ARABIA DISTRICT

LOCATION

The Arabia district is in the northeastern most portion of the Trinity Range in central Pershing County. The district is about 5 miles wide, 15 miles long, with its center about 5 miles southwest of Rye Patch Dam. The route across the dam also provides the shortest access to the district from the east.

HISTORY

The initial mining activity in the district began in 1861 with the discovery of the Montezuma Mine. Ultimately it became the largest mine and biggest producer in the district. According to Johnson (1977) a five-stamp mill was moved from the Trinity district and relocated on the east bank of the Humboldt River in 1863. The site selected for the mill was later known as Oreana. This mill began crushing ore from the Montezuma Mine and by 1866 a second mill was constructed to handle additional ore from the New Jersey Mine and many smaller properties that were located and developed about the same time. According to Paher (1970) the activity in the Arabia district led to the construction of the first smelter in Nevada in 1867. The smelter furnaces operated day and night blackening the sky over Oreana with clouds of smoke and antimonial vapors. The milling had been a huge success but financial difficulties plagued the operation causing a temporary shutdown in 1869. Thereafter the smelter functioned intermittently until 1871 when it was destroyed by fire. The mines continued to operate but production declined sharply after 1875. Of the $1.5 million produced from the district more than half came from the Montezuma Mine.

GEOLOGICAL SETTING

The southern part of the district is underlain by Cretaceous granodiorites that outcrop in the vicinity of the Arabia mines and elsewhere and intrudes metasediments of Triassic age Johnson (1977). The composition of the rocks are similar at the north end of the district but smaller areas of granodiorite are exposed there as compared to the southern end of the district. The central part of the district is covered by Tertiary sediments and minor volcanic flow rocks.

ORE DEPOSITS

The ore deposits at Arabia are along veins in fractures and shears in granodiorite or in metasediments that form xenoliths in the granodiorite. Most of the veins consist of quartz, gouge and locally abundant lead-silver-antimony minerals with lessor amounts of copper and zinc minerals and minor gold. The dominant ore mineral is argentiferous-bindheimite but also jamesonite, plumbojarosite, jarosite and arsenopyrite are also present along with a wide range of yellow oxides of both lead and

antimony. The richest veins were almost solid bindheimite which is commonly earthy, yellowish brown or may even have a high yellow luster. Workings in the main camp are a labyrinth of shallow prospects, open-pits, inclines, shafts and open stopes that follow north trending veins, except at the Montezuma Mine where the vein system strikes east-west.

To the north of the main camp are numerous workings and prospects that have explored similar but lower grade mineralization along quartz veins in granite and metasedimentary rocks. At the Bottomely claims, stibnite-bearing quartz veins have been exposed along shallow trenches at the top of a knoll. Minor shows of perlite, pumice, clay and diatomite have been prospected along the northern margin of the district.

GEOCHEMICAL RELATIONSHIPS

Analyses of ore samples from the Arabia mines were remarkably consistent. Anomalous values for lead, silver, antimony, and arsenic, were reported from all the major workings in the district. Zinc was commonly present but at lower concentrations and more scattered. High values for boron seemed to correlate fairly well with high metal values. Gold was detected in all of the samples and ranged in value from .05 to 29.0 ppm.

SELECTED REFERENCES

Johnson, M. G. (1977) Geology and Mineral Deposits of Pershing County, Nevada: NBMG Bull. 89.

Lawrence, E. F. (1963) Antimony deposits of Nevada: NBMG Bull. 61.

Paher, S. W. (1970) Nevada Ghost Towns and Mining Camps: Howell-North, San Diego.