PROPERTY NAME: Copper King Mine

MINERAL COMMODITY(IES): WO₃, copper

TYPE OF DEPOSIT: Intrusive contact (skarn), shear zone

ACCESSIBILITY: 

OWNERSHIP: 

PRODUCTION: About 950 tons, 70% WO₃, 1951, 1956

HISTORY: Originally located for copper between 1906-08, by I.A. Friedman and Jesse Knight

DEVELOPMENT: Three shafts, open pit, several trenches

ACTIVITY AT TIME OF EXAMINATION: None

UTM IS FOR SAMPLE SITE 2992

UTM FOR SAMPLE SITE 2993 IS N 4429955 E 343160

UTM FOR SAMPLE SITE 2994 IS N 4429910 E 343200

REMARKS: Samples 2992, 2993, 2994

REFERENCES:

EXAMINER: J.V. Tingley

DATE VISITED: April 16, 1985
COPPER KING MINE

Other names ---------- Blue Wolf, Copper Kelly
Location -------------- S28,T25N,R28E
                   U.T.M. 4,430,000N, 343,300E
                   Lat. 40°00'30"N, Long. 118°50'W
Base map -------------- Ragged Top Mountain 7.5' quadrangle (1981)
Tungsten Production --- 670 units WO₃ (1952-56)

The Copper King Mine is on the west flank of the Trinity Range, about 3
miles southwest of Ragged Top Mountain, at an altitude of 4,500 feet. The
claims were originally located and explored for copper, by L. A. Friedman and
Jesse Knight, between 1906 and 1908. Several shallow shafts were sunk, but
there is no recorded copper production. The U.S. Vanadium Co. conducted
exploration for tungsten in 1944, but soon abandoned the property. Cordero
Mining Co. acquired the property in 1951 and shipped 750 tons of ore, that
contained 0.82 percent WO₃, from an open pit adjacent to the Copper King
shaft. In 1956 an additional 193 tons of ore, that contained 0.22 percent
WO₃, was mined by lessees and shipped to the Toulon Mill. The property was
again explored for copper in 1968 but no production was reported. In 1976 the
General Electric Co. acquired the property and did extensive mapping,
sampling, and drilling. Based on the drill results it was estimated that the
indicated ore potential of the property was a maximum of 500,000 tons of
material that averaged 0.4 percent WO₃. This material is contained in about
five separate, but parallel, zones of scheelite mineralization in the tactite
lense.

The ore deposit is in a tactite lense which occurs along the eastern
margin of a large granodiorite mass, where it is in contact with sedimentary
rocks of Triassic-Jurassic age. Limestone beds within the sedimentary section
have been silicified, forming epidote-garnet tactite masses. Bedding within
the tactite is steep. The outcrops of tactite are small and pod-like, but
drilling results indicate that pendants of tactite extend as much as 900 feet
into the enclosing granodiorite. Scheelite associated with pyrite, chalcopyrite, bornite, and molybdenite occurs in lenses within the tactite bodies. Shear zones, which cut the tactite, are mineralized with secondary copper minerals.