(175)
Item# 67

3A0 0053

a. Pioche district, Lincoln County, Nevada.

b. Geographic coordinates: 37°56'N, 114°29'W.

Cu-1
Pb-2
Zn-2
Ag-2
Au-2

c. Status of exploitation: Chief producing mine, the Combined Metals mine, closed by economic conditions in 1957 after a long run (since 1924) as a major producer of zinc, lead and silver. Silver production from oxidized ores in the district began in 1869, reached a high peak in 1872, and had nearly ceased by 1885. A second period of production, involving also lead and zinc with a little copper, began in 1906, was sharply augmented in 1912, and culminated in the long run of Combined Metals mine production. This second period of production has been sensitive to economic conditions, so that the annual output has shown wide fluctuations, with some years of no production. Reserves of district are reported (confidentially) to be very low, perhaps exhausted.

d. References: Westgate, Lewis G., and Knopf, Adolph, 1932, Geology and ore deposits of the Pioche district, Nevada: U. S. Geol. Survey Prof. Paper 171.

e. Adequacy of our present knowledge: Adequate. A new report is in preparation by Park, Newman, and Cochanz.

f. Topographic coverage: 1:24,000, 1953.

g. Major mineralogic and geologic features: (1) Replacement veins and bedded replacement deposits in Cambrian limestone (with interbedded shale) being intersected with steep fissures; (2) veins (oxidized) in Cambrian quartzite; (3) replacement lenses (oxidized) in highly silicified granite porphyry dike (least productive). Quartz monzonite intrusive and allied types several miles away, sparse granite porphyry

dikes in district, Tertiary(?). Argentiferous galena, jack, pyrite, chalcopyrite; manganiferous siderite, minor quartz. Oxidized ores prominent in early days, included cerussite, cerargyrite, iron and manganese oxides.

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, Mich.) 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 1,000,000 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.