

3910 0015

(246)
Item #16

68

REVEILLE DISTRICT

LOCATION

The Reveille mining district is located in the northern Reveille Range about 15 miles southeast of Warm Springs, a point at the junction of US Highway 6 and State Route 375 about 50 miles east of Tonopah, Nye County. The mines and prospects of the district are located at the crest and on the west side of the range in Township 2 North, Range 51 1/2 East.

HISTORY

Ore was discovered here in August, 1866, and the district was immediately organized and named in honor of the Reese River Reveille, the newspaper in Austin, Nevada (Thompson and West, 1881). In 1869, stamp mills to treat ore from the mines were built near water in Reveille Valley, 12 miles to the west. These mills ran for only a short time before failing. In 1875, the larger mill, a ten-stamp operation, resumed operations and continued to run at intervals for the next four years. This operation is credited with \$1.5 million in bullion (Thompson and West, 1881). The camp was abandoned in 1880. New Reveille, a camp in the district located about 2 miles south of the original mines, was discovered in the late 1880's and operated in the 1890's, in 1904-1906 or 1907, and at times over the years from 1911 to 1950 (Kral, 1951). Kleinhampl and Ziony (1984) credit most of the pre-1904 production of the district to the old Reveille mines and the post-1904 production to mines at New Reveille. They credit the district with \$741,274 in production, 1866-1963.

In the mid-1970's, the major properties in the Reveille district came under the control of Gold Creek Mining Co. That company embarked on a mining venture which involved open-pit mining of the surface area surrounding the old underground mines and moving the rock to heap leach pads constructed at the foot of the range to the west. This operation was not successful, and the camp is again deserted.

GEOLOGIC SETTING

The north half of the Reveille Range consists essentially of a gently west-tilted core block of Paleozoic strata broken into faulted mosaic blocks. These blocks are bounded on all sides by faults that separate the core from generally less intensely but complexly faulted Tertiary rocks.

The exposed Paleozoic section consists of carbonate assemblages of Lower Paleozoic Antelope Valley Limestone, Pogonip Group, and Eleana Formation and of coarse to fine clastic rocks of Permian or Pennsylvanian age (Kleinhampl and Ziony, 1984). Tertiary volcanic rocks lie unconformably on and are faulted against the Paleozoic rocks. They consist of welded ash-flow tuffs and lavas and include some dikes and sills that cut exposed Paleozoic strata. The thickest tuff unit mapped in the district, the Monotony Tuff, covers most of the east flank of the Reveille Range (Ekren and others, 1973). The source of this tuff is a large, disrupted caldera which lies mainly to the east of the range in Railroad Valley. Gravity anomalies indicate that the western edge of the caldera nearly coincides with the eastern frontal scarp of the

NBME OFR 86-14

range and is immediately adjacent to the substantial section of Paleozoic rocks to the west (Snyder and Healey, 1983). The mines of the district are located in the faulted Paleozoic rocks along the margin of the described caldera.

ORE DEPOSITS

The Reveille district was originally prospected for gold and silver, and major silver production came chiefly from two mines, the Gila at old Reveille camp and the New Reveille Mine at New Reveille camp. Early reports noted that near-surface ore at both the Gila and New Reveille mines was oxidized and consisted mainly of cerargyrite and cerussite with some galena, malachite, and azurite in a gangue of quartz and gypsum (Ball, 1907). Ball noted that the ore occurred in quartz veins and stringers ramifying through brecciated zones in the Paleozoic rocks near their contact with rhyolite. The deposits were described as podiform occurrences which were found within several tens of feet of the surface and were associated chiefly with irregularly silicified zones rather than well-developed veins.

All of the deposits in the Reveille district occur where lower Paleozoic quartzite (Eureka Quartzite of the Pogonip Group) is in fault contact with the oldest welded tuffs. Ore-bearing solutions apparently moved upward and laterally in and adjacent to the highly fractured quartzite and were trapped by the overlying impermeable tuff. The tuff nearly everywhere appears to be in low-angle fault contact with the underlying Paleozoic rocks (Ekren and others, 1973). Open-pit operations at the mines in the old Reveille part of the district have destroyed evidence of the old workings and it is difficult to identify exact locations of old shafts and other landmarks. At the Amazon, Fisherman, Knickerbocker property, southwest of the Gila Mine, new cuts and pits explore a wide shear zone in carbonate rocks near contact with a Tertiary dike. Pods of iron-oxide stained, silicified rock up to thirty feet in diameter are exposed along the zone. At the Antimonial Mine, on the east side of the district, a vuggy, silicified zone from 2 to 24 inches wide is exposed along the quartzite-rhyolite contact. The New Reveille Mine has been spared the recent attempt at open-pit mining, and workings there are intact. The ore zone is highly iron-oxide stained at surface and follows a quartzite-rhyolite contact. Ore samples from this mine contained cerargyrite, cerussite, galena, sphalerite in brecciated, vuggy quartz.

GEOCHEMICAL RELATIONSHIPS

Gold was detected in several samples from the district but the values were low, the highest value obtained was 0.35 ppm from the New Reveille Mine. Silver values were high, ranging from 100 to 1500 ppm in samples from the western parts of the district; samples from the Gila Mine and Antimonial Mine contained only 15 ppm silver. Antimony was highly anomalous in all samples. Arsenic was anomalous in all samples, but very high in samples from New Reveille. Molybdenum was moderately anomalous in samples from New Reveille and the Kietzke mine area. Barium was high only in samples from the Kietzke Mine.

SELECTED REFERENCES

- Ball, S. H. (1907) Mines of the Silver Peak Range, Kawich Range and other southern Nevada districts: USGS Bulletin 308.
- Ekren, E. B., Rogers, C. L., and Dixon, G. L. (1973) Geologic and Bouguer gravity map of the Reville quadrangle, Nye County, Nevada: USGS Map I-806.
- Kleinhampl, F. J., and Ziony, J. I. (1984) Mineral resources of northern Nye County, Nevada: NBMG Bull. 99B.
- Kral, V. E. (1951) Mineral resources of Nye County, Nevada: NBMG Bull. 50.
- Lawrence, E. F. (1963) Antimony deposits of Nevada: NBMG Bull. 61.
- Paher, S. W. (1970) Nevada ghost towns and mining camps: Berkeley, CA, Howell-North.
- Snyder, D. B., and Healey, D. L. (1983) Interpretation of the Bouguer gravity map of Nevada, Tonopah sheet: NBMG Report 38.
- Thompson, T. H., and West, A. A. (1881) History of Nevada: Berkeley, CA, Howell-North [1958].