

## AMOLE MINING DISTRICT

The Amole Mining District was established in the early 1870s in response to early mining claims in the Tucson Mountains. The earliest reference to the district is in a Federal Mineral Survey Map dated May 13, 1871 which refers to the “Sierra de Amole Mining district”. The first mine in the Tucson Mountains was the Nequilla Mine that had been located in December of 1865. A claim for the mine was recorded by Jesus and Ramon Bustamente and Domingo Gallego on February 17 1866. The claim was subsequently sold to James Lee and William Scott who patented the claim on September 28 1872. The Nequilla Mine was the first patented mining claim in the Arizona Territory. The mine was an underground operation and primarily produced lead with a small amount of silver. The quantity of ore produced was not significant and the mine closed in 1923. There was a peak near the mine locally referred to as “Soap Weed Peak” that was used as a reference for the location of the mine. Since the Soap Weed Yucca was commonly called by its Spanish name “Amole”, it appears that the district’s name evolved from that relationship. The Nequilla is located just outside the southeast boundary of Saguaro NP West.

Mineral deposits within the district were generally small and of low grade ore. There were over 200 prospector pits and mines established within the district but very few were profitable from an ore extraction standpoint. A large percentage of the money that was made over the years came from the sale of claims by speculators. This article provides a short summary of six of the mines, five of which are located within the current boundaries of the Tucson Mountain District of Saguaro National Park. Three of these mines (the Gould, Gila monster and Thunderbird) are of particular interest to the GVR Hiking Club since they are located along Saguaro NP trails used by the club. The other three mines that are summarized in this article because of their interesting history are the Nequilla (see above paragraph), the Mile-Wide and the Old Yuma.

GOULD MINE – This mine was established in 1906 by the Gould Copper Mining Company that had been founded by S. H. Gould. The Gould Camp was fully equipped and included a mess hall and a blacksmith shop. The company subsequently filed 18 additional claims in the Amole District between 1906 and 1911 that were purely speculative claims and not developed. The Gould Mine had a 350 foot main shaft and two tunnels (60 feet and 70 feet). The mine produced about 1,500 tons of ore (primarily copper with small amounts of silver and lead) worth about \$9000 between 1907 and 1911 before the company went bankrupt. Future owners of the mine had no better luck from a profitability standpoint and the mine was finally closed in 1954. The Banner Mining Company acquired the property in the late 1950s with the intent of creating an open pit operation. This



Figure 1 Gould Mine Tailings

plan was stopped when President Kennedy issued Presidential Proclamation 3439 in 1961 that expanded the western unit of Saguaro National Monument by 5360 acres that included the area of the Gould Mine. Figure 1 shows the Gould Mine tailings as seen from the Sendero Esperanza Trail (photo by Peter White). Figure 2 is the remains of a stone structure that was probably used for the storage of explosives. Figure 3 is the barricaded opening of the 350 foot mine shaft. Photos 2 & 3 by Mary Pulkrabek.



Figure 2. Stone Structure



Figure 3. Gould Mine Shaft

**THUNDERBIRD MINE** – The Thunderbird Mine is located upslope from the Thunderbird Trail a short distance north from the junction of the Sweetwater and Thunderbird Trails. A short spur trail leads to the top of the tailings and a gated adit. There is very little published history of this mine and its tailings are relatively small which leads you to believe that it was a rather small operation. However, when you return to the Thunderbird Trail and continue following it you will shortly come to another short spur trail that leads toward the lower portion of the mine's tailings. At the end of this trail there is another gated adit which is almost directly below the other adit. It appears that both of these gated adits are associated with what is commonly referred to as the Thunderbird Mine. Figures 4 and 5 depict the upper adit and Figures 6 and 7 are of the lower adit. The primary minerals recovered from the mine were zinc, copper, lead and silver.



Figure 4 Thunderbird Upper Adit



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Figure 5. Thunderbird Upper Adit



Figure 6. Thunderbird Lower Adit



Figure 7. Thunderbird Lower Adit

GILA MONSTER MINE – The Gila Monster Mine is located adjacent to a large limestone formation (Figure 8) in the eastern foothills of the Tucson Mountains. The mine is located at the junction of the Thunderbird and Gila Monster Trails and is about a mile from the El Camino Del Cerro Trailhead. There is very little information pertaining to the mine’s origin, period of operation or the amount of ore produced. The mine was an underground operation that consisted of two shafts, currently gated, of unknown depth. Figure 8 also shows the gated access shaft that is located at the base of the limestone formation. Figure 9 shows the second access shaft that is located about 30 feet from the other shaft. The minerals produced were primarily copper and lead with some zinc. From a rock collector’s viewpoint, the mine also produced some interesting specimens of red-fluorescing calcite and willemite (zinc silicate).



Figure 8. Gila Monster Mine



Figure 9. Second Access Shaft

MILE WIDE MINE – This mine was originally established as the Copper King Mine by L. Martin Warer and is located just north of the Gould Mine on the western slopes of the Tucson Mountains. In 1915 Warer sold the mine to Charles Reininger who founded the Mile Wide Mining Company and changed the name of the mine to the Mile Wide Mine. The company,

under Reininger, expanded the mine's operations by building four houses, a workshop, mess house, rock crusher, mill and access road (a portion of which is now part of the King Canyon Trail). The mine had one 400 foot shaft and several small excavations within the claim's boundaries. The prime production period was 1917 and 1918. During that period the ore was shipped to the Southern Arizona Smelter Company (SASCO) located just west of the current town of Red Rock for processing. The SASCO smelter had reopened in 1915 but essentially ceased operation again in 1919 during the Spanish Flu pandemic. The ore contained copper, silver, gold, Molybdenum, zinc and lead. These activities gave the impression that the operation was a bonanza and Reininger took full advantage of that in pushing stock sales to investors. However, considering the low grade of the ore and the existing methods of mineral extraction the operation was barely profitable. As a result, Charles Reininger came up with a different way of making his fortune. In 1919 he gathered up half of the investors' money from the company's stock sales, sold all of his stock shares for \$100,000 and disappeared, never to be heard from again. Several other owners attempted to keep the operation going over the years but the mine was finally closed permanently in 1942

OLD YUMA MINE – The Old Yuma Mine is located in the northeast corner of Saguaro National Park and is a short distance southeast of Picture Rocks Peak. It was one of the earliest mines developed in the Tucson Mountains with the original claim being filed in 1872. It was the most successful and also had the longest operating period of all the mines in the Amole Mining District. It had a series of owners and finally ceased operations in 1947. During the early years the ore was shipped to Globe for processing and the primary mineral produced was lead. Later assays showed that the ore consisted of 4 % lead, 1% Copper, 0.6 % Zinc, 0.3% Molybdenum, 1 ounce of Silver per ton and 0.1 ounce of Gold per ton of ore. Museum quality crystals of Vanadinite and Wulfenite were also recovered from the mine. During the years leading up to World War 1 one of the investors, Colonel Epes Randolph, anticipated that there would be an increased demand for the mines' minerals, particularly Molybdenum. He was instrumental in the construction of a smelter and a mill that could process 100 tons of ore a day. The mill was closed after operating for only two years because of the high cost of its operation. The operation of the smelter continued until the mid-1920s when it was also closed. Sporadic operations continued until 1947 when the mine was abandoned as no longer being profitable. Richard Bideaux, owner of the Consolidated Mining and Milling Company, bought the property and attempted to reopen the mine in the mid-1980s by further developing the underground workings and establishing a heap leach facility that would use cyanide to leach out the gold. The resulting environmental issues and legal challenges resulted in the company stopping its efforts to reopen the mine. The government acquired the property in 2001 and it became part of Saguaro National Park.

An interesting bit of history involving the Old Yuma Mine occurred in the 1930s. An outlaw by the name of Cliff Adkins kidnapped Tucson banker Gordon Sawyer in 1932, held him captive in an abandoned well at a local ranch and demanded a ransom of \$60,000. Deputies were able to

track and rescue Sawyer but Adkins managed to escape, evade his pursuers and take refuge in the old Yuma Mine. He forced the mine supervisor, “One Eyed” Joe Baker, to keep him hidden but after a \$5000 reward was posted some mine workers managed to slip away and notify the authorities as to Adkins whereabouts. A combined force of Tucson Police and the Border Patrol soon apprehended Adkins.

Summery prepared by Tom Johnson in June 2022 from Saguaro National Park Brochures, AZ Daily Star Mine Tales by William Ascara and several web sites including but not limited to mindat.org, ExploreTucsonMountains.com, desertmuseum.org and thediggins.com. Figures 4-9 by T. Johnson