S 6, 21, 28, 11N, 68E Tungsten Metals Item 8

The Tungsten Metals property consists of 8 claims situated in the low hills on the west flank of the Snake Range about 54 miles southeast of Ely.

Tungsten ore was discovered in the district in 1915 and was mined in 1916. In 1913, the Minerva Tungsten Corporation was incorporated and equipped with a 150 ton concentrating mill shortly before the price of tungsten fell below production costs. Except for a small leasing operation, in 1932, the property was idle until 1936, when the Tungsten Metals Corporation was formed to take over the mines. A 75 ton mill was built in 1936 and 4 mines were developed, namely the Scheelite Chief, Oriole, West Everit, East Everit and the Silver Bell. Work on these properties were continued until 1945. Shortly thereafter the property was acquired by Robert Stopper, who operated the mines on a small scale until his death in the early 1950's. The property was then leased to the Combined Metals and Reduction Co. until 1956 when the tungsten support program was terminated.

Rocks exposed in the area consist of shale and black and white limestones that strike easterly and dip at low angles south. These formations have been broken by numerous normal faults of varying displacements and intruded by post-ore dikes and sills of rhyolite that extend north-westerly across the district. No igneous rocks are exposed in the area, although granitic rocks are found 8 miles north.

The tungsten ore bodies occur as shoots in quartz veins that occupy faults in limestone. The ore shoots rake gently westward, roughly parallel to the limestone bedding, and are more or less continuous. However, subsequent

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faulting has in places disrupted this continuity.

The quartz veins strike easterly and dip 45° to 70° N. They vary in width from a few inches to 30 feet or more and are known to extend at least 3,000 to 4,000 feet laterally. The quartz varies in thickness along the strike and dip and may occasionally be disturbed by a series of closely spaced parallel fractures or by horses of limestone as shown in figure 6.

FIGURE 6 - Base Map showing Tungsten Veins, Minerva Mining District, White Pine County, Nevada.

The scheelite-bearing veins consisted mainly of quartz and calcite, which in places was mineralized with traces of totrahedrite, galena, silver haloids, powellite and cuprodescloizite.

Ore production came mostly from open stopes in quartz veins enclosed in limestone. Little or no timber was required, although minor amounts were used in drifts or cross-cuts. A large amount of cross-cutting was necessary to locate and develop faulted segments which greatly increased the development costs.

When ore shoots were intersected by drifting or cross-cutting, stopes were started from these openings. Small drift pillars were left under stopes for haulageway protection.

During the period 1936 to 1943 approximately 101,000 tons of ore was milled from which 79,293 units were recovered that contained 60° plus WO_3. This production figure has been largely increased by mining operations that were conducted during the period 1943 to 1957. Properly developed the district could again become an important producer of tungsten.