W. Pine Co. 1620 0005

S27, 21N, 69E

(342) 193

Item 2

The Tungstonia property consists of 37 lode claims situated in the low foothills on the north end of the Kern Mountains, about 92 miles by road northeast of Ely, the supply base, and 65 miles east of Cherry Creek, shipping point on the Nevada Northern Railroad.

Tungsten veins in the area were discovered in 1910. Previous to 1910, very little development was done except necessary assessment work. Demand for tungsten during World War I resulted in further development and some production, but with cessation of hostilities, work in the area was discontinued. The property remained idle until 1935, when the Tungsten Minerals Inc. acquired the property and resumed mining operations. A 25 ton gravity concentration mill with magnetic separation was constructed in 1938. In the spring of 1940, work began on the No. 1 vein and was carried on until 1945. In the late 1940's the property was acquired by the Strategic Metals Inc., and in the early 1950's it was leased to the Helmar Enterprise Inc.

The country rock is a medium-to-coarse-grained muscovite-biotite granite cut by a series of quartz veins in an area ½ mile wide and 3/4 mile long.

Tungsten mineralization occurs in 5 veins on the property as shown in figure 8. The veins are roughly parallel to each other and strike about N. 20°E. and dip 55° to 60°E.

FIGURE 8 - Tungsten Deposits at Tungsten Minerals, Inc., Regan Mining District, White Pine County, Nevada.

USBM Unpubl. data, 1963

The ore shoots occur in the quartz-filled veins that vary from a few inches to several feet. Quartz outcrops along the general strike of the veins can be traced on surface for several miles. The individual mineralized quartz outcrops appear as lenses which end abruptly to form an echelon pattern in the vein systems. Paralleling the quartz veins, and in many places occupying the same fissure, are dikes of fine-grained diabase. The dikes are strongly silicified and mineralized with pyrite and fluorite where it contacts the quartz veins. In these places, the granite hanging wall is sericitized and mineralized with pyrite. There appears to be little cross-faulting, although some shearing is noted.

The ore mineral is hubnerite, a manganese tungstate($MnWO_4$). When pure, it contains 76.6 percent tyngstic trioxide(WO_3). Other associated minerals are pyrite, galena, fluorite, and occasionally small amounts of chalcopyrite and sphalerite. Pyrite is the most abundant mineral, gold and silver in small amounts have been reported. The hubnerite occurs in the quartz as isolated crystals and in small cluster bunches. However the hubnerite mineralization is very spotty.

The main workings consist of 2 adits 23 feet apart vertically which were driven along the strike of the No. 1 vein. The upper adit extends for about 200 feet. The lower adit(elevation 7,870 feet) was driven about 700 feet. The main stoped area begins about 180 feet from the portal of the lower adit and continues for about 180 feet on the strike of the vein. In addition, there is an inclined shaft known as Old Shaft, (elevation at collar about 7,735 feet), which was sunk years ago to a depth of 80 feet. It is 800 feet south of the main workings. A shallow open cut extends about 100 feet north and south of the shaft. The workings that show some stoping are full of water and inaccessible.

An inclined shaft sunk on the dip of vein No. 2, (eliminated "Wolframite" workings), was excavated to a depth of 60 feet. At a depth of 40 feet, a drift was driven 120 feet south and 60 feet north. An open cut was excavated south for a distance of about 145 feet. The area between the floor of the open cut and the 40 foot level was stoped for a horizontal distance of about 70 feet.

Years ago, a cross-cut adit (elevation 8,070 feet), was partially driven toward the veins no. 3, 4 and 5. This working was designed to intersect the veins at depth. After driving 285 feet, the adit was abandoned. About 530 feet of linear excavation would be required to intersect vein No. 4. The Griswold shaft on vein No. 4 was sunk to a depth of 43 feet. Additional work includes a number of small trenches excavated for exploratory and assessment purposes.

Production from the property during the period 1938 to 1942 amounted to 3,523 tons, averaging 0.78 percent WO_3, from which 2,311 units containing 60 percent WO_3 were recovered. The property was operated until the shut-down in 1945 and again in the early 1950's. The amount of ore produced is not definitely known.

Resulting from the investigation, a reserve 20,000 tons is indicated that may average 0.53 percent or about 11,000 units of WO_3.