



Historic Mining and Quarrying in Jefferson County

Early prospectors scoured Jefferson County for precious metals, but found little other than some placer gold in Clear Creek. Jefferson County's other mineral resources, such as coal, claystone, quarry rock, sand, and gravel, proved to be more important and supported a variety of industries.

Coal mining and stone quarrying were major industries in the late 1800s and early 1900s. Base metals in small quantities and uranium to a larger extent were also mined in the county. Gravel extraction continues as an important industry today.



Placer mining in Clear Creek, circa 1910 -Denver Public Library

Gold mining

Prospectors discovered a small amount of gold in 1850 at the confluence of Ralston Creek and Clear Creek in present-day Arvada, the first documented gold discovery in the region. During the 1859-1860 Gold Rush, some placer mining occurred in Clear Creek east of present-day Golden. Placer mining continued on Clear Creek west of Golden into the 1900s.

Coal mining

Coal mining was an important county economic industry. Coal was first discovered in 1859 near Coal Creek, 14 miles north of Golden. Murphy Mine on Ralston Creek was an early operation. The

White Ash, Loveland, Boss, Pittsburgh, Black Diamond, and other mines operated at Golden in the 1800s and early 1900s. Coal was mined at the Bluebird /Satanic Mine, located northeast of Morrison near West Alameda Parkway at C-470, from 1872 into the 1930s.

The county's longest operating coal mine was at Leyden, along Leyden Road (West 82nd Avenue) east of Highway 93, where coal was produced for nearly a century. Michael, Martin, and Patrick Leyden discovered coal in this area in the late 1860s. The Leyden brothers developed their coal mine and delivered coal by ox-drawn wagon to Golden and Denver, where they sold it for \$3.00 a ton.

In 1902, the Leyden Coal Mining Company was formed. The company built the Denver & Northwest Railroad that ran between Leyden and Denver and shipped coal to the power generating plant for the Denver Tramway Company at the west edge of Denver. The mining company erected workers' housing at Leyden, which today consists of a collection of small houses and the Community Hall.

Stone quarries

Stone quarrying was an important county industry until the mid 1900s. The Dakota Hogback that runs north-south along the Front Range contains substantial deposits of sandstone, limestone, and several adjacent clay beds. Sandstone from Dakota Hogback quarries was used in several Morrison buildings. Limestone was used for building and for industrial processes. It went into several buildings, including the Central City Opera House and the trim on the Brown Palace Hotel in Denver. Smelters and mills at Golden also consumed limestone to process ore.

Granite quarries operated in Clear Creek Canyon, Bear Creek Canyon, Mount Vernon Canyon, and along the North Fork and South Fork of the Platte River. For example, red granite dimensional stone quarried near Buffalo Creek was used in many buildings in Colorado, Wyoming, and Nebraska. A quarry below Foxton yielded stone blocks for the State Capitol Building. The pegmatite quarries near Swede Gulch and Kerr Gulch produced white quartz, used in various buildings in the Evergreen area. In west Jefferson County, native granite was used in a number of dwellings. The abundance of stone encouraged distinctive stone features such as prominent foundations, fireplace chimneys and porches, and was used in landscaping.



Miners' housing at Leyden is all that remains of the coal operation
-Cathleen Norman



Leyden coal mine, circa 1910 -Denver Public Library

Fossil quarries

The Dakota Hogback north of Morrison yielded dinosaur fossils, excavated after initial discoveries in 1877 by Arthur Lakes, geology professor at Colorado School of Mines. The fossil deposits excited national interest and triggered the “dinosaur wars” between two noted paleontologists - Othniel Charles Marsh from Yale University and Edward Drinker Cope with the Philadelphia Academy of Science.

Most of the fossils were taken east and exhibited at Peabody Museum in Connecticut and other institutions. Today called Dinosaur Ridge, this part of the hogback has been designated a National Natural Landmark. Most of the area is owned and maintained by Jefferson County Open Space.

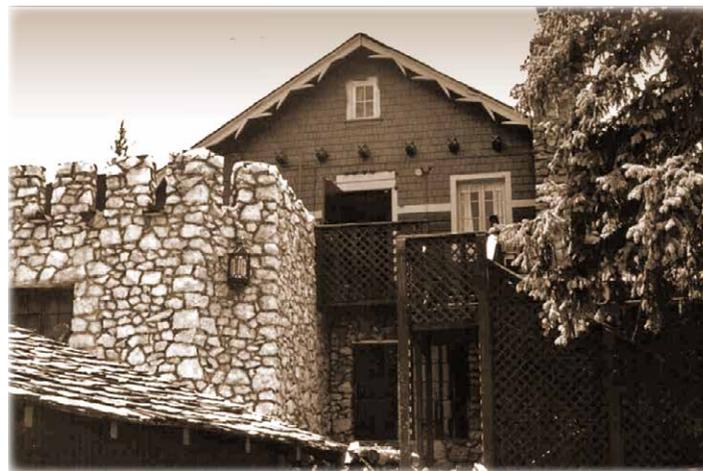
Base metals and other minerals

Other mineral products in Jefferson County include minor quantities of copper, feldspar, mica, beryl, and gypsum. Copper was produced around the turn of the century at the Malachite Mine, three miles west of Morrison along Bear Creek in the Mount Vernon Mining District. The mine had two tunnels 305 feet in length and a 150-foot shaft. It produced about \$35,000 in ore. Another copper operation was the FM&D Copper Mine west of Idledale, where a vein was discovered in 1866 and periodically worked until 1917.

A deposit of gypsum near Morrison was used to make plaster of Paris. Some tin mining took place on the Lilly Karsch

Ranch in the late 1800s and the Shield M. Ranch in the early 1900s, both in Deer Creek Canyon.

About six miles west of Pine, the Saxonia Milling, Smelting, and Refining Works opened in 1880 and served a brief flurry of iron, copper, and lead mining activity. The mill site consisted of a crusher, stamp mills, roasting furnace, and blast furnace. Adjacent to Saxonia, Crossons consists of a



Brook Forest Inn south of Evergreen used white quartz quarried in the vicinity -Cathleen Norman

main dwelling that served as the residence for the manager of the Saxonia operation and several one-room cabins. After the brief spurt of mining and processing activity ended, the buildings were used as a fishing camp for sportsmen arriving on the Denver South Park & Pacific Railroad.

Clay, sand, and gravel

Jefferson County has been an important producer of clay, sand, and gravel. Clay pits along the Dakota Hogbacks at Golden and Morrison have supported brick and ceramics production from the late 1800s through the present day. Golden industries have used this material for manufacture of brick, fire-clay bricks, tile, ceramic porcelains, and architectural elements such as window lintels and sills.

For many decades, gravel and sand deposits have been exploited, including those from the valley floors of Bear Creek, Clear Creek and the South Platte River and its North Fork. Other deposits are located on Rocky Flats, a very large alluvial plain. Different gravel quarries have been developed in the mountains of Jefferson County. Sand and gravel served as road surfacing, concrete aggregates and other industrial uses.

Uranium mining

Uranium became an economical mineral commodity in the mid-1900s. For a short period, the Schwartzwalder Mine, northwest of Golden at the edge of present-day White Ranch Park, was one of the most productive uranium deposits in the U.S. It was developed in

the 1950s by Fred Schwartzwalder and was sold in the 1960s to the Denver-Golden Corporation.

Uranium was also mined near Kassler Creek west of Chatfield Reservoir and at a site midway up Golden Gate Canyon.