BI-METALLIC

Owner: M. C. Carson, 1911 Cherry Street, Bandon, Oregon.

Location: Northeast quarter of sec. 7, T. 10 S., R. 35 E. 2 miles from the Greenhorn Granite road at an elevation of 6800 feet at the cabins.

History: No production in spite of the large amount of development work.

Development: 2100 foot lower tunnel (now partly caved) and 400 foot drift. 15 foot upper tunnel caved.

Geology: Country rock serpentine and fine-grained diorite. Ore is quartz with some tetrahedrite. Disseminated molybdenite is present in the diorite in places. Banded cherts occur adjacent to the serpentine just above the lower tunnel mouth. Chromite occurs in the serpentine half a mile west of the lower tunnel.

Miscellaneous: Timber is abundant; power line crosses property; water plentiful; elevation places property near timber line and winters are quite severe.

J. E. Allen.
Bimetallic Claims. — The Bimetallic group, formerly called the Intrinsic, is located in Secs 6 and 7, T. 10 S., R. 35 E., near the headwaters of Salmon creek, about 2 3/4 miles from the Ben Harrison mine in a straight line and about the same distance from the town of Greenhorn with which it is connected by wagon road. The elevation of the principal workings is about 7,000 feet. It is on the southern slopes of a branch ridge of the main Greenhorn range.

The principal country rock is diorite, a peripheral differentiate of the granodiorite intrusion. Much serpentine and greenstone was observed on the opposite side of Salmon creek. The immediate geology is complex. Large dikes which are neither a true granodiorite-porphyry nor an aplite, but a sort of intermediate which might be called a granodiorite-porphyry aplite strikes north and south on the east side of the property. They were probably welled up in fissures at a period of time midway between the time when the two types of dikes were being formed. After this dike had become solidified, the dike and the adjoining diorite along its western side was shattered in a series of parallel breaks partaking of the nature of a shear zone. This must have been at a period considerably after the time when true aplices were formed elsewhere in the intrusion because it has been filled with almost pure quartz. The bands or ribbons of quartz are so completely cemented to the intervening dike rock that cross sections with the splendid luster of the quartz in contrast with the creamy but dull color of the dike rock makes a decidedly pleasing appearance.

On the northeastern part of the claims, just beyond the saddle, is a light-colored rock composed almost entirely of calcite impregn. with chalcopyrite and tetrahedrite and containing some secondary feldspar and quartz. This has low values in gold and silver.

The general direction of the veins is E.-W., but these veins are the result of a more or less complex fracturing. The principal workings are in a basin about half way up to the saddle from the creek. There has been a great deal of weathering and decomposition of the rock generally which may have been due to a centralizing of the fracturing in the basin.

On the side hill west of the development is a large cropping at least 25 feet wide which appears to be the result of a partial replacement of country rock with quartz in which there are many veinlets and quartz crystals. Manganese is evident throughout, although in small percentages, and samples taken from this exposure assay about $1 in gold. It could not be determined with the limited amount of development on the surface nearby whether or not this is a harder portion of the same lode seen in the principal workings to the east, which because of its more resistant nature, has not weathered as fast as the country rock or the softer part of the vein.

The underground workings were so poorly ventilated that candles would not give sufficient light to observe very much, but it appears that there is a wide zone of softened badly decomposed rock in which there are lenses of good ore either along the walls or at places between them. How much value, if any, is contained throughout the mass is unknown, but from its appearance it is probably too low grade to mine outside of these lenses. Whether these lenses, which in places are of
stoping width, have much vertical or horizontal extent was not ascertained.

On the dump there is quite a tonnage of ore in which there is varying amounts of tetrahedrite with some pyrite and chalcopyrite. It is said that this ore has been sorted over twice and the first shipment contained between two and three hundred dollars a ton, and that the second sorting brought between one and two hundred dollars, while a third sorting, which has been begun, assays about $75. The main ore dump will naturally average much less than the latter amount.

This deposit is also the product of ascending magmatic waters, but the extremely soft nature of the entire lode would lead one inevitably to question the primary nature of the sulphides present, although tetrahedrite is normally a primary mineral.

The gold values are usually between one and two dollars per ton, and the amount of gold present seems to bear but little relation to the amount of silver present.

Swartley 14:37

The mine was shut down from 1914 to 1919, when 700 feet of the old upper tunnel was retired. Development consisted of a crosscut 2152 feet long, with drifts for 410 feet south.

Informant: M. C. Carson
11/2/20

BI METALLIC MINE

GREENHORN DISTRICT: Is 10 miles north from shipping point, Tipton, Oregon, on the Sumpter Valley Road. Mine was located 25 years ago and consists of 6 unpatented lode claims, recorded in Canyon City, Grant County, Oregon. Located in a high mountain area; the country rock is greenstone with hanging walls of diorite, greenstone foot; vein strata bearing northeast and southwest; width 16 feet, length 3000 feet. The mineral is silver, assays at 100 ounces per ton. Water is ample; power available from Eastern Oregon Light & Power Company, nearby. Equipped with shop, 4 ore cars, track and all hand mining tools. Developed by 3000 feet of tunnels and a 4-foot by 6 foot shaft. Mine is now idle. Owner is M. C. Carson, Baker, Ore.

(Prescott---6/1/37).