AREA V

Mineral Resource Office October 27, 1965

Memorandum

To: Chief, Office of Minerals Exploration
Geological Survey, Washington

From: R. L. Bolmer, Mining Engineer
Area V Mineral Resource Office
Bureau of Mines, Denver

Subject: Field examination for OME-6374 (Silver), John D. Crim
Wewissa mine, Ouray County, Colo.

The Wewissa mine was examined July 29, 1965, in response to the subject application for financial assistance in minerals exploration. The examination was made with John D. Crim, the applicant and present operator of the mine.

Project proposal

Crim currently is exploiting a small ore shoot on the Wewissa vein from a 25-ft. winze sunk near the breast of the lower adit level of the mine. The project work proposed in his application - extending the old Upper Benack adit some 500 feet along the Wewissa vein at an estimated cost of $26,750 - is designed to intersect this shoot about 168 feet below the present winze workings. Nearly half of the proposed work would be expended in bypassing a caved stope on the Benack level.

Location, ownership, and extent of property

The property included in the application consists of the patented Wewissa lode mining claim (Survey No. 6449) and the located Matchless No. 1 lode mining claim, both situated in sec. 23, T 43 N, R 7 W, NMPM, Ouray County, Colo. These two overlapping claims are part of the former Des Ouray or Eurades group of 30 to 40 contiguous claims laid out along Mineral Creek, midway between Engineer and Abrams Mountains. Mineral Creek is traversed by the Mineral Point - Uncompahgre jeep road which turns from U.S. Highway 550 some 4 miles south of Ouray. The portal of the Lower Wewissa adit is about 1-1/2 miles, by private jeep road, off

the latter route. A very steep jeep road connects the Lower Wewissa and Upper Benack adits; only a foot trail extends to the Upper Wewissa workings.

The applicant does not have a formal lease on either claim but has merely entered into a contract with the owner (Kuykendall Mines, Inc.) to conduct mining operations thereon. Under the terms of this contract, the applicant is entitled to 65 percent of the net returns on all ore produced from the claims but must assume all operational costs excepting that of mining equipment, which is furnished by the owner. The contract also calls for the performance of a minimum amount of work on the property each year and may be renewed annually at the option of the contractor, provided all the stipulated conditions have been met.

Only the present working level of the mine - the Lower Wewissa adit at an elevation of 11,606 feet - was accessible for examination. Both the Upper Wewissa adit (elev. 11,688 ft.) and the Upper Benack adit (elev. 11,413 ft.) were caved at their portals and could not be examined.

According to the map submitted with the application, the portals of the Lower and Upper Wewissa adits are about 250 and 404 feet, respectively, inside the southern end line of the Wewissa claim, while the portal of the Upper Benack adit is some 283 feet outside this end line, on the adjoining Benack claim. The applicant does not have a lease or mining contract on the latter claim.

An old composite map of the property appearing in a report by V. C. Kelley* shows the horizontal distance between the portals of the Upper Benack and Upper Wewissa adits to be about 600 feet, as opposed to about 687 feet on the applicant's map. This old map also shows the Upper Benack adit extending an aggregate of some 900 feet along the projected plane of the vein (N25°E). Such an extension would put the end of the Benack adit either directly below, or only some 79 feet behind, the existing breast of the Lower Wewissa adit, depending on which map is correct.

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* Kelley, V. C. Geology, Ore Deposits, and Mines of the Mineral Point, Poughkeepsie, and Upper Uncompahgre Districts, Ouray, San Juan, Hinsdale Counties, Colorado. Colo. Sci. Soc. Proc., v. 14, No. 7, 1946, pp. 377-81.

Description of deposit

The structure followed by the Lower Wewissa adit is a wide fault-fissure zone in latite. Fissure filling (largely base-metal sulfides with silver in a quartz-barite gangue) is confined to the more intensely fractured central few feet of the zone. Small stringers, lenses, and pods of high-grade sulfide mineralization occur intermittently along the series of closely spaced fractures in the latter system. Such occurrences generally are very narrow, ranging from only a fraction of an inch up to perhaps three inches. Widths approaching a foot are rare, even along the two short sections classed as ore shoots and stoped by the applicant. The average width of the mineral streak in either stope probably never exceeded six inches.

Smelter settlement sheets submitted by the applicant indicate an aggregate 1961-64 mine production of 283 tons of ore averaging .02 oz/T gold, 41.1 oz/T silver, 1.5 pct copper, 20.4 pct lead, and 3.3 pct zinc. Such production represents the narrow mineral streak as selectively mined by repsing methods. Virtually all the high-grade mineral is recovered, while dilution is kept to a minimum.

Economic considerations

The net value of the 1961-64 mine production, after treatment and transportation charges, averages $62.53 a ton. Only 72 percent of this net value, or $44.92 a ton, was realized by the applicant. (His current return is only 65 percent of the net value.) In the stoping method used by the applicant, a minimum of 4 to 5 tons of rock is broken for each ton of ore recovered. The net amount realized by the applicant thus is equivalent to about $9 to $11 on each ton mined.

The applicant has been operating the mine in partnership with his brother. No other personnel are employed. It is claimed that the amounts realized from production have covered all operating expenses to date. Analysis of the operations indicate that such could be the case, provided the two working partners were content with only modest wages for their effort.

Conclusions and recommendations

The only chance of putting the present operations on a profitable basis would be the discovery of wider and more continuous ore shoots. However, the nature of the fault-fissure zone is such that only short, narrow, high-grade streaks of mineral can be expected. Any appreciable widening of these streaks probably would be at the expense of the grade. Wider but lower grade ore could not be selectively mined as at present and undoubtedly would require milling before it could be marketed.

There is nothing to indicate that the small ore shoot near the end of the Lower Wewissa adit, now being mined on a barely-break-even basis, would improve at depth. Other similar shoots in the mine have been of very limited extent, and it is more likely that the present shoot will pinch out before reaching the Upper Benack level. There also is some evidence that the old and presently caved Upper Benack level, which the applicant wants to rehabilitate and extend, already may have been driven as far as the current stoping operations on the Lower Wewissa level.

The unknown condition and extent of the old workings probably is sufficient to disqualify the proposed project for Government participation. However, the principal reason for not recommending any exploration of the property is the apparent geologic improbability of making a significant discovery.

R. L. Bolmer

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cc: Washington Office, OME
OME-6374
OME Chron. file
M. H. Salsbury, BM
R. L. Bolmer, BM