

GOLD CLUSTER GROUP

L. Burnt River
Chicken Creek District
Baker County

Owners: M. P. Gifford and John E. Johnson, Route 1, Huntington.

Location: Elevation 4500'. Sections 21 and 22, T 12 S, R 44 E W. M. About $4\frac{1}{2}$ miles from the highway and railroad at Weatherby.

Area: 10 unpatented lode claims in one group and two in another $\frac{1}{4}$ mile west.

History: The "Knight" tunnel, 161 feet below the Sam McGee #1 tunnel, was operated 40 years ago. Gifford located present claims in 1928, and has done all the rest of the work since that time. In the last 3 years about 200 tons have been produced, averaging about \$40.00 per ton, or a total of perhaps \$8000.00 since 1928.

Equipment: The operation is by two men, and there is no equipment beyond a Model T Ford truck, by which the ore is taken to mill, wheelbarrows, drills, etc. The ore is taken to the Little Hill 2 stamp mill, which is operated by the same truck. Passed through 40 mesh screen and over 3' and 7' copper plates, silvered.

Geology: The country rock is biotite granodiorite, cut by several vein systems striking north and dipping about 35 degrees to the west. In the Sam McGee tunnel the vein is offset to the east by numerous small step faults, which causes the trend of the tunnel to take a N 35° E to N 65° E direction, while the true strike is about N 70° E for the vein. The vein averages 3" wide, but in places is said to be as much as 16". It is composed predominantly of either white sugar or white layered quartz. The layering seems to be the result of movement rather than primary. There is only a small amount of limonite stain. Clay gouge is present, also suggesting a large amount of post mineral movement. Miners in the district refer to a basaltic "blowout" which caused the vein system. This basalt, however, is Tertiary (Miocene) basalt and post mineral. If it is a feeder plug and not just a capping, it may have helped cause the later step faulting. The ore is free milling. There are almost no concentrates when passed over vanner tables. Gold appears as wires and nuggets in the clean white quartz and is said to be 770 to 825 fine.

Conditions affecting mining: There is no water available at the present time, although several old ditches, previously used for Chicken Creek placers, cut across above the property. Timber must be hauled a distance of about 4 miles. There is only about 12" of snow, and work can go on all year. The road is open most of the year.

Development: There is over 600' of tunnel on the property as follows:

 Knight Tunnel: 200' with 100' branches. Stopped 80' to surface, about 60' wide.

 Sam McGee: Two upper levels, 100' each.

 Lower level 250', stopped to surface.

 Shepherd: 3 tunnels: 80', 80', and 30'. Shaft 25'.

 Gold Cluster: Shaft 20'.

 Lone Juniper: Tunnel 130'.

There are numerous other shallow pits exposing small stringers. The old placer workings up the numerous gulches have lead to several veins which have been opened but not developed.

Economics: The present method of operation on the narrow veins in the district provides wages for the men. On that basis it can be said to be profitable. Larger operations would not be justified; but, on the other hand, there are probably numerous localities in the region which would support good miners that are now not in operation. The type of ore, the free milling gold, and the well-defined veins make this district a good one for the small miner. The lack of water and timber, the small veins, and the relatively steep and rough country make larger operations questionable.

Mr. Gifford would like to see other miners working on his property and would welcome a chance to lease the property. He plans to put up a small mill; and if he can get a number of small operators, he will mill their ore.

Informant: Mr. M. P. Gifford

June 15, 1938

John Eliot Allen
Field Geologist