

## VARYVILLE DISTRICT

## LOCATION

The original townsite at Varyville is on Bartlett Creek on the northern end of the Black Rock Range, northern Humboldt County. The Varyville mining district covers the area generally around Bartlett Peak, between the Black Rock Range to the southwest and the main Pine Forest Range to the northeast. Access is via dirt roads about 25 miles west of the Quinn River Crossing from Highway 8 north of Winnemucca.

## HISTORY

According to Lincoln (1923), the original lode discovery was made by a man named Vary in the early 1870's and the district and townsite were then named after him. In 1875 the area was organized as the Columbia district but thereafter was referred to by various authors, including Gianella (1943), as the Leonard Creek district. Willden (1964), however, identified the district as the Bartlett district. We will use the original name, Varyville.

The earliest work in the district was done by miners who processed gold ore using an arrastre but by the late 1870's two, five-stamp mills were running (Paher, 1970, p. 148). According to Vanderburg (1938) one of the mills was operated by steam and the other by water power obtained from Bartlett Creek. Both mills were equipped with amalgamation pans. The lode mines declined rapidly and the activity ceased in the early 1880's. Couch and Carpenter (1943) show production from the district as 184 ounces of gold for 1875 and 926 ounces for 1936. Copper, lead, and silver are also present but their production has been negligible. Vanderburg (1938) reported the gold-silver production from the district in 1936-37 as coming from the Columbia Mine in Pearl Canyon. Willden (1964) refers to the Lincoln Greenhorn group of claims, half a mile south of Bartlett Peak, stockpiling and shipping tungsten ore in 1953. A reported 6,505 dry tons of ore containing 0.15 percent  $WO_3$  was shipped to the Gatchell mill for processing, and ore ranging from 0.25 to 0.59 percent  $WO_3$  is reported to remain in the mine workings. The property has been idle since 1954 (Johnson and Benson, 1963, p. 47). A small tonnage of copper ore was reported by Willden (1963) to have been shipped to the Utah Smelter from the Blue Jack property, section 14, T41N, R27E in 1954. This is the same location in which a uranium occurrence was reported by Castor and others (1982) for the National Uranium Resource Evaluation on the Vya 2<sup>0</sup> quadrangle. Three other copper properties in the district are associated with quartz veins in various granites. They include the Skyview Copper Dyke and the Roberts Copper Mine in sections 4 and 18, T41N, R28E, and an un-named mine in section 27, T41N, R27E. None of these properties have any recorded production but their workings are fairly extensive.



## GEOLOGICAL SETTING

Rocks exposed in the district consist of Tertiary volcanic units with some metamorphosed fine-clastic sedimentary formations of Triassic and Jurassic age. The older rocks have been intruded by several different bodies of granodiorite and diorite of Cretaceous to Tertiary age.

## ORE DEPOSITS

The mines are developed on veins in shears which cut the pre-Tertiary rocks. A fault at the Blue Jack property which has both copper and uranium mineralization brings basalt of Tertiary age against granodiorite. Mines on the west side of the range are in metamorphic rocks intruded by granodiorite. The workings are along irregular tactite bodies that cut across the bedding in the metasediments. Development at the Columbia Mine exposes a fissure vein that strikes east-west and dips about 70° north. According to Vanderburg (1938) the width of the vein varies from 1 to 5 feet and cuts both diorite and slate. The vein material consists of brecciated diorite that is strongly altered and contains gold associated with arsenical oxides and sulphides and a small amount of copper. The copper content increases with depth and the average grade of the ore was reported to be 1 ounce of gold and 3 ounces of silver per ton. Approximately 2,000 tons were mined between 1936 and 1937. Because of the base character of the ore, no attempt was made to mill the ore locally and it was shipped to Winnemucca for processing.

## GEOCHEMICAL RELATIONSHIPS

Samples from the older part of the district, near Varyville, were generally low in base metals except for one sample north of Bartlett Creek which is high in lead and antimony and had moderate arsenic, copper, and zinc with 5,000 ppm silver and .65 ppm gold. A sample from the Columbia Mine had over 10,000 ppm arsenic, 150 ppm silver, 15 ppm gold, 5,000 ppm copper, and minor lead and antimony.

## SELECTED REFERENCES

- Castor, S., Mitchell, T., and Quade, J. G. (1982) National Uranium Resource Evaluation for the Vya 2° quadrangle, prepared for the Dept. of Energy, Grand Junction, Colorado.
- Couch, B. F., and Carpenter, J. A. (1943) Nevadas Metal and Mineral Production (1859-1940): Univ. of Nevada Bull. No. 4.
- Gianella, V. P., and Prince, R. W. (1945) Bibliography of Geologic Literature of Nevada: Univ. of Nevada Bull. No. 6.
- Johnson, A. C., and Benson, W. T. (1963) Tungsten Deposits of Nevada: USBM, unpub. report.



Lincoln, F. C. (1923) Mining District and Mineral Resources of Nevada:  
Nevada Newsletter Publishing Co., Reno.

Paher, S. W. (1970) Nevada Ghost Towns and Mining Camps: Howell-North, San  
Diego.

Vanderburg, W. O. (1938) Reconnaissance of Mining Districts in Humboldt  
County, Nevada: USBM IC 6995.

Willden, R. (1964) Geology and Mineral Deposits of Humboldt County,  
Nevada: NBMG Bull. 59.