2160 0062

(91)

Item # 64

a. Goldfield district, Esmeralda County, Nevada.

b. Geographic coordinates: 37°42'N., 117°15'W.

c. Status of exploitation: Discovered in 1902, stampede in 1903, major production 1904 to 1918. In period 1903 to 1921 inclusive, silver production totalled 1,345,314 oz. Production 1908-1917: 3,094,253 tons gold ore worth $72,393,065. 1903-32, 4,105,951 oz Au; 1,646,687 oz Ag; 3,817 tons Cu; 17 tons Pb.

Cu-1
Pb-0
Zn-0
Ag-1
Au-3

d. References: Lincoln, F. C., 1923, Mining districts and mineral resources of Nevada: Reno, Nev. Newsletter Pub. Co., p. 67-73; Nev. Univ. Bull. 44, vol. 44, no. 5, 1948. Ransome, 1909a; Searls, 1948.

e. Adequacy of present knowledge:

f. Topographic coverage: Adequate; Goldfield special, 1905, 6-min. square area, 1:24,000; Goldfield, 1952, 15-min. quadrangle, 1:62,500.

g. Major mineralogic and geologic features: Cambrian shale intruded by Cretaceous(?) alaskite and overlain by Tertiary lavas and lake sediments. The sequence of layers from bottom to top is rhyolite, latite, tuff, rhyolite, rhyolite andesite, dacite, vitrophyre with intercalated andesite, rhyolite, andesite breccia, breccia, lake beds intercalated with basalt; conglomerate, rhyolite, breccia, conglomerate, sandstone, and basalt.

The ore deposits are irregular lodes in fractured and altered country rocks that have replacements by quartz, kaolinite, alunite, and pyrite. Principal ore bodies are in dacite, but some are in rhyolite, andesite, and latite, and at latite-shale contacts. Ore minerals are pyrite, marcasite, bismuthinite, goldfieldite, arsenical famatinite, native gold, and tellurides, and minor amounts of other sulphides. Characteristic rich ore consists of concentric shells of ore minerals about altered rock fragments.

Silver in the United States

(Data sheets for individual mining districts, prepared in conjunction with metallogenic map for 1960 International Geological Congress.)

Authorship:

E. T. McKnight - All districts west of the Mississippi River, except most of those silver-producing districts containing less than 1,000 tons of lead or zinc in the following states: Arizona, New Mexico, Nevada, Oregon and Washington. Also the following silver districts in 4 of the states mentioned: Vulture, and Helvetia, Ariz.; Ash Peak, Miami, Globe, Apache, Black Range, Chloride Flat, Georgetown and Lake Valley, New Mexico: Ashwood and Granite, oregon; Deertrail, Nespelem and Ruby-Conconully, Washington.

A. V. Heyl, Jr. - All districts east of the Mississippi River (except White Pine district, Michigan.)

Harry Klemic and W. L. Newman - Silver districts not associated with lead or zinc, in Arizona, New Mexico, Nevada, Oregon, and Washington (except as listed above).

Size categories of deposits
(as penciled in left margins)

	0	1	2	3
Cu	Less than 1,000 tons	1,000 to 50,000 tons	50,000 to 1,000,000 tons	More than 1,000,000 tons
Pb	"	"	"	"
Zn	"	"	"	"
Ag	Less than 100,000 oz.	100,000 to 5,000,000 oz.	5,000,000 to 50,000,000 oz.	More than 50,000,000 oz.
Au	Less than 10,000 oz.	10,000 to 100.000 oz.	100,000 to 1,000,000 oz.	More than 1,000,000 oz.

(NOTE: Categories for Au are less certain than for others.)

District No. on metallogenic map penciled at lower right.