So. 157 Howard Street
Spokane 4, Washington

October 5, 1951

Memorandum

To: A. E. Weissenborn, Exec. Officer, DMA, Field Team, Region II

From: Hilton A. Youngberg, Geologist, U. S. Geological Survey

Subject: Docket DMA-199, Gold Star Mining & Milling Company, Silver Bow County, Montana

RECOMMENDATIONS

It is recommended that the applicant be denied a production loan because of the lack of ore reserves. The property also should not be given further consideration for exploration aid as the mine does not contain a feasible exploration target.

LOCATION

The property of the Gold Star Mining & Milling Company is located at Silver Star, Montana, approximately 38 miles southwest of Butte, Montana. The claims composing the Gold Star Mining & Milling Company property are 1½ to 2 miles southwesterly from the village of Silver Star.

PROPERTY

The property consists of 24 located claims and one patented claim, the Galena, M.S. 3904, which is leased from the Holbert Estate. The claims cover portions of several veins in the Silver Star Mining district. These veins are known as the Galena, Mohawk, Bedford, Silver Star, Morning Star and Gold Star. The names of the individual unpatented claims are not available.

REVIEW OF FIELD INVESTIGATION

Approximately six hours were spent on the property visiting old tunnels, dumps and examining assays and maps.

The mine consists of several thousand feet of old rehabilitated workings and new workings on the veins listed above which were exploited for their gold content.

The country rocks are pre-Beltian gneisses and schists. An occasional aplite dike was observed in the mine workings. Quartz monzonite of the Butte Batholith outcrops approximately one mile to the north.

The veins except for the Galena are very narrow and tight, usually not exceeding 1 to 6 inches of minable material in small ore shoots. The Galena vein has widths of 2 to 5 feet between walls. Small shoots of high-grade gold ore averaging 18 inches wide and 20 to 30 feet long were mined from portions of this vein.

No workings on the property were of sufficient depth to expose unoxidized ores. The gold ores were apparently largely free milling as they were treated by gravity concentration and amalgamation. The base metal content of the veins is small. Malachite, cuprite, anglesite, vanadinite are present in small amounts. The gold concentrates obtained by treating old dumps contain small amounts of copper and seven to eight percent lead. The dumps are, however, small and do not contain important amounts of these metals. The mine contains no measured or indicated ore.

The property has some possibility of becoming an operating gold mine and producing small amounts of lead as a by-product. The amount of lead which the property could produce is small and would not justify an exploration loan or the production loan requested.

cc: U.S.B.M., Spokane
U.S.B.M., Albany

EAY/bh