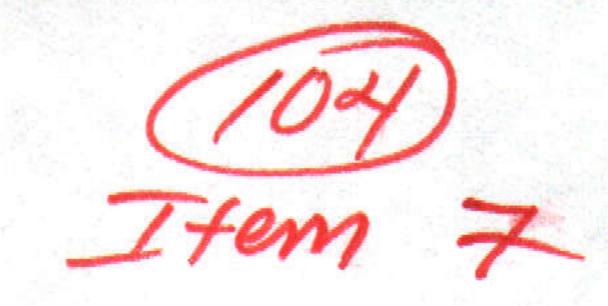
See also 83-12 for geochemical results.



TULE CANYON DISTRICT

4920 0007

The Tule Canyon mining district has, at times, been called a sub-district of the Lida mining district, and at others, a separate district unto itself. For administrative purposes, the CRIB and field sheets have been included in the Lida file, but a separate report is submitted for Tule Canyon.

The Tule Canyon mining district is located in Tule Canyon in T7S, R4OE, adjacent to and north of the California-Nevada state line in the southwest part of Esmeralda County, Nevada. Access to the district is from the south by way of Death Valley, California, or Oriental Wash; from the east by way of dirt roads from Nevada Highway 3; or from the north over jeep trails through MaGruder Mountain or Pidgeon Springs. During the wet season the roads are impassable and the canyon becomes a shallow free flowing river.

According to Vanderburg (1936) placer gold was discovered in 1876, although it has been reported the placers were worked by Mexicans around 1848 when Nevada was still part of Mexico. Chinese workers were imported in 1876 to work the placers in the northern part of the canyon. Due to the scarcity of water during most of the year placer mining was worked by hand methods. The next recorded period of activity occurred in the 1930's when individuals and small companies were reported to be exploring the economics and logistics of future placer gold operations in the canyon. Minor lode operations were noted along the east and west sides of the canyon, and the southern part of the canyon has been extensively explored, but no production has been reported from these workings.

The district is situated in a north-trending, dog-leg canyon which cuts through the Jurassic Sylvania Pluton. The quartz monzonite pluton is highly weathered and fractured, and is cut with massive quartz veins and alaskite dikes running parallel to fault and shear zones. About midway through the canyon is what

appears to be a remnant roof pendant of Precambrian Wyman Formation, surrounded by intrusive. The thinly bedded, silicious, metasediments of the Wyman are tilted to the vertical and are further metamorphosed to hornfels, phyllites and schists. Along the contact aureole the rocks are chloritized and carry galena and tetrahedrite. Remnants of Quaternary-Tertiary basalt flows cap the surrounding ridges and overlie the pluton near the pendant (Albers, Stewart, 1972).

Passing through the district are a series of east-west trending, high angle fault zones, tentatively marking the southern boundary of the Silver Peak-Palmetto-Montezuma Oroflex (Albers, 1967). Associated with the fault zone are abundant quartz veins and stringers which locally carry stringers, pods, and clots of pyrite, chalcopyrite, galena and tetrahedrite. Some iron oxides and supergene copper minerals are present. The fault breccia and quartz veins are coated with several phases of late stage silica flooding. Extensive sericitization was noted throughout the district associated with the shear zones and the metamorphic aureole along the igneous-sedimentary contact.

Selected References:

- Albers, J. P. (1967) Belt of sigmoidal bending and right-lateral faulting in the western Great Basin: GSA Bulletin, v. 78, no. 2.
- Albers, J. P. and Stewart J. H. (1972) Geology and mineral deposits of Esmeralda County; Nevada: NBMG Bulletin 78.
- Anonymous (1982) Grapevine Canyon G-E-M Resources Area: Great Basin GEM Joint Venture Technical Report GRA No. NV-21.
- Garside, L. J. (1973) Radioactive mineral occurrences in Nevada: NBMG Bulletin 81.
- Hewett D.F. et al (1936) Mineral resources of the region around Boulder Dam: USGS Bulletin 871.
- Lincoln, F. C. (1923) Mining districts and mineral resources of Nevada: Nevada

Publications Co.

Vanderburg, W. O. (1936) Placer mining in Nevada: NBMG Bulletin 27.