

Extenuate Mine: Upper Tunnel
Site 5ST1139

The site encompasses the remnants of the Extenuate Mine's upper tunnel, which miners worked both independently and as part of the greater Extenuate operation, depending on timeframe. Currently, archaeological features and an intact ore bin represent the mining operation. The site, at around 10,240 feet elevation, lies on the north side of French Gulch in the McKay Mining District. The terrain consists of a steep, southeast-facing slope that descends directly down to the Extenuate Tunnel, located below the site. A dense and young aspen forest punctuated with second-growth fir trees grows throughout the site except for on the waste rock dump. Several roads pass through the site, and one ascends northeast to French Gulch's north rim and served as a major artery to other mines. A second road descends southeast to the Extenuate Mine, and a third road traverses westerly to additional mines. The site possesses impaired integrity, but because the waste rock dumps can be seen from afar, the site is a contributing element of French Gulch's historic landscape.

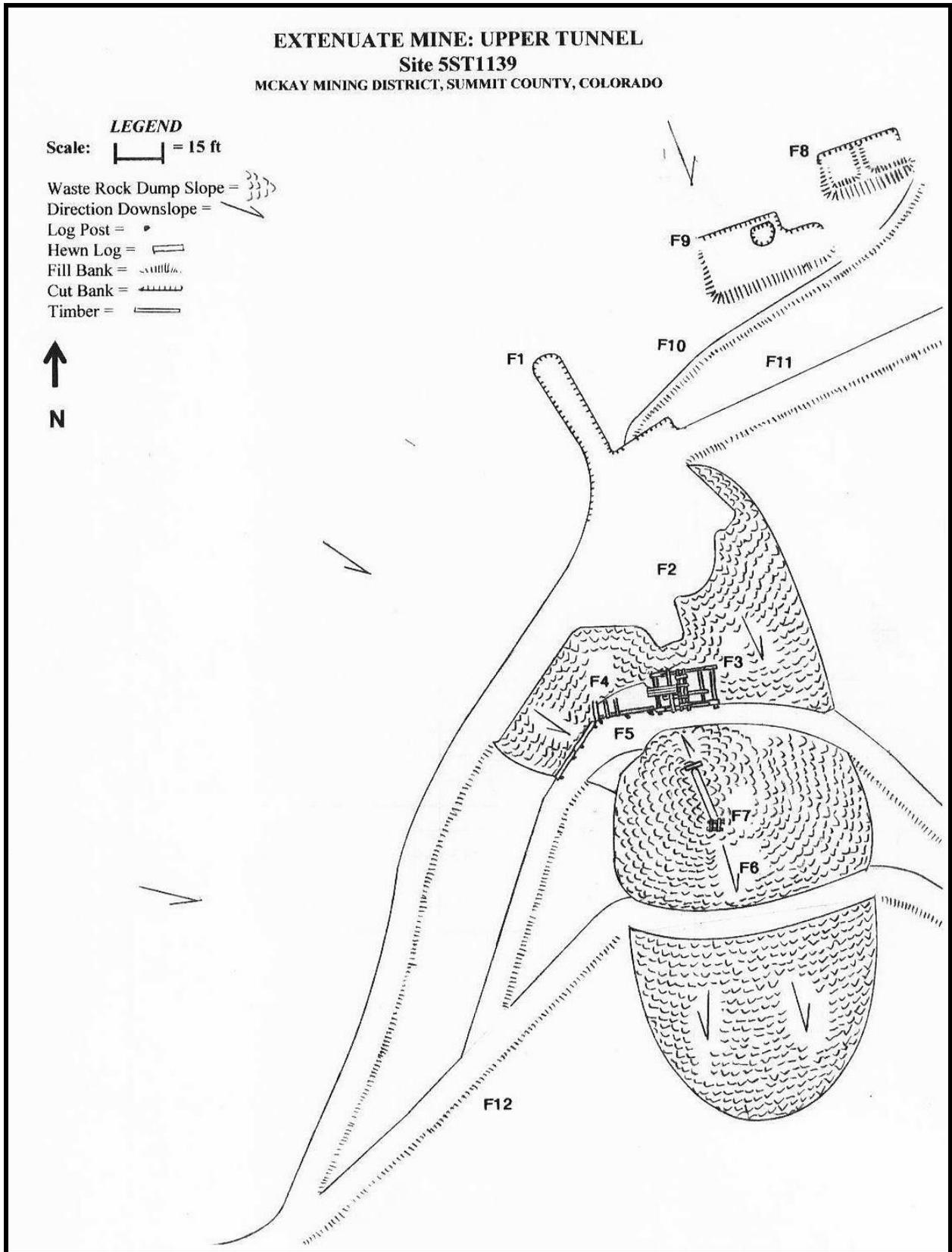


Figure 2.8: Plan view of Extenuate Mine: Upper Tunnel site.

Extenuate Mine: Upper Tunnel Site History

The upper tunnel was a component of the larger Extenuate Mine, whose history is discussed above (see Extenuate Mine). It remains unknown exactly when the upper tunnel was initially developed, although it shares the same general timeframes as the main mine downslope.

Extenuate Mine: Upper Tunnel Site Description

The site is relatively simple and consists of a collapsed tunnel, two waste rock dumps, a standing ore bin, the ruins of a second bin, and several residential features. The tunnel portal (F1) collapsed, leaving a linear are of subsidence. The upper waste rock dump (F2) manifests as a pad 68 by 105 feet in area and 10 feet thick. Miners graded the top-surface flat and erected the mine's surface facilities near the tunnel portal. Clear evidence of the facilities is, however, absent due to the impacts of erosion, revegetation, and a recreational road.

Miners constructed two identical ore bins at the toe of the waste rock dump to store pay rock between shipments. One bin (F3) stands intact while the adjacent unit (F4) has been reduced to ruins. The intact bin (F3) is a rectangular, flat-bottom structure 12 by 18 feet in area and 7 feet high in the interior. Workers assembled the log walls with V-notch joints and chinked gaps with planks to prevent fine ore from leaking out. The bin featured a low-angled, front-gabled roof supported by three log beams. While the roof mostly collapsed, it featured plank siding and at least one port to input pay rock. A trestle supported by two log beams traversed the top and supported a rail line used to input ore. A screen stood on the trestle, and its purpose was to sort the crude ore by grade. When miners dumped the ore onto the screen, metal-rich fine material dropped through into the bin. Waste-laden course pay rock rolled off the screen, down a chute, and into the adjacent bin (F4). The front (south) side stands elevated 5 feet above an adjacent loading area (F5) so ore could easily be shoveled into wagons. Workers assembled the bin's primary woodwork with a combination of cut- and wire nails, and used wire nails to repair the trestle. The bin currently stands in poor condition. The foundation and the wall against the waste rock dump rotted, the chinking is gone, and the roof partially collapsed. In addition, the wood is heavily oxidized and possesses little structural integrity.

As miners developed the underground workings, they generated waste rock that had to be dumped on the surface. The miners were unable to contribute much of the material to the existing waste rock dump without inundating the ore bins and blocking the roads. Instead, workers built a trestle over the ore bins and extended it to the south. By repeatedly ejecting waste rock off the trestle, the miners created a new, second dump (F6) that became almost as large as the first. The second dump currently manifests as a mound 78 by 120 feet in area capped by an isolated cone of waste rock. The top-surface features the remnant of the trestle (F7) used to dump the material.

Except for structural materials associated with the ore bins and the trestle remnant, the mine complex offers a particularly impoverished artifact assemblage. Erosion buried numerous items, and those on the waste rock dumps were destroyed by the caustic nature of mineralized material.

During the mine's early years, it appears that most of the workers lived in several boardinghouses upslope from the tunnel. The buildings are gone, and several platforms currently remain. The eastern platform (F8) is 12 by 24 feet in area and features raised berms that divide the top-surface into two separate depressions. The berms elevated the building to keep it dry during snowmelt. The western platform (F9) conforms to an L-shaped footprint and features a collapsed root cellar in the corner. According to the footprint, the building was 18 by 22 feet in

area with a 10 by 10 foot extension. The platforms and environs are heavily overgrown, which conceals most artifacts. Regardless, some domestic refuse extends up to 42 feet downslope, and red bricks and assay slag indicate that the western building included an assay shop. Buried deposits are possible on and immediately downslope from the platforms.

The artifacts on and downslope from the platforms provide a general timeframe of occupation. A combination of hand-finished bottle fragments and hole-in-cap cans assembled with lapped side seams reflect a timeframe spanning from the 1880s into the early 1890s. A bottle base with an “McC” maker’s mark predates 1886.¹

Extenuate Mine: Upper Tunnel Site Interpretation

During its operating life, the upper tunnel was a substantial but simple mine. The large waste rock dumps indicate that the underground workings were extensive and almost certainly linked with the greater Extenuate Mine downslope. The upper tunnel’s surface plant, however, was austere and lacked machinery, requiring the miners to conduct most work by hand. The ore bins indicate that the mine yielded ore, and the operators constructed a primitive screening system to segregate the pay rock by grade. The system allowed metal-rich fine material to drop into the eastern bin and shunted coarse, waste-laden cobbles into the western bin. The fine material was then shipped directly to a smelter while the low-grade ore went to a concentration mill. Overall, the simplicity of the surface plant, the lack of machinery, and the use of local logs for the ore bins reflect the investment of limited capital.

According to material evidence at the residential complex, the mine was developed during the first half of the 1880s and saw activity as late as the early 1890s. Such a timeframe is in concert with archival records. Wire nails scattered throughout the site reflect later activity, most likely during the 1900s and 1910s in concert with the rest of the Extenuate property. Because the Wellington Mines Company used the Extenuate Tunnel as its principal haulageway underground, it seems likely that lessees operated the upper tunnel during the above timeframe.

It appears that the residents were male workers who belonged to a limited socioeconomic status. The artifact assemblage includes no items representing fine and costly goods or women. The workers consumed a diet based primarily on preserved foods supplemented with fresh beef. Only a handful of fragmented liquor bottles indicate that the workers drank little alcohol when on-site. The workers did, however, consume a high quantity of medicine, which reflects several trends. One is that the workers suffered from chronic ailments such as respiratory or digestive problems, which were common on the mining frontier. The other trend could be the recreational use of medicine for its opiate contents.

Extenuate Mine: Upper Tunnel Site Significance and Management Recommendations

Due to natural decay in the forms of erosion and revegetation, the upper tunnel retains limited integrity as a historic site. The details of the operation are not sufficiently represented to recommend the site a significant resource. The site does, however, possess some value as a contributing element of French Gulch’s historic landscape. The waste rock dumps are prominent, can be seen from afar, and belong to a group of mines that dot French Gulch’s north side.

Because the site is recommended ineligible for the NRHP and the SRHP, few actions are recommended for the site. The only recommendation is to preserve the appearance of the dumps.

¹ Toulouse, 1971:351.