descriptions of the rye patch mine and the history are given by t. l. barnes and m. j. barnes, p. b. and u. b. anderson (1939, p. 151), and by w. o. yost (1969, p. 11). according to yost, the mine was discovered in 1912, and from 1912 to 1920 was owned by an english company during which time it was known as the alpha of rye zoo mine. in 1913 the mine was taken over by the rye patch mining company. total value of production in gold alone was over $2,000,000, principally in silver, but some gold and copper apparently was also recovered.

as shown on the geologic map of the elkhorn quadrangle (yost and others, 1969), the rye patch mine is in the talco-cummington marble of the upper part of the prida formation, not more than a few hundred feet stratigraphically above the contact between the prida formation and the rock castle schist. the ore, according to yost, was as follows:

- **shattered limestones full of boulders and branching stringers of quartz and calcite, occurring in great thickness.**
- **shattered limestones with definite foliation but grading on west into country rock.**

in addition to quartz and calcite, barnes reports pyrite, galena, scheelite, talc, and pyromarble, and perhaps enstatite and serpentine. little material that can be said to represent ore was seen during the present examination.

a few small pads and lodes of scheelite were found by the authors. although nothing approaching normal scheelite lenses were seen, the presence of scheelite veins was noted in the rye patch mine in other silicified-carbonate deposits that occur in the prida formation in the humboldt range.

the vein system as seen at the 1500- and 2000-foot levels in exposed talco-cummington marble is parallel in bedding and irregular masses of altered limestone, talc, and calcite that replace metal veins of the prida formation adjacent to bedding-planar veins. the talco-cummington marble strikes generally n. 35° w. and dips between 10 and 25 degrees northwest. this vein system apparently is the rye patch vein as described by barnes.

in the northern portion of the 2000-foot level, a steeply dipping shear zone accompanied by some silicified carbonate rock is exposed. this may be a part of the upper part of the rye patch mine. the dip of the shear zone is from the southwest to the northeast. this may be the alpha mine which barnes notes **"as a mere fissure that bounds the ore on the west."

both alpine and mine bodies of the prida formation in the rye patch mine. the ore rocks dip mostly northwest, and rock northwest is most abundant. some of the rock referred to an alpine mine may be altered banded rock which also occurs make up part of the prida formation, and may in part be identical with the talco-cummington marble of the rye patch mine.

a composite file of quartz veinlets and carbonates found in the talco-cummington marble of the prida formation would be expected to yield a high grade of scheelite and pyrite. scheelite veins in the talco-cummington marble adjacent to the bedding-planar veins have been noted by barnes. a scheelite deposit in the humboldt range has been described by barnes. the scheelite deposit in the humboldt range has been described by barnes.