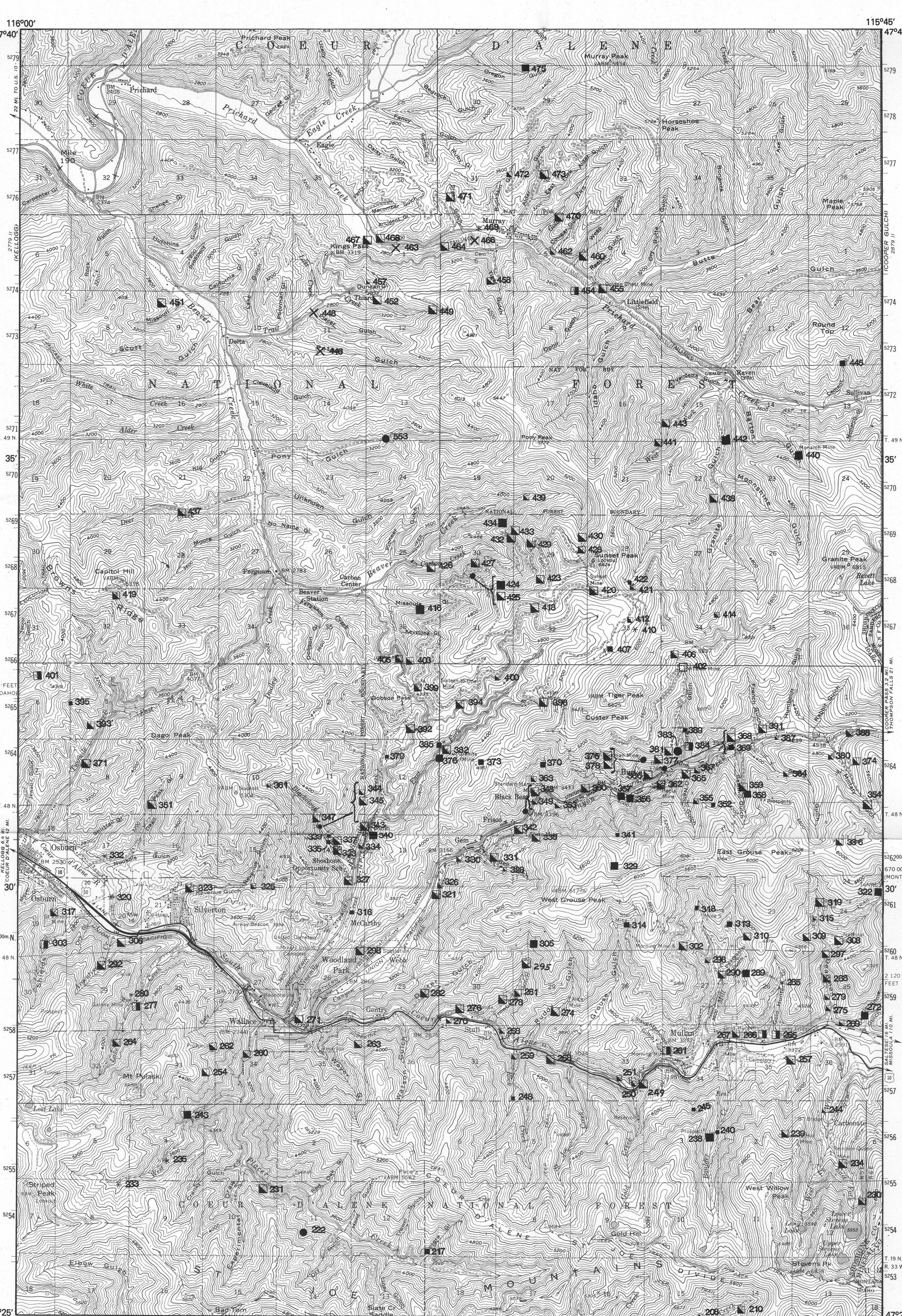


MAP A. METALLIC MINERAL OCCURRENCES IN THE WALLACE 1° X 2° QUADRANGLE, MONTANA AND IDAHO



MAP B. METALLIC MINERAL OCCURRENCES IN AND NEAR THE COEUR D'ALENE MINING DISTRICT, MONTANA AND IDAHO

REFERENCES

- Anderson, A. L., 1928, A geologic reconnaissance in the St. Maries region, Idaho: Idaho Bureau of Mines and Geology Pamphlet 30, 22 p.
- Bell, R. K., 1908, 9th Annual Report of the Mining Industry of Idaho for 1907: State Mine Inspector's Report, 217 p.
- Bondurant, K. T., and Lawson, D. C., 1965, Directory of mining enterprises for 1965: Montana Bureau of Mines and Geology Bulletin 72, 65 p.
- Calhoun, F. C., and Jones, E. L., Jr., 1914, Economic geology of the region around Millard, Idaho and Saltese, Montana: U.S. Geological Survey Bulletin 540-2, p. 167-211.
- Campbell, A. B., 1960, Geology and mineral deposits of the St. Regis Superior area, Mineral County, Montana: U.S. Geological Survey Bulletin 1082-1, 67 p.
- Campbell, Stewart, 1922, 23rd annual report on the mining industry of Idaho for 1921: State Mine Inspector's Report, 152 p.
- 1923, 24th annual report on the mining industry of Idaho for 1922: State Mine Inspector's Report, 209 p.
- 1924, 25th annual report on the mining industry of Idaho for 1923: State Mine Inspector's Report, 249 p.
- 1927, 28th annual report on the mining industry of Idaho for 1926: State Mine Inspector's Report, 269 p.
- Carter, R. A., and Li, T. M., 1976, Idaho's Coeur d'Alene District sets sights on record production: Mining Engineering, v. 28, no. 7, p. 49-64.
- Collier, A. J., 1906, Ore deposits of the St. Joe River Basin, Idaho: U.S. Geological Survey Bulletin 285, p. 129-130.
- Cook, E. P., 1955, Prospecting for uranium, thorium, and tungsten in Idaho: Idaho Bureau of Mines and Geology Pamphlet 102, 53 p.
- Crosby, C. M., 1968, A preliminary examination of trace mercury in rocks, Coeur d'Alene District, Idaho: Quarterly Colorado School of Mines, v. 64, no. 1, p. 169-194.
- Crowley, F. A., 1960, Directory of known mining enterprises, 1959: Montana Bureau of Mines and Geology Bulletin 14, 64 p.
- 1962, Directory of known mining enterprises, 1961: Montana Bureau of Mines and Geology Bulletin 25, 71 p.
- 1963, Mining and mineral deposits (except fuels): Sanders County, Montana: Montana Bureau of Mines and Geology Bulletin 34, 58 p.
- Day, D. T., and Richards, R. H., 1906, Useful minerals in the black sands of the Pacific Slope: Mineral Resources of the United States for Calendar Year 1905, p. 1175-1246.
- DeMunn, V. C., and Ackerman, W. C., 1958, 1958, 57th annual report on the mining industry of Idaho for 1957: State Mine Inspector's Report, 116 p.
- Fletcher, C. D., 1959, 60th annual report on the mining industry of Idaho for 1958: State Mine Inspector's Report, 116 p.
- 1960, 61st annual report on the mining industry of Idaho for 1959: State Mine Inspector's Report, 113 p.
- 1962, 63rd annual report on the mining industry of Idaho for 1961: State Mine Inspector's Report, 113 p.
- Polwell, W. T., 1958, Lucky Friday Mine—history, geology, and development: Mining Engineering, v. 10, no. 12, p. 1266-1268.
- Frylund, V. C., Jr., 1964, Ore deposits of the Coeur d'Alene District, Shoshone County, Idaho: U.S. Geological Survey Professional Paper 445, 103 p.
- Geach, R. D., 1965, Directory of mining enterprises for 1964: Montana Bureau of Mines and Geology Bulletin 46, 81 p.
- 1968, Directory of mining enterprises for 1967: Montana Bureau of Mines and Geology Bulletin 67, 93 p.
- Geach, R. D., and Chablin, J. M., 1963, Directory of known mining enterprises, 1962: Montana Bureau of Mines and Geology Bulletin 33, 84 p.
- Gerry, C. W., 1922, Gold, silver, copper, lead, and zinc in Idaho: U.S. Geological Survey Mineral Resources of the United States, 1920, p. 239-259.
- Gibson, Russell, 1948, Geology and ore deposits of the Libby quadrangle, Montana: U.S. Geological Survey Bulletin 956, 131 p.
- Gibson, Russell, Jenks, W. F., and Campbell, Jan, 1941, Stratigraphy of the Belt Series in the Libby and Trout Creek quadrangles, northwestern Montana and northern Idaho: Geological Society of America, Bulletin 52, p. 363-390.
- Gilbert, F. C., 1935, Directory of Montana mining properties: Montana Bureau of Mines and Geology Memoir 15, 99 p.
- Harrison, J. R., Griggs, A. B., and Wells, J. D., 1981, Generalized geologic map of the Wallace 1° x 2° quadrangle, Montana and Idaho: U.S. Geological Survey Miscellaneous Field Investigations Map MF-1354-A, 1:250,000.
- Hobbs, E. W., Griggs, A. B., Wallace, R. E., and Campbell, A. B., 1965, Geology of the Coeur d'Alene District, Shoshone County, Idaho: U.S. Geological Survey Professional Paper 478, 139 p.
- Hosterman, J. W., 1959, Geology of the Murray area, Shoshone County, Idaho: U.S. Geological Survey Bulletin 1027-B, 23 p.
- Johns, W. M., 1959, Geologic investigations in the Kootenai-Flathead area, northwest Montana: Progress Report 4, Montana Bureau of Mines and Geology Bulletin 29, 38 p.
- 1964, Geologic investigations in the Kootenai-Flathead area, northwest Montana: Progress Report 5, Montana Bureau of Mines and Geology Bulletin 42, 66 p.
- 1970, Geology and Mineral Deposits of Lincoln and Flathead Counties, Montana: Montana Bureau of Mines and Geology Bulletin 78, 182 p.
- Johns, W. M., Smith, A. G., Barnes, W. C., Gilmore, W. H., and Page, W. R., 1963, Geologic investigations in the Kootenai-Flathead area, northwest Montana: Progress Report 5, Montana Bureau of Mines and Geology Bulletin 42, 66 p.
- Lincoln County, Montana: Montana Bureau of Mines and Geology Bulletin 36, 68 p.
- 1971, Directory of mining enterprises for 1970: Montana Bureau of Mines and Geology Bulletin 88, 57 p.
- 1975, Directory of mining enterprises for 1974: Montana Bureau of Mines and Geology Bulletin 95, 64 p.
- 1977, Directory of mining enterprises for 1976: Montana Bureau of Mines and Geology Bulletin 104, 58 p.
- 1978, Directory of mining enterprises for 1977: Montana Bureau of Mines and Geology Bulletin 107, 56 p.
- Lyden, C. J., 1948, The gold placers of Montana: U.S. Geological Survey Bulletin 726, 152 p.
- Macdonald, D. F., 1905, Economic features of northern Idaho and northwestern Montana: U.S. Geological Survey Bulletin 285, p. 41-52.
- McDowell, C. A., 1951, 35th annual report on the mining industry of Idaho for 1950: State Mine Inspector's Report, 174 p.
- 1952, 54th annual report on the mining industry of Idaho for 1951: State Mine Inspector's Report, 188 p.
- 1955, 57th annual report on the mining industry of Idaho for 1954: State Mine Inspector's Report, 157 p.
- 1957, 59th annual report on the mining industry of Idaho for 1956: State Mine Inspector's Report, 176 p.
- Miller, R. N., 1959, Geology of the South Nootka Mountains, Pergus County, Montana: Montana Bureau of Mines and Geology Bulletin 100, 63 p.
- Montana Bureau of Mines and Geology, 1973, Directory of mining enterprises, 1972: Montana Bureau of Mines and Geology Bulletin 108, 59 p.
- 1976, Directory of mining enterprises, 1975: Montana Bureau of Mines and Geology Bulletin 100, 63 p.
- Moore, R. A., 1910, East Coeur d'Alene Mining District, Montana: The Mining World, v. 33, p. 271-276.
- Pardee, J. T., 1911, Geology and mineralization of the upper St. Joe River Basin, Idaho: U.S. Geological Survey Bulletin 478-B, 23 p.
- Ransome, F. L., and Callahan, F. D., 1908, The geology and ore deposits of the Coeur d'Alene District, Idaho: U.S. Geological Survey Professional Paper 62, 203 p.
- Reid, R. E., 1961, Guidebook to the geology of the Coeur d'Alene Mining District, Idaho: Montana Bureau of Mines and Geology Bulletin 16, 37 p.
- Reymer, M. L., and Trautman, C. J., 1969, Directory of Montana mining properties: Montana Bureau of Mines and Geology Memoir 31, 125 p.
- Rowe, J. P., 1911, Geology and ores of the Carter District, Montana: Mining and Engineering World, v. 34, p. 1035-1041.
- 1911, Gold quartz mining in western Montana: Mining and Engineering World, v. 34, p. 1035-1041.
- Sahlin, W. M., 1957, Mines and mineral deposits, Missoula and Ravalli Counties, Montana: Montana Bureau of Mines and Geology Bulletin 8, 63 p.
- Schradler, F. C., 1911, Gold-bearing ground moraine in northwestern Montana: U.S. Geological Survey Bulletin 470, p. 62-74.
- Shannon, P. J., 1938, Geology and ore deposits of the Murray, Idaho: Idaho Bureau of Mines and Geology Pamphlet 47, 44 p.
- Shannon, P. J., and Taylor, A. T., Jr., 1936, Geology and ore occurrence of the Hog Heaven mining district, Flathead County, Montana: Montana Bureau of Mines and Geology Memoir 17, 26 p.
- Stout, E. S., and Ackerman, W. C., 1958, Directory of known mining enterprises of Montana, 1957: Montana Bureau of Mines and Geology Information Circular 20, 57 p.
- 1959, Directory of known mining enterprises, 1958: Montana Bureau of Mines and Geology Bulletin 10, 80 p.
- Trautman, C. J., and Walcott, C. R., 1910, Directory of Montana mining properties: Montana Bureau of Mines and Geology Memoir 20, 135 p.
- Unpley, J. R., and Jones, E. L., Jr., 1923, Geology and ore deposits of Shoshone County, Idaho: U.S. Geological Survey Bulletin 732, 156 p.
- U.S. Bureau of Mines, 1981, Minerals Availability System, Denver, Colorado, 1981, 100 p.
- U.S. Geological Survey, 1981, Computerized Resource Information Bank, Denver, Colorado, 1981, 100 p.
- Wagner, W. E., 1949, The geology of part of the south slope of the St. Joe Mountains, Shoshone County, Idaho: Idaho Bureau of Mines and Geology Pamphlet 82, 48 p.
- Wallace, R. E., and Hosterman, J. W., 1956, Reconnaissance geology of western Mineral County, Montana: U.S. Geological Survey Bulletin 1027-A, 37 p.
- Weiss, P. L., Armstrong, P. C., and Rosenblum, Samuel, 1958, Reconnaissance for radioactive minerals in Washington, Idaho, and western Montana: U.S. Geological Survey Bulletin 1074-B, 41 p.
- Wilson, R. S., 1963, Geochemical exploration reconnaissance of the Avery area, Idaho: University of Idaho M.A. thesis, Moscow, Idaho, 81 p.
- Zartman, R. E., and Stacey, J. S., 1971, Lead isotopes and mineralization ages on Belt Supergroup rocks, northwestern Montana and northern Idaho: Economic Geology, v. 66, no. 6, p. 849-860.

MAPS SHOWING MINERAL OCCURRENCE DATA FOR THE WALLACE 1° X 2° QUADRANGLE, MONTANA AND IDAHO

By
Sharon Chesson¹, Raymond R. Wallace², and Thomas Griffith¹
1984

¹ U. S. Geological Survey
² U. S. Forest Service

Geology (from MF-1354-A, 1981) by J. E. Harrison, A. B. Griggs, and J. D. Wells, 1970-1981; assisted by R. E. Corbridge (1972), Joseph Rogers (1973), and J. P. Harrison (1970-1980). Mineral occurrence data compiled in 1981-82.

EXPLANATION FOR MINERAL OCCURRENCES¹

Status of exploration indicated by size of symbol (keyed to numbers shown, which are explained in the table). Locality numbers on map also keyed to table.

- 4 3 2 1
- OCCURRENCES IN VEINS**
- ■ ■ Base metals: (Cu, Pb, Zn)
 - * * * Precious metals: (Au, Ag)
 - ■ ■ Mixed base and precious metals: (Cu, Pb, Zn) ± (Au, Ag) ± (W, U, Mo)
 - ■ ■ Mixed base and precious metals plus antimony or arsenic: (Cu, Pb, Zn) ± (Au, Ag) ± (Sb, As) ± (W, U, Mo)
 - Mixed base and precious metals plus nickel: (Cu, Pb, Zn) ± (Au, Ag) ± Ni
 - ■ ■ Molybdenum-tungsten with or without precious metals: (Mo-W) ± (Au, Ag)
 - ▲ ▲ Platinum group metals with or without other metals: (Pt, Pd) ± (other metals)
 - ◇ Uranium: U
 - Barium: Ba
 - Fluorine: F
 - ● Miscellaneous metallic and nonmetallic occurrences not fitting above categories precisely (see table for commodities at a given locality)
- OCCURRENCES OF STRATABOUND METALS**
- ◆ ◆ Copper-silver: Cu-Ag
- PLACERS**
- × × × Gold: Au

¹ Commodities included in the various types of deposits are shown by chemical symbols for elements; the formula (Cu, Pb, Zn) ± (Au, Ag) ± (W, U, Mo) should be read as "copper and/or lead and/or zinc, plus gold and/or silver, with or without minor amounts of tungsten and/or bismuth and/or uranium and/or cobalt."

LIST OF MINERAL OCCURRENCES									
Key	Reference	Name	Location	Latitude	Longitude	Commodity	Exploration	Exploration	Exploration
1	1	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
2	2	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
3	3	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
4	4	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
5	5	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
6	6	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
7	7	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
8	8	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
9	9	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
10	10	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
11	11	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
12	12	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
13	13	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
14	14	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
15	15	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
16	16	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
17	17	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
18	18	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
19	19	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
20	20	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
21	21	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
22	22	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
23	23	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
24	24	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
25	25	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
26	26	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
27	27	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
28	28	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
29	29	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
30	30	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
31	31	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
32	32	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
33	33	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
34	34	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
35	35	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
36	36	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
37	37	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
38	38	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
39	39	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
40	40	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
41	41	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
42	42	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
43	43	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
44	44	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
45	45	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
46	46	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
47	47	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
48	48	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
49	49	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
50	50	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
51	51	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
52	52	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
53	53	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
54	54	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
55	55	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
56	56	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
57	57	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
58	58	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
59	59	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
60	60	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
61	61	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
62	62	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
63	63	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
64	64	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
65	65	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
66	66	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
67	67	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
68	68	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
69	69	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958
70	70	Shoshone plant	Shoshone, Idaho	43°00'N	114°00'W	Cu, Pb, Zn	1958	1958	1958