

GLEESON ARIZONA

The Mines of Gleeson



Glenn Snow
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GSnow@GleesonArizona.com

Cover photograph: Head frame: Defiance Mine. Gleeson, Arizona.

Mines and miners in Gleeson go back centuries before any recorded history in the area. The Apache who ruled this territory for centuries were not miners themselves, but they negotiated with other tribes such as the Navajo for the right to extract Turquoise near the north end of Turquoise Ridge. Evidence of these ancient mines was documented as early as the 1850's although the mines themselves had not been worked for decades. In the early 1870's the Chiricahua Apache tribe had been largely suppressed, killed, or moved to the reservation, and among the first to take advantage of the vacant landscape were the miners and prospectors.

The turquoise mines in the area were reopened when Tiffany & Company (jewelers from New York), created a fashion craze for the polished blue-green stone in the 1880's. Turquoise from Persia (Iran), the other major source, has a bluer tint, while that from New Mexico and Arizona is more green. Combinations of these colors became quite a fashion, and engendered the reopening of the turquoise mines in this vicinity. In fact, the original name for the town was "Turquois, Arizona Territory". When the fashion waned, those mines were forgotten, but other valuable minerals had come to light in the meantime and were pursued. While gold and silver were occasionally found in various mines of the Gleeson area, it was copper which was the big money producer, and brought in miners, prospectors, adventurers, and settlers from far and wide.

Following is a brief account of the major mines in the Gleeson area, all but one of which (the Mystery Mine) are visible from the Gleeson jail.

Copper Belle Mine

The Copper Belle is the largest mine in Gleeson. It was begun as the "Leonard" mine in 1887 by Mr. Kit Charleston, who worked the claim only a few years. It was bought by John Gleeson in 1896 and developed as the Copper Belle on a much larger scale. Gleeson worked the Copper Belle from 1896 until 1901 when the Shannon Copper Company negotiated a 5-year lease and bonded the property from him. Eventually, the Shannon Company purchased

the land from Gleeson for about \$100,000. During the time that Gleeson owned it, he shipped about \$280,000 in quite rich (4% - 7%) copper ore from the shaft. At that time, there was no train into town, and so the ore was hauled by wagon 30 miles north to the Southern Pacific railroad station at Cochise. For a while, an attempt was made to smelt the ore right in Gleeson by burning the copper sulphides with juniper in two furnaces, but this was not very successful, and shipment of the ore to Cochise resumed.



The Shannon Company owned multiple claims on adjoining land, made up of the following nine claims: Copper Belle, Elizabeth, Oak Grove, Joe, Catherine, Dandy, Durand, Charleston, and Empire. This was known as the Charleston Group, and work on this property was sometimes referred to informally as working on the “Charleston Mine” or the “Shannon Mine”, although most of the work was done through either the Copper Belle or the Pemberthy (1917) shafts. The Copper Belle shaft is about 400 feet deep, and the Pemberthy shaft

is just over 600 feet. There are more than seven miles of interconnected underground tunnels in this operation. The Shannon Company continued to operate the mine until 1957, when it closed the mine and left the vicinity. The head frame and loading conveyor, remnants of this most productive mine in the area, can still be seen from quite a distance.

Tejon Mine

The Tejon claim was also located by Kit Charleston in 1888, and purchased by William McKittrick, a prominent cattle rancher from Willcox. McKittrick was also a veteran of the Spanish American

war, having gone to Cuba in 1898 as an aide to General Shafter. He was, in fact, the man who raised the U.S. flag in victory over the governor's palace in Santiago de Cuba at the end of that campaign. He later married the General's daughter Mary Shafter. By 1910 Captain McKittrick had moved most of his cattle operations to Kern County in California, but kept hold of his mining operations in Gleeson.

The Tejon shaft was sunk in 1911 in an attempt by McKittrick to find something similar to the riches of the Copper Belle. In fact, both gold and silver in significant quantities were also found, and became the focus of operations in this mine. It never reached anywhere near the size of the Copper Belle, although the shaft was dug to 518 feet. The underground tunneling only amounted to just over a half-mile, distributed among five levels. The copper found in this mine was not of a very rich grade (only 1.5%), and in fact arrived in the area some time in pre-history by being leached in with water from a higher elevation.

The Tejon mine languished in the 1920's, but produced some ore during the Great Depression and again in World War II. The last mining operations in the Tejon ceased in 1954, and have not re-commenced.

Tom Scott Mine

The Tom Scott Mine, visible just above the railroad grade near the southern tip of Gleeson Ridge, was one of the earliest locations of mining in the district. Primarily a lead-silver mine, it produced about \$50,000 worth of lead and silver in the 1880's. During World War I, over 2,500 tons of ore were produced, containing silver and lead, but also gold and copper. In 1925, the Tejon Mining Company, owned by the McKittrick family, leased the mine and sub-let its operation to various mining entrepreneurs who worked what was left of the mine for a few years. The Tom Scott was always a small operation, with less than 2600 feet of underground tunnels connecting on five levels. Interestingly, the main entrance to the Tom Scott is actually the *bottom* level of the workings, where an adit (horizontal tunnel) goes 1000 feet

northeast into the mountain, and connects with 4 more layers *above* that main tunnel, as the miners followed the mineral veins upward. This allowed the Tom Scott to remain always a small operation, as the ore fell *down* with each blast, and didn't have to be hauled upward with buckets or winches. The last operations in the Tom Scott ceased simultaneous with the Tejon, in 1954.

Defiance Mine

The Defiance Mine, high up on the Gleeson Ridge, can be identified by the head frame which is still standing, and which is the subject of the photograph on the cover of this pamphlet. The Defiance was a very small operation which began in 1900 and continued very sporadically until 1958. In that entire period it produced only about 10,000 tons of ore, which contained silver and lead, and trace amounts of gold and zinc.

The Defiance was mostly a tunnel-mine, with the main workings being an adit (horizontal tunnel) about 450 feet long, two winzes (interior vertical shafts), and some connecting drifts. The Defiance was owned by Martin Costello, whose careful purchase of mines in the Gleeson and Courtland area netted him a fortune. His mining holdings became the core of the huge Calumet and Arizona Mining Company, and resulted in Marty Costello becoming a millionaire several times over. A million dollars in 1900 would be worth around 25 million in 2009. Mr. Costello retired to Los Angeles in 1902, and his family continued his mining operations in Arizona. He committed suicide in an apartment in Los Angeles in 1911.

Silver Bill Mine

The Silver Bill mine, located about 400 feet southeast of the Defiance, was also owned by Martin Costello, but provided a greater output than its smaller cousin. The shaft of the Silver Bill was sunk in 1890, with most of the workings put in between 1893 and 1896. The main workings of the Silver Bill are found along a 270 foot ramp which angles down at about 45 degrees and then has overhead connections (raises) into the ore body. The last major



drift connects with the “Mystery Tunnel”, a mining tunnel which runs 780 feet northeast right through the mountain to the entrance of the Mystery Mine, which is just over the top of the mountain. After 1924, all the ore removed from the Silver Bill was brought out through the tunnel and delivered out through the entrance of the Mystery Mine. At that time the buildings and other structures at the Silver Bill entrance were taken down.

The Silver Bill produced primarily silver and lead, but small amounts of gold, copper and manganese were also part of its output. This was the longest running mine in the area, beginning in 1890 and was still being actively worked in 1978.

Mystery Mine

The Mystery Mine is not really visible from the Gleeson side of the mountains, but is included here because of its connection with the Silver Bill. The Mystery Mine was located in 1879 by Mr. J. McMann, and was later owned by Paul Warnekros and his wife. Warnekros was a big name in Tombstone, and had considerable real estate holdings in southern Arizona. At one time he had interests in thirty different mines.

The Mystery Mine wasn't seriously mined until 1923, when a long tunnel was excavated right through the mountain to connect with the drifts of the Silver Bill mine. The Mystery was unusual for the area in that its workings were all on a single level. It was basically one long tunnel, with short raises (overhead excavations), stopes (mining rooms), and side-drifts (dead-ends) which marked its course. The Mystery produced lead, zinc, copper, and gold in

moderate quantities. The tunnel became the primary exit point for the Silver Bill mine, because of its easier access to the railroad. The Mystery mine was closed in 1942, and no excavations took place after that date.

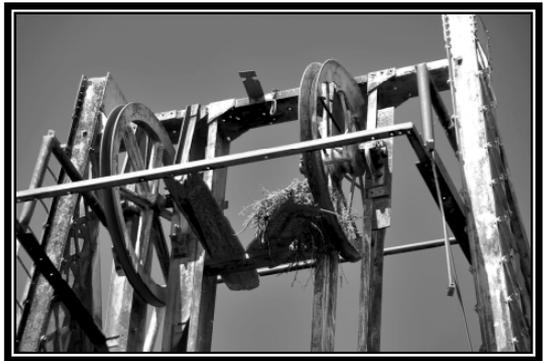
Conclusion

Beginning with the Apache and the Navajo agreements, mining was an important factor in the economy and the population of the Gleeson area, and continued to be until the mid 1950's when most every mining company abandoned the district. The cessation of rail service in 1933 and the removal of the railroad tracks made later mining a considerably more expensive operation, and one which did not draw much interest.

Silver, lead, copper, gold, zinc and a few other minerals were the primary minerals drawn from the ground around Gleeson, and their mining increased and decreased depending on market prices, transportation, and wartime demand.

Warning

Every one of the mines in the Gleeson area is located on private land, and they all have been totally abandoned for many decades... some of them untouched for half a century. It is both illegal and unwise in the extreme to enter into a



mining tunnel, even though it might seem, at first glance, to be quite sturdy. Rotten timbers, earth movement, oxidation and erosion have all significantly weakened every shaft, tunnel, adit and winze. Please do not allow a curious or adventuresome spirit to override caution and bring about a disaster.