2840 0001

near 165

Item 8

LITTLE MOUNTAIN

LOCATION

The Little Mountain district is located in the general area north and south of Empty Mountain (Little Mountain) on the southwestern edge of the Cedar range. The largest of the few prospects in the district are located near the common corner of T3-T4S and R68-69E on the south side of Empty Mountain. One additional prospect is located several miles to the north in Miller Spring Wash.

HISTORY

No information is available on the discovery or production history of this district. All of the workings are small and production must have been minor at best. Recent claims were in evidence in the district but no work was being done at the time of our examination (1983-1984).

GEOLOGIC SETTING

Empty Mountain is composed of "older" Tertiary andesitic volcanics (Tschanz and Pampeyan, 1970) which have been intruded by several small stocks of diorite. To the north of Empty Mountain, in Miller Wash, a small outcrop of pre-Tertiary carbonate rock is exposed on the diorite contact. Other very small carbonate masses must be present in other areas on the diotire contact as small pods of skarn mineralization were found at some of the prospects in the district. Tschanz and Pampeyan, 1970, describe the entire diorite mass as being weakly chloritized, but alteration is most intense along the contact with the older volcanics and along shear zones that cut the contacts. On the regional map of Lincoln County (Ekren, et al, 1977) the Little Mountain area falls along the northern rim of the Caliente caldron complex, and is generally on the eastern extension of the Tempiute lineament.

ORE DEPOSITS

All of the small mineral deposits within the Little Mountain district occur in or near the intrusive bodies. Most are confined to narrow shear zones which cut the contacts, and mineralization consists mainly of stainings of copper minerals. Epidote and other skarn minerals are present with pods of magnetite, psilimelane, specularite, malachite and chrysocolla. Wall rocks near the mineralilzed shear zones are commonly silicified and the rocks are stained with several shades of unidentified yellow and green oxide minerals.

NBMG OFR 84-1

GEOCHEMICAL RELATIONSHIPS

Samples taken from the prospects south of Little Mountain contain values which might be expected from copper skarn occurrences. Very high copper values were, of course, obtained from the selected ore samples. Samples were also high in lead and zinc, and contained some silver. Anomalous bismuth was present in two samples and one, from the southern-most prospect (sample site 786) was very high in molybdenum, possibly accounted for by some of the yellow oxide mineral reported present there.

SELECTED REFERENCES

Ekren, E. B., Orkild, P. P., Sargent, K. A., and Dixon, G. L., 1977, Geologic Map of Tertiary rocks, Lincoln County, Nevada: USGS Map I-1041.

Tschanz, C. M., and Pampeyan, E. H., 1970, Geology and Mineral Deposits of Lincoln County, Nevada: NBMG Bull. 73.