

6/46

Donnelly Group
NAME

Gold, Silver and Lead
PRINCIPAL ORE

MINOR MINERALS

4 S. _____ 44 E. _____ 31 _____ S

PUBLISHED REFERENCES

Swartley, 14:87
Bulletin 14-A, page 116

.....
Wallowa COUNTY

.....
Wallowa Range AREA

.....
8500' (about) ELEVATION

.....
..... ROAD OR HIGHWAY

.....
..... DISTANCE TO
..... SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) Address

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OPERATOR Name of claims Area Pat. Unpat.

Name of claims Area Pat. Unpat.

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EQUIPMENT ON PROPERTY

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WALLOWA
RANGE
WALLOWA
DISTRICT

Donnelly Group.—A closer view of this saddle brings out strongly the amount of bowlders fallen from the cliffs since glacial days on which a zigzag trail is built to the prospect, 950 feet above the lake.

Here, in the central part of the exposure of the great intrusion, the granodiorite more nearly resembles that found at Cornucopia. We are too far away from limestone borders to have the "tonalitic phase."

The granodiorite is cut by porphyry dikes, one of which 20 to 30 feet wide crosses the top of this ridge with a strike N. 25° E. dip 80° to 85° E. This dike is shattered eight to ten feet wide and in this width irregular quartz veins have been deposited. This porphyry dike is undoubtedly connected with the granodiorite intrusion, but the peculiar mineral composition of the groundmass places it midway between a true porphyry and an aplite. The dike was formed later than the granodiorite porphyry dikes found elsewhere and before the true aplite dikes, since it partakes of the nature of each. In the shattered portion the porphyry shows the effects of pressure and the subsequent alteration especially of the feldspars and biotite, has produced small amounts of calcite and secondary quartz from the feldspars, and chlorite from the biotite.

Basalt dikes cutting in almost every direction are found in this vicinity. A small one cuts from side to side of the quartz vein, while

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a much larger one roughly at right angles to the vein is seen in the shadow of the cliff. The principal quartz vein in the shattered zone is from four to six inches wide, is somewhat lenticular and has small branching stringers extending into the shattered zone.

The ore minerals are galena, tetrahedrite, sphalerite, and a very small amount of chalcopryrite. It is said that high values in gold and silver are also present. The sulphides occur in some stringers an inch or so wide in the quartz. From the field relations, the mineral characteristics of the vein and the alteration of the porphyry, it is evident that hot aqueous ascending solutions filled the fractures and profoundly affected the adjoining porphyry.

This vein was found late in the fall a year ago and it has not been developed to prove or disprove its worth. Its actual width is small and if enlargement at depth is not found the ore will have to be rich to pay the high cost of mining and transportation to the railroad and smelter. The smaller parallel quartz veins in the shear zone give some promise that they will unite with the larger one at a little greater depth. The owners have started a drift with the hope that this will prove to be the case.

From the apex of the Donnelly vein we look southward across the Minam at the granite ridges beyond which Eagle river flows toward the south.

(over)

To the northwestward looking across the lower part of the curving ridge on which we stand, we get a view of Brown mountain on its other side and see still more plainly the outlines of the ancient channel.

Looking backward across the cirque lake we see a part of Minam lake, the backward trail and the pass over which we came. Between

the first and second ridge is the East fork of the Lostine and the high ridge in the background is the watershed that separates Hurricane creek from the West fork of Wallowa river.
