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Item 7

NEW PASS DISTRICT

The New Pass mining district is located in Ts. 20 and 21N, Rs. 40 and 41E and because of the relaignment of Churchill and Lander Counties, the boundary passes through the middle of the district. The district is accessible from the southeast from U.S. Highway 50 along good dirt roads.

The district was organized in the 1860's when gold was discovered by miners from Austin. Periods of activity up to the present have been sporadic with about 35,000 tons of ore produced at a little less than 1 ounce of gold and silver per ton. Manganese was discovered in 1918 and 5,000 tons, valued at more than $100,000 were produced from 1940-1953 at 30% manganese (Stager, 1977).

The district is made up of Late Paleozoic and Early Mesozoic siliceous and volcanic clastics of the transitional sequence above the Roberts Mountain Thrust Plate that are conformably deposited with some low angle thrust faulting. The beds are generally north striking with an isoclinal west dip. Tertiary ash-flow tuffs overlay the district in all but the western part. Subsequent faulting produced gently east dipping fault blocks (Stager, 1977). The gold and manganese ore occurs along or near faults that cut the rocks of the Triassic Havallah Sequence, implying the district's mineralization is post-Triassic. Supergene copper minerals coat fractures and fault surfaces. Gabbros have been encountered at depth in the Thomas W. Mine and outcropping at some of the minor workings north of the New Pass Mine. Most of the workings follow sulfide bearing quartz veins.

The major gold producer in the district is the New Pass Mine with 7 patented and 20 unpatented claims, currently owned by Don Jung. The mine has been producing since the 1880's and is currently being leased by a Candian mining company which is in the process of exploratory drilling and trenching. The mine site is covered with numerous shafts and tunnels, the deepest being the Thomas W, at 550

J. Tingley + R. Smith (1982) Mineral Inventory of Eureka-Shoshone Resource Area: NBMG ~~82-10~~ 83-3. See also 83-4 for geochemical results.

feet. There are several miles of underground workings. At this mine, free gold occurs in steeply dipping banded quartz veins in gouge zones. The veins are from 6 inches to 6 feet wide, averaging 2-4 feet. The gold runs a Au:Ag ration of 1:1 and produces up to 10 ounces per ton. At the 240 foot level of the Thomas W shaft, sulfides (pyrite sprays and galena pods) occur in brecciated veins. At the 490 foot level, a crosscut was run due east through gabbro. On the west side were the thinly bedded shales and limestones of the Triassic Favret Formation. Quartz is a gangue mineral and ore minerals include gold, argentiferous galena, argentiferous galena enclosing native gold, auriferous pyrite copper sulfide, azurite, and malachite (Lincoln, 1923). Most of the ore is oxidized.

Small deposits of manganese occur at scattered localities within the New Pass district. At these deposits, crystalline pyrolusite and wad occurs parallel to the northeast striking interbedded chert and shale of the Havallah sequence with local concentrations along faults and fractures. Crystalline pyrolusite is also disseminated throughout the adjacent country rock. The deposits are probably the result of oxidation of primary manganese carbonates which were deposited by hydrothermal solutions, and later concentrated during the weathering process (Stager, 1977). There is minor limonite staining and quartz is a gangue mineral. There has been no activity in these areas since 1954.

Selected References:

Lincoln, F. C. (1923) Mining districts and mineral resources of Nevada. Nevada Newsletter Publishing Co., Reno.

Stewart, J. H., McKee, H., Stager, H. K. (1977) Geology and mineral deposits of Lander County, Nevada. NBMG Bull. 88.

U.S.B.M. (undated) Hazardous surface openings to abandoned underground mines - Nevada. Prepared by International Mining Consultants, Inc., Contract #J0295039.