RAGGED TOP DISTRICT

LOCATION

The Ragged Top district is located in the southern Trinity Range in the vicinity of Ragged Top Mountain. Most of the district is in southern Pershing County but mines along the county border in northern Churchill County are also included in this district. The area along the county border is sometimes included in a separate district, Copper Valley. The principal mines in the Ragged Top district are the Ragged Top tungsten mine northwest of Ragged Top Mountain in Section 12,T25N,R28E, and the Copper King tungsten-copper mine east of Copper Valley on the Pershing-Churchill County line in Section 28,T25N,R28E.

HISTORY

Field evidence indicates that the southern portion of this district (the Copper Valley area) was being prospected in the late 1800's but the first record of claims in the area is in 1906-1908 when L. A. Freidman and Jesse Knight located the Copper King claims. The Copper King outcrop is highly stained with copper minerals, and this first work was, no doubt, for copper and silver. There is evidence that a small amount of ore was shipped from the Copper King, but no record of production exists.

In late 1915, scheelite was discovered in a tactite occurrence on the Ragged Top claims located on the west side of the Trinity Range a few miles north of the Copper King area. The Ragged Top claims were developed for tungsten by the Chicago-Nevada Tungsten Co., a mill was built at Toulon, and an estimated 12,000 to 20,000 tons of 1 percent WO_3 was mined up through the end of World War I (Johnson, 1977). No additional tungsten production is recorded for the district until the 1952-1956 period when small quantities of ore were produced. During this same time period, Cordero Mining Co. produced about 614 units of WO_3 from the old Copper King claims to the south. There has been continued exploration for both tungsten and copper in both the Ragged Top and Copper King portions of the Ragged Top district during the late 1960's through the early 1980's but the results have been generally dissappointing. There was no activity in the district at the time of our examination.

GEOLOGIC SETTING

Most of the Ragged Top district is underlain by Tertiary volcanic rocks and Triassic and Jurassic metasedimentary rocks. Several bodies of granodiorite intrude the metasedimentary rocks in the western and southern parts of the district. Masses of limestone occur along the western flank of the range and where this limestone has been intruded and surrounded by granodiorite layers of tactite occur at the contact between the two rock units. The present outcrop pattern is that of metamorphosed sedimentary rocks and intrusives forming a gently sloping, moderately disected pediment skirt around the western and southern flanks of the more rugged volcanic mountain range.

ORE DEPOSITS

At the Ragged Top Mine, on the northwest side of the district, layers of tactite, in places 50 feet wide and hundreds of feet long, occur along the limestone-granodiorite contact. The tactite contains brown garnet, epidote, calcite, quartz, and scheelite. The tungsten content of the ore shipped from the Ragged Top Mine averaged about 1 percent WO_3 (Stager, in prep.). Many of the tactite outcrops in the pediment to the northwest of the mine, while bold in outcrop, have the appearance of shallow-rooted pendants and probably do not have much depth potential.

At the Copper King property to the south, scheelite mineralization with some copper occurs in a steeply-dipping, east-west trending tactite lense which occurs on the east side of a granodiorite mass. Here, the granodiorite underlies the pediment to the west. The tactite occurrence at Copper King resembles those at Ragged Top but, at Copper King, drill data has confirmed that the scheelite-bearing tactite lense extends as much as 1000 feet below outcrop. Exploration work on this deposit has indicated that some 200,000 units of WO_3 could be present in the tactite zone but, under current mining costs and tungsten market conditions, the deposit is not commercial.

GEOCHEMICAL RELATIONSHIPS

Ore samples from both the Ragged Top and Copper King mines were very similar in geochemical analysis; tungsten and low molybdenum values in association with high manganese, moderate to high copper, low zinc, essentially no lead or bismuth, and trace amounts of silver. Low but slightly anomalous tin was found to be present at the Ragged Top Mine but not the Copper King. The Coon Can tungsten property, sometimes included in the nearby Toy district, displayed geochemical relationships similar to those seen in the Ragged Top ores. Analysis from ores collected at the Copper Queen and Hard-To-Find mines, located on the southern border of the district in Churchill County (sometimes included in the Jessup district), show geochemical values almost identical to the Ragged Top ores. The Hard-To-Find ore contained higher silver values, however.

SELECTED REFERENCES

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