

Carolina Gold

Client: Ridgeway Mining Company

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By Jan Collins



When John DeWitt Chapman was a schoolboy in Cheraw, South Carolina, he loved geography. "Maps, geography—I made the honor roll every time in those subjects," he says proudly.

Nearly fifty years later, that interest paid off. In 1969, Chapman struck gold.

Today, Amselco Minerals, Inc. plans to develop the deposit Chapman found near the town of Ridgeway in Fairfield County, South Carolina. And Chapman, 71, now a retired upholsterer who lives with his wife, Mildred, in Lexington, still roams the byways of South Carolina in his specially-equipped jeep, searching for gold.

"I've just always seemed to know where to find it," he confides. "You don't have to go far from home to find your treasure."

The graying prospector took up gold hunting in 1960. "I had a good friend who panned for gold. He taught me, and we went all over the state."

Chapman first found gold off highway 321 in Cedar Creek, South Carolina. For the next nine years, he traced all the branches and tributaries of Cedar Creek. He ended up in Ridgeway. Three times Chapman took samples from a bank of soil and rock in Ridgeway that he was convinced contained gold. No gold was found.

Finally, he went back to the same area after a rain. That's when he found "real fine gold" particles, gleaming in the sun.

Chapman contacted the state geology office. Geologists came to Ridgeway and drilled 50 holes or so, confirming Chapman's find. But in 1969, gold was priced at only \$35 an ounce. No companies were interested in drilling at that price.

It wasn't until the late 1970's, when the price of gold shot up to about \$800 an ounce, that Amselco Minerals, Inc., came to Ridgeway to explore the area. For two years, Chapman worked for Amselco, showing them where he thought more gold was located. Today, although he's hard of hearing and has lost a leg due to complications from an aneurysm, Chapman still searches for gold for Amselco on a finder's fee basis.

"I go looking when the weather is suitable," he says. Using maps and geological survey reports, Chapman takes soil and rock samples and creek and branch samples. His jeep is crammed with special equipment that helps him in his work. He loves to show visitors a recent sample flecked with fine gold.

"I never get tired of it, " he says. "I love it."

The history of South Carolina has been forged with indigo, rice, cotton, textiles—and gold. America's first gold rush, in fact, took place not in California in 1849, but in the Piedmont section of the Carolinas nearly half a century earlier.

It began in 1799 with the discovery of a 17-pound gold nugget in Cabarrus County, North Carolina. The Carolina gold rush continued intermittently in both Carolinas until 1942, when President Franklin Delano Roosevelt closed all gold mines as a nonessential industry in wartime. Between 1829 and 1942, 318,825 troy ounces of gold were produced in South Carolina. Today, gold is once again being mined in the Palmetto State.

"We're mining now what the old timers left," says Jack S. Whisnant, operations manager of the Piedmont Mining Company, Inc. Piedmont Mining in 1981 reopened the old Haile Mine in Kershaw, South Carolina, the most productive mine east of the Mississippi in the 19th and early 20th centuries.

Nine miles northeast of the Haile Mine, the Brewer deposit is being developed by Nicor Mineral Ventures, recently acquired by the London-based Costain Group plc. Thirty miles south of the Haile, a major project has been announced by Galactic Resources Ltd., Vancouver, and Amselco Minerals, Inc., of Denver, Colorado, to develop the Kiff deposit near the town of Ridgeway, South Carolina.

According to the South Carolina Geological Survey, South Carolina gold occurs in three types of deposits: (a) low-grade siliceous replacement deposits; (b) quartz veins generally less than ten feet thick; and (c) placers of stream gravel or other surface material.

The deposits are part of a belt that extends throughout the Piedmont of the Southeastern United States from northern Virginia to eastern Alabama. It is called the Carolina Slate Belt.

Why the resurgent interest in gold? New technology for mining the gold more cheaply, and a jump in the price of gold (from \$35 an ounce in the early 1970's to about \$450 per ounce in recent months), are usually cited. So is romance. "The romance is in the metals," says Whisnant, "even though more money is in things like sand, gravel and clay. [Gold mining] has an aura about it that digging dirt just doesn't have."

The old-timers thought so, too.

Early Days

Conrad Reed, son of a Cabarrus County farmer, spied a shiny yellow rock in the shallow waters of Little Meadow Creek, North Carolina, while playing there one day in 1799. He took it to his father, John Reed, who thought the rock was worthless and used the 17-pound nugget as a doorstep for nearly three years. By 1801, however, the elder Reed, a German immigrant, realized the rock was gold. The Carolina gold rush had begun.

Prospectors in neighboring South Carolina heard about the Reed strike and began panning for gold in the Palmetto State. By 1802, the metal had been discovered in the Greenville district of South Carolina.

In 1828, Benjamin Haile discovered gold in the bed of a stream that ran through his plantation near Camden in Lancaster County, South Carolina. That same year, gold was discovered at the Brewer property in nearby Chesterfield County. By 1829, the first South Carolina gold had been shipped from the Haile Mine to the Philadelphia Mint.

In the 1830's, one of South Carolina's most productive eras, the Brewer Mine employed 100 to 200 miners and "is said to have yielded \$1.50 to \$3 per person per day." Miners in those days had a profit-sharing agreement, but the gross profit depended on how much each individual was able to recover from the ground. In 1838, branches of the U.S. Mint were established in Charlotte, North Carolina, and Dahlonega, Georgia.

Prospectors followed the gold-laden streams into other Piedmont counties; within a few years, gold had been found in more than 130 locations in 18 South Carolina counties. (That number is 19 today. Gold was discovered in Fairfield County in 1969).

The most famous—and most productive—gold mine in South Carolina, however, was the Haile mine.

Haile Mine

Within a year of Benjamin Haile's discovery, men carrying gold pans, picks, and shovels arrived to search for gold. Sand and gravel along the streams were worked first. Later, lode deposits were discovered on slopes alongside the creek. "Miners leased land in lots of 50 square feet and worked them as deep as 25 feet."

During the Civil War, the Confederacy obtained gold and other mineral deposits from the Haile. As a result, wrote photojournalist Bruce Roberts, "[General George] Sherman made a special point of sending a detachment of troops to burn and destroy the building and equipment of the Haile Mine on his march through South Carolina."

After several failed efforts to reopen the Haile following the war, E.G. Spilsbury took control and erected a large mill in 1881. In 1888, a German-born engineer, Dr. Adolph Thies, took control of the Haile and developed a barrel chlorination process to extract gold from low-grade sulfide ore. The process was enormously successful, and the Haile was active until 1908, producing more than 150,000 ounces of gold during that period.

This was the heyday of the Haile Mine. Clyde C. Pittman, who grew up at the Haile where his father worked, remembered that "whiskey flowed" in the early 1900's. "There were no cowboys or gunmen with their Colt 45's swaggering about, but most everyone at the Mine 'packed a weapon,' ..either a very sharp knife, a razor, or an Iver Johnson '32."

"Dice, poker, card games of every kind flourished," Pittman wrote in his book, *Death of a Gold Mine*. So did tourism. "They drove out from Kershaw in buggies, hacks, carriages and now and then [in a] fancy fringed-top surrey," Pittman remembered. "Sometimes there would be picnickers with their wicker baskets filled with food who would come and spend their entire day. Sometimes we would see them strolling along the creek, searching among the pebbles and gravel of the stream. Papa said, 'They are all gold crazy.' "

Writing in 1972 about his memories, Pittman could "still see those fancy ladies, their skirts sweeping the ground, little gold watches pinned up on their shoulders, carrying a bright parasol, veils tied over their 'Breton sailors.' The men are remembered by their wing collars, hat rims turned up all the way round, and their bright tan shoes."

In August 1908, a boiler explosion killed Ernest Thies, Adolph Thies's son and successor as mine operator. The mine was closed until 1934, when it was reopened and worked profitably until padlocked by President Roosevelt in 1942.

Production was not resumed after World War II because gold prices were too low to cover operating expenses.

Dorn Mine

The Dorn Mine was second only to the Haile Mine in total gold production in South Carolina. William B. "Billy" Dorn of McCormick County discovered a small amount of gold on his country estate about 1835. Then in 1852, Dorn made a sizeable strike. Using slave labor exclusively, the mine made Billy Dorn a wealthy man.

By 1859, at the peak of its production, the Dorn Mine had yielded nearly one million dollars worth of the precious metal. The *Greenville News* wrote that Billy Dorn "made such a strike that he once considered having gold shingles put on his house." His generosity was legendary. When at the age of 55 he married 15-year-old Martha Jane Rutledge of Abbeville County, he gave his bride \$500 to spend for wedding gifts. At the end of the ceremony, he presented the preacher with a pair of gloves. The minister was disappointed until he discovered a \$100 gold piece in each finger of the gloves.

During the Civil War, Dorn outfitted an entire company with his gold mine profits. Once a month, Dorn's slaves would take a wagonload of provisions to the company commander and his men in Charleston. Dorn closed his mine permanently in 1865, on the day General Robert E. Lee surrendered to Union forces at the Appomattox Courthouse.

Reconstruction

The War Between the States ended the first period of gold production in South Carolina. The Mint at Charlotte, turned into a Confederate military headquarters during the Civil War, never made another gold coin. It was reopened in 1869 as an assay office.

During Reconstruction, total gold production in South Carolina, "remained less than \$10,000 a year, a fraction of what it had been before the war." It was as if, said Bruce Roberts, "the gold had gone with the wind that blew across South Carolina after Sherman's march."

Shortly after 1880, several processes of ore treatment were discovered and tried with varying degrees of success. Mining activity declined before World War I, and no production was reported for the years 1918 to 1925.

On August 15, 1932, the *Greensboro Daily News* "reported the finding of a 12-pound gold nugget at the Nugget Gold Mine near Charlotte. Calls and letters poured into the Charlotte Chamber of Commerce, asking for locations of old and abandoned mines in the Carolinas."

Then in January 1934, the price of gold at the U.S. Mint was increased from \$20.67 per troy ounce to \$35. This stimulated gold exploration even more, and in South Carolina at least 35 different mines were worked actively between 1934 and 1942. Even the Dorn Mine in McCormick County, which had been closed for decades, was surveyed and a small operation reopened.

The Haile Mine went back into business until 1942; so did other small mines, mainly in western York and eastern Cherokee Counties, near the hamlet of Smyrna.

Current Day Mining

In the late 1970's, the price of gold skyrocketed past \$800 an ounce. Because of new techniques developed in mining operations around the world since the 1940's, it once again became profitable to mine for gold in South Carolina. But grizzled prospectors of yesteryear with their picks and shovels wouldn't recognize the gold-extracting process of today.

The gold that is buried near Ridgeway in Fairfield County, for example, doesn't come in nuggets or rich veins. Instead, it is encased in ore that contains 0.033 ounces of gold per ton. To extract the gold, Ridgeway Mining Company, a subsidiary of Amselco Minerals, Inc., will:

- Dig ore from two pits, the first a 63-acre South Pit and the second an 85-acre North Pit. Each pit will be dug to a depth of about 400 feet. Groundwater will be pumped from the pits and will be treated before being pumped into Bear Creek. Any groundwater or rainwater that is discharged into area creeks and streams will be cleaner than the existing water.
- Blast with explosives to loosen the earth so the rock and soil can be excavated and removed from the pits by 85-ton trucks and front-end loaders.
- Transport the ore to a crusher that reduces the rocks to sizes of eight inches or less. A conveyor will move the ore to two grinders, which reduce the ore to a powder.
- Combine water, sodium cyanide, and quick lime with the ore in the grinders to produce an ore "slurry." This mixture is then moved through a series of 10 "vat leach tanks," each of which is 50 feet high and 55 feet in diameter. The cyanide dissolves the gold, which is then chemically bonded to carbon granules that have been added to the mixture. The gold is then stripped from the carbon and recovered through electroplating.
- Melt the gold and small amounts of silver in a furnace, pour it into 1,000-ounce bars, and ship it off-site for further refinement.

South Carolina geologists think there are other recoverable gold deposits in the state. "There are at least three more operations [including the proposed Ridgeway site]. That's a pretty safe statement," says Norman K. Olson, State Geologist.

Olson and Arthur H. Maybin III, chief of mineral resources for the South Carolina Geological Survey, agree that South Carolina is a natural choice for further exploration. "The state has a proven historical base for gold deposits," says Maybin. Many old mines, Maybin adds, "were not closed because they were mined out. They were closed because FDR shut them down in 1942."

Conclusion

Many Americans don't realize that America's first gold rush was in the Carolinas. History has

overlooked this, perhaps, because not all the gold produced in the Carolinas and Georgia was recorded in the books at the U.S. Mint. "Much of the gold was shipped to Europe... A good deal of the gold was taken to the nearest bar instead of the nearest mint." But the Carolina gold rush saved the young country "from being dependent on foreign sources of gold." It also "put into circulation gold coins, both privately and officially minted, in a land where cash of any kind was scarce."

The Carolina gold rush was truly "one of the most successful monetary programs ever undertaken in the United States."

Facts About Gold...

- Gold was mined by the earliest civilizations. Mankind has always valued it above all other metals.
- Since ancient times, gold has symbolized immortality and purity.
- Gold is one of 52 natural elements. It is 19 times heavier than water, six times heavier than most rock-forming minerals, and twice as heavy as lead.
- Gold is called the "eternal metal." It will not tarnish or corrode.
- Gold is almost as soft as lead and is easy to shape.
- One ounce of pure gold can be drawn into a strand of wire 50 miles long.
- Gold is used for monetary purposes by governments and central banks. It is also used for jewelry, in ornamental objects, in dental materials, and for industrial purposes. It is used increasingly in the electronics, space, and defense industries.
- New uses for gold continue to be found. Gold used in space equipment acts as a shield against thermal radiation. In fact, the sun visors of astronauts' helmets are covered with transparent gold foil.
- Gold has been discovered and/or mined in the following South Carolina counties: Abbeville, Anderson, Cherokee, Chesterfield, Edgefield, Fairfield, Greenville, Greenwood, Kershaw, Lancaster, Laurens, McCormick, Newberry, Oconee, Pickens, Saluda, Spartanburg, Union, York.
- Among the Southeastern states in total gold production, North Carolina ranks first, Georgia second, and South Carolina, third.