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(41)

Item 3

NW-40-7  
(Au, Ag,  
W, Mo)

AREA: RISUE CANYON (Part of Wellington District)  
(gold, silver, tungsten, molybdenum)

T. 9 N., R. 23 E.  
Douglas County, Nevada  
U.S.G.S. Desert Creek Peak, Nevada-California  
quadrangle 1:62,500

#### GENERAL BACKGROUND

The Risue Canyon area lies mainly in Toiyabe National Forest with just the northern end extending into the Walker Planning Unit. The area is located on the west flank of the Wellington Hills next to the California-Nevada border.

Several mines and prospects are located in the area, the largest of these being the Arrowhead mine which lies outside the planning unit. Copper sulfide ores have been mined at the Arrowhead mine.

Other reported minerals include gold, silver, tungsten, molybdenum, and pyrophyllite and sericite. Unsubstantiated and highly suspect reports of platinum deposits have also been made for the Risue Canyon area.

#### GEOLOGY AND TECHNICAL DATA

As with the Topaz Lake area published information on the geology of the Risue Canyon area is sparse. The most recent detailed study was done by Halsey (1953) when he mapped the Sweetwater Mountains, Wellington Hills and Antelope Valley areas. He states that the west flank of the Wellington Hills is composed of a sequence of Tertiary sediments overlying Cretaceous plutonic rocks which form the core of the Sweetwater Mountains. These sediments consist of alluvial fan gravels and lacustrine calcareous and bentonitic clays which were deposited between periods of volcanism in Mio-Pliocene times.

The Cretaceous plutonic rocks consist of quartz monzonite and granodiorite. These intrusive rocks form the main massif of the Sweetwater Range and probably underlie the Tertiary volcanic rocks which form the crest and east flank of the Wellington Hills.

Remnant in the Cretaceous plutons are isolated bodies of Triassic-Jurassic sedimentary and volcanic rocks. These marine limestones and clastic sediments with interbedded sodic flows, sills, and tuffs are the metamorphosed remains of the host into which the quartz monzonite and granodiorite were intruded. Several of the metasedimentary and metavolcanic remnants occur in contact with the granitic plutonic rocks in the Risue Canyon area.

Mineralization has occurred where limestones and limy metasediments contact quartz monzonite and quartz dioritic rocks. Base sulfides consisting mainly of pyrite and chalcopyrite occur in contact metamorphic tactite deposits. Some gold and tungsten-bearing scheelite occurs with the sulfides.

Several small mines in the canyon have produced minor amounts of marginal gold-copper ore in the past. Tungsten, though present, has not occurred in economic quantities except in Blackwell Canyon which lies across the California-Nevada border immediately south of the Walker Planning Unit. A small unrecorded tungsten production was derived from mines in Blackwell Canyon during World War II.

Other minerals associated with tactite deposits not in the Risue Canyon area but immediately south include magnetite, galena, and barite. Schilling (1962) reports the occurrence of molybdenum as molybdenite, ferrimolybdate, and powellite associated with scheelite in tactites, in dikes of decomposed granite, and in Tertiary volcanic rocks in the Risue Canyon area.

Some of the crystalline meta-limestones south of Risue Canyon have been mined intermittently but apparently are not commercial grade due to excessive fracturing or too many iron, carbonaceous, and siliceous impurities.

Archbold (in Moore, 1969), describes an occurrence of sericite on the Sericite Claims in Section 20, T. 9 N., R. 23 E., near the mouth of Risue Canyon.

He describes a sericitic layer 10 to 12 feet thick and at least 100 feet long which crops out in steeply-dipping Triassic and Jurassic metavolcanics. The sericitic material is composed of fine-grained muscovite and quartz with traces of tourmaline.

#### CURRENT ACTIVITY

No known major exploration or development programs are being conducted in the Risue Canyon area at present. Numerous mining claims exist in the area, however, and several groups are considered active.

#### ACCESS

Entrance to the area may be gained by way of the Risue Canyon Road, an unpaved light-duty road which intersects Route 22 on the east side of the Sweetwater Mountains just north of Sweetwater Summit. Access from the west is gained from Route 395 through Topaz via Topaz Lane. Several unimproved roads lead from Risue Canyon Road to old mines and prospects and provide access to most of the area.

#### PRODUCTION STATISTICS

No recorded production statistics are known for the Risue Canyon area although the Arrowhead mine is thought to have produced some ore.

#### POTENTIAL FOR DEVELOPMENT

Past exploration and mining experience indicates that mineralization in the area occurs in small, irregular, and discontinuous deposits. All indications are that future discoveries will involve the same type deposits.

For this reason any future development is expected to be through small surface and underground mines probably utilizing less than 10 men. The area might well support a small, subsidized tungsten production in the future.

No major exploration is expected in the near future. Prospecting through geologic study, hand sampling, and use of minimal equipment is expected to continue.

#### MANAGEMENT OPPORTUNITIES

With the possibility of some tungsten being produced from the Risue Canyon area in the future, the opportunity exists to further identify potential tungsten and associated mineral deposits.

There is also the opportunity to protect the Risue Canyon area from exclusion from the mining laws so that potential sources of this valuable mineral may be discovered and developed.

#### COMPANIES AND CLAIMANTS IN THE AREA

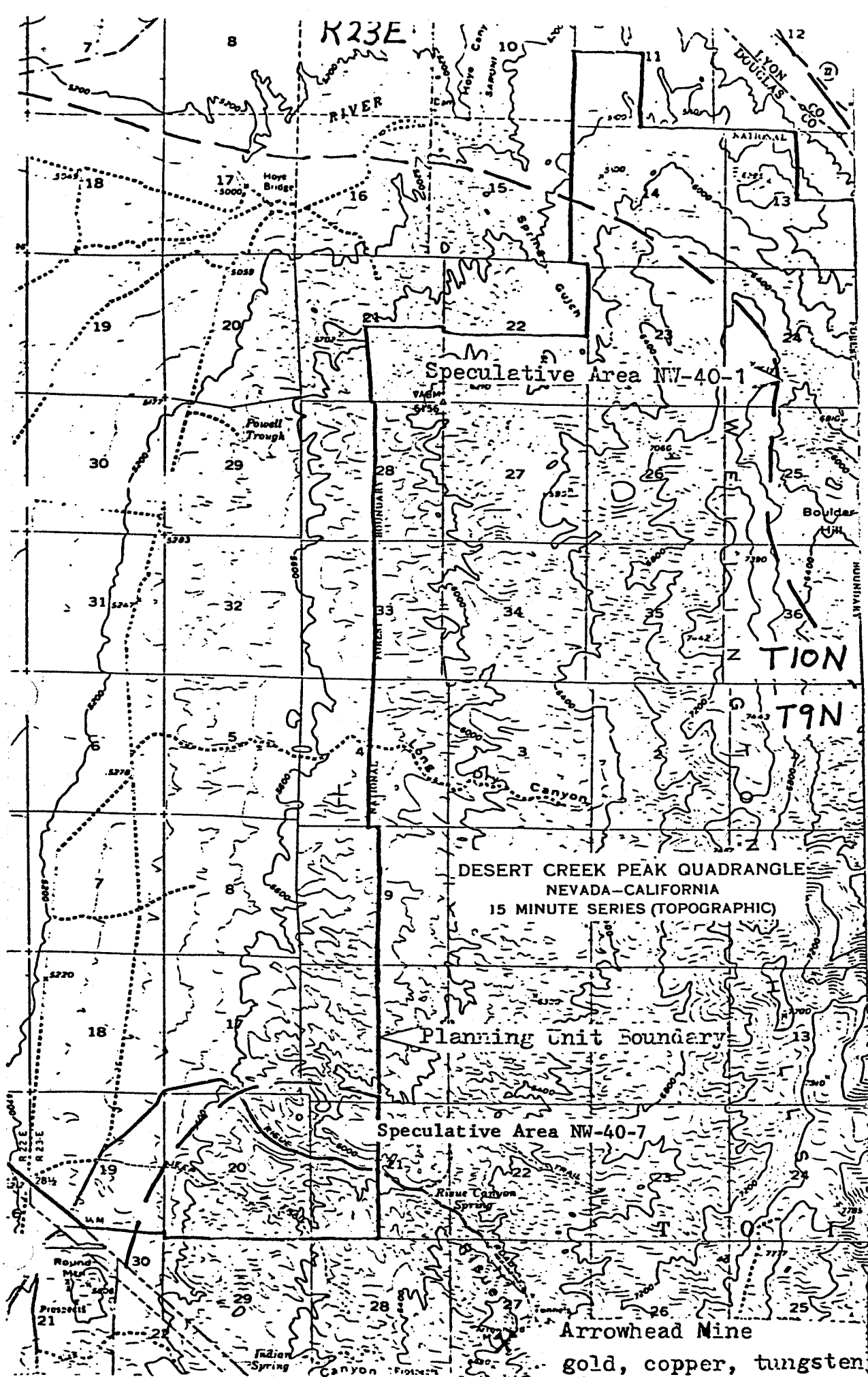
Rorick, Ralph and Marilyn  
Rt. 1, Box 205 - Topaz, Nevada  
Claims: R and M Placers Nos. 1-6, Wealth Nos. 1-9  
(6 placer and 9 lode claims)

#### SELECTED REFERENCES

Halsey, J.H., 1953, Geology of parts of the Bridgeport, California and Wellington, Nevada, quadrangles: Ph.D. thesis, Univ. of California (Berkeley).

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

Schilling, J.H., 1962, An inventory of molybdenum occurrences in Nevada: Nevada Bur. Mines Rept. 2.



*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.*