400

AUG 11 1952

Mr. John Amos Leming
5658 Alexira Blvd.
Los Angeles 36, California

Re: Docket No. DMA 15742 - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Leming:

We have just been informed by Mr. Miller, Executive Officer, DMA Region III, that you have not submitted an amended application for exploration assistance as we were advised you would do by Mr. Madden's letter of June 5, 1952.

As we wrote you in our letter of May 29, your application is more than a year old and we have not received a definite proposal from you to date since first writing you last January. In accordance with the last paragraph of our letter of May 29, we have now removed your application from our active file and consider the matter closed.

Our action does not prevent you from filing a new application for exploration assistance on the same property. We realize that there may be extenuating circumstances that have prevented you from submitting the requested information. As so much time has passed since you submitted the original application and costs have changed and possibly also your exploration plans, the filing of a new application will entail little or no extra work. If you do file a new application, we suggest that you refer to the original one for any data that may be usable therein. We wish to assure you that a new application will be processed promptly as there is no delay just because of a change in number.

Sincerely yours,

C. O. Mittendorf

Acting Administrator

GOSelfridge:ls
8/8/52

cc: Docket
Admn. Read. File
Field Team, Reg. 3
G. O. Selfridge
G. W. Lemmon, USGS
R. D. Geehan, USBM

DEFENSE MINERALS EXPLORATION ADMINISTRATION
GCSelfridge

5284 3538

14X 3923 Working und, DMEA
August 5, 1952

H. C. Miller, Executive Officer, DMEA Region 2, 1012 Flood Bldg.
870 Market Street, San Francisco, California
Docket DMA 1574X - Tungsten - Pinnacle Tungsten Company

On June 5 Mr. John Amos Fleming advised us he was submitting an amended application to you within a few days. Please inform us if he has done so.

C. O. Mittendorf
C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration

GCSelfridge:ls

CC: Docket
Admn. Reading File
G. C. Selfridge
Audits

EXPLORATION

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

On March 3, 1952, you wrote us that Mr. Heron had agreed to examine your property, after which you would either supplement and amend your application or ask us to consider it withdrawn without prejudice.

We note that your application is now more than one year old. We would like to clear our files of all of the old DMA applications and so would appreciate hearing from you at your earliest convenience.

We wish to cooperate with you in the matter of allowing ample time but if the needed information has not been received by June 30, 1952, we will then remove the application from our active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

Chalfrid Gaehn /[illegible]/52

Copy to: Docket
Adm. Serv. Inv. File
Field Team, Region 3
C. C. Chalfrid
[illegible] Gaehn - [illegible]
[illegible] Lemson - [illegible]

Pinnacle Tungsten Company
D. V. O'Flaherty, Secretary
23 No. La Senda
South Laguna, California

Re: Docket No. IMA 157[illegible]X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. O'Flaherty:

Our files on the subject application note that on August 22, 1951, we were informed that a geological report on your property and a revised application would be forthcoming in the near future.

To date we have not received the said report or application and so are unable to continue with your application.

If you intend to complete your application, please supply us with the above noted information. If you do not desire to complete your application, a letter to this effect will enable us to withdraw your application, without prejudice.

Sincerely yours,

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

QLBrewer'lm
1/21/52

cc: Admn. Reading File
Docket
R. W. Goshen, USGM
D. M. Lemmon, USGS
Field Team Reg. III
G. C. Selfridge
Q. L. Brewer

400

FILE COPY
SURNAME:

Selfridge

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

AUG 11 1952

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

We have just been informed by Mr. Miller, Executive Officer, DMEA Region III, that you have not submitted an amended application for exploration assistance as we were advised you would do by Mr. Madden's letter of June 5, 1952.

As we wrote you in our letter of May 29, your application is more than a year old and we have not received a definite proposal from you to date since first writing you last January. In accordance with the last paragraph of our letter of May 29, we have now removed your application from our active file and consider the matter closed.

Our action does not prevent you from filing a new application for exploration assistance on the same property. We realize that there may be extenuating circumstances that have prevented you from submitting the requested information. As so much time has passed since you submitted the original application and costs have changed and possibly also your exploration plans, the filing of a new application will entail little or no extra work. If you do file a new application, we suggest that you refer to the original one for any data that may be usable therein. We wish to assure you that a new application will be processed promptly as there is no delay just because of a change in number.

Sincerely yours,

C. O. Mittendorf

Acting Administrator

8-11-52

GCSelfridge:ls
8/8/52

cc: Docket
Admn. Read. FFile
Field Team, Reg. 3
G. C. Selfridge
D. M. Lemmon, USGS
R. W. Geehan, USBM

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY Bureau of Mines

PBS TELETYPE

Originator:
Ext.: 472 Room: 1006
Flood Bldg., San Francisco

Appro.: Bureau of Mines
Date: August 6, 1952
Time: 2:35 p.m.
No.:
To: C. O. Mittendorf, Acting Administrator, Defense Minerals Exploration Administration, Interior Building, Washington, D. C.

BL

Subject:

Reurtt August 6, Subject - Docket DMA 1574X (Tungsten) Pinnacle Tungsten Company. To date no amended application has been received from Mr. Fleming.

H. C. Miller
Executive Officer, DMEA Field Team
Region III

Authorized:

H. C. Miller

CONFIRMATION

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

166 WA SFS /I-BOM/

SANFRANCISCO CALIF 8-6-52 156P

C O MITTENDORF ACTG ADMINISTRATOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION INTERIOR BLDG WA

REURTT AUGUST 6, SUBJECT - DOCKET DMA 1574X /TUNGSTEN/ PINNACLE TUNGSTEN COMPANY. TO DATE NO AMENDED APPLICATION HAS BEEN RECEIVED FROM MR. FLEMING.

H C MILLER EXEC OFCR DMEA FLD TEAM REG III

6 DMA 1574X

OA 215P

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 7 1952

AUG 7 3 11 PM '52

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION
GCSelfridge
5284 3538
Selfridge

14X 3923 Working Fund,
August 5, 1952

H. C. Miller, Executive Officer, DMEA Region 2, 1012 Flood Bldg.
870 Market Street, San Francisco, California
Docket DMA 1574X - Tungsten - Pinnacle Tungsten Company

On June 5 Mr. John Amos Fleming advised us he was submitting an amended application to you within a few days. Please inform us if he has done so.

C. O. Mittendorf (for)
C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration

GCSelfridge:ls

CC: Docket
Admn. Reading File
G. C. Selfridge
Audits

IF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 6-9-52

REFERRED TO:
1. Code 400
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.

H. E. ADAMS

Initials of sender.

GPO 16—63815-1

ASSOCIATES
SYDNEY SANNER
THOMAS J. MADDEN
JOSEPH C. SMITH

JOHN AMOS FLEMING
ATTORNEY AT LAW
5658 WILSHIRE BOULEVARD
LOS ANGELES 36, CALIFORNIA
WEbster 8-6271

June 5, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 9 1952

United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D.C.

Re Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Attention: Mr. C. O. Mittendorf

Dear Mr. Mittendorf:

In the absence of Mr. Fleming, I am answering your letter of May 29th last relative to the above application.

Mr. Heron has completed his examination of our Round Valley Mine and the application for an exploratory loan is in the course of preparation and will be filed in San Francisco within the next few days.

Thank you for your interest in the matter.

Yours very truly,

Thomas J. Madden

THOMAS J. MADDEN

TJM.MBG

FILE COPY
SURNAME:

Selfridge.

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

MAY 29 1952

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

On March 3, 1952, you wrote us that Mr. Heron had agreed to examine your property, after which you would either supplement and amend your application or ask us to consider it withdrawn without prejudice.

We note that your application is now more than one year old. We would like to clear our files of all of the old DMA applications and so would appreciate hearing from you at your earliest convenience.

We wish to cooperate with you in the matter of allowing ample time but if the needed information has not been received by June 30, 1952, we will then remove the application from our active file and consider the matter closed.

Sincerely yours,

5/29

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls 5/29/52

Copy to: Docket
Admin. Reading File
Field Team, Region 3
G. C. Selfridge
R. W. Geehan - USBM
D. M. Lemmon - USGS

ASSOCIATES
SYDNEY SANNER
THOMAS J. MADDEN
JOSEPH C. SMITH

JOHN AMOS FLEMING
ATTORNEY AT LAW
5658 WILSHIRE BOULEVARD
LOS ANGELES 36, CALIFORNIA
WEbster 8-6271

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 5 1952

March 3, 1952

Re: Docket No. DMA. 1574X-Tungsten
Lava Creek Area
Inyo County, California

United States Department
of the Interior
Defense Minerals Administration
Washington 25, D.C.

Attention: Mr. G. C. Selfridge,
Chief, Iron and Ferro-Alloy Division

Dear Mr. Selfridge:

Thank you for your very helpful letter of February 26, 1952.

We have since my last letter to you secured the services of Charles Heron, a well known mining engineer and geologist in this State, who has been helpful and will, we believe, advise us in this matter.

Mr. Heron, after reading our report on the Lava Creek property, which is the subject of Docket No. DMA 1574X, stated that it would not, in his opinion, qualify for a production loan but might well qualify for aid for further exploration of what has been exposed. The snow is beginning to leave this property now. Mr. Heron has agreed to examine it as soon as possible, after which we will either supplement and amend our application now pending before DMEA, or ask you to consider it withdrawn without prejudice.

This coming week Mr. Heron is to examine the Round Valley mine at Bishop, which he believes may qualify for a production loan. He has read the Lemon Report on this property and examined properties adjacent to it. We have asked him to guide us in the development and production program we are now conducting there. This of course, as you point out, would require an application to the Defense Materials Procurement Agency.

We now have a small mill (now doing about twenty tons on two shifts) in operation a few miles from the Round Valley Mine and are shipping the excess ore from said mine to the Ben

Ware Mill south of Bishop. The latter mill will take no less than 500 ton lots, which puts a strain on our working capital until we begin stoping.

We greatly appreciate your patience and consideration.

Very truly yours,

John Amos Fleming

JOHN AMOS FLEMING for
PINNACLE TUNGSTEN CO.

JAF.MBG

400

FILE COPY
SURNAME:

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

Selfridge
Pratt

FEB 26 1952

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

Some months ago the functions of the Defense Minerals Administration were divided between two new agencies, the Defense Materials Procurement Agency and the Defense Minerals Exploration Administration. The latter Agency, DMEA, succeeded to all of the functions of DMA with respect to exploration for strategic and critical minerals and metals. It is with this Agency that your present application is filed.

I gather from your letter that you are interested in obtaining financing for production rather than aid for exploration. If this is the case, you should apply to the Defense Materials Procurement Agency, Washington 25, D. C. In case you are not interested in obtaining aid for exploration of the subject claims, will you please so inform us.

Enclosed herewith is a copy of Mineral Order 5 and a set of "Questions and Answers" that will help you decide whether or not you are primarily interested in exploration aid or financing for production.

Sincerely yours,

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

S.V. 2-26-52

GCSelfridge:ls
2/21/52

cc: Admn. Reading File
Docket
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS
G. C. Selfridge
Enclosures

ASSOCIATES
SYDNEY SANNER
THOMAS J. MADDEN
JOSEPH C. SMITH

JOHN AMOS FLEMING
ATTORNEY AT LAW
5658 WILSHIRE BOULEVARD
LOS ANGELES 36, CALIFORNIA
WEbster 8-6271

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 14 1952

February 12, 1952

Docket No. DMA 1574X-Tungsten
Lava Creek Area
Inyo County, Calif.

United States Department of the Interior
Defense Minerals Administration
Washington 25, D.C.

Attention: Mr. G. C. Selfridge
Acting Chief
Iron and Ferro-Alloy Division

Dear Mr. Selfridge:

Thank you very much for your letter of January 22nd concerning the above entitled matter and application filed by D. V. O'Flaherty and O. R. Heidrich, general partners of Pinnacle Tungsten Co., a limited partnership. Mr. O'Flaherty, who has since resigned, forwarded your letter to me for I have taken his place as one of the two general partners in this limited partnership.

The geological report you speak of has been completed. However we have not filed a revised application with you or forwarded that report to you for several reasons. Frankly the principal reason is that we have been so busy as a small organization trying to produce WO3 concentrates that we have not had the time or money to really study the possibilities of assistance from your administration, and from what all of us have read and heard in the interim we have assumed that we could not qualify in sufficient time for a loan or assistance from you to accomplish any worthwile result. This of course may well be due to our ignorance of the true situation and facts.

Since filing that application we have been extremely active and have reopened the Round Valley Mine a few miles northwest of Bishop, which as you may or may not know is a well known mine in the tungsten hills of the Bishop area, which produced in the first and second World Wars. We have spent a lot of money there developing it and it is beginning to look very promising. We have been shipping about ten tons a day of ore which looks very promising, running from .8 to 1% currently, and it appears now to carry gold, silver, zinc and bismuth. We are not at this time prepared to state how much these other metals will run. Extensive assays are being made looking toward that end. This mine, as you may know, is not far from the Pine Creek operation of the Vanadium Company.

All of this ore has been produced in development work. We have been snowed in at the Pinnacle, which is the subject of the application, since November 1st. The snow is beginning to run off now and we anticipate that activities may be resumed there within a month or six weeks.

Our experience has proven one very definite thing and that is that hauling charges to mills are almost prohibitive for any long distance and that in order to get even a fair recovery in a customs mill the presence of your own experienced mill man is absolutely necessary. Because of this we have just rented and are about to begin operation of a small thirty-ton mill. We have also found that the sale and disposal of concentrates is a matter fraught with many pitfalls.

Suffice it to say that we have gone ahead and are going ahead spending quite a bit of money and we hope we will succeed and produce enough WO_3 to be of some consequence in the re-armament program.

With regard to the application: We have now consulted Charles Heron of Los Angeles, a distinguished geologist, who, I believe is known to your administration. He has advised us with respect to a small prospect which we were developing near Needles, California. We are now in the process of consulting with him about the Pinnacle and the Round Valley. Our consultation with him is in the nature of confirmation and advice additional to that we have received from our geologist, William Fischer of Bishop.

At the moment we are seriously considering applying for an RFC loan to construct a mill and for some loan or assistance from your administration for the purpose of mining the Pinnacle and the Round Valley Mine in an extensive way. In this connection we would appreciate your sending us the latest published law, regulations and policy of your administration.

Mr. Fischer's report on the Pinnacle, we believe, would conservatively estimate a minimum of 20,000 tons of ore, all of which would have a minimum enrichment of .5% from the Pinnacle. If you believe any good purpose would be served we can send you a copy of his report at once.

To summarize: We are now thinking of applying for loans involving both the Pinnacle property and the Round Valley property, as well as an RFC loan to construct a mill. We understand the latter application would be largely processed by your administration.

Thank you for your courtesy, and we hope that the application need not be withdrawn at this time, although if it must we will have to abide by it.

Sincerely,

John Amos Fleming

JOHN AMOS FLEMING

JAF.MBG

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

Rewritten

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

The Defense Minerals Administration program has been extended under the administration of the Defense Minerals Exploration Administration. Applications for Government assistance are being accepted and processed as before. When a mining project has passed the exploration stage successfully, further aid for development and production, including funds for the erection of a mill, can be secured from the Government through the Defense Materials Procurement Agency. This type of aid is granted on approved projects, is non-participating, and is 100 percent repayable with interest.

We shall hold your present application in abeyance until you are able to supply us with the requested information. If you make application for Government assistance for the exploration of the Round Valley property, please make the request by submitting a separate application.

Sincerely yours,

G. C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

The Defense Minerals Administration program has been extended under the administration of the Defense Minerals Exploration Administration. Applications for Government assistance are being accepted and processed as before. When a mining project has passed the exploration stage successfully, further aid for development and production, including funds for the erection of a mill, can be secured from the Government through the Defense Materials Procurement Agency. This type of aid is granted on approved projects, is non-participating, and is 100 percent repayable with interest.

We shall hold your present application in abeyance until you are able to supply us with the requested information. If you make application for Government assistance for the exploration of the Round Valley property, please make the request by submitting a separate application.

Sincerely yours,

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/18/52
cc: Admn. Reading File
Docket
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS
G. C. Selfridge

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DMA 1574[illegible] - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

The Defense Minerals Administration program has been extended under the administration of the Defense Minerals Exploration Administration. Applications for Government assistance are being accepted and processed as before. When a mining project has passed the exploration stage successfully, further aid for development and production, including funds for the erection of a mill, can be secured from the Government through the Defense Materials Procurement Agency. This type of aid is granted on approved projects, is non-participating, and is 100 percent repayable with interest.

We shall hold your present application in abeyance until you are able to supply us with the requested information. If you make application for Government assistance for the exploration of the Round Valley property, please make the request by submitting a separate application.

Sincerely yours,

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/18/52
cc: Admn. Reading File
Docket
Field Team, Region 3
K. W. Geehan, USBM
D. M. Lemmon, USGS
G. C. Selfridge

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. DPA 1574 - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 18, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

The Defense Minerals Administration program has been extended under the Administration of the Defense Minerals Exploration Administration. Applications for Government assistance are being accepted and processed as before. When a mining project has passed the exploration stage successfully, further aid for development and production, including funds for the erection of a mill, can be secured from the Government through the Defense Materials Procurement Agency. This type of aid is granted on approved projects, is non-participating, and is 100 percent repayable with interest.

We shall hold your present application in abeyance until you are able to supply us with the requested information. If you make application for Government assistance for the exploration of the Round Valley property, please make the request by submitting a separate application.

Sincerely yours,

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:lc
2/18/52
cc: Admn. Reading File
Docket
Field Team, Region 3
R. S. Geohan, [illegible]
[illegible] N. Lemmon, [illegible]
G. C. Selfridge

Mr. John Amos Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. MA 15749 - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

The Defense Minerals Administration program has been extended under the Administration of the Defense Minerals Exploration Administration. Applications for Government assistance are being accepted and processed as before. When a mining project has passed the exploration stage successfully, further aid for development and production, including funds for the erection of a mill, can be secured from the Government through the Defense Materials Procurement Agency. This type of aid is granted on approved projects, is non-participating, and is 100 percent repayable with interest.

We shall hold your present application in abeyance until you are able to supply us with the requested information. If you make application for Government assistance for the exploration of the Round Valley property, please make the request by submitting a separate application.

Sincerely yours,

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/18/52
cc: Admn. Reading File
Docket
Field Team, Region 3
R. W. Gnehan, USGS
D. M. Lemmon, USGS
G. C. Selfridge

Mr. John Ames Fleming
5658 Wilshire Blvd.
Los Angeles 36, California

Re: Docket No. LMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

The Defense Minerals Administration program has been extended under the administration of the Defense Minerals Exploration Administration. Applications for Government assistance are being accepted and processed as before. When a mining project has passed the exploration stage successfully, further aid for development and production, including funds for the erection of a mill, can be secured from the Government through the Defense Materials Procurement Agency. This type of aid is granted on approved projects, is non-participating, and is 100 percent repayable with interest.

We shall hold your present application in abeyance until you are able to supply us with the requested information. If you make application for Government assistance for the exploration of the Round Valley property, please make the request by submitting a separate application.

Sincerely yours,

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/18/52
cc: Admn. Reading File
Docket
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS
G. C. Selfridge

C
O
P
Y

Mr. John Amos Fleming
5638 Wilshire Boulevard
Los Angeles 36, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area Claims
Inyo County, California

Dear Mr. Fleming:

This is in reply to your letter of February 12, 1952, in which you have outlined the status of the properties of the Pinnacle Tungsten Company.

Some months ago the functions of the Defense Minerals Administration were divided between two new agencies, the Defense Materials Procurement Agency and the Defense Minerals Exploration Administration. The latter agency, DMEA, succeeded to all of the functions of DMA with respect to exploration for strategic and critical minerals and metals.

I gather from your letter that you desire to obtain financing for production rather than aid for exploration. If this is the case, you should apply to Defense Materials Procurement Agency, Washington, D. C. In case you should wish to procure Government aid in connection with an exploration project, you should make application to this agency, Defense Minerals Exploration Administration. For this purpose, there is enclosed a copy of Mineral Order 5, of DMEA.

Sincerely yours,

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Enclosure

400

FILE COPY
SURNAME:

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

Brewer
Selfridge
Mattesday

JAN 22 1952

Pinnacle Tungsten Company
D. V. O'Flaherty, Secretary
23 No. La Senda
South Laguna, California

Re: Docket No. DMA 1574X - Tungsten
Lava Creek Area
Inyo County, California

Dear Mr. O'Flaherty:

Our files on the subject application note that on August 22, 1951, we were informed that a geological report on your property and a revised application would be forthcoming in the near future.

To date we have not received the said report or application and so are unable to continue with your application.

If you intend to complete your application, please supply us with the above noted information. If you do not desire to complete your application, a letter to this effect will enable us to withdraw your application, without prejudice.

Sincerely yours,

1-22-52

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

QLBrewer:lm
1/21/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
G. C; Selfridge
Q. L. Brewer

1578

Primrose tungsten Co

Missing - letters etc from 5/31 to 9/26 and 9/26 to date ?

we should have received data from the Opp shortly after 9/26 -

~~See Adams~~

Write Tadman up? 1/16

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8-24-51

REFERRED TO:
AUG 24 1951
Recd by Mr. Holderer

1. Code 340
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.

Adams
A. E. C.
Initials of sender.

GPO 16—63815-1

H. C. PARKER CO.

TELEPHONE REPUBLIC 7762
1424 K STREET, N. W.
WASHINGTON 5, D. C.
U. S. A.

CONSULTING ENGINEERS ○ PURCHASING AGENTS ○ EXPORTERS

CABLE ADDRESS - PARKERCO

August 22, 1951

Defense Minerals Administration
Room 3624, Dept. of Interior
Washington, D. C.

Am A

Reference: - Application #1574
Pinnacle Tungsten Company

Dear Mr. Holderer:

I have just received the attached letter dated August 20th, from Mr. John Fleming, which I am sure will confirm all the statements made by J. Ross Clark II respecting the seriousness of the Pinnacle group with regard to the development of this property.

It is anticipated that we will have in your hands a revised application shortly after Labor Day. —

May I thank you for your excellent cooperation. Mr. Clark appreciated receiving first hand the information you were kind enough to give him.

Sincerely,

Herbert C. Parker

Herbert C. Parker

P. S. As I have a copy of Mr. Flemmings letter you may wish to retain the original for your files.

HCP/bb

Called Parker 9/26/51
Will furnish more data 9/24

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 24 1951

JOHN AMOS FLEMING
ATTORNEY AT LAW
5658 WILSHIRE BOULEVARD
LOS ANGELES, CALIFORNIA

August 20th, 1951

Mr. Herbert Parker
H. C. Parker Co.
1424 K Street, N.W.
Washington 5, D.C.

Dear Mr. Parker:

Since my talk with you I have again been at the Pinnacle Tungsten property in Inyo County, near Independence, California, which is the subject of application number 1574, filed with the Defense Minerals Administration of the Department of the Interior by Pinnacle Tungsten Co., a limited copartnership. While there is considerable material information set out in the application, which I will not repeat here, we all now know that the application is not sufficient as it now stands. As a matter of fact the operators, Heidrich and O'Flaherty had not then had the services or report of a competent geologist, they did not have sufficient time to make up full data, and their project had not then reached the stage of exploration they had planned.

In the two and a half months which have elapsed several exposures of unknown ore bodies and the services of William Fischer, geologist, now of Bishop, California, have resulted in a change of everyone's calculations, and it appears that this could be a major tungsten discovery. Mr. Fischer will not, of course, make his report hurriedly or piecemeal and we therefore believe the application should not be amended or a new one filed until his report is completed in full. His report, I am sure, will be of the highest type and greatest detail - including aerial photography, colored and black and white, thorough assaying and maps - all of which takes care and time. He and his crew have been and still are thoroughly lamping (ultra violet ray) the area at night and doing the other work in daylight.

There is now and has been for some years past, much exploration for and mining of tungsten ore (scheelite) in the Bishop area. United States Vanadium has a large mining operation and mill near Bishop. Other big mining companies are active there now. William Fischer seems to be highly regarded there and has had vast experience with tungsten. I will not attempt to qualify him here for his report will contain that.

DEPARTMENT OF THE
Defense Minerals Administration
RECEIVED
AUG 24 1951

While I, as a lawyer, have had no experience with tungsten, I believe I have had as much legal and practical experience with mining in California, Nevada, and Arizona in the last twenty years as any lawyer in this area. Based upon what I have seen, what I have heard from the operators and Mr. Fischer, I will try to describe this project to you and, for what little it may be worth, give you my opinion of it.

AREA INVOLVED:

The property is located in the Lava Creek basin, 4.38 miles west of Range 34 East, and 3.40 miles north of Township 12 South, Mt. Diablo B. & M., Inyo County, California, at an elevation of from 6,000 feet to 8,500 feet above sea level.

The property is reached by proceeding north of Independence, California, on the main highway approximately 11 miles, where one turns due west on a paved road, called the Division Creek Road, about three miles to the Los Angeles Water and Power Department Division Creek Power Station. Thereafter, a dirt road constructed by the Pinnacle group and their predecessor climbs up about four miles to the first group of claims in this property. This road is a perfectly safe dirt road over which all forms of heavy equipment can travel and down which 20-ton ore trucks can be readily operated. The average grade is probably not over 10%.

This first group of claims we will refer to hereafter as the "Valley View Claims", of which there are four. They lie on the east slope at a relatively low altitude, and can be worked the year round without difficulty. A tunnel has now been driven into an ore body in this group right at the road level and is being continued as a development. The road then extends on up and over about two miles into the Lava Creek basin and now ends at an elevation of about 8,000 feet, where there are a group of some ten contiguous lode claims. On these claims two tunnels have been driven more than ten feet into the good ore, and which will be driven further for development purposes. This group will be hereinafter referred to as the "Pinnacle-Glacier Group".

West of the latter group, contiguous to them, and higher in this basin there have been located about ten additional lode claims, hereinafter called the "Fischer Group", to which no road has yet been built. All of the ore bodies hereinafter referred to have been examined, including night lamping with ultra violet ray equipment by Mr. Fisher and the operators. In fact I accompanied Fischer, Heidrich and O'Flaherty last Friday night upon a climb into the Fischer Group to about 8500 feet where I saw a huge structure lamped showing extraordinary enrichment upon the surfaces at two sides and at the footing. Samples were taken while I was present and I am submitting for assay to Smith-Emory here in Los Angeles. The assays will be completed in a day or two for tungsten and molybdenum and if you believe it might be worth while, copies of the assay report can be forwarded to you.

GEOLOGY:

I am informed that the property under consideration is a part of the discontinuous septum of metamorphic sedimentary rocks, and can be traced from the Mammoth area lying far to the north of this property, southerly to Sawmill Canyon near Independence, California, the overall distance being approximately 50 miles.

The septum which consists of individual segments, are referred to as roof pendants for the reason that they represent remnants of the roof rocks invaded by the plutonic complex, and consist of altered limestone, shale, and sandstone. They range in age from the Cambrian to Triasic, and the individual pendants vary considerably in size from tens of feet to great, elongated masses several miles in area, and as much as one mile in depth. I am informed by the geologist that so far they are dealing with roof pendants of the small but very rich type and also with a medium sized variety having an average grade of at least 0.4 WO_3.

The predominating rocks of the matamorphosed sedimentary type are hornfels, andasite, quartzite, shists, and some marble. The tungsten ore bodies are found in the contact zones of altered limestone and marble and are composed essentially of calcium, iron, aluminum silicates form by attitive thermal metamorphism.

The tactite zones consisting of dark silicates such as garnet, alamandite, diopsite, vary toward hedenbergite, epidote, hornblends, quarts, idocrase, some fluorite and small particles of pyrite.

It is assumed that the alteration was brought about at a late stage by hot solutions penetrating the granite limestone contacts after the granite shell had been solidified, and that the solution penetrated the limestone by way of fault fissures and bedding planes, and that a progressive change in solution caused the following minerals to form: garnet, dipsite, hornblende, idocrase, quartz, and scheelite, sulphides, and veins of quartz and calcite. I am told that the outstanding feature that has been observed is the widespread shear zone as continued shearing of the brittle earlier minerals, among which garnet predominates, helped keep the passageways open until final mineralization was completed.

LOCATION OF ORE BODIES:

In the Valley View Group a 30-foot shaft had been sunk about 20 feet west of the orebody, and, as stated before, the operators have driven a tunnel into and through the orebody, finding that the values at the surface persist at the point of interception. I have seen the vein lamped in this tunnel and it appears commercial. Assays have not yet been completed.

Going now to the so-called Pinnacle-Glacier Group. On the Firecracker claim there are two prominent outcroppings with a northerly and southerly strike which consist mainly of lime, garnet, and epidote, which are flanked by granite. The width of the limestone is about 20 feet, and of the garnet and epidote about 40 feet.

The Pinnacle claim has been thoroughly examined and is considered along with other claims contiguous to it commercial in all respects. The outcroppings are rugged, more or lessspiral shaped and stand by themselves in the canyon flanked by steep shear zones. They are typical small pendants and highly mineralized. Two distinct mineral zones are present, separated by diorite. Both zones are about six feet in width and can easily be traced over 100 feet, and they are believed to go to much greater length. It is estimated that the ore in these bodies will average between 2 and 3% WO_3. Some specimens that I have seen have been assayed as high as 10% Wo_3. It is feasible to and a road is being constructed to within 200 feet of the orebodies, to which an ore car or tramway could easily bring ore to the road. It appears probable that it should be developed by cutting the face of the outcrop and driving a tunnel the full length of about 100 feet, crosscutting at 50 feet to the east and west in order to expose additional orebodies. It is thought that the two mineral zones will come together at depth.

The Rudy No. 1 in this group is much the same as the Pinnacle except that the outcrops reveal a much richer ore. The ore is predominantly lime and the distance between the orebodies in the Rudy No. 1 and the Pinnacle is about 300 feet, so that the two could be worked together.

The Glacier No. 1 at the north slope of the basin has three parallel orebodies in the shear zones which are highly mineralized. The average value will run about 0.75 to 1% WO_3. There are about 3,000 tons of commecial ore available and apparent in the workings on this claim. There are other visible orebodies on this group of claims but they have not yet been thoroughly examined or explored. With the exception of Glacier No. 1 the north slope of the basin has not yet been thoroughly examined but is believed to contain several very large structures and orebodies.

The Bill Fischer Group are in the highest and most difficult terrain of the three groups. There are some very large structures and the float found in and about them, in some of which are boulders weighing close to 5 tons, give every indication that there is a mineral average or value of about 0.5 WO_3. One very rich and very large structure in this group is the one to which I climbed several nights ago. I was shown 40 feet of lime tactite, then 18 inches of ore which from lamping could assay in excess of 10% WO_3, then 4 feet more of tectite lime, and then 12 inches of ore which from lamping could assay in excess of 10% WO_3. At least 32 feet of the lime tactite should assay at about 0.4% WO_3 from the lamping. The structure appeared to be about 40 feet wide and 100 feet in height. There could very well be 10,000 tons of ore which should have an over-all richness of at least 2% and could easily average 5%. Float was found and lamped which was traced from far above this structure and it could have backs of as much as 400 feet. The contacts were granadyolite and andasite.

There are in this operation 12 faces now and when Mr. Fischer completes his work there could very well be 12 more. The geology is complex, the country precipitous and difficult. I believe that if sufficient funds were available for further exploration and for development this property could within a few months turn out to be a larger and much richer property than the U.S. Vanadium property mentioned above. It appears the operators are obliged to and will within a month begin shipping very rich ore to a mill near Bishop. As they are presently financed, equipped and organized it is not likely they can ship

more than forty to fifty tons per day. Mill facilities are also short in the area. Properly financed, equipped, and organized, if a full exploration and development program were carried out at once and their own mill constructed it is not at all improbable that this property could be made to mine and mill 500 tons per day of very rich ore. Needless to say the operators cannot do anything like that on private finance nor would they be able or disposed to do it as quickly as possible and as the present exigencies of the situation seem to warrant, if private money was in hand.

Any courtesy, advice or assistance you can give us in this matter will be greatly appreciated by Ross Clark and by me. As we discussed, if it is as big and as rich as now appears, it may be very important to all of us and will require the skill and services of a great many to quickly bring it to important production.

With kind personal regards,

Sincerely,

John Amos Fleming

JOHN AMOS FLEMING

JAF.MBG

No exhibit A;

1574-X

No clear plan of exploration.

No indication that property contains enough ore to pay back $22,500 loan (cost of $30,000) — 7,100 units WO_3.

Map of channels [illegible]

DMR

6-14-51

Dma - 1574 X

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region III

1415 Appraisers Bldg.
630 Sansome Street
San Francisco 11, Calif.

May 31, 1951

Memorandum

To: Defense Minerals Administration, Washington, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: Application for Aid for an Exploration Project

The attached application was received in this office on May 31, 1951.

Applicant: Pinnacle Tungsten Company
Independence, California

Date of Application: May 26, 1951 Estimated Cost: $30,000.00

Mineral or Metal: Scheelite or Tungsten Percentage of Government Participation: 75%

Location of Mine: Lava Creek, 11 miles north of Independence, Calif.

H. C. Miller

H. C. Miller
Executive Officer, DMA Field Team
Region III

P.S. Set MF-100 also attached.

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-1574X

Date received 6/5/51

Participation

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date ~~May 26, 1951.~~

FILL IN THIS BLOCK

Date of application May 26, 1951.

Estimated cost $ 30,000

Mineral or metal Scheelite Or Tungsten

Percentage of Government participation 75

Location of mine Lava Creek, 11 miles north of Independence, Calif.

Date of filing MF-100

DMA Docket Number, if available

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? (Limited Partnership).

*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. See Form M. F. 100

*5. Are you the owner or the lessee of the property? See

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				

*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.

Pinnacle Tungsten Co., (Name of company)

By Daniel V O'Flaherty (Signature of authorized official)

May 26, 1951 (Date)

Secretary (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

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103
Defense Minerals Administration.

Answers under heading," The Applicant".

1. Limited Partnership.

2. O. R. Heidrick. 14368 Polk st., San Fernando, Calif.
D. V. O'Flaherty, 23 No. La Senda, South Laguna, Calif.
J. A. Fleming, 5658 Wilshire Blvd, Los Angeles, Calif.
J. Ross Clark II, 5658 Wilshire Blvd., Los Angeles, Calif.
J. V. Smith, 21 So. Encino, South Laguna, Calif.
R. W. Rowlands, 11 La Senda Place, South Laguna, Calif.

7. Lease attached and in good standing (on Pinnacle Mining Co., claims). Location notice filed on three Valley View Claims- in good standing.

8. Pinnacle Tungsten Co., is a new organization taking over properties of the Pinnacle Mining Co. No liabilities. Assets consists of claims with benefit of $ 25,000 spent by Pinnacle Mining Co., on roads, trails, preliminary exploration, ect. Also have lease contract of purchase on all necessary equipment for mining. Equipment worth from 12 to $ 15,000.

9. Ten Thousand Dollars. Sufficient to pay our part of cost.

10. Exploration will be on 13 claims located on a high plateau and in Lava Cr Creek Canyon - a aanyon or gash in the High Sierras, very similar th the Vanadium Mine at Pine Creek, Bishop Area, California. Exposures are accessable and workable. Three of these claims (Valley View) are just above road to Lava Creek and can be worked from the road. So we have two separate areas however they are both on the road. We have equipment to explore both.

10. Claims are recorded in records of Inyo County, Calif., as per. attached map. Located at Lava Creek, 11 miles north ofIndependenca, Calif., thence due west of Division Creek, to Scott Springs, thence by graded road, built by Pinnacle Mining Co.,) to claims.
Location 37 deg. 568, 98" North.Lat.
Long. 118 deg. 21' o9" West.
4.38 Mi. West of R 34 E.
3.40 North of T 12 S.
At S.E. corner of Glacier No. 1, Mt. Diablo, B & M,
Inyo County, Calif.

11. Answered on Form M.F. 100.

12. " " " " "

13. " " " " "

14. Complete camp equipment- Army tents.

15. Ore shipped to mills Via., our road, thence by Highway 395 to Bishop, Calif., mills, Vanadium, Red Hill Mill, Benware Mill. Shipped by truck at $ 3.50 per. ton.

16. Answered on Form M.F. 100.

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103,
Defense Minerals Administration.

Answers under heading, " The Applicant".

17. Not in production.

18. Answered on Form M.F. 100.

19. Property inLava Creek was unaccessable until we put road in last year, 1950. Deposits were located but due to low priceand inaccessability they were not worked. Road granted by Dept. of Agriculture for our use only. Road kept under lock.

THE EXPLORATION

20. Scheelite located in veins and " Blow-outs".

21. We expect to open up six showings consisting of blowouts and vein material. These six vary in width from four feet to eighteen feet and all show from point 4 or 5 up tp 7% Scheelite. On one streak, 18" to 2', we had as high as 46% assay . We estimate that within six months we will develop several strong bodies of excellent ore.

22. The exposurs are in the tactite and garnetite. The granites are in evidence atvthe claims as are the limestones. We have every type of rock to make ore. Furthermore the lampings are excellent and our channel cut assays have checked with the lampings. The garnetite structures are strong. Shipments made from Valley View Claims (3) ran 1.7% and formations indicate excellent chances of continuing ore bodies. We have not expended money for geological maps. We have considerable knowledge of geology from our school work and field work so have relied upon that and our conclusions have been verified by other mining men.

REQUIREMENTS AND COSTS.

23. We plan on this development work:
   a. Labor:
      Two miners..... $15 to $ 16 per. day.
      Four muckers.... $ 12 per. day.
      Camp- Will eat and live in Independence, Calif.
   b. Supervision:
      One Manager..... $ 350 to $400 per. mo.
      One man to be Ass't Mgr. , purchasing Agt., and mine bookeeper at ... $250 per. mo.
   c. None.
   d. $ 2500 to $ 4000 should be allocated for housing.
   e. One extra hammer, some extra airhose or pipe.
   f. $ 150 per. mo.
   g. $ 12,000 to $ 15,000.
   h. $ 300 per. mo.
   i. $ 20.00 per. day.

24. We anticipate exploeing the higher reaches of our properties. We estimate about six months to open up at least five locations after project is approved. Money will be spent in accordance with good mining practice. As winter approaches we should have a standby dozier to clean snow off roads.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dma-1574X

Date received 6/5/51

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date May 26, 1951.

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~[illegible]~~ ~~[illegible]~~ ~~zation Deduction) of Internal Revenue Code, 1950,~~ (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

X
5

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production Not in production

   If not in production or operation, estimated date when production will begin six months.
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is 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 Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: 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)
O. R. Heidrich San Fernando, Calif.	General Partner Manager.	None.					
D. V. O'Flaherty, So. Laguna, Calif.	General Partner Ass't. Mgr.	None					
J. A. Fleming, 5658 Wilshire Blvd.	Limited Partner Los Angeles	None.					
J. Ross Clark II. 5658 Wilshire Blvd.,	Limited Partner. Los Angeles	None.					
J. V. Smith, So. Laguna, Calif.	Limited Partner,	None.					
R. W. Rowlands, So. Laguna, Calif.	Limited Partner	None.					
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. 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	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by a available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Pinnacle Tungsten Co.
(Name of company)

By Daniel V. O'Haberty
(Signature of authorized official)

May 26, 1951
(Date)

Sec'y
(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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

PINNACLE TUNGSTEN CO.
Independence
California

1. Materials produced:
   (a) Scheelite - Tungsten
   (b) No by-products

2. Quarry and drift mining on exposed blowouts and veins in place. This development on virgin properties located in Lava Creek eleven miles north and west of Independence, California. Opened up and explored from July 1950 to November 1950 by Pinnacle Mining Co. Pinnacle Tungsten Co. taking over from Pinnacle to carry on exploration and development.

   (a) One winze sunk 14 feet on No. 1
   (b) One drift of 30 feet on No. 1
   (c) 30 feet
   (d) On Valley View proper claims (3) old tunnel of 40 feet and one shaft 20 feet deep (tunnel caved).
   This claim worked some years ago when tungsten was low in price and hardly marketable. Assays on waste pile ore ran from 1% to 3%. Spuds of considerable size picked off dump.

   No pumping problem on any of claims.

3. Old road rebuilt (4 miles) and 1½ miles of new road built into valley by Pinnacle Mining Co., 1950, at cost of $7500.

   (a) All ore can be shipped from mine, by good road, to Bishop 40 miles away. Nearest town is Independence, Calif. 16 to 18 miles from property.
   (b) District name not known. Location 37° 56.89'N
   (c) Long 118° 21.09' W
   4.38 Mi West of R34E
   3.40 Mi North of T12S
   Mt. Diablo B&M
   Inyo County, Calif.
   (d) Inyo County, Calif.

4. (a) Getting ready to start operations. Pinnacle Tungsten Co. will take over from Pinnacle Mining Co. and carry on. Snow forced closing down in Dec. 1950 due to fact we were not prepared. However work can be carried on all year with proper preparations.
   (b) Lessee on Lava Creek claims.
   Located three claims ourselves on Valley View proper. Owner. Expect to work both groups simultaneously.

5. Produced 83 tons from our No. 1 claim in November 1950. In course of development.

6. Experience of operator.

O. R. Heidrich, of 14368 Polk St., San Fernando, California. Consulting metallurgist with long and highly efficient record as consulting metallurgist throughout the southwest as well as Mexico and Central America. His whole business life has been devoted to mining starting, as a boy, at Grass Valley, California. He has worked and studied every phase of mining from mucking up through the various stages until today he is employed as consultant on various problems connected with mill construction and ore dressing. He has done considerable work as consultant and supervisor of tungsten properties.

Mr. Heidrich will continue as superintendent for the Pinnacle Tungsten Co. He acted in the same capacity for the Pinnacle Mining Co.

The applicant, Daniel V. O'Flaherty, studied his geology and mineralogy at Bridgewater State Teachers College at Bridgewater, Massachusetts and at Harvard, from which he graduated in 1911. On graduation O'Flaherty taught and coached the athletic teams at Cambridge Latin School, Cambridge, Mass., and at English High School, Boston, Mass. In 1920 came to California and engaged in the Real Estate business and as sales manager and developer. Helped develop Walnut Park, Morningside Heights, Girard, and several pieces in and around San Fernando, Calif. He is at present one of the developers of Three Arch Bay, So. Laguna, California, the outstanding development in this area.

Since 1920 the applicant has continually been more or less active in mining and prospecting. Among his mining activities have been the following: Manager of gold (placer) operation on Green River at Vernal, Utah; manager of drift mine at Calder, California; assistant to manager on lead zinc mine at Portal, Arizona.

Applicant acted as purchasing agent and mine bookkeeper on these claims for the Pinnacle Mining Co. from whom the Pinnacle Tungsten Co. are taking over.

Mr. Heidrich was V. President and director of the Pinnacle Mining Company. Mr. O'Flaherty was secretary and a director of the same company.

Mr. O'Flaherty will act as purchasing agent and mine bookkeeper for the Pinnacle Tungsten Co.

7. History.

The properties of the Pinnacle Tungsten Co. consist of two groups of claims.

1. 10 claims (as per attached map) taken over from the Pinnacle Mining Co. This as lease by Pinnacle from Paul Passage of Independence, Calif.
2. 3 claims located by O. R. Heidrich et al on old workings - known as Valley View claims.

The 10 claims were originally located in an almost inaccessable valley, Lava Creek, by Philip Day who in turn

passed them on to Paul Passage. Lava Creek, at the claims, is at 8500 foot elevation in a very rugged area. The highway from Independence to Bishop is at 4000 feet. Due to inaccessable condition no development work, except location work, was carried on until the Pinnacle Mining Co. finished their road (as per map) in November of 1950, at a cost of approximately $7500. While road was under construction prospecting with lamps and assays was carried on from a tent camp established in the valley- all the material for the camp had to be packed in.

On. Glacier No. 1 claim we drove in 25 to 30 feet on a "blowout". We built a bin and constructed a high line. This blowout was 10 feet across and the face showed values up to 10% - one streak going as high as 40%. This work was done to determine the direction of flow. In order to expedite matters we hired "gyppo" miners and shipped 83 tons of the total output to Bishop where between the gyppo output and the mill the return was about .4.

Our sampling on 6 different exposures that vary in width from 4 feet to 18 feet show values ranging from point four up to seven point three. The area has not been fully explored but these six exposures are readily accessable from the floor of the valley and any are or all of them could make large ore-bodies.

Just as we were getting set to start real exploration snow came and, due to inadequate housing etc., we decided to close down for the winter.

However, it would be easy to keep the mine operating all year since the road is exposed to the sun for most of the way and only about 1200 feet of it would have to be worked in time of heavy snow.

The 3 claims (known as Valley View) were worked for a short time in or about 1938 or 9. Extremely high grade ore was recovered; but, according to the story given us, the one shipment they made to the mill at Bishop was for the greater part stolen as specimen ore. However, according to one of the original locators, they received about $1000.00 in royalties on a 10% basis - tungsten at that time being about $22.00 per unit. The partners squabbled and gave up the property.

There is an old tunnel and a short winze on the property. The tunnel is caved; the winze is more or less filled in with debris. From the lamping and sampling of the waste pile the ore must have been rich for our sample ran 3% and the lamp gave evidence of very high grade ore in the quartz and garnetite.

15 tons shipped to Nevada mill ran 1.72%.

The formation is strong and the veins are distinct. We propose cleaning up the old workings and carrying on from there.

(b) No immediate production; but the Bishop area is recognized as one of our finest potential tungsten areas.
(c) Have no written reports but rely upon our own experience and knowledge supplemented by other mining men's advice and knowledge.

10. Production:

11. Not in production. Potential ore, from surface indications, could be great.

12. The six exposures at the valley (Lava Creek) can be designated as three in place and three in blowouts. The three blowouts are big enough to be quarried. They show valves from point 4 up to 10 per cent.
The three in place show assay values from 1% to 7.3%. These will require further exploration to develop ore bodies. They are about 4 to 6 feet in width.

13. Access Roads:
State highway 395 to Independence to Bishop. Turn off (west) at Division Creek, 11 miles north of Independence. Paved from 395 to Power house (4 miles). Dirt graded road from Power House to Scott Springs. Scott Springs to mine about 5 miles of graded, switchback, road. Good road conditions. Ore trucks and our Ford Pickup make it easily.

14. Water Supply:
Spring in Lava Creek flowing good stream. Water available it is certain in floor of valley. No flowing stream except at Scott Springs - 4 miles air line.

15. Power:
Electric power generated at Division Creek Power house 6 miles from Lava Creek - air line.

16. Labor:
Two miners and 4 muckers.

17. Three large Army tents with beds, heaters, kitchen equipment etc. used as camp in 1950.
We have two compressors 105 and 210, three trucks and all equipment for mining, including hammer, airhose, pipe, cable, diamond drill with 400 ft. of stems, forge shovels, picks, rails, mine cars, stoper, etc. etc. We lease full equipment from Pinnacle Mining Co., of which the members of Pinnacle Tungsten Co. were members, for $150.00 per month.

18. Nothing except the fact that the usual mining prospect has but one or two showings. We have 6 definite showings of substantial bodies and assays and lampings lead us to believe we have the makings of a real mining venture. The upper reaches of our claims we have not explored, feeling we have plenty in close proximity to the floor of the valley to keep us busy for years.

THIS AGREEMENT, made and entered into this 20th day of June, A.D. 1950, by and between PAUL A. PASSAGE and ALMA A. PASSAGE, his wife, of the County of Inyo, State of California, the parties of the first part, hereinafter referred to as the Owners, and O.R. HEIDRICH, of the County of Los Angeles, State of California and DANIEL V. O'FLAHERTY, of the County of Orange, State of California, the parties of the second part, hereinafter referred to as the Lessees;

WITNESSETH:

THAT WHEREAS, the Owners are vested with the title and entitled to the possession of those certain unpatented mining claims and real property worked as a mine situate in the County of Inyo, State of California, and more particularly described as follows, to-wit:

The GLACIER # 1, located June 29, 1949, and amended June 17, 1950, notice of location and amendment being recorded in the Inyo County Records, to which recordation reference is hereby made.

The GLACIER # 2, located November 10, 1949, and amended June 17, 1950, notice of location and amendment being recorded in the Inyo County Records, to which recordation reference is hereby made.

The GLACIER # 3, located July 18, 1949, and amended June 17, 1950, notice of location and amendment being recorded in the Inyo County Records, to which recordation reference is hereby made.

The GLACIER # 4, located July 18, 1949, and amended June 17, 1950, notice of location and amendment being recorded in the Inyo County Records, to which recordation reference is hereby made.

The GLACIER # 5, located June 17, 1950, notice of location being recorded in the Inyo County Records, to which recordation reference is hereby made.

The GLACIER # 6, located June 17, 1950, notice of location being recorded in the Inyo County Records, to which recordation reference is hereby made.

The PINNACLE, located June 17, 1950, notice of location being recorded in the Inyo County Records, to which recordation reference is hereby made.

The FIRE CRACKER, located June 17, 1950, notice of location being recorded in the Inyo County Records, to which recordation reference is hereby made.

TOGETHER with all equipment and improvements located on said hereinabove described mining claims and mill site.

TOGETHER with all the rights, privileges, and franchises thereto incident, appurtenant, and therewith usually had and enjoyed, and all tenements and appurtenances thereto belonging, or in anywise appertaining, including the right to waters from any springs upon said real property for use in mining and milling operations by said Lessees.

TOGETHER with an as appurtenant to the aforesaid mining ground all improvements, structures, buildings, machinery, tools, supplies and equipment upon or used in connection with said mine, expressly including all water rights and priorities and water privileges and all flumes, pipe lines, ditches, power lines, structures, improvements, equipment and appliances used in connection with any such water and/or water rights; and,

WHEREAS, it is the desire of the Lessees to take possession of and lease said mining ground and mining claims (as hereinabove described) and to prospect, work, develop and mine the same, with a view to the purchase thereof:

NOW, THEREFORE, the said Owners hereby grant to the Lessees for and during such term or period as the Lessees shall perform, keep and comply with every covenant, term and condition hereof on their part to be kept or performed, the immediate possession and right to the exclusive possession of said hereinabove described mining ground, and the whole thereof, with the appurtenances and water rights thereto appertaining, together with the option to purchase the same for the full purchase price of One Hundred Thousand (100,000) Dollars, in lawful money of the United States of America, without interest, to be paid and payable at the residence of said Owners in said County, in installments as hereinafter provided.

(1) Lessees are hereby expressly granted the right to enter upon said premises and to mine and explore the same and to take, remove and dispose of any and all metals or minerals or other substances (organic or inorganic) and whether existing as placer, lode or other type of deposit on or beneath the surface of said property so long as this contract shall be and remain in full force and effect. That said mining operations to be conducted by the Lessees may be by any method selected by the Lessees as the most practical, expedient and economical method to be pursued in the extraction and recovery of minerals on the said lands.

(2) In the conduct of said mining operations the Lessees shall have the right and privilege of using all buildings, improvements, machinery, tools, equipment, water and water rights, ditch and ditch rights, power lines and roads now on said premises or appurtenant thereto, and they shall have the further privilege of erecting other and additional improvements, buildings, structures and of installing such equipment and appliances as they may think proper. All mining operations, however, shall at all times be conducted and carried on in a good and minerlike fashion and in accordance with established and accepted methods and practice, and not otherwise. The Owners, or their duly appointed agent or representative, shall have the privilege of entering into and inspecting said properties and all buildings, improvements and workings thereon for the purpose of ascertaining the manner in which the Lessees are carrying on said operations.

(3) The work of prospecting, exploring, developing and mining of said properties shall be divided into the following periods:

(a) The period of six months from date hereof is allowed the Lessees as a time within which to test, sample, map and assay said lands and to conduct mining operations thereon and to mine the minerals on said property and to ship minerals recovered

therefrom and retain all proceeds therefrom as the property of said Lessees, subject to the payment of the royalties hereinafter provided for. On or before December 20th, 1950, said Lessees shall elect whether to surrender this lease and option or to continue mining operations on said real property; and, in the latter event, shall pay all taxes thereafter falling due on said real property.

(b) During the month of May, 1951, in the event said Lessees shall elect to continue such mining operations, they will commence such mining operations and thereafter conduct the same diligently, and shall cause to be performed on said premises 150 shifts or more of labor per 90 days in such mining operations and in the development of said property as a mine -- the term "shift" meaning a workman employed to labor on and/or in said mine in furtherance of the mining projects contemplated by this agreement of one day of eight hours work, or such other maximum working day as may be prescribed by law or governmental regulations; a suspension of work due to unavoidable accidents, strikes, acts of God, war, weather conditions or other casualties beyond the control of the Lessees excepted.

(4) The Lessees may, at any time, during the term herein stated, surrender this lease and agreement, together with the possession of said properties hereinabove described, upon the giving of written notice to that effect to the Owners and thereupon be relieved of all future obligations hereunder, including the payment of any moneys becoming due and payable thereafter, but such surrender shall not release the Lessees from any obligation or liability theretofore accrued by them hereunder.

(5) As a further and additional consideration of this agreement, the said Lessees shall pay to said Owners at their residence in said County of Inyo, California, as rental for said real property, and as royalty payments, ten per cent (10%) of the gross value of all gold or silver ores or minerals mined or produced from said properties, or any part thereof. If the Lessees shall mill or reduce gold or silver ores mined from said properties they shall ship all bullion and/or concentrates either to the United States Mint in San Francisco, California, or the Selby Smelting Works of California, or to any other recognized customs mill or smelter. If the Lessees shall ship gold or silver ore mined from said properties, without milling, it shall be shipped to one of said mills or smelters. In the event of the disposition of other minerals or ores mined or recovered from said properties, they shall be disposed of by the Lessees in the customary channels of trade and commerce. Within five (5) days after the receipt by the Lessees of the mint, smelter or mill payments for said shipments, or the payment by the buyer of other than gold or silver ores, the Lessees shall pay the hereinbefore designated percentage or royalty on the gross yield and value of said ores, metals or minerals minted, smelted or sold, as aforesaid, as evidenced by the mint, mill or smelter returns or shipping or billing invoices therefor, after deducting therefrom the mint charges or smelter costs, together with any charges, commissions, taxes (including severance taxes) or seigniorage now or hereafter to be imposed by authority of the Federal Government of the United States or the State of California, directly relating to the purchase or production of gold or silver bullion or ores or minerals, but excluding any milling charges made by custom mills. That said net returns from said mint, smelter and mills (excluding milling charges) or other buyers of said ores or minerals, after deducting therefrom said

charges, costs, commissions, taxes and seigniorage, shall be used in determining the gross value for royalty purposes hereunder.

All royalty payments made by the Lessees to the Owners as aforesaid shall constitute rental for said real property, and shall also constitute payments upon the balance of said punchase price of said real property in the event the Lessees shall elect to exercise said option.

All payments to be made on account of royalty, as hereinabove specified, shall be accompanied by a mint or smelter return (or shipping or billing invoice as to any ore or minerals not sold or disposed of to the United States Mint, or one of the specified customs mills or smelters) evidencing the gross yield of said ores minted and smelted and sold as herein provided.

(6) That the Owners shall have the right in person, or through their representatives, to be present at each and every cleanup of ores taken or extracted from said property whenever such cleanup shall be made on the premises. The Owners shall likewise have access to all shipping and refining returns, milling or production records, or other records giving information of the amount of minerals reduced, extracted or recovered by the Lessees from said mining ground and of the proceeds thereof.

(7) That the Lessees may assign this lease, or any interest therein, and sublease the whole, or any portion of said properties, and this lease shall be binding upon and extend to the assigns, successors, executors, administrators and heirs of the parties hereto.

(8) That there is hereby granted to the Lessees the right to dump waste materials or tailings on the surface of said lands, or any adjacent lands acquired by the Lessees, to erect restraining dams in connection with the storage and restraint of mine tailings, to build reservoirs and store waters, and to stockpile, or otherwise deposit ores, concentrates or other products from mining operations conducted on said premises.

(9) There is granted to the Lessees the right to use any waters riparian to said lands and to pump said riparian waters in connection with unrestricted mining operations to be conducted on said premises, as well as the free and unrestricted use of any other waters on or appurtenant to said lands, whether in the form of springs, percolating waters or other sources of supply, providing said Owners have a legal right thereto.

(10) In the event the Lessees discover any lodes or veins whose apices lie within 2000 feet of the boundaries of said hereinabove described lands and deem it necessary or advisable to locate the same under the lode mining laws of the United States and the State of California in order to protect or secure any extralateral rights as to said lodes or veins, the Lessees may make said locations in the name of the Owners and said locations and any extralateral rights incident thereto, and any other locations by said Owners or their associates within said area within 2000 feet of the boundaries of said leased lands, shall be subject to the terms and conditions of this agreement and upon full compliance therewith by the Lessees shall be conveyed to the Lessees with any other properties agreed to be conveyed hereunder.

(11) The Lessees may acquire in their own name any other

property, water rights, mill sites, tailings sites and mining lands, whether adjacent or contiguous to the properties herein described, and whether used as appurtenant or in connection therewith, without claim or right thereto or therein by the Owners of the lands and properties hereinabove described, which said lands, mining properties and water rights shall be held, used and possessed by the Lessees independently and beyond the scope of the terms and conditions of this agreement, subject only to the reciprocal mining rights granted by paragraph 12 hereof.

(12) It is mutually agreed by and between the Owners and the Lessees that for the purpose of enabling the Lessees to carry on to the best advantage and with greater economy and convenience the mining and development of the gold and silver ores or other minerals existing upon, in or under the mining premises hereinabove described, or existing upon, in or under any adjacent lands or mining ground which the Lessees may now, or hereafter, own or acquire or from which they may now or hereafter have the right to so mine and remove minerals, that the Lessees shall have the right and privilege, if they so elect, to gain access to, and when gained by them, to remove the gold and silver ores or minerals from, in, under or upon the said hereinabove described premises and/or such adjoining lands through any tunnel or tunnels, shaft or shafts, workings or openings, whether located upon the said mining premises hereinabove described, or upon any such adjacent lands. And for such purposes the Lessees shall have the right to drive tunnels or make openings (including the extension of open pits, drain tunnels and sluice ways) from said mining premises herein described into and upon such adjacent lands, or from such adjacent lands into said herein described mining premises; it being understood that gold and silver mined from the premises herein described shall at all times be kept separate from gold and silver mined from any such adjacent lands.

(13) The Lessees may, at their own cost and expense, apply for, in the names of the Owners, and prosecute to completion an application for a patent as to any of said hereinabove described lands which are now held as unpatented mining locations. The Owners agree to cooperate with the Lessees in procuring such a patent and will, at the request of the Lessees, make and sign an application for a patent, and otherwise abide by the rules and regulations of the United States Land Office relating to the procurement of a patent on unpatented mining claims. In the event any patent or patents are secured in the manner aforesaid, any and all merchantable timber on said patented lands shall be and become the sole property of said Lessees regardless of the consummation of the sale herein provided for; provided, however, that said Lessees shall, in the event this option is terminated in any manner other than by the purchase of said lands, remove such timber within five years after such termination.

(14) Upon demand of the Lessees, after payment of sums aggregating $10,000.00 or more upon said purchase price, the Owners will execute and deposit in escrow with a bank in Bishop, California, a good and sufficient deed conveying to the Lessees all of the hereinabove described properties with the apprutenances and water rights thereto belonging, free and clear of all liens and/or encumbrances and adverse claims of any kind or character, except the following:

(a) The paramount title of the United States as to any unpatented mining claims;

(b) Any lien or claim, applying or existing from any act done or suffered by the Lessees.

Said deed will be deposited, as aforesaid, with appropriate instructions to said escrow holder, to deliver said deed to the Lessees, or their successors or assigns, or to their order, upon the payment in full according to the terms hereof of the total purchase price hereinabove named for said properties, in royalty payments or otherwise, and provided that the Lessees have otherwise performed all of the terms and conditions of this agreement on their part to be performed.

Concurrently therewith the Owners will deposit in escrow as aforesaid, subject to similar instructions, title insurance in the sum of $100,000.00, showing said title to be vested in the Owners; or, in the event it is impossible to secure such title insurance, there shall be so deposited in lieu thereof a certificate of title or title report in the best and most satisfactory form procurable showing such title to be vested in the Owners; and the same shall be subject to inspection by the Lessees, their agents and attorneys from time to time as required by them.

(15) The said Owners shall not be liable nor responsible for any work or labor of whatever kind or character done or performed in, on, or upon said property during the life of this agreement, or for any material or materials furnished to be used, or used, in, on, upon, or in connection with the working of said property.

(16) The said Lessees will pay all expenses and charges of each and every nature for which they shall become expressly or impliedly liable, in anywise connected with the working of said property during the life of this agreement, and will protect and save harmless the said property from all claims and liens of each and every nature arising from any act of the Lessees.

(17) The Owners shall have the right to enter upon said property at any and all reasonable times, and to post thereon, a notice that niether they, nor the said property, will be responsible or liable for any work or labor done or performed thereon at the direction of the Lessees, or any agent, representative, grantee or successor of the said Lessees, or for any material or materials used by, or furnished to be used by, the said Lessees, or any agent, representative, grantee or successor of the Lessees, upon, in or about, or in the improvement of, said property, or any part thereof.

(18) The said Lessees promise and agree, as soon as work shall be commenced by any employee upon said property under this agreement, to procure and carry a policy of insurance for the protection of the parties hereto for any injury or injuries to employees under the Workmen's Compensation, Insurance and Safety Act of the State of California, and under the Acts amendatory thereto, and to carry the same as their own proper charge and expense.

(19) All development work done, and all improvements made upon said property shall be in accordance with the requirements, rules and regulations of the Industrial Accident Commission of the State of California, and shall constitute the annual assessment work required to maintain the unpatented mining claims aforesaid. Said Lessees covenant and agree to perform the necessary assessment work for the year 1950 to 1951 and thereafter during said term, and to provide the necessary improvements to so maintain said unpatented

mining claims to the extent of $100.00 in value annually on each of said claims, and to record proper proofs of labor in connection therewith in the office of the County Recorder at Inyo, California, on or before the 15th day of June of each year during said term and any extension thereof, unless this agreement is cancelled, surrendered or terminated prior to that date.

(20) TIME is of the essence of this contract.

(21) Each and every agreement, covenant, term or condition herein contained on the part of the Lessees to be kept or performed shall be and it is hereby made a condition of this agreement, and in the event that the Lessees shall fail or refuse to keep or perform any agreement, covenant, term or condition set forth herein for sixty days after written notice of default specifying the particulars of said alleged default, the Owners may at their option with written notice to the Lessees and without waiving any other right hereunder, or at law, or against the Lessees arising from any such default, terminate this agreement and with or without process of law, expel, remove and put out the Lessees from the possession of the hereinabove described mining claims and property; but such termination shall not release the Lessees from any obligation or liability theretofore incurred by them under the provisions hereof.

A waiver of one default by the Owners shall not be deemed to be a waiver of any other default.

Should any such default be by its nature not capable of being remedied within said sixty day period, then and in that event, such alleged default shall be deemed cured in the event the Lessees commence to remedy such default within said sixty day period.

(22) In the event of the termination of this contract in any manner other than by the consummation of the sale of said properties, the Lessees may remove all machinery and equipment, including underground and surface pumps, rails, air and compressor pipes, leaching tanks, tools, supplies and other personal property whatsoever which may hereafter be placed on said property by the Lessees; said removal to be accomplished within six months (weather and road conditions permitting) after the termination of this contract as aforesaid - it being distinctly agreed and understood between the parties hereto that any of the following improvements hereafter placed upon said property shall remain thereon and be surrendered therewith, to-wit: all buildings, including mill buildings, warehouses, assay offices, bunkers for the storing of ore, flumes, ditches and sluice boxes constructed on said property, any gallows or head frames to any shaft situated thereon; and, as to any underground works, all ladders, underground bunkers and all underground timbering affixed to and a part of said mine.

In the event of the termination of this contract, as aforesaid, all sums of money theretofore paid to the Owners, shall be regarded as liquidated damages for the prior use and occupation of said mining ground and improvements, and shall be so retained by the Owners, without claims or demands therfor by the Lessees.

(23) Whenever this lease is terminated by its expiration or by the action of the parties hereto or by operation of law, Lessees shall and will peacefully and quietly leave, surrender and yield up said premises unto the Owners, and said Lessees, at the request of the Owners, covenant and agree to execute to said Owners a quitclaim deed in respect to the properties herein described, releasing,

quitclaiming and surrendering said properties, and the whole thereof, from the provisions of this agreement and any cloud upon the title arising therefrom.

(24) Subject to the approval of the United States Forest Service, Lessees are granted the right to cut and remove from said premises all sound and merchantable standing timber thereon and to dispose of the same as their own property, but in that event they shall pay to said Owners, in addition to the purchase price aforesaid stumpage payments for all timber which may be cut by them for use other than upon said premises, at the rate of $2.00 per thousand feet, log scale, measured or scaled by the Scribner Decimal C Log Scale. Such payment shall be made in lawful money of the United States in installments as the timber is cut, and shall be made on or before the 1st day of each month and shall be sufficient to pay for all timber cut prior to the 1st day of such month, respectively, after deducting prior payments. With each such payment, Lessees will furnish Owners duplicate statements of their

STATE OF CALIFORNIA
County of Inyo } ss.
On this 21st day of June A.D. 1950 before me Jess G. Sutliff
a Notary Public in and for the said County and State, residing therein, duly commissioned and sworn, personally appeared Paul A. Passage and Alma A. Passage
known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Jess G. Sutliff
Notary Public in and for said County and State

My Commission expires
Campbell Bros., Printers, 3801 San Pablo Ave., Oakland, PI 5-8888
GENERAL ACKNOWLEDGMENT

STATE OF California
County of Orange } ss.

ON THIS 22nd day of June, A. D., 1950, before me, R. W. Rowlands a Notary Public in and for said County and State, personally appeared Daniel V. O'Flaherty and O. R. Heidrich, known to me, to be the persons whose names are subscribed to the within Instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

R. W. Rowlands
Notary Public in and for said County and State.

ACKNOWLEDGMENT — GENERAL — WOLCOTTS FORM 231

Commission expires Mar. 8, 1952

Nellie Fries
4.70pd

quitclaiming and surrendering said properties, and the whole thereof, from the provisions of this agreement and any cloud upon the title arising therefrom.

(24) Subject to the approval of the United States Forest Service, Lessees are granted the right to cut and remove from said premises all sound and merchantable standing timber thereon and to dispose of the same as their own property, but in that event they shall pay to said Owners, in addition to the purchase price aforesaid stumpage payments for all timber which may be cut by them for use other than upon said premises, at the rate of $2.00 per thousand feet, log scale, measured or scaled by the Scribner Decimal C Log Scale. Such payment shall be made in lawful money of the United States in installments as the timber is cut, and shall be made on or before the 1st day of each month and shall be sufficient to pay for all timber cut prior to the 1st day of such month, respectively, after deducting prior payments. With each such payment, Lessees will furnish Owners duplicate statements of the log scale measurements upon which the same is based.

(25) This contract shall expressly inure to the benefit of and shall bind the successors, assigns, heirs, administrators and executors of the parties hereto.

(26) Provided, always, anything hereinbefore to the contrary notwithstanding, that said Lessees shall pay to said Owners an annual installment of $1200.00, to apply upon said purchase price and as the payment or prepayment of royalties herein provided for, on the 1st day of January of each year beginning January 1st, 1952, and any and all payments of royalties hereunder shall apply as prepayments upon such annual installments.

IN WITNESS WHEREOF, the said parties have executed this agreement in duplicate, the day and year first hereinabove written.

My Commiss.
Campbell Bros., I.
GENERAL A

(SEAL)

(SEAL)

(SEAL)

(SEAL)
(OWNERS)

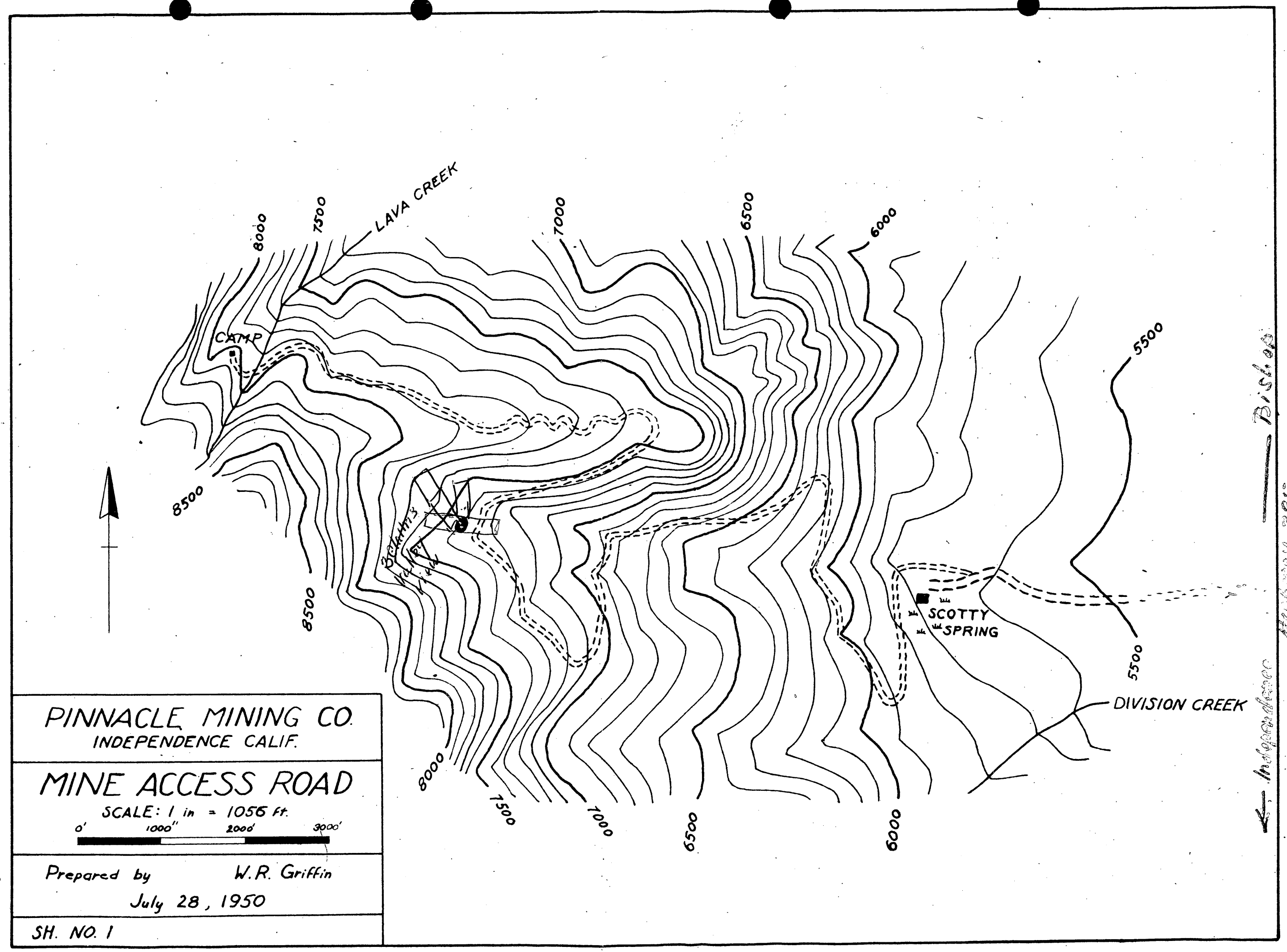
Dan V O'Flaherty
50 9

(SEAL)

(SEAL)
(LESSEES)

85
1

Nellie Fries
4.70



PINNACLE MINING CO.
INDEPENDENCE CALIF.

MINE ACCESS ROAD

SCALE: 1 in = 1056 ft.

0' 1000' 2000' 3000'

Prepared by W.R. Griffin

July 28, 1950

SH. NO. 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-1574X

Date received 6/5/51

Participation

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date May 26, 1951.

FILL IN THIS BLOCK

Date of application May 26, 1951.

Estimated cost $ 30,000

Mineral or metal Scheelite Or Tungsten

Percentage of Government participation 75

Location of mine Lava Creek, 11 miles north of Independence, Calif.

Inyo Co

Date of filing MF-100

DMA Docket Number, if available

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? (Limited Partnership).

*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. See Form M. F. 100

*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				

*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.

Pinnacle Tungsten Co.,
(Name of company)

By Daniel V. Flaherty
(Signature of authorized official)

May 26, 1951
(Date)

Secretary
(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

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103
Defense Minerals Administration.

Answers under heading," The Applicant".

1. Limited Partnership.

2. O. R. Heidrick. 14368 Polk st., San Fernando, Calif.
D. V. O'Flaherty, 23 No. La Senda, South Laguna, Calif.
J. A. Fleming, 5658 Wilshire Blvd, Los Angeles, Calif.
J. Ross Clark II, 5658 Wilshire Blvd., Los Angeles, Calif.
J. V. Smith, 21 So. Encino, South Laguna, Calif.
R. L. Rowlands, 11 La Senda Place, South Laguna, Calif.

7. Lease attached and in good standing (on Pinnacle Mining Co., claims). Location notice filed on three Valley View Claims- in good standing.

8. Pinnacle Tungsten Co., is a new organization taking over properties of the Pinnacle Mining Co. No liabilities. Assets consists of claims with benefit of $ 25,000 spent by Pinnacle Mining Co., on roads, trails, preliminary exploration, ect. Also have lease contract of purchase on all necessary equipment for mining. Equipment worth from 12 to $ 15,000.

9. Ten Thousand Dollars. Sufficient to pay our part of cost.

10. Exploration will be on 13 claims located on a high plateau and in Lava Cr Creek Canyon - a canyon or gash in the High Sierras, very similar th the Vanadium Mine at Pine Creek, Bishop Area, California. Exposures are accessable and workable. Three of these claims (Valley View) are just above road to Lava Creek and can be worked from the road. So we have two separate areas however they are both on the road. We have equipment to explore both.

10. Claims are recorded in records of Inyo County, Calif., as per. attached map. Located at Lava Creek, 11 miles north ofIndependenca, Calif., thence due west of Division Creek, to Scott Springs, thence by graded road, built by Pinnacle Mining Co.,) to claims.
Location 37 deg. 568, 98" North.Lat.
Long. 118 deg. 21' 09" West.
4.38 Mi. West of R 34 E.
3.40 North of T 12 S.
At S.E. corner of Glacier No. 1, Mt. Diablo, B & M,
Inyo County, Calif.

11. Answered on Form M.F. 100.

12. " " " " "

13. " " " " "

14. Complete camp equipment- Army tents.

15. Ore shipped to mills Via., our road, thence by Highway 395 to Bishop, Calif., mills, Vanadium, Red Hill Mill, Benware Mill. Shipped by truck at $ 3.50 per. ton.

16. Answered on Form M.F. 100.

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103,
Defense Minerals Administration.

Answers under heading, " The Applicant".

17. Not in production.

18. Answered on Form M.F. 100.

19. Property inLava Creek was unaccessable until we put road in last year, 1950. Deposits were located but due to low priceand inaccessability they were not worked. Road granted by Dept. of Agriculture for our use only. Road kept under lock.

THE EXPLORATION

20. Scheelite located in veins and " Blow-outs".

21. We expect to open up six showings consisting of blowouts and vein material. These six vary in width from four feet to eighteen feet and all show from point 4 or 5 up tp 7% Scheelite. On one streak, 18" to 2', we had as high as 46% assay . We estimate that within six months we will develop several strong bodies of excellent ore.

22. The exposurs are in the tactite and garnetite. The granites are in evidence atvthe claims as are the limestones. We have every type of rock to make ore. Furthermore the lampings are excellent and our channel cut assays have checked with the lampings. The garnetite structures are strong. Shipments made from Valley View Claims (3) ran 1.7% and formations indicate excellent chances of continuing ore bodies. We have not expended money for geological maps. We have considerable knowledge of geology from our school work and field work so have relied upon that and our conclusions have been verified by other mining men.

REQUIREMENTS AND COSTS.

23. We plan on this development work:
    a. Labor:
        Two miners..... $15 to $ 16 per. day.
        Four muckers.... $ 12 per. day.
        Camp- Will eat and live in Independence, Calif.
    b. Supervision:
        One Manager..... $ 350 to $400 per. mo.
        One man to be Ass't Mgr. , purchasing Agt., and mine bookeeper at ... $250 per. mo.
    c. None.
    d. $ 2500 to $ 4000 should be allocated for housing.
    e. One extra hammer, some extra airhose or pipe.
    f. $ 150 per. mo.
    g. $ 12,000 to $ 15,000.
    h. $ 300 per. mo.
    i. $ 20.00 per. day.

24. We anticipate exploeing the higher reaches of our properties. We estimate about six months to open up at least five locations after project is approved. Money will be spent in accordance with good mining practice. As winter approaches we should have a standby dozier to clean snow off roads.

Refer to	Noted	Date
Answered		

DEPARTMENT OF
BUREAU OF
REGION
RECEIVED
MAY 31 1951
SAN FRANCISCO, CALIFORNIA

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-1574X

Date received 6/5/51

Participation

Pinnacle Tungsten Co.,
Independence, Calif.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 31 1951
SAN FRANCISCO, CALIFORNIA

Name and address of applicant

Date May 26, 1951.

FILL IN THIS BLOCK

Date of application May 26, 1951.

Estimated cost $ 30,000

Mineral or metal Scheelite Or Tungsten

Percentage of Government participation 75

Location of mine Lava Creek, 11 miles north of Independence, Calif.

Date of filing MF-100

DMA Docket Number, if available

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? (Limited Partnership).

*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. See Form M. F. 100

*5. Are you the owner or the lessee of the property? See

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.

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

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

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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.

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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

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    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
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    (*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.

Pinnacle Tungsten Co.,
(Name of company)

By Daniel O'Flaherty
(Signature of authorized official)

May 26, 1951
(Date)

Secretary
(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

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103
Defense Minerals Administration.

Answers under heading," The Applicant".

1. Limited Partnership.

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J. A. Fleming, 5658 Wilshire Blvd, Los Angeles, Calif.
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Long. 118 deg. 21' o9" West.
4.38 Mi. West of R 34 E.
3.40 North of T 12 S.
At S.E. corner of Glacier No. 1, Mt. Diablo, B & M,
Inyo County, Calif.

11. Answered on Form M.F. 100.

12. " " " " "

13. " " " " "

14. Complete camp equipment- Army tents.

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Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103,
Defense Minerals Administration.

Answers under heading, " The Applicant".

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19. Property inLava Creek was unaccessable until we put road in last year, 1950. Deposits were located but due to low priceand inaccessability they were not worked. Road granted by Dept. of Agriculture for our use only. Road kept under lock.

THE EXPLORATION

20. Scheelite located in veins and " Blow-outs".

21. We expect to open up six showings consisting of blowouts and vein material. These six vary in width from four feet to eighteen feet and all show from point 4 or 5 up tp 7% Scheelite. On one streak, 18" to 2', we had as high as 46% assay . We estimate that within six months we will develop several strong bodies of excellent ore.

22. The exposurs are in the tactite and garnetite. The granites are in evidence atvthe claims as are the limestones. We have every type of rock to make ore. Furthermore the lampings are excellent and our channel cut assays have checked with the lampings. The garnetite structures are strong. Shipments made from Valley View Claims (3) ran 1.7% and formations indicate excellent chances of continuing ore bodies. We have not expended money for geological maps. We have considerable knowledge of geology from our school work and field work so have relied upon that and our conclusions have been verified by other mining men.

REQUIREMENTS AND COSTS.

23. We plan on this development work:
    a. Labor:
        Two miners..... $15 to $ 16 per. day.
        Four muckers.... $ 12 per. day.
        Camp- Will eat and live in Independence, Calif.
    b. Supervision:
        One Manager..... $ 350 to $400 per. mo.
        One man to be Ass't Mgr. , purchasing Agt., and mine bookeeper at ... $250 per. mo.
    c. None.
    d. $ 2500 to $ 4000 should be allocated for housing.
    e. One extra hammer, some extra airhose or pipe.
    f. $ 150 per. mo.
    g. $ 12,000 to $ 15,000.
    h. $ 300 per. mo.
    i. $ 20.00 per. day.

24. We anticipate exploeing the higher reaches of our properties. We estimate about six months to open up at least five locations after project is approved. Money will be spent in accordance with good mining practice. As winter approaches we should have a standby dozier to clean snow off roads.

Form MF-100
(March 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dma-1574X

Date received 6/5/51

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date May 26, 1951.

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~[illegible]~~ ~~[illegible]~~ ~~zation Deductions of Internal Revenue Code 1950~~ (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

5

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production Not in production

   If not in production or operation, estimated date when production will begin six months.
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is 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 Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: 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)
O. R. Heidrich	General Partner						
San Fernando, Calif.	Manager.	None					
D. V. O'Flaherty,	General Partner						
So. Laguna, Calif.	Ass't. Mgr.	None					
J. A. Fleming,	Limited Partner						
5658 Wilshire Blvd.	Los Angeles	None.					
J. Ross Clark II.	Limited Partner.						
5658 Wilshire Blvd.,	Los Angeles.	None.					
J. V. Smith,	Limited Partner,						
So. Laguna, Calif.		None.					
R. W. Rowlands,	Limited Partner						
So. Laguna, Calif.		None.					
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. 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	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(*a*) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Pinnacle Tungsten Co. (Name of company)

By Daniel C. O'Haberty (Signature of authorized official)

May 26, 1951 (Date)

Sec't (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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

PINNACLE TUNGSTEN CO.
Independence
California

1. Materials produced:
   (a) Scheelite - Tungsten
   (b) No by-products

2. Quarry and drift mining on exposed blowouts and veins in place. This development on virgin properties located in Lava Creek eleven miles north and west of Independence, California. Opened up and explored from July 1950 to November 1950 by Pinnacle Mining Co. Pinnacle Tungsten Co. taking over from Pinnacle to carry on exploration and development.

   (a) One winze sunk 14 feet on No. 1
   (b) One drift of 30 feet on No. 1
   (c) 30 feet
   (d) On Valley View proper claims (3) old tunnel of 40 feet and one shaft 20 feet deep (tunnel caved).
   This claim worked some years ago when tungsten was low in price and hardly marketable. Assays on waste pile ore ran from 1% to 3%. Spuds of considerable size picked off dump.

   No pumping problem on any of claims.

3. Old road rebuilt (4 miles) and 1½ miles of new road built into valley by Pinnacle Mining Co., 1950, at cost of $7500.

   (a) All ore can be shipped from mine, by good road, to Bishop 40 miles away. Nearest town is Independence, Calif. 16 to 18 miles from property.
   (b) District name not known. Location 37° 56.89'N
   (c) Long 118° 21.09' W
   4.38 Mi West of R34E
   3.40 Mi North of T12S
   Mt.Diablo B&M
   Inyo County, Calif.
   (d) Inyo County, Calif.

4. (a) Getting ready to start operations. Pinnacle Tungsten Co. will take over from Pinnacle Mining Co. and carry on. Snow forced closing down in Dec. 1950 due to fact we were not prepared. However work can be carried on all year with proper preparations.
   (b) Lessee on Lava Creek claims.
   Located three claims ourselves on Valley View proper. Owner. Expect to work both groups simultaneously.

5. Produced 83 tons from our No. 1 claim in November 1950. In course of development.

6. Experience of operator.

O. R. Heidrich, of 14368 Polk St., San Fernando, California. Consulting metallurgist with long and highly efficient record as consulting metallurgist throughout the southwest as well as Mexico and Central America. His whole business life has been devoted to mining starting, as a boy, at Grass Valley, California. He has worked and studied every phase of mining from muckking up through the various stages until today he is employed as consultant on various problems connected with mill construction and ore dressing. He has done considerable work as consultant and supervisor of tungsten properties.

Mr. Heidrich will continue as superintendent for the Pinnacle Tungsten Co. He acted in the same capacity for the Pinnacle Mining Co.

The applicant, Daniel V. O'Flaherty, studied his geology and mineralogy at Bridgewater State Teachers College at Bridgewater, Massachusetts and at Harvard, from which he graduated in 1911. On graduation O'Flaherty taught and coached the athletic teams at Cambridge Latin School, Cambridge, Mass., and at English High School, Boston, Mass. In 1920 came to California and engaged in the Real Estate business and as sales manager and developer. Helped develop Walnut Park, Morningside Heights, Girard, and several pieces in and around San Fernando, Calif. He is at present one of the developers of Three Arch Bay, So. Laguna, California, the outstanding development in this area.

Since 1920 the applicant has continually been more or less active in mining and prospecting. Among his mining activities have been the following: Manager of gold (placer) operation on Green River at Vernal, Utah; manager of drift mine at Calder, California; assistant to manager on lead zinc mine at Portal, Arizona.

Applicant acted as purchasing agent and mine bookkeeper on these claims for the Pinnacle Mining Co. from whom the Pinnacle Tungsten Co. are taking over.

Mr. Heidrich was V. President and director of the Pinnacle Mining Company. Mr. O'Flaherty was secretary and a director of the same company.

Mr. O'Flaherty will act as purchasing agent and mine bookkeeper for the Pinnacle Tungsten Co.

7. History.

The properties of the Pinnacle Tungsten Co. consist of two groups of claims.

1. 10 claims (as per attached map) taken over from the Pinnacle Mining Co. This as lease by Pinnacle from Paul Passage of Independence, Calif.
2. 3 claims located by O. R. Heidrich et al on old workings - known as Valley View claims.

The 10 claims were originally located in an almost inaccessable valley, Lava Creek, by Philip Day who in turn

passed them on to Paul Passage. Lava Creek, at the claims, is at 8500 foot elevation in a very rugged area. The highway from Independence to Bishop is at 4000 feet. Due to inaccessable condition no development work, except location work, was carried on until the Pinnacle Mining Co. finished their road (as per map) in November of 1950, at a cost of approximately $7500. While road was under construction prospecting with lamps and assays was carried on from a tent camp established in the valley- all the material for the camp had to be packed in.

On. Glacier No. 1 claim we drove in 25 to 30 feet on a "blowout". We built a bin and constructed a high line. This blowout was 10 feet across and the face showed values up to 10% - one streak going as high as 40%. This work was done to determine the direction of flow. In order to expedite matters we hired "gyppo" miners and shipped 83 tons of the total output to Bishop where between the gyppo output and the mill the return was about .4.

Our sampling on 6 different exposures that vary in width from 4 feet to 18 feet show values ranging from point four up to seven point three. The area has not been fully explored but these six exposures are readily accessable from the floor of the valley and any are or all of them could make large ore-bodies.

Just as we were getting set to start real exploration snow came and, due to inadequate housing etc., we decided to close down for the winter.

However, it would be easy to keep the mine operating all year since the road is exposed to the sun for most of the way and only about 1200 feet of it would have to be worked in time of heavy snow.

The 3 claims (known as Valley View) were worked for a short time in or about 1938 or 9. Extremely high grade ore was recovered; but, according to the story given us, the one shipment they made to the mill at Bishop was for the greater part stolen as specimen ore. However, according to one of the original locators, they received about $1000.00 in royalties on a 10% basis - tungsten at that time being about $22.00 per unit. The partners squabbled and gave up the property.

There is an old tunnel and a short winze on the property. The tunnel is caved; the winze is more or less filled in with debris. From the lamping and sampling of the waste pile the ore must have been rich for our sample ran 3% and the lamp gave evidence of very high grade ore in the quartz and garnetite.

15 tons shipped to Nevada mill ran 1.72%.

The formation is strong and the veins are distinct. We propose cleaning up the old workings and carrying on from there.

(b) No immediate production; but the Bishop area is recognized as one of our finest potential tungsten areas.
(c) Have no written reports but rely upon our own experience and knowledge supplemented by other mining men's advice and knowledge.

10. Production:

11. Not in production. Potential ore, from surface indications, could be great.

12. The six exposures at the valley (Lava Creek) can be designated as three in place and three in blowouts. The three blowouts are big enough to be quarried. They show valves from point 4 up to 10 per cent.
The three in place show assay values from 1% to 7.3%. These will require further exploration to develop ore bodies. They are about 4 to 5 feet in width.

13. Access Roads:
State highway 395 to Independence to Bishop. Turn off (west) at Division Creek, 11 miles north of Independence. Paved from 395 to Power house (4 miles). Dirt graded road from Power House to Scott Springs. Scott Springs to mine about 5 miles of graded, switchback, road. Good road conditions. Ore trucks and our Ford Pickup make it easily.

14. Water Supply:
Spring in Lava Creek flowing good stream. Water available is certain in floor of valley. No flowing stream except at Scott Springs - 4 miles air line.

15. Power:
Electric power generated at Division Creek Power house 6 miles from Lava Creek - air line.

16. Labor:
Two miners and 4 muckers.

17. Three large Army tents with beds, heaters, kitchen equipment etc. used as camp in 1950.
We have two compressors 105 and 210, three trucks and all equipment for mining, including hammer, airhose, pipe, cable, diamond drill with 400 ft. of stems, forge shovels, picks, rails, mine cars, stoper, etc. etc. We lease full equipment from Pinnacle Mining Co., of which the members of Pinnacle Tungsten Co. were members, for $150.00 per month.

18. Nothing except the fact that the usual mining prospect has but one or two showings. We have 6 definite showings of substantial bodies and assays and lampings lead us to believe we have the makings of a real mining venture. The upper reaches of our claims we have not explored, feeling we have plenty in close proximity to the floor of the valley to keep us busy for years.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dma-1574X

Date received 6/5/51

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date May 26, 1951.

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~Necessity certificate under provisions of Section 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5)~~ priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (~~6~~ 5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry(ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
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   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production Not in production
   If not in production or operation, estimated date when production will begin six months.
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

16—63792-1

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is 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 Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: 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)
O. R. Heidrich	General Partner						
San Fernando, Calif.	Manager.	None					
D. V. O'Flaherty,	General Partner						
So. Laguna, Calif.	Ass't. Mgr.	None					
J. A. Fleming,	Limited Partner						
5658 Wilshire Blvd.	Los Angeles	None.					
J. Ross Clark II.	Limited Partner.						
5658 Wilshire Blvd.,	Los Angeles.	None.					
J. V. Smith,	Limited Partner,						
So. Laguna, Calif.		None.					
R. V. Rowlands,	Limited Partner						
So. Laguna, Calif.		None.					
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. 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	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by an available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Pinnacle Tungsten Co.
(Company)

By Daniel V. O'Flaherty
(Signature of authorized official)

May 26, 1951
(Date)

Secretary
(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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

PINNACLE TUNGSTEN CO.
Independence
California

1. Materials produced:
   (a) Scheelite - Tungsten
   (b) No by-products

2. Quarry and drift mining on exposed blowouts and veins in place. This development on virgin properties located in Lava Creek eleven miles north and west of Independence, California. Opened up and explored from July 1950 to November 1950 by Pinnacle Mining Co. Pinnacle Tungsten Co. taking over from Pinnacle to carry on exploration and development.

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   This claim worked some years ago when tungsten was low in price and hardly marketable. Assays on waste pile ore ran from 1% to 3%. Spuds of considerable size picked off dump.

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   4.38 Mi West of R34E
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O. R. Heidrich, of 14363 Polk St., San Fernando, California. Consulting metallurgist with long and highly efficient record as consulting metallurgist throughout the southwest as well as Mexico and Central America. His whole business life has been devoted to mining starting, as a boy, at Grass Valley, California. He has worked and studied every phase of mining from mucking up through the various stages until today he is employed as consultant on various problems connected with mill construction and ore dressing. He has done considerable work as consultant and supervisor of tungsten properties.

Mr. Heidrich will continue as superintendent for the Pinnacle Tungsten Co. He acted in the same capacity for the Pinnacle Mining Co.

The applicant, Daniel V. O'Flaherty, studied his geology and mineralogy at Bridgewater State Teachers College at Bridgewater, Massachusetts and at Harvard, from which he graduated in 1911. On graduation O'Flaherty taught and coached the athletic teams at Cambridge Latin School, Cambridge, Mass., and at English High School, Boston, Mass. In 1920 came to California and engaged in the Real Estate business and as sales manager and developer. Helped develop Walnut Park, Morningside Heights, Girard, and several pieces in and around San Fernando, Calif. He is at present one of the developers of Three Arch Bay, So. Laguna, California, the outstanding development in this area.

Since 1920 the applicant has continually been more or less active in mining and prospecting. Among his mining activities have been the following: Manager of gold (placer) operation on Green River at Vernal, Utah; manager of drift mine at Calder, California; assistant to manager on lead zinc mine at Portal, Arizona.

Applicant acted as purchasing agent and mine bookkeeper on these claims for the Pinnacle Mining Co. from whom the Pinnacle Tungsten Co. are taking over.

Mr. Heidrich was V. President and director of the Pinnacle Mining Company. Mr. O'Flaherty was secretary and a director of the same company.

Mr. O'Flaherty will act as purchasing agent and mine bookkeeper for the Pinnacle Tungsten Co.

7. History.

The properties of the Pinnacle Tungsten Co. consist of two groups of claims.

1. 10 claims (as per attached map) taken over from the Pinnacle Mining Co. This as lease by Pinnacle from Paul Passage of Independence, Calif.
2. 3 claims located by O. R. Heidrich et al on old workings - known as Valley View claims.

The 10 claims were originally located in an almost inaccessable valley, Lava Creek, by Philip Day who in turn

passed them on to Paul Passage. Lava Creek, at the claims, is at 8500 foot elevation in a very rugged area. The highway from Independence to Bishop is at 4000 feet. Due to inaccessable condition no development work, except location work, was carried on until the Pinnacle Mining Co. finished their road (as per map) in November of 1950, at a cost of approximately $7500. While road was under construction prospecting with lamps and assays was carried on from a tent camp established in the valley- all the material for the camp had to be packed in.

On. Glacier No. 1 claim we drove in 25 to 30 feet on a "blowout". We built a bin and constructed a high line. This blowout was 10 feet across and the face showed values up to 10% - one streak going as high as 40%. This work was done to determine the direction of flow. In order to expedite matters we hired "gyppo" miners and shipped 83 tons of the total output to Bishop where between the gyppo output and the mill the return was about .4.

Our sampling on 6 different exposures that vary in width from 4 feet to 18 feet show values ranging from point four up to seven point three. The area has not been fully explored but these six exposures are readily accessable from the floor of the valley and any are or all of them could make large ore-bodies.

Just as we were getting set to start real exploration snow came and, due to inadequate housing etc., we decided to close down for the winter.

However, it would be easy to keep the mine operating all year since the road is exposed to the sun for most of the way and only about 1200 feet of it would have to be worked in time of heavy snow.

The 3 claims (known as Valley View) were worked for a short time in or about 1938 or 9. Extremely high grade ore was recovered; but, according to the story given us, the one shipment they made to the mill at Bishop was for the greater part stolen as specimen ore. However, according to one of the original locators, they received about $1000.00 in royalties on a 10% basis - tungsten at that time being about $22.00 per unit. The partners squabbled and gave up the property.

There is an old tunnel and a short winze on the property. The tunnel is caved; the winze is more or less filled in with debris. From the lamping and sampling of the waste pile the ore must have been rich for our sample ran 3% and the lamp gave evidence of very high grade ore in the quartz and garnetite.

15 tons shipped to Nevada mill ran 1.72%.

The formation is strong and the veins are distinct. We propose cleaning up the old workings and carrying on from there.

(b) No immediate production; but the Bishop area is recognized as one of our finest potential tungsten areas.
(c) Have no written reports but rely upon our own experience and knowledge supplemented by other mining men's advice and knowledge.

10. Production:

11. Not in production. Potential ore, from surface indications, could be great.

12. The six exposures at the valley (Lava Creek) can be designated as three in place and three in blowouts. The three blowouts are big enough to be quarried. They show valves from point 4 up to 10 per cent.
The three in place show assay values from 1% to 7.3%. These will require further exploration to develop ore bodies. They are about 4 to 5 feet in width.

13. Access Roads:
State highway 395 to Independence to Bishop. Turn off (west) at Division Creek, 11 miles north of Independence. Paved from 395 to Power house (4 miles). Dirt graded road from Power House to Scott Springs. Scott Springs to mine about 5 miles of graded, switchback, road. Good road conditions. Ore trucks and our Ford Pickup make it easily.

14. Water Supply:
Spring in Lava Creek flowing good stream. Water available it is certain in floor of valley. No flowing stream except at Scott Springs - 4 miles air line.

15. Power:
Electric power generated at Division Creek Power house 6 miles from Lava Creek - air line.

16. Labor:
Two miners and 4 muckers.

17. Three large Army tents with beds, heaters, kitchen equipment etc. used as camp in 1950.
We have two compressors 105 and 210, three trucks and all equipment for mining, including hammer, airhose, pipe, cable, diamond drill with 400 ft. of stems, forge shovels, picks, rails, mine cars, stoper, etc. etc. We lease full equipment from Pinnacle Mining Co., of which the members of Pinnacle Tungsten Co. were members, for $150.00 per month.

18. Nothing except the fact that the usual mining prospect has but one or two showings. We have 6 definite showings of substantial bodies and assays and lampings lead us to believe we have the makings of a real mining venture. The upper reaches of our claims we have not explored, feeling we have plenty in close proximity to the floor of the valley to keep us busy for years.

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 - 1574X

Date received 6/5/51

Participation

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date May 26, 1951.

FILL IN THIS BLOCK

Date of application May 26, 1951.

Estimated cost $ 30,000

Mineral or metal Scheelite Or Tungsten

Percentage of Government participation 75

Location of mine Cave Creek, 11 miles north of Independence, Calif.

Date of filing MF-100

DMA Docket Number, if available

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? (Limited Partnership).

*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. See Form M. F. 100

*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				

*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.

Pinnacle Tungsten Co.,
(Name of company)

By Daniel O'Flaherty
(Signature of authorized official)

May 26, 1951
(Date)

Secretary
(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

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103
Defense Minerals Administration.

Answers under heading," The Applicant".

1. Limited Partnership.

2. O. R. Heidrick. 14368 Polk st., San Fernando, Calif.
D. V. O'Flaherty, 23 No. La Senda, South Laguna, Calif.
J. A. Fleming, 5658 Wilshire Blvd, Los Angeles, Calif.
J. Ross Clark II, 5658 Wilshire Blvd., Los Angeles, Calif.
J. V. Smith, 21 So. Encino, South Laguna, Calif.
R. W. Rowlands, 11 La Senda Place, South Laguna, Calif.

7. Lease attached and in good standing (on Pinnacle Mining Co., claims). Location notice filed on three Valley View Claims- in good standing.

8. Pinnacle Tungsten Co., is a new organization taking over properties of the Pinnacle Mining Co. No liabilities. Assets consists of claims with benefit of $ 25,000 spent by Pinnacle Mining Co., on roads, trails, preliminary exploration, ect. Also have lease contract of purchase on all necessary equipment for mining. Equipment worth from 12 to $ 15,000.

9. Ten Thousand Dollars. Sufficient to pay our part of cost.

10. Exploration will be on 13 claims located on a high plateau and in Lava Cr Creek Canyon - a aanyon or gash in the High Sierras, very similar th the Vanadium Mine at Pine Creek, Bishop Area, California. Exposures are accessable and workable. Three of these claims (Valley View) are just above road to Lava Creek and can be worked from the road. So we have two separate areas however they are both on the road. We have equipment to explore both.

10. Claims are recorded in records of Inyo County, Calif., as per. attached map. Located at Lava Creek, 11 miles north ofIndependenca, Calif., thence due west of Division Creek, to Scott Springs, thence by graded road, built by Pinnacle Mining Co.,) to claims.
Location 37 deg. 568, 98" North.Lat.
Long. 118 deg. 21' o9" West.
4.38 Mi. West of R 34 E.
3.40 North of T 12 S.
At S.E. corner of Glacier No. 1, Mt. Diablo, B & M,
Inyo County, Calif.

11. Answered on Form M.F. 100.

12. " " " " "

13. " " " " "

14. Complete camp equipment- Army tents.

15. Ore shipped to mills Via., our road, thence by Highway 395 to Bishop, Calif., mills, Vanadium, Red Hill Mill, Benware Mill. Shipped by truck at $ 3.50 per. ton.

16. Answered on Form M.F. 100.

Pinnacle Tungsten Co.,
Independence, Calif.

Application under Form M.F.-103,
Defense Minerals Administration.

Answers under heading, " The Applicant".

17. Not in production.

18. Answered on Form M.F. 100.

19. Property inLava Creek was unaccessable until we put road in last year, 1950. Deposits were located but due to low priceand inaccessability they were not worked. Road granted by Dept. of Agriculture for our use only. Road kept under lock.

THE EXPLORATION

20. Scheelite located in veins and " Blow-outs".

21. We expect to open up six showings consisting of blowouts and vein material. These six vary in width from four feet to eighteen feet and all show from point 4 or 5 up tp 7% Scheelite. On one streak, 18" to 2', we had as high as 46% assay . We estimate that within six months we will develop several strong bodies of excellent ore.

22. The exposurs are in the tactite and garnetite. The granites are in evidence atvthe claims as are the limestones. We have every type of rock to make ore. Furthermore the lampings are excellent and our channel cut assays have checked with the lampings. The garnetite structures are strong. Shipments made from Valley View Claims (3) ran 1.7% and formations indicate excellent chances of continuing ore bodies. We have not expended money for geological maps. We have considerable knowledge of geology from our school work and field work so have relied upon that and our conclusions have been verified by other mining men.

REQUIREMENTS AND COSTS.

23. We plan on this development work:
    a. Labor:
        Two miners..... $15 to $ 16 per. day.
        Four muckers.... $ 12 per. day.
        Camp- Will eat and live in Independence, Calif.
    b. Supervision:
        One Manager..... $ 350 to $400 per. mo.
        One man to be Ass't Mgr. , purchasing Agt., and mine bookeeper at ... $250 per. mo.
    c. None.
    d. $ 2500 to $ 4000 should be allocated for housing.
    e. One extra hammer, some extra airhose or pipe.
    f. $ 150 per. mo.
    g. $ 12,000 to $ 15,000.
    h. $ 300 per. mo.
    i. $ 20.00 per. day.

24. We anticipate exploeing the higher reaches of our properties. We estimate about six months to open up at least five locations after project is approved. Money will be spent in accordance with good mining practice. As winter approaches we should have a standby dozier to clean snow off roads.

Form MF-100
(March 1951)

U.S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dma - 1574X

Date received 6/5/51

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 31 1951
SAN FRANCISCO, CALIFORNIA

Pinnacle Tungsten Co.,
Independence, Calif.

Name and address of applicant

Date May 26, 1951.

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5)~~ priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (~~6~~ 5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) **State whether or not property is now in operation, and if in operation, by whom operated.**
   (*b*) **Are you operating this property as:**
   ☐ Owner.
   ☐ Lessee.
   ☐ Contractor.
5. Number of years in production Not in production
   If not in production or operation, estimated date when production will begin six months.
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is 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 Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: 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)
O. R. Heidrich	General Partner						
San Fernando, Calif.	Manager.	None					
D. V. O'Flaherty,	General Partner						
So. Laguna, Calif.	Ass't. Mgr.	None					
J. A. Fleming,	Limited Partner						
5658 Wilshire Blvd.	Los Angeles	None.					
J. Ross Clark II.	Limited Partner.						
5658 Wilshire Blvd.,	Los Angeles.	None.					
J. V. Smith,	Limited Partner,						
So. Laguna, Calif.		None.					
R. W. Rowlands,	Limited Partner						
So. Laguna, Calif.		None.					
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. 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	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Pinnacle Tungsten Co.
(Mining company)

By Daniel V. O'Flaherty
(Signature of authorized official)

May 26, 1951
(Date)

Secretary
(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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

PINNACLE TUNGSTEN CO.
Independence
California

1. Materials produced:
   (a) Scheelite - Tungsten
   (b) No by-products

2. Quarry and drift mining on exposed blowouts and veins in place. This development on virgin properties located in Lava Creek eleven miles north and west of Independence, California. Opened up and explored from July 1950 to November 1950 by Pinnacle Mining Co. Pinnacle Tungsten Co. taking over from Pinnacle to carry on exploration and development.

   (a) One winze sunk 14 feet on No. 1
   (b) One drift of 30 feet on No. 1
   (c) 30 feet
   (d) On Valley View proper claims (3) old tunnel of 40 feet and one shaft 20 feet deep (tunnel caved).
   This claim worked some years ago when tungsten was low in price and hardly marketable. Assays on waste pile ore ran from 1% to 3%. Spuds of considerable size picked off dump.

   No pumping problem on any of claims.

3. Old road rebuilt (4 miles) and 1½ miles of new road built into valley by Pinnacle Mining Co., 1950, at cost of $7500.

   (a) All ore can be shipped from mine, by good road, to Bishop 40 miles away. Nearest town is Independence, Calif. 16 to 18 miles from property.
   (b) District name not known. Location 37° 56.89'N
   (c) Long 118° 21.09' W
   4.38 Mi West of R34E
   3.40 Mi North of T12S
   Mt.Diablo B&M
   Inyo County, Calif.
   (d) Inyo County, Calif.

4. (a) Getting ready to start operations. Pinnacle Tungsten Co. will take over from Pinnacle Mining Co. and carry on. Snow forced closing down in Dec. 1950 due to fact we were not prepared. However work can be carried on all year with proper preparations.
   (b) Lessee on Lava Creek claims.
   Located three claims ourselves on Valley View proper. Owner. Expect to work both groups simultaneously.

5. Produced 83 tons from our No. 1 claim in November 1950. In course of development.

6. Experience of operator.

O. R. Heidrich, of 14368 Polk St., San Fernando, California. Consulting metallurgist with long and highly efficient record as consulting metallurgist throughout the southwest as well as Mexico and Central America. His whole business life has been devoted to mining starting, as a boy, at Grass Valley, California. He has worked and studied every phase of mining from mucking up through the various stages until today he is employed as consultant on various problems connected with mill construction and ore dressing. He has done considerable work as consultant and supervisor of tungsten properties.

Mr. Heidrich will continue as superintendent for the Pinnacle Tungsten Co. He acted in the same capacity for the Pinnacle Mining Co.

The applicant, Daniel V. O'Flaherty, studied his geology and mineralogy at Bridgewater State Teachers College at Bridgewater, Massachusetts and at Harvard, from which he graduated in 1911. On graduation O'Flaherty taught and coached the athletic teams at Cambridge Latin School, Cambridge, Mass., and at English High School, Boston, Mass. In 1920 came to California and engaged in the Real Estate business and as sales manager and developer. Helped develop Walnut Park, Morningside Heights, Girard, and several pieces in and around San Fernando, Calif. He is at present one of the developers of Three Arch Bay, So. Laguna, California, the outstanding development in this area.

Since 1920 the applicant has continually been more or less active in mining and prospecting. Among his mining activities have been the following: Manager of gold (placer) operation on Green River at Vernal, Utah; manager of drift mine at Calder, California; assistant to manager on lead zinc mine at Portal, Arizona.

Applicant acted as purchasing agent and mine bookkeeper on these claims for the Pinnacle Mining Co. from whom the Pinnacle Tungsten Co. are taking over.

Mr. Heidrich was V. President and director of the Pinnacle Mining Company. Mr. O'Flaherty was secretary and a director of the same company.

Mr. O'Flaherty will act as purchasing agent and mine bookkeeper for the Pinnacle Tungsten Co.

7. History.

The properties of the Pinnacle Tungsten Co. consist of two groups of claims.

1. 10 claims (as per attached map) taken over from the Pinnacle Mining Co. This as lease by Pinnacle from Paul Passage of Independence, Calif.
2. 3 claims located by O. R. Heidrich et al on old workings - known as Valley View claims.

The 10 claims were originally located in an almost inaccessable valley, Lava Creek, by Philip Day who in turn

passed them on to Paul Passage. Lava Creek, at the claims, is at 8500 foot elevation in a very rugged area. The highway from Independence to Bishop is at 4000 feet. Due to inaccessable condition no development work, except location work, was carried on until the Pinnacle Mining Co. finished their road (as per map) in November of 1950, at a cost of approximately $7500. While road was under construction prospecting with lamps and assays was carried on from a tent camp established in the valley- all the material for the camp had to be packed in.

On. Glacier No. 1 claim we drove in 25 to 30 feet on a "blowout". We built a bin and constructed a high line. This blowout was 10 feet across and the face showed values up to 10% - one streak going as high as 40%. This work was done to determine the direction of flow. In order to expedite matters we hired "gyppo" miners and shipped 83 tons of the total output to Bishop where between the gyppo output and the mill the return was about .4.

Our sampling on 6 different exposures that vary in width from 4 feet to 18 feet show values ranging from point four up to seven point three. The area has not been fully explored but these six exposures are readily accessable from the floor of the valley and any are or all of them could make large ore-bodies.

Just as we were getting set to start real exploration snow came and, due to inadequate housing etc., we decided to close down for the winter.

However, it would be easy to keep the mine operating all year since the road is exposed to the sun for most of the way and only about 1200 feet of it would have to be worked in time of heavy snow.

The 3 claims (known as Valley View) were worked for a short time in or about 1938 or 9. Extremely high grade ore was recovered; but, according to the story given us, the one shipment they made to the mill at Bishop was for the greater part stolen as specimen ore. However, according to one of the original locators, they received about $1000.00 in royalties on a 10% basis - tungsten at that time being about $22.00 per unit. The partners squabbled and gave up the property.

There is an old tunnel and a short winze on the property. The tunnel is caved; the winze is more or less filled in with debris. From the lamping and sampling of the waste pile the ore must have been rich for our sample ran 3% and the lamp gave evidence of very high grade ore in the quartz and garnetite.

15 tons shipped to Nevada mill ran 1.72%.

The formation is strong and the veins are distinct. We propose cleaning up the old workings and carrying on from there.

(b) No immediate production; but the Bishop area is recognized as one of our finest potential tungsten areas.
(c) Have no written reports but rely upon our own experience and knowledge supplemented by other mining men's advice and knowledge.

10. Production:

11. Not in production. Potential ore, from surface indications, could be great.

12. The six exposures at the valley (Lava Creek) can be designated as three in place and three in blowouts. The three blowouts are big enough to be quarried. They show valves from point 4 up to 10 per cent.
The three in place show assay values from 1% to 7.3%. These will require further exploration to develop ore bodies. They are about 4 to 5 feet in width.

13. Access Roads:
State highway 395 to Independence to Bishop. Turn off (west) at Division Creek, 11 miles north of Independence. Paved from 395 to Power house (4 miles). Dirt graded road from Power House to Scott Springs. Scott Springs to mine about 5 miles of graded, switchback, road. Good road conditions. Ore trucks and our Ford Pickup make it easily.

14. Water Supply:
Spring in Lava Creek flowing good stream. Water available it is certain in floor of valley. No flowing stream except at Scott Springs - 4 miles air line.

15. Power:
Electric power generated at Division Creek Power house 6 miles from Lava Creek - air line.

16. Labor:
Two miners and 4 muckers.

17. Three large Army tents with beds, heaters, kitchen equipment etc. used as camp in 1950.
We have two compressors 105 and 210, three trucks and all equipment for mining, including hammer, airhose, pipe, cable, diamond drill with 400 ft. of stems, forge shovels, picks, rails, mine cars, stoper, etc. etc. We lease full equipment from Pinnacle Mining Co., of which the members of Pinnacle Tungsten Co. were members, for $150.00 per month.

18. Nothing except the fact that the usual mining prospect has but one or two showings. We have 6 definite showings of substantial bodies and assays and lampings lead us to believe we have the makings of a real mining venture. The upper reaches of our claims we have not explored, feeling we have plenty in close proximity to the floor of the valley to keep us busy for years.

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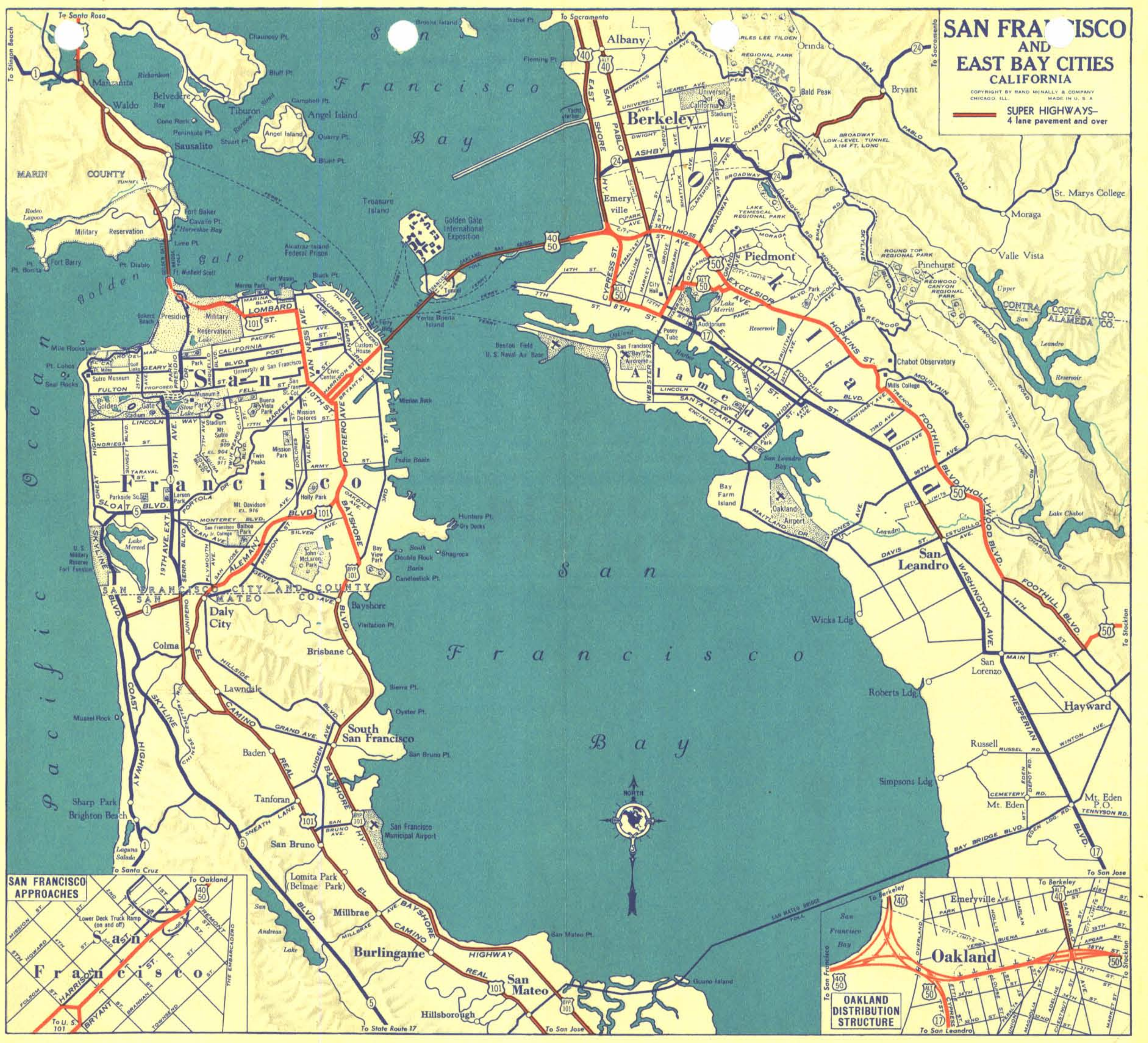

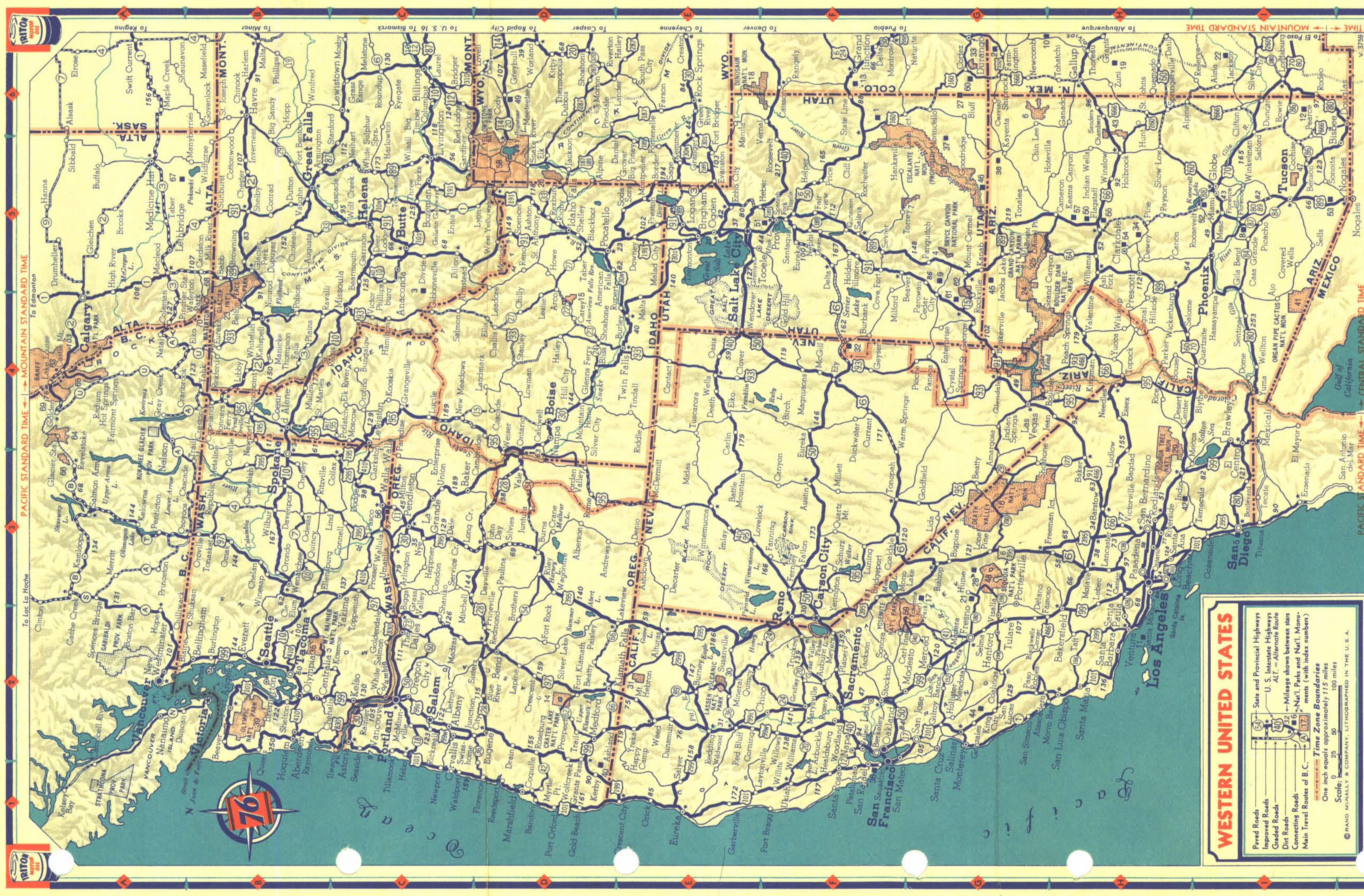

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TOUR OUR NATIONAL PARKS

The National Parks of the United States (and Canada) always are created by act of Congress to preserve some unusual scenery or other natural wonder, or some historic or scientific feature of outstanding national interest. Duplication of scenery or natural phenomena is avoided as new areas are set aside. A complete tour, therefore, of our own American points of interest offers a panorama unequaled in all the world. The major function is the promotion of the well-being of Americans through the health-giving qualities of inspiration, relaxation and recreation in pure air, in natural surroundings of inspiring grandeur. Be sure to see these National Parks on your Western Tour.

BANFF ***(Alberta)***—Although smaller than Jasper, the 2,585 square miles of Banff National Park are filled with massive ranges, ice-fields and glaciers. Lake Louise, nestling 5,680 feet above sea level, is probably the finest gem of scenery in the world—typical of Canada.

BRYCE CANYON ***(Utah)***—Located in the same general desert region that produced the Grand Canyon and Zion, Bryce Canyon is in reality a great horseshoe-shaped bowl three miles long and two miles wide. Sunrise and sunset bring exquisite beauty to the pink and lemon-yellow conglomerates.

CRATER LAKE ***(Oregon)***—In the heart of the Cascade Mountains there lies in a setting of lava a lake of unbelievable blue. Long before the human race appeared, Mount Mazama was destroyed in volcanic eruption. The resulting crater, some 4,000 feet deep, filled with an accumulation of snow and rain water to form exotic Crater Lake.

GENERAL GRANT ***(California)***—Easily accessible from Sequoia, General Grant, although smaller in size, offers an unparalleled vista of mountain grandeur through King's River Canyon. In the Giant Forest the General Grant Tree has a base diameter of 40.3 feet, rising to a height of 267 feet.

GLACIER ***(Montana)***—A romance of geology. Glacier National Park contains 250 lakes of particular beauty and 60 small glaciers. Here is a richly colored land of ruggedly modeled mountains, twisting valleys, precipices thousands of feet high, innumerable rushing streams. The great Blackfeet Indian Reservation adjoins the Park.

GRAND CANYON ***(Arizona)***—Color and the immense drama of erosion is the fame of this mile-deep gorge. Today the Colorado River flows through a series of self-dug canyons 217 miles in length and in some places more than a dozen miles across the top. Carved and fretted beyond description, the blues, grays, mauves, reds of conglomerate and sandstone reflect a rainbow against the setting sun.

JASPER ***(Alberta)***—4,200 square miles of sparkling world is the area once known as the Glittering Mountains. The famed Canadian Rockies send up peak after peak as spires overlooking the verdant mountain meadows, streams and lakes. Fishing, big game hunting and winter sports add to the natural appeal of Canadian scenic splendor.

LASSEN VOLCANIC ***(California)***—Impressive Lassen Peak, from which the park derives its name, surveys a breath-taking panorama of mountain beauty including the splendid Chain-of-Lakes in the eastern region, Chaos Crags, innumerable boiling hot springs and many volcanic cones. Lassen Peak is the only recently active volcano in the United States proper, its last eruptions occurring between 1914 and 1921.

MOUNT RAINIER ***(Washington)***—A complicated glacial system flowing from one peak gives Mt. Rainier an impressive beauty not exceeded by any glacial system in the United States. Twenty-eight rivers of ice pour slowly down into dense forests broken only by lakes and wild-flower parks gorgeous with the bloom of over 600 species of flowering plants.

OLYMPIC ***(Washington)***—Olympic National Park is a primitive wilderness of glacier-clad peaks, flower-covered meadows, streams and jewel-like lakes, deep winding canyons and broad valleys supporting a rich forest growth unequaled elsewhere in America. Almost surrounded by the Pacific Ocean, the area lies in the central part of Olympic Peninsula.

SEQUOIA ***(California)***—Home of the Big Trees. Sequoia National Park covers some 604 square miles of virgin Giant Forest. The Sequoias usually grow in groups or groves. The largest and perhaps the oldest is the General Sherman Tree which towers 272.4 feet high.

YELLOWSTONE ***(Wyoming)***—Established as the first National Park in 1872, Yellowstone is celebrated because it contains more and greater geysers than all the rest of the world together. The entire region is of volcanic origin—a vast area famous for water volcanos, Canyon of the Yellowstone, wild life and unexcelled trout fishing.

YOSEMITE ***(California)***—This magnificent pleasure land including the celebrated Yosemite Valley is an area 752,744 acres in extent on the west slope of the Sierra Nevada. Famous for its lakes, waterfalls and lofty granite domes, Yosemite was named for the Indians who dwelt there.

ZION ***(Utah)***—The desert of southern Utah finds its most expressive beauty in a canyon country vividly colored and fantastically carved. The gorge, bounded by sandstone cliffs, has been known to the Mormons since the late fifties, having been first explored in 1862. Act of Congress created the Park in 1919.

PACIFIC COAST RADIO GUIDE

CITY	KILO-CYCLES	CALL LETTERS	CITY	KILO-CYCLES	CALL LETTERS	CITY	KILO-CYCLES	CALL LETTERS
Aberdeen, Wash.	1310	KXRO	Los Angeles, Calif.	1120	KFSG	San Francisco, Calif.	610	KFRC
Astoria, Oreg.	1370	KAST	Los Angeles, Calif.	1000	KFVD	San Francisco, Calif.	790	KGO
Baker, Oreg.	1500	KBKR	Los Angeles, Calif.	950	KFWB	San Francisco, Calif.	1070	KJBS
Bakersfield, Calif.	1370	KERN	Los Angeles, Calif.	1200	KGFJ	San Francisco, Calif.	680	KPO
Bakersfield, Calif.	1550	KPMC	Los Angeles, Calif.	900	KHJ	San Francisco, Calif.	1420	KSAN
Bellingham, Wash.	1200	KVOS	Los Angeles, Calif.	570	KMTR	San Francisco, Calif.	560	KSFO
Bend, Oreg.	1310	KBND	Los Angeles, Calif.	1050	KNX	San Francisco, Calif.	1230	KYA
Berkeley, Calif.	1370	KRE	Los Angeles, Calif.	1120	KRKD	San Jose, Calif.	1010	KQW
Beverly Hills, Calif.	710	KMPC	Lowell, Ariz.	1200	KSUN	San Luis Obispo, Calif.	1200	KVEC
Billings, Mont.	780	KGHL	Marshfield, Oreg.	1200	KOOS	Santa Ana, Calif.	1500	KVOE
Boise, Ida.	1350	KIDO	Medford, Oreg.	1410	KMED	Santa Barbara, Calif.	1500	KDB
Bozeman, Mont.	1420	KRBM	Mexicali, Mex.	750	XEAA	Santa Barbara, Calif.	1220	KTMS
Butte, Mont.	1340	KGIR	Mexicali, Mex.	1110	XECL	Santa Rosa, Calif.	1310	KSRO
Calgary, Alta.	930	CFAC	Mexicali, Mex.	660	XEAO	Seattle, Wash.	1370	KEEN
Calgary, Alta.	1030	CFCN	Merced, Calif.	1040	KYOS	Seattle, Wash.	710	KIRO
Calgary, Alta.	6030	CFVP	Missoula, Mont.	1260	KGVO	Seattle, Wash.	970	KJR
Calgary, Alta.	690	CJCJ	Modesto, Calif.	740	KTRB	Seattle, Wash.	1270	KOL
Cananea, Mex.	1010	XEFQ	Monterey, Calif.	1210	KDON	Seattle, Wash.	920	KOMO
Cedar City, Utah	1310	KSUB	Nampa, Ida.	1200	KFXD	Seattle, Wash.	1120	KRSC
Centralia, Wash.	1440	KELA	Nelson, B. C.	1420	CKLN	Seattle, Wash.	1220	KTW
Chico, Calif.	1260	KHSL	Nogales, Mex.	990	XEAF	Seattle, Wash.	760	KXA
Chilliwack, B. C.	780	CHWK	Oakland, Calif.	1280	KLS	Spokane, Wash.	1120	KFIO
Coeur d'Alene, Ida.	1200	KGCI	Oakland, Calif.	880	KLX	Spokane, Wash.	890	KFPY
Corvallis, Oreg.	550	KOAC	Oakland, Calif.	930	KROW	Spokane, Wash.	1470	KGA
El Centro, Calif.	1500	KXO	Ogden, Utah	1400	KLO	Spokane, Wash.	590	KHQ
Edmonton, Alta.	960	CFRN	Olympia, Wash.	1210	KGY	Stockton, Calif.	1100	KGDM
Edmonton, Alta.	730	CJCA	Pasadena, Calif.	1210	KPPC	Stockton, Calif.	1200	KWG
Edmonton, Alta.	580	CKUA	Phoenix, Ariz.	1390	KOY	Tacoma, Wash.	1330	KMO
Eugene, Oreg.	1420	KORE	Phoenix, Ariz	620	KTAR	Tacoma, Wash.	570	KVI
Eureka, Calif.	1450	KIEM	Pocatello, Ida.	900	KSEI	Tijuana, Mex.	670	XELO
Everett, Wash.	1370	KRKO	Portland, Oreg.	1300	KALE	Tijuana, Mex.	820	XEBG
Fresno, Calif.	1310	KARM	Portland, Oreg.	1420	KBPS	Tijuana, Mex.	860	XEMO
Fresno, Calif.	580	KMJ	Portland, Oreg.	1160	KEX	Tijuana, Mex.	980	XEAC
Gallup, N. M.	1500	KAWM	Portland, Oreg.	620	KGW	Tijuana, Mex.	1150	XEC
Glendale, Calif.	850	KIEV	Portland, Oreg.	940	KOIN	Tijuana, Mex.	1400	XEAU
Globe, Ariz.	1210	KWJB	Portland, Oreg.	1060	KWJJ	Trail, B. C.	910	CJAT
Grand Junction, Colo.	1200	KFXJ	Portland, Oreg.	1420	KXL	Tucson, Ariz.	1370	KTUC
Grand Prairie, Alta.	1200	CFGP	Prescott, Ariz.	1500	KYCA	Tucson, Ariz.	1260	KVOA
Grants Pass, Oreg.	1310	KUIN	Price, Utah	1420	KEUB	Twin Falls, Ida.	1240	KTFI
Great Falls, Mont	1280	KFBB	Prince Rupert, B. C.	580	CFPR	Vancouver, B. C.	1100	CBR
Helena, Mont.	1210	KPFA	Provo, Utah	1210	KOVO	Vancouver, B. C.	600	CJOR
Idaho Falls, Ida.	1320	KID	Pullman, Wash.	1220	KWSC	Vancouver, B. C.	1010	CKCD
Jerome, Ariz.	1310	KCRJ	Redding, Calif.	1200	KVCV	Vancouver, B. C.	1410	CKFC
Kalispell, Mont.	1310	KGEZ	Reno, Nev.	1380	KOH	Vancouver, B. C.	6080	CKFX
Kamloops, B. C.	880	CFJC	Rock Springs, Wyo.	1370	KVRS	Vancouver, B. C.	1410	CKMO
Kelowna, B. C.	630	CKOV	Roseburg, Oreg.	1500	KRNR	Vancouver, B. C.	1010	CKWX
Klamath Falls, Oreg.	1210	KFJI	Sacramento, Calif.	1490	KFBK	Vancouver, B. C.	880	KVAN
La Grande, Oreg.	1420	KLBM	Sacramento, Calif.	1210	KROY	Victoria, B. C.	1450	CFCT
Lethbridge, Alta.	1210	CJOC	Safford, Ariz.	1420	KGLU	Visalia, Calif.	890	KTKC
Lewiston, Ida.	1390	KRLC	Salt Lake City, Utah	1290	KDYL	Wallace, Ida.	1420	KWAL
Logan, Utah	1200	KVNU	Salt Lake City, Utah	1130	KSL	Walla Walla, Wash.	1370	KUJ
Long Beach, Calif.	1250	KFOX	Salt Lake City, Utah	1500	KUTA	Watsonville, Calif.	1310	KHUB
Long Beach, Calif.	1360	KGER	Salem, Oreg.	1360	KSLM	Wenatchee, Wash.	1500	KPQ
Longview, Wash.	780	KWLK	San Bernardino, Calif.	1210	KFXM	Yakima, Wash.	1250	KIT
Los Angeles, Calif.	780	KECA	San Diego, Calif.	600	KFSD	Yuma, Ariz.	1420	KUMA
Los Angeles, Calif.	1300	KFAC	San Diego, Calif.	1300	KGB	Yuma, Ariz.	1210	KYUM
Los Angeles, Calif.	640	KFI						

WESTERN STATES MILEAGE CHART

V. 4001	Fresno, Calif.	Las Vegas, Nev.	Los Angeles, Calif.	Medford, Oreg.	Phoenix, Ariz.	Portland, Oreg.	Sacramento, Calif.	San Bernardino, Calif.	San Diego, Calif.	San Francisco, Calif.	Seattle, Wash.	Spokane, Wash.	Tacoma, Wash.	Vancouver, B. C.	Walla Walla, Wash.	Yuma, Ariz.
Albuquerque, N. Mex.	954	589	795	1399	462	1495	1121	744	832	1139	1575	1425	1563	1700	1317	658
Astoria, Oreg.	906	1194	1126	414	1515	105	739	1174	1250	796	203	497	172	347	352	1390
Bakersfield, Calif.	107	293	112	599	502	908	274	161	237	292	1098	1146	1067	1242	1008	377
Barstow, Calif.	245	155	134	737	418	1046	412	77	207	430	1236	1218	1205	1380	1059	293
Bellingham, Wash.	1079	1319	1299	587	1688	278	912	1347	1423	981	88	360	118	57	354	1563
Blythe, Calif.	439	216	222	931	170	1240	606	171	235	624	1430	1306	1399	1574	1204	111
Boise, Idaho	869	691	980	507	1070	474	702	923	1053	771	550	400	538	675	292	1014
Calgary, Alta.	1511	1355	1644	1074	1625	857	1344	1587	1717	1413	780	472	797	888	631	1797
Coeur d'Alene, Idaho	1073	1107	1293	636	1494	419	906	1290	1417	975	337	34	359	450	193	1430
Crater Lake, Oreg.	536	789	756	74	1145	309	369	804	880	438	499	528	468	643	390	1020
Denver, Colo.	1312	912	1201	1394	925	1355	1200	1144	1274	1294	1431	1168	1419	1556	1173	1121
El Paso, Texas	1033	759	816	1525	424	1756	1200	765	757	1218	1836	1688	1824	1961	1578	578
Ely, Nev.	603	303	592	684	682	862	458	535	665	554	938	788	926	1063	680	626
Eugene, Oreg.	678	997	898	187	1287	122	511	946	1022	580	313	507	281	457	369	1162
Eureka, Calif.	459	834	679	207	1077	452	301	736	812	289	642	809	611	786	671	952
Everett, Wash.	1020	1259	1240	528	1629	219	853	1288	1364	922	29	301	59	116	295	1504
Flagstaff, Ariz.	631	266	472	1076	206	1349	798	421	500	816	1450	1298	1438	1575	1192	402
Fresno, Calif.		400	219	492	609	801	167	268	347	185	991	1039	960	1135	901	484
Grand Canyon, Ariz.	656	291	509	1101	243	1254	823	458	537	841	1330	1180	1318	1455	1072	439
Klamath Falls, Oreg.	480	733	700	76	1089	340	313	748	824	382	530	559	449	674	421	964
Lake Louise, Alta.	1425	1455	1645	988	1747	771	1258	1642	1769	1327	694	386	711	802	545	1784
Lassen Nat'l Pk., Calif.	345	605	565	214	954	523	178	613	689	256	713	724	682	857	565	829
Las Vegas, Nev.	400		289	810	379	1076	567	232	362	585	1241	1091	1233	1366	989	322
Lewiston, Idaho	998	981	1218	561	1368	344	831	1194	1324	900	382	110	370	507	97	1304
Long Beach, Calif.	240	298	20	732	401	1041	407	66	102	425	1231	1279	1200	1375	1141	273
Los Angeles, Calif.	219	289		712	392	1021	386	57	128	404	1211	1259	1180	1355	1121	267
Medford, Oreg.	492	810	712		1101	309	325	760	836	394	499	602	468	643	464	976
Needles, Calif.	400	118	289	892	263	1201	567	232	302	585	1359	1209	1360	1503	1107	204
Oakland, Calif.	174	574	393	388	783	697	88	442	521	11	887	935	856	1031	797	658
Olympia, Wash.	931	1206	1151	439	1540	130	764	1199	1275	833	60	354	29	204	302	1415
Pendleton, Oreg.	863	944	1083	426	1325	227	696	1052	1182	765	303	204	291	428	45	1273
Phoenix, Ariz.	609	379	392	1101		1410	776	341	375	794	1600	1478	1569	1744	1370	195
Portland, Oreg.	801	1076	1021	309	1410		634	1069	1145	703	190	385	159	334	247	1285
Prescott, Ariz.	596	266	379	1076	113	1350	763	328	407	781	1515	1365	1503	1640	1257	309
Red Bluff, Calif.	298	645	518	194	907	503	131	566	642	200	693	741	662	837	603	782
Redding, Calif.	329	676	549	163	938	472	162	597	673	231	662	710	631	806	572	813
Reno, Nev.	306	447	484	363	810	629	139	469	599	233	819	787	788	963	628	685
Riverside, Calif.	267	242	52	759	345	1068	434	10	120	452	1258	1266	1227	1402	1107	220
Sacramento, Calif.	167	567	386	325	776	634		435	514	94	824	872	793	968	734	651
Salem, Oreg.	750	1068	970	258	1359	51	583	1018	1094	652	241	436	210	385	298	1234
Salt Lake City, Utah	839	448	737	889	720	856	670	680	810	764	932	782	920	1057	674	896
San Bernardino, Calif.	268	232	57	760	341	1069	435		130	453	1259	1256	1228	1403	1097	216
San Diego, Calif.	347	362	128	836	375	1145	514	130		532	1335	1383	1304	1479	1227	179
San Francisco, Calif.	185	585	404	394	794	703	94	453	532		893	941	862	1037	803	669
San Jose, Calif.	144	544	364	429	753	738	119	412	488	47	928	976	897	1072	838	628
San Luis Obispo, Calif.	142	432	197	617	591	926	306	256	316	235	1116	1178	1085	1260	1040	466
Santa Barbara, Calif.	245	374	95	719	489	1028	408	154	215	337	1218	1280	1187	1362	1142	364
Santa Fe, N. Mex.	1016	651	857	1461	524	1498	1183	806	894	1201	1573	1424	1561	1698	1315	720
Santa Rosa, Calif.	225	625	445	367	834	676	100	493	569	55	866	914	835	1010	776	709
Seattle, Wash.	991	1241	1211	499	1600	190	824	1259	1335	893		303	30	144	285	1475
Sequoia Nat'l Pk., Calif.	92	410	229	584	619	893	259	278	357	277	1083	1131	1052	1227	993	494
Spokane, Wash.	1039	1091	1259	602	1478	385	872	1256	1383	941	303		325	416	159	1414
Stockton, Calif.	120	520	339	372	729	681	47	388	467	85	871	919	840	1015	781	604
Tacoma, Wash.	960	1233	1180	468	1569	159	793	1228	1304	862	30	325		175	273	1444
Tahoe, Calif.	287	478	507	393	816	702	120	475	605	214	892	836	861	1036	677	691
The Dalles, Oreg.	766	1034	986	329	1375	92	599	1034	1110	668	256	293	240	381	155	1250
Tijuana, Mexico	362	376	142	854	393	1163	529	146	18	547	1353	1401	1322	1497	1245	197
Tucson, Ariz.	728	503	511	1220	124	1529	895	460	423	913	1719	1602	1688	1863	1494	244
Vancouver, B. C.	1135	1366	1355	643	1744	334	968	1403	1479	1037	144	416	175		410	1619
Wells, Nev.	645	441	730	710	820	724	484	673	803	578	800	650	788	925	542	764
Wenatchee, Wash.	958	1201	1178	521	1567	300	791	1226	1302	860	162	169	176	247	241	1442
Yakima, Wash.	849	1092	1069	412	1458	191	682	1117	1193	751	153	225	141	278	132	1333
Yosemite Nat'l Pk., Calif.	96	496	315	494	705	803	169	364	443	195	993	1041	962	1137	903	580
Yuma, Ariz.	484	322	267	976	195	1285	651	216	179	669	1475	1414	1444	1619	1313	

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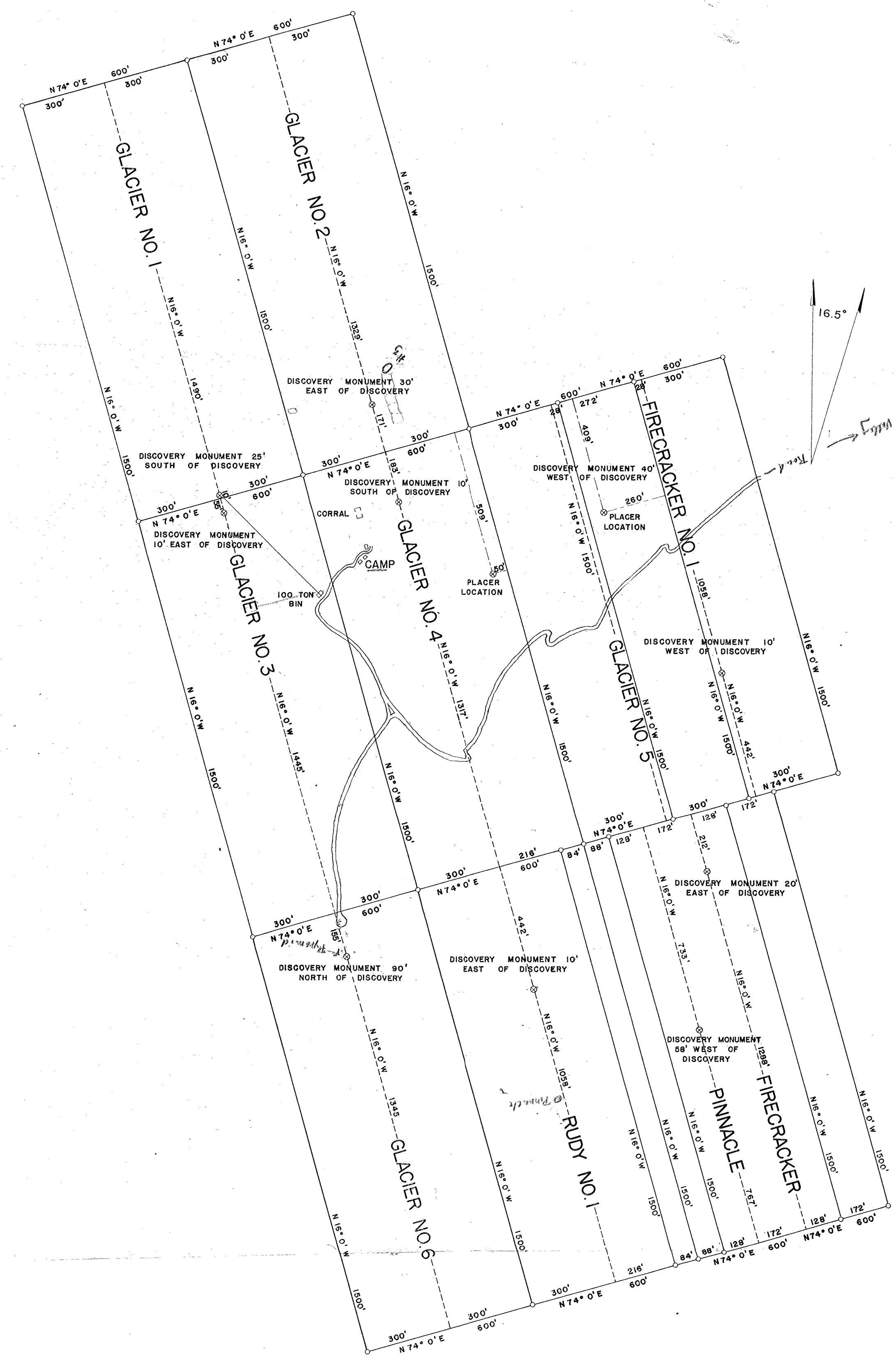
California-Nevada

UNION OIL ROAD MAP

1890 OUR 50th YEAR OF SERVICE 1940

Union Oil Company



PINNACLE MINING CO.

INDEPENDENCE CALIF.

PRELIMINARY MINE CLAIM SURVEY

KNOWN AS THE
GLACIER NO. 1, 2, 3, 4, 6, RUDY NO. 1,
PINNACLE, FIRECRACKER, FIRECRACKER NO.1
LODES & GLACIER NO. 4 AND NO. 5 PLACER

LOCATION

LAT. 37° 56.89'N LONG. 118° 21.09' W
4.38 MI. WEST OF R34E
3.40 MI. NORTH OF T12S
AT SOUTHEAST CORNER GLACIER NO.1
MT. DIABLO B. & M. INYO COUNTY, CALIF.

SURVEYED, SEPT. 27 TO OCT. 19, 1950
BY WILLIAM R. GRIFFIN