



Carroll O. Bradberry & Associates

ENGINEERS • CONSULTANTS
LOS ALTOS • CALIFORNIA

INCORPORATED

BY: CCM

W.O.

885.1

MINERAL: Tungsten
and Manganese

DATE: 12-20-64

MINERAL DEPOSIT ALONG WESTERN PACIFIC RAILROAD
WINNEMUCCA TO WELLS

PROPERTY NAME:

Golconda Mine



LOCATION: Humboldt County, Nevada

 _____ W 1/2 _____ 36 _____ 36N _____ 40E
 _____ 1/4 OF NW _____ 1/4 OF SEC _____ 1 _____ TWP _____ 35N RGE _____ 40E

DISTRICT: _____

MILEPOST: _____

POTENTIAL:

☐ LARGE☐ IMMEDIATE☒ MEDIUM☐ NEAR FUTURE☐ SMALL☒ DISTANT FUTURE☐ UNKNOWN

DESCRIPTION Pits and trenches in 6000 foot long by 1000 foot wide area yielded 103,000 tons of 0.78 percent WO_3 ; similar WO_3 content reported in dumps. The tungsten-bearing iron and manganese oxides with minor fluorite are in bedded (over)

OWNERSHIP Undetermined

ACCESS About 2 miles north to the Western Pacific Railroad and Highway 40.

SOURCES OF DATA Southern Pacific Railroad report, "Minerals for Industry", part 2, p. 114 (1964)

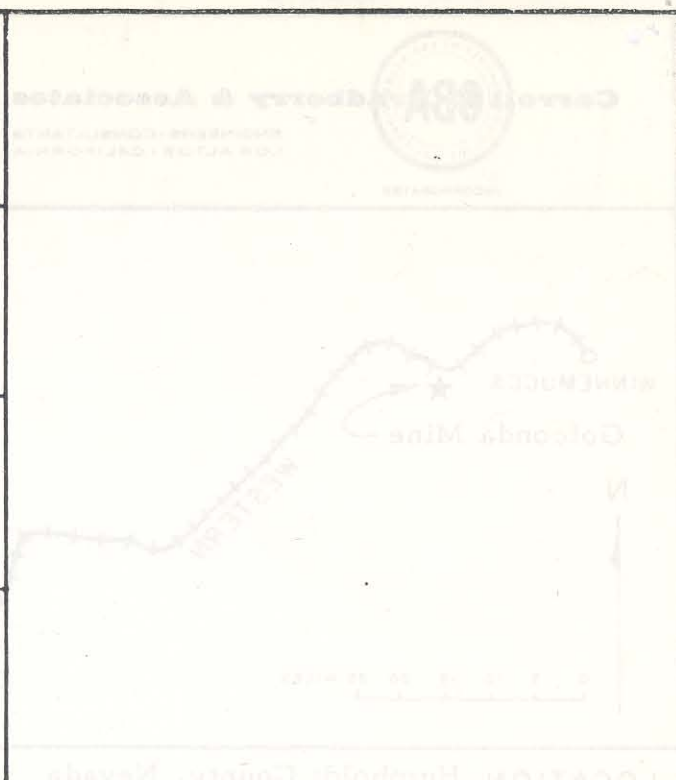
PRODUCTION 103,000 tons**RESERVES** Undetermined

ECONOMICS Price is presently depressed on both tungsten and manganese, mainly due to available, rich foreign ores.

CONCLUSIONS Will undoubtedly be reopened in the future when the prices rise on either tungsten or manganese.

THE WESTERN PACIFIC RAILROAD COMPANY

BY: CCM		NO. 85.1	MINERAL DEPOSIT ALONG WESTERN PACIFIC RAILROAD
DATE: 11-20-64		MINERAL DEPOSIT ALONG WESTERN PACIFIC RAILROAD	
PROPERTY NAME: Winnemucca to Wells		Golconda Mine	



Description: (Cont.) travestine, clay, and gravel deposits, 1 to 20 feet thick; locally clay contains up to 40 percent MnO_2 and 7 percent WO_3 ; the metallic oxides and travestine were deposited by thermal waters.

OWNERSHIP: Undetermined

ACCESS: Highway 40. About 5 miles north to the Western Pacific Railroad and

SOURCES OF DATA: Southern Pacific Railroad report, "Minerals for Industry," part 2, p. 114 (1964)
PRODUCTION: 103,000 tons

RESERVES: Undetermined

ECONOMICS: Price is presently depressed on both tungsten and manganese. Mainly due to available, rich foreign ores.

CONCLUSIONS: Will undoubtedly be reopened in the future when the price rises on either tungsten or manganese.

THE WESTERN PACIFIC RAILROAD COMPANY



TREND SYSTEMS AS GUIDES TO PROSPECTING

DAVID LE COUNT EWANS
CONSULTING GEOLOGIST

RENO NEVADA
MARCH-1969

TUNGSTEN

Tungsten is a ductile, white metal with a melting point of $3,410^{\circ}\text{C}$. ($6,152^{\circ}\text{F}$.) which is higher than any other metal. It retains much of its tensile strength and elasticity at temperatures up to 500°C . (932°F .) Tungsten steels and carbides are extensively used in machine tools, jet and rocket engines, and other applications where structural strength, extreme hardness, and resistance to wear at elevated temperatures are needed.

Tungsten occurs chiefly as scheelite (CaWO_4) and most tungsten ore bodies are contact deposits developed in lime-rich rocks by granite intrusions. Although tungsten deposits are widely distributed in the world, China has been by far the largest producer (28 percent) and has the largest reserves. The United States has been the second largest producer (13 percent), but until 1951 consumed more than it produced. Nevada and California have been the largest producing states, each having produced about 30 percent of the total for the United States. Quotations for domestic scheelite in mid 1963 were around \$8 and in December 1964 were \$17 to \$19 per short ton unit of WO_3 , in contrast to a Government stockpile price of \$63 in 1951-1956. These much lower prices since 1956 have resulted in the closing of most tungsten mines in the United States except a few that produce ores containing other marketable minerals.

About 28 miles northeast of Winnemucca in the Potosi mining district, from 8 to 15 miles north of the Western Pacific Railroad, scheelite occurs around the margins of a large granodiorite body in silicated limestone that is interbedded with argillite. An estimated five hundred thousand units of WO_3 have been produced from underground workings extending to a depth of over four hundred feet. A unit of WO_3 contains 15.86 pounds of tungsten and weighs 20 pounds.

The area north of this district has a thrust plate (a large slice of rock pushed over some other rocks in mountain making) estimated to be 100 to 700 feet thick overlying the ore-bearing strata. As gold also occurs in the mines of the district, a geochemical survey of the covered area north of the Potosi mining district would seem quite worthwhile.

TUNGSTEN

(Continued)

The Nevada-Massachusetts property, one of the two largest United States producers of tungsten, is about 27 miles southwest of Winnemucca, Nevada, 11 miles south of the Western Pacific Railroad. It has produced one million five hundred thousand units of WO_3 from open pits and from underground workings which extend to a depth of over fourteen hundred feet.

The Golconda mine, 17 miles southeast of Winnemucca, has produced one hundred five thousand units of WO_3 from tungsten-bearing iron and manganese oxides. These oxides were deposited by Pleistocene hot springs as fissure veins and as blankets cementing gravel beds.