224 New Customhouse
Denver, Colorado

June 12, 1951

Memorandum

To: W. R. Storms

(Through Chief, Mining Division)

Charles Anderson

From: DMA Field Team, Region IV

Subject: DMA Docket 514, King Hecla Group, Henry V. Small, Globe, Arizona

On May 24 we forwarded the application on DMA 514, King Hecla Group.

Attached are two copies of form MF-100 and MF-103 which should be made a part of the brochure.

F. T. Allsman, Alternate

A. H. Koschmann

A. H. Koschmann

Attachments

DMA

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

REGIONAL DIRECTOR'S OFFICE
REGION IV
JUN 11 1951
BUREAU OF MINES
DENVER, COLORADO

JUN 7 1951

Re: Docket No. DMA-514X
Henry V. Snell
Copper
Exploration Aid

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

Dear Mr. East:

The application for an exploration loan of Henry V. Snell, 4125 South Figueroa, Los Angeles 37, California, has been received by the Copper Branch after we wrote to you asking for a field team examination of this property.

For your information we are enclosing two copies of Form MF-100 and Form MF-103, the applications of Henry V. Snell. Please return these when you have completed your report.

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

Enclosures 4

Approved:

Lowell B. Moon
for the Bureau of Mines

Olaf Rove
for the Geological Survey

May 24, 1951

Memorandum

To: W. R. Storms

Through Chief, Mining Division W. H. K.

Charles Anderson

From: DMA Field Team, Region IV

Subject: DMA Docket 514, King Hecla Group, Henry V. Snell, Globe, Arizona

We are forwarding you the application on DMA Docket 514, King Hecla Group at Globe, Arizona. You will note that this is an exploration loan request on a 50-50 basis, but that the original application was submitted for an operating loan.

Please investigate this property and submit your report. It is not necessary to go into as great detail regarding an exploration request as in the case of a direct loan. A copy of the letter from the Coordinating Committee is attached.

Please return the original brochure when you submit your report.

J. H. East, Jr.

A. H. Koschmann

Attachments
Coordinating Committee letter, May 16
Report on King Hecla Group and King Hecla Property
MRB 146, with two maps
HHE/cl Copies to DMA files, Koschmann

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

DMA file attached

May 16, 1951

Re: Docket No. DMA-514

RECEIVED
DEFENSE MINERALS ADM. OFFICE
REGION IV
MAY 23 1951
BUREAU OF MINES
DENVER, COLORADO

Mr. J. H. East, Jr.
224 New Customhouse
Denver 2, Colorado

Dear Mr. East:

We are forwarding herewith an application for a $20,000 Government participation exploration project from Mr. Henry V. Snell, 4125 South Figueroa, Los Angeles 37, California. This application was originally submitted for a $200,000 operating loan. We suggested that on the basis of information submitted to us this should be an exploration project on a 50-50 basis. We have received a letter from him asking that his application be so considered.

Will you please arrange for a Field Team to look at this property and submit a report from the viewpoint of an exploration project.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Coordinating Committee

Attachments

APPROVED:

Lowell B. Moon
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

JHE

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

May 16, 1951

Re: Docket No. DMA-514

Mr. Henry V. Snell
4125 South Figueroa
Los Angeles 37, California

Dear Mr. Snell:

We are glad to have your letter of May 7, in which you ask for assurance of favorable action on a proposed 50 percent Government exploratory project for $20,000. We are requesting a field team to make an examination of your proposal. You should receive a letter from Mr. J. H. East, Jr., in the near future, to arrange for this examination. Until we receive the report from the field team we will not be able to give any assurance of what action may be recommended.

We were about to mail a reply to yours of April 25, in which we hoped to clarify the special consideration clause in the Information Release of February 20, 1951. This paragraph was intended to provide for changes in the various commodity percentages in the event the supply-demand situation were to change. It was not meant to suggest that different projects in a given commodity group, as copper, would receive different treatment dependent on their individual merits or needs.

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

DMacLaren:pf

Copy to: J. H. East, Executive Officer, DMA Field Team,
224 New Customhouse, Denver 2, Colorado (2)
Executive Secretary
Mr. Lyon
Mr. Moon
Mr. MacLaren
Files

May 16, 1951

Re: Docket No. DMA-514

Mr. Henry [illegible]. Small
4125 South Figueroa
Los Angeles 37, California

Dear Mr. Small:

We are glad to have your letter of May 7, in which you ask for assurance of favorable action on a proposed 50 percent Government exploratory project for $20,000. We are requesting a field team to make an examination of your proposal. You should receive a letter from Mr. J. H. East, Jr., in the near future, to arrange for this examination. Until we receive the report from the field team we will not be able to give any assurance of what action may be recommended.

We were about to mail a reply to yours of April 25, in which we hoped to clarify the special consideration clause in the Information Release of February 20, 1951. This paragraph was intended to provide for changes in the various commodity percentages in the event the supply-demand situation were to change. It was not meant to suggest that different projects in a given commodity group, as copper, would receive different treatment dependent on their individual merits or needs.

Very truly yours,

Tom Lyon
PB.

Tom Lyon, Chairman
Coordinating Committee

DMcLaren:pf

Copy to: J. H. East, Executive Officer, DMA Field Team,
224 New Customhouse, Denver 2, Colorado (2)
Executive Secretary
Mr. Lyon
Mr. Moon
Mr. MacLaren
Files

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

REGIONAL DIRECTOR'S OFFICE
REGION IV
APR 11 1951
BUREAU OF MINES
DENVER, COLORADO

April 4, 1951

Re: Docket No. DMA-514

Mr. Henry V. Snell
P. O. Box 1947
Prescott, Arizona

My dear Mr. Snell:

This is in reply to your letter of March 24, 1951, with reference to your application for a production loan for the King-Neela mine at Globe, Arizona.

I have asked Mr. Lyon, who is now Director of the Supply Division, Defense Minerals Administration, about this application and he tells me that he wrote to you, on March 21, a letter which you should have received shortly after writing me. I gather that careful inspection of the information submitted by you with your application showed that the project was essentially one of exploring for additional ore reserves rather than a case of established ore reserves upon which a production project and loan could be based. Mr. Lyon tells me that he sent you a copy of the preliminary announcement of the forthcoming exploratory program of Defense Minerals Administration and I trust that this may prove of interest to you.

Sincerely yours,

JAMES BOYD

Administrator

CHJohnson:ba
Administrator's Reading File
Copy to J. H. East, 224 New Customhouse, Denver 2, Colorado, W. C. I.
Executive Secretary, W. C. I.
Copper Commodity Committee, W. C. I.
F i l e s

Prescott, Arizona
March 24, 1951

Dr. James Boyd
Administrator of the Defense Minerals Administration
Washington, D. C.

COPY

Dear Dr. Boyd:

I am writing you direct because, as the saying goes, I would like to get some information "right out of the Horse's mouth".

A little over two months ago I filed an application for a mine loan on a property I have in the Globe-Miami district, which I think will make a copper mine. I am supported in this belief by two able geologists (Carl Lausen and William Porri) who made a report and detail geological maps on this property, copies of which accompany my application.

To justify my opinion, I will say that I got my E. M. from Michigan College of Mines and Technology in 1900, and have operated largely in the Southwest ever since and many years in the Globe-Miami district. I do not want to bore you with a lot of detail, but as background will state that with associates I bought the principal part of what is now Magma Copper, at Superior, Arizona, and sold it to George Gunn of Salt Lake and W. B. Thompson of New York, who organized the present Magma Company. I had under option a considerable part of the Inspiration ore body which was taken over from me into the present company; I bought as a prospect and developed into the present company; I bought as a prospect and developed the first asbestos mine opened in Arizona and later sold it to the Johns-Manvaille Company, and as stated in my application worked at numerous properties in the area.

Your Bureau of Mines office in Tucson is familiar with this property as I approached them last year to get the Bureau to use some of their exploration funds on my property. They had no allocated funds but apparently were favorable impressed through their knowing Carl Lausen and his work on the Arizona State Bureau of Mines. The Tucson office kept copies of the report and maps I submitted. It happens that I have known Charley Kumke of your Tucson office for 35 years - he is directing the Manganese Explorations out of that office.

The File number of my application is "DOCKET NO. DMA-514" I am going to ask you to look at it. To coordinate certain activities that I must act on very soon I would like to know as early as possible what action I may expect on my application.

Thanking you for any information you may give me, I am,

Very truly yours,

Henry V. Snell, P. O. Box 1947
Prescott, Arizona

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

April 4, 1951

Re: Docket No. DMA-514

Mr. Henry V. Snell
P. O. Box 1947
Prescott, Arizona

My dear Mr. Snell:

This is in reply to your letter of March 24, 1951, with reference to your application for a production loan for the King-Keela mine at Globe, Arizona.

I have asked Mr. Lyon, who is now Director of the Supply Division, Defense Minerals Administration, about this application and he tells me that he wrote to you, on March 21, a letter which you should have received shortly after writing me. I gather that careful inspection of the information submitted by you with your application showed that the project was essentially one of exploring for additional ore reserves rather than a case of established ore reserves upon which a production project and loan could be based. Mr. Lyon tells me that he sent you a copy of the preliminary announcement of the forthcoming exploratory program of Defense Minerals Administration and I trust that this may prove of interest to you.

Sincerely yours,

JAMES BOYD

Administrator

CHJohnson:ba
Administrator's Reading File
Copy to J. H. East, 224 New Customhouse, Denver 2, Colorado, W. C. I.
Executive Secretary, W. C. I.
Copper Commodity Committee, W. C. I.
F i l e s

Prescott, Arizona
March 24, 1951

Dr. James Boyd
Administrator of the Defense Minerals Administration
Washington, D. C.

Dear Dr. Boyd:

I am writing you direct because, as the saying goes, I would like to get some information "right out of the Horse's mouth".

A little over two months ago I filed an application for a mine loan on a property I have in the Globe-Miami district, which I think will make a copper mine. I am supported in this belief by two able geologists (Carl Lausen and William Porri) who made a report and detail geological maps on this property, copies of which accompany my application.

To justify my opinion, I will say that I got my E. M. from Michigan College of Mines and Technology in 1900, and have operated largely in the Southwest ever since and many years in the Globe-Miami district. I do not want to bore you with a lot of detail, but as background will state that with associates I bought the principal part of what is now Magma Copper, at Superior, Arizona, and sold it to George Gunn of Salt Lake and W. B. Thompson of New York, who organized the present Magma Company. I had under option a considerable part of the Inspiration ore body which was taken over from me into the present company; I bought as a prospect and developed into the present company; I bought as a prospect and developed the first asbestos mine opened in Arizona and later sold it to the Johns-Manvaille Company, and as stated in my application worked at numerous properties in the area.

Your Bureau of Mines office in Tucson is familiar with this property as I approached them last year to get the Bureau to use some of their exploration funds on my property. They had no allocated funds but apparently were favorable impressed through their knowing Carl Lausen and his work on the Arizona State Bureau of Mines. The Tucson office kept copies of the report and maps I submitted. It happens that I have known Charley Kumke of your Tucson office for 35 years - he is directing the Manganese Explorations out of that office.

The File number of my application is "DOCKET NO. DMA-514" I am going to ask you to look at it. To coordinate certain activities that I must act on very soon I would like to know as early as possible what action I may expect on my application.

Thanking you for any information you may give me, I am,

Very truly yours,

Henry V. Snell, P. O. Box 1947
Prescott, Arizona

COPY

March 21, 1951

Re: Docket No. DMA-514

Mr. Henry V. Snell
Box 1947
Prescott, Arizona

Dear Mr. Snell:

This is in reply to your letter of March 17, 1951. Your application for a loan of $200,000 to develop and operate the King-Hecla group of copper claims in Gila County, Arizona was reviewed rather carefully by the Copper Branch. It was noted that no ore reserves are established such as would be necessary to operate at current prices and to permit repayment of the loan. We concluded that you might perhaps be able to take advantage of the exploratory program of the Defense Minerals Administration and as we have been expecting from week to week to be able to announce that program we failed to act as promptly on your application as we should like to have done. I am enclosing a preliminary announcement of the exploratory program and as soon as the regulations and application forms are available these will be sent to you.

Very truly yours,

Tom Lyon

Tom Lyon, Chief
Copper Branch

CHJohnson:pf

Copy to: Executive Officer, DMA Field Team, Region IV,
224 New Customhouse, Denver 2, Colorado w.c.i.
Executive Secretary w.c.i.
Copper Commodity Committee w.c.i.
Files

Prescott, Arizona, March 17, 1951

Mr. Tom Lyon,
C/O Defense Minerals Administration, Copper Division
Washington 25, D. C.

Dear Mr. Lyon:

I had a contacting acquaintance with Mr. J. K. Richardson through mutual friends and wrote him a personal letter to Washington in regard to a mine loan application I have on file. I received an answer from Mr. Richardson from Salt Lake in which he gave me your name as the one to whom to write. You of course do not know me.

The application I have filed for a Federal loan is to open a property that I think will make a copper mine, and my opinion is strongly supported by two able geologists, as outlined in their report and detailed geological maps accompanying my application.

I have operated in the Southwest for many, many years as a Mining Engineer at various mines and to a large extent on my own account. I do not want to bore you with a lot of detail but I do feel I should give you a little of my background: With associates I bought the claims which are now the Magma Copper Company and sold them to George Gunn of Salt Lake and W. B. Thompson of New York, who organized the present Magma Company; I also held options on claims covering a considerable part of the Inspiration ore body and they were taken over from me when the present Inspiration Company was formed; I also bought as a prospect and developed the first asbestos mine in Arizona and later sold it to the Johns-Manville Company.

The file number of my application is "DOCKET NO. DMA-514". I am going to ask you to look at it. To coordinate certain activities that I must act on very soon I would like to know as early as possible what action I may expect on my application.

As I outlined in my application, I cannot move large tonnages at the start but in a reasonable time I believe I can supply sizeable amounts of copper which the country needs.

The Tucson, Arizona, office of Bureau of Mines is familiar with the property throught the fact of having copies of reports and maps, and their knowledge of Carl Lausen (with the Arizona Bureau of Mines for quite some time) who was a co-maker of report and detail geological maps accompanying my application, was very favorable.

Thanking you for any information you may give me, I am,

Very truly yours,

/s/

Henry V. Snell, P.O. Box 1947
Prescott, Arizona

HVS-M

COPY

DMA

DEFENSE MINERALS
ADMIN
REGION IV
1951
BUREAU OF MINES
DENVER, COLORADO

February 7, 1951

Re: Docket No. DMA-514

Mr. Henry V. Snell
Box 1947
Prescott, Arizona

Dear Mr. Snell:

This is to acknowledge receipt of your letter dated January 16, 1951 (which was not received by the Defense Minerals Administration until January 29) transmitting an application on Form NSRB-146 for a loan of $200,000 to explore the King-Neela group of copper claims in Gila County, Arizona.

The application has been assigned the above docket number, to which reference would be made in any future communication, and has been referred to the Copper Branch for consideration.

Very truly yours,

/s/ Tom Ryan for

J. K. Richardson
Chief, Copper Branch

CHJohnson:pf

Copy to: Executive Officer, DMA Field Team Region IV,
224 New Customhouse, Denver 2, Colorado
Executive Secretary
Copper Commodity Committee
Files

FILE

Mining Division
Dal Field,
JAN 15 1951
Bureau Of Mines
Denver, Colorado

January 12, 1951

Mr. Henry V. Snell
Box 1947
Prescott, Arizona

My dear Mr. Snell:

In answer to your letter of January 10, the Bureau of Mines at this time has no funds for additional exploration or development of mineral deposits in Arizona other than the Artillery Peak manganese deposits that we are developing in southern Mohave County. Whether or not we will receive funds for such work in the next fiscal year, beginning July 1, we do not know.

In regard to a possible government exploration loan, I do not think that such loans are being granted at the present time. However, I would suggest that if you want such a loan, you apply to the Defense Minerals Administration. Your name then will be on the list if and when such loans are made. We are enclosing five copies of Form NSRB-146 for such a loan. As this form is not too good for mining, I would suggest that you file a supplemental letter with the Form NSRB-146, if you wish to apply, and give additional information as suggested on the last sheet of the attached press release. A supplemental form to accompany Form NSRB-146 is being made up in Washington for mine loans but to date none of these supplemental forms have reached us.

Sincerely yours,

Walter R. Storms
Chief, Ariz-N. Mex. Branch,
Mining Division, Region IV

cc: PTAllsman
File
DF

Mining Division
Dept. Rec'd.
DEC 21 1950
BUREAU OF MINES
Denver, Colorado

December 18, 1950

Mr. Henry V. Snell
P. O. Box 1947
Prescott, Ariz.

514

My dear Mr. Snell:

In answer to your letter of December 13, we do not, as yet, have application blanks for applying for a mine loan. However, you may obtain these blanks (Form NSRB-146, "Application for Government Loan under Sec. 302 of Defense Production Act of 1950") by applying to Mr. Charles H. Dunning, Director, Arizona Department of Mineral Resources, Minerals Bldg., Fairgrounds, Phoenix, or to Mr. Charles Willis, Secretary, Arizona Small Mine Operators Assn., 528 Title and Trust Bldg., Phoenix.

We hope to have a supply of application blanks in the near future.

Sincerely yours,

Walter R. Storms, Chief
Arizona-New Mexico Branch

CC P. T. Allsman
462.1
DF

WRStorms:frj

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

April 9, 1951

Re: Docket No. DMA-514

Mr. Henry V. Snell
4125 South Figueroa Street
Los Angeles 37, California

Dear Mr. Snell:

Thank you for your letter of March 27, 1951 addressed to Mr. Lyon, formerly Chief of the Copper Branch.

We are pleased to have your comments on the proposed exploratory program and shall be glad to send you the application forms and regulations as soon as they are available, hoping that something can be worked out for the King-Hecla Mine.

Very truly yours,

J. B. Gowen, Acting Chief
Copper Branch, DMA

CHJohnson:pf

Executive Secretary w.c.i.
Copy to: Executive Officer, DMA Field Team, Region IV,
224 New Customhouse, Denver 2, Colorado w.c.i.
Copper Branch w.c.i.
Files

Prescott, Arizona, March 27, 1951

Mr. Tom Lyon,
Chief, Copper Branch, Defense Minerals Administration,
Washington 25, D. C.

Dear Mr. Lyon: Re: Docket No.DMA-514

I have your letter of March 21st on above subject matter.

It is true that I have no ore reserves, as such, and as set out in my application could start producing only a limited tonnage from the small veins while the large vein is being explored and opened up for production. Frankly, the mine has to be made on the large vein - the small veins in themselves are only feeders and indicators of the general mineralization. The large vein is thoroughly leached, showing occasional stain and small bunches of ore, but is a natural for secondary enrichment, and I feel quite certain oxidized ore bodies are going to be found in the quartzite and lime above the permanent water level.

I have no objection whatever to the exploratory program idea, in fact, it might be the prudent plan as a few drill holes to depth in the large vein would be very informative. I do, however, have the same objection to the matching funds idea as held by the Arizona Small Mine Operators Association, and ably expressed by Charley Willis, its secretary, "If we had our own funds we would be working now".

As set out in the "Information Service" release of February 20th, which you enclosed, it certainly would be proper that the Government be repaid as set out in par. 1 of pg. 2; also, it would seem to me that the project would have to be carried out project by project, as set out in par. 3, pg. 2, and if the principle set out in the last sentence of par. 5, pg. 2, viz., "However, in exceptional cases involving the most strategic and critical metals and minerals the Secretary may depart from the matching principle in whole or in part if he finds that such action is necessary to accomplish the objectives of the program.", the program would get quick results.

Several months ago, in fact, last year, I visited the Tucson office of the Bureau of Mines to interest them in using some of their exploratory funds on my property, but all the funds they had were allocated principally to manganese. They took copies of my maps and reports and my impression was that they were favorably impressed and inclined. They of course knew Carl Lausen (who collaborated in the geological data I submitted) and his work at the Arizona State Bureau of Mines and his recognized ability. He had also been mine geologist at one of the large mines in the district in which my property is located and so was intimately familiar with that district.

I shall be glad to have you send me the application forms as you suggest and see if we cannot work out something, as I am convinced I have a sizeable mine waiting to be demonstrated.

I have just completed my work here and will be in Los Angeles for some time, so in future please address all correspondence to me at

Mr. Henry V. Snell
4125 South Figueroa Street
Los Angeles 37, California

Very truly yours, /s/

HVS-M

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

REGIONAL DIRECTOR'S OFFICE BAKER, NV OCT 1 1951 DENVER, COLO.

SEP 26 1951

Mr. Henry V. Small
4125 South Figueroa Street
Los Angeles 37, California

Re: Docket No. DMA-514X

Dear Mr. Small:

Your application for exploration aid has been received by the Defense Minerals Administration and we are sorry to inform you that it must be denied.

On the basis of the material submitted with your application and the material available to the Government it is felt that the geological possibilities of the property do not warrant Government participation in further exploration at this time.

We appreciate your interest in the Defense Program and thank you for submitting your property for consideration.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

HVWaugh:rw
9-24-51

Copy to: Administrator's Reading File
Executive Officer, DMA Field Team IV
Mr. Gowen
Mr. C. H. Johnson
Mr. D. MacLaren
Files - DMA Docket

J.F.S.

ME
WBM

Lautich

310

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

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

SEP 26 1951

Memorandum

To: Administrative Management Division

From: Director, Supply Division

Subject: Application for exploration aid of Mr. Henry V. Small, 4125 South Figueroa Street, Los Angeles 37, California, DMA-514X, Commodity-Copper

Denial of this application has been recommended by Field Team, Region IV for the following reasons:

1. The general meager mineralization as shown by the very small amount of favorable appearing gossan thus indicating the lack of primary acid forming sulfides.

2. The presence of calcite in the vein which would act as a precipitant and prevent any large scale migration of the copper.

3. The high copper content (5%) of the oxide ores formerly mined shows that conditions were not favorable, locally at least, for the removal of the copper.

4. The project presented for exploratory drilling would be "blind" both as to depth and position along the stretch of the vein. The cost of such drilling before obtaining decisive results could well exceed the $20,000 anticipated.

5. There has been little or no recorded production of oxidized ore from the Saddle Back vein, though it has been adequately prospected at the surface. No known minable ore reserves exist on the property.

A letter has been prepared to the applicant informing him of this denial.

Transmitted herewith for your disposal is the entire file consisting of the following:

2 Sets of one form and answer sheet each of MF-100 and 105
1 Field Team Report on Henry V. Small's King Keela Group with cover letter

routed

1 Report on King Hecla Group - Location & Topography
1 Report on King Hecla property by H. V. Smeed with maps attached
1 Geologic map of the King Hecla Copper Co., June 20, 1949
1 Sheet showing section of the King Hecla Copper Co., June 20, 1951
1 Form BMS 146
7 Carbon letters to Mr. Henry V. Small from:
    Tom Lyon, February 7, 1951
    Tom Lyon, March 21, 1951
    James Boyd, April 4, 1951
    J. B. Gowen, April 19, 1951
    J. B. Gowen, April 19, 1951
    Tom Lyon, May 16, 1951 (2 copies)
    L. F. Strobel, June 15, 1951
4 Carbon letters to Mr. J. M. Hart, Jr. from
    Tom Lyon, May 16, 1951 (2 copies)
    J. B. Gowen, June 4, 1951 (3 copies) with 3 carbon letters attached for H. V. Small to Mr. Gowen, April 25, 1951
    Tom Lyon, June 5, 1951 (3 copies)
    Tom Lyon, June 7, 1951
1 Original and carbon copy of letter to Dr. James Boyd from:
    Henry V. Small, January 18, 1951
3 Carbon letters from H. V. Small to:
    Tom Lyon, March 17, 1951
    Tom Lyon, March 27, 1951
    Defense Minerals Administration, May 16, 1951 (3 copies)

Tom Lyon

Tom Lyon, Director
Supply Division

Attachment

HVHaugh:rw
9-24-51

Copy to: Administrator's Reading File
Executive Officer, DMA Field Team IV
Mr. J. B. Gowen
Mr. G. H. Johnson
Mr. MacLaren
Files - DMA Docket

224 New Customhouse
Denver, Colorado

June 25, 1951

Memorandum

To: Regional Director, Region IV (in Washington)

From: Chief, Mining Division

Subject: DMA dockets - Arizona-New Mexico

Following is a telegram received from W. R. Storms this morning:

"DMA Examiners recommend that loan be denied for dockets 112, 240, 514, 691, 813, 1057 and 1220. Final reports will be mailed when completed."

F. T. Allsman

/el

224 New Customhouse
Denver, Colorado

June 18, 1951

Memorandum

To: W. R. Storms

(Through Chief, Mining Division)

From: Executive Officer, DMA Field Team, Region IV

Subject: DMA Docket 514, King Hecla Group, Henry V. Snell
Globe, Arizona

On May 24 we forwarded the application on DMA 514. We are attaching a copy of a letter from J. B. Gowen, Acting Chief, Copper Branch, relative to DMA 514, with an attached letter from Henry V. Snell.

J. H. East, Jr.

J. H. East, Jr.

Attachments

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

REGIONAL DIRECTOR'S
OFFICE
REGION IV
JUN 11 1951
BUREAU OF MINES
DENVER, COLORADO

June 4, 1951

Re: Docket No. DMA-514

Mr. J. H. East, Jr.
224 New Customhouse
Denver 2, Colorado

Dear Mr. East:

For your information and your files we are enclosing a copy of a letter from Henry V. Snell which we inadvertently failed to send you when we wrote to you on May 16, 1951.

Very truly yours,

J. B. Gowen

J. B. Gowen, Acting Chief
Copper Branch, DMA

Enclosure

JHE

Los Angeles, California, April 25, 1951

Mr. J. B. Gowen
Acting Chief Copper Branch, DMA
Defense Minerals Administration
Washington 25, D. C.

Docket No. DMA-514

COPY

Dear Mr. Gowen:

I have your letters of April 9th and of April 19th with exploratory loan application forms enclosed.

In my original loan application on Form NSRB-146 (now your Docket DMA-514), I brought out on page 8 of that form that I still owe $5,000.00 on my purchase obligation before I have title as sole owner of the property.

In my opinion, the very least amount that should be considered an as exploratory fund is $15,000.000 This figure may be too low as it is more or less based on contract drilling rates of some years ago on a project with which I was associated. If it were decided that the proper exploration would be through shaft and drifting thereform the $15,000.00 of course would be entirely inadequate.

My part of the $15,000.00 would be $7,500.00, which with my obligation of $5,000.00 which I necessarily must meet would make a load more than I can carry right now. On March 21 st Mr. Tom Lyon wrote me and sent me copy of "Information Release" of February 20, 1951, and in the last sentence of paragraph 5, on page 2, it states:

"However, in exceptional cases involving the most strategic and critical metals and minerals the Secretary may depart from the matching principle in whole or in part if he finds that such action is necessary to accomplish the objectives of the program."

Based on every statement I have seen in the press, also Government releases, copper is certainly critical, and further corroborating this statement the Engineering and Mining Journal, which is accepted as top authority, in its current issue of April, 1951, states, "The supply of copper continues inadequate", and therefore it seems to me I should qualify under the paragraph quoted above and get total, or practically total, as the Government's proportion of the exploratory fund.

I think if you will review the maps and data in my file you will agree that the possibilities of my property warrant the application of the principle set out in the paragraph quoted above from the "Information Release".

Awaiting your early reply, I am,

Very truly yours,

Henry V. Snell, 4125 S. Figueroa, Los Angeles 37, California

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

FROM Walter R. Storms

BUREAU Of Mines

CHG. APPROPRIATION Full Rate DMA

Tucson, Arizona, June 6, 1951

U. S. GOVERNMENT PRINTING OFFICE 10—1723

Phoned 4.08 p.m. frj

H. V. Snell
Hassayampa Hotel
Prescott, Arizona

Defense Minerals Administration engineers will be in Globe June 13 or 14 to examine your King Hecla group. Please advise if you can meet them at Old Dominion Hotel.

Walter R. Storms
U. S. Bureau of Mines

Confirmation
CC P. T. Allsman
DMA 514
TS (2)
DF

WRStorms:frj

Mining Division
Date Rec'd.
JUN 11 1951
BUREAU OF MINES
Denver, Colorado

224 New Customhouse
Denver 2, Colorado

July 17, 1951

Memorandum

To: London Strobel, Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 514, Final Report, Henry V. Snell's King Hecla Group, Gila County, Arizona

Attached is the report on Docket DMA 514, H. V. Snell's King Hecla Group.

We agree with the field engineers and recommend that the application be denied.

J. H. Eastman, Jr.

A. H. Koschmann

Attachment

1d
cc: Koschmann
DMA

FOR GOVERNMENT USE ONLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

REGIONAL DIRECTOR'S OFFICE
REGION IV
JUL 13 1951
BUREAU OF MINES
DENVER, COLORADO

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

July 13, 1951

Memorandum

To: J. H. East, Jr., U. S. Bureau of Mines

A. H. Koschmann, U. S. Geological Survey

From: Chief, Mining Division, Region IV

Subject: DMA Docket 514, Final Report, Henry V. Snell's King Hecla Group, Gila County, Arizona

The original application by Henry V. Snell, was for a $200,000 loan for the development and exploration of the King Hecla group of claims. No known mineable reserves exist on the property and at the suggestion of the Coordinating Committee of Defense Minerals Administration, the original application was changed, with the concurrence of the applicant, to a $20,000 exploration loan.

After a detailed examination by the U. S. Geological Survey and the U. S. Bureau of Mines, the team recommends denial of the proposed project.

We concur with their conclusions that the amount and character of the observed mineralization are inadequate to justify the possibility of any underlying sulfide enrichment and this application should be denied.

P. T. Allsman

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

TUCSON, ARIZONA

July 5, 1951

Memorandum

To : Paul T. Allsman, Denver, Colorado

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

Subject : Final Report, DMA Docket 514, Henry V. Snell's King Hecla Group, Gila County, Ariz.

Enclosed are original and 7 copies of the section on Summary, Conclusions and Recommendations by L. L. Farnham of the Bureau of Mines and C. S. Bromfield of the Geological Survey, and the Engineering report by Farnham for the above docket. Nels Peterson of the Geological Survey visited this property with Farnham and Bromfield, and I believe, concurs with their findings.

This report has my approval.

The brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC P. T. Allsman (7)
C. A. Anderson
DMA 514
DF

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

200 New Customhouse
Denver 2, Colorado

July 11, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: Report on DMA 514, King Hecla Group (H. V. Snell), Gila County, Arizona

Enclosed are the original and 7 copies of the geologic section of the above report by C. S. Bromfield.

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

Enclosures

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

July 6, 1951

Memorandum

To: Mr. A. H. Koschmann, Denver, Colorado

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

Subject: Report on DMA 514, King Hecla Group (H. V. Snell), Gila County, Arizona

Enclosed are 1 original and 7 copies of the geologic section of the above report by C. S. Bromfield of the Geological Survey. The authors recommend that an exploration loan be denied because of the lack of evidence of mineralization in the subject area. I approve the geologic report and the conclusions and recommendations.

Please return one copy to W. R. Storms and one copy to us.

A. F. Shride

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

Enclosures 8

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-514, Henry V. Snell's King Hecla Group

Gila County, Arizona

L. L. Farnham, Mining Engineer
U. S. Bureau of Mines

C. S. Bromfield, Geologist
U. S. Geological Survey

July 1951

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By L. L. Farnham[1] and C. S. Bromfield[2]

Early in 1951 Henry V. Snell of 4125 South Figuero St., Los Angeles 37, Calif., made an application for a Government loan of $200,000 under the Defense Production Act of 1950, to be used in the development and exploitation of the King Hecla Group of mining claims. At the suggestion of the Coordinating Committee of The Defense Minerals Administration, this original application was changed to a $20,000 exploration loan. The applicant proposed to use the loan in the search for an enriched secondary sulfide zone, thought to possibly underlie the outcrop of a vein traversing the property.

The 17 unpatented mining claims comprising the King Hecla Group are situated some 5.5 miles northeast of Globe, Gila County, Arizona. It was presumed by the applicant that the northeasterly trending fault fissures, with which the noted copper deposits of the Globe area were associated, would, if they continued, pass through his property. The type of mineralization, however, on the King Hecla Group has little if any similarity to that of the Old Dominion and neighboring mines.

Seven or more veins of various sizes and attitudes outcrop upon the King Hecla claims. The principal one, upon which the applicant proposed the exploration, is a northeasterly trending fault

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

fissure cutting Pre-Cambrian and Cambrian sediments, and dipping 55° southeasterly. The fissure filling is principally brecciated wall rock cemented by oxides of manganese and iron with calcite and minor amounts of quartz. The length and average width of the mineralization within the vein was not apparent. The dumps from the old exploratory openings on the fissure were very poorly mineralized. The great bulk of the material was altered wall rock containing a few random pieces of favorable appearing gossan.

No evidence of well defined or persistent ore shoots were apparent in any of the old superficial workings. The small past production of essentially silver-lead ores came from small scattered bunches distributed irregularly within the veins.

No known mineable ore reserves exist upon the property.

The applicant proposed to explore the main vein by diamond drilling in a search for enriched ore. He estimated that a total of 3,000 feet of drilling would suffice, costing $20,000. The number of holes contemplated was not given, nor were their location or depth.

The former operations on the property have shown that the small erratic ore bodies found in the past are not profitable. Any future value that the claims might have would depend upon finding larger and more persistent ore shoots of the kind formerly mined or, as the applicant hopes, a deeper secondarily enriched zone.

It is the opinion of the writers that both of these possibilities seem remote. The search for the superficially enriched ores within the oxidized zone would be "blind". The amount and character of the observed mineralization in the vein appears inadequate to justify the possibility of the existence of any significant underlying sulfide enrichment. In any event its position along the strike of the vein and its depth are both unknown, consequently the search might prove much more costly than anticipated.

Therefore, it is recommended that the applicant's request for a loan be denied.

Geology

KING HECLA GROUP PROJECT
GILA COUNTY, ARIZONA

Geology

By Calvin S. Bromfield
Geologist, U. S. Geological Survey

KING HECLA GROUP PROJECT
GILA COUNTY, ARIZONA

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Fig. 2 Geology of the King Hecla Claims (See Engineering Report)

GENERAL GEOLOGY

The King Hecla claims are in the Globe district, Gila County, Arizona. The rock formations within the district include a series of Precambrian and Paleozoic quartzites, limestones, and shales lying on a basement complex of Pinal schist. These rocks are intruded by dikes, sills, and irregular masses of diabase and by various granitic rocks. Remnants of thick dacite flows of early Tertiary age cap many hills. Gila conglomerate of probable Pliocene age covers much of the intermontane areas.

The rocks near Globe are cut by a group of northeasterly faults of pre-dacite age with which the ore deposits are associated. Post-ore faults of northwesterly trend cut the northeasterly faults and displace associated ore bodies.

The greatest production in the district has come from one member of the northeasterly trending fissure system known as the Old Dominion vein. Along this vein there were several productive properties.

The King Hecla group of claims lies about 5 miles northeast of Globe. The claims are approximately two miles northeast of the most northeasterly producing property on the Old Dominion vein. The applicant infers the main or Saddle Back vein to be an extension of the Old Dominion vein. The lack of exposures and an intervening valley deposit of post-ore Gila conglomerate prevent any proof that it is the same vein. The main vein or Saddle Back vein occupies a northeasterly trending fault.

The rocks in the area of the claims are part of the Precambrian Apache group and include from oldest to youngest the

Pioneer shale, Barnes conglomerate, Dripping Spring quartzite, and Mescal limestone. Unconformably overlying the Mescal limestone is the Cambrian Troy quartzite.

Several northeasterly faults and veins cross the claims. The largest of these is the Saddle Back fault (fig. 2) which has a throw of approximately 380 feet. A northwesterly fault (fig. 2) with approximately 400 feet of throw cuts the northeasterly faults.

ORE DEPOSITS

The applicant has amended his original request for a $200,000 development loan to a request for $20,000 to carry out an exploration program. With this money the applicant wishes to diamond drill the Saddle Back vein to find a postulated secondary zone of copper enrichment.

Northeast of the road three small adits have been driven into the hillside on the Saddle Back vein. This work is over thirty years old, and, as a result, is caved and inaccessible. The adit nearest the road was the only place where the vein could be observed by the examining team. Here the vein was about 5 feet wide and consisted of a barren breccia of quartzite fragments and comminuted wall rock. Material on the dumps was largely of barren wall rock. Manganese oxides (probably pyrolusite) were quite common as coating. Malachite stains were observed, but were rather rare. There were a few pieces of material that might properly be classed as a gossan. These consisted of a dull red mass of hematite and specularite containing rare malachite stains or seams and probably some copper oxide. Some galena boxwork was observed in one specimen.

The vein does not outcrop southwest of the road but two adits were driven here in an attempt to cut the vein. The lower adit was entirely in the footwall and failed to find the vein. The upper adit cut a vein trending in a direction parallel to the Saddle Back vein, but only the footwall was seen and it could not be determined whether this was the Saddle Back fault. The fault was filled with barren breccia.

CONCLUSIONS

The vein could not be observed sufficiently owing to the inaccessibility of the workings, but there are several lines of reasoning that mitigate against the possibility of the Saddle Back vein's developing any important copper production. First, a comparison with other producers in the Globe district, shows that whereas an important part of the early production of these mines came from the oxidized ores there has been little or no recorded production of oxidized ore from the Saddle Back vein, though it has been adequately prospected at the surface. According to a statement by H. V. Snell, small parallel veins have produced $50,000 to $70,000 in oxidized lead-silver-copper ore. This is stated to have been "pockety" in nature.

Second, there is no evidence for assuming the presence of any considerable amount of copper in the primary sulphide. Absence of any significant amount of gossan in the outcrop of the Saddle Back vein would seem to signify a lack of pyrite in the primary ore which, with the calcite of the gangue, make conditions unfavorable to extensive migration of copper from the outcrop.

Third, the intensity of mineralization diminishes to the northeast along the productive veins of the Globe district. The prominence of silver and lead as compared with copper in the veins of the King Hecla group suggests either a mineralization unrelated to the productive copper veins of the Globe district, or a zoning away from the center of mineralization.

The comparisons with the productive zone of the Globe district are unfavorable, but regardless of their validity the generally unmineralized character of the vein itself does not allow the writers to recommend this as a sound project having a reasonable chance of making a significant discovery of metals.

HENRY V. SNELL'S KING HECLA GROUP
GILA COUNTY, ARIZONA
DMA Docket 514

Engineering Report

By L. L. Farnham
Mining Engineer
U. S. Bureau of Mines

Engineering

HENRY V. SNELL'S KING HECLA GROUP
GILA COUNTY, ARIZONA
(DMA-514)

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Ownership and extent	2
Description of the deposit	2
Ore reserves	4
Exploration and development	4
Project proposals	5
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2	Geology of King Hecla Claims	2

INTRODUCTION

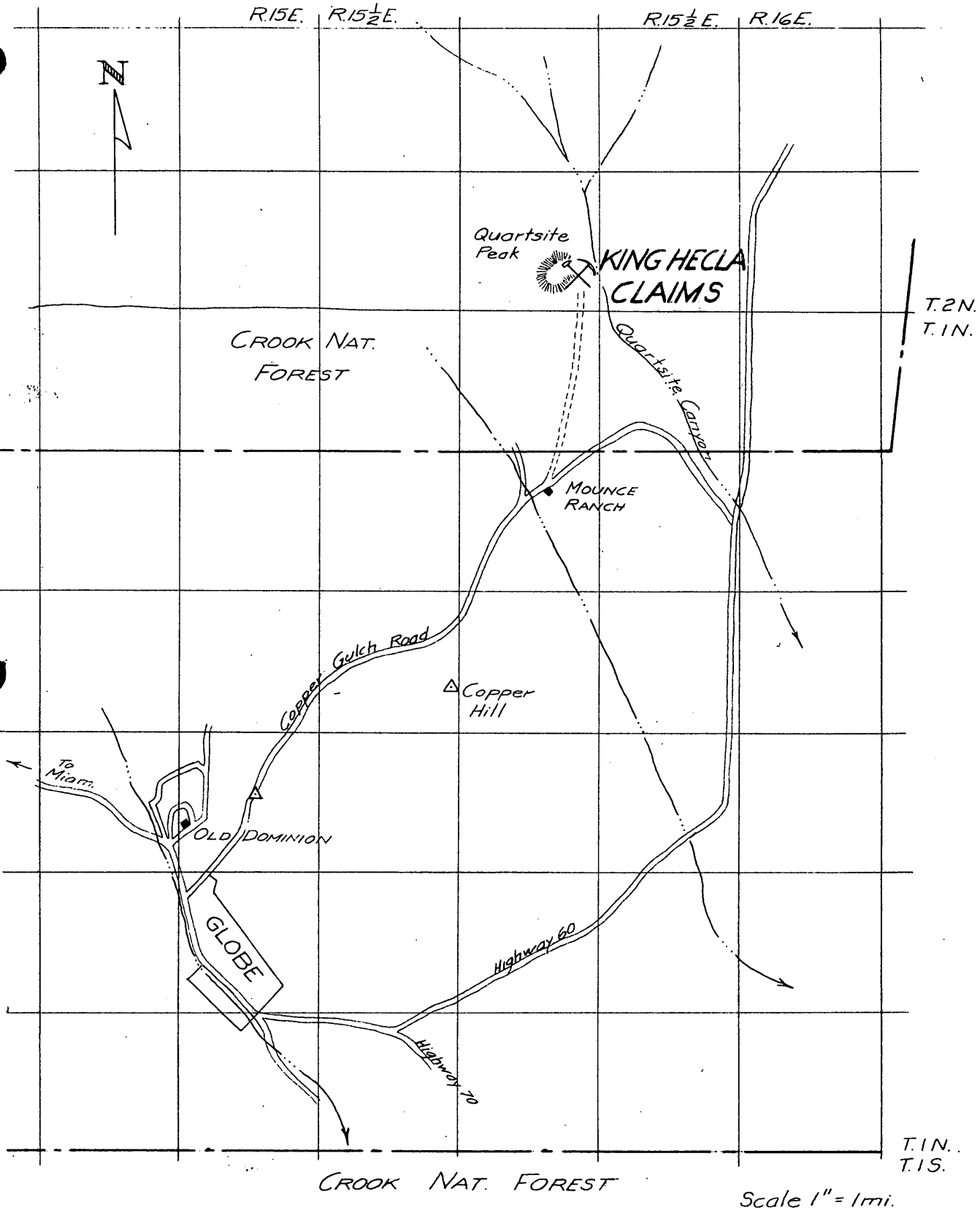
This report covers the results of the investigation of the King Hecla Group of mining claims made in connection with the loan application of Henry V. Snell, 4125 South Figueroa St., Los Angeles 37, Calif., to the Defense Minerals Administration. The application, as originally submitted, requested a $200,000 operating loan. This later was changed to a $20,000 exploration project. The money was to be used in the search for a possible zone of secondary sulfide enrichment which the applicant thought might underlie the outcrop of a vein traversing the King Hecla property.

ACKNOWLEDGMENTS

Acknowledgment is hereby made to Henry V. Snell, owner of the property, and Nels P. Peterson of the Geological Survey for the courtesies and help extended the field team during the examination of the property.

LOCATION AND PHYSICAL FEATURES

The King Hecla Group is situated about 5.5 airline miles northeast of Globe, Gila County, Arizona. The property is reached from Globe via the Copper Gulch road to the Mounce ranch. From there the road runs almost due north for 1.5 miles and ends at the mine. This part of the road is in poor condition with the last mile impassable. (Fig. 1)



DMA 514

Fig. 1. Location map, King Hecla Project, Gila Co., Arizona

The claims are in a moderately rugged area with rather precipitous canyon walls on the east and north slopes. Vegetation is sparse. The climate is similar to that prevailing in the arid desert regions of the Southwest.

HISTORY AND PRODUCTION

Little is known of the history or production of the King Hecla. A report accompanying the applications states that the claims were located about 35 years ago. HenryV. Snell, the applicant, estimates that the total production has amounted to between $50,000 and $75,000. This production camefrom the shallow workings on several different veins. About 54 tons, mined by the applicant 30 years ago, is said to have contained 37.4 ounces of silver per ton, 11.6 percent lead, and 5.1 percent copper. This would indicate that the chief value of King Hecla ore was silver-lead.

OWNERSHIP AND EXTENT

The King Hecla Group consists of 17 unpatented mining claims. The applicant has purchased the group for $25,000 but still owes a balance of $5,000.

DESCRIPTION OF THE DEPOSIT

There are seven or more veins of various lengths and widths exposed on the property. The strikes of the veins range from N.30° E. to N. 80° E., with dips from 50° to 80°. (Fig. 2). Vein widths vary from 3 to perhaps as much as 20 feet. All the fissures cutCambrian and Pre-Cambrian sediments which dip moderately to the southwest.

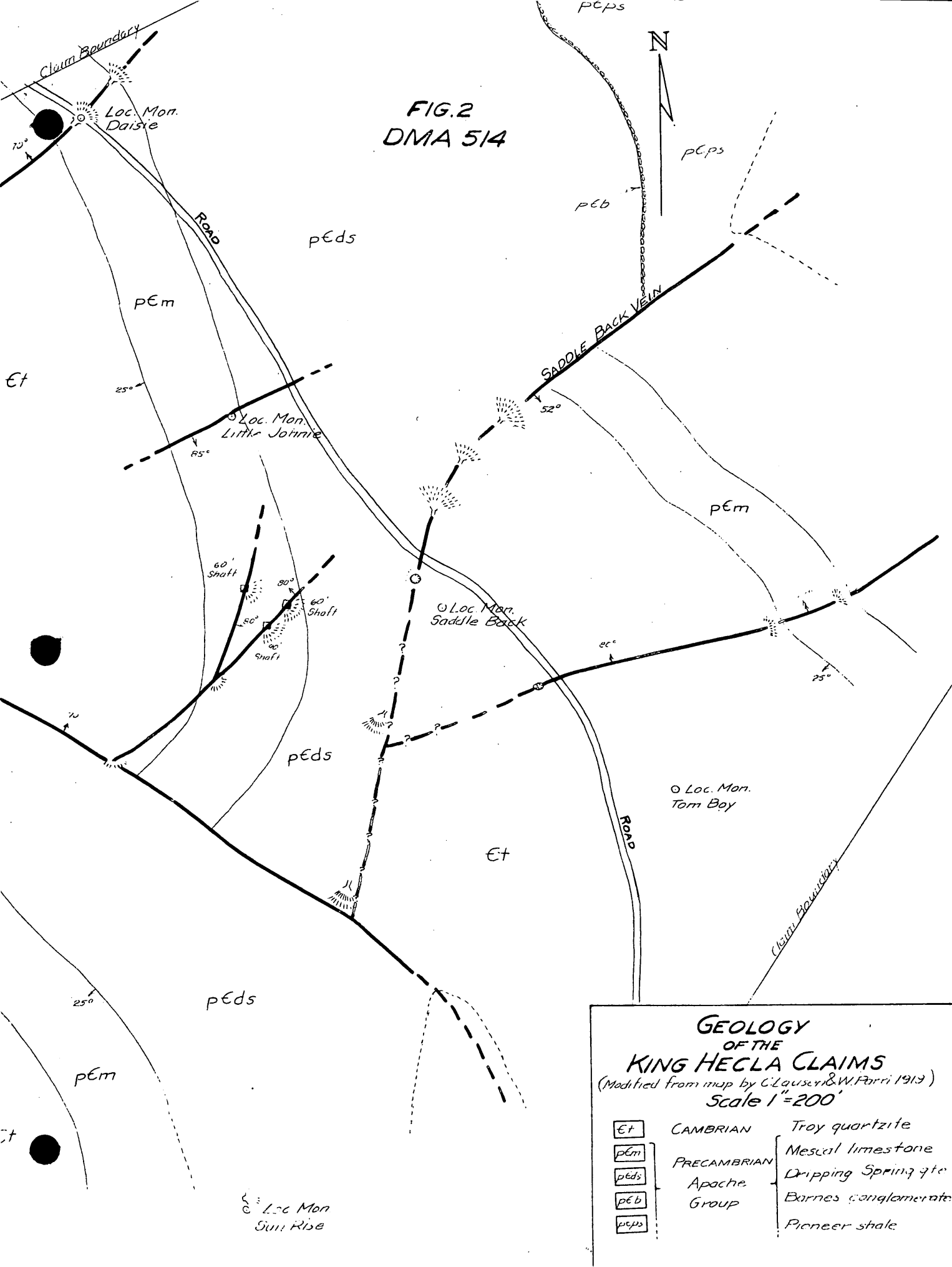


FIG. 2
DMA 514
N
Claim Boundary
Loc. Mon. Daisie
Road
pЄds
pЄm
Єt
pЄb
pЄps
Saddle Back Vein
Loc. Mon. Little Johnnie
Loc. Mon. Saddle Back
Loc. Mon. Tom Boy
60' Shaft
Loc. Mon. Sun Rise
Geology of the King Hecla Claims
(Modified from map by C. Lausen & W. Parri 1919)
Scale 1" = 200'
Єt Cambrian Troy quartzite
pЄm Precambrian Apache Group Mescal limestone
pЄds Dripping Spring qte
pЄb Barnes conglomerate
pЄps Pioneer shale

The principal vein of the system, known as the Saddle Back, is a fault fissure trending about N. 30° E. and dipping 55° Southeasterly. It is said to have a known length of 1,300 feet. This is open to question as much of the surface is covered with detritial material. Three adits, driven on this vein, are reported to have disclosed vein widths of 20 feet. Unfortunately the portals of all these adits are now tightly caved so that the character of the vein filling could only be judged from the dumps resulting from this work. In an open cut above the adits the mineralized section of the fissure was about 5 feet wide. The fissure filling of all the veins is principally brecciated wall rock cemented by varying amounts of oxides of manganese and iron, with calcite and minor amounts of quartz. The dumps, representing the vein material broken in the adit drifts, were very poorly mineralized. The great bulk of all the dumps was altered wall rock containing only very minor amounts of favorable-appearing gossan. Manganese and iron oxides, showing some copper and oxide lead minerals, were the principal constituents of this gossan.

The old superficial workings on the property showed no indications of the presence of well defined or persistent ore shoots. The small past production of essentially silver-lead evidently came from small isolated bunches of ore distributed irregularly within the veins. The value of the ores mined probably did not repay the cost of the work that was necessary to find them.

It is unfortunate that so much of the old underground openings were found inaccessible. Had they been open they might have disclosed different or more favorable conditions than those that were observed. However, it seems improbable that any additional information that they might have furnished would have materially changed the main conclusions of this report.

ORE RESERVES

There are no known ore reserves exposed on the King Hecla property at this time.

EXPLORATION AND DEVELOPMENT

The early day search for high-grade silver ore resulted in considerable prospecting and shallow exploration on the various veins. Three shafts reaching depths of from 60 to 90 feet, with rather extensive drifting, served to explore the small Saddle Back vein and its northern branch. This work is now inaccessible. Openings on the main Saddle Back vein consisted of four adits of unknown length driven on the fissure from the steep eastern hillside. All of this work was caved and inaccessible with the exception of the westerly-most shaft and its connecting adit. Here the vein had an exposed width of 6 feet with the manganese-iron mineralization following the footwall. Another adit, consisting of some 350 feet of work, driven from the base of the westernly slope, failed to find the main vein. It appeared that this work was improperly located and did not necessarily disprove the presence of the vein in this area.

No buildings or other equipment are left upon the property. The nearest source of water is the Mounce ranch, about 1.5 miles south of the claims.

PROJECT PROPOSALS

The applicant proposed to search for an enriched secondary sulfide zone thought to possibly underlie the outcrop of the Saddle Back vein. It was suggested that diamond drilling be employed for this exploration. He estimated that 3,000 feet of drilling would suffice, costing about $20,000. No definite proposal was made as to the number of holes necessary nor their location or depth. The applicant said that he was willing and able to participate in the cost of the work on a 50-50 basis.

CONCLUSIONS AND RECOMMENDATIONS

The applicant's chief reasons for believing the King Hecla Group is worthy of further exploration are based upon its proximity to Globe and the apparent similarity of geological conditions on his property and those with which the well known copper deposits of that area are associated. The northeastward trending fault fissure which was so productive at the Old Dominion splits before passing under cover about two miles southwest of the King Hecla. A fault fissure of somewhat similar strike occurs on the applicant's property but it probably is not a continuation of the Old Dominion vein. Going northeasterly from Globe the copper ore bodies decreased

progressively in size until the termination of the ore was reached at least two miles southwest of the King Hecla. The major portion of the copper produced (1,000,000,000 lbs.) from the Old Dominion and neighboring mines came from the oxide zone. Rich copper ores outcropped and secondary sulfide enrichments were comparatively unimportant. It is true that the same rock formations and some northeastward trending fault fissures occur on the King Hecla property as they do at the Old Dominion, but there the similarity ends. The King Hecla is evidently outside of the central copper zone and its mineralization is more of the silver-lead type. The Old Dominion ore averaged less than an ounce of Silver per ton with little if any lead, whereas the chief value of the ore produced from the King Hecla was silver-lead. No favorable comparison can be made between the great amounts of mineralization in and associated with the veins at Globe and the meager mineralization at the King Hecla. Thus it appears that a comparison of the two areas is hardly pertinent.

The applicant expressed little or no faith in the commercial possibilities of the small erratic ore shoots such as were formerly mined on his property. The future value of the property then will depend either upon finding larger and more persistent oxide ore bodies than those thus far found, or, as the applicant hopes, a deeper enriched sulfide zone. Both of these possibilities appear remote.

The complexity of the problems involved in judging gossans, as to what may underlie them, are appreciated by the writer. In this case the reasoning used was based upon the following considerations: (1) The general meager mineralization as shown by the very small amount of favorable appearing gossan, thus indicating the lack of primary acid-forming sulfides; (2) The presence of calcite in the vein which would act as a precipitant and prevent any large scale migration of the copper; (3) the high copper content (5%) of the oxide ores formerly mined shows that conditions were not favorable, locally at least, for the removal of the copper.

In consideration of these unfavorable conditions it is the opinion of the writer that it is highly improbable that any worth while secondary sulfide enrichment exists in the King Hecla veins.

In any event the target presented for exploratory drilling would be "blind", both as to depth and position along the strike of the vein. The cost of such drilling before obtaining decisive results could well exceed the $20,000 anticipated.

Therefore, it is recommended that the application for a loan be denied.