

4020 0211

District Round Mountain

Location Nye County

Au/Ag ratio pre 1960 production ~ 1/1

post 1960 announced reserves 1/1.8

Chief ore minerals

Gold, pyrite, Manganese oxides, arsenic, silver halide, anorthite, electrum

Rare or unusual minerals

realgar, Anomalous Thallium, molybdenum, Tungsten, Tin, antimony, beryllium and zinc present in altered zone

Gangue minerals

quartz, adularia, fluorite, alunite (secondary)

Host rock

Rhyolitic ash-flow tuff

Alteration

phyllitic, argillic, silicification, propylitization, adularia in veins and fractures with quartz

Mineralization age

25 my.

Vertical range Au-Ag ore

305 m

Production

1905-1960

7150 Kg Ag

6844 Kg Au

1960-1982

announced reserves

514,463 Kg Ag

284,416 Kg Au

Deposit type

stockwork, disseminated, vein

Selected references

Berger, B. R., Tingley, J. V., and Filippek, L., 1981, Origin of pathfinder trace-elements patterns associated with gold-silver mineralization in late oligocene volcanic rocks, Round Mountain, Nye County, Nevada. Abs. symposium on precious metals in geochemical exploration, northern Cordillera, Association of Exploration Geochemists, Vancouver, British Columbia, April, 1981. Kleinhampl, F. J. and Zisny, J. L., 1982, Geology and mineral resources of northern Nye County, Nevada; Nevada Bureau of Mines and Geology Bulletin, parts A and B.

Current production from Round Mountain is by heap leach methods, which result in a recovery of ~ 60% Au and 30% Ag contained in ore. Hydrothermal breccias and breccia pipe present and influence ore distribution. Deposit occurs in intracaldera tuff on cauldron margin.