# [70] Item 4

# GROOM DISTRICT

#### LOCATION

The Groom mining district is located in the southwestern Groom Range. The district is centered around the one major mine, the Groom Mine in T7S, R55E about 5 miles north of Groom Lake. While the district is not at this time officially included within the limits of the Nellis Air Force Bombing and Gunnery Range, the Air Force has essentially taken the area and all non-military access is restricted.

## **HISTORY**

The Groom Mine was discovered in 1864, the district was organized in 1869, and a small, unrecorded amount of low-grade silver ore was produced between that time and about 1875. In 1885, the property was acquired by the Sheahan family who still own it. Production has been recorded for the periods 1915-1918, 1918-1942, and 1942-1956. Total production for the 1915-1918 period is recorded \$935,900 in silver and lead with minor zinc, copper and trace gold.

#### GEOLOGIC SETTING

In the vicinity of the Groom mining area, the rocks of the Groom Range consist of a thick section of lower Paleozoic rocks that strike north and dip steeply to the east. The Paleozoic rocks are covered on the east and north by Tertiary volcanic rocks. These volcanic rocks may be related to the Bald Mountain caldron which is shown by Ekren, et. at, 1977, to be several miles north of the Groom district. According to Humphrey, 1945, the Groom district is in a 2,000-foot-wide, complexly faulted graben of Pioche Shale, Lyndon Limestone, Chisholm Shale, and Peasley Member of the Highland Peak Formation faulted into the Prospect Mountain Quartzite. The Main fault, the north-striking fault which bounds this graben on the east, has been calculated by Humphrey to have had a vertical movement of over 3000 feet.

### ORE DEPOSITS

The only productive ore bodies at the Groom Mine have been replacement deposits in limestone within the graben, on the hanging wall of the Main fault. The bedded replacement deposits are in three thin limestone beds in the upper part of the Pioche Shale, the irregular replacement deposits are in the Lyndon Limestone along steep fissures related to the Main fault. The limestone along the mineralized fissures is commonly silicified. Argentiferous galena and sphalerite are the primary ore minerals, but cerussite and anglesite occur in the oxidized ores. South of the Groom Mine, the Black Metal (Lane) mine has produced a small amount of zinc ore and a few small gold deposits occur in breccia zones in quartzite some distance to the north of the Groom Mine.

# COMMENTS

Since the Air Force is restricting access to the Groom range, we were not able to conduct any field examinations in this area. We contacted Air Force Security and made a request to visit the area but it was denied. We were told we could not gain admission to this sensitive area "anytime in the foreseeable future". Our descriptions of the area therefore are taken entirely from available literature, and we have no geochemical relationships to report. Fortunately, the report by Humphrey, 1945, is very good, and it contains detailed descriptions of the ore occurrences in the district.

## SELECTED REFERENCES

- Ekren, E. B., Orkild, P. P., Sargent, K. A., and Dixon, G. L., 1977, Geologic Map of Tertiary Rocks, Lincoln County, Nevada: USGS map I-1041.
- Humphrey, F. L., 1945, Geology of the Groom District, Lincoln County, Nevada: NBMG Bull. 42.
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