

## CALAVERAS CEMENT COMPANY

*By Noah Berner*

### *A New Enterprise During Tough Times*

The 1920s were a difficult decade for Calaveras County. While much of the country thrived during the years that came to be called the “Roaring Twenties,” the population of Calaveras County declined to its lowest level since the beginning of the Gold Rush.

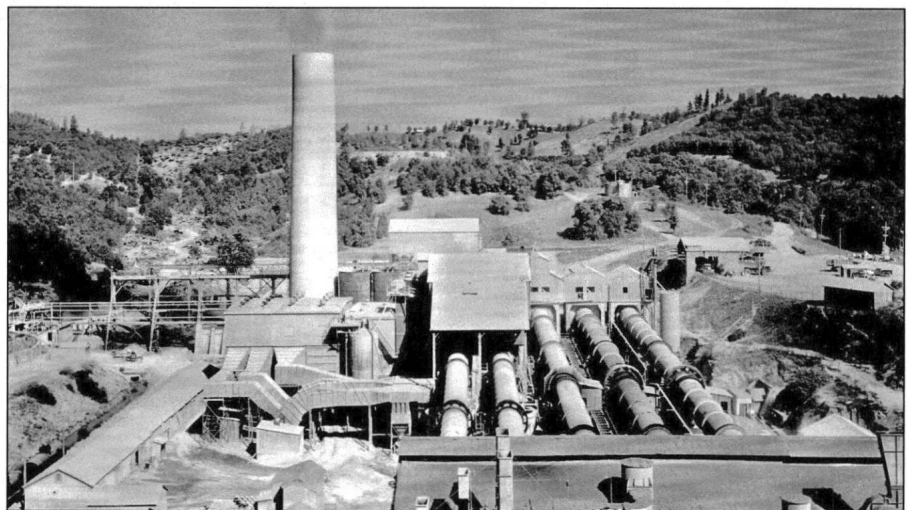
By the early years of the decade, almost all of the major gold mines in the county had closed down due to a combination of factors including rising production costs and a fixed gold price. While those involved directly in mining operations lost their jobs, all of the subsidiary industries that catered to the mining industry were also hit hard.

In a period of economic decline, there was one encouraging development—the opening of the Calaveras Cement Company’s Portland cement plant in San Andreas in 1926. In the following years, the plant would grow to become the largest private-sector employer in Calaveras County.

### *William Wallace Mein*

The Calaveras Cement Company was founded by William Wallace Mein, a man whose life and career had previously centered around gold mining.

William Wallace Mein was the son of “Captain” Thomas Mein, who was born in Scotland in 1838 before moving to the United States with his parents at the age of 3.



**The Calaveras Cement Company plant in San Andreas in 1960.**  
*(Courtesy of Calaveras County Historical Society)*

In 1859, 21-year-old Thomas Mein left his home in St. Lawrence County in New York to seek his fortune out West. He soon found himself in Nevada County, where he quickly made a name for himself in mining circles.

At the age of 29, Thomas Mein became the manager of the Wigham Mine outside of Nevada City, one of the largest hydraulic mines in the area. He married a local girl and had four sons, the third of which was William Wallace Mein, born in 1873.

From Nevada City, Thomas Mein went on to develop the El Callao Mine in Venezuela and to supervise the operation of the Treadwell Mine near Juneau, Alaska, in the 1880s.

After gold was discovered on the Rand at Johannesburg, Thomas Mein relocated to South Africa in 1891 and was placed in charge of the Robinson Mine, the largest gold-producer in the world at the time.

Although William Wallace Mein was only a teenager, he had already spent many years with his father in the goldfields. He began working in the milling department at the Robinson Mine before being placed in charge of the chlorination of ores at the age of 21.

In 1896, the family returned to California. Thomas Mein was in ill health after having spent years inhaling large quantities of rock dust while working underground. Thomas Mein passed away in 1900, the same year that William Wallace Mein graduated from the University of California with a Bachelor of Science degree.

Mein decided to return to South Africa, eventually becoming the manager of the Robinson Mine, the position once held by his father, at the age of 30. In his four years on the job, production doubled and profits almost tripled.

In 1907, Mein married Frances Williams, the daughter of a leading figure in the South African diamond industry and associate of Cecil Rhodes. The couple had two children in South Africa, and another two after relocating back to the United States in 1911.

In the following years, Mein served as consulting engineer to the International Nickel Company, the Dome Mines and the Canadian Mining and Exploration Company.

During World War I, he served his government as an assistant to the Secretary of Agriculture and as the

director of fertilizer control. After the war, he lived in New York City for four years and engaged in the development of various oil and mining enterprises.

In 1922, Mein once again returned to his home state to raise his children and be closer to his aging mother. He expected business to boom in California in the coming years.

### *A Chance Conversation*

It was through sheer coincidence that Mein went on to found Calaveras Cement Company.

In the early 1920s, William MacNider, an industrial salesman active in Northern California, optioned several limestone deposits in San Andreas with the idea of developing a cement industry in the area.

MacNider happened to have an office in a San Francisco business building adjacent to an office shared by Mein and George Poore, another man whose career was centered around mining.

When the phone in Mein and Poore's office stopped working on Dec. 15, 1922, Poore went next door to use MacNider's phone. He noticed several limestone samples on MacNider's desk, and asked about them following his phone call.

MacNider informed Poore that he had control of the finest limestone deposit in the state of California, and that he represented a group of businessmen in Stockton who were looking for financial backing to establish a cement manufacturing company.

It turned out that the deposit was located two miles south of San Andreas, at Kentucky House in Calaveras County. The two men called Mein into the discussion. Intrigued, he visited the deposit with a former classmate and mining engineer on the day after Christmas.

### *Calaveras Cement Company and the San Andreas Plant*

During the Gold Rush, Kentucky House served as a trading post and a center of mining activities. Its location on the third crossing of the Calaveras River between Stockton and Murphys made it an ideal stopping place for stage coaches passing through the area.

The Kentucky House building was located on a 500-acre parcel held under option by the Stockton businessmen, and the deposit was named after the old frame landmark.

The property contained three limestone deposits—Hills Number 1, 2 and 3. A smaller property was held under option about five miles to the east of Kentucky House near Calaveritas, which contained a deposit known as Hill Number 4, or the Old Gulch Deposit.

Mein began an extensive program of sampling and testing, which included digging three miles of trenches and driving a 7-foot-wide, 700-foot-long tunnel through Hill Number 1. Pleased with the results, he acquired a 50% interest in the real estate. His good standing in mining and financial circles allowed him to secure the \$2 million necessary to start the company in a short period of time.

In 1923, rail transportation was necessary to both build the plant and transport materials, as trucking was still in its infancy. Talks soon began with Southern Pacific, owners of the closest rail connection about 13 miles away in Valley Springs.

Southern Pacific agreed to extend its line eight miles to North Branch on the condition that Mein and his associates would build the remaining five-and-a-quarter miles of track. The parties reached an agreement and plans began to fall into place.

Official incorporation papers were signed on Jan. 13, 1925, and the first meeting of stockholders was held two weeks later. Mein was elected to sit on the nine-member board of directors, and was picked as president at the first board meeting.

While ground was broken for the San Andreas plant on May 1, 1925, work proceeded slowly until the railway was finished several months later on Christmas Eve. Afterwards, heavy machinery was brought in and the plant was completed by the following summer.

On May 9, 1926, the company held an open house and barbecue that drew an estimated crowd of 15,000 people—more than two-and-a-half-times the county's population at the time. It was the largest gathering ever held in Calaveras County up to that point.

Attendees were treated to a tour of the plant's two-kiln, wet-process cement mill, which could produce 3,000 barrels (a barrel contains 376 pounds) of cement a day. At the time, it was the most modern and efficient cement mill on the Pacific Coast.

A few weeks later, gasoline locomotives began transporting rock from Hill Number 1 to the crusher. The first batch of cement was shipped by rail on June

14, 1926, and shipments grew slowly but steadily in the following months. Fewer than 100 workers were employed when the plant began producing, but that number would more than quadruple in the coming decades.

A new wing was added to Kentucky House itself that year. In the following years, the historic building would be used as a meeting place and lodging house for company officials, customers and guests.

Shortly before the first batch of cement was shipped, the company hosted the Angels Boosters Club at Kentucky House, and Judge J. A. Smith was one of the Boosters present. He would go on to serve as the first president of the Calaveras County Historical Society in the 1950s.

"Judge J. A. Smith expressed the pleasure it was to the people of Calaveras to have the plant erected here and also stated that he believed that the new era of the mining of non-metallic minerals had arrived, and that the next few years would see wonderful extensions in this line," a June 10, 1926 article in the *Calaveras Californian* reads.

By the end of the plant's full year of operation, the number of Calaveras Cement dealers totaled 150. Over 636,000 barrels of cement were sold in 1927, and the plant achieved capacity production in October of that year.

Towards the end of 1927, the company received its first large order—to supply the cement for the 358-foot Pardee Dam and its powerhouse on the Mokelumne River. Over 750,000 barrels of Calaveras Cement were used on the project.

A Dec. 27, 1927 article in the *Calaveras Californian* reflected on the shift from gold to limestone production in Calaveras County.

"Time was, of course, when the Mother Lode mines employed many men," the article reads. "Those days are gone forever, more's the pity! 'The days of old, the days of gold, the days of '49' are merely memories. The Calaveras Cement Company's works will, however, do not a little to bring back some of the prosperity that prevailed when old Amador and Calaveras were in the height of their mining glories."

Construction was booming across the country in 1928, and Calaveras Cement Company delivered over 1 million barrels and netted \$642,000 that year. Total shipments of Portland cement across the nation reached a peak of 176 million barrels, a record which wouldn't be surpassed until 1942.

With the success of the business established, Southern Pacific agreed to purchase Calaveras Cement Company's railroad line for \$255,000, the actual cost of construction.

In July of 1929, Calaveras Cement Company listed its shares on the San Francisco Exchange, the first cement company to do so.

### *The Great Depression*

The construction industry was hit hard by the Great Depression, and Calaveras Cement Company was no exception. In 1932 and 1933, the San Andreas plant averaged only one-third of production capacity, and the operation lost about \$96,000 during those two years.

Mein met the challenge head on by giving orders to sell cement at bare manufacturing cost if necessary in order to maintain production and employment, and embarked on a policy of making substantial expenditures in maintenance and development to increase efficiency.

Help came in 1933, when the company was hired to supply cement for the San Francisco-Oakland Bay Bridge. The massive center anchorage and deep water piers alone used 400,000 barrels of Calaveras Cement.

As part of its plant improvement program, in 1935 the company completed a five-and-a-half-mile private road from the plant to Hill Number 4 in Calaveritas.

By that time, Hill Number 1 was only producing 70% calcium carbonate, while Hill Number 4 averaged 98% calcium carbonate. The increased purity of the deposit offset the additional transportation costs.

The project cost \$200,000 and led to the abandonment of Hill Number 1 and a shift from transporting raw materials by rail to transporting them by truck.

The bridge reading "Calaveras Cement" which passes over Highway 49 between San Andreas and Angels Camp was constructed for the new road.

Sales and shipments continued to climb after 1933, with shipments in 1937 reaching over 1 million barrels for the first time since 1929.

During those years, Calaveras Cement was used in the O'Shaughnessy Dam project on the Tuolumne River, which impounds Hetch Hetchy Reservoir, as well as the Broadway Tunnel linking Oakland and Orinda.

The 1930s saw the beginning of a shift from rail transportation to truck transportation. While Calaveras Cement Company had moved almost all of its product by rail prior to 1934, by 1937 almost 20% of shipments were made by outside trucking firms, and the company made the decision to operate its own fleet of trucks the following year.

Despite the depression, Calaveras Cement Company doubled production during the 1930s. The gold mines boomed as well due to an increase in the price per ounce, with gold production in the county reaching a record 123,500 ounces in 1939.

### *World War II*

With German troops storming across Europe, the United States began expanding its military facilities even before its entrance into the war. Many projects took place in California, which offered a strategic location relative to the Pacific theater and an ideal climate for training. Cement was crucial for these facilities, and the industry was put on a complete war footing.

Calaveras Cement was used in almost every major defense project in Northern California during the war, including McClellan Field, the Fairfield-Suisun airbase, Mare Island and Hunter's Point, the Rough and Ready naval supply annex, Mather Field and the Signal Corps Depot, the Naval Airfield at Crows Landing, the Armored Force training center at Camp Beale and the Navy's Camp Shoemaker.

With cement diverted for military purposes, Calaveras Cement Company had to request the government's permission to reduce shipments to the Bureau of Reclamation's Friant Dam project on the San Joaquin River. The dam, the fourth largest in the world at the time, would consume 800,000 barrels of Calaveras Cement.

As demand rose, the company began a four-year program to expand and improve its facilities in 1940. This began with the construction of a 40-mile-long, 8-inch pipeline to bring natural gas to the plant from the Rio Vista gas field. The switch from oil to natural gas lowered fuel cost and improved kiln operations, and the plant became the first user of natural gas in the Sierra Nevada foothills.

Calaveras Cement Company shipped over 1.3 million barrels of cement in 1941, a new record which wasn't broken until 1947.



By 1945, Calaveras Cement Company's truck fleet had grown to eight units. In that year, the plant's product was shipped 74% by truck and 26% by rail.

### ***Expansion and Improvement***

Following the end of the war in 1945, Calaveras Cement Company embarked on a five-year, \$2.5 million expansion and improvement program to meet increasing demand.

The biggest capital improvement was the addition of a third kiln, which was 50% larger than the original two kilns. The 360-foot-long kiln was purchased from the Defense Plant Corporation, and had previously been used in war production by the Manganese Ore Company at Henderson, Nevada.

The massive kiln had to be cut into nine pieces for shipment, and the railroads provided special routing to bring them into California. Dedicated in 1946, the new kiln increased burning capacity by 100%, and other phases of manufacturing were increased in turn to match the kiln's increased capacity.

The company's truck fleet was also expanded to 21 truck and trailer units. The company's trucks traveled over 1.4 million miles in 1949—a total distance that amounts to about 57 trips around the world.

From 1946 to 1949, total shipments of Portland cement in the United States grew from 106.4 million barrels to 206.2 million barrels, and Calaveras Cement Company broke company records each year in 1947, 1948 and 1949.

From 1926 to 1950, the capacity of the San Andreas plant more than doubled from 3,000 barrels to 7,500 barrels per day. From 1945 to 1958, production capacity tripled.

In the postwar years, Calaveras Cement was used on Highway 40 (now Highway 80), Highway 50 and Highway 99, as well as Pacific Gas and Electric Company's Cresta and Rock Creek Dam installations on the Feather River.

Over 1 million barrels of Calaveras Cement were used in the construction of the Kern and Delta-Mendota canals, the major irrigation waterways of the Central Valley Project.

Many industrial plant expansions during those years used cement from the San Andreas plant, including the Columbia Steel Company plant addition in Pittsburg.

About 1.6 million barrels of Calaveras Cement helped to build the Pine Flat Dam near Fresno. The

dam was built by the Guy F. Atkinson Company, the builder of the Pardee Dam. While that project led to Calaveras Cement Company's first large order, the Pine Flat Dam project led to its biggest order in its first 25 years of operation.

During the building boom of the 1950s, Calaveras Cement was used in highway projects in Manteca and the Lafayette Bypass and Roseville Freeway, the Travis Runway Extension, the parking aprons at Castle Air Force Base, and the facilities for the 1960 Winter Olympics at Squaw Valley.

The company continued its policy of constant modernization in all departments and enlarged its sales force. By 1958, the plant employed 450 people, with five kilns producing 650,000 tons (3.5 million barrels) of cement annually.

Rock was dislodged with the help of ammonium nitrate, which could blast loose more than 100,000 tons of rock at a time. During production, the rock underwent about 80 separate processes and about 350 physical and chemical tests.

The final product was ground finer than flour, allowing it to pass through a screen with 100,000 openings per square inch and capable of holding water. It took about 1.6 tons of raw material to produce one ton of cement.

In 1959, the original owners sold out to the Flintkote Company, a nationwide manufacturer of building materials.

The company expanded its distribution network and completed a state of the art one-kiln cement plant north of Redding in 1962. While the San Andreas plant used the wet process, the new plant used the dry process and had a capacity of 280,000 tons (1.5 million barrels).

By 1971, the company's limestone quarries around San Andreas and Calaveritas had played out, and a new source of raw materials was needed.

A new quarry with crushing and grinding facilities was developed at Cataract Gulch on Camp 9 Road outside of Vallecito in the early 1970s. The company estimated that the deposit contained 90% pure calcium carbonate and could supply enough raw materials for the plant for 100 years at the current rate of usage.

The deposit is part of the Columbia-Sonora limestone belt, which encompasses about 20-square-miles and constitutes the largest limestone body in the Sierra Nevada.

The limestone was transported to the San Andreas plant through a 17.4-mile underground pipeline built by Bechtel Corporation for \$1.5 million. Through the pipeline, a mixture of limestone and water—known as slurry—was conveyed through 8-inch pipe at 2,500 pounds of pressure. The pipeline was the first underground limestone slurry pipeline built in North America.

On the weekends, the pipeline was shut down and flushed with 200,000 gallons of water. During operations, a 3-foot-long scraper device—called a “pig”—was driven through the line by water or slurry to brush the pipeline clean.

With the price of natural gas on the rise, both the San Andreas and Redding plants were converted to use coal. In San Andreas, this involved the installation of over 3,000 feet of railroad track and new storage facilities.

During the 1970s, Calaveras Cement was used in freeway projects in Stockton, Eastridge Shopping Center in San Jose, and the Social Services Building and Market Street beautification project in San Francisco.

In 1979, a Canadian company, Genstar, bought out the Flintkote Company’s cement manufacturing operations in Calaveras County.

Over the years, Calaveras Cement Company gradually introduced new products to the market, and by 1980, the company was producing 11 different types of cement.

### ***Working at the Cement Plant***

Bruce Langley began working for Calaveras Cement Company in October of 1954 shortly after graduating from Calaveras High School.

Hired first as a laborer, he went on to hold a variety of positions, including slurry operator, kiln-oiler, lab analyst, safety engineer and personnel manager.

“It was noisy and dusty,” he said. “There’s an old saying that the cement plant was the only place you could be ass-deep in mud and get dust in your eye.”

While it was hard work, Langley looks back fondly on his 23 years of working at the plant.

“It was a good employer, they took care of their people very well, and they were stable,” he said. “Everybody knew everybody, and we all kind of got along.”

Besides providing good wages for locals, the company gave back to the community in other ways as well, often volunteering labor and other resources for projects in the area.

“They were very generous with their equipment and their people,” Langley said. “All you had to do was ask. They were very, very willing to do whatever the community needed that they could help with.”

Langley stayed with the parent company through several changes in ownership, eventually retiring in 1999 as a vice president of human resources.

“I never looked for another job,” he said. “I worked for them for 44 years.”

### ***The End of an Era***

By the early 1980s, increases in the costs of production, the availability of cheaper cement clinker and finished cement from Asia and a variety of other factors combined to close down the San Andreas plant in 1983.

Though Langley had left the plant in 1977 to take a managerial position with the plant’s parent company in Los Angeles, he played an instrumental role in the closure.

“The decision wasn’t made without great thought,” he said. “I would think the impact was great, because you have a large number of people—it was no longer 450—but a large number of people who were making a lot less money, and therefore paid a lot less taxes, and purchased a lot less merchandise in the county.”

By the time of its closure, the plant had been in continuous operation for 56 years. During 40 of those years, it had been the largest private-sector employer in Calaveras County.

At its height, the San Andreas plant employed 450 people. By the time it closed, that number was down to only 136. Following the plant’s closure, the heavy machinery was sold off. Demolition of the site didn’t begin until 2005, and wasn’t completed until 2013.

In that year, a row of 100-foot-tall silos, which could be seen from Pool Station Road since the plant expansions of the 1950s, finally came crashing down. Kentucky House itself had already been demolished in the 1990s.

During its more than five-and-a-half decades of operation, the San Andreas plant provided high quality cement for projects across the state of California.

The construction of the Parrotts Ferry Bridge in 1980 was one of the last projects to use cement from the plant. The bridge’s 640-foot center span was the

longest bridge span in the United States that used a segmental cantilever construction method.

While Calaveras County is best known for its gold, no single gold mine ever contributed more to the county's regional economy than the San Andreas cement plant.

Although the end of cement production was a big blow for Calaveras residents, the county was able to quickly bounce back. Between 1979 and 1990, Calaveras County's population grew by three-fifths, finally matching and exceeding its peak of 20,183 at the height of the Gold Rush. Since then, the population has more than doubled to over 45,000 residents.

Though Calaveras County was built on extractive industries, the economy now revolves around service industries, trade, real estate, agriculture and tourism.

The closure of the San Andreas plant was a big blow to the county, but it was ultimately able to recover by embracing new industries. As has been the case in the past, Calaveras County will likely thrive in the years to come as it continues to adapt to a changing world.

*For more on Calaveras Cement Company and the San Andreas plant, visit the Red Barn Museum in San Andreas.*

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**Workers gather at the cement plant in San Andreas in the mid-1900s. (Courtesy of Calaveras County Historical Society)**



# Calaveras County Historical Society

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The Calaveras County Historical Society is a nonprofit corporation. It meets on the fourth Thursday of each month in various communities throughout the County. Locations and scheduled programs are announced in advance. Some meetings include a dinner program, and visitors are always welcome.

The Society operates the Calaveras County Museum which is open daily from 10:00 AM to 4:00 PM in the historic County courthouse located at 30 Main Street in San Andreas; and the historic Red Barn Museum at 891 Mountain Ranch Road, also in San Andreas, which is open Friday through Sunday, 10:00 AM to 4:00 PM, except for major holidays.

The Society's office is located in historic San Andreas, the Calaveras County seat. Visitors are always welcome to stop by the office for assistance with research, and are encouraged to visit the museums while in the area. The office is open Monday through Friday from 10:00 AM to 4:00 PM, except on major holidays. The telephone number is (209) 754-1058, or contact us at: CCHS@goldrush.com; Red Barn Museum (209) 754-0800.

## 2021-2022 Coming Events

**Thursday, October 28  
Membership Meeting  
Calaveras County Airport**

**Saturday, November 6  
Open House, Red Barn  
Bring your branding irons**

**Thursday, November 18  
Membership Meeting  
Mountain Ranch Community Club**

*NOTE: Reservations are required for  
Membership Meetings (209) 754-1058.*

**There is no Membership  
Meeting in December**

## Volunteers

The Historical Society is fortunate to have a roster of enthusiastic and talented volunteers! We would welcome anyone who would like to help the Historical Society by volunteering to work in the Society office, museums and bookstore doing various kinds of activities. Please contact the Society office at (209) 754-1058 or email [cchs@goldrush.com](mailto:cchs@goldrush.com)

*NOTE: The Historical Society is grateful for donations of artifacts and documents relating to the history of Calaveras County. However, we will not be able to accept any donations until November due to a large backlog of documents and items still being processed. Thank you!*