## COURTLAND ARIZONA

## Mining History



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Cover photograph: abandoned mine conveyer, Courtland Arizona.

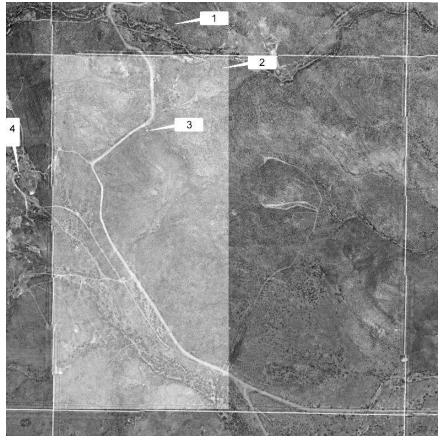
ining was the life blood of the town of Courtland, Arizona. Located near the southern tip of the Dragoon Mountains in Cochise County, even the pre-history of the Courtland area was intertwined with the search for valuable minerals.

In the centuries of Apache rule, mining "rights" were traded with other tribes for food, weapons, and other commodities. Navajo Indians would travel south from the four-corners area and trade with the Apache for the right to mine turquoise, which they used for jewelry and other decorations. The Chiricahua Apache, who roamed throughout this part of southern Arizona, were not miners themselves, but made arrangements with their neighbors which benefited both parties. Whites who ventured into the area usually found their way out quickly, as the Apache and the would-be settlers battled for territory and respect. When the Apache were forced from their land and removed elsewhere, prospectors and miners were among the first to scour the hills looking for geological riches.

Tiffany & Co., an east coast retailer in luxury items created a stir with turquoise jewelry, which became a fad in the early 1890's. Much of their turquoise was mined in the mountains which later became part of Courtland. The town of Gleeson, just around the bend from Courtland, was originally called "Turquoise", and was located north of its current-day site, on the edge of the mountains which divide Gleeson from Courtland. When the fad died down, the turquoise mines were abandoned, though they still contain some of the beautiful blue-green marbled stone.

In 1908, assays were made in the hills of what would soon become central Courtland. The ore was rich with copper. In fact, where most copper mines produced ore that was 2% to 3% copper, Courtland's ore was assayed at 7.5%. While gold can be profitably mined by individuals because of its high price, copper must be produced in large quantities to be profitable. Large quantities can only be obtained by large operations run by large companies. That's where the Young brothers of Clinton Iowa stepped in.

William and Courtland Young were lumber magnates from the great plains. While Courtland Young was content to manage the family business back home, his brother William was intent on taking advantage of the great opportunities being realized out in the "wild west." A report of the 7.5 percent ore reached him and he sprinted out to Arizona and bought up as much land as he could manage. They ended up owning the western half of Township 19S R25E, Section 21 on the Salt River meridian. That half-section ran one mile from the current Courtland Road up to the arroyo in central Courtland, on both sides of what is now Ghost Town Trail.



The light colored area was owned by Great Western Copper Co.

- 1 Germania mine, owned by the Calumet and Arizona Co.
- 2 Mary mine, owned by the Great Western Copper Co.
- 3 Courtland jail (for reference)
- 4 Leadville #3 mine, owned by the Leadville Mining Co.

At the same time, the Calumet and Arizona Mining Company leased mining rights on the Germania claim, just north of the Young brothers' land. The Germania mine in fact became the highest producing copper mine in the area, and lasted longer than the others. At its height, it produced some 6000 tons of ore each day, according to the Courtland Arizonan.

Mines in the area came and went with a dizzying array of names and locations. As one company bought out the workings of another company, it was hard to keep track of who owned what and who was working on which mine. Many of the mines, even from competing companies, connected with each other in drifts and cross connects. The Germania, for example, had underground connecting tunnels to the April Fool, the Miami, the Casey, and the Mary mines.

Some mining terminology might be helpful to the uninitiated.

*mine*: a hole in the ground from which ore is removed.

ore: raw rock containing (hopefully) valuable minerals

along with more useless material

shaft: vertical hole in the ground. This is usually where

miners enter and exit the mine, and also where

winches lower buckets to bring up the ore

drift: horizontal tunnel

cross-connect: a drift which connects with another tunnel

adit: horizontal tunnel directly accessible from the

surface which serves for drainage or ventilation

(pronounced add-it)

ore-dump: pile where the ore is dumped when it comes out of

the shaft

mill: where big heavy hammers ("stamps") crush the

ore into little pieces

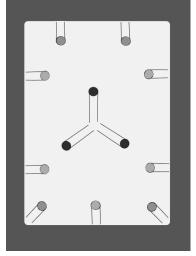
tailings: finely crushed ore powder which has been stripped

of desired minerals

Work in the large mines, such as the copper mines in Courtland, operated on a cycle of drill-blast-clear-repeat. Before any drilling took place, a mining supervisor would examine the rock face inside the mine to see what direction the vein went...in

other words, to see where the miners should work next. Miners would enter the mine and drill holes into the rock where the mining supervisor told them. These holes were usually about  $1\frac{1}{2}$  to 2 inches in diameter, and sometimes angled in, out, up, or down as they went in. A very specific pattern of holes was dug in each area, so that when the dynamite exploded it brought out the largest possible tonnage of ore. A typical example of such a pattern is

shown at right. The holes were drilled using a manual drill and hammer either by one person (a "single jack" operation), or by two people, one holding the drill and the other swinging the hammer (a "double jack" operation). In later years, compressed-air powered drills did the work, which was much faster, but also raised huge amounts of dust, which quickly became hazardous for the miners. Once the holes were drilled, they would place dynamite into the holes, connected



with fuses cut to very specific lengths, so that an exact sequence of blasts would take place. The image of a single stick of dynamite blowing out a huge amount of ore is a fantasy. In most rock, a single stick of dynamite would only crack the rock face. Instead a triple sequence of blasts was used to get the ore.

First, the center was blasted, which created a hole in the middle of the rock face. Then the left and right sides were blasted to compress the rock into the center hole. Finally, the top and bottom were blasted to lift the ore out from the face and dump it on the floor of the drift.

The blasting would take place at multiple locations, wherever a mining team was working. It was done at lunch and at the end of the day, or at the end of a shift in mines that ran multiple shifts. The dust and debris would settle during the shift change. Then a crew would enter and haul out the ore, clearing the mine for the repeat of the cycle. Drill, blast, clear, repeat.

As the rock was brought up, it would be examined by the supervisor for the presence of valuable minerals. Then if it had copper or gold or other valuable content it was put on the "ore dump" for transport to a mill. Otherwise it was put on the "waste dump," where it remained. The presence or absence of valuable content helped the supervisor determine what direction to proceed in the next round of blasting.

The mines of Courtland were mostly for copper. There were, however, some small gold mining operations in the hills to the west of Courtland. Several "gold strikes" occurred in the brief history of the town, which always piqued peoples' interest. Since gold was something you could mine by yourself (or in a partnership), it was very attractive to small operators and loners. One such loner was George Cummings, who lived in the hills of Courtland. George was married to "Big Nose Kate", the one-time girlfriend of Doc Holliday. Kate left him, and he spent his time prospecting in the hills between Courtland and Gleeson. He hit "lodes" several times, but never got enough gold to really make his living. George committed suicide in 1915 in Courtland, and is buried next to his horse and two dogs in the mountains near his old shack.

The big copper mines of Courtland fizzled out beginning in 1912, and all mining had ceased by the end of 1913. Several die-



hard miners kept trving. and when copper prices rose the midst World War I, there was a brief attempt re-open the to but Germania, didn't last long, as the timbers had rotted, the drifts had

collapsed, and groundwater had flooded much of the underground workings.

In recent years, a company from Germany has been drilling and prospecting the area, to see if modern technology can get any more from the ground. They were a presence in 2006-7, but haven't been seen much since.

Hikers in the area will see claim stakes all throughout Courtland. The oldest visible claims (1910-1930) are marked by piles of rocks with 4x4 posts sticking up. From 1930 to 1980, the markers tend to be smaller 2x2 posts. After 1980, the 2x2 posts have some kind of container secured to the top (like a prescription pill bottle), with the claim notice folded inside.

Every decade or so, the local government contracts to fence off the abandoned mines in the area, to keep cattle and people from falling in. Some of the fences are in good repair, some of them are not. Many mines, including the Germania's 500 foot main shaft, are not fenced, and pose a significant risk of death to those who walk around the area without paying strict attention to their footing.

Mining was the life blood and central reason for the establishment of the town of Courtland. When the mines lived, the town lived. But when the mines died, the town died with



them. Big mining companies have short attention spans. There were enough alternatives in southern Arizona to allow the companies to move on as soon as the veins were tapped out. In some towns, the people found other reasons to stay around, sometimes for a century or more. Courtland, however, was not one of those towns. The "ghosts" of this particular ghost town are all miners, and not much remains of their efforts here, except for some old ruins and a lot of holes in the ground.