

TOLICHA (MONTE CRISTO)

Gold, Silver

Location. The Tolicha District is located in the neighborhood of Monte Cristo Springs on the N. slopes of Tolicha Peak and of Quartz Mountain in S. W. Nye Co. Bonnie Clare on the T. & T. R. R. is 20 m. W., but the district is more commonly reached from Goldfield which lies 50 m. to the N. W. by way of the Gold Crater road.

History. The district was prospected as early as 1905, but did not attract particular attention until Jordon and Yaiser found rich ore in 1917. Then George Wingfield explored the Life Preserver Group under lease and bond; later, E. Harney became interested and a Gibson mill was installed; and more recently the claims were taken over by Tonopah interests. The Landmark Group was acquired by C. E. Knox and associates of Tonopah; and the Southey property on Quartz Mountain is to be developed by Salt Lake people. Two carloads of ore have been shipped from the district.

Geology. The country rock is Tertiary rhyolite. This rock has been kaolinized or silicified around Monte Cristo Springs and at Quartz Mountain camp, according to Ball. Veins in the altered rhyolite consisting of quartz and silicified rhyolite stained with limonite carry gold and a little silver.

Bibliography. USGS Kawich topographic map. Ball 308. 141-2. Hill 507 223.

Exerpt from United States Geological Survey Bulletin No. 808, pages 141-142.

TOLICHA PEAK AND QUARTZ MOUNTAIN

Topography and Geography

Tolicha Peak, a striking cone rising from Pahute Mesa, is a landmark for miles. Quartz Mountain, a somewhat lower east-west ridge, extends eastward from Tolicha Peak. The hills are bare, except for a sparse growth of desert shrubbery. Monte Cristo Springs, on the western slope, furnish sufficient water for 15 to 20 head of stock.

General Geology

The formations of these mountains from the base up are Cambrian (?) schist, post-Jurassic granite, Tertiary rhyolite, and Tertiary basalt.

Sedimentary Rocks

Cambrian (?) schist. - The hill $2\frac{1}{2}$ miles southeast of Tolicha Peak appears greenish gray in color at a distance, and is probably formed of a bluish-gray schistose rock which occurs abundantly in the desert gravels to the south of this hill. The rock is very fine grained, except for some small crystals of biotite and hornblende. White, ellipsoidal areas 1 inch long spot the blue-gray rock. Under the microscope the groundmass appears as an exceedingly fine aggregate of quartz and feldspar, in which are embedded small areas of quartz, orthoclase, ragged hornblende, and biotite. The rock is probably a metamorphosed Paleozoic shale, possibly of Cambrian age.

Igneous Rocks

A specimen of rhyolite from Tolicha Peak collected by Mr. S. G. Benedict contains an inclusion of gray granite of medium grain. Post-Jurassic granite probably underlies this peak.

Rhyolite forms Tolicha Peak and the east side of Quartz Mountain. The predominant type is a dense flinty rock of reddish color with a few small phenocrysts of glassy feldspar, quartz, and biotite. Flow lines, perlitic parting, and spherulites are well developed. Gray glassy facies, transparent in thin flakes, are interbedded with this type, as are white or light-gray incoherent facies in which the phenocrysts are abundant and equal the groundmass in bulk. Flow breccias are rather common. This rhyolite is probably about contemporaneous with the earlier rhyolite of the Kawich Range and is presumably of early Miocene age.

Prior to the extrusion of the basalt which covers Pahute Mesa (see p. 137) Tolicha Peak was eroded into a rugged mountain. The valley between Tolicha Peak and Obsidian Butte is upon the contact between the rhyolite and basalt.

Structure

The rhyolite of Tolicha Peak is complexly cut by normal faults with displacement of 10 to 50 feet. These faults in some places are less than 100 yards apart. The rhyolite is also intensely jointed.

The rhyolite around Monte Cristo Springs is kaolinized or silicified. Prospect holes are located on quartz veins in altered rhyolite, the ore being quartz and silicified rhyolite stained by limonite. Quartz Mountain Camp, on the northern slope of Quartz Mountain, was not visited, but the conditions, according to the reports of prospectors, are similar to those at Monte Cristo Springs. The altered masses, which resemble those of Silverbow and are faulted like those of Bullfrog, are outlined on the economic map (fig. 4, p. 45).