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DUTCH FLAT DISTRICT

LOCATION

For the purposes of this report the Dutch Flat district includes all of the southern quarter of the Hot Springs Range. This places the Dutch Flat Mine at about the north end of the district and the Red Devil Prospect at the south end. Then, there is an unnamed prospect on the south east corner. Bailey and Phoenix, and also Wilden consider the district as being only on the west slope of the range and extending from the Dutch Flat Mine south to the Red Devil Prospect. All the mines and prospects are on the Osgood Mountain 15-minute topographic map.

HISTORY

Placer gold was discovered in the district in 1893. It's reported that about \$200,000 in gold has been produced from the placers. This figure is based on the price of gold at \$35 per ounce. During the first year, production was reported to have been \$75,000. Most of this gold was recovered by working with rockers. Water for the rockers was hauled in wagons from Spring Canyon, about one mile from the placer ground. The water was obtained from a well sunk to a depth of 25 feet. Since the late 1930's the placers have been worked intermittently but not profitably. Lack of a good water supply is the main problem.

Cinnabar was noted in the early placer operations, and in 1940 cinnabar was discovered in a fault zone cutting sandstone and shales. The deposits are small and only the Dutch Flat Mine has had any significant production. Total production for the district has probably not exceeded 90 flasks.

GEOLOGIC SETTING

The bulk of the district is composed of the Cambrian Harmony Formation which is made up of sandstone and shales. North northeasterly of the Dutch Flat Mine is a Tertiary granodiorite intrusive. A contact metamorphic aureole surrounds this intrusive and may be the source of the scheelite in the placer deposits. Asymmetrical, north plunging folds characterize the structure in the Harmony Formation, and these are cut by normal vertical faults which trend northeast and southwest. In the east, southeast portion of the district is an area covered by Tertiary basaltic and andesitic rocks. Locally this unit may include more silicic rocks and even sedimentary rocks. In the southeastern edge of the district is a small cropping of Ordovician Valmy Formation. In this area the unit is composed almost entirely of a medium gray to white quartzite.

ORE DEPOSITS

Wilden and Hotz have described the ore deposits of the district as follows: "Two types of lode deposits of two ages are present in the area,

and the existence of a third is inferred. The oldest consists of two sets of quartz veins that contain minor amounts of gold and base metal sulphides. The youngest type is disseminated cinnabar in a shear zone that is younger than the quartz veins. Contact metamorphic rocks containing scheelite may be present in the area, but such deposits were not observed . . . , the only known evidence of their existence is the scheelite and garnet in the placer."

" . . . The quartz veins occupy two northeast striking fault systems: one, in the granodiorite stock, dips about 30° northwest and another, in the sedimentary rocks, dips steeply from northwest to southeast. The veins are generally from 3 inches to 2 feet thick, but veins as much as 8 feet thick have been observed. Some veins exposed in the mine workings give assay values in gold ranging from 0.01 to 0.05 ounces per ton and in silver ranging from 0.3 to 1.5 ounces per ton. . . . it was reported that pockets of ore running \$200 in gold per 50-pound ore sack were encountered in the El Paso Mine. Galena, sphalerite, chalcopyrite, pyrite, and jamesonite have been identified in some vein quartz. Small amounts of scheelite were observed in two of the quartz veins, and small pebbles of quartz containing scheelite have been found in the slope-wash gravels."

"Cinnabar is found disseminated in a shear zone in metamorphosed shale and feldspathic quartzite of the Harmony Formation just west of the granodiorite stock. The shear zone strikes about $N10^{\circ}E$, dips from 20° to $35^{\circ}SE$ and has an average width of about 5 feet over a length of 900 feet. . . . Cinnabar is disseminated throughout the shear zone and locally in the undisturbed sedimentary rocks on either side of the shear zone. . . . The average grade of the mined material was about 20 pounds of mercury per ton."

"Two types of placer deposits are present in the area; stream deposits containing water-transported material, and slope-wash deposits containing material weathered from rocks in the immediate vicinity. The stream-transported material occurs in the bottoms of the larger canyons and on the alluvial fan below the mouth of Sodarís Canyon . . . The stream deposits range in depth from 10 feet in the upper parts of the canyons to 35 feet at the mouth of Sodarís Canyon, with an average depth of about 20 feet. The depth of the alluvial fan below the mouth of the canyon is known from a few scattered prospect pits to range from 12 to 90 feet."

"The slope-wash deposits are found on both sides of El Paso Gulch to a height of as much as 50 feet above the creek bottom. The slope-wash deposits, as the term is used here, include some stream-transported material which was left on the sides of the canyons as the streams cut down through bedrock. . . . The slope-wash deposits range in depth from 5 to about 25 feet with an average vertical depth to bedrock of 12 feet."

Current activity in the district is non-existent. There is one new block of claims staked along the range front between Sodarís and Spring Canyons. The claims were staked in February, 1985 but there (April, 1985) has been no physical work done on them.

SELECTED REFERENCES

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