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Item 1

NEVADA DISTRICT

The Nevada mining district is less than ten miles southeast of Ely in the southern Duck Creek Range. Most of the mines are situated in the western foothills flanking the range and within Tamberlaine Canyon. The district is best known for its production of manganese ore from mines east of the mouth of Tamberlaine Canyon. However, within the last decade renewed exploration and mining have focused on the areas surrounding old silver prospects north of the manganese mines.

The southern Duck Creek Range is mainly composed of even bedded, grey limestones of the Devonian Guilmette formation. Younger limestones and shales of the Pilot, Joana, and Chainman formations are exposed at the southern tip of the range. Older Devonian dolomites outcrop in the northern part of the district. Displacements within and between the Paleozoic formations occur along northeast and northwest-striking, high-angle normal and reverse faults. We observed no intrusive rocks in the area.

More than 20,000 short tons of manganese ores were produced from mines in the district between 1910-1959. There is no record of production for other metals, but prospecting of silver-lead-copper ores began in 1869 and continues to this day.

The manganese mines consist of extensive underground and surface workings located in the northeast quarter of section 10, T15N, R64E. The deposits have been described in detail by Roberts (1942). In summary, the oxidized manganese ores occur as replacement deposits in Joana limestones along faults and along

See also 83-2 for geochemical results.

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J. Tingley + J. Bentz (1982) Mineral Res. of Egan Resource Area: NBMG OFR-82-9

bedding planes adjacent to faults. The deposits are characterized by extensive altered areas that are silicified or contain abundant iron oxides and gossan. Calcite veins commonly cement breccias or cut the host rocks. Samples of oxidized ore near the Vietti shaft contained prismatic crystals of pyrolusite. Elements associated with the sampled manganese ore include silver, arsenic, tungsten, and molybdenum.

Recent exploration work near the Vietti and Caesar manganese mines is probably related to known occurrences of gold-silver ore in the area. Roberts (1942) and Papke (1979) also note that some fluorite is found in these deposits.

Sampling and drilling of the old workings near the head of Tamberlaine Canyon took place in June, 1981. The workings explore shear zones in silicified Joana(?) limestones. A rib of jasperoid breccia outcrops near the workings. White quartz cementing the breccia contains dispersed sulfides. A sample (710) of limestone breccia collected from the dump showed high silver (500 ppm) and moderate zinc and lead values.

The Carrie Ann pit, a small open pit silver mine located in the southeast quarter of section 28, T16N, R64E, is operated by Silver West Mining Co. and, at the time of our July, 1981 visit, had been in operation for three months. Limestone beds within the pit dip moderately to the north and are locally bleached, silicified, and iron stained. Zones of intense alteration occur along several northwest-striking, high-angle faults. These zones are marked by brecciation and calcite veining of the host rock, abundant hematite and limonite, and slight

copper mineralization. The primary ore of the deposit is argentiferous galena which replaces silicified limestone or occurs in calcite veins and pods within the altered zones. The average mined ore contains 2-3 oz. silver/ton, .02-.05 oz. gold/ton, and minor lead.

All the samples collected from the northern part of the district contain some silver. A few samples with high silver values also showed anomalous arsenic.

Selected References

- Hose, R. K., Blake, M. C., and Smith, R.M. (1976) Geology and mineral resources of White Pine County, Nevada: NBM&G Bull. 85.
- Lincoln, F. C. (1923) Mining districts and mineral resources of Nevada: Nevada Newsletter Publishing Company.
- Papke, K. (1979) Fluorspar in Nevada: NBM&G Bull. 93.
- Pardee and Jones (1920) Deposits of manganese ore in Nevada: USGS Bull. 710-F.
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