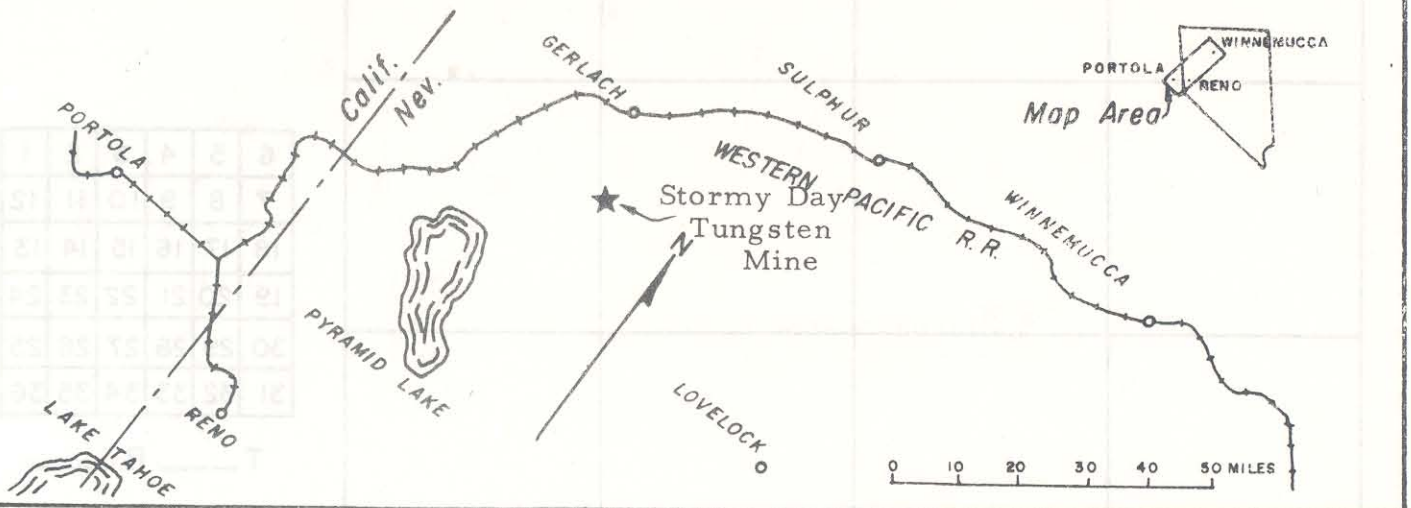
Carroll G. Bradberry & Associates
ENGINEERS · CONSULTANTS
LOS ALTOS · CALIFORNIA
INCORPORATED

BY: CCM | DATE: 8/12/64 | W.O.: 885.1 | MINERAL: Tungsten

MINERAL DEPOSIT ALONG WESTERN PACIFIC RAILROAD
PORTOLA TO WINNEMUCCA

PROPERTY NAME: Stormy Day Tungsten Mine



LOCATION: Pershing County, Nev.
____ 1/4 OF ____ 1/4 OF SEC 29 TWP 30N RGE 24E
DISTRICT: Hooker
MILEPOST:

POTENTIAL:
- ☐ IMMEDIATE
- ☐ NEAR FUTURE
- ☒ DISTANT FUTURE
- ☐ LARGE
- ☐ MEDIUM
- ☒ SMALL
- ☐ UNKNOWN

DESCRIPTION: Discovered 1941; operated 1942 thru early 1944 & 1951-1955 Scheelite-bearing tactite zone striking N-S between granodiorite on east and thin-bedded, shaly limestone with intercolated thicker bedded, purer limestone members. Sedimentary rocks strike N-S; dip 50°-70° W. Tactite, locally with schellite, is generally a coarse-grained aggregate of garnet, epidote, pyroxene, quartz (over)

RESERVES: Production: 20,000 tons of ore; grade of ore not given. Reserves unknown. Probable that richest ore near surface is already mined. Mine shut down when Federal Government terminated its purchase program in October 1956.

ACCESS: 18 miles by road north to Gerlach, Nevada and Western Pacific Railroad

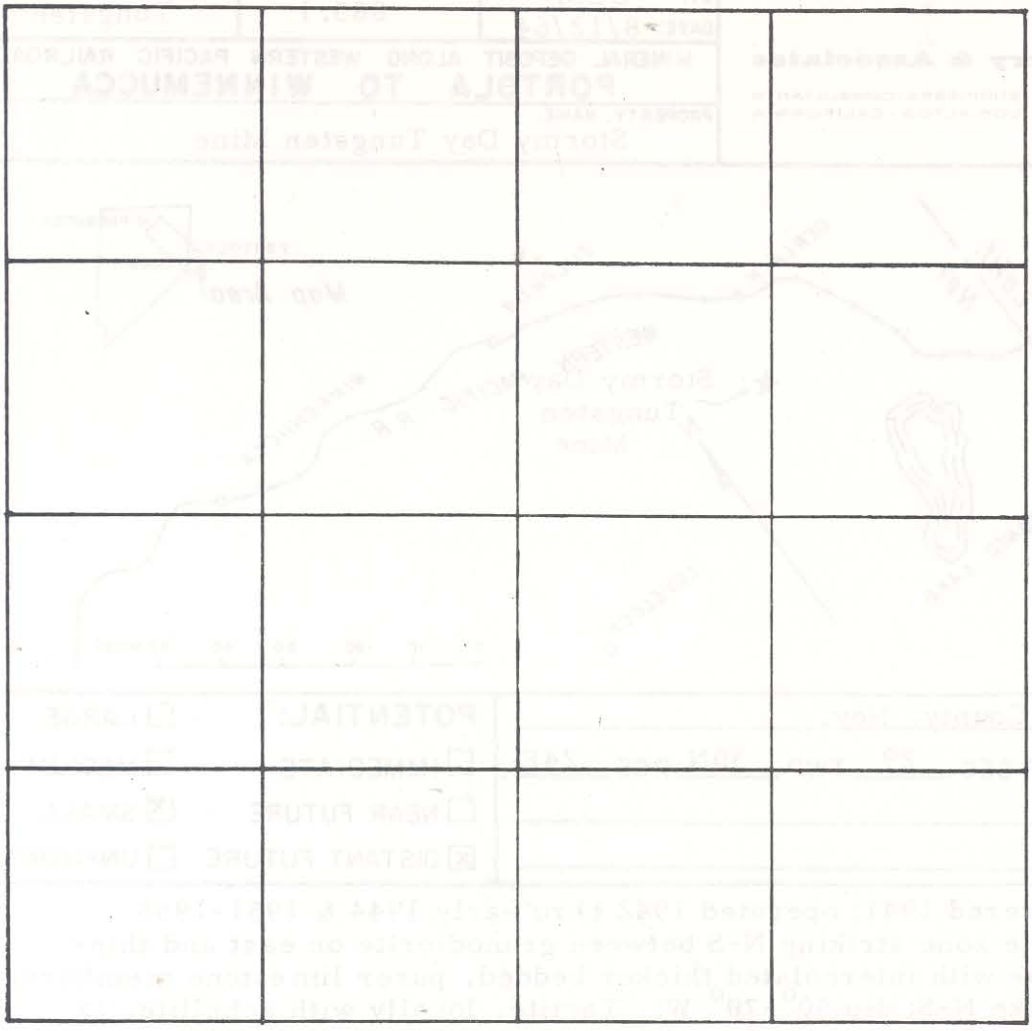
OWNERSHIP: Robert N. Avery, 333 N. Bayshore Blvd., San Mateo, California. (also see Mrs. Helen Thrasher, Postmistress, Gerlach, Nev.)

SOURCES OF DATA: US Bur. Mines Inf. Circ. 7854 (1958), interview and county records.

ECONOMICS: Mine may reopen if the price of tungsten should go up. Tungsten has to a considerable extent been replaced in many of its uses by molybdenum, so the price of tungsten may not rise again very soon.

CONCLUSIONS: In 14 years from discovery to last shut down this mine produced only 1500 tons per year, average. It is a very small mine and apparently not a large ore body.

THE WESTERN PACIFIC RAILROAD COMPANY



6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

T____ R____

SECTION _____

SCALE: 1" = 1000'

(Description continued) - pyrrhotite, pyrite, molybdenite, and chalcopyrite. Other zones of coarse tactite and fine-grained, pale, calc-silicate hornfels contain little or no scheelite. The scheelite-bearing tactite ore bodies measured as much as 16 feet in thickness; however, most are 4 to 10 feet thick. Ore deeply oxidized to 100 foot depth, appreciably enriching ore from 20 to 50 feet below surface.

TUNGSTEN

Tungsten is a ductile, white metal with a melting point of 3,410° C. (6,152° 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.

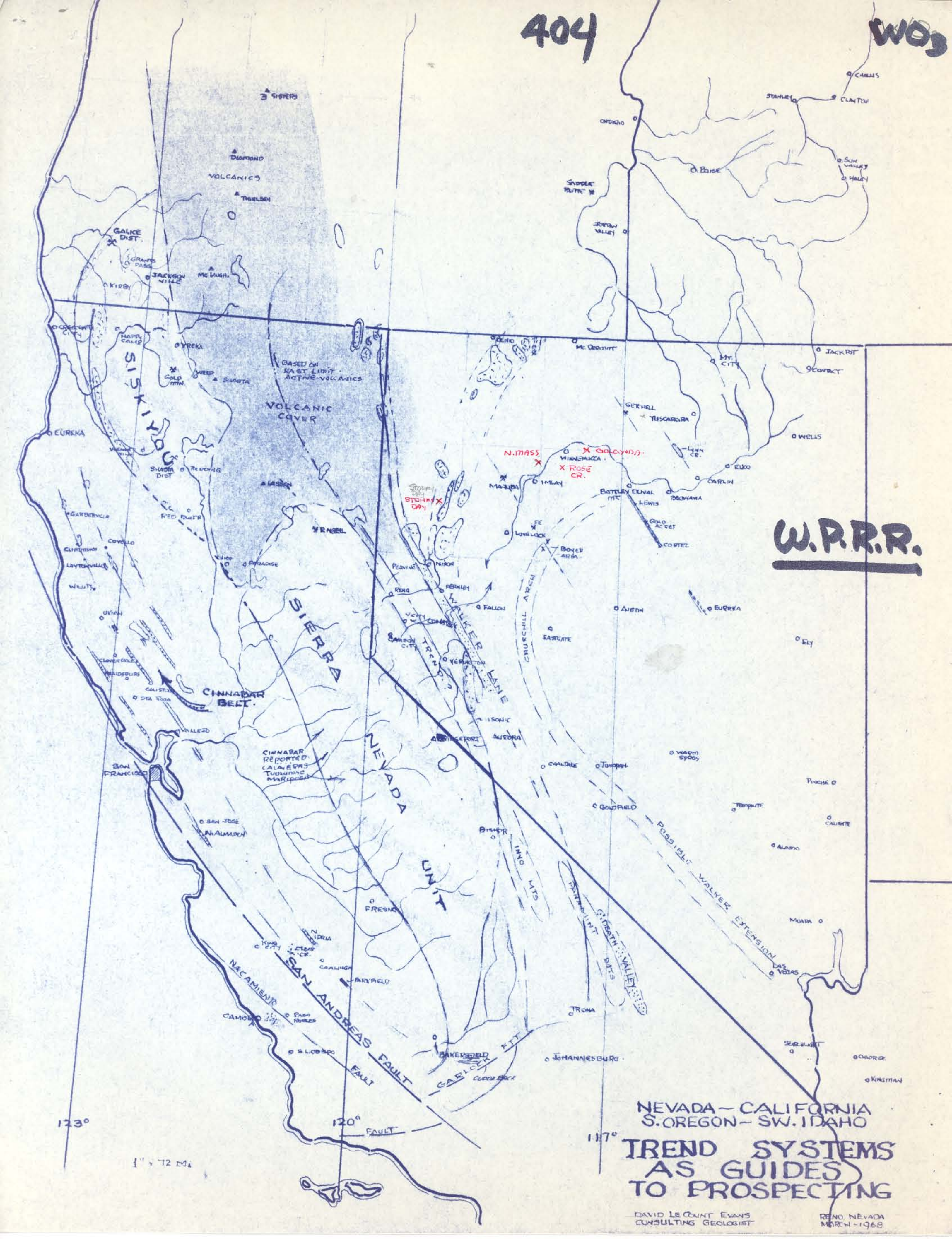
About 28 miles northeast of Winnemucca in the Potosi mining district, from 8 to 15 miles north of the Western Pacific Railroad, scheelite occurs around the margins of a large granodiorite body in silicated limestone that is interbedded with argillite. An estimated five hundred thousand units of WO_3 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.


404
WO3
W.P.R.R.
3 SISTERS
DIAMOND
VOLCANICS
THIELSEN
GALICE DIST.
GRANTS PASS
JACKSON VILLE
KIRBY
Mc LAUGH.
CRESCENT CITY
HAPPY CAMP
SISKIYOU
YREKA
GOLD MTN
WEED
SHASTA
BASED ON EAST LIMIT ACTIVE VOLCANICS
VOLCANIC COVER
EUREKA
SHASTA DIST
REDDING
LASSEN
RED BLUFF
GARBERVILLE
COVELLO
LAYTONVILLE
WILLITS
UKIAH
CHICO
PARADISE
CLOVERDALE
HEALDSBURG
CALISTOGA
STA ROSA
CINNABAR BELT.
VALLEJO
SAN FRANCISCO
SAN JOSE
N. ALMADEN
SIERRA
NEVADA
UNIT
CINNABAR REPORTED CALAVERAS TUOLUMNE MARIPOSA
FRESNO
KING CITY
IDRIA
COALINGA
PARKFIELD
SAN ANDREAS FAULT
NACAMIENTO FAULT
CAMBRIA
PASO ROBLES
S. LUIS OBISPO
BAKERSFIELD
GARLOCK FLT
CUDDEBACK
JOHANNESBURG
FAULT
ONTARIO
BOISE
SADDLE BUTTE
JORDAN VALLEY
STANLEY
CLAYTON
CHALLIS
SUN VALLEY
HAILEY
DENIO
Mc DERMITT
JACKPOT
CONTACT
MT. CITY
GETCHELL
TUSCARORA
N. MASS
GOLCONDA
WINNEMUCCA
ROSE CR.
MARIGOLD
IMLAY
STORMY DAY
BATTLE MTN
LEWIS
PALISADE
CARLIN
ELKO
WELLS
GOLD ACRES
CORTEZ
LOVELOCK
BOYER AREA
PEAVINE
NIXON
RENO
FERNLEY
FALLON
AUSTIN
EUREKA
ELY
CARSON CITY
COMSTOCK
YERINGTON
WALKER LANE
CHURCHILL ARCH
EASTGATE
AURORA
COALDALE
TONOPAH
WARM SPGS
PIOCHE
GOLDFIELD
TEMPIUTE
CALIENTE
ALAMO
BISHOP
INYO MTS
PANAMINT MTS
DEATH VALLEY
POSSIBLE WALKER EXTENSION
MOAPA
LAS VEGAS
TRONA
SEARCHLIGHT
CHLORIDE
KINGMAN
123°
120°
117°
1" = 72 Mi.
NEVADA - CALIFORNIA
S. OREGON - SW. IDAHO
TREND SYSTEMS
AS GUIDES
TO PROSPECTING
DAVID LE COUNT EVANS
CONSULTING GEOLOGIST
RENO, NEVADA
MARCH - 1968