. **Deposit:** Nearly vertical vein said to be 27 ft. wide with a paystreak 2 ft. wide. Parallel to Vandalia vein. **Dev:** 1 crosscut. **Assays:** Old assays report 48% Pb, 50 oz. Ag. **Prod:** Small amount. **Ref:** 12, p. 87. 13, p. 157. 14, p. 28. 33, 1907, p. 1026. 97, 1935, p. 354. 158.
- Blue Rock (92)**
 (see under copper)
- Bluebell (146)**
Loc: Sec. 6, (28-11E), at Mineral City, Silver Cr. dist. **Owner:** Clara Thompson, Index, Wash. **Ore:** Gold, silver, lead, copper. **Ref:** 158.
- Bluff (147)**
Loc: NW¼ sec. 8, (28-11E), on the E. side of Silver Cr. **Prop:** 5 claims. **Ore:** Gold, copper. **Ore min:** Chalcopyrite, pyrite. **Deposit:** 4-ft. vein with 2 in. of ore, 25-ft. vein with 4½ in. of high-grade ore, and another parallel vein with some ore. **Dev:** 20-ft. adit. **Assays:** \$7.50 Au. **Ref:** 14, p. 29. 63, p. 31.
- Bon Ton (87)**
 (see under copper)
- Bonanza**
 (see Mineral Center)
- Bonanza Queen (46)**
 (see under copper)
- Border Queen (75)**
 (see under copper)
- Bornite**
 (see Bangor Creek under copper)
- Boston**
 (see under copper)
- Broken Ridge (178)**
 (see under copper)
- Brooklyn (93)**
Loc: Secs. 11, 13, and 14, (29-11E), above the El Dorado prospect, Monte Cristo dist. **Ore:** Gold. **Dev:** Short adit in ore. **Ref:** 14, p. 22. 58, p. 10.

Buckeye (235)
(see under copper)

Bullet (41)
(see under copper)

Bullion King

Loc: Silver Cr. dist. **Ore:** Gold, silver, copper, lead. **Ref:** 158.

Bunker Hill

(see Copper Belle under copper)

Burns (6)

Loc: NW¼ sec. 18, (32-10E), on W. side of Gold Mtn., Darrington dist. **Prop:** 7 claims. **Owner:** Puget Sound Copper Co. **Ore:** Gold, silver, copper. **Deposit:** Ore body is exposed for 100 ft. and has an av. width of 4½ ft. **Ref:** 14, p. 8. 63, p. 52. 88, p. 62. 159, p. 134.

Butte and Big Bear

(see Big Bear and Butte)

Calumet

(see Glacier Peak under copper)

Calumet (200)

Loc: Near center N½ sec. 27, (29-10E), in Sultan Basin. **Elev:** 4,600 to 5,000 ft. **Access:** About ½ mi. from road. 26 mi. to railroad at Sultan. **Prop:** Calumet claim. **Owner:** Sultan Basin Mining Co., Robert Curtiss, lessee, Monroe, Wash. (1951). **Ore:** Gold, silver, copper, zinc. **Ore min:** Chalcopyrite, pyrrhotite, marcasite, arsenopyrite, sphalerite, galena. **Deposit:** Quartz vein from 6 to 24 in. wide along a fracture zone in metamorphic rocks. **Dev:** 250-ft. adit, 9 open cuts. **Assays:** Tr. to 1.03 oz. Au, 0.56 to 5.33 oz. Ag, 0.48% to 6.50% Cu, 0.10% to 4.85% Zn. **Ref:** 23, pp. 62, 65-68. 37, p. 56. 150, p. 30.

Caplin-Holbrooke (116)

Loc: Sec. 33, (29-11E), on the E. Fk. of Silver Cr. about 2 mi. N. of Mineral City. **Prop:** 9 claims: Gold Eagle, New Strike, Last Chance, Mt. Beauty, Fortunate Monarch, Silver Queen, Good Grub, Cougar, Two Hams. **Ore:** Gold, silver, copper. **Deposit:** 10-ft. vein with two 12-in. paystreaks of ore. **Dev:** 75-ft. adit. **Assays:** As high as \$90 Au, Ag, Cu. **Ref:** 13, pp. 159-160. 14, p. 29.

Cascade (232)

(see under copper)

Cassidy (112)

Loc: NE¼ sec. 26, (29-11E), at the entrance of Glacier Basin, Monte Cristo dist. **Elev:** 4,000 to 4,800 ft. **Prop:** 4 patented claims. **Ore:** Gold, silver. **Ore min:** Arsenopyrite. **Deposit:** 2 mineralized fractures 3 to 5 ft. wide. **Dev:** Several short adits. **Assays:** \$7 Au, Ag. 6% to 10% As. **Ref:** 14, p. 22. 158.

Castle (211)

Loc: Sec. 29, (29-11E), NW. of the Edison prospect, Silver Cr. dist. **Ore:** Gold, silver. **Deposit:** 20-ft. vein with 4 ft. of ore. **Dev:** 30-ft. adit. **Assays:** \$25 per ton. **Ref:** 14, p. 30. 63, p. 29.

Champion (148)

Loc: Sec. 6, (28-11E), Silver Cr. dist. **Prop:** 1 claim. **Owner:** Clara Thompson, Index, Wash. **Ore:** Gold, silver, lead, copper. **Deposit:** 12-ft. vein of concentrating ore. **Assays:** \$20 Au, Ag, Pb. **Ref:** 13, p. 163. 14, p. 30. 158.

Charlotte (230)

(see under copper)

Clara Thompson

(see Jasperson)

Cleveland (47)

(see under copper)

Colts (76)

(see under copper)

Commercial (194)

(see under copper)

Commonwealth

Loc: Snohomish County. **Owner:** Commonwealth Mining Co., Seattle, Wash. (1941). **Ore:** Gold, silver, copper. **Prod:** Has produced. **Ref:** 58, p. 15.

Commonwealth

(see Jasperson)

Consolidated

Loc: At the head of Marten Cr. adjacent to the New Seattle property, Silverton dist. **Prop:** 4 claims. **Owner:** Mineral Mountain Mining & Tunnel Co. (1909). **Ore:** Gold, silver, copper. **Ore min:** Arsenopyrite, tetrahedrite. **Deposit:** Extension of the New Seattle vein. **Ref:** 14, p. 42. 63, p. 22. 114, no. 5, 1909, p. 105.

Cooperative (195)

(see under copper)

Copper Belle (229)

(see under copper)

Copper Chief (149)

(see under copper)

Copper Cliff

Loc: Silverton dist. **Ore:** Gold, silver, copper. **Ref:** 158.

Copper Independent (Independent) (48)

(see also Ore Recoveries under copper)

Loc: NE¼ sec. 19, (30-10E), at mouth of Silver Gulch, ½ mi. SE. of Silverton. **Elev:** 3,000 ft. **Access:** Road from Silverton. **Prop:** 3 claims. **Owner:** Leased from Lambda Chemical Corp. by Ore Recoveries Corp. (1943). Copper Independent Consolidated Mining Co. (1902-1908). **Ore:** Gold, silver. **Ore min:** Pyrite, arsenopyrite. **Gangue:** Sheared granite and quartz. **Deposit:** Mineralized shear zone in granite contains ore bodies from 100 to 200 ft. in dia. and 2 to 3 ft. wide. **Dev:** 3 adits, drifts, and raises totaling about 700 ft. **Assays:** 0.6 to 0.7 oz. Au. **Prod:** 1 carload of picked ore shipped to the Everett smelter prior to 1901. **Ref:** 14, pp. 39-40. 22, p. 9. 33, 1907, p. 518; 1908, p. 557. 43, 1902, p. 832. 46, pp. 164-165. 63, p. 18. 88, p. 68. 114, no. 5, 1909, pp. 98-99. 158.

Copper Prince (49)

Loc: SW¼ sec. 20, (30-10E), Silverton dist. **Ore:** Gold, silver, copper. **Ref:** 14, p. 42.

Copper Queen (39)

(see under copper)

Copperhead (50)

(see under copper)

Cora M (135)

Loc: NW¼ sec. 4, (28-11E), Silver Cr. dist. **Ore:** Gold. **Deposit:** 3½-ft. vein. **Dev:** 20-ft. adit. **Assays:** \$12 per ton. **Ref:** 14, p. 30. 63, p. 28.

Cornucopia (82)

Loc: SW¼ sec. 33, (30-10E), 1,000 ft. below the outlet of Copper Lk., Silverton dist. **Elev:** 2,200 ft. **Prop:** 4 claims. **Ore:** Gold, silver, lead. **Ore min:** Galena, pyrite. **Deposit:** Vein with from 18 to 30 in. of ore. Another vein 3 to 4 ft. wide. **Dev:** 30-ft. adit. **Assays:** \$28.20 Au, \$9.60 Ag. **Ref:** 14, p. 42. 63, p. 24.

Corona (136)

(see under silver)

Courtney (19)

(see under copper)

Covered Wagon (179)

(see under copper)

Crown

(see Bell and Crown under copper)

Crown Point (150)

(see under lead)

Dahl

(see Eclipse)

Daisy (137)

Loc: Sec. 9, (28-11E), Silver Cr. dist. **Prop:** 10 claims. **Ore:** Gold, silver, lead. **Ore min:** Galena, arsenopyrite. **Deposit:** Vein from 4 to 12 ft. wide in granite. **Dev:** 15-ft. shaft, 50-ft. adit. **Assays:** \$7 to \$70 Au, and as high as \$60 Ag. Av. \$20 Au, Ag. **Ref:** 14, p. 30. 63, p. 33.

Damm

(see under copper)

Darrington (Elwell-Darrington)

(see Elwell-Darrington)

Darrington

(see Gold Mountain under copper)

Deerfly (81)

(see under lead)

Del Campo

Loc: On the E. slope of the ridge dividing the Sauk, Sultan, and Stilaguamish watersheds, overlooking Crater Lk., 2½ mi. W. of Monte Cristo. **Prop:** 3 claims. **Owner:** Del Campo Metals Co. **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite. **Deposit:** 10- to 30-ft. fracture zone that can be traced for 2,000 ft. on the surface. **Dev:** 25-ft. adit, several open cuts. **Assays:** Surface ore runs \$44.86 Au, Ag, 13.8% Cu. **Ref:** 14, p. 23. 63, p. 14. 105, 1909, p. 871.

Delco and Marengo (117)

Loc: Sec. 33, (29-11E), Silver Cr. dist. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Large vein. **Ref:** 14, p. 31. 63, p. 29.

Delta

(see under copper)

Deway (180)

Loc: S½ sec. 18, (28-11E), Silver Cr. dist. **Owner:** Silver Creek Mining Co. **Ore:** Gold, silver, copper. **Ref:** 158.

Diamond Hitch (212)

(see under copper)

Double Eagle (77)

Loc: Sec. 5, (30-10E), along the W. Fk. of Coal Cr., Silverton dist. **Prop:** 4 claims. **Ore:** Gold. **Ore min:** Native gold. **Deposit:** 14- to 40-ft. vein of quartz carrying free-milling gold. **Assays:** From \$1 to \$20. Av. \$8 Au. **Ref:** 14, p. 42. 63, p. 22.

Dry Creek

Loc: On W. end of Long Mtn., Silverton dist. **Prop:** 4 claims. **Ore:** Gold, silver, copper. **Ore min:** Arsenopyrite, chalcopyrite. **Deposit:** 9-ft. vein with 24 in. of ore. **Assays:** \$2 to \$7 Au, Ag. **Ref:** 14, p. 43.

Eclipse (Dahl) (51)

Loc: Secs. 17, 18, and 19, (30-10E), on S. side of Stilaguamish R. at foot of Huckleberry Ridge, Silverton dist. **Prop:** 51 claims

(1952). **Owner:** R. D. Taft, Robe, Wash. (1952—). Eclipse Consolidated Mining & Investment Co. of Seattle (1915-1918). Virginia-Agenda Co. (1921-1924). Chemical Products Ass'n. (1925-1926). Lambda Chemical Corp. leasing to Ore Recoveries Corp. (1943). **Ore:** Gold, silver, copper, mercury. **Ore min:** Arsenopyrite, native mercury. **Deposit:** 1 vein carrying arsenopyrite. 1 vein in Marble Gulch carrying gold, silver, and copper. Mercury in some workings. **Dev:** More than 5 mi. of underground work reported. **Assays:** Reported to be 7% Hg from an incline and 3% Hg from an adit just S. of the incline. **Ref:** 14, pp. 42-43. 63, p. 19. 97, 1913, p. 210. 98, 1918-1926. 105, 1915, p. 742. 114, no. 5, 1909. 141, p. 88. 158.

Edison (213)

(see also Mineral Center)

Loc: NE¼ sec. 29, (29-11E), Silver Cr. dist. **Owner:** Mineral Center Mining Co., Tacoma, Wash. (1951). Bonanza Mining & Smelting Co. (1901). **Ore:** Gold, copper, silver. **Ore min:** Chalcopyrite, arsenopyrite. **Deposit:** 50-ft. vein in granite. **Assays:** \$10 to \$15 per ton. **Ref:** 63, p. 28. 88, p. 74. 97, 1907, p. 475. 98, 1918, p. 60. 114, no. 5, 1909.

El Dorado (105)

(see under copper)

Elmo

(see Gold Bar and Elmo under lead)

Elwell-Darrington (20)

Loc: NW¼ sec. 27, (32-9E), on E. side of Gold Mtn. adjacent to the Burns prospect, Darrington dist. **Owner:** Elwell-Darrington Mining Co. (1901). **Ore:** Gold, copper. **Deposit:** 7- to 8-ft. mineralized zone carrying 2 to 3 ft. of ore. **Ref:** 14, p. 8. 88, p. 62. 159, p. 134.

Emma Bess (151)

Loc: NE¼ sec. 6, (28-11E), on E. side of Silver Cr. **Ore:** Gold. **Deposit:** Extension of the Ben Butler vein. **Dev:** 25- and 30-ft. adits. **Ref:** 14, p. 31. 63, p. 30.

Emma Moore (118)

(see under lead)

Emma No. 2

(see under lead)

Engdahl (152)

(see Martin Engdahl under lead)

Ethel

(see Annie Laurie and Ethel)

Ethel (231)

(see under copper)

Ethel Consolidated

(see Ethel under copper)

Etruria

(see under lead)

Eureka (78)

(see under copper)

Everett (52)

(see under copper)

Evergreen (181)

(see under copper)

Fanny (53)

Loc: SE¼ sec. 19, (30-10E), on a spur of the mountain S. of Silver Gulch, Silverton dist. **Prop:** 1 claim. **Owner:** Messrs. Lasell and Moore (1892). **Ore:** Gold, silver, copper. **Deposit:** 22 in. of ore. **Dev:** 30-ft. adit, open cuts. **Assays:** \$12 to \$46 Au, Ag, Cu. **Ref:** 13, p. 163. 14, p. 43. 63, p. 19.

Feldt (11)

(see under silver)

Florence-Rae (233)

(see under copper)

Florence Rae (Rudebeck-Florence Rae) (201)

(see under copper)

Foggy (106)

(see under copper)

Forest Hope (7)

(see under copper)

Fortunate

Loc: Monte Cristo dist. **Ore:** Gold, silver. **Deposit:** Mineralized zone at contact of peridotite with slaty quartzite. **Prod:** Reported to have produced some ore. **Ref:** 14, p. 20. 149, p. 830.

Fortunate (214)

Loc: Sec. 32, (29-11E), 1 mi. NE. of Mineral City, Silver Cr. dist. **Ore:** Gold, silver. **Prod:** Reported to have produced some ore. **Ref:** 14, p. 28.

"45" (66)

(see under silver)

Garfield

(see under lead)

Gettysburg (153)

(see under lead)

Gift

Loc: On the divide between Goat Lk. and the N. Fk. of Sauk R., Monte Cristo dist. **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 8-ft. quartz vein. **Dev:** 15-ft. adit. **Ref:** 14, p. 23. 63, pp. 16-17.

Glacier Peak (80)

(see under copper)

Glengarry

(see under silver)

Glory of the Mountain (94)

Loc: SE $\frac{1}{4}$ sec. 2, (29-11E), $\frac{1}{2}$ mi. NE. of Goat Lk., Monte Cristo dist. **Prop:** 7 claims. **Ore:** Gold, silver. **Ore min:** Arsenopyrite, pyrite. **Deposit:** Wide mineralized fracture zone contains an ore body 20 ft. wide. **Dev:** 40-ft. adit. **Assays:** \$21 to \$27 Au, \$1.80 to \$4.80 Ag. **Prod:** Has produced. **Ref:** 14, p. 23. 58, p. 24. 63, p. 16.

Golconda

(see under lead)

Gold Bar (215)

(see under copper)

Gold Bar and Elmo

(see under copper)

Gold Boy (154)

Loc: Sec. 7, (28-11E), on W. side of Silver Cr. **Ore:** Gold. **Deposit:** 16-ft. vein with 2 ft. of ore. **Dev:** 20-ft. adit. **Assays:** \$16 Au. **Ref:** 14, p. 32. 63, p. 31.

Gold Eagle (216)

Loc: Sec. 29, (29-11E), on Silver Tip Mtn., Silver Cr. dist. **Prop:** 3 claims. **Ore:** Gold, copper. **Ore min:** Chalcopyrite, chalcocite, arsenopyrite. **Deposit:** 5-ft. vein. **Dev:** 175-ft. adit. **Assays:** \$12 to \$15 Au. **Ref:** 14, p. 32. 63, p. 29.

Gold Mountain (10)

(see under copper)

Gold Standard (155)

Loc: NW $\frac{1}{4}$ sec. 5, (28-11E), Silver Cr. dist. **Ore:** Gold, silver. **Dev:** Open cut. **Ref:** 63, p. 29.

Golden Chord (34)

Loc: NW $\frac{1}{4}$ sec. 12, (30-9E), Silverton dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 22.

Golden Chord

(see Justice)

Golden Eagle (203)

(see under molybdenum)

Good Hope (119)

Loc: Sec. 33, (29-11E), 2 mi. from Monte Cristo. **Access:** Road from Mineral City. **Prop:** 10 patented claims: 41144 and Fraction, Evening Star, Lucky Boy, Good Hope, Starlight, Starlight Ext. No. 2, Prince, Good Hope Ext., Queen. **Owner:** F. P. Hallinan, Portland, Ore. (1941). Good Hope Gold & Copper Mining Co. (1909). **Ore:** Gold, silver, copper, lead, zinc, vanadium. **Dev:** About 2,000 ft. of adits. **Prod:** Reportedly 1 carload in 1909. **Ref:** 58, p. 26. 114, no. 5, 1909. 158.

Granite and Maud (54)

Loc: SW $\frac{1}{4}$ sec. 20, (30-10E), on Silver Gulch, Silverton dist. **Ore:** Gold, silver, lead. **Ore min:** Arsenopyrite, galena. **Deposit:** 2 veins, one of which carries 8 in. of ore. **Dev:** 30-ft. shaft, 40-ft. adit. **Assays:** \$43 Au, Ag. **Ref:** 14, p. 43. 63, pp. 18-19.

Granite Mountain

(see under copper)

Grant (120)

Loc: Sec. 27, (29-11E), Monte Cristo dist. **Ore:** Gold. **Ref:** 14, p. 23. 114, no. 5, 1909, p. 104.

Gray Mare (12)

(see under silver)

Gray Rock (1)

Loc: SE $\frac{1}{4}$ sec. 19, (32-9E), Darrington dist. **Owner:** D. A. Witcher, Darrington, Wash. (1942). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Small quartz stringers carrying pyrite and cutting granitic rock. **Dev:** One 50-ft. adit. **Ref:** 14, p. 8.

Great Northern (72)

Loc: NW $\frac{1}{4}$ sec. 35, (29-8E), on S. side of Sultan R. **Access:** Road up Sultan R. **Prop:** 3 claims. **Ore:** Gold, copper, silver. **Ore min:** Chalcopyrite, pyrite. **Deposit:** Mineralized shear zone 60 ft. wide along a contact between granite and slate. Ore minerals are disseminated throughout the zone. **Assays:** Av. of 6 assays showed \$32 Au, \$3.45 Cu, \$1.76 Ag. **Ref:** 14, pp. 47-48. 63, p. 25.

Great Scott (138)

Loc: Sec. 3, (28-11E), Silver Cr. dist. **Prop:** 7 claims. **Ore:** Gold, silver, copper. **Ore min:** Arsenopyrite, chalcopyrite, pyrite. **Deposit:** 40-ft. vein between granite and slate walls carries 3 to 18 in. of ore. 2 other veins 5 and 10 ft. wide. **Dev:** 30-ft. crosscut, open cuts. **Assays:** \$8 to \$56 Au, 2% to 3% Cu. **Ref:** 14, p. 33. 63, p. 32.

Green Crown (13)

(see under copper)

Grizzly

(see under copper)

Gunn Peak (198)

(see under copper)

Gypsy Queen (156)
(see under lead)

Hammond
(see Keystone under copper)

Hancock (217)
(see under copper)

Hannah (14)
(see under copper)

Hard Pass (204)
(see under copper)

Harley
Loc: T. 32 N., R. 10 E., near the middle of Gold Mtn., Darrington dist. **Prop:** 8 claims. **Owner:** Charles Burns (1901). **Ore:** Gold. **Deposit:** Vein 4 ft. wide crops out for 150 ft. **Assays:** \$42 to \$43 per ton, mostly Au (1901). **Ref:** 14, p. 9. 88, p. 62.

Hecla (35)
(see under copper)

Helena (30)
(see under copper)

Helena and Sadie (205)
(see under copper)

Hiawatha (121)
Loc: Sec. 33, (29-11E), about 1 mi. S. of Silver Lk. on W. side of the E. Fk. of Silver Cr. **Ore:** Gold, silver. **Deposit:** Vein. **Dev:** 40-ft. adit. **Ref:** 14, p. 33. 63, p. 28.

Hicks
(see Sultan King under copper)

Highland (29)
(see under copper)

J. J. Hill
Loc: Silver Cr. dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 30.

Holbrooke
(see Caplin-Holbrooke)

Homestead
(see Cascade under copper)

Hoodoo (55)
(see under copper)

Hope (157)
Loc: Sec. 5, (28-11E), on Hubbart Peak, Silver Cr. dist. **Ore:** Gold, copper. **Ore min:** Chalcopyrite, pyrite. **Deposit:** 25- to 30-ft. vein with 5 ft. of ore on the footwall. **Dev:** 100-ft. adit on the vein, and a crosscut adit. **Assays:** \$5 to \$42 per ton. **Ref:** 14, p. 33. 63, p. 28.

Horseshoe and Treasure Box (206)
Loc: Sec. 36, (29-10E), just E. of Sheep Gap, Silver Cr. dist. **Ore:** Gold, copper. **Deposit:** 4-ft. vein with 8 in. of ore. **Dev:** 16-ft. adit. **Assays:** \$17 to \$27 per ton. **Ref:** 14, p. 33. 63, p. 30.

Howard
(see Cooperative under copper)

Hunter (21)
(see under copper)

Idaho (158)
(see under lead)

Imperial (56)
(see under copper)

Independent
(see Copper Independent)

Index
(see Lake Serene under copper)

Index Gold Mines, Inc. (182)
Loc: Secs. 18 and 19, (28-11E), Silver Cr. dist. **Access:** Road. **Prop:** 5 unpatented claims: Daily West, Daily West No. 1, LeRoy, Snow Shoe, Virtue. **Owner:** Henry Siepman, Seattle, Wash. (1942). **Ore:** Gold, silver, lead, zinc. **Ore min:** Arsenopyrite. **Deposit:** Said to be a vein more than 18 in. wide. **Dev:** 300-ft. adit. **Assays:** Typical assay said to be 5.4 oz. Ag, 6.4% Pb, 2.5% Zn, 11.59% As. **Prod:** Reportedly shipped 10 tons of ore per day in 1939. **Ref:** 14, p. 28. 46, p. 168. 158.

Index-Independent
(see Lake Serene under copper)

Iowa (Mint) (202)
(see under copper)

Iowa (Washington-Iowa)
(see Washington-Iowa under copper)

Iron Clad (183)
Loc: Sec. 18, (28-11E), on E. side of Silver Cr. about 1 mi. N. of Galena. **Prop:** 4 claims. **Ore:** Gold. **Ore min:** Arsenopyrite. **Deposit:** 20 ft. of concentrating ore with a narrow streak of high-grade ore. **Dev:** 80-ft. adit. **Assays:** High-grade ore shows \$60 Au. **Ref:** 14, p. 33. 63, p. 32.

Iron Mountain
Loc: On Howard Cr., Index dist. **Prop:** 6 claims. **Ore:** Gold, copper. **Ref:** 63, p. 34.

Isabell
(see Red Cross under copper)

J. B. (122)
Loc: Sec. 27, (29-11E), Monte Cristo dist. **Ore:** Gold, silver, lead. **Ref:** 14, p. 23. 114, no. 5, 1909, p. 104.

Jackson
(see St. Louis and Jackson under copper)

Jamboree (159)
(see under copper)

Jasperson (Clara Thompson, Webster, Commonwealth, McCombs) (160)

Loc: Sec. 36, (29-10E) and sec. 6, (28-11E), N. of the Bear claim on S. slope of Mineral Mtn., on W. side of the W. Fk. of Silver Cr. **Elev:** 3,400 ft. **Access:** Truck road. **Prop:** 17 unpatented claims, including: Sigma, Bullion King. **Owner:** Leased by W. Eggart, Seattle, Wash. (1941). Mrs. Clara Thompson and Lawrence Thompson, Index, Wash. (1938). McCombs & Co. (1934). **Ore:** Gold, silver, copper, lead, mercury, vanadium. **Ore min:** Cinnabar, pyrite, arsenopyrite, chalcopyrite, galena, sphalerite, stibnite, vanadinite. **Gangue:** Quartz. **Deposit:** Narrow mineralized fracture zones in granodiorite. Ore shoots are sporadic and only 3 to 8 in. wide. **Dev:** Adit more than 30 ft. long and other workings said to total 3,000 ft. **Assays:** 8 samples show 0.02 to 0.44 oz. Au, tr. to 19.20 oz. Ag, tr. to 4.5% Cu, 0.8% to 15.1% Pb. **Ref:** 13, p. 160. 14, pp. 30, 34, 38. 58, p. 72. 63, p. 30. 158.

Jesse (22)
Loc: Sec. 33, (32-9E), at headwaters of Buckeye Cr., Darrington dist. **Ore:** Gold, silver, copper. **Deposit:** 9 to 18 in. of ore. **Ref:** 14, p. 9. 63, p. 51.

Jessie (218)
Loc: SW $\frac{1}{4}$ sec. 32, (29-11E), Silver Cr. dist. **Ore:** Gold. **Ref:** 63, p. 29.

Jim Dandy (161)

Loc: SW $\frac{1}{4}$ sec. 8, (28-11E), Silver Cr. dist. **Prop:** 6 claims. **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite, pyrite, arsenopyrite. **Deposit:** 22-ft. vein with 8 in. of ore. **Dev:** 2 adits, one 40 ft. long. **Assays:** As high as \$80 per ton. **Ref:** 14, p. 34. 63, p. 30.

John Newhouse (70)

Loc: SW $\frac{1}{4}$ sec. 20, (29-10E). **Elev:** 2,900 ft. **Access:** $\frac{1}{2}$ mi. E. of Sultan Basin road by an old trail. **Owner:** Reportedly prospected several years ago by John Newhouse. **Ore:** Gold (?). **Ore min:** Pyrite in argillite on dump. **Deposit:** No vein apparent. **Dev:** Old caved adit. **Ref:** 23, p. 73.

Jones

(see Kromona under copper)

Jumbo (219)

Loc: Sec. 29, (29-11E), on W. side of the E. Fk. of Silver Cr., Monte Cristo dist. **Ore:** Gold, silver, copper. **Ore min:** Pyrite. **Deposit:** Quartz vein. **Assays:** \$21.08 Au, \$2.20 Ag. **Ref:** 13, p. 162. 14, p. 34. 58, p. 35.

Jumbo

Loc: Darrington dist. **Ore:** Gold, copper. **Ref:** 98, 1925, p. 1820.

Justice (Golden Chord) (123)

Loc: Sec. 27, (29-11E), on NW. side of Wilmon Peak overlooking Monte Cristo. **Elev:** 4,000 ft. **Access:** $\frac{3}{4}$ mi. by trail from Monte Cristo. **Prop:** 3 claims: John, Thomas, Irma. **Owner:** John Birney, Everett, Wash. (1940). Justice Mining Co. (1905). **Ore:** Gold, silver. **Ore min:** Arsenopyrite, pyrite. **Gangue:** Quartz. **Deposit:** A 1- to 3-ft. mineralized shear zone in andesite contains ore bodies from 70 to 400 ft. in length. Nearly all the known ore has been removed. **Dev:** 3 adit levels totaling about 2,200 ft. **Assays:** Av. assays showed 0.43 oz. Au, 3 oz. Ag, 12.4% As. **Prod:** Considerable ore produced from 1903 to 1905. **Ref:** 14, p. 20. 58, p. 25. 63, p. 13. 91, p. 241. 97, 1905, p. 337. 149, pp. 813, 819. 158.

Justin (8)

Loc: SW $\frac{1}{4}$ sec. 19, (32-10E), on SE. side of Gold Mtn., Darrington dist. **Prop:** 3 claims. **Ore:** Gold, silver, copper, mercury. **Deposit:** 12-ft. vein. **Ref:** 14, p. 9. 63, p. 52. 158.

Kena and Troly

(see Skrinde under copper)

Keystone (100)

Loc: Sec. 22, (29-11E), 1 mi. E. of Monte Cristo. **Ore:** Gold, silver, copper, lead. **Ore min:** Galena, chalcopyrite, pyrite. **Deposit:** 4- to 20-ft. mineralized shear zone that carries from 10 to 18 in. of ore. **Dev:** 30-ft. adit, large open cut. **Assays:** \$8 to \$30 Au, 6 to 40 oz. Ag. **Ref:** 13, p. 150. 14, p. 23. 63, p. 14.

Keystone (74)

(see under copper)

Keywinder (23)

(see under copper)

Kromona (209)

(see under copper)

Lake Serene (236)

(see under copper)

Lakeview Extension (79)

Loc: SW $\frac{1}{4}$ sec. 1, (30-11E), Silverton dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 22.

Lalla Rookh

(see Tobique and Lalla Rookh)

Larson (2)

(see under lead)

Last Chance (184)

Loc: Sec. 18, (28-11E), on W. side of Silver Cr., 2 mi. N. of Galena. **Access:** Truck road. **Owner:** Silver Creek Mining Co. (1907-1935). **Ore:** Gold, silver, lead. **Deposit:** Nearly vertical vein that strikes NW. **Dev:** 1 crosscut adit. **Prod:** Small amount in 1935. **Ref:** 14, p. 28. 33, 1907, p. 1026. 63, p. 29. 97, 1935, p. 354. 158.

Last Dollar (162)

(see under copper)

Last Hope

Loc: Monte Cristo dist. **Ore:** Gold, silver. **Deposit:** Mineralized fracture zone. **Prod:** Reported to have produced some ore. **Ref:** 14, p. 21.

Le Roy (90)

(see under silver)

Lida (220)

(see under copper)

Lily James (57)

Loc: NW $\frac{1}{4}$ sec. 17, (30-10E), Silverton dist. **Ore:** Gold, silver. **Ore min:** Arsenopyrite. **Deposit:** 20-ft. zone with mineralized streaks. **Dev:** 80-ft. crosscut. **Assays:** \$7 Au, Ag. **Ref:** 14, p. 44. 63, p. 21.

Lily of the West (95)

Loc: Sec. 11, (29-11E), just E. of Goat Lk., Monte Cristo dist. **Ore:** Gold. **Ore min:** Arsenopyrite. **Deposit:** 2 $\frac{1}{2}$ -ft. mineralized fracture zone. **Dev:** Short crosscut. **Ref:** 14, p. 24. 63, p. 16.

Little Chief (69)

(see under copper)

Little Giant (107)

Loc: Sec. 13, (29-11E), 1 mi. SE. of Goat Lk. at head of the basin, Monte Cristo dist. **Ore:** Gold, silver. **Ore min:** Sulfides. **Deposit:** 8-ft. fracture zone that carries 18 in. to 8 ft. of ore. **Dev:** Short crosscut. **Ref:** 14, p. 24. 63, p. 16.

Lockwood (164)

(see under lead)

Lockwood Pyrite (73)

(see under iron)

Lost Creek (196)

(see under copper)

Louise

(see Mineral Center)

Lucky Joe (166)

Loc: Sec. 7, (28-11E), just W. of Mineral City, Silver Cr. dist. **Ore:** Gold. **Deposit:** 6 to 12 in. of ore. **Assays:** \$30 Au. **Ref:** 14, p. 34. 63, p. 30.

Lulu (58)

Loc: SE $\frac{1}{4}$ sec. 19, (30-10E), across Silver Gulch from the Granite and Maud prospect, Silverton dist. **Ore:** Gold, silver, lead. **Ore min:** Arsenopyrite, galena. **Deposit:** 8 in. of ore. **Dev:** 30-ft. shaft, 40-ft. adit. **Assays:** \$43 Au, Ag. **Ref:** 13, p. 166. 14, p. 44. 63, p. 19.

M and H No. 2 (165)

Loc: Sec. 7, (28-11E), on W. side of Silver Cr. **Ore:** gold, silver, copper. **Deposit:** Vein with 18 in. of ore on the footwall and 14 in. on the hanging wall. **Assays:** \$24 Au. **Ref:** 14, p. 34. 63, p. 31.

McCombs

(see Jasperson)

McKinley (185)

Loc: Sec. 18, (28-11E), on E. side of Silver Cr. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 10-in. quartz vein. **Dev:** 40-ft. adit. **Ref:** 14, p. 34.

Mackinaw (89)

(see under copper)

Magus

(see "45" under silver)

Manley (24)

(see under copper)

Marengo

(see Delco and Marengo)

Martin Engdahl (163)

(see under lead)

Maud

(see Granite and Maud)

Mayflower (186)

Loc: SW $\frac{1}{4}$ sec. 17, (28-11E), Silver Cr. dist. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 20-ft. shear zone with from 8 to 36 in. of ore. **Dev:** 30-ft. adit. **Assays:** \$12 Au. **Ref:** 14, p. 35. 63, p. 31.

Michigan (187)

Loc: NE $\frac{1}{4}$ sec. 19, (28-11E), on W. side of Silver Cr. **Owner:** Michigan Gulch Mining Co. (1892). **Ore:** Gold, silver, zinc. **Ore min:** Pyrite, sphalerite. **Gangue:** Quartz. **Deposit:** 3-ft. shear zone with 2 to 15 in. of ore. A 2- to 3-ft. cross shear with 3 in. of ore. **Dev:** 70-ft. adit. **Assays:** \$40 to \$70 Au. **Ref:** 13, p. 159. 14, p. 35. 63, p. 31.

Miiki Maru (207)

Loc: Sec. 36, (29-10E), just below Sheep Gap, Silver Cr. dist. **Ore:** Gold, silver, copper. **Ore min:** Chalcopryrite, pyrite. **Deposit:** Mineralized shear zone with from 14 to 48 in. of ore. **Assays:** \$17 Au, 4 oz. Ag, 3% Cu. **Ref:** 14, p. 35. 63, p. 30.

Milwaukee (67)

(see under zinc)

Mineral Center (Bonanza, Edison, Louise, Washington-Iowa) (221)

(see also Edison under gold, Washington-Iowa under copper)

Loc: W $\frac{1}{2}$ sec. 32, (29-11E), $\frac{1}{4}$ mi. E. of Red Gulch on N. side of Silver Cr. **Elev:** 3,500 ft. **Access:** 1 $\frac{1}{2}$ mi. by trail from Mineral City. **Prop:** 13 claims, 10 of which are patented: Rattler, Emma, White Rose, Jessie, Monarch, Red Rose, Louise, Louise Fr., Jumbo, Blackbeard, Blue Bird, Torino, Edison. **Owner:** Mineral Center Mining Co., Tacoma, Wash. (1919-1951). Bonanza Mining & Smelting Co. (1902-1918). **Ore:** Gold, copper, silver, lead, zinc. **Ore min:** Pyrite, chalcopryrite, malachite, azurite, galena, arsenopyrite, pyrrhotite, sphalerite, molybdenite. **Gangue:** Silicified rock. **Deposit:** Mineralized shear zones in metasediments. One zone is 40 ft. wide and contains abundant pyrite and some chalcopryrite. **Dev:** Workings on 3 levels total 3,500 ft. **Improv:** 5 buildings, sawmill, compressor, blacksmith shop, and hand tools (1946). **Assays:** Various assays show from 0.04 to 0.18 oz. Au, 0.04 to 7.38 oz. Ag. The large zone assays 0.10 oz. Au, 7.38 oz. Ag. **Ref:** 88, p. 74. 97, 1907, p. 475. 98, 1918, p. 60. 150, p. 36. 158.

Mineral Mines (167)

(see under copper)

Minnehaha (126)

Loc: Sec. 33, (29-11E), on E. side of the E. Fk. Silver Cr. **Prop:** 1 claim. **Owner:** John A. Campbell (1892). **Ore:** Gold, silver. **Ore min:** Pyrite. **Gangue:** Quartz. **Deposit:** Mineralized shear zone with from 6 to 20 in. of ore. **Dev:** 60-ft. adit. **Assays:** \$30 to \$65 Au, Ag. **Ref:** 13, p. 162. 14, p. 35. 63, p. 28.

Mint

(see Iowa under copper)

Molly

Loc: On Jumbo Mtn., Darrington dist. **Prop:** Group of claims. **Owner:** Mr. Neste et al. (1910). **Ore:** Gold, silver, copper. **Dev:** 170-ft. adit, 50-ft. adit. **Assays:** Av. value of \$15 Au, Ag, Cu, more than half of which is Au. **Ref:** 14, p. 10. 88, p. 63.

Monitor and Sterling (40)

(see under copper)

Monte Cristo (Mystery, Pride) (113)

Loc: Sec. 26, (29-11E), 1 mi. E. of Monte Cristo. **Elev:** 3,000 to 5,500 ft. **Access:** Trail from Monte Cristo. **Prop:** 14 claims, including: Pride of the Woods, Pride of the Mountains, Mystery, Galore, Eighty Nine, Baltic. **Owner:** H. S. Ofstie, Everett, Wash. (1949). Monte Cristo Mining & Concentration Co. (1902). Monte Cristo Metals Co. (1907). Puget Sound Reduction Co. (1907-1918). Boston-American Mining Co. (1922-1926). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Arsenopyrite, pyrite, chalcopryrite, galena, sphalerite, jamesonite, realgar. **Gangue:** Quartz, calcite, sheared rock. **Deposit:** Shear zone in schist and tonalite contains lenses of sulfide ore from 100 to 300 ft. in dia. and 1 to 15 ft. thick. Mineralization in other minor fractures. **Dev:** 3 main levels of adits and several smaller adits. Total underground work about 12,000 ft. **Assays:** 0.20 oz. Au, 3.00 oz. Ag, more than 6% As. Other assays showed for surface ores: 0.95 oz. Au, 12 oz. Ag, 4% Cu, 5% Pb; for deeper ores: 0.6 oz. Au, 7 oz. Ag, 1% Cu, 2 $\frac{1}{2}$ % Pb. **Prod:** 300,000 tons of ore. The ore came mainly from the Mystery and Pride claims above the 700-ft. level. **Ref:** 13, p. 148. 14, p. 21. 33, 1907, p. 941; 1908, p. 1142. 63, pp. 12-13. 88, pp. 71-72. 97, 1907, p. 475. 98, 1918-1926. 100, 1897, p. 180. 112, p. 197. 132, pp. 130-134. 149, pp. 803-804, 813, 818-821, 841. 158. 159, p. 136.

Morning Star (139)

(see under lead)

Mountain Cedar (71)

(see under copper)

Mountain Goat

(see under lead)

Murdock

(see under lead)

Myrtle C. (9)

(see under copper)

Mystery (Mountain Cedar, Paystreak)

(see Mountain Cedar under copper)

Mystery (Monte Cristo, Pride)

(see Monte Cristo)

National (222)

(see under copper)

Nemo (59)

Loc: NW $\frac{1}{4}$ sec. 17, (30-10E), Silvertown dist. **Prop:** 5 claims. **Ore:** Gold, silver, copper. **Ore min:** Chalcopryrite, arsenopyrite. **Deposit:** Quartz vein. **Dev:** 175-ft. adit at valley level. **Assays:** \$8 to \$15 Au, Ag. **Ref:** 14, p. 45. 63, p. 21.

Nesta (25)

(see under copper)

Nevada (96)

(see under copper)

New Seattle (36)

(see under silver)

New York (60)

(see under copper)

New York-Seattle (140)

(see under copper)

Non Pareil (197)

(see under copper)

North Star

(see Sunrise)

Northwest Consolidated

Loc: On W. side of Weden Cr., Monte Cristo dist. **Owner:** Northwest Consolidated Mining Co. (1915). **Ore:** Gold, silver, copper. **Deposit:** Mineralized arkose at contact of intrusive dike of tonalite. **Prod:** 1916. **Ref:** 14, p. 21. 97, 1916, p. 614. 149, p. 829.

Nunn

(see Taylor & Nunn)

O and B (101)

(see under copper)

Occidental (85)

Loc: Sec. 10, (29-10E), on Vesper Peak. **Owner:** Chas. Kelly, Joseph Wartz, Alden S. Chase, Everett, Wash. **Ore:** Gold, silver, copper. **Ref:** 158.

Old Gray Mare

(see Gray Mare under silver)

Oldfield

(see Sunrise)

Ontario (171)

(see under lead)

Ore Recoveries (61)

(see under copper)

Oro Fino (188)

(see under copper)

Orphan Boy (125)

(see also Silver Queen)

Loc: NE¼ sec. 33, (29-11E), Silver Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 27.

P. and I. (102)

Loc: Sec. 21, (29-11E), Monte Cristo dist. **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite, pyrite. **Deposit:** 2- to 6-ft. mineralized fracture zone in andesite carries 5 to 24 in. of ore. **Dev:** 112-ft. adit. **Assays:** \$8.80 to \$21 Au. **Ref:** 14, p. 24. 63, p. 14.

Paystreak

(see Mountain Cedar under copper)

Peabody (124)

(see also Sidney)

Loc: NE¼ sec. 27, (29-11E), on W. slope of Wilmon Peak, Monte Cristo dist. **Elev:** 3,400 ft. **Access:** Trail from Monte Cristo. **Prop:** 1 patented claim: Remnant; 6 unpatented claims: Gene Elton, Lincoln, Sheridan, Kittie Mackay, Grant, Sidney. **Owner:** Louis H. McRae, Everett, Wash. (1949). Kitty A. Peabody, Edmonds, Wash. (1936). **Ore:** Gold, silver, lead, zinc.

Ore min: Arsenopyrite, pyrite, galena, sphalerite. **Gangue:** Quartz and altered andesite. **Deposit:** Mineralized fracture zone in andesite ranges from a few in. to 18 in. wide. **Dev:** 200-ft. adit, several short adits and open cuts. **Assays:** 0.3 to 0.6 oz. Au, 1 to 36 oz. Ag. **Prod:** 1905. **Ref:** 14, p. 21. 97, 1905, p. 336. 114, no. 5, 1909, p. 103. 157. 158.

Pelican (26)

Loc: SW¼ sec. 27, (32-9E), on Jumbo Mtn., Darrington dist. **Ore:** Gold. **Ore min:** Arsenopyrite. **Deposit:** 12-in. vein. **Dev:** 12-ft. adit. **Assays:** \$12 Au. **Ref:** 14, p. 10. 63, p. 51.

Penn

(see Foggy under copper)

Perm

Loc: Darrington dist., 7 mi. from Bedel and 7 mi. from Barlow Pass. **Ore:** Gold, silver, lead, zinc. **Ore min:** Arsenopyrite, tetrahedrite, galena, sphalerite. **Deposit:** Ore in fissures in schist and underlying granite. **Assays:** Sulfides av. \$9.88 Au and Ag, 3.15% As, 5.5% Sb, 3% to 5% Zn, 3% to 4% Pb. **Ref:** 158.

Philo (108)

(see under copper)

Pride

(see Monte Cristo)

Pride of Index

(see Lake Serene under copper)

Q. T. (127)

(see also Silver Queen)

Loc: SE¼ sec. 33, (29-11E), Silver Cr. dist. **Ore:** Gold, silver. **Ref:** 63, p. 27.

Queen Anne (27)

Loc: SE¼ sec. 27, (32-9E), on Jumbo Mtn., Darrington dist. **Owner:** Ole and Pete Nesta, Darrington, Wash. (1942). **Ore:** Gold, silver, copper, lead, zinc. **Ore min:** Chalcopyrite, galena, sphalerite, arsenopyrite, bornite. **Gangue:** Quartz. **Deposit:** Ore minerals associated with quartz in a 3-ft. fracture zone in granite. **Dev:** 1 adit. **Assays:** Tr. to \$550 Au, tr. to \$60 Ag, tr. to \$35 Cu. **Ref:** 14, p. 10.

Rainy (Ben Lomond) (103)

Loc: Sec. 22, (29-11E), ¼ mi. NE. of Monte Cristo. **Elev:** 3,000 ft. **Access:** Trail from Monte Cristo. **Prop:** 3 claims. **Owner:** J. F. Birney, Everett, Wash. (1930-1940). Ben Lomond Mining Co. (1914-1915). **Ore:** Gold, silver. **Ore min:** Arsenopyrite, pyrite. **Deposit:** Mineralized fracture zone in schist and andesite. Main ore body is 300 ft. in dia. and 8 in. to 5 ft. wide. **Dev:** 800-ft. adit, 200-ft. shaft. **Assays:** 862 tons shipped to smelter in 1913 to 1915 av. 0.638 oz. Au, 2.20 oz. Ag, 19.6% As. **Prod:** 20,000 tons of ore reported. **Ref:** 13, p. 149. 14, pp. 21-22. 63, p. 13. 97, 1914, p. 651; 1915, p. 572. 149, p. 814. 158.

Red Cloud (169)

Loc: Sec. 6, (28-11E), on W. side of Silver Cr. **Prop:** 3 claims. **Ore:** Gold, silver, lead. **Ore min:** Pyrite, cerussite. **Deposit:** 4- to 6-ft. shear zone with 3 to 9 in. of ore. **Dev:** 60-ft. adit. **Ref:** 14, p. 36. 63, p. 30.

Red Cross (228)

(see under copper)

Remonille (141)

Loc: SE¼ sec. 3, (28-11E), Silver Cr. dist. **Prop:** 3 claims. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 3- to 10-ft. shear zone. **Dev:** 25-ft. adit. **Assays:** \$10 Au. **Ref:** 14, p. 36. 63, p. 29.

Republican (109)

(see under lead)

Ruby King (168)

Loc: SE $\frac{1}{4}$ sec. 7, (28-11E), on Cascade Gulch, Silver Cr. dist. **Ore:** Gold, silver, copper, lead. **Ore min:** Arsenopyrite, chalcopyrite. **Deposit:** Shear zone with 5 ft. of ore. **Dev:** 60-ft. and 20-ft. adits. **Assays:** \$30 Au. Said also to carry Ag, Pb. **Ref:** 13, p. 158. 14, p. 36. 63, p. 31.

Rudebeck-Florence Rae

(see Florence Rae under copper)

S. M. P. (170)

(see under zinc)

Sadie

(see Helena and Sadie under copper)

St. Louis (173)

(see under copper)

St. Louis and Jackson (37)

(see under copper)

Sam Strom (5)

(see under copper)

Scriber

(see Kromona under copper)

Seattle

Loc: In Red Gulch, Monte Cristo dist. **Ore:** Gold, silver, copper. **Deposit:** Mineralized zone 3 ft. wide consisting of narrow streaks of sulfides along joints in slate. **Ref:** 14, p. 25. 149, p. 823.

Seventy Six (128)

(see under lead)

Shirley (189)

(see also Skrinde under copper)

Loc: Sec. 18, (28-11E), 1 $\frac{1}{2}$ mi. N. of Galena bridge. **Owner:** Wm. E. Skrinde, Index, Wash. (1938). **Ore:** Gold, silver, copper. **Ref:** 158.

Sidney (129)

(see also Peabody)

Loc: Sec. 27, (29-11E), Monte Cristo dist. **Prop:** 1 unpatented claim (part of Peabody group). **Owner:** L. H. McRae, Everett, Wash. (1950). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite. **Gangue:** Quartz. **Dev:** Small amount. **Ref:** 13, p. 150. 14, p. 25. 114, no. 5, 1909, p. 104. 149, p. 833. 157.

Silver Coin (38)

Loc: NW $\frac{1}{4}$ sec. 11, (30-9E), on Marten Cr. just W. of Silverton. **Elev:** 2,700 to 3,500 ft. **Access:** 3 $\frac{1}{2}$ mi. by bulldozer road from highway. 40 mi. to railroad. **Prop:** 4 claims: Silver Coin Nos. 1 to 4. **Owner:** Silver Coin Mining Co., Lake Stevens, Wash. (1950). **Ore:** Gold, silver, lead, copper, bismuth, zinc. **Ore min:** Chalcopyrite, cosalite, sphalerite, pyrrhotite, pyrite. **Gangue:** Quartz, sericite, chlorite. **Deposit:** Mineralized fractures in granite. Widest mineralized zone was 3 ft., though a zone 12 ft. wide has been hydrothermally altered. **Dev:** Caved adit said to be 137 ft. long. **Assays:** Grab sample of cosalite ore showed 0.34 oz. Au, 98.78 oz. Ag, 2.20% Cu, 8.8% Bi, 19.2% Zn, 9.1% Pb. Chip sample across 4-ft. width showed 2.5% Zn, 0.5% Pb, 0.01% Bi, 1.40 oz. Ag, 0.005 oz. Au. Chip sample across 3-ft. width showed 10.1% Zn, 1.4% Pb, 0.01% Bi, 4.70 oz. Ag, tr. Au. **Ref:** 69, p. 14. 157. 158.

Silver Creek

(see Broken Ridge under copper)

Silver Horseshoe (83)

(see under silver)

Silver Lake (130)

Loc: Sec. 33, (29-11E), on Silver Tip Mtn., Silver Cr. dist. **Prop:** 6 claims. **Ore:** Gold, silver, lead. **Ore min:** Pyrite, galena. **Deposit:** 3- to 4 $\frac{1}{2}$ -ft. shear zone and 2 other shear zones with ore. **Dev:** 150-ft. adit, 101-ft. adit, 160-ft. adit, 50-ft. crosscuts. **Assays:** \$16 to \$140 per ton. **Ref:** 14, p. 37. 63, pp. 27-28.

Silver Queen (131)

Loc: Secs. 28 and 33, (29-11E), on E. Fk. of Silver Cr. **Prop:** Includes the Orphan Boy and Q. T. claims. **Ore:** Gold, silver, lead, zinc. **Ore min:** Pyrite, galena, sphalerite. **Deposit:** 6- to 30-ft. shear zone with 18 to 24 in. of ore. Another shear zone with 6 in. of ore. Several other small mineralized shear zones. **Dev:** 200-ft. adit, 286-ft. adit, 25-ft. adit, several open cuts. **Assays:** \$36 to \$45 Au, \$3.35 Ag. **Ref:** 14, p. 37.

Silver Slipper (172)

Loc: NW $\frac{1}{4}$ sec. 6, (28-11E), on W. side of Silver Cr. **Ore:** Gold, copper, silver. **Ore min:** Arsenopyrite, chalcopyrite, argentite. **Deposit:** 8-ft. shear zone with 24 in. of ore. **Dev:** 40-ft. adit. **Assays:** As high as \$80 Au. **Ref:** 13, p. 162. 14 p. 37. 63, p. 31.

Skrinde (190)

(see under copper)

Sloman (15)

Loc: Sec. 32, (32-9E), on N. side of White Horse Mtn., Darrington dist. **Ore:** Gold, silver, copper. **Deposit:** 5-ft. vein. **Dev:** 2 adits each 50 ft. long. **Assays:** As high as \$33 per ton. **Ref:** 14, p. 10. 58, p. 64. 63, p. 51. 88, p. 63.

Standard

(see under lead)

Steele (88)

Loc: N $\frac{1}{2}$ sec. 19, (29-11E), Silver Cr. dist. **Access:** Trucl road. **Prop:** Several claims. **Owner:** I. E. Steele. **Ore:** Gold. **Ore min:** Pyrite. **Gangue:** Quartz, calcite. **Deposit:** 1- to 3-ft vein in argillite. **Dev:** 150-ft. adit and several open cuts. **Ref:** 14, p. 37.

Sterling

(see Monitor and Sterling under copper)

Sultan King (208)

(see under copper)

Sultan Queen

(see Sultan King under copper)

Sunday Star

Loc: Silver Cr. dist. **Prop:** 1 claim. **Owner:** J. N. Scot (1892). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 3 $\frac{1}{2}$ -ft mineralized shear zone. **Dev:** 40-ft. shaft. **Assays:** \$40 Au, Ag. **Ref:** 13, p. 163. 14, p. 37.

Sunrise (North Star, Oldfield) (16)

Loc: NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, (32-9E). **Access:** 5 mi. by road to railroad near Darrington. **Prop:** 4 claims. **Owner:** W. E. Old field, Seattle, Wash. (1951-1952). **Ore:** Gold, silver, copper, lead, zinc, molybdenum. **Ore min:** Chalcopyrite, galena, molybdenite, arsenopyrite, sphalerite, pyrite. **Gangue:** Quartz. **Deposit:** Narrow fractures cutting granite are filled with quartz and ore minerals. **Dev:** 2 adits aggregating 155 ft. **Assays:** 0.08 to 0.55 oz. Au, 1.3 to 9.1 oz. Ag, 0.8% to 1.67% Cu, 0.1% Mo, 9% As. **Ref:** 14, p. 10. 133, p. 40.

Sunrise (86)

(see under copper)

Sunset (234)

(see under copper)

Sunset (97)

Loc: Sec. 12, (29-11E), about ½ mi. S. of Goat Lk., Monte Cristo dist. **Ore:** Gold, silver. **Ore min:** Arsenopyrite, pyrite. **Deposit:** Fracture zone carrying 3 ft. of ore. **Assays:** \$33 Au, Ag. **Ref:** 14, p. 25. 63, p. 16.

Sunset and Beatrice (191)

(see under lead)

Taylor & Nunn (Bergensen, Tum Tum) (17)

Loc: Sec. 29, (32-9E), on headwaters of Ashton Cr., Darrington dist. **Access:** 1½ mi. from road. **Owner:** J. A. Taylor, Lakewood, Wash. (1935). **Ore:** Gold, silver, molybdenum. **Ref:** 14, p. 10. 58, p. 67. 158.

Texas (192)

Loc: NE¼ sec. 17, (28-11E), Silver Cr. dist. **Prop:** 5 claims. **Ore:** Gold, silver. **Ore min:** Arsenopyrite. **Deposit:** Mineralized shear zone with from 4 to 7 ft. of ore. **Dev:** 20-ft. adit, several open cuts. **Assays:** \$20 per ton. **Ref:** 14, p. 37. 63, p. 31.

Threadwell

Loc: Monte Cristo dist. **Ore:** Gold, silver, lead, copper, zinc. **Ore min:** Pyrite, chalcopyrite, galena, sphalerite. **Deposit:** Mineralized fracture zone. **Dev:** 10-ft. and 110-ft. adits. **Assays:** \$9 to \$20 Au in the upper 10 ft. Much lower grade ore in the unoxidized zone. **Ref:** 14, p. 25.

Three Sisters (62)

Loc: Sec. 18, (30-10E), Silverton dist. **Ore:** Gold, silver. **Ref:** 58, p. 67.

Three Star (98)

Loc: Sec. 11, (29-11E), about ½ mi. W. of Goat Lk., Monte Cristo dist. **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 8- to 12-ft. fracture zone that carries from 3 to 7 ft. of ore. **Dev:** Small amount. **Ref:** 14, p. 25. 63, p. 16.

Tobique and Lalla Rookh (104)

Loc: Sec. 21, (29-11E), just N. of the O and B mine, Monte Cristo dist. **Ore:** Gold, silver, lead. **Ore min:** Pyrite, galena. **Deposit:** 12- to 15-ft. fracture zone in andesite. **Dev:** Two 15-ft. adits and another adit of unknown length. **Assays:** \$8 to \$30 Au, 6 to 40 oz. Ag. **Ref:** 14, p. 25. 63, p. 14.

Treasure Box

(see Horseshoe and Treasure Box)

Troly

(see Skrinde under copper)

Troublesome Pass

(see under silver)

Tum Tum

(see Taylor & Nunn)

Twentieth Century (132)

(see under silver)

Typo

(see Argonaut and Typo)

Uncle Sam (199)

(see under copper)

Undaunted (223)

Loc: Sec. 31, (29-11E), on Mineral Mtn., Silver Cr. dist. **Prop:** 4 claims. **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 6 mineralized shear zones that range from 1½ to 6 ft. in width and carry from 6 to 36 in. of ore. **Dev:** 35-ft. adit and several open cuts. **Assays:** \$12 to \$70 per ton. **Ref:** 14, p. 38. 63, p. 29.

Union (99)

Loc: Sec. 12, (29-11E), ¼ mi. E. of the SE. end of Goat Lk., Monte Cristo dist. **Ore:** Gold, silver. **Ore min:** Arenso-pyrite, pyrite. **Deposit:** Mineralized fracture zone that carries 1½ to 4 ft. of ore. **Dev:** 40-ft. crosscut. **Ref:** 14, p. 26. 63, p. 16.

Vandalia (175)

(see under lead)

Victory

Loc: Silver Cr. dist. **Ore:** Gold, copper, lead, silver. **Ref:** 14, p. 38. 105, 8/02, p. 122.

Virginia (63)

(see under copper)

Washington-Iowa (225)

(see Mineral Center, and see also Washington-Iowa under copper)

Wayside (42)

(see under copper)

Webster

(see Jasperson)

Weden Creek

(see Mackinaw under copper)

Welman (3)

Loc: SE¼ sec. 19, (32-9E), on White Horse Mtn., Darrington dist. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 14-in. vein. **Assays:** As much as \$94 Au. **Ref:** 14, p. 11. 63, p. 51.

Westland (174)

(see under copper)

Whaleback (224)

Loc: Sec. 29, (29-11E), Silver Cr. dist. **Ore:** Gold, silver, copper. **Ore min:** Chalcopyrite, pyrite. **Deposit:** 15 ft. of concentrating ore. **Assays:** \$4 to \$10 Au, Ag. **Ref:** 14, p. 38. 63, p. 29.

Whistler (110)

(see under lead)

White Gander (28)

(see under copper)

Whitehorse (18)

(see under zinc)

Wilbur Index

(see Lake Serene under copper)

Wild Rose (226)

(see under copper)

Wildcat (133)

Loc: SE¼ sec. 33, (29-11E), Silver Cr. dist. **Ore:** Gold, silver. **Deposit:** Wide shear zone with 6½ ft. of concentrating ore. **Dev:** 40-ft. adit. **Assays:** \$10 Au. **Ref:** 14, p. 38. 63, p. 28.

Wilmon Peak

Loc: On Wilmon Peak, Monte Cristo dist. **Prop:** 7 claims. **Ore:** Gold. **Dev:** 2 adits. **Ref:** 14, p. 26. 63, p. 13.

Winnie (227)

(see under copper)

Winter Coon (64)

Loc: Sec. 19, (30-10E), Silverton dist. **Owner:** Virginia-Agenda Co. (1922-1930). **Ore:** Gold, silver, copper, arsenic. **Ref:** 14, p. 45. 97, 1930, p. 675. 98, 1922, p. 1669; 1925, p. 1836; 1926, p. 1599.

Yankee Boy (44)

(see under copper)

Yellow Jacket

Loc: Index dist. **Ore:** Gold. **Ref:** 58, p. 74.

Zeta (134)

Loc: Sec. 34, (29-11E), about 1 mi. E. of Silver Lk. on the Monte Cristo side of the divide. **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite, bornite. **Deposit:** 3 parallel mineralized fractures. One shows from 8 to 24 in. of ore, another shows 3 to 18 in. of ore. **Dev:** 15-ft. adit, several open cuts. **Assays:** \$5 to \$6 Au, \$3 to \$11 Ag. **Ref:** 14, p. 26. 63, p. 27.

STEVENS COUNTY

A and C (131)

(see under copper)

Abe Lincoln (41)

Loc: Sec. 1, (39-36E), on flat bench 1 mi. E. of Rockcut, Orient dist. **Elev:** 2,350 ft. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Ore min:** Pyrite, chalcopyrite. **Deposit:** Mineralized quartz vein occurs in a country rock consisting of Orient gneiss cut by diorite dikes. **Dev:** 120-ft. shaft with 40-ft. crosscut at 100-ft. level, and another 100-ft. shaft. **Assays:** \$30 Au. **Ref:** 30, p. 129. 104, 9/32. 164, pp. 289-290.

Abe Lincoln (Comstock)

(see Comstock under lead)

Acme (F. H. and C.)

(see F. H. and C.)

Acme (Acme-Dora) (151)

(see under lead)

Admiral (192)

(see under copper)

Advance (101)

(see under zinc)

Aguila (153)

(see under lead)

Al Ki

(see under lead)

Aladdin (Blue Ridge, Sierra Zinc)

(see Sierra Zinc under zinc)

Aladdin (140)

(see under lead)

Alert

Loc: On N. Fk. Fifteen Mile Cr., Northport dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 107.

Alice

(see under copper)

Alice C (45)

Loc: Sec. 18, (39-37E), ¼ mi. E. of First Thought property. **Access:** ¼ mi. from road. **Prop:** 2 claims: Alice C, Protection. **Owner:** May be part of holdings of Gold Syndicate Corp. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Latite flows cut by monzonite dikes. Fracture zones in these rocks mineralized with auriferous pyrite. **Dev:** 70-ft. double-compartment shaft and 2 adits. **Ref:** 30, p. 133. 164, p. 261.

Alice May

Loc: On Onion Cr., Northport dist. **Ore:** Gold. **Ref:** 63, p. 111.

Alma (152)

(see under silver)

Amazon (174)

(see under copper)

American Boy (64)

Loc: Sec. 31, (39-37E), Orient dist. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Ore min:** Pyrite and small amounts of chalcopyrite. **Deposit:** Mineralized fracture zone in limestone parallel to the bedding planes. **Dev:** 25-ft. shaft, several open cuts. **Assays:** Reportedly \$15 Au. **Ref:** 30, p. 127. 164, p. 281.

Anaconda (113)

(see under lead)

Antelope (82)

Loc: Sec. 20, (39-38E), Orient dist. **Elev:** 3,650 ft. **Access:** Near road. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Ore min:** Pyrite, pyrrhotite, chalcopyrite, melanterite. **Gangue:** Quartz. **Deposit:** 2½- to 4-ft. vein in Jumbo volcanics. **Dev:** Inclined shaft about 100 ft. deep. **Assays:** Sample taken across the vein said to assay \$26.25. **Prod:** 50 tons of ore said to have been mined. **Ref:** 30, p. 135. 164, p. 251.

Ark (150)

(see under silver)

Audrey M. (63)

(see under copper)

B and B (170)

(see under copper)

Bald Eagle (32)

Loc: Sec. 25, (40-36E), E. of Mogul property, Orient dist. **Elev:** 3,650 ft. **Access:** Near road. **Prop:** 3 unpatented claims, including: Bald Eagle Nos. 1 and 2. **Owner:** Abandoned (1941). Bald Eagle Gold Mining Co. (1897). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite, a few specks of galena. **Gangue:** Quartz. **Deposit:** Country rock of quartzite, schist, and limestone cut by diorite dikes, is traversed by two mineralized fracture zones, one 12 ft. wide. **Dev:** 25-ft. shaft, 15-ft. shaft, and other shafts total about 100 ft. Also a few open cuts. **Assays:** \$1 to \$6 Au, Ag. **Ref:** 30, p. 129. 63, p. 106. 164, p. 287.

Banner

(see Chinto under copper)

Bear Mountain (155)

(see under lead)

Beecher (37)

Loc: Near center sec. 31, (40-37E), Orient dist. **Elev:** 2,500 ft. **Access:** 2 mi. NE. of Rockcut by road. **Owner:** Beecher Gold Mining Co. (1909-1924). **Ore:** Gold, silver, copper, lead. **Ore min:** Free gold, pyrite, sylvanite, galena, limonite, chalcopyrite. **Gangue:** Quartz, calcite. **Deposit:** 2 quartz veins, one 4 to 24 in. wide, another as much as 8 ft. wide. Country rock is schist and Rossland volcanics cut by diabase. **Dev:** 65-ft. shaft with 115-ft. drift at bottom. Other short drifts. **Assays:** Av. \$4 to \$24 Au, high-grade \$136 to \$296 Au. **Prod:** 2 shipments aggregating 22 tons prior to 1913. **Ref:** 7, p. 88. 97, 1915, p. 575; 1916, p. 616. 98, 1918, 1922, 1925. 114, 8/09, p. 60. 164, p. 285.

Belcher (176)

(see under copper)

Belle of the Mountain

Loc: Summit dist., about 18 mi. W. of Chewelah. **Access:** Road from Chewelah. **Owner:** C. H. Bodge (1890). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** 3-ft. quartz vein. **Dev:** 20-ft. shaft. **Assays:** Ore on dump showed \$20 Au. **Ref:** 12, p. 77. 13, p. 124.

Belmont (54)

Loc: Near center sec. 18, (39-37E). Joins the First Thought property on the SW. **Prop:** 1 claim. **Owner:** May be part of Gold Syndicate Corp. holdings. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** 2 intersecting sets of fractures in latite and monzonite porphyry show some mineralization. **Dev:** 30-ft. shaft and some trenching. **Ref:** 30, p. 121. 164, p. 265.

Benvenue

(see Gold Reef)

Bertha M (157)

(see under lead)

Big Iron (28)

(see under iron)

Big Jim (Sweet Home) (75)

Loc: Sec. 19, (39-38E). **Prop:** 1 fraction. **Ore:** Gold, copper. **Deposit:** Vein cutting dark basic igneous rock. **Dev:** 10-ft. shaft and several open cuts. **Assays:** Said to assay \$4 Au, \$1 Cu. **Ref:** 164, p. 252.

Big Strike (121)

Loc: Sec. 12, (40-42E), Northport dist. **Access:** 12 mi. by road to railroad at Boundary. **Owner:** Newton Hartman, Colville, Wash. **Ore:** Gold. **Ref:** 158.

Birton

Loc: Near Sheep Cr., 6 mi. from Northport. **Prop:** 12 claims. **Owner:** Birton Gold Mining & Milling Co. (1897). **Ore:** Gold, copper. **Ore min:** Iron and copper sulfides. **Ref:** 63, p. 106.

Black Horse

(see Columbia Tungsten under tungsten)

Black Witch

(see Alma under silver)

Blue Belle

Loc: Summit dist., about 18 mi. W. of Chewelah. Adjoins Belle of the Mountain on S. **Access:** Road from Chewelah. **Owner:** P. Kearney, D. B. Arman, and J. Davis (1890). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** 3-ft. quartz vein. **Dev:** 40-ft. shaft. **Assays:** Hand samples from dump assayed \$20 Au. **Ref:** 12, pp. 77-78. 13, p. 123.

Blue Bird (85)

Loc: Sec. 19, (39-38E), Orient dist. **Prop:** 1 claim. **Owner:** Centennial Mines Co. (1924-1926). Minorca-Homestake Mines Co. (1922). **Ore:** Gold, silver, copper. **Deposit:** Limestone and calcareous argillite cut by basic dikes. Residual areas of Jumbo volcanics. 5- to 7-ft. vein cuts the series. **Ref:** 98, 1925, p. 1808; 1926, p. 1573. 164, p. 250.

Blue Goose (15)

(see under copper)

Blue Grass (Katy) (57)

Loc: Near center E½ sec. 24, (39-36E), near top of Toulou Mtn., Orient dist. **Elev:** 3,000 ft. **Access:** 1 mi. from road. **Prop:** 3 unpatented claims. **Owner:** Gus Dahl, Orient, Wash. (1940). Blue Grass Gold, Silver, Copper Mining Co. (1909). **Ore:** Gold, silver, copper. **Ore min:** Pyrite, chalcopyrite. **Gangue:** Quartz. **Deposit:** Conglomerate, shale, tuff, dacite, and andesite cut by monzonite and granite dikes. Mineralization is in fracture zones near the dikes. One zone is 3 ft. wide. **Dev:** 40-ft. shaft, 410-ft. crosscut, open cuts. **Assays:** Av. said to be \$1.00 Au, though assays as high as \$16 have been obtained. **Ref:** 30, pp. 123-124. 114, no. 5, 1909, p. 62. 164, pp. 271-272.

Blue Ridge

(see Sierra Zinc under zinc)

Blue Star

(see Eagle under silver)

Bluebird

(see Loon Lake Copper under copper)

Bonanza Copper (198)

(see under copper)

Brooks (201)

(see under silver)

Bruce Creek

(see A and C under copper)

Bryant (38)

(see under copper)

Bucher

Loc: Orient dist. **Ore:** Gold. **Prod:** 1907. **Ref:** 97, 1908, p. 580.

Buck Mountain

(see under silver)

Buffalo (118)

(see under silver)

Bullion (97)

(see under lead)

Burrus (139)

(see under zinc)

Butte (46)

Loc: Secs. 7 and 18, (39-37E), on First Thought Mtn., Orient dist. **Owner:** Treasure Gold Mining Co., Spokane, Wash. **Ore:** Gold, silver. **Ref:** 158.

Centennial (76)

(see under copper)

Charity

(see F. H. and C.)

Checops (168)

(see under copper)

Chewelah Consolidated (156)

(see under lead)

Chewelah Eagle

(see Eagle under silver)

Chewelah Standard (183)

(see under copper)

Chinto (175)

(see under copper)

Churchill (30)

(see under copper)

City View (149)

Loc: SW¼ sec. 16, (36-38E). **Elev:** 2,330 ft. **Access:** 1 mi. E. of Kettle Falls (Meyers Falls). **Prop:** Several claims. **Owner:** Abandoned (1941). **Ore:** Gold, lead, silver, copper. **Ore min:** Galena, pyrite. **Deposit:** 5-in. and 3-ft. quartz veins cutting argillite and limestone. Pyrite occurs in the wall rock. **Dev:** 60-ft. adit, 50-ft. adit, 12-ft. shaft. **Assays:** Ore said to assay \$9.00 Au and to carry values in Pb and Ag. **Ref:** 30, p. 55. 158. 164, p. 234.

Clara (110)

Loc: Secs. 10 and 11, (40-41E), Northport dist. **Ore:** gold, silver, copper. **Prod:** Has produced. **Ref:** 58, p. 14. 63, p. 111.

Coffer (73)

(see under copper)

Colonel Fish

(see Gold Hill)

Columbia

(see Iroquois under zinc)

Columbia River (146)

(see under copper)

Columbia Tungsten (163)

(see under tungsten)

Comstock (31)

(see under copper)

Comstock (Abe Lincoln) (89)

(see under lead)

Contention

(see Mountain View under silver)

Copper Butte (65)

(see under copper)

Copper-Gold

(see Coffer under copper)

Copper Jack (18)

(see under copper)

Copper King (135)

(see under lead)

Copper Queen (173)

(see under copper)

Coyote (105)

(see under lead)

Coyote (Rightside)

(see Rightside under copper)

Coyotte

(see Coyote under lead)

Crescent

(see Orient, Crescent, and Deadwood under copper)

Daisy

(see Daisy-Tempest under silver)

Daisy-Tempest (160)

(see under silver)

Deadwood

(see Orient, Crescent, and Deadwood under copper)

Defender (59)

(see under zinc)

Dille

(see Pelkey and Dille under copper)

Dora

(see Acme under lead)

Double Standard (90)

(see under copper)

Douglas

(see under tungsten)

Douglas Hunter

Loc: Northport dist. **Ore:** Gold, silver. **Ref:** 104, 9/30/32, p. 29.

Dumbolton (190)

Loc: Secs. 11 and 12, (31-39E), on Douglas Mtn., Springdale area. **Access:** 2 mi. from road. **Prop:** 10 claims. **Owner:** P. S. Dumbolton, Spokane, Wash. (1949). **Ore:** Reportedly gold, mercury, and tin. **Ore min:** Cinnabar. **Ref:** 158.

Eagle (178)

(see under silver)

Eagle Newport

(see Aguila under lead)

Easter Sunday (25)

Loc: Near center E½ sec. 22, (40-37E), Orient dist. **Elev:** 3,550 ft. **Access:** 8 mi. E. of Rockcut on Easter Sunday Lk. road. **Prop:** 2 patented claims: Easter Sunday, Cairn. **Owner:** D. C. Ames & Associates, Kenilworth, Ill. (1949). Memphis Mining Co. (1903). Waukegan Mining Co. (1903). Waukegan & Washington Mining & Smelting Co. (1907). Forest Mining & Milling Co. (1909). **Ore:** Gold, copper, silver. **Ore min:** Pyrite, chalcopyrite, sphalerite, galena, boulangerite, tetrahedrite. **Deposit:** 2- to 6-ft. quartz vein in cherty argillite. Vein sparsely mineralized and cut off by a monzonite dike. **Dev:** 130-ft. inclined shaft and 2 short levels run at 70 and 100 ft. from the collar, total 550 ft. of workings. 480-ft. diamond drill hole. **Assays:** 20-ton shipment av. 1.21% Cu, 0.44 oz. Au, 12.4 oz. Ag. **Prod:** Shipped approx. 20 tons of ore in 1909. **Ref:** 7, pp. 83-84. 30, p. 131. 33, 1907, p. 1156. 98, 1925, p. 1817. 100, 1903, pp. 100-101. 111, p. 8. 112, p. 178. 114, no. 5, 1909, p. 60. 116, no. 12, 1907, p. 15. 132, pp. 141-142. 164, pp. 274-275.

Easy Money

(see Magma under zinc)

Edna (191)

(see under copper)

Eldorado

Loc: Sec. 19, (40-42E), adjoining the Lucile property, Northport dist. **Ore:** Gold. **Ref:** 97, 1928, p. 703. 106, 9/17/28, p. 24.

Eldorado (Magma)

(see Magma under zinc)

Elmo (74)

(see under copper)

Elvick (93)

Loc: NW¼SE¼ sec. 7, (40-40E), Northport dist. **Access:** Near road. **Prop:** 2 unpatented claims. **Owner:** Mike Elvick, Northport, Wash. (1941). **Ore:** Gold, lead. **Deposit:** Quartz vein in which are small pockets and lenses of ore. **Dev:** Two 100-ft. adits and some open cuts. **Ref:** 30, p. 104.

Empire

Loc: Adjoins Sunnyside property, Orient dist. **Ore:** Gold. **Ref:** 63, p. 108.

Enterprise

Loc: Orient dist. **Owner:** American Scotia Mining Co. (1918). **Ore:** Gold, silver, copper. **Ref:** 112, p. 165.

Eureka (Eureka and Orient, Indian, Orient Eureka) (3)

Loc: Secs. 13, 24, and 25, (40-36E), E. of Kettle R., Orient dist. **Elev:** 2,485 ft. **Access:** 5 mi. by road from railroad at Rockcut. **Prop:** 11 patented and 14 unpatented claims. **Owner:** Orient Eureka Gold Mines Co., Tacoma, Wash. (1951). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Galena, chalcopyrite, sphalerite, pyrite. **Deposit:** Several quartz veins in schist and diabase. **Dev:** 1,500 ft. of workings in adits, shafts, and open cuts. **Assays:** Some veins returned \$32 Au, others \$60 Pb and Zn. **Prod:** Produced in 1890's. **Ref:** 108, 9/39, p. 30. 164, p. 292.

Eureka (Uncle Sam)

(see Uncle Sam under lead)

Eureka and Orient

(see Eureka)

Examiner

Loc: On Mineral Hill in the Flat Cr. area, Northport dist. **Prop:** 4 claims. **Owner:** Examiner Mining Co. (1902). **Ore:** Gold, silver. **Deposit:** 6-ft. vein. **Dev:** 450 ft. of adits and shafts. **Assays:** \$2 to \$16 Au, Ag. **Ref:** 88, pp. 6-7.

Express

(see St. Paul-Express under copper)

F. H. and C. (Faith, Hope, and Charity; or Acme) (13)

Loc: Secs. 19 and 30, (40-37E), Orient dist. **Elev:** 2,600 ft. **Access:** 5 mi. NE, of Rockcut by road. **Prop:** 3 patented, 10 unpatented claims. **Owner:** Goldstake Mining Corp. (1941). F. H. & C. Gold Mining Co. (1918-1920). Acme Consolidated Mines, Inc. (1930). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** 3- to 5-ft. quartz vein. **Dev:** 250-ft. shaft with drifts on 4 levels, total 1,500 ft. Large amount of open-cut work. **Assays:** Smelter shipment said to return 2.36 oz. Au, 1.9 oz. Ag. **Prod:** 1 small shipment to Tacoma smelter about 1917, produced 1929. **Ref:** 1-B, 7/21/32, p. 1. 30, p. 118. 97, 1918, p. 510; 1930, p. 676. 98, 1920-1925. 104, 6/15/35, p. 27; 2/29/36, p. 28; 12/15/36, p. 27. 112, p. 178. 113, April-May 1934, p. 15. 158. 164, pp. 277-278.

Faith

(see F. H. and C.)

Father Lode

Loc: Orient dist. **Ore:** Gold. **Prod:** 1933. **Ref:** 97, 1934, p. 297.

Fidelity (92)

Loc: Sec. 6, (40-40E), Northport dist. **Ore:** Gold, copper. **Ref:** 58, p. 22. 63, p. 106.

First Thought (47)

Loc: Secs. 7 and 18, (39-37E). **Elev:** 2,900 ft. **Access:** 3 mi. E. of railroad at Orient, on First Thought Mtn. Lookout road. **Prop:** 17 patented, 11 unpatented claims. **Owner:** Gold Syndicate Corp., Spokane, Wash. (1949—). First Thought Gold Mines Co., Ltd. (1905-1934). First Thought Mining Corp. (1937-1944). **Ore:** Gold, silver. **Ore min:** Pyrite, free gold. **Gangue:** Quartz, calcite. **Deposit:** Mineralized zone 15 to 110 ft. wide in rhyolite porphyry and quartz latite. Richer ores in the zone occur at intersections of faults. **Dev:** 1½ mi. of workings on 7 levels. **Assays:** 40,000 tons of ore av. ¾ oz. Au, ½ oz. Ag. **Prod:** \$1,350,000 in gold prior to 1948. Produced 1904, 1906-1909, 1934-1942. **Ref:** 7, pp. 71-76. 30, pp. 117-118. 39. 68, p. 9. 97, 1905, 1907-1910, 1931, 1935, 1937-1941. 98, 1918-1926. 99, 11/27/34. 104, 6/15/32, p. 27; 7/15/34, p. 26. 106, 5/5/32. 112, p. 178. 113, 2/18/37, p. 8. 129, p. 164. 130, p. 67. 141, p. 22. 158. 164, pp. 258-260.

First Thought Extension (49)

Loc: Sec. 18, (39-37E), SE. of the First Thought property, Orient dist. **Access:** Near road. **Prop:** Several claims. **Owner:** May be part of holdings of the Gold Syndicate Corp. **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Latite flows cut by monzonite dikes. Numerous fault zones in both formations are mineralized by pyrite said to carry gold. **Dev:** 650 ft. of work in main adit. **Assays:** Said to assay up to \$400 Au. **Ref:** 30, p. 135. 114, no. 5, 1909, p. 59. 164, p. 261.

Fissure (34)

Loc: Sec. 30, (40-37E), Orient dist. **Owner:** Martin Woldsen, Spokane, Wash. **Ore:** Gold, silver. **Ref:** 158.

Flannigan

(see Iroquois under zinc)

Frisco Standard (119)

(see under silver)

Galena Farm (132)

(see under lead)

Galena Ridge

(see Galena Farm under lead)

Gem (58)

Loc: Sec. 19, (39-37E), on N. slope of First Thought Mtn., 6 mi. NE. of Orient. **Elev:** 3,440 ft. **Access:** Road. **Prop:** 4 unpatented claims. **Owner:** Paul Anderson, Colville, Wash. (1941). **Ore:** Gold. **Ore min:** Auriferous pyrite. **Gangue:** Quartz. **Deposit:** Lavas and interbedded sediments cut by monzonite and fine-grained granite dikes. Ore occurs in a 4-ft. fracture zone in one of the granite dikes. **Dev:** 250-ft. adit, 105-ft. shaft, and 4 drifts from 12 to 60 ft. long. **Assays:** Some selected samples assayed \$1,000 Au. Ore said to av. \$40 per ton. **Prod:** 1939. **Ref:** 30, p. 123. 97, 1940, p. 480. 106, 7/21/32, p. 1. 158. 164, p. 271.

Georgic (70)

(see under copper)

Germania (202)

(see under tungsten)

Giant Silver

(see Red Cloud under copper)

Globe (66)

(see under copper)

Gold Bar (127)

Loc: Secs. 15 and 22, (37-38E). **Elev:** 1,600 to 2,100 ft. **Access:** 1,000 ft. E. of State Highway 22 by road. 1½ mi. to railroad at Evans. **Prop:** 120 acres of deeded land in 8 patented claims: Mayflower Nos. 1 to 6 and Contact Nos. 1 and 2. **Owner:** Gold Bar Mining Co., Bossburg, Wash. (1948-1950). **Ore:** Gold, silver, copper, lead, zinc. **Ore min:** Pyrite, tetrahedrite, sphalerite. **Deposit:** Quartz veins from ½ in. to 8 in. wide filling fractures in quartzite and argillite. Veins sparsely mineralized. Small tonnage of ore exposed. **Dev:** About 1,000 ft. of workings in 4 adits and 2 inclines. **Assays:** 7 assays show from 0.005 to 0.15 oz. Au, 1.2 to 62.0 oz. Ag, tr. to 1.3% Pb, tr. to 1.7% Zn, tr. to 0.3% Cu, 1.02% to 2.70% As. **Prod:** 400-lb. test shipment to Bunker Hill smelter prior to 1945. **Ref:** 30, pp. 80-81. 69, p. 8. 158.

Gold Fisher and White Bear

Loc: Orient dist. **Ore:** Gold. **Prod:** 1933, 1934. **Ref:** 97, 1934, p. 297; 1935, p. 355.

Gold Hill (Colonel Fish)

Loc: 1 mi. E. of Kettle Falls. **Owner:** G. L. Duckworth (1942). **Ore:** Gold with some silver and lead. **Dev:** 300-ft. shaft with a 600-ft. drift on the 150-ft. level and a 300-ft. drift on the 300-ft. level. Also a 600-ft. adit near the shaft. **Ref:** 158.

Gold Ledge (143)

Loc: SW¼ sec. 4, (36-38E), Kettle Falls dist. **Access:** Near road. **Prop:** 460 acres of deeded land. **Owner:** Franklin Good (1941). Sliver Queen Mining Co. (1934-1935). **Ore:** Gold, silver. **Deposit:** Quartz vein along contact of argillite and porphyry. **Dev:** 150-ft. inclined shaft, large open cut. **Assays:** 6 tons shipped netted \$40 per ton Au, Ag. **Prod:** 6 tons in 1934. **Ref:** 30, p. 56. 97, 1935, p. 355. 99, 1/8/35. 104, 12/15/34, p. 22. 113, April-May 1934, p. 5.

Gold Reef (Benvenue, Golden Reef) (145)

Loc: SW¼SE¼ sec. 9, (36-38E), on top of hill, Kettle Falls dist. **Elev:** 3,100 ft. **Access:** Road. **Prop:** 4 unpatented claims. **Owner:** William Setzer and Ross Morehead, Colville, Wash. (1949). Bunker Hill & Sullivan Mining & Concentrating Co.

(1932). M. I. Stelman and G. F. Grundy (1938). **Ore:** Gold, silver, copper. **Deposit:** Quartz vein said to av. 2 to 3 ft. wide and to be traceable for 800 ft. Vein is along contact between argillite and an acidic dike. **Dev:** 750 ft. of adits and 165 ft. of shafts and inclines. **Improv:** Small homemade mill. **Assays:** 24 tons shipped to smelter assayed 0.542 oz. Au, 0.834 oz. Ag. **Prod:** \$100,000 reported prior to 1935. 1939 (24 tons). 2 or 3 carloads in 1946 and 1947. **Ref:** 30, p. 55. 68, p. 9. 97, 1910-1912, 1915. 104, 3/15/32, p. 27; 8/30/32, p. 28. 106, 4/7/32, p. 10. 158. 164, pp. 231-232.

Gold Stake (14)

Loc: Secs. 19 and 30, (40-37E), between First Thought Mtn. and Summit Mtn. on upper Sand Cr., Orient dist. **Owner:** Goldstake Mining Corp., Orient, Wash. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940. 158.

Gold Wreath

Loc: T. 36 N., R. 38 E., Kettle Falls dist. **Ore:** Gold. **Prod:** 1931. **Ref:** 97, 1931, p. 478.

Golden Hope

(see Sunday)

Golden Reef

(see Gold Reef)

Graves (69)

(see under copper)

Gray Eagle

(see Rightside under copper)

Great Republic (91)

(see under copper)

H. R. H. (122)

Loc: Sec. 12, (40-42E), Northport dist. **Access:** 12 mi. by road to railroad at Boundary. **Owner:** Newton Hartman. **Ore:** Gold. **Ref:** 158.

Ham (162)

(see under lead)

Harper

(see Pritchard and Harper)

Hartford

(see Krug under copper)

Hecla (179)

(see under copper)

Hi Cliff

(see Uncle Sam under lead)

Hidden Treasure (48)

Loc: Sec. 18, (39-37E), S. of the Belmont claim. **Access:** Near road. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold. **Ore min:** Pyrite. **Gangue:** Quartz. **Deposit:** Pyrite and irregular stringers of quartz occur in a fracture zone in latite near an intrusive monzonite dike. **Dev:** 35-ft. shaft, 60-ft. tunnel, open cuts. **Prod:** 1934. **Ref:** 30, pp. 122-123. 97, 1935, p. 355. 164, pp. 264-265.

High Grade

(see Turk under copper)

Highland (115)

(see under lead)

Homestake (77)

Loc: Sec. 19, (39-38E). **Elev:** 3,800 ft. **Access:** Near road. **Prop:** Several unpatented claims. **Owner:** Julius Weston, Northport, Wash. (1941). Minorca-Homestake Mines Co. (1922). Centennial Mines Co. (1924-1926). **Ore:** Gold, copper, silver,

lead. **Ore min:** Chalcopyrite, pyrite, pyrrhotite. **Gangue:** Quartz. **Deposit:** 4½-ft. vein in Jumbo volcanics. **Dev:** 2 shafts 27 and 12 ft. deep. Trenching for 100 ft. along the vein. **Assays:** Said to assay \$17.00 Au, \$8.60 Cu, \$3.15 Ag. At one place the vein is reported to show 4½ ft. of \$31 ore. **Prod:** 100 tons of ore shipped. **Ref:** 30, p. 136. 98, 1925, p. 1808; 1926, p. 1573. 164, pp. 251-252.

Honest John (196)

(see under silver)

Hope

(see F. H. and C.)

Hope and Twin Cabins (86)

(see under copper)

Hubbard (96)

(see under lead)

Indian

(see Eureka)

International (40)

Loc: Sec. 6, (39-37E), on N. end of First Thought Mtn., Orient dist. **Elev:** 3,540 to 3,640 ft. **Access:** 2 mi. E. of Rockcut, near road. **Prop:** Several unpatented claims. **Owner:** Abandoned (1941). **Ore:** Gold, silver, copper. **Deposit:** Latite lavas and interbedded Tertiary shales cut by dikes of monzonite and granite. Work has been concentrated along the contact of the dikes with latite and shale. **Dev:** 2 shafts, one 125 ft. deep, and an adit about 1,000 ft. long. **Assays:** Tr. to \$27 Au, Ag reported. **Ref:** 30, p. 133. 164, pp. 261-262.

Interstate

Loc: Orient dist. **Owner:** Vulcan Mining Co. (1915-1924). **Ore:** Gold, silver. **Ref:** 97, 1915, p. 575. 112, 1918-1926.

Iron Cap

(see Ham under lead)

Iron Horse

Loc: On Deep Cr., Northport dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 111.

Iron Horse (20)

(see under iron)

Iron Mask (10)

(see under zinc)

Iroquois (114)

(see under zinc)

Jay Gould (181)

(see under silver)

Jayhawker (24)

(see under copper)

John Hays (159)

(see under silver)

Juno-Echo (184)

(see under copper)

Katy

(see Blue Grass)

Kemp Komar

(see Loon Lake under copper)

Keough (120)

(see under lead)

Kettle River

(see White Elephant)

Key West

(see Loon Lake under copper)

King

(see Edna under copper)

Koyotte

(see Rightside under copper)

Krug (164)

(see under copper)

Lake**Loc:** Orient dist. **Ore:** Gold, copper. **Ref:** 105, 7/4/08, p. 9.**Lakeside (7)**

(see under copper)

Lakeview

(see Roosevelt under silver)

Lem (29)**Loc:** Sec. 27, (40-37E), Orient dist. **Access:** Road. **Prop:** 40 acres of patented land. **Owner:** Lem Gryant, Orient, Wash. (1941). **Ore:** Gold, silver, copper. **Deposit:** Quartz vein 4 to 6 ft. wide. **Dev:** 100 ft. of work in adits and a shaft. **Ref:** 30, p. 120.**Liberty Copper (166)**

(see under copper)

Little Gem

(see under silver)

Little Giant (12)

(see under lead)

Little Kitten**Loc:** Stevens County. **Owner:** Mohawk Mining Co. (1908). **Ore:** Gold. **Ref:** 116, no. 5, 1909, p. 117.**Lone Star (102)**

(see under silver)

Loon Lake Copper (194)

(see under copper)

Lottie (78)

(see under copper)

Lucky Boy

(see Turk under copper)

Lucky Four (123)

(see under silver)

Lutjens (94)**Loc:** SW $\frac{1}{4}$ sec. 8, (40-40E), Northport dist. **Access:** Road. **Prop:** 100 acres of deeded land. **Owner:** Adolph Lutjens, Northport, Wash. (1941). **Ore:** Gold. **Deposit:** Quartz vein in argillite has been traced on the surface for 200 ft. **Dev:** 35 ft. of adit work and 50 ft. of work in 3 shafts. Also a few open cuts. **Ref:** 30, p. 100. 106, 7/7/32.**M. and C.**

(see U. S. Copper Gold under silver)

McAdoo (182)**Loc:** Sec. 8, (32-41E), 3 $\frac{1}{2}$ mi. E. of Chewelah. **Owner:** New Currency Mining Co. **Ore:** Gold, silver. **Ref:** 158.**McKinley (4)****Loc:** Sec. 24, (40-36E), Orient dist. **Elev:** 2,850 to 3,050 ft. **Access:** About 3 mi. by road and trail NE. of Rockcut. **Prop:** At least 6 claims. **Owner:** Abandoned (1941). **Ore:** Gold, copper, silver, lead. **Ore min:** Pyrite, azurite, malachite. **Gangue:** Quartz, gouge, calcite. **Deposit:** Small quartz veins in diabase, the largest 2 to 14 in. wide. Sparsely mineralized. **Dev:** Severalshafts 10 to 40 ft. deep, and open cuts. **Ref:** 7, pp. 88-89. 30, p. 133. 164, p. 278.**McNally (21)**

(see under copper)

McNess (26)**Loc:** Sec. 22, (40-37E), Orient dist. **Access:** Road. **Prop:** 2 unpatented claims. **Owner:** Mr. McNess, Orient, Wash. (1941). **Ore:** Gold, copper. **Deposit:** Quartz vein. **Dev:** 100 ft. of shaft. **Ref:** 30, p. 124.**Magma (136)**

(see under zinc)

Margarete (1)

(see under lead)

Maryland

(see Bonanza Copper under copper)

Michigan (50)**Loc:** Secs. 7 and 18, (39-37E), Orient dist. **Access:** 1 mi. from road. 4 mi. from Orient. **Prop:** 4 patented claims: Climax, Plutania, Moonlight, Butte. **Owner:** Abandoned (1941). Michigan Gold Mining Co. (1922). Treasure Gold Mining Co. (1937). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** Gold-bearing pyrite occurs along zones of crushing and faulting in latite flows. The latite has been cut by numerous dikes of monzonite porphyry. **Dev:** 800-ft. and 400-ft. adits, shallow shaft. **Ref:** 30, p. 133. 98, 1920, p. 1497; 1925, p. 1824. 114, no. 5, 1909, p. 59. 158. 164, pp. 260-261.**Middleport (142)**

(see under zinc)

Minnehaha (171)

(see under copper)

Minorca (79)

(see under copper)

Mint

(see under copper)

Mogul (11)

(see under copper)

Molly Gibson (87)**Loc:** Sec. 2, (40-38E), Orient dist. **Access:** $\frac{1}{2}$ mi. from road. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Deposit:** Said to be a mineralized fracture zone 1 to 2 ft. wide. **Dev:** 50-ft. shaft, 2 surface cuts. **Ref:** 30, p. 137.**Monahan (197)**

(see under copper)

Monitor (16)**Loc:** Sec. 29, (40-37E), just W. of the Mystery claim in Box Canyon, Orient dist. **Access:** Near road. **Prop:** 3 unpatented claims. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Deposit:** Granite dike shows some mineralization at its contact with latite. **Dev:** 75-ft. adit, 35-ft. shaft. **Ref:** 30, p. 128. 164, p. 282.**Montana (83)****Loc:** Sec. 20, (39-38E), Orient dist. **Elev:** 3,475 ft. **Ore:** Gold, copper. **Ore min:** Pyrite. **Deposit:** Vein in Rosslund volcanics. **Dev:** A few open cuts and a small shaft. **Ref:** 164, p. 256.**Montana and Washington (35)**

(see under copper)

Montgomery (189)

(see under copper)

Montgomery (Platsburg)

(see Platsburg under copper)

Moonlite

(see Morning under silver)

Moore (106)

Loc: Sec. 25, (40-39E), Northport dist. **Access:** Road. **Prop:** Patented ranch land. **Owner:** John Moore, Northport, Wash. (1941). **Ore:** Gold, silver, copper. **Deposit:** Small fracture zone impregnated with mineralized quartz. **Dev:** 225-ft. adit with a 60-ft. crosscut. **Ref:** 30, p. 106.

Moraski (111)

(see under copper)

Morning (137)

(see under silver)

Morning Star

Loc: Orient dist. **Owner:** American-Scotia Mining Co. (1918). **Ore:** Gold, silver, copper. **Ref:** 112, p. 165.

Mount Olive (51)

Loc: Sec. 18, (39-37E), Orient dist. **Owner:** Valley Dew M. & M. Co. (1908). **Ore:** Gold. **Ref:** 116, no. 4, 1908, p. 91.

Mountain View (103)

(see under silver)

Mountain View Extension (104)

(see under silver)

Mullen (187)

(see under lead)

Mullen Iron (126)

(see under iron)

Myceerah (117)

(see under lead)

Myrtle

(see under lead)

Mystery (19)

(see under copper)

Nabob (180)

(see under copper)

Napoleon (125)

(see under iron)

Nellie S.

(see Chewelah Standard under copper)

Nest Egg (61)

Loc: Sec. 30, (39-37E), 15 mi. from Bossburg, Northport dist. **Access:** Road. **Ore:** Gold, silver, copper. **Ref:** 58, p. 48. 63, p. 108.

Newport (Eagle-Newport)

(see Aguila under lead)

Noble Four

(see under copper)

North Star (55)

Loc: SE $\frac{1}{4}$ sec. 18, (39-37E). **Elev:** 2,400 ft. **Access:** 3 mi. E. of Orient by road. **Prop:** Several claims. **Owner:** Abandoned (1941). Valley Dew M. & M. Co. (1908). North Star Mining Co. (1908-1909). **Ore:** Gold. **Ore min:** Pyrite. **Gangue:** Calcite, quartz, gouge. **Deposit:** Mineralized shear zone about 6 ft. wide in quartz latite. **Dev:** 580-ft. drift and 70-ft. crosscut, also a shaft which intersects the drift. **Assays:** \$1.50 in Au reported. **Ref:** 7, p. 77. 30, p. 121. 114, no. 5, 1909, p. 60. 116, no. 4, 1908, p. 91. 164, p. 265.

Northport (99)

Loc: SW $\frac{1}{4}$ sec. 16, (39-40E), on N. side of Fish Cr. **Elev:** 2,230 ft. **Access:** 3 mi. SE. of Northport by road. **Ore:** Gold. **Ore min:** Limonite. **Deposit:** Brecciated zone of limonitic replacement in limestone 3 ft. wide. **Dev:** 65-ft. shaft, 93-ft. crosscut. **Assays:** Reportedly \$12 Au at bottom of the shaft. **Ref:** 164, pp. 316-317.

O-Lo-Lim (204)

(see under copper)

O'Neal-Schenk

(see Rightside under copper)

Ora

(see under copper)

Orazada (203)

(see under silver)

Orient, Crescent, and Deadwood (63A)

(see under copper)

Orient Eureka

(see Eureka)

Oropacum (43)

Loc: Sec. 7, (39-37E), just N. of the First Thought mine, Orient dist. **Elev:** 3,250 ft. **Access:** Near road. **Prop:** 1 unpatented claim. **Owner:** May be part of Gold Syndicate Corp. holdings (1951). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Fracture zones in quartz latite have been impregnated with quartz and pyrite. **Dev:** 2 shafts connected by a drift total about 50 ft. of work. **Assays:** Mineralized zone said to give a general assay of \$3 Au. Picked samples said to run as high as \$47 Au. **Ref:** 30, p. 134. 164, p. 264.

Orpha (80)

(see under copper)

Pacific Copper (167)

(see under copper)

Pay Streak (88)

Loc: Sec. 2, (40-38E), Orient dist. **Access:** Near road. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold. **Deposit:** Quartz vein about 1 ft. wide. **Dev:** Open cuts. **Ref:** 30, p. 136.

Paymaster

(see under copper)

Payne (185)

(see under copper)

Pedivar

(see under silver)

Pedro (84)

Loc: Sec. 20, (39-38E), E. of Antelope mine, Orient dist. **Elev:** 3,600 ft. **Prop:** 1 claim. **Ore:** Gold, silver, copper. **Ore min:** Pyrite and small amount of chalcopyrite. **Deposit:** Small outcrop of a vein in Jumbo volcanics. **Dev:** 8-ft. shaft. **Assays:** Said to assay \$8.20 Au, Ag, Cu. **Ref:** 164, p. 251.

Pelkey and Dille (22)

(see under copper)

Pennant (52)

Loc: Sec. 18, (39-37E), Orient dist. **Owner:** Valley Dew M. & M. Co. (1908). **Ore:** Gold. **Ref:** 116, no. 4, 1908, p. 91.

Perry (2)

(see under lead)

Platsburg (165)

(see under copper)

Pomeroy (27)

(see under zinc)

Pop (71)

(see under copper)

Princess**Loc:** Orient dist. **Ore:** Gold. **Prod:** 1926. **Ref:** 97, 1926, p. 470.**Pritchard and Harper (129)****Loc:** SE $\frac{1}{4}$ sec. 5, (37-39E), Clugston Cr. area. **Access:** Road. **Prop:** 160 acres of deeded land. **Owner:** Messrs. Pritchard and Harper, Portland, Oreg. (1941). **Ore:** Gold, tungsten. **Gangue:** Quartz. **Deposit:** Fracture zone 200 ft. wide is impregnated with quartz and said to carry values in gold and tungsten. **Dev:** Small open cuts. **Improv:** 3 good buildings (1941). **Ref:** 30, p. 80.**Quadra****Loc:** Near head of Flat Cr., 10 mi. W. of Northport. **Ore:** Gold, silver, copper. **Ref:** 63, p. 107.**Reardon Copper**

(see Turk under copper)

Red Cloud (200)

(see under copper)

Red Lion (42)

(see under copper)

Red Sheaf (128)**Loc:** Secs. 8 and 17, (37-39E), Clugston Cr. dist. **Access:** Road. **Prop:** 160 acres under lease. **Owner:** Lloyd T. Jacobson and Swen Nelson (1941). **Ore:** Gold, copper, zinc, silver. **Deposit:** Quartz vein. **Dev:** About 255 ft. of adits, several open cuts. **Assays:** Said to av. \$6 per ton in all values. **Ref:** 30, p. 81.**Redwood**

(see Eagle under silver)

Regina (23)

(see under copper)

Revenue

(see under copper)

Rich Four**Loc:** Near Sheep Cr., 12 mi. from Northport. **Ore:** Gold. **Deposit:** Quartz in slate. **Ref:** 63, p. 106.**Rightside (148)**

(see under copper)

Rinchaw

(see Middleport under zinc)

Robena

(see Young America under zinc)

Rocky Creek

(see Burrus under zinc)

Rocky Lake (154)

(see under molybdenum)

Roosevelt (112)

(see under silver)

Royal Gold

(see Hubbard under lead)

St. Crispin (107)**Loc:** Sec. 25, (40-39E), on Sheep Cr. **Elev:** 1,400 ft. **Access:** About 1 mi. W. of Northport by road. **Prop:** 6 unpatented claims. **Owner:** Abandoned (1941). St. Crispin Mining, Milling, Smelt-ing and Development Co. (1908-1926). **Ore:** Gold, copper, silver, lead. **Gangue:** Quartz. **Deposit:** Mineralized zone in argillite. Said to be 8 more similar zones. **Dev:** 470-ft. shaft, 50-ft. shaft, and about 150 ft. of crosscuts, all caved (1941). **Assays:** 4% Cu, \$26 Au, 13 oz. Ag. **Ref:** 30, p. 96. 98, 1925, p. 1830; 1926, p. 1593. 116, no. 2, 1908, p. 24. 164, pp. 315-316.**St. Paul-Express**

(see under copper)

Saratoga**Loc:** On ridge between Kettle and Columbia Rivers, on Saratoga Mtn., Orient dist. **Ore:** Gold, silver, copper, lead. **Ref:** 63, p. 107.**Scandia (100)**

(see under zinc)

Schenk

(see Rightside under copper)

Scotia (67)

(see under copper)

Scott (138)**Loc:** Sec. 6, (37-41E), on J. W. Scott's 160-acre ranch at Aladdin. **Elev:** 2,450 ft. **Prop:** Deeded land. **Owner:** J. W. Scott (1934). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** Series of erratic lenticular quartz veins 0 to 30 in. wide parallel to bedding in argillite. **Dev:** 50-ft. inclined shaft. **Assays:** Tr. Au, 0.33 oz. Ag. **Ref:** 158.**Second Thought (56)****Loc:** Near center SW $\frac{1}{4}$ sec. 18, (39-37E), adjoining First Thought property on SE. **Elev:** 2,700 ft. **Access:** 3 mi. E. of Orient by road. **Prop:** 5 claims and 3 fractions. May be part of holdings of Gold Syndicate Corp. **Owner:** Second Thought Gold Mines Co. (1909-1920). Valley Dew M. & M. Co. (1908). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:** Pyrite impregnations and joint and fault fissure fillings in quartz latite cut by quartz monzonite dikes. **Dev:** 64-ft. shaft, 40-ft. shaft, 22-ft. shaft, 5 other shafts, and some open cuts. **Assays:** Pyritiferous material said to assay \$2 Au; some surface ore from Searchlight claim assayed \$8 Au. **Ref:** 7, pp. 76-77. 30, p. 121. 58, p. 61. 114, no. 5, 1909, p. 60. 116, no. 4, 1908, p. 91. 164, pp. 263-264.**Short Wait (98)**

(see under lead)

Sierra Zinc (134)

(see under zinc)

Silent Bell

(see Pop under copper)

Silver Mountain

(see Daisy-Tempest under silver)

Silver Queen

(see Ark under silver)

Smoky Bullion

(see A and C under copper)

Sprague

(see Checops under copper)

Steel Galena

(see Ham under lead)

Sterrett (109)

(see under lead)

Stockwell

(see Columbia Tungsten under tungsten)

Sugar Loaf

(see Vanasse under silver)

Summit (8)

(see under copper)

Sunday (Sunday Morning Star, Golden Hope) (147)

Loc: S½SE¼ sec. 7, (36-38E), 2 mi. NE. of Kettle Falls.
Elev: 2,000 to 2,300 ft. **Access:** Road. **Prop:** 3 unpatented claims: John G. Mine, Columbia Mine, Rock Rose Mine. **Owner:** Golden Hope Mining Co. (1940). Reportedly abandoned in 1941. **Ore:** Gold, silver. **Deposit:** 2 quartz veins 4 to 6 in. wide in argillite and limestone. **Dev:** 3 adits, one 350 ft. long; shaft 150 ft. deep; other shallow shafts and open cuts. **Assays:** Ore said to av. \$25 per ton. **Prod:** 1912, 1915. **Ref:** 30, p. 55. 97, 1912, p. 923; 1915, p. 574. 158. 164, p. 233.

Sunday Morning Star

(see Sunday)

Sunnyside

Loc: Near Saratoga property, Orient dist. **Ore:** Gold, silver, copper. **Ref:** 63, p. 107.

Sunset (108)

(see under lead)

Superior Copper (169)

(see under copper)

Sure Thing (60)

Loc: Sec. 25, (39-36E). **Elev:** 2,000 ft. **Access:** 3 mi. SE. of Orient by road and trail. **Prop:** 4 unpatented claims. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Ore min:** Pyrite. **Deposit:** Calcareous argillite cut by monzonite dikes. Fracture zones slightly mineralized with auriferous pyrite. **Dev:** Several open cuts and shallow shafts. **Ref:** 30, p. 123. 164, p. 270.

Surprise

(see Uncle Sam under lead)

Swamp King (36)

Loc: Sec. 30, 40-37E), adjoining Little Giant on the E. **Elev:** 2,650 ft. **Access:** Road. **Prop:** 5 unpatented claims. **Owner:** Andrew Abrahamson and Joe Bodbout, Orient, Wash. (1941). Swamp King Mining Co. (1915). **Ore:** Gold, silver. **Ore min:** Free gold, pyrite. **Deposit:** Quartz vein about 8 in. wide in diabase cut by camptonite dikes. **Dev:** 60-ft. adit and 3 shafts total 200 ft. of workings. **Prod:** Small shipment reported. **Ref:** 7, p. 88. 30, p. 122. 158. 164, pp. 285-286.

Swamp Queen

Loc: Orient dist. **Ore:** Gold. **Prod:** Test shipment in 1928. **Ref:** 97, 1928, p. 703.

Sweet Home

(see Big Jim)

Syndicate

(see under copper)

Tempest (161)

(see under silver)

Thomason Queen (158)

(see under copper)

Three Orphans (9)

(see under lead)

Titanic (Valley Dew) (44)

Loc: Sec. 7, (39-37E), W. of First Thought Mtn., Orient dist. **Elev:** 3,500 ft. **Access:** Road. **Prop:** 10 unpatented claims. **Owner:** Abandoned (1941). Titanic Mining Co., Spokane, Wash. (1915-1920). **Ore:** Gold, silver. **Ore min:** Pyrite. **Deposit:**

Latite cut by numerous monzonite dikes. Fracture zones in these rocks are mineralized by auriferous pyrite. **Dev:** 551-ft. adit, 540-ft. adit, and 400-ft. Gettern adit. **Assays:** One zone said to assay \$8 Au. Assay in 1909 reports \$18.85 Au, 1 oz. Ag. **Ref:** 30, pp. 133-134. 114, no. 5, 1909, p. 59. 164, pp. 262-263.

Tom Moore (33)

(see under lead)

Tramp

(see under copper)

Treadwell

(see Iron Mask under zinc)

Trojan (62)

Loc: N½ sec. 30, (39-37E). **Elev:** 2,850 to 3,250 ft. **Access:** 2 mi. up Bear Cr. by trail from Orient. **Owner:** Abandoned (1941). Trojan Mining & Milling Co. (1908). **Ore:** Gold, copper, lead, silver. **Ore min:** Pyrite, pyrrhotite, galena. **Deposit:** Tuffs, shales, and greenstone cut by monzonite are scantily mineralized along fractures and along contact of sedimentary rocks and monzonite. **Dev:** 3 adits and a shallow shaft aggregate several hundred ft. of workings. **Assays:** Small amounts of gold. **Ref:** 7, pp. 81-82. 30, p. 122. 116, no. 4, 1908, p. 91; no. 5, 1909, p. 62. 164, pp. 270-271.

Trophy (53)

Loc: Sec. 18, (39-37E), Orient dist. **Access:** Near road. **Prop:** 4 claims: Buckeye, Wild Rose, Wild Rose Fraction, Imperial. **Owner:** L. E. Gourlie, Orient, Wash. (1941). Valley Dew M. & M. Co. (1908). Trophy Gold Mining Co. (1909). Trophy Gold Mining & Milling Co. (1920). **Ore:** Gold. **Ore min:** Pyrite. **Deposit:** Latite and interbedded shale cut by monzonite porphyry dikes. Fracture zones mineralized with pyrite carry some gold. **Dev:** 300 ft. of adit and 100 ft. of shaft work. **Assays:** Said to range from tr. to \$12 Au. **Ref:** 30, p. 123. 116, no. 4, 1908, p. 91; no. 5, 1909, p. 60. 164, pp. 265-266.

Tungsten King (195)

(see under tungsten)

Turk (199)

(see under copper)

Twilight (68)

(see under copper)

Twin Cabins

(see Hope and Twin Cabins under copper)

U. S. Copper Gold (186)

(see under silver)

Udehard (6)

Loc: Sec. 17, (40-37E), on divide between Box Canyon and Deep Cr., Orient dist. **Elev:** 2,840 ft. **Access:** Road. **Prop:** 4 claims: Billiken, Commonwealth, Socialist, Dauntless. **Owner:** Abandoned (1941). **Ore:** Gold, copper. **Ore min:** Chalcopyrite, pyrite, bornite, malachite, limonite. **Gangue:** Siderite. **Deposit:** Rosslund volcanics in which are 2 fracture zones that have been somewhat mineralized. **Dev:** 2 adits, one 35 ft. long, the other about 65 ft. long. Several open cuts. **Assays:** Ore said to assay \$20 Au, \$11 Cu. **Ref:** 30, p. 128. 164, pp. 283-284.

Uncle Sam (72)

(see under copper)

Uncle Sam (Hi Cliff) (130)

(see under lead)

United Copper (172)

(see under copper)

United Silver Copper

(see United Copper under copper)

United Treasure (116)

(see under silver)

Valley Dew

(see Titanic)

Van Stone (133)

(see under zinc)

Vanasse (144)

(see under silver)

Victory

(see Vanasse under silver)

Viking (39)

(see under copper)

War Eagle (81)

Loc: Sec. 19, (39-38E), Orient dist. **Owner:** Centennial Mines Co. (1924-1926). American-Scotia Mining Co. (1918). **Ore:** Gold, silver, copper. **Ref:** 98, 1925, p. 1808; 1926, p. 1573. 112, p. 165.

Washington

(see Montana and Washington under copper)

Wells Fargo (193)

(see under antimony)

Western Molybdenum

(see Juno-Echo under copper)

White Bear

(see Gold Fisher and White Bear)

White Elephant (Kettle River) (5)

Loc: Near center sec. 19, (40-37E), Orient dist. **Elev:** 2,650 ft. **Access:** 4 mi. from Rockcut by road. **Prop:** 6 unpatented claims: Kettle River, Rosslund Mountain, Golden Cycle, Golden Triangle, Little Tiger, Little Penny. **Owner:** Kettle River Gold Mining Co., Spokane, Wash. (1934-1941). Orient Gold Mines, Ltd. (1915-1918). Orient Golden Rock Mining Co. (1918-1922). Gold Fissure Mining Co. (1935-1937). **Ore:** Gold, silver, copper. **Ore min:** Pyrite. **Deposit:** Mineralized zone in limestone and quartzite cut by fine-grained dikes and quartz veins. **Dev:** 225-ft. shaft; 85-ft. crosscut and 110 ft. of drifting on 100-ft. level, 50 ft. of drifting and 50 ft. of crosscutting on 200-ft. level. **Assays:** Ore said to av. \$7.00 Au. **Ref:** 30, p. 120. 98, 1918-1925. 99, 1/29/35. 104, 6/15/35, p. 27; 2/29/36, p. 28; 12/15/36, p. 27; 2/28/37, p. 28. 106, 7/21/32, p. 1. 112, p. 196. 150, p. 34. 158. 164, p. 292.

White Horse (95)

(see under copper)

Wilkerson (141)

Loc: Sec. 21, (37-41E), Northport dist. **Access:** Road. **Prop:** 3 unpatented claims. **Owner:** A. E. Wilkerson, Aladdin, Wash. (1941). **Ore:** Gold. **Deposit:** Quartz vein 6 to 30 in. wide. **Dev:** 134 ft. of adit. **Ref:** 30, p. 92.

Windfall (188)

(see under copper)

Winslow (177)

(see under lead)

Yellow Jacket (17)

Loc: Sec. 29, (40-37E), Orient dist. **Access:** Near road. **Prop:** 1 unpatented claim. **Owner:** Abandoned (1941). **Ore:** Gold. **Ore min:** Pyrite. **Gangue:** Quartz. **Deposit:** 1-ft. vein lies along contact between granite and calcareous quartzite.

Dev: Large open cut. **Assays:** Vein said to assay \$20 Au. **Ref:** 30, p. 124. 164, pp. 281-282.

Young America (124)

(see under zinc)

WHATCOM COUNTY

Alameda (29)

Loc: Sec. 28, (38-17E), Slate Cr. dist. **Ore:** Gold. **Deposit:** 3-ft. quartz vein. **Assays:** \$28 to \$35 (1897). **Ref:** 63, p. 58.

Allen Basin (28)

Loc: Sec. 34, (38-17E), in Allen Basin, Slate Cr. dist. **Access:** 5 mi. by road NW. of Harts Pass. **Prop:** 14 patented claims. **Owner:** Slate Creek Mining Co., Seattle, Wash. (1949). Cascadian Engineering Corp. (1932, 1934). Flying Cloud Mining Co. (1932-1933). **Ore:** Gold, silver, lead, zinc. **Ore min:** Free gold, arsenopyrite, pyrite, and some galena and sphalerite. **Deposit:** At least 2 quartz veins 3 to 30 in. thick cutting sedimentary and igneous rocks. **Dev:** 2 shafts, a caved adit, and several open cuts. **Assays:** Av. grade of ore is \$1.25 to \$3.00 Au. All values av. \$12 to \$15 per ton. **Prod:** Some ore apparently shipped in early 1900's and a few tons in 1938-1940. **Ref:** 104, 10/15/32, p. 29; 3/15/33, p. 17. 106, 7/7/32; 10/6/32, p. 9; 11/6/32, p. 9. 158.

Alphretta (25)

Loc: Sec. 3, (38-17E). **Prop:** 1 patented claim. **Owner:** John Buchanan and Randle S. Case, Seattle, Wash. (1952). **Ore:** Gold. **Ref:** 158.

American Eagle

(see St. Francis)

Anacortes (27)

Loc: SW $\frac{1}{4}$ sec. 24, (38-16E), near head of Cascade Cr., Slate Cr. dist. **Prop:** 7 claims. **Owner:** Anacortes Gold Mining Co. (1935-1939). **Ore:** Gold, silver. **Ore min:** Free gold, tellurides, sulfides. **Deposit:** Quartz vein av. 2 ft. wide in slate and conglomerate. **Dev:** 310-ft. drift, 100-ft. drift, 90-ft. drift. **Assays:** Av. \$18 to \$20 Au, Ag. **Prod:** Has produced. **Ref:** 63, p. 57. 88, pp. 49-50. 104, 7/15/32, p. 29; 10/15/35, pp. 25-26; 9/15/36, p. 34. 113, 7/36. 114, no. 5, 1909.

Anoka (47)

Loc: Sec. 11, (37-16E), Slate Cr. dist. **Prop:** 6 patented claims. **Owner:** John E. Wells, Tulsa, Oklahoma (1952). Mountain Top Mining Co. (1912). **Ore:** Gold. **Assays:** As high as \$48 Au. **Prod:** Stamp mill operated in 1900's. **Ref:** 158.

Azurite (59)

Loc: Secs. 30 and 31, (37-17E) and secs. 25 and 36, (37-16E), on Mill Cr., Slate Cr. dist. **Access:** Truck road over Harts Pass from Methow Valley. **Prop:** 42 unpatented claims including Azurite, Copper Dike, Seattle (1949). 11 unpatented claims (1952). **Owner:** Azurite Gold Co., Winthrop, Wash. (1925—). Leased by American Smelting & Refining Co. (1934-1943). **Ore:** Gold, copper, zinc, silver, lead. **Ore min:** Chalcopyrite, sphalerite, pyrite, pyrrhotite, galena. **Deposit:** A 2- to 7-ft. quartz vein cutting through argillite is mineralized in places. Other undeveloped veins are also reported. Ore-producing body has been depleted. **Dev:** About 3,000 ft. of adit work, chiefly on 2 levels. Since 1941 a 125-ft. winze was sunk and crosscuts were driven both ways from the winze. **Assays:** 58,358 tons shipped av. 0.473 oz. Au. **Prod:** 1920, 1930, 1934, 3,000 tons in 1936, 27,530 tons in 1937, 36,515 tons in 1938, 5,375 tons in 1939. Produced 1941. Gross value of production reported \$972,000. **Ref:** 46, pp. 230-231. 97, 1920, 1930, 1934, 1937-1939. 98, 1920-1926. 104, 11/30/35, p. 26; 2/29/36, p. 28; 12/15/36, p. 27. 106, 12/19/29; 5/1/30; 12/4/30; 3/19/31, pp. 19-20. 108, 7/39, p. 22; 10/39, p. 32. 158.

B. C. & M. (51)

Loc: Sec. 20, (37-16E), 2 mi. up Granite Cr. above junction with Canyon Cr. **Prop:** 1 claim. **Owner:** Berry, Clark, and Roger McRea, Rockport, Wash. **Ore:** Gold, silver. **Ref:** 158.

Baltimore (30)

Loc: NW¼ sec. 27, (38-17E), at head of Barron Cr., Slate Cr. dist. **Access:** 10 mi. by road NW. of Harts Pass. **Prop:** 22 unpatented claims. **Owner:** Baltimore Mines, Inc., Seattle, Wash. (1949—). **Ore:** Gold, zinc, lead. **Ore min:** Free gold, pyrite, galena, sphalerite. **Deposit:** Quartz veins in quartzite and argillite reportedly 3 to 6 ft. wide. **Dev:** 1 adit about 600 ft. long, several open cuts. **Improv:** Mine camp for 10 to 15 men and complete equipment for small-scale mining (1940). **Assays:** Av. value said to be \$15 to \$20 per ton. **Ref:** 68, p. 6. 106, 4/15/37, p. 35. 158.

Beck and Short Grub (31)

Loc: Sec. 36, (38-17E), Slate Cr. dist. **Prop:** 2 claims. **Owner:** Mrs. John A. Barron, Anacortes, Wash. (1952). **Ore:** Gold, silver, copper. **Deposit:** Quartz vein 3 to 6 in. wide in slate intruded by porphyry. **Assays:** 2.75 oz. Au, 51.0 oz. Ag. **Ref:** 58, p. 6. 63, p. 57. 114, no. 5, 1909. 158.

Bird and Saw Pits (53)

Loc: Sec. 4, (37-17E), Slate Cr. dist. **Prop:** 2 patented claims. **Owner:** Mrs. Guy Waring, Melton, Mass. (1952). **Ore:** Gold. **Ref:** 158.

Bismarck (54)

Loc: NE¼NE¼ sec. 3, (37-17E), Slate Cr. dist. **Ore:** Gold, copper, silver. **Deposit:** 4-ft. vein. **Ref:** 63, p. 58.

Blonden (16)

Loc: Near center sec. 28, (40-9W), Mt. Baker dist. **Ore:** Gold. **Ref:** 158.

Bonita

(see New Light)

Boundary Gold

(see Lone Jack)

Boundary Red Mountain (Red Mountain) (11)

Loc: NE¼ sec. 4, (40-9E), 2 mi. S. of the international boundary, Mt. Baker dist. **Access:** Road and trail from Chilliwack, B. C. **Prop:** 6 patented and 5 unpatented claims. Those patented are: Klondike, Rocky Draw, Mountain Boy Lode, Glacier, Climax, Climax Ext. No. 1. **Owner:** Gold Basin Mining and Development Co., Bellingham, Wash. (1954—). Judge Elmon Scott (1897-1912). Boundary Red Mountain Mining Co. (1915-1934). International Gold Mines, Ltd. (1935-1938). J. W. Langley, Sumas, Wash. (1943). Tom Bourn, Bremerton, Wash. (1952). **Ore:** Gold. **Ore min:** Free gold, pyrite, chalcopryrite, pyrrhotite. **Deposit:** Finely divided gold in a quartz vein which varies from 6 in. to 7 ft. and av. 3 ft. in width. The vein can be traced for 4,500 ft. on the surface. Diorite country rock. **Dev:** 3,000 ft. of drifts equally divided among 3 adit levels. Ore developed to depth of 433 ft. below No. 1 level and 100 ft. above. **Assays:** Mine-run ore av. \$15 Au. An ore shoot 520 ft. long and av. 26 in. wide had an av. value of 1.13 oz. Au. **Prod:** 1912-1917, (\$148,578 in 1916, \$131,918 in 1917), 1920-1922, (\$95,000 in 1922), 1925, 1929-1930, 1935, 1936 (200 tons), 1937-1942, 1947. **Ref:** 43, 3/31/23, p. 597. 97, 1913-1916, 1921-1923, 1925, 1930, 1931, 1937-1941. 98, 1918-1926. 99, 12/18/34, 1/8/35, 3/12/35. 104, 4/15/35, p. 23; 5/30/35; 10/30/35, p. 25. 106, no. 18, 1922, pp. 1-2. 117, no. 18, pp. 1-2. 129, pp. 306-309. 130, p. 69. 141, pp. 20, 22, 34. 158.

Brooks-Willis

(see Lone Jack)

Casa Grande (32)

Loc: Sec. 35, (38-17E), Slate Cr. dist. **Prop:** 1 patented claim. **Owner:** E. H. Miller, Yelton McLaughlin, Bellingham, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Chain Lakes (19)

(see under zinc)

Chancellor (Indiana) (33)

Loc: SW¼ sec. 26, (38-17E), 2 mi. N. of the New Light mill, Slate Cr. dist. **Access:** About 6 mi. NW. of Harts Pass by road. **Prop:** 4 patented claims: Indiana, Illinois, Ptarmigan, Chancellor. **Owner:** Frank D. Hyde, Berlin, Maryland (1946—). Chancellor Mining Co. (1907). **Ore:** Gold, silver, lead, zinc. **Ore min:** Pyrite, arsenopyrite, galena, sphalerite. **Deposit:** Quartz-calcite veinlets fill fractures along shear zones in quartzite. Zones are 3 to 12 in. wide. **Dev:** 2 levels 250 ft. apart; one is a 225-ft. adit and the other is an adit with 650 ft. of drifts and crosscuts. **Assays:** 119.4 tons shipped av. 0.735 oz. Au, 3.48 oz. Ag. **Prod:** 1903, 119.4 tons in 1935-1939. **Ref:** 58, p. 33. 104, 8/30/36, p. 26; 10/30/36, p. 32. 114, no. 2, 1906, p. 22; no. 5, 1909, p. 90. 158. 159, p. 133.

Crown Point (26)

Loc: Near W. ¼ cor. sec. 21, (38-17E), Slate Cr. dist., adjacent to the Anacortes property. **Owner:** R. C. Sylvester, C. I. Carpenter, W. J. Farrell, C. Ashley (1897). **Ore:** Gold, silver. **Deposit:** 4-ft. vein of quartz mixed with black slate. **Dev:** 60-ft. adit. **Ref:** 63, p. 57.

Dick

(see Tom, Dick, and Harry)

Eureka

(see New Light)

Evergreen (12)

Loc: NW¼ sec. 21, (40-9E), on Swamp Cr., 2 mi. N. of Shuksan Cabins. **Elev:** 200 ft. above Swamp Cr. **Access:** Across the creek from Swamp Cr. road. **Prop:** 8 unpatented claims: Evergreen Nos. 6 to 13. **Owner:** Bert Lowry, Bellingham, Wash. (1943). Evergreen Mines, Inc., Seattle, Wash. (1937). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Sphalerite, galena, pyrite, chalcopryrite. **Gangue:** Quartz, calcite. **Deposit:** Small ore stringers from ½ in. to 8 in. wide in argillite. Pyrite is also disseminated in the argillite. **Dev:** 2 drifts 40 and 30 ft. long. **Assays:** Ore said to av. \$17.00 in all values. **Prod:** Shipped to Tacoma smelter in 1938. **Ref:** 158.

First Chance (3)

Loc: Sec. 36, (40-7E), Mt. Baker dist. **Access:** About 5 mi. by good road to railroad at Glacier. **Owner:** Lem and Verstanding, Bellingham, Wash. (1934). **Ore:** Gold. **Gangue:** Quartz. **Deposit:** Vein in schists. **Dev:** Several short adits. **Ref:** 119, no. 2, 1913, pp. 1-3. 158.

First Find and Ivanhoe (34)

Loc: Sec. 36, (38-17E), Slate Cr. dist. **Prop:** 2 patented claims. **Owner:** S. W. Schaefer, Winthrop, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Fourth of July (22)

Loc: Sec. 32, (39-9E), at head of Swift Cr., on W. side of Mt. Dewey, Baker Lk. dist. **Prop:** 1 claim. **Owner:** J. B. Hall and Griffon Watkins, Bellingham, Wash. (1952). **Ore:** Gold. **Prod:** Stamp mill operated in early days. **Ref:** 158.

Galena

(see Verona)

Gargett (7)

Loc: SW $\frac{1}{4}$ sec. 4 and SE $\frac{1}{4}$ sec. 8, (40-9E), on S. side of Red Mtn., Mt. Baker dist. **Elev:** 5,000 and 7,000 ft. **Access:** Trail from Twin Lakes. **Prop:** 7 unpatented claims. **Owner:** John Curtis, Victor Todd, Bert Boyer, Bellingham, Wash. (1952). Gargett Bros., Sumas, Wash. (1940). **Ore:** Gold, silver, copper, lead, zinc. **Ore min:** Sphalerite, galena, chalcopyrite, pyrite, malachite, chalcocite, azurite, massicot, pyrrhotite. **Deposit:** Mineralized quartz vein in limestone and a band of mineralized siliceous limestone in argillite and quartzite. The vein av. 12 in. in width for a length of 20 ft. **Dev:** Open cut on upper property and a 2,000-ft. adit on the lower property, also a second adit. **Assays:** A 5-ton test shipment av. 1.03 oz. Au, 4.34 oz. Ag, 0.78% Cu, 8% Pb, Zn reported from upper adit. **Prod:** A 5-ton test shipment was made to the Tacoma smelter in 1940. **Ref:** 58, p. 23. 158.

Glacier

(see Midas under copper)

Goat (35)

(see also New Light)

Loc: SW $\frac{1}{4}$ sec. 33, (38-17E), SW. of and adjacent to the Allen Basin claims, Slate Cr. dist. **Prop:** Now part of the Slate Creek group (1950). **Owner:** Slate Creek Mining Co. (1950). **Ore:** Gold. **Prod:** Produced many years ago. **Ref:** 158.

Goat Mountain (17)

Loc: On Goat Mtn., 4 mi. from Shuksan and 1 mi. E. of Swamp Cr., Mt. Baker dist. Probably in sec. 28, (40-9E). **Prop:** 2 claims. **Ore:** Gold. **Ore min:** Pyrite, free gold. **Deposit:** Quartz vein 6 to 12 in. wide, 450 ft. long. **Dev:** Open cuts. **Assays:** Possibly \$60 to \$70 Au. **Prod:** Small amounts in 1902 and 1903. **Ref:** 158.

Gold Basin (8)

Loc: Sec. 6, (40-9E), near Red Mountain mine, Mt. Baker dist. **Prop:** 2 claims. **Owner:** International Gold Mines, Ltd. (1935). Wm. White and A. L. Westin, Bellingham, Wash. (1934). **Ore:** Gold. **Ore min:** Free gold. **Gangue:** Quartz. **Deposit:** 4-ft. vein in greenstone and diorite. **Assays:** 1.5 to 2.0 oz. Au. **Prod:** \$17,000 before 1934. **Ref:** 104, 5/30/35. 158.

Gold Coin (Randall) (55)

Loc: Sec. 4, (37-17E), Slate Cr. dist. **Access:** 12 mi. by trail from road. **Prop:** 4 claims, including: Randall, Good Enough, Gold Bug. **Owner:** W. B. Wells, Anacortes, Wash. (1952). **Ore:** Gold. **Deposit:** Quartz vein in slate. **Dev:** 150-ft. adit. **Assays:** High values reported. **Ref:** 58, p. 56. 158.

Gold Hill (60)

(see under silver)

Gold Ridge

Loc: On both sides of Cascade summit about 10 mi. S. of Canadian line, Slate Cr. dist. **Owner:** Gold Ridge Mining Co. (1902). **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Three E.-trending ledges, four N.-trending ledges. **Dev:** 830 ft. of adits, shafts, raises. **Assays:** Av. \$10 Au. **Ref:** 88, pp. 48-49.

Gold Run (9)

Loc: SE $\frac{1}{4}$ sec. 5, (40-9E), Mt. Baker dist. **Ore:** Gold, silver, copper. **Prod:** 1938. **Ref:** 58, p. 26. 97, 1939, p. 492. 99, 2/12/35. 104, 1/30/35, p. 23.

Gold Standard (13)

Loc: Sec. 16, (40-9E), Mt. Baker dist. **Ore:** Gold. **Ref:** 158.

Golden Arrow

(see Tacoma)

Granite (52)

Loc: Sec. 17, (37-16E), at mouth of Granite Cr., Slate Cr. dist. **Prop:** 1 unpatented claim. **Owner:** Morley Bouck, Rockport, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Great Excelsior (Lincoln, President) (4)

Loc: Sec. 6, (39-8E), W. of Wells Cr. and S. of N. Fk. of Nooksack R. **Elev:** 1,400 to 2,500 ft. **Access:** 2 mi. by trail from the Nooksack Forest Camp. **Prop:** 10 claims and 2 fractions. **Owner:** Great Excelsior Mining Co., H. E. Barnes, Bellingham, Wash. (1902-1952). Hammond Mining Co. (1914-1926). **Ore:** Gold, silver. **Ore min:** Pyrite, chalcopyrite, arsenopyrite, galena, sphalerite, tellurides, native silver. **Gangue:** Quartz, dolomite. **Deposit:** Brecciated greenstone cemented by sulfides. 2 mineralized zones; one is 75 ft. wide and said to be all paying ore. **Dev:** Several adits and a large stope total several hundred ft. of workings. **Assays:** 64 samples showed tr. to 0.08 oz. Au, the av. being 0.02 to 0.03 oz. In some samples Ag av. 2.0 oz. **Prod:** 10,000 tons with net return of \$20,276 to 1915. 305.10 tons of conc. shipped av. 1.857 oz. Au per ton. **Ref:** 1, 1914, pp. 51-53. 88, pp. 43-44. 98, 1918-1926. 112, p. 182. 114, no. 5, 1909, p. 87. 119, no. 2, 1913, pp. 1-3. 145, p. 96. 158. 159, p. 132.

Harry

(see Tom, Dick, and Harry)

Henrietta (5)

Loc: Adjoins the Great Excelsior group, Mt. Baker dist. **Prop:** Group of claims. **Ore:** Gold. **Deposit:** Said to be the same as the Great Excelsior. **Ref:** 159, p. 132.

Hidden Treasure

Loc: Slate Cr. dist. **Ore:** Gold. **Ref:** 159, p. 133.

Homestake (36)

Loc: Sec. 27, (38-17E), Slate Cr. dist. **Prop:** 10 unpatented claims. **Owner:** L. A. Gourlie, Winthrop, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Hoosier (6)

Loc: Near the Great Excelsior group, Mt. Baker dist. **Ore:** Gold. **Ref:** 159, p. 132.

Indiana (37)

(see Chancellor)

Iron Cap (20)

Loc: At Mt. Baker lodge. **Access:** 45 mi. by road from Bellingham. **Prop:** 7 claims. **Owner:** Wm. Entwistle and associates, Seattle, Wash. (1934). **Ore:** Gold. **Dev:** 120-ft. adit, 60-ft. adit. **Assays:** \$16 Au reported. **Ref:** 158.

Ivanhoe

(see First Find and Ivanhoe)

Jarvis

Loc: Mt. Baker dist. **Ore:** Gold. **Ref:** 158.

June Bug (38)

Loc: Sec. 35, (38-17E), Slate Cr. dist. **Prop:** 4 lode, 2 placer claims. **Owner:** Lena Hendrickson, Bellingham, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Keystone (39)

Loc: Sec. 35, (38-17E), Slate Cr. dist. **Prop:** 1 patented claim. **Owner:** Frank Shell, Cashmere, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Lambert

(see Lone Jack)

Lincoln

(see Great Excelsior)

Lone Jack (Mount Baker, Post-Lambert, Brooks-Willis, Boundary Gold) (14)

Loc: SE $\frac{1}{4}$ sec. 15 and sec. 22, (40-9E), about 1 mi. SE. of Twin Lakes, near head of W. Fk. Silesia Cr. **Elev:** 4,000 to 6,000 ft. **Access:** Truck road from end of Twin Lks. road. **Prop:** 5 patented, 17 unpatented claims. **Owner:** R. J. Cole, Seattle, Wash., lessee (1951). Mt. Baker Mining Co. (1898-1915). Boundary Gold Co. (1915-1924). Brooks-Willis Metals, Inc. (1928). Estate of P. R. Brooks (1940). **Ore:** Gold, silver. **Ore min:** Free gold, gold telluride. **Deposit:** Quartz vein in schist has an av. width of 30 in. and is traceable for 2,500 ft. Values are localized in payshoots. Gold mostly too finely divided to be seen with the naked eye. **Assays:** Av. tenor of the ore said to be \$15 to \$35 Au. Picked samples ran as high as \$850 per ton. **Prod:** 1902-1905 (\$360,000). Produced 1915-1918. Total production reported to be 9,463 oz. Au, 1,961 oz. Ag. **Ref:** 43, 1902, p. 379. 88, pp. 42-43. 97, 1915-1917, 1924, 1928, 1930. 98, 1920-1925. 105, 1903, p. 140. 112, p. 171. 119, 1913, pp. 1-2. 129, p. 309. 130, p. 69. 141, p. 22. 145, pp. 95-96. 150, p. 35. 158. 159, pp. 131-132.

Lone Star

Loc: On Swamp Cr., Mt. Baker dist. **Ore:** Gold. **Ore min:** Sulfides, tellurides. **Deposit:** 25-ft. quartz vein. **Dev:** 68-ft. adit, 20-ft. adit. **Ref:** 88, p. 45.

Maccabee

Loc: Slate Cr. Dist. **Owner:** Cascadian Engineering Corp. (1932). **Ore:** Gold. **Ref:** 106, 7/7/32, p. 14.

Mammoth (40)

Loc: Sec. 33, (38-17E), Slate Cr. dist. **Elev:** 5,500 to 6,500 ft. **Access:** About 5 mi. NW. of Harts Pass by road. **Prop:** 6 patented and several unpatented claims. **Owner:** Harts Pass Mining Co., Seattle, Wash. (1946). Owens Gold Mines (1935). Mammoth Gold Mines Co. (1935-1936). Mammoth Gold Mining Co. (1936). **Ore:** Gold, silver, lead, zinc. **Ore min:** Pyrite, arsenopyrite, galena, sphalerite, free gold, tellurides. **Deposit:** A 1- to 3-ft. quartz vein in argillite and quartzite carries sulfides together with gold and silver. **Dev:** 3 adits total about 2,250 ft. **Assays:** The 15,000 tons of ore produced av. \$26.50 per ton. **Prod:** Reportedly produced 15,000 tons of ore prior to 1900 and 30,000 tons by 1942. Reportedly more than \$1,000,000 total prior to 1942. **Ref:** 63, p. 57. 88, pp. 47-48. 97, 1923, p. 416; 1935, p. 355. 99, 2/12/35. 104, 4/30/35, p. 29; 11/30/35, p. 26; 3/15/36, p. 23; 8/30/36, p. 24. 158. 159, p. 133.

Mansfield (10)

Loc: Sec. 19, (40-9E), on Yellow Aster Butte. **Owner:** Chas. M. Sorenson, Bellingham, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Midas (2)

(see under copper)

Minnesota

(see Seattle-St. Louis)

Monica

(see New Light)

Monte Cristo

Loc: On Canyon Mtn., Slate Cr. dist. **Prop:** 2 claims. **Ore:** Gold. **Deposit:** 2 veins, each about 7 $\frac{1}{2}$ ft. wide. **Assays:** Av. \$6 Au. **Ref:** 88, p. 50.

Morley B. (49)

Loc: Sec. 8, (37-16E), N. of junction of Canyon Cr. and Granite Cr., Slate Cr. dist. **Owner:** Glenn E. Tyler and Morley Bouck, Rockport, Wash. **Ore:** Gold, silver. **Ref:** 158.

Morovitz

Loc: Mt. Baker dist. **Ore:** Gold, silver. **Ref:** 158.

Mount Baker

(see Lone Jack)

Mountain Goat

Loc: Slate Cr. dist. **Ore:** Gold. **Improv:** 5-stamp mill and cyanide plant (1903). **Ref:** 159, p. 133.

Myrtle (41)

Loc: Sec. 35, (38-17E), Slate Cr. dist. **Prop:** 1 patented claim. **Owner:** Mrs. John A. Barron, Anacortes, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Nevada City

Loc: Slate Cr. dist. **Ore:** Gold. **Ref:** 104, 7/5/32, p. 29.

New Light (Eureka, Bonita, Slate Creek, Monica) (42)

(see also Goat)

Loc: Center S $\frac{1}{2}$ sec. 27, (38-17E), about 7 mi. NW. of Harts Pass, Slate Cr. dist. **Elev:** 5,500 to 6,600 ft. **Access:** Road to mine from Mazama. **Prop:** 16 unpatented claims. **Owner:** Western Gold Mining Inc., Seattle, Wash. (1952—). Eureka Mining Co. (1895-1902). Chancellor Mining Co. (1909). Slate Creek Gold Mining Co. (1915). New Light Mining Co. (1933-1936). Monica Mines, Inc. (1939). Slate Creek Mining Co. (1941-1952). **Ore:** Gold, silver. **Ore min:** Free gold, pyrite, sylvanite. **Deposit:** Fracture zone in limy and graphitic argillite contains interlacing quartz veinlets, graphitic shear zones, and breccia zones cemented by quartz and sulfides. **Dev:** Several thousand ft. on 6 levels. **Improv:** Camp buildings and 100-ton flotation mill (1955). **Assays:** Early work, \$30 to \$40 Au, later work 0.2 to 0.4 oz. Au, in 1950 about \$12 Au. **Prod:** 60,000 tons of ore in the 1900's and several tons of good-grade ore in 1940 to 1942. Small amount 1949. **Ref:** 1, no. 2, 1917, p. 29. 46, pp. 234-235. 63, p. 57. 88, p. 47. 97, 1907, 1935, 1938-1940. 99, 2/26/35. 104, 6/15/32, p. 18; 10/30/34, p. 22; 9/30/35, p. 24; 8/30/36, p. 26; 11/30/36, p. 29. 105, 1895, p. 106. 106, 6/4/31, 8/3/33. 114, no. 2, 1906, p. 22; no. 5, 1909, pp. 88, 90. 150, p. 39. 158. 159, p. 133.

Ninety-nine (43)

Loc: Near center sec. 26, (38-17E), on Crater Mtn., Slate Cr. dist. **Prop:** 11 claims. **Owner:** Charles H. Ballard, Barron, Wash. (1902). **Ore:** Gold, silver. **Ore min:** Free gold, tellurides. **Deposit:** 4-ft. ledge with 2-ft. paystreak, in slate and quartzite. **Dev:** 240-ft. crosscut, drifts. **Ref:** 88, p. 49.

Nooksack (1)

Loc: Near E. $\frac{1}{4}$ cor. sec. 35, (40-4E), Mt. Baker dist. **Elev:** 1,200 ft. **Access:** Trail. **Prop:** 3 properties: Nooksack, Givens-Nooksack, Land-Nooksack. **Owner:** Nooksack Mining Co. (1903). **Ore:** Gold. **Ore min:** Gold-bearing sulfide. **Deposit:** Small quartz stringers in andesite. **Dev:** More than 1,500 ft. of underground workings, mostly caved. **Assays:** It is reliably reported that more than 50 channel samples av. \$2 Au at the old price. **Prod:** Probably produced. **Ref:** 88, p. 44. 105, 4/04, p. 236. 158. 159, p. 131.

North American (Velvet) (48)

Loc: Sec. 11, (37-16E), between Boulder Cr. and Mill Cr., Slate Cr. dist. **Elev:** 4,300 ft. **Prop:** 10 unpatented claims. **Owner:** North American Mining & Milling Co. (1902-1915). **Ore:** Gold, silver. **Ore min:** Free gold. **Gangue:** Quartz. **Deposit:** 6 veins. **Dev:** 240-ft. adit, 28-ft. adit, 22-ft. adit, 2 other old adits. **Assays:** Av. \$15 Au, Ag (1934). **Prod:** Has produced. **Ref:** 88, p. 50. 114, no. 5, 1909. 116, no. 10, 1907, p. 18. 158.

Northern Cascade

(see Gold Hill under silver)

Peterson

(see Gold Hill under silver)

Pierce

Loc: On Silesia Cr., about 5 mi. from the Lone Jack mine, Mt. Baker dist. **Prop:** 10 claims. **Ore:** Gold. **Ore min:** Free gold. **Deposit:** Vein av. 3 ft. wide. **Dev:** 50-ft. shaft, 40-ft. shaft, 60-ft. adit. **Assays:** Av. \$12 Au. **Ref:** 88, p. 45.

Post-Lambert

(see Lone Jack)

President

(see Great Excelsior)

Randall

(see Gold Coin)

Red Mountain

(see Boundary Red Mountain)

Rockefeller (61)

Loc: Sec. 23, (37-17E), Slate Cr. dist. **Ore:** Gold, silver. **Prod:** Shipped 1 ton. **Ref:** 58, p. 59. 63, p. 58.

Ruth Mountain Pyrite (23)

(see under iron)

Saginaw (15)

Loc: W½ sec. 15, (40-9E), Mt. Baker dist. **Access:** About 1 mi. by trail from Twin Lakes road. **Prop:** 4 patented claims. **Owner:** Saginaw Gold & Copper Mines, Inc., Bellingham, Wash. (1948—). **Ore:** Gold, copper, lead, silver. **Gangue:** Quartz, calcite. **Deposit:** 3½-ft. ledge in diorite. **Dev:** 300-ft. adit with 200 ft. of crosscuts, 76-ft. adit with 31-ft. crosscut, two 36-ft. adits. **Assays:** Picked sample gave 70% Pb, 0.20 oz. Au, 200 oz. Ag. Others gave 0.34 to 1.82 oz. Au, 0.78 to 2.06 oz. Ag, tr. to 2.13% Cu. Av. said to be \$6.00 Au, Ag, Cu. **Ref:** 88, pp. 44-45. 150, p. 38. 158.

St. Francis (American Eagle)

Loc: On Wells Cr., Mt. Baker dist. **Owner:** Ray Salsbury, Bellingham, Wash. (1952). **Ore:** Gold. **Ref:** 158.

St. Louis

(see Seattle-St. Louis)

Saw Pits

(see Bird and Saw Pits)

Seattle-St. Louis (Minnesota) (46)

Loc: Sec. 30, (38-17E), Slate Cr. dist. **Owner:** Seattle-St. Louis Gold Mines Co. (1908-1918). **Ore:** Gold. **Prod:** 1913. **Ref:** 97, 1908, p. 582; 1912, p. 923; 1913, p. 801. 112, p. 201. 114, no. 5, 1909, p. 91.

Shanghai (56)

Loc: Sec. 2, (37-17E) and sec. 35, (38-17E), Slate Cr. dist. **Prop:** 2 patented claims: Shanghai, Naniken. **Owner:** J. L. Yelton, Bellingham, Wash. (1952). **Ore:** Gold, silver, copper. **Ref:** 158.

Short Grub

(see Beck and Short Grub)

J. E. Sigh

(see under copper)

Silver Creek (24)

(see under molybdenum)

Silver Tip (18)

(see under copper)

Slate Creek

(see New Light)

South Mt. Baker**Loc:** Mt. Baker dist. **Ore:** Gold. **Ref:** 158.**Square Shooter**

Loc: Slate Cr. dist. **Ore:** Gold. **Prod:** 1937. **Ref:** 58, p. 64. 97, 1938, p. 460.

Sun

Loc: Mt. Baker dist. **Owner:** International Gold Mines, Ltd. (1935). **Ore:** Gold. **Ref:** 99, 3/12/35.

Tacoma (Golden Arrow) (44)

Loc: SE¼ sec. 34, (38-17E), on W. side of Slate Cr. **Access:** Road from Mazama. **Prop:** 4 unpatented claims. **Owner:** E. H. Spafford and Walter Gourlie, Twisp, Wash. (1952—). Gold Standard Mining Co. (1902). H. C., E. E., and M. J. Blocher (1938). **Ore:** Gold, lead, zinc, silver. **Ore min:** Free gold, tellurides, galena, sphalerite, pyrite, arsenopyrite. **Deposit:** 2 veins, one said to av. 2 ft. thick. One is 3 to 12 in. thick. **Dev:** Shaft, lower adit about 300 ft. long. **Assays:** Tr. to \$34.00 Au. **Prod:** 10-ton test shipment netted \$60.00 per ton. **Ref:** 88, p. 48. 133, p. 34. 158.

Terra Alta

Loc: On Bear Mtn. S. of the Lone Jack mine, Mt. Baker dist. **Owner:** Terra Alta Mining Co. (1902). **Ore:** Gold. **Ore min:** Sulfides, tellurides. **Deposit:** 14-ft. vein. **Dev:** 100 ft. of workings. **Assays:** \$306 per ton (prior to 1902). **Ref:** 88, p. 44.

Tom, Dick, and Harry

Loc: Whatcom County. **Ore:** Gold. **Prod:** 1936. **Ref:** 97, 1937, p. 553.

Trapper (62)

Loc: Sec. 36, (37-17E), Slate Cr. dist. **Prop:** 1 patented claim. **Owner:** Donald J. MacLean, Salt Lake City, Utah (1952). **Ore:** Gold. **Ref:** 158.

Tripod (45)

Loc: Sec. 35, (38-17E), Slate Cr. dist. **Prop:** 1 patented claim. **Owner:** S. W. Schaefer, Winthrop, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Tyler

(see Veradell)

Velvet

(see North American)

Veradell (Tyler) (50)

Loc: Sec. 8, (37-16E), Ruby Cr. dist. **Owner:** Glenn E. Tyler, Rockport, Wash. **Ore:** Gold, silver. **Ref:** 158.

Verona (Galena) (21)

Loc: Sec. 20, (39-9E), Mt. Baker dist. **Access:** Near Mt. Baker highway about 4 mi. below the Mt. Baker lodge. **Prop:** 5 claims. **Owner:** Helen Tweit, Bellingham, Wash. (1952). Verona Mining Co. (1934). James Sullivan and Harold Bland, Bellingham, Wash. (1944). **Ore:** Gold, silver, lead, zinc, copper. **Ore min:** Pyrite. **Deposit:** Shear zone in altered volcanic rock contains stringers and lenses of mineralized quartz and calcite. Some stringers as much as 6 in. wide. **Dev:** 65-ft. adit with a 20-ft. drift. **Improv:** Several old cabins. **Assays:** \$10 to \$20 per ton reported. One assay showed 0.21 oz. Au, 80¢ Ag, 14.5% Pb. **Ref:** 158.

Walla Walla (57)

Loc: Sec. 1, (37-17E), Slate Cr. dist. **Prop:** 12 claims. **Ore:** Gold. **Ref:** 158.

Whistler (58)

Loc: Secs. 8 and 17, (37-17E), Slate Cr. dist. **Access:** Road. **Prop:** 4 patented claims. **Owner:** Marguerite Roth, Bellingham, Wash. (1952). **Ore:** Gold, silver, copper. **Ore min:** Sulfides. **Deposit:** Ore bodies said to be 2 to 6 ft. wide. **Assays:** Reportedly \$15 to \$20 per ton. One assay reported to show \$48 Au, 3.7% Cu. **Prod:** 1936, 1937. **Ref:** 63, p. 58. 97, 1937, p. 553; 1938, p. 460. 158.

White Swan

Loc: Mt. Baker dist. **Owner:** Mt. Baker Gold, Copper, and Tin Co. (1909-1918). **Ore:** Gold, silver. **Ref:** 98, 1918, p. 111. 114, no. 5, 1909, p. 87.

Willis

(see Lone Jack)

Wright (63)

Loc: Sec. 34, (37-17E), Slate Cr. dist. **Prop:** 3 unpatented claims: Faner, Fluor, Fodder. **Owner:** Geo. W. Wright, Mount Vernon, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Yellow Aster

(see under nickel)

YAKIMA COUNTY

Bear Gap

(see Fife)

Black Hawk (2)

Loc: Sec. 25, (17-10E), Summit dist. **Ore:** Gold. **Ref:** 58, p. 7. 63, p. 46.

Blue Bell

(see Fife)

Chinook (11)

(see under copper)

Comstock (3)

Loc: SW $\frac{1}{4}$ sec. 29, (17-11E), Summit dist. **Ore:** Gold, silver. **Ref:** 63, p. 44.

Copper Mining Co. (14)

(see under copper)

Crown Point (4)

Loc: A little W. of the Comstock property, Summit dist. **Owner:** George M. Brown (1897). **Ore:** Gold, silver. **Deposit:** 7-ft. vein. **Dev:** 30-ft. adit. **Assays:** Av. \$38 Au, Ag (1897). **Ref:** 63, p. 44.

Damfino (5)

Loc: SW $\frac{1}{4}$ sec. 31, (17-11E), Summit dist. **Owner:** James A. Farrell, J. R. Forrest, Tacoma, Wash. (1897). **Ore:** Gold, silver. **Assays:** \$13 Au, 2 oz. Ag. **Ref:** 63, p. 45.

Dry Spring (6)

Loc: NW $\frac{1}{4}$ sec. 31, (17-11E), Summit dist. **Ore:** Gold, silver. **Ref:** 63, p. 45.

Elizabeth Gold Hill (10)

Loc: NW $\frac{1}{4}$ sec. 4, (16-11E), Summit dist. **Ore:** Gold, silver, lead, copper. **Ref:** 33, 1918, pp. 1473-1474. 63, p. 44.

Eva

Loc: Summit dist. **Ore:** Gold, silver. **Ref:** 63, p. 44.

Fife (Bear Gap, Pickhandle, Manitau, Blue Bell) (7)

Loc: Sec. 31, (17-11E), along the Cascade crest from Bear Gap to Crown Point. **Elev:** 5,000 to 6,000 ft. **Access:** Road up Morse Cr. from Chinook Pass highway reaches within $\frac{1}{2}$ mi of the property. **Prop:** 2 patented claims: Cold Spring, Silver Reef; and 12 unpatented claims. **Owner:** Manitau Mining & Milling Co. (1941). **Ore:** Gold, silver. **Ore min:** Free gold. **Deposit:** Small quartz veinlets in volcanic rock. Volcanic rock itself reputedly carries gold values. **Assays:** 90 channel samples 10 to 20 ft. in length over an area 1,200 by 1,800 ft. showed an av. value of \$1.37 Au. **Prod:** 1896. **Ref:** 13, p. 162. 63, p. 44. 158.

Gold Hill (8)

Loc: S $\frac{1}{2}$ sec. 31, (17-11E), Summit dist. **Elev:** 4,500 to 6,000 ft. **Access:** Morse Cr. road crosses the property. **Prop:** 4 patented claims: Eureka, Climax, Lake Paragon, Boston; and 24 unpatented claims. **Owner:** E. A. Bannister and G. A. Mosher, Yakima, Wash. **Ore:** Gold, reportedly lead, zinc, copper, silver, tungsten. **Ore min:** Free gold. **Deposit:** Small quartz veinlets in volcanic rock. Volcanic rock itself reputedly carries gold values. **Dev:** 2 adits, each about 500 ft. long. **Assays:** Hand samples assayed 75¢ to \$1.50 Au. **Ref:** 58, p. 25. 158.

Gold Links (1)

Loc: Secs. 4 and 5, (17-11E), Summit dist. **Owner:** Gold Links Mining Co., Yakima, Wash. (1941). **Ore:** Gold. **Ref:** 58, p. 26.

Highland (12)

Loc: Sec. 6, (16-11E), Summit dist. **Ore:** Gold, silver. **Ref:** 63, p. 45.

Lakeview

(see under tungsten)

Lolette (9)

Loc: NW $\frac{1}{4}$ sec. 29, (17-11E), Summit dist. **Ore:** Gold, silver. **Ref:** 63, p. 44.

Manitau

(see Fife)

New Find (15)

(see under copper)

Pickhandle

(see Fife)

Richmond (13)

(see under lead)

GOLD, PLACER

The numbered placer gold occurrences are shown on late 10, on page 29 in volume 2.

ASOTIN COUNTY

Clarkston Placer (1)

Loc: Snake R. near Clarkston. **Ore:** Gold. **Ore min:** Gold, magnetite, ilmenite, zircon. **Assays:** River sand concentrated by panning gave \$24.99 per ton in gold, 572 lb. magnetite, 530 lb. ilmenite, and 30 lb. zircon per ton. **Ref:** 126.

Snake River Placer

Loc: Snake R., Asotin County. **Ore:** Gold. **Ore min:** Gold, zircon, ilmenite, magnetite. **Assays:** Natural sand 12¢ to \$1.64 per ton gold, tr. to 2 lb. per ton zircon, 12 to 18 lb. per ton ilmenite, 20 to 34 lb. per ton magnetite. **Ref:** 38-A, p. 1216. 126, p. 14.

ENTON COUNTY

Artesian Coulee Placer (1)

Loc: Sec. 6, (4-24E), 4 mi. E. of Alderdale. **Elev:** 250 ft. **Access:** On railroad. **Ore:** Gold. **Deposit:** Gravel in a deserted channel of the Columbia R. covering several square miles. **Assays:** 50¢ to \$2.00 per cu. yd. **Ref:** 158.

Berrian Island (Goody) Placer (4)

Loc: Sec. 1, (5-28E) and sec. 6, (5-29E), on N. bank of Columbia R. **Elev:** 300 ft. **Owner:** A. H. Goody, Inc., Tacoma, Wash. (1950). **Ore:** Gold. **Gangue:** Gravel. **Deposit:** Screened material from the J. G. Shotwell aggregate plant was run through sluice boxes and a low-grade conc. recovered. **Assays:** 2 to 6 mills per ton. **Prod:** Plant operated 6 weeks and conc. shipped to Tacoma smelter in 1949. **Ref:** 158.

Blalock Island Placer (3)

Loc: On Blalock Is., in Columbia R., near Patterson. **Owner:** R. C. Matney, Prosser, Wash., Fred Blake, Grandview, Wash., and others (1954—). **Ore:** Gold. **Prod:** Small amount 1954. **Ref:** 69-A, p. 8. 158.

Gone Busted Placer (2)

Loc: On Blalock Is., in Columbia R., near Patterson. **Ore:** Gold. **Prod:** Dry-land washing plant operated 1938-1940. **Ref:** 97, 1937, p. 458; 1938, p. 489; 1939, p. 476; 1940, p. 472.

Goody Placer

(see Berrian Island Placer)

IELAN COUNTY

Bloom Placer (14)

Loc: Sec. 1, (22-17E), on Peshastin Cr., 1 mi. above Nigger Cr., Blewett dist. **Elev:** 2,200 ft. **Access:** Near U. S. Highway 97. **Prop:** 3 claims. **Owner:** G. W. and J. M. Bloom and John Snider (1897). **Ore:** Gold. **Assays:** About 25¢ per yd. **Prod:** About \$100 by 1897. **Ref:** 63, p. 77. 67, p. 48.

Cook Placer (17)

Loc: Blewett dist. **Ore:** Gold. **Prod:** Unknown amount in 1908. **Ref:** 67, p. 48. 97, 1908, p. 578.

Crawford Placer (18)

Loc: Blewett dist. **Ore:** Gold. **Prod:** Unknown amount in 1908. **Ref:** 63, p. 77. 67, p. 48. 97, 1908, p. 578.

Deep Creek Placer (4)

Loc: Sec. 19, (27-18E), at the mouth of Deep Cr. **Prop:** 13 claims. **Owner:** Deep Creek Mining Co. (1897). **Ore:** Gold.

Assays: About 26¢ per yd. **Prod:** Unknown amount. **Ref:** 63, p. 79. 67, p. 48.

Entiat River Placers (6)

Loc: Along Entiat R. **Ore:** Gold. **Ref:** 13, p. 174.

Icicle Creek Placers (7)

Loc: Along Icicle Cr. **Ore:** Gold. **Prod:** Reportedly considerable. **Ref:** 13, p. 174.

Ingalls Creek Placer (12)

Loc: Sec. 25, (23-17E), on Peshastin Cr. at the mouth of Ingalls Cr. **Owner:** Mr. Hensel (1897). **Ore:** Gold. **Prod:** Unknown amount. **Ref:** 67, p. 48.

Lakeside Placer (3)

Loc: Secs. 14 and 15, (27-22E), near Lakeside. **Ore:** Gold. **Ref:** 67, p. 48.

Last Chance Placer (19)

(see Last Chance under gold, lode)

Leavenworth Placer (8)

Loc: Secs. 10 and 11, (24-17E), near Leavenworth. **Ore:** Gold. **Ref:** 67, p. 48.

Mad River Placer (5)

Loc: On Mad R. **Ore:** Gold. **Ref:** 105, 1898, p. 613.

Nigger (Negro) Creek Placers (15)

Loc: Secs. 2 and 3, (22-17E), from mouth of Nigger Cr. upstream for 2 mi. **Prop:** Many claims. **Owner:** Several. **Ore:** Gold. **Assays:** 10¢ to \$1.20 per yd. **Prod:** \$1,100 prior to 1897. **Ref:** 67, p. 48.

Peake and Son Placer (20)

Loc: Blewett dist. **Ore:** Gold. **Prod:** 1908. **Ref:** 97, 1908, p. 578.

Peshastin Creek Placers (24)

Loc: On upper reaches of Peshastin Cr. **Ore:** Coarse gold. **Deposit:** Placer gold found in best concentration on bedrock below gravels. **Assays:** Gold contains little silver. **Prod:** Has produced. **Ref:** 12, p. 8. 13, p. 173. 143, p. 78. 144, p. 9.

Railroad Creek Placer (2)

Loc: Secs. 16 and 17, (31-18E), on Railroad Cr. **Ore:** Gold. **Ref:** 67, p. 48.

Ruby Creek Placer (13)

Loc: Sec. 36, (23-17E), at mouth of Ruby Cr. **Prop:** 6 claims. **Owner:** James and Thomas Lynch, Riley Eisenhour, and Thomas Medhurst (1897). **Ore:** Gold. **Ref:** 67, p. 48.

Shaser Creek Placer (16)

Loc: SE¼ sec. 14, (22-17E), near mouth of Shaser Cr. **Ore:** Gold. **Assays:** Gold contains little silver. **Prod:** Unknown amount. **Ref:** 67, p. 48. 144, p. 9.

Simbach Placer (21)

Loc: Blewett dist. **Ore:** Gold. **Prod:** Unknown amount in 1908. **Ref:** 67, p. 49. 97, 1908, p. 578.

Solita Placer (22)

Loc: On Peshastin Cr. **Ore:** Gold. **Prod:** Unknown amount in 1931. **Ref:** 67, p. 49.

Stehekin River Placers (1)

Loc: Along Stehekin R. **Ore:** Gold. **Ref:** 13, p. 174.

Wednesday Placer (10)

Loc: On Wenatchee R. near Dryden. **Ore:** Gold. **Prod:** Unknown amount in 1931. **Ref:** 67, p. 49.

Wenatchee Placer (11)

Loc: Sec. 3, (22-20E), at Wenatchee. **Ore:** Gold. **Ref:** 67, p. 49.

Wenatchee River Placer (9)

Loc: Sec. 22, (24-18E), on Wenatchee R. 1½ mi. below Peshastin. **Owner:** W. M. Keene and O. A. Benjamin, Seattle, Wash. (1897). **Ore:** Gold. **Assays:** As much as \$1.00 per yd. **Prod:** Unknown amount. **Ref:** 67, p. 49.

Wilson Placer (23)

Loc: Blewett dist. **Ore:** Gold. **Prod:** Unknown amount in 1908. **Ref:** 67, p. 49.

CLALLAM COUNTY

Bartnes Placer

(see Main and Bartnes Placer)

Big Wink Creek Placer

(see Morgan Placer)

Cedar Creek (Starbuck) Placer (8)

Loc: Near mouth of Cedar Cr. in E½ sec. 18, (29-15W). **Elev:** Sea level. **Access:** 10 mi. up the beach from La Push. **Owner:** J. M. Starbuck (1917). **Ore:** Gold, platinum. **Ore min:** Free gold, platinum, ilmenite, magnetite, chromite, zircon. **Deposit:** Gold and platinum occur in a beach placer in a 2- to 15-in. sand layer on the surface of a wave-cut bench in clay. The sand layer is said to be 400 ft. long and 100 ft. wide at low tide. **Assays:** Said to yield from 2 to 5 pennyweights of Au and Pt per cu. yd. Ratio of Pt to Au ranges from 1:5 to 1:15. **Prod:** Reported \$5,000 in gold and 5 oz. of crude platinum prior to 1917. **Ref:** 126, pp. 3-5.

Japanese Placer

(see Little Wink Placer)

Johnson Point Placer (7)

Loc: NW¼ sec. 5, (28-15W), at Johnson Point (Cape Johnson). **Access:** Reached by hiking 4 mi. N. along beach from La Push. **Ore:** Gold. **Deposit:** Beach placers and gold in Pleistocene deposits of the bench adjacent. **Assays:** Some pans of sand ran as high as 60¢ Au, and some panners recovered \$2 to \$10 per day. **Prod:** 1908. **Ref:** 135-A, p. 233.

Little Wink (Japanese, Sand Point) Placer (3)

Loc: Center S½SW¼ sec. 1, (30-16W), at mouth of Little Wink Cr. **Access:** Trail. **Ore:** Gold. **Deposit:** Reworked Pleistocene gravels in a beach placer. **Ref:** 158.

Lovelace Placer

(see Shi Shi Beach Placer)

Main and Bartnes Placer (6)

Loc: NW¼NW¼ sec. 19, (30-15W), near small stream. **Access:** Trail. **Prop:** 1 placer claim. **Owner:** Lee Main and A. Bartnes, Everett, Wash. (1940). **Ore:** Gold. **Deposit:** Sand and gravel cemented by clay and iron oxide. Some boulders a foot in dia. **Dev:** Irregular pit 30 ft. long, 15 ft. wide, and 6 ft. deep. **Improv:** Flume 150 ft. long (1940). **Ref:** 158.

Morgan (Big Wink Creek) Placer (3A)

Loc: NW¼NW¼NE¼ sec. 12, (30-16W), on beach 125 ft. NW. of mouth of Big Wink Cr. **Access:** Trail. **Owner:** S. D. Morgan (1940). **Ore:** Flour gold. **Deposit:** Reworked Pleistocene gravels at high-tide level. Boulders as much as 2 ft. in dia.; those 1 ft. in dia. are common. **Dev:** Pit 30 ft. long, 15 ft. wide, and 6 ft. deep. **Ref:** 158.

Morrow Placer (4)

Loc: SW¼SW¼ sec. 18, (30-15W), at high-tide level. **Elev:** 5 ft. **Access:** Trail. **Prop:** Placer claims. **Owner:** J. D. Morrow (1940). **Ore:** Flour gold. **Deposit:** Beach placer in which there is a 2-ft. layer of gravel reworked by wave action from Pleistocene gravel. **Dev:** An area 50 by 25 ft. has been worked. **Assays:** Spotty fine gold content av. \$4.00 per yd. **Prod:** Worked from 1932 to 1940. Best year's cleanup was \$1,678. **Ref:** 158.

Ozette Beach Placer (2)

Loc: Sec. 12, (31-16W), on the beach 2 mi. N. of mouth of Ozette R. **Elev:** Sea level. **Access:** Trail from Lk. Ozette. **Ore:** Gold, platinum. **Deposit:** Beach deposit of gold and platinum concentrated along surface of a wave-cut terrace in sandstone. **Prod:** Small amount in early 1900's. **Ref:** 3, p. 156. 97, 1916, p. 610. 126, pp. 3, 5. 135-A, pp. 232-233.

Sand Point Placer

(see Little Wink Placer)

Shi Shi Beach (Lovelace) Placer (1)

Loc: Beach between Portage Head and Point of Arches in secs. 18, 19, and 30, (32-15W). **Elev:** Sea level. **Access:** Road from Neah Bay reaches place on cliff above the beach. **Owner:** W. W. Lovelace (1908). **Ore:** Gold, platinum, iridium, osmium. **Ore min:** Magnetite, ilmenite, free gold, platinum, iridosmine, zircon. **Deposit:** Beach deposit in which a thin layer of fine heavy sand rests on a wave-cut terrace in sandstone overlain by 1 to 3 ft. of gravel and sand. Gold and platinum are found in the thin layer and in cracks in the bedrock. **Assays:** A conc. showed 1,120 lb. ilmenite, 96 lb. zircon, \$558.09 gold, \$20.45 platinum per ton. **Prod:** \$15,000 in gold prior to 1904 from this and Ozette placer. **Ref:** 3, pp. 154-156. 38-A, pp. 1218-1219. 47, vol. 17, 1906, p. 467. 97, 1908, p. 578. 126, p. 14. 135-A, p. 232.

Starbuck Placer

(see Cedar Creek Placer)

Sunset Creek Placer (9)

Loc: Sec. 19, (29-15W). **Ore:** Gold, platinum. **Ref:** 158.

Yellow Banks Placer (5)

Loc: 2 mi. S. of Sand Point in SW¼ sec. 18, (30-15W). **Elev:** Sea level. **Access:** Reached by hiking S. along beach from the Ozette R. or N. from La Push. **Owner:** D. J. Wright (1917). **Ore:** Gold, platinum. **Ore min:** Free gold, platinum, ilmenite, magnetite. **Deposit:** Beach deposit of gold and platinum concentrated on surface of a wave-cut terrace in Pleistocene drift. **Prod:** Small amount in early 1900 and in 1939. **Ref:** 3, pp. 156-157. 47, vol. 17, p. 467. 97, 1940, p. 476. 126. 135-A, p. 233. 141, p. 103.

CLARK COUNTY

Brush Prairie Placer (3)

Loc: On Brush Prairie. **Ore:** Gold. **Ore min:** Free gold, magnetite, ilmenite. **Deposit:** Placer "black sands." **Assays:** A sample of conc. showed 1,176 lb. magnetite, 328 lb. ilmenite, \$57.05 gold per ton (1905). **Ref:** 38-A, pp. 1218-1219. 126, p. 14.

Camas Placer (4)

(see under titanium)

Lewis River Placer (2)

Loc: 5 mi. E. of Moulton on the Lewis R., 1 mi. above McMunn placer. **Elev:** 850 ft. **Access:** Road up E. Fk. Lewis R. **Owner:** Company from Portland, Oregon (1912). **Ore:** Gold. **Deposit:** Placer gravel in river bed. **Dev:** Pit 75 by 100 ft. and 30 ft. deep. **Improv:** \$30,000 hydraulic mining outfit (1912). **Assays:** 1 oz. Au recovered from 1 ton of black sand. **Prod:** 1 oz. of gold. **Ref:** 126, pp. 6-7.

McMunn Placer (1)

Loc: On E. Fk. Lewis R. about 4 mi. E. of Moulton. Approx. sec. 21, (4-4E). **Elev:** 800 ft. **Prop:** 1 placer claim. **Owner:** Harvey McMunn (1912). **Ore:** Gold, platinum. **Ore min:** Free gold, platinum, magnetite, hematite, limonite. **Deposit:** Gold and platinum occur in a thin veneer of gravel on bedrock and in cracks in the bedrock. Gold but not platinum found also in higher terrace gravels. **Assays:** Panning tests indicate the pay gravel to contain 0.126 gm. Pt, 1.14 gm. Au. **Prod:** McMunn reports \$150 in gold and 1½ oz. platinum. **Ref:** 126, pp. 6-9. 130, p. 85. 141, p. 103.

DOUGLAS COUNTY**Columbia River Placer**

Loc: Columbia R. **Ore:** Gold. **Ore min:** Gold, magnetite, chromite, ilmenite, zircon, monazite. **Assays:** 13 lb. of black sand recovered from 1 cu. yd. of gravel showed 1,414 lb. magnetite, 150 lb. chromite, 188 lb. ilmenite, 24 lb. zircon, 6 lb. monazite, \$30.59 gold per ton (1905). **Ref:** 38-A, pp. 1218-1219. 126, p. 14.

Trouble Placer

Loc: On Columbia R. at Stevenson's Ferry landmark. **Prop:** 1 placer claim. **Owner:** Mrs. Rebecca Stevenson, Barry, Wash. (1938). **Ore:** Gold. **Assays:** One man panned \$105 in 5 days. **Ref:** 158.

FERRY COUNTY**Alva Stout Placer (6)**

Loc: NW¼ sec. 2, (36-32E), Republic dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Baby Ben Placer

(see Big and Baby Ben Placer)

Bacon Bar Placer (30)

Loc: N½ sec. 15, (28-33E), on N. side of Columbia R., about 1 mi. upstream from mouth of Sanpoil R. **Ore:** Gold. **Assays:** 15 samples showed 8¢ to 13¢ per cu. yd. **Ref:** 158.

Big and Baby Ben Placer

Loc: Ferry County. **Ore:** Gold. **Ref:** 97, 1935, p. 352.

Blance Placer (7)

Loc: Sec. 4, (36-32E), Eureka dist. **Owner:** Doblaska Lime & Mining Co., Republic, Wash. **Ore:** Gold. **Ref:** 158.

Blue Bar Island Placer (20)

Loc: Bar in Columbia R. near mouth of Stray Dog Cr., sec. 12, (31-36E). **Ore:** Gold. **Deposit:** Flour gold occurs in surficial layer of gravel in low bar. Said to be renewed by annual freshets. **Assays:** Panning tests indicate a miner with sluice or rocker might wash out 50¢ worth per day. **Ref:** 26, p. 66. 122, p. 177.

Bridge Creek Placer (18)

Loc: Secs. 31 and 32, (32-37E). **Ore:** Gold. **Ref:** 158.

Chas. V. Burnell Placer

Loc: Ferry County. **Owner:** Chas. V. Burnell, Wilbur, Wash. (1939). **Ore:** Gold. **Prod:** \$7,077 in 1938. **Ref:** 158.

Covington Bar Placer (29)

Loc: Sec. 9, (28-33E), on N. side of Columbia R. **Owner:** Henry Covington (1934). **Ore:** Gold. **Assays:** 19 test holes showed no values of importance except in a small area of less than 1 acre, where 5 holes tested gave an av. of 30¢ per cu. yd. **Ref:** 158.

Daisy Placer (12)

Loc: On W. bank of Columbia R., 2 mi. above Daisy. Approx. in sec. 1, (33-37E). **Ore:** Gold. **Gangue:** Iron-stained sand and gravel. **Deposit:** Terraces 20 to 30 ft. above river level contain a 6-in. paystreak at a depth of 1 ft. **Assays:** Samples of the paystreak ran 2¢ or 3¢ per cu. yd. **Ref:** 26, p. 68.

Davis Placer

Loc: Ferry County. **Ore:** Gold. **Prod:** 1933. **Ref:** 97, 1934, p. 296.

Dora B. Placer (8)

Loc: Sec. 4, (36-32E), Eureka dist. **Owner:** Doblaska Lime & Mining Co., Republic, Wash. **Ore:** Gold. **Ref:** 158.

Fish Placer

Loc: Along Columbia R. **Ore:** Gold. **Prod:** 1939, 1940. **Ref:** 97, 1940, p. 477; 1941, p. 472.

Frank Thorp Placer (4)

Loc: Republic dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Fruitland Placer (15)

Loc: Covada dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 352.

Gold Creek Placers (10)

Loc: Along Gold Cr. from mouth of Strawberry Cr. to W. Fk. Sanpoil R. **Ore:** Gold. **Dev:** Prospect pits only. **Assays:** "Color" or two of gold per pan. **Ref:** 122, p. 103.

Goosmus Creek Placer (2)

Loc: On Big Goosmus Cr., Danville area. **Owner:** A. E. Milton and Roy Hathaway, Curlew, Wash. (1950). **Ore:** Gold. **Deposit:** Placer deposit containing many boulders, along narrow creek bottom. **Improv:** Small sluicing outfit (1949). **Ref:** 69, p. 9. 158.

Hellgate Bar Placer (31)

Loc: Lot 5, sec. 13, (28-33E), N. side of Columbia R. **Owner:** United States. **Ore:** Gold. **Deposit:** A high bar had gravel 2½ to 3 ft. thick showing values of 21.8¢ per cu. yd. A lower bar had 7 or 8 acres of gravel 2 to 3 ft. thick av. 27¢ per cu. yd. A low bench 2 mi. long and 300 ft. to ½ mi. wide contains an iron-stained gold-bearing layer about 6 in. thick, 100 to 600 yd. wide, and 2 mi. long. **Assays:** The 6-in. paystreak av. 1¢ to 5¢ per cu. yd. **Prod:** Small amount in early 1900's. **Ref:** 26, pp. 62-63. 158.

Johnson Placer (13)

Loc: On bank of Columbia R. in NE¼ sec. 8, (32-37E). **Prop:** 1 placer claim. **Owner:** W. Johnson. **Ore:** Gold. **Paystreak** consists of 1 to 3 ft. of medium- to fine-textured gravel beneath 4 to 8 ft. of sand. **Dev:** Pit 2,000 cu. yd. in size. **Assays:** Av. of 5¢ per yd. from the pit. **Prod:** \$100 reported. **Ref:** 122, pp. 177-178.

Keller Placers (24)

Loc: Along Sanpoil R. near Keller. **Ore:** Gold. **Assays:** Panning tests "yielded but an inconsiderable quantity of gold." **Ref:** 122, p. 140.

Kettle River Placers (3)

Loc: Along Kettle R. **Ore:** Gold. **Ref:** 13, p. 174.

Kirby Bar Placer (35)

Loc: Secs. 15 and 16, (27-35E), on N. side of Columbia R., opposite Peach. **Owner:** J. M. Kirby, Peach, Wash. (1934). **Ore:** Gold. **Assays:** Panning indicated 38.7¢ per cu. yd. **Ref:** 158.

Long Placer

Loc: On Columbia R. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 352.

Marcella Placer (5)

Loc: On Granite Cr., Republic dist. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 477.

Newton Placer

Loc: Ferry County. **Owner:** Newton Construction Co. **Ore:** Gold. **Prod:** 90,000 cu. yd. gravel was placed in 1939. **Ref:** 97, 1940, p. 477.

Ninemile Placer (25)

Loc: On Columbia R. near mouth of Ninemile Cr., probably in sec. 16, (29-35E). **Ore:** Gold. **Ore min:** Flake gold worth 0.02¢ per flake and much flour gold. **Deposit:** 2 terraces, one 30 ft. and the other 100 ft. above Columbia R. Paystreaks as much as 1 to 3 ft. thick in the terraces. **Dev:** Old Chinese workings extend $\frac{3}{4}$ mile along the river and 200 ft. back from the river. **Assays:** Paystreak av. a little more than 40¢ per yd. **Ref:** 26, pp. 64-65.

Peach Placer (34)

Loc: Opposite the town of Peach, on N. side of Columbia R. in secs. 14 and 15, (27-35E). **Ore:** Gold. **Deposit:** River terrace about 300 ft. above Columbia R. **Dev:** Considerable placer mining prior to 1910. **Assays:** Panning tests made in 1910 failed to reveal any colors. **Ref:** 26, p. 63.

Peach Island Placer (33)

Loc: Large island in Columbia R. between Peach and the mouth of Spokane R. **Ore:** Gold. **Deposit:** Gravel bar. **Dev:** Upriver end of island worked by Chinese to depth of 3 or 4 ft. prior to 1910. **Ref:** 26, p. 63.

Plum Bar Placer (28)

Loc: Lots 7 and 8, sec. 17, (28-32E), about 6 mi. up the Columbia R. from Grand Coulee Dam, on N. side of the river. **Owner:** Col. White (1934). **Ore:** Gold. **Assays:** 77,000 cu. yd. av. 33.1¢ per yd. **Prod:** J. H. Collins washed 700 to 800 cu. yd. per day in 1934. Produced 1938-1939. **Ref:** 97, 1939, p. 490; 1940, p. 477. **104,** 6/15/35, p. 27. **158.**

Rico Placer (11)

Loc: 20 mi. S. of Republic. **Ore:** Gold. **Assays:** 50¢ to 75¢ per cu. yd. **Ref:** 105, 1911, p. 417.

Rogers Bar Placer (22)

Loc: Sec. 23, (30-36E), on W. bank of Columbia R., 2 mi. below the town of Hunters. **Prop:** Bar is about $3\frac{1}{2}$ mi. long. **Owner:** Colville Indian Reservation. **Ore:** Gold, platinum. **Deposit:** 3 bars, 30, 75, and 100 ft. above the river, include 1,500 acres of land. The best pay gravel is found in bars exposed only at low water. **Assays:** Tests indicate paystreaks in the lower bar to run 1¢ to 50¢ per yd. in gold. **Prod:** 4 operators were working in 1934. **Ref:** 26, pp. 65-66. **97,** 1935, p. 352. **158.**

Sanpoil River, West Fork Placers (9)

Loc: Down W. Fk. from Gold Cr. to mouth of W. Fk. Sanpoil R. **Ore:** Gold. **Dev:** Prospect pits only. **Assays:** Greatest amount of Au from a single pan was 0.005¢. Est. 4¢ per cu. yd. **Ref:** 13, p. 174. **26,** p. 68. **122,** p. 103.

Singer Placer (1)

Loc: Secs. 4 and 5, (40-34E), on Fourth of July Cr., Danville dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 352.

Sixmile Placer (26)

Loc: At mouth of Sixmile Cr., 6 mi. above the mouth of Spokane R. In sec. 34, (29-35E). **Ore:** Gold. **Ore min:** Flake

gold av. 0.01¢ in value, and considerable flour gold. **Deposit:** Terrace of Columbia R. Gold is found in the upper 2 ft. of the terrace, which consists of clayey silt and gravel. **Assays:** Upper 2 ft. of the section was found to have a value of 8¢ per cu. yd. **Ref:** 26, p. 64.

Stout Placer

(see Alva Stout Placer)

Stranger Creek Placer (14)

Loc: At mouth of Stranger Cr., opposite Gifford. **Ore:** Gold. **Deposit:** Bar contains a 1- to 3-ft. paystreak at a depth of 7 ft. Sampling indicates the paystreak to have a very limited extent. **Assays:** Panning tests indicate the paystreak runs $5\frac{1}{2}$ ¢ to 40¢ per cu. yd. **Ref:** 26, p. 67.

Stray Dog Placer (21)

Loc: Approx. sec. 12, (31-36E). **Ore:** Gold. **Gangue:** Gravel. **Deposit:** Thin layer of rusty gravel in the bank of a high-water channel of Columbia R. **Assays:** Panning tests yielded an av. of 100 particles of flour gold per pan worth between $\frac{1}{8}$ ¢ and $\frac{1}{4}$ ¢. **Ref:** 122, p. 177.

Taft Placer (16)

Loc: Covada dist. **Ore:** Gold. **Prod:** 1911. **Ref:** 158.

Thompson Placer (19)

Loc: River bar due E. of Covada, in sec. 6, (31-37E). **Prop:** 1 placer claim. **Owner:** James Thompson. **Ore:** Gold. **Deposit:** 6 in. of pay gravel on bank of Columbia R. **Dev:** Pit. **Assays:** Washing said to have yielded but "small wages." **Ref:** 122, p. 177.

Threemile Placer (27)

Loc: On Columbia R. 3 mi. above the mouth of Spokane R. In sec. 11, (25-35E). **Ore:** Gold. **Ore min:** Gold in large thin flakes about 0.01¢ in value and flour gold. **Deposit:** Bench 20 ft. above the river contains large angular boulders. Pay gravels occupy the spaces between boulders. **Assays:** A sample of gravel, exclusive of boulders, gave \$1.60 per ton in gold. **Prod:** Worked by Chinese prior to 1910. **Ref:** 26, p. 64.

Turtle Rapids Placer (17)

Loc: On Columbia R., 2 mi. above Blue Bar, near Turtle Rapids, near Covada. **Ore:** Gold. **Deposit:** Terrace 60 ft. above high water extending along the river for several miles contains a paystreak a few inches thick. **Dev:** Worked by Chinese. **Assays:** Panning tests indicate the paystreak to run 30¢ per cu. yd. **Ref:** 26, pp. 66-67.

Whitestone Placer (32)

Loc: Sec. 16, (28-34E), along Columbia R. **Ore:** Gold. **Prod:** 1933. **Ref:** 97, 1934, p. 296.

Wilmont Bar Placer (23)

Loc: Lot 6, sec. 4, (29-36E), on N. bank of Columbia R., opposite Jerome post office. **Ore:** Gold, cerium, thorium. **Ore min:** Monazite, magnetite, ilmenite, zircon, free gold. **Deposit:** 2 terraces, one 20 and the other 100 ft. above Columbia R. In lower terrace gold occurs in surficial 1 to 5 ft. of material. **Assays:** Lb. per ton: magnetite, 1,308; ilmenite, 150; monazite, 30; zircon, 60; gold, \$1.65 per ton. Panning tests indicate a value of 10¢ to 14¢ gold per cu. yd. in lower bar and a fraction of a cent per cu. yd. in the upper bar. **Prod:** 1934. **Ref:** 26, p. 65. **38-A,** pp. 1218-1219. **97,** 1935, p. 352. **126,** p. 15. **158.**

GARFIELD COUNTY

Pomeroy Placer

Loc: Near Pomeroy (?). **Ore:** Gold. **Deposit:** Placer "black sand." **Assays:** Conc. showed 426 lb. magnetite, 298 lb. ilmenite, 72 lb. zircon, \$17.36 gold and platinum per ton. **Ref:** 38-A, pp. 1218-1219. **126,** p. 14.

GRANT COUNTY

A. B. C. Placer (1)

Loc: Sec. 22, (18-23E). **Ore:** Gold. **Ref:** 158.

Chinaman Bar Placer (2)

Loc: Secs. 10 and 11, (13-24E), Chinaman Bar, on Columbia R., 4 mi. E. of Priest Rapids. **Owner:** A. H. and J. H. Miller, Ellensburg, Wash. (1941). **Ore:** Gold. **Prod:** 1939-1941. **Ref:** 22, p. 8. **97**, 1940, p. 477; 1941, p. 473.

TRAYS HARBOR COUNTY

Cow Point Placer

Loc: On ocean beach, at Cow Point. **Ore:** Gold. **Assays:** A large sample showed 0.02 oz. Au per ton. **Ref:** 38-A, pp. 1218-1219. **126**, pp. 13-14.

Damons Point Placer

(see under titanium)

Kaufman Placer

Loc: Aberdeen area. **Ore:** Gold. **Prod:** 1908. **Ref:** **97**, 1908, p. 578.

Moclips Placer

(see under cerium)

Moclips River Placer (1)

Loc: Sec. 8, (20-12W). **Ore:** Gold. **Ref:** 158.

Oyhut Placer (2)

Loc: On ocean beach at Oyhut. **Ore:** Gold. **Assays:** 72¢ Au per ton. **Ref:** 38-A, pp. 1216-1217. **126**, p. 14.

Point Brown Placer (3)

Loc: Secs. 15 and 23, (17-12W). **Ore:** Gold. **Ref:** 158.

EFFERSON COUNTY

Ruby Beach Placer (1)

Loc: E½NE¼ sec. 31, (26-13W), on tombolo between Abbey Is. and Ruby Beach. **Access:** Road. **Ore:** Gold. **Deposit:** Very fine-grained gold in beach sand. **Improv:** Gold recovery plant built about 1916, but never operated. **Ref:** 158.

ING COUNTY

Money Creek Placer (2)

Loc: Secs. 20 and 29, (26-11E). **Ore:** Gold. **Ref:** 158.

Raging River Placers (3)

Loc: Along Raging R. **Ore:** Gold. **Ref:** 13, p. 172.

Seattle Placer

Loc: Vicinity of Seattle. **Ore:** Gold, iron, chromium, platinum, thorium, cerium. **Ore min:** Magnetite, chromite, monazite. **Deposit:** Black sand sample tested by the U. S. Geological Survey. **Assays:** Sample contained 10.82 lb. magnetite, 1.18 lb. monazite, 0.28 lb. chromite, 31¢ gold per ton (1905). **Ref:** 38, p. 156.

Snoqualmie Placer (4)

Loc: On Middle Fk. of Snoqualmie R. **Ore:** Gold. **Assays:** Gold said to occur in paying quantity. **Ref:** 13, p. 167.

Snoqualmie River Placers

Loc: Along Snoqualmie R. **Ore:** Gold. **Ref:** 13, p. 172.

Tolt River Placer (1)

Loc: SE¼ sec. 29, (26-8E), on Tolt R. **Ore:** Gold. **Deposit:** Fine placer gold said to occur in top 18 in. of gravel in the river bars in this vicinity. **Ref:** 158.

KITITAS COUNTY

Baker Creek Placers (7)

Loc: Along Baker Cr. above its junction with Swauk Cr. **Ore:** Gold. **Deposit:** One nugget found on a bench of Swauk Cr. above the mouth of Baker Cr. had a value of \$1,004. **Ref:** 88, p. 88.

Battle Axe Placer

Loc: On Cle Elum R. **Owner:** John H. Corbins and William McKasson (1897). **Ore:** Gold. **Ref:** 63, p. 66.

Bear Cat Placer (6)

Loc: Sec. 33, (21-17E), Swauk dist. **Ore:** Gold. **Prod:** 1930. **Ref:** **97**, 1930, p. 673.

Becker Placer (13)

Loc: Sec. 10, (20-17E), Swauk dist. **Ore:** Gold. **Prod:** Has produced. **Ref:** **97**, 1915, p. 570; 1916, p. 612.

Beckman Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** Has produced. **Ref:** 105, 1914, p. 473.

Big Salmon La Sac Placer (2)

Loc: On Cle Elum R. at Big Salmon La Sac. **Owner:** R. DeWitt and William Taylor (1897). **Ore:** Gold. **Ref:** 63, p. 66.

Black Bar Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1939. **Ref:** 63, p. 67. **97**, 1940, p. 478.

Black Jack Placer

Loc: Liberty dist. **Ore:** Gold. **Prod:** 1922, 1923. **Ref:** **97**, 1922, p. 254; 1923, p. 413. **141**, p. 22.

Boulder Creek Placer (10)

Loc: At junction of Boulder and Williams Creeks, sec. 1, (20-17E). **Owner:** Salem Mining Co. (1936). **Ore:** Gold. **Deposit:** Stream gravels. Pay dirt found at or closely above bedrock. **Assays:** 50¢ to \$40 per yd. **Prod:** Considerable. (1936). **Ref:** **97**, 1937, p. 551. **143**, p. 77. **144**, p. 9.

Bovee Placer

Loc: N½ sec. 22 (?), (21-17E), near Blewett highway, ½ mi. N. of Mineral Springs. **Prop:** 3 claims: Nellie, Telephone, Television. **Owner:** Charles W. Bovee, Bellevue, Wash. (1955—). **Ore:** Gold. **Ref:** 158.

Bryant Bar (Deer Gulch) Placer (14)

Loc: Sec. 10, (20-17E), Swauk dist. **Prop:** 65 acres. **Owner:** Deer Gulch Placers, Inc., Seattle, Wash. (1938). **Ore:** Gold. **Ore min:** Coarse free gold. **Deposit:** Cemented gravel on a bench. Bedrock is flat. **Dev:** 325 ft. of drifts. **Assays:** Av. 35¢ per yd., max. 90¢ per yd. **Prod:** 1939. **Ref:** **97**, 1940, p. 478. **104**, 2/15/39, 3/15/39. **108**, 12/39, p. 19.

Burcham Placer (15)

Loc: NE¼ sec. 10, (20-17E), Swauk dist. **Owner:** Nunzio Dilauro, Liberty, Wash. (1938). **Ore:** Gold. **Prod:** 1934, 1936. **Ref:** **97**, 1935, p. 353; 1937, p. 551.

Cedar Creek Placer (17)

Loc: NE¼ sec. 3, (20-17E). **Ore:** Gold, silver. **Prod:** 1918. **Ref:** **97**, 1918, p. 506.

China Camp Placer

(see under platinum)

Cle Elum Placer (4)

Loc: On Cle Elum R. near town of Cle Elum. **Ore:** Gold. **Prod:** Reportedly considerable. **Ref:** 12, pp. 9, 95.

Cle Elum River Placer

Loc: Along Cle Elum R. from near headwaters to a place about halfway to its mouth. **Ore:** Gold. **Ref:** 13, p. 173. 63, p. 66.

Deer Gulch Placer

(see Bryant Bar Placer)

Dennett Placer (16)

Loc: SE $\frac{1}{4}$ sec. 10, (20-17E), Swauk dist. **Owner:** Cascade Chief Mining Co. (1934). **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353. 104, 4/30/34, p. 22.

Discovery Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Elliott Placer

Loc: On Williams Cr. **Prop:** 1 claim. **Ore:** Gold. **Assays:** One nugget found in 1900 had a value of \$1,100. **Ref:** 63, p. 68. 88, p. 88.

Emma Placer

Loc: Swauk dist. **Owner:** Golden Rule Mining Co. (1908-1932). **Ore:** Gold. **Ref:** 97, 1905, p. 336; 1908, p. 579. 106, 2/4/32.

Ford Placer

Loc: Swauk dist. **Owner:** Cedar Valley Gold Mining Co. (1909-1915). **Ore:** Gold. **Prod:** 1912. **Ref:** 158.

Fortune Creek Placer (1)

Loc: On Cle Elum R. near mouth of Fortune Cr. **Owner:** Messrs. Hicks and Jones (1897). **Ore:** Gold. **Ref:** 63, p. 66.

Fountain Head Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1908. **Ref:** 97, 1908, p. 579. 158.

Fraction Placer (18)

Loc: Sec. 10, (20-17E), Swauk dist. **Ore:** Gold. **Prod:** Amount not known. **Ref:** 97, 1916, p. 612.

General Minerals Placer (27)

Loc: Ellensburg area. **Owner:** General Minerals Co., Seattle, Wash. (1952). **Ore:** Gold. **Ref:** 133, p. 33.

Gold Bar Placer (21)

Loc: Sec. 15, (20-17E), Swauk dist. **Prop:** 3 claims. **Owner:** B & B Gold Mines, Inc., Cle Elum, Wash. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 478. 158.

Golden Rule Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** More than \$93,000 prior to 1934. **Ref:** 97, 1908, 1915, 1916, 1918, 1922, 1924, 1934. 106, 2/4/34, p. 14.

Hamilton Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1915-1916. **Ref:** 97, 1916, p. 612.

Hampton Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1915. **Ref:** 97, 1915, p. 570.

Hinds Placer

(see Needham and Hinds Placer)

Hinton-McCauley Placer (8)

Loc: Sec. 36, (21-17E). **Ore:** Gold. **Prod:** 1915. **Ref:** 97, 1915, p. 570.

Hope Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1912. **Ref:** 158.

Kittitas Placer

Loc: Kittitas County. **Ore:** Gold, iron, chromium. **Deposit:** Black sand sample tested by the U. S. Geological Survey. **Assays:** Sample carried 1,643 lb. magnetite, 188 lb. chromite, \$315.00 gold per ton. **Ref:** 38, p. 156.

Laurel Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1915. **Ref:** 158.

Little May Placer

(see Weninger and Little May Placer)

Livingston Bar Placer

Loc: Livingston Bar, Swauk dist. **Owner:** B & B Gold Mines, Inc., Seattle, Wash. (1939). **Ore:** Gold. **Ref:** 104, 2/15/39; 7/30/39.

McCauley Placer

(see Hinton-McCauley Placer)

Magpie Canyon Placer (26)

Loc: NE $\frac{1}{4}$ sec. 34, (19-18E). **Ore:** Gold. **Ref:** 158.

Manastash Creek Placer (5)

Loc: Sec. 7, (18-15E). **Ore:** Gold. **Ref:** 158.

Midnight Star Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1908. **Ref:** 97, 1908, p. 579.

Naneum Creek Placer (9)

Loc: Secs. 25 and 26, (21-18E). **Ore:** Gold. **Ref:** 158.

Needham and Hinds Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 394,000 cu. yd. of gravel treated in 1940. **Ref:** 97, 1941, p. 473.

Nez Jensen Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1902. **Ref:** 100, 1902, p. 80.

Nugget Placer (11)

Loc: Secs. 1 and 2, (20-17E) and sec. 6, (20-18E). **Owner:** Nugget Properties, Inc., Seattle, Wash. (1952—). **Ore:** Gold. **Prod:** 1952. **Ref:** 108, 1/53, p. 90. 133, p. 37.

Old Bigney Placer (12)

Loc: SW $\frac{1}{4}$ sec. 1, (20-17E), near Liberty. **Ore:** Gold. **Prod:** More than \$200,000 prior to 1903. Produced 1908, 1915, 1916, 1923. **Ref:** 97, 1908, 1915, 1916, 1923. 105, 1914, p. 473. 141, p. 22.

Perry Placer (25)

Loc: On Yakima R. about 2 mi. below mouth of Swauk Cr. Probably in sec. 28, (19-17E). **Owner:** F. C. Porter, Thorp, Wash. (1934). **Ore:** Gold. **Dev:** Small pit. **Assays:** 36¢ per yd. **Prod:** Small amount in 1934. **Ref:** 158.

Princeton Bar Placer

Loc: At Princeton Bar, Cle Elum R. **Owner:** L. F. McConihe (1897). **Ore:** Gold. **Ref:** 63, p. 66.

Sheep Springs Placer (23)

Loc: SE $\frac{1}{4}$ sec. 17, (19-17E), Swauk dist. **Access:** Road and trail. **Ore:** Gold. **Ore min:** Free gold, very fine. **Deposit:** Gravels similar in appearance to those at Swauk Cr. **Assays:** Est. 8¢ to 10¢ per cu. yd. **Ref:** 158.

Sunflower Placer

Loc: Liberty, Swauk dist. **Ore:** Gold. **Prod:** 1908, 1916. **Ref:** 97, 1908, p. 612; 1916, p. 579. 141, p. 22.

Sunny Bar Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1934-1939. **Ref:** 97, 1935-1940.

Swauk Creek Placers (22)

Loc: Along Swauk Cr. between the mouths of Baker and First Creeks. **Ore:** Gold. **Deposit:** Gravels from a few feet to 70 or 80 ft. in thickness. Pay gravels are found on and near bedrock. **Assays:** Gravel varies from a few cents to \$40 per yd. **Prod:** Considerable. **Ref:** 13, p. 174. 88, pp. 87-88. 143, pp. 76-78. 144, p. 9. 159, pp. 137-138.

Swauk Mining & Dredging Placer (19)

Loc: Secs. 3 and 10, (20-17E). **Owner:** Swauk Mining & Dredging Co., Cle Elum, Wash. (1921-1949). **Ore:** Gold. **Assays:** Tests prior to 1923 showed 32¢ per yd. **Prod:** 1933. **Ref:** 12, p. 8. 68, p. 17. 97, 1921, p. 426; 1934, p. 296. 98, 1922, p. 1667; 1925, p. 1834; 1926, p. 1597. 129, p. 276. 141, p. 22.

Teanaway River Placers (3)

Loc: Along Teanaway R. **Ore:** Gold. **Ref:** 13, p. 173.

Theresa Placer

Loc: Swauk dist. **Ore:** Gold. **Prod:** 1915. **Ref:** 158.

Weninger and Little May Placer

Loc: Liberty. **Ore:** Gold. **Prod:** 1922-1923. **Ref:** 97, 1922, p. 254; 1923, p. 413. 141, p. 22.

Williams Creek Placers (20)

Loc: Along Williams Cr. near Liberty and at its junction with Swauk Cr. **Ore:** Gold. **Deposit:** Good pay gravel is found within 3 or 4 ft. of bedrock and 70 or 80 ft. below present stream level. **Prod:** Considerable. **Ref:** 88, p. 88. 143, p. 77. 144, p. 9.

Yakima River Placer (24)

Loc: Secs. 20 and 21, (19-17E). **Ore:** Gold. **Ref:** 158.

LINCOLN COUNTY

Angle Placer

(see Keller Ferry Placer)

Barnell Placer (1)

Loc: Sec. 7, (28-33E), at Swawilla Basin, near Plum, ½ mi. below the ferry. **Owner:** Mr. Mays, Coeur d'Alene, Idaho. **Ore:** Gold. **Prod:** \$200 to \$400 per week in 1938. **Ref:** 158.

China Bar Placer (7)

Loc: Secs. 12 and 13, (27-35E), on E. side of Columbia R. **Ore:** Gold. **Deposit:** Low bar containing gold in upper portion. Bar covers about 250 acres. Gravel tested to a depth of 6 ft. av. about 20¢ per cu. yd. **Assays:** 2¢ or 3¢ per cu. yd. **Prod:** 1928. Said to have been worked out by Chinese. **Ref:** 26, p. 68. 97, 1929, p. 426. 158.

Clark Placer (2)

Loc: SE¼NE¼ sec. 8, (28-33E), along Columbia R. **Ore:** Gold. **Prod:** \$4,657 in 1933, \$8,243 from 19,700 yd. of gravel in 1934. **Ref:** 97, 1933, p. 296; 1935, p. 353.

Creston Ferry Placer (5)

Loc: Sec. 2, (27-34E), at Creston Ferry. **Ore:** Gold. **Deposit:** River bench. **Dev:** A portion of the bench was worked by placer miners prior to 1910. **Ref:** 26, p. 63.

Davenport Placer

Loc: Near Davenport (?). **Ore:** Gold. **Assays:** A cu. yd. of gravel yielded 25 lb. of conc. which showed 664 lb. magnetite, \$59.12 gold per ton. **Ref:** 38-A, pp. 1218-1219. 126, p. 15.

Keller Ferry (Angle) Placer (3)

Loc: E½ sec. 8, (28-33E), opposite the mouth of Sanpoil R. **Owner:** James E. Angle (1932-1934). **Ore:** Gold. **Prod:** 1932. 186.8 oz. Au from 11,628 cu. yd. of gravel in 1933-1934. **Ref:** 104, 6/30/33, p. 18. 158.

Latta and Phillips Placer

Loc: 15 mi. up Columbia R. from Grand Coulee Dam. **Owner:** Messrs. Latta and Phillips leasing from State (1934). **Ore:** Gold. **Ref:** 158.

Peach Bar Placer (6)

Loc: Sec. 22, (27-35E), at village of Peach. **Ore:** Gold. **Deposit:** Low bar. **Assays:** Panning gave an av. of 19¢ per cu. yd. **Ref:** 158.

Phillips Placer

(see Latta and Phillips Placer)

Winkelman Bar Placer (4)

Loc: S½ sec. 9, (28-33E). **Owner:** Mr. Winkelman (1934). **Ore:** Gold. **Ore min:** Free gold. **Assays:** 2 composite samples showed 22.5¢ and 20.0¢ per cu. yd. **Ref:** 158.

OKANOGAN COUNTY

Altoona Placer (9)

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1902. **Ref:** 100, no. 4, 1902, p. 77.

Ballard Placer (20)

Loc: 1 mi. below Conconully, on Salmon R. **Owner:** Charles H. Ballard and J. R. Wallace (1897). **Ore:** Gold. **Deposit:** Bench about 1 mi. square. **Assays:** 0.1¢ to 10¢ per pan. **Ref:** 63, p. 94.

Ben Holland Placer

Loc: Okanogan County. **Owner:** Ben Holland Placer Mining Co. (1905). **Ore:** Gold. **Prod:** 1905. **Ref:** 97, 1905, p. 336.

Cassimer Bar Placer (23)

Loc: At mouth of Okanogan R. **Ore:** Gold. **Prod:** Considerable production reported from 1860 to 1890. **Ref:** 12, pp. 10, 94.

Chinaman's Friend Placer

Loc: Okanogan County. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Condon Ferry Placer

Loc: On Columbia R. **Owner:** J. N. and H. W. Payne (1939). **Ore:** Gold. **Prod:** Recovered \$100 per day in 1939. **Ref:** 108, 7/39, p. 22.

Crouse (Strawberry Creek) Placer (29)

Loc: On Strawberry Cr. in S½ sec. 35, (34-31E). **Access:** 1½ mi. N. of Park City by road. **Owner:** Harry Crouse (1913). **Ore:** Gold. **Ore min:** Free gold, magnetite, ilmenite. **Gangue:** Stream gravel. **Deposit:** Flats from 20 to 200 ft. wide along the stream are underlain by a shallow layer of coarse gravel. **Dev:** Small pits. **Assays:** 2 pans of gravel from the layer next to bedrock yielded 1¢ in Au and 1 oz. or more of black sand. **Prod:** Reportedly \$100 worth of gold. **Ref:** 122, pp. 93, 102-103.

Cuba Line Placer (7)

Loc: Sec. 1, (40-29E), Myers Cr. dist. **Ore:** Gold. **Ref:** 158.

Dan Mooney Placer (11)

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1925. **Ref:** 97, 1934, p. 296.

Davey Placer (10)

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 478.

Deadman Creek Placer (12)

Loc: On Deadman Cr., Myers Cr. dist. **Ore:** Gold. **Deposit:** Placers in creek bed and in bars as much as 250 ft. above the creek. **Assays:** As much as 40¢ per yd. **Ref:** 63, p. 110.

Fourth of July Creek Placer (13)

Loc: On Fourth of July Cr., Myers Cr. dist. **Ore:** Gold. **Ref:** 63, p. 110.

Funk Placer

Loc: Along Columbia R. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 478.

Gold Bar Placer (24)

Loc: Near Kartar, along Columbia R. **Owner:** Gold Bar Mining Co. (1939). **Ore:** Gold. **Prod:** 1934, 1939. Washing plant treated 10,045 cu. yd. in 1939. **Ref:** 97, 1935, p. 353; 1940, p. 478.

Gold Creek Placers (30)

Loc: Along Gold Cr. from the mouth of Strawberry Cr. to W. Fk. Sanpoil R. **Ore:** Gold. **Dev:** Prospect pits only. **Assays:** "Color" or two of gold per pan. **Ref:** 122, p. 103.

Gove Placer

Loc: Along Columbia R. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Grove Placer

Loc: On Columbia R. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 478.

Hill Placer

Loc: On Columbia R. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 478.

Hopkins Placer (26)

Loc: On Columbia R. near Alameda. **Ore:** Gold. **Prod:** 1939-1940. **Ref:** 97, 1940, p. 477; 1941, p. 472.

Johnson Placer (14)

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Johnson Placer (22)

Loc: On Twisp R. **Ore:** Gold. **Prod:** 1915. **Ref:** 97, 1915, p. 572.

Lucky Strike Placer

Loc: On Columbia R. **Ore:** Gold. **Prod:** 1939. **Ref:** 97, 1940, p. 478.

Mary Ann Creek Placer (18)

Loc: On Mary Ann Cr., 1 mi. S. of Chesaw. **Prop.** 14 claims. **Ore:** Gold. **Deposit:** Gold occurs from grass roots downward to bedrock. 7-in. clay seam 4 ft. above bedrock acts as false bedrock, and values are richer above the clay than elsewhere. **Prod:** \$40,000 in 1880's. **Ref:** 88, pp. 27-28. 105, no. 1, 1905, p. 15. 158.

Meadows Placer (19)

Loc: 8 mi. above Conconully, on N. Fk. of Salmon R. **Ore:** Gold. **Deposit:** Bar placer. **Assays:** 10¢ to 15¢ per yd. **Ref:** 63, p. 94.

Methow River Placers (21)

Loc: Along Methow R. **Ore:** Gold. **Ref:** 13, p. 174.

Murray Placer (25)

Loc: Sec. 11, (30-28E), Kartar area. **Owner:** Gilbert V. Murray, Okanogan, Wash. (1951). **Ore:** Gold. **Prod:** Has produced intermittently. **Ref:** 133, p. 37. 158.

Myers Creek Placer (15)

Loc: On Myers Cr. **Ore:** Gold. **Ref:** 63, p. 110.

Nespelem Bar Placer (27)

Loc: On Nespelem Bar, at and near the mouth of Nespelem R. **Access:** Road. **Prop:** 320 acres of patented land. **Ore:** Gold. **Deposit:** Terrace ½ mi. wide and 100 ft. above Columbia R. contained a thin paystreak of iron-stained sandy clay. **Assays:** Tests indicate no ground on the bar can be expected to yield as much as 0.01¢ per cu. yd. **Ref:** 26, p. 62.

Nespelem River Placers (28)

Loc: Along Nespelem R. **Ore:** Gold. **Ref:** 13, p. 174.

Nugget Placer (31)

Loc: On Strawberry Cr., Park City dist. **Ore:** Gold. **Prod:** 1926. **Ref:** 97, 1926, p. 467.

Okanogan River Placers

Loc: Along Okanogan R. **Ore:** Gold. **Ref:** 13, p. 174.

Olcott Placer (1)

Loc: Oroville dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

Ottia May Placer (16)

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1933, 1934, 1939. **Ref:** 97, 1934, p. 296; 1935, p. 353; 1940, p. 478.

Poyneer Placer

Loc: Along Columbia R. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Rock Creek Placer

Loc: On Rock Cr. **Ore:** Gold. **Prod:** Considerable production reported about 1890. **Ref:** 12, p. 94.

Shotwell Placer (32)

Loc: NW¼ sec. 10, (29-25E), on terrace about 100 ft. above Columbia R. **Access:** Road. **Ore:** Gold. **Deposit:** Fine gold in terrace gravels covering large area. **Prod:** 1954. Small amount of gold produced as byproduct of aggregate production for Chief Joseph Dam. **Ref:** 69-A, p. 15. 158.

Similkameen Placers (2)

Loc: Along the Similkameen R. between Oroville and Nighthawk. **Access:** Road from Nighthawk or Oroville. **Ore:** Gold. **Deposit:** Gold found as flake gold, shot gold, and nuggets in the river bars and lower terraces. **Prod:** Reportedly \$500,000 in the few years following 1859. Intermittent to 1955. **Ref:** 12, pp. 6-7, 94. 13, p. 173. 54, p. 23. 154, p. 96.

Similkameen Falls Placer (6)

Loc: At Similkameen Falls. **Ore:** Gold. **Ore min:** Free gold, ilmenite, magnetite, hematite. **Assays:** A cu. yd. of gravel yielded 110 lb. of conc. which showed 1,664 lb. magnetite, 160 lb. hematite, 152 lb. ilmenite, \$31.40 gold per ton (1905). **Ref:** 38-A, pp. 1218-1219. 126, p. 15.

Slate Rock Placer (3)

Loc: Oroville dist. **Ore:** Gold. **Prod:** 1930. **Ref:** 97, 1930, p. 673.

Spoonamore Placer (17)

Loc: Myers Cr. dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 353.

Strawberry Creek Placer

(see Crounse Placer)

Vancouver Placer (4)

Loc: Oroville dist. **Owner:** Vancouver Mines, Inc. (1934-1935). **Ore:** Gold. **Prod:** 1933-1934. **Ref:** 97, 1934, p. 297; 1935, p. 354.

Walker Placer (8)

Loc: Secs. 13 and 14, (40-29E), Myers Cr. dist. **Ore:** Gold. **Prod:** 1930. **Ref:** 97, 1930, p. 673.

Wasco Placer (5)

Loc: Oroville dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

PACIFIC COUNTY

Fort Canby Placer (2)

Loc: Mouth of Columbia R., near Fort Canby. **Ore:** Gold. **Deposit:** Sand. **Assays:** 822 lb. magnetite, 240 lb. ilmenite, 81¢ gold per ton. **Ref:** 38-A, pp. 1218-1219. 126, p. 15.

Ocean Park Placer (1)

Loc: Ocean beach at Ocean Park. **Ore:** Gold. **Deposit:** Sand. **Assays:** 22 lb. magnetite, 4 lb. ilmenite, 87¢ gold per ton. **Ref:** 38-A, pp. 1218-1219. 126, p. 15.

Sand Island Placer (3)

Loc: Island at mouth of Columbia R., just S. of Ilwaco. **Ore:** Gold. **Deposit:** Sand. **Assays:** 160 lb. magnetite, 68 lb. ilmenite, 2 lb. zircon, \$1.51 gold per ton. **Ref:** 38-A, pp. 1178, 1218-1219. 126, p. 15.

PEND OREILLE COUNTY

Browns Lake Placer (5)

Loc: NW¼NE¼ sec. 24, (34-44E), at E. end of Browns Lk., Newport dist. **Access:** Road. **Owner:** Wm. Abraham and C. N. Newburn (1920). **Ore:** Gold. **Dev:** 20-ft. shaft. **Assays:** Only occasional colors. **Ref:** 139, p. 56.

Harvey Bar Placer (2)

Loc: On Pend Oreille R. in N. center sec. 26, (40-43E). **Access:** ½ mi. W. of Slate Cr. road. **Ore:** Gold. **Deposit:** Placer gravel on pockety dolomite bedrock. **Prod:** Intermittent. **Ref:** 128, p. 78.

O'Sullivan Creek Placer

(see Sullivan Creek Placer)

Schierding Placer (1)

Loc: On E. side Pend Oreille R. just below mouth of Z Canyon gorge. **Elev:** 1,900 ft. **Access:** 2½ mi. by road W. of Crescent Lk. **Prop:** 120 acres of patented land. **Owner:** William Schierding and associates, Metaline Falls, Wash. (1943). **Ore:** Gold. **Deposit:** Well-rounded river gravel, generally less than 6 in. in dia., but some boulders up to 18 in. **Improv:** Dragline scraper, revolving grizzly, a screen and waterjet, and 2 sets of sluice boxes lined with riffles and blankets, dismantled (1938). **Assays:** Small colors of flat gold with well-rounded edges. One nugget of 2 pennyweight. **Prod:** 1935. **Ref:** 29, p. 51. 128, p. 78.

Schultz Placer (4)

Loc: Near SE. cor. sec. 19, (39-43E), in draw near Schultz's cabin. **Ore:** Gold. **Deposit:** Surface gravels. **Assays:** Reportedly 50¢ to \$1.50 per yd. **Prod:** Reportedly produced about 1900. **Ref:** 158.

Sullivan (O'Sullivan) Creek Placer (3)

Loc: On Sullivan Cr. E. of Metaline Falls. **Ore:** Gold. **Assays:** Nuggets valued at \$20 each have been found. **Prod:** Reportedly several hundred thousand dollars. **Ref:** 12, pp. 8-9, 95. 13, p. 173.

PIERCE COUNTY

Morse Creek Placer (3)

Loc: Near head of Morse Cr. **Ore:** Gold. **Ref:** 63, p. 44.

Ogren Placer (1)

Loc: Sec. 12, (17-10E), Summit dist. **Owner:** R. E. Ogren and Walter Zelepusa, Enumclaw, Wash. (1952—). **Ore:** Gold. **Ref:** 133, p. 38.

Silver Creek Placer (2)

Loc: NE¼ sec. 25, (17-10E), on headwaters of Silver Cr. **Elev:** 4,500 ft. **Access:** Road up Silver Cr. **Ore:** Gold. **Deposit:** Placer deposit from which considerable coarse gold has reportedly been recovered. **Improv:** Sluice boxes. **Assays:** Recoveries over a 10-yr. period av. \$1.25 per yd. **Prod:** About 1920 to 1930. **Ref:** 158.

SKAGIT COUNTY

Anacortes Placer (1)

Loc: Near Anacortes. **Ore:** Gold. **Deposit:** Placer (probably beach). **Assays:** 2 samples showed 715 and 1,137 lb. chromite, 41¢ and 14¢ gold per ton. **Ref:** 38-A, pp. 1218-1219. 126.

Babe Placer

Loc: Skagit County. **Owner:** Walter E. Woodrich, Rockport, Wash. **Ore:** Gold. **Ref:** 158.

Day Creek Placer (2)

Loc: Day Cr. **Ore:** Gold. **Prod:** 1939. **Ref:** 158.

Fidalgo Island Placer

(see Fidalgo Island under chromium)

Ruby Creek Placer

Loc: Near headwaters of Ruby Cr. **Ore:** Gold. **Deposit:** First placer gold discovery west of the Cascade Mtns. **Assays:** Reportedly as high as \$28 per yd. **Ref:** 12, pp. 7-8, 94. 13, pp. 171-172. 145, p. 95.

Skagit River Placer

Loc: Along headwaters of Skagit R. **Ore:** Gold. **Ref:** 13, p. 171.

SKAMANIA COUNTY

Camp Creek Placer

Loc: Skamania County. **Ore:** Gold. **Prod:** 1939, 1940. **Ref:** 97, 1940, p. 479; 1941, p. 475.

Hudson and Meyers Placer (1)

Loc: On McCoy Cr., probably in sec. 15, (10-8E). **Ore:** Gold. **Ref:** 158.

Meyers Placer

(see Hudson and Meyers Placer)

Texas Gulch Placer (2)

Loc: E½ sec. 25, (4-5E). **Ore:** Gold. **Ref:** 158.

SNOHOMISH COUNTY

Alder Placer (30)

Loc: Sec. 6, (27-8E), Sultan dist. **Ore:** Gold. **Ref:** 158.

Alpha and Beta Placers (8)

Loc: SW. cor. sec. 32, SE. cor. sec. 31, (30-10E), and E½ sec. 6, (29-10E). **Elev:** 2,000 ft. **Prop:** 2 patented claims. **Owner:** Sykes estate (1943). **Ore:** Gold. **Deposit:** Sand and gravel in flat area below steep slopes at head of Williamson Cr. **Dev:** No visible pits or other digging. **Ref:** 23, p. 50.

Aristo Placer (22)

Loc: Sec. 17, (28-8E), on Sultan R. just below the mouth of Sultan R. Canyon. **Owner:** H. E. Rathje, Sultan, Wash. **Ore:** Gold. **Prod:** Small amount produced by primitive methods and small hydraulic unit. **Ref:** 14, p. 50. 23, p. 13.

Bench Placer (35)

Loc: Sec. 19, (28-11E), 800 ft. from junction of Silver Cr. with N. Fk. of Skykomish R. **Owner:** Mrs. Belle Fowler, Index, Wash. **Ore:** Gold. **Assays:** 80¢ to \$1.00 per yd. **Ref:** 158.

Bertha D. Placer (23)

Loc: Secs. 8 and 17, (28-8E), Sultan dist. **Owner:** H. E. Bonner, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Beta Placer

(see Alpha and Beta Placers)

Black Hawk Placer (20)

Loc: N½ secs. 4 and 5, (28-8E), Sultan dist. **Owner:** S. T. Markel and F. L. Boyd. **Ore:** Gold. **Ref:** 158.

Blake Placer (16)

Loc: Sec. 21, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** Eric G. S. Ward, Laurel Heights, Wash. **Ore:** Gold. **Ref:** 158.

Bonnie Belle Placer (36)

Loc: Secs. 19 and 20, (28-11E), 9 mi. from Index on N. Fk. of Skykomish R., Silver Cr. dist. **Prop:** 1 patented placer claim. **Owner:** H. L. Fowler, Index, Wash. **Ore:** Gold. **Ref:** 158.

Calf Moose Placer (1)

Loc: Sec. 14, (32-8E), White Horse Mtn. area. **Prop:** 1 patented placer claim. **Owner:** Galbraith & Co., Seattle, Wash. (1910). **Ore:** Gold. **Ref:** 158.

Condor Placer (9)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** T. E. Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Cow Moose Placer (2)

Loc: Sec. 13, (32-8E), White Horse Mtn. area. **Prop:** 1 patented placer claim. **Owner:** Galbraith & Co., Seattle, Wash. **Ore:** Gold. **Ref:** 158.

Cox Placer (17)

Loc: Sec. 22, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** H. S. Ofstie, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Darrington Placer (3)

Loc: NW¼ sec. 23, (32-9E), near the town of Darrington on the W. side of Sauk R. **Ore:** Gold. **Ref:** 14, p. 50.

Deer Creek Placer (4)

Loc: On Deer Cr. near Darrington. **Ore:** Gold. **Ref:** 14, p. 50.

Dixie Placer (37)

Loc: Sec. 19, (28-11E), Silver Cr. dist. **Prop:** 1 patented placer claim. **Owner:** Miller Logging Co. **Ore:** Gold. **Ref:** 158.

Double Eagle Placer (7)

Loc: Secs. 8 and 9, (30-10E), on Coal Cr. about 2 mi. NE. of Silverton. **Prop:** 8 claims. **Ore:** Gold. **Ref:** 14, p. 50.

Douglas Placer (38)

Loc: Sec. 20, (28-11E), Silver Cr. dist. **Prop:** 1 patented placer claim. **Owner:** Miller Logging Co., Index, Wash. **Ore:** Gold. **Ref:** 158.

Emerson Placer (10)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** T. E. and Lottie Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

F and W Placer

Loc: Darrington dist. **Ore:** Gold. **Ref:** 104, 2/28/37, p. 28.

Franklin Placer (11)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** T. E. and Lottie Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Gold Bar Placer (33)

Loc: Secs. 6, 7, and 8, (27-9E), on Skykomish R. **Ore:** Gold. **Prod:** Small amount. **Ref:** 14, p. 50.

Granite Falls Placer (5)

Loc: NW¼ sec. 8, (30-7E), on N. side of the S. Fk. of Stila-guamish R. about 1 mi. NE. of Granite Falls. **Ore:** Gold. **Ref:** 14, pp. 50-51.

Helen Deahn Placer (24)

Loc: Secs. 8 and 17, (28-8E), Sultan dist. **Owner:** H. E. Bonner, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Horseshoe Bend Placer (25)

Loc: Sec. 8, (28-8E), on Sultan R. 5 mi. N. of the town of Sultan. **Prop:** 157 acres of patented ground. **Ore:** Gold. **Ore min:** Coarse gold. **Dev:** Considerable amount of work. **Assays:** Av. values 25¢ to 40¢ per yd. **Prod:** Several thousand dollars. **Ref:** 14, p. 51. 63, p. 25.

Howard Placer (41)

Loc: NE¼ sec. 5, (27-11E), on Howard Cr. **Prop:** 1 claim. **Ore:** Gold. **Ref:** 14, p. 51.

Ida Placer (31)

Loc: Sec. 6, (27-8E), Sultan dist. **Ore:** Gold. **Ref:** 158.

Jones Placer (12)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** T. E. Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Junction Placer (13)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** T. E. Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Junction Nos. 1 to 3 Placer (18)

Loc: Sec. 22, (29-11E), Monte Cristo dist. **Prop:** 3 patented placer claims. **Owner:** J. A. Andrews, Monte Cristo, Wash. **Ore:** Gold. **Ref:** 158.

Leon Placer (39)

Loc: Sec. 20, (28-11E), Silver Cr. dist. **Prop:** 1 patented placer claim. **Owner:** Miller Logging Co., Index, Wash. **Ore:** Gold. **Ref:** 158.

Line a Little Placer (34)

Loc: NE¼ sec. 19, (27-10E), on the N. side of the N. Fk. of Skykomish R. about ½ mi. W. of Index. **Prop:** 2 claims. **Ore:** Gold. **Ref:** 14, p. 51.

Lockwood Placer (14)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Owner:** T. E. and Lottie Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

McCloud Placer

(see Sultan Canyon Placer)

Merry Mixer Placer (26)

Loc: Secs. 8 and 17, (28-8E), Sultan dist. **Prop:** 1 patented placer claim. **Owner:** H. E. Bonner, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Mom and Pop Placer (27)

Loc: Secs. 8 and 17, (28-8E), Sultan dist. **Prop:** 1 patented placer claim. **Owner:** H. E. Bonner, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Olympic Placer (42)

Loc: Sec. 32, (27-12E), on Beckler R. **Ore:** Gold. **Ref:** 158.

Orient Placer (15)

Loc: Sec. 16, (29-11E), Monte Cristo dist. **Prop:** 1 patented placer claim. **Owner:** T. E. and Lottie Skaggs, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Peterson Placer (6)

Loc: Near center sec. 9, (30-7E), on Stilaguamish R. **Prop:** Placer claim. **Owner:** Ed Peterson, East Stanwood, Wash. (1934). **Ore:** Gold. **Deposit:** Gold-bearing gravels being cyanided here in 1934. **Ref:** 158.

Phoenix Placer (40)

Loc: NW¼ sec. 29, (28-11E), on Howard Cr. **Prop:** 1 claim. **Ore:** Gold. **Ref:** 14, p. 51.

Pork Barrel Placer (28)

Loc: Secs. 8 and 17, (28-8E), Sultan dist. **Owner:** H. E. Bonner, Everett, Wash. **Ore:** Gold. **Ref:** 158.

Sailors Bar Placer

Loc: On Sultan R. **Ore:** Gold. **Prod:** \$6,000. **Ref:** 14, p. 51. 63, p. 25.

Shirley Placer

Loc: On the N. Fk. of Skykomish R. near Galena. **Ore:** Gold. **Prod:** Small amount in 1934. **Ref:** 14, p. 51. 97, 1935, p. 354.

Stilaguamish River Placers

Loc: Along Stilaguamish R. **Ore:** Gold. **Assays:** Said to have been some rich placer deposits. **Ref:** 13, p. 172. 14, p. 51.

Sultan Placer (32)

Loc: NW¼ sec. 5, (27-8E), on Skykomish R., S. of the town of Sultan. **Ore:** Gold. **Prod:** \$200 up to 1934, \$1,408 during 1934. **Ref:** 14, p. 51.

Sultan Canyon (McCloud) Placer (19)

Loc: SE¼SE¼ sec. 32, (29-8E) and NE¼ sec. 5, (28-8E). **Access:** Road. **Owner:** Frank Morgan, Falls City, Wash. (1952). **Ore:** Gold. **Prod:** 1951. **Ref:** 133, p. 39.

Sultan River Placer (29)

Loc: On Sultan R. at W. edge of the town of Sultan, probably in sec. 31, (28-8E). **Ore:** Gold. **Improv:** Suction-dredge operation. **Prod:** Some production in 1947. **Ref:** 158.

Sultan River Placers

Loc: Along Sultan R. from its source to its mouth. **Ore:** Gold. **Assays:** Av. yield said to be 40¢ to 85¢ per yd. **Ref:** 12, p. 95. 13, p. 172. 63, pp. 25-26.

Young Placer

Loc: Near Sultan. **Prop:** 7 claims. **Owner:** Frank A. Young, Sultan, Wash. **Ore:** Gold. **Ref:** 14, p. 51.

Yreka Placer (21)

Loc: Sec. 5, (28-8E), Sultan dist. **Ore:** Gold. **Ref:** 158.

TEVENS COUNTY**Anderson Placer**

Loc: Northport dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

B and W Placer

Loc: Columbia R. **Owner:** K. E. Boissoneau (1940). **Ore:** Gold. **Prod:** 1938-1940. **Ref:** 97, 1939, p. 491.

Blue Bar Placer (19)

Loc: Sec. 20, (31-37E), Kettle Falls dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

Bossburg Bar Placer (11)

Loc: Sec. 25, (38-37E), on W. bank of Columbia R. **Owner:** Federal Land Bank (1934). **Ore:** Gold. **Deposit:** Large bench or high bar which had 30,000 cu. yd. of gravel av. 25¢ per yd. **Ref:** 158.

Brod-Hurst Placer (14)

Loc: Marcus dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354. 104, 6/30/35, p. 22.

China Bend Placer (9)

Loc: Lots 3 and 4, sec. 7, (38-38E), on SE. bank of Columbia R. **Ore:** Gold. **Assays:** 8 samples showed 8.7¢ to 32.5¢ per cu. yd. **Ref:** 158.

Collins Placer (18)

Loc: Along Columbia R., 2½ mi. from Daisy. **Owner:** J. H. Collins, Colville, Wash. (1938). **Ore:** Gold. **Assays:** Av. 20¢ per yd. **Prod:** Owner grossed about \$200 daily from 1,000 cu. yd. of gravel in 1938. **Ref:** 97, 1939, p. 491. 113, 6/16/38.

Colville River Placer

Loc: Along Colville R. **Ore:** Gold. **Ref:** 13, p. 174.

Dead Man's Eddy Placer

(see Nigger Creek Bar Placer)

Evans Placer (3)

Loc: Northport to international boundary. Camp on W. bank of the reservoir just N. of Northport. **Prop:** Placer lease on 5 mi. of shoreline on the Columbia R. reservoir. **Owner:** Ray Evans, Northport, Wash. (1941). **Ore:** Gold. **Improv:** 2 buildings, a shop, and a steam power suction dredge (1941). **Assays:** Said to range from 10¢ to \$35.00 per yd. **Prod:** Presumably produced prior to 1941. **Ref:** 30, p. 103.

Gibson Bar Placer (21)

Loc: Secs. 10 and 15, (29-35E), at Gibson Bar, on E. side of Columbia R. **Owner:** Harvey R. Cline Co. (1940). **Ore:** Gold. **Deposit:** Gravel av. 4 ft. thick covering about 100 acres. **Assays:** 13 test holes av. 14.3¢ per cu. yd. **Prod:** 1938-1940; mined in early days by Chinese. **Ref:** 97, 1939, p. 491; 1940, p. 479; 1941, p. 475. 158.

Grover Placer

Loc: On Columbia R. **Ore:** Gold. **Prod:** 1938-1939. **Ref:** 97, 1939, p. 491; 1940, p. 479.

Holsten Placer (17)

Loc: Sec. 29, (35-37E), on E. bank of Columbia R., 6 mi. below Kettle Falls. **Owner:** Mr. Holsten (1934). **Ore:** Gold. **Ore min:** Free gold. **Assays:** Small production in 1934 on gravels running 26¢ to 30¢ per cu. yd. **Ref:** 158.

Hurst Placer

(see Brod-Hurst Placer)

La Dow Placer (20)

Loc: Along Columbia R., near Hunters. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

McGrath Placer

Loc: Along Columbia R., Northport dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

Marcus Placer (15)

Loc: At Marcus. **Ore:** Gold. **Deposit:** River sand. **Assays:** 1,096 lb. magnetite, 56 lb. ilmenite, \$12.61 gold per ton from a 5-lb. conc. from 1 yd. of gravel. **Ref:** 38-A, pp. 1218-1219. 126, p. 15.

Meyers Falls Placer (16)

Loc: Sec. 30, (36-38E), Meyers Falls dist. **Ore:** Gold. **Ref:** 158.

Nigger Bar Placer (2)

Loc: Secs. 14 and 21, (40-41E), 2 mi. S. of Canadian boundary, on W. side of Columbia R. **Ore:** Gold. **Deposit:** Bar 300 ft. wide and more than 1 mi. long is covered by a 2-ft. overburden of sand and large boulders. **Assays:** A 125-ft. strip 1,000 ft. long had 2½ ft. of gravel av. 26¢ per cu. yd. **Ref:** 158.

Nigger Creek Bar (Dead Man's Eddy) Placer (5)

Loc: Sec. 28, (40-40E), at mouth of Nigger Cr., on W. bank of Columbia R. **Owner:** Roberts Leasing Co. (1933-1934). **Ore:** Gold. **Deposit:** Large low bar, with no large boulders. **Assays:** Av. 27.9¢ per cu. yd. **Prod:** 1933-1934. **Ref:** 97, 1934, p. 297; 1935, p. 355. 158.

Ninemile Bar Placer (10)

Loc: Sec. 15, (38-38E), on E. bank of Columbia R. **Owner:** State (1934). **Ore:** Gold. **Ore min:** Free gold. **Assays:** 8 tests showed 2.6¢ to \$1.18 per cu. yd. **Ref:** 158.

No Bear Placer (1)

Loc: Secs. 4 and 9, (40-40E), Northport dist. **Ore:** Gold. **Ref:** 158.

Nobles Placer (7)

Loc: Secs. 29 and 32, (39-39E), near Evans. **Owner:** Nobles, Inc. (1934). **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

Northport Bar Placer (6)

Loc: Sec. 36, (40-39E), on W. bank of Columbia R. opposite Northport. **Ore:** Gold. **Ore min:** Free gold. **Assays:** 7 test pits showed an av. of 2 ft. of gravel which ran 20.1¢ per cu. yd. **Ref:** 158.

Orient Placer (8)

Loc: Sec. 23, (39-37E), Orient dist. **Ore:** Gold. **Ref:** 158.

Pohle Placer

Loc: Along Columbia R., Northport dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

Reed and Roberts Placer (4)

Loc: Sec. 20, (40-40E), about 1 mi. W. of Columbia R. **Owner:** Indian Department leasing to Messrs. Reed and Roberts (1934). **Ore:** Gold. **Deposit:** High bench. **Prod:** \$17,500 reported from less than 2 acres of gravel 3 ft. deep in 1934. **Ref:** 158.

Roberts Placer

(see Reed and Roberts Placer)

Sandoz Placer (13)

Loc: Sec. 22, (37-38E), 5 mi. S. of Bossburg. **Owner:** F. W. Sandoz, Bossburg, Wash. **Ore:** Gold. **Ref:** 158.

Valbush Bar Placer (12)

Loc: Secs. 16 and 21, (37-38E), on E. side of Columbia R. between Marcus and Bossburg. **Owner:** State, leasing to Messrs. Billings, Nobel, Brod, Price, Raymond, and Foster (1934). **Ore:** Gold. **Assays:** 25,000 cu. yd. produced in 1934 yielded an av. of 21.4¢ per yd. Another operator on the same bar recovered \$3,486.00 from 16,000 cu. yd. in 1934. **Prod:** 1934, 1939, 1940. **Ref:** 97, 1940, p. 479; 1941, p. 475. 158.

Van Stone Placer

Loc: Along Columbia R., Northport dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

Weston Placer

Loc: Along Columbia R., Northport dist. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 354.

WHATCOM COUNTY

Alice Mae Placer (7)

Loc: Secs. 11 and 12, (37-14E), on Ruby Cr., ¼ mi. W. of Beebe Ranger Station. **Ore:** Gold. **Ref:** 158.

Bellingham Placer

(see under iron)

Combination Placer (6)

Loc: Sec. 2, (37-17E), Slate Cr. dist. **Prop:** 1 patented claim. **Owner:** Reuben Pierson, Seattle, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Donald A Placer

Loc: Slate Cr. dist. **Ore:** Gold. **Prod:** 1915. **Ref:** 158.

Eureka Placer

Loc: Slate Cr. dist. **Prop:** 2 placer claims. **Owner:** Eureka Gold Mining Co., Wenatchee, Wash. (1938). **Ore:** Gold. **Ref:** 158.

Farrar Placer (12)

Loc: On Ruby Cr. between Lime and Darlington Creeks. Approx. in sec. 36, (38-16E). **Access:** Road. **Prop:** Several claims along a 2-mi. stretch of Ruby Cr. **Owner:** Mrs. John Farrar (1948). **Ore:** Gold. **Prod:** Several hundred dollars per year up to 1948. **Ref:** 158.

Grizzly Placer (14)

Loc: Sec. 3, (37-17E), Slate Cr. dist. **Owner:** R. E. Johnson. **Ore:** Gold. **Ref:** 158.

Hope Placer (1)

Loc: Sec. 18, (39-5E), on Bill Cr. **Ore:** Gold. **Ref:** 158.

Jackass Placer (4)

Loc: Sec. 10, (37-14E), ½ mi. below junction of Cut Out Cr. and Granite Cr. **Prop:** 1 claim. **Owner:** Ralph E. Pride, Bellingham, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Johnnie S. Placer (10)

Loc: Sec. 17, (37-16E), at mouth of Granite Cr., Slate Cr. dist. **Prop:** 1 claim. **Owner:** Morley Bouck, Rockport, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Lazy Tar Heel Placer (8)

Loc: Secs. 10, 11, and 12, (37-14E), Ruby Cr. dist. **Owner:** Walt Woodrich, Sedro Woolley, Wash. (1939). **Ore:** Gold. **Prod:** 1939. **Ref:** 158.

New Light Placer (13)

Loc: Sec. 31, (38-17E). **Ore:** Gold. **Ref:** 158.

Nip and Tuck (Tanya) Placer (9)

Loc: Sec. 11, (37-14E), Slate Cr. dist., about 5 mi. S. of Ruby Cr. **Prop:** 5 placer claims (1952). **Owner:** F. A. Weihe, Bellingham, Wash. (1952). Tommy Rowland (1893-1894). R. E. Johnson, Winthrop, Wash. (1942). **Ore:** Gold. **Assays:** 50¢ per yd. **Ref:** 158.

Normandy Placer

Loc: On Slate Cr. above mouth of Canyon Cr. **Prop:** 1 placer claim. **Owner:** E. C. Fisher, Marblemount, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Old Discovery Placer (11)

Loc: On Ruby Cr. about 2 mi. above its confluence with Granite Cr. Probably SE¼ sec. 9, (37-16E). **Ore:** Gold. **Deposit:** Placer gold is found in old stream channels well above present stream level. **Prod:** Several thousand dollars in "old days." **Ref:** 63, p. 58. 158.

Park Placer

Loc: Slate Cr. dist. **Prop:** 1 placer claim. **Owner:** James Yelton, Bellingham, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Rose Placer (2)

Loc: On headwaters of S. Fk. Nooksack R. **Prop:** 1 placer claim. **Owner:** J. W. Erlandson, Mount Vernon, Wash. (1952). **Ore:** Gold. **Ref:** 158.

Ruby Creek Placer (15)

Loc: Sec. 3, (37-17E), Slate Cr. dist. **Owner:** Granite Creek Mining Co. (1906-1909). **Ore:** Gold. **Prod:** 1906, 1908. **Ref:** 63, p. 58. 97, 1906, p. 368; 1908, p. 582. 114, no. 5, 1909, p. 91.

Scougale Placer (3)

Loc: Sec. 36, (38-13E), Slate Cr. dist. **Ore:** Gold. **Prod:** \$950 taken out in 6 weeks in 1897. **Ref:** 63, p. 58.

Tanya Placer

(see Nip and Tuck Placer)

Washington Placer

Loc: Slate Cr. dist. **Ore:** Gold. **Prod:** 1915. **Ref:** 158.

Woodrich Placer (5)

Loc: Approx. in sec. 25, (37-14E), 2 mi. up Canyon Cr. from Beebe's cabin on Granite Cr. **Access:** About 5 mi. by trail from the Ruby Cr. road. **Ore:** Gold. **Deposit:** An old gravel bar, 300 ft. long and 5 to 20 ft. thick, from which at least 2 nuggets valued at \$30 to \$40 each were taken. **Ref:** 158.

Properties—Iron is exceeded in abundance in the earth's crust only by silicon and aluminum. Pure iron is a silver-white, moderately hard, ductile malleable magnetic metal that is capable of taking a high polish. Commercial iron usually contains some carbon, phosphorus, silicon, sulfur, and manganese. Pig iron contains about 2 percent carbon and is hard and brittle and has a fairly high melting temperature. Wrought iron contains only a few tenths of a percent or less of carbon and is tough, malleable, grayish white, and is difficultly fusible. The electrical conductivity of iron is about one-seventh that of copper. Much of the metal's usefulness stems from the great variation in physical properties which can be produced by tempering, annealing, working, and by adding various quantities of other elements. Iron is stable in dry air but oxidizes readily in moist air or water, forming rust. In its chemical reactions it exhibits valences of 2 and 3 and forms ferrous and ferric compounds. Other properties are given in the table on page 12.

Uses—Iron is the cheapest, most abundant, and most versatile of metals. To list all the uses of iron and steel would require a detailed description of modern civilization and industry. Iron salts are used in dyes, inks, polishing powder, in the textile industry, and in many other applications. Iron ore is used primarily in the manufacture of pig iron, some of which is used to make cast iron, wrought iron, but most of which is converted to steel. However, iron ores are put to a number of other uses, which, although not quantitatively important nationally, are of considerable interest to possible iron-ore producers in Washington. Iron ore has been used in making magnesite refractories, for ballasting ships, for heavy concrete aggregate, for shielding atomic reactors, in making

WHITMAN COUNTY

Indian Bar Placer (1)

Loc: Sec. 15, (14-41E), near Penawawa. **Ore:** Gold. **Prod:** 1934. **Ref:** 97, 1935, p. 356.

YAKIMA COUNTY

Elizabeth Placer (1)

Loc: Secs. 4 and 5, (17-11E), Summit dist. **Owner:** Gold Links Mining Co. (1939). **Ore:** Gold. **Ref:** 158.

Gold Hill Placer (3)

Loc: Sec. 35, (17-11E), Morse Cr. area. **Ore:** Gold. **Prod:** 1933, 1934. **Ref:** 97, 1934, p. 298; 1935, p. 356.

Gold Links Placer (2)

Loc: Secs. 4 and 5, (17-11E), Summit dist. **Prop:** 3 placer claims. 20 lode claims. **Owner:** Gold Links Mining Co. (1939). **Ore:** Gold. **Ref:** 158.

Morse Creek Placer

Loc: Near head of Morse Cr., Summit dist. **Owner:** H. L. Tucker and George Gibbs, Yakima, Wash. (1880-1882). **Ore:** Gold. **Deposit:** An \$80 nugget was found, and \$1 nuggets were not uncommon. **Assays:** Early operators made "good wages." **Ref:** 63, p. 44.

Surveyors Creek Placer (4)

Loc: Sec. 14, (8-12E), on Klickitat R. **Ore:** Gold. **Ref:** 158.

IRON

special portland cements, in ferroalloys, and in mineral pigments such as ocher, umber, and sienna. Washington ores have been used for all these purposes. Other uses are as a heavy medium in sink-float ore-concentrating plants, in the manufacture and purification of heating gas, and as a flux in smelting ores of other metals.

Production—Iron accounts for more than 90 percent of the total production tonnage of the 30 or so metallic elements used industrially. The ore was produced in 17 states in 1950. About 80 percent of the ore produced in that year came from the Lake Superior region, and only about 6 percent came from the western states, most of it from Utah and California. There were 247 producing mines in the country, 38 of which each mined over one million tons of ore in that year. Three of the largest western steel plants were located at Provo, Utah; Fontana, California; and Pueblo, Colorado. Much smaller plants in Seattle and elsewhere in Washington have used small tonnages of iron ore. Pig iron was first made in this state at Irondale, near Port Townsend, in 1881. By the end of 1889 this plant had turned out 24,806 tons of iron. Production continued irregularly for a few more years, and during these later stages of activity (1902-1903, 1907-1910, and 1917-1919) the plant is reported to have produced 41,000 tons of pig iron. Iron ore production in Washington has never been large and has been intermittent, but during the years from 1918 through 1944 there were only 4 years in which there was no production. Total production has amounted to about 100,000 tons, and the maximum output for any one year has been about 14,000 tons.

Prices—Iron is the cheapest of the metals. The average value of all grades of pig iron f.o.b. blast furnaces in 1950

was \$42.85 per ton. The average price for finished steel was nearly double this figure, rising from 2.396 cents per pound in 1943 to 3.862 cents in 1950. The average value per gross ton of Lake Superior iron ore f.o.b. mines was \$4.90 in 1950, compared with \$4.50 in 1949, \$3.91 in 1948, and a range of from \$4.45 to \$5.50 in the years 1929 to 1941. The average values of iron ores produced in Washington have been considerably higher than these figures, perhaps twice as high, and the sale price, here, may vary within rather wide limits, subject to negotiation for each individual sales contract.

Ore minerals—Iron is a normal constituent of hundreds of minerals, and is one of the most abundant elements of the earth's crust, yet few minerals are capable of serving as ores of iron, since few contain the metal in sufficient quantities or in the right combination to make extraction profitable. The chief ore minerals in order of their importance are: hematite, Fe_2O_3 , containing 70.0 percent iron; magnetite, Fe_3O_4 , containing 72.4 percent iron; limonite, a hydrous iron oxide of variable composition and containing 59 to 63 percent iron; and siderite, FeCO_3 , containing 48.2 percent iron. The sulfides pyrite and pyrrhotite are ordinarily considered to be ores of sulfur, but they contain 46.6 and 61.6 percent iron respectively, and the sinter that remains after roasting to

recover the sulfur is sometimes marketable as iron ore. The best grades of iron ore, as mined, contain 48 to 68 percent iron, with a minimum of silicon, titanium, phosphorus, calcium, aluminum, and sulfur. Specifications regarding impurities vary considerably, but phosphorus should not exceed 0.045 percent and sulfur 0.25 percent; nevertheless, acceptable ore may in some instances contain as much as 0.18 percent phosphorus and 0.20 percent sulfur.

Geology—Iron-ore deposits are of various origins, including segregations of magnetite and titaniferous magnetite in igneous rocks; contact-metamorphic deposits of magnetite and specularite; replacement deposits of hematite; sedimentary deposits of hematite, limonite, and siderite; residual or lateritic deposits of hematite and limonite; oxidation or gossan deposits of limonite; and placer deposits of magnetite sands. Ores occurring in any of these types of deposits may have been subjected to metamorphism subsequent to their origin. Each of these types of origin is represented by Washington iron-ore deposits. Of interest but no economic importance is the occurrence of metallic iron as small masses and grains disseminated in basalt penetrated by a well drilled in a search for gas and oil in Grant County.

OCCURRENCES

The map showing the numbered iron occurrences is plate 11, on page 31 in volume 2.

ASOTIN COUNTY

Clarkston Placer (1)

(see under gold, placer)

Snake River Placer

(see under gold, placer)

CHELAM COUNTY

Blewett (Washington Nickel) (3)

Loc: Secs. 13 and 14, (22-17E), on a prominent ridge N. of Shaser Cr. at its junction with Peshastin Cr. **Elev:** 2,900 to 4,080 ft. **Access:** E. end of property is on highway U. S. 97, and W. end is accessible by a short private road. **Prop:** 11 claims, including: Iron King, McCarthy, Magnetite No. 1, Rothert. **Owner:** Washington Nickel Mining & Alloys, Inc., Seattle, Wash. (1944). **Ore:** Iron, nickel, chromium. **Ore min:** Hematite, magnetite, chromite, nickel silicates. **Gangue:** Shale. **Deposit:** Sedimentary beds, high in iron and carrying appreciable quantities of nickel and chromium, lying stratigraphically between Eocene Swauk sandstone and conglomerate and pre-Eocene serpentinized peridotite. **Dev:** Several caved adits and numerous pits. Mapped topographically and geologically. Magnetic survey made by Wash. Division of Geology in 1942 and 1943. Drilled (10 holes totaling 2,395 ft.) and sampled by the U. S. Bureau of Mines, and tested metallurgically by the Bailey Furnace Co. **Assays:** U. S. Bureau of Mines testing showed 46,000 tons assaying 0.88% Ni, 2.5% Cr_2O_3 , 32% Fe, and 8,000,000 tons assaying 0.39% Ni, 0.85% Cr_2O_3 , 11.53% Fe. **Ref:** 16, 17, pp. 15-16. 48, pp. 3-5. 67, p. 19. 78, pp. 29, 31. 84,

86, pp. 87-101. 90, 95, p. 6. 111, p. 7. 142, pp. 70-72. 158. 161, p. 49. 179, pp. 77-82.

Davenport

(see Nigger Creek)

First Creek (1)

(see under titanium)

Iron King

(see Rothert)

Nigger Creek (Davenport) (2)

Loc: $\text{S}\frac{1}{2}\text{SW}\frac{1}{4}$ and $\text{N}\frac{1}{2}\text{SE}\frac{1}{4}$ sec. 7 and $\text{NW}\frac{1}{4}\text{SW}\frac{1}{4}$ sec. 8, (22-17E) and $\text{SE}\frac{1}{4}\text{SE}\frac{1}{4}$ sec. 12, (22-16E). **Elev:** 4,100 to 4,800 ft. **Access:** 4 mi. of road and 2 mi. of trail up Nigger Cr. from its mouth. **Prop:** 4 claims. **Owner:** C. P. Davenport, Auburn, Wash., and others (1944). **Ore:** Iron, chromium, nickel. **Ore min:** Hematite, magnetite. **Gangue:** Shale. **Deposit:** Sedimentary iron beds exposed in 3 areas contain 59,850 tons of exposed, 45,720 tons of probable, and 435,850 tons of possible ore. **Dev:** 75-ft. adit and several old open cuts. **Ref:** 17, pp. 16-20. 67, p. 15. 90.

Rothert (Iron King) (4)

Loc: Sec. 13, (22-17E), Blewett dist. **Ore:** Iron. **Ref:** 142, p. 70-71.

Washington Nickel

(see Blewett)

CLALLAM COUNTY

Cedar Creek Placer (3)

(see under gold, placer)

Lovelace Placer

(see Shi Shi Beach Placer under gold, placer)

Shi Shi Beach Placer (1)

(see under gold, placer)

Starbuck Placer

(see Cedar Creek Placer under gold, placer)

Yellow Banks Placer (2)

(see under gold, placer)

LARK COUNTY**Bokemier**

(see Howland Acres)

Brush Prairie Placer (2)

(see under gold, placer)

Camas Placer (5)

(see under titanium)

Canyon Creek Placer

Loc: Canyon Cr. **Ore:** Iron. **Ore min:** Magnetite, hematite. **Gangue:** Quartz. **Assays:** One sample showed 1,726 lb. magnetite, 200 lb. hematite, 74 lb. quartz per ton. **Ref:** 38-A, pp. 1218-1219. 126, p. 14.

Howland Acres (Bokemier) (3)

Loc: E½SW¼ sec. 5, (2-2E), ½ mi. S. and ¼ mi. E. of Barberton. **Elev:** 200 ft. **Access:** 1 mi. by road from railroad. **Owner:** A. H. Bokemier, Vancouver, Wash. (1945). **Ore:** Iron. **Ore min:** Limonite. **Deposit:** Surface deposit (covered by 6 to 18 in. of soil) of bog iron covering an exposed area 12 by 24 ft. is said to be as much as 20 ft. deep. Deposit consists of spongy limonite contaminated by included sand. Float and small outcrops in an area of 30 to 50 acres, but ore is not continuous over this whole area. **Assays:** Two analyses, each representing only 2-ft. thickness of ore, showed 10.7%, 10.9% ignition loss; 14.3%, 23.6% SiO₂; 0.4%, 0.2% TiO₂; 30.4%, 42.6% Fe; 5.5%, 9.2% Mn₂O₃; 1.81%, 2.52% P₂O₅. **Ref:** 157. 158.

McMunn Placer (1)

(see under gold, placer)

Washougal (4)

Loc: SE¼NE¼ sec. 25, (2-3E), on Miller farm near Little Washougal R. **Access:** 400 ft. E. of the highway. **Ore:** Iron. **Ore min:** Magnetite. **Deposit:** Black sand reportedly 43 ft. thick was encountered in a well at a depth of 97 ft. **Ref:** 158.

WLITZ COUNTY**Ayers (1)**

Loc: About halfway between Ryderwood and Castle Rock. **Owner:** G. L. Ayers, Rt. 4, Box 407, Olympia, Wash. **Ore:** Iron. **Deposit:** Bog ore. **Assays:** 86% Fe₂O₃. **Ref:** 158.

UGLAS COUNTY**Columbia River Placer**

(see under gold, placer)

RRY COUNTY**Belcher (11)**

(see under copper)

Belcher (Blue Bell-Belcher) (9)

Loc: NW¼ sec. 8, (37-34E), Belcher dist. **Elev:** 4,050 to 4,500 ft. **Access:** On Lambert Cr. about 14 mi. by road NE. of

Republic. 8 mi. from railroad. **Owner:** Belcher Mining Co. (1909-1922). Belcher Mountain Gold and Copper Co. (1907). Blue Bell-Belcher Mining Co. (1918). **Ore:** Iron, copper, gold. **Ore min:** Pyrite, magnetite, pyrrhotite, chalcopyrite. **Gangue:** Garnet, tremolite, epidote. **Deposit:** Two or three irregular replacement bodies in limestone in a contact-metamorphosed series of limestone and shales cut by monzonite dikes. Iron sulfides more abundant than magnetite. **Dev:** 3 adits and shaft aggregate about 4,000 ft. of development. **Assays:** \$0.40 to \$1.00 Au, 4% Cu in lower workings. Trail smelter said to have bought the sulfide ore for \$4, and Granby bought large quantities at \$2.50 per ton. **Prod:** Considerable production 1909-1911, 1913-1917. **Ref:** 7, pp. 175-179. 48, p. 6. 91, p. 249. 97, 1910-1918. 98, 1918, 1920, 1922. 112, 1918, p. 168. 114, no. 6, 1906, p. 79; no. 1, 1907, p. 3; no. 5, 1909, p. 71. 116, no. 10, 1907, p. 19. 142, pp. 59-61.

Blue Bell-Belcher

(see Belcher)

Boyds

Loc: In Deadman Cr. area near Boyds. **Ore:** Iron. **Ref:** 48, p. 6. 158.

Copper Key (8)

(see under copper)

Curlew Lake

Loc: 1½ mi. from Curlew Lk. **Ore:** Iron. **Ore min:** Hematite. **Ref:** 48, p. 6. 105, vol. 87, no. 1, 1903, p. 13.

Hawkeye (5)

(see under gold)

Iron Chief (7)

Loc: Adjoins Lamefoot on S. Probably in N½ sec. 9, (37-33E). **Ore:** Iron. **Deposit:** Minor surface work discloses a replacement ore body in limestone. **Ref:** 157.

Kelly Camp (1)

(see under tungsten)

Lambert Creek (6)

Loc: Sec. 6, (37-34E). **Ore:** Iron. **Ref:** 48, p. 6.

Lamefoot (3)

Loc: ¾ mi. E. of Curlew Lk., ¼ mi. from State Highway 10, about 10 mi. NE. of Republic, and 5 mi. W. of the Belcher mine. Probably near center sec. 4, (37-33E). **Ore:** Iron, silver, gold. **Ore min:** Pyrite. **Deposit:** Replacement body in limestone, cut by several dikes. **Dev:** 90-ft. shaft all in ore. An adit discloses 90 ft. of ore where it cuts the ore at 150-ft. depth. Outcrops indicate large ore body. Diamond drill holes. **Ref:** 157.

Oversight (10)

(see also Pin Money under gold)

Loc: Near center E½ sec. 18, (37-34E), on SE. side of Cooke Mtn., Belcher dist. **Elev:** 4,650 ft. **Access:** 13 mi. by road from railroad at Republic. **Prop:** 4 claims: Pin Money, Oversight, Granite, Wander. **Owner:** Oversight Mining & Milling Co. (1906-1918). **Ore:** Iron, copper, gold. **Ore min:** Pyrite, pyrrhotite, magnetite, chalcopyrite. **Deposit:** Ore minerals occur in a lenticular body replacing limestone. Some ore nearly pure magnetite. **Dev:** Surface cuts, short adits, and shafts. **Assays:** Av. of 3 samples showed 50.2% Fe, tr. Cu, 13.3% SiO₂, 14.2% S, 0.09 oz. Au. One sample showed 26.97% Fe, 14.71% CaO, 12.91% MgO, 8.90% S, 0.164% P₂O₅, nil As. **Prod:** 1934. **Ref:** 7, pp. 170-173. 33, 1907, p. 904. 48, pp. 5-6. 97, 1935, p. 352. 98, vol. 13, p. 118. 105, 1906, p. 313; 1907, p. 264. 114, no. 1, 1907, p. 3; no. 5, 1909. 116, no. 2, 1908, p. 30; no. 5, 1908, p. 117. 142, p. 59. 157.

Wilmont Bar Placer (12)

(see under gold, placer)

Winnipeg (4)

(see under gold)

Wiseman (2)

Loc: Sec. 4, (37-33E), N. of Lamefoot mine. **Access:** Near Republic-Curlew highway. **Prop:** Several claims. **Owner:** Joe Wiseman, Republic, Wash. (1943). **Ore:** Iron. **Ore min:** Magnetite. **Deposit:** Similar to Belcher deposit. **Dev:** Surface cuts. **Ref:** 158.

Yaki

(see Winnipeg under gold)

GARFIELD COUNTY

Pomeroy Placer

(see under gold, placer)

GRAYS HARBOR COUNTY

Dennis

(see Elma)

Elma (Dennis) (1)

Loc: S $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 28, (18-5W), 3 $\frac{1}{2}$ mi. from railroad at Elma. **Access:** Road S. from McCleary. **Owner:** Mr. Thomas, Seattle, Wash. (1942). **Ore:** Iron, titanium. **Ore min:** Ilmenite, magnetite. **Deposit:** A 1- to 4-ft. bed of stratified, in part consolidated black sand is 2 or 3 acres in extent and covered by 3 to 8 ft. of overburden. Known tonnage 5,000. **Dev:** Several open cuts and pits. **Assays:** 50.02% Fe, 0.80% SiO₂, 0.18% P₂O₅, 0.062% S, 22.23% TiO₂. **Prod:** 1 carload and a 1,000-lb. lot were shipped for experimental purposes. **Ref:** 48, p. 7. 142, pp. 107-109. 158.

JEFFERSON COUNTY

Black Hump (3)

(see under manganese)

Chimacum Valley (1)

Loc: In Chimacum Valley S. of Irondale. **Ore:** Iron. **Ore min:** Limonite. **Deposit:** Bog ore of rather poor quality and limited extent. **Assays:** 53.67% Fe. **Prod:** An attempt was made to use this ore in the furnace at Irondale in 1880. **Ref:** 48, p. 7. 140, pp. 5, 10.

Mount Claywood (2)

(see under manganese)

North Pole Quartz (4)

(see under manganese)

KING COUNTY

Anderson (Baring) (1)

Loc: S $\frac{1}{2}$ sec. 10 and near SE. cor. sec. 11, (26-10E), 1 mi. from railroad at Baring. **Elev:** 1,200 ft. **Access:** 1 mi. by road S. of Baring, thence by trail $\frac{1}{2}$ mi. **Prop:** 2 claims and 80 acres of deeded land. **Owner:** Theodore Anderson, Everett, Wash. (1943). **Ore:** Iron, lead, zinc, silver, gold, copper. **Ore min:** Magnetite. **Gangue:** Amphibole. **Deposit:** Ore body in limy quartzite is presumably a contact-replacement deposit. Exposure is a lenticular mass 25 to 30 ft. in height and 15 ft. in width. Known tonnage 2,000. **Dev:** 2 open cuts and a caved adit said to be 175 ft. long. **Assays:** 35.00% to 60.70% Fe, 9.51% to 10.20% SiO₂, 0.75% Al₂O₃, 4.53% CaO, 1.15% MgO, 0.65% P,

0.09% S, tr. to 0.94% TiO₂. **Prod:** 1 carload said to have been shipped. **Ref:** 48, p. 9. 141, p. 66. 142, pp. 92-93. 158.

Baring

(see Anderson)

Chair Peak

(see Kelley)

Chief

Loc: King County. **Prop:** 1 patented claim. **Owner:** James Taylor, Seattle, Wash. **Ore:** Iron. **Ref:** 158.

Cliff (7)

Loc: Sec. 7, (22-11E), Gold Cr. dist. **Ore:** Iron. **Prod:** Amount not known. **Ref:** 58, p. 14.

Climax (8)

Loc: Sec. 7, (22-11E), Gold Cr. dist. **Ore:** Iron. **Ref:** 58, p. 14.

Denny (6)

Loc: Sec. 6, (22-11E) and sec. 31, (23-11E), 2 mi. NW. of Snoqualmie Pass. **Elev:** 3,500 ft. **Prop:** 9 patented claims. **Ore:** Iron. **Ore min:** Magnetite, pyrite. **Gangue:** Garnet, quartz, actinolite, calcite. **Deposit:** Ore occurs as ovoid lenses, 20 ft. or more across, in a contact metamorphic deposit between limestone and intrusive granodiorite. Known tonnage 5,000. **Dev:** 53-ft. adit, open cuts and pits. **Assays:** 55.48% to 68.54% Fe, 1.89% to 7.99% SiO₂, 0.021% P, 0.089% to 0.25% S. (analyses from 3 fairly representative samples). **Ref:** 13, p. 42. 48, p. 8. 63, p. 41. 111, p. 7. 130, p. 70. 140, pp. 25-27. 141, p. 66. 142, pp. 86-90. 146, p. 13. 158. 167, pp. 25-26. 179, pp. 22-24.

Dobroff (9)

Loc: S $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, (20-6E). **Access:** Road. **Prop:** 20 acres of deeded land. **Owner:** Mrs. Clarabelle Dobroff, Enumclaw, Wash. (1944). **Ore:** Iron. **Ore min:** Limonite. **Deposit:** Deposit of bog iron said to cover fair-sized area. **Ref:** 158.

Green Mountain (3)

Loc: SE $\frac{1}{4}$ sec. 33, (24-9E), on Green Mtn., 6 mi. from Sallal Prairie, Snoqualmie dist. **Ore:** Iron. **Ore min:** Hematite, magnetite. **Ref:** 48, p. 10. 63, p. 41.

Green River

Loc: Snoqualmie dist. **Ore:** Iron. **Assays:** 45.51% Fe, 10.12% SiO₂, 0.05% S, tr. P. **Ref:** 13, p. 48. 48, p. 10.

Guye (Mt. Logan, Summit) (4)

Loc: Secs. 28, 32, and 33, (23-11E), about 2 $\frac{1}{2}$ mi. from the railroad at Rockdale, Snoqualmie dist. **Elev:** 4,600 ft. **Prop:** 12 patented claims. **Owner:** J. F. Hubbart, Auburn, Wash. (1928—). F. W. Guye (1884-1928). **Ore:** Iron, lead, zinc, silver, gold. **Ore min:** Magnetite, pyrite, galena, sphalerite. **Gangue:** Garnet. **Deposit:** Deposits are of contact-metamorphic origin and very similar to those of the Denny property but are, in general, wider and more continuous. Known tonnage 10,000. A vein near the center of the Industry Lode claim is said to be 6 ft. wide and is well mineralized with galena and sphalerite. **Dev:** 1 adit, 4 or 5 open cuts and pits. **Assays:** Two representative analyses show 59.94% to 64.31% Fe, 2.0% to 2.64% Al₂O₃, 4.07% to 6.71% SiO₂, 0.32% to 0.93% CaO, 0.37% to 0.39% MgO, 0.019% to 0.020% P, 0.013% to 0.016% S, 0.11% to 0.24% TiO₂, 0.39% to 0.58% Mn. Other samples show as high as \$138 per ton in Pb, Zn, Au, Ag. Two assays on picked samples showed 0.04 oz. Au, 2.44 oz. Ag, 16.6% to 24.5% Pb, 32.4% Zn. **Ref:** 13, p. 45. 48, pp. 8-9. 63, p. 41. 111, p. 7. 130, p. 70. 140, pp. 25-26. 141, p. 66. 142, pp. 90-92. 146, p. 13. 167, pp. 26-27. 178. 179, pp. 22-24.

Kelley (Chair Peak) (5)

Loc: NW $\frac{1}{4}$ sec. 30, (23-11E), on Chair Peak. **Ore:** Iron, copper. **Ore min:** Magnetite. **Ref:** 13, p. 42. 48, p. 10. 63, p. 41.

Mt. Logan

(see Guye)

Seattle Placer

(see under gold, placer)

Smith

(see Williams-Smith)

Summit

(see Guye)

Williams-Smith (2)

Loc: Secs. 35 and 36, (26-10E), 5 mi. from railroad at Miller R. **Elev:** 2,900 ft. **Prop:** 2 claims: Washington, Chicago. **Ore:** Iron. **Ore min:** Magnetite. **Deposit:** Ore bodies are probably contact replacements of limestone. Magnetite crops out in 3 places, the largest exposure being 51 ft. across. **Dev:** 257-ft. adit said to have been driven into one of the bodies. **Assays:** 66% to 67% Fe, 2.70% to 4.10% SiO₂, 0.0264% to 0.37% P, no S. **Ref:** 48, p. 9. 141, p. 66. 142, pp. 93-94. 158.

KITTITAS COUNTY**Balfour Guthrie**

(see Cle Elum River)

Bean Creek (5)

Loc: NE $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, (22-16E), on both E. and W. sides of Bean Cr. **Access:** Reached from the Teanaway R. road by 2 mi. of trail up Bean Cr. **Prop:** Part of a 25-claim block. **Owner:** In part by E. K. Brown, Ellensburg, and A. R. Jordin, Liberty, Wash. (1944). **Ore:** Iron, nickel, chromium. **Ore min:** Magnetite, hematite. **Deposit:** Sedimentary iron ore along contact of Swauk sediments with serpentine occurs in 2 areas about $\frac{1}{4}$ mi. apart. Exposed tonnage is 6,470, probable additional tonnage is 8,840, and possible additional tonnage is 850. **Dev:** None. **Ref:** 17, pp. 23-26. 90.

Big Creek (7)

Loc: Exact location unknown; said to be 5 mi. SE. of Easton. **Ore:** Iron. **Assays:** Av. composition from 5 analyses is 44.73% Fe, 27.35% SiO₂, 3.18% CaO, 0.35% MgO, 2.79% Mn, 1.20% P, 0.02% S, 0.08% Cu. **Ref:** 48, p. 12. 167, p. 24.

Cle Elum River, north deposit (Balfour Guthrie) (1)

Loc: Secs. 26, 34, and 35, (23-14E), on both sides of Cle Elum R., N. of Boulder Cr. **Elev:** 3,000 ft. **Access:** Cle Elum R. road. **Prop:** 14 claims of a 20-claim block. **Owner:** Balfour, Guthrie & Co., Ltd. (1946). **Ore:** Iron, nickel, chromium. **Ore min:** Magnetite, hematite, millerite, chrome spinel. **Gangue:** Diaspore, clachite. **Deposit:** Sedimentary iron occurring along contact of Swauk formation with peridotite. Drilling indicates an ore reserve of about 6 $\frac{1}{4}$ million tons of 40.86% Fe. **Dev:** Numerous trenches, open cuts, and diamond drill holes. **Assays:** Av. of analyses from 52 diamond drill holes was 40.82% Fe, 0.83% Ni, 2.40% Cr₂O₃, 8.83% SiO₂, 16.46% Al₂O₃, 0.051% P, 0.115% S, 0.46% Mn. **Ref:** 13, pp. 42-43. 17, pp. 40-41. 48, pp. 10-11. 78, pp. 29, 31. 85. 87. 87-A. 90. 130, p. 70. 135. 141, p. 65. 142, pp. 73-79. 146, pp. 13-14. 158. 167, pp. 22-25. 176. 177. 178. 179, 1949, pp. 67-76. 180.

Cle Elum River, south deposit (Balfour Guthrie) (2)

Loc: SE $\frac{1}{4}$ and NW $\frac{1}{4}$ sec. 1, N $\frac{1}{2}$ sec. 2, and E $\frac{1}{2}$ sec. 3, (22-14E), E. of Cle Elum R. **Elev:** 2,700 to 5,000 ft. **Access:** The Cle Elum R. road cuts the W. end of these deposits. **Prop:** 20 claims and 1 fraction. **Owner:** Balfour, Guthrie & Co., Ltd.

(1944). **Ore:** Iron, nickel, chromium. **Ore min:** Magnetite, hematite. **Deposit:** Sedimentary iron ore exposed in 4 areas along a distance of 2 mi. contains 3,370 tons of exposed, 21,550 tons of probable, and 191,360 tons of possible ore. **Dev:** 500-ft. adit, several caved adits, and a number of old open cuts. **Ref:** 13, pp. 42-43. 17, pp. 36-39. 48, pp. 10-11. 78, pp. 29, 31. 85. 87. 87-A. 90. 130, p. 70. 135. 140, pp. 27-36. 141, p. 65. 142, pp. 73-79. 146, pp. 13-14. 158. 167, pp. 22-25. 177. 178. 179, pp. 67-76. 180.

Devine

Loc: T. 22 N., R. 16 E. on Beaver Cr., about 3 mi. S. of Mt. Stuart, E. of Teanaway R. **Ore:** Iron. **Assays:** 46.23% Fe, 16.56% SiO₂, 12.60% Al₂O₃, 0.54% Mn, 1.11% Ni, 1.7% Cr. **Ref:** 114, no. 5, 1904. 142, pp. 84-85.

Durrwachter (Liberty Lode) (9)

Loc: Secs. 9 and 10, (19-15E), 2 mi from the railroad at South Cle Elum. **Elev:** 2,800 ft. **Prop:** 6 claims. **Owner:** Charles and E. G. Durrwachter (1922). **Ore:** Iron. **Ore min:** Hematite. **Gangue:** Garnet, glaucophane. **Deposit:** Ore body consists of 2 roughly parallel zones of hematite-bearing glaucophane schist of sedimentary origin. The upper body extends for more than 2,000 ft. and is several ft. thick in places. **Assays:** 26.56% Fe, 29.49% SiO₂, 0.24% P, 0.09% S. **Ref:** 48, pp. 11-12. 142, pp. 79-81.

Ellensburg Improvement Co.

Loc: S. of Cle Elum. **Prop:** 5 claims: Iron Heart, Iron Crest, Nigger Baby, Uncle Sam, Brother Jonathan. **Owner:** Ellensburg Improvement Co. (1892). **Ore:** Iron. **Ore min:** "Brown hematite." **Assays:** 54.30% to 55.00% Fe, 7.90% to 8.02% SiO₂, 0.09% to 0.13% S, 0.13% to 0.18% P. **Ref:** 13, p. 43.

Grand Entry

Loc: S. of Cle Elum. **Prop:** 1 claim: Grand Entry. **Owner:** Thomas Johnson, Seattle, Wash. (1892). **Ore:** Iron. **Ore min:** "Brown hematite." **Dev:** Small amount. **Ref:** 13, p. 43.

Iron Peak (4)

Loc: SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, (22-16E), and S $\frac{1}{2}$ sec. 12 and SE $\frac{1}{4}$ and N $\frac{1}{2}$ sec. 11, (22-15E). **Elev:** 3,700 to 5,900 ft. **Access:** Reached from Teanaway R. road by 2 mi. of trail up Bean and Beverly Creeks. **Owner:** In part by E. K. Brown, Ellensburg, and A. R. Jordin, Liberty, Wash. (1944). **Ore:** Iron, nickel, chromium. **Ore min:** Magnetite, hematite. **Deposit:** 7 exposures of sedimentary iron ore along serpentine-Swauk formation contact contain 176,260 tons of exposed, 33,670 tons of probable, and 98,370 tons of possible ore. **Dev:** A few old open cuts. **Assays:** An av. of 13 analyses included with others from Blewett and Cle Elum showed 45.55% Fe, 1.79% Cr, 0.90% Ni, 0.05% P. **Ref:** 17, pp. 26-36. 90. 142, pp. 84-85.

Kittitas Placer

(see under gold, placer)

Liberty Lode

(see Durrwachter)

Manastash Creek (10)

Loc: Said to be on the headwaters of the S. Fk. of Manastash Cr. **Ore:** Reportedly iron. **Ref:** 167, p. 24.

Stafford Creek (6)

Loc: NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14 and NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, (22-16E), on W. side of Stafford Cr. **Elev:** 4,000 to 5,100 ft. **Access:** 2 $\frac{1}{2}$ mi. by road and 2 mi. by trail up Stafford Cr. **Prop:** Part of a 25-claim block. **Owner:** E. K. Brown, Ellensburg, and A. R. Jordin, Liberty, Wash. (1944). **Ore:** Iron, nickel, chromium. **Ore min:** Magnetite, hematite. **Deposit:** Sedimentary ore along

contact of Swauk formation with serpentine occurs in two areas about ½ mi. apart. Exposed tonnage is 1,650, probable tonnage 3,040, and possible tonnage 62,150. **Dev:** Several old open cuts. **Ref:** 17, pp. 20-23. 90.

Taneum (8)

Loc: On N. Fk. of Taneum Cr., 12 mi. SE. of Easton. **Ore:** Iron. **Deposit:** Said to be a deposit of iron ore 10 ft. thick. **Assays:** Five analyses show an av. of 44.73% Fe, 27.35% SiO₂, 2.79% Mn, 1.20% P, 0.02% S. **Ref:** 48, p. 12. 142, p. 86. 167, pp. 24-25.

Teanaway (3)

Loc: Probably sec. 12, (22-15E), about 3 mi. S. of Mt. Stuart, E. of Teanaway R. **Elev:** 5,000 to 6,000 ft. **Ore:** Iron, nickel, chromium. **Assays:** Av. of 13 analyses shows 50.13% Fe, 11.71% SiO₂, 9.63% Al₂O₃, 0.84% Mn, 1.09% Ni, 1.65% Cr, 0.27% P, no S. **Ref:** 48, p. 11. 142, pp. 84-85.

LINCOLN COUNTY

Davenport Placer

(see under gold, placer)

MASON COUNTY

Brown Mule

(see Triple Trip under manganese)

Triple Trip (1)

(see under manganese)

OKANOGAN COUNTY

Aztec (9)

Loc: NW¼ sec. 24, (40-30E), on Buckhorn Mtn. **Elev:** 5,100 to 5,400 ft. **Access:** 14 mi. from Toroda by Toroda Cr.-Nicholson Cr. road. **Prop:** 1 unpatented claim: Aztec. **Owner:** Henry T. Nelson, Frank Woodworth, G. W. Bartell, and W. O. Miller (1947). **Ore:** Iron. **Ore min:** Pyrrhotite, pyrite, magnetite, chalcopyrite. **Gangue:** Garnet, epidote. **Deposit:** Contact-metamorphic replacement of limestone. **Dev:** Caved shaft, drill holes. **Assays:** Drill hole at elev. 5,278 ft. at depth intervals of 480-490, 539-599, and 894-957 ft. showed 18.6% to 50.6% Fe, 0.01% to 0.07% Cu, 0.2% to 8.7% S, 0.002% to 0.027% P, 11.8% to 25.6% SiO₂, 0.05% to 0.29% TiO₂, tr. to .005 oz. Au, 0.1 to 0.4 oz. Ag. **Ref:** 15. 106, 2/4/32. 142, p. 63. 154, p. 48. 181.

Buckhorn

(see Magnetic)

Controller (26)

(see under copper)

Copper Queen (10)

(see under copper)

Copper World Extension (4)

(see under copper)

Crouse Placer (17)

(see under gold, placer)

Crystal Butte (16)

Loc: SW¼SE¼ and SE¼SW¼ sec. 35, (40-30E), ¼ mi. E. of old Crystal Butte mine, Buckhorn Mtn. area. **Elev:** 4,300 ft. **Access:** 5 mi. by road SE. of Chesaw. **Prop:** Several claims. **Owner:** Mr. Speddon, Seattle, Wash. (1945). **Ore:** Iron, copper. **Ore min:** Pyrrhotite, pyrite, magnetite, chalcopyrite, small amount of scheelite. **Gangue:** Quartzite, argillite. **Deposit:**

Replacement of quartzite and argillite near its contact with syenite. **Dev:** 5 prospect shafts, a 350-ft. adit, 2 trenches total 420 ft. in length, and 3 small open cuts. **Assays:** Chalcopyrite less than 1%. Only a few tons of magnetite in the deposit. **Ref:** 18, pp. 19-22. 37, p. 29. 154, pp. 48-49.

Dutch John (5)

(see under tungsten)

Eureka (24)

(see under zinc)

Finella (3)

Loc: On top of Kruger Mtn., sec. 7, (40-27E) (?), Oroville dist. **Prop:** 9 claims. **Ore:** Iron, silver. **Ore min:** Magnetite. **Dev:** Trenches and an adit. **Assays:** 13.4% to 24.0% Fe, tr. Au, tr. to 1.80 oz. Ag. **Ref:** 158.

Fuller (Pateros, Lone Pine) (6)

Loc: Near center sec. 26, (30-23E), just W. of the nose of the ridge back of Pateros. **Elev:** 2,300 ft. **Access:** 2½ mi. by road from Pateros. **Prop:** 2 claims. Lone Pine Nos. 1 and 2. **Owner:** Leased by S. J. Holden, Cle Elum, Wash., from the A. D. Fuller estate (1949). **Ore:** Iron. **Ore min:** Magnetite, a little chalcopyrite. **Gangue:** Hornblende, actinolite, biotite, calcite, epidote. **Deposit:** Ore is an intimate intermixture of magnetite with hornblende and actinolite. It occurs in veins and thin lenses in a body of hornblende, actinolite, and biotite. Exposure along the strike is 400 or 500 ft. in length and about 50 ft. wide. Sulfides in the zone are associated with quartz. **Dev:** 150 ft. of adits and a quarry. **Assays:** Analysis of better than av. grade ore shows 57.02% Fe, 4.51% SiO₂, 0.05% P₂O₅, 0.097% S, 3.25% TiO₂. A 10-ft. channel sample showed 40.50% Fe, 4.19% Ti, 0.026% P, 0.004% S, 0.02% Cu; and an 18-ft. channel sample showed 24.29% Fe, 3.10% Ti, 0.024% P, 0.038% S, 0.11% Cu. **Prod:** Reportedly 1,000 tons prior to 1943, 1,250 tons in 1943, 1 carload in 1944. **Ref:** 48, p. 14. 111, p. 7. 142, pp. 68-69. 157. 158.

Gold Axe (11)

Loc: About 500 ft. W. of center sec. 24, (40-30E). **Elev:** 4,900 ft. **Access:** ½ mi. by trail S. of Magnetic mine. **Ore:** Iron. **Ore min:** Magnetite, pyrrhotite. **Gangue:** Garnet, epidote, calcite. **Deposit:** Lens-like replacement deposits in limestone. **Dev:** 200-ft. adit, several shafts. **Assays:** \$16.00 to \$42.50 in all values. **Prod:** 6 cars shipped ran \$10 to \$20 per ton. **Ref:** 15. 54, pp. 7-8. 158.

Grant

(see Roosevelt)

Great Western (20)

(see under lead)

Hart Stone

(see Kelsey under copper)

Hidden Treasure (18)

(see under copper)

Home Run (22)

(see under silver)

Iron Cap (23)

Loc: Near W. line sec. 9, (31-30E), Nespelem dist. **Prop:** 1 claim: Iron Cap. **Ore:** Iron. **Ore min:** Limonite, magnetite (?). **Deposit:** Massive to earthy limonite 20 ft. or more in width at the surface, probably an oxidation of primary magnetite. **Ref:** 48, p. 14. 122, p. 83.

Iron Crown (25)

Loc: Near center sec. 10, (31-30E). **Prop:** 1 claim: Iron Crown. **Ore:** Iron (?). **Deposit:** Shaft sunk along the wall of granodiorite porphyry dike. Dike is post mineral and not genetically associated with mineralization. **Dev:** Inclined shaft. **Ref:** 122, p. 83.

Iron Mask

(see Copper World Extension under copper)

Kelsey (2)

(see under copper)

Lodge

(see Dutch John under tungsten)

Lone Pine

(see Fuller)

MacLean

(see Roosevelt)

Magnetic (Buckhorn, Neutral Aztec) (12)

(see also Aztec and see also Number Nine under copper)

Loc: N½ sec. 24, (40-30E), Myers Cr. dist. **Elev:** 5,000 ft. **Access:** 24 mi. by road to railroad at Curlew. **Prop:** 5 unpatented claims: Neutral, Copper Queen, Polaris, Crystal Springs, and No. 9. **Owner:** Keokuk Electro-Metals Co., Keokuk, Iowa (1951). British Columbia Copper Co. (1908). Magnetic Mining Co. (1939-1950). **Ore:** Iron. **Ore min:** Magnetite, pyrrhotite, pyrite, chalcopyrite, scheelite. **Gangue:** Garnet, epidote. **Deposit:** Contact metamorphic replacement of limestone containing an estimated several million tons of iron ore. **Dev:** Open pit 300 ft. long by 50 to 120 ft. wide by 100 ft. deep, an 85-ft. adit, and a 30-ft. tunnel. **Improv:** 2 cabins, 2 bunkhouses, cookhouse, blacksmith shop, compressor, small crusher (1949). **Assays:** A 300-lb. sample across a 30-ft. exposure showed 55.4% Fe, 0.5% Mn, 7.9% SiO₂, 1.4% S, 0.05% P. Some samples assay 80¢ to 85¢ Au. **Prod:** 2,000 tons 1919-1920, 35,550 tons 1937-1944. **Ref:** 15, 37, p. 28. 48, pp. 12-13. 58, p. 11. 97, 1917-1920, 1938, 1940, 1941. 108, 7/39. 111, p. 7. 130, p. 71. 141, p. 69. 142, pp. 61-65. 150, p. 34. 154, pp. 47-48. 158. 168, pp. 92-93. 177. 178. 179, 1949, pp. 12-17. 181.

Mohawk

(see under zinc)

Monterey (13)

(see under copper)

Myers Creek (8)

Loc: SE¼ sec. 23, (40-30E), near bottom of a deep valley, Myers Cr. dist. **Prop:** 2 patented claims. **Owner:** Myers Creek Mining Co. (1911). **Ore:** Iron, copper. **Ore min:** Pyrite, pyrrhotite, some chalcopyrite and magnetite. **Deposit:** Ore mass about 40 ft. wide enclosed in quartzite is composed largely of pyrite and pyrrhotite. **Ref:** 154, p. 47.

Neutral Aztec

(see Magnetic)

Number Nine (14)

(see under copper and see also Magnetic)

Pateros

(see Fuller)

Peerless (1)

(see under copper)

Ramsey (19)

(see under copper)

Rebecca (28)

(see under copper)

Red Bird (27)

(see under copper)

Roosevelt (Grant, MacLean, Teddy Roosevelt) (15)

Loc: Secs. 24 and 25, (40-30E), on NE. slope of Buckhorn Mtn. **Elev:** 4,600 ft. **Access:** Truck roads from both Chesaw and Curlew. **Prop:** 10 unpatented claims and 2 fractions. **Owner:** Mrs. Elise MacLean Dewar, Mrs. Joseph McCarthy, and Roger O. Oscarson, Spokane, Wash. (1945). Grant Consolidated Mining Co. (1907-1924). **Ore:** Iron, copper, gold, silver. **Ore min:** Magnetite, chalcopyrite, pyrite, scheelite. **Gangue:** Garnet, epidote, calcite, quartz, actinolite, titanite. **Deposit:** Contact-metamorphic deposit. **Dev:** 825-ft. lower adit with about 800 ft. of drifts and stopes. Several other short adits and open cuts are caved. **Assays:** 12 cars av. 7% to 9% Cu, \$2 to \$4 Au, \$2 to \$4 Ag. **Prod:** 12 carloads of hand-sorted ore prior to 1912 returned about \$21,000. 2,000 tons magnetite shipped 1919-1920. **Ref:** 15, 33, 1908, p. 737. 37, pp. 28-29. 48, pp. 13-14. 54, p. 7. 58, p. 67. 97, 1907, p. 475; 1908, p. 579. 98, 1920-1925. 105, 1902, p. 347. 111, p. 7. 112, p. 181. 116, no. 8, 1907, p. 14; no. 12, 1907, p. 15; no. 2, 1908, p. 24; no. 3, 1908, p. 60; no 5, 1908, p. 117. 142, pp. 65-67. 154, pp. 44-46. 158. 179, pp. 17-18. 181.

Sherwood

(see Dutch John under tungsten)

Similkameen Falls Placer

(see under gold, placer)

Stone

(see Kelsey under copper)

Strawberry Creek Placer

(see Crouse Placer under gold, placer)

Strawberry Lake (7)

Loc: NE¼SE¼ sec. 7, (40-30E), ½ mi. W. of Strawberry Lk. **Elev:** 4,000 ft. **Access:** 3 mi. by road NW. of Chesaw. **Owner:** William and Theodore Buckley, Chesaw, Wash. (1945). **Ore:** Iron, tungsten. **Ore min:** Magnetite, pyrite, scheelite. **Gangue:** Garnet, quartzite. **Deposit:** Contact replacement of quartzite and limestone. Deposit 165 ft. long and 75 ft. wide with central core of nearly solid magnetite 70 ft. long and 50 ft. wide. **Dev:** 5 shallow prospect shafts, 2 short adits, and several old open cuts. **Assays:** Central core of deposit 80% magnetite. **Prod:** None. **Ref:** 18, pp. 22-24. 37, pp. 29-30.

Teddy Roosevelt

(see Roosevelt)

Texas Creek

(see Dutch John under tungsten)

Twin Pine (21)

(see under zinc)

PACIFIC COUNTY

Beards Hollow Placer (2)

(see under platinum)

Chetlo Harbor (1)

(see also Chetlo Harbor under lode gold)

Loc: Sec. 9, (11-10W), at Chetlo Harbor at the mouth of Naselle R. **Ore:** Iron. **Ore min:** Pyrite. **Deposit:** Said to be a deposit about 3 ft. wide at the surface and extending for 7 mi. **Ref:** 158.

Fort Canby Placer (3)

(see under gold, placer)

McGowan Placer (5)

Loc: SW $\frac{1}{4}$ sec. 22, (9-10W), on N. bank of Columbia R. **Elev:** 6.4 to 11.7 ft. **Access:** Adjacent to U. S. Highway 101 about $2\frac{1}{2}$ mi. E. of Chinook. **Owner:** C. A. McGowan (1947). **Ore:** Iron, titanium, zirconium. **Ore min:** Magnetite, ilmenite, zircon. **Gangue:** Quartz, garnet, feldspar, mica. **Deposit:** Magnetite sand 1.5 to 8 ft. thick (av. 4.5 ft.) extends over an area 2,400 ft. long and 400 ft. wide. **Dev:** Drilling by U. S. Bur. Mines (1944). **Assays:** 25 drill holes show 21.12% to 43.46% Fe, 3.04% to 14.01% TiO₂. A high-grade sample showed 53% magnetite, 18% ilmenite, 1% zircon. **Prod:** None. **Ref:** 48, pp. 14-15. **80. 179, pp. 44-47.**

Sand Island Placer (4)

(see under gold, placer)

PEND OREILLE COUNTY**Berkin**

(see Wolf Creek under lead)

Buzzell

(see Lucky Strike under zinc)

Davenport-Troyer

(see Gem)

Gem (Davenport-Troyer) (5)

Loc: Sec. 21, (39-43E), Metaline dist. **Access:** Road. **Prop:** 6 unpatented claims. **Owner:** Messrs. Troyer and Davenport, Metaline, Wash. (1941). **Ore:** Iron, lead. **Ore min:** Hematite. **Deposit:** Replacement of silicified limestone. **Dev:** 450 ft. of adits and raises. **Prod:** 800 tons of iron ore prior to 1941. **Ref:** 29, p. 43. **58, p. 18.**

Lead Metal (2)

Loc: Secs. 11 and 14, (40-44E), Metaline dist. **Access:** Road. **Prop:** 13 unpatented claims. **Owner:** Phil LaSota, Metaline Falls, Wash. (1941). **Ore:** Iron, lead, zinc. **Deposit:** A replacement deposit of iron with some lead and zinc has been exposed in several open cuts for a length of 800 ft. and width of 4 ft. **Dev:** 15-ft. shaft, numerous open cuts and trenches. **Ref:** 29, p. 61.

Lehigh (7)

Loc: One pit in center E $\frac{1}{2}$ sec. 30, (39-43E), and the other near NE. cor. same section. **Elev:** 3,200, and 2,900 ft. respectively. **Access:** Road. **Owner:** Lehigh Portland Cement Co. (1937). **Ore:** Iron. **Ore min:** Limonite. **Deposit:** Oxidized pyrite bodies. **Dev:** Pits. **Prod:** 1936, 1937. **Ref:** 128, p. 78.

Lucky Strike (3)

(see under zinc)

Red Crown (4)

(see under lead)

Reynolds Creek (9)

(see under copper)

Saddle (1)

(see under zinc)

Troyer

(see Gem)

Washington (6)

(see under lead)

Washington Rock

(see Washington under lead)

Wolf Creek (8)

(see under lead)

SKAGIT COUNTY**Eagle (1)**

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Assays:** 58.00% Fe, 4.13% Mn, 7.00% SiO₂. **Ref:** 13, pp. 45, 48.

Fairhaven (2)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Magnetite, hematite. **Deposit:** Ore minerals occur as a band in glaucophane schist. **Ref:** 142, p. 99.

Hamilton (Iron Mountain) (3)

Loc: Secs. 23 and 24, (35-6E) and sec. 30, (35-7E). Also eastward in secs. 20 and 21, (35-7E). **Elev:** 100 to 900 ft. **Access:** Road and logging railroad. **Prop:** At least 20 claims, among them the Hamilton, Mayflower, Blue Jay, Last Chance, Fairhaven, Washington, Inaugural, Scottish Chief, Manhattan, Helena, Treadwell, Legal Tender, Parnell, and Keystone. **Owner:** Dewey Smith and Fred Russell (1943). **Ore:** Iron, manganese. **Ore min:** Hematite, magnetite. **Gangue:** Glaucophane-garnet schist. **Deposit:** Discontinuous beds or lenses in fine-grained glaucophane-garnet schist of pre-Chuckanut age. Five more or less parallel beds are known in the 6 mi. between Hamilton and Birdsvew. Beds from a few ft. to 30 ft. in thickness. Known tonnage 20,000. **Dev:** Old openings now inaccessible. Considerable trenching by the W. P. A. in 1939. **Assays:** Av. composition from 15 analyses: 37.79% Fe, 24.73% SiO₂, 6.01% Al₂O₃, 6.56% CaCO₃, 9.75% Mn₂O₃, 0.49% P, 0.16% S. **Prod:** About 5,000 tons mined. **Ref:** 13, p. 41. **48, p. 15. 63, pp. 18-21. 72, p. 32. 111, p. 7. 130, p. 70. 140, pp. 6, 9, 16, 19-25. 141, pp. 66-67. 142, pp. 95-102. 158. 167, pp. 27-29. 177. 178. 179, pp. 27-36.**

Iron Mountain

(see Hamilton)

Katie (4)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Assays:** 62.00% Fe, 3.00% Mn, 6.50% SiO₂, tr. S, tr. P. **Ref:** 13, pp. 42, 45.

Last Chance (5)

Loc: Secs. 23 and 24, (35-6E), Hamilton area. **Ore:** Iron. **Ore min:** Hematite, magnetite. **Gangue:** Quartz, glaucophane, garnet. **Deposit:** 10-ft. bed. **Assays:** 60.00% Fe, 7.03% SiO₂, 0.04% S, tr. P. **Ref:** 13, p. 41. **142, p. 99.**

Mabel (6)

Loc: Hamilton area. **Ore:** Iron. **Deposit:** 14-ft. bed traceable on the surface for 2,000 ft. **Ref:** 13, p. 41.

Mayflower (7)

Loc: Secs. 23 and 24, (35-6E). **Ore:** Iron. **Ref:** 142, pp. 96-99.

O'Toole (8)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite, magnetite. **Deposit:** Bodies of ore 15 to 60 ft. thick reported. **Assays:** Av. of 7 analyses: 54.45% Fe, 9.77% SiO₂, 0.155% S, 0.0557% P. **Ref:** 13, pp. 41, 44.

Pittsburg (9)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Gangue:** Quartz. **Assays:** 29.11% to 32.92% Fe, 28.05% to 32.46% SiO₂, 0.20% to 0.31% P, 8.43% to 8.56% Al, 8.11% to 13.11% Mn, 6.71% to 8.06% Ca. **Ref:** 140, p. 24.

Puget (10)

Loc: Hamilton area. **Prop:** 6 claims. **Owner:** Seattle Manganese Iron Co. (1892). **Ore:** Iron. **Ore min:** Hematite. **Assays:** Av. of 6 analyses: 52.33% Fe, 11.38% SiO₂, tr. S. **Ref:** 13, p. 41.

Scottish Chief (11)

Loc: Secs. 23 and 24, (35-6E), Hamilton area. **Ore:** Iron.
Ref: 142, pp. 96-99.

Tacoma (12)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Deposit:** 20-ft. bed. **Assays:** 58.13% Fe, 4.12% SiO₂, 0.19% S, 0.06% P. **Prod:** 20 tons shipped to Irondale smelter. **Ref:** 13, pp. 43-44, 47. 63, p. 53.

Tennessee No. 3 (13)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Assays:** 42.90% Fe, 2.00% Mn, 21.93% SiO₂. **Ref:** 13, p. 48.

Treadwell (14)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Gangue:** Quartz. **Ref:** 140, p. 21.

Tyee (15)

Loc: Hamilton area. **Ore:** Iron. **Ore min:** Hematite. **Assays:** 63.07% Fe, 7.03% SiO₂. **Ref:** 13, pp. 44, 47.

Washington (16)

Loc: Secs. 23 and 24, (35-6E), Hamilton area. **Ore min:** Hematite, magnetite. **Gangue:** Glauconite schist. **Assays:** 56.72% Fe, 5.94% SiO₂, 0.03% S, 0.07% P. **Ref:** 13, pp. 44, 47. 142, p. 99.

NOHOMISH COUNTY

Arlington (2)

Loc: SW ¼ sec. 20, (32-6E), N. of Arlington. **Owner:** Gerald A. Royce, Seattle, Wash. (1952). **Ore:** Iron. **Deposit:** Bog ore. **Ref:** 158.

Big Four

Loc: On N. slope of Big Four Mtn. **Owner:** F. E. Wing, Tacoma, Wash. (1952). **Ore:** Iron. **Ore min:** Magnetite, hematite. **Deposit:** Exposure 500 ft. wide of ore similar in appearance to the Cle Elum R. iron. **Ref:** 158.

Blue Stone (8)

Loc: NW ¼ sec. 4, (28-10E), Sultan Basin dist. **Access:** On small tributary of Elk Cr. about 3 mi. SE. of its confluence with the N. Fk. of Sultan R. **Prop:** 1 unpatented claim. **Owner:** C. F. Smith and Vance Curtiss (1943). **Ore:** Iron. **Ore min:** Magnetite, pyrite, specular hematite. **Gangue:** Actinolite. **Deposit:** Narrow lens-shaped contact-metamorphic deposit about 50 ft. long in quartzite and schist. **Ref:** 23, p. 74.

Coe (4)

Loc: Sec. 36, (32-5E). **Access:** 1½ mi. by road from railroad at Arlington. **Prop:** Deeded property. **Owner:** C. H. Tracey and Geo. Murphy, Arlington, Wash. (1938). F. O. Coe (1922). **Ore:** Iron. **Ore min:** Limonite, bog iron. **Deposit:** Ore is 2½ to 3 ft. thick and covers an area of about 2 to 3 acres. Est. 10,000 to 15,000 tons of ore in sight. **Ref:** 14, p. 13. 48, p. 16. 142, p. 103.

Darrington (5)

Loc: SW ¼ sec. 5 and NW ¼ sec. 8, (31-10E), Darrington dist. **Elev:** 1,600 ft. **Access:** 1½ mi. by trail from the Clearwater Guard Station. **Prop:** 2 claims: Iron Range Nos. 1 and 2. **Owner:** W. E. Gustafson, Sedro Woolley, Wash. (1943). **Ore:** Iron. **Ore min:** Magnetite, pyrite. **Gangue:** Quartz. **Deposit:** 7 outcrops of iron ore are exposed over a distance of 850 ft. Ore is bedded deposit of magnetite 8 to 10 ft. thick interbedded with schist and phyllite. Ore is cut by pyrite-bearing quartz stringers and veins in places. **Assays:** Much of the ore contains 40% Fe or more. **Ref:** 14, p. 8. 48, p. 17. 158.

Florence-Rae (9)

(see under copper)

Florence Rae (Rudebeck-Florence Rae) (7)

(see under copper)

Jefferson (3)

Loc: NW ¼ NE ¼ sec. 29, (32-6E), 4 mi. NE. of Arlington. **Elev:** About 100 ft. **Access:** 4 mi. by road to railroad at Arlington. **Prop:** Farm land. **Owner:** Harold G. Miller, Arlington, Wash. (1938). Thomas Jefferson (1922). **Ore:** Iron. **Ore min:** Limonite. **Deposit:** Bog iron 2½ to 3 ft. thick covers 30 acres. Only a small tonnage available. **Dev:** Open pits. **Assays:** 51% Fe, 4.93% SiO₂, 0.02% S. **Prod:** Ore removed from 3 or 4 acres (6,000 tons). **Ref:** 14, p. 13. 48, pp. 16-17. 63, pp. 23-25. 105, 8/06, p. 223. 142, p. 103.

Lockwood Pyrite (6)

Loc: NE ¼ sec. 36, (29-8E), Sultan dist. **Elev:** 1,700 to 2,350 ft. **Access:** Reached from Sultan by way of Olney Cr. road for 4½ mi., thence by Blue Mtn. road and old logging road for 5 mi., thence E. by trail for 3 mi. **Prop:** 160 acres held under State land lease by Thomas P. Rook and John R. Allen, Seattle, Wash. (1951—). Formerly leased by A. H. Brueggeman and associates, Seattle, Wash. (1943-1951). Joseph F. Koehler, Everett, Wash., claims the same property by virtue of staked claims. (1943). **Ore:** Iron, sulfur, gold, silver. **Ore min:** Pyrite, pyrrhotite, sphalerite. **Gangue:** Quartz, sericite. **Deposit:** Some 3,500,000 tons of ore to a depth of 500 ft. in 3 tabular bodies, totaling more than 3,000 ft. in length, 1 to 75 ft. thick in metamorphic rock. **Dev:** 1 adit about 210 ft. long and about 35 open cuts, pits, and trenches. **Assays:** Assays on more than 150 samples from 5 to 52 ft. in length show 10% to 43% Fe, 9% to 46% S. Av. of 75 analyses shows 25% Fe, 25.6% S. Other analyses show 0.05 to 0.20 oz. Au, 0.40 to 0.90 oz. Ag. **Ref:** 14, p. 49. 23, pp. 79-86. 46, pp. 169-170. 158. 179, pp. 37-41.

Pilchuck Creek (1)

Loc: T. 32 N., R. 5 E., along Pilchuck Cr., about 6 mi. NW. of Arlington. **Ore:** Iron, titanium. **Ore min:** Magnetite, rutile. **Deposit:** Basal sediments of the Chuckanut formation. Low-grade ore covers large area. **Dev:** Shallow pits. **Ref:** 14, p. 13. 48, p. 17.

STEVENS COUNTY

Bechtol (8)

(see under lead)

Bechtol Iron

(see Idler)

Big Iron (1)

Loc: SW ¼ SW ¼ sec. 24, (40-37E), on E. side of Sulphide Mtn., Orient dist. **Elev:** 3,750 ft. **Access:** 14 mi. by road to railroad at Orient. **Prop:** 9 claims. **Owner:** W. Lon Johnson and associates, Colville, Wash. (1952). Northwest Magnesite Co. (1926). Big Iron Mining Co. (1897-1933). **Ore:** Iron, tungsten, gold, silver. **Ore min:** Magnetite, pyrite, pyrrhotite, chalcopyrite, scheelite, hematite, limonite. **Gangue:** Limestone, quartzite. **Deposit:** Elongate replacement zone in limestone and quartzite 480 ft. long, 130 ft. wide, 45 ft. deep. Ore occurs in bands separated by quartzite. **Dev:** Open pit 200 ft. by 100 ft. by 25 ft. deep, 2 short shafts, several caved shafts, 5 long trenches, several open cuts. **Assays:** Handpicked ore shipped av. about 56% Fe. 35,000 tons produced av. 80% iron oxide. **Prod:** 35,000 tons of magnetite ore from 1924 to 1937. Produced also 1940-1941. **Ref:** 7, pp. 82-83. 18, pp. 7-12. 30,

p. 118. 37, p. 64. 48, p. 21. 63, p. 106. 97, 1926-1931, 1934-1941. 111, p. 7. 114, no. 5, 1909. 158. 164, p. 275. 179, pp. 19-20.

Bill Nye (28)

Loc: Secs. 16 and 20, (31-39E), Chewelah dist. **Owner:** Gopher Mining Co., St. Paul, Minn. **Ore:** Iron. **Ref:** 158.

Brown (30)

Loc: N. center sec. 19, (31-39E), near the Crosby magnesite deposit. **Access:** Road to the Crosby Camp. **Prop:** 1 claim: Boise. **Owner:** J. Richard Brown, Spokane, Wash. (1944). **Ore:** Iron. **Ore min:** Hematite, martite. **Deposit:** Compact slaty hematite ore of high grade lying between dolomite and slate. Ore body is 15 ft. thick and exposed for 75 ft. **Dev:** Shallow surface pits. **Ref:** 158.

W. J. Bryan

(see Bechtol under lead)

Burrus (15)

Loc: Sec. 10, (37-40E), high on mountain. **Prop:** 8 unpatented claims. **Owner:** Abandoned (1941). **Ore:** Iron. **Ore min:** Magnetite. **Dev:** Location work only. **Ref:** 30, pp. 97-98.

Cannon (25)

Loc: NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, (31-38E), on crest of the Huckleberry Mtns. on second peak N. of the lookout station. **Elev:** 5,700 ft. **Owner:** Earl Cannon, Chewelah, Wash. (1944). **Ore:** Iron. **Ore min:** Hematite. **Gangue:** Quartzite. **Deposit:** A bed of hematite 6 in. thick interbedded with quartzite. Grade of ore is good, but quantity is too limited for commercial use. **Dev:** Open cut. **Ref:** 158.

Capital

(see Kulzer)

Chapman (18)

Loc: SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, (35-40E), Colville dist. **Owner:** R. F. Chapman, Colville, Wash. (1943). **Ore:** Iron. **Ore min:** Pyrite, pyrrhotite. **Gangue:** Quartz. **Deposit:** Sample submitted to the Division of Mines and Geology consisted largely of pyrite and pyrrhotite. Said to be a 50-ft. ledge or seam of this material. **Ref:** 158.

Chloride Queen (16)

(see under lead)

Clay (31)

(see also Hill)

Loc: Near center sec. 14, (31-38E). **Prop:** Part of Hill group. **Ore:** Iron. **Ore min:** Hematite, limonite, martite. **Deposit:** Iron-rich beds less than 4 ft. thick interbedded with metasediments. **Ref:** 158.

Colville Queen

(see Chloride Queen under lead)

Conners (34)

Loc: SW $\frac{1}{4}$ sec. 16 and NW. cor. sec. 21, (29-37E). **Elev:** 2,400 ft. **Access:** 8 mi. S. of Fruitland by road. **Prop:** State land. **Owner:** S. J. Conners leasing from State (1944). **Ore:** Iron. **Ore min:** Magnetite, limonite. **Gangue:** Limestone, chert. **Deposit:** Exposed lens of magnetite ore 8 ft. thick, 15 ft. wide, and 120 ft. long. Ore occurs as a replacement of limestone near intrusive granite. Ore body may be 10 ft. by 50 ft. by 350 ft. **Dev:** 8-ft. prospect shaft, caved adit, 4 open cuts. **Assays:** An est. 20,000 tons of 40% magnetite ore. **Prod:** None. **Ref:** 18, pp. 16-19.

Copper King (14)

(see under lead)

Deer Lake (23)

Loc: NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, (30-41E), on ridge extending NW. from Deer Lk. **Ore:** Iron. **Ore min:** Hematite. **Deposit:** Quartz vein at least 50 ft. wide and extending for at least 1 mi. NW. of Deer Lk. contains irregular fillings of hematite. No commercial ore in sight. **Dev:** Open cut. **Assays:** Hematite constitutes about 1% of the rock on the dump. **Ref:** 158.

Deer Lake Road (24)

Loc: SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, (30-41E), adjacent to and on E. side of the road to Deer Lk. **Access:** On road 4 mi. N. of Loon Lk. **Ore:** Iron. **Ore min:** Siderite, hematite. **Deposit:** Large quartz vein in which are crystals and bunches of siderite largely altered to hematite. Noncommercial occurrence. **Dev:** Open cut. **Ref:** 158.

Dunn Mountain

(see Taylor)

Electric Point (10)

(see under lead)

Gladstone (11)

(see under lead)

Grannis

(see Iron Duke-Iron Duchess)

Hill (Iron Jack) (29)

(see also Clay)

Loc: SE $\frac{1}{4}$ sec. 17 and NW $\frac{1}{4}$ sec. 20, (31-39E), about 9 mi. W. of the town of Valley. **Elev:** 3,050 ft. **Access:** Road. **Prop:** At least 14 patented claims: Hilltop, Iron Cup, Ash, Oak, Tamarack, Big Iron, Iron King, Iron Queen, Iron Hill, Iron Jack, Jackpot, Slay, Jackson, Bill Nye. **Owner:** J. J. Hill estate, St. Paul, Minn. (1941). **Ore:** Iron. **Ore min:** Hematite, magnetite, martite. **Gangue:** Calcite, quartzite. **Deposit:** Ore minerals occur in fractured and metamorphosed dolomite, probably as replacements. Also hematite interbeds in quartzite. It is reported that diamond drill holes revealed 4 veins of hematite, each about 14 ft. wide and running 62% Fe, 5% SiO₂. **Dev:** Extensive old workings, now caved. Also some diamond drilling. **Assays:** 68.57% Fe, 1.69% SiO₂, 0.024% P, 0.006% S. **Ref:** 30, p. 48. 48, p. 18. 141, pp. 67-68. 142, pp. 40-43. 158.

I. X. L. (3)

Loc: Sec. 11, (39-37E), Colville area. **Ore:** Iron. **Ore min:** Limonite, hematite. **Deposit:** Ore occurs as small irregular bodies in limestone. **Dev:** 2 adits, 60-ft. shaft at face of lower one. **Assays:** 50.48% to 56.58% Fe, 4.49% to 14.90% SiO₂, 2.00% to 2.48% Al₂O₃, 0.32% S, 0.30% to 0.31% P. **Ref:** 140, pp. 37-38. 142, pp. 46-47, 57.

Idler (Bechtol Iron, Tye) (13)

Loc: Sec. 27, (39-41E), on the W. side of Deep Lk., Northport dist. **Elev:** 2,850 ft. **Prop:** 1 claim: Idler. **Owner:** David Bechtol and Firmer Walkley (1941). **Ore:** Iron. **Ore min:** Limonite. **Gangue:** Limestone. **Deposit:** Irregular ore body in limestone. It is 6 to 25 ft. wide and traceable for 1,000 ft. along its outcrop. Limonite is a surface alteration of siderite. **Dev:** Adits and open cuts. **Prod:** 300 tons of iron ore. **Ref:** 21, 30, p. 92. 48, p. 19. 73, p. 99. 141, p. 68. 142, pp. 48-50.

Iron Duchess

(see Iron Duke-Iron Duchess)

Iron Duke-Iron Duchess (Grannis) (32)

Loc: Center and SW $\frac{1}{4}$ sec. 9, and NW $\frac{1}{4}$ sec. 16, (30-38E), Deer Trail dist. **Access:** $\frac{1}{4}$ mi. S. by trail from a point 4.3 mi. NE. on Cleveland mine road from the Hunters-Springdale road. 18 mi. from railroad at Springdale. **Prop:** 3 patented claims:

Iron Duke, Duke's Daughter, Duchess. **Owner:** H. J. Grannis, Duluth, Minn. (1941-1949). **Ore:** Iron. **Ore min:** Hematite. **Deposit:** Lens of sedimentary hematite 300 to 400 ft. long and up to 10 ft. thick enclosed in argillite which is a red-bed that can be traced for several miles. **Dev:** 75-ft. shaft, open cuts. **Assays:** Owner reports a specimen showed 62.03% Fe, 0.014% P, 0.019% S. **Ref:** 30, p. 70. 157.

Iron Horse (2)

Loc: Near SW. cor. sec. 28, (40-37E), Orient dist. **Access:** About 300 ft. by trail N. of the Pierre Cr. road from a place ½ mi. E. of the Pierre Lk.-Gilbert Lk. road junction. **Ore:** Iron, copper, gold. **Ore min:** Magnetite, pyrrhotite, pyrite, chalcopyrite. **Deposit:** Ore minerals occur as narrow stringers and pods in limestone. Several hundred tons of ore on the dump. Dip needle showed no deflection, indicating small deposit. **Dev:** Open cut, shaft reportedly 75 ft. deep. **Improv:** Cabin (1940). **Ref:** 116, no. 3, 1909, p. 64. 158.

Iron Jack

(see Hill)

Iron Tunnel

(see Thompson)

Keystone (McDonald) (12)

Loc: Secs. 17 and 20, (39-42E), 4 mi. E. of Leadpoint. **Access:** 14 mi. by road from railroad at Boundary. **Prop:** 5 unpatented claims. **Owner:** C. R. McDonald, Northport, Wash. (1941). **Ore:** Iron, lead, silver. **Ore min:** Limonite, galena, hematite. **Deposit:** Said to be ore chimneys similar to those at the Electric Point mine, in which is galena carrying small values in silver. **Dev:** 650 ft. of workings mostly in small shafts and open cuts. **Improv:** Cabin (1941). **Assays:** Lead ore shipped said to have run 72% to 80% Pb, 2 oz. Ag. Iron ore av. 57% Fe. **Prod:** A few tons of high-grade lead ore prior to 1941. Iron ore shipped for use in portland cement 1936-1940. **Ref:** 30, p. 103. 97, 1937-1941. 158.

Kulzer (Capital, Vigilant) (21)

Loc: Secs. 20 and 21, (31-41E), Chewelah dist. **Elev:** 2,200 ft. **Access:** 6 mi. by road from railroad at Valley. **Prop:** 4 claims: Vigilant, Capital, Climax, Ninety-eight. **Owner:** Leased by Three Peaks Mining Co., Salt Lake City, Utah (1951-1952). Mike Kulzer, Valley, Wash. (1910-1949). **Ore:** Iron. **Ore min:** Limonite, hematite. **Gangue:** Dolomitic limestone. **Deposit:** Irregular limonite-hematite bodies in limestone at its contact with granite. Ore zone from a few to 30 ft. wide and traceable for 500 ft. Ore also occurs at contact of limestone with overlying basalt. **Dev:** 15 adits, open cuts, and pits. **Assays:** Ore shows on analysis: 53.56% Fe, 8.45% SiO₂, 0.14% P, 0.004% S. **Prod:** About 7,000 tons produced prior to 1914 was used at Tacoma smelter as flux. Small production in 1921. Total of 12,000 tons reported. **Ref:** 12, p. 80. 13, p. 125. 30, p. 46. 48, pp. 17-18. 58, p. 71. 111, p. 7. 112, p. 156. 130, p. 71. 140, pp. 38-39. 141, p. 67. 142, pp. 37-40. 157. 158. 164, pp. 186-187. 167, pp. 31-32.

Lenna's Luck (Lenore's Luck) (17)

Loc: Near center sec. 30, (35-38E), about 300 ft. down the SW. slope of the ridge. **Prop:** 4 unpatented claims. **Owner:** Mrs. Lenore Marty, Kettle Falls, Wash. (1941). **Ore:** Iron. **Ore min:** Earthy and specular hematite. **Deposit:** 2 beds of iron ore in quartzite have a max. thickness of 6 in. and are separated by 6 in. of quartzite. Noncommercial quantity of ore exposed. **Dev:** 5-ft. pit. **Assays:** High-grade ore. **Ref:** 30, p. 59. 158.

Lenore's Luck

(see Lenna's Luck)

Loon Lake (22)

Loc: SE¼ sec. 28, (31-41E), on S. slope of mountain N. of Loon Lake Copper mine. **Access:** Truck road within 300 ft. of workings. **Ore:** Iron. **Ore min:** Hematite, limonite. **Deposit:** A quartz vein 6 ft. wide in argillite and quartzite contains seams of hematite and limonite as much as 5 in. wide. Noncommercial deposit. **Dev:** Several open cuts. **Assays:** Iron constitutes less than 10% of the vein. **Ref:** 158.

Lucile (7)

Loc: Sec. 19, (40-39E), Northport dist. **Access:** 1 mi. from road. **Prop:** 1 unpatented claim. **Owner:** Ben Hofer and associates, Northport, Wash. (1941). **Ore:** Iron. **Ore min:** Hematite (?). **Deposit:** Said to be "dike" of hematite about 6 ft. in av. width. **Dev:** 8-ft. shaft (caved 1941). **Ref:** 30, pp. 104-105.

McDonald

(see Keystone)

McKale (20)

Loc: NW¼ sec. 19, (32-40E), on W. side of Buck Canyon, Chewelah dist. **Elev:** 2,550 ft. **Access:** Road. **Prop:** 80 acres of deeded land. **Owner:** Messrs. Kulzer and Woodbury, Valley, Wash. **Ore:** Iron. **Ore min:** Hematite. **Gangue:** Quartz. **Deposit:** Quartzite, and siliceous limestone in which is said to be a 2-ft. vein of hematite. **Dev:** Adit caved 40 ft. from portal. **Ref:** 30, p. 45. 164, p. 187.

Mally (26)

Loc: W½ sec. 11, (31-38E), SW. of the 5,814-ft. peak in the Huckleberry Mtns. **Elev:** 4,400 ft. **Access:** 1 mi. by trail from end of old logging road just N. of the summit on the Cedonia-Blue Cr. road. **Owner:** Joe Mally (1944). **Ore:** Iron, reportedly chromium. **Ore min:** Hematite, martite, magnetite. **Gangue:** Quartzite. **Deposit:** A bed of hematite-rich argillite or quartzite interbedded with quartzite. Bed has a max. thickness of 20 ft. and is exposed discontinuously for a distance of a mile. **Dev:** 20-ft. trench. **Assays:** Sample from the 20-ft. trench reportedly assayed 35% Fe, 1% Cr. **Ref:** 158.

Marcus

(see under gold, placer)

Mullen Iron (6)

Loc: Sec. 12, (37-37E). **Access:** Near road. **Prop:** 40 acres of deeded land. **Owner:** Mr. Mullen, Chewelah, Wash. (1941). **Ore:** Iron, gold. **Ore min:** Pyrrhotite. **Dev:** Caved adits. **Assays:** Said to carry small values in gold. **Ref:** 30, p. 78.

Napoleon (5)

Loc: NW¼ sec. 3, (37-37E), Orient dist. **Elev:** 2,350 to 2,600 ft. **Access:** 2 mi. by road from railroad at Boyds. **Prop:** 2 patented claims. **Owner:** Ideal Cement Co., Spokane, Wash. (1955—). P. Burns & Co. (1904-1905). British Columbia Copper Co. (1905-1916). Spokane-Portland Cement Co., Spokane, Wash. (1943-1954). **Ore:** Iron, copper, gold. **Ore min:** Pyrrhotite, pyrite, magnetite, chalcopyrite, limonite, a little hematite. **Gangue:** Amphibole, garnet, calcite. **Deposit:** Amphibolite intruded by monzonite porphyry is host of the ore minerals. Contact deposit developed to width of 300 ft., length of 700 ft., and depth of 250 ft. Ore in lower workings is primary sulfides and at upper workings is mostly iron oxide. **Dev:** 1,230 ft. of surface work, 1,100 ft. of underground work, diamond drilling. Production is from open pit (1952). **Assays:** Run-of-mine ore said to contain approx. 33% Fe, 12% S, 10% CaO, 30% SiO₂, 0.3% Cu, 0.05 to 0.1 oz. Au, tr. Ag. **Prod:** 1907-1910, 1913-1917, 1938-1955. **Ref:** 7, pp. 89-91. 30, pp. 85-86. 33, 1907, pp. 391-392; 1908, p. 413. 48, p. 20. 97, 1907-1910, 1913-1917, 1938-1940. 104, 8/30/32, p. 29. 114, no. 5, 1909, pp.

60-61. 116, no. 9, 1907, p. 17. 133, p. 39. 142, pp. 55-56. 158. 164, pp. 293-294. 179, pp. 20-22.

Northwest Magnesite (27)

Loc: SW $\frac{1}{4}$ sec. 3, (31-39E), on S. side of Huckleberry Cr. **Elev:** 3,000 ft. **Access:** Road from Keystone quarry. **Owner:** Northwest Magnesite Co., Chewelah, Wash. (1944). **Ore:** Iron. **Ore min:** Limonite and a little hematite and magnetite. **Gangue:** Quartzite. **Deposit:** Beds of ferruginous quartzite from 1 to 12 in. thick constitute a stratigraphic unit 10 to 15 ft. thick. Grade and quantity too low for commercial use. **Ref:** 158.

Pittsburg

Loc: Stevens County. **Ore:** Iron. **Ref:** 105, no. 4, 1904, p. 70.

Read (33)

Loc: N $\frac{1}{2}$ sec. 14, (30-37E), Deer Trail dist. **Elev:** 2,700 ft. **Access:** E. end of property crossed by the old Fruitland-Springdale road. **Prop:** 2 claims: Granite, Magnetite. **Owner:** J. W. Glasgow and Henry Becker, Hunters, Wash. (1944). **Ore:** Iron, copper. **Ore min:** Magnetite, chalcopyrite, scheelite. **Gangue:** Calcite, wollastonite, tremolite, garnet, ludwigite, fluorite. **Deposit:** Contact-metamorphic replacement of limestone. Deposit from a few in. to possibly 40 ft. wide, 3,000 ft. long. **Dev:** 5 shallow prospect shafts, 2 short adits, several open cuts. The 2 adits and 3 of the shafts are caved. **Assays:** Magnetite constitutes up to 80% of the body in places, but taken as a whole it is low grade. **Prod:** A few tons have been smelted. **Ref:** 18, pp. 12-16. 30, p. 63. 37, pp. 72-73. 48, pp. 18-19. 142, pp. 43-46. 158.

Scotia (4)

(see under copper)

Silver King

Loc: Valley dist. **Ore:** Iron. **Ore min:** Hematite and some magnetite. **Deposit:** Veins and bedded deposits principally in limestone and porphyry. **Assays:** 67.56% to 68.10% Fe, 1.12% to 1.66% SiO₂, 0.25% to 0.38% S. **Ref:** 140, pp. 36, 38.

Taylor (Dunn Mountain) (19)

Loc: Near NE. cor. sec. 31, (33-39E), on SE. slope of Dunn Mtn. in small valley. **Elev:** 3,000 ft. **Access:** 1 $\frac{1}{2}$ mi. by road from the Mill Cr. road at a place 6 mi. W. of Addy. **Prop:** Deeded land. **Owner:** Charles Taylor, Chewelah, Wash. (1944). **Ore:** Iron. **Ore min:** Hematite, magnetite, martite. **Gangue:** Quartzite. **Deposit:** Several thin iron-rich beds in quartzite; the thickest is about 10 in. Noncommercial quantity of ore. **Dev:** Several trenches. **Assays:** Fair grade of ore but high in silica. **Ref:** 158.

Thompson (Iron Tunnel) (9)

Loc: E $\frac{1}{2}$ sec. 23, (39-41E), at NE. end of Deep Lk. **Elev:** 3,075 ft. **Access:** 14 mi. by road from railroad at Northport. **Prop:** 6 claims: Iron Rich, Iron Farm, Iron State, Iron Tunnel, Iron Slope. **Owner:** S. J. Morin, Spokane, Wash. (1949-1952). **Ore:** Iron. **Ore min:** Limonite, goethite, turgite. **Deposit:** Limonite occurs as vein in dolomite. It is 3 $\frac{1}{2}$ to 60 ft. wide and continuous for 800 ft. A continuation of the vein has an av. width of 10 ft. and is traceable for 1,000 ft. **Dev:** 85-ft. adit, numerous pits and trenches. **Assays:** 16 representative samples from an av. width of 17.8 ft. showed an av. of 53.78% Fe, 0.155% P, 4.22% insol., 0.04% Mn, 0.1% Pb, 0.1% Zn, 0.5% S, 0.04% Ti. **Prod:** 1941. **Ref:** 30, p. 97. 48, p. 20. 73, pp. 97-98. 141, pp. 68-69. 142, pp. 51-54. 150, p. 40. 158.

Tyee

(see Idler)

Vigilant

(see Kulzer)

Wolfley (35)

Loc: SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, (29-37E). **Access:** 8 $\frac{1}{2}$ mi. SE. of Hunters by road. **Prop:** State land lease. **Owner:** Conrad Wolfley (1944). **Ore:** Iron. **Ore min:** Magnetite, limonite. **Gangue:** Granite, limestone. **Deposit:** Ore body about 2 ft. thick along the contact of granite and limestone is exposed in 4 places. Ore can be traced magnetically for only 200 ft. Ore body too small for commercial use. **Ref:** 158.

Woohaa

(see Bechtol under lead)

THURSTON COUNTY

St. Clair Lake (Talcott) (1)

Loc: SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, (17-1E), on shore at southernmost tip of Lk. St. Clair. **Elev:** 75 ft. **Access:** 400 yd. of private road from the Olympia-Yelm highway at a place 9 mi. E. of Olympia. **Owner:** Noyes Talcott, Olympia, Wash. (1920—). **Ore:** Iron. **Ore min:** Limonite (bog iron). **Deposit:** Av. 4 ft. in thickness and is roughly 450 ft. long and 300 ft. wide. Contains 7,600 tons above the swamp border. **Assays:** One analysis shows 54.05% Fe₂O₃, 14.90% SiO₂, 7.25% Al₂O₃, 2.80% organic matter, 18.20% moisture. **Prod:** Small amount mined for mineral pigment. **Ref:** 58, p. 21. 158.

Talcott

(See St. Clair Lake)

WHATCOM COUNTY

Bellingham Placer

Loc: Bellingham area. **Ore:** Iron, gold. **Ore min:** Magnetite, hematite, limonite. **Deposit:** Samples of black sand tested by the U. S. Geological Survey. **Assays:** Two samples tested. One carried 1,978.6 lb. per ton of magnetite and hematite, the other 1,427.0 lb. per ton of limonite. Each carried tr. Au. **Ref:** 38, p. 156.

Church Mountain (3)

Loc: Approx. sec. 35, (40-7E) and southward. **Elev:** 1,300 ft. plus. **Access:** 4 mi. from the railroad at Glacier. **Ore:** Iron. **Ore min:** Hematite. **Deposit:** Impure hematite ore occurs on and in fossiliferous (probably Mesozoic) sediments. Ore formed by the dehydration of clayey and sandy limonite, and in part by surficial concentration of iron oxide derived from ferruginous sandstone. **Ref:** 48, pp. 21-22. 111, p. 7. 158. 179, pp. 51-52.

Hematite

(see Sumas Mountain)

Herringa

(see Sturman and Herringa)

Jim Mountain (5)

Loc: Said to be on Jim Mtn., possibly in sec. 9, (38-17E). **Access:** Said to be reached from Slate Cr. road by 5 mi. of trail up Canyon Cr. **Owner:** W. E. Gamble, Seattle, Wash. (1942). **Ore:** Iron. **Ore min:** Pyrrhotite. **Deposit:** Said to be 3 massive veins of pyrrhotite 12, 6, and 4 ft. wide. **Assays:** Samples spectrographed showed 70% to 80% FeS₂. **Ref:** 158.

Ruth Mountain Pyrite (4)

Loc: On Ruth Mtn., approx. in secs. 17 and 20, (39-10E), Mt. Baker dist. **Elev:** 2,500 to 6,600 ft. **Access:** Trail from Ruth Cr. road. **Owner:** Abandoned (1949). **Ore:** Iron, gold. **Ore min:** Pyrite. **Deposit:** Said to be four veins; one on top

of the mountain 30 ft. wide, one halfway down 15 ft. wide, one nearly down 20 ft. wide, and one near the river 10 to 15 ft. wide. **Dev:** Short crosscut adit on 15-ft. vein. **Assays:** Reportedly \$0.28 to \$176.00 Au. **Ref:** 158.

Sturman and Herringa (1)

Loc: Secs. 8 and 17, (40-3E), near Lynden. **Elev:** 100 ft. **Prop:** Farm land. **Owner:** Thomas Herringa and Mr. Sturman. **Ore:** Iron. **Ore min:** Limonite (bog iron). **Deposit:** Typical of several bog deposits in the vicinity of Bellingham, Ferndale, and Lynden. The Sturman deposit covers an acre or so to an av. depth of 2 ft. The Herringa deposit may cover 5 acres and varies in thickness from 0 to 2 or 3 ft. **Assays:** 39.67% Fe, 19.43% SiO₂, 0.153% P, 0.013% S. **Ref:** 48, p. 22. 142, pp. 103-104. 158. 179, pp. 42-43.

Sumas Mountain (Hematite) (2)

Loc: Sec. 2, (39-4E) and sec. 35, (40-4E), on W. slope of Sumas Mtn. **Elev:** 700 to 1,600 ft. **Access:** ½ mi. by trail. **Prop:** 7 claims known as the Hematite group held under prospecting permits from the State. **Owner:** Yamate Trading Co., Ltd., San Francisco, Calif., acquired 20-yr. lease in 1952. Hematite Iron & Gold Mines Development Co., John Westin, et al. (1934). **Ore:** Iron. **Ore min:** Limonite, scattered grains of magnetite. **Deposit:** Ferruginous mudstone or low-grade limonite occurs as a blanket on altered peridotite and underlies a basal conglomerate of the Chuckanut formation. Exposures as much as 20 ft. thick extend 1,500 ft. or so up the W. side of Sumas Mtn. **Dev:** 60-ft. adit, open cuts. **Assays:** A picked sample gave on analysis 37.21% Fe, 20.83% SiO₂, 0.20% P, 0.008% S. **Ref:** 48, pp. 22-23. 58, p. 29. 142, pp. 105-107. 158. 179, pp. 53-55.

LEAD

Properties—Lead is a bluish-gray metal, which on fresh surfaces has a bright luster that soon tarnishes on exposure to air. It is one of the heaviest metals, is very soft and highly malleable, but has only slight tenacity and low ductility. It is a poor conductor of electricity. It is very plastic, tends to flow under very light loads, and may be extruded easily to form wire or tubes. Lead has an unusual and useful combination of properties in having a low melting point but high boiling point. It is chemically inert to common corrosive conditions, and is attacked upon very slowly by dilute acids. It forms two series of chemical compounds, in which it shows valences of 2 and 4. Other properties are given in the table on page 12.

Uses—Lead was probably one of the first metals to be won from its ores by smelting. In 1950 about 52 percent of all lead consumed went into three products—batteries (32 percent), cable coverings (11 percent), and tetraethyl lead for high-octane gasoline (9 percent). About 9 percent of the total consumption went into paint pigments. In the two last mentioned uses the lead is in the form of chemical compounds; other important uses of lead compounds are in dyes, insecticides, ceramic glazes, medicine, matches, oil refining, and gas production. Other uses of lead in the metallic form are for ammunition, calking metal, casting metal, sheet metal, sheet lead, lead plating, collapsible tubes, foil, weights, ballast, shot, and pipe and containers for corrosive liquids. Lead is a constituent of many alloys, antimony being the most common alloying metal, but common also are tin, arsenic, and calcium. Some of these alloys are used as solder, type metal, bearing metal, pewter, and terne metal.

Production—In 1951 there were 11 lead smelters in the country, 1 each in California, Colorado, Idaho, Illinois, Kansas, Missouri, Montana, New Jersey, and Texas, and 1 in Utah. An important factor in the lead market is secondary lead, the recovery of which has exceeded mine production of new lead each year for many years.

The first recorded production of lead in Washington was in 1898, and some lead has been mined each year since then, although the amount has varied greatly from year to year. The record was in 1952, when 11,744 short tons valued at \$3,781,568 was produced. The previous record was in 1950, with 10,334 tons, which ranked Wash-

ington ninth among the states in lead output, and amounted to 2.4 percent of the total United States production for that year. Lead accounted for 26 percent of the value of metallic ore produced in Washington in 1952. Total output from 1898 through 1952 was 124,766 short tons, valued at \$25,617,254. Some lead has been mined in each of 10 different counties, but of recent years most has been from the Metaline district in Pend Oreille County and the Bossburg and Northport districts in Stevens County. In 1950 these 3 districts produced respectively 7,445 tons, 2,640 tons, and 237 tons of lead and ranked 10th, 20th, and 41st among the lead-producing districts in the United States. The mine of the Pend Oreille Mines & Metals Co. was the leading lead producer in the state in 1952.

Prices—The price of lead has very closely paralleled that of zinc for at least the past 60 years, and the prices of the two metals have been close to the same figure at any given time. During the period 1897 through 1950, the yearly average prices of the two metals have been within 2½ cents of each other each year except for the years 1915, 1916, 1947, 1948, and 1949. The spread was greatest at 8.5 cents in 1915, and the average spread for the years 1947 to 1949 was 3.88 cents. During the 56 years preceding 1953 the lowest price reached was 3.18 cents per pound in 1932 and the highest was 21.5 cents in late 1948. From 1900 until World War I, lead prices averaged between 4 and 6 cents per pound. The yearly average price advanced to 8.71 cents in 1917, but by 1921 had fallen to 4.55 cents. It then rose to 9.02 cents by 1925, after which began a continued drop which ended at the low of 3.18 cents in 1932. The price rose to 6.01 cents by 1937, dropped a little in 1938, then rose again to 6.5 cents by 1942, where it was maintained by government regulation through 1945. When the ceiling price restriction was removed the yearly average price rose rapidly to 18.04 cents by 1948, and late in that year the all-time high quotation of 21.5 cents was reached. The following year the price was dropping, and the average for 1950 was 13.3 cents per pound. The 1951 average was back up to 17.3 cents, but by April 1953 the price had dropped back to 12.5 cents. By October 1954 the price was back to 15 cents, where it remained through June 1955.