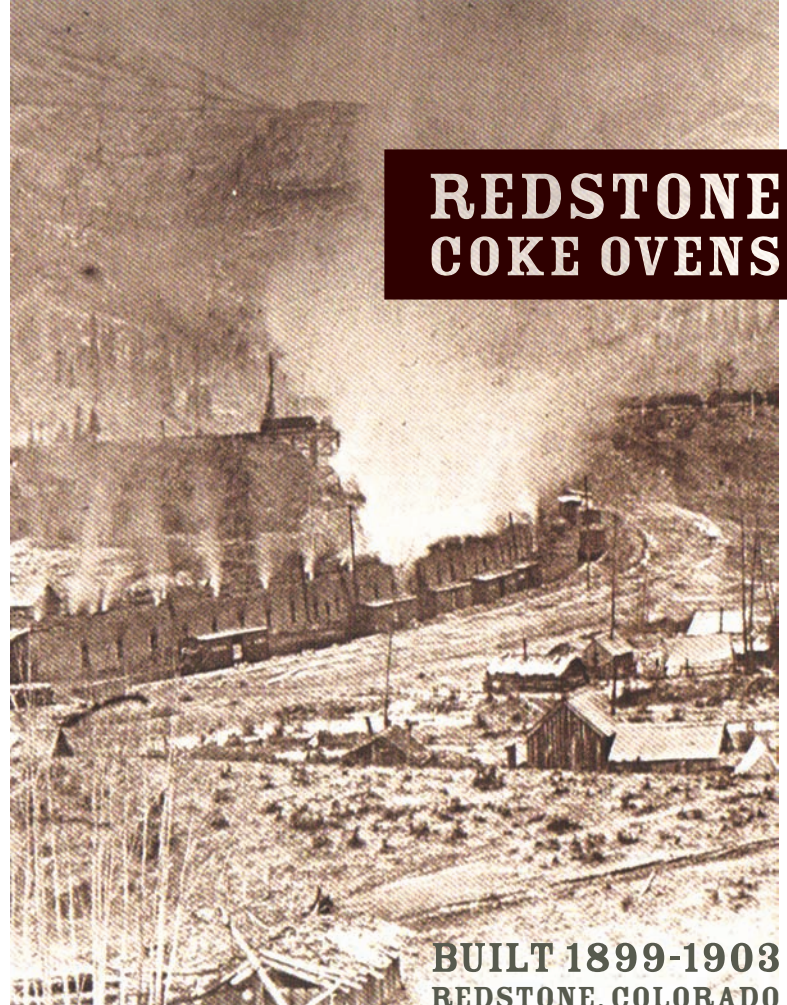


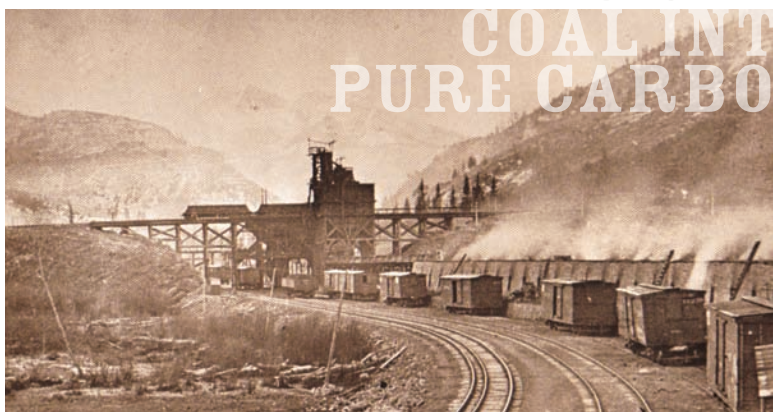


# **REDSTONE COKE OVENS**

**BUILT 1899-1903  
REDSTONE, COLORADO**

These ovens comprise part of the Redstone Coke Ovens Historic District, where men at the turn of the century “coked” some of the country’s finest metallurgical coal, turning the coal into coke, or pure carbon. Brought by narrow gauge railroad from the mines above Redstone at Coalbasin, the coal was loaded into the top of the 249 beehive-shaped ovens. Redstone cokers cooked the coal for two days, steamed it off with ice-cold water, then shipped it to Colorado Fuel and Iron in Pueblo, Colorado, the biggest steel mill west of the Mississippi. There, the Redstone coke, limestone and iron ore were dumped into blast furnaces to create steel, which made the locomotives, steel rails and barbed wire that settled the American West.

WHERE THE  
MEN TURNED  
COAL INTO  
PURE CARBON



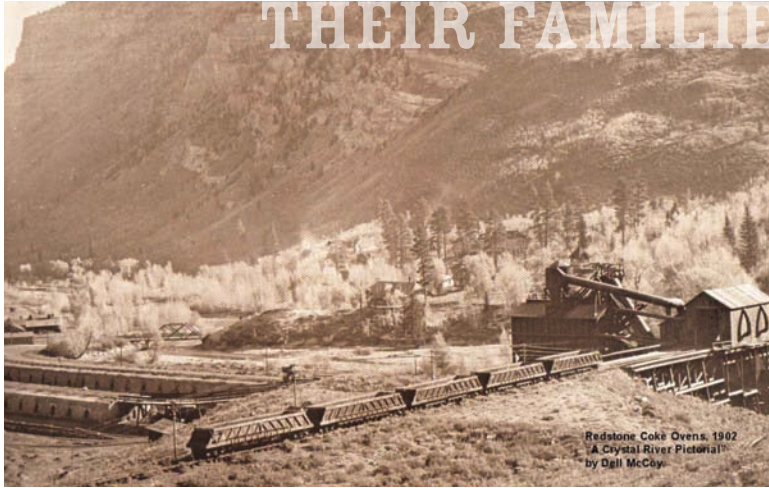
## FROM THE GROUND UP

The town of Redstone existed because of its coke ovens. Founded at the turn of the 20th century, Redstone was the vision and venture of one man, the “Fuel King of the West,” John Cleveland Osgood. A contemporary of better known east coast billionaires John D. Rockefeller and J.P. Morgan, Osgood was the president of CF&I, the leading coal baron in the Western Mountain region and the sixth wealthiest man in the country at the time. In his quest to build a model industrial village, Osgood unveiled “the Redstone experiment,” building the infrastructure and mapping the town of Redstone from scratch. Redstone was a company town, constructed solely to house the men who worked the ovens and their families.

Osgood believed in “enlightened paternalism,” – hoping that by treating his workers well, he could retain their loyalty and obtain greater production from them. Some historians also believe this sociological experiment was a way to control the workers’ existence and squash unionization. Osgood provided pristine housing in 84 cottages individually designed by architecture firm Boal & Harnios. Wives and families were encouraged to join the men in Redstone, to create a vibrant, diverse community. Among other state-of-the-art luxuries, Osgood built a bachelor’s hostel (now The Redstone Inn) a theater, hospital, clubhouse and outdoor gazebo where concerts were held throughout the summer season. A mile up river from Redstone lay Osgood’s Crystal Park estate, featuring Cleveholm Manor, his own 42-room, Tudor-style mansion, now known as the Redstone Castle.



## SOME 300 WORKERS AND THEIR FAMILIES



## A DAY IN THE LIFE

The work at the ovens was long and laborious. The coke ovens ran all day and all night spewing sulfurous smoke from their vent holes, which polluted the otherwise clear skies. Noxious fumes escaped and filled the air with a foul stench. The cokers battled intense heat, and at the close of the day were covered from head to toe in soot. When their shifts ended they would walk to the bathhouse, bathe in plunge baths and showers, then change into clean clothes, before heading into town.

Most men who lived in Redstone were immigrants to the United States, having been recruited by Osgood via advertisements in Europe. On any given day you would hear Italian, Czech, Welsh, German and Slovak. Newspapers from around the world were provided to workers to keep abreast of information from their native lands. While various languages and cultures made it difficult for the supervisor to communicate with the men, it also prevented the workers from talk of unionization.

Nevertheless, there was a feeling of success and collective brotherhood for the approximately 300 workers and their families who made Redstone an ideal, working community for close to a decade.

## EUROPEAN RECRUITS



While you explore the Coke Oven site, keep an eye out for symbolic markers. These have been placed at key locations to exemplify important aspects including significant historic and structural elements, as well as preservation modifications and vegetation.



### RAILROAD & TRANSPORTATION

"Larry cars" ran along the top of the ovens to unload raw coal. Coke was raked out of the front and loaded into railroad cars for transport.



### NATIVE VEGETATION

In an ongoing management plan, invasive species are removed to reduce degradation and native shrubs and grasses are reestablished to stabilize the soils.



### ARCHITECTURE

Three ovens have been completely reconstructed to illustrate the original design and operating condition.



### STRUCTURAL MATERIALS

Ovens were constructed with "firebrick" and insulated with clay and loam. Iron was used for the door frames.

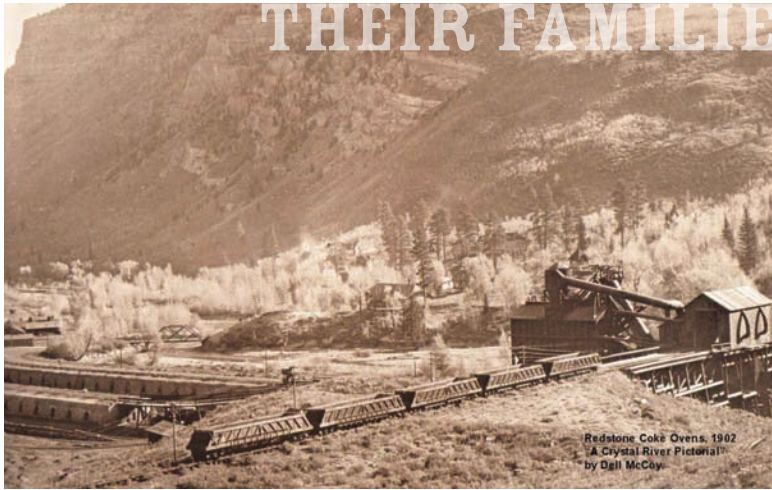


### PRESERVATION MODIFICATIONS

Stabilization construction has been done to prevent further deterioration and safety hazards and is consistent with historic materials and practices. Contemporary techniques have been minimally integrated, and only where necessary.



## SOME 300 WORKERS AND THEIR FAMILIES



While you explore the Redstone Coke Ovens site, keep an eye out for symbolic markers. These have been placed at key locations to exemplify important aspects including significant historic and structural elements, as well as preservation modifications and vegetation.



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### ARCHITECTURE

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### STRUCTURAL MATERIALS

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### PRESERVATION MODIFICATIONS

Stabilization, consistent with historic materials and practices, has been done to prevent further deterioration. Contemporary methods are minimal, integrated only where necessary.



## DEMAND DROPS & OPERATIONS CEASE IN 1909



## BRICK & MORTAR

The coke ovens were the standard hemispherically shaped "beehive" ovens. This shape was common, although it was rapidly being replaced by newer technologies at the time. All of the ovens were identical and constructed with a special type of brick called firebrick, crafted to withstand high heat.

The floors measured 13 feet in diameter, the domes rose almost eight feet above the base and the trunnel opening measured 14 inches in diameter. The front of each oven contained an arched opening about three-by-three feet, which was surrounded by an iron door frame. There was no permanent door, as the front opening would be loosely bricked up and daubed with mud before coking.

The ovens were constructed in two batteries, each containing two rows of ovens staggered about each other. Between the ovens were piers to support I-beams carrying the standard gauge "larry car" tracks along the top of the ovens. Clay and loam was packed in the spaces between the ovens to help insulate them. Some of this material, over time, has been vitrified by the intense heat from the ovens into a solid, stone-like mass.

As seen in the partial reconstruction, a 16-foot-deep earthen wharf was built in front of each row of ovens, about three feet above the railroad tracks and three feet below the oven doors. This provided an area for the men who raked the coke from the ovens and loaded it into railroad cars.

## ONE CHAPTER CLOSES

It's hard to know how successful Redstone could have become had Osgood been able to retain control of CF&I. A severe drop in gold and steel production throughout Colorado lessened the demand for both coal and coke. Since the major smelters in Pueblo were closer to the new coal fields around Trinidad, it became no longer economical to haul coke from the mountains of Redstone.

Without a demand for coke, operations in Redstone ceased in 1909, just nine years after the first oven was fired. The miners and cokers moved onto other camps in Colorado, the post office was closed and Redstone was virtually abandoned.

In 1956, Mid-Continent Coal and Coke Company reopened the mines at Coalbasin. The company refaced some of the Redstone coke ovens with masonry block and concrete, and ran a coking operation at the site from 1959 to 1961.

## CELEBRATED REMNANTS

## A NEW LIFE

Now owned by Pitkin County, the coke ovens themselves are the only remnants of the coking operation at Redstone. In 1942, the train tracks and oven doors were salvaged for the World War II effort. Once the dismantling of the iron door frames took place the ovens began to crumble. All other coking structures on and around the site have all but vanished.

The site was placed on the National Register of Historic Places in 1990, preserving the history of not only Redstone but the American West. Working within the guidelines of the Secretary of the Interior and Colorado State Historical Society, many ovens have received stabilization treatments. The arches, crowns and liners have been rebuilt to historical dimensions to prevent further failure, and invasive vegetation has been removed, reseeded with native species. The trunnels have been repaired and round steel caps have been installed over them to prevent water infiltration. Others have been partially stabilized, while the remainder are left to ruin.

The acquisition of this site in 2004, was made possible by grants from Pitkin County's Open Space and Trails Board and Colorado's State Historical Fund. The preservation project was funded by Pitkin County, Colorado Department of Transportation, U.S. Dept. of the Interior *Preserve America* program and the National Scenic Byway Program.

# REDSTONE'S STORY CONTINUES

With its celebrated past, Redstone is proud to represent the historic development of coal mining and processing, and steel making industries in the West. Today Redstone is home to artists, galleries, restaurants, lodging and residents of every kind. This year-round population is eager to preserve the stories of Redstone's colorful past, embracing its historic role as the "Ruby of the Rockies."

*Want to know more about the Coke Ovens and town of Redstone? Visit the Historic Redstone Museum located at the park in the center of town.*

**Please do your part!** Help us further preserve this important national treasure: remove any trash, stay on designated pathways, and be sure to share this knowledge and experience with others. Questions, please call 970/963-1787.

