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White Pine County

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## BUTTE VALLEY AREA

Butte Valley is a typical, north-trending Basin and Range graben located in northwestern White Pine County. It is bounded on the west by the Butte Mountains and on the east by the Cherry Creek and Egan Ranges. A southern access route to the valley is provided by the Thirty-mile Road which heads north from Hwy. 80 at Robinsons Summit.

Large claim blocks held by Bear Creek Mining Company and Exxon Minerals are located on valley fill just west of the southern Cherry Creek Range (T22-23N, R60-61E). Activity on these claims has received recent attention because of the reported discovery of a large porphyry copper deposit beneath Tertiary alluvium and volcanics.

A seismic refraction survey of the prospect area was conducted by Gulf Science and Technology for Bear Creek Mining Company. The results were reported in Shuey et al., 1977, and summarized by Wright, 1981. According to Wright, the deposit is overlain by 100-1,000' of basin fill, an unaltered slide block of Paleozoic sediments, and directly by an old fanglomerate. The survey revealed that the deposit is complexly faulted. W. R. Wilson, formerly of Bear Creek Mining Company, informed us that Bear Creek drilled several deep (1,000' or more) holes in which sulfides were found. Because of the deposit's estimated depth (approximately 2,000' below the surface) and the unstable conditions of the alluvial overburden, it is currently considered unfeasible for development.

See also 83-2 geochemical results.

J. Tingley + J. Bentz (1982) Mineral Res. of Egan Resource area: NBME OFR 82-9

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About ten miles to the north, Gulf Minerals conducted exploratory drilling for porphyry copper on their Mag claims (T24N, R61E) in 1975. They still held the claims in 1979.

No sign of drilling or any other activity was found in our reconnaissance examination of the area in July, 1981. However, we did visit and sample an inactive prospect pit in the southeastern part of the valley.

## Selected References

- Shuey, R. T., Farr, J., Fix, J., Omnes, G., and Ruskey, F. (1977) Seismic methods: Geophysics applied to detection and delineation of non-energy, non-renewable resources: Univ. of Utah, Dept. of Geol. and Geophysics, Rept. on Grant AER 76 80802, 309pp.
- Wright, P. M. (1981) Seismic methods in mineral exploration: Econ. geology, Seventy-fifth Anniversary Volume, p. 863-870.