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Item 4

ROBERTS DISTRICT

The Roberts mining district is located on the west side of the Simpson Park Mountains, south of McClusky Pass and north of Walti Hot Springs, in T24N,R48E, Eureka County. The district is bordered on the west by Nevada Highway 21, approximately 42 miles northeast of Austin.

The district was organized in 1870 with the discovery of the O'Dair Mine, now the Keystone Mine, by Roberts and Tucker (White, 1871; Lincoln, 1923). Earlier production from the district was unrecorded, but production figures were published in 1948, 1949, and 1962 for silver, lead, copper, and zinc, for a total dollar value of less than $5,000 (Roberts, et al., 1967). No production was noted from 1950 through 1961.

The district is located in the Keystone Window of the Roberts Mountain Thrust Plate. Exposed in the window is the autochthonous Devonian Nevada Formation, a dolomite, surrounded almost entirely by the allochthonous Ordivician-Silurian siliceous clastics of the Valmy and Vinini Formations. The west side of the range has been downdropped along an inferred, north trending, high angle fault and is covered with alluvium. The fault is inferred by the presence of Walti Hot Springs, which is currently depositing sinter (Garside and Schilling, 1979), and the steepness of the range front. Intruding the Paleozoic sediments is a 33.0 million year old porphyritic granodiorite stock (Silberman and McKee, 1970). The district is within and aligned along the Battle Mountain-Eureka mineral belt.

The principal working of the district is the Keystone Mine located along the contact between the dolomite and the intrusive. At the Keystone, sulfide ore (pyrite, sphalerite, and chalcopyrite) occurs as lenticular pods in garnet/epidote tactite along the contact. Galena located near the surface is said to be argentiferous and at 25 feet, copper ore was found (Lincoln, 1923; Roberts et al., 1967). Pyrite and sphalerite are disseminated in the granodiorite.

J. Tingley + P. Smith (1982) Mineral Inventory of Eureka-Shoshone Resource Area: NBMG OFR 82-10 / 83-3 and 83-4

Minor copper oxides occur in gossan with the sulfides. The limestone is faulted and sheared with calcite cementing the breccia. The underground workings total over 1,500 feet and peripheral shafts and prospect pits surround the main workings. Chevron Resources of Sparks staked the area around the mine the week following our field inspection (August, 1981) and the mine area had recently been drilled.

The Z Claims, which extend from the Keystone Mine north along the west facing slope of the range front to the Bauman Ranch, have been extensively drilled and trenched, possibly as late as 1980. No other activity was observed. The claims are in the shales and quartzites of the Vinini-Valmy Formations, and no surface mineralization was observed.

Other minor workings around the district include the Pat Prospect, which is entirely surrounded by the Tonkin Claims and are located 3 miles west of the Tonkin Range and south of Pat Canyon. The workings are in the Simpson Park Window of the Roberts Mountain Thrust Plate and are currently under exploration by U.S. Exploration Co. Minor gold, zinc, and arsenic anomalies have been reported from a jasperoid outcrop on these claims.

Selected References:

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