DMA

REGIONAL DIRECTOR'S OFFICE
REGION IV
DEC 29 1951
BUREAU OF MINES
DENVER, COLORADO
DEC 26 1951

Mr. W. S. Ballard, President
J. L. Mining Company
1812 E. McDowell Road
Phoenix, Arizona

Re: Docket No. 2066
Silver Queen Mine

Dear Mr. Ballard:

With reference to your application for exploration project assistance of August 24, 1951, the Government has made a detailed study of the data submitted by you and, also, all geological and field data presently available. We find that prior exploration conducted on the surface and in the Silver Queen Shaft has not indicated the presence of worthwhile mineralization. Your proposal to deepen the shaft to 800 feet and drift at 100 feet intervals from the shaft, also, does not appear to be sufficiently supported by geological evidence to substantiate the possibility of making a discovery which would result in a worthwhile production of base metal. Your application for exploration project assistance under Mineral Order 5 is therefore denied.

The Government is very much interested in participation in all well defined projects geologically favorable for the discovery and later production of a significant tonnage of strategically important mineral. We appreciate, therefore, the opportunity to review your project and regret that it does not fulfill the requirements for this participation.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

DEMoulds:lm
12/11/51

cc: Admn. Pending File
Mails and Files Br.
C. O. Mittendorf
R. H. Mote, DSRM
E. T. McKnight
Field Team Reg. IV
Docket
D. E. Moulds

REGIONAL DIRECTOR'S
OFFICE
REGION IV
JAN 2 1952
BUREAU OF MINES
DENVER, COLORADO

December 11, 1951

Memorandum

To: Mr. S. O. Mittendorf, Acting Administrator

From: D. W. Moulds

Subject: Recommendation for denial of application for exploration project assistance. Docket No. DMA 2066X, J. L. Mining Company, Phoenix, Arizona, Lead-Zinc.

The subject application for exploration project assistance was made under date of May 15, 1951, for a project amounting to $100,000. The project was referred to Region IV for field examination which was made on October 29-30, 1951, and report received in Washington on November 28, 1951.

The Property:

The property consists of 11 claims situated in the Big Bug Mining District, Yavapai County, Arizona. Property is held under lease and option by the subject corporation. The principal workings consist of a 210 foot inclined shaft with about 87 feet of drift and crosscut on the 115 foot level. Development equipment on the property consists of headframe, hoist, compressors, drills, pumps, storage tanks and miscellaneous tools. A 20 x 20 building and trailer were used for living quarters. The owners deepened the shaft from 100 to 180 feet and did the work on the 115 foot level in 1947 and the subject company sunk 25 feet in 1951. The only evident production is a few hundred pounds of sorted ore.

Geology:

Country rock is Yavapai schist with Precambrian granite intrudes the schist and outcrops on one side of the property. A hornblend dike occurs near the mine.

The mine workings follow a fault paralleling the schistosity which is filled with breccia and gouge, and varies from 2 to 6 feet in width. Small scattered quartz veinlets with minor sphalerite and galena occur in the fault breccia.

The Project:

The applicant proposes to enlarge and retimber the shaft from the surface to the 100 foot level, install pump station at 200 foot level, sink shaft 585 feet (to 800 foot level) and drift 100 feet each way from shaft at each level (100 - 800) which would amount to about 1600 feet. The estimate for this work is $100,000 and to be completed in one year.

Conclusions:

The field team examination indicated that the only justification for the past development and proposed exploration was the mineralized zone associated with the fault in the Yavapai schist, and reported high-grade silver ore produced from early surface work. The lead-zinc mineralization in the shaft is confined to a few widely scattered, discontinuous quartz stringers with the average grade represented by six samples being less than 0.5% combined lead and zinc and less than an ounce of silver. These samples were taken by Mr. George P. Bateford, consulting engineer, who had previously examined the mine for the applicant.

The President of the Company indicated that there was no apparent change in rock, structure, or mineralization from the 115 foot level to the bottom of the shaft.

Recommendation:

The field team report indicates that the present development does not indicate any criteria to substantiate the possibility of discovery of a worthwhile tonnage of base metal production by exploration of the fault zone in depth such as is proposed. It is therefore recommended that the attached letter of denial be sent to the applicant.

D. N. Moulds

DNMoulds:lm
12/11/51

cc: Admn. Reading File
Mails and Files Br.
C. O. Hittendorf
R. H. Mote, USBM
R. T. McKnight, USGS
Field Team Reg. IV
Docket
D. N. Moulds

[illegible] New Customhouse
Denver 2, Colorado

Rec'd 11-20-51

November 14, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Contract [illegible], J. L. Mining Company, Silver Queen Lead-Zinc Mine, Yavapai County, Arizona

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

In recent with the conclusions and recommendations of the accompanying report that the exploration loan of $[illegible] be denied.

The brochure is enclosed.

T. H. EAST, JR

T. H. East, Jr.

A. H. Koschmann

A. H. Koschmann

WDM:oj
cc: DMA Subject, Chron.
AHKoschmann

224 New Customhouse

Denver 2, Colorado

November 21, 1951

Memorandum

To: C. O. Mittendorf, Director, Production Expansion Division
Defense Minerals Administration

From: Executive Officer, DMA Field Team, Region IV

Subject: DMA Docket 2066, J. L. Mining Company, Silver Queen Lead-Zinc Mine, Yavapai County, Arizona

Enclosed herewith are six copies of a mining lease of Silver Queen Group of claims and six copies of financial statement as of June 30, 1951.

This information was presumably requested by Tom Lynn under date of September 19. A report of an examination was sent you from this office on November 20, 1951. You will note that we recommended denial of the loan.

J. H. Kent, Jr.

Enclosures

FTA:M

cc: DMA docket, chron.
Kopelmann

Form 6-95

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REFERENCE SLIP

DATE 11/21/51

REFERRED TO:

1. ~~Allaman~~ RPG
2.
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	
..... Conference	..... Referring to .....
..... Consideration	
..... Filing	..... Reply for signature of .....
..... Instructions	
..... Investigation	..... Rewriting
..... Initials	..... Signature
..... Mailing	..... Suggestions
..... Previous correspondence	..... Your information

REMARKS: Letter from J. L. Mining Co., Inc enclosing 6 copies of mining lease of Silver ~~Xxxxx~~ Queen Group claims and 6 copies of financial statement dated June 30, 1951.

Check (X) before the items needing attention.

Initials of sender.

GPO 16—51162-1

DAKIN & COMPANY AUDITING • ACCOUNTING • BOOKKEEPING • INCOME TAX SERVICE

1812 E. McDOWELL ROAD
PHOENIX, ARIZONA

November 19, 1951

Mr. J. H. East Jr. Executive Office,
DMA Field Team,
224 New Customhouse,
Denver, Colorado.

Dear Mr. East:

Re: D M A - 2066

This letter will acknowledge the letter of September 19, 1951 of Mr. Tom Lyon from Washington D. C.

In compliance with his instructions the following are enclosed:

1 Six copies, mining lease of Silver Queen group of claims.

2 Six copies of financial statement as of June 30, 1951.

The landlord releases will follow when the remaining lessor returns and executes the releases.

Yours truly,

Barton Dakin

Secretary - Treasurer
J. L. MINING COMPANY, INC.

Mining Division
Region IV

November 14, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 2044, J. L. Mining Company, Silver Queen Lead-Zinc Mine, Yavapai County, Arizona

The application of the subject docket was for an exploration loan of $100,000.

The proposed exploration program consisted of sinking the present shaft from 200 feet to 800 feet, with 200 feet of drifting on the 800-foot level.

The mineralization at the mine consists of sphalerite and galena occurring in a fault gouge as widely scattered veinlets, usually less than ½ inch thick and not over 1 foot in length. There are no measured nor indicated reserves, and the apparent grade of the "ore" is less than 0.5 percent combined lead and zinc.

There is no reason to expect that better ore will be found by exploration.

The examining team recommends denial of the application, with which we concur.

W. H. Wing Tay
Paul T. Alamon

WDM:oj
cc: DMA subject, chronological
AHKoschmann

224 New Customhouse
Denver 2, Colorado

September 24, 1951

Memorandum

To: W. R. Stone (Through Chief, Mining Division, Region IV)
(With Brochure)

C. A. Anderson

From: DMA Field Team, Region IV

Subject: DMA-2066, J. L. Mining Co., applicant, Silver Queen Lead-Zinc Mine, Big Bug Mining District, Yavapai County, Arizona

Enclosed is application for an exploration project at a cost of $100,000 at the subject docket, and a review by the Coordinating Committee.

The proposed work is shaft sinking for 800 feet and then drifting 100 feet each way.

A field examination is required to determine the geological probabilities of discovery and justification of the proposed work, which appears to be extensive without definite evidence of mineralization at depth.

Please return the brochure with your report.

J. H. East, Jr.

A. H. Koschmann

WDM:oj
cc: DMA Subject & Chron.
cc: AHKoschmann

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

224 New Customhouse
Denver 2, Colorado

November 14, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA docket 2066, J. L. Mining Company, Silver Queen Lead-Zinc Mine, Yavapai County, Arizona

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 exploration loan of $100,000 be denied.

The brochure is enclosed.

[illegible]

W. H. Hart, Jr.

A. H. Koschmann

A. H. Koschmann

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

November 14, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 2066, J. L. Mining Company, Silver Queen Lead-Zinc Mine, Yavapai County, Arizona

The application of the subject docket was for an exploration loan of $100,000.

The proposed exploration program consisted of sinking the present shaft from 200 feet to 800 feet, with 200 feet of drifting on the 800-foot level.

The mineralization at the mine consists of sphalerite and galena occurring in a fault gauge as widely scattered veinlets, usually less than ½ inch thick and not over 1 foot in length. There are no measured nor indicated reserves, and the apparent grade of the "ore" is less than 0.5 percent combined lead and zinc.

There is no reason to expect that better ore will be found by exploration.

The examining team recommends denial of the application, with which we concur.

W. H. King

W. H. King for
Paul T. Allsman

Mining Division
Date Rec'd.

NOV 9 1951

BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Arizona-New Mexico Branch
[redacted]
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

MINING DIVISION
REGION IV

November 7, 1951

Memorandum

To : Paul T. Allsman, Denver, Colorado

From : Chief, Arizona-New Mexico Br., Mining Div., Region IV

Subject: Final Report, DMA Docket 2066, J. L. Mining Company's Silver Queen Lead-Zinc Mine, Yavapai County, Ariz.

Enclosed are original and 7 copies of the section on Summary, Conclusions and Recommendations by J. N. Faick of the Geological Survey and T. M. Romslo of the Bureau of Mines, and the section on Engineering by Romslo for the above report. The section on Geology will be submitted by the Geological Survey.

This report has my approval.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: P. T. Allsman (7)
C. A. Anderson
DMA-2066
DF

FOR VICTORY
BUY
UNITED STATES SAVINGS BONDS AND STAMPS

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

November 8, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 2066, Silver Queen Mine (Lead-Zinc), J. L. Mining Company, Yavapai County, Arizona

Enclosed are the original and 7 copies of the geologic report by J. N. Faick of the U. S. Geological Survey covering the above docket. It has been recommended that the loan be denied.

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

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson, Arizona

November 6, 1951

Memorandum

To: Field Team, Region IV, Denver, Colorado
Through: Mr. A. H. Koschmann

From: Mr. A. F. Shride, Tucson, Arizona

Subject: Geologic Report, DMA 2066, Silver Queen Mine (Lead-Zinc), J. L. Mining Company, Yavapai County, Arizona

Enclosed are the original and 7 copies of the above report by J. N. Faick of the Geological Survey.

This report and the recommendation that an exploration loan be denied, because the presumed ore body contains only sparsely scattered sulfides and there is no geologic expectation of improvement with depth, have my approval.

A. F. Shride

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 8

RECEIVED
NOV 1951

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-2066, J. L. Mining Company's

Silver Queen Lead-Zinc Mine

Yavapai County, Ariz.

John N. Faick, Geologist
U. S. Geological Survey

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

November 1951

als

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By John B. Faick[1] and T. M. Tomslo[2]

The Silver Queen lead-zinc mine, Yavapai County, Ariz., was examined in connection with a request for Governmental assistance by the J. L. Mining Co., 1812 E. McDowell Road, Phoenix, Ariz. The examination was made in October 1951 by the Defense Minerals Administration, under docket DMA-2066, as part of its program authorized by the Defense Production Act of 1950.

The company proposed to expend an estimated $100,000 on a program designed to find substantial reserves of lead-zinc ore. The program involved the deepening of a shaft from 200 to 800 feet and the driving of 200 feet of drifts from the shaft on levels to be established at 100-foot intervals. The company indicated a willingness to finance 50 percent of the cost of the project.

The property was explored by several shallow surface workings and a 100-foot shaft prior to 1947. Since 1947 the shaft has been deepened to 210 feet and about 100 feet of lateral workings have been driven on the 115-foot level. A few hundred pounds of sorted lead-zinc ore probably represents the total production of this type of ore. A little high-grade silver ore may have been produced from the surface workings during the early 1900's.

Yavapai schist and Bradshaw granite, both of Pre-Cambrian age, and hornblende diorite are the outcropping rocks on the property, the schist being the dominate rock. The mine is developed along a steep dipping fault in this schist.

1/ Geologist, U. S. Geological Survey
2/ Mining Engineer, U. S. Bureau of Mines

Ore mineralization, as sphalerite and galena, is confined to a few widely scattered, discontinuous stringers that generally are less than ½ inch thick and only a few inches long. Six samples, taken in the shaft and lateral workings, indicate that the average lead-plus-zinc content of the deposit is less than 0.5 percent.

At present the mine is inactive but the company intends to renew exploratory work as soon as funds are available from the sale of stock. The mine is equipped to carry out this work.

Ore mineralization, that has been explored by the mine workings, is meager, less than 0.5 percent of combined lead and zinc. Furthermore there is no reason to expect that minable ore will be found in the unexplored part of the deposit. Therefore, it is recommended that the application for an exploratory loan be denied because the deposit contains no measured nor indicated ore reserves and because the possibilities of discovering ore are unfavorable.

Memorandum Report on Geology of the Silver Queen Mine
Yavapai County, Arizona
DMA 2066 - Lead-Zinc

The Silver Queen Lead-Zinc Mine lies on the eastern slope of the Bradshaw Mountains about 2 miles west of the well known Iron King Mine. The mine is in an area of Yavapai schist, which locally varies considerably in character. The dominant rock type is fine-textured, siliceous, silvery-gray phyllite or sericite schist. This rock has pronounced foliation, which at the mine strikes N. 25° E. and dips about 60° to the west. The sericite schist is gradational into other rock types, most of which are quite granular and crudely banded gneisses. It is thought that the Yavapai schist in the vicinity of the Silver Queen Mine represents intensively metamorphosed extrusive igneous rocks such as andesites, rhyolites, basalts, and tuff beds.

About 1000 feet north and northwest of the mine is an area underlain by medium grained equigranular granite. It is relatively fresh and unaltered in appearance and is thought to be intrusive into the Yavapai schist. An elongate body of hornblende diorite, thought to be a dike, is exposed on a small hill about 150 feet east of the mine. Exposed in the hanging wall, about 20 feet from the vein, is a dark greenish-black rock that may be a basaltic dike.

The Silver Queen Mine is developed on a fault that is parallel to the schistosity of the country rock. The fault has been explored along the dip by a 210 feet inclined shaft and by 3 short drifts and two short crosscuts. At the time of this examination only the upper 155 feet of shaft and about 105 feet of drifts and crosscuts on the 115 level were accessible.

The fault zone developed by these workings is covered by alluvium and can be traced only for a few feet on the surface where it appears to have been prospected for oxidized gold and silver ores. In the mine the fault is a zone ranging from 2 to 6 feet in thickness and averaging about 4 feet between walls. It is filled with gouge and brecciated wall rock. The breccia fragments show moderate hydrothermal alteration, and most of the fault gouge has been completely altered. Hydrothermal alteration, with decreasing intensity, extends into the hanging wall for about 10 feet and into the foot wall for about 2 feet. The fault zone has been slightly discolored by supergene solutions which have oxidized most of the available pyrite and deposited a thin coating of limonite.

Mineralization along the fault zone consists of sparse sphalerite and galena. A few veinlets, usually less than ½ inch thick and a few inches long, occur in the fault gouge and spherical masses of sphalerite and galena as large as two inches in diameter were found on the dump. The examining engineers took no samples but assays are available on 6 samples taken by George B. Botsford, Consulting Mining Engineer and Geologist, who prepared a report on the mine for the applicant.

The assays of samples taken by Mr. Botsford are given below:

No.	Location	Ag in ounces	Pb in percent	Zinc in percent
1.	Breast N. drift - 115 level	8.8	0.20	0.40
2.	Breast S. drift - 115 level	0.60	0.10	0.20
3.	Shaft at 145 ft. deep	0.40	0.10	0.10
4.	Shaft at 167 ft. deep	0.40	0.10	0.20
5.	Drill hole in shaft at 150 ft.	0.60	0.20	0.10
6.	Drill hole in shaft at 150 ft.	0.80	0.10	0.10

These samples appear to be representative of the deposit, and no commercial grade ore has yet been found. According to the applicants, the geologic structure and degree of mineralization are essentially the same in the flooded portions of the mine as in the accessible portions. The prospect has been adequately explored by the shaft, drifts, and crosscuts and there has been no apparent change in character of the deposit to the depth of 210 feet. There is no reason to expect improvement at greater depths; therefore, additional exploration seems unjustified.

It is recommended that the application for an exploration loan be denied.

J. L. MINING COMPANY'S
SILVER QUEEN LEAD-ZINC MINE
YAVAPAI COUNTY, ARIZ.
DMA-2066

Engineering Report

By T. M. Romslo,
Mining Engineer
U. S. Bureau of Mines

November 1951

J. L. MINING COMPANY'S
SILVER QUEEN LEAD-ZINC MINE
YAVAPAI COUNTY, ARIZ.
DMA-2066

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INTRODUCTION

The Silver Queen lead-zinc mine, Yavapai County, Ariz., was examined in connection with an application by the J. L. Mining Co. for Governmental aid on a proposed exploratory project. The examination was made by the Defense Minerals Administration, under docket DMA-2066, as part of its program authorized by the Defense Production Act of 1950. This report contains information obtained during the investigation, and presents conclusions and recommendations regarding the merits of the proposed operations.

The company proposed to enlarge and re-timber the upper 100 feet of a 210-foot shaft, to sink the shaft to the 300-foot level and to drive 200 feet of drifts on levels to be established at 100-foot intervals. Estimates prepared by the applicant indicated that the work could be completed in one year at a cost of $100,000. The application stated that the company was prepared to finance the project in accordance with regulations governing Governmental aid on exploratory projects.

The examination was made October 29 and 30, 1951, by J. N. Faick, Geological Survey, and T. M. Pomslo and B. C. Brown, Bureau of Mines. The engineers were accompanied during the field examination by W. S. Ballard, president of the J. L. Mining Co.

LOCATION AND ACCESSIBILITY

The property is 5.2 miles by road from the village of Humbolt, Ariz. (fig. 1). Humbolt is a station on a spur line of the Santa Fe Railroad and also is serviced by State Highway 69. The mine can be

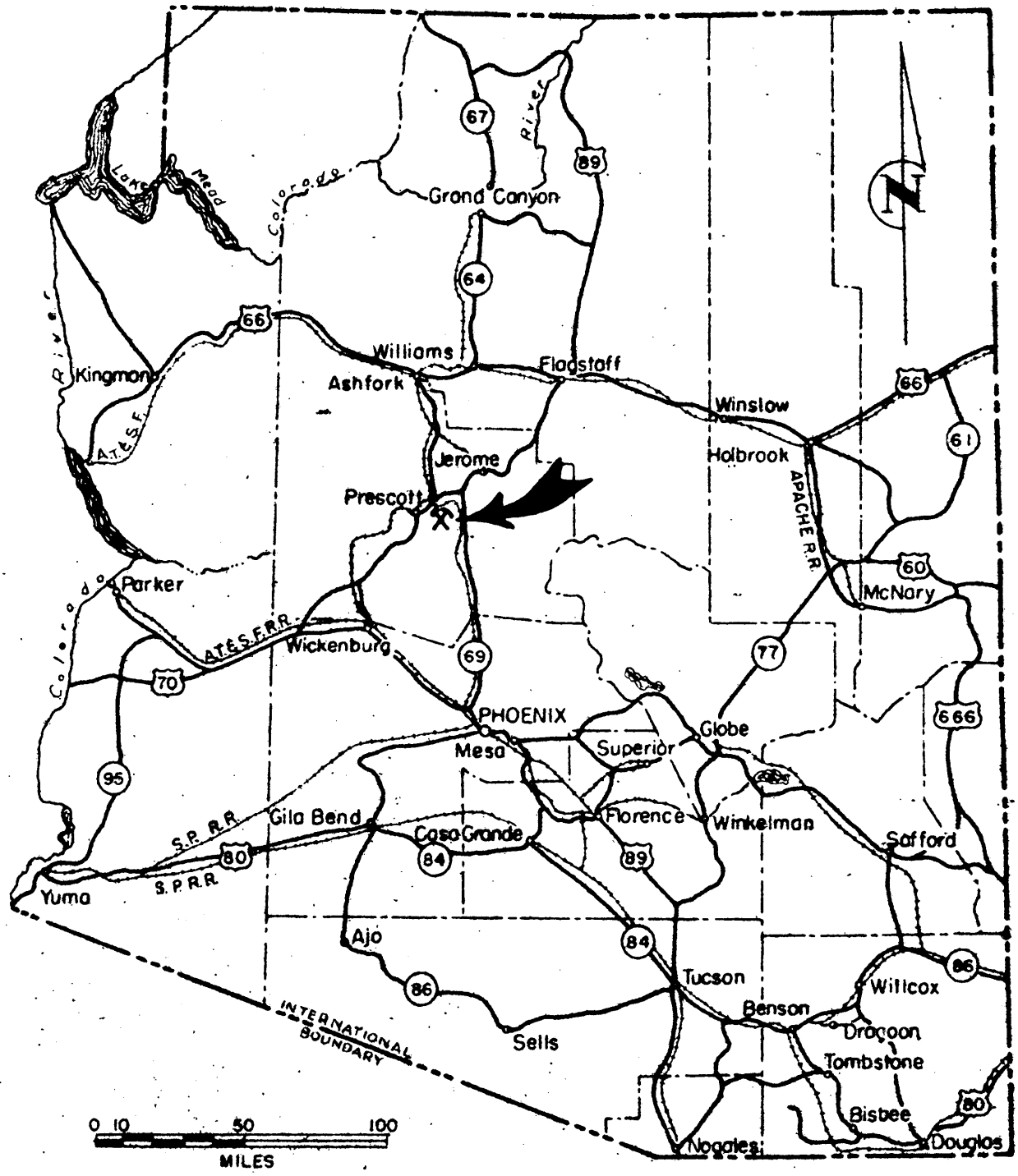

Figure 1. Location Map, J. L. Mining Co., Silver Queen Mine, Big Bug Mining District, Yavapai County, Arizona

D. M. A. 2066

reached from Humbolt by traveling 0.5 miles south on the highway to a road junction designated by a sign marked "Iron King Mine". This branch road leads to the Silver Queen mine. It passes the office of the Iron King mine and then forks at 5 places. The road to be taken at each fork is signed "J. L. Mining Company".

PHYSICAL FEATURES AND CLIMATE

The property is on the northwest slope of the Bradshaw Mountains. It is in an area of moderately rugged topography and has an average altitude of about 5,000 feet.

The climate is characteristic of the intermediate altitudes of northern Arizona. Days are hot and nights are pleasant during the summer. Winters are mild. Precipitation is confined to heavy rainfalls during a few months of the summer and consists of light rainfalls and snowfalls during the winter.

Vegetation consists of a heavy growth of several varieties of shrubs.

HISTORY AND PRODUCTION

There is no available information on the early history of the property. Until 1947 it had been developed by a 100-foot shaft and several small pits and trenches. The owners deepened the shaft 80 feet and drifted on the 115-foot level in 1947. The mine then lay idle until 1951 when the J. L. Mining Co. gained control of the property. This company started sinking operations and had the shaft bottom at 215 feet on October 29, 1951.

Information obtained during the DMA investigation indicates that the total production of lead-zinc ore is represented by a few hundred pounds of sorted material that is stored near the shaft. A very small amount of high-grade silver ore is reported to have been produced from shallow surface workings during the early 1900's.

PROPERTY AND OWNERSHIP

The property comprises a group of 11 lode mining claims, 3 of which have been patented, in secs. 17, 18, and 19, T. 13 N., R. 1 E., Big Bug Mining District, Yavapai County, Ariz. It is held by the J. L. Mining Co., 1812 E. McDowell Road, Phoenix, Ariz., under a lease and option agreement with the owners, Mr. and Mrs. Theo Scutz and Mr. and Mrs. Joe Sylvia, Humbolt, Ariz. The agreement is for a period of 10 years from January 1951 and calls for royalty payments of 10 percent on net smelter returns from ores produced from the property.

The J. L. Mining Co. is incorporated in Arizona. It has an authorized capital of $1,500,000 divided into 1,500,000 shares of par value of $1.00 each. The company was authorized in 1948 to sell 300,000 shares. Officers of the company include W. S. Ballard, President, and Burton B. Dakin, Secretary and Treasurer.

GEOLOGY AND DEPOSIT

Pre-Cambrian Yavapai schist, probably of igneous origin, is the predominate rock on the property. Bradshaw granite, also of Pre-Cambrian age, intrudes the schist and crops out over a wide area along the northwest side of the property. It also occurs as scattered small outcrops

in the vicinity of the mine. Other exposed rocks appear to be confined to hornblende diorite that occurs near the mine as an elongate body, probably a dike. A fault, striking N. 28° E. and dipping about 60° to the west, cuts the schist at the shaft. It can be traced for a few feet and then is obscured by the mine dump and alluvium.

The mine workings follow the fault which parallels the schistosity of the country rock. The fault zone, filled with gouge and brecciated wall rock, varies in width from 2 to 6 feet. A cross-cut into the hanging-wall on the 115-foot level has exposed a basaltic rock.

Sphalerite and galena were the only ore minerals noted in the underground workings. They occur in the fault gouge as widely scattered veinlets, usually less than ½ inch thick and generally not more than 1 foot in length. The assays of 6 samples taken by George B. Botsford, Consulting Mining Engineer and Geologist, probably represent the degree of mineralization. Botsford examined the mine for the applicant and a copy of his report was loaned to the examining engineers. The assays of his samples follow.

No.	Location	Silver, ounces	Lead, percent	Zinc, percent
1	Breast N. drift-115 level	8.8	0.20	0.40
2	Breast S. drift-115 level	0.60	0.10	0.20
3	Shaft at 145-feet deep	0.40	0.10	0.10
4	Shaft at 167-feet deep	0.40	0.10	0.20
5	Drill hole in shaft at 150 ft.	0.60	0.20	0.10
6	Drill hole in shaft at 150 ft.	0.80	0.10	0.10

There was no apparent change in the rock, structure, and degree of mineralization from the 115-foot level to the bottom of the shaft, according to the president of the company.

PRESENT STATUS

General

Shaft-sinking operations, that were halted a few months ago, are expected to be renewed as soon as additional funds can be obtained through the sale of stock. In the meantime, equipment is being maintained in working order by a caretaker who lives on the property.

Mine Workings

The principal workings consist of a 210-foot inclined 1½-compartment shaft with lateral workings on the 115-foot level. This level is developed by a drift to the north for 52 feet and a 15-foot drift to the south. The foot-and hanging walls at the south drift each have been cut by a cross-cut about 20 feet long. Water stands in the shaft at a depth of about 155 feet from the surface.

Surface Plant and Equipment

Living quarters on the property consist of a 20-by 20-foot garage-type building and an automobile trailer. Other structures are a small "A-type" headframe and 2 sheds. The mine hoist is installed in one of the sheds, and equipment and supplies are stored in the other building.

The major mining equipment items are a 315 cfm compressor, an air-driven hoist, 2 sump pumps, an air blower, and 3 jackhammers. Other items include blacksmith and welding equipment, a 105 cfm compressor, and oil and water storage tanks. Small tools, drill accessories, mine rails, and timber also are stored at the mine.

CONCLUSIONS

Lead-zinc mineralization is confined to a few widely scattered, discontinuous quartz stringers. The average grade of the deposit as represented by 6 samples is less than 0.5 percent of combined lead and zinc, and less than one ounce of silver a ton.

The deposit contains no measurable nor indicated ore. Furthermore there are no criteria that would justify further exploration.

RECOMMENDATIONS

It is recommended that the application for an exploratory loan at the Silver Queen mine be denied because the developed portion of the deposit is nearly barren of ore mineralization and because there is no reason to indicate minable ore will be encountered at greater depths.