

A BRIEF HISTORY OF THE MILL CITY TUNGSTEN MINES
Tungsten, Pershing County, Nevada

Compiled by Donald I. Segerstrom
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As can best be determined, the tungsten deposits in the Eugene Mountains, Mill City Mining District, Pershing County, Nevada, were discovered in the winter of 1914 by a party headed by Emil Stank, then of Lovelock, Nevada. In search of silver, the expedition was not aware that the heavy brownish-white sand they encountered in panning samples was scheelite (tungsten) mineral.

Having a longish memory for a prospector, Stank recalled the material he had found in 1914 when, in 1917, the United States government issued a call for tungsten minerals. In March, 1917, he and others returned to the Mill City District, about 8 miles northwest of the town of Mill City, and filed claims on the area now known as Stank Hill. A vein (bed) of tungsten ore was exposed for a distance of about 150 feet across the top of the hill and the Stank party proceeded to mine the deposit. Even today evidences of high grade ore can be found in the areas Stank and his group did not mine.

The Stank discovery of high-grade ore soon became common knowledge and the Sutton group of claims were located in March of 1917 by Thomas Sutton. He soon formed the Mill City Tungsten Mining Company to work the claims which are now known as the Sutton No. 1 or Sutton South mine workings.

Also established in March, 1917 was the Nevada-Humboldt Mining Corporation. The firm was headed by M. Friedman who came to the Mill City district from his operations at the neighboring silver camp at Rochester. Friedman was one of the leading operators at Rochester and was in the process of promoting the Rochester Railroad which was to run from the Southern Pacific at Oreana to the mines at Rochester. He was later to become the principal operator at the rush camp at Seven Troughs, west of Lovelock.

Within sixty days of its location the Stank Mine was taken over by a corporation known as Pacific Tungsten Company.

By the fall of 1917 the following firms had been formed and were operating (or planning to operate) in the Mill City tungsten mining district:

Pacific Tungsten Company
Nevada-Humboldt Corporation
Mill City Tungsten Mining Company

Pacific Milling Company
Mill City Development Company
Tungsten Products Company

In early 1918, W. J. Loring, a prominent California mining operator, optioned the Pacific Tungsten Company which was operating the Stank mine and combined it with the Mill City Tungsten Mining Company to form the Pacific Milling Company with the objective the construction of the Pacific Mill. The mill was to have a capacity of 150 tons of ore per day.

Before construction was completed, Loring purchased 75% of the Mill City Tungsten Mining Company; the remaining one-fourth interest was later purchased by Charles H. Segerstrom, also of California.

Also during 1918, the Nevada-Humboldt Company formed a subsidiary, Tungsten Products Company, which proceeded to construct the Humboldt (Friedman) mill with a planned capacity of 100 tons per day.

About the same date the Pacific Tungsten Company, the Mill City Tungsten Company and the Nevada-Humboldt Company formed a new subsidiary, the Mill City Development Company for the purpose of bringing water and electric power to the mining district. The Humboldt Corporation agreed to pay one-half of the cost of the power and water lines.

The water line, of 6 inch diameter wire-bound redwood pipe, ran from a well near the Humboldt River about six miles to the mill and mine sites. The total cost for the pumping plants and related equipment was \$35,000.

Meanwhile the power line was extended from the terminus of the Valley Power Company's main transmission line to a point near Oreana. The power line from Oreana to the tungsten mining district was constructed at a cost of \$64,000, the entire amount rebated over the years through power consumed.

A prominent Nevada mining operator who was a late entry in the "tungsten sweepstakes" in the Mill City District was A. A. Codd. The Codd workings are located west of Stank Hill. He began his career in Goldfield, was a pioneer in the wild camp of Rawhide, and in 1918 left his mark on the workings at Tungsten.

With 250 gallons of water per minute available from the Humboldt River well, and with electric power connected, the Pacific Mill was to begin operation in November, 1918. A total of 600 tons of ore was run during the month in "tuning up" the mill, the ore being drawn from the Mill City Tungsten Company's Sutton Mine. The records indicate that about 12 pounds of WO_3 (tungsten trioxide) was recovered from

each ton of ore milled during this period. About 5000 tons of ore from the Stank Mine were processed during December, 1918, with a production of 27 pounds of WO_3 per ton of ore treated.

The Humboldt (Friedman) Mill was tuned up in December, 1918 with 1036 tons of ore processed which produced 5 pounds of WO_3 per ton. The mill ran about 14,000 tons of ore in December, 1918 and January, 1919 and produced 15 pounds of WO_3 per ton of the Humboldt Mine output.

From April through November, 1918 both firms shipped ore to a custom mill at Toulon at a freight cost of \$7.00 per ton. The Stank and Sutton mines shipped 7032 tons of ore which produced heads of 1.85% WO_3 and the Humboldt Mine shipped 7905 tons which produced heads of 1.50% WO_3 . These percentages are recovered amounts and not necessarily the ore percentages fed into the mill. The ore values were substantially higher.

After the World War I Armistice in November, 1918, both properties milled ore on hand and ceased operations in February, 1919. Each owed large sums of money.

In the spring of 1919, The United States Smelting, Mining and Refining Company; the firm of Hayden, Stone and Company (investment bankers); and E. A. Clark purchased the Nevada-Humboldt property for \$333,333 and spent an additional \$50,000 on it with the idea of consolidating it with Pacific Tungsten Company. At this time Pacific Tungsten owed about \$425,000 which it was unable to pay. Its creditors subsequently caused the property to be sold and it was acquired by Nevada-Massachusetts Company at Sheriff's sale.

Nevada-Massachusetts Company later purchased the assets of the Nevada-Humboldt Corporation including the Humboldt mine and mill and all of its outlying interests in the Mill City District.

Production from the mines at Tungsten up until December 12, 1922 totaled some 35,711 tons, not including 10,000 tons shipped to the East by rail. This output produced after milling 581,476 pounds of concentrate or 24,073 short ton units. (A short ton unit is 20 pounds of contained WO_3 .)

In 1925, Nevada-Massachusetts Company, Inc., a corporation headed by Charles H. Segerstrom, Sr., began mining and milling the ores from the consolidated properties using the Pacific Mill. The Humboldt mill had been partially dismantled between 1919 and 1925.

During the six year period from 1925 through 1930 Nevada-Massachusetts Company milled 50,000 tons of ore per year for a total of 300,000 tons. Just over 180,000 short ton units of WO_3 were produced from this tonnage.

Company records reveal that between 1925 and 1944 a total of 1,150,522 tons of ore was mined and milled from the properties. The cut-off date coincides with the destruction of the Pacific Mill by fire on November 11, 1943.

During 1940-1941, Nevada-Massachusetts Company had constructed a 1000 ton per day mill about 4000 feet south of the Pacific Mill in order to process the tailings from the Pacific Mill. This plant was in operation at the time of the fire at the Pacific Mill. Following the fire the new tailings mill was adapted to take mine ore, about six months being consumed in making the changeover. Due to the extreme war-time demand for tungsten at the time it was critical that this changeover be accomplished rapidly.

Between 1944 and 1958, disregarding a few short shutdowns due to labor strife and low tungsten prices, the mines at Tungsten operated continuously, mining and milling in the period over 2 million tons of ore.

From 1917 until 1958, the mines at Tungsten produced 3,032,627 tons of ore. From this ore was extracted 1,730,831 units of WO_3 . The average tungsten content of the ore through the years was .70% WO_3 . Units lost in milling numbered 299,609. Using an arbitrary value of \$42 per short ton unit of tungsten, gross money production of the mines exceeds \$72,000,000.

Employment at the mines at Tungsten between 1925 and 1958 varied from 62 in 1925 to as many as 280 during the years of World War II, the Korean War and the National Stockpiling Program. For many years the community of Tungsten was the second largest town in Pershing County and it supported a post office, general store, large single-men's boarding house, elementary school, community hall, library, service station and more than 110 one-family dwellings.

After shut-down of the mines and mills in 1958 because of depressed tungsten prices, Nevada-Massachusetts Company placed the property on a maintenance basis with a crew of 20 key men. In the spring of 1962 the Board of Directors of Nevada-Massachusetts Company reluctantly decided to allow the mines to fill with water and to sell the surface equipment and buildings. In September, 1962 most of the equipment and buildings were sold at auction and the property was placed on a caretaker basis.

In 1969, Nevada-Massachusetts Company was dissolved and the mining properties were acquired by the family of the late Charles H. Segerstrom, Sr.

A new organization, Tungsten Properties, Ltd., took possession of the property in January, 1970 and outlined plans to re-open the mines and process the tailings that had accumulated in an amount of over

3,000,000 tons.

Tungsten Properties, Ltd. is owned by Charles H. Segerstrom, Jr., Sonora, California; William F. Segerstrom, Sonora, California; The Estate of Donald I. Segerstrom, Sonora, California; Richard J. Segerstrom, Portola Valley, California; and Mrs. Martha S. Johnson, Cleveland, Ohio.

Note: Production figures herein do not include tonnages from custom milling, ore from other company mines, nor Golconda mine production. Milling from stockpiled ore results are not included.

Sources:

O. F. Heizer, USBM report - 1932
O. H. Hershey, Reports - 1932-33
P. F. Kerr, Nevada B. M. - 1934
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