DMA Form 1

DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 560

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INT.-DUP. SEC., WASH., D.C. 98868

560 - American Metal Mining Company (Lead-Zinc-Copper), South Fork - Big Cottonwood Canyon District, Salt Lake County, Utah. 11/16/51 - Weather conditions prevent examination until June 1952.

FILE COPY
SURNAME:

500

Keating
Johnson
Kimball
J. Johnson

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

OCT 14 1952

Mr. Charles S. Woodward, President
American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Re: Docket No. 560
(Lead, Zinc, Copper)

Dear Mr. Woodward:

The Government has made a careful study of the data submitted in your application together with all the geological and field reports available. We have been unable to marshall sufficient evidence to permit us to reach a conclusion that the program of exploration work you proposed might be successful. Under the circumstances it has become necessary to advise you that your application for exploration project assistance is denied.

We wish to express our appreciation of the opportunity you have given us to consider your defense exploration project, and it is with regret that we have to inform you of an unfavorable decision regarding your request.

Sincerely yours,

C. O. Mittendorf
Administrator

(bw)
10-14-52

AGKeating/bw (written 10/10/52)
Copy to:
Docket
Amd. R. File
Operating Comm.
Mr. Keller (2)
Mr. Keating
Mr. Bishop
Mr. McKnight
Region IV (2)

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

500

Memorandum:

To: Administrator

From: Acting Chief, Base Metals Division

Subject: Recommendation for denial of the application of American Metal Mining Co., Docket No. DMA-560

This application was made May 17, 1951, but primarily because of the correspondence necessitated by the failure of the Applicant to properly complete the forms, a review of the application by the USGS commodity specialist was delayed until October 11, 1951. The mine examination requested in the review was postponed until the following year because of the winter. A report from the Field Team was received in this office on September 22.

In the opinion of the examining and commodity engineers there is small likelihood of finding significant bodies of ore in the area proposed for exploration.

The principal reason advanced is that ore bodies in the Cottonwood District are associated with intrusives, being found in or near their upper portions. In the American Metal Mining Company area these intrusives have been truncated by erosion and the inference is that ore bodies that might have existed were removed. Sampling of the mine at the horizon at which the proposed exploration was to have been done indicates that the mineralization is predominently pyritic and of no commercial interest.

This property was granted an R.F.C. loan in the amount of $5,000 in 1942. None of this loan has been repaid to date, though extensive exploration work has been carried on.

In concurrence with the opinions of the field engineers and Washington members of the USGS and USBM it is recommended that the application for exploration by the American Metal Mining Company Docket No. DMA 560 be denied assistance.

A. G. Keating

A. G. Keating, Acting Chief
Base Metals Division

FILE COPY
SURNAME:

500

Keating

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

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A. G. Keating
~~FXCorbett~~ bw (written 10/10/52)

/s/
A. G. Keating, Acting Chief
Base Metals Division

Copy to:
Docket
Admr. R. File
Op. Comm.
H. F. Keller (2)
~~F. X. Corbett~~ A. G. Keating
Mr. Bishop
Mr. McKnight
Chron.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~GEOLOGICAL SURVEY~~
WASHINGTON 25, D. C.

October 7, 1952

Memorandum

Re: DMA-560
American Metal Mining Co.
Big Cottonwood Canyon
Salt Lake County, Utah
Lead-zinc-copper
$65,065

To: Mr. H. F. Keller

From: E. L. Newcomb, USGS
O. M. Bishop, USBM

Subject: Concurrence with field team denial

The applicant requests Government assistance to drift 1500 feet along the Garfield and Silver King fissures on the South Price tunnel level. Additional raising will be done if favorable mineralization is found in the drifts.

The field team recommends that the applicant's proposal be denied.

The old workings consist of the Branborg and South Price tunnel levels and associated drifts and crosscuts. The ore minerals are argentiferous galena, sphalerite, and pyrite in a quartz gangue. The ore veins on the Branborg tunnel level are narrow and contain only small amounts of lead-zinc mineralization. Past production from the Branborg tunnel is unknown, but it is reported that some ore was mined 50 years ago. No ore has been produced from the South Price tunnel level.

Orebodies in the Cottonwood District are believed to have been deposited in and around the upper portions of the intrusive bodies in the area. Where these upper portions have been deeply eroded, as in the case of the area of the applicant's property, fewer possible orebodies remain. Examination of the South Price tunnel has indicated that pyrite is predominant at this depth. The assays of 3 samples taken by the field team on the Garfield fissure on the South Price tunnel level indicated that lead and zinc occur in negligible amounts. This evidence strongly indicates that significant lead-zinc orebodies are unlikely to be found on this level.

A Reconstruction Finance Corporation loan was made on this property in 1942. None of this loan has been repaid as the mine has not produced any ore even though extensive exploration work has been done on the property.

We concur with the field team and recommend that the applicant's proposal be denied.

E. L. Newcomb

E. L. Newcomb
Geologist

O. M. Bishop

O. M. Bishop
Mining Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~GEOLOGICAL SURVEY~~
WASHINGTON 25, D. C.

October 7, 1952

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Geologist

O. M. Bishop
Mining Engineer

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

224 New Customhouse
Denver 2, Colorado

September 17, 1952

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMA Docket 560, (Lead-Zinc-Copper), American Metal Mining Company, Big Cottonwood Canyon, Salt Lake County, Utah

Enclosed are the original and three copies of the report pertaining to the above application.

The field examiners concur that the applicants proposed drifting from the South Price Tunnel does not appear to be geologically sound, and they recommend that the loan be denied.

We concur in this recommendation.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

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

200 New Customhouse
Denver 2, Colorado

September 15, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 560, American Metal Mining Company, Big Cottonwood Canyon, Salt Lake County, Utah.

Enclosed are 8 copies of the geologic report by J. H. Hasler, B. J. Sharp, and D. C. Laub of the U. S. Geological Survey covering the above docket. It has been recommended that the loan be denied.

The brochure is enclosed.

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

Enclosures (9)

Room 208, 222 So. West Temple
Salt Lake City 1, Utah
10 September 1952

Memorandum

To: A. W. Koschmann

From: Ralph J. Roberts

Subject: Docket DMA-560, American Metal Mining Company, Big Cottonwood Canyon, Salt Lake County, Utah.

Enclosed are 8 copies of a geologic report on the American Metal Mining claims, Docket DMA-560, which was made in response to a request for a field examination.

The South Price Tunnel cuts through sedimentary rocks ranging in age from Mississippian to pre-Cambrian. The ore bodies follow northwest-trending fissures and consist mainly of argentiferous galena.

There are no ore reserves in the South Price tunnel and the outlook for the discovery of ore at that depth is not promising. It is therefore recommended that the applicant's request for a loan of $65,065 be denied.

I concur with the conclusions and recommendations of the examining geologists.

for - Ralph J. Roberts

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA-560, American Metal Mining Company, Big Cottonwood Canyon, Salt Lake County, Utah

J. W. Hasler, B. J. Sharp, and D. C. Laub, Geologists
U. S. Geological Survey

September 10, 1952

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Figure 1. Index Map of Utah

Docket DMA-560, American Metal Mining Company,

21 So. West Temple, Salt Lake City, Utah

INTRODUCTION

The American Metal Mining Co., has applied to the Defense Minerals Exploration Administration for a loan to be used for exploration of lead and zinc at the American Metal Mining property, Big Cottonwood Mining district, Salt Lake County, Utah.

A field examination was requested by the Field Team Region IV, October 23, 1951. The examination was made by J. W. Hasler, B. J. Sharp and D. C. Laub of the U. S. Geological Survey.

Location and Accessibility

The American Metal Mining Company property is located about 15 miles southeast of Salt Lake City in Big Cottonwood Canyon, Salt Lake County, Utah in section 30 and 31, T. 2 S., R. 3 E., Salt Lake Base and Meridian at an altitude of 8,502 feet (fig. 1). The mine can be reached by travelling up Big Cottonwood Canyon via Utah State Highway 152 to Reynolds flat, thence 3 miles south up Mill D South Fork on an unimproved road passable by automobile.

History and production

The American Metal Mining Company property consists of 24 unpatented claims, 2 patented claims, and has an option on 6 patented and 2 unpatented claims. Only three of these claims, the Charity, Satisfaction and Fortune, and included in the proposed exploration program.

The workings consist of two tunnels: (1) the Branborg tunnel which has 3,140 feet of drift and crosscuts, and (2) the South Price tunnel which consists of 4,702 feet of crosscuts. The Branborg tunnel is 623 feet higher than the Price tunnel.

The production record from the Branborg tunnel has not been made available although there was some ore mined over 50 years ago. There has been no production from the South Price tunnel. During 1942 the American Metal Mining Company received a loan from the Reconstruction Finance Corporation amounting to $5,000.00 which was to be paid back from subsequent production. To date the company has produced no ore and consequently has not paid any of the loan back to the R.F.C. The vein sampled by R.F.C. engineers in the Branborg tunnel was high grade lead ore but only averaged 7.5 inches, and at present low metal prices and high mining costs the ore cannot be mined at a profit.

GEOLOGY

The rocks in the mine area are quartzite and shale of lower Cambrian age, and Mutual grit and tillite of pre-Cambrian age. The Cambrian Ophir shale is in fault contact with limestone of lower Mississippian age. The beds strike north and dip from 40° to 45° west. The sedimentary rocks are cut by several faults which strike N. 35°-40° E. and dip 50°-60° NW. locally known as the Silver King vein, Garfield fissure and Gustus Adolphus fissure. A large fault, the West Superior fault strikes north and dips 80° east. The ore deposits are found in the northeast striking Garfield, Silver King and Gustus Adolphus fissures.

ORE DEPOSITS

The ore is found in mineralized faults which strike northeast and dip steeply northwest. The ore minerals are argentiferous galena, sphalerite, and pyrite in a quartz gangue.

In the Branborg tunnel small narrow ore bodies have been found, but according to Calkins[1] stocks that have been deeply eroded such as the Little

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[1] Calkins, F. C., Geology and ore deposits of the Cottonwood-American Fork Area, Utah: Prof. Paper 201, p. 99.

Cottonwood stock--contain only a few small ore deposits, and these are near the apex of the stock.

This suggests that the South Price tunnel is too low to find significant ore bodies. The fissure, called the Garfield fissure found in the South Price tunnel, by the applicant is 200 feet southwest of where the projected Garfield fissure should be on that level. The fault strikes S. 62° W. and dips N. 64° and has been exposed for 75 feet along the strike, and is as much as three feet thick. Three samples cut across the fault gave only negligible results.

ORE RESERVES

There are no indicated or inferred ore reserves on the Garfield fissure at this level. The Silver King vein has not been cut from the South Price tunnel, and probably lies a short distance ahead in a northwesterly direction, and no reserves can be given for the Silver King vein.

PROPOSED EXPLORATION

The applicant proposes to drift along the Garfield and Silver King fissures in the South Price tunnel for a distance of 750 feet on each, and raise at the most favorably mineralized zones found. The applicant estimated that the cost of the work would be $93,590.00.

SUMMARY AND CONCLUSIONS

The American Metal Mining Company, Salt Lake City, Utah has applied to the Defense Minerals Exploration Administration for a loan to explore for lead, zinc and silver on their property in the Big Cottonwood Mining District, Salt Lake County, Utah.

An examination was made by J. W. Hasler, B. J. Sharp and D. C. Laub as a result of a request by the Field Team Region IV.

The American Mining Company property consists of 24 unpatented claims, 2 patented claims, and has an option on 6 patented and 2 unpatented claims; of these claims, only the Charity, Satisfaction and the Fortune are included in the proposed exploration program.

During 1942, the American Mining Company received a loan from the Reconstruction Finance Corporation amounting to $5,000.00. The loan was to be paid back from subsequent production. To date the company has produced no ore and consequently the R.F.C. loan has not been paid.

Pre-Cambrian tillite and grit, quartzite and shale of lower Cambrian age which are in fault contact with limestone of lower Mississippian age underlie the mine area. Several mineralized faults that strike NE and dip steeply W. traverse the area. The bodies are found in these northeast-striking faults.

The ore bodies are small, and Calkins[1] states that stocks that have been

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as deeply eroded as has the Little Cottonwood stock contain only a few small ore deposits, and these are near the apex of the stock. This suggests that the South Price tunnel is too low to find any significant ore bodies, and the DMEA examination seems to substantiate this fact, in that these mineralized faults contain mostly pyrite at depth.

There are no indicated or inferred ore reserves on the Garfield or Silver King faults.

The applicant has proposed drifting along the Garfield fault and Silver King fault from the South Price tunnel level, and raise on the most favorable showings.

The proposed exploration program from the South Price tunnel does not appear to be geologically sound, and it is felt that the applicant should explore these faults nearer known occurrences of ore rather than go to such excessive depths on

the faults. It is therefore recommended that the application for a loan be denied.

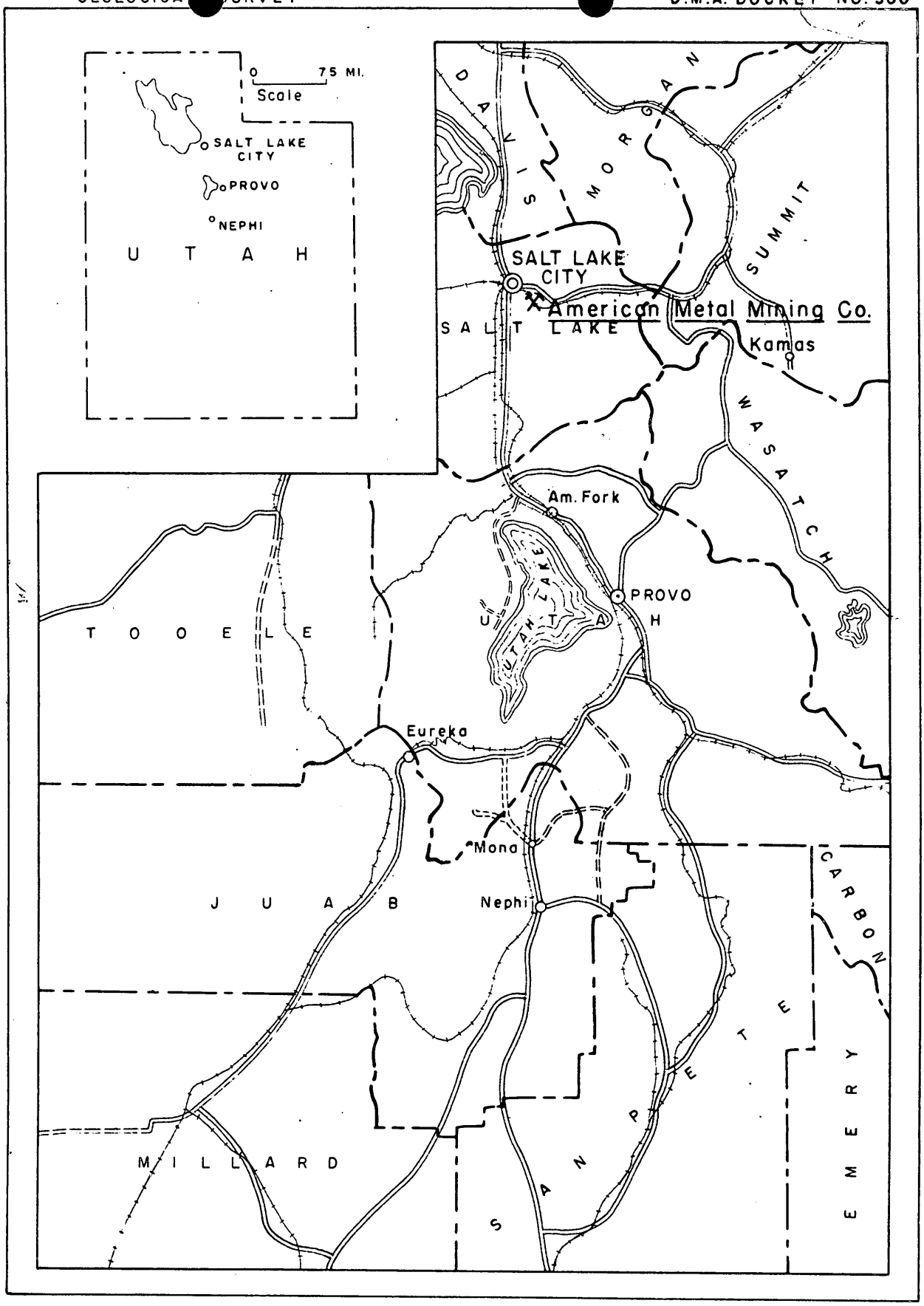

FIG. 1 INDEX MAP OF CENTRAL UTAH

0 5 10 15 20 MILES
Scale

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

224 New Customhouse
Denver 2, Colorado

September 17, 1952

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMA Docket 560, (Lead-Zinc-Copper), American Metal Mining Company, Big Cottonwood Canyon, Salt Lake County, Utah

Enclosed are the original and three copies of the report pertaining to the above application.

The field examiners concur that the applicants proposed drifting from the South Price Tunnel does not appear to be geologically sound, and they recommend that the loan be denied.

We concur in this recommendation.

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WASHINGTON 25, D. C.

200 New Customhouse
Denver 2, Colorado

September 15, 1952

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Subject: DMA Docket 560, American Metal Mining Company, Big Cottonwood Canyon, Salt Lake County, Utah.

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

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Room 204, 222 So. West Temple
Salt Lake City 1, Utah
10 September 1952

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To: A. M. Kenshington

From: Ralph J. Roberts

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The South Price Tunnel cuts through sedimentary rocks ranging in age from Mississippian to pre-Cambrian. The ore bodies follow northwest-trending fissures and consist mainly of argentiferous galena.

There are no ore reserves in the South Price tunnel and the outlook for the discovery of ore at that depth is not promising. It is therefore recommended that the applicant's request for a loan of $65,065 be denied.

I concur with the conclusions and recommendations of the examining geologists.

for - Ralph J. Roberts

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Project DMA-560, American Metal Mining Company,

Big Cottonwood Canyon, Salt Lake County, Utah

J. W. Hasler, B. J. Sharp, and D. C. Laub, Geologists
U. S. Geological Survey

September 10, 1952

Reviewed by
DMEA OPERATING COMMITTEE
9/24/52
(date)

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The workings consist of two tunnels: (1) the Bromberg tunnel which has 3,140 feet of drift and crosscuts, and (2) the South Price tunnel which consists of 4,702 feet of crosscuts. The Bromberg tunnel is 623 feet higher than the Price tunnel.

The production record from the Bremberg tunnel has not been made available although there was some ore mined over 50 years ago. There has been no production from the South Price tunnel. During 1942 the American Metal Mining Company received a loan from the Reconstruction Finance Corporation amounting to $5,000.00 which was to be paid back from subsequent production. To date the company has produced no ore and consequently has not paid any of the loan back to the R.F.C. The vein sampled by R.F.C. engineers in the Bremberg tunnel was high grade lead ore but only averaged 7.5 inches, and at present low metal prices and high mining costs the ore cannot be mined at a profit.

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The rocks in the mine area are quartzite and shale of lower Cambrian age, and Mutual grit and Tillite of pre-Cambrian age. The Cambrian Ophir shale is in fault contact with limestone of lower Mississippian age. The beds strike north and dip from 40° to 45° west. The sedimentary rocks are cut by several faults which strike N. 35°-40° E. and dip 50°-60° NW. locally known as the Silver King vein, Garfield fissure and Gustus Adolphus fissure. A large fault, the West Superior fault strikes north and dips 80° east. The ore deposits are found in the northeast striking Garfield, Silver King and Gustus Adolphus fissures.

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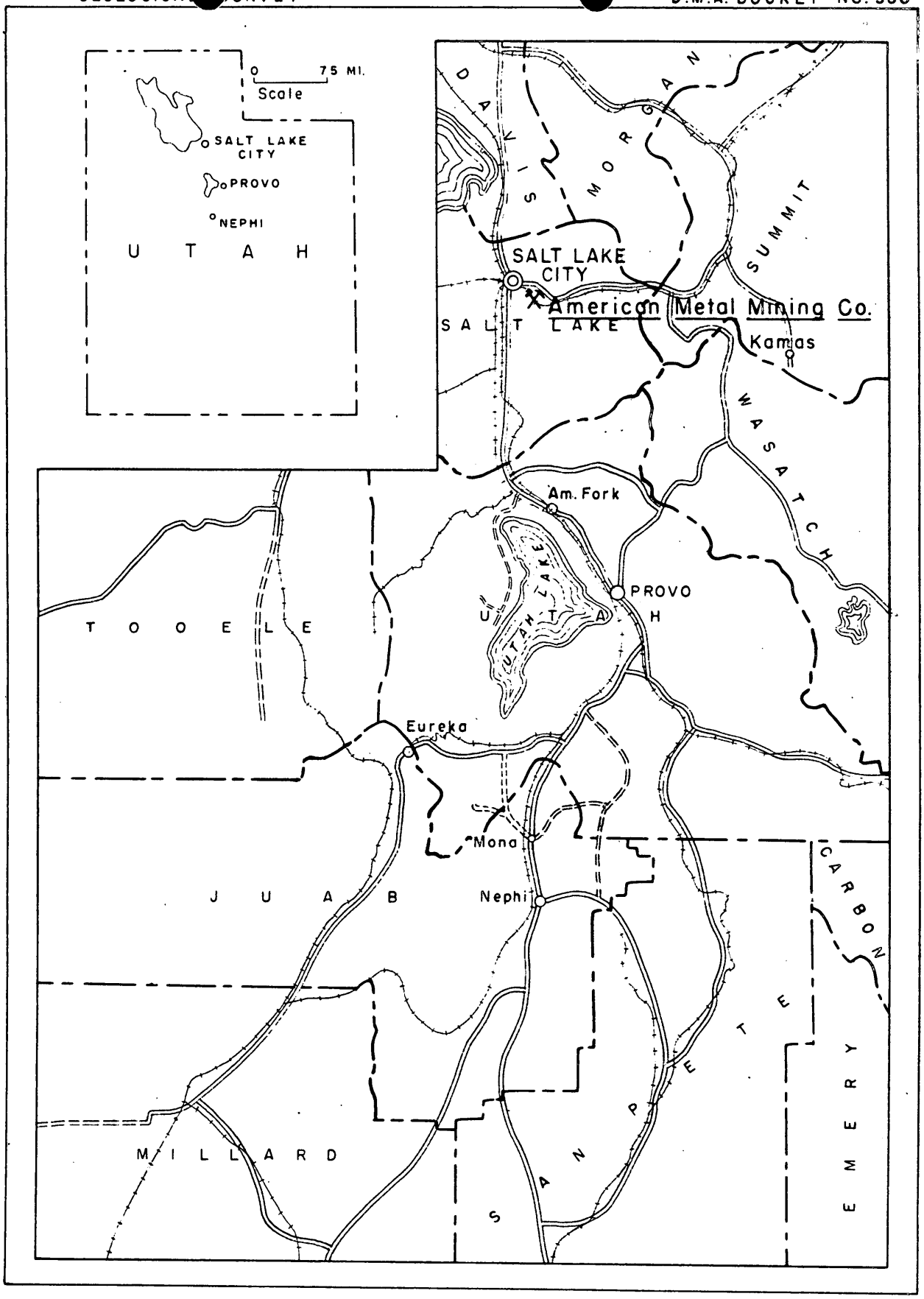

FIG. 1 INDEX MAP OF CENTRAL UTAH

0 5 10 15 20 MILES
Scale

FILE COPY
SURNAME: 350

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

Lyons (EJL)
McKnight
Bishop
Billings
Ryan

In reply please refer to: Docket DMA-560

OCT 16 1951

[redacted]

Mr. Charles S. Woodward, President
American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Woodwards

The application of the American Metal Mining Company for a loan to explore their property in the South Fork-Big Cottonwood Canyon District, Salt Lake County, Utah, has been referred to Mr. J. H. East, Jr., Executive Officer, DMA Field Team, 224 New Customhouse, Denver 2, Colorado, for further information and advice.

We had previously believed that the examination of the adjacent properties of Mountain Mines Company on the same vein, would furnish sufficient data to complete action on the application of the American Metal Mining Company. Unfortunately, the information received was not complete enough for this and we consider that a field examination will be required for an efficient appraisal.

We regret this delay and will complete action on your application as soon as the field report is received.

Very truly yours,

SIGNED
Tom Lyon, Director
Supply Division

10-17

EJLyons:emp G 10-11-51
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 r. file
DMA docket files

350

FILE COPY
SURNAME:

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

Billings
O'Leary
(for MY-2)
McKnight

DMA-560

Mr. Charles S. Woodward, President
American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

AUG 7 1951

Dear Mr. Woodward:

Your letter of July 25, 1951 with enclosed data addressed to Mr. Otto Herres has been received and referred to me. Mr. Herres, as I presume you know, is no longer with the Defense Minerals Administration.

I note from paragraph 3 of your letter that your company is carrying on a steady operation of the property which is under consideration for an exploration loan. From the request for information dated July 20, 1951, from the Requirements Division, it appears you failed to supply the necessary information required by this division as listed under items 1 to 9 inclusive in said report.

As to item 8 wherein the request states "Not in operation", this statement no doubt was predicated upon your failure to answer question 4 on Form MP-100 wherein it is asked whether or not your property is now in operation: also upon your reply to question 5 on Form MP-100 wherein you state "None", and further under this question that production "Depends on results of exploration".

Your application for exploration assistance DMA-286 has been sent to the field team for investigation of your property. Also, such investigation will provide us with the necessary information to process your DMA-560 for exploration assistance.

I am informed that the snow condition in your area has delayed the field investigation and I assure you we are endeavoring to expedite final action on your two projects. The MP-100 forms and data which you enclosed with your letter of July 25 are returned herewith. I regret these misunderstandings and the delay that has developed. If we can be of any further assistance, please call on us.

Yours very truly,

T. P. Billings, Chief
Lead-Zinc Branch

TPBILLINGS:km

cc: Reports & Records
Note
McKnight
Enclosures
DMA Docket File
8/6/51

CHARLES S. WOODWARD,
PRESIDENT

BEN B. HALL,
VICE-PRESIDENT

LOUISE M. ORTON,
SECRETARY-TREASURER

American Metal Mining Company

21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY 1, UTAH

MINES AT
BIG COTTONWOOD CANYON
SALT LAKE COUNTY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 30 1951

July 25, 1951

Mr. Otto Herres
Chief Lead-Zinc Branch
Defense Minerals Adm.
Washington, D.C.

Re: Dockett DMA-560

Dear Mr. Herres:

Some of the letters that come out of the office of the DMA is a challenge to one's intelligence. The enclosed data for instance.

From the inception of our application on Jan. 8, 1951 for a development loan, we have tried to make ourselves clear and have tried to answer all questions that you have sent to us.

Our mine is in steady operation. The expenditures are at least $2,000.00 per month. The present program is entirely one of development. The loan ask for was for the continuation of our development program. We have indicated to you that we were ready to stand one half of the expense of a project.

We have never indicated to you that our mine was not in operation. Just where did you get the impression that we were closed down. We sent to you the enclosed MF-100 forms on June 6, 1951 and have anxiously awaited your further pleasure.

If the DMA is sincere in carrying out the desires of the Congress in regard to the assistance to the Mining Industry, then we are ready, willing and anxious to do our part to try to develop the materials which are critical.

We see no point in sending the enclosed MF-100 forms back to us. We stand ready to proceed with the proposed project. It took a lot of time and effort to prepare the application for a loan and we resent very much the manner in which the matter has been handled since it was filed.

Yours very truly,

Charles S. Woodward

Charles S. Woodward, President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 30 1951
LAMBOR F. STROBEL
Executive Secretary

AUG 2 1951 5

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

DMA-560

Mr. Charles S. Woodward, President
American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Woodward:

Your letter of July 25, 1951 with enclosed data addressed to Mr. Otto Herres has been received and referred to me. Mr. Herres, as I presume you know, is no longer with the Defense Minerals Administration.

I note from paragraph 3 of your letter that your company is carrying on a steady operation of the property which is under consideration for an exploration loan. From the request for information dated July 20, 1951, from the Requirements Division, it appears you failed to supply the necessary information required by this division as listed under items 1 to 9 inclusive in said report.

As to item 8 wherein the request states "Not in operation", this statement no doubt was predicated upon your failure to answer question 4 on Form MF-100 wherein it is asked whether or not your property is now in operation; also upon your reply to question 5 on Form MF-100 wherein you state "None", and further under this question that production "Depends on results of exploration".

Your application for exploration assistance DMA-288 has been sent to the field team for investigation of your property. Also, such investigation will provide us with the necessary information to process your DMA-560 for exploration assistance.

I am informed that the snow condition in your area has delayed the field investigation and I assure you we are endeavoring to expedite final action on your two projects. The MF-100 forms and data which you enclosed with your letter of July 25 are returned herewith. I regret these misunderstandings and the delay that has developed. If we can be of any further assistance, please call on us.

Yours very truly,

T. P. Billings, Chief
Lead-Zinc Branch

TPBILLINGS:ks

cc: Reports & Records
Mote
McKnight
Enclosures
DMA Docket File

8/6/51

350

CHARLES S. WOODWARD,
PRESIDENT

BEN B. HALL,
VICE-PRESIDENT

LOUISE M. ORTON,
SECRETARY-TREASURER

AUG 20 1951

American Metal Mining Company

21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY 1, UTAH

MINES AT
BIG COTTONWOOD CANYON
SALT LAKE COUNTY

August 14, 1951

Mr. T. P. Billings, Chief
Lead-Zinc Branch
Defense Minerals Administration
Washington, D. C.

Re; DMA 560

Dear Mr. Billings:

Thank you for your very fine letter of about August 10th received and noted.

It has been a real struggle for us to keep going but we are determined that we have a good Lead-Zinc-Copper Mine if the development work can be finished. We have spent approximately $180,000.00 in developing this mine and have now reached a point in the lower tunnel where the downward extention of the upper tunnel ores should be found. We are anxious to set up a project in order to complete this work and are willing to stand 50% of the casts. Our present expense is about $2000,00 per month.

Will appreciate anything you can do to speed a decision on this application. It was sent in January 9, 1951.

Yours very truly,

Charles S. Woodward

Charles S. Woodward

AUG 20 1951

FILE COPY
SURNAME:

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

May 24, 1951

Mr. Charles S. Woodward, President
American Metal Mining Company
21 South West Temple Street
Salt Lake City, Utah

Subject: DMA-560X
Re: Exploration Loan
Hiawatha; Omaha, Blue
Bell; The Hermit etc.

My dear Mr. Woodward:

Receipt is acknowledged of your application and attachments of May 10, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-560X and was referred to Mr. Otto Herres, Chief, Lead-Zinc Branch on May 18, 1951.

In any future correspondence relating to your application, kindly refer to DMA-560X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:mab
cc: Strobel-2
Files
Herres
Lyon

a.e.c.

May 3, 1951

Ref: Docket DWA-560

Mr. Charles H. Woodward, President
American Metal Mining Company
31 South West Temple Street
Salt Lake City 1, Utah

Dear Mr. Woodward:

In reply to your letter of April 21, relative to your application, DWA-560:

The Defense Minerals Administration has recently reexamined your original application and the amendments suggested in your letter. Before we can proceed further with your application it will be necessary that certain questions involving interpretation of the data submitted be clarified.

The conclusion, outlined in our letter of April 12, that the work to be done on this proposed project would be on the Hiawatha, Omaha, Clara M., Bernard, Blue Bell, Hermit and Blue Bell extension claims, was based on your supporting documents. Exhibit "A", "Lease and Option to Purchase," covers only these claims. The copy of the R. F. C. "Borrowers' Contract," in the paragraph under the heading "Description and Mining Claims" also lists only these claims. From these data it was assumed that any exploration agreements that might be made as a result of this proposal would be on these properties. The claim map, however, shows certain proposed work on other claims, but it is not clearly stated in the application that this is all the work covered by the application.

The retirement of the R. F. C. loan with funds that might be allocated for an exploration project is not possible under the regulations governing exploration loans. The subordination of the R.F.C. lien will have to be accomplished through negotiation by the company and the R. F. C.

In order to facilitate the processing of your application, it is suggested that you complete Form MF-135, "Application for Aid for an Exploration Project", enclosed with our letter of April 12. We urge you to be specific in your answers to the questions.

A prompt return of this information will be appreciated.

Very truly yours,

L. B. Moon
H. H. Mote
L. F. Strobel
T. Lyon

J. T. Harris, Chief
Lead-Zinc Branch

A.Brokaw:comp
5/3/51 Copies to:
J. H. East, Jr. Region IV (2)
Chief, Lead-Zinc Br.
A. T. McKnight 4204 GSA

FILE COPY
SURNAME:

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

APR 12 1951

Copy to Herres
Mote

Mr. Charles S. Woodward, President
American Metal Mining Company
21 South West Temple Street
Salt Lake City, Utah

In reply please
refer to DMA-560

Dear Mr. Woodward:

One of the purposes of the Defense Production Act of 1950 is the encouragement of exploration, development and mining of strategic minerals and metals. Where an applicant has proven reserves of strategic materials, Federal aid in mining can be given through procurement contracts for such materials as are in short supply. On the strength of these contracts, the applicant can obtain private financing in most instances.

The program recently approved for encouragement of exploration of strategic materials calls for participation on the part of the applicant. For zinc, lead, and copper deposits it will be necessary to match Government funds on an equal basis. Funds advanced by the Government will be considered a loan, to be repaid if the exploration is profitable, but to be canceled if unsuccessful. The details of the plan, explaining the projects that will be eligible for assistance, the terms and schedules of financing, repayment, and other pertinent information, are enclosed.

A review of your application (DMA-560) for financial aid in an exploration and development program on the Hiawatha, Omaha, Clara M, Barnard, Blue Bell, The Hermit and Blue Bell Extension claims indicates that part of your proposal may be considered under this exploration program. Details concerning expenditures that will be considered chargeable to exploration aid will be subject to a final determination by negotiation, but as a preliminary appraisal, we believe that the program will apply to $93,250.00 of your total request.

Before we can proceed further with consideration of your application, which may or may not require a field examination, please indicate your willingness to provide your share of the funds needed to carry out the proposed exploration. Any modification of your original proposal that you may wish to make will be considered, but you should be specific concerning the work you wish to undertake.

EJLyons:emp G 4/10/51
Copies to: J. H. East, Jr. Region IV (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
L. B. Moon
R. H. Mote
L. F. Strobe Enclosures
C.O. Mittendorf
Files

Very truly yours,

Otto Herres

OTTO HERRES, Chief
Lead-Zinc Branch

McKnight

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

Mr. J. H. East, Jr.
Executive Officer, DMA Field Team
Region IV
224 New Customhouse
Denver 2, Colorado

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. DMA-560

Commodity Lead, zinc, copper

Applicant Charles S. Woodward, President, American Metal Mining Co.
21 South West Temple Street, Salt Lake City 1, Utah.

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-560

Commodity Lead-Zinc-Copper

Total Amount $93,590

Govt. Participation 50% ($46,795)

1. Name and Address of Applicant Charles S. Woodward, President, American Metal Mining Company, 21 South West Temple Street, Salt Lake City 1, Utah

2. Location of Property South Fork-Big Cottonwood Canyon, Salt Lake County, Utah

3. Mineral or metal Lead, zinc, copper Is it listed in Section 9 of MO-5?

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination X

e) Is there an alternative and favorable project? Don't know
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Does not apply

Does the lease have sufficient time to run to cover a future productive period? Does not apply

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202 _____

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower _____

b) Equipment and supplies _____
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* _____

d) Water (question 13)* _____

e) Power (question 13)* _____

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Don't know

Is a field check needed on this point? Yes

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Yes

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is? _____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable? Don't know

f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? No

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? Don't know

d) Is a field check needed? Yes

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed? Don't know

c) Is the schedule excessive for the work proposed? " "

d) Are the proposed wages and salaries reasonable? " "

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? The description of the project is not clear. The proposed work shown on the maps does not appear to be well planned on the basis of information furnished. If a geologic examination determines that further exploration is not warranted, mining methods and costs need not be investigated.

The following material is attached:

1 copy of Form NSRB-146
1 " " " MF-103
7 Exhibits
Correspondence

Reviewed by: Erwin J. Lyons - GS

Date 10-11-51

INT.-DUP. SEC., WASH., D.C. 99009

Mr. Herres

Docket No. DMA- 560

Commodity: zinc lead and copper

Name of Applicant: American Metal Mining Company (Charles S. Woodward, president)

Address of Applicant: 21 South West Temple Street Salt Lake City, Utah

Name of Property: Hiawatha; Omaha; Clara M; Barnard; Blue Bell; The Hermit; and Blue Bell Extension unpatented mining claims

Location of Property: Salt Lake County, Utah

Nature of Application: Loan of $100,000

Action Dates

Application: 1/26/51

Received: 1/31/51

Acknowledged:

Referred to LEAD-ZINC Committee: 2/6/51

LANDON F. STROBEL

AMERICAN METAL MINING COMPANY
31 SOUTH WEST TEMPLE STREET
SALT LAKE CITY, UTAH

SUPPLEMENTAL INFORMATION

The present group, who hold the controlling interest of American Metal Mining Company, acquired control of the stock in 1942.

A loan was secured from R.F.C. in the amount of $5,000.00 to clean out the caved portions, and re-timber the old upper levels of the Mine (or Branborg workings). This work was completed in 1943. The result was, it was found, that the old timers had developed and mined considerable high grade silver, lead, copper and zinc ores and there remained a good ore showing both on the Fairfield and Silver King veins. See Exhibits "1" showing samples taken by F.R.G.W. Crane of R.F.C. and also by our company.

HERRES 2-6-51

dmd 560

Owing to the bad condition of the Branborg workings and the heavy flow of water, it was decided to drop down to the canyon level and drive a long drainage and development tunnel. $190,000.00 has been spent since 1943 in this work. See working map or Exhibit "2". This work has now reached a point directly under the ore showings in the Branborg tunnel - the lower tunnel being 625 feet below the Branborg Tunnel. About 400 gallons of water per minute are flowing from the lower, or South Price tunnel.

A District Map is enclosed showing relationship of American Metal property to other Mines in district. See Exhibit "3". The Big and Little Cottonwood Districts have produced to date approximately $40,000,000.00.

A good dirt road has been constructed from the main Big Cottonwood Highway to the mine, a distance of three miles. The U. S. Smelting Company Plant is located at Midvale, Utah, just 23 miles west of the mine, in Salt Lake Valley.

It will require approximately 18 months to complete the proposed development.

Charles S. Woodward is manager and Frank Yanchar is Superintendent.

The management has had a lifetime experience in developing mines in Utah, Nevada and Idaho.

The property is best reached from Salt Lake City, Utah.

The equipment now on the property consists of the following:

2 - four room homes for living quarters.
Ample Mine buildings
1 - W.B.Q Gardner - Denver Compressor - 285 Cu. Ft. and driven by 50 H. P. Electric Motor.
1 - Ingersol j - 3 Bit Grinding Machine.
Blacksmith Shop.
2 - D - 89 Gardner - Denver Automatic Feed Drifters
1 - Gardner - Denver Leader
1 - Gardner - Denver Stoper
1 - Gardner - Denver Jack Hammer
2 - Ventilator Fans
14- 18 Cu. Ft. Mine Cars - Fair Condition
Rails, pipe, steel and tools necessary to complete 200 feet drifting.
For schedule of new equipment see Exhibit No. 4.

The Blue Bell, Gravel Bed, Clara M. Barnard, Hiawatha and Omaha, are Patented

Claims, and are owned by Price Mining Company, a Utah Corporation. The Mountain Mines Company has held under option the above named six patented claims. A new option and lease was granted on January 22, 1951. This Lease and Option was assigned to the American Metal Mining Company together with a Lease and Option on two unpatented claims, known as the Hermit and Blue Bell Extention - See Exhibit "7".

The Price Mining Company has given the American Metal Mining Company a Right of Way through the South Price Tunnel and also permanant surface rights on portions of the Blue Bell and Gravel Bed Patented claims. This Right of Way agreement is dated January 22, 1951 - See Exhibit "8".

The main South Price Tunnel has now been extended into that portion of the property where important developments can be expected very soon.

The ore reserves cannot be estimated at this time, as the ore deposits have not yet been found at the South Price Tunnel level. This tunnel is 625 feet vertically below the Branborg tunnel where the ore deposits are showing and where the old timers mined ores over 50 years ago.

This peoposed development is most important as it will determine the existence of ore deposits at the South Price tunnel level and will also tend to encourage other companies in the district to explore to greater depths.

The company owns 24 unpatented claims and 2 patented claims - approximately 500 acres. It also has the option on 6 patented and 2 unpatented claims as indicated in Exhibit "7".

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 560 X

Date received 5-17-51

Participation

AMERICAN METAL MINING COMPANY
21 SOUTH W. TEMPLE STREET
SALT LAKE CITY 1, UTAH

Name and address of applicant

Date May 10, 1951

FILL IN THIS BLOCK

Date of application January 8, 1951

Estimated cost $95,590.00

Mineral or metal Lead-Zinc-Copper

Percentage of Government participation 50%

Location of mine South Fork- Big Cottonwood Canyon, Salt Lake County, Utah.

Date of filing MF-100 January 8, 1951

DMA Docket Number, if available DMA-560

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

Mine is not on Production.

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

American Metal Mining Company
(Name of company)

By Charles L. Woodward
(Signature of authorized official)

May 10, 1951
(Date)

President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

American Metal Mining Company
21 South W. Temple Street
Salt Lake City 1, Utah

Supplemental Information not made clear in application filed January 8, 1951.

Docket DMA- 560

- - - - - - - - - - - - - - - - - -

The following numbers to questions on Form MF-105 are made clear herewith:

6. We are the owner of all property through which and upon which the proposed work is to be done under our application for a development loan.

7. No work will be done on the claims held under Option to Purchase Agreement- See Exhibit "7" formally submitted, Covering Hiawatha, Omaha, Clara M., Barnard, Blue Bell, Hermit and Blue Bell Extention. These claims were only optioned pending the outcome of present development. The agreement was submitted because we thought you wanted to know what claims, if any were optioned by the company.

10. The only mining claims where the proposed development will be done are as follows:

CHARITY, SATISFACTION and FORTUNE. Unpatented claims owned by the company.

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1. A lower development and drainage tunnel is being run to provide drainage and a deep tunnel for prospecting the lower regions of the property. This tunnel has now reached a point where the veins developed in the upper levels of the mine should be found. In fact, we believe that the Silver King Vein has been found but the present work consists of-trying to locate the Garfield vein. Soon as this vein is found, then we propose to drift along each vein in search of the ore shoots, for a distance of 750 feet on each vein. We also propose to raise at the most favorable spot toward the upper levels of the mine.

2. Under existing conditions, we propose to do all tunnel and raise work under contract- the contractor to pay all Compensation Insurance, Un-employment Insurance premiums and comply with all other Federal & State requirements. The contractor to keep 50% of the net Smelter Returns on all ores taken from the dimensions of the drifts or raises being run, if they will save the ore. The company to furnish all tools and equipment, air, blasting supplies and etc. and pay for the work as outlined below:

REQUIREMENTS AND COSTS

Estimated cost of Project		$93,590.00
Bits and Drill Steel	$2,350.00	
Seven Mine Cars	1,365.00	
Air Ventilating Pipe	1,580.00	
One Gardner-Denver Loader	3,095.00	
Freight to Mine	100.00	

Omaha 560 (Cont.)

856

American Metal Mining Company- Continued

1500 feet tunnel work	$14,250.00
700 feet Raises	9,975.00
Manager Salary (2 Years)	3,600.00
Compressor Man (2 Years)	7,200.00
Engineering (2 Years)	3,600.00
Equipment Rental (2 Years)-To Company-	22,000.00
Blasting Supplies-- Overall	14,000.00
Misc. Expense -- Overall	10,475.00
Estimated Total	$ 93,590.00

The above estimate is based upon a two year program of actual development, after the approval of the loan. This is calculated on a one shift per day basis.

The $8,490.00 item for supplies and equipment needed should be available soon as loan is approved. The balance of $85,100.00 should be available on a basis of $3,500.00 per month.

It will not be necessary to spend money for buildings and repairs unless something unforseen happens. The Misc. Expence item should provide for any immergency.

Respectfully submitted,

American Metal Mining Company,

Charles S. Woodward

By, Charles S. Woodward, President

AUG 21 1951

Hold

To Mac to handle

this docket was being held for a receipt on the Mayflower which adjoins. By 522 ↑ the docket, the Am. Flag Mine, they were sent the "inactive" letter.

·500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE AUG 20 1951

REFERRED TO:

1. 350 3618
2.
3.
4.

FOR:

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

REMARKS:

Check (X) before the items needing attention.

ROBERT E. ADAMS REA

Initials of sender.

GPO 16—63815-1

Form MF-103
(April 1951).

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 560 X

Date received 5-17-51

Participation

AMERICAN METAL MINING COMPANY
21 SOUTH W. TEMPLE STREET
SALT LAKE CITY 1, UTAH

Name and address of applicant

Date May 10, 1951

FILL IN THIS BLOCK

Date of application January 8, 1951

Estimated cost $93,590.00

Mineral or metal Lead-Zinc-Copper

Percentage of Government participation 50%

Location of mine South Fork-Big Cottonwood Canyon, Salt Lake County, Utah.

Date of filing MF-100 January 8, 1951

DMA Docket Number, if available DMA-560

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

Mine is not on Production.

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

American Metal Mining Company
(Name of company)

By Charles S. Woodward
(Signature of authorized official)

May 10, 1951
(Date)

President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

American Metal Mining Company
21 South W. Temple Street
Salt Lake City 1, Utah

Supplemental Information not made clear in application filed January 8, 1951.

Docket DMA- 560

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The following numbers to questions on Form MF-103 are made clear herewith:

5. We are the owner of all property through which and upon which the proposed work is to be done under our application for a development loan.

7. No work will be done on the claims held under Option to Purchase Agreement- See Exhibit "7" formally submitted, Covering Hiawatha, Omaha, Clara M., Barnard, Blue Bell, Hermit and Blue Bell Extention. These claims were only optioned pending the outcome of present development. The agreement was submitted because we thought you wanted to know what claims, if any were optioned by the company.

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It is very difficult to outline definitely the work proposed for the following reasons:

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2. Under existing conditions, we propose to do all tunnel and raise work under contract- the contractor to pay all Compensation Insurance, Un-emp loyment Insurance premiums and comply with all other Federal & State requirements. The contractor to keep 50% of the net Smelter Returns on all ores taken from the dimensions of the drifts or raises being run, if they will save the ore. The company to furnish all tools and equipment, air, blasting supplies and etc. and pay for the work as outlined below:

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American Metal Mining Company- Continued

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Blasting Supplies-- Overall	14,000.00
Misc. Expense -- Overall	10,475.00
Estimated Total	$ 93,590.00

The above estimate is based upon a two year program of actual development, after the approval of the loan. This is calculated on a one shift per day basis.

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Respectfully submitted,

American Metal Mining Company,

Charles S. Woodward

By, Charles S. Woodward, President

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 560 X

Date received 5-17-51

Participation

AMERICAN METAL MINING COMPANY
21 SOUTH W. TEMPLE STREET
SALT LAKE CITY 1, UTAH

Name and address of applicant

Date May 10, 1951

FILL IN THIS BLOCK

Date of application January 8, 1951

Estimated cost $93,520.00

Mineral or metal Lead-Zinc-Copper

Percentage of Government participation 50%

Location of mine South Fork- Big Cottonwood Canyon, Salt Lake County, Utah.

Date of filing MF-100 January 8, 1951

DMA Docket Number, if available DMA-560

INSTRUCTIONS

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16—64067-1

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CERTIFICATION

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American Metal Mining Company (Name of Company)

By Charles S. Woodward (Signature of authorized official)

May 10, 1951 (Date)

President (Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

American Metal Mining Company
21 South W. Temple Street
Salt Lake City 1, Utah

Supplemental information not made clear in application filed January 8, 1951.

Docket DMA- 560

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American Metal Mining Company- Continued

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Respectfully submitted,

American Metal Mining Company,

Charles S. Woodward

By, Charles S. Woodward, President

EXHIBIT "1." dmi 5

MR HERBERT M. FAY
RECONSTRUCTION FINANCE CO.
DOOLEY BLDG.
CITY

AUGUST 26, 1943
SALT LAKE CITY, UTAH

CERTIFICATE OF ASSAY

DEASON & NICHOLS
ASSAYERS AND CHEMISTS

DESCRIPTION		NO.	GOLD OZS.	SILVER OZS.	WET LEAD	COPPER	ZINC
I.R.G.W. Crane Garfield Vein Bramborg Tunnel							
Cut	12""	1	0.01	5.36	7.50		9.21
Cut	3"	2	0.01	8.26	14.00	shows	33.20
Cut	5"	3	0.005	12.42	19.05		24.40
Cut	7"	4	0.005	4.40	4.70		3.00
Cut	6"	5	0.015	22.36	35.40		3.00
Silver King Cut	6"	6	0.01	11.40	12.10	shows	2.50

CHARGES $18.00

C. IVAN NICHOLS

66

SAMPLES TAKEN FROM

BRANBORG WORKINGS OR UPPER LEVEL

AMERICAN METAL MINE
BIG COTTONWOOD CANYON

GARFIELD VEIN

No.	Ozs. Gold	Ozs. Silver	% Lead	% Copper	% Zinc
1	Tr	22.0	34.8	.30	4.9
2	Tr	18.4	33.4	.41	25.8
3	.02	16.4	26.5	.09	15.4
4	.02	14.2	18.6	.20	27.0
5	Tr	20.6	28.8	.40	14.3
6	Tr	28.1	37.0		11.5
7	.02	20.0	21.0		1.9
8	.01	3.7	5.1		15.1
9	.01	5.36	7.50		9.21
10	.01	8.26	14.0		33.20
11	.005	12.42	19.05		24.40
12	.005	4.40	4.70		3.00
13	.015	22.36	35.40		3.00
14	.01	26.0	25.2	1.4	20.9
15	.01	24.4	39.8	1.0	6.6

SILVER KING VEIN

1	Tr	19.6	16.2	0.2	15.5
2	Tr	20.7	15.2		11.4
3	.01	12.7	8.4		3.9
4	Tr	40.8	41.6		12.1
5	.01	11.4	12.1		2.5
6	.02	74.2	22.0	5.92	6.6
7	.01	68.4	51.8	3.19	4.6
8	.01	48.2	68.6	.5	3.2

GUSTAVE ADDLPHUS VEIN

1	Tr	68.8	74.6		3.7 (Brnches
2	Tr	49.2	36.0		(Through vein (on surface

LOAN AGENCY OF THE

RECONSTRUCTION FINANCE CORPORATION
504 DOOLY BUILDING SALT LAKE CITY 1, UTAH

January 5, 1951

American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Attention: Mr. Charles S. Woodward, President

Re: Docket No. C-ND-7603
Loan No. 485

Gentlemen:

Agreeable with the request contained in your letter dated January 4, 1941, we are pleased to enclose five copies of Borrower's contract in connection with the captioned loan.

Inasmuch as this loan has been administered and serviced by the Washington Office of the Corporation, we are communicating with that office to obtain a statement of the amount of indebtedness, and shall furnish you with this information as soon as available.

Very truly yours,

Signed L. C. Anderson
Manager

Enclosures

R.F.C. LOAN AGREEMENT

BORROWER'S CONTRACT

In consideration of loan to undersigned by Reconstruction Finance Corporation (RFC) of $5,000 to clean out and retimber a crosscut tunnel and shafts and to install equipment at the mining property described at the foot hereof, undersigned agrees that the net proceeds of operation of said mining property over operating costs, and proceeds from sale of equipment acquired with loan or operation funds, shall be applied to repayment, at the written direction of the Chief, Self-Liquidating Division of RFC (Division Chief), until the said sum is repaid to RFC, at the Salt Lake City Branch of the Federal Reserve Bank of San Francisco, with interest at 6% per annum, payable semi-annually on January 1 and July 1. To assure that the loan will not be used for any other purpose, undersigned agrees that it shall be deposited in First National Bank Salt Lake City, Utah, Depositary, in a special account designated "American Metals Mining Company RFC Account", subject to withdrawals by undersigned only in accordance with written requests of undersigned, approved by RFC Supervising Engineer and filed with the Depositary, itemizing purposes and amounts currently required. As security for net proceeds and for application to repayment, undersigned, in so far as its lease-option contracts permit, grants and conveys to RFC lien on said equipment and on its interest in the minerals, in place and severed, and on the proceeds of sale thereof, and agrees (1) that all such proceeds shall be paid into the said Account, subject to like withdrawal and application, (2) that in so far as Division Chief deems essential to such security, RFC may inspect and supervise, and may conduct operations, directly or by contract, with use of all equipment, and (3) that undersigned will give further assurances upon request, including specific chattel mortgages on such equipment after same is acquired. Undersigned does not undertake to repay in any other manner, but withdrawals may be suspended by written notice to the Depositary by the Supervising Engineer or by Division Chief, and the whole or any part of the amount in said Account may be applied to repayment, at the written direction of Division Chief, at any time Division Chief is of opinion that such part or whole is not required for the purposes of the loan, or that further expenditure will not accomplish the purposes of the loan nor result in net proceeds.

Dated September 10, 1942.

AMERICAN METALS MINING COMPANY
a corporation

BY (Signed) Charles S. Woodward
President

(CORPORATE SEAL)

Attest: (Signed) Louise H. Orton
Secretary

DESCRIPTION OF MINING CLAIMS

Patented mining claims: Hiawatha; Omaha; Clara M; Barnard; all being U.S. Survey #4465; Gravel Bed U.S. Survey #6364 and Blue Bell, U.S. Survey #6549 and also the Hermit and Blue Bell Extension unpatented mining claims, all the foregoing being in Big Cottonwood Mining District, Salt Lake County, State of Utah.

Approved by (Signed) Herbert M. Fay, Supervising Engineer
Herbert M. Fay
Dooly Building
Salt Lake City, Utah

COPY

EXHIBIT "4"

Jan. 8, 1961

American Metal Mining Co.
21 South West Temple
Salt Lake City, Utah

Attention: Mr. Chas. S. Woodward

Gentlemen:

In line with our conversation today, we take pleasure in quoting you as follows upon the equipment which you propose to install at your property in Big Cottonwood Canyon:

AIR COMPRESSOR

1 - Class WBQ Gardner-Denver stationary water-cooled air compressor complete with pilot for constant speed control - with grooved sheave and V-belt drive.
Approximate shipping weight 3800 lbs.
Price FOB Quincy, Illinois $2116.40

1 - 50 HP, 1200 RPM, 3 phase, 60 cycle, 440 volt, open-type electric motor.
Price FOB Salt Lake City, Utah . . . . . $ 947.00.

1 - G.E. or equal magnetic across-the-line starter for above motor.
Price FOB Salt Lake City, Utah . . . . . $ 92.40.

DRILLING EQUIPMENT

1 - Model R94 Gardner-Denver wet self-rotated stoping drill complete with 1" Q.O. chuck.
Price FOB Salt Lake City, Utah . . . . . $ 670.00.

50 - 1-5/8" Timken MCA CS Carbide Bits.
Price FOB Salt Lake City . . . . . $ 12.10 each.

100 - 2" Timken MCA CS Carbide Bits.
Price FOB Salt Lake City . . . . . $ 14.20 each.

DRILLING EQUIPMENT Cont'd.

1-1/8" Round Hollow Drill Steel made up with lugged shanks and Timken H threads as follows:

12 - 2' lengths - Price FOB Salt Lake City	$5.30	each
12 - 4' " " " " " "	7.50	"
12 - 6' " " " " " "	9.70	"
6 - 8' " " " " " "	12.10	"

MISCELLANEOUS

12 - Z18 Card Iron Works Timken roller-bearing mine cars for 18" gauge track - capacity 18.7 cu. ft.
Price FOB Salt Lake City . . . . . $195.00.

500' - 1/2" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 10.38 per 100'

500' - 1" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 20.09 " "

1000' - 2" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 42.98 " "

1000' - 10" diameter galvanized ventilation pipe 24" gauge.
Price FOB Salt Lake City . . . . . $ per 100'

Bulletins of the CBQ Air Compressor and the Model R94 Stoping Drill are attached.

Most of this equipment is available from Salt Lake stock and reasonably prompt delivery can be made of the remainder.

Very truly yours,

GARDNER-DENVER COMPANY

By J. Mathesen
District Manager

FBR:IM
Enc.

AMERICAN METAL MINING CO.
21 SOUTH WEST TEMPLE ST.
SALT LAKE CITY, UTAH

EXHIBIT "5"

No engineers reports are available. Ray E. Marsell, Geologist, at the University of Utah has taken care of the geological work since 1942. His last letter to the company, is attached herewith.

Following is a quotation from Professional Paper 201 by U. S. Geological Survey, by F. C. Calkins and B. S. Butler - 1943, Pages 106 and 107.

AMERICAN METAL MINING COMPANY

A group of claims formerly owned by the American Consolidated Copper Co. but now owned by the American Metal Mining Co., lies on and near Montreal Hill. The country rock consists of the Tintic quartzite, the Ophir formation, a few feet of the Maxfield limestone, most of which is cut out on an unconformity, the Jefferson (?) dolomite, and the Madison limestone. Most of the ground lies west of thw West Superior fault, and all the development up to 1920 had been done in that part of the ground. In 1920 development work by way of the Tar Baby lower tunnel was begun, and it was being carried on as late as 1936. (See below and pl. 33.)

The area is crossed by seveml fissures, among the most prominent of which are the Garfield, Silver King, and Gustavus Adolphus. All of these strike No. 35° 40° E. and dip 50°-60° NW. Another fissure, probably a branch of the Garfield, strikes No. 10°E. and dips about 60° W. The old tunnel, now caved, is mainly in the Tintic quartzite but passes through considerable shale. The Garfield fissure and its branch carry ore containing pyrite, sphalerite, and galena in a quartz gangue. The fissures have been cut by a long adit, and the Garfield fissure has been followed by drifts to the southwest and northeast. Northeastword it pinches at the contact between the quartzite and the shale. No prospecting for a continuation of the fissure in the limestone above the shale had been undertaken, but shallow pits inthe limestone had revealed small quantities of lead carbonate with a high silver content, which may be connected with northeasterly fissures. The Silver King fissure was cut by the tunnel 1,200 feet from the portal. In the summer of 1916 a short drift on this fissure exposed vein quartz and a little sulfide. The ore in the Gustavus Adolphus fissure shows the same type of mineralization but contains less zinc and more silver than that from the Garfield fissure. Small amounts of oxidized ore mined from shallow workings are said to have yielded 1,000 ounces of silver to the ton, but the oxidized ores are very superficial and almost negligible.

Prospecting had been done to the north of Montreal Hill, but at the time of visit this work was not accessible. So far as learned, no large bodies of ore had been encountered.

TAR BABY WORKINGS

The Tar Bay property has been worked, in the main, through the Tar Baby lower tunnel, on Mill d South Fork northeast of Montreal Hill, and the same tunnel has also been used for some years bythe American Metal Mining Co. At the end of 1936, about 5,000 feet of work had been done from this tunnel in Tar Baby ground and 2,000 feet in American Metal ground, Work was then being done only in the American Metal branch. The upper Tar Baby tunnel, close to the road and 250 feet higher than the lower, is about 1,900 feet long. It is now caved, but it was open some years ago and was then plotted by pacing traverse. The more recent development has been done through the Tar Baby workings.

GEOLOGY

The surface of the Tar Baby and American Metal holdings is mantled in greater part with talus, moraine, and alluvium; but there are some good exposures near the creek and on the slope to the east. The gorge of the creek near the working tunnel is partly eroded along a fault, believed to be the East Superior, that brings cherty Deseret limestone against Cambrian rocks which are further dislocated by other faults. The geology of the properties can best be studies, however, in the workings, which reveal a surprising complexity of structure.

The rocks exposed, both underground and on the surface, include all the sedimentary formations from Tintic quartzite to Deseret limestone and a single dike, consisting of granodiorite porphyry, which is sometimes called the Tar Baby dike. The dips of the sedimentary rocks are almost everywhere eastward; the westward dip of the Ophir limestone about 200 feet south of the portal is a reverse dip. The dips vary widely in steepness, and the strike departs considerably in places from its average of about north-northwest, but no definite folds can be traced.

The structure is especially characterized by faulting, and the greatest of the faults is the uper Alta overthrust, which in the southern part of the Tar Baby workings has been explored on three levels. Here the hanging wall of the overthrust is Tintic quartzite and the footwall Deseret limestone, as in a large part of the Cardiff mine. In the drift along the overthrust to the north, the hanging wall is still quartzite and the footwall limestone; but some of this limestone appears to be older than Deseret. It is uncertain whether these older rocks come in because the bedding of the limestone converges northward with the fault or because branch overthrusts diverge northward from it; the later hypothesis appears the most probable in view of what is desclosed in the more northerly workings. At any rate the overthrust apparently bends eastward, on a very short curve, near the middle of the workings, and in the drift that follows it eastward its footwall consists of Ophir shale. The Tab Baby dike here follows the contact for a short distance.

The overthrust has this same easterly course in the upper tunnel, where the hanging wall is quartzite and the footwall consists of Ophir shale and Maxfield crosscut extending eastward from the lower tunnel.

In the northern part of the lower workings there are a few reverse faults of low or moderate eastward dip whose handing walls are of Ophir sahle or Maxfield limestone. These faults are presumably lower branches of the Alta Overthrust, corresponding to those exposed in the cliff above the Drederick tunnel. One reversefault contact near the entrance to the American Metal branch dips westward and possibly represents the west limb of an arch in the thrust surface; but in that case the footwall rocks would presumably also be arched, and so far as observed they all dip eastward. This contact, then, may represent a different, west-dipping overthrust, one or two of which have been found in other workings.

The East Superior fault has not been positively identified in the Tar Baby workings, which presumably cross it, but what seems to be its most probable location is indicated on plate 33. The West Superior fault, on the other hand, is readily recognizable where it is crossed by the American Metal branch of the tunnel near its western end. It here has two branches, both nearly vertical, the western one of which has the greater throw; and the aggregate effect of the movement has been to bring Jefferson limestone on the east down against Tintic quartzite on the west. The Tar Baby dike, also is cut off and, to judge from its few surface outcrops, probably offset northward on the west side of the fault.

Both the American Metal and the Tar Baby branches, near their inner ends, cross fault contacts of low dip. These presumably are on a single fault, which has not been recognized on the surface. The fault is almost certainly normal; at its western crossing its footwall is quartzite and its hanging wall limestone that seems most probably to be Cambrian; at its eastern crossing its footwall in Mississippian limestone and its hanging wall quartzite, presumably that above the Alta overthrust, which is so well exposed nearby.

MINERALIZATION

Ore has been mined at several places in the lower workings from both properties, but no large ore body has yet been developed.

The conditions most favorable to the formation of such a body would have seemed, beforehand, to be present in the ground explored by the southermost of the Tar Baby workings. Here, as in the most productive part of the Cardiff mine, the Alta overthrust has brought the Tintic quartzite in contact with the Deseret limestone and is cut by fissures of northeasterly strike. Several car-

loads of ore is said to have been taken from one of the fissures, but unfortunately the mineralization does not, to any great extent, either, penetrate the quartzite or bed out along the contact. Years ago some ore consisting partly of galena was taken from a raise where the overthrust bends eastward and is cut by the dike, but the precise relations and amount of this ore were not determined. All the ore taken from the Tar Baby property appears to have been taken from places near the main, or upper, Alta overthrust.

In the American Metal property, the quartzite hanging wall of this overthrust has been eroded away. Minor trust faults lower in the thrust zone are cut by the workings east of the West Superior fault, but west of that even these have been removed by erosion. Good ore is said to have been taken from several places in these workings. Most if not all of it seems to have come from steep fissures rather than from bed deposits. The westermost and highest raise in the mine in 1936, followed the intersection of two fissures west of the West Superior fault.

DEPARTMENT OF GEOLOGY
206 GEOLOGY BUILDING

UNIVERSITY OF UTAH
SALT LAKE CITY 1

September 25th, 1950

American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Mr. Charles S. Woodward, President

Gentlemen:

On September 15th, I spent several hours underground in an examination of the South Price Tunnel workings of your company. I was ably assisted by Mr. Woodward and Mr. Yanchers in bringing the geologic mapping up to date; the formations encountered in driving the tunnel since my last visit a year ago were sampled and identified and a large scale map and section showing the results of my geologic survey have already been supplied the Company for their files. After plotting the details of the survey on the large property map and after a careful analysis of the whole picture presented thus far, I offer the following suggestions:

1. The major fault crossed in the segment of the tunnel with a course of S. 76° 30′ W. and 537.4 feet from the face of the tunnel (as of Sept. 15, 1950) proves to be a reverse fault where the "hanging wall" has raised vertically, overriding the "footwall". This movement brings the pre-Cambrian Big Cottonwood series of quartzite-conglomerates and gray-black to purple argillites (hardened shales) up in contact with the bottom or close to the base of the Tintic quartzite, in which the tunnel lies for a considerable distance before encountering this fault. The pre-Cambrian formations in which the last 500 feet (plus) of the tunnel has been driven are exposed to the west on the east side of Mineral Fork, just below the crest of the ridge; the tough quartzite-conglomerates are a re-crystallized and firmly welded mass of quartz grains and quartz pebbles, and are exceedingly difficult to drill. In Mineral Fork, the argillites and conglomerates rest unconformably on the thick pre-Cambrian tillite, so widely exposed in the head of Mineral Fork and in the mine workings of the Mountain Mines Company. The purple, "Mutual" quartzite member appears to be absent, probably cut out by the erosional unconformity that separates the pre-Cambrian formations from the younger Tintic Quartzite of Cambrian Age.
   It appeared that the "face" of the tunnel at the time of my examination was rapidly approaching the tillite (which will be easier to drill).

2. From a study of the jointing and fissuring disclosed in the tunnel, I am convinced that the **Silver King fissure has not been cut** yet and still lies a short distance ahead and in a northwesterly direction. The mineralized fissure trending N. 45° E., which was encountered in 1947, in the west drift 250 feet from its junction with the main tunnel, possessed some of the characteristics of the Silver King vein, but it lacked the porphyry dike thus far always found to be associated with the Silver King vein, and the vein, when followed, tightened up and the mineralization weakened. It may well be that this fissure was a footwall fissure below the Silver King vein like some found in association with it in the Mountain Mines Tunnel. It seems likely that the same fissure with a slightly altered course was encountered at a point 161 feet from the face (9-15-50) of the main tunnel, when a strong flow of water entered on the fissure from the "back" and southwall. The strike of this fissure was determined to be N. 32° E. with a dip of 63° N. W. It seems that a more northerly trend, a somewhat lower dip, and the effect of the reverse fault previously mentioned all would account for the probable offset of the King vein to a position still to the northwest of the present face.

3. In the light of the foregoing discussion, it seems clear that the objective, the Silver King vein, if present at all, must lie a matter of a few tens of feet ahead in a northwesterly direction. With the development program this close to completion, surely the facts warrant its continuance until the King vein is encountered or eliminated entirely as a reasonably certain objective. The Silver King vein should show considerable width, bleaching and other alteration in both "foot" and "hanging wall" and the presence of a narrow porphyry dike.

Respectfully yours,

R. E. Marsell, Assoc. Prof.
Department of Geology

REM:brm

American Metal Mining Company
21 South West Temple St.
Salt Lake City, Utah

(EXHIBIT "6")

RIGHT OF WAY AGREEMENT

This Agreement, made and entered into this 22nd day of January, 1951, by and between Price Mining Company, a Utah Corporation, as Grantor and American Metal Mining Company, as Grantee:

WHEREAS, said Grantee has, during the past eight years, extended what is known as the South Price Tunnel in a Southerly direction, on through the property of said Grantor and into its own property on the South and because of the fact that the further extention of said tunnel has and is serving as a drainage and development tunnel for the properties of both the Grantor and Grantee;

NOW THEREFORE, in consideration of the premises, and faithful performance and the expenditures that have been made by said Grantee, in extending said South Price Tunnel approximately Four Thousand (4,000) feet in and under what is known as Montreal Hill, the said Grantor hereby conveys to said Grantee a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel and the said Grantee herely conveys to said Grantor, a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel. The Grantor further conveys to said Grantee, surface rights on the Patented Lode Claims known as, Blue Bell, Survey No. 6549 and Gravel Bed, Survey No. 6364, and more fully described as follows:

Commencing at a point Twenty (20) Feet South of the mouth of the South Price Tunnel, on the west side line of the Gravel Bed Patented Lode Claim, Thence N. 75° 35' E. Two Hundred Fifty (250) Feet, thence N. 14° 25' W. to the center line of the main road, leading to the Cardiff Mine, thence Westerly along the center line of said road to a line running Easterly and Westerly through the center of said Gravel Bed and Blue Bell patented lode claims, thence Westerly approximately Three Hundred (300) Feet, thence S. 14° 25' E. Three Hundred Seventy Five (375) Feet, thence N. 75° 35' E. to the place of beginning.

Said surface rights are conveyed for the purpose of ingress and engress, for the removing of ore and waste from said South Price Tunnel, or from properties of said Grantee, for depositing waste, storing ores pending hauling, for the erecting of mine buildings and living quarters, and for the purpose of carrying on its mining operations in said South Price Tunnel.

IN WITNESS WHEREOF, the said parties, Grantor and Grantee, have hereunto set their hands and seals this 22nd Day of January, 1951.

PRICE MINING COMPANY

By Wm. M. McCrea Vice-Pres.
Grantor

Attest:

D. S. Hall
Secretary

AMERICAN METAL MINING COMPANY

By Charles S. Woodward, Pres.
Grantee

Attest:

Louise M. Orton
Secretary

STATE OF UTAH)
: ss
COUNTY OF SALT LAKE)

On the 22nd day of January, 1951, personally appeared before me, Wm. M. McCrea who being by me duly sworn, did say that he is the Vice-President of Price Mining Company, and B. B. Hall, who being by me duly sworn, did say that he is the Secretary of Price Mining Company, and that said instrument was signed in behalf of said corporation by authority of its By-Laws, and said Wm. M. McCreaand B. B. Hall acknowledged to me that said corporation executed the same.

Theone M. Price
Notary Public,
Residing at Salt Lake City, Utah

My Commission Expires: Dec. 26, 1951.

STATE OF UTAH)
: ss
COUNTY OF SALT LAKE)

On the 25th day of January, 1951, personally appeared before me, Charles S. Woodward, who being by me duly sworn, did say that he is the President of American Metal Mining Company, and Louise M. Orton, who being by me duly sworn, did say that she is the Secretary of American Metal Mining Company, and that said instrument was signed in behalf of said corporation by authority of its By-Laws, and said Charles S. Woodward and Louise M. Orton acknowledged to me that said corporation executed the same.

John M. Orton
Notary Public,
Residing at Salt Lake City, Utah

My Commission Expires:

American Metal Mining Co.
21 South W. Te[illegible]e St.
Salt Lake City, Utah

(EXHIBIT "7")

LEASE AND OPTION TO PURCHASE

THIS LEASE AND OPTION entered into this 25th day of January, 1951 by and between the Mountain Mines Company, a Utah corporation, Lessor, and the American Metal Mining Company, a corporation, Lessee,

W I T N E S S E T H :

That for and in consideration of the covenants herein contained to be performed by the parties hereto, the Lessor hereby and by these presents leases unto the Lessee the following mining claims situate in the Big Cottonwood Mining District, Salt Lake County, State of Utah, more particularly described as follows:

Patented:	HIAWATHA	--	U. S. Survey #4465
	OMAHA	--	U. S. Survey #4465
	CLARA M.	--	U. S. Survey #4465
	BARNARD	--	U. S. Survey #4465
	GRAVEL BED	--	U. S. Survey #6364
	BLUE BELL	--	U. S. Survey #6549
Unpatented:	HERMIT		
	BLUE BELL EXTENSION		

for the term commencing with date hereof and terminating on the 1st day of February, 1956, it being the express purpose and intent of the parties hereto to hereby and by these presents assign unto the Lessee that certain lease and option heretofore entered into on the 22nd day of January, 1951 at Salt Lake City, Utah, between the Price Mining Company, Lessor, and the Mountain Mines Company, Lessee --

TO HAVE AND TO HOLD the patented claims above described under and pursuant to the terms and conditions set forth in said lease and option. It is further understood and agreed that the unpatented claims above described are to be held subject to the same terms and conditions as the patented claims and for the same term.

It is further understood and agreed that the Lessee is hereby and by these presents given an option to purchase the above described six patented and two unpatented lode mining claims for the sum of Thirty-three Thousand Dollars ($33,000) said option to be co-extensive with the life of this lease, Two Thousand Dollars ($2000) to be paid on or before February 1, 1954, and an additional Two Thousand Dollars ($2000) to be paid on of before February 1, 1955, if said option is to be extended beyond said date. The remaining Twenty-nine Thousand Dollars ($29,000) of said purchase price shall be paid on or before the 1st day of February, 1956; that unless said payments are made as aforesaid, said option shall expire, otherwise it shall remain open to the 1st day of February, 1956.

IN WITNESS WHEREOF this lease and option has been executed in duplicate by authority of a resolution of the Board of Directors of said Lessor the day and year first above written.

MOUNTAIN MINES COMPANY

By Glen A. Finlayson
Vice President

George H. Blunck
Secretary

AMERICAN METAL MINING COMPANY

By B. B. Hall
Vice President

Louise M. Orton
Secretary

LEASE AND OPTION

THIS INDENTURE, made this 22nd day of January, A. D., 1951, at Salt Lake City, Utah between Price Mining Company, a Utah Corporation, herein designated as Lessor, and Mountain Mines Company, herein designated as Lessee.

WITNESSETH:

That said Lessor for and in consideration of the royalties, covenants, and agreements hereinafter mentioned and reserved to be paid, kept and performed by the Lessee, has remised, leased, let and by these presents does remise, lease and let unto said Lessee all its right, title, and interest in and to certain mining property situated in the Big Cottonwood Mining District, Salt Lake County, State of Utah, consisting of the following patented mining claims to-wit:

HIAWATHA **	U. S. Survey # 4465	Gravel Bed **	U. S. Survey #6364
OMAHA **	U1 S. Survey #4465	Blue Bell **	U. S. Survey #6549
CLARA M. **	U. S. Survey #4465		
BARNARD **	U. S. Survey #4465		

TO HAVE AND TO HOLD the said leased premises unto the Lessee for the purpose of mining from the date hereof for a period of five years, that is from the 1st day of February, 1951, until the 1st day of February, 1956, unless sooner terminated by the violation of any covenant hereinafter contained against the said Lessee, and in consideration of this lease, the Lessee and Lessor covenant and agree as follows:

That said Lessee shall pay as rent or royalty on all ores mined and shipped from said premises, a royalty of ten per cent of the net value of all ores mined and shipped from said premised having a value of Fiteen ($15.00) Dollars per ton or less; fifteen per cent of all ores having a value of more than ($15.00) Fifteen Dollars and not more than Twenty ($20.00) Dollars per ton; twanty per cent of all ores having a value of more than Twenty ($20.00) Dollars and not more than Twenty Five ($25.00) Dollars per ton; twenty five per cent of all ores having a value of more that Twenty Five ($25.00) Dollars per ton, said royalty to be paid on the net smelter returns after deducting charges for assaying, sampling, transportation and mill or smelter treatment.

That all shipments of ore shall be made by the Lessee in the name of the Lessor, on account of the Lessee, and the smelter or mill purchasing said ore shall issue duplicate settlement sheets, one for the Lessor and one for the Lessee, and royalties are to be remitted to the Lessor by the smelter or mill purchasing the ore.

The officers or agents of the Lessor may at any time be permitted to enter upon the said premises and into the workings of the mine and all parts thereof.

The Lessee reserve the right to remove or cause to be removed any mining machinery which it may install, provided the same shall be removed within thrity days

after the forfeiture or termination of this lease and option, provided that buildings and permanent fixtures which have been affixed to the realty shall not be included in this reservation.

The Lessee may sell or transfer this lease and option, or may sublease any portion of such property.

The Lessee, shall upon request, give to the Lessor such reports as may be necessary for the use of the Lessor in making any Government or State reports which it may be required to make. The Lessee shall comply with all rules, regulations, laws and statutes of the State of Utah and the United States Government including the laws with respect to compensation insurance, old age pension and unemployment insurance.

The Lessee agrees to pay all taxes that may be levied against the property of the Lessor during the term of its lease.

The Lessee shall operate the porperty in a good and workmanlike manner according to good mining practice, shall remove from the mine such earth and rock as is consistent with good mining practice and shall timber when necessary.

In addition to the foregoing covenants, the Lessor hereby gives and grants unto the Lessee the right, privilege, and option to purchase all of the hereinabove described property for the sum of Thirty Thousand ($30,000.00) Dollars, which amount is to be paid upon the following conditions and at the following times;

The sum of Two Thousand ($2,000.00) Dollars shall be paid on or before February 1, 1954, an additional Two Thousand ($2,000.00) Dollars to be paid on or before February 1, 1955, and the remaining balance of Twenty Six Thousand ($26,000.00) Dollars to be paid on or before the expiration of this lease on, to wit: the first day of February, 1956.

All royalty payments made to the Lessor as herein provided shall be credited on the purchase price of this property and shall be credited on the amounts in the order of their due dates; that is, all royalty payments made during the first three years shall be credited on the first Two Thousand ($2,000.00) Dollar payment. When this sum shall have been paid in full, subsequent royalty payments are to be credited on the next Two Thousand ($2,000.00) Dollars until this amount shall have been paid in full, and then all other payments shall be credited on the remaining balance.

It is understood and agreed by the parties hereto that in the event assessments have been, or are levied by the Lessee upon its capital stock, since December 20, 1950, the assessments due on such stock as may be held by the Lessor, shall not be required to be paid in cash, but the amount of such assessments shall be credited a payments upon the amounts due under the terms of this lease and

option. The same conditions shall apply to any Franchise Taxes paid by Lessee for the account of the Lessor.

It is understood and agreed that time is the essence of this agreement and if the Lessee shall fail to make any payments at the time herein provided, or fail to perform any conditions required to be performed, the Lessor shall have the option to declare the contract forfeited, and in this event, this lease and option shall cease and terminate and all payments forfeited, this being kept by the Lessor as liquidated damages for rental of said premises.

IN WITNESS WHEREOF, this contract has been executed in duplicate by authority of a resolution of the Board of Directors of both said Lessor and said Lessee companies this 22nd day of January, A. D. 1951.

PRICE MINING COMPANY

By Wm. M.McCrea, Vice-Pres.
Lessor

Attest:

B. B. Hall
Secretary

MOUNTAIN MINES COMPANY

By Charles S. Woodward, Pres.
Lessee

Attest:

George H. Blunck
Secretary

dma 560

EXHIBIT "I"

MR HERBERT M. FAY
RECONSTRUCTION FINANCE CO.
DOOLEY BLDG.
CITY

AUGUST 26, 1943
SALT LAKE CITY, UTAH

CERTIFICATE OF ASSAY

DEASON & NICHOLS
ASSAYERS AND CHEMISTS

DESCRIPTION		NO.	GOLD OZS.	SILVER OZS.	WET LEAD	COPPER	ZINC
I.R.G.W. Crane Garfield Vein Bramberg Tunnel							
Cut	12""	1	0.01	5.36	7.50		9.21
Cut	3"	2	0.01	8.26	14.00	shows	33.20
Cut	5"	3	0.005	12.42	19.05		24.40
Cut	7"	4	0.005	4.40	4.70		3.00
Cut	6"	5	0.015	22.36	35.40		3.00
Silver King Cut	6"	6	0.01	11.40	12.10	shows	2.50

CHARGES $18.00

C. IVAN NICHOLS

SAMPLES TAKEN FROM

BRANBORG WORKINGS OR UPPER LEVEL

AMERICAN METAL MINE
BIG COTTONWOOD CANYON

GARFIELD VEIN

No.	Ozs. Gold	Ozs. Silver	% Lead	% Copper	% Zinc
1	Tr	22.0	34.8	.30	4.9
2	Tr	18.4	33.4	.41	25.8
3	.02	16.4	26.5	.09	15.4
4	.02	14.2	18.6	.20	27.0
5	Tr	20.6	28.8	.40	14.3
6	Tr	28.1	37.0		11.5
7	.02	20.0	21.0		1.9
8	.01	3.7	5.1		15.1
9	.01	5.36	7.50		9.21
10	.01	8.26	14.0		33.20
11	.005	12.42	19.05		24.40
12	.005	4.40	4.70		3.00
13	.015	22.36	35.40		3.00
14	.01	26.0	25.2	1.4	20.9
15	.01	24.4	39.8	1.0	6.6

SILVER KING VEIN

1	Tr	19.6	16.2	0.2	15.5
2	Tr	20.7	15.2		11.4
3	.01	12.7	8.4		3.9
4	Tr	40.8	41.6		12.1
5	.01	11.4	12.1		2.5
6	.02	74.2	22.0	5.92	6.6
7	.01	68.4	51.8	3.19	4.6
8	.01	48.2	68.6	.5	3.2

GUSTAVE ADOLPHUS VEIN

1	Tr	68.8	74.6		3.7 (Brnches
2	Tr	49.2	36.0		(Through vein (on surface

EXHIBIT "4."

Jan. 8, 1951

American Metal Mining Co.
21 South West Temple
Salt Lake City, Utah

Attention: Mr. Chas. S. Woodward

Gentlemen:

In line with our conversation today, we take pleasure in quoting you as follows upon the equipment which you propose to install at your property in Big Cottonwood Canyon:

AIR COMPRESSOR

1 - Class WBQ Gardner-Denver stationary water-cooled air compressor complete with pilot for constant speed control - with grooved sheave and V-belt drive.
Approximate shipping weight 3200 lbs.
Price FOB Quincy, Illinois . . . . . $2116.40.

1 - 50 HP, 1200 RPM, 3 phase, 60 cycle, 440 volt, open-type electric motor.
Price FOB Salt Lake City, Utah . . . . . $ 947.00.

1 - G.E. or equal magnetic across-the-line starter for above motor.
Price FOB Salt Lake City, Utah . . . . . $ 92.40.

DRILLING EQUIPMENT

1 - Model RS4 Gardner-Denver wet self-rotated stoping drill complete with 1" Q.O. chuck.
Price FOB Salt Lake City, Utah . . . . . $ 670.00.

50 - 1-5/8" Timken MCA CS Carbide Bits.
Price FOB Salt Lake City . . . . . $ 12.10 each.

100 - 2" Timken MCA CS Carbide Bits.
Price FOB Salt Lake City . . . . . $ 14.20 each.

DRILLING EQUIPMENT Cont'd.

1-1/8" Round Hollow Drill Steel made up with lugged shanks and Timken H threads as follows:

12 - 2' lengths -	Price	FOB	Salt	Lake	City	$5.30	each
12 - 4' "	"	"	"	"	"	7.50	"
12 - 6' "	"	"	"	"	"	9.70	"
6 - 8' "	"	"	"	"	"	12.10	"

MISCELLANEOUS

12 - Z18 Card Iron Works Timken roller-bearing mine cars for 18" gauge track - capacity 18.7 cu. ft.
Price FOB Salt Lake City . . . . . $195.00.

500' - 1/2" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 10.38 per 100'

500' - 1" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 20.09 " "

1000' - 2" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 42.86 " "

1000' - 10" diameter galvanized ventilation pipe 24" gauge.
Price FOB Salt Lake City . . . . . $ per 100'

Bulletins of the VBQ Air Compressor and the Model R94 Stoping Drill are attached.

Most of this equipment is available from Salt Lake stock and reasonably prompt delivery can be made of the remainder.

Very truly yours,

GARDNER-DENVER COMPANY

By: J. M. Mathews
District Manager

FRM:IM
Enc.

EXHIBIT "6."

AMERICAN METAL MINING
21 SOUTH WEST TEMPLE ST.
SALT LAKE CITY, UTAH

No engineers reports are available. Ray E. Marsell, Geologist, at the University of Utah has taken care of the geological work since 1942. His last letter to the company, is attached herewith.

Following is a quotation from Professional Paper 201 by U. S. Geological Survey, by F. C. Calkins and B. S. Butler - 1943, Pages 106 and 107.

AMERICAN METAL MINING COMPANY

A group of claims formerly owned by the American Consolidated Copper Co. but now owned by the American Metal Mining Co., lies on and near Montreal Hill. The country rock consists of the Tintic quartzite, the Ophir formation, a few feet of the Maxfield limestone, most of which is cut out on an unconformity, the Jefferson (?) dolomite, and the Madison limestone. Most of the ground lies west of thw West Superior fault, and all the development up to 1920 had been done in that part of the ground. In 1920 development work by way of the Tar Baby lower tunnel was begun, and it was being carried on as late as 1936. (See below and pl. 33.)

The area is crossed by several fissures, among the most prominent of which are the Garfield, Silver King, and Gustavus Adolphus. All of these strike No. 35° 40° E. and dip 50°-60° NW. Another fissure, probably a branch of the Garfield, strikes No. 10°E. and dips about 60° W. The old tunnel, now caved, is mainly in the Tintic quartzite but passes through considerable shale. The Garfield fissure and its branch carry ore containing pyrite, sphalerite, and galena in a quartz gangue. The fissures have been cut by a long adit, and the Garfield fissure has been followed by drifts to the southwest and northeast. Northeastword it pinches at the contact between the quartzite and the shale. No prospecting for a continuation of the fissure in the limestone above the shale had been undertaken, but shallow pits inthe limestone had revealed small quantities of lead carbonate with a high silver content, which may be connected with northeasterly fissures. The Silver King fissure was cut by the tunnel 1,200 feet from the portal. In the summer of 1916 a short drift on this fissure exposed vein quartz and a little sulfide. The ore in the Gustavus Adolphus fissure shows the same type of mineralization but contains less zinc and more silver than that from the Garfield fissure. Small amounts of oxidised ore mined from shallow workings are said to have yielded 1,000 ounces of silver to the ton, but the oxidised ores are very superficial and almost negligible.

Prospecting had been done to the north of Montreal Hill, but at the time of visit this work was not accessible. So far as learned, no large bodies of ore had been encountered.

TAR BABY WORKINGS

The Tar Bay property has been worked, in the main, through the Tar Baby lower tunnel, on Mill d South Fork northeast of Montreal Hill, and the same tunnel has also been used for some years bythe American Metal Mining Co. At the end of 1936, about 5,000 feet of work had been done from this tunnel in Tar Baby ground and 2,000 feet in American Metal ground. Work was then being done only in the American Metal branch. The upper Tar Baby tunnel, close to the road and 250 feet higher than the lower, is about 1,900 feet long. It is now caved, but it was open some years ago and was then plotted by pacing traverse. The more recent development has been done through the Tar Baby workings.

GEOLOGY

The surface of the Tar Baby and American Metal holdings is mantled in greater part with talus, moraine, and alluvium; but there are some good exposures near the creek and on the slope to the east. The gorge of the creek near the working tunnel is partly eroded along a fault, believed to be the East Superior, that brings cherty Deseret limestone against Cambrian rocks which are further dislocated by other faults. The geology of the properties can best be studies, however, in the workings, which reveal a surprising complexity of structure.

The rocks exposed, both underground and on the surface, include all the sedimentary formations from Tintic quartzite to Deseret limestone and a single dike, consisting of granodiorite porphyry, which is sometimes called the Tar Baby dike. The dips of the sedimentary rocks are almost everywhere eastward; the westward dip of the Ophir limestone about 200 feet south of the portal is a reverse dip. The dips vary widely in steepness, and the strike departs considerably in places from its average of about north-northwest, but no definite folds can be traced.

The structure is especially characterized by faulting, and the greatest of the faults is the uper Alta overthrust, which in the southern part of the Tar Baby workings has been explored on three levels. Here the hanging wall of the overthrust is Tintic quartzite and the footwall Deseret limestone, as in a large part of the Cardiff mine. In the drift along the overthrust to the north, the hanging wall is still quartzite and the footwall limestone; but some of this limestone appears to be older than Deseret. It is uncertain whether these older rocks come in because the bedding of the limestone converges northward with the fault or because branch overthrusts diverge northward from it; the later hypothesis appears the most probable in view of what is desclosed in the more northerly workings. At any rate the overthrust apparently bends eastward, on a very short curve, near the middle of the workings, and in the drift that follows it eastward its footwall consists of Ophir shale. The Tab Baby dike here follows the contact for a short distance.

The overthrust has this same easterly course in the upper tunnel, where the hanging wall is quartzite and the footwall consists of Ophir shale and Manfield crosscut extending eastward from the lower tunnel.

In the northern part of the lower workings there are a few reverse faults of low or moderate eastward dip whose handing walls are of Ophir sahle or Maxfield limestone. These faults are presumably lower branches of the Alta Overthrust, corresponding to those exposed in the cliff above the Drederick tunnel. One reversefault contact near the entrance to the American Metal branch dips westward and possibly represents the west limb of an arch in the thrust surface; but in that case the footwall rocks would presumably also be arched, and so far as observed they all dip eastward. This contact, then, may represent a different, west-dipping overthrust, one or two of which have been found in other workings.

The East Superior fault has not been positively identified in the Tar Baby workings, which presumably cross it, but what seems to be its most probable location is indicated on plate 33. The West Superior fault, on the other hand, is readily recognizable where it is crossed by the American Metal branch of the tunnel near its western end. It here has two branches, both nearly vertical, the western one of which has the greater throw; and the aggregate effect of the movement has been to bring Jefferson limestone on the east down against Tintic quartzite on the west. The Tar Baby dike, also is cut off and, to judge from its few surface outcrops, probably offset northward on the west side of the fault.

Both the American Metal and the Tar Baby branches, near their inner ends, cross fault contacts of low dip. These presumably are on a single fault, which has not been recognized on the surface. The fault is almost certainly normal; at its western crossing its footwall is quartzite and its hanging wall limestone that seems most probably to be Cambrian; at its eastern crossing its footwall in Mississippian limestone and its hanging wall quartzite, presumably that above the Alta overthrust, which is so well exposed nearby.

MINERALIZATION

Ore has been mined at several places in the lower workings from both properties, but no large ore body has yet been developed.

The conditions most favorable to the formation of such a body would have seemed, beforehand, to be present in the ground explored by the southernmost of the Tar Baby workings. Here, as in the most productive part of the Cardiff mine, the Alta overthrust has brought the Tintic quartzite in contact with the Deseret limestone and is cut by fissures of northeasterly strike. Several car-

loads of ore is said to have been taken from one of the fissures, but unfortunately the mineralization does not, to any great extent, either, penetrate the quartzite or bed out along the contact. Years ago some ore consisting partly of galena was taken from a raise where the overthrust bends eastward and is cut by the dike, but the precise relations and amount of this ore were not determined. All the ore taken from the Tar Baby property appears to have been taken from places near the main, or upper, Alta overthrust.

In the American Metal property, the quartzite hanging wall of this overthrust has been eroded away. Minor trust faults lower in the thrust zone are cut by the workings east of the West Superior fault, but west of that even these have been removed by erosion. Good ore is said to have been taken from several places in these workings. Most if not all of it seems to have come from steep fissures rather than from bed deposits. The westernmost and highest raise in the mine in 1936, followed the intersection of two fissures west of the West Superior fault.

DEPARTMENT OF GEOLOGY
206 GEOLOGY BUILDING

UNIVERSITY OF UTAH
SALT LAKE CITY 1

September 25th, 1950

American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Mr. Charles S. Woodward, President

Gentlemen:

On September 15th, I spent several hours underground in an examination of the South Price Tunnel workings of your company. I was ably assisted by Mr. Woodward and Mr. Yanchers in bringing the geologic mapping up to date; the formations encountered in driving the tunnel since my last visit a year ago were sampled and identified and a large scale map and section showing the results of my geologic survey have already been supplied the Company for their files. After plotting the details of the survey on the large property map and after a careful analysis of the whole picture presented thus far, I offer the following suggestions:

1. The major fault crossed in the segment of the tunnel with a course of S. 76° 30′ W. and 537.4 feet from the face of the tunnel (as of Sept. 15, 1950) proves to be a reverse fault where the "hanging wall" has raised vertically, overriding the "footwall". This movement brings the pre-Cambrian Big Cottonwood series of quartzite-conglomerates and gray-black to purple argillites (hardened shales) up in contact with the bottom or close to the base of the Tintic quartzite, in which the tunnel lies for a considerable distance before encountering this fault. The pre-Cambrian formations in which the last 500 feet (plus) of the tunnel has been driven are exposed to the west on the east side of Mineral Fork, just below the crest of the ridge; the tough quartzite-conglomerates are a re-crystallized and firmly welded mass of quartz grains and quartz pebbles, and are exceedingly difficult to drill. In Mineral Fork, the argillites and conglomerates rest unconformably on the thick pre-Cambrian tillite, so widely exposed in the head of Mineral Fork and in the mine workings of the Mountain Mines Company. The purple, "Mutual" quartzite member appears to be absent, probably cut out by the erosional unconformity that separates the pre-Cambrian formations from the younger Tintic Quartzite of Cambrian Age.
   It appeared that the "face" of the tunnel at the time of my examination was rapidly approaching the tillite (which will be easier to drill).

2. From a study of the jointing and fissuring disclosed in the tunnel, I am convinced that the **Silver King fissure has not been cut** yet and still lies a short distance ahead and in a northwesterly direction. The mineralized fissure trending N. 45° E., which was encountered in 1947, in the west drift 250 feet from its junction with the main tunnel, possessed some of the characteristics of the Silver King vein, but it lacked the porphyry dike thus far always found to be associated with the Silver King vein, and the vein, when followed, tightened up and the mineralization weakened. It may well be that this fissure was a footwall fissure below the Silver King vein like some found in association with it in the Mountain Mines Tunnel. It seems likely that the same fissure with a slightly altered course was encountered at a point 161 feet from the face (9-15-50) of the main tunnel, when a strong flow of water entered on the fissure from the "back" and southwall. The strike of this fissure was determined to be N. 32° E. with a dip of 63° N. W. It seems that a more northerly trend, a somewhat lower dip, and the effect of the reverse fault previously mentioned all would account for the probable offset of the King vein to a position still to the northwest of the present face.

3. In the light of the foregoing discussion, it seems clear that the objective, the Silver King vein, if present at all, must lie a matter of a few tens of feet ahead in a northwesterly direction. With the development program this close to completion, surely the facts warrant its continuance until the King vein is encountered or eliminated entirely as a reasonably certain objective. The Silver King vein should show considerable width, bleaching and other alteration in both "foot" and "hanging wall" and the presence of a narrow porphyry dike.

Respectfully yours,

R. E. Marsell, Assoc. Prof.
Department of Geology

REM:brm

American Metal Mining Company
21 South W. Temple St.
Salt Lake City, Utah

(EXHIBIT "6")

RIGHT OF WAY AGREEMENT

This Agreement, made and entered into this 22nd day of January, 1951, by and between Price Mining Company, a Utah Corporation, as Grantor and American Metal Mining Company, as Grantee:

WHEREAS, said Grantee has, during the past eight years, extended what is known as the South Price Tunnel in a Southerly direction, on through the property of said Grantor and into its own property on the South and because of the fact that the further extention of said tunnel has and is serving as a drainage and development tunnel for the properties of both and Grantor and Grantee;

NOW THEREFORE, in consideration of the premises, and faithful performance and the expenditures that have been made by said Grantee, in extending said South Price Tunnel approximately Four Thousand (4,000) feet in and under what is known as Montreal Hill, the said Grantor hereby conveys to said Grantee a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel and the said Grantee hereby conveys to said Granter, a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel. The Grantor further conveys to said Grantee, surface rights on the Patented Lode Claims known as, Blue Bell, Survey No. 6549 and Gravel Bed, Survey No. 6364, and more fully described as Follows:

Commencing at a point Twenty (20) Feet South of the mouth of the South Price Tunnel, on the west side line of the Gravel Bed Patented Lode Claim, thence N. 75° 35' E. Two Hundred Fifty (250) Feet, thence N. 14° 25' W. to the center line of the main road, leading to the Cardiff Mine, thence Westerly along the center line of said road to a line running Easterly and Westerly through the center of said Gravel Bed and Blue Bell patented lode claims, thence Westerly approximately Three Hundred (300) Feet, thence S.14° 25' E. Three Hundred Seventy Five (375) Feet, thence N. 75° 35' E. to the place of beginning.

Said surface rights are conveyed for the purpose of ingress and egress, for the removing of ore and waste from said South Price Tunnel, or from properties of said Grantee, for depositing waste, storing ores pending hauling, for the erecting of mine buildings and living quarters, and for the purpose of carrying on its mining operations in said South Price Tunnel.

IN WITNESS WHEREOF, the said parties, Grantor and Grantee, have hereunto set their hands and seals this 22nd day of January, 1951.

PRICE MINING COMPANY

By Wm. M. McCrea Vice-Pres.
Grantor

Attest:

B. B. Hall
Secretary

AMERICAN METAL MINING COMPANY

By Charles S. Woodward, Pres.
Grantee

Attest:

Louise M. Orton
Secretary

State of Utah)
: ss
County of Salt Lake)

On the 22nd day of January, 1951, personally appeared before me, Wm. M. McCrea, who being by me duly sworn, did say that he is the Vice-President of Price Mining Company, and B. D. Hall, who being by me duly sworn, did say that he is the Secretary of Price Mining Company, and that said instrument was signed in behalf of said corporation by authority of its By-Laws, and said Wm. M. McCrea and B. D. Hall acknowledged to me that said corporation executed the same.

Theone M. Price
Notary Public
Residing at Salt Lake City, Utah

My Commission Expires: Dec. 26, 1951.

State of Utah)
: ss
County of Salt Lake)

On the 25th day of January, 1951, personally appeared before me, Charles S. Woodward, who being by me duly sworn, did say that he is the President of American Metal Mining Company, and Louise M. Orton, who being by me duly sworn, did say that she is the Secretary of American Metal Mining Company, and that said instrument was signed in behalf of said corporation by authority of its By-Laws, and said Charles S. Woodward and Louise M. Orton acknowledged to me that said corporation executed the same.

John M. Orton
Notary Publice,
Residing at Salt Lake City, Utah

My Commission Expires:

American Metal Mining C[illegible]
21 South W. Temple St.
Salt Lake City, Utah

[illegible]HIBIT "g")

LEASE AND OPTION TO PURCHASE

THIS LEASE AND OPTION entered into this 1st day of February, 1951, by and between the Mountain Mines Company, a Utah corporation, Lessor, and the American Metal Mining Company, a corporation, Lessee,

W I T N E S S E T H ,

That for and in consideration of the covenants herein contained to be performed by the parties hereto, the Lessor hereby and by these presents leases unto the Lessee the following mining claims situate in the Big Cottonwood Mining District, Salt Lake County, State of Utah, more particularly described as follows:

Patented:	HIAWATHA	--	U. S. Survey #4465
	OMAHA	--	U. S. Survey #4465
	CLARA M.	--	U. S. Survey #4465
	BARNARD	--	U. S. Survey #4465
	GRAVEL BED	--	U. S. Survey #6364
	BLUE BELL	--	U. S. Survey #6549
Unpatented:	HERMIT		
	BLUE BELL EXTENSION		

for the term commencing with date hereof and terminating on the 1st day of February, 1956, it being the express purpose and intent of the parties hereto to hereby and by these presents assign unto the Lessee that certain lease and option heretofore entered into on the 22nd day of January, 1951 at Salt Lake City, Utah, between the Price Mining Company, Lessor, and the Mountain Mines Company, Lessee --

TO HAVE AND TO HOLD the patented claims above described under and pursuant to the terms and conditions set forth in said lease and option. It is further understood and agreed that the unpatented claims above described are to be held subject to the same terms and conditions as the patented claims and for the same term.

It is further understood and agreed that the Lessee is herby and by these presents given an option to purchase the above described six patented and two unpatented lode mining claims for the sum of Thirty-three Thousand Dollars($33,000) said option to be co-extensive with the life of this lease, Two Thousand Dollars ($2000) to be paid on or before February 1, 1954, and an additional Two Thousand Dollars ($2000) to be paid on or before February 1, 1955 if said option is to be extented beyond said date. The remaining Twenty-nine Thousand Dollars ($29,000) of said purchase price shall be paid on or before the 1st day of February 1956; that unless said payments are made as aforesaid, said option shall expire, otherwise it shall remain open to the 1st day of February, 1956.

IN WITNESS WHEREOF this lease and option has been executed in duplicate by authority of a resolution of the Board of Directors of said Lessor the day and year first above written.

MOUNTAIN MINES COMPANY

BY Glen A. Finlayson
Vice President

George H. Blunck
Secretary

AMERICAN METAL MINING COMPANY

BY B. B. Hall
Vice President

Louise M. Orton
Secretary

LEASE AND OPTION

THIS INDENTURE, made this 22nd day of January, A. D., 1951, at Salt Lake City, Utah, between Price Mining Company, a Utah Corporation, herein designated as Lessor, and Mountain Mines Company, herein designated as Lessee.

W I T N E S S E T H :

That said Lessor for and in consideration of the royalties, covenants, and agreements hereinafter mentioned and reserved to be paid, kept and performed by the Lessee, has remised, leased, let and by these presents does remise, lease and let unto said Lessee all its right, title, and interest in and to certain mining property situated in the Big Cottonwood Mining District, Salt Lake County, State of Utah, consisting of the following patented mining claims to-wit:

HIAWATHA — U. S. Survey #4465		GRAVEL BED — U. S. Survey #6364	
OMAHA — U. S. Survey #4465			
CLARA M. — U. S. Survey #4465		BLUE BELL — U. S. Survey #6549	
BARNARD — U. S. Survey #4465			

TO HAVE AND TO HOLD the said leased premises unto the Lessee for the purpose of mining from the date hereof for a period of five years, that is from the 1st day of February, 1951, until the 1st day of February, 1956, unless sooner terminated by the violation of any covenant hereinafter contained against the said Lessee, and in consideration of this lease, the Lessee and Lessor covenant and agree as follows:

That said Lessee shall pay as rent or royalty on all ores mined and shipped from said premises, a royalty of ten per cent of the net value of all ores mined and shipped from said premised having a value of Fifteen ($15.00) Dollars per ton or less; fifteen per cent of all ores having a value of more than ($15.00) Fifteen Dollars and not more than Twenty ($20.00) Dollars per ton; twenty per cent of all ores having a value of more than Twenty ($20.00) Dollars and not more than Twenty Five ($25.00) Dollars per ton; Twenty five per cent of all ores having a value of more than Twenty Five ($25.00) Dollars per ton, said royalty to be paid on the net smelter returns after deducting charges for assaying, sampling, transporation and mill or smelter treatment.

That all shipments of ore shall be made by the Lessee in the name of the Lessor, on account of the Lessee, and the smelter or mill purchasing said ore shall issue duplicate settlement sheets, one for the Lessor and one for the Lessee, and royalties are to be remitted to the Lessor by the smelter or mill purchasing the ore.

The officers or agents of the Lessor may at any time be permitted to enter upon the said premises and in o the working of the mine and all parts thereof.

The Lessee reserves the right to remove or cause to be removed any mining machinery which it may install, provided the same shall be removed within thirty days after the forfeiture or termination of this lease and option, provided that

buildings and permanent fixtures which have been affixed to the realty shall not be included in this reservation.

The Lessee may sell or transfer this lease and option, or may sublease any portion of such property.

The Lessee, shall upon request, give to the Lessor such reports as may be necessary for the use of the Lessor in making any Government or State reports which it may be required to make. The Lessee shall comply with all rules, regulations, laws and statutes of the State of Utah and the United States Government including the laws with respect to compensation insurance, old age pension and unemployment insurance.

The Lessee agrees to pay all taxes that may be levied against the property of the Lessor during the term of its lease.

The Lessee shall operate the property in a good and workmanlike manner according to good mining practice, shall remove from the mine such earth and rock as is consistent with good mining practice and shall timber when necessary.

In addition to the foregoing covenants, the Lessor hereby gives and grants unto the Lessee the right, privilege, and option to purchase all of the hereinabove described property for the sum of Thirty Thousand ($30,000.00) Dollars, which amount is to be paid upon the following conditions and at the following times:

The sum of Two Thousand ($2,000.00) Dollars shall be paid on or before Feburary 1, 1954, an additional Two Thousand ($2,000.00) Dollars to be paid on or before February 1, 1955, and the remaining balance of Twenty Six Thousand ($26,000.00) Dollars to be paid on or before the expiration of this lease on, to wit: the first day of February, 1956.

All royalty payments made to the Lessor as herein provided shall be credited on the purchase price of this porperty and shall be credited on the amounts in the order of their due dates; that is, all royalty payments made during the first three years shall be credited on the first Two Thousand ($2000,00) Dollar payment. When this sum shall have been paid in full, subsequent royalty payments are to be credited on the next Two Thousand ($2,000.00) Dollars until this amount shall have been paid in full, and then all other payments shall be credited on the remaining balance.

It is understood and agreed by the parties hereto that in the event assessments have been, or are levied by the Lessee upon its capital stock, since December 20, 1950, the assessments dre on such stock as may be held by the Lessor, shall not be required to be paid in cash, but the amount of such assessments shall be credited a payments upon the amounts due under the terms of this lease and option. The same conditions shall apply to any Franchise Taxes paid by Lessee for the account of the Lessor.

It is understood and agreed that time is the essence of this agreement and if the Lessee shall fail to make any payments at the time herein provided, or fail to perform any conditions required to be performed, the Lessor shall have the option to declare the contract forfeited, and in this event, this lease and option shall cease and terminate and all payments forfeited, this being ketp by the Lessor as liquidated damages for rental of said premises.

IN WITNESS WHEREOF, this contract has been executed in duplicate by authority of a resolution of the Board of Directors of both said Lessor and said Lessee companies this 22nd day of January, A. D. 1951.

PRICE MINING COMPANY

BY Wm. M. McCrea, Vice-Pres.
Lessor

Attest:

B. B. Hall
Secretary

MOUNTAIN MINES COMPANY

BY Charles S. Woodward, Pres.
Lessee

Attest:

George H. Blunck
Secretary

LOAN AGENCY OF THE

RECONSTRUCTION FINANCE CORPORATION
504 DOOLY BUILDING SALT LAKE CITY 1, UTAH

January 5, 1951

American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Attention: Mr. Charles S. Woodward, President

Re: Docket No. C-ND-7603
Loan No. ~~485~~ 566

Gentlemen:

Agreeable with the request contained in your letter dated January 4, 1941, we are pleased to enclose five copies of Borrower's contract in connection with the captioned loan.

Inasmuch as this loan has been administered and serviced by the Washington Office of the Corporation, we are communicating with that office to obtain a statement of the amount of indebtedness, and shall furnish you with this information as soon as available.

Very truly yours,

Signed L. C. Anderson
Manager

Enclosures

DRILLING EQUIPMENT Cont'd.

1-1/8" Round Hollow Drill Steel made up with lugged shanks and Timken H threads as follows:

12 - 2' lengths -	Price	FOB	Salt	Lake	City		$5.30 each
12 - 4' "	"	"	"	"	"		7.50 "
12 - 6' "	"	"	"	"	"		9.70 "
6 - 8' "	"	"	"	"	"		12.10 "

MISCELLANEOUS

12 - Z18 Card Iron Works Timken roller-bearing mine cars for 18" gauge track - capacity 18.7 cu. ft.
Price FOB Salt Lake City . . . . . $195.00.

500' - 1/2" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 10.38 per 100'

500' - 1" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 20.09 " "

1000' - 2" Galvanized Pipe.
Price FOB Salt Lake City . . . . . $ 42.86 " "

1000' - 10" diameter galvanized ventilation pipe 24" gauge.
Price FOB Salt Lake City . . . . . $ per 100'

Bulletins of the [illegible] Air Compressor and the Model R94 Stoping Drill are attached.

Most of this equipment is available from Salt Lake stock and reasonably prompt delivery can be made of the remainder.

Very truly yours,

GARDNER-DENVER COMPANY

By: [signature]
District Manager

FEM:IM
Enc.

R.F.C. LOAN AGREEMENT

BORROWER'S CONTRACT

In consideration of loan to undersigned by Reconstruction Finance Corporation (RFC) of $5,000 to clean out and retimber a crosscut tunnel and shafts and to install equipment at the mining property described at the foot hereof, undersigned agrees that the net proceeds of operation of said mining property over operating costs, and proceeds from sale of equipment acquired with loan or operation funds, shall be applied to repayment, at the written direction of the Chief, Self-Liquidating Division of RFC (Division Chief), until the said sum is repaid to RFC, at the Salt Lake City Branch of the Federal Reserve Bank of San Francisco, with interest at 6% per annum, payable semi-annually on January 1 and July 1. To assure that the loan will not be used for any other purpose, undersigned agrees that it shall be deposited in First National Bank Salt Lake City, Utah, Depositary, in a special account designated "American Metals Mining Company RFC Account", subject to withdrawals by undersigned only in accordance with written requests of undersigned, approved by RFC Supervising Engineer and filed with the Depositary, itemizing purposes and amounts currently required. As security for net proceeds and for application to repayment, undersigned, in so far as its lease-option contracts permit, grants and conveys to RFC lien on said equipment and on its interest in the minerals, in place and severed, and on the proceeds of sale thereof, and agrees (1) that all such proceeds shall be paid into the said Account, subject to like withdrawal and application, (2) that in so far as Division Chief deems essential to such security, RFC may inspect and supervise, and may conduct operations, directly or by contract, with use of all equipment, and (3) that undersigned will give further assurances upon request, including specific chattel mortgages on such equipment after same is acquired. Undersigned does not undertake to repay in any other manner, but withdrawals may be suspended by written notice to the Depositary by the Supervising Engineer or by Division Chief, and the whole or any part of the amount in said Account may be applied to repayment, at the written direction of Division Chief, at any time Division Chief is of opinion that such part or whole is not required for the purposes of the loan, or that further expenditure will not accomplish the purposes of the loan nor result in net proceeds.

Dated September 10, 1942.

AMERICAN METALS MINING COMPANY
a corporation

BY (Signed) Charles S. Woodward
President

(CORPORATE SEAL)

Attest: (Signed) Louise M. Orton
Secretary

DESCRIPTION OF MINING CLAIMS

Patented mining claims: Hiawatha; Omaha; Clara M; Barnard; all being U.S. Survey 7465; Gravel Bed U.S. Survey 7364 and Blue Bell, U.S. Survey 6549 and also the Hermit and Blue Bell Extension unpatented mining claims, all the foregoing being in Big Cottonwood Mining District, Salt Lake County, State of Utah.

Approved by (Signed) Herbert W. Fay, Supervising Engineer
Herbert W. Fay
Dooly Building
Salt Lake City, Utah

COPY

SAMPLES TAKEN FROM

BRANBORG WORKINGS OR UPPER LEVEL

AMERICAN METAL MINE
BIG COTTONWOOD CANYON

GARFIELD VEIN

No.	Ozs. Gold	Ozs. Silver	% Lead	% Copper	% Zinc
1	Tr	22.0	34.8	.30	4.9
2	Tr	18.4	33.4	.41	25.8
3	.02	16.4	26.5	.09	15.4
4	.02	14.2	18.6	.20	27.0
5	Tr	20.6	28.8	.40	14.3
6	Tr	28.1	37.0		11.5
7	.02	20.0	21.0		1.9
8	.01	3.7	5.1		15.1
9	.01	5.36	7.50		9.21
10	.01	8.26	14.0		33.20
11	.005	12.42	19.05		24.40
12	.005	4.40	4.70		3.00
13	.015	22.36	35.40		3.00
14	.01	26.0	25.2	1.4	20.9
15	.01	24.4	39.8	1.0	6.6

SILVER KING VEIN

1	Tr	19.6	16.2	0.2	15.5
2	Tr	20.7	15.2		11.4
3	.01	12.7	8.4		3.9
4	Tr	40.8	41.6		12.1
5	.01	11.4	12.1		2.5
6	.02	74.2	22.0	5.92	6.6
7	.01	68.4	51.8	3.19	4.6
8	.01	48.2	68.6	.5	3.2

GUSTAVE ADDLPHUS VEIN

1	Tr	68.8	74.6		3.7 (Brnches
2	Tr	49.2	36.0		(Through vein (on surface

EXHIBIT "1."

dma 560

MR HERBERT M. FAY
RECONSTRUCTION FINANCE CO.
DOOLEY BLDG.
CITY

AUGUST 26, 1943
SALT LAKE CITY, UTAH

CERTIFICATE OF ASSAY

DEASON & NICHOLS
ASSAYERS AND CHEMISTS

DESCRIPTION		NO.	GOLD OZS.	SILVER OZS.	WET LEAD	COPPER	ZINC
I.R.G.W. Crane Garfield Vein Bramborg Tunnel							
Cut	12""	1	0.01	5.36	7.50		9.21
Cut	3"	2	0.01	8.26	14.00	shows	33.20
Cut	5"	3	0.005	12.42	19.05		24.40
Cut	7"	4	0.005	4.40	4.70		3.00
Cut	6"	5	0.015	22.36	35.40		3.00
Silver King Cut	6"	6	0.01	11.40	12.10	shows	2.50

CHARGES $18.00

C. IVAN NICHOLS

EXHIBIT "4."

Jan. 8, 1951

American Metal Mining Co.
21 South West Temple
Salt Lake City, Utah

Attention: Mr. Chas. S. Woodward

Gentlemen:

In line with our conversation today, we take pleasure in quoting you as follows upon the equipment which you propose to install at your property in Big Cottonwood Canyon:

AIR COMPRESSOR

1 - Class WBQ Gardner-Denver stationary water-cooled air compressor complete with pilot for constant speed control - with grooved sheave and V-belt drive.
Approximate shipping weight 3200 lbs.
Price FOB Quincy, Illinois . . . . . $2116.40.

1 - 50 HP, 1200 RPM, 3 phase, 60 cycle, 440 volt, open-type electric motor.
Price FOB Salt Lake City, Utah . . . . . $ 947.00.

1 - G.E. or equal magnetic across-the-line starter for above motor.
Price FOB Salt Lake City, Utah . . . . . $ 92.40.

DRILLING EQUIPMENT

1 - Model R94 Gardner-Denver wet self-rotated stoping drill complete with 1" Q.O. chuck.
Price FOB Salt Lake City, Utah . . . . . $ 670.00.

50 - 1-5/8" Timken VCA CS Carbide Bits.
Price FOB Salt Lake City . . . . . $ 12.10 each.

100 - 2" Timken VCA CS Carbide Bits.
Price FOB Salt Lake City . . . . . $ 14.20 each.

AMERICAN METAL MINING CO.
21 SOUTH WEST TEMPLE ST.
SALT LAKE CITY, UTAH

EXHIBIT "5"

No engineers reports are available. Ray E. Marsell, Geologist, at the University of Utah has taken care of the geological work since 1942. His last letter to the company, is attached herewith.

Following is a quotation from Professional Paper 201 by U. S. Geological Survey, by F. C. Calkins and B. S. Butler - 1943, Pages 106 and 107.

AMERICAN METAL MINING COMPANY

A group of claims formerly owned by the American Consolidated Copper Co. but now owned by the American Metal Mining Co., lies on and near Montreal Hill. The country rock consists of the Tintic quartzite, the Ophir formation, a few feet of the Maxfield limestone, most of which is cut out on an unconformity, the Jefferson (?) dolomite, and the Madison limestone. Most of the ground lies west of thw West Superior fault, and all the development up to 1920 had been done in that part of the ground. In 1920 development work by way of the Tar Baby lower tunnel was begun, and it was being carried on as late as 1936. (See below and pl. 33.)

The area is crossed by several fissures, among the most prominent of which are the Garfield, Silver King, and Gustavus Adolphus. All of these strike No. 35° 40° E. and dip 50°-60° NW. Another fissure, probably a branch of the Garfield, strikes No. 10°E. and dips about 60° W. The old tunnel, now caved, is mainly in the Tintic quartzite but passes through considerable shale. The Garfield fissure and its branch carry ore containing pyrite, sphalerite, and galena in a quartz gangue. The fissures have been cut by a long adit, and the Garfield fissure has been followed by drifts to the southwest and northeast. Northeastword it pinches at the contact between the quartzite and the shale. No prospecting for a continuation of the fissure in the limestone above the shale had been undertaken, but shallow pits inthe limestone had revealed small quantities of lead carbonate with a high silver content, which may be connected with northeasterly fissures. The Silver King fissure was cut by the tunnel 1,200 feet from the portal. In the summer of 1916 a short drift on this fissure exposed vein quartz and a little sulfide. The ore in the Gustavus Adolphus fissure shows the same type of mineralization but contains less zinc and more silver than that from the Garfield fissure. Small amounts of oxidized ore mined from shallow workings are said to have yielded 1,000 ounces of silver to the ton, but the oxidized ores are very superficial and almost negligible.

Prospecting had been done to the north of Montreal Hill, but at the time of visit this work was not accessible. So far as learned, no large bodies of ore had been encountered.

TAR BABY WORKINGS

The Tar Bay property has been worked, in the main, through the Tar Baby lower tunnel, on Mill d South Fork northeast of Montreal Hill, and the same tunnel has also been used for some years bythe American Metal Mining Co. At the end of 1936, about 5,000 feet of work had been done from this tunnel in Tar Baby ground and 2,000 feet in American Metal ground, Work was then being done only in the American Metal branch. The upper Tar Baby tunnel, close to the road and 250 feet higher than the lower, is about 1,900 feet long. It is now caved, but it was open some years ago and was then plotted by pacing traverse. The more recent development has been done through the Tar Baby workings.

GEOLOGY

The surface of the Tar Baby and American Metal holdings is mantled in greater part with talus, moraine, and alluvium; but there are some good exposures near the creek and on the slope to the east. The gorge of the creek near the working tunnel is partly eroded along a fault, believed to be the East Superior, that brings cherty Deseret limestone against Cambrian rocks which are further dislocated by other faults. The geology of the properties can best be studies, however, in the workings, which reveal a surprising complexity of structure.

The rocks exposed, both underground and on the surface, include all the sedimentary formations from Tintic quartzite to Deseret limestone and a single dike, consisting of granodiorite porphyry, which is sometimes called the Tar Baby dike. The dips of the sedimentary rocks are almost everywhere eastward; the westward dip of the Ophir limestone about 200 feet south of the portal is a reverse dip. The dips vary widely in steepness, and the strike departs considerably in places from its average of about north-northwest, but no definite folds can be traced.

The structure is especially characterized by faulting, and the greatest of the faults is the uper Alta overthrust, which in the southern part of the Tar Baby workings has been explored on three levels. Here the hanging wall of the overthrust is Tintic quartzite and the footwall Deseret limestone, as in a large part of the Cardiff mine. In the drift along the overthrust to the north, the hanging wall is still quartzite and the footwall limestone; but some of this limestone appears to be older than Deseret. It is uncertain whether these older rocks come in because the bedding of the limestone converges northward with the fault or because branch overthrusts diverge northward from it; the later hypothesis appears the most probable in view of what is desclosed in the more northerly workings. At any rate the overthrust apparently bends eastward, on a very short curve, near the middle of the workings, and in the drift that follows it eastward its footwall consists of Ophir shale. The Tab Baby dike here follows the contact for a short distance.

The overthrust has this same easterly course in the upper tunnel, where the hanging wall is quartzite and the footwall consists of Ophir shale and Maxfield crosscut extending eastward from the lower tunnel.

In the northern part of the lower workings there are a few reverse faults of low or moderate eastward dip whose handing walls are of Ophir sahle or Maxfield limestone. These faults are presumably lower branches of the Alta Overthrust, corresponding to those exposed in the cliff above the Drederick tunnel. One reversefault contact near the entrance to the American Metal branch dips westward and possibly represents the west limb of an arch in the thrust surface; but in that case the footwall rocks would presumably also be arched, and so far as observed they all dip eastward. This contact, then, may represent a different, west-dipping overthrust, one or two of which have been found in other workings.

The East Superior fault has not been positively identified in the Tar Baby workings, which presumably cross it, but what seems to be its most probable location is indicated on plate 33. The West Superior fault, on the other hand, is readily recognizable where it is crossed by the American Metal branch of the tunnel near its western end. It here has two branches, both nearly vertical, the western one of which has the greater throw; and the aggregate effect of the movement has been to bring Jefferson limestone on the east down against Tintic quartzite on the west. The Tar Baby dike, also is cut off and, to judge from its few surface outcrops, probably offset northward on the west side of the fault.

Both the American Metal and the Tar Baby branches, near their inner ends, cross fault contacts of low dip. These presumably are on a single fault, which has not been recognized on the surface. The fault is almost certainly normal; at its western crossing its footwall is quartzite and its hanging wall limestone that seems most probably to be Cambrian; at its eastern crossing its footwall in Mississippian limestone and its hanging wall quartzite, presumably that above the Alta overthrust, which is so well exposed nearby.

MINERALIZATION

Ore has been mined at several places in the lower workings from both properties, but no large ore body has yet been developed.

The conditions most favorable to the formation of such a body would have seemed, beforehand, to be present in the ground explored by the southermost of the Tar Baby workings. Here, as in the most productive part of the Cardiff mine, the Alta overthrust has brought the Tintic quartzite in contact with the Deseret limestone and is cut by fissures of northeasterly strike. Several car-

loads of ore is said to have been taken from one of the fissures, but unfortunately the mineralization does not, to any great extent, either, penetrate the quartzite or bed out along the contact. Years ago some ore consisting partly of galena was taken from a raise where the overthrust bends eastward and is cut by the dike, but the precise relations and amount of this ore were not determined. All the ore taken from the Tar Baby property appears to have been taken from places near the main, or upper, Alta overthrust.

In the American Metal property, the quartzite hanging wall of this overthrust has been eroded away. Minor trust faults lower in the thrust zone are cut by the workings east of the West Superior fault, but west of that even these have been removed by erosion. Good ore is said to have been taken from several places in these workings. Most if not all of it seems to have come from steep fissures rather than from bed deposits. The westermost and highest raise in the mine in 1936, followed the intersection of two fissures west of the West Superior fault.

DEPARTMENT OF GEOLOGY
206 GEOLOGY BUILDING

UNIVERSITY OF UTAH
SALT LAKE CITY 1

September 25th, 1950

American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Mr. Charles S. Woodward, President

Gentlemen:

On September 15th, I spent several hours underground in an examination of the South Price Tunnel workings of your company. I was ably assisted by Mr. Woodward and Mr. Yanchers in bringing the geologic mapping up to date; the formations encountered in driving the tunnel since my last visit a year ago were sampled and identified and a large scale map and section showing the results of my geologic survey have already been supplied the Company for their files. After plotting the details of the survey on the large property map and after a careful analysis of the whole picture presented thus far, I offer the following suggestions:

1. The major fault crossed in the segment of the tunnel with a course of S. 76° 30′ W. and 537.4 feet from the face of the tunnel (as of Sept. 15, 1950) proves to be a reverse fault where the "hanging wall" has raised vertically, overriding the "footwall". This movement brings the pre-Cambrian Big Cottonwood series of quartzite-conglomerates and gray-black to purple argillites (hardened shales) up in contact with the bottom or close to the base of the Tintic quartzite, in which the tunnel lies for a considerable distance before encountering this fault. The pre-Cambrian formations in which the last 500 feet (plus) of the tunnel has been driven are exposed to the west on the east side of Mineral Fork, just below the crest of the ridge; the tough quartzite-conglomerates are a re-crystallized and firmly welded mass of quartz grains and quartz pebbles, and are exceedingly difficult to drill. In Mineral Fork, the argillites and conglomerates rest unconformably on the thick pre-Cambrian tillite, so widely exposed in the head of Mineral Fork and in the mine workings of the Mountain Mines Company. The purple, "Mutual" quartzite member appears to be absent, probably cut out by the erosional unconformity that separates the pre-Cambrian formations from the younger Tintic Quartzite of Cambrian Age.
   It appeared that the "face" of the tunnel at the time of my examination was rapidly approaching the tillite (which will be easier to drill).

2. From a study of the jointing and fissuring disclosed in the tunnel, I am convinced that the **Silver King fissure has not been cut** yet and still lies a short distance ahead and in a northwesterly direction. The mineralized fissure trending N. 45° E., which was encountered in 1947, in the west drift 250 feet from its junction with the main tunnel, possessed some of the characteristics of the Silver King vein, but it lacked the porphyry dike thus far always found to be associated with the Silver King vein, and the vein, when followed, tightened up and the mineralization weakened. It may well be that this fissure was a footwall fissure below the Silver King vein like some found in association with it in the Mountain Mines Tunnel. It seems likely that the same fissure with a slightly altered course was encountered at a point 161 feet from the face (9-15-50) of the main tunnel, when a strong flow of water entered on the fissure from the "back" and southwall. The strike of this fissure was determined to be N. 32° E. with a dip of 63° N. W. It seems that a more northerly trend, a somewhat lower dip, and the effect of the reverse fault previously mentioned all would account for the probable offset of the King vein to a position still to the northwest of the present face.

3. In the light of the foregoing discussion, it seems clear that the objective, the Silver King vein, if present at all, must lie a matter of a few tens of feet ahead in a northwesterly direction. With the development program this close to completion, surely the facts warrant its continuance until the King vein is encountered or eliminated entirely as a reasonably certain objective. The Silver King vein should show considerable width, bleaching and other alteration in both "foot" and "hanging wall" and the presence of a narrow porphyry dike.

Respectfully yours,

R. E. Marsell, Assoc. Prof.
Department of Geology

REM:brm

LOAN AGENCY OF THE

RECONSTRUCTION FINANCE CORPORATION
504 DOOLY BUILDING SALT LAKE CITY 1, UTAH

January 5, 1951

American Metal Mining Company
21 South West Temple Street
Salt Lake City 1, Utah

Attention: Mr. Charles S. Woodward, President

Re: Docket No. C-ND-7603
Loan No. ~~485~~ 1558

Gentlemen:

Agreeable with the request contained in your letter dated January 4, 1941, we are pleased to enclose five copies of Borrower's contract in connection with the captioned loan.

Inasmuch as this loan has been administered and serviced by the Washington Office of the Corporation, we are communicating with that office to obtain a statement of the amount of indebtedness, and shall furnish you with this information as soon as available.

Very truly yours,

Signed L. C. Anderson
Manager

Enclosures

R.F.C. LOAN AGREEMENT

BORROWER'S CONTRACT

In consideration of loan to undersigned by Reconstruction Finance Corporation (RFC) of $5,000 to clean out and retimber a crosscut tunnel and shafts and to install equipment at the mining property described at the foot hereof, undersigned agrees that the net proceeds of operation of said mining property over operating costs, and proceeds from sale of equipment acquired with loan or operation funds, shall be applied to repayment, at the written direction of the Chief, Self-Liquidating Division of RFC (Division Chief), until the said sum is repaid to RFC, at the Salt Lake City Branch of the Federal Reserve Bank of San Francisco, with interest at 6% per annum, payable semi-annually on January 1 and July 1. To assure that the loan will not be used for any other purpose, undersigned agrees that it shall be deposited in First National Bank Salt Lake City, Utah, Depositary, in a special account designated "American Metals Mining Company RFC Account", subject to withdrawals by undersigned only in accordance with written requests of undersigned, approved by RFC Supervising Engineer and filed with the Depositary, itemizing purposes and amounts currently required. As security for net proceeds and for application to repayment, undersigned, in so far as its lease-option contracts permit, grants and conveys to RFC lien on said equipment and on its interest in the minerals, in place and severed, and on the proceeds of sale thereof, and agrees (1) that all such proceeds shall be paid into the said Account, subject to like withdrawal and application, (2) that in so far as Division Chief deems essential to such security, RFC may inspect and supervise, and may conduct operations, directly or by contract, with use of all equipment, and (3) that undersigned will give further assurances upon request, including specific chattel mortgages on such equipment after same is acquired. Undersigned does not undertake to repay in any other manner, but withdrawals may be suspended by written notice to the Depositary by the Supervising Engineer or by Division Chief, and the whole or any part of the amount in said Account may be applied to repayment, at the written direction of Division Chief, at any time Division Chief is of opinion that such part or whole is not required for the purposes of the loan, or that further expenditure will not accomplish the purposes of the loan nor result in net proceeds.

Dated September 10, 1942.

AMERICAN METALS MINING COMPANY
a corporation

BY (Signed) Charles S. Woodward
President

(CORPORATE SEAL)

Attest: (Signed) Louise M. Orton
Secretary

DESCRIPTION OF MINING CLAIMS

Patented mining claims: Hiawatha; Omaha; Clara M; Barnard; all being U.S. Survey #4465; Gravel Bed U.S. Survey #6364 and Blue Bell, U.S. Survey #6549 and also the Hermit and Blue Bell Extension unpatented mining claims, all the foregoing being in Big Cottonwood Mining District, Salt Lake County, State of Utah.

Approved by (Signed) Herbert M. Fay, Supervising Engineer
Herbert M. Fay
Dooly Building
Salt Lake City, Utah

COPY

America[illegible]etal Mining Co.
21 South[illegible]. Temple Street
Salt Lake City, Utah

(EXH[illegible]T "6")

RIGHT OF WAY AGREEMENT

This Agreement, made and entered into this 22nd day of January, 1951, by and between Price Mining Company, a Utah Corporation, as Grantor and American Metal Mining Company, as Grantee:

WHEREAS, said Grantee has, during the past eight years, extended what is known as the South Price Tunnel in a Southerly direction, on through the property of said Grantor and into its own property on the South and because of the fact that the further extention of said tunnel has and is serving as a drainage and development tunnel for the properties of both and Grantor and Grantee;

NOW THEREFORE, in consideration of the premises, and faithful performance and the expenditures that have been made by said Grantee, in extending said South Price Tunnel approximately Four Thousand (4,000) feet in and under what is known as Montreal Hill, the said Grantor hereby conveys to said Grantee a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel and the said Grantee hereby conveys to said Granter, a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel. The Grantor further conveys to said Grantee, surface rights on the Patented Lode Claims known as, Blue Bell, Survey No. 6549 and Gravel Bed, Survey No. 6364, and more fully described as Follows:

Commencing at a point Twenty (20) Feet South of the mouth of the South Price Tunnel, on the west side line of the Gravel Bed Patented Lode Claim, thence N. 75° 35' E. Two Hundred Fifty (250) Feet, thence N. 14° 25' W. to the center line of the main road, leading to the Cardiff Mine, thence Westerly along the center line of said road to a line running Easterly and Westerly through the center of said Gravel Bed and Blue Bell patented lode claims, thence Westerly approximately Three Hundred (300) Feet, thence S.14° 25' E. Three Hundred Seventy Five (375) Feet, thence N. 75° 35' E. to the place of beginning.

Said surface rights are conveyed for the purpose of ingress and egress, for the removing of ore and waste from said South Price Tunnel, or from properties of said Grantee, for depositing waste, storing ores pending hauling, for the erecting of mine buildings and living quarters, and for the purpose of carrying on its mining operations in said South Price Tunnel.

IN WITNESS WHEREOF, the said parties, Grantor and Grantee, have hereunto set their hands and seals this 22nd day of January, 1951.

PRICE MINING COMPANY

By Wm. M. McCrea Vice-Pres.
Grantor

Attest:

B. B. Hall
Secretary

AMERICAN METAL MINING COMPANY

By Charles S. Woodward, Pres.
Grantee

Attest:

Louise M. Orton
Secretary

America[illegible]etal Mining Co.
21 South[illegible]. Temple Street
Salt Lake City, Utah

(EXH[illegible]T "6")

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NOW THEREFORE, in consideration of the premises, and faithful performance and the expenditures that have been made by said Grantee, in extending said South Price Tunnel approximately Four Thousand (4,000) feet in and under what is known as Montreal Hill, the said Grantor hereby conveys to said Grantee a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel and the said Grantee hereby conveys to said Granter, a permanent right of way for all purposes of ingress and egress in, along and through said South Price Tunnel. The Grantor further conveys to said Grantee, surface rights on the Patented Lode Claims known as, Blue Bell, Survey No. 6549 and Gravel Bed, Survey No. 6364, and more fully described as Follows:

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Said surface rights are conveyed for the purpose of ingress and egress, for the removing of ore and waste from said South Price Tunnel, or from properties of said Grantee, for depositing waste, storing ores pending hauling, for the erecting of mine buildings and living quarters, and for the purpose of carrying on its mining operations in said South Price Tunnel.

IN WITNESS WHEREOF, the said parties, Grantor and Grantee, have hereunto set their hands and seals this 22nd day of January, 1951.

PRICE MINING COMPANY

By Wm. M. McCrea Vice-Pres.
Grantor

Attest:

B. B. Hall
Secretary

AMERICAN METAL MINING COMPANY

By Charles S. Woodward, Pres.
Grantee

Attest:

Louise M. Orton
Secretary

AMERICAN METAL MINING COMPANY
21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY, UTAH

SUPPLEMENTAL INFORMATION

The present group, who hold the controlling interest of American Metal Mining Company, acquired control of the stock in 1942.

A loan was secured from R.F.C. in the amount of $5,000.00 to clean out the caved protions, and re-timber the old upper levels of the Mine (or Branborg Workings). This work was completed in 1943. The result was, it was found that the old timers had developed and mined considerable high grade silver, lead, copper and zinc ores and there remained a good ore showing both on the Garfield and Silver King veins. See Exhibits "1" showing samples taken by I.R.G.W. Crane of R.F.C. and also by our company.

Owing to the bad condition of the Branborg workings and the heavy flow of water, it was decided to drop down to the canyon level and drive a long drainage and development tunnel. $190,000.00 has been spent since 1943 in this work. See working map or Exhibit "2". This work has now reached a point directly under the ore showings in the Branborg tunnel - the lower tunnel being 625 feet below the Branborg Tunnel. About 400 gallons of water per minute are flowing from the lower, or South Price tunnel.

A District Map is enclosed showing relationship of American Metal property to other Mines in district. See Exhibit "3". The Big and Little Cottonwood Districts have produced to date approximately $40,000,000.00.

A good dirt road has been constructed from the main Big Cottonwood Highway to the mine, a distance of three miles. The U. S. Smelting Company Plant is located at Midvale, Utah, just 23 miles west of the mine, in Salt Lake Valley.

It will require approximately 18 months to complete the proposed development.

Charles S. Woodward is manager and Frank Yanchar is Superintendent.

The management has had a lifetime experience in developing mines in Utah, Nevada and Idaho.

The property is best reached from Salt Lake City, Utah.

The equipment now on the property consists of the following:

2 - four room homes for living quarters.
Ample Mine buildings
1 - W.B.Q Gardner - Denver Compressor - 285 Cu. Ft. and driven by 50 H. P. Electric Motor.
1 - Ingersol j - 3 Bit Grinding Machine.
Blacksmith Shop.
2 - D - 89 Gardner - Denver Automatic Feed Drifters
1 - Gardner - Denver Loader
1 - Gardner - Denver Stoper
1 - Gardner - Denver Jack Hammer
2 - Ventilator Fans
14- 18 Cu. Ft. Mine Cars - Fair Condition
Rails, pipe, steel and tools necessary to complete 200 feet drifting.
For schedule of new equipment see Exhibit No. 4.

The Blue Bell, Gravel Bed, Clara M. Barnard, Hiawatha and Omaha, are Patented

Claims, and are owned by Price Mining Company, a Utah Corporation. The Mountain Mines Company has held under option the above named six patented claims. A new option and lease was granted on January 22, 1951. This Lease and Option was assigned to the American Metal Mining Company together with a Lease and Option on two unpatented daims, known as the Hermit and Blue Bell Extention - See Exhibit "7".

The Price Mining Company has given the American Metal Mining Company a Right of Way through the South Price Tunnel and also permanant surface rights on portions of the Blue Bell and Gravel Bed Patented claims. This Right of Way agreement is dated January 22, 1951 - See Exhibit "6".

The main South Price Tunnel has now been extended into that portion of the property where important developments can be expected very soon.

The ore reserves cannot be estimated at this time, as the ore deposits have not yet been found at the South Price Tunnel level. This tunnel is 625 feet vertically below the Branborg tunnel where the ore deposits are showing and where the old timers mined ores over 50 years ago.

This proposed development is most important as it will determine the existence of ore deposits at the South Price tunnel level and will also tend to encourage other companies in the district to explore to greater depths.

The company owns 24 unpatented claims and 2 patented claims - approximately 500 acres. It also has the option on 6 patented and 2 unpatented claims as indicated in Exhibit "7".

8. Output from the use of funds applied for will be for the following purposes:
a. For the following principal prime defense contracts (if any) with the United States Government:

Date of contract (a)	Contracting Government Agency (b)	Program symbol (2 digits) or other contract identification (c)	Materials or services (d)	Delivery date(s) (e)	Amount *(Dollars)* (f)
		INAPPLICABLE			

b. For the following subcontracts (if any) with U.S. Government prime defense contractors:

Date of contract (a)	Materials or services (b)	Supplied to *(Give name and address of firm)* (c)	Delivery date(s) (d)	(e) Government agency receiving end product or services (f) Program symbol (2 digits) or other contract identification	Amount *(Dollars)* (g)
		INAPPLICABLE		(e) (f)	
				(e) (f)	
				(e) (f)	

c. For the following classes or types of customers not covered by contracts listed above (list materials or services to be provided and, wherever possible, also indicate final product use):

INAPPLICABLE

9. **Feasibility**

(a) Estimate anticipated requirements for manpower, equipment, raw materials, energy, fuel, transportation facilities, water supply, housing, community facilities, and other factors of production, for (1) preparation of the facilities and (2) actual operation thereof. (The estimates may be limited to those factors of substantial significance to the preparation and operation of the facilities for which the funds are intended.)

Twelve men needed to do job at present. Future needs will depend on developments. Housing facilities ample for present.

(b) Discuss and evaluate the availability of each of the above factors in the area(s) where the funds will be used.

Men reuqired are available.

10. The following applications for necessity certificates for tax amortization (Under Section 124A of the Internal Revenue Code) for facilities at the location(s) covered by this application have been filed since January 1, 1950.

Date of application (a)	Government file number (b)	(Estimated) Total of facilities in dollars on each application (c)	(d) If final action has been taken, give date of	
			Issuance	Denial
	~~INAPPLICABLE~~			

11. **Recent Efforts to Obtain Credit**

(a) Banks—List names and addresses of all Banks of Deposit of Applicant within the last 5 years: *(Mark with an asterisk (*) bank or banks in which deposits are now kept)*

*Farmers State Bank, Woods Cross, Utah
First Security Bank, Salt Lake City, Utah

11. **Recent Efforts to Obtain Credit** - Continued

(b) State efforts to obtain credit, within 60 days preceding date of application, from banks, the Reconstruction Finance Corporation, or other sources, results, and reasons if refused. (NOTE.— Section 302 of the Defense Production Act of 1950 states that a loan may be extended "only to the extent that it is not otherwise available on reasonable terms." Accordingly, Applicant should show that it has applied to each bank named in (a) above, or explain the reason for not doing so. The fact that a loan of the particular maturity and terms applied for is refused by a bank or banks is not sufficient to comply with the statute, if credit on reasonable terms is available. State whether a bank will participate in the loan, and if so, state name of bank and amount of participation. Full particulars must be given.) List the names and addresses of banks and other lending institutions to which applications for credit have been made, and in each case state date of application, amount of credit available, if any, maximum term for which credit is available, what consideration, if any, was given to possible guarantee of loan under Federal Reserve Regulation V, and reason for refusal or reason loan was not obtained. Indicate whether or not application was definitely refused for further credit on any basis.

Loans for Mine development are not available at Banks.

12. What other forms of government financial assistance, if any, have been received or requested by the applicant in connection with the purposes of the loan herein applied for? If applicant plans to request such assistance in the future, give details.

R.F.C. loan in 1942 as indicated $5,000.00

The further development of property is the only method of determining future needs.

13. **HISTORY, MANAGEMENT, LEASED AGREEMENTS, INSURANCE, ETC.**

These subjects should be fully covered in statements attached hereto. Outline past management experience or other basis for showing competence of the Applicant to perform in accordance with expressed purpose of the application. If plant was purchased, state price, form and terms of payment, date of purchase, from whom and under what circumstances purchase was made. If it is proposed to construct or acquire new facilities (including equipment), state estimated cost and basis of such estimate, form and terms of payment, and from whom purchases of facilities will be made. State whether Applicant, or the business or plant, has been in receivership, bankruptcy, Chapter X, XI or XII, in hands of creditors, committee, or whether Applicant has effected a compromise with creditors, and if so, discuss fully. Indicate whether business is conducted in leased premises and whether any facilities are leased from others and describe terms of any lease agreements. List type and amount of insurance carried on plant property. Describe briefly any pending or threatened litigation affecting Applicant.

AMERICAN METAL MINING CO.

FIVE LARGEST STOCKHOLDERS

James L. Stafford	Middletown, Del.	74,000	shares
Henry D. Hoyle	Newhouse Bldg. Salt Lake City, Utah	51,000	"
F. G. Taylor	812 N. Harrison St. Wilmington, Del.	37,800	"
C. H. Ketchum	700 W. 4th South Street Salt Lake City, Utah	30,000	"
Frank Yanchar	3791 Forest Hills Dr. Salt Lake City, Utah	26,200	"

14. NAMES AND ADDRESSES OF OFFICERS, DIRECTORS, OR PARTNERS, AND IN ADDITION THERETO, THE FIVE LARGEST STOCKHOLDERS IF A CORPORATION.

NAME AND ADDRESS (a)	Official title (If officer is also director indicate by "D") (b)	Total of annual salary, commissions, bonuses, etc., received from Applicant and affiliates during last fiscal year (c)	Estimated net worth outside of Applicant (d)	Number of shares held in applicant: Common (e)	Number of shares held in applicant: Preferred (f)	Life insurance carried for benefit of Applicant: Amount (g)	Life insurance carried for benefit of Applicant: Net cash surrender value after loans (h)
Charles S. Woodward	Pres. (D)	$1800.00	$30,000.00	14500		None	
Ben B. Hall	Vice Pres (D)	120.00	40,000.00	11000		"	
Glen A. Finlayson	Director	120.00	40,000.00	7500		"	
F. O. Taylor	Director	120.00	10,000.00	34500		"	
Garthur Ginn	Director	120.00	20,000.00	11557		"	
Louise M. Orton	Sec & Treas.	479.50	10,000.00	6933		"	
	Total		x x x x x			x x x	x x x

15. CAPITAL STOCK ISSUES

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par value (c)	Number of shares outstanding (d)	Dividend rate last paid (e)
Common stock	$ 100,000.00	$ 100,000.00	$ .10	1,000,000	None
Preferred stock	$	$	$		

16. PURCHASE AND SALES RELATIONS WITH OTHERS

Does Applicant buy from, sell to, or use the services of, any concern or partnership in which an officer, director, large stockholder, or partner of the Applicant has a substantial interest? If not, so state. If so, give names of such officers, directors, stockholders, and partners, and names of such concerns or partnerships.

No

Does any officer, director, large stockholder, or partner of Applicant receive any commission, bonus, or other payment in cash or services from any concern or partnership with which Applicant has business dealings? If not, so state. If so, give names of such officers, directors, stockholders, or partners and amounts of such commissions, bonuses, or payments.

No

17. COMPENSATION SCHEDULE

INSTRUCTIONS: The schedule shall show the amount of compensation being paid to all employees of Applicant receiving compensation at a rate in excess of $10,000 per annum, including employees paid on a part-time basis where the rate of compensation exceeds $10,000 per annum computed on a full-time basis. If Applicant is a corporation, the schedule should show the compensation, regardless of amount, being paid to all officers, directors, and such stockholders as have an interest in Applicant's business of 10 percent or more. If Applicant is a partnership, the schedule should show the compensation being paid to, or being withdrawn by, all partners for their personal use. If Applicant is an individual, the schedule should show the amount being withdrawn by Applicant for his personal use. In each case the listed person's connection with the business should be indicated (i.e., whether an officer, director, stockholder, partner, owner, etc.). The calendar basis for the compensation should likewise be shown. Attorneys or firms of attorneys on a regular retainer or salary basis should be included. The schedule should include a separate notation indicating the source and amount of any compensation being paid by a company or firm directly or indirectly controlling, affiliated with, or controlled by, Applicant. If the space provided herein is insufficient, the schedule should be continued on the reverse side or appropriate continuation sheets should be attached.

None

17. **COMPENSATION SCHEDULE** - Continued
The term "compensation", as used herein and such schedule, shall include all salaries, fees, bonuses, commissions, retainers, regular drawing accounts, and other payments, direct or indirect, in money or otherwise, for personal services.

Name (a)	Position (b)	Compensation paid during previous fiscal year (c)	Present compensation (d)
Charles S. Woodward	Pres. & Manager	$1800.00	$1800.00
Frank Yanchar	Foreman - Compressor Man	3600.00	3600.00
Louise M. Orton	Sec. & Treas.	479.50	600.00

18. **COLLATERAL**
(a) The applicant offers the following described collateral as security for repayment of the loan applied for.

Description (a)	Date acquired (b)	Cost (c)	Book Value (Net) (d)	Appraised* value (e)
Property now held: None				
To be acquired: None				

* This column need be filled in only if a recent appraisal has been made. If so, identify appraiser below.

Name (a)	Title (b)	Date (c)

(b) Describe existing liens, if any, on property listed above.

INAPPLICABLE

AMERICAN METAL MINING CO

Balance Sheet Dec. 30, 1950

ASSETS

Current Assets		
Cash & Bank	289.03	
Accounts Receivable	725.60	
Assessments Receivable	2726.18	
Total Current Assets	3740.81	
Fixed Assets		
Mining Property	123850.82	
Machinery & Tools	9993.35	
Developement Costs	234755.38	
Mountain Mines Lease	21212.40	
Road Contracts	389.75	
Total Property & Equipment	390201.70	
Deferred Charges		
Mine Supplies (Prepaid expenses)	4625.00	
Total of Assets		398567.51

LIABILITIES

Current Liabilities		
Bills and Accounts Payable	4170.21	
Taxes Payable	133.08	
Notes Payable	1582.51	
Total Current Liabilities	5885.80	
Deferred Liabilities		
Note Payable R.F.C.	5000.00	
Capital Stock		
Authorized 1000000 Sh. @ 10¢ 10000000	100000.00	
Unissued - -	- -	
Outstanding	100000.00	
Surplus		
Donated Surplus	7177.20	
Paid in Surplus	262916.82	
Treasury Surplus	17771.91	
Earned Surplus - Operating Deficit	724.22	
Total Surplus	287681 .71	
Total of Liabilities, Capital Stock & Surplus		398567.51

EXHIBIT A - CURRENT FINANCIAL STATEMENT

As of _____

(Date not more than 30 days prior to date of application)

ASSETS

CURRENT ASSETS

1. Cash ..... $ _____
2. Notes receivable ..... $ _____
   Less reserve for doubtful notes ..... _____
3. Accounts receivable:
   Current ..... $ _____
   Past due not over 4 months ..... _____
   Past due over 4 months ..... _____ $ _____
   Less reserve for doubtful accounts ..... _____
4. Inventories:
   Raw materials ..... $ _____
   Work in process ..... _____
   Finished goods ..... _____ $ _____
   Less reserve for inventory losses ..... _____
5. Other current assets (describe) _____

ATTACHED

TOTAL CURRENT ASSETS ..... $ _____

FIXED AND OTHER ASSETS

6. Plant used in business:
   Land ..... $ _____
   Buildings ..... _____
7. Machinery ..... _____
8. Equipment, furniture, and fixtures ..... _____ $ _____
   Less reserve for depreciation ..... _____
9. Investments—stocks and bonds ..... _____
10. Investments in affiliated companies ..... _____
11. Receivables due from affiliated companies ..... _____
12. Real estate not used in business ..... _____
13. Due from officers, directors, employees, stockholders ..... _____
14. Deferred charges ..... _____
15. Other assets ..... _____

TOTAL ASSETS ..... $ _____

ATTACHED

LIABILITIES

CURRENT LIABILITIES

16. Notes payable (see schedule 1, page 10):
    Banks ..... $ _____
    Trade creditors ..... _____
    Officers, stockholders, relatives ..... _____
    Insurance companies ..... _____ $ _____
17. Accounts payable ..... _____
18. Other current liabilities:
    Delinquent taxes { Real estate ..... $ _____
    Delinquent taxes { Federal ..... _____
    Wages and salaries ..... _____
    Due officers ..... _____
    Accrued interest, rent, taxes, wages, etc ..... _____
    _____ _____ _____

TOTAL CURRENT LIABILITIES ..... $ _____

FIXED AND OTHER LIABILITIES

19. Machinery liens ..... _____
20. Mortgage debts (see schedule 2, page 10) ..... _____
21. Bonds or debentures (see schedule 2, page 10) ..... _____
22. Other liabilities ..... _____

NET WORTH

23. Common stock (if Applicant is incorporated) ..... $ _____
24. Preferred stock (if Applicant is incorporated) ..... _____
25. Surplus (if Applicant is incorporated) ..... _____
26. Capital and Surplus Account (if Applicant is partnership or individual) ..... _____

TOTAL LIABILITIES ..... $ _____

27. Contingent liabilities (explain) _____ $

NOTE.— Submit copy of last available audit or of financial statement at close of last fiscal period (if such date differs from date of above statement).

SCHEDULE I - Notes Payable (in detail)

Name and address	Maturity	Amount	State amount and character of collateral	Name of guarantor(s) and/or endorser(s)
Farmers State Bank	2-1-51	$800.00	None	None
Frank Yanchar	12-31-51	800.00	"	"

SCHEDULE 2 - Mortgage Debt (real estate and/or chattels) or Bond Issue

Names and addresses of holders	Date of maturity	Interest rate	Unpaid principal amount	Date to which interest is paid
None			$	
TOTAL	X X X X X X X	X X X X X X	$	X X X X X X X X X X X X X X X X

If mortgage secures a bond issue, state whether bonds are principally held by management and/or stockholders or by others, and attach copy of mortgage indenture.

EXHIBIT B - CONDENSED COMPARATIVE STATEMENT OF INCOME AND EXPENSES

For years ended _____

(Insert date of end of fiscal year)

(000.00 omitted)

	(Figures for 3 preceding years)			Current year as of date of Exhibit A
	19	19	19	
1. Net sales				
2. Cost of goods sold				
3. Gross profit on sales (line 1 minus line 2)	INAPPLICABLE			
4. Other income (itemize)				
5. Total (line 3 plus line 4)				
6. Salaries (officers or partners)*				
7. Selling and all other expenses				
8. Total of lines 6 and 7				
9. Profit or loss before depreciation and Federal taxes (line 5 minus line 8)				
10. Depreciation				
11. Federal Income and Excess Profits Taxes				
12. Net profit or loss (line 9 minus lines 10 and 11)				
ANALYSIS OF SURPLUS				
13. Total surplus at beginning of period				
14. Net profit or loss for period				
15. Line 13 plus line 14 if profit; line 13 minus line 14 if loss				
Add:				
16. Surplus paid in during period				
17. Surplus resulting from revaluation of assets				
18. Other additions to surplus (itemize)				
19. Total of lines 15 to 18, inclusive				
Deduct:				
20. Dividends				
21. Other charges to surplus (itemize)				
22. Total of lines 20 and 21				
23. Surplus at end of period (line 19 less line 22), MUST AGREE WITH SURPLUS AS SHOWN IN BALANCE SHEETS				

* To include all payments of any kind (commissions, bonuses, withdrawals) to officers or partners.

NOTE—If years included in the above tables are not adequately representative of applicant's financial experience, information may be submitted for additional years.

EXHIBIT C - CONDENSED COMPARATIVE STATEMENT OF CONDITION

For years ended _____
(Insert date of end of fiscal year)

(000.00 omitted. Use figures to nearest thousand. For instance, the figure $3,489.36 should be written as 3; the figure $3,689.36 should be written as 4)

ASSETS	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
CURRENT ASSETS:				
1. Cash				
2. Receivables (after deducting reserves)				
3. Inventories				
4. Other current assets:				
TOTAL CURRENT ASSETS				
FIXED AND OTHER ASSETS:				
5. Plant accounts (before depreciation):				
Machinery, equipment, etc.	INAPPLICABLE			
Delivery equipment				
Real estate and buildings used in business				
6. Other assets (as investments, real estate not used in business, etc.):				
TOTAL ASSETS				
LIABILITIES				
CURRENT LIABILITIES:				
8. Notes payable	SEE BALANCE SHEET			
9. Accounts payable				
10. Accrued liabilities				
11. Other current liabilities:				
TOTAL CURRENT LIABILITIES				
FIXED AND OTHER LIABILITIES:				
12. Mortgage debts				
13. Debentures				
14. Other fixed liabilities:				
RESERVES:				
15. Reserve for depreciation				
16. Other reserves:				
NET WORTH:				
17. Common stock (issued) (if Applicant is incorporated)				
18. Preferred stock (issued) (if Applicant is incorporated)				
19. Surplus (if Applicant is incorporated)				
20. Capital and surplus account (if Applicant is partnership or individual)				
TOTAL LIABILITIES				

NOTE— If years included in the above table are not adequately representative of applicant's financial experience, condition statements may be submitted for additional years.

EXHIBIT D

AGREEMENT AS TO COMPENSATION FOR SERVICES RENDERED OR TO BE RENDERED TO APPLICANT IN CONNECTION WITH APPLICATION AND/OR LOAN

To induce the United States Government and its agencies to make a loan under Sec. 302 of the Defense Production Act of 1950 to AMERICAN METAL MINING COMPANY (hereinafter called "Applicant") and in consideration of the making of a loan to Applicant, the undersigned, having been retained by Applicant for the purpose of rendering professional or other services in connection with its application for a loan or loans, hereby represents, warrants, and agrees that the undersigned has not been paid, has not made any agreement with the Applicant to be paid, and has not procured any person to pay or agree to pay, and will not, directly or indirectly, charge or receive any bonus, fee, or commission in any form in connection with the said application for, or the obtaining of, the loan applied for by the Applicant, or any compensation in any form for services rendered or to be rendered in connection therewith except for the services and in the amounts stated below:

Name	Description of services	Amount paid	Amount to be paid
NONE		$	$

To induce the making of the loan and the employment of the undersigned by Applicant, the undersigned hereby further warrants, covenants and agrees, upon the consideration herein specified, and in consideration of the employment of the undersigned by Applicant, as above recited, that if the amount of compensation stated above for any such services shall not be deemed reasonable by any agency of the United States Government, the undersigned will reduce the charge for such services to such amount as shall be deemed reasonable by such agency, and will not, directly or indirectly, charge or collect from the Applicant or any other person, any sum in excess of the amount so deemed reasonable; and that if the undersigned has heretofore collected, from the Applicant or any other person, as compensation for any such services, any amount deemed by such agency to be unreasonable, the undersigned will refund to Applicant or such other person such sums as are in excess of the amount deemed reasonable. The undersigned further warrants, covenants and agrees that if the amount of the compensation for any such services is not determinable at the date of application, or is not stated above, it will not collect or charge any sum as compensation for such services without the prior written approval of the Government agency with which this application is officially filed as to the nature of the services for which such compensation is to be paid and the amount of such compensation.

Witness: _____

Address of witness: _____

Dated Jan. 8, 19 51

NOTE—Corporations must execute foregoing certificate in corporate name, by duly authorized officer, and seal must be affixed and duly attested; partnerships must execute in firm name, together with signature of a general partner. If no compensation is paid or to be paid for services rendered in connection with application or loan, this should be so stated and the Applicant should sign this Exhibit.

CERTIFICATION

The Applicant hereby certifies that the statements made in the foregoing application, and all exhibits and documents submitted in connection therewith, are true and correct statements to the best of Applicant's information and belief and are submitted as a basis for credit. ~~The Applicant agrees to reimburse any agency of the United States Government upon demand for any expenses incurred in connection with or arising out of this application or any loan made pursuant hereto.~~

Dated January 26, 19 51

Witness: _____

(For individual applicants)

_____ (Signature)

Witness: _____

(For partnership applicants)

_____ (Full name of firm)

By _____ (Signature), a general partner.

(For corporate applicants)

(CORPORATE SEAL)

AMERICAN METAL MINING COMPANY (Full corporate name of Applicant)

Attest: Louise M. Orton (Signature), SECRETARY & TREASURER (Title)

By Charles L. Woodward (Signature), PRESIDENT (Title)

The United States Criminal Code, 18 U.S.C., Sec. 1001, makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE: 1950 O - 916171

Form NSRB-146
(Nov. 1950)

UNITED STATES GOVERNMENT

APPLICATION FOR GOVERNMENT LOAN
UNDER SEC. 302 OF
DEFENSE PRODUCTION ACT OF 1950

FORM APPROVED
BUDGET BUREAU NO. 25-R002

AMOUNT OF LOAN REQUESTED

TERMS OF LOAN REQUESTED

DATE OF APPLICATION

NAME AND ADDRESS OF APPLICANT *(Street, City, Zone, State)*

AMERICAN METAL MINING CO.
21 SOUTH WEST TEMPLE ST.
SALT LAKE CITY, UTAH

TO BE FILLED IN BY DELEGATE AGENCY

(DATE RECEIVED)

COMM.

AGRIC.

INT.

D.T.A.

FILE NO.

INSTRUCTIONS

Application should be filed with the Department of Commerce, Department of Agriculture, Department of Interior, or the Defense Transport Administration, whichever has the primary interest in the facilities, products, or processes involved. However, for convenience of the applicant, he may file with any government agency with which he has contract or other pertinent relationships and such agency will arrange for the transmittal of the application to the appropriate office.

Submit four (4) signed copies of the application. Name and address of applicant should be stamped or typed for identification of each sheet of the application and all accompanying papers. When a question is inapplicable, this should be so stated on the form. Additional sheets may be attached in answering any questions or in providing other supporting information.

1. PURPOSE OF LOAN

Give a brief general statement of the purpose of the loan requested, including in the table below estimated amounts for such major purposes as land acquisition, building construction, purchase of plant, purchase of equipment, working capital, repayment of debt, etc. Statement should make clear whether funds will be used for expansion of capacity, development of technological processes, or production of essential materials.

General Statement

1. Pay present loan to R.F.C.
2. Purchase additional new equipment.
3. To complete 1900 feet of drifts and cross-cuts, also 625 feet of raising.
4. Management and office expense.

NATURE OF EXPENDITURE	AMOUNT
1. Pay R.F.C. loan and interest (Estimated)	6,750.00
2. New equipment and supplies	11,125.00
3. Drifting, Cross-Cuts and Raising.	74,125.00
4. Management & Office - 2 years	8,000.00
Total amount applied for	$100,000.00

2. PROPOSED METHOD FOR REPAYMENT OF LOAN

State sources of funds, and proposed schedule of repayment

Loan can only be repaid, if and when ores are found and marketed. Suggest 10% of net smelter settlements be applied.

3. NATURE OF BUSINESS AND DESCRIPTION OF PROJECT

Describe fully the business activity for which the funds are intended. In so doing, identify the materials and services to be produced, describe the facilities and processes involved, and explain in detail any research activity and the nature of the results expected. Attach blueprints and specifications, if available, and furnish other technical details to the extent that they are not covered elsewhere in the application.

Prospecting for silver, Lead, Copper and Zinc, exploring for ore shoots found in upper levels of mine.

4. Relationship to National Defense. Explain carefully how the expenditure of the funds will contribute to national defense. As a part of such explanation, the following questions should be answered to the extent possible:

(a) What evidence exists as to current shortages of the materials or services to be produced?

Current statistics indicate shortages in Zinc, Lead and Copper.

(b) What evidence exists as to future shortages of the materials or services to be produced?

Statistics indicate that domestic deposits of above named metals must be found, if our economy is to remain secure.

(c) Are such shortages, if any, regional or national in scope?

National

(d) In what respects will the use of the funds aid directly in expediting the carrying out of government defense contracts? (A listing of defense contracts, if any, held by applicant is required in item 8 below.)

May help provide future needs.

4. Relationship to National Defense - Continued

(e) In what respects will the use of the funds aid indirectly in expediting the carrying out of government defense contracts or related operations?

Most all industries need metals.

(f) Are there available alternative methods or facilities to accomplish the same purpose as that for which these funds are intended? (For instance, unused capacity, possibility of multiple shift operations, idle facilities, readily convertible equipment, sub-contracting?) If answer is yes, explain why alternatives are not used.

No.

5. Maximum Designed Production

List separately materials or services identified in item 3 (a)	Unit of measure (b)	Maximum designed production with existing facilities (c)	Average percentage of maximum designed production used in quarter preceding filing of application (d)	Maximum designed production including use of funds applied for (e)
INAPPLICABLE				

6. Employment

(a) Number currently employed at location(s) where funds are to be used. (Use pay period ending nearest 15th of month preceding filing of application.)

4 men

(b) Maximum feasible employment with existing facilities.
(1) Single shift operation.

4 men

(2) Multiple shift operation (specify how many shifts).

2

(c) Estimated additional employees required by the use of the funds applied for.

8 men

7. Timing

(a) On what date(s) are the requested funds needed?

Funds for payment of R.F.C. loan, and new equipment, needed soon as possible.

(b) On what expected date(s) will applicant begin to use such funds and obtain output from the use of such funds? Wherever possible, give planned schedule of output.

Other funds needed at rate of $5,000.00 per month, commencing April 1, 1951.

AMERICAN METAL MINING COMPANY
21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY 1, UTAH

SUPPLEMENTAL INFORMATION

The present group, who hold the controling interest of American Metal Mining Company, acquired control of the stock in 1942.

A loan was secured from R.F.C. in the amount of $5,000.00 to clean out the caved portions, and re-timber the old upper levels of the Mine (or Branborg Workings). This work was completed in 1943. The result was, it was found that the old timers had developed and mined considerable high grade silver, lead, copper and zinc ores and there remained a good ore showing both on the Garfield and Silver King veins. See Exhibits "1" showing samples taken by I.R.G.W. Crane of R.F.C. and also by our company.

Owing to the bad condition of the Branborg workings and the heavy flow of water, it was decided to drop down to the canyon level and drive a long drainage and development tunnel. $190,000.00 has been spent since 1943 in this work. See working map or Exhibit "2". This work has now reached a point directly under the ore showings in the Branborg tunnel - the lower tunnel being 625 feet below the Branborg Tunnel. About 400 gallons of water per minute are flowing from the lower, or South Price tunnel.

A District Map is enclosed showing relationship of American Metal property to other Mines in district. See Exhibit "3". The Big and Little Cottonwood Districts have produced to date approximately $40,000,000.00.

A good dirt road has been constructed from the main Big Cottonwood Highway to the mine, a distance of three miles. The U. S. Smelting Company Plant is located at Midvale, Utah, just 23 miles west of the mine, in Salt Lake Valley.

It will require approximately 18 months to complete the proposed development.

Charles S. Woodward is manager and Frank Yanchar is Superintandent.

The management has had a lifetime experience in developing mines in Utah, Nevada and Idaho.

The property is best reached from Salt Lake City, Utah.

The equipment now on the property consists of the following:

2 - four room homes for living quarters.
Ample Mine buildings
1 - W.B.Q Gardner - Denver Compressor - 285 Cu. Ft. and driven by 50 H.P. Electric Motor.
1 - Ingersol J - 3 Bit Grinding Machine.
Blacksmith Shop.
2 - D - 89 Gardner-Denver Automatic Feed Drifters
1 - Gardner-Denver Loader
1 - Gardner - Denver Stoper
1 - Gardner - Denver Jack Hammer
2 - Ventilator Fans
14- 28 Cu. Ft. Mine Cars - Fair Condition
Rails, pipe, steel and tools necessary to complete 200 feet drifting.
For schedule of new equipment see Exhibit No. 4.

The Blue Bell, Gravel Bed, Clara M. Barnard, Hiawatha and Omaha, are Patented

Claims, and are owned by Price Mining Company, a Utah Corporation. The Mountain Mines Company has held under option the above named six patented claims. A new option and lease was granted on January 22, 1941. This Lease and Option was assigned to the American Metal Mining Company together with a lease and option on two unpatented claims, known as the Hermit and Blue Bell Extontion - See Exhibit "7".

The Price Mining Company has given the American Metal Mining Company a Right of Way through the South Price Tunnel and also permanant surface rights on portions of the Blue Bell and Gravel Bed Patented claims. This Right of Way agreement is dated January 22, 1941 - See Exhibit "6".

The main South Price Tunnel has now been extended into that portion of the property where important developments can be expected very soon.

The ore reserves cannot be estimated at this time, as the ore deposits have not yet been found at the South Price Tunnel level. This tunnel is 625 feet vertically below the Branborg tunnel where the ore deposits are showing and where the old timers mined ores over 50 years ago.

8. Output from the use of funds applied for will be for the following purposes:
a. For the following principal prime defense contracts (if any) with the United States Government:

Date of contract (a)	Contracting Government Agency (b)	Program symbol (2 digits) or other contract identification (c)	Materials or services (d)	Delivery date(s) (e)	Amount *(Dollars)* (f)
		INAPPLICABLE			

b. For the following subcontracts (if any) with U.S. Government prime defense contractors:

Date of contract (a)	Materials or services (b)	Supplied to *(Give name and address of firm)* (c)	Delivery date(s) (d)	(e) Government agency receiving end product or services (f) Program symbol (2 digits) or other contract identification	Amount *(Dollars)* (g)
		INAPPLICABLE		(e) (f)	
				(e) (f)	
				(e) (f)	

c. For the following classes or types of customers not covered by contracts listed above (list materials or services to be provided and, wherever possible, also indicate final product use):

INAPPLICABLE

9. **Feasibility**

(a) Estimate anticipated requirements for manpower, equipment, raw materials, energy, fuel, transportation facilities, water supply, housing, community facilities, and other factors of production, for (1) preparation of the facilities and (2) actual operation thereof. (The estimates may be limited to those factors of substantial significance to the preparation and operation of the facilities for which the funds are intended.)

Twelve men needed to do job at present. Future needs will depend on developments. Housing facilities ample for present.

(b) Discuss and evaluate the availability of each of the above factors in the area(s) where the funds will be used.

Men required are available.

10. The following applications for necessity certificates for tax amortization (Under Section 124A of the Internal Revenue Code) for facilities at the location(s) covered by this application have been filed since January 1, 1950.

Date of application (a)	Government file number (b)	(Estimated) Total of facilities in dollars on each application (c)	(d) If final action has been taken, give date of	
			Issuance	Denial
	INAPPLICABLE			

11. **Recent Efforts to Obtain Credit**

(a) Banks—List names and addresses of all Banks of Deposit of Applicant within the last 5 years: *(Mark with an asterisk (*) bank or banks in which deposits are now kept)*

*Farmers State Bank, Woods Cross, Utah
First Security Bank, Salt Lake City, Utah

11. **Recent Efforts to Obtain Credit** - Continued

(b) State efforts to obtain credit, within 60 days preceding date of application, from banks, the Reconstruction Finance Corporation, or other sources, results, and reasons if refused. (NOTE.- Section 302 of the Defense Production Act of 1950 states that a loan may be extended "only to the extent that it is not otherwise available on reasonable terms." Accordingly, Applicant should show that it has applied to each bank named in (a) above, or explain the reason for not doing so. The fact that a loan of the particular maturity and terms applied for is refused by a bank or banks is not sufficient to comply with the statute, if credit on reasonable terms is available. State whether a bank will participate in the loan, and if so, state name of bank and amount of participation. Full particulars must be given.) List the names and addresses of banks and other lending institutions to which applications for credit have been made, and in each case state date of application, amount of credit available, if any, maximum term for which credit is available, what consideration, if any, was given to possible guarantee of loan under Federal Reserve Regulation V, and reason for refusal or reason loan was not obtained. Indicate whether or not application was definitely refused for further credit on any basis.

Loans for Mine development are not available at Banks.

12. What other forms of government financial assistance, if any, have been received or requested by the applicant in connection with the purposes of the loan herein applied for? If applicant plans to request such assistance in the future, give details.

R.F.C. Loan in 1942 as indicated $5,000.00

The Further development of property is the only method of determining future needs.

13. **HISTORY, MANAGEMENT, LEASED AGREEMENTS, INSURANCE, ETC.**

These subjects should be fully covered in statements attached hereto. Outline past management experience or other basis for showing competence of the Applicant to perform in accordance with expressed purpose of the application. If plant was purchased, state price, form and terms of payment, date of purchase, from whom and under what circumstances purchase was made. If it is proposed to construct or acquire new facilities (including equipment), state estimated cost and basis of such estimate, form and terms of payment, and from whom purchases of facilities will be made. State whether Applicant, or the business or plant, has been in receivership, bankruptcy, Chapter X, XI or XII, in hands of creditors, committee, or whether Applicant has effected a compromise with creditors, and if so, discuss fully. Indicate whether business is conducted in leased premises and whether any facilities are leased from others and describe terms of any lease agreements. List type and amount of insurance carried on plant property. Describe briefly any pending or threatened litigation affecting Applicant.

AMERICAN METAL MINING CO.

FIVE LARGEST STOCKHOLDERS

James L. Stafford	Middletown, Del.	74,000	shares
Henry D. Moyle	Newhouse Bldg. Salt Lake City, Utah	51,000	"
F. O. Taylor	812 N. Harrison St. Wilmington, Del.	37,800	"
C. H. Ketchum	780 W. 4th South Street Salt Lake City, Utah	30,000	"
Frank Yanchar	3791 Forest Hills Dr. Salt Lake City, Utah	26,200	"

14. NAMES AND ADDRESSES OF OFFICERS, DIRECTORS, OR PARTNERS, AND IN ADDITION THERETO, THE FIVE LARGEST STOCKHOLDERS IF A CORPORATION.

NAME AND ADDRESS (a)	Official title (If officer is also director indicate by "D") (b)	Total of annual salary, commissions, bonuses, etc., received from Applicant and affiliates during last fiscal year (c)	Estimated net worth outside of Applicant (d)	Number of shares held in applicant: Common (e)	Number of shares held in applicant: Preferred (f)	Life insurance carried for benefit of Applicant: Amount (g)	Life insurance carried for benefit of Applicant: Net cash surrender value after loans (h)
Charles S. Woodward	Pres. (D)	$1800.00	$30,000.00	14500		None	
Ben B. Hall	Vic-Pres. (D)	120.00	40,000.00	11000		"	
Glen A. Finlayson	Director	120.00	40,000.00	7500		"	
F. O. Taylor	Director	120.00	10,000.00	34500		"	
Garthur Ginn	Director	120.00	20,000.00	11557		"	
Louise M. Orton	Sec. & Treas.	479.50	10,000.00	6933		"	
	Total		x x x x x			x x x	x x x

15. CAPITAL STOCK ISSUES

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par value (c)	Number of shares outstanding (d)	Dividend rate last paid (e)
Common stock	$ 100,000.00	$ 100,000.00	$ .10	1,000,000	None
Preferred stock	$ None	$	$		

16. PURCHASE AND SALES RELATIONS WITH OTHERS

Does Applicant buy from, sell to, or use the services of, any concern or partnership in which an officer, director, large stockholder, or partner of the Applicant has a substantial interest? If not, so state. If so, give names of such officers, directors, stockholders, and partners, and names of such concerns or partnerships.

No

Does any officer, director, large stockholder, or partner of Applicant receive any commission, bonus, or other payment in cash or services from any concern or partnership with which Applicant has business dealings? If not, so state. If so, give names of such officers, directors, stockholders, or partners and amounts of such commissions, bonuses, or payments.

No

17. COMPENSATION SCHEDULE

INSTRUCTIONS: The schedule shall show the amount of compensation being paid to all employees of Applicant receiving compensation at a rate in excess of $10,000 per annum, including employees paid on a part-time basis where the rate of compensation exceeds $10,000 per annum computed on a full-time basis. If Applicant is a corporation, the schedule should show the compensation, regardless of amount, being paid to all officers, directors, and such stockholders as have an interest in Applicant's business of 10 percent or more. If Applicant is a partnership, the schedule should show the compensation being paid to, or being withdrawn by, all partners for their personal use. If Applicant is an individual, the schedule should show the amount being withdrawn by Applicant for his personal use. In each case the listed person's connection with the business should be indicated (i.e., whether an officer, director, stockholder, partner, owner, etc.). The calendar basis for the compensation should likewise be shown. Attorneys or firms of attorneys on a regular retainer or salary basis should be included. The schedule should include a separate notation indicating the source and amount of any compensation being paid by a company or firm directly or indirectly controlling, affiliated with, or controlled by, Applicant. If the space provided herein is insufficient, the schedule should be continued on the reverse side or appropriate continuation sheets should be attached.

None

17. **COMPENSATION SCHEDULE** - Continued
The term "compensation", as used herein and such schedule, shall include all salaries, fees, bonuses, commissions, retainers, regular drawing accounts, and other payments, direct or indirect, in money or otherwise, for personal services.

Name (a)	Position (b)	Compensation paid during previous fiscal year (c)	Present compensation (d)
Charles S. Woodward	Pres. & Manager	$1800.00	$1800.00
Frank Yanchar	Foreman - Compressor Man	3600.00	3600.00
Louise M. Orton	Sec. & Treas.	479.50	600.00

18. **COLLATERAL**
(a) The applicant offers the following described collateral as security for repayment of the loan applied for.

Description (a)	Date acquired (b)	Cost (c)	Book Value (Net) (d)	Appraised* value (e)
Property now held: None				
To be acquired: None				

* This column need be filled in only if a recent appraisal has been made. If so, identify appraiser below.

Name (a)	Title (b)	Date (c)

(b) Describe existing liens, if any, on property listed above.

INAPPLICABLE

AMERICAN METAL MINING CO.

Balance Sheet Dec. 30, 1950

ASSETS

Current Assets		
Cash & Bank	289.03	
Accounts Receivable	725.60	
Assessments Receivable	2726.18	
Total Current Assets	3740.81	
Fixed Assets		
Mining Property	123850.82	
Machinery & Tools	9993.35	
Developement Costs	234755.38	
Mountain Mines Lease	21212.40	
Road Contracts	389.75	
Total Property & Equipment	390201.70	
Deferred Charges		
Mine Supplies (prepaid expenses)	4625.00	
Total of Assets		398567.51

LIABILITIES

Current Liabilities		
Bills & Accounts Payable	4170.21	
Taxes Payable	133.08	
Notes Payable	1582.51	
Total Current Liabilities	5885.80	
Deferred Liabilities		
Note Payable R.F.C.	5000.00	
Capital Stock		
Authorized 1000000 Sh. @ 10¢	100000.00	
Unissued *	- -	
Outstanding	100000.00	
Surplus		
Donated Surplus	7177.20	
Paid in Surplus	262916.82	
Treasury Surplus	17771.91	
Earned Surplus - Operating Deficit	724.22	
Total Surplus	287681.71	
Total of Liabilities Capital Stock & Surplus		398567.51

EXHIBIT A - CURRENT FINANCIAL STATEMENT

As of _____

(Date not more than 30 days prior to date of application)

ASSETS

CURRENT ASSETS

1. Cash ..... $ _____
2. Notes receivable ..... $ _____
   Less reserve for doubtful notes ..... _____
3. Accounts receivable:
   Current ..... $ _____
   Past due not over 4 months ..... _____
   Past due over 4 months ..... _____ $ _____
   Less reserve for doubtful accounts ..... _____ _____
4. Inventories:
   Raw materials ..... $ _____
   Work in process ..... _____
   Finished goods ..... _____ $ _____
   Less reserve for inventory losses ..... _____ _____
5. Other current assets (describe) ATTACHED _____ _____
   TOTAL CURRENT ASSETS ..... $ _____

FIXED AND OTHER ASSETS

6. Plant used in business:
   Land ..... $ _____
   Buildings ..... _____
7. Machinery ..... _____
8. Equipment, furniture, and fixtures ..... _____ $ _____
   Less reserve for depreciation ..... _____ _____
9. Investments—stocks and bonds ..... _____
10. Investments in affiliated companies ..... _____
11. Receivables due from affiliated companies ..... _____
12. Real estate not used in business ..... _____
13. Due from officers, directors, employees, stockholders ..... _____
14. Deferred charges ..... _____
15. Other assets ..... _____
    TOTAL ASSETS ..... $ _____

LIABILITIES

CURRENT LIABILITIES

16. Notes payable (see schedule 1, page 10):
    Banks ..... $ _____
    Trade creditors ..... _____
    Officers, stockholders, relatives ..... _____
    Insurance companies ..... _____ $ _____
17. Accounts payable ..... _____
18. Other current liabilities:
    Delinquent taxes { Real estate ..... $ _____
    Delinquent taxes { Federal ..... _____
    Wages and salaries ..... _____
    Due officers ..... _____
    Accrued interest, rent, taxes, wages, etc ..... _____
    _____ _____ _____
    TOTAL CURRENT LIABILITIES ..... $ _____

FIXED AND OTHER LIABILITIES

19. Machinery liens ..... _____
20. Mortgage debts (see schedule 2, page 10) ..... _____
21. Bonds or debentures (see schedule 2, page 10) ..... _____
22. Other liabilities ..... _____

NET WORTH

23. Common stock (if Applicant is incorporated) ..... $ _____
24. Preferred stock (if Applicant is incorporated) ..... _____
25. Surplus (if Applicant is incorporated) ..... _____
26. Capital and Surplus Account (if Applicant is partnership or individual) ..... _____
    TOTAL LIABILITIES ..... $ _____

27. Contingent liabilities (explain) _____ $

NOTE.— Submit copy of last available audit or of financial statement at close of last fiscal period (if such date differs from date of above statement).

SCHEDULE I - Notes Payable (in detail)

Name and address	Maturity	Amount	State amount and character of collateral	Name of guarantor(s) and/or endorser(s)
Farmers State Bank	2-1-51	$800.00	None	None
Frank Yanchar	12-31-51	800.00	"	"

SCHEDULE 2 - Mortgage Debt (real estate and/or chattels) or Bond Issue

Names and addresses of holders	Date of maturity	Interest rate	Unpaid principal amount	Date to which interest is paid
None			$	
TOTAL	X X X X X X X	X X X X X X	$	X X X X X X X X X X X X X X X X

If mortgage secures a bond issue, state whether bonds are principally held by management and/or stockholders or by others, and attach copy of mortgage indenture.

EXHIBIT B - CONDENSED COMPARATIVE STATEMENT OF INCOME AND EXPENSES

For years ended _____

(Insert date of end of fiscal year)

(000.00 omitted)

	(Figures for 3 preceding years)			Current year as of date of Exhibit A
	19	19	19	
1. Net sales				
2. Cost of goods sold				
3. Gross profit on sales (line 1 minus line 2)				
4. Other income (itemize)				
5. Total (line 3 plus line 4)		INAPPLICABLE		
6. Salaries (officers or partners)*				
7. Selling and all other expenses				
8. Total of lines 6 and 7				
9. Profit or loss before depreciation and Federal taxes (line 5 minus line 8)				
10. Depreciation				
11. Federal Income and Excess Profits Taxes				
12. Net profit or loss (line 9 minus lines 10 and 11)				
ANALYSIS OF SURPLUS				
13. Total surplus at beginning of period				
14. Net profit or loss for period				
15. Line 13 plus line 14 if profit; line 13 minus line 14 if loss				
Add:				
16. Surplus paid in during period				
17. Surplus resulting from revaluation of assets				
18. Other additions to surplus (itemize)				
19. Total of lines 15 to 18, inclusive				
Deduct:				
20. Dividends				
21. Other charges to surplus (itemize)				
22. Total of lines 20 and 21				
23. Surplus at end of period (line 19 less line 22), MUST AGREE WITH SURPLUS AS SHOWN IN BALANCE SHEETS				

* To include all payments of any kind (commissions, bonuses, withdrawals) to officers or partners.

NOTE—If years included in the above tables are not adequately representative of applicant's financial experience, information may be submitted for additional years.

EXHIBIT C - CONDENSED COMPARATIVE STATEMENT OF CONDITION

For years ended _____
(Insert date of end of fiscal year)

(000.00 omitted. Use figures to nearest thousand. For instance, the figure $3,489.36 should be written as 3; the figure $3,689.36 should be written as 4)

ASSETS	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
CURRENT ASSETS:				
1. Cash				
2. Receivables (after deducting reserves)				
3. Inventories				
4. Other current assets:				
TOTAL CURRENT ASSETS				
FIXED AND OTHER ASSETS:				
5. Plant accounts (before depreciation):	INAPPLICABLE			
Machinery, equipment, etc.				
Delivery equipment				
Real estate and buildings used in business				
6. Other assets (as investments, real estate not used in business, etc.):				
TOTAL ASSETS				
LIABILITIES				
CURRENT LIABILITIES:				
8. Notes payable	SEE BALANCE SHEET			
9. Accounts payable				
10. Accrued liabilities				
11. Other current liabilities:				
TOTAL CURRENT LIABILITIES				
FIXED AND OTHER LIABILITIES:				
12. Mortgage debts				
13. Debentures				
14. Other fixed liabilities:				
RESERVES:				
15. Reserve for depreciation				
16. Other reserves:				
NET WORTH:				
17. Common stock (issued) (if Applicant is incorporated)				
18. Preferred stock (issued) (if Applicant is incorporated)				
19. Surplus (if Applicant is incorporated)				
20. Capital and surplus account (if Applicant is partnership or individual)				
TOTAL LIABILITIES				

NOTE— If years included in the above table are not adequately representative of applicant's financial experience, condition statements may be submitted for additional years.

EXHIBIT D

AGREEMENT AS TO COMPENSATION FOR SERVICES RENDERED OR TO BE RENDERED TO APPLICANT IN CONNECTION WITH APPLICATION AND/OR LOAN

To induce the United States Government and its agencies to make a loan under Sec. 302 of the Defense Production Act of 1950 to American Metal Mining Company (hereinafter called "Applicant") and in consideration of the making of a loan to Applicant, the undersigned, having been retained by Applicant for the purpose of rendering professional or other services in connection with its application for a loan or loans, hereby represents, warrants, and agrees that the undersigned has not been paid, has not made any agreement with the Applicant to be paid, and has not procured any person to pay or agree to pay, and will not, directly or indirectly, charge or receive any bonus, fee, or commission in any form in connection with the said application for, or the obtaining of, the loan applied for by the Applicant, or any compensation in any form for services rendered or to be rendered in connection therewith except for the services and in the amounts stated below:

Name	Description of services	Amount paid	Amount to be paid
None		$	$

To induce the making of the loan and the employment of the undersigned by Applicant, the undersigned hereby further warrants, covenants and agrees, upon the consideration herein specified, and in consideration of the employment of the undersigned by Applicant, as above recited, that if the amount of compensation stated above for any such services shall not be deemed reasonable by any agency of the United States Government, the undersigned will reduce the charge for such services to such amount as shall be deemed reasonable by such agency, and will not, directly or indirectly, charge or collect from the Applicant or any other person, any sum in excess of the amount so deemed reasonable; and that if the undersigned has heretofore collected, from the Applicant or any other person, as compensation for any such services, any amount deemed by such agency to be unreasonable, the undersigned will refund to Applicant or such other person such sums as are in excess of the amount deemed reasonable. The undersigned further warrants, covenants and agrees that if the amount of the compensation for any such services is not determinable at the date of application, or is not stated above, it will not collect or charge any sum as compensation for such services without the prior written approval of the Government agency with which this application is officially filed as to the nature of the services for which such compensation is to be paid and the amount of such compensation.

Witness: _____

Address of witness: _____

Dated January 8, 1951

NOTE—Corporations must execute foregoing certificate in corporate name, by duly authorized officer, and seal must be affixed and duly attested; partnerships must execute in firm name, together with signature of a general partner. If no compensation is paid or to be paid for services rendered in connection with application or loan, this should be so stated and the Applicant should sign this Exhibit.

CERTIFICATION

The Applicant hereby certifies that the statements made in the foregoing application, and all exhibits and documents submitted in connection therewith, are true and correct statements to the best of Applicant's information and belief and are submitted as a basis for credit. [illegible]

Dated January 26, 1951, 19____

Witness: _____ (For individual applicants) _____ (Signature)

Witness: _____ (For partnership applicants) _____ (Full name of firm)

By _____ (Signature), a general partner.

(For corporate applicants)

(CORPORATE SEAL)

AMERICAN METAL MINING COMPANY (Full corporate name of Applicant)

Attest: Louise M. Orton (Signature), SECRETARY & TREASURER (Title)

By Charles L. Woodward (Signature) PRESIDENT (Title)

The United States Criminal Code, 18 U.S.C., Sec. 1001, makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE: 1950 O - 916171

Form NSRB-146
(Nov. 1950)

UNITED STATES GOVERNMENT

APPLICATION FOR GOVERNMENT LOAN
UNDER SEC. 302 OF
DEFENSE PRODUCTION ACT OF 1950

FORM APPROVED
BUDGET BUREAU NO. 25-R002

AMOUNT OF LOAN REQUESTED

TERMS OF LOAN REQUESTED

DATE OF APPLICATION

NAME AND ADDRESS OF APPLICANT *(Street, City, Zone, State)*

AMERICAN METAL MINING COMPANY
21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY, UTAH

TO BE FILLED IN BY DELEGATE AGENCY

(DATE RECEIVED)

COMM.

AGRIC.

INT.

D.T.A.

FILE NO.

INSTRUCTIONS

Application should be filed with the Department of Commerce, Department of Agriculture, Department of Interior, or the Defense Transport Administration, whichever has the primary interest in the facilities, products, or processes involved. However, for convenience of the applicant, he may file with any government agency with which he has contract or other pertinent relationships and such agency will arrange for the transmittal of the application to the appropriate office.

Submit four (4) signed copies of the application. Name and address of applicant should be stamped or typed for identification of each sheet of the application and all accompanying papers. When a question is inapplicable, this should be so stated on the form. Additional sheets may be attached in answering any questions or in providing other supporting information.

1. PURPOSE OF LOAN

Give a brief general statement of the purpose of the loan requested, including in the table below estimated amounts for such major purposes as land acquisition, building construction, purchase of plant, purchase of equipment, working capital, repayment of debt, etc. Statement should make clear whether funds will be used for expansion of capacity, development of technological processes, or production of essential materials.

General Statement

1. Pay present loan to R.F.C.
2. Purchase additional new equipment.
3. To complete 1900 feet of drifts and cross-cuts, also 625 feet of raising.
4. Management and office expense.

NATURE OF EXPENDITURE	AMOUNT
1. Pay R.F.C. loan and interest (Estimated)	6,750.00
2. New equipment and supplies	11,125.00
3. Drifting, Cross-Cuts and Raising	74,125.00
4. Management & Office 2 years	8,000.00
Total amount applied for	$100,000.00

2. PROPOSED METHOD FOR REPAYMENT OF LOAN

State sources of funds, and proposed schedule of repayment

Loan can only be repaid, if and when ores are found and marketed. Suggest 10% of net smelter settlements be applied.

3. NATURE OF BUSINESS AND DESCRIPTION OF PROJECT

Describe fully the business activity for which the funds are intended. In so doing, identify the materials and services to be produced, describe the facilities and processes involved, and explain in detail any research activity and the nature of the results expected. Attach blueprints and specifications, if available, and furnish other technical details to the extent that they are not covered elsewhere in the application.

Prospecting for Silver, Lead, Copper and Zinc, exploring for ore shoots found in upper levels of mine.

4. **Relationship to National Defense.** Explain carefully how the expenditure of the funds will contribute to national defense. As a part of such explanation, the following questions should be answered to the extent possible:

(a) What evidence exists as to current shortages of the materials or services to be produced?

Current statistics indicate shortages in Zinc, Lead and Copper.

(b) What evidence exists as to future shortages of the materials or services to be produced?

Statistics indicate that domestic deposits of above named metals must be found, if our economy is to remain secure.

(c) Are such shortages, if any, regional or national in scope?

National

(d) In what respects will the use of the funds aid directly in expediting the carrying out of government defense contracts? (A listing of defense contracts, if any, held by applicant is required in item 8 below.)

May help provide future needs.

4. Relationship to National Defense - Continued

(e) In what respects will the use of the funds aid indirectly in expediting the carrying out of government defense contracts or related operations?

Most all industries need metals.

(f) Are there available alternative methods or facilities to accomplish the same purpose as that for which these funds are intended? (For instance, unused capacity, possibility of multiple shift operations, idle facilities, readily convertible equipment, sub-contracting?) If answer is yes, explain why alternatives are not used.

No

5. Maximum Designed Production

List separately materials or services identified in item 3 (a)	Unit of measure (b)	Maximum designed production with existing facilities (c)	Average percentage of maximum designed production used in quarter preceding filing of application (d)	Maximum designed production including use of funds applied for (e)
~~INAPPLICABLE~~				

6. Employment

(a) Number currently employed at location(s) where funds are to be used. (Use pay period ending nearest 15th of month preceding filing of application.)

4 men

(b) Maximum feasible employment with existing facilities.

(1) Single shift operation.

4 men

(2) Multiple shift operation (specify how many shifts).

2

(c) Estimated additional employees required by the use of the funds applied for.

8 men

7. Timing

(a) On what date(s) are the requested funds needed?

Funds for payment of R.F.C. loan, and new equipment, needed soon as possible.

(b) On what expected date(s) will applicant begin to use such funds and obtain output from the use of such funds? Wherever possible, give planned schedule of output.

Other funds needed at rate of $5,000.00 per month, commencing April 1, 1951.

State of Utah)
: ss
County of Salt Lake)

On the 22nd day of January, 1951, personally appeared before me, Wm. M. McCrea, who being by me duly sworn, did say that he is the Vice-President of Price Mining Company, and B. B. Hall, who being by me duly sworn, did say that he is the Secretary of Price Mining Company, and that said instrument was signed in behalf of said corporation by authority of its By-Laws, and said Wm. M. McCrea and B. B. Hall acknowledged to me that said corporation executed the same.

Theone M. Price
Notary Public
Residing at Salt Lake City, Utah

My Commission Expires: Dec. 26, 1951.

State of Utah)
: ss
County of Salt Lake)

On the 25th day of January, 1951, personally appeared before me, Charles S. Woodward, who being by me duly sworn, did say that he is the President of American Metal Mining Company, and Louise M. Orton, who being by me duly sworn, did say that she is the Secretary of American Metal Mining Company, and that said instrument was signed in behalf of said corporation by authority of its By-Laws, and said Charles S. Woodward and Louise M. Orton acknowledged to me that said corporation executed the same.

John M. Orton
Notary Publice,
Residing at Salt Lake City, Utah

My Commission Expires:

American Metal Mining Co.
21 South W. Temple St.
Salt Lake City, Utah

(EXHIBIT "7")

LEASE AND OPTION TO PURCHASE

THIS LEASE AND OPTION entered into this 1st day of February, 1951, by and between the Mountain Mines Company, a Utah corporation, Lessor, and the American Metal Mining Company, a corporation, Lessee,

W I T N E S S E T H :

That for and in consideration of the covenants herein contained to be performed by the parties hereto, the Lessor hereby and by these presents leases unto the Lessee the following mining claims situate in the Big Cottonwood Mining District, Salt Lake County, State of Utah, more particularly described as follows:

Patented:	HIAWATHA	--	U. S. Survey #4465
	OMAHA	--	U. S. Survey #4465
	CLARA M.	--	U. S. Survey #4465
	BARNARD	--	U. S. Survey #4465
	GRAVEL BED	--	U. S. Survey #6364
	BLUE BELL	--	U. S. Survey #6549
Unpatented:	HERMIT		
	BLUE BELL EXTENSION		

for the term commencing with date hereof and terminating on the 1st day of February, 1956, it being the express purpose and intent of the parties hereto to hereby and by these presents assign unto the Lessee that certain lease and option heretofore entered into on the 22nd day of January, 1951 at Salt Lake City, Utah, between the Price Mining Company, Lessor, and the Mountain Mines Company, Lessee --

TO HAVE AND TO HOLD the patented claims above described under and pursuant to the terms and conditions set forth in said lease and option. It is further understood and agreed that the unpatented claims above described are to be held subject to the same terms and conditions as the patented claims and for the same term.

It is further understood and agreed that the Lessee is herby and by these presents given an option to purchase the above described six patented and two unpatented lode mining claims for the sum of Thirty-three Thousand Dollars ($33,000) said option to be co-extensive with the life of this lease, Two Thousand Dollars ($2000) to be paid on or before February 1, 1954, and an additional Two Thousand Dollars ($2000) to be paid on or before February 1, 1955 if said option is to be extented beyond said date. The remaining Twenty-nine Thousand Dollars ($29,000) of said purchase price shall be paid on or before the 1st day of February 1956; that unless said payments are made as aforesaid, said option shall expire, otherwise it shall remain open to the 1st day of February, 1956.

IN WITNESS WHEREOF this lease and option has been executed in duplicate by authority of a resolution of the Board of Directors of said Lessor the day and year first above written.

MOUNTAIN MINES COMPANY

BY Glen A. Finlayson
Vice President

George H. Blunck
Secretary

AMERICAN METAL MINING COMPANY

BY B. B. Hall
Vice President

Louise M. Orton
Secretary

LEASE AND OPTION

THIS INDENTURE, made this 22nd day of January, A. D., 1951, at Salt Lake City, Utah, between Price Mining Company, a Utah Corporation, herein designated as Lessor, and Mountain Mines Company, herein designated as Lessee.

W I T N E S S E T H :

That said Lessor for and in consideration of the royalties, covenants, and agreements hereinafter mentioned and reserved to be paid, kept and performed by the Lessee, has remised, leased, let and by these presents does remise, lease and let unto said Lessee all its right, title, and interest in and to certain mining property situated in the Big Cottonwood Mining District, Salt Lake County, State of Utah, consisting of the following patented mining claims to-wit:

HIAWATHA	-- U. S. Survey #4465	GRAVEL BED	-- U. S. Survey #6364
OMAHA	-- U. S. Survey #4465		
CLARA M.	-- U. S. Survey #4465	BLUE BELL	-- U. S. Survey #6549
BARNARD	-- U. S. Survey #4465		

TO HAVE AND TO HOLD the said leased premises unto the Lessee for the purpose of mining from the date hereof for a period of five years, that is from the 1st day of February, 1951, until the 1st day of February, 1956, unless sooner terminated by the violation of any covenant hereinafter contained against the said Lessee, and in consideration of this lease, the Lessee and Lessor covenant and agree as follows:

That said Lessee shall pay as rent or royalty on all ores mined and shipped from said premises, a royalty of ten per cent of the net value of all ores mined and shipped from said premised having a value of Fifteen ($15.00) Dollars per ton or less; fifteen per cent of all ores having a value of more than ($15.00) Fifteen Dollars and not more than Twenty ($20.00) Dollars per ton; twenty per cent of all ores having a value of more than Twenty ($20.00) Dollars and not more than Twenty Five ($25.00) Dollars per ton; Twenty five per cent of all ores having a value of more than Twenty Five ($25.00) Dollars per ton, said royalty to be paid on the net smelter returns after deducting charges for assaying, sampling, transporation and mill or smelter treatment.

That all shipments of ore shall be made by the Lessee in the name of the Lessor, on account of the Lessee, and the smelter or mill purchasing said ore shall issue duplicate settlement sheets, one for the Lessor and one for the Lessee, and royalties are to be remitted to the Lessor by the smelter or mill purchasing the ore.

The officers or agents of the Lessor may at any time be permitted to enter upon the said premises and into the working of the mine and all parts thereof.

The Lessee reserves the right to remove or cause to be removed any mining machinery which it may install, provided the same shall be removed within thirty days after the forfeiture or termination of this lease and option, provided that

Form NSRB-146
(Nov. 1950)

UNITED STATES GOVERNMENT

APPLICATION FOR GOVERNMENT LOAN
UNDER SEC. 302 OF
DEFENSE PRODUCTION ACT OF 1950

FORM APPROVED
BUDGET BUREAU NO. 25-R002

AMOUNT OF LOAN REQUESTED

TERMS OF LOAN REQUESTED

DATE OF APPLICATION

TO BE FILLED IN BY DELEGATE AGENCY

(DATE RECEIVED)

COMM.

AGRIC.

INT.

D.T.A.

FILE NO.

NAME AND ADDRESS OF APPLICANT *(Street, City, Zone, State)*

AMERICAN METAL MINING COMPANY
21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY, UTAH

INSTRUCTIONS

Application should be filed with the Department of Commerce, Department of Agriculture, Department of Interior, or the Defense Transport Administration, whichever has the primary interest in the facilities, products, or processes involved. However, for convenience of the applicant, he may file with any government agency with which he has contract or other pertinent relationships and such agency will arrange for the transmittal of the application to the appropriate office.

Submit four (4) signed copies of the application. Name and address of applicant should be stamped or typed for identification of each sheet of the application and all accompanying papers. When a question is inapplicable, this should be so stated on the form. Additional sheets may be attached in answering any questions or in providing other supporting information.

1. PURPOSE OF LOAN

Give a brief general statement of the purpose of the loan requested, including in the table below estimated amounts for such major purposes as land acquisition, building construction, purchase of plant, purchase of equipment, working capital, repayment of debt, etc. Statement should make clear whether funds will be used for expansion of capacity, development of technological processes, or production of essential materials.

General Statement

1. Pay present loan to R.F.C.
2. Purchase additional new equipment.
3. To complete 1900 feet of drifts and cross-cuts, also 625 feet of raising.
4. Management and office expense.

NATURE OF EXPENDITURE	AMOUNT
1. Pay R.F.C. loan and interest (Estimated)	6,750.00
2. New Equipment and supplies	11,125.00
3. Drifting, Cross-Cuts and Raising	74,125.00
4. Management & Office 2 years	8,000.00
Total amount applied for	$100,000.00

2. PROPOSED METHOD FOR REPAYMENT OF LOAN

State sources of funds, and proposed schedule of repayment

Loan can only be repaid, if and when ores are found and marketed. Suggest 10% of net smelter settlements be applied.

3. NATURE OF BUSINESS AND DESCRIPTION OF PROJECT

Describe fully the business activity for which the funds are intended. In so doing, identify the materials and services to be produced, describe the facilities and processes involved, and explain in detail any research activity and the nature of the results expected. Attach blueprints and specifications, if available, and furnish other technical details to the extent that they are not covered elsewhere in the application.

Prospecting for Silver, Lead, Copper and Zinc, exploring for ore shoots found in upper levels of mine.

4. **Relationship to National Defense.** Explain carefully how the expenditure of the funds will contribute to national defense. As a part of such explanation, the following questions should be answered to the extent possible:

(a) What evidence exists as to current shortages of the materials or services to be produced?

Current statistics indicate shortages in Zinc, Lead and Copper

(b) What evidence exists as to future shortages of the materials or services to be produced?

Statistics indicate that domestic deposits of above named metals must be found, if our economy is to remain secure.

(c) Are such shortages, if any, regional or national in scope?

National

(d) In what respects will the use of the funds aid directly in expediting the carrying out of government defense contracts? (A listing of defense contracts, if any, held by applicant is required in item 8 below.)

May help provide future needs.

4. Relationship to National Defense - Continued

(e) In what respects will the use of the funds aid indirectly in expediting the carrying out of government defense contracts or related operations?

Most all industries need metals.

(f) Are there available alternative methods or facilities to accomplish the same purpose as that for which these funds are intended? (For instance, unused capacity, possibility of multiple shift operations, idle facilities, readily convertible equipment, sub-contracting?) If answer is yes, explain why alternatives are not used.

No

5. Maximum Designed Production

List separately materials or services identified in item 3 (a)	Unit of measure (b)	Maximum designed production with existing facilities (c)	Average percentage of maximum designed production used in quarter preceding filing of application (d)	Maximum designed production including use of funds applied for (e)
INAPPLICABLE				

6. Employment

(a) Number currently employed at location(s) where funds are to be used. (Use pay period ending nearest 15th of month preceding filing of application.)

4 men

(b) Maximum feasible employment with existing facilities.
(1) Single shift operation.

4 men

(2) Multiple shift operation (specify how many shifts).

2

(c) Estimated additional employees required by the use of the funds applied for.

8 men

7. Timing

(a) On what date(s) are the requested funds needed?

Funds for payment of R.F.C. loan, and new equipment, needed soon as possible.

(b) On what expected date(s) will applicant begin to use such funds and obtain output from the use of such funds? Wherever possible, give planned schedule of output.

Other funds needed at rate of $5,000.00 per month, commencing April 1, 1951.

AMERICAN METAL MINING COMPANY
21 SOUTH WEST TEMPLE STREET
SALT LAKE CITY 1, UTAH

SUPPLEMENTAL INFORMATION

The present group, who hold the controling interest of American Metal Mining Company, acquired control of the stock in 1942.

A loan was secured from R.F.C. in the amount of $5,000.00 to clean out the caved portions, and re-timber the old upper levels of the Mine (or Branborg Workings). This work was completed in 1943. The result was, it was found that the old timers had developed and mined considerable high grade silver, lead, copper and zinc ores and there remained a good ore showing both on the Garfield and Silver King veins. See Exhibits "1" showing samples taken by I.R.G.W. Crane of R.F.C. and also by our company.

Owing to the bad condition of the Branborg workings and the heavy flow of water, it was decided to drop down to the canyon level and drive a long drainage and development tunnel. $190,000.00 has been spent since 1943 in this work. See working map or Exhibit "2". This work has now reached a point directly under the ore showings in the Branborg tunnel - the lower tunnel being 625 feet below the Branborg Tunnel. About 400 gallons of water per minute are flowing from the lower, or South Price tunnel.

A District Map is enclosed showing relationship of American Metal property to other Mines in district. See Exhibit "3". The Big and Little Cottonwood Districts have produced to date approximately $40,000,000.00.

A good dirt road has been constructed from the main Big Cottonwood Highway to the mine, a distance of three miles. The U. S. Smelting Company Plant is located at Midvale, Utah, just 23 miles west of the mine, in Salt Lake Valley.

It will require approximately 18 months to complete the proposed development.

Charles S. Woodward is manager and Frank Yanchar is Superintendent.

The management has had a lifetime experience in developing mines in Utah, Nevada and Idaho.

The property is best reached from Salt Lake City, Utah.

The equipment now on the property consists of the following:

2 - four room homes for living quarters.
Ample Mine buildings
1 - W.B.Q Gardner - Denver Compressor - 285 Cu. Ft. and driven by 50 H.P. Electric Motor.
1 - Ingersol J - 3 Bit Grinding Machine.
Blacksmith Shop.
2 - D - 89 Gardner-Denver Automatic Feed Drifters
1 - Gardner-Denver Loader
1 - Gardner - Denver Stoper
1 - Gardner - Denver Jack Hammer
2 - Ventilator Fans
14- 18 Cu. Ft. Mine Cars - Fair Condition
Rails, pipe, steel and tools necessary to complete 200 feet drifting.
For schedule of new equipment see Exhibit No. 4.

The Blue Bell, Gravel Bed, Clara M. Barnard, Hiawatha and Omaha, are Patented

Claims, and are owned by Price Mining Company, a Utah Corporation. The Mountain Mines Company has held under option the above named six patented claims. A new option and lease was granted on January 22, 1941. This Lease and Option was assigned to the American Metal Mining Company together with a lease and option on two unpatented claims, known as the Hermit and Blue Bell Extention - See Exhibit "7".

The Price Mining Company has given the American Metal Mining Company a Right of Way through the South Price Tunnel and also permanant surface rights on portions of the Blue Bell and Gravel Bed Patented claims. This Right of Way agreement is dated January 22, 1941 - See Exhibit "6".

The main South Price Tunnel has now been extended into that portion of the property where important developments can be expected very soon.

The ore reserves cannot be estimated at this time, as the ore deposits have not yet been found at the South Price Tunnel level. This tunnel is 625 feet vertically below the Branborg tunnel where the ore deposits are showing and where the old timers mined ores over 50 years ago.

8. Output from the use of funds applied for will be for the following purposes:
a. For the following principal prime defense contracts (if any) with the United States Government:

Date of contract (a)	Contracting Government Agency (b)	Program symbol (2 digits) or other contract identification (c)	Materials or services (d)	Delivery date(s) (e)	Amount *(Dollars)* (f)
		INAPPLICABLE			

b. For the following subcontracts (if any) with U.S. Government prime defense contractors:

Date of contract (a)	Materials or services (b)	Supplied to *(Give name and address of firm)* (c)	Delivery date(s) (d)	(e) Government agency receiving end product or services (f) Program symbol (2 digits) or other contract identification	Amount *(Dollars)* (g)
		INAPPLICABLE		(e) (f)	
				(e) (f)	
				(e) (f)	

c. For the following classes or types of customers not covered by contracts listed above (list materials or services to be provided and, wherever possible, also indicate final product use):

INAPPLICABLE

9. **Feasibility**

(a) Estimate anticipated requirements for manpower, equipment, raw materials, energy, fuel, transportation facilities, water supply, housing, community facilities, and other factors of production, for (1) preparation of the facilities and (2) actual operation thereof. (The estimates may be limited to those factors of substantial significance to the preparation and operation of the facilities for which the funds are intended.)

Twelve men needed to do job at present. Future needs will depend on developments. Housing facilities ample for present.

(b) Discuss and evaluate the availability of each of the above factors in the area(s) where the funds will be used.

Men required are available.

10. The following applications for necessity certificates for tax amortization (Under Section 124A of the Internal Revenue Code) for facilities at the location(s) covered by this application have been filed since January 1, 1950.

Date of application (a)	Government file number (b)	(Estimated) Total of facilities in dollars on each application (c)	(d) If final action has been taken, give date of	
			Issuance	Denial
	INAPPLICABLE			

11. **Recent Efforts to Obtain Credit**

(a) Banks—List names and addresses of all Banks of Deposit of Applicant within the last 5 years: *(Mark with an asterisk (*) bank or banks in which deposits are now kept)*

*Farmers State Bank, Woods Cross, Utah
First Security Bank, Salt Lake City, Utah

11. **Recent Efforts to Obtain Credit** - Continued

(b) State efforts to obtain credit, within 60 days preceding date of application, from banks, the Reconstruction Finance Corporation, or other sources, results, and reasons if refused. (NOTE.— Section 302 of the Defense Production Act of 1950 states that a loan may be extended "only to the extent that it is not otherwise available on reasonable terms." Accordingly, Applicant should show that it has applied to each bank named in (a) above, or explain the reason for not doing so. The fact that a loan of the particular maturity and terms applied for is refused by a bank or banks is not sufficient to comply with the statute, if credit on reasonable terms is available. State whether a bank will participate in the loan, and if so, state name of bank and amount of participation. Full particulars must be given.) List the names and addresses of banks and other lending institutions to which applications for credit have been made, and in each case state date of application, amount of credit available, if any, maximum term for which credit is available, what consideration, if any, was given to possible guarantee of loan under Federal Reserve Regulation V, and reason for refusal or reason loan was not obtained. Indicate whether or not application was definitely refused for further credit on any basis.

Loans for Mine development are not available at Banks.

12. What other forms of government financial assistance, if any, have been received or requested by the applicant in connection with the purposes of the loan herein applied for? If applicant plans to request such assistance in the future, give details.

R.F.C. loan in 1942 as indicated $5,000.00

The further development of property is the only method of determining future needs.

13. **HISTORY, MANAGEMENT, LEASED AGREEMENTS, INSURANCE, ETC.**

These subjects should be fully covered in statements attached hereto. Outline past management experience or other basis for showing competence of the Applicant to perform in accordance with expressed purpose of the application. If plant was purchased, state price, form and terms of payment, date of purchase, from whom and under what circumstances purchase was made. If it is proposed to construct or acquire new facilities (including equipment), state estimated cost and basis of such estimate, form and terms of payment, and from whom purchases of facilities will be made. State whether Applicant, or the business or plant, has been in receivership, bankruptcy, Chapter X, XI or XII, in hands of creditors, committee, or whether Applicant has effected a compromise with creditors, and if so, discuss fully. Indicate whether business is conducted in leased premises and whether any facilities are leased from others and describe terms of any lease agreements. List type and amount of insurance carried on plant property. Describe briefly any pending or threatened litigation affecting Applicant.

AMERICAN MINERAL MINING CO.

FIVE LARGEST STOCKHOLDERS

James L. Stafford	Middletown, Del.	74,000	shares
Henry D. Moyle	Newhouse Bldg. Salt Lake City, Utah	51,000	"
F. O. Taylor	812 N. Harrison St. Wilmington, Del.	37,800	"
C. H. Ketchum	700 E. 4th South Street Salt Lake City, Utah	30,000	"
Frank Vanchar	3791 Forest Hills Dr. Salt Lake City, Utah	28,200	"

14. NAMES AND ADDRESSES OF OFFICERS, DIRECTORS, OR PARTNERS, AND IN ADDITION THERETO, THE FIVE LARGEST STOCKHOLDERS IF A CORPORATION.

NAME AND ADDRESS (a)	Official title (If officer is also director indicate by "D") (b)	Total of annual salary, commissions, bonuses, etc., received from Applicant and affiliates during last fiscal year (c)	Estimated net worth outside of Applicant (d)	Number of shares held in applicant: Common (e)	Number of shares held in applicant: Preferred (f)	Life insurance carried for benefit of Applicant: Amount (g)	Life insurance carried for benefit of Applicant: Net cash surrender value after loans (h)
Charles S. Woodward	Pres. (D)	1800.00	$30,000.00	14500		None	
Ben B. Hall	Vice-Pres. (D)	120.00	40,000.00	11000		"	
Glen A. Finlayson	Director	120.00	40,000.00	7500		"	
F. O. Taylor	Director	120.00	10,000.00	34500		"	
Garthur Ginn	Director	120.00	20,000.00	11557		"	
Louise M. Orton	Sec. & Treas	479.50	10,000.00	6933		"	
	Total		x x x x x			x x x	x x x

15. CAPITAL STOCK ISSUES

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par value (c)	Number of shares outstanding (d)	Dividend rate last paid (e)
Common stock	$ 100,000.00	$ 100,000.00	$ .10	1,000,000	None
Preferred stock	$	$	$		

16. PURCHASE AND SALES RELATIONS WITH OTHERS

Does Applicant buy from, sell to, or use the services of, any concern or partnership in which an officer, director, large stockholder, or partner of the Applicant has a substantial interest? If not, so state. If so, give names of such officers, directors, stockholders, and partners, and names of such concerns or partnerships.

No

Does any officer, director, large stockholder, or partner of Applicant receive any commission, bonus, or other payment in cash or services from any concern or partnership with which Applicant has business dealings? If not, so state. If so, give names of such officers, directors, stockholders, or partners and amounts of such commissions, bonuses, or payments.

No

17. COMPENSATION SCHEDULE

INSTRUCTIONS: The schedule shall show the amount of compensation being paid to all employees of Applicant receiving compensation at a rate in excess of $10,000 per annum, including employees paid on a part-time basis where the rate of compensation exceeds $10,000 per annum computed on a full-time basis. If Applicant is a corporation, the schedule should show the compensation, regardless of amount, being paid to all officers, directors, and such stockholders as have an interest in Applicant's business of 10 percent or more. If Applicant is a partnership, the schedule should show the compensation being paid to, or being withdrawn by, all partners for their personal use. If Applicant is an individual, the schedule should show the amount being withdrawn by Applicant for his personal use. In each case the listed person's connection with the business should be indicated (i.e., whether an officer, director, stockholder, partner, owner, etc.). The calendar basis for the compensation should likewise be shown. Attorneys or firms of attorneys on a regular retainer or salary basis should be included. The schedule should include a separate notation indicating the source and amount of any compensation being paid by a company or firm directly or indirectly controlling, affiliated with, or controlled by, Applicant. If the space provided herein is insufficient, the schedule should be continued on the reverse side or appropriate continuation sheets should be attached.

None

17. **COMPENSATION SCHEDULE** - Continued

The term "compensation", as used herein and such schedule, shall include all salaries, fees, bonuses, commissions, retainers, regular drawing accounts, and other payments, direct or indirect, in money or otherwise, for personal services.

Name (a)	Position (b)	Compensation paid during previous fiscal year (c)	Present compensation (d)
Charles S. Woodward	Pres. & Manager	$1800.00	$1800.00
Frank Yanchar	Foreman - Compressor Man	3600.00	3600.00
Louise M. Orton	Sec. & Trea.	479.50	600.00

18. **COLLATERAL**

(a) The applicant offers the following described collateral as security for repayment of the loan applied for.

Description (a)	Date acquired (b)	Cost (c)	Book Value (Net) (d)	Appraised* value (e)
Property now held: None				
To be acquired: None				

* This column need be filled in only if a recent appraisal has been made. If so, identify appraiser below.

Name (a)	Title (b)	Date (c)

(b) Describe existing liens, if any, on property listed above.

INAPPLICABLE

AMERICAN METAL MINING CO.

Balance Sheet Dec. 30, 1950

ASSETS

Current Assets		
Cash & Bank	289.03	
Accounts Receivable	725.60	
Assessments Receivable	2726.18	
Total Current Assets	3740.81	
Fixed Assets		
Mining Property	123850.82	
Machinery & Tools	9993.35	
Developement Costs	234755.38	
Mountain Mines Lease	21212.40	
Road Contracts	389.75	
Total Property & Equipment	390201.70	
Deferred Charges		
Mine Supplies (prepaid expenses)	4625.00	
Total of Assets		398567.51

LIABILITIES

Current Liabilities		
Bills & Accounts Payable	4170.21	
Taxes Payable	133.08	
Notes Payable	1582.61	
Total Current Liabilities	5885.80	
Deferred Liabilities		
Note Payable R.F.C.	5000.00	
Capital Stock		
Authorized 1000000 Sh. @ 10¢	100000.00	
Unissued -	- -	
Outstanding	100000.00	
Surplus		
Donated Surplus	7177.20	
Paid in Surplus	262916.82	
Treasury Surplus	17771.91	
Earned Surplus - Operating Deficit	724.22	
Total Surplus	287681.71	
Total of Liabilities Capital Stock & Surplus		398567.51

EXHIBIT A - CURRENT FINANCIAL STATEMENT

As of _____

(Date not more than 30 days prior to date of application)

ASSETS

CURRENT ASSETS

1. Cash ..... $ _____
2. Notes receivable ..... $ _____
   Less reserve for doubtful notes ..... _____
3. Accounts receivable:
   Current ..... $ _____
   Past due not over 4 months ..... _____
   Past due over 4 months ..... _____ $ _____
   Less reserve for doubtful accounts ..... _____
4. Inventories:
   Raw materials ..... $ _____
   Work in process ..... _____
   Finished goods ..... _____ $ _____
   Less reserve for inventory losses ..... _____
5. Other current assets (describe) _____

ATTACHED

TOTAL CURRENT ASSETS ..... $ _____

FIXED AND OTHER ASSETS

6. Plant used in business:
   Land ..... $ _____
   Buildings ..... _____
7. Machinery ..... _____
8. Equipment, furniture, and fixtures ..... _____ $ _____
   Less reserve for depreciation ..... _____
9. Investments—stocks and bonds .....
10. Investments in affiliated companies .....
11. Receivables due from affiliated companies .....
12. Real estate not used in business .....
13. Due from officers, directors, employees, stockholders .....
14. Deferred charges .....
15. Other assets .....

ATTACHED

TOTAL ASSETS ..... $ _____

LIABILITIES

CURRENT LIABILITIES

16. Notes payable (see schedule 1, page 10):
    Banks ..... $ _____
    Trade creditors ..... _____
    Officers, stockholders, relatives ..... _____
    Insurance companies ..... _____ $ _____
17. Accounts payable .....
18. Other current liabilities:
    Delinquent taxes { Real estate ..... $ _____
    Delinquent taxes { Federal ..... _____
    Wages and salaries ..... _____
    Due officers ..... _____
    Accrued interest, rent, taxes, wages, etc. ..... _____
    _____ _____

TOTAL CURRENT LIABILITIES ..... $ _____

FIXED AND OTHER LIABILITIES

19. Machinery liens .....
20. Mortgage debts (see schedule 2, page 10) .....
21. Bonds or debentures (see schedule 2, page 10) .....
22. Other liabilities .....

NET WORTH

23. Common stock (if Applicant is incorporated) ..... $ _____
24. Preferred stock (if Applicant is incorporated) ..... _____
25. Surplus (if Applicant is incorporated) ..... _____
26. Capital and Surplus Account (if Applicant is partnership or individual) .....

TOTAL LIABILITIES ..... $ _____

27. Contingent liabilities (explain) _____ $

NOTE.— Submit copy of last available audit or of financial statement at close of last fiscal period (if such date differs from date of above statement).

SCHEDULE I - Notes Payable (in detail)

Name and address	Maturity	Amount	State amount and character of collateral	Name of guarantor(s) and/or endorser(s)
Farmers State Bank	2-1-51	$800.00	None	None
Frank Yanchar	12-31-51	800.00	"	"

SCHEDULE 2 - Mortgage Debt (real estate and/or chattels) or Bond Issue

Names and addresses of holders	Date of maturity	Interest rate	Unpaid principal amount	Date to which interest is paid
None			$	
TOTAL	X X X X X X X	X X X X X X	$	X X X X X X X X X X X X X X X X

If mortgage secures a bond issue, state whether bonds are principally held by management and/or stockholders or by others, and attach copy of mortgage indenture.

EXHIBIT B - CONDENSED COMPARATIVE STATEMENT OF INCOME AND EXPENSES

For years ended _____
(Insert date of end of fiscal year)
(000.00 omitted)

	(Figures for 3 preceding years)			Current year as of date of Exhibit A
	19	19	19	
1. Net sales				
2. Cost of goods sold				
3. Gross profit on sales (line 1 minus line 2)				
4. Other income (itemize)	INAPPLICABLE			
5. Total (line 3 plus line 4)				
6. Salaries (officers or partners)*				
7. Selling and all other expenses				
8. Total of lines 6 and 7				
9. Profit or loss before depreciation and Federal taxes (line 5 minus line 8)				
10. Depreciation				
11. Federal Income and Excess Profits Taxes				
12. Net profit or loss (line 9 minus lines 10 and 11)				
ANALYSIS OF SURPLUS				
13. Total surplus at beginning of period				
14. Net profit or loss for period				
15. Line 13 plus line 14 if profit; line 13 minus line 14 if loss				
Add:				
16. Surplus paid in during period				
17. Surplus resulting from revaluation of assets				
18. Other additions to surplus (itemize)				
19. Total of lines 15 to 18, inclusive				
Deduct:				
20. Dividends				
21. Other charges to surplus (itemize)				
22. Total of lines 20 and 21				
23. Surplus at end of period (line 19 less line 22), MUST AGREE WITH SURPLUS AS SHOWN IN BALANCE SHEETS				

* To include all payments of any kind (commissions, bonuses, withdrawals) to officers or partners.

NOTE—If years included in the above tables are not adequately representative of applicant's financial experience, information may be submitted for additional years.

EXHIBIT C - CONDENSED COMPARATIVE STATEMENT OF CONDITION

For years ended _____
(Insert date of end of fiscal year)

(000.00 omitted. Use figures to nearest thousand. For instance, the figure $3,489.36 should be written as 3; the figure $3,689.36 should be written as 4)

ASSETS	(Figures for 3 preceding years) 19	19	19	Current year as of date of Exhibit A
CURRENT ASSETS:				
1. Cash				
2. Receivables (after deducting reserves)				
3. Inventories				
4. Other current assets:				
	INAPPLICABLE			
TOTAL CURRENT ASSETS				
FIXED AND OTHER ASSETS:				
5. Plant accounts (before depreciation):				
Machinery, equipment, etc.				
Delivery equipment				
Real estate and buildings used in business				
6. Other assets (as investments, real estate not used in business, etc.):				
TOTAL ASSETS				
LIABILITIES				
CURRENT LIABILITIES:	SEE BALANCE	SHEET		
8. Notes payable				
9. Accounts payable				
10. Accrued liabilities				
11. Other current liabilities:				
TOTAL CURRENT LIABILITIES				
FIXED AND OTHER LIABILITIES:				
12. Mortgage debts				
13. Debentures				
14. Other fixed liabilities:				
RESERVES:				
15. Reserve for depreciation				
16. Other reserves:				
NET WORTH:				
17. Common stock (issued) (if Applicant is incorporated)				
18. Preferred stock (issued) (if Applicant is incorporated)				
19. Surplus (if Applicant is incorporated)				
20. Capital and surplus account (if Applicant is partnership or individual)				
TOTAL LIABILITIES				

NOTE— If years included in the above table are not adequately representative of applicant's financial experience, condition statements may be submitted for additional years.

EXHIBIT D

AGREEMENT AS TO COMPENSATION FOR SERVICES RENDERED OR TO BE RENDERED TO APPLICANT IN CONNECTION WITH APPLICATION AND/OR LOAN

To induce the United States Government and its agencies to make a loan under Sec. 302 of the Defense Production Act of 1950 to AMERICAN METAL MINING COMPANY (hereinafter called "Applicant") and in consideration of the making of a loan to Applicant, the undersigned, having been retained by Applicant for the purpose of rendering professional or other services in connection with its application for a loan or loans, hereby represents, warrants, and agrees that the undersigned has not been paid, has not made any agreement with the Applicant to be paid, and has not procured any person to pay or agree to pay, and will not, directly or indirectly, charge or receive any bonus, fee, or commission in any form in connection with the said application for, or the obtaining of, the loan applied for by the Applicant, or any compensation in any form for services rendered or to be rendered in connection therewith except for the services and in the amounts stated below:

Name	Description of services	Amount paid	Amount to be paid
NONE		$	$

To induce the making of the loan and the employment of the undersigned by Applicant, the undersigned hereby further warrants, covenants and agrees, upon the consideration herein specified, and in consideration of the employment of the undersigned by Applicant, as above recited, that if the amount of compensation stated above for any such services shall not be deemed reasonable by any agency of the United States Government, the undersigned will reduce the charge for such services to such amount as shall be deemed reasonable by such agency, and will not, directly or indirectly, charge or collect from the Applicant or any other person, any sum in excess of the amount so deemed reasonable; and that if the undersigned has heretofore collected, from the Applicant or any other person, as compensation for any such services, any amount deemed by such agency to be unreasonable, the undersigned will refund to Applicant or such other person such sums as are in excess of the amount deemed reasonable. The undersigned further warrants, covenants and agrees that if the amount of the compensation for any such services is not determinable at the date of application, or is not stated above, it will not collect or charge any sum as compensation for such services without the prior written approval of the Government agency with which this application is officially filed as to the nature of the services for which such compensation is to be paid and the amount of such compensation.

Witness: _____

Address of witness: _____

Dated JAN. 8, 19 51

NOTE—Corporations must execute foregoing certificate in corporate name, by duly authorized officer, and seal must be affixed and duly attested; partnerships must execute in firm name, together with signature of a general partner. If no compensation is paid or to be paid for services rendered in connection with application or loan, this should be so stated and the Applicant should sign this Exhibit.

CERTIFICATION

The Applicant hereby certifies that the statements made in the foregoing application, and all exhibits and documents submitted in connection therewith, are true and correct statements to the best of Applicant's information and belief and are submitted as a basis for credit. ~~The Applicant agrees to employ any agent or the United States Government and any agent or any agencies or instrumentalities of the United States Government in connection with or arising out of this application.~~

Dated January 26, 1951, 19____

Witness: _____ (For individual applicants)

_____ (Signature)

Witness: _____ (For partnership applicants)

_____ (Full name of firm)

By _____ (Signature), a general partner.

(For corporate applicants)

(CORPORATE SEAL)

AMERICAN METAL MINING COMPANY (Full corporate name of Applicant)

Attest: Louise M. Orton (Signature), SECRETARY & TREASURER (Title)

By Charles L. Woodward (Signature), PRESIDENT (Title)

The United States Criminal Code, 18 U.S.C., Sec. 1001, makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

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