TUNGSTEN ORE IN EASTERN NEVADA.

By F. B. Weeks., 1903

A hübnerite-bearing vein was discovered about 12 miles south of Osceola, Nev., in 1900. It occurs in the foothills on the west slope of the Snake Mountains, near the base of Wheeler Peak. The nearest railway point is Frisco, Utah, on the Oregon Short Line Railway, about 100 miles distant.

The country rock is a rather coarse porphyritic granite, composed of quartz, mica, and hornblende, and having a rudely bedded structure parallel to that of the overlying Cambrian quartzite, which dips 20° to 25° SSW. The vein cuts across this granite, striking N. 68° E. and dipping 65° NW. The main vein is normally about 3 feet wide, pinching in places to a few inches, but rapidly regaining its usual width. Several smaller veins, from a few inches to a foot in width, outcrop on the slopes and can be traced to the main vein, entering it at a sharply acute angle. The main vein was traced for a distance of 2,100 feet by croppings and float from its outcrop near the base of the lowest foothill up the slope of the mountain.

Sufficient development had not been made at the time of visit to determine the extent of ore deposition. The vein walls are well defined. Where the vein has its average thickness, it is formed of milky-white quartz, carrying a large amount of hübnerite. Where the vein pinches, the quartz is schistose, and the ore is in small stringers and small in amount. The ore occurs in solid masses, frequently attaining a thickness of 6 to 12 inches. It is also disseminated through the quartz in thick plate-like forms, and also occurs crystallized with the quartz crystals. Small shoots of ore penetrate the country rock for a few inches. The vein material is easily crushed, and the hübnerite, because of its weight, can be readily separated by jigging.

At one locality on the vein there was a somewhat remarkable occurrence of the ore. It was found in large bunches or blocks averaging 75 per cent tungstic acid, and from a small space $4\frac{1}{2}$ tons of ore were obtained. Scheelite has been found in small bunches and streaks with the hübnerite.

More recent information regarding the development of this ore body may be found in a paper by Mr. Fred B. Smith in the Engineering and Mining Journal, volume 73, pages 304–305, 1902.