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Item 4

MOREY DISTRICT

The Morey mining district is located on the east flank of the Hot Creek Range in northeastern Nye County. The district was visited briefly during our field reconnaissance of proximate areas, but merits only brief comment in this report because of its location outside of the designated Egan Resource Area.

The district was discovered in 1865. The most productive years were between 1866-91 and 1937-47 when more than 6,000 tons of silver ore valued at about $500,000 were produced (Kleinhampl, in press). Lesser amounts of gold and lead were also produced.

The old workings consist of numerous shafts and adits on the lower west slope of Morey Canyon, a fault created drainage approximately three miles northeast of Morey Peak. In more recent years, International Minerals and Chemical Corp. and Superior Oil Co. have conducted exploratory drilling in the central and western part of the district. A few private individuals hold claims in the area as well.

The deposits at Morey are high-grade, silver-bearing, epithermal fissure veins hosted by Oligocene, rhyodacitic to quartz latitic intracaldera ash-flow tuffs of the Williams Ridge and Morey Peak formation. The veins strike east-west, are vertical or steeply south dipping, and oxidized in their upper portions.

The mineralogy of the veins is complex. The main ore mineral is andorite. It occurs in the veins along with a rare and unusual mineral assemblage which includes pyrargyrite, stephanite, sphalerite, galena, stibnite, jamesonite, owyheeite, cassiterite, pyrite, and arsenopyrite (Kleinhampl, in press). Most of the

See also 83-2 for geochemical results.

J. Tingley + J. Bentz (1982) Mineral Res. of Egan Resource Area: NBMG 83-1

vein material we observed on the dumps was composed of alternating bands of quartz and rhodochrosite (the primary gangue materials) containing clots and stringers of ruby silver.

One-half mile southwest of the base of Morey Canyon, a major, northwest-striking fault displaces the veins. On the northeast side of the fault, in the vicinity of the main workings, the upper oxidized portions of the veins are exposed adjacent to propyllitically altered tuffs. Southwest of the fault, the tuffs show quartz-sericite alteration.

Extensive drilling of the sericitically altered tuffs approximately one mile west of the main district was prompted by the discovery of lead, silver, and molybdenum anomalies by I.C.C. (Kleinhampl, in press). Kleinhampl also notes that disseminated sulfides and anomalous tin values are found in tuffs surrounding the main district.

In addition to the expected elements, tin is present in samples collected from the workings in the central district.

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