

GEOLOGY AND ORE POTENTIAL
OF THE HACKBERRY, SILVER KING, HOMESTAKE, AND UNNAMED LODES
HACKBERRY DISTRICT, MOHAVE COUNTY, ARIZONA

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ABSTRACT

The Hackberry, Silver King, Homestake, and Unnamed Lodes occur along NW and WNW-trending fracture sets, in a complex of meta-morphic rocks and dikes, in the northern Peacock Range. The Hackberry district was discovered in 1874, and several mines were operated from 1875-1919. Recorded production is: 5400 Oz Au and 641,000 Oz Ag, most of which came from the Hackberry Mine. Exploration is ongoing at present.

The lodes are composed of one or more fracture sets within envelopes of argillic alteration. Mineral consists mostly of sphalerite-galena-pyrite in a quartz gangue. Mineral deposits occur as irregular veins, lenses, and vein breccia zones within the lodes.

Vertical zoning is well defined and consists of: an upper quartz zone, an intermediate precious metals (PM)-sulfide zone, and a lower base metals sulfide zone. The base metals zone, and the full extent of the PM zone, were explored only in the Hackberry Mine. From east to west, across the map area, the present land surface exposes successively lower zones in the lodes, suggesting post-mineral uplift to the west.

On the basis of field mapping and geochemical anomalies, three targets for additional exploration have been outlined on the Hackberry Lode. Target areas are also suggested for the other lodes.

GENERAL

This report summarizes the results of a two-week mapping program (June 19-30, 1985) at the Hackberry Mine, Mohave County, Arizona, and on the surrounding property. In addition, suggestions are made for future exploration.

The Hackberry Mine consists of twelve patented and six unpatented claims that are located in the Hackberry (Peacock) district. The owner is Nicholas M. Hughes, Las Vegas, Nevada. The Hughes property is overstaked by 52 unpatented claims owned by Western States Minerals, Wheat Ridge, Colorado (see Figure 1). Western States Minerals may also have a lease on several claims that cover the Silver King and Homestake Mines, two adjacent properties to the Hackberry Mine. The claims are located in the northern part of the Peacock Range, about 25 miles northeast of Kingman.

History

The district consists of the Hackberry, South Hackberry, Silver King, and Homestake Mines, and several other prospects. The Hackberry and South Hackberry claims were staked in 1874, and the district produced sporadically from 1875 through 1919. The Hackberry was the only deep mine and has been credited with most of the district's production. Keith and others (1983, p.28-29) credited the district with a total of 5400 Oz Au and 641,000 Oz Ag from an unknown tonnage.

Hughes acquired the Hackberry property in the late 1950's. Western States Minerals overstaked Hughes in the late 1970's, built several roads and drill pads on the Silver King property, and did a limited amount of drilling through 1984. Hughes has stated that he leased the Hackberry claims to a Canadian company in 1980-81.

Field Work

The Hackberry, Silver King, and Homestake lodes, and an unnamed lode located southwest of the Hackberry Mine, were mapped by tape and Brunton. Related cultural features (eg. workings and drill roads) were noted, and outcrops were sampled on about a 100-foot spacing. 131 chip and grab samples were collected and assayed for ten indicator and pathfinder elements. Assay results are shown in Appendix 3. Plate I shows the results of the field mapping. Plate II is an interpretation of the lode geology. Plates III-V profile assay results for the four lodes.

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