

## GEM CLAIMS

WALLOWA  
RANGE  
WALLOWA  
DISTRICT

*The Gem Group.*—Turning up a side gulch to the west and within three miles of Wallowa lake we reach the Gem group of claims about one-half mile away from the main stream. The elevation is approximately 6,000 feet at the principal contact of the granodiorite with limestone and calcareous schists.

Pegmatite and aplite dikes are present. The aplite dikes for the most part are small ones in the granodiorite, while a pegmatite dike, consisting chiefly of quartz and feldspar, is about 10 feet wide.

The characteristic contact-metamorphic minerals, such as garnet, epidote, quartz, calcite, pyrite, chalcopyrite, molybdenite and magnetite are found. The molybdenite is associated with pyrite, with quartz, epidote and calcite as a gangue. The magnetite is associated with quartz, and pyrite with a small amount of epidote.

A short crosscut tunnel has been driven diagonally toward the contact in granodiorite, but has not reached it, but has cut through an irregular bunch of fine-grained pyrite, chalcopyrite, quartz, garnet and epidote. A crystalline limestone float containing considerable fluorite was found, which doubtless came from the limestone farther up the mountain. Fluorine is one of the so-called mineralizers, and its presence is indicative of activity subsequent to the intrusion of the granodiorite. Further field investigation might indicate that the mineralizers have penetrated considerably the overlying sediments. A storm prevented completing the field work here.