

Clark County

Small amounts of scheelite occur at several localities scattered along the west side of the Virgin Mountains, principally in Mohave County, Arizona, near the Nevada and Utah borders. The scheelite occurs in pre-Cambrian schists and gneisses, usually in amphibole-rich layers, or in narrow quartz veins and pegmatites. The Nevada occurrences, on the Deer Trail and Cabin Canyon groups of claims, are south of Mesquite, which is on U. S. Highway 91. Despite considerable prospecting in 1942-43, no ore was found.

Caliente, Nevada

April 22, 1943

Memorandum:

Tungsten deposits in Cabin, Limekiln, and Hancock canyons
near Mesquite, Nevada.

The tungsten deposits in Cabin, Limekiln and Hancock canyons are from 15 to 20 miles south to south east respectively of Mesquite, Nevada, in the Virgin mountains. Hancock canyon is in Arizona. *So is Limekiln.*

Claims in Cabin canyon held by Albert Wharton, R.C. Colton, E. A. Walker, include Shooting Star and 3 others. Other claims in Limekiln canyon are held by Wharton, Walker, and A. Barnum. Claims in Hancock canyon, the Big Bend group of 6, are held by Wharton, Walker, Barnum, and Floyd Bekin jr (of Bekin truck lines, if he finances it).

We visited claims in Cabin canyon on April 5, those in Hancock canyon on April 6, we did not visit those in Limekiln canyon.

Wharton is the most active one of the owners, the rest of whom are local farmers. All are relatively inexperienced in mining.

In Cabin canyon tactite (?) composed of fine grained quartz, pyroxene?, and minor garnet, occurs in thin beds in a series of hornfels and marble, injected by granite, the whole forming a stock work. The quartz-pyroxene beds vary from 1 to 3 feet in thickness, and do not seem to be continuous for more than 50 feet along the strike, though exposures are not satisfactory. The quartz-pyroxene beds have been prospected by several shallow pits. Scheelite, fluorescing yellow, occurs as thin plates up to $\frac{1}{2}$ inch in diameter, 1 to 2 mm thick, sparsely disseminated along joints. The grade is very low, and no ore is visible.

We did not visit the claims in Limekiln canyon as Mr. Wharton said the geology was the same as that in Cabin canyon.

In Hancock canyon, the general geology is similar, but there seems to be a much greater proportion of hornfels; in fact, ¹saw no limestone, and little granite. Tactite composed of garnet and quartz, occurs as a lenticular bed 10 feet long, 4 feet wide in the center.

Scheelite in crystals up to $\frac{1}{2}$ inch in diameter fluoresced white. The grade of this body of tectite might average 1% of WO_3 . If the ore extends downward 10 feet there are 30 tons of ore here, which at 1% of WO_3 contain 30 units.

Summary

Tectite composed of quartz and garnet containing scheelite ore occurs in one lens in a series of hornfels in Hancock canyon. In Limestone and Cabin canyon a quartz-pyroxene rock containing some scheelite occurs in a stock work with hornfels, marble and granite.

Unless something better is found, there seems to be little likelihood of much tungsten production from the area.

Donald G. Bryant

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