

# HAYBOLT PROPERTY

## SPARTA GRANITE DISTRICT DEPOSITS

### DEPOSITS IN THE SPARTA GRANITE DISTRICT

The Sparta mining district is located in T. 8 S., R. 44 E. This township is between lower Eagle creek and Powder river, and with the exception of its northern border is a granitic area surrounded by recent basalts. Doubtless it was once entirely covered by the Columbia river basalt since Sparta Butte, close to the town of Sparta, is an uneroded remnant of basalt. The Sparta region, no larger than 30 square miles, is a granitic stock which was intruded into the older greenstones and sediments. These older greenstones and sediments which covered this granitic stock at the time were eroded from its top. Afterwards when the great flows of Columbia river basalt spread over wide expanses in eastern Oregon they covered the Sparta region also, and erosion, with the exception of the northern border, has not fully uncovered all of the intrusion which had been uncovered previous to the first flow of this late basalt.

This intrusion is a light-colored rock of very coarse-grained texture, and consists chiefly of feldspar and quartz. The rock, in thin section, is seen to be composed chiefly of albite feldspar, which sometimes shows zonal growth with the central portion of the feldspar crystals more basic than the outer parts. This rock is a soda granite and the much larger quartz grains and the more basic portions of the feldspars suggest that it is a more acidic phase of the intrusion which elsewhere in eastern Oregon is almost altogether the more basic granodiorite. Besides the granite there are outcrops of porphyry in the vicinity.

In the granitic area adjacent to Sparta we have normal fissure veins formed by the deposition of quartz coming from the cooling mass below. The same type of vein is found cutting the greenstones, but the more distant they are from the intrusive the less extensive is their mineralization.

There is very little activity in mining in this district at the present time. Some work is being done upon the Haybolt property and at the Gem mine. A small amount of placer mining is also carried on. The surface of the granite is badly weathered and the shafts and various tunnels and open cuts have nearly all caved in so that there is little to be observed.

On the Haybolt property development work is being done upon stringers of quartz which are reported to be frequently of high grade.