Re: Docket MA-288

OCT 9 1951

REGIONAL DIRECTOR'S OFFICE REGION IV OCT 12 1951 BUREAU OF MINES DENVER, COLORADO

Mr. Charles S. Woodward, President
Mountain Mines Company
21 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Woodward:

We have received a report based upon the field team's examination of the property of the Mountain Mines Company in Salt Lake County, Utah.

Although there has been some production from the surface workings of your property, the ore which has been produced from the upper and lower tunnels has been of low or submarginal grade and there is no indication of increase in grade with depth. The 2000 ft. of drifting which has been done on the Silver King fissure on the lower tunnel level has revealed no ore bodies of commercial size and grade. The nickel occurrence which you mentioned in your letter of September 8, has little economic significance in view of the geologic environment in which it occurs. The amount of nickel present is about one-tenth of that which is necessary in order to profitably mine large, low-grade deposits having larger amounts of base metals than are present on your property.

In view of the above further exploration does not appear warranted and we are unable to justify an expenditure of public funds for the work you propose. I regret, therefore, that your application must be denied.

We wish to thank you for bringing this property to our attention.

Very truly yours,

SIGNED

for Lon Lyon, Director
Supply Division

EJLyons:emp
G 10-3-51
Copies to: J. H. East Jr. (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
O. M. Bishop
Directors r. files 4214 GSA

Br. r. files 4214 GSA

Administrators xl files
DMA docket files

quartz gangue. Raising at several points along the drift revealed no ore shoots.

In a letter dated September 8, 1951, the applicant claims that after the examination by the field team an iron sulfide vein containing 0.142% Ni was encountered in the drift along the Silver King fissure. However, this small a percentage of nickel in a deposit of this type has little economic significance.

In the same letter it is stated that an ore shoot containing 22% to 60% Pb and 14 to 124 oz. Ag was found in the upper levels of the mine. No description of the samples from which these values were obtained is given and the percentages quoted would indicate grab samples which are of little value in appraising a property.

The applicant proposes to extend the drift southwesterly on the Silver King fissure an additional 500 ft. and to put in 600 ft. of raise at various locations along the vein. Total estimated cost of this project is $42,600.

Because the re found in both the upper and lower tunnels was submarginal in grade and the present drift along the Silver King fissure has revealed no significant change in mineralization in the various formations, the field team recommends that this application be denied. The Lead-Zinc Branch concurs with this recommendation.

The following material is attached:

1 copy of Form NSRB-146 with supporting exhibits
DMA correspondence and memoranda
1 copy of field team report.

T. P. Billings, Chief
Lead-Zinc Branch

Approved:
SIGNED
Director, Supply Division

JB Parsons for Wall
JB

EJLyons:emp
G 10-3-51
Copies to: J. H. East, Jr. Region IV (2)
Chief, Lead-Zinc Branch
E. T. McKnight 4204 GSA
O. M. Bishop
Directors. r. files 4214 GSA

Br. r. files 4214 GSA

Administrators r. file
DMA docket files

224 New Customhouse
Denver 2, Colorado

September 26, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee
Defense Minerals Administration

From: Executive Officer, DMA Field Team, Region IV

Subject: DMA Docket 288, Mountain Mines Company, Salt Lake County, Utah

This is in reply to your letter of September 20, regarding the above docket. The field report was submitted to Washington September 20, 1951.

J. H. East, Jr.

FHield

cc: DMA
Kuechmann

Form 6-95

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REFERENCE SLIP

DATE 9/24/51

REFERRED TO:

1. ~~Allsman~~ PTC
2.
3.
4.

FOR:

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

REMARKS: Please prepare letter for my signature as Exec. Officer---(Letter from Lyon, Re: DMA 288, Mountain Mines, requesting info with regard to report)

Check (X) before the items needing attention.

To W.O. 9/20

JHE

Initials of sender.

GPO 16—51162-1

Alderman
Please tell
my successor as
Examiner
JPE

350

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

SPECIAL DELIVERY
OFFICE
REGION IV
SEP 24 1951
BUREAU OF MINES
DENVER, COLORADO

Air Mail

SEP 20 1951

DMA-288
Mountain Mines Co.
Silver King Mine, Utah
Lead-Zinc-Gold-Silver

Mr. J. H. East, Jr.
Executive Officer, Reg. IV
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. East:

This is to advise that we received a letter from the applicant with respect to the status of DMA 288 - Mountain Mines Company.

The docket for a field examination of the property was sent to you some time ago and as yet we have received no report. Please advise when we may expect your report for further review.

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

Approved:

Lowell B. Moon
For Bureau of Mines

T. P. Thayer
For Geological Survey

Mining Division
Region IV

September 20, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report DMA Docket 888, Mountain Mines Co., Salt Lake City, Utah

Enclosed are eight copies of the "Summary, Conclusions and Recommendations, eight copies of the geologic report and eight copies of the engineering report on the above application for an exploration loan estimated to cost $42,600.00.

The lower workings consist of a crosscut tunnel 3,200 feet long, and approximately 2,000 feet of drifting on the vein. The workings on the vein are approximately 2,000 feet below the outcrop. At the elevation, the vein consists of quartz with pyrite and small amounts of lead, zinc, silver and gold. No production of any consequence has been made from this level. The examining Team concludes that continuation of the drift will encounter the same formation and recommends that the loan be denied. We concur with their recommendations.

Paul T. Allsman

JFS:oj
cc: DMA Subject and Chron.

[redacted] New Customhouse
Denver 2, Colorado

Air Mail

September 21, 1951

[redacted]

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report - DMA Docket 288, Mountain Mines Co., Salt Lake County, Utah

Enclosed are original and two copies of the final report on the above application for an exploration loan.

We concur with the findings of the examining team and recommend that the application be denied.

for J. K. Reed, Jr.

A. H. Koschmann

[redacted]

JFS:oj
cc: DMA Subject and Chronological

350

RECEIVED RECORDS
OFFICE
REGION IV
SEP 24 1951
BUREAU OF MINES

Air Mail

SEP 20 1951

DMA-283
Mountain Mines Co.
Silver King Mine, Utah
Lead-Zinc-Gold-Silver

Mr. J. E. Hast, Jr.
Executive Officer, Reg. IV
204 New Customhouse Building
Denver 2, Colorado

Dear Mr. Hast:

This is to advise that we received a letter from the applicant with respect to the status of DMA 283 - Mountain Mines Company.

The docket for a field examination of the property was sent to you some time ago and as yet we have received no report. Please advise when we may expect your report for further review.

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

Approved:

Lloyd B. Moon

For Bureau of Mines

J Hazzle

For Geological Survey

TPBillings:lm
9/17/51

cc: Admn. Lending File
T. Lyon
Mote
McKnight
Billings
DMA Docket File

J. H. East, Jr. Region IV

350

DMH

REGIONAL DIRECTOR'S
OFFICE
REGION IV
OCT 12 1951
BUREAU OF MINES
DENVER, COLORADO

OCT 9 1951

Re: Docket DMA-288
Mountain Mines Company
Mountain Mines, Salt
Lake County, Utah.
Exploration loan, $42,600
Lead, copper, silver, gold

Memorandum

To: Reports and Records Unit
Administrative Management Div.

From: Chief, Lead-Zinc Branch

Subject: Recommendation for denial of application for exploration loan submitted by Mountain Mines Company, Salt Lake City, Utah.

The property, which has been examined and reported on by the field team, is in the western part of the Big Cottonwood District, Salt Lake County, Utah.

The country rock of the area is pre-Cambrian quartzite and slate overlain by tillite and basal quartzite of Cambrian age. The sediments strike northwest and dip about 35° NE. Cutting these rocks is the Silver King fissure which strikes N. 60° E. and dips 60° to 70° NW. The fissure is a normal fault of rather small throw but is persistent along strike and down dip.

The mineralized part of the fissure ranges from 1 to 48 inches in width, the ore occurring in stringers and pods in the quartz vein filling.

Early production from the property is reported to have had a value of about $280,000, principally in gold and silver, which came from relatively shallow workings at two widely separated locations along the outcrop of the vein. More recently some production has come from the upper tunnel which intersects the vein about 600 ft. below the outcrop. This ore had an average assay of 2.5% Pb, 0.21% Cu, 0.8 oz. Ag, and 0.01 oz. Au.

The present company has driven a 3200 ft. crosscut to intersect the Silver King fissure about 1,900 ft. below the outcrop. From the intersection with the fissure, a 2,000 ft. drift has been driven to the southwest along the fissure. From the crosscut some ore averaging 0.7% Pb, 0.34% Cu, 0.2 oz. Ag, and 0.003 oz. Au per ton was obtained.

The drift along the vein passed through about 1,200 ft. of tillite and is in the underlying quartzite. Mineralization consists of pyrite and small amounts of lead, zinc, silver, and gold in a

Recorded

Mining Division
Region IV

May 7, 1951

Memorandum

To: S. R. Wilson

From: Chief, Mining Division, Region IV

Subject: DMA Docket 288, Mountain Mines Company, Salt Lake City, Utah

Attached are copies of letters from the Field Team, Region IV, and the Coordinating Committee, DMA, regarding the above docket.

The brochure is being sent to Ralph Roberts as directed by the Team. If there is anything you can do to assist Mr. Roberts in the examination, please do so.

P. T. Allsman

Attachments

Copy to Ralph Roberts (with brochure)
DMA files
Allsman

PTA/al

May 4, 1951

Memorandum

To: PSIT. Allaman and Ralph Roberts

From: DMA Field Team, Region IV

Subject: DMA Docket 288, Mountain Mines Company

We are attaching the brochure of the Mountain Mines Company, DMA Docket 288.

Please read the subject letter carefully and make the investigation requested.

We are forwarding the brochure to Mr. Allaman, for forwarding to Ralph Roberts.

J. H. East, Jr.

A. H. Koechmann

Attachments
Coordinating Committee memo
Brochure
JHE/el
cc-dma files
3

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

April 24, 1951

REGIONAL DIRECTOR'S OFFICE
REGION IV
MAY 3 - 1951
BUREAU OF MINES
DENVER, COLORADO

Memorandum

To: Executive Officer of Field Team, Region IV

From: Coordinating Committee, D. M. A.

Subject: Application of
Mountain Mines Company
Charles S. Woodward, President
21 South West Temple Street
Salt Lake City 1, Utah
Mine on Mineral Fork of Big Cottonwood Canyon,
Salt Lake County, Utah

Re: Docket DMA-288

Subject docket was previously denied as essentially a gold-silver proposition (see Lead-Zinc Branch memo of January 29, copies of which were sent to field team; also letter of same date to applicant). Although the point was not made in letter to applicant, much of the appraisal of this property was based on mapping the mine by Max Crittenden of the Geologiczl Survey. The appraisal was that applicant was in an unfavorable stratigraphic horizon for lead-zinc, was proposing to explore in a direction away from the center of mineralization, and had gambled on finding good base metal ore below surface enrichment of precious metals but that enough work had already been done at the lower level to pretty well prove that the gamble had failed.

Applicant made a vigorous protest that he had been turned down without an examination of his property. In reply to this, the Lead-Zinc Branch pointed out to applicant the considerations on which the denial had been made, including study of a published report on the Cottonwood district, and of unpublished mapping carried on by the Geological Survey in the mine area in recent years, also pointing out the negative results achieved by the exploration to date. (See letter of March 12, copies of which were sent to field team). However, applicant was told that if, after reviewing the reasons for the previous denial, he wished to submit an application for assistance under the exploration program, it might be possible that further consideration might be given to his proposal.

In a letter of April 18, applicant applies for exploration aid, cutting the amount from $100,000 in the original application to $53,100 to cover an abbreviation of the original proposal.

Exec. Officer
Region IV

REGIONAL DIRECTOR'S
OFFICE
REGION IV
MAR 23 1951
BUREAU OF MINES
DENVER, COLORADO

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

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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

The Defense Minerals Administration has based its geologic interpretations on published reports on the Cottonwood area, and on unpublished mapping carried out by the Geological Survey in recent years in the area that includes your mine. These interpretations are supported on certain details by the reports accompanying your application.

On the basis of considerations set forth above, the Lead-Zinc Branch feels that the chances for finding new lead-zinc deposits by the exploration that you propose are not promising. After reviewing the information set forth above if you wish to submit an application for assistance under the exploration program soon to be published, it may be possible that further consideration might be given to your proposal.

Your letter of January 29, from S. H. Williston, Director of Supply Division, Defense Minerals Administration, is returned to you herewith as per your request.

Very truly yours,

OTTO HERRES Chief
Lead-Zinc Branch

Enclosure

ETMcKNIGHT:emp:ks
G 3/12/51
Copies to: Chief, Lead-Zinc Br.
USGS-McKnight
L. B. Moon
R. H. Mote
✓2 copies to Exec. Officer
Regional Field Team, Region IV
Strobel
Mittendorf
Files

Exec. Officer
Region IV

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

[illegible] 1951

[illegible]

[illegible]
[illegible]
[illegible]

[illegible]

[illegible] acknowledge [illegible] letter [illegible] February 16, [illegible] the enclosed letter declining your application for Federal aid under the Defense Production Act of 1950.

I am in agreement with the sentiments expressed in your letter, that all possible [illegible] sources of supply of materials should be encouraged, if they show any promise of additional production. If the [illegible] the expected supply of [illegible] the next ten years should be ample for requirements, unless some unforeseen [illegible] develops. [illegible] production, on the other hand, must be expanded in order to satisfy the requirements. [illegible] are available under the exploration program recently approved for the Defense Minerals Administration. Under this program, the Government will loan half of the funds needed for exploration on an approved project, the other half to be furnished by the applicant. However, only the more promising projects are being approved, those that, on reasonable probability, may yield significant tonnages of lead or zinc metals.

After receipt of your letter, we had the application of [illegible] Mines Company reexamined. The [illegible] has the [illegible] level development already carried out [illegible] proposed as a [illegible] project [illegible] development [illegible] favorable for [illegible] However, [illegible] setting [illegible] not very favorable [illegible]

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

The Defense Minerals Administration has based its geologic interpretations on the published report on the Cottonwood area, and on unpublished mapping carried out by the Geological Survey in recent years in the area that includes your mine. These interpretations are supported on certain details by the reports accompanying your application.

On the basis of considerations set forth above, the Lead-Zinc Branch feels that the chances for finding new lead-zinc deposits by the exploration that you propose are not promising. After reviewing the information set forth above if you wish to submit an application for assistance under the exploration program soon to be published, it may be possible that further consideration might be given to your proposal.

Your letter of January 29, from S. H. Williston, Director of Supply Division, Defense Minerals Administration, is returned to you herewith as per your request.

Very truly yours,

OTTO RUDNICK, Chief
Lead-Zinc Branch

Enclosure

ETMcKNIGHT:emp:ks
G 3/12/51
Copies to: Chief, Lead-Zinc Br.
USGS-McKnight
L. B. Moon
R. H. Mote
✓2 copies to Exec. Officer
Regional Field Team, Region IV
Strobel
Mittendorf
Files

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

DMA

REGIONAL DIRECTOR'S OFFICE
REGION IV
FEB 5 - 1951
BUREAU OF MINES
DENVER, COLORADO

January 31, 1951

Mr. Charles S. Woodward
Mountain Mines Company
21 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Woodward:

Your letter to Dr. Boyd, dated January 13, enclosing copy of a letter written to Senator McCarran concerning the need for processing plants in the West to handle the treatment of oxidized zinc ores has been referred to me for reply.

The Defense Production Act of 1950 provides for Federal aid to expand productive capacity and supply of strategic and critical minerals. Procedures for the encouragement of exploration and development, however, have not yet been worked out in detail. You may be assured that I am doing all that I possibly can to urge the approval of a constructive program to develop new mines and benefit the mining industry for the good of our country.

Very truly yours,

OTTO HERRES, Chief
Lead-Zinc Branch

OHERRES/ks

CC: Mr. Mote
Mr. McKnight
Mr. Herres
Mr. Strobel
2 copies to Executive Officer Field Team
Region IV - Denver, Colo.
Files

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

January 31, 1951

Mr. Charles S. Woodward
Mountain Mines Company
21 South West Temple Street
Salt Lake City 1, Utah

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Very truly yours,

OTTO HERRES, Chief
Lead-Zinc Branch

OHERRES/ks

CC: Mr. Mote
Mr. McKnight
Mr. Herres
Mr. Strobel
2 copies to Executive Officer Field Team
Region IV - Denver, Colo.
Files

REGIONAL DIRECTOR'S
OFFICE
REGION IV
FEB 1 0 1951
BUREAU OF MINES
DENVER, COLORADO

January 29, 1951

Mr. Charles E. Woodward
Mountain Mines Company
21 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Woodward:

Your request (No. [illegible]-28[illegible]) for assistance under the Defense Production Act of 1950 has been reviewed by the Lead-Zinc Branch of the Defense Minerals Administration.

As explained in the enclosed press release, before a loan for development will be made by the Reconstruction Finance Corporation, the Defense Minerals Administration must certify that the minerals sought are necessary for national defense. Furthermore, projects to be approved by the Defense Minerals Administration must, in its judgment, show definite promise of yielding material of acceptable grade, physical character, and specifications in amounts that will significantly improve the mineral supply position for national defense.

The evidence supporting your application indicates that your property was essentially a producer of gold and silver and that the ore is rather low in zinc and lead. Because at the present time the shortage of lead and zinc is not as acute as that of some other minerals, only the more promising lead-zinc projects can be considered.

Under these circumstances, therefore the Lead-Zinc Branch of the Defense Minerals Administration feels that an expenditure of public funds to support a project such as you propose is not justifiable.

The Lead-Zinc Branch, Defense Minerals Administration, wishes to thank you for bringing this property to its attention.

Very truly yours,

G. H. Williston, Director
Supply Division
Defense Minerals Administration

copy to: Chief, Lead-Zinc Branch
Geological Survey - McAnight
J. H. Hedges
R. H. Lotz
2 copies to Executive Officer,
Regional Field Team, Region IV ✓
Strobel
Mattendorf
Finnegan 1

RJLyons:jeh
G-1/29/51

REGIONAL DIRECTOR'S
OFFICE
REGION IV
FEB 12 1951
BUREAU OF MINES
DENVER, COLORADO

January 29, 1951

Mr. Charles C. Goodward
Mountain Lines Company
21 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Goodward:

Your request (No. [illegible]-28[illegible]) for assistance under the Defense Production Act of 1950 has been reviewed by the Lead-Zinc Branch of the Defense Minerals Administration.

As explained in the enclosed press release, before a loan for development will be made by the Reconstruction Finance Corporation, the Defense Minerals Administration must certify that the minerals sought are necessary for national defense. Furthermore, projects to be approved by the Defense Minerals Administration must, in its judgment, show definite promise of yielding material of acceptable grade, physical character, and specifications in amounts that will significantly improve the mineral supply position for national defense.

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Under these circumstances, therefore the Lead-Zinc Branch of the Defense Minerals Administration feels that an expenditure of public funds to support a project such as you propose is not justifiable.

The Lead-Zinc Branch, Defense Minerals Administration, wishes to thank you for bringing this property to its attention.

Very truly yours,

C. H. Williston, Director
Supply Division
Defense Minerals Administration

copy to: Chief, Lead-Zinc Branch
Geological Survey - McNaught
J. H. Hedges
R. H. Mote
2 copies to Executive Officer,
Regional Field Team, Region IV
Strobel
Hettemorf
Files
Chrono 1

RJLyons:jeh
0-1/29/51

[illegible] 1951

Memorandum January 2[illegible], 1951

To: Executive Secretary
Through: Operating Committee, LMA

From: Lead-Zinc Branch, LMA

Subject: Docket LMA-238
Mountain Mines Company, Salt Lake City, Utah

The Mountain Mines Company application, submitted by Charles S. Goodward, president, has been reviewed by the Lead-Zinc Branch, LMA.

The applicant requests $100,000 to be used to purchase and install new equipment, to drive 1,000 feet of tunnel and an equivalent amount of raises, and to assist a group of persons who have leased the upper levels of the mine. The property has not been in operation since October 1, 1950.

The information accompanying the application does not include an estimate of the ore reserves nor a statement of the grade of the ore to be mined. Assays of the ore already mined from the tunnel show that it was essentially a gold and silver ore and the lead and zinc content averages about 2.5% and 1.5% respectively.

The Lead-Zinc Branch, LMA, therefore, recommends that no loan be granted to the Mountain Mines Company and that the attached letter be sent to the applicant.

Otto [illegible], Chief
Lead-Zinc Branch, LMA

Approved:
LMA Operating Committee

/S/
Chairman

/S/
J. H. Hedges

/S/
Olaf N. Hove

copy to: Chief, Lead-Zinc Branch
Geological Survey - McKnight
J. H. Hedges
E. H. Pate
2 copies to Executive Officer,
Regional Field Team, Region IV
Strobel
Hetzendorf
Files

DMA

FEB 1 1951

Memorandum January 27, 1951

To: Executive Secretary
Through: Operating Committee, DMA

From: Lead-Zinc Branch, DMA

Subject: Docket M/A-238
Mountain Mines Company, Salt Lake City, Utah

The Mountain Mines Company application, submitted by Charles J. Goodman, President, has been reviewed by the Lead-Zinc Branch, DMA.

The applicant requests $100,000 to be used to purchase and install new equipment, to drive 1,000 feet of tunnel and an equivalent amount of raises, and to assist a group of persons who have leased the upper levels of the mine. The property has not been in operation since October 1, 1950.

The information submitted with the application does not include an estimate of the ore reserves nor a statement of the grade of the ore to be mined. Assays of the ore already mined from the tunnel show that it was essentially a gold and silver ore and the lead and zinc content averaged about 2.5% and 1.5% respectively.

The Lead-Zinc Branch, DMA, therefore, recommends that no loan be granted to the Mountain Mines Company and that the attached letter be sent to the applicant.

Otto Herres, Chief
Lead-Zinc Branch, DMA

Approved:
DMA Operating Committee

/s/
Chairman

/s/
J. B. Hedges

/s/
Olaf A. Hove

Copy to: Chief, Lead-Zinc Branch
Geological Survey - McKnight
J. B. Hedges
K. H. Note
2 copies to Executive Officer, Regional Field Team, Region IV
Strobel
Hetzendorf
Files

Form 6–98

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

U. S. GOVERNMENT PRINTING OFFICE 16—53493-2

Application is forwarded to the field team with request that an additional field examination be made that can either modify the original decision, or which can be used to bolster a final denial.

Crittenden will write to Ralph Roberts concerning where to find his original mapping, which can be used as a basis for a further examination. Also, some of the Bureau of Mines engineers in the Salt Lake region may be familiar with this property and may be able to contribute to the question of whether this property can be expected to produce lead and zinc as a result to the exploration proposed.

As analysis of the application has been made by the Lead-Zinc Branch in the memo accompanying the original denial, and in the letter of March 12 sent to the applicant, no further analysis is necessary.

Tom Lyon
Chairman

Approved:
DMA Coordinating Committee

Lowell B. Moon
L. B. Moon

for T. P. Thayer
Olaf N. Rove

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

224 New Customhouse
Denver 2, Colorado

Air Mail

September 21, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report - DMA Docket 288, Mountain Mines Co., Salt Lake County, Utah

Enclosed are original and two copies of the final report on the above application for an exploration loan.

We concur with the findings of the examining team and recommend that the application be denied.

for Paul Callaway
J. H. East, Jr.

A. H. Koschmann
A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

September 20, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report DMA Docket 228, Mountain Mines Co., Salt Lake City, Utah

Enclosed are eight copies of the Summary, Conclusions and Recommendations, eight copies of the geologic report and eight copies of the engineering report on the above application for an exploration loan estimated to cost $42,600.00.

The lower workings consist of a crosscut tunnel 3,200 feet long, and approximately 2,000 feet of drifting on the vein. The workings on the vein are approximately 2,000 feet below the outcrop. At the elevation, the vein consists of quartz with pyrite and small amounts of lead, zinc, silver and gold. No production of any consequence has been made from this level. The examining Team concludes that continuation of the drift will encounter the same formation and recommends that the loan be denied. We concur with their recommendations.

Paul T. Allsman

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Administration
200 New Customhouse
Denver 2, Colorado

August 22, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 288, Mountain Mines Company, Salt Lake City, Utah

Enclosed are eight copies of the geologic report by Byron J. Sharp and J. W. Hasler of the U. S. Geological Survey covering the above docket.

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

Enclosures (15)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

Mining Division
Date Rec'd.
SEP 18 1951
BUREAU OF MINES
Denver, Colorado

September 17, 1951

Memorandum

To: Paul T. Allsman, Chief, Mining Division, Region IV

From: Chief, Utah-Wyoming Branch, Mining Division

Subject: DMA 288, Mountain Mines Co., Salt Lake County, Utah

Attached are 8 copies of the subject report, including the Summary, Conclusions and Recommendations section. The geologic section was submitted by the Survey August 13, 1951.

Stephen R. Wilson
Stephen R. Wilson

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 307, 320 South Main
Salt Lake City 1, Utah
17 August 1951

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DMA-288, Mountain Mines Company, Salt Lake City, Utah

Enclosed are eight copies of the report of the geological examination of the Mountain Mines Company in response to a request from Field Team IV. Also enclosed is one copy of Summary, Conclusions, and Recommendations; Proposed Exploration; and Conclusions and Recommendations which has been included in the Bureau of Mines report.

The lead-silver ore deposits are in pre-Cambrian tillite and quartzite. The past production has been of sub-marginal grade. It is concluded that the possibility of finding commercial grade ore is unfavorable because the metal content appears to decrease downward. It is recommended that the application for an exploration loan be denied.

I concur with the examining geologists' recommendation that the application for an exploration loan be denied.

Bonnie M. Stagg
for - Ralph J. Roberts

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA 288, Mountain Mines Company, Salt Lake County, Utah

Byron J. Sharp and J. W. Hasler, Geologists
U. S. Geological Survey

July 23-25, 1951

MOUNTAIN MINES CO.
SALT LAKE COUNTY, UTAH

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By W. E. Young and
J. W. Hasler

Mountain Mines Co., Big Cottonwood district, Salt Lake County, Utah, has requested an exploratory loan of $42,600 to conduct underground exploration. The property was examined by members of the Bureau of Mines and Geological Survey and data assembled for evaluation of the proposed loan.

The predominant rocks in the area are pre-Cambrian quartzite and slate overlain by tillite and the basal quartzite of the Cambrian formation. A strong fissure, the Silver King, strikes N. 60° E. and dips 60° to 70° to the northwest. The fissure is a normal fault of small throw, but is persistent down dip and along the strike. The fissure has produced ores from points near the surface, but little ore has been mined from the present exploratory adit, approximately 2,000 feet below the vein outcrop. At this elevation the vein consists of quartz with pyrite and small amounts of lead, zinc, silver and gold.

It is concluded that the proposed exploration will disclose non-commercial ore comparable in grade to that encountered in drifting on the vein on the lower adit. It is therefore recommended that the loan request be denied.

MOUNTAIN MINES CO.
SALT LAKE COUNTY, UTAH

Engineering Report

By W. E. Young
Mining engineer
U. S. Bureau of Mines

MOUNTAIN MINES CO.
SALT LAKE COUNTY, UTAH

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INTRODUCTION

Mountain Mines Co. property in the western part of the Big Cottonwood district, Salt Lake County, Utah, was examined by the Geological Survey during July 1951. A preliminary examination had previously been made by the Bureau of Mines. Data have been assembled for evaluating an exploratory loan proposal under DMA docket 288.

LOCATION AND PHYSICAL FEATURES

The mine lies at the head of Mineral Fork of Big Cottonwood Canyon. The portal of the lower adit is located at the bottom of a large cirque surrounded by precipitous canyon walls. The main vein crosses the highest ridges and peaks in the area. A fair road with steep grades extends from the Big Cottonwood Canyon road to the portal of the lower adit. The road from this adit to the upper workings is extremely steep with several switchbacks. Deep snows and severe conditions make travel difficult during winter months.

HISTORY AND PRODUCTION

Early-day production from this property is reported to have totalled approximately $280,000, principally in gold and silver. Ores were mined from relatively shallow workings at two widely separated locations along the outcrop of the vein.

During the past few years, the company has been conducting an ambitious program for development of the vein at depth, completing

a 3,200-foot crosscut to intersect the vein 2,000 feet below its outcrop. Nearly 2,000 feet of drifting has been completed on the vein. No production of any consequence has been made from the latter workings.

In addition to the above work, the company has leased parts of the surface workings. Some ore has been shipped as a result of this work, but the quantity has been small and the grade low.

DESCRIPTION OF THE DEPOSIT

The rocks included in the area are pre-Cambrian quartzite and slate, overlain by tillite and the basal quartzite of the Cambrian formation. The regional strike of the formations is slightly west of north with an easterly dip. They have been cut by the strong Silver King fissure that strikes N. 60° E. and dips 60° to 70° to the northwest. The eastern extension of the fissure is being developed by the American Metals Co. from the Little Cottonwood Canyon side. Its western extension can be traced on the surface through Mineral Fork Basin across the ridge and into Mill "B" South Fork.

Ores have been mined from shallow, near-surface stopes at two widely separated locations on the fissure.

MINABLE ORE RESERVES

There are no minable ore reserves known at this time.

PRESENT STATUS

A crosscut has been driven 3,200 feet to intersect the vein at 2,000 feet below its outcrop. Approximately 2,000 feet of drifting

has been done along the fissure.

The mine is equipped with compressor, pneumatic drills, pipe, track, and ventilation system. Tramming is done with a horse-drawn train of small mine cars. A large office and dormitory is located near the portal of the tunnel. There is no milling equipment on the property.

The applicant proposes to complete 500 additional feet of drifting in a westerly direction along the vein on the lower adit. The cost of this work is estimated at $30 per foot, or $15,000. Also proposed is 600 feet of raising to be done at various locations along the vein from the lower level. The cost of this work is estimated at $46 per foot, or $27,600.

The total cost of the project is estimated at $42,600.

CONCLUSIONS AND RECOMMENDATIONS

The Silver King vein has been explored by approximately 2,000 feet of drifting along its strike and no ore shoots of commercial grade and size have been found. The work was accomplished by driving 3,200 feet of crosscut to intersect the vein at approximately 2,000 feet below its outcrop. For the first 1,200 feet, the drift has explored the vein through the tillite and the remaining footage of the drift in the underlying quartzite. No appreciable change in mineralization was encountered in either formation. In view of the

probability that continuation of the drift will encounter the same formation, no additional work is recommended. Several attempts to find ore shoots by raising at various points along the drift met with failure. It is recommended that the loan application be denied.

Docket DMA 288, Mountain Mines Company

GEOLOGY

The mine workings are mainly in tillite and associated rocks of pre-Cambrian age which strike northwest and dip about 35° SE. These rocks are cut by the Silver King fissure which strikes N. 50° E. and an average dip of 70° NW. The fissure is a normal fault of rather small throw, but is persistent both down dip and along the strike.

The mineralized zone along the vein ranges in thickness from 1 to 48 inches. The ore was localized along the vein and occurs as narrow stringers in the quartz vein filling.

The lower drift extends westward along the fissure into pre-Cambrian quartzite of the Big Cottonwood series which are unconformably below the tillite but have roughly the same attitude here in this area.

ORE DEPOSITS

The ore occurs in stringers and pods in quartz which fills the extensive Silver King vein. The upper close to the surface yielded some low grade ore. The lower tunnel (see Fig. 2) which cuts the vein at a depth of 1,900 feet revealed considerable pyrite, but little commercial ore.

The chief ore minerals of the mine are pyrite, galena, and some secondary lead carbonate and iron oxides. The gangue is chiefly quartz.

The ore shipped from the upper workings averaged 2.5 percent lead, .21 percent copper, .8 oz. silver and .01 oz. gold to the ton. Near the surface, the ore was somewhat enriched and could be shipped at a small profit.

Shipments from the lower workings averaged .7 percent lead, .34 percent copper, .2 oz. silver, and .003 oz. gold to the ton. At current market prices this ore has a gross value of only $4.29 a ton.

It is likely that further exploratory work at depth will disclose vein material comparable in grade to the material shipped from the lower tunnel.

ORE RESERVES

There are no ore reserves of commercial value in the Mountain Mines Company workings. The stoped ore from the upper tunnels was of sub-marginal grade. The ore shipped from the lower tunnel was lower in value than the one which was shipped from the upper tunnel. Further exploratory work is not likely to find any ore of commercial grade.

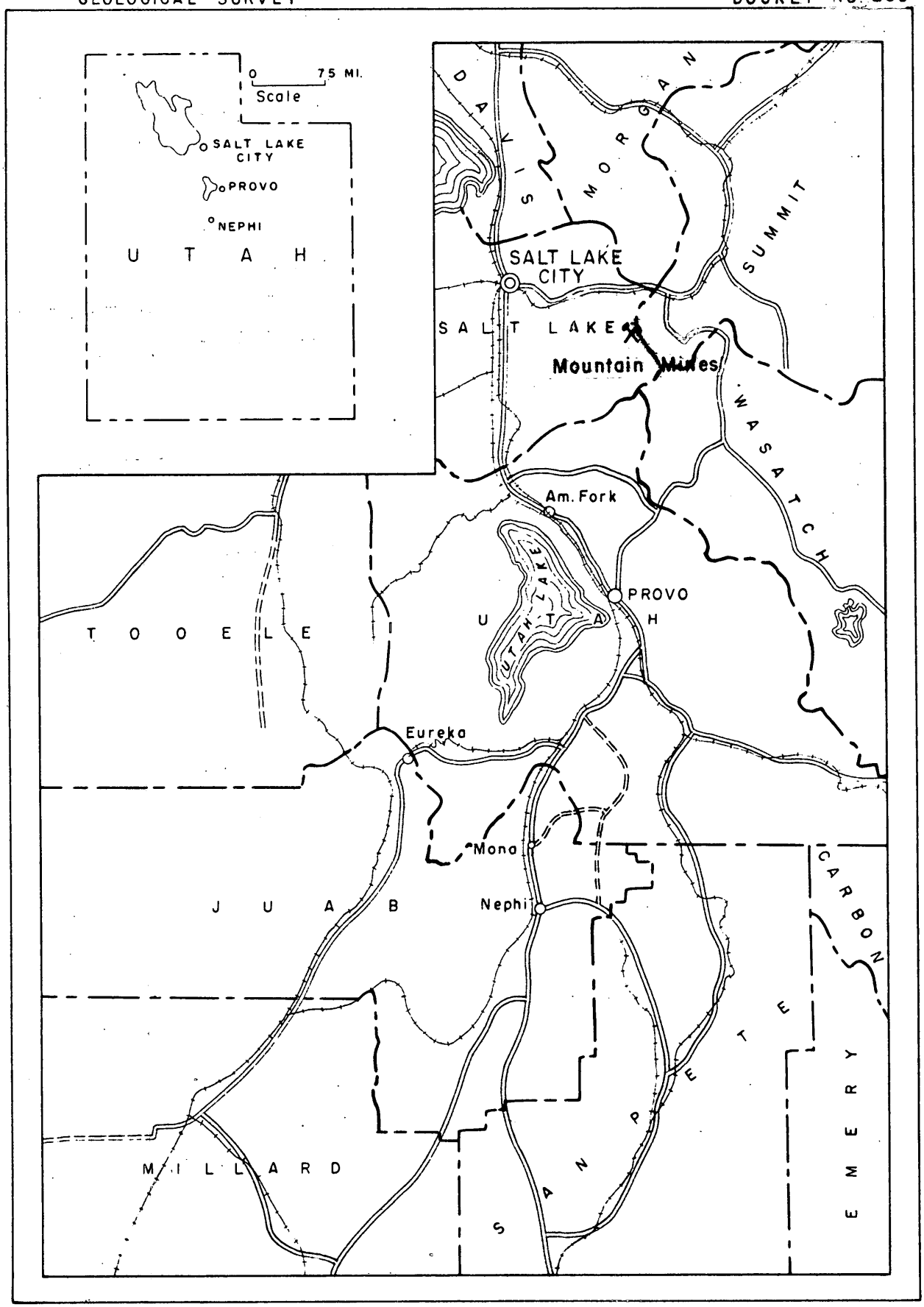


FIG. 1 INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

Docket DMA 288, Mountain Mines Company

Salt Lake County, Utah

SECTION ON GEOLOGY FOR

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The ore deposits are in stringers and pods in quartz along the Silver King vein, which strikes N. 50° E. and dips 70° NW and cuts through tillite of pre-Cambrian age. Most of the past production from this mine came from workings on the Silver King vein near the surface. According to available shipping records, the ore from these workings averaged 2.5 percent lead, .21 percent copper, .2 oz. silver, and .003 oz. gold to the ton. Pyrite is the predominent mineral in the lower tunnel.

In view of these facts, it is concluded that the possibilities for commercial ore at depth are unfavorable because the ore values are lower at depth due to increase in pyrite, and decrease in lead, copper, and silver, It is therefore, recommended that the application for an exploration loan be denied.

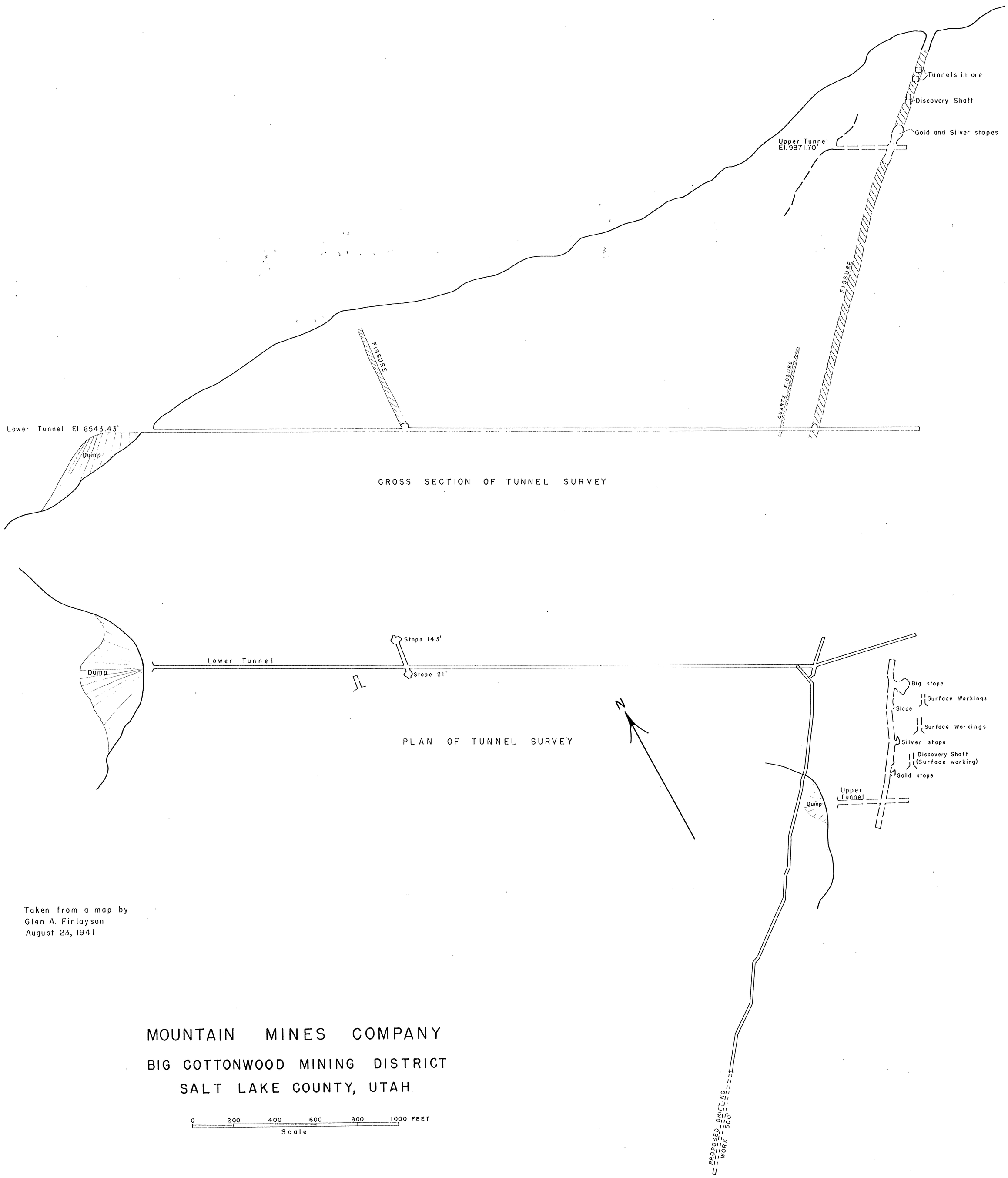
The attached paragraphs are for inclusion in the Bureau of Mines report.

SECTION ON GEOLOGY FOR PROPOSED EXPLORATION

The applicant proposes to explore the Silver King vein at the depth of the lower tunnel workings. This project includes 500 feet of drifting westward along the Silver King vein at an estimated cost of $15,000, and 600 feet of raising estimated to cost $27,600. The examining geologists are of the opinion that the program is not likely to disclose ore of commercial grade. The Silver King vein is persistent, but the ore is more pyritic and lower grade in depth.

SECTION ON GEOLOGY FOR CONSLUSIONS AND RECOMMENDATIONS

It is concluded that the exploration program proposed by the Mountain Mines Company is not geologically sound, because the ore mined from the upper tunnel of the Silver King vein was not of commercial grade. The vein at depth contains much pyrite and little commercial sulphide ore. Due to the fact that the vein shows lower grade mineralization at depth, it is recommended that the loan be denied.



Taken from a map by
Glen A. Finlayson
August 23, 1941

MOUNTAIN MINES COMPANY

BIG COTTONWOOD MINING DISTRICT

SALT LAKE COUNTY, UTAH

0 200 400 600 800 1000 FEET
Scale

FIG. 2