

*Tourist Guide*  
to the  
**BUTTE-  
ANACONDA**

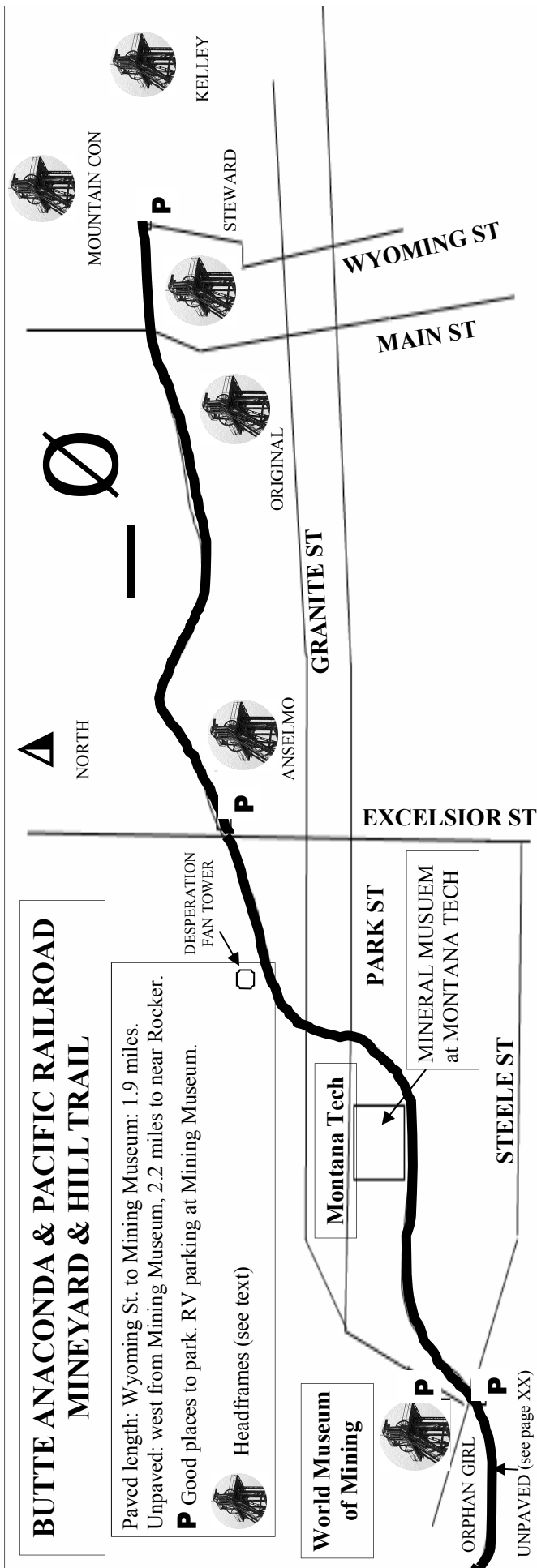
**COPPERWAY**



*and*  
*the Richest Hill on Earth*

*Part 1: BA&P Trail*  
*From Kelley Mine to*  
*Interstate Overpass*

*by*  
*Richard J. Gibson*  
*2010*

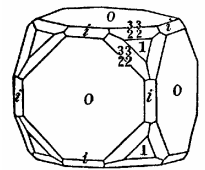


The Mineyard and Hill trail follows the old bed of the Butte, Anaconda, and Pacific Railroad — the first heavy-haul electrified railway in the world.

## MINEYARD TRAIL GUIDE

The BA&P wound its way across the Butte hill, stopping at all the important mines to pick up ore for shipment to the smelter at Anaconda, about 25 miles west of here. On this walk, you pass the headframes of several of Butte's most important and longest-serving mines.

The railroad was organized in 1892, with the first trains running from Anaconda mines to the smelter January 1, 1894. The line from Rucker into the Butte Hill opened in January 1895. The railroad was owned by Marcus Daly's Anaconda Copper Mining Co. and was served by 33 steam locomotives until 1913, when the company took the bold step of electrifying the main line.



*Galena crystal  
(lead ore)*

Twenty-seven electric engines were built between 1913 and 1917, and served until 1967. Today, only one survives: #47, built in 1914, is part of the World Museum of Mining collection and is on display at the Anselmo Mine Yard in uptown Butte, restored by retired railroad workers.

Diesel engines, built in the 1950s, took over for both the remaining steam engines (which operated on parts of the road until 1952) and for the electric engines in 1967. Passengers were carried until 1955, on two to four trains per day.

In 2002-2003, the tracks were taken up along with some of the road bed itself, because it had been constructed using mine tailings and smelter waste, which can react when exposed to the elements to produce acid and other undesirable pollutants. The road was covered with new rock and shaped into the trail we see today — but you may still find some chunks of rock with pyrite or copper sulfides if you look carefully along the path.

The BA&P Railroad and this trail are contributing elements of the Butte-Anaconda-Walkerville National Historic Landmark District. The paved, level trail has benches and interpretive signs.

Near the Wyoming Street trailhead, the two headframes of the Kelley Mine can be seen.

## THE KELLEY

The last shafts to be created (1947) and last to close (1980), the Kelley was named for Anaconda president Cornelius "Con" Kelley. With a huge five-compartment shaft, the #1 began hauling 15,000 tons of ore per day to the surface in 1952, the most productive mine on the hill. The 2-compartment #2 shaft could raise or lower 100 men at a time. The #1 shaft was raised from below from drifts extending from the High Ore and other mines.

The Kelley was the first mine to use block caving on a grand scale, a technique of removing gigantic roomfuls of ore rather than simply mining along narrow tunnels and drifts.

## MOUNTAIN CON

High on the hill to the north of the railroad tunnel stands the headframe of the Mountain Con mine, Butte's deepest at 5,291 feet and the basis for the nickname, "a mile high and a mile deep."

The Steward Mine claim was patented by W.A. Clark, John Steward, and others in 1877, but its active production time began about 1900, when it reached 1000 feet in depth, and continued until 1973. It ultimately reached 4,400 feet and was among Butte's hottest mines — the lower levels were known as the "Chinese laundry" because of the high heat and humidity.

## THE STEWARD

The 30-foot-thick Steward vein was rich in silver and contributed to Butte's 1880s and 1890s silver boom, but like most of the mines in central Butte copper was the primary product of the Steward. The headframe is 126 feet high and dates to 1898-1902, making it one of the older headframes on the Butte hill. The hoist house was erected between 1891 and 1906. The hoist engine was converted from steam to compressed air in 1906. The tower on the rear (north) side of the hoist building holds the compressed-air storage tank.



Gold Crystal

## THE ORIGINAL

The Original is at the site where early explorers in 1856 saw rough holes

dug with sharpened elk horns. The mine itself dates to 1878 and reached a depth of 3,569 feet before it shut down in 1940.

The headframes of the Original and Steward are nearly identical. The Original's headframe is 127 feet tall.

Along the path as you proceed west you'll soon see a partially buried steel pipe. It carried compressed air from the central compressor to the Anselmo, where it was stored in a tall cylinder until needed for mining operations.

The Anselmo is the best preserved of all the mine yards in Butte (see page XX). It has been

## THE ANSELMO

maintained in almost the same condition it was in when it shut down in 1959 (when a crippling, 6-month strike hit Butte), after operating since 1887. The headframe was originally at the Black Rock Mine, but was moved to the Anselmo in 1936 — it was a common practice to move structures and equipment around as old mines played out.

The Anselmo shaft is 4301 feet deep. It began as a zinc and silver mine, with copper coming to the fore later. In the early 1900's, Butte produced about a third of all the copper produced in the world. Today, about a third of the world's copper comes from Chile.

The trail curves through residential neighborhoods as it winds westward. Near a sharp turn to the south (left) you'll see an octagonal concrete tower north of the trail—the Desperation Fan Tower, where bad air exited from the Anselmo Mine.

The World Museum of Mining occupies the former yard of the Orphan Girl, a major silver producer at 7½ million ounces—but that is just 1% of all the silver produced in Butte. The mine operated from 1875 to 1956 and reached the 3200 level. Silver predominated in the mines of the outer camp west and north of central Butte. The headframe at the museum stood at the Colorado Mine until it was moved to serve the Orphan Girl about 1925, when Butte's population was about 60,000—nearly double that of today. It was common practice to move equipment around the hill as some mines declined and others came to the fore.

## THE ORPHAN GIRL

After the early 1920s, when the Anaconda Company consolidated its control on most of the mines in Butte, all the mines were interconnected underground through a tunnel system totalling more than 10,000 miles in length.

The World Museum of Mining opened in 1965.

geology through MT Tech. West Gagnon space.

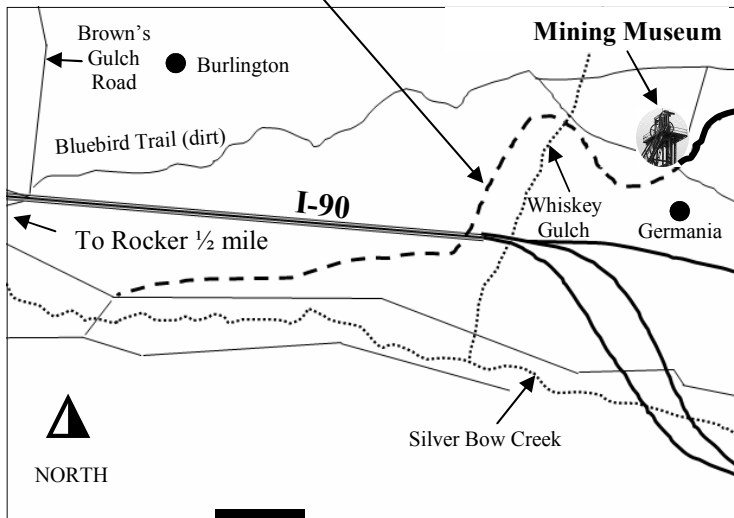
## FURTHER READING

The best treatment on the BA&P Railroad is *Wired for Success* by Charles V. Mutschler. Thoroughly researched, comprehensive, and highly readable. Published by Washington State University Press (2002).

*Butte & Anaconda Revisited* (1991), by Brian Shovers and others, has details about mine yards and their history. Available at Books & Books, Mining Museum, Mineral Museum. Montana Bureau of Mines Special Publication 99.

COPPER	21,479,571,676 pounds
ZINC	4,909,202,540 pounds
MANGANESE	3,702,787,341 pounds
LEAD	854,797,405 pounds
MOLYBDENUM	183,128,294 pounds
SILVER	714,643,005 ounces
GOLD	2,922,446 ounces
CADMIUM	4,306,156 pounds
BISMUTH	4,042,663 pounds
SELENIUM	316,855 pounds
TELLURIUM	237,256 pounds

## BA&P Trail west of Mining Museum (unpaved)



This description begins at the start of the unpaved trail, just south of the Mining Museum, and goes to just beyond the crossing of Whiskey Gulch (about ½ mile one way; the full trail length is 2.2 miles).

### BA&P TRAIL GUIDE

Several mining districts can be seen as you head west along the trail. The Elba and Mountain Boy mines, just to the south of the railroad, were active in the 1880s and 1890s, with reports of ore bearing as much as 130 oz per ton of silver—quite rich indeed. The silver mines of Butte's Outer Camp were active until 1893, when the silver panic shut many of them down. Many were reactivated in 1915 and later.

In the distance to the south beyond the Elba mine dumps, Germania was a small community clustered around the mine complex of the same name. At least one mine shaft there reached more than 1000 feet below the surface. The principal mine in 1891 was producing "several hundred ounces of gold per ton" from the 150- and 200-foot levels.

Remnants of brick and wood structures together with individual home garbage pits and community dumps are all



*Small vials from Germania trash dumps. The tallest is about 2".  
Collected by the author in 2007.*

that survives of Germania. Most of the bottles and other relics found there date to the 1930s.

On the right, across the ditch from the railroad bed, a par-

tially buried flume can be seen. This wooden box carried water from a point east or southeast of the Orphan Girl Mine, under the railroad bed, and on to the bank of the drainage to your left (south). It may have served as a source of water for a placer operation in the gully to the south, or it may have been a disposal conduit for water from the Orphan Girl Mine.

The trail continues west, passing through a road cut in the Butte Granite. A few thin veins can be seen, mostly coated with black manganese oxide. These coatings are found on rocks and tailings throughout Butte's outer camp, west of the Orphan Girl. Although the coatings are not very valuable, the Butte District was rich in manganese and produced almost 4 billion pounds, especially in the 1920s to 1940s.

The granite, host rock of the ore-bearing veins at Butte, crystallized about 78 million years ago. Later, about 50 million years ago, volcanoes (including the one that is now Big Butte) spewed lavas and ash over much of the country west and northwest of Butte. Granite underlies thin topsoil out here—though much of the soil is nothing but coarse decomposed granite (technical name, "grus").

A burned out structure on the southwest side of the trail was part of a loading facility. In the flats south of the big bend of the railroad bed you can see the foundations of many large buildings.

The big curve to the left in the trail takes the former railroad bed across Whiskey Gulch, which runs from the northwest flank of Big Butte down to Silver Bow Creek near the Interstate. Placer operations were conducted on the lower reaches of this gulch, south of the railroad, and a few sapphires have been found in that area.

The Nettie Mine, whose dumps are visible on the western skyline during most of the walk, was one of the most important mines west of the Orphan Girl. The mine began about 1880, and as early as 1886, it was down to 200 feet and produced 20 tons per day assaying about 50 ounces of silver per ton. It was an important manganese producer from its earliest days, although silver was more valuable. The black streaks and coatings on the tailings pile are manganese oxide.

### NETTIE MINE

By 1912, the Nettie had three separate shafts, down to about 550 feet, exploiting three important veins of silver ore as well as the abundant manganese. The veins were typically 5 to 8 feet wide, reaching 25 feet in places.

The main shaft area had a complex of large buildings, headframe, and four tall smokestacks.

On the trail, dogs should be kept on a leash, but there are many roads and paths in the general area of the trail south and west of the Mining Museum where friendly dogs can run free, and you can



Dog-friendly

explore the old garbage dumps for bottles. Most of the dangerous waste piles and shafts have been smoothed over and filled in, but lots of loose rocks, boards with nails, sharp pieces of metal and glass and other debris remain in this area, so use caution in walking around.

Many of the roads on either side of the walking trail south and west of the Mining Museum are unpaved but drivable, and they ultimately connect about two miles to the west with Brown's Gulch Road and Rocker, on the interstate. Be aware, however, that these roads are minimally maintained and are rutted, have lots of stray pieces of metal, rusty nails and broken glass, sharp rocks and other impediments to healthy tires. Also, people like to drink out there, so you can expect to see near-daily dumpings of beer cans and bottles. We apologize for the trash.

Target shooting is permitted north of the walking path and west of Whiskey Gulch, especially near the road at the foot of the Nettie Mine dumps.

Well off to the west, almost to Brown's Gulch, is the site of Burlington, a town of some 500 miners in the early 1900s. About all that remains, apart from the mine dumps, is a few concrete foundations. The larger mines surrounding Burlington included the Moody & Sankey, Champion, Great Republic, and Bluebird.

The road west—the continuation of Park Street—is called Bluebird Trail, and the “Bluebird Incident” on Miners Union Day, June 13, 1887, marks the first time Butte became a “closed shop” with all workers belonging to a union. On that day miners from Butte marched out to the Bluebird, the only non-union mine around, and forcibly enrolled the Bluebird's miners into the union.

*Below: along the unpaved trail—part of a loading facility.*

