Spanish Silver, Mexican Gold, and American Copper

Mining History in the San Pedro Mountains
NEW MEXICO, the Land of Enchantment, has long been known for its mineral riches. Miners have labored here from prehistoric times to the present day. Their work is visible throughout the state, from turquoise artifacts to hand-dug pits to abandoned mining camps to present-day mines employing thousands of workers.

New Mexico’s mining heritage can be seen south of Santa Fe along the Turquoise Trail. The Cerrillos Hills and the Ortiz and San Pedro Mountains form a mineral belt where deposits of gold, silver, copper, turquoise, zinc, lead, coal, and other minerals can be found. Geologists call this area the San Pedro-Ortiz porphyry belt. It is the oldest mining area in the United States, first worked by native peoples and, later, by Spanish, Mexican, and American miners.

Mining has left its legacy on the landscape, including hundreds of abandoned shafts, pits, and waste piles.

An abandoned mine tunnel in the San Pedro Mountains.

Despite the risk these features pose to the public and wildlife, they are part of our shared history and tell a story that must not be lost. The New Mexico Abandoned Mine Land Program (AML), using funding from the Office of Surface Mining Reclamation and Enforcement and the Bureau of Land Management, is working to preserve this story through a series of archaeological studies in the region prior to safeguarding the long-abandoned mines. This booklet focuses on the mining area in the San Pedro Mountains and the old mining camp of San Pedro, which was surveyed in 2015 by WestLand Resources, Inc., under contract with AMLP.

Map of the San Pedro Mountains and New Placers mining district showing the main mountain peaks, Spanish-era Santa Catalina mine, Golden placer field, San Pedro copper mine, and the communities of San Pedro and Golden.

The San Pedro mining area is known as the New Placers mining district and was made famous as a placer gold district during the early nineteenth century and, later, as a copper mining area, although lesser quantities of lead, zinc, and silver have also been mined from its dry hills. The district ranks ninth in historical copper production in New Mexico with some 17 million pounds produced during the late nineteenth and early twentieth centuries, most of it from the celebrated San Pedro or “Big Copper” mine. Overall placer gold production is harder to determine since most of the gold came from individual miners near Golden. Current records place the district fourth among New Mexico’s goldfields at more than 100,000 ounces.

A VERY RICH MINING DISTRICT!

Special Correspondent Writes About the Golden Country.

Albuquerque Daily Citizen, February 11, 1898

The San Pedro Mountains and the nearby Cerrillos Hills were first prospected for silver by the Spanish during the 1580s, making the San Pedro-Ortiz porphyry belt the oldest European mining area in what is now the United States. Despite the discovery of precious metals, little development was done during Spanish Colonial times, but in 1839, when the region was still part of Mexico, placer gold was
discovered at the foot of the mountains. This discovery resulted in the first mining boom in the San Pedros and, together with the nearby Old Placers boom of 1828, would mark the first gold rushes in the American West. But placer mining in the San Pedros never developed into a successful industrial-scale enterprise and was mostly left to individual miners and small groups. Meanwhile, others looked to the richer gold and copper lodes of the district. Despite gold being more valuable, copper mining, backed by American capital, dominated the district during the late nineteenth century and into the early 1900s. Industrial copper mining in the district finally ended in 1918 with the closing of the San Pedro mine.

Today, traces of the historical mining operations—underground workings, mine dumps, stone mills (arrastras), smelters, placer pits, isolated miners’ shacks, refuse piles, and the old mining camps of San Pedro and Golden—persist as vivid reminders of the miners who worked the placers and lodes of the San Pedro Mountains.

**ECONOMIC MINERALS**

The mineral resources of the New Placers district consist of base and precious metals found in hardrock (lode) deposits as well as gold in secondary (placer) deposits that were formed from the erosion of hardrock veins higher up the mountains. Gold flakes, dust, and nuggets are found on the gravel-rich alluvial terraces and fans along the flanks of the San Pedros. The richest placer field is located near the aptly named community of Golden. Economic minerals found in hardrock consist of copper, gold, silver, lead, zinc, iron, and tungsten. Of these, only copper has proven its worth economically, with the San Pedro copper mine on San Pedro Mountain producing most of the valuable ore in the district. Gold and silver were also extracted secondarily from the copper mines, and numerous small lode gold mines and the arrastras used to extract this precious mineral dot the San Pedro Mountains. In addition, silver-bearing lead ore deposits are present in a small area known to the Spanish as Las Minas de Santa Catalina.
SPANISH SILVER

New Mexico has long been associated with mineral wealth, both fictitious and real. The mythical association of the region with precious metals and other riches traces its origin to sixteenth century Spanish colonial expansion and the accounts of Cabeza de Vaca and Fray Marcos de Niza, which told of golden cities—the famed Seven Cities of Cibola—in what is now New Mexico. Although Francisco Vásquez de Coronado mounted an entrada in 1540–1542 in search of Cibola, he found only native peoples, none of whom possessed the vast, unlimited stores of gold the Spanish were searching for. Despite Coronado’s failure, the lure of precious metals remained a significant part of Spanish Colonial expansion in New Mexico.

The next expedition to the north following Coronado was that of Fray Agustín Rodríguez and Francisco Sánchez Chamuscado in 1581–1582, who led a group of friars, soldiers, and Mexican natives through New Mexico. The Chamuscado expedition passed by what would become known as the Tuerto Mountains and, later, the San Pedro range. Chamuscado, a professional soldier, was also knowledgeable about mining, and in 1582 he discovered the mineral deposits of the San Pedros, which he christened Las Minas de Santa Catalina. He also found other nearby mineral locations, including those of present-day Cerrillos, which he named Malpartida. These discoveries marked the beginning of European mineral prospecting in what is now the United States.

All the mineral locations discovered by Chamuscado contained silver, the most important precious metal then coming out of the Spanish colonies in the Americas.

Prehistoric grinding stone (metate) from the San Pedro Mountains. This metate was made from local sandstone and used to grind seeds into flour.

Sixteenth century silver mining methods in the Americas. This 1594 woodcut by Theodor de Bry depicts the famed silver mines of Potosí, Bolivia. To the left of the shaft, two burros are packing ore to the water-driven mill.
Around 1600, the silver mines of Cerrillos and San Pedro were being worked by the Spanish, who erected smelters and other reduction facilities in the adjacent area. There is also some evidence that the San Pedro copper deposits, less than a mile up the mountain from the Santa Catalina, were prospected and assayed around this time. However, Spanish Colonial mining in the San Pedros was limited, and it would be hundreds of years before the first great mining rush.

**MEXICAN GOLD**

As early as 1828, gold-bearing sands were found in the Ortiz Mountains or Old Placers mining area.

**The Old Placers, (Pinches’in) New Placers, &c., are reached either from Bernalillo or from Wallace. The Old Placers were first discovered in 1828, by a herder from Somora, who found particles of gold in the sand; and quickly attracted a crowd of fortune-seekers. The washing was done by hand or in small “rockers,” water being very scarce and the greater part of the work being done in the winter, when melted snow was used. From $40,000 to $60,000 a year was thus extracted. The principal village of the region was called Dolores. In 1830 the “New Placers” were discovered a short distance to the south-west, and the miners soon crowded to the new Eldorado. The village of Tuerto quickly grew into a bustling town, and in 1845 contained no less than twenty-two stores. For several years the product of this entire region was about $250,000 annually; but the limit to the crude, hand-working processes employed was finally reached, and the vast stores of golden dust beneath the surface now awaits the development for which capital is being supplied. The “Old Copper Mine” at San Pedro is now being extensively worked; and besides its great value produces the most beautiful cabinet specimens of rich color that can be imagined.

The San Francisco Catholic church in Golden, said to have been constructed during the early nineteenth century placer gold rush (Jane Kanter, courtesy Palace of the Governors Photo Archives [NMHM/DCA], HP.2014.14.184).

Golden is now mining town which has taken the place of Tuerto, and in the future bids fair to be one of the most prosperous mining centers in New Mexico.

**Berger’s Tourists’ Guide to New Mexico (1883)**

These are known as placer deposits after the Spanish word for “sandbank” and were exploited by Mexican-era miners in the region. Unlike hardrock mines, which entail a substantial capital investment before any profits can be realized, placer mining requires little more than a spade, muscle, and simple washing equipment and could be accomplished by individuals or small groups of miners. Because of the lack of water in the region, winter was the preferred time for placer mining as snow could be melted and used to wash the sand in horn spoons (goat horns) and wooden pans known as bateas. During dry times, the less productive dry-washing technique was employed.

In the evening we visited a town at the base of the principal mountain; here, mingled with the houses, were huge mounds of earth, thrown out from the wells [placer drift mines], so that the village looked like a village of gigantic prairie dogs. Nearly all the people were at their wells, and were drawing up bags of loose sand by means of windlasses. Around little pools, men, women, and children were grouped, intensely pouring over these bags of loose sand, washing the sand in wooden platters or goat horns. One cannot but feel pity for these miserable wretches, and congratulate himself that he does not possess a gold mine.

Although many people gathered at the mines during the winter months, it seems that most eked out a meager living from the placer grounds. The vestiges of these early efforts can still be seen in the thousands of infilled pits along the face of the mountains near Golden.
Other miners worked the gold veins higher up the mountains. The gold from the hardrock mines was extracted in stone amalgamation mills known as arrastras.

**ARRASTRA**

Arrastra are the Spanish word for “to drag” and are a type of ancient milling technique that was widely used in the processing of gold and silver ore. Blindfolded donkeys or horses were harnessed to the end of the mill and driven around the arrastra, thereby crushing the ore with large drag stones. Mercury (quicksilver) was sprinkled over the milled ore and the resulting “slime” or amalgam was collected and heated to recover the gold or gold-silver “sponge” from the mercury. Archaeologists have recently recorded a number of arrastras in the San Pedros. The gold bonanza in the New Placers would only last until the end of the 1840s, with many of the inhabitants moving on in search of richer diggings or out of fear of reprisals by the American victors of the recent Mexican War. The boom in the New Placers also proved attractive to American period speculators and swindlers, who sought title to the mineral lands with fabricated Spanish-era land grants.

**AMERICAN COPPER**

In the early 1880s, New Mexico witnessed a mining rush with the opening of remote areas to industry by the transcontinental railroad and the expansion of the national economy, resulting in a dramatic increase in the price of base metals. Copper was in increasing demand for wire production as North America and Europe adopted electric power. The “Big Copper Mine” on San Pedro Mountain thus became the focus of mining in the New Placers district during the 1880s and into the next century.

*The San Pedro copper mine below San Pedro Mountain, circa 1908.*

*The Santa Fe Gold & Copper Mining Co. smelter below the San Pedro mine, circa 1908. Before its construction in 1900, the company used the smelter in the community of San Pedro that was built around 1880.*

**SAN PEDRO COPPER**

The Santa Fe Gold and Copper Company Has Immense Bodies of Ore.

_Santa Fe New Mexican, February 6, 1900_
The copper companies formed to work the San Pedro mine during the late nineteenth century were all funded by Eastern American capital: San Pedro & Cañon del Agua Co. (1880), Santa Fe Copper Co. (1888), and Santa Fe Gold & Copper Mining Co. (1899). These companies created a copper-mining landscape in the San Pedros that consisted of underground mines, an aerial tramway to transport the ore, mills, smelters, and the little mining camp of San Pedro, the remains of which can still be seen today from NM 344.

THE SAN PEDRO MINING CAMP

The community of San Pedro was established in the spring of 1880 when the San Pedro & Cañon del Agua Co. began operations at the San Pedro copper mine. The new camp was developed along the southwestern flank of the mountains where the mining company had established its offices and smelting works. Homes and commercial establishments sprung up on the more level areas near the works as was typical of Western boom towns of the era.

Descriptions of the camp in 1880 fit the typical mining camp arrangement, with dozens of residences and boarding houses for the company workers, a mercantile, a dressmaker, three saloons, and a hotel providing entertainment and rooms for the public. Mining-related infrastructure included the company office, stables, assay house, blacksmiths shops, carpentry shop, and the smelter.

Oddly enough, period newspapers proclaimed that no spirituous liquors were allowed in the camp during the early 1880s and that San Pedro was the “only temperance camp in the Territory.” Based on the number of saloons in San Pedro and the thousands of alcohol bottles that have been documented by archaeologists, this appears to have been something of an exaggeration.
families, merchants, and the usual boom town hangers-on were also living in the new community. For a few years, the camp rushed forward, but the good times were short-lived. In 1884, the price of copper fell and the San Pedro & Cañon del Agua Co. mines and smelter closed. This marked the end of the first San Pedro copper boom. Mining employment dwindled and with it the population of the camp. Nevertheless, this early 1880s rush set the stage for the further expansion of the community later in the decade.

According to the New Mexico Bureau of Immigration, some 1,000 men were employed at the mines and smelter in 1882, with a total company payroll of $50,000. San Pedro itself likely contained many more souls since the miners’
And expand it did. In July 1889, the townsite was formally laid out by a company associated with Santa Fe Copper, the Golden 9 newspaper was established, and a new flood of miners and entrepreneurs arrived. The 1889 townsite plat shows an organized community with 59 blocks laid out in 25-by-130 foot lots, alleyways, and wide streets named after the men associated with Santa Fe Copper and other towns in New Mexico. Lots were reserved for Roman Catholic, Episcopal, Presbyterian, and Methodist churches, reflecting the multicultural flavor of Western mining camps.

The company directors were also kind enough to reserve a spot for a public school, reportedly the first in Santa Fe County, where religious societies controlled much of the instruction. The lot book for the San Pedro Townsite indicates that during the heady days of 1889, almost 60 lots were sold, most along the eastern edge of town nearest the smelter. Speculation was clearly running high, and it was hoped that San Pedro would turn into the next mining metropolis of New Mexico.

The Golden 9 newspaper was certainly pushing the new community to when it stated in its inaugural edition:

When a man buys a San Pedro town lot at a nominal figure, washes out about $1,000 in placer gold in his backyard, and strikes a lead [vein] in his cellar, he isn’t taking long chances.

While this statement is clearly a stretch—there was placer gold but no actual veins in the platted townsite—it shows how prospective buyers were seduced by visions of golden riches. Promotion and actual mining employment soon resulted in a run on the community, the results of which can be plainly seen in the description of the various dwellings that were being constructed in the summer of 1889:

Possibly a more varied assortment of residence buildings has never before been seen as are now going up in San Pedro. The unprecedented demand has exhausted the supply of building material, and everything available is being substituted. Log houses, frame houses, adobe houses, sod houses, pole houses, conglomerate houses, milled houses and dugouts are going up by the hundreds. There are many substantial buildings going up also, but the great bulk is of the shell order. This is a result of the boom.

From 1889 to 1892—Santa Fe Copper’s first period of production—perhaps a thousand people resided in San Pedro. New businesses also sprang up in 1889, including a physician, an attorney, a real estate broker who also sold insurance, an assayer, the San Pedro Hotel, five mercantiles, four restaurants, a meat market, a bakery, seven saloons, a gambling establishment, a barber shop, seven construction companies, a livery stable, a carriage dealer, three blacksmiths, and a laundry. San Pedro was a lively town that year, having long since abandoned its pretense of being the only “temperance camp in the Territory.”

July 1889 plat of the San Pedro townsite (courtesy Chavez History Library, 78-94-S126 1889).
Like many mining communities in the West, San Pedro was a multicultural camp with Hispanic, Anglo-American, and European miners, businessmen, and other workers. Owing to the vagaries of the copper market and the national economy, operations at the Santa Fe Copper mine were irregular during the first decade of the twentieth century, with the company ceasing all operations in 1907. This doesn’t seem to have had much of an effect on San Pedro; in 1910, the population stood at 351, with many miners apparently working placer deposits or farming nearby plots. Later, in 1915 and 1916, Santa Fe Copper had its last important period of production, which likely resulted in new arrivals to the camp. However, this new growth was short-lived; in 1918, the Santa Fe smelter burned and the copper mine closed. The 1920 census shows only 244 people living in San Pedro.

The closing of Santa Fe Copper and the national recession following World War I tolled the death knell for the little community of San Pedro. When General Land Office surveyors mapped the township in 1923, they reported only “several families” as living in San Pedro. San Pedro would live on for a few more years during the late 1920s when the owner of a nearby lead-zinc mine built a small store near the old camp and registered it for postal service under the name Carnahan.

By the early 1940s, San Pedro was essentially a ghost town. It was described in the Santa Fe New Mexican under the headline Haunting Echoes of the Past: “There is little of
old San Pedro left to be seen... though a few ruins and foundations, some of them snake-infested, remain as a reminder of its glory days.” Over the next several decades, only a few buildings remained standing. One of these was a church constructed of blocks formed from smelter slag, but it, too, was eventually removed.

Today only scattered foundations, refuse piles, masonry coke ovens, the slag heap, and, farther to the southwest, the town cemetery stand as testament to the once booming community of San Pedro and the long history of mining in the San Pedro Mountains.

The ruins of San Pedro, circa 1950s. These buildings have since collapsed, but the foundations are still present (Marjorie F. Lambert Photographic Collection, courtesy State Archives of New Mexico, 29307).

The coke ovens and slag heap in San Pedro, circa 1950s. Slag is a byproduct of the smelting process. The black conical items are pieces of slag that partially cooled in iron pots used to haul the waste from the smelter (Marjorie F. Lambert Photographic Collection, courtesy State Archives of New Mexico, 29304).

The old San Pedro church, circa 1950s. This unique church was composed of blocks cast from molten smelter slag (Marjorie F. Lambert Photographic Collection, courtesy State Archives of New Mexico, 29308).

SUGGESTED READING


Contemporary map of mining districts near Santa Fe that appeared in the March 21, 1900 edition of the Santa Fe New Mexican. North-central New Mexico has a rich mining heritage and contains deposits of precious and base metals, coal, turquoise, and industrial minerals. Note the New Placers (San Pedro) mining district on the lower left.

Cover: Print on an 1891 Tuerto Mountain Copper & Gold Co. stock certificate (L. Bradford Prince Papers, courtesy State Archives of New Mexico, Serial No. 14054, Folder 7).