UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

22[illegible] New Customhouse
Denver 2, Colorado

November 29, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Preliminary Report, DMA Docket 1079, Franklin Mining Company, applicant; Franklin, Oro Fino, and Mary F. Lead-Zinc Mines, Independent Mining District, Clear Creek County, Colorado

Enclosed herewith are the original and two copies of the report on the subject docket.

We concur with the conclusions and recommendations of the examining team that the development loan of $380,000 be denied.

The company has stated that they would like to be considered for an exploration loan. Investigations by the U. S. Geological Survey and the U. S. Bureau of Mines will be started as soon as this office receives the applicant's application for an exploration loan.

The brochure will be held here in this office until a final report on the exploration application is completed.

J. H. East, Jr.

J. H. East, Jr.

A. H. Koschmann

A. H. Koschmann

Enclosure

WDM:fwe
cc: Koschmann, DMA Docket, Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

November 26, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: ~~Final~~ Preliminary Report, DMA Docket 1079, Franklin Mining Company, applicant; Franklin, Oro Fino, and Mary F. Lead-Zinc Mines, Independent Mining District, Clear Creek County, Colorado

The application of the subject docket was for a development loan of $380,000.

The purpose of this loan was to develop ore reserves and to reconstruct a mill to beneficiate the ores.

The Franklin Vein varies in width from a few inches to 12 feet. Rich zinc-lead deposits are found at the intersection of the main fracture and cross factures. Most of these have been mined, and the remaining mineable reserves are estimated at only 24,000 tons with an average grade of 0.10 ounces gold and 1.50 ounces silver per ton, 1.0 per cent lead and 1.5 per cent zinc.

Due to the low tonnage and grade of present reserves, the examining team recommends denial of the development loan, with which we concur.

There are large inferred reserves which require verification by exploration.

W. H. King

W. H. King, for
P. T. Allsman

Mining Division
Date Rec'd.

NOV 23 1951

BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20
Denver Federal Center
Denver 14, Colorado

November 21, 1951

Memorandum

To: Chief, Mining Division, Region IV

From: Chief, Colorado Branch, Mining Division

Subject: DMA-1079, Franklin Mining Company, Franklin Mine, Clear Creek County, Colorado

Please find enclosed the original and seven copies of the Summary, Conclusions, and Recommendations by T. H. Kuhn and R. R. McLellan, and the identical number of copies of McLellan's Engineering Report on the subject docket.

McLellan concludes there are insufficient minable ore reserves to maintain a profitable operation or repay the loan, but that additional exploration is justified. He recommends denial of the direct loan and suggests the applicant or the owners apply for an exploration loan. I concur.

The brochure and mine maps furnished by the Field Team are also returned herewith.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

November 13, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1079, Franklin Mining Company, Independent Mining District, Clear Creek County, Colorado

Attached are 8 copies of the preliminary geological report by Truman Kuhn on the subject property. Proven reserves are insufficient to warrant a development loan, and Kuhn, therefore, recommends that the development loan be denied. However, available geologic data indicates that the company, if interested, might qualify for an exploration loan.

I concur with Mr. Kuhn's recommendation.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Attachments (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1079, Franklin Mining Co., Franklin Mine

Clear Creek County, Colorado

Lead-Zinc

Truman N. Kuhn, Geologist
U. S. Geological Survey

Russell E. McLellan, Mining Engineer
Bureau of Mines

November 14, 1951

FRANKLIN MINING CO.,
FRANKLIN MINE
CLEAR CREEK COUNTY, COLORADO

Summary, Conclusions, and Recommendations

By T. H. Kuhn
Geologist
U. S. Geological Survey

R. R. McLellan
Mining Engineer
Bureau of Mines

FRANKLIN MINING CO.,
FRANKLIN MINE
CLEAR CREEK COUNTY, COLORADO

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By T. H. Kuhn and R. R. McLellan

1. The Franklin Mining Company of Denver, Colorado requests a direct loan of $380,000.00 to construct a mill and to commence production from the Franklin Mine near Idaho Springs, Colorado.

2. The company has no milling equipment but owns sufficient mining equipment to start immediate underground operations.

3. The company last operated the mine from August 1947 through March 1951 showing a deficit of $3,000.00 at the close of the period.

4. Known reserves are too low in grade and in quantity to assure a profitable operation or to assure even partial repayment of a loan.

5. A large inferred reserve exists, but verification can be made only through additional exploration and development.

6. It is recommended that a direct loan be denied and that the company or the trustee be encouraged to apply for an exploration loan.

Geology

FRANKLIN MINING COMPANY

INDEPENDENT MINING DISTRICT

CLEAR CREEK COUNTY, COLORADO

DMA DOCKET 1079

By Truman H. Kuhn, Geologist
U. S. Geological Survey

FRANKLIN MINING COMPANY
INDEPENDENT MINING DISTRICT
CLEAR CREEK COUNTY, COLORADO

The Franklin Mining Company, Denver, Colorado, has applied for a $350,000 loan (DMA Docket 1079) to develop lead and zinc ores in the Franklin Mine and to erect a mill to treat the Franklin ores. The Franklin, Ore Pine and Mary F claims are controlled by the company and are located near the old town of Gilson Gulch in Section 25, T. 55 S., R. 73 W. The mine is approximately one airline mile northwest of Idaho Springs in the Independent Mining District, Clear Creek County, Colorado

The property was examined on September 9, 1951, accompanied by E. G. Rice, Manager for the Franklin Mining Company, and on September 28, October 12 and October 19, 1951, accompanied by Russell McLellan, engineer for the U. S. Bureau of Mines.

GEOLOGY

On page 282 of "Economic Geology of Gilpin County and adjacent Parts of Clear Creek and Boulder Counties, Colorado," Bastin and Hill state:

"The Franklin vein, which was discovered in 1868, is traceable on the surface from the village of Gilson Gulch eastward to the vicinity of the Old Freemen shaft as a continuous well-defined lode. - - - West of Gilson Gulch the Franklin vein probably merges with one of the veins opened in the Freighter's Friend and Gem workings, but the precise relations are not known."

As exposed in the accessible Franklin workings, the Franklin vein dips 55°-65° W. and strikes N. 65°-80° W. The vein occupies a strong fracture zone 2 to 10 feet in width, composed of broken and altered wall rock with varying amounts of pyrite, galena, sphalerite, quartz and rhodochrosite. The wall rock is principally a granite gneiss with some monzonite porphyry, granite, and schist.

At the shaft on the first level, the Franklin vein splits into two northwesterly trending branches. The line of intersection rakes steeply to the northwest and on the sixth level, the split is approximately 50 feet west of the shaft. According to the stope maps, one of the most productive portions of the Franklin Mine was near this intersection.

ORE RESERVES AND RECOMMENDATIONS

Because of a lack of sufficient data, it is not possible to accurately estimate the proven ore reserves. Based upon stope maps furnished by the Franklin Mining Company and upon limited level mapping, the proven ore reserves are estimated to be in the magnitude of 20,000 tons. It is extremely unlikely that further field work will prove the presence of more than the 20,000 tons of measured ore. Mr. Rice estimated 21,100 tons of proven ore.

Sample data for determining an average grade of the ore is not available. However, judging from underground vein exposures, it is estimated that the ore would average only slightly higher than minimum commercial grade.

Since the estimated maximum tonnage and grade is not sufficiently high to insure repayment of the proposed $580,000 loan, it is recommended

that the application for a loan to develop the Franklin Mine and erect a mill be denied.

The available geologic data indicates a reasonably large tonnage of inferred ore, and it is possible that the Franklin Mining Company might qualify for an exploration loan.

FRANKLIN MINING CO.,
FRANKLIN MINE
CLEAR CREEK COUNTY, COLORADO

Engineering

Engineering Report

By R. R. McLellan
Mining Engineer
Bureau of Mines

FRANKLIN MINING CO.,
FRANKLIN MINE
CLEAR CREEK COUNTY, COLORADO

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FRANKLIN MINING CO.,
FRANKLIN MINE
CLEAR CREEK COUNTY, COLORADO

ENGINEERING REPORT

By

R. R. McLellan

INTRODUCTION

P. J. Garbarino, director of the Franklin Mining Company, Denver, Colorado, has requested a direct loan from the Defense Minerals Administration, docket 1079, in the amount of $380,000.00 to resume mining at the Franklin Mine and to construct a 150 ton per day mill near Idaho Springs, Colorado. Truman H. Kuhn of the U. S. Geological Survey and R. R. McLellan of the Bureau of Mines have mapped and sampled the mine in part and have compiled sufficient information to recommend the denial of a direct loan.

ACKNOWLEDGMENTS

Maps, shipment records, and general information were obtained from P. J. Garbarino of Denver, Colorado, and from E. C. Rice of Idaho Springs, Colorado.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Franklin Mine is at the site of the old town of Gibson Gulch 3.5 miles north of Idaho Springs, Clear Creek County, Colorado (fig. 1). A good secondary county road leads directly to the shaft at an altitude of approximately 8,750 feet. The area is mountainous, and precipitous slopes are common. Snowfall is comparatively light enabling easy access

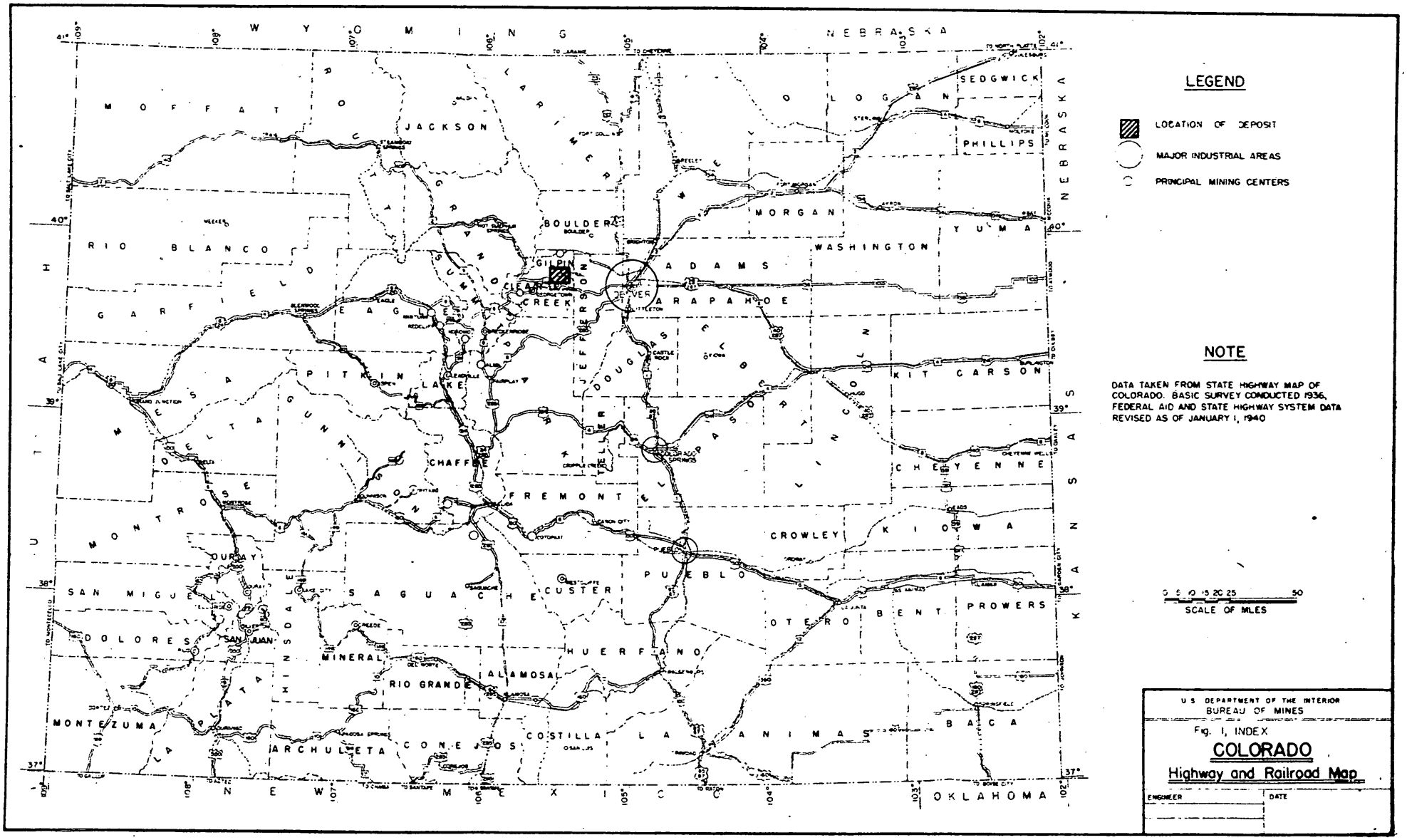

Fig. 1 LOCATION MAP, THE FRANKLIN MINE, CLEAR CREEK COUNTY, COLORADO, DMA 1079

to the mine during winter months. There is sufficient water for mining purposes but not for milling. A mill probably would have to be located on Clear Creek downstream from the town of Idaho Springs. Electric power is supplied by the Public Service Company of Colorado. Timber and other supplies may be purchased at Idaho Springs or at Denver.

HISTORY AND PRODUCTION

Commencing in 1865 the Franklin No. 73 shaft was sunk to a depth of 200 feet on the intersection of the Mary F and the Franklin veins. Approximately 450 feet of laterals were driven and considerable stoping was done. No production records are available for this mining.

The Franklin Mining Company operated the mine from August 1947 through March 1951. Shipments included 5,777 tons of crude ore and 787.15 tons of concentrates for a net mill and smelter return of approximately $89,400.00. Crude ore averaged 0.17 oz. gold, 5.04 ozs. silver per ton, 3.94 percent lead and 4.64 percent zinc. The company reports a deficit of $3,000.00 at the close of the period.

To the east and to the west of the Franklin No. 73 claim, the vein has been mined extensively through the Gem, Freighter's Friend, and Silver Age mines.

OWNERSHIP AND EXTENT

The property under consideration consists of three claims, the Franklin No. 73, the Oro Fino, and the Mary F, all of which are under the trusteeship of Katharine B. Gaddis of San Francisco, California. The claims were leased in 1943 to Joseph P. Ruth of Denver, Colorado and were subleased in 1946 to the Franklin Mining Company of Denver. The direct lease and the sublease expire June 11, 1953. Twelve percent royalty is paid to Katharine B. Gaddis and five percent to Joseph P. Ruth.

DESCRIPTION OF THE DEPOSITS

The Franklin vein occupies a compression fracture within granite gneiss and monzonite porphyry. Mineralized tension fractures extend into the footwall and hangingwall at angles of 15 to 45 degrees. Rich lead-zinc deposits usually are found at the intersections of the main fissure and the tension fractures. The vein has an average dip of 50 degrees and ranges from several inches to 12 feet in thickness. Although considerable faulting has occurred parallel to the strike, the walls require little timber. The vein can be traced for several miles and has been one of the largest producers in the district.

MINABLE ORE RESERVES

Underground sampling and mapping have not been completed; however, sufficient information is available to indicate that few, if any, of the remaining blocks of ground can be classified as ore. Stope maps of the accessible workings show that all higher grade mineralized zones were mined and this has been confirmed by the company engineer, E. C. Rice. Not more than 24,000 tons of measured vein could be mined from levels now accessible. This rock is estimated to contain an average of 0.10 oz. gold, 1.5 ozs. silver, per ton, 1.0% lead, and 1.5% zinc. It is probable that considerable reserve exists in the unexplored area east on the fifth, sixth, and seventh levels, and at depth below the seventh and eighth levels.

PRESENT STATUS

Exploration and Development

Comparatively little exploration has been done from the Franklin No. 73 shaft. The vein has been developed by 700 feet of inclined shaft, 2000 feet of drifts and cross-cuts, and 158 feet of winzes. Lateral development extends 300 feet west and 100 feet east of the shaft. The No. 4 level

connects the Franklin mine with the Freighter's Friend and Gem mines to the west, and with the Silver Age mine to the east. Stoping from this level has been continuous for a lateral distance of nearly 5000 feet.

The Franklin No. 73 shaft is in good condition. Bad air prevented examination of the No. 8 level and the connecting winze.

All levels with the exception of No. 6 and No. 7 are blocked by one or more caves.

Mining and Milling Equipment

The company owns two compressors capable of producing 600 cubic feet per minute, two hoists each capable of hoisting 1.5 tons at 300 feet per minute, and sufficient machines, tools, and miscellaneous equipment for immediate operation. Surface buildings consist of one hoist house, one compressor house and one store house. Electric power is installed at the mine.

PROJECT PROPOSALS, WITH COSTS

The Franklin Mining Company estimates they will require a direct loan of at least $380,000.00 to construct a mill and to commence production from the Franklin mine. All known ore shoots have been mined completely. Measured reserves do not exceed 24,000 tons of low grade vein material, although a large inferred reserve exists to the east and below the present workings. The company has no milling equipment but owns considerable mining equipment.

CONCLUSIONS

Measured reserves are not sufficient in quantity or grade to maintain a profitable operation or to repay a direct loan of $380,000.00. In less

than a year's time of mining and milling under the terms of the application, all measured reserves would be depleted with little or no profit to the company. Additional exploration and development should be considered by the company.

RECOMMENDATIONS

It is recommended that a direct loan to the Franklin Mining Company be denied. Should the company apply for an exploration loan, it is recommended that the mapping and sampling be continued by the Geological Survey and the Bureau of Mines. In view of the fact that the vein has been highly productive on the adjoining properties and that comparatively little exploration has been done from Franklin No. 73 shaft, it is believed that additional ore shoots might be located east of the sixth, seventh, and eighth levels, and also at depth. There is little doubt that an exploration loan for a reasonable amount could be recommended.