

3290 0005

NW-31-9
(Cu, Fe, Au,
Ag, gyp,
talcose
minerals)

202

Item 6

(and 188)

AREA: → EAST MASON VALLEY (Part of Yerington District)
→ NORTHERN WASSUK (Mountain View District)
(copper, iron, gold, silver, gypsum, talcose minerals)

T. 11-13 N., R. 25-29 E.
Lyon and Mineral Counties, Nevada
U.S.G.S. Yerington, Wabuska, Schurz, and Mount
Grant, Nevada quadrangles 1:62,500

GENERAL BACKGROUND

The East Mason Valley-Northern Wassuk area includes the hills east of Yerington, the mantled west flank of the Wassuk Range east and southeast of Yerington, and the northern Wassuk Range south to the north end of Walker Lake. The area encompasses the eastern part of the Yerington mining district and the series of old mines and prospects in the Wassuk Range which comprise the Mountain View mining district.

Some copper, gold, silver, and gypsum was produced from several small mines from the early 1900's through World War I. More recent activity has consisted of extensive exploration.

GEOLOGY AND TECHNICAL DATA

The geology consists of Cretaceous granitic plutonic rocks, i.e., granodiorite, quartz monzonite, and quartz monzonite porphyry which has intruded and assimilated Triassic and Jurassic sedimentary and volcanic rocks. The sediments and volcanics are left only as isolated metamorphosed remnant bodies within the plutons. The Cretaceous and Triassic-Jurassic rocks are in places overlain by Tertiary volcanic rocks. Much of the bedrock, however, has been covered with Tertiary and Quaternary alluvium on the broad pediment surface forming the west flank of the Wassuk Range.

Mineralization in the area occurs as deposits within the granitic plutons and as contact-metamorphic replacement deposits in the metasediments. The old copper, gold, and silver mines have exploited mineralization primarily in veins and shear zones within the granitic plutons.

The Blue Jay mine located four miles east of Yerington in NE 1/4 Section 20, T. 13 N., R. 26 E., developed a crushed zone in granodiorite which contained oxidized copper at the surface and primary copper sulfide (chalcopyrite) at depth. Development included a 450 foot deep shaft and several adits. No production was recorded.

The Mountain View mine is in the Mountain View mining district in the projected NW 1/4 Section 23, of unsurveyed T. 13 N., R. 27 E. The mine operated from 1904 through at least 1909 and exploited gold and silver from quartz and iron oxide veins in sericitized diorite and granitic rocks.

The Northern Light mine located in the Mountain View district in NW 1/4 Section 18, T. 12 N., R. 28 E., produced oxidized copper ore containing malachite, azurite, antlerite, and cuprite. The ore was found in sheared metasedimentary limestone and was developed during World War I by two shafts and several hundred feet of workings. The remaining ore is mainly pyrite with some chalcopyrite and bornite.

Gypsum has been produced from the Regan mine located in NW 1/4 Section 6, T. 12 N., R. 27 E., about 11 miles east of Yerington. The gypsum deposit was accidentally discovered in the early 1900's when a prospect shaft was driven on a suspected gold-bearing vein in a small granite island protruding through the pediment mantle. The pediment gravels masked an underlying sequence of metasedimentary and metavolcanic rocks into which the granite had been intruded. When the shaft was driven, it encountered bedded gypsum within a sequence of limestone, shale, chert, and rhyolite. Significant development of the gypsum deposit began in the 1930's when surface mining was initiated on the ore body. The pit stayed in production until the 1940's.

The remaining gypsum deposit may be several hundred feet thick but is apparently limited in lateral extent (Stoddard and Carpenter, 1950).

Talcosite mineralization occurs at the Talco prospect on Luhr Hill about 2 1/2 miles southeast of Yerington in SW 1/4 NW 1/4 Section 30, T. 13 N., R. 26 E. Initially called pyrophyllite by Stoddard and Carpenter (1950), the mineral has since then been identified by x-ray diffraction as leuchtenbergite, a magnesium-aluminum chlorite. The mineralization occurs along a shear zone within coarse-grained porphyritic quartz monzonite. An incline driven 30 feet down the dip of the shear zone exposed about a 3 foot thickness of leuchtenbergite. This ore body is poorly exposed on the surface and can be traced for less than 100 feet along strike (Archbold, in Moore, 1969). No production has been recorded.

CURRENT ACTIVITY

Recent exploration by U.S. Steel has revealed the presence of a large iron-copper deposit in Pumpkin Hollow about eight airline miles southeast of Yerington. The deposit was discovered in 1962 after field investigation confirmed the existence of a large magnetic anomaly first noted in aeromagnetic surveys in 1960. Subsequent field exploration including drilling identified a deposit consisting primarily of magnetite with chalcopyrite in a thick sequence of limestone, shale, chert, and tuff altered pyrometamorphically to skarn. Approximately 500 feet of barren latite and rhyolite flows and thin Tertiary and Quaternary gravel overburden cover the metamorphosed sediments and their incorporated ore deposits. The ore reportedly occurs in four separate bodies (Moore, 1971).

U.S. Steel has applied, therefore, for mineral patent for 965 acres of lode and millsite claims in Sections 1, 2, 3, 4, 9, 10, 11, T. 12 N., R. 26 E. and Section 35 T. 13 N., R. 26 E. The portion of the deposit covered by this patent application reportedly contains 250 million tons of ore grading something less than 40% iron and 0.3% copper (Moore, 1971). There is information to the effect, however, of the reported existence of high-grade sulfide copper in association with the iron.

No other significant exploration or development activities have been reported, but numerous mining claims exist throughout the East Mason Valley-Northern Wassuk area. Courthouse records indicate continuing assessment work on many of these claims.

ACCESS

Numerous paved roads from Yerington afford easy access to the area. The higher elevations of the northern Wassuk Range are somewhat more remote but existing roads, many leading to old mining camps, usually extend to within at most a mile away from any point in the area.

PRODUCTION STATISTICS

Only limited production has occurred from mines in the area. Patented mines including the Mountain View and Granite in the Mountain View district had a recorded production in 1909 of \$4,500 in gold and silver (Ross, 1961, Table 6.3). Mines on national resource lands including the Northern Light and Yerington Mountain Copper Company mines in the Mountain View district produced \$29,000 of copper from 1916 through 1917 (Ross, 1961, Table 6.3). The Regan Mine also on national resource land produced nearly 50,000 tons of gypsum at a value of \$150,000 in the period 1935-1941. In 1943 the Parr Terminal Company, then leasing the property from the claimants, reported gypsum production for cement plant use of 18,000 tons at a value of \$43,000 (Stoddard and Carpenter, 1950, p. 94).

POTENTIAL FOR DEVELOPMENT

The potential for development of large copper-iron deposits is very high in the East Mason Valley-Northern Wassuk area. Sufficient reserves have been blocked out by exploration drilling in the U.S. Steel claims at Pumpkin Hollow to delineate an identified economic reserve containing measured, indicated, and inferred ore reserves. This area is shown as Area 1 within NW-31-9 on the Mineral Inventory Overlay.

Development of the economic reserves of U.S. Steel will not likely be by open-pit due to the amount of stripping required to get to ore and inherent environmental impact of surface mining. The reported presence of high grade copper with the iron might make an underground operation feasible. Such an operation would likely include a mill, magnetic separators and a pelletizing plant adjacent to the mine. Pelletized iron would then be produced, hauled to the Wabuska railhead, and probably shipped to the U.S. Steel plant at Provo, Utah. The copper sulfide ore would likely be processed at Anaconda's sulfide plant at Weed Heights. Such a mining operation would likely employ several hundred men and would have a significant impact on Yerington in which the miners and their families would probably be housed.

Another area of potential value is shown as Area 2 of NW-31-9 on the Mineral Inventory Overlay. In 1968, Kennecott Copper Company conducted an extensive drilling program around Black Mountain in a favorable geologic zone between the old mines of the Mountain View district. This exploratory drilling reportedly for copper-gold mineralization (Richmond and Chichester, 1968) has revealed sufficient copper-iron ore underlying the volcanic cap-rock to define an identified subeconomic submarginal reserve. Much of the reserve, however, is on the Walker Indian Reservation, east of the planning unit and may therefore be restricted from development.

Prospecting activities can be expected to continue. These activities will include remote sensing methods, geochemical surveys, trenching, and core drilling.

MANAGEMENT OPPORTUNITIES

There exists the opportunity for development of the U.S. Steel iron-copper deposits. This economic area is considered the most important and the most likely to be developed in the whole planning unit. Several reasons may be cited for this opinion.

U.S. Steel is in search of new sources of taconite iron to support its steel-making facilities at Provo, Utah. Anaconda is rapidly exhausting its reserves of copper at the Weed Heights pit. This company, too, needs new sources of ore to keep its sulfide and oxide plants in operation. The U.S. Steel iron-copper deposits at Pumpkin Hollow seem to solve both problems. The high-grade iron can be extracted, pelletized and shipped to Provo and the sulfide copper can be taken to the Anaconda sulfide plant to keep it in operation. If Anaconda mines one of its predominantly oxide ore deposits at the same time, sufficient quantities of both oxide and sulfide ore will be supplied to keep both plants in operation at Weed Heights. The location of the U.S. Steel deposits is optimum for shipment to Provo. Since the primary market for steel products is the West Coast, now-empty trains returning to Provo after delivering steel to California can easily be diverted to the Yerington area to load up on taconite pellets.

In addition to development, the opportunity exists to protect the lands within the economic area plus additional lands needed for dumps, tailings and plant facilities. These additional lands are included in the delineated development area in NW-31-9 on the Minerals Management Opportunities Overlay.

There exists the opportunity to protect for mineral exploitation those lands in the subeconomic area in the northern Wassuk Range until such time as they become economic.

The opportunity is also present once these lands become economic to allow for further identification of values and amounts of ore deposits within the lands.

The opportunity exists to protect the remainder of area NW-31-9 from withdrawal or restriction from the general mining laws so that new potential deposits may be discovered and developed in the future. Once such deposits are discovered there is the opportunity to identify and define their values and amounts.

COMPANIES AND CLAIMANTS ACTIVE IN THE AREA

1. Aiazzi, Ray
Box 486 - Yerington, Nevada
Claim: M.J.B. Lode Claim
2. Atlas Alloys Inc.
(no address)
Claims: R.A. Nos. 1-32
(32 lode claims)
3. Baker, John & Herbert
Box EE - Yerington, Nevada
Claims: Talco Lode Claim Group
(7 lode claims)
4. Banks, Moqui
P.O. Box 68 - Quincy, California 95971
Claim: Orabi
(lode claim)
5. Beal, L.H.
795 West 12th Street - Reno, Nevada
Claims: ZFR Nos. 1-114 and ZFR Extension
(115 lode claims)
6. Bear Creek Mining Company
Box 8 Dishman Branch - Spokane, Washington 99213
Claims: UN Lode Claim Group
(67 lode claims)
7. Bowker, Ryall A.
P.O. Box 6211 - Reno, Nevada 89503
Claims: Windy Point Nos. 1-9 and Windy Point
Discovery
8. Carlos, Joe
Greenacres Lane - Yerington, Nevada
Claims: Ramona Lode Claim Group
(3 lode claims)
9. Childs, H. & L.
Rt. 1, Box 334A - Halfmoon Bay, California
Claims: Valemar Lode Claim Group
(9 lode claims)

10. Childs, Lola Y.
Rt. 1 Box 334A - Halfmoon Bay California
Claims: Tedeboy Nos. 1-10
(10 lode claims)
11. Chopp, August
(no address)
Claim: R. & D. Lode Claim
12. Colorado Energy Corporation
1844 Valley View Road - Boulder, Colorado 80301
Claims: Colorado-Northern Lights Nos. 1-16
(16 lode claims)
13. Desert Minerals Corporation
205 N. Center Street - Yerington, Nevada
Claims: Stephan D. Lode Claim Group, Corey Lode
Claim Group, Colgrove-McLeod and Geraldine Groups,
and Padre Nos. 1-22
(104+ lode claims)
14. Diehl, Bud
Ace Grulli
George Buckham
(no address)
Claims: B&J, Golden Boy, Ten Pins, and Poor Boy
Placer Claims
(10 160-acre placer claims)
15. Edwards, Ray and Lola Childs
Edwards Engineering Corporation
101 Alexander Ave. - Pompton Plains, New Jersey
Claims: Bobmar Nos. 1-6, E.W. Nos. 1A-30A,
R.C. No. 1
(37 lode claims)
16. Fisher, Robert L.
1270 Osford Avenue - Sparks, Nevada 89431
Claims: Mustang Nos. 1-4
(4 lode claims)
17. Fleischer, Ethel M. et al
(no address)
Claims: Highgrade Copper Lode Nos. 1-5
(5 lode claims)

18. Gray, Irving B.
1395 Haskell Street, Suite A - Reno, Nevada
Claims: Cowboy Nos. 1-52, Pizen Switch Nos. 69-112,
Bonanza Lode Claim Group
(95+ lode claims)
19. Huntley, Grant H.
1130 Pine Ridge Drive - Reno, Nevada 89502
Claims: Pioneer Lode Claim Group,
Terry Nos. 1-12
(48 lode claims)
20. International Minerals and Chemical Corporation
1196 Telegraph Street - Reno, Nevada
Claims: Coyote Lode Claim Group,
Park Lode Nos. 1-10
(136 lode claims)
21. International Minerals and Chemical Corporation
Irving B. Gray, Agent
1440 Majestic Drive - Reno, Nevada
Claims: Bluebell Lode Claim Group,
Buttercup Lode Claim Group
(88 lode claims)
22. International Minerals Company
1057 Commercial Street
San Carlos, California 94070
Claims: Jump Lode Nos. 1-53
(53 lode claims)
23. Johnson and Mattice
P. O. Box 747 - Yerington, Nevada
Claims: Bieeword Lode Claim Group
(4 lode claims)
24. Lowland Minerals Corporation
Oklahoma City, Oklahoma
Tams C. Whitson, President
Claims: Beterbe Nos. 1-126,
Pad Nos. 1-28
(28 lode and placer claims)

25. Miller, Charles
P. O. Box 415 - Hawthorne, Nevada
Claims: Owl Nos. 1-2
(2 lode claims)
26. Mattice, B.&L. and M. & R.
Rt. 1, 19A - Yerington, Nevada
Claims: Mattice Lode Claim Group
(10 lode claims)
27. Palosky, Joan
P. O. Box 345 - Babbitt, Nevada 89416
Claims: Buckhorn Lode Claim Group,
Lost Zone Nos. 1-12
(16 lode claims)
28. Palosky, Kenneth R.
P. O. Box 345 - Babbitt, Nevada 89416
Claims: Lowland Lode Nos. 1-45,
Venus Lode Claim Group,
Rainy Lode Claim
(319 lode claims)
29. Regan, John
P. O. Box 921 - Yerington, Nevada
Claims: Red Top, Black Top, Copper Lode, Western
Lode Claim Groups
(54 lode claims)
30. Roan, Carl
(no address)
Claims, Geri Nos. 1-12
(12 lode claims)
31. Shafer, Bob
204 S. West - Yerington, Nevada
Claims: Johnson and Shafer Nos. 1-11
(11 lode claims)
32. Schaub, Martin L.
66154 Mission Blvd. Sp. 14 - Rubidoux, CA. 92509
Claims: Desco Lode Claim Group
(42 lode claims)

33. Smith, Earl W.
(no address)
Claims: Ruth Nos. 65-117
(53 lode claims)
34. Sutter, Bessie & Association
(no address)
Claims: Lucky Penrod Nos. 1-3,
Barefoot Millionaire Placer Nos. 1-9,
Barefoot Millionaire Placer No. 10
(13 lode and placer claims)
35. USSRAM Exploration Company
(no address)
Claims: Hideaway
(unknown type and number claims)
36. U.S. Steel Corporation
P. O. Box 510 - Provo, Utah 84601
Claims: Lyon Lode and Mill Site Claim Group
(unknown number claims)
37. Yocum, Thomas
2217 E. Houston - Visalia, California 93277
Claims: White Crystal Nos. 1-3, Gray Owl,
Walker Lode Nos. 1-3,
Spotted Dog Nos. 1-9
(16 lode and placer claims)

SELECTED REFERENCES

Couch, B.F. and Carpenter, J.A., 1943, Nevada's metal and mineral production (1859-1940, inclusive): Nevada Univ. Bull., v. 37, no. 4, Geol. and Min. Ser. no. 38.

Moore, J.G., 1969, Geology and mineral deposits of Lyon, Douglas, and Ormsby Counties, Nevada: Nevada Bur. Mines Bull. 75.

Moore, Lyman, 1971, Economic evaluation of California-Nevada iron resources and iron ore markets: U.S. Bur. Mines Inf. Circ. 8511.

Partial field examination J.R. Gilbert April and May 1976.

Papke, K.G., 1975, Talcose minerals in Nevada: Talc, chlorite, and pyrophyllite: Nevada Bur. Mines and Geol. Bull. 84.

Reeves, R.G., 1964, Iron, in Mineral and water resources of Nevada: Nevada Bur. Mines. Bull. 65, p. 101-112.

_____, Shawe, F.R., and Kral, V.E., 1958, Iron ore deposits of west-central Nevada: Nevada Bur. Mines Bull. 53, pt. B.

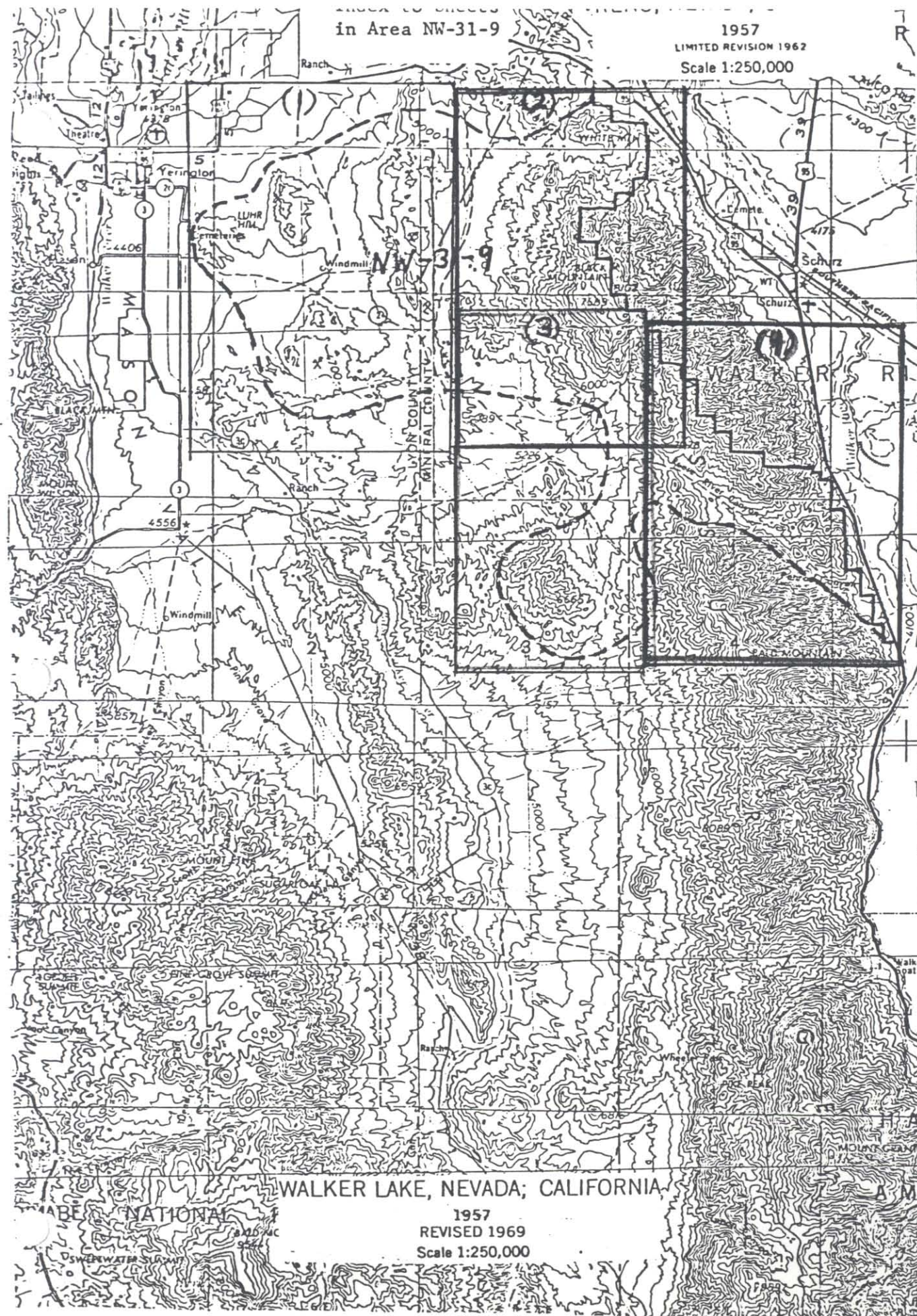
Ross, D.C., 1961, Geology and mineral deposits of Mineral County, Nevada: Nevada Bur. Mines Bull. 58.

Stoddard, C. and Carpenter J.A., 1950, Mineral resources of Storey and Lyon Counties, Nevada: Nevada Univ. Bull., v. 44, Geol. and Min. Ser. no. 49.

Partial field examination J.R. Gilbert April 1976.

INDEX TO SHEETS
in Area NW-31-9

1957
LIMITED REVISION 1962
Scale 1:250,000



WABUSKA QUADRANGLE
NEVADA-LYON CO.
15 MINUTE SERIES (TOPOGRAPHIC)

Speculative Area NW-31-7

Blue Jay Mine
copper

Talco Prospect
aluminous minerals

Speculative Area NW-31-9

Regan Mine
gypsum

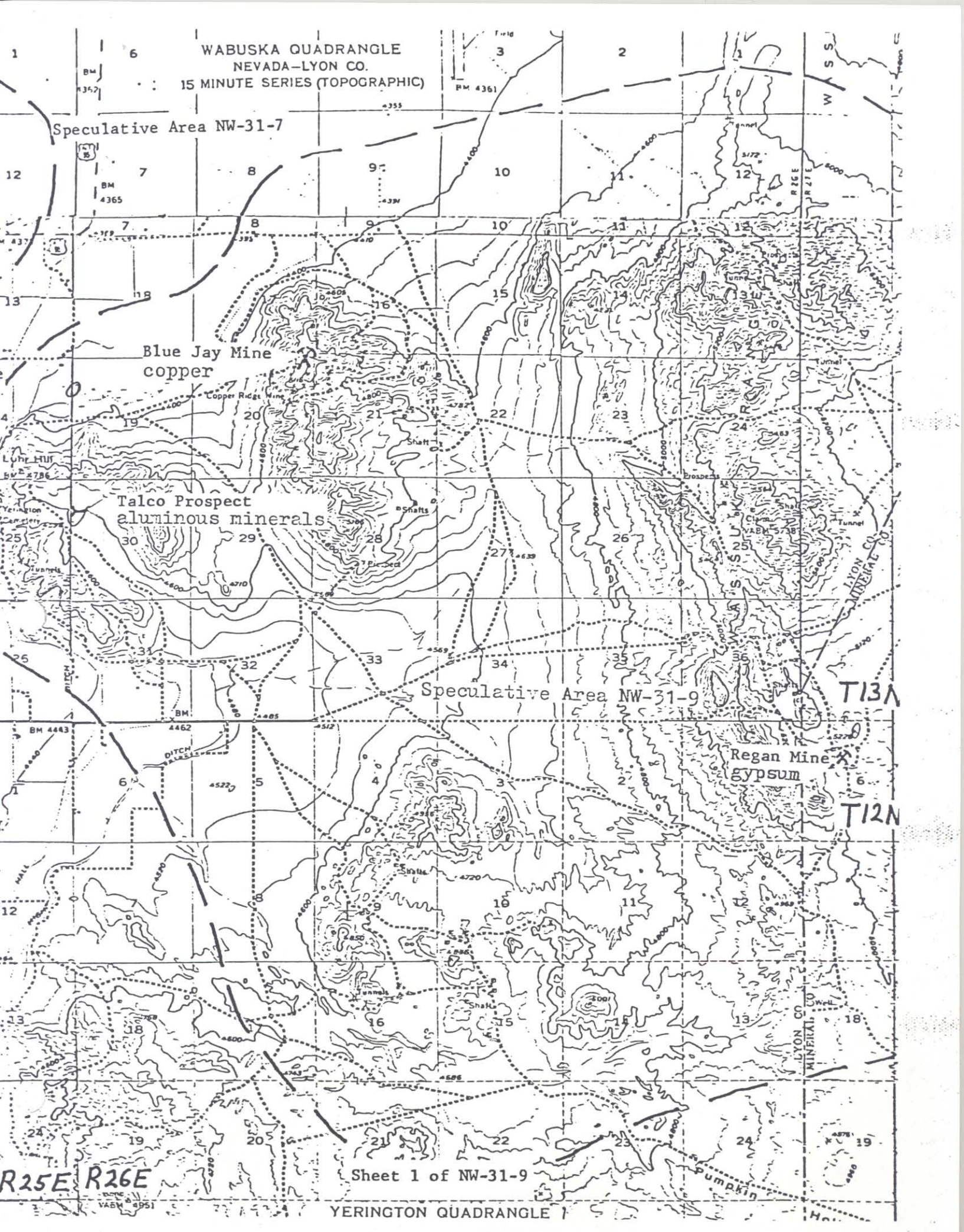
T13A

T12N

Sheet 1 of NW-31-9

YERINGTON QUADRANGLE

R25E R26E



Mountain View Mine
gold, silver

Speculative Area NW-31-9

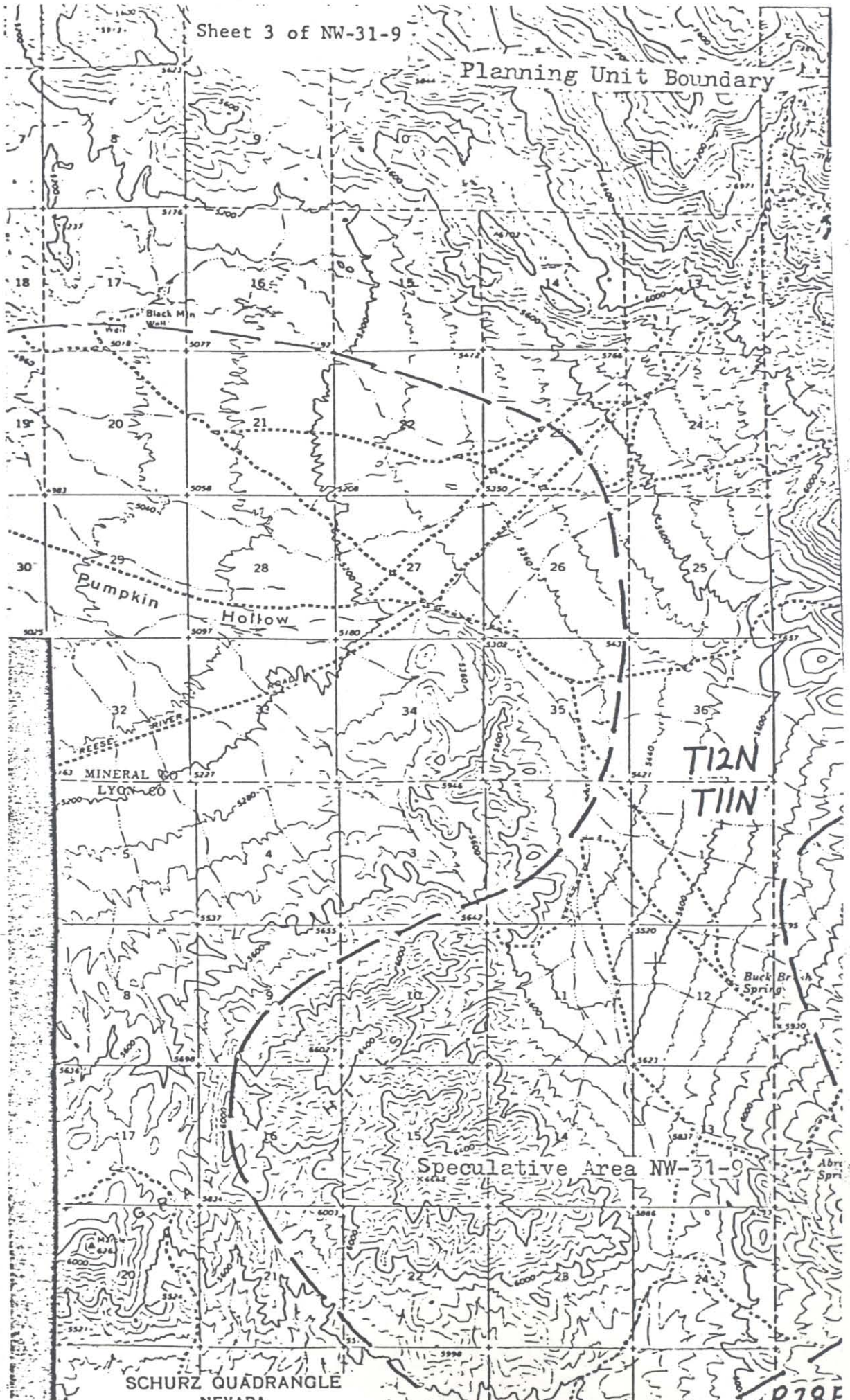
Planning Unit Boundary

T13N

T12N

Northern
Copper

Planning Unit Boundary



SCHURZ QUADRANGLE
NEVADA
15 MINUTE SERIES (TOPOGRAPHIC)

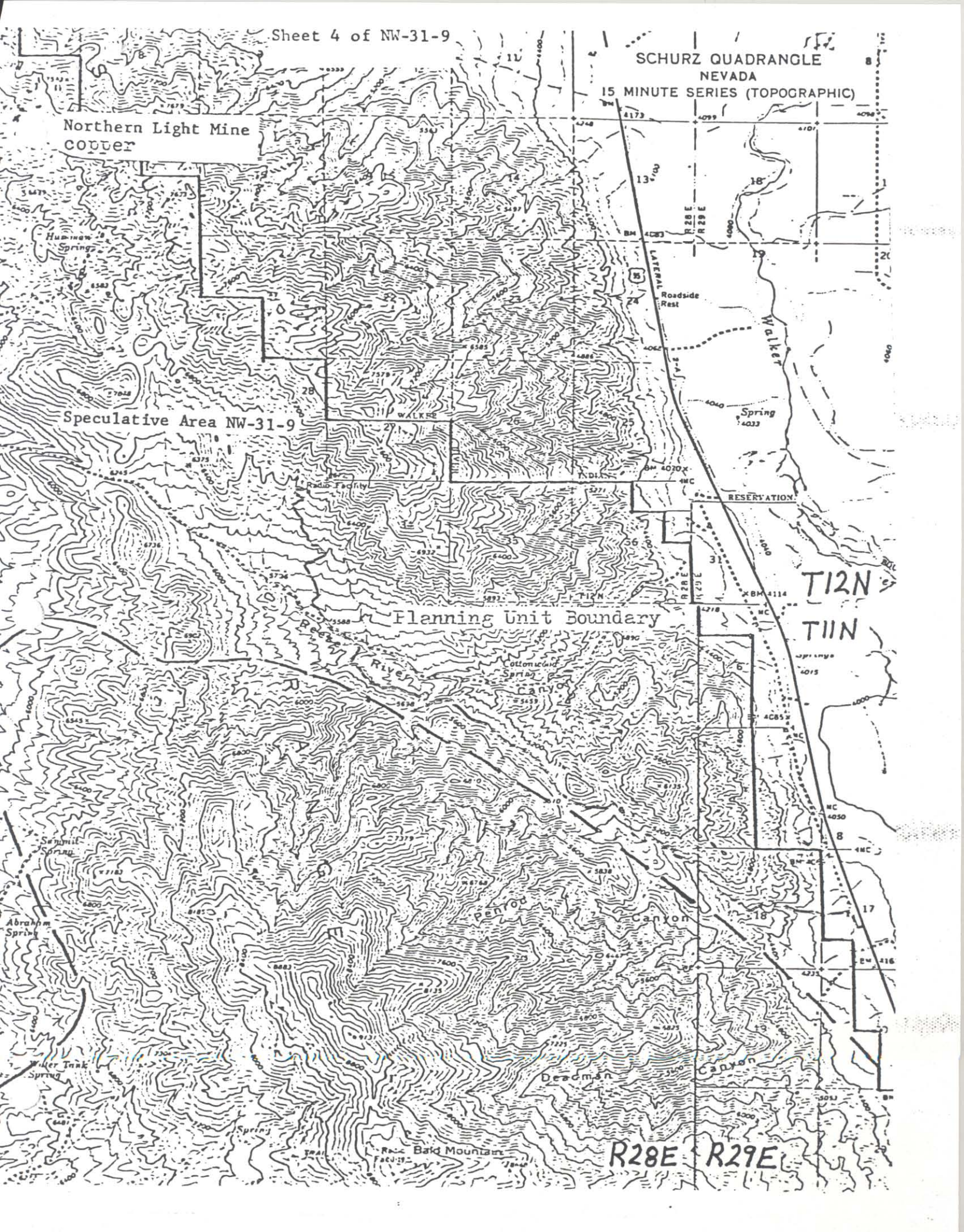
Northern Light Mine
Copper

Speculative Area NW-31-9

Planning Unit Boundary

T12N
T11N

R28E R29E



Taken from:

.42 Minerals
Inventory and Analysis
of the
Walker Planning Unit

Carson City District
Nevada and California

by
J. R. Gilbert
1976

see Lyon County - general
file, Item 13 for general
pre face remarks.