DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip Tungsten

CONTROLLED DOCUMENT

DMA Docket No. 2192

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION LOAN

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

To:	CODE 340 ~~Ferro Alloys Br.~~	Date	10-30-51
To:	P.E. Div.	Date	12/5/51
To:	Op. Comm	Date	4/11/52
To:	Op Com.	Date	7-9-52
To:	Op Com	Date	9-10-52
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

aec **DO NOT DETACH**

CONTROLLED DOCUMENT

Office of
Executive Officer
DMEA Field Team
Region III

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 13 1952

400

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

October 9, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA 2192X (Tungsten), Midland Mining Company, Mariposa County, California

Reference is made to your subject letter, dated September 10, in which you suggested that I advise Mr. Aglietti that if your office received no communication from him by September 30, 1952, you would remove the application from your active file and consider the docket closed.

Mr. Aglietti called at the office last week while I was in Boulder City and again on October 8 to inform me that he would like to have you hold his file open for another sixty days or so. His company is attempting to acquire some additional claims and is planning to submit a new application for an exploration loan when these surrounding claims have been tied up.

H. C. MILLER

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

Copy to E. H. Bailey, USGS

R. H. Adams, Chief, Oper. Control and
Statistics Division, DMEA
Iron and Ferro-Alloy Division, DMEA

Oct. 1, 1952

Removal of application from the active files
Docket No. DMA 2192X - Tungsten
Midland Mining Company
Mariposa County, California

The applicant was advised by letter that he must inform us by September 30, 1952, whether or not he wished to continue with his application. To date, we have not received any communication from them, therefore, we are removing the docket from the active files. The docket is transmitted herewith.

George C. Selfridge

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

Attachment

McClure - 10/1/52

cc: Admn. Reading File
Docket
G. C. Selfridge

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

September 16, 1952

Mr. Paul Aglietti
The Midland Mining Co.
461 Market Street
San Francisco, California

Re: Docket DMA 2192X (Tungsten)
Midland Mining Company
Mariposa County, California

Dear Mr. Agliettti:

We have had no reply from you to my letter of July 16, 1952, and presume that you are no longer interested in an exploration loan.

The Washington Office of the Defense Minerals Exploration Administration has written to me to the effect that if no communication regarding your application is received by them from me by September 30, 1952, your application will be removed from the active file and the docket considered closed.

May we, therefore, have a reply from you within the next two weeks to my July 16 letter.

Sincerely yours,

H. C. MILLER

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

Copy to E. H. Bailey, USGS
DMEA, Interior Building, Washington 25, D. C.

SEP 10 1952

Mr. H. O. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 219ZX - Tungsten
Midland Mining Company
Mariposa County, California

Dear Mr. Miller:

Reference is made to the subject application and your letter of July 16, 1952, to the applicant, Mr. Agliatti.

Please advise Mr. Agliatti that if no communication is received by this office by September 30, 1952, we will remove the application from our active file and consider the docket closed.

Sincerely yours,

Chairman, Operating Committee

FARutledge:lm
9/10/52

Approved:

J. H. Hedges

Member, Bureau of Mines

E. T. McKnight

Member, Geological Survey

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
W. S. Martin
F. A. Rutledge

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

400

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

July 16, 1952

Mr. Paul Aglietti
The Midland Mining Co.
461 Market Street
San Francisco, California

Re: Docket DMA 2192X (Tungsten)
Midland Mining Company
Mariposa County, California

Dear Mr. Aglietti:

Kindly let us know if we should continue holding your application for a Government loan to explore your tungsten property in our active file.

If you do not care to go through with the application it would be appreciated if you would tell us, as the Washington Office is requesting from us a report on the status of your proposed project.

Very truly yours,

H. C. MILLER

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

Copy to DMEA, Interior Building, Washington 25, D. C. (2)
E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 21 1952

EXPLORATION

400

Mr. H. C. Miller
Executive Officer, DMEA Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 2192 -
Tungsten
Midland Mining Company
Mariposa County, California

Dear Mr. Miller:

Please refer to our letter of April 14, 1952. We have held the subject application in abeyance pending further advice from you. Will you please inform us of the status of the proposed project.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

GCSelfridge:ls 7/8/52

CC: Docket
Admn. Reading File
G. C. Selfridge
Field Team, Reg. 3
Operating Committee
D. M. Lemmon, USGS
R. W. Geehan, USBM

Approved:

J. H. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

Mr. Q. L. Brewer 400

400 file

APR 14 1952

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 2192X - Tungsten
Midland Mining Company
Mariposa County, California

Dear Mr. Miller:

We have reviewed the field team report on the subject property and your memorandum of February 29, 1952, which was attached thereto.

The thought expressed in the second paragraph wherein Mr. Bateman's original conclusions are revised because the applicants "have not been able to make a satisfactory arrangement for custom milling" does not appear to be well founded. DMEA can only aid the miner in his exploration work. We cannot do his development work for him because of his inability to make milling arrangements to his own liking.

In the instant case, it appears that the Government is being requested to loan $10,125.00 (75% of $13,500.00) for the purpose of making accessible for mining an inferred maximum amount of 4,000 tons of ore from which the Government could, at best, recover as royalty only approximately $4,000.00. Obviously, we cannot make a loan in excess of the royalty which we may possibly receive from the exploration of the maximum amount of the inferred ore.

However, we believe that a small loan, solely for exploration, could possibly be approved, provided the applicant concurs. We suggest that several "long hole" drill holes be drilled from the face of the existing adit for the purpose of determining the position of the underground extension of the outcrop ore. If the ore is found at the adit level, the adit could be extended to transect the ore, and, as a third stage, a winze could be sunk a short distance in ore.

As a first stage, we might suggest the following:

Repairing the present road so as to be possible for jeep travel only, and preparing compressor site	$ 500.00
Rental of portable 60 cu.ft. compressor for 1 month	275.00
Rental of drifter, column, arm, saddle, etc. for 1 month	100.00
Rental of 200 ft. of 1" or 1-1/2" pipe for 1 month	20.00
Rental of 60 ft. of long-hole-steel for 1 month	25.00
Purchase of tungsten carbide bits 5 @$20.00	100.00
Small tools and supplies, carbide, etc. gasoline and oil	100.00
Assays, estimated	50.00
<u>Labor</u>	
2 - Miners @$15.00/ea., 15 shifts each	450.00
1 - Owner-foreman $20.00/shift, 20 shifts	400.00
1 - Consulting geologist @$50.00/day, 3 days for preparing maps, logging samples, preparing final report	150.00
Miscellaneous, including transportation of equipment	230.00
	$2,400.00

The second stage would cover the costs of adit extension, say, up to 80 feet at an overall cost of $25.00 per foot or - 2,000.00

The third stage might additionally allow sinking, say, 50 feet, on ore, for $50.00 per foot or 2,500.00

Each stage, of course, being dependent upon the successful completion of the preceding stage, to the satisfaction of and approval by the Government.

If the applicant concurs in the above program, please have him prepare an amended application along the lines hereinabove noted.

Otherwise, as you observe, the property should be mined from the surface, a procedure in which the Government cannot participate.

The application will be held in abeyance pending your advice.

Sincerely yours,

(signed) FRANK E. JOHNSON

for Acting Administrator
Defense Minerals Exploration
Administration

RLBrewer:lm
4/10/52

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

400

April 7, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Midland Mining Company
Blue Star Tungsten
Mairposa County, California

DMEA 2192, Tungsten

The proposed program will cost too much per ton of ore that might be located. The program favored by Bateman (sinking a shaft) is sound and would seem to me to be legitimate exploration. Of course, the ore mined from a shaft would not pay for the cost of sinking but, as all the work would presumably be in ore, there would be no dead work, and the over-all costs might be reduced. A 45-foot shaft would reach the adit level.

Bateman's map and section indicate that the face of the adit is only a few feet from the projected dip of the ore body. Why not drill a few long holes with a drifter to determine the location of the ore, if any, on the adit level? This could be followed by drifting and, if such a program indicated a better chance for developing a substantial ore reserve than now seems probable, a second phase of the project could be started. If the "Long holes" did not locate ore it would be obvious that an extensive ore body would not be located, and the project could be terminated at a very small cost to the applicant and the Government.

I recommend approval of an exploration loan providing that:

1. The work comprises the shaft sinking at a reasonable cost, or

2. The work comprises long hole drilling followed by extending the adit to the ore thus located, and drifting not over 50 feet; to be followed by a reexamination of the deposit by the Field Team, or

Copy retained 400

3. Any other low-cost program that meets approval of your staff and the applicant, providing it will terminate the work if ore does not extend to the adit level.

The trenching proposed by the applicant is not supported by any facts. If there is a favorable area, this work could well be included.

Robert W. Geehan

Attachment

IN REPLY REFER TO:

G-MD-DML

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

File

March 17, 1952

Memorandum

To: C. L. Brewer, DMEA

From: D. M. Lemmon, USGS

Subject: Midland Mining Co. DMEA 2192-X Tungsten
Mariposa County, California

Re your note of March 13, 1952:

I sent you a memorandum on the field report on March 12, 1952, before receiving Mr. Miller's letter of transmittal.

I agree with you that the costs are excessive for the expectable target. You might be able to draw up a more reasonable total cost by cutting the amount of drift from 150 to 50 feet (length of ore at surface) and eliminating the winze. Seems to me that 4,000 tons of 0.5 percent WO_3 warrants only about $6,300 Government participation in exploration, or a total project of $8,400.

The chance of finding enough ore for a mill is poor.

D M Lemmon

DMLemmon:gt

IN REPLY REFER TO:

G-MD-DML

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

147A

March 12, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Field Report DMEA 2192 - Tungsten
Midland Mining Co.
(Peter de Michelis and Paul Aglietti)
461 Market St.
San Francisco 5, Calif.

Property: Blue Star Tungsten prospect
Sec. 22, T. 3 S., R. 19 E.
Mariposa County, California

A field report dated February 21 was prepared by Paul C. Bateman, U.S.G.S., who examined the property January 29-30, 1952.

Scheelite is present in a mass of quartz-sulfide rock 45 feet long and 5 to 13 feet wide, enclosed by granite. The content of WO_3 is 0.5 to 1.0 percent.

The deposit is opened at the surface by pits. An adit 65 feet long, 45 feet beneath the outcrop, is entirely in granite although the face is beneath the surface cut. The field team recommends that the following program be undertaken under a DMEA exploration contract: Extend the adit 30 feet, and, if ore is found, drift 150 feet or to the limit of ore. If no ore is found, raise to ore (maximum 50 feet). If ore is found on the adit level, sink 50 feet in ore. The estimated cost is $13,900 if all stages are completed. The Field Team apparently did not submit a detailed break-down of the costs.

I concur with the Field Team that the recommended exploration is warranted.

DM Lemmon

DMLemmon:gt

Midland Mining Company
461 Market Street
San Francisco, California

Re: Docket No. DMA 2192X - Tungsten
Blue Star Claims
Mariposa County, California

Dear Sirs:

Receipt is acknowledged of your letter dated February 18, 1952, which explains that Mr. Peter De Michelis holds the legal title to the lease in his sole name.

We shall contact you at a later date in the event that an assignment of the lease to the partnership is required by this agency.

Sincerely yours,

George C. Selfridge

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

GCGentry:lm
2/28/52

cc: Admn. Reading File
Docket
F. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
G. C. Selfridge
G. C. Gentry

FEB 8 1952

file

Midland Mining Company
461 Market Street
San Francisco, California

Re: Docket No. DMA 2192X - Tungsten
Blue Star Claims
Mariposa County, California

Dear Sirs:

A further examination of the lease agreement dated July 22, 1951, shows that the said lease agreement is between W. J. Barnett and L. W. Barnett, called the First Parties, and Peter J. De Michelis, called the Second Party.

However, it is noted that your application, referred to in the subject docket, is signed by Peter De Michelis and Paul Aglietti as partners, apparently operating as the Midland Mining Company.

We would like to know if Mr. De Michelis has assigned his lease to the Midland Mining Company and/or to Mr. Aglietti since the present status of the lease is confusing.

In the event that an assignment has been made by Mr. De Michelis, we will require copies of said assignment, together with copies of the required notice to W. J. Barnett and L. W. Barnett as defined in paragraph (d) on page four of the lease agreement dated July 22, 1951.

May we hear from you at your earliest convenience.

Sincerely yours,

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

GCSelf

GGGentry:ls
2/6/52

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

120

JAN 4 1952

Midland Mining Company
461 Market Street
San Francisco, California

Re: Docket No. DMA-2192X
Tungsten
Mariposa County, California

Gentlemen:

Your application for assistance in exploring your tungsten property in Mariposa County, California, Docket No. DMA-2192X, has been reviewed by the Iron and Ferro-Alloy Division of the Defense Minerals Exploration Administration and has been referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1312 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination.

The Regional office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

COMITTENDORF/hb

Copy to: Adm. Reading File
H. C. Miller, Region III
Mr. Selfridge, Rm. 3538
DMEA Files

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

Official File
Store File
12/20 DB

OK to go ahead

Note - correction on page "2 of 4 pages"

Dear Sir:

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

Applicant Midland Mining Co, 461 Market St. San Francisco, Calif.

Docket No. 2192X -

Commodity Tungsten

Amount $ 28,050.00

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

Sincerely yours,

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Defense Minerals Exploration Administration

Review of Application for Exploration Assistance

Docket No. DMA-2192-X

Commodity TUNGSTEN

Total Amount 28,050=

Govt. Participation 75%

1. Name and Address of Applicant MIDLAND MINING CO.
461 MARKET ST - SAN FRANCISCO 5, CALIF

2. Location of Property Sec 22; T3S; R19E; MDB&M
MARIPOSA County - Calif.
4 Mi SW from EL PORTAL.

3. Mineral or metal TUNGSTEN Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good ✓ but small in area

b) Poor

c) None

d) Don't know—needs field examination for checking + revised application

e) Is there an alternative and favorable project?
(If so, attach an explanation)

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

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes, but they are already in the file. —

a) MF-201? ~~in Washington file~~ —

b) MF-202 ✓ ~~in Washington file~~ — See first copy below (See attached page 2 also).

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

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Not mentioned in Application —

e) Power (question 13)* Yes

Is a field check needed on any of these points? ~~Yes, in [illegible]~~ter. No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Not filed.
(only Form 103, June 1957 is filed: Have M.F. 100 filled out + filed)

Is a field check needed on this point? don't know

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

a) Is the project adequately described? ~~Yes~~ No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

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

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

If not, what part of it is?

disclosures herewith,

7. Are subordination agreements necessary? Yes, ~~but they are ready.~~

   a) MF-201? ~~In the file.~~

   b) MF-202 has been filed.— ~~In Washington file.~~

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

   a) Available manpower Yes

   b) Equipment and supplies Yes
      (question 14 plus general knowledge of availability)*

   c) Accessibility (question 12)* Yes

   d) Water (question 13)* Not mentioned in application.

   e) Power (question 13)* Yes

   Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Not filed. (Only form MF-103, June, 1951, is filed; have MF-100 filled out and filed).

   Is a field check needed on this point? Don't know

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

   a) Is the project adequately described? No

      If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

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

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

      If not, what part of it is?

Is this part a worth-while exploration project? _____

d) Are the cost estimates detailed? Not satisfactorily

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? ~~[illegible]~~ Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? No ~~[illegible] must check on M7100, Item 6, not filed~~

b) If so, are sufficient data furnished? ~~[illegible]~~ If so, attach a draft.

c) Is a field check needed? No

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

a) Is it applicable? no

b) Sufficient data? _____ If so, attach a draft.

c) Are rents and charges reasonable? _____

d) Is a field check needed? no

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

a) Are there sufficient data? Yes, ~~[illegible]~~

b) Is the schedule adequate for the work proposed? yes

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

d) Are the proposed wages and salaries reasonable? yes

e) Is a field check needed? no

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Yes -

Re: Item 17 - See attached sheet

Reviewed by:

Date 12/19-57

DRAFT

Review of Application for Exploration Assistance - Re: DMA 2192X-Tungsten

Item 17

Herewith are the following files:

1 Copy USGS memo, re this Docket No.

1 Copy of application, including Landlord's Subordination Agreement, assay certificate Pittsburgh Testing Laboratory, assay certificate Abbot A. Hanks, Inc., spectrographic certificate Abbot A. Hanks, Inc., mining lease and option, and reconnaissance report by Wilbur H. Grant.

Note that MF-103, June, 1951, only, has been filed. It is necessary to have MF-100 filed also, particularly as to items 6 and 14.

The necessity for your field investigation is easily seen when the applicant's proposed exploration program is compared with the report of engineer, Wilbur H. Grant. Grant (page 9 and 10) recommends (1) stripping of outcrop and evaluation of the exposed orebody, (5) road building, and (8) mining directly from outcrop, while the applicant proposes two exploratory adits, 2,000 feet of diamond drilling, road building, etc., all on a known outcrop 15 x 40 feet in area.

We should have a definite program developed by a field examination with sufficient additional supporting data.

Enclosures as indicated.

Review of Application for Exploration Assistance - Re: DMA 2192X-Tungsten

Item 17

Herewith are the following files:

1 Copy USGS memo, re this Docket No.

1 Copy of application, including Landlord's Subordination Agreement, assay certificate Pittsburgh Testing Laboratory, assay certificate Abbot A. Hanks, Inc., spectrographic certificate Abbot A. Hanks, Inc., mining lease and option, and reconnaissance report by Wilbur H. Grant.

Note that MF-103, June, 1951, only, has been filed. It is necessary to have MF-100 filed also, particularly as to items 6 and 14.

The necessity for your field investigation is easily seen when the applicant's proposed exploration program is compared with the report of engineer, Wilbur H. Grant. Grant (page 9 and 10) recommends (1) stripping of outcrop and evaluation of the exposed orebody, (5) road building, and (8) mining directly from outcrop, while the applicant proposes two exploratory adits, 2,000 feet of diamond drilling, road building, etc., all on a known outcrop 15 x 40 feet in area.

We should have a definite program developed by a field examination with sufficient additional supporting data.

Enclosures as indicated.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 13 1952

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

October 9, 1952

10/14/52
Give New number when rec'd.

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA 2192X (Tungsten), Midland Mining Company, Mariposa County, California

Reference is made to your subject letter, dated September 10, in which you suggested that I advise Mr. Aglietti that if your office received no communication from him by September 30, 1952, you would remove the application from your active file and consider the docket closed.

Was Closed 10/1/52 withdrawn

Mr. Aglietti called at the office last week while I was in Boulder City and again on October 8 to inform me that he would like to have you hold his file open for another sixty days or so. His company is attempting to acquire some additional claims and is planning to submit a new application for an exploration loan when these surrounding claims have been tied up.

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

Copy to E. H. Bailey, USGS

Copy retained 400
George C. Selfridge

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : R. E. Adams, Chief, Oper. Control and Statistics Division, DMEA

DATE: Oct. 1, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Removal of application from the active files
Docket No. DMA 2192X - Tungsten
Midland Mining Company
Mariposa County, California

The applicant was advised by letter that he must inform us by September 30, 1952, whether or not he wished to continue with his application. To date, we have not received any communication from them, therefore, we are removing the docket from the active files. The docket is transmitted herewith.

G. C. Selfridge

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

Attachment

FILE COPY 400
SURNAME:

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

R. E. Adams, Chief, Oper. Control and Statistics Division, DMEA
Iron and Ferro-Alloy Division, DMEA

Oct. 1, 1952

Selfridge

Removal of application from the active files
Docket No. DMA 2192X - Tungsten
Midland Mining Company
Mariposa County, California

The applicant was advised by letter that he must inform us by September 30, 1952, whether or not he wished to continue with his application. To date, we have not received any communication from them, therefore, we are removing the docket from the active files. The docket is transmitted herewith.

George C. Selfridge

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

Attachment

McClure - 10/1/52

cc: Admn. Reading File
Docket
G. C. Selfridge

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

September 16, 1952

Mr. Paul Aglietti
The Midland Mining Co.
461 Market Street
San Francisco, California

Re: Docket DMA 2192X (Tungsten)
Midland Mining Company
Mariposa County, California

Dear Mr. Aglietti:

We have had no reply from you to my letter of July 16, 1952, and presume that you are no longer interested in an exploration loan.

The Washington Office of the Defense Minerals Exploration Administration has written to me to the effect that if no communication regarding your application is received by them from me by September 30, 1952, your application will be removed from the active file and the docket considered closed.

May we, therefore, have a reply from you within the next two weeks to my July 16 letter.

Sincerely yours,

H. C. MILLER

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

Copy to E. H. Bailey, USGS
DMEA, Interior Building, Washington 25, D. C.

FILE COPY
SURNAME:

Rutledge
Martin

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

SEP 10 1952

Mr. H. C. Miller
Executive Officer, Region III
1018 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 219XX - Tungsten
Midland Mining Company
Mariposa County, California

Dear Mr. Miller:

Reference is made to the subject application and your letter of July 16, 1952, to the applicant, Mr. Aglietti.

Please advise Mr. Aglietti that if no communication is received by this office by September 30, 1952, we will remove the application from our active file and consider the docket closed.

Sincerely yours,

F. E. Johnson (B.J.H.)

Chairman, Operating Committee

FARutledge'lm
9/10/52

J.H. 9-10-52

Approved:

J. H. Hedges

Member, Bureau of Mines

E. T. McKnight

Member, Geological Survey

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
W. S. Martin
F. A. Rutledge

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

July 16, 1952

We sent F.T. on follow up of this one.

Mr. Paul Aglietti
The Midland Mining Co.
461 Market Street
San Francisco, California

Re: Docket DMA 2192X (Tungsten)
Midland Mining Company
Mariposa County, California

Dear Mr. Aglietti:

Kindly let us know if we should continue holding your application for a Government loan to explore your tungsten property in our active file.

If you do not care to go through with the application it would be appreciated if you would tell us, as the Washington Office is requesting from us a report on the status of your proposed project.

Very truly yours,

H. C. MILLER

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

Copy to DMEA, Interior Building, Washington 25, D. C. (2)
E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 21 1952

409

FILE COPY
SURNAME:

Selfridge.

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

JUL 10 1952

Mr. E. C. Miller
Executive Officer, DMEA Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 2192 -
Tungsten
Midland Mining Company
Mariposa County, California

Dear Mr. Miller:

Please refer to our letter of April 14, 1952. We have held the subject application in abeyance pending further advice from you. Will you please inform us of the status of the proposed project.

Sincerely yours,

(signed) FRANK E. JOHNSON
(JHS)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

GCSelfridge:ls 7/8/52

CC: Docket
Admn. Reading File
G. C. Selfridge
Field Team, Reg. 3
Operating Committee
D. M. Lemmon, USGS
R. W. Geehan, USBM

Approved:
J. H. Hedges
(JHS)
Member, Bureau of Mines

T. P. Thayer
(JHS)
Member, Geological Survey

7/3[illegible]

Mr. Selfridge:

Mr. Miller has had since receipt of our April 14 letter to contact applicant re possible exploration plan outlined by the Washington office. A follow-up to Miller would seem in order to learn whether we can expect a new application from the Co.

ls

Docket 400

FILE COPY

SURNAME:

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

Penny
Gillidge
Geologist
Bateman
Fitzhugh

APR 14 1952

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 2192X - Tungsten
Midland Mining Company
Mariposa County, California

Dear Mr. Miller:

We have reviewed the field team report on the subject property and your memorandum of February 29, 1952, which was attached thereto.

The thought expressed in the second paragraph wherein Mr. Bateman's original conclusions are revised because the applicants "have not been able to make a satisfactory arrangement for custom milling" does not appear to be well founded. DMEA can only aid the miner in his exploration work. We cannot do his development work for him because of his inability to make milling arrangements to his own liking.

In the instant case, it appears that the Government is being requested to loan $10,125.00 (75% of $13,500.00) for the purpose of making accessible for mining an inferred maximum amount of 4,000 tons of ore from which the Government could, at best, recover as royalty only approximately $4,000.00. Obviously, we cannot make a loan in excess of the royalty which we may possibly receive from the exploration of the maximum amount of the inferred ore.

However, we believe that a small loan, solely for exploration, could possibly be approved, provided the applicant concurs. We suggest that several "long hole" drill holes be drilled from the face of the existing adit for the purpose of determining the position of the underground extension of the outcrop ore. If the ore is found at the adit level, the adit could be extended to transect the ore, and, as a third stage, a winze could be sunk a short distance in ore.

As a first stage, we might suggest the following:

Repairing the present road so as to be possible for jeep travel only, and preparing compressor site	$ 500.00
Rental of portable 60 cu.ft. compressor for 1 month	275.00
Rental of drifter, column, arm, saddle, etc. for 1 month	100.00
Rental of 200 ft. of 1" or 1-1/2" pipe for 1 month	20.00
Rental of 60 ft. of long-hole-steel for 1 month	25.00
Purchase of tungsten carbide bits 5 @$20.00	100.00
Small tools and supplies, carbide, etc. gasoline and oil	100.00
Assays, estimated	50.00
<u>Labor</u>	
2 - Miners @$15.00/ea., 15 shifts each	450.00
1 - Owner-foreman $20.00/shift, 20 shifts	400.00
1 - Consulting geologist @$50.00/day, 3 days for preparing maps, logging samples, preparing final report	150.00
Miscellaneous, including transportation of equipment	230.00
	$2,400.00

The second stage would cover the costs of adit extension, say, up to 80 feet at an overall cost of $25.00 per foot or - 2,000.00

The third stage might additionally allow sinking, say, 50 feet, on ore, for $50.00 per foot or 2,500.00

Each stage, of course, being dependent upon the successful completion of the preceeding stage, to the satisfaction of and approval by the Government.

If the applicant concurs in the above program, please have him prepare an amended application along the lines hereinabove noted.

Otherwise, as you observe, the property should be mined from the surface, a procedure in which the Government cannot participate.

The application will be held in abeyance pending your advice.

Sincerely yours,

(signed) FRANK E. JOHNSON (for)

for Acting Administrator
Defense Minerals Exploration
Administration

QLBrewer'lm
4/10/52

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

April 7, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Midland Mining Company DMEA 2192, Tungsten
Blue Star Tungsten
Mairposa County, California

The proposed program will cost too much per ton of ore that might be located. The program favored by Bateman (sinking a shaft) is sound and would seem to me to be legitimate exploration. Of course, the ore mined from a shaft would not pay for the cost of sinking but, as all the work would presumably be in ore, there would be no dead work, and the over-all costs might be reduced. A 45-foot shaft would reach the adit level.

Bateman's map and section indicate that the face of the adit is only a few feet from the projected dip of the ore body. Why not drill a few long holes with a drifter to determine the location of the ore, if any, on the adit level? This could be followed by drifting and, if such a program indicated a better chance for developing a substantial ore reserve than now seems probable, a second phase of the project could be started. If the "Long holes" did not locate ore it would be obvious that an extensive ore body would not be located, and the project could be terminated at a very small cost to the applicant and the Government.

I recommend approval of an exploration loan providing that:

1. The work comprises the shaft sinking at a reasonable cost, or

2. The work comprises long hole drilling followed by extending the adit to the ore thus located, and drifting not over 50 feet; to be followed by a reexamination of the deposit by the Field Team, or

Copy retained 400

3. Any other low-cost program that meets approval of your staff and the applicant, providing it will terminate the work if ore does not extend to the adit level.

The trenching proposed by the applicant is not supported by any facts. If there is a favorable area, this work could well be included.

Robert W. Geehan

Robert W. Geehan

Attachment

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

April 7, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Midland Mining Company — DMEA 2192, Tungsten
Blue Star Tungsten
Mairposa County, California

The proposed program will cost too much per ton of ore that might be located. The program favored by Bateman (sinking a shaft) is sound and would seem to me to be legitimate exploration. Of course, the ore mined from a shaft would not pay for the cost of sinking but, as all the work would presumably be in ore, there would be no dead work, and the over-all costs might be reduced. A 45-foot shaft would reach the adit level.

Bateman's map and section indicate that the face of the adit is only a few feet from the projected dip of the ore body. Why not drill a few long holes with a drifter to determine the location of the ore, if any, on the adit level? This could be followed by drifting and, if such a program indicated a better chance for developing a substantial ore reserve than now seems probable, a second phase of the project could be started. If the "Long holes" did not locate ore it would be obvious that an extensive ore body would not be located, and the project could be terminated at a very small cost to the applicant and the Government.

I recommend approval of an exploration loan providing that:

1. The work comprises the shaft sinking at a reasonable cost, or

2. The work comprises long hole drilling followed by extending the adit to the ore thus located, and drifting not over 50 feet; to be followed by a reexamination of the deposit by the Field Team, or

RWGeehan:lds
Copy to: Field Team
Ferrous Metals
Mr. Geehan
F i l e s

3. Any other low-cost program that meets approval of your staff and the applicant, providing it will terminate the work if ore does not extend to the adit level.

The trenching proposed by the applicant is not supported by any facts. If there is a favorable area, this work could well be included.

Robert W. Geehan

Attachment

IN REPLY REFER TO:

G-MD-DML

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1952

March 17, 1952

Memorandum

To: Q. L. Brewer, DMEA

From: D. M. Lemmon, USGS

Subject: Midland Mining Co. DMEA 2192-X Tungsten
Mariposa County, California

Re your note of March 13, 1952:

I sent you a memorandum on the Field report on March 12, 1952, before receiving Mr. Miller's letter of transmittal.

I agree with you that the costs are excessive for the expectable target. You might be able to draw up a more reasonable total cost by cutting the amount of drift from 150 to 50 feet (length of ore at surface) and eliminating the winze. Seems to me that 4,000 tons of 0.5 percent WO_3 warrants only about $6,300 Government participation in exploration, or a total project of $8,400.

The chance of finding enough ore for a mill is poor.

Don Lemmon

Ato ves file

IN REPLY REFER TO:

G-MD-DML

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

March 17, 1952

Memorandum

To: C. L. Brewer, DMEA

From: D. M. Lemmon, USGS

Subject: Midland Mining Co. DMEA 2192-X Tungsten
Mariposa County, California

Re your note of March 13, 1952:

I sent you a memorandum on the Field report on March 12, 1952, before receiving Mr. Miller's letter of transmittal.

I agree with you that the costs are excessive for the expectable target. You might be able to draw up a more reasonable total cost by cutting the amount of drift from 150 to 50 feet (length of ore at surface) and eliminating the winze. Seems to me that 4,000 tons of 0.5 percent WO_3 warrants only about $6,300 Government participation in exploration, or a total project of $8,400.

The chance of finding enough ore for a mill is poor.

D M Lemmon

DMLemmon:gt

IN REPLY REFER TO:

G-MD-DML

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

March 12, 1952

Legal Status?

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Field Report DMEA 2192 - Tungsten
Midland Mining Co.
(Peter de Michelis and Paul Aglietti)
461 Market St.
San Francisco 5, Calif.

Property: Blue Star Tungsten prospect
Sec. 22, T. 3 S., R. 19 E.
Mariposa County, California

A field report dated February 21 was prepared by Paul C. Bateman, U.S.G.S., who examined the property January 29-30, 1952.

Scheelite is present in a mass of quartz-sulfide rock 45 feet long and 5 to 18 feet wide, enclosed by granite. The content of WO_3 is 0.5 to 1.0 percent.

The deposit is opened at the surface by pits. An adit 65 feet long, 45 feet beneath the outcrop, is entirely in granite although the face is beneath the surface cut. The field team recommends that the following program be undertaken under a DMEA exploration contract: Extend the adit 30 feet, and, if ore is found, drift 150 feet or to the limit of ore. If no ore is found, raise to ore (maximum 50 feet). If ore is found on the adit level, sink 50 feet in ore. The estimated cost is $13,900 if all stages are completed. The Field Team apparently did not submit a detailed break-down of the costs.

I concur with the Field Team that the recommended exploration is warranted.

D M Lemmon

1-26400 file

IN REPLY REFER TO:

G-MD-DML

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

March 12, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Field Report DMEA 2192 - Tungsten
Midland Mining Co.
(Peter de Michelis and Paul Aglietti)
461 Market St.
San Francisco 5, Calif.

Property: Blue Star Tungsten prospect
Sec. 22, T. 3 S., R. 19 E.
Mariposa County, California

A field report dated February 21 was prepared by Paul C. Bateman, U.S.G.S., who examined the property January 29-30, 1952.

Scheelite is present in a mass of quartz-sulfide rock 45 feet long and 5 to 18 feet wide, enclosed by granite. The content of WO_3 is 0.5 to 1.0 percent.

The deposit is opened at the surface by pits. An adit 65 feet long, 45 feet beneath the outcrop, is entirely in granite although the face is beneath the surface cut. The field team recommends that the following program be undertaken under a DMEA exploration contract: Extend the adit 30 feet, and, if ore is found, drift 150 feet or to the limit of ore. If no ore is found, raise to ore (maximum 50 feet). If ore is found on the adit level, sink 50 feet in ore. The estimated cost is $13,900 if all stages are completed. The Field Team apparently did not submit a detailed break-down of the costs.

I concur with the Field Team that the recommended exploration is warranted.

D M Lemmon

DMLemmon:gt

IN REPLY REFER TO:

G-MD-DML

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

March 17, 1952

Memorandum

To: [illegible] L. Brewer, DMEA

From: D. M. Lemmon, USGS

Subject: Midland Mining Co. DMEA 2192-[illegible] Tungsten
Mariposa County, California

Re your note of March 13, 1952:

I sent you a memorandum on the Field report on March 12, 1952, before receiving Mr. Miller's letter of transmittal.

I agree with you that the costs are excessive for the expectable target. You might be able to draw up a more reasonable total cost by cutting the amount of drift from 150 to 50 feet (length of ore at surface) and eliminating the winze. Seems to me that 4,000 tons of 0.5 percent WO_3 warrants only about $6,300 Government participation in exploration, or a total project of $8,400.

The chance of finding enough ore for a mill is poor.

D M Lemmon

DMLemmon:gt

IN REPLY REFER TO:

G-MD-DML

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

March 12, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Field Report DMEA 2172 - Tungsten
Midland Mining Co.
(Peter de Michelis and Paul Aglietti)
461 Market St.
San Francisco 5, Calif.

Property: Blue Star Tungsten prospect
Sec. 22, T. 3 S., R. 19 E.
Mariposa County, California

A field report dated February 21 was prepared by Paul C. Bateman, U.S.G.S., who examined the property January 29-30, 1952.

Scheelite is present in a mass of quartz-sulfide rock 45 feet long and 5 to 18 feet wide, enclosed by granite. The content of WO_3 is 0.5 to 1.0 percent.

The deposit is opened at the surface by pits. An adit 65 feet long, 45 feet beneath the outcrop, is entirely in granite although the face is beneath the surface cut. The field team recommends that the following program be undertaken under a DMEA exploration contract: Extend the adit 30 feet, and, if ore is found, drift 150 feet or to the limit of ore. If no ore is found, raise to ore (maximum 50 feet). If ore is found on the adit level, sink 50 feet in ore. The estimated cost is $13,900 if all stages are completed. The Field Team apparently did not submit a detailed break-down of the costs.

I concur with the Field Team that the recommended exploration is warranted.

D M Lemmon

DMLemmon:gt

D.M.E.A. December 3, 1951

D. M. Lemmon, U. S. Geological Survey

Exploration application ($28,050) DMA 2192 - Tungsten
Midland Mining Co.
461 Market St.
San Francisco 5, Calif.

Property: Blue Star Claims
Sec. 22, T. 3 S., R. 19 E.
Hites Cove Mining District
Mariposa County, California
4 miles SW from El Portal

Proposal: Complete road, drive 200 feet of adits, do 2,000 feet of diamond drilling, with costs as follows:

2 adits 50 and 100 feet below outcrop - 200 ft at $25	$ 5,000
2,000 feet diamond drilling at $7	14,000
3/4 mile road	2,000
Building	1,000
Supervision, 6 months at $500	3,000
Rental of equipment, fuel, powder, etc.	3,050
	$ 28,050

The application is accompanied by a brief report prepared by Wilbur H. Grant, consulting geologist and engineer, San Francisco. Mr. Grant spent one day at the property, prepared a map, and recommended a limited exploration program, much less ambitious than the one proposed by the applicants. Mr. Grant took no samples but relied on the assays of 5 samples taken by the applicants.

Mineralization: An exposure of scheelite-bearing rock (tactite ?) 15 by 40 feet in size is opened to a depth of 25 feet by topography and a pit. Five samples taken by the owners gave the following assays in percentage of WO_3: 0.39, 0.67, 0.74, 2.55, and 3.08. From the data given, it appears that the weighted average is about 1.0% WO_3.

The ore is not adequately exposed at the surface, and might extend somewhat farther beneath soil and detritus. The ore body appears to be surrounded by granite.

Conclusions: The exploration proposal made by the applicant is not acceptable and is not in accordance with recommendations of the applicant's consultant.

note Date 12/3/51

If the data submitted is correct, the following program might be justified, in stages:

1) Strip surface and sample.
2) If sampling successful, build road.
3) Rent compressor and drill. Start shipping from open pit. Ore must be rich enough to stand 190 mile haulage to mills at Consolidated Tungsten Co. or Tulare County Tungsten Co.
4) Drive adit or sink shaft in ore.

Recommendation: This property apparently has not been examined by the Geological Survey or Bureau of Mines.

It is recommended that the field team, Region III, San Francisco, be requested to examine the prospect. If exploration is warranted, an acceptable program should be discussed with the applicants.

Don Lemmon

DMLemmon:gt

(and o'k'd - by Geehan)

Copies to: E.H.Bailey (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

April 7, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Midland Mining Company — DMEA 2192, Tungsten
Blue Star Tungsten
Mairposa County, California

The proposed program will cost too much per ton of ore that might be located. The program favored by Bateman (sinking a shaft) is sound and would seem to me to be legitimate exploration. Of course, the ore mined from a shaft would not pay for the cost of sinking but, as all the work would presumably be in ore, there would be no dead work, and the over-all costs might be reduced. A 45-foot shaft would reach the adit level.

Bateman's map and section indicate that the face of the adit is only a few feet from the projected dip of the ore body. Why not drill a few long holes with a drifter to determine the location of the ore, if any, on the adit level? This could be followed by drifting and, if such a program indicated a better chance for developing a substantial ore reserve than now seems probable, a second phase of the project could be started. If the "Long holes" did not locate ore it would be obvious that an extensive ore body would not be located, and the project could be terminated at a very small cost to the applicant and the Government.

I recommend approval of an exploration loan providing that:

1. The work comprises the shaft sinking at a reasonable cost, or

2. The work comprises long hole drilling followed by extending the adit to the ore thus located, and drifting not over 50 feet; to be followed by a reexamination of the deposit by the Field Team, or

RWGeehan:lds
Copy to: Field Team
Ferrous Metals
Mr. Geehan
F i l e s

3. Any other low-cost program that meets approval of your staff and the applicant, providing it will terminate the work if ore does not extend to the adit level.

The trenching proposed by the applicant is not supported by any facts. If there is a favorable area, this work could well be included.

Robert W. Geehan

Attachment

3/13

DMA 2192
Midland Mining
Hungry - near El Portal.

D Lemmon

Herewith the Original papers
your Opinion of 12/3/51
and
Field Team Report by Bateman 9/21
Letter by Miller - 9/28

Sir stay with Bateman and start mining from the out crop.

This deal is much too small to go running drifts ~~etc~~ in all directions trying to find the ore in depth.

Just because its not profitable (Applicants own statement) they want USA to put in 3/4 of $13,500 in exploration, the best they can come out with is 4000 tons or $3½ of uncle's money per ton of $22 ore (my figure).

Our return 5% on $22 ore - is $1.10/ton, hence we should have 12,000 tons ± in geological target, not 4000, at best.

I would stay with Bateman - on basis of size of target, efficiency of exploration methods, and that the applicants inability to make milling arrangements to his own liking is no business of ours.

Your opinion is Requested

JFB

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

1012 Flood Building
870 Market Street
San Francisco 2, California

February 28, 1952

Memorandum

To: C. O. Mittendorf, Administrator, Defense Minerals Exploration Administration, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-2192X (Tungsten), Midland Mining Company, Mariposa County, California

Reference is made to your undated "Review of Application for Exploration Assistance", received in this office on January 9, 1952.

Attached are four copies of a report, "DMEA-2192, Blue Star Mine, Mariposa County, California (Tungsten)", by Paul C. Bateman, geologist, U. S. Geological Survey, dated February 21, 1952. Mr. Bateman's conclusion is that the deposit should be explored at depth and that the best way to do this is to sink a shaft in ore from the surface, defraying the expense by shipping the ore mined to a custom mill. Obviously this method of exploration would not necessitate Government assistance. The applicants, however, do not agree that this procedure is best, because, as they state, they have not been able to make a satisfactory arrangement for custom milling, and because they hope to develop enough ore to build a mill of their own.

At a conference between Mr. Paul Aglietti, Mr. Bateman, and me, an alternate exploration program was developed. Mr. Bateman considers this alternate program to be only the second best method of exploration; consequently, he does not give the proposal his unqualified endorsement, although he thinks it deserves careful consideration of the committee group in Washington. The alternate exploration program is described in the report. Costs of the alternate program is as follows:

First phase:

Bulldozer repair of road 0.7 mile	$1,000
Surface trenching	500
30 ft. of drifting to extend present adit to 100 ft. at $25 a foot	750

50 ft. raise to ore body if ore is not found in the 30 ft. extension of present adit (to determine dip of ore) at $25 a foot — $1,250

Second phase:

Contingent upon results of work done under the first phase and only if ore is encountered in the extension of the present adit, carry out 150 ft. of drifting on the adit level to obtain information on the length and grade of ore body, at $25 a foot — 3,750

Third phase:

Contingent upon favorable results of work done under first and second phases, sink 50 ft. in ore from the adit level at $35 a foot — 1,750

too low

In addition to the above, the following costs will be incurred:

$10/sq ft ?

not in keeping

Construct 6' x 8' tool house, labor and material	500
Construct rock chute over road 25' long (necessary), labor and material	500
Rental of compressor, jackhammer, etc., contract 3 mos. at $250	750
Rental of property (see lease agreement), 3 mos. at $200	600
Sampling and assaying, 3 mos. at $50	150
Gasoline and oil for compressor, 3 mos. at $100	300
Office expenses, telephone, clerical services, 3 mos. at $75	225
Compensation insurance, social security, 3 mos. at $150	450
1-Second hand weapon carrier	800
400 ft. mine rail, second hand	75
200 ft. 2" air pipe	75
1-mine car	175
1-Supervisor at $500 per month	1,500
Total.....	$15,100

more detail

?

not allowed

Get more detail

Miners wages $15 a day

No provision for health

Mr. Aglietti has submitted four copies of MF-100 form to this office. These four copies are attached herewith.

The docket also is being returned herewith.

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

Attachments

Copy to E. H. Bailey, USGS

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

DMEA 2192, Blue Star Mine

Mariposa County, California

(Tungsten)

Paul C. Bateman, Geologist
U. S. Geological Survey

February 21, 1952

Reviewed by
DMEA OPERATING COMMITTEE
3-7-52
(date)

Summary and Conclusions

The outcrop of the Blue Star tungsten deposit is a small mass of ore of moderately good grade and excellent quality surrounded by granite. The ore body has not been explored at depth; the face of a 65-foot adit, 45 feet vertically beneath the north end of the ore body, is in granite. Because the ore is of good grade and excellent quality, delineation of the ore body at depth is desirable, but the best means of exploration, through a shaft sunk in ore, is not favored by the applicants. A compromise proposal to explore the ore body through the adit has been developed jointly by the field team and the applicant. This proposal merits careful consideration, but because the cost seems high the field team does not give it its unqualified endorsement.

Introduction

I examined the Blue Star tungsten mine the afternoon and evening of January 29, and morning of January 30, 1952, accompanied by the applicants, Messers. Paul Aglietti and Peter De Michelis. The mine is in Sec. 22, T. 3 S., R. 19 E., about 3½ miles ESE from El Portal in Mariposa County, California. It is reached from the Yosemite all-year highway approximately 3 miles west of El Portal by walking south on the Hite Cove trail about 0.7 miles to the property. The trail as far as the mine has been widened by the applicants, and was passable by jeep until it was washed out by a rain storm shortly before my visit. The mine area and the trail are shown on the U. S. Geological Survey "El Portal" 7½ minute quadrangle.

Geology

The deposit is of the contact-metamorphic type and is in the eastern margin of a small granitic mass (probably a stock). Schist, quartzite, and hornfels are common types among the metamorphic rocks that bound the granitic mass, and about 50 feet east of the deposit a thin bed of marble crops out. The ore body is poorly exposed on a steep soil-covered hillside. Workings consist of a number of open cuts and prospect pits, and a 65-foot adit. (see accompanying sketch map). The heavy rain storm a few days before my examination, had filled the surface workings with loose soil making the study of the ore body difficult.

On the surface the ore body appears to be partly or entirely enclosed in granite and is separated from the main belt of metamorphic rocks by about 50 feet. The ore body is wedge-shaped in outcrop-about 45 feet long, 18 feet wide at the north end, and less than 5 feet wide at the south end. At the south end the ore body is only poorly exposed and both the length and the width may be somewhat greater beneath the soil cover than is shown on the map. At the north end the ore body is in contact with hornfels or schist, but because of soil cover the relation between the schist in contact with the ore and the main mass of metamorphic rock 50 feet away was not determined.

The ore consists mainly of quartz and a sulfide mineral (probably maracasite) and contains scheelite. The scheelite crystals are larger than usual, averaging about one-quarter inch across, and under ultra-violet light fluoresce blue-white, indicating a very low molybdenum content. The ore was estimated under ultra-violet light to contain at least 1.0% of WO_3, but four chip samples taken from the outcrop indicate that the average grade may be only about 0.5%. The localities and analyses of the samples are shown on the accompanying illustration. Sample No. 3 should not be included in any calculation of grade because it includes barren wall rock.

The ore body has not been found in the adit, although the face of the adit is directly beneath the north end of the surface exposure. Exposures in the surface cuts suggest that the ore body may dip east at a very steep angle, but the exposed contacts are irregular and may have no significance. If the ore body does extend downward to the level of the adit it probably dips east or rakes south. Because the face of the adit is beneath the north end of the ore body it is not likely that the ore body continues to the adit level if it rakes north.

Since my examination the applicants have done a small amount of trenching on the contact between granite and the thin bed of marble exposed 50 feet east of the outcrop of the ore body and report scheelite.

Reserves

On the surface the ore body is about 40 feet long and averages 10-12 feet wide; on the assumption 10 cubic feet of ore equals one ton, the ore body contains 40 tons of ore per foot of depth. The ore is exposed by topography and surface trenches to a depth of about 25 feet; it is estimated to contain a reserve of measured ore about 1000 tons containing 500-600 units. In all probability another 500-1000 tons exist beneath this ore, but in view of the absence of ore in the adit no larger tonnage can be inferred.

Further Exploration

The moderately good grade and fine quality of the ore exposed at the surface make it desirable to explore the ore body, even though the size probably is small. The least expensive way of exploring the deposit appears to be to sink a shaft in ore from the surface and truck the ore mined to a custom mill to defray the expenses. The applicants do not favor such a program because they maintain they have not been able to make a profitable arrangement for custom milling and because they hope to develop enough ore to build a mill of their own.

A less desirable and more expensive way to explore the ore body is through the adit. The following has been agreed on in a conference between Mr. Aglietti, Messers. H. C. Miller and Spangler Ricker of the Bureau of Mines and myself as a reasonable procedure for exploring the ore body

through the adit:

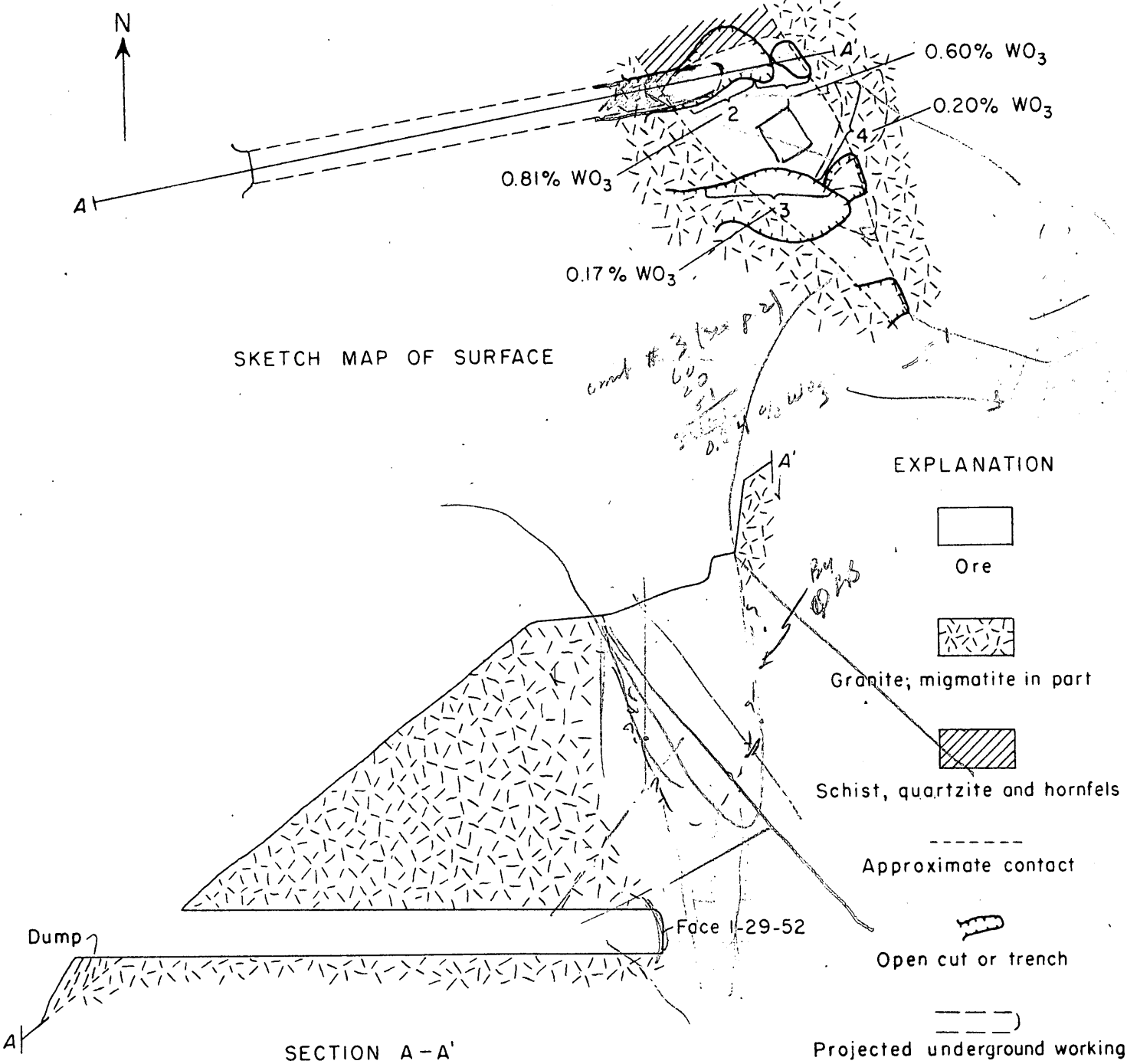
1. Continue the adit 30 feet to a total length of 100 feet.
2. If ore is intersected in the adit, drift 150 feet or to the limits of the ore body, whichever is reached first.
3. If no ore is intersected in the adit (step 1), raise 50 feet from a point 70 feet from the adit portal to the center of the outcrop of the ore body.
4. If the raise (step 3) suggests that the ore body continues downward to the adit level, drive a level working from the adit through the ore body or 150 feet, whichever is accomplished first.
5. If ore of commercial grade and volume is found at the adit level, sink a winze in ore 50 feet.

In addition, the applicants wish to explore by trenching the new discovery they report finding on the limestone contact 50 feet east of the ore body.

The cost of the complete program, estimated at $13,900 appears high but the total amount will only be spent if the ore body is found to continue downward beneath the adit level. If ore extends to the deepest level proposed ~~from~~ for exploration, 100 feet beneath the outcrop, probably 4,000 tons or more of ore containing 2,000 to 2,500 units of WO3 will be indicated.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMA 2192 X
(TUNGSTEN)



Mapped by P. C. Bateman, January 1952

BLUE STAR PROSPECT, MARIPOSA COUNTY, CALIFORNIA

20 0 20 40 Feet

Approximate scale

Form MF-100
(May 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. _____

Date received _____

MIDLAND MINING COMPANY
461 MARKET St.
SAN FRANCISCO 5. CALIFORNIA

Name and address of applicant

Date February 28, 1952

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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (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? Will be Tungsten (WO_3)
   (b) What are the byproducts, if any? none
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. 70 Ft. of Adit.
   (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.

   DEPARTMENT OF THE INTERIOR Defense Minerals Administration RECEIVED MAR 4 1952
3. For each operation listed above supply the following:
   (a) Distance and direction from nearest town and shipping point. About 63 miles.
   (b) Mining district. Hites Cove mining District.
   (c) Township, Section, Range. Section 22--T. 3 S.-- I9 E.
   (d) County, State. Mariposa County California.
4. (a) State whether or not property is now in operation, and if in operation, by whom operated. The property is n not in operation.
   (b) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee. We lease the property.
   - ☐ Contractor.
5. Number of years in production none.

   If not in production or operation, estimated date when production will begin Estimate production wollbegin 7-I-"52
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. (A) Paul Aglietti mining off and on since 1941. (B) Peter De Michelis mining since 1934
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. No History- New discovery.
   (b) State briefly the known history and production of adjoining and neighboring properties. Only Gold property near by.
   (c) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

   Report by Mr. Wilbur H. Grant, ounsulting Engineer and geologist, accompanies applicant application for an exploration lean.

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)
Peter De Michelis	Partner						
Paul Aglietti	"						
Morris M. Grupp	"						
Clarence M. Frank	"						
John Bufalini	"						
Max Friedman	"						
Joseph Romeo	"						
	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. Not applicable

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. See report by Mr. Wilburn H. Grant which accompanies applicant loan application.

(*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. **Deposit is only a prospect-assays given in loan application.**

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show computed. Tabulated total ore reserve as follows: **Not applicable.**

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: **Deposit is one mile from U.S. Hihway 140. About Two miles from Indian Flat.**

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

14. Water Supply: **Source of water is creek 300 Ft. from deposit- ample water for mining operation.**

State source and quantity of water available for operations and whether sufficient for all seasons. **Unlimited water in Mercede River, about one mile from deposit.**

15. Power:

State amount of power used, rate per hour, and source thereof. **None used at present- High tension line about one mile from deposit.**

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. **3 miners.**

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. **Small shack.only.**

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.

Midland Mining Company
(Name of company)

By Paul Schutt
(Signature of authorized official)

February 28, 1952
(Date)

Partner
(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

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

DMEA 2192, Blue Star Mine

Mariposa County, California

(Tungsten)

Paul C. Bateman, Geologist
U. S. Geological Survey

February 21, 1952

Reviewed by
DMEA OPERATING COMMITTEE

3-7-52
(NB) (date)

Summary and Conclusions

The outcrop of the Blue Star tungsten deposit is a small mass of ore of moderately good grade and excellent quality surrounded by granite. The ore body has not been explored at depth; the face of a 65-foot adit, 45 feet vertically beneath the north end of the ore body, is in granite. Because the ore is of good grade and excellent quality, delineation of the ore body at depth is desirable, but the best means of exploration, through a shaft sunk in ore, is not favored by the applicants. A compromise proposal to explore the ore body through the adit has been developed jointly by the field team and the applicant. This proposal merits careful consideration, but because the cost seems high the field team does not give it its unqualified endorsement.

Introduction

I examined the Blue Star tungsten mine the afternoon and evening of January 29, and morning of January 30, 195[illegible], accompanied by the applicants, Messers. Paul Aglietti and Peter De Michelis. The mine is in Sec. 22, T. 3 S., R. 19 E., about 3½ miles ESE from El Portal in Mariposa County, California. It is reached from the Yosemite all-year highway approximately 3 miles west of El Portal by walking south on the Hite Cove trail about 0.7 miles to the property. The trail as far as the mine has been widened by the applicants, and was passable by jeep until it was washed out by a rain storm shortly before my visit. The mine area and the trail are shown on the U. S. Geological Survey "El Portal" 7½ minute quadrangle.

Geology

The deposit is of the contact-metamorphic type and is in the eastern margin of a small granitic mass (probably a stock). Schist, quartzite, and hornfels are common types among the metamorphic rocks that bound the granitic mass, and about 50 feet east of the deposit a thin bed of marble crops out. The ore body is poorly exposed on a steep soil-covered hillside. Workings consist of a number of open cuts and prospect pits, and a 65-foot adit. (see accompanying sketch map). The heavy rain storm a few days before my examination, had filled the surface workings with loose soil making the study of the ore body difficult.

On the surface the ore body appears to be partly or entirely enclosed in granite and is separated from the main belt of metamorphic rocks by about 50 feet. The ore body is wedge-shaped in outcrop-about 45 feet long, 16 feet wide at the north end, and less than 5 feet wide at the south end. At the south end the ore body is only poorly exposed and both the length and the width may be somewhat greater beneath the soil cover than is shown on the map. At the north end the ore body is in contact with hornfels or schist, but because of soil cover the relation between the schist in contact with the ore and the main mass of metamorphic rock 50 feet away was not determined.

The ore consists mainly of quartz and a sulfide mineral (probably marcasite) and contains scheelite. The scheelite crystals are larger than usual, averaging about one-quarter inch across, and under ultra-violet light fluoresce blue-white, indicating a very low molybdenum content. The ore was estimated under ultra-violet light to contain at least 1.0% of WO_3, but four chip samples taken from the outcrop indicate that the average grade may be only about 0.5%. The localities and analyses of the samples are shown on the accompanying illustration. Sample No. 3 should not be included in any calculation of grade because it includes barren wall rock.

The ore body has not been found in the adit, although the face of the adit is directly beneath the north end of the surface exposure. Exposures in the surface cuts suggest that the ore body may dip east at a very steep angle, but the exposed contacts are irregular and may have no significance. If the ore body does extend downward to the level of the adit it probably dips east or rakes south. Because the face of the adit is beneath the north end of the ore body it is not likely that the ore body continues to the adit level if it rakes north.

Since my examination the applicants have done a small amount of trenching on the contact between granite and the thin bed of marble exposed 50 feet east of the outcrop of the ore body and report scheelite.

Reserves

On the surface the ore body is about 40 feet long and averages 10-12 feet wide; on the assumption 10 cubic feet of ore equals one ton, the ore body contains 40 tons of ore per foot of depth. The ore is exposed by topography and surface trenches to a depth of about 25 feet; it is estimated to contain a reserve of measured ore about 1000 tons containing 500-700 units. In all probability another 500-1000 tons exist beneath this ore, but in view of the absence of ore in the adit no larger tonnage can be inferred.

Further Exploration

The moderately good grade and fine quality of the ore exposed at the surface make it desirable to explore the ore body, even though the size probably is small. The least expensive way of exploring the deposit appears to be to sink a shaft in ore from the surface and truck the ore mined to a custom mill to defray the expenses. The applicants do not favor such a program because they maintain they have not been able to make a profitable arrangement for custom milling and because they hope to develop enough ore to build a mill of their own.

A less desirable and more expensive way to explore the ore body is through the adit. The following has been agreed on in a conference between Mr. Aglietti, Messrs. H. C. Miller and Spangler Ricker of the Bureau of Mines and myself as a reasonable procedure for exploring the ore body

through the adit:

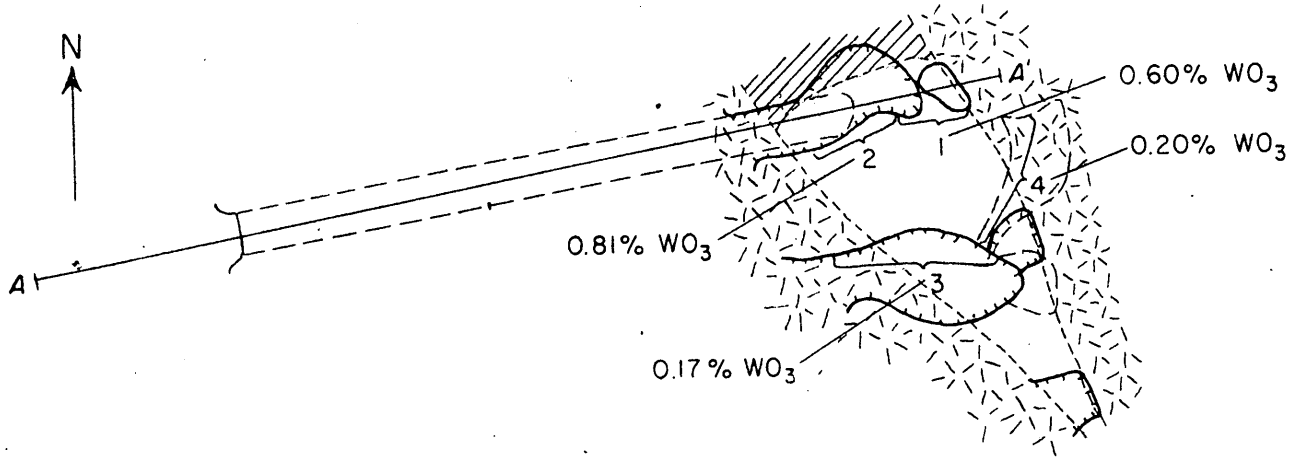
1. Continue the adit 30 feet to a total length of 100 feet.
2. If ore is intersected in the adit, drift 150 feet or to the limits of the ore body, whichever is reached first.
3. If no ore is intersected in the adit (step 1), raise 50 feet from a point 70 feet from the adit portal to the center of the outcrop of the ore body.
4. If the raise (step 3) suggests that the ore body continues downward to the adit level, drive a level working from the adit through the ore body or 150 feet, whichever is accomplished first.
5. If ore of commercial grade and volume is found at the adit level, sink a winze in ore 50 feet.

In addition, the applicants wish to explore by trenching the new discovery they report finding on the limestone contact 50 feet east of the ore body.

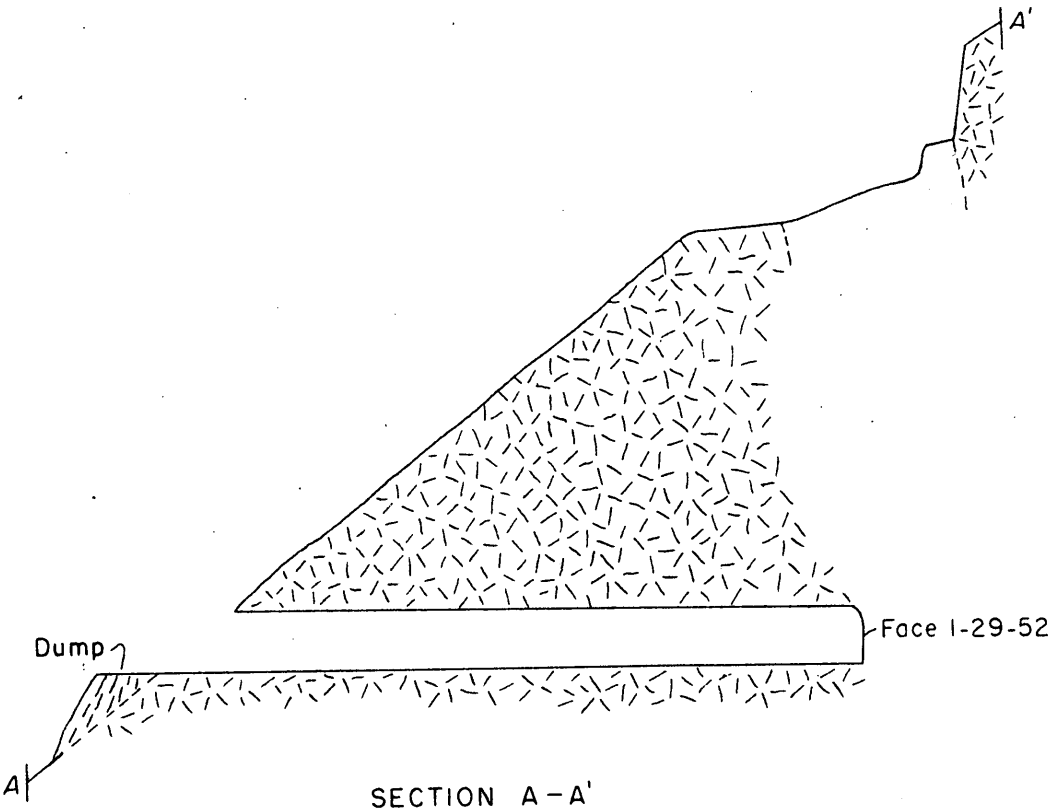
The cost of the complete program, estimated at $13,900 appears high but the total amount will only be spent if the ore body is found to continue downward beneath the adit level. If ore extends to the deepest level proposed for exploration, 100 feet beneath the outcrop, probably 4,000 tons or more of ore containing 2,000 to 2,500 units of WO_3 will be indicated.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMA 2192X
(TUNGSTEN)



SKETCH MAP OF SURFACE



SECTION A–A'

EXPLANATION

Ore

Granite; migmatite in part

Schist, quartzite and hornfels

Approximate contact

Open cut or trench

Projected underground working

Mapped by P. C. Bateman, January 1952

BLUE STAR PROSPECT, MARIPOSA COUNTY, CALIFORNIA

20 0 20 40 Feet

Approximate scale

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMA - 2192
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

RECEIVED
OCT 29 1951
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

Name and address of applicant

MIDLAND MINING CO
(Peter De Michelis and Paul Aglietti, Partners)
461 Market St.,
San Francisco 5, Calif.

Date October 10th 1951

If you have already filed MF-100, give date filed June 1951 not rec by R.+R., type of assistance requested none,

DMA Docket Number (if available) ~~none~~ 2192

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

MIDLAND MINING CO.
(Name of company)

X By Peter De Michelis
By Paul Ghielli
(Signature of authorized official)

October 10th 1951
(Date)

Partners
(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—64067-2

1. (a) Those certain unpatented mining claims, in the Hites Cove mining district, more particularly described as follows:

BLUE STAR TUNGSTEN #1.
Located May 22nd 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 408, Mariposa County Records

BLUE STAR TUNGSTEN #2
Located May 22nd, 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 409, Mariposa County Records.

BLUE STAR TUNGSTEN #3
Located May 22nd,1951
Recorded June 11th, 1951 in Vol. A-2 of Mining Records on page 418, Mariposa County Records

(b) See lease attached

(c) Section 22 - T. 3. S - R. 19 E.

Note 1 - Both areas are the same
Note 2 - See attached land lord suburdination agreement

2. (a) Tungsten (Wo 3)

(b) See attached reconnaissance report of Mr. Wilbur H Grant and Assay reports of Pittsburg and Abbott A Hanks Inc.

3. (a) Step 1. Finish road including switch-backs to terminate 50 ft. under present workings.

Step 2. Drive 75 ft adit from switch-back road level to intercept ore body and explore ore at this point. Adit approx. 50 ft. below present workings.

Step 3. Drive 125 ft. adit 50 ft. lower in elevation and on lower road level to intercept ore body at this point and explore same.

Step 4. Diamond drilling program:

1. Drill several holes from lower road level to develop ore body of present workings at greater depth (approx 225 ft).

2. Drill several holes from upper road level (approx. 50 ft. below present workings) and slightly to the north for the purpose of developing new ore bodies.

Total cost of the project: $28,050.00

Note: The above work to be done successively with little change, providing each step in program proves successfully. If not, then the necessary changes shall be made in accordance to necessity.

(b) Six months.

4. See attached Map No. 3

5. None

6. Small tool house, labor and material: $500.00

   3/4 of mile road: $2000.00

   Rock soot over road, labor and material $500.00

7. (a) Rental compressor, jack hammer at $200.00 per mo.: $1200.00

   (b) None

   (c) None

8. Three miners at $15.00 per day.

   One supervisor at $500.00 per month.

9. Recapitulation of costs based on a six months period of operation:

200 ft of tunnel at $25.00 per foot	$5000.00
2000 ft diamond drilling (contract) at $7.00 per ft	14000.00
Supervision at $500.00 per month	3000.00
Sampling and assaying	400.00
Gasoline and oil at $75.00 per month	450.00
Office stationary, clerical services etc at $100.00 per month	600.00
Small tool house, labor and material	500.00
3/4 mile road	2000.00
Rental of compressor, jack hammers at $200.00 per mo.	1200.00
Rock shoot over road	500.00
Compensation insurance, social security	400.00
Total costs based on a six months period of operation	$28050.00

10. (a) We are prepared to invest $7012.50

    (b) Yes

11. We have already spent over $2000.00 opening the property

X

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Mariposa, State of California, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 22, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 18th day of October, 1951

William J. Barnett
Lemuel W. Barnett

United States of America
Yosemite National Park

On this 18th day of October, 1951, before me, Gene J. Ottonello, U.S. Commissioner, in and for the said Yosemite National Park, Northern District of California, duly commissioned and sworn, personally appeared William J. Barnett and Lemuel W. Barnett, 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.

GENE J. OTTONELLO
UNITED STATES COMMISSIONER
YOSEMITE NATIONAL PARK
CALIFORNIA

U.S. GOVERNMENT PRINTING OFFICE: 1952-O-[illegible]

20M-9-50

FORM 407

PITTSBURGH TESTING LABORATORY

ESTABLISHED 1881

PITTSBURGH, PA.

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS OR EXTRACTS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

ORDER No.

LABORATORY No. 26907

CLIENT'S No.

651 HOWARD STREET
SAN FRANCISCO 5, CALIFORNIA

FILE No.

REPORT

September 10, 1951

Midland Mining Company
461 Market Street
San Francisco, California

Subject: Samples (2)
Tungsten

Results:

Sample #1	Center of Ore	3.08% WO_3
Sample #2	Contact Zone, approx. 2 ft on outskirts of ore body	0.39% WO_3

Respectfully submitted,

PITTSBURGH TESTING LABORATORY

Clyde B. Gentle
District Manager

WPS/S:ml
cc: Above-5

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

July 16, 1951

DEPOSITED BY P. J. Feykert
617 Bryant Street
San Francisco, California

SAMPLE OF ORE

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER Value @ $	Percentages	
32002	#1					Tungstic Oxide	0.67
03	#2					" "	2.55
04	#3					" "	0.74

We hereby certify that the above originates from ore samples drawn from Blue Star Tungsten Mine, as follows:

#1 - Outer edge - lenght of sample 9 ft
#2 Center ore - 10 tons on dump
#3 Inner edge - lenght of sample 7 ft

MIDLAND MINING CO.

By Paul Galliett

ABBOT A. HANKS, INC.

Original Signed by
P. T. BEE

bob

LABORATORY REPORT
ABBOT A. HANKS, INC.
ENGINEERS, ASSAYERS, CHEMISTS, METALLURGISTS
CONSULTING - TESTING - INSPECTING
ESTABLISHED 1866
624 SACRAMENTO STREET
SAN FRANCISCO 11, CALIFORNIA
TELEPHONE GARFIELD 1-1697

Lab. No. 31738 Date July 9, 1951

Submitted by Fair Manufacturing Co.
617 Bryant Street
San Francisco, California

Sample Mark #2

QUALITATIVE SPECTROGRAPHIC ANALYSIS
Metals Found and Estimated Percentage Range

Less than .03%	.03% to .30%	.30% to 3%	3% to 30%	30% to 100%
Titanium Copper Molybdenum Vanadium Nickel Cobalt Chromium	Manganese Potassium	Aluminum Calcium Magnesium Sodium	Iron Silicon Tungsten	

We hereby certify that the above ore samples originate from BLUE STAR TUNGSTEN MINE.

MIDLAND MINING CO.

By Paul Aplett

Remarks

RESPECTFULLY SUBMITTED,
ABBOT A. HANKS, INC.

Original Signed by
By P. T. BEE
Spectro-Chemist

bob

FORM A-5

MINING LEASE AND OPTION

THIS AGREEMENT, made this 22nd day of July, 1951 between W. J. BARNETT and L. W. BARNETT of El Portal, California, hereinafter called First Parties, and PETER J. De MICHELIS of San Francisco, California, hereinafter called Second Party,

WITNESSETH:

1. That for and in consideration of the rents, covenants, payments and agreements hereinafter contained, to be kept, paid and performed on the part of the Second Party, First Parties do hereby lease unto Second Party, the following described real property located in the County of Mariposa, State of California, to wit:

Those certain unpatented mining claims, in the Hites Cove Mining District, more particularly described as follows:

Blue Star Tungsten No. 1
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 408, Mariposa County Records.

Blue Star Tungsten No. 2
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 409, Mariposa County Records.

Blue Star Tungsten No. 3
Located May 22, 1951
Recorded June 11, 1951 in Vol. A-2 of Mining Records at page 418, Mariposa County Records.

First Parties warrant that there are no liens or encumbrances against said mining claims.

2. This lease shall run for a period of ten (10) years from date hereof and so long thereafter as minerals in paying quantities can be produced, saved and sold thereon.

3. Upon execution of this agreement, Second Party agrees to pay to First Parties the sum of Two Hundred Dollars ($200.00) and in consideration of this payment First Parties grant to Second Party the right to enter upon said above described properties for the purpose of prospecting and sampling same, surveying and

Checking property lines and any other work Second Party may deem necessary for proper development of the properties.

On or before thirty (30) days after signing of this agreement, subject to the term herein, Second Party agrees to pay to First Parties a further sum of Two Hundred Dollars ($200.00), per month for nine months, to be paid not later than the 5th day of each month from date of the first of said payments within which Second Party agrees to commence further prospecting and development of the above described mining property.

4. Commencing within one (1) month after the expiration of the above nine (9) months period, Second Party shall make minimum payments of Four Hundred Dollars ($400.00) per month to First Parties in the manner as hereinafter described.

5. Second Party agrees to pay to First Parties a royalty of Six Per Cent (6%) of the value of all minerals produced, shipped and sold from the above described leased premises. The 6% royalty means 6% of the net returns from proceeds of any ore or concentrates shipped and sold to a buyer and the net returns shall mean the total sum paid to Second Parties by any buyer. Said royalty payments to be made to First Parties within ten (10) days from and after receipt by Second Party of said proceeds from buyer. Second Party to furnish First Parties, at time of each payment, a duplicate statement of account between second Party and buyer covering such payment made by buyer.

6. Second Party agrees with First Parties as follows:

(a) To enter upon said properties and to work same as a mine for the production of tungsten and any other valuable minerals that may be found and produced profitably.

(b) All mining shall be done in a minerlike fashion and in conformity with all State and Federal laws and regulations pertaining to mining, with due regard to safety, development and preservation of said premises as a workable mine.

(c) To commit no waste and do no act thereon which will impede mining operations or impair the operating condition of said mining claims, and suffer no default which might in any manner involve the First Parties in liability of any kind or character.

(d) To permit the First Parties or their authorized representatives at all reasonable times to have access to any and all workings in or on said premises for the purpose of inspecting or sampling same.

(e) At all times to keep an accurate set of accounts and records of all production, shipments, and receipts, which accounts and records shall be available for inspection by First Parties at any reasonable time.

(f) To, at all times during the term hereof, keep and save First Parties and the premises free and clear of all costs, liens and encumbrances of every nature whatsoever made or suffered by Second Party, and to do no act or thing which shall constitute a cloud upon the First Parties title to the aforesaid property.

(g) To carry all necessary Workmens Compensation Insurance and to comply with all State and Federal laws pertaining to the safety of employees.

(h) If this lease be terminated before completion of all the terms thereof, the Second Party agrees to deliver to the First Parties the said premises in good condition and repair.

7. It is mutually understood and agreed as follows:

(a) That in the event Second Party fails to perform any covenants or any other provision of this lease, that all rights and privileges of the Second Party under the terms of this lease may, at the option of the First Parties, be terminated in the manner hereinafter set out.

(b) In the event of termination of this lease prior to the completion of all the terms hereof, the Second party shall have the right to remove all machinery and equipment from said property within a period of ninety (90) days after termination of the lease.

(c) That all State and County Taxes levied against the property and mining machinery and equipment and improvements to paid by the Second Party when they become due and before delinquency.

(d) The Second Party shall have an assignable right and interest in this lease to such responsible persons who shall assume this lease and the agreement for payment of overriding royalty made by second party with Hazel Ayers and Herbert Merrill this date and agree to be bound by the terms hereof. No assignment hereof to be made without the Second Party having first given to the First Parties at least ten (10) days written notice of his intention to assign his interest herein, said notice to containthe name and address of any proposed assignee hereof.

(e) In the event there is a default on the part of the Second Party in any of the covenants or terms of this lease and the default shall continue for a period of thirty (30) days thereafter First Party may serve written notice of default on Second Party, First Parties may finally terminate this lease by giving written notice of their final termination of this lease; and upon such final termination all rights of Second Party in and to said real property shall cease and terminate, save and except the right to remove their personal property, machinery and equipment within a period of ninety (90) days after such termination.

8. It is recognized by all parties hereto that tungsten prices have fluctuated and that there are times when tungsten cannot be mined except at a loss, and it is recognized by all parties hereto that at the present time a favorable market exists for tungsten; and it is expected that Second Party will use diligence in mining the maximum amount of tungsten that is reasonably possible under the circumstances during the period when tungsten price is high. Should the price of tungsten drop so that it is impossible to operate the property except at a loss, then Second Party need not operate said mine for a period of not to exceed six (6) months without any penalties and Second Party shall be

relieved of making the minimum monthly payments as specified. If the non-operation of said mine shall exceed a period of six (6) months, then Second Party must pay to First Parties the sum of One Hundred Dollars ($100.00) per month, provided further that the suspension of operations under this provision need not be permitted by First Parties for a period longer than twelve (12) months.

9. It is expressly agreed that delays or failure to operate said mine when caused by strikes, lock-outs, act of God, military orders or other government interference with operations, inability to get materials after due diligence, or any other cause beyond the control of Second Party, that during such period of time when mining operations have been suspended that Second Party shall not be penalized or held to be in default, and the obligation to pay the minimum monthly payments shall also be suspended, but as soon as with reasonable diligence said mine can again be operated, Second Party must again perform all the terms of this lease.

10. Second Party shall have the option of terminating this lease by the giving of written notice of such intention to First Parties, together with possession of said properties and thereupon be relieved of all future obligations hereunder, including the payment of any monies becoming due and payable thereafter, but such surrender shall not release Second Party from any obligations or liability theretofore incurred by them hereunder.

11. First Parties, in Consideration of this agreement, do hereby grant to the Second Party during the term of this agreement and so long as Second Party shall not be in default hereunder, the exclusive right and option to purchase the above described property for a total purchase price of Eighty Thousand ($80,000.00) and First Parties agree that all royalty payments of six per cent (6%) and any other payments of any kind made from any source by Second Party to First Parties shall be applied on the purchase price; and First Parties agree that when they have received the purchase price of $ 80,000.00 that they will,

by proper conveyance convey all of the above described premises to the Second Party.

12. It is understood and agreed between all parties hereto that the minimum monthly payment of Four Hundred Dollars ($400.00) mentioned in paragraph 4 hereof, may be covered by royalty payment or in the event the royalty payments required to be made hereunder shall not equal $400.00 per month then Second Party shall pay such additional amount as may be required to bring the total monthly payment up to $400.00 per month, the minimum monthly payment required to be made hereunder, and shall be paid to the First Parties at their address shown hereinafter.

13. Any notices, letters or other communications, required in connection with any matters arising under the within lease and option shall be directed to the respective parties here at the address following their respective names:

R. J. Barnett and L. V. Barnett,
P.O.Box 16,
El Portal, California

Peter J. De Nicholis,
142 Oxford Street,
San Francisco, California

If any of the above parties change their addresses they shall give written notice to the other parties and upon receipt of notice of such change, the new address shall be controlling hereunder.

14. Second Party agrees that he will perform all assessment work on the above described property which is required by law of the United States and record proof of same, to keep said mining claims in good standing, at their expense and to do said work at least thirty (30) days prior to the time than said work must be performed and notify First Parties that same has been done.

15. Time is and shall be of the essence of this agreement. Every provision hereof shall inure to the benefit of and be binding

upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the respective parties have executed these presents the day and year first written above.

H. J. Barnett

L. E. Barnett
First Parties

Peter J. De Michelis
Second Party

STATE OF CALIFORNIA
COUNTY OF
Mariposa

On July 22, 1951 before me, the undersigned, a Notary Public in and for said County and State, Personally appeared: H. J. Barnett, L. E. Barnett and Peter J. De Michelis, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.
WITNESS my hand and official seal.

R. O. Curran

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

TABLE CONTENTS

	Page
Introduction	1
Legal	1
Location	2
Elevations	2
Property	2
Workings	3
General Geology	3
Rocks	4
Ore	6
Assays	6
U.S. Government Activity	7
Road to Mine	8
Conclusions	8
Recommendations	9

- - - - - - -oOo- - - - - - -

APPENDIX

Map I GENERAL MAP

Map 2 PLAN OF WORKINGS.

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951.

I N T R O D U C T I O N

At the request of Messrs. PAUL AGLIETTI and P. De MICHELIS, on September 13 and 14, 1951, I made a reconnaissance examination of their BLUE STAR TUNGSTEN MINE, spending one full day on their property. The purpose of the examination was essentially to interpret the economic geology and recommend procedure for future activities on the property.

L E G A L

In the short space of one day my time was devoted to the essential geological economic aspects of the ore occurrence. No time was devoted to checking such important legal data as claim locations, options, terms, titles, encumbrances, etc. These are as important as the presence of profitable orebodies. The members of the Syndicate are experienced business men so, no doubt, have given these matters the attention they deserve.

L O C A T I O N

Merced, the nearest railroad point is 66 miles by paved highway S 54 W from the property. The property is 27 miles over the same paved highway (the main entrance road to the Yosemite National Park) N 39 E from Mariposa, the county seat of Mariposa County where the mining claims are recorded. To these distances must be added .63 of a mile S 6 E up about an 8% graded 3 ft. wide trail to the mine workings.

E L E V A T I O N S

On Map I is shown the topograhpy of the immediate area of the claims. This is traced from an enlargement (from 1^{in} = 2000 ft. to 1^{in} = 400 ft.) of that portion of the topographic map of the El Portal Quadrangle of the U.S. Geological Survey which was printed in 1949. It shows steep hillsides. There is a difference of elevation on the property of 1330 feet. The main working is about 550 feet above the highway.

P R O P E R T Y

The property consists of three unpatented lode mining claims, Blue Star #1, 2 and 3, as shown on Map #1 attached hereto.

There are no buildings nor equipment on the property other than personal property owned by the lessees, consisting of drill steel, hammers, picks, shovels, etc.

W O R K I N G S

Map #2 was constructed from a tape and compass survey made by P. De MICHELIS and me. It was tied into the sharp turn in the Hite Cove trail at the southerly end of the Blue Star #1 Claim (See Map #1). Map #2 shows all the prospect workings, cuts, pits and winzes which were called to my attention while at the property. There are eight in number. Ore occurs in only three of them as labeled on the map.

G E N E R A L G E O L O GY

The California State geological map (1916) shows a strip of metamorphosed Jurasic sediments about three miles wide extending about S 35 E from the City of Mariposa with large areas of granite outcroping on each side of it. These Jurasic rocks show on both sides of Merced River from Briceburg to Indian Flat just west of the area of Map I, and dominate in the ridge east of where the trail meets the highway. It is possibly a "roof pendant" underlain by the granite batholith. Beds strike and dip in many directions.

Besides the outcrop of the granite batholith on each side of the three mile wide strip of Jurasic metamorphic rocks, dikes of granite of considerable width (say 500 feet or so) cut into the metamorphic sedimentaries a mile or so before they terminate. The east wall of one of these dikes crosses the trail about where the trail enters the Blue Star #3 claim and probably continues under wash at least to a point 230 feet south of the

main working where the trail crosses the westerly side of the granite dike.

R O C K S

The Jurasic metamorphic sediments were originally deposited as a fine mud on the oceans continental shelf. On the outer reaches they were interdeposited with limy material which became limestone later. Closer to shore the mud was interdeposited with sometimes sand and sometimes with gravel. Geological processes converted the mud to shale, the sand to sandstone and the gravel to conglomerate. When the Tertiary granite lava which became the great Sierra Nevada batholith was intruded up towards the overlying sedimentary rocks, the whole mass of the latter were lifted several thousand feet, tilted, contorted, faulted, fractured and those nearest the granite magma were heated almost to a liquid and silicified to a hornstone. These geologic processes account for the complex nature of these rock occurrences. During the subsequent millions of years following down to the present, trillions of tons of the overlying sedimentary, metamorphic rocks and even much of the granite has been leached, weathered and transported towards the Nevada deserts and the sea by glaciers, rains and streams thus leaving the conditions which we see today.

The Granite lavas in such enormous masses remained covered by sedimentary rocks for millions of years until the Magmas

completely became coarsely crystalline solid granites. They solidified slowly from the outside towards their magmatic centers. This history accounted for fine grained granitic rocks near their contacts with the colder sedimentary rocks and increasing in coarseness towards the center of the mass. Sometimes the feldspar crystals, last to solidify, became as much as a foot in diameter which makes a good source of material for making porcelain. Also the varying chemical composition of the granite magma and the mixing action of the movement of it while still liquid cause hundreds of rock types to crystallize from it by the time it is completely solidified. These can range from dominant black biotite mica (called schlieren) to nearly white types such as aplite and alaskite which are composed of little more than quartz and feldspar. The probable average chemical composition of the Sierra Nevada batholith rocks would produce a rock type called quartz monzonite (sometimes called granodiorite).

The granites outcropping on the Blue Star group are dominantly a granite sand or granite laterite (disintegrated granite in place) due to weathering. This is dominantly only a few feet in thickness, varying to a semi-leached and thence to fresh fine-grained granite. The granites on these claims are parts of a dike which accounts for its finer texture.

Most of the Blue Star Claim #1 and the westerly half of #3 are covered with a foot or more of wash which conceals much geologic data which would be useful in determining all the

possibilities for commercial orebodies. The remaining half of the group expose outcrops of Jurasic partly metamorphosed sediments. No ore is found in them to date.

O R E

The developed ore is dominantly a dark gray mineralization with a microscopic silicious groundmass in which occur crystals of scheelite varying from ½ inch in diameter to almost microscopic size. There is also partially identifiable fine grained brassy colored mineral resembling pyrite. In all probabilities there are minute other minerals in the ore which are too fine to determine with a hand lens. The alteration of the host rock has been so complete by introduced minerals that it is impracticable to determine whether it was originally a granite or an altered shale rock. Although the gradation phases are dark gray in color, most of the evidence indicates that it originally was a granite. The evidence indicates that the ore occurs in discontinuous lenses completely surrounded by granite.

A S S A Y S

The ultra-violet light clearly indicates a dominant reaction of only scheelite present in an appreciable quantity. The weights of the different types indicate that the fine-grained compact ores with phenocrysts of scheelite less than one tenth of an inch in diameter may be a higher grade than those where the scheelite crystals are up to one half inch in diameter. The response to the ultra violet light is so positive that no sampling during mining will be necessary. After a limited experience, the operator can

determine what rock will pay to mine by use of the ultra-violet light.

Mr. P. DeMICHELIS says that the samples he has had assayed run from .59% WO_3 near the rim of the orebody to 3.08% WO_3 in the best concentration.

It is of interest to know that the syndicate received the first prize at a recent Mariposa County Fair for the best tungsten ore exhibit from new tungsten prospects during the past year.

U. S. GOVERNMENT ACTIVITY

On September 8, 1951 Chairman Lyndon B. Johnson (D. Tex.) of the Senate Arms Service Preparedness Subcommittee wrote a letter to W.C. Schroeder, Acting Administrator of the Defense Minerals Administration with a copy to Jess Larson, Director of the newly created Defense Minerals Procurement Agency in which he requested eleven sets of data concerning the marketing of ore produced by small operators whose ore assays from .3% to 1% tungsten. His inquiry especially requested data concerning what has been done in establishing depots and price quotations for the purchase by the U.S. Government of low grade tungsten ore. Also "9. What financial or other assistance has been recommended by the Defense Minerals Administration for the increase in nation's tungsten mill or refining capacity? Give us the details including the amount of money and capacity involved."

This offers a new alternative. If no market can be found for the ore already developed with a satisfactory profit from mining it, additional capital expenditures might be postponed

until the Syndicate can determine what the U.S. Government will do in the near future to assist the small operator. At least this evidence can be investigated still further while other plans are maturing.

ROAD TO MINE

The geological evidence indicates that the trail is in soil over hornstone for only about 1,200 feet down from the gulch just easterly of the barbwire fence gate. The balance of the trail of 2,100 feet probably is in soil over granite laterite which should be able to be removable by a bull dozer without drilling and blasting except where an occasional "nigger-head" of fresh granite is encountered. The probabilities are that the trail can be widened to a truck road for at least two thirds of the total length. Furthermore, it is possible that some of the trail over hornstone could be widened by the bull dozer.

CONCLUSIONS

1. The foot or so of soil which covers most of the westerly facing steep hillside materially reduced the ability of a geological engineer to secure the needed evidence with which to determine all of the ore-controls of this property in a one day reconnaissance examination.

2. The eight prospect workings driven to date does expose the best quality of tungsten (scheelite) ore I have seen in any of my field trips. The assay value will vary from one half to over three per cent. Mill values have been exposed for a length of forty feet in a N 40 W direction, for a depth of twenty-five feet

and a maximum horizontal width of twenty feet. (The maximum width at right angles to the dip may be not more than fifteen feet). Any tungsten prospect with such a showing is worthy of having more new capital spent cautiosly to determine more about the trend of its economic value.

3. The partly developed orebody is either an ore shoot in the form of a pitching chimney or a lens completely in a wide granite dike at least fifty feet from the nearest rock of sedimentary origin which contains some cherty limestone beds up to ten feet in width. So far, no other orebody has been exposed by prospecting which was called to my attention.

4. There are several other factors besides geological ore controls which have much to do with determining the profit nature of this enterprise. They are inter dependent. Some of them are itemized above under "U.S. GOVERNMENT ACTIVITY" and "LEGAL". The program to be followed is important.

R E C O M M E N D A T I O N S

1. Strip the soil from above the outcropping orebody so that all its exposed features can be evaluated to determine its commercial possibilites.

2. Investigate fully government aids to small tungsten miners both in practice and contemplated.

3. Make a survey of all ore buyers and treatment plants to which the Blue Star ore might be sent. The data needed from them should include per cent recovery of the mill, how much of your ore they can treat daily, what they will charge for milling a ton of ore, probable grade of your concentrates, what arrangement they

will make for your representative to check all steps in the process and the nature of the contract they are willing to sign.

4. Determine the cost of hauling and freight to each ore buyer, treatment plant or government stock-piling depots.

5. Cost of widening road from highway to mine.

6. Estimate cost of surface plant and equipment and cost of mining and delivering ore to trucks.

7. If from the above data and other cost factors you can calculate a satisfactory profit from the apparent developed ore now, then start truck road to the mine. In order to have bin room at the orebody of fifty feet, the switch-back road from the trail should start one hundred feet up the Hite Cove trail from the point the present foot trail to the workings starts.

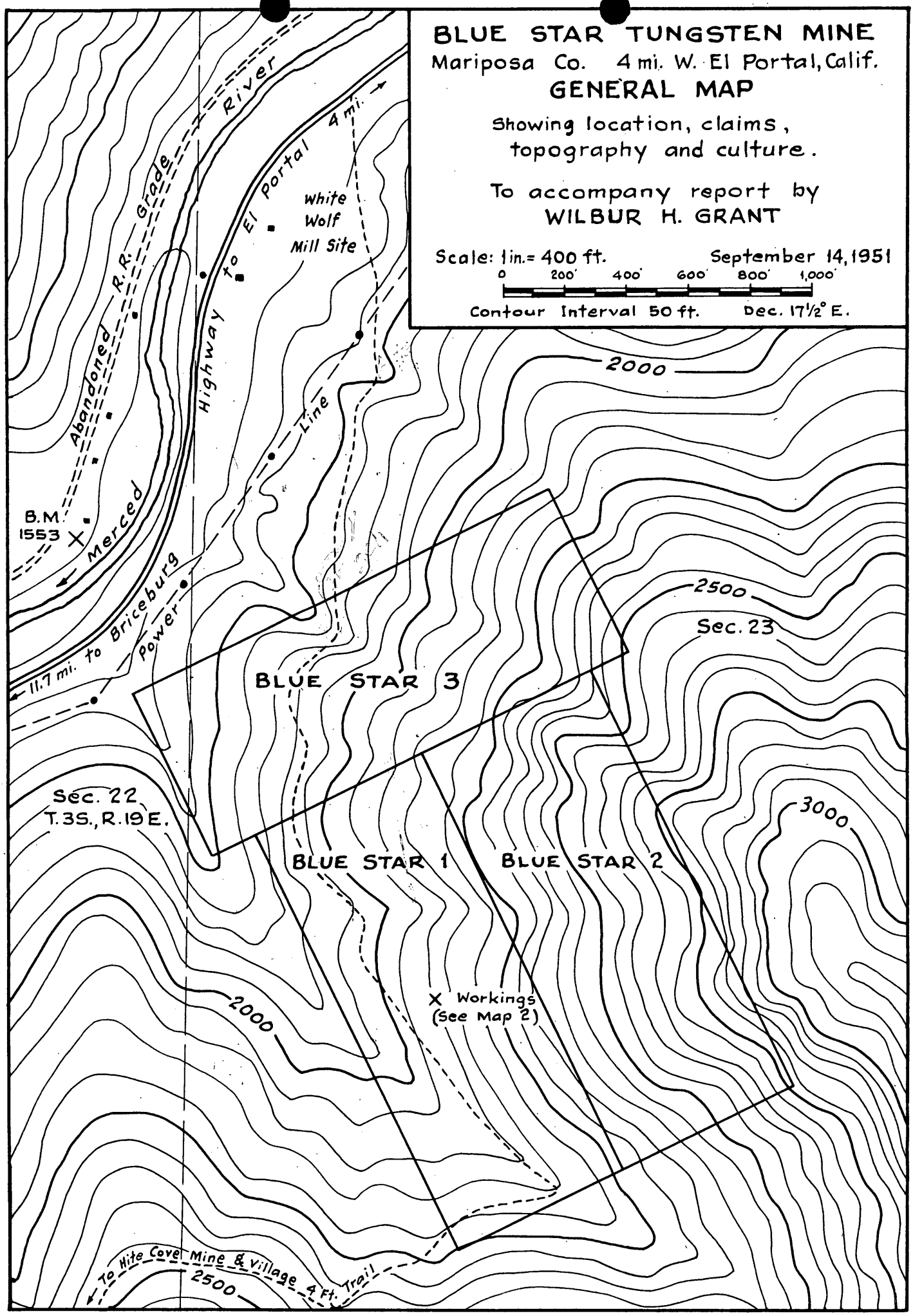
8. The best system for prospecting and development of this particular orebody is to use that followed by American pioneers and still used by Mexican miners. It is ~~to~~ either "follow the ore" or "stope-develop" it. By the latter method you will not miss any of the pay ore and at the same time you will have an income and need less new capital. Experience has shown that by these methods more ore will be marketed than can be estimated conservatively from the present available evidence.

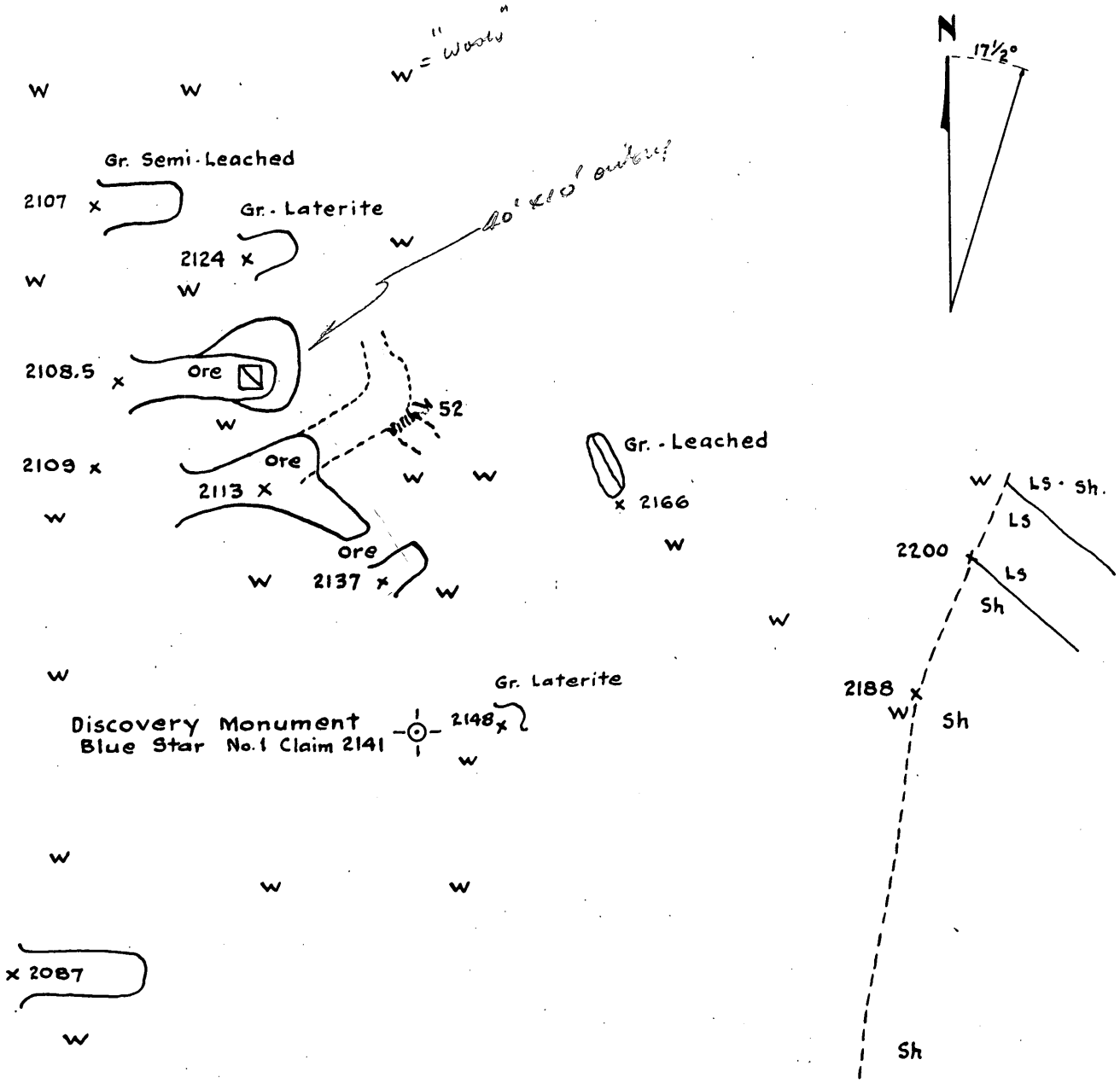
Respectfully submitted,

Wilbur H. Grant

San Francisco 4, California,
September 14, 1951.

A P P E N D I X


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi. W. El Portal, Calif.
GENERAL MAP
Showing location, claims, topography and culture.
To accompany report by
WILBUR H. GRANT
Scale: 1 in. = 400 ft.
September 14, 1951
0 200' 400' 600' 800' 1,000'
Contour Interval 50 ft.
Dec. 17½° E.
Abandoned R.R. Grade
Merced River
Highway to El Portal 4 mi.
White Wolf Mill Site
Power Line
B.M. 1553
11.7 mi. to Briceburg
2000
2500
3000
Sec. 23
Sec. 22
T.3S., R.19E.
BLUE STAR 3
BLUE STAR 1
BLUE STAR 2
X Workings (See Map 2)
To Hite Cove Mine & Village 4 Ft. Trail



BLUE STAR TUNGSTEN MINE

Mariposa Co. 4 mi. W. El Portal, Calif.

PLAN OF WORKINGS

To accompany report by
WILBUR H. GRANT

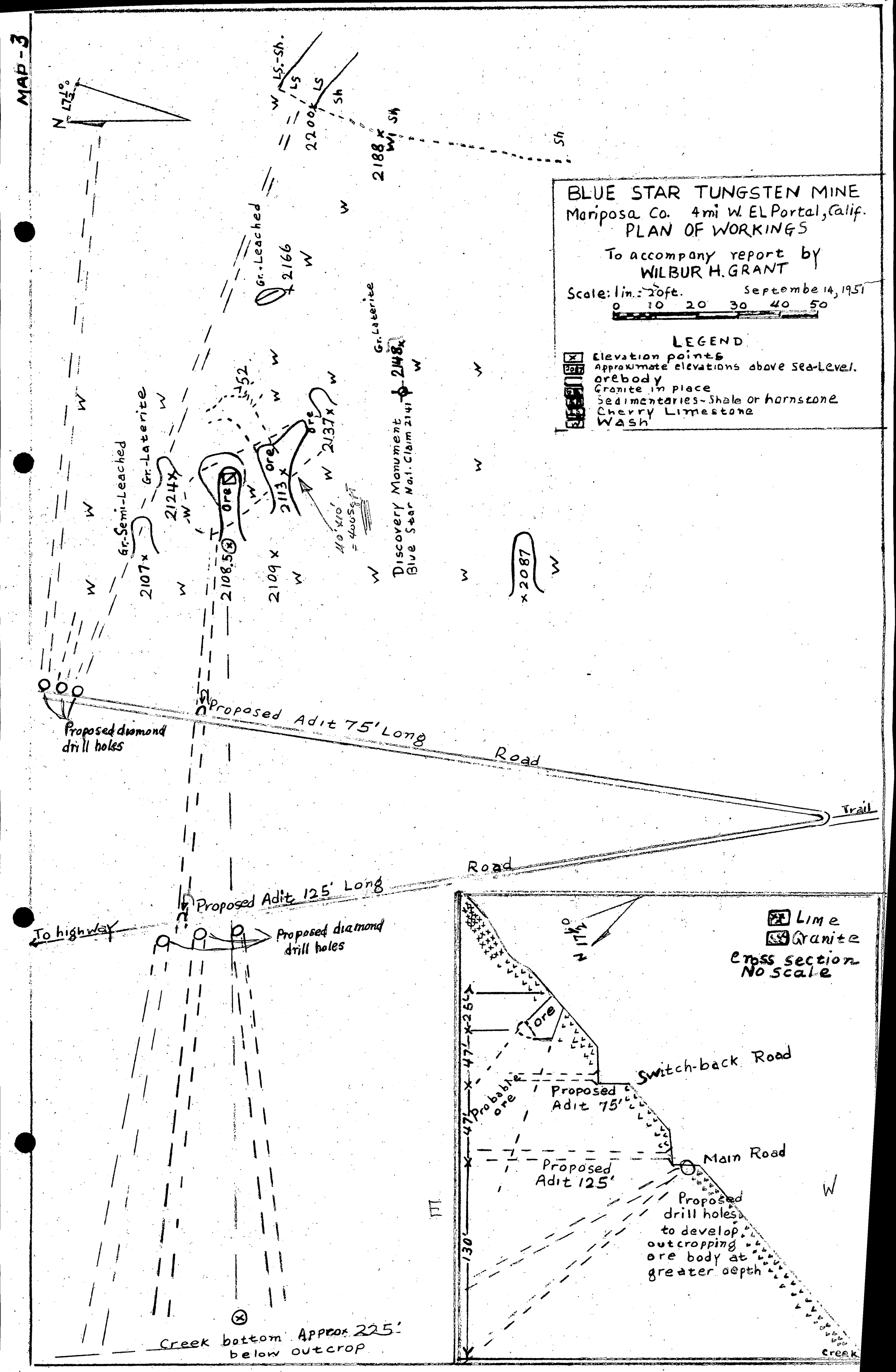
Scale: 1 in. = 20 ft. September 14, 1951

0 10 20 30 40 50

LEGEND

- X — Elevation points
- 2087 — Approximate elevations above Sea-Level.
- Orebody
- Gr. — Granite in place.
- Sh. — Sedimentaries - Shale or hornstone
- Ls — Cherty limestone
- W — Wash

MAP-3


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4mi W. El Portal, Calif.
PLAN OF WORKINGS
To accompany report by
WILBUR H. GRANT
Scale: 1in. = 20ft.
September 14, 1951
0 10 20 30 40 50
LEGEND
Elevation points
Approximate elevations above sea-Level.
orebody
Granite in place
Sedimentaries-Shale or hornstone
Cherry Limestone
Wash
N 17½°
LS-Sh.
LS
Sh
2200
2188
Gr.-Leached
2166
Gr.-Laterite
2148
52
Ore
2137
2124
2113
Gr.-Semi-Leached
2107
2108.5
2109
40'x10' = 400 sq ft
Discovery Monument
Blue Star Nat. Claim 2141
2087
Proposed diamond drill holes
Proposed Adit 75' Long
Road
Trail
Proposed Adit 125' Long
To highway
Proposed diamond drill holes
Creek bottom Approx 225' below outcrop
E
Lime
Granite
cross section
No scale
N 17½°
Ore
26'
47'
47'
130'
Switch-back Road
Probable ore
Proposed Adit 75'
Main Road
Proposed Adit 125'
Proposed drill holes to develop outcropping ore body at greater depth
W
Creek

Rec'd. S.H.
1/7/52

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

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Dear Sir:

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

Applicant Midland Mining Co., 461 Market St., San Francisco, Calif.

Docket No. 2192X

Commodity Tungsten

Amount $28,050.00

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

Sincerely yours,

C. D. Mitkenbow

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

Defense Minerals Exploration Administration

Review of Application for Exploration Assistance

Docket No. DMA 2192X

Commodity Tungsten

Total Amount $28,050.00

Govt. Participation 75%

1. Name and Address of Applicant Midland Mining Company
461 Market Street
San Francisco 5, Calif.

2. Location of Property Sec. 22; T3S; R19E; MDB&M
Mariposa County, California
4 Mi. S.W. from El Portal

3. Mineral or metal Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good XX - but small in area.

b) Poor

c) None

d) Don't know—needs field examination for checking and revised application.

e) Is there an alternative and favorable project? (If so, attach an explanation)

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

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes - See inclosures herewith.

a) MF-201? _____

b) MF-202 Has been filed

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

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Not mentioned in application

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

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

(Only form MF-103, June, 1951, is filed; have MF-100 filled out and filed).

Is a field check needed on this point? Don't know.

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

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

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

If not, what part of it is? _____

Is this part a worth-while exploration project?_____

d) Are the cost estimates detailed? **Not satisfactorily.**

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? **No** If so, attach a draft.

e) Are the cost estimates reasonable? **Yes**

f) Should more information be requested from applicant? **Yes**

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

11. Exhibit B (question 23-d)*

a) Is it applicable? **No**

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

c) Is a field check needed? **No**

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

a) Is it applicable? **No**

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed? **No**

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

a) Are there sufficient data? **Yes**

b) Is the schedule adequate for the work proposed? **Yes**

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

d) Are the proposed wages and salaries reasonable? **Yes**

e) Is a field check needed? **No**

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Yes - See attached sheet re item 17.

Reviewed by: Q. L. Brewer

Date Dec. 19, 1951

R. W. Gehon
Don Lemon

Review of Application for Exploration Assistance - Re: DMA 2192X-Tungsten

Item 17

Herewith are the following files:

1 Copy USGS memo, re this Docket No.

1 Copy of application, including Landlord's Subordination Agreement, assay certificate Pittsburgh Testing Laboratory, assay certificate Abbot A. Hanks, Inc., spectrographic certificate Abbot A. Hanks, Inc., mining lease and option, and reconnaissance report by Wilbur H. Grant.

Note that MF-103, June, 1951, only, has been filed. It is necessary to have MF-100 filed also, particularly as to items 6 and 14.

The necessity for your field investigation is easily seen when the applicant's proposed exploration program is compared with the report of engineer, Wilbur H. Grant. Grant (page 9 and 10) recommends (1) stripping of outcrop and evaluation of the exposed orebody, (5) road building, and (8) mining directly from outcrop, while the applicant proposes two exploratory adits, 2,000 feet of diamond drilling, road building, etc., all on a known outcrop 15 x 40 feet in area.

We should have a definite program developed by a field examination with sufficient additional supporting data.

Enclosures as indicated.

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

Rec'd. S-T.
1/7/52

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

Dear Sir:

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

Applicant Midland Mining Co., 461 Market St., San Francisco, Calif.

Docket No. 2192X

Commodity Tungsten

Amount $28,050.00

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

Sincerely yours,

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Defense Minerals Exploration Administration

Review of Application for Exploration Assistance

Docket No. DMA 2192X

Commodity Tungsten

Total Amount $28,050.00

Govt. Participation 75%

1. Name and Address of Applicant Midland Mining Company
461 Market Street
San Francisco 5, Calif.

2. Location of Property Sec. 22; T3S; R19E; MDB&M
Mariposa County, California
4 Mi. S.W. from El Portal

3. Mineral or metal Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good XX - but small in area.

b) Poor

c) None

d) Don't know—needs field examination for checking and revised application.

e) Is there an alternative and favorable project?
(If so, attach an explanation)

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

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? ~~Yes - See inclosures herewith.~~

a) MF-201? _____

b) MF-202 Has been filed

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

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Not mentioned in application

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

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

~~(Only form MF-103, June, 1951, is filed; have MF-100 filled out and filed).~~

Is a field check needed on this point? Don't know.

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

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

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

If not, what part of it is? _____

Is this part a worth-while exploration project?_____

d) Are the cost estimates detailed? **Not satisfactorily.**

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? **No** If so, attach a draft.

e) Are the cost estimates reasonable? **Yes**

f) Should more information be requested from applicant? **Yes**

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

11. Exhibit B (question 23-d)*

a) Is it applicable? **No**

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

c) Is a field check needed? **No**

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

a) Is it applicable? **No**

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed? **No**

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

a) Are there sufficient data? **Yes**

b) Is the schedule adequate for the work proposed? **Yes**

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

d) Are the proposed wages and salaries reasonable? **Yes**

e) Is a field check needed? **No**

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Yes - See attached sheet re item 17.

Reviewed by: Q. L. Brewer

Date Dec. 19, 1951

Review of Application for Exploration Assistance - Re: DMA 2192X-Tungsten

Item 17

Herewith are the following files:

1 Copy USGS memo, re this Docket No.

1 Copy of application, including Landlord's Subordination Agreement, assay certificate Pittsburgh Testing Laboratory, assay certificate Abbot A. Hanks, Inc., spectrographic certificate Abbot A. Hanks, Inc., mining lease and option, and reconnaissance report by Wilbur H. Grant.

Note that MF-103, June, 1951, only, has been filed. It is necessary to have MF-100 filed also, particularly as to items 6 and 14.

The necessity for your field investigation is easily seen when the applicant's proposed exploration program is compared with the report of engineer, Wilbur H. Grant. Grant (page 9 and 10) recommends (1) stripping of outcrop and evaluation of the exposed orebody, (5) road building, and (8) mining directly from outcrop, while the applicant proposes two exploratory adits, 2,000 feet of diamond drilling, road building, etc., all on a known outcrop 15 x 40 feet in area.

We should have a definite program developed by a field examination with sufficient additional supporting data.

Enclosures as indicated.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1981 JAN 7 AM 9:00

SAN FRANCISCO, CALIFORNIA

Form MF-100
(May 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. _____

Date received _____

MIDLAND MINING COMPANY
461 MARKET St.
SAN FRANCISCO 5. CALIFORNIA

Name and address of applicant

Date February 28, 1952

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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (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? Will be Tungsten (WO_3)
   (b) What are the byproducts, if any? none
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. 70 Ft. of Adit.
   (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.

   DEPARTMENT OF THE INTERIOR
   Defense Minerals Administration
   RECEIVED
   MAR 4 1952
3. For each operation listed above supply the following:
   (a) Distance and direction from nearest town and shipping point. About 63 miles.
   (b) Mining district. Hites Cove mining District.
   (c) Township, Section, Range. Section 22--T. 3 S.-- I9 E.
   (d) County, State. Mariposa County California.
4. (a) State whether or not property is now in operation, and if in operation, by whom operated. The property is n not in operetion.
   (b) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee. We lease the property.
   - ☐ Contractor.
5. Number of years in production ____none____

   If not in production or operation, estimated date when production will begin Estimate production wollbegin 7-I-"52
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. (A) Paul Aglietti mining off and on since 1941. (B) Peter De Michelis mining since 1934
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. No History- New discovery.
   (b) State briefly the known history and production of adjoining and neighboring properties. Only Gold property near by.
   (c) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

   Report by Mr. Wilbur H. Grant, ounsulting Engineer and geologist, accompanies applicant application for an exploration loan.

16—63792-2

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)
Peter De Michelis	Partner						
Paul Aglietti	"						
Morris M. Grupp	"						
Clarence M. Frank	"						
John Bufalini	"						
Max Friedman	"						
Joseph Romeo	"						
	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. Not applicable

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. See report by Mr. Wilburn M. Grant which accompanies applicant loan application.

(*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. Deposit is only a prospect-assays given in loan application

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show computed. Tabulated total ore reserve as follows: Not applicable.

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: Deposit is one mile from U.S. Hiway 140. About Two miles from Indian Flat.
Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply: Source of water is creek 300 Ft. from deposit- ample water for mining operation.
State source and quantity of water available for operations and whether sufficient for all seasons.
Unlimited water in Mercede River, about one mile from deposit.

15. Power:
State amount of power used, rate per hour, and source thereof. None used at present- High tension line about one mile from deposit.

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

17. Equipment and Facilities: 3 miners.

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. Small shack only.

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.

Midland Mining Company
(Name of company)

By Paul Schlitt
(Signature of authorized official)

February 28, 1952
(Date)

Partner
(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

Form MF-100
(May 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. _____

Date received _____

MIDLAND MINING COMPANY
461 MARKET St.
SAN FRANCISCO 5, CALIFORNIA

Name and address of applicant

Date ~~Prebuary 28 1952~~

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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (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? Will be Tungsten (WO_3)
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). 70 Ft. of Adit
   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. About 63 miles
   (*b*) Mining district. Hites Cove mining District
   (*c*) Township, Section, Range. Section 22--T. 3. S.--R. 19 E.
   (*d*) County, State. Mariposa County California.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. The property is not in operation.
   (*b*) Are you operating this property as:
   ☐ Owner.
   ☒ Lessee. We lease the property.
   ☐ Contractor.
5. Number of years in production none
   If not in production or operation, estimated date when production will begin Estimate production will begin 7-1-'52
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. (A) Paul Aglietti mining off and on since 1941. (B) Peter De Michelis mining since 1934
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. No History- New discovery.
   (*b*) State briefly the known history and production of adjoining and neighboring properties. Only Gold property near by.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
   Report by Mr. Wilbur H. Grant, consulting Engineer and geologist, accompanies applicant application for an exploration loan.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

792-2

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)
Peter De Michelis	Partner						
Paul Aglirtti	"						
Morris M. Grupp	"						
Clarence M. Frank	"						
John Bufalini	"						
Max Friedman	"						
Joseph Romeo	"						
	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. Not applicable

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. See report by Mr. Wilburn H. Grant which accompanies applicant loan application.

16—63792-1

(*b*) If deposit is other than [illegible]er:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve. Deposit is only a prospect-assays given in loan application.

(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: Not applicable.

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, even 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: Deposit is one mile from U.S. Hihway 140, about Two miles from Indian Flat

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

14. Water Supply: Source of water is creek 300 Ft. from deposit- ample water for mining operetion.

State source and quantity of water available for operations and whether sufficient for all seasons of year. unlimited water in Mercede River about one mile from deposit.

15. Power:

State amount of power used, rate per hour, and source thereof. None used at present- Hogh tension line about one mile from pdeposit.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. 3 miners.

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. Small shack only.

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.

Midland Mining Company
(Name of company)

By Paul Aylett
(Signature of authorized official)

February 28 1952
(Date)

Partner
(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

Form MF-100
(May 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. _____

Date received _____

MIDLAND MINING COMPANY
461 MARKET St.
SAN FRANCISCO 5, CALIFORNIA

Name and address of applicant

Date Frebuary 28 1952

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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (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? Will be Tungsten (WO_3)
   (*b*) What are the byproducts, if any? none
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. 70 Ft. of Adit
   (*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. About 63 miles
   (*b*) Mining district. Hites Cove mining District
   (*c*) Township, Section, Range. Section 22--T. 3. S.--R. 19 E.
   (*d*) County, State. Mariposa County California.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. The property is not in operation.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee. We lease the property.
   - ☐ Contractor.
5. Number of years in production none

   If not in production or operation, estimated date when production will begin Estimate production will begin 7-1-"52
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. (A) Paul Aglietti mining off and on since 1941. (B) Peter De Michelis mining since 1934
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. No History- New discovery.
   (*b*) State briefly the known history and production of adjoining and neighboring properties. Only Gold property near by.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

   Report by Mr. Wilbur H. Grant, cunsulting Engineer and geologist, accompanies applicant application for an exploration loan.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1952

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)
Peter De Michelis	Partner						
Paul Aglirtti	"						
Morris M. Grupp	"						
Clarence M. Frank	"						
John Bufalini	"						
Max Friedman	"						
Joseph Romeo	"						
	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. Not applicable

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. See report by Mr. Wilburn H. Grant which accompanies applicant loan application.

(*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. Deposit is only a prospect-assays given in loan application.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show computed. Tabulated total ore reserve as follows: Not applicable.

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: Deposit is one mile from U.S. Hiway 140, about Two miles from Indian Flat
Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply: Source of water is creek 300 Ft. from deposit- ample water for mining operation.
State source and quantity of water available for operations and whether sufficient for all seasons of year.
unlimited water in Mercede River about one mile from deposit.

15. Power:
State amount of power used, rate per hour, and source thereof. None used at present- High tension line about one mile from deposit.

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

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. Small shack only.

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.

Midland Mining Company
(Name of company)

By Paul Hyatt
(Signature of authorized official)

February 28 1952
(Date)

Partner
(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

FILE COPY
SURNAME:

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

Selfridge
Smith

FEB 29 1952

Midland Mining Company
461 Market Street
San Francisco, California

Re: Docket No. DMA 2192X - Tungsten
Blue Star Claims
Mariposa County, California

Dear Sirs:

Receipt is acknowledged of your letter dated February 18, 1952, which explains that Mr. Peter De Michelis holds the legal title to the lease in his sole name.

We shall contact you at a later date in the event that an assignment of the lease to the partnership is required by this agency.

Sincerely yours,

George C. Selfridge

cc 2/29

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

GGGentry'lm
2/28/52

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 26 1952

February 18 1952.

Docket No. DMA 2192X - Tungsten
Blue Star Claims - Mariposa
County, California

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

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

Gentlemen:

In reply to your letter of February 8, 1952, requesting information as to whether or not Mr. DeMichelis has assigned the lease to the Midland Mining Company and/or to Mr. Aglietti, the legal status of the lease at present is that Mr. Peter DeMichelis holds the legal title to the lease in his sole name. However, there is a partnership agreement between seven parties, one of whom is Mr. DeMichelis, in which, among other things, the following provisions appear:

> ". . . and that in the event that actual conveyance of said undivided one-seventh (1/7th) interests of, in and to said lease shall not be made, the Lessees under said lease shall hold said lease in trust for the benefit of all of the parties hereto in the amount of an undivided one-seventh (1/7th) interest for each of the parties hereto including the Lessees."

This provision hereinabove cited is in force and effect since there has been no legal conveyance of the lease to the partners. Consequently at present Mr. DeMichelis holds the legal title in the lease as trustee for the benefit of the seven partners.

I trust that this will serve to answer your inquiry, but if not and if further details are required I shall be happy to furnish you with a copy of the actual mining partnership agreement, and if necessary we can procure an assignment of the lease to the individual partners or to the partnership. However, unless otherwise necessary, we prefer to have the title to the lease remain as it is.

Yours very truly,

Paul Aglietti

Sell file

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

DMEA file

Mr Durham suspended
Original
HB
12/28/51

Tom Lemmon

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Dear Sir:

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

Applicant Midland Mining Co., 461 Market St., San Francisco, Calif.

Docket No. 2192X

Commodity Tungsten

Amount $28,050.00

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

Sincerely yours,

C. O. Mittendorf

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Defense Minerals Exploration Administration

Review of Application for Exploration Assistance

Docket No. DMA 2192X

Commodity Tungsten

Total Amount $28,050.00

Govt. Participation 75%

1. Name and Address of Applicant Midland Mining Company
461 Market Street
San Francisco 5, Calif.

2. Location of Property Sec. 22; T3S; R19E; MDB&M
Mariposa County, California
4 Mi. S.W. from El Portal

3. Mineral or metal Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good XX - but small in area.

b) Poor

c) None

d) Don't know—needs field examination for checking and revised application.

e) Is there an alternative and favorable project?
(If so, attach an explanation)

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

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes - See inclosures herewith.

a) MF-201? _____

b) MF-202 Has been filed

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

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Not mentioned in application

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

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

(Only form MF-103, June, 1951, is filed; have MF-100 filled out and filed).

Is a field check needed on this point? Don't know.

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

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

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

If not, what part of it is? _____

Is this part a worth-while exploration project?_____

d) Are the cost estimates detailed? Not satisfactorily.

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? Yes

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

11. Exhibit B (question 23-d)*

a) Is it applicable? No

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

c) Is a field check needed? No

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

a) Is it applicable? No

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed? No

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

a) Are there sufficient data? Yes

b) Is the schedule adequate for the work proposed? Yes

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

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Yes - See attached sheet re item 17.

Reviewed by: Q. L. Brewer

Date Dec. 19, 1951

Review of Application for Exploration Assistance - Re: DMA 2192X-Tungsten

Item 17

Herewith are the following files:

1 Copy USGS memo, re this Docket No.

1 Copy of application, including Landlord's Subordination Agreement, assay certificate Pittsburgh Testing Laboratory, assay certificate Abbot A. Hanks, Inc., spectrographic certificate Abbot A. Hanks, Inc., mining lease and option, and reconnaissance report by Wilbur H. Grant.

Note that MF-103, June, 1951, only, has been filed. It is necessary to have MF-100 filed also, particularly as to items 6 and 14.

The necessity for your field investigation is easily seen when the applicant's proposed exploration program is compared with the report of engineer, Wilbur H. Grant. Grant (page 9 and 10) recommends (1) stripping of outcrop and evaluation of the exposed orebody, (5) road building, and (8) mining directly from outcrop, while the applicant proposes two exploratory adits, 2,000 feet of diamond drilling, road building, etc., all on a known outcrop 15 x 40 feet in area.

We should have a definite program developed by a field examination with sufficient additional supporting data.

Enclosures as indicated.

400
FILE COPY
SURNAME:

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

FEB 8 1952

Midland Mining Company
461 Market Street
San Francisco, California

Re: Docket No. DMA 2192X - Tungsten
Blue Star Claims
Mariposa County, California

Dear Sirs:

A further examination of the lease agreement dated July 22, 1951, shows that the said lease agreement is between W. J. Barnett and L. W. Barnett, called the First Parties, and Peter J. De Michelis, called the Second Party.

However, it is noted that your application, referred to in the subject docket, is signed by Peter De Michelis and Paul Aglietti as partners, apparently operating as the Midland Mining Company.

We would like to know if Mr. De Michelis has assigned his lease to the Midland Mining Company and/or to Mr. Aglietti since the present status of the lease is confusing.

In the event that an assignment has been made by Mr. De Michelis, we will require copies of said assignment, together with copies of the required notice to W. J. Barnett and L. W. Barnett as defined in paragraph (d) on page four of the lease agreement dated July 22, 1951.

May we hear from you at your earliest convenience.

Sincerely yours,

George G. Selfridge

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

GCSelf

GGGentry:ls
2/6/52

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

FILE COPY
SURNAME:

Brewer

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

110

BN

JAN 4 1952

Selfridge

Midland Mining Company
461 Market Street
San Francisco, California

Re: Docket No. DMA-2192X
Tungsten
Mariposa County, California

Gentlemen:

Your application for assistance in exploring your tungsten property in Mariposa County, California, Docket No. DMA-2192X, has been reviewed by the Iron and Ferro-Alloy Division of the Defense Minerals Exploration Administration and has been referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination.

The Regional office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

1-4-52

C. O. Mittendorf (for)

Acting Administrator
Defense Minerals Exploration
Administration

1-4 field

COMITTENDORF/hb

Copy to: Adm. Reading File
H. C. Miller, Region III
Mr. Selfridge, Rm. 3538
DMEA Files

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : D.M.E.A. DATE: December 3, 1951

FROM : D. M. Lemmon, U. S. Geological Survey

SUBJECT: Exploration application ($28,050) DMA 2192 - Tungsten
Midland Mining Co.
461 Market St.
San Francisco 5, Calif.

Property: Blue Star Claims
Sec. 22, T. 3 S., R. 19 E.
Hites Cove Mining District
Mariposa County, California
4 miles SW from El Portal

Proposal: Complete road, drive 200 feet of adits, do 2,000 feet of diamond drilling, with costs as follows:

2 adits 50 and 100 feet below outcrop - 200 ft at $25	$ 5,000
2,000 feet diamond drilling at $7	14,000
3/4 mile road	2,000
Building	1,000
Supervision, 6 months at $500	3,000
Rental of equipment, fuel, powder, etc.	3,050
	$ 28,050

The application is accompanied by a brief report prepared by Wilbur H. Grant, consulting geologist and engineer, San Francisco. Mr. Grant spent one day at the property, prepared a map, and recommended a limited exploration program, much less ambitious than the one proposed by the applicants. Mr. Grant took no samples but relied on the assays of 5 samples taken by the applicants.

Mineralization: An exposure of scheelite-bearing rock (tactite ?) 15 by 40 feet in size is opened to a depth of 25 feet by topography and a pit. Five samples taken by the owners gave the following assays in percentage of WO_3: 0.39, 0.67, 0.74, 2.55, and 3.08. From the data given, it appears that the weighted average is about 1.0% WO_3.

The ore is not adequately exposed at the surface, and might extend somewhat farther beneath soil and detritus. The ore body appears to be surrounded by granite.

Conclusions: The exploration proposal made by the applicant is not acceptable and is not in accordance with recommendations of the applicant's consultant.

If the data submitted is correct, the following program might be justified, in stages:

1) Strip surface and sample.
2) If sampling successful, build road.
3) Rent compressor and drill. Start shipping from open pit. Ore must be rich enough to stand 190 mile haulage to mills at Consolidated Tungsten Co. or Tulare County Tungsten Co.
4) Drive adit or sink shaft in ore.

Recommendation: This property apparently has not been examined by the Geological Survey or Bureau of Mines.

It is recommended that the field team, Region III, San Francisco, be requested to examine the prospect. If exploration is warranted, an acceptable program should be discussed with the applicants.

Don Lemmon

OK. Robert W. Geehan

Mr. Peter De Michelis, Partner
Midland Mining Company
461 Market Street
San Francisco 5, California

Subject: DMA-2192
Re: Exploration Loan
Blue Star Tungsten Mine

My dear Mr. De Michelis:

This will acknowledge receipt of your application dated October 10, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2192 and referred to the Ferro Alloys Branch.

Kindly refer to DMA- 2192 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMA-2192
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

RECEIVED 1951 DEPARTMENT OF THE INTERIOR Defense Minerals Administration

Name and address of applicant

MIDLAND MINING CO
(Peter De Michelis and Paul Agliotti, Partners)
461 Market St.,
San Francisco 5, Calif.

Date October 10th 1951

If you have already filed MF-100, give date filed June 1951 not rec'd in R+R., type of assistance requested none,

DMA Docket Number (if available) ~~none~~ 2192

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

MIDLAND MINING CO.
(Name of company)

X By Peter De Michelis
(Signature of authorized official)

By Paul Gluth

October 10th 1951
(Date)

Partners
(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—64067-2

MIDLAND MINING CO., 461 MARKET ST., SAN FRANCISCO, 5, CALIFORNIA

RIDER TO FORM MP-103

1. (a) Those certain unpatented mining claims, in the Hites Cove mining district, more particularly described as follows:

BLUE STAR TUNGSTEN #1.
Located May 22nd 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 408, Mariposa County Records

BLUE STAR TUNGSTEN #2
Located May 22nd, 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 409, Mariposa County Records.

BLUE STAR TUNGSTEN #3
Located May 22nd, 1951
Recorded June 11th, 1951 in Vol. A-2 of Mining Records on page 418, Mariposa County Records

(b) See lease attached

(c) Section 22 - T. 3. S - R. 19 E.

Note 1 - Both areas are the same
Note 2 - See attached land lord suburdination agreement

2. (a) Tungsten (Wo 3)

(b) See attached reconnaissance report of Mr. Wilbur H Grant and Assay reports of Pittsburg and Abbott A Hanks Inc.

3. (a) Step 1. Finish road including switch-backs to terminate 50 ft. under present workings.

Step 2. Drive 75 ft adit from switch-back road level to intercept ore body and explore ore at this point. Adit approx. 50 ft. below present workings.

Step 3. Drive 125 ft. adit 50 ft. lower in elevation and on lower road level to intercept ore body at this point and explore same.

Step 4. Diamond drilling program:

1. Drill several holes from lower road level to develop ore body of present workings at greater depth (approx 225 ft).

2. Drill several holes from upper road level (approx. 50 ft. below present workings) and slightly to the north for the purpose of developing new ore bodies.

Total cost of the project: $28,050.00

Note: The above work to be done successively with little change, providing each step in program proves successfully. If not, then the necessary changes shall be made in accordance to necessity.

(b) Six months.

4. See attached Map No. 3

5. None

6. Small tool house, labor and material: $500.00

   3/4 of mile road: $2000.00

   Rock soot over road, labor and material $500.00

7. (a) Rental compressor, jack hammer at $200.00 per mo.: $1200.00

   (b) None

   (c) None

8. Three miners at $15.00 per day.

   One supervisor at $500.00 per month.

9. Recapitulation of costs based on a six months period of operation:

200 ft of tunnel at $25.00 per foot	$5000.00
2000 ft diamond drilling (contract) at $7.00 per ft	14000.00
Supervision at $500.00 per month	3000.00
Sampling and assaying	400.00
Gasoline and oil at $75.00 per month	450.00
Office stationary, clerical services etc at $100.00 per month	600.00
Small tool house, labor and material	500.00
3/4 mile road	2000.00
Rental of compressor, jack hammers at $200.00 per mo.	1200.00
Rock shoot over road	500.00
Compensation insurance, social security	400.00
Total costs based on a six months period of operation	$28050.00

10. (a) We are prepared to invest $7012.50

    (b) Yes

11. We have already spent over $2000.00 opening the property

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Mariposa, State of California, described in a certain Exploration Project Contract dated _____, 195__, between _____,

the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 22, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 18th day of October, 195 1

William J. Barnett
Lemuel W. Barnett

United States of America
Yosemite National Park

U. S. GOVERNMENT PRINTING OFFICE 16—64152-1

On this 18th day of October, 1951, before me, Gene J. Ottonello, U. S. Commissioner, in and for the said Yosemite National Park, Northern District of California, duly commissioned and sworn, personally appeared William J. Barnett and Lemuel W. Barnett, 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.

GENE J. OTTONELLO
UNITED STATES COMMISSIONER
YOSEMITE NATIONAL PARK
CALIFORNIA

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

July 16, 1951

DEPOSITED BY P. J. Feykert
617 Bryant Street
San Francisco, California

SAMPLE OF ORE

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER Value @ $	Percentages	
32002	#1					Tungstic Oxide	0.67
03	#2					" "	2.55
04	#3					" "	0.74

We hereby certify that the above originates from ore samples drawn from Blue Star Tungsten Mine, as follows:

#1 - Outer edge - lenght of sample 9 ft
#2 Center ore - 10 tons on dump
#3 Inner edge - lenght of sample 7 ft

MIDLAND MINING CO.

By Paul Iglieti

ABBOT A. HANKS, INC.
Original Signed by
P. T. BEE

bob

LABORATORY REPORT
ABBOT A. HANKS, INC.
ENGINEERS, ASSAYERS, CHEMISTS, METALLURGISTS
CONSULTING - TESTING - INSPECTING
ESTABLISHED 1866
624 SACRAMENTO STREET
SAN FRANCISCO 11, CALIFORNIA
TELEPHONE GARFIELD 1-1697

Lab. No. 31738 Date July 9, 1951

Submitted by Fair Manufacturing Co.
617 Bryant Street
San Francisco, California

Sample Mark #2

QUALITATIVE SPECTROGRAPHIC ANALYSIS
Metals Found and Estimated Percentage Range

Less than .03%	.03% to .30%	.30% to 3%	3% to 30%	30% to 100%
Titanium Copper Molybdenum Vanadium Nickel Cobalt Chromium	Manganese Potassium	Aluminum Calcium Magnesium Sodium	Iron Silicon Tungsten	

We hereby certify that the above ore samples originate from BLUE STAR TUNGSTEN MINE.

MIDLAND MINING CO

By Paul Hallett

Remarks

RESPECTFULLY SUBMITTED,
ABBOT A. HANKS, INC.
Original Signed by
By P. T. BEE
Spectro-Chemist

bob

FORM A-5

FORM 407-A

PITTSBURGH TESTING LABORATORY

ESTABLISHED 1881

PITTSBURGH, PA.

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS OR EXTRACTS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

ORDER No.

LABORATORY No. 26907

CLIENT'S No.

051 HOWARD STREET
SAN FRANCISCO 5, CALIFORNIA

FILE No.

REPORT

September 10, 1951

Midland Mining Company
461 Market Street
San Francisco, California

Subject: Samples (2)
Tungsten

Results:

Sample #1	Center of Ore	3.08% WO_3
Sample #2	Contact Zone, approx. 2 ft on outskirts of ore body	0.39% WO_3

Respectfully submitted,

PITTSBURGH TESTING LABORATORY

Clyde B. Gentle

District Manager

WPS/Sml
cc: Above-5

MINING LEASE AND OPTION

THIS AGREEMENT, made this 22nd day of July, 1951 between W. J. BARNETT and L. W. BARNETT of El Portal, California, hereinafter called First Parties, and PETER J. De MICHELIS of San Francisco, California, hereinafter called Second Party,

WITNESSETH:

1. That for and in consideration of the rents, covenants, payments and agreements hereinafter contained, to be kept, paid and performed on the part of the Second Party, First Parties do hereby lease unto Second Party, the following described real property located in the County of Mariposa, State of California, to wit:

Those certain unpatented mining claims, in the Hites Cove Mining District, more particularly described as follows:

Blue Star Tungsten No. 1
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 408, Mariposa County Records.

Blue Star Tungsten No. 2
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 409, Mariposa County Records.

Blue Star Tungsten No. 3
Located May 22, 1951
Recorded June 11, 1951 in Vol. A-2 of Mining Records at page 418, Mariposa County Records.

First Parties warrant that there are no liens or encumbrances against said mining claims.

2. This lease shall run for a period of ten (10) years from date hereof and so long thereafter as minerals in paying quantities can be produced, saved and sold thereon.

3. Upon execution of this agreement, Second Party agrees to pay to First Parties the sum of Two Hundred Dollars ($200.00) and in consideration of this payment First Parties grant to Second Party the right to enter upon said above described properties for the purpose of prospecting and sampling same, surveying and

Checking property lines and any other work Second Party may deem necessary for proper development of the properties.

On or before thirty (30) days after signing of this agreement, subject to the term herein, Second Party agrees to pay to First Parties a further sum of Two Hundred Dollars ($200.00), per month for nine months, to be paid not later than the 5th day of each month from date of the first of said payments within which Second Party agrees to commence further prospecting and development of the above described mining property.

4. Commencing within one (1) month after the expiration of the above nine (9) months period, Second Party shall make minimum payments of Four Hundred Dollars ($400.00) per month to First Parties in the manner as hereinafter described.

5. Second Party agrees to pay to First Parties a royalty of Six Per Cent (6%) of the value of all minerals produced, shipped and sold from the above described leased premises. The 6% royalty means 6% of the net returns from proceeds of any ore or concentrates shipped and sold to a buyer and the net returns shall mean the total sum paid to Second Parties by any buyer. Said royalty payments to be made to First Parties within ten (10) days from and after receipt by Second Party of said proceeds from buyer. Second Party to furnish First Parties, at time of each payment, a duplicate statement of account between second Party and buyer covering such payment made by buyer.

6. Second Party agrees with First Parties as follows:

(a) To enter upon said properties and to work same as a mine for the production of tungsten and any other valuable minerals that may be found and produced profitably.

(b) All mining shall be done in a minerlike fashion and in conformity with all State and Federal laws and regulations pertaining to mining, with due regard to safety, development and preservation of said premises as a workable mine.

(c) To commit no waste and do no act thereon which will impede mining operations or impair the operating condition of said mining claims, and suffer no default which might in any manner involve the First Parties in liability of any kind or character.

(d) To permit the First Parties or their authorized representatives at all reasonable times to have access to any and all workings in or on said premises for the purpose of inspecting or sampling same.

(e) At all times to keep an accurate set of accounts and records of all production, shipments, and receipts, which accounts and records shall be available for inspection by First Parties at any reasonable time.

(f) To, at all times during the term hereof, keep and save First Parties and the premises free and clear of all costs, liens and encumbrances of every nature whatsoever made or suffered by Second Party, and to do no act or thing which shall constitute a cloud upon the First Parties title to the aforesaid property.

(g) To carry all necessary Workmens Compensation Insurance and to comply with all State and Federal laws pertaining to the safety of employees.

(h) If this lease be terminated before completion of all the terms thereof, the Second Party agrees to deliver to the First Parties the said premises in good condition and repais.

7. It is mutually understood and agreed as follows:

(a) That in the event Second Party fails to perform any covenants or any other provision of this lease, that all rights and privileges of the Second Party under the terms of this lease may, at the option of the First Parties, be terminated in the manner hereinafter set out.

(b) In the event of termination of this lease prior to the completion of all the terms hereof, the Second party shall have the right to remove all machinery and equipment from said property within a period of ninety (90) days after termination of the lease.

(c) That all State and County Taxes levied against the property and mining machinery and equipment and improvements be paid by the Second Party when they become due and before delinquency.

(d) The Second Party shall have an assignable right and interest in this lease to such responsible persons who shall assume this lease and the agreement for payment of overriding royalty made by second party with Hazel Ayers and Herbert Merrill this date and agree to be bound by the terms hereof. No assignment hereof to be made without the Second Party having first given to the First Parties at least ten (10) days written notice of his intention to assign his interest herein, said notice to containthe name and address of any proposed assignee hereof.

(e) In the event there is a default on the part of the Second Party in any of the covenants or terms of this lease and the default shall continue for a period of thirty (30) days thereafter First Party may serve written notice of default on Second Party, First Parties may finally terminate this lease by giving written notice of their final termination of this lease; and upon such final termination all rights of Second Party in and to said real property shall cease and terminate, save and except the right to remove their personal property, machinery and equipment within a period of ninety (90) days after such termination.

8. It is recognized by all parties hereto that tungsten prices have fluctuated and that there are times when tungsten cannot be mined except at a loss, and it is recognized by all parties hereto that at the present time a favorable market exists for tungsten; and it is expected that Second Party will use diligence in mining the maximum amount of tungsten that is reasonably possible under the circumstances during the period when tungsten price is high. Should the price of tungsten drop so that it is impossible to operate the property except at a loss, then Second Party need not operate said mine for a period of not to exceed six (6) months without any penalties and Second Party shall be

relieved of making the minimum monthly payments as specified. If the non-operation of said mine shall exceed a period of six (6) months, then Second Party must pay to First Parties the sum of One Hundred Dollars ($100.00) per month, provided further that the suspension of operations under this provision need not be permitted by First Parties for a period longer than twelve (12) months.

9. It is expressly agreed that delays or failure to operate said mine when caused by strikes, lock-outs, act of God, military orders or other government interference with operations, inability to get materials after due diligence, or any other cause beyond the control of Second Party, that during such period of time when mining operations have been suspended that Second Party shall not be penalized or held to be in default, and the obligation to pay the minimum monthly payments shall also be suspended, but as soon as with reasonable diligence said mine can again be operated, Second Party must again perform all the terms of this lease.

10. Second Party shall have the option of terminating this lease by the giving of written notice of such intention to First Parties, together with possession of said properties and thereupon be relieved of all future obligations hereunder, including the payment of any monies becoming due and payable thereafter, but such surrender shall not release Second Party from any obligations or liability theretofore incurred by them hereunder.

11. First Parties, in Consideration of this agreement, do hereby grant to the Second Party during the term of this agreement and so long as Second Party shall not be in default hereunder, the exclusive right and option to purchase the above described property for a total purchase price of Eighty Thousand ($80,000.00) and First Parties agree that all royalty payments of six per cent (6%) and any other payments of any kind made from any source by Second Party to First Parties shall be applied on the purchase price; and First Parties agree that when they have received the purchase price of $ 80,000.00 that they will,

by proper conveyance convey all of the above described premises to the Second Party.

12. It is understood and agreed between all parties hereto that the minimum monthly payment of Four Hundred Dollars ($400.00) mentioned in paragraph 4 hereof, may be covered by royalty payment or in the event the royalty payments required to be made hereunder shall not equal $400.00 per month then Second Party shall pay such additional amount as may be required to bring the total monthly payment up to $400.00 per month, the minimum monthly payment required to be made hereunder, and shall be paid to the First Parties at their address shown hereinafter.

13. Any notices, letters or other communications, required in connection with any matters arising under the within lease and option shall be directed to the respective parties here at the address following their respective names:

W. J. Barnett and L. W. Barnett,
P.O.Box 16,
El Portal, California

Peter J. De Michelis,
142 Oxford Street,
San Francisco, California.

If any of the above parties change their addresses they shall give written notice to the other parties and upon receipt of notice of such change, the new address shall be controlling hereunder.

14. Second Party agrees that he will perform all assessment work on the above described property which is required by law of the United States and record proof of same, to keep said mining claims in good standing, at their expense and to do said work at least thirty (30) days prior to the time when said work must be performed and notify First Parties that same has been done.

15. Time is and shall be of the essence of this agreement. Every provision hereof shall inure to the benefit of and be binding

upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the respective parties have executed these presents the day and year first written above.

W. J. Barnett

L. W. Barnett
First Parties

Peter J. De Michelis
Second Party

STATE OF CALIFORNIA
COUNTY OF
Mariposa

On July 22, 1951 before me, the undersigned, a Notary Public in and for said County and State, Personally appeared: W. J. Barnett, L. W. Barnett and Peter J. De Michelis, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they excuted the same.
WITNESS my hand and official seal.

R. O. Curran

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

4

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

TABLE CONTENTS

	Page
Introduction	1
Legal	1
Location	2
Elevations	2
Property	2
Workings	3
General Geology	3
Rocks	4
Ore	6
Assays	6
U.S. Government Activity	7
Road to Mine	8
Conclusions	8
Recommendations	9

-------oOo-------

APPENDIX

Map I GENERAL MAP

Map 2 PLAN OF WORKINGS.

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951.

I N T R O D U C T I O N

At the request of Messrs. PAUL AGLIETTI and P. De MICHELIS, on September 13 and 14, 1951, I made a reconnaissance examination of their BLUE STAR TUNGSTEN MINE, spending one full day on their property. The purpose of the examination was essentially to interpret the economic geology and recommend procedure for future activities on the property.

L E G A L

In the short space of one day my time was devoted to the essential geological economic aspects of the ore occurrence. No time was devoted to checking such important legal data as claim locations, options, terms, titles, encumbrances, etc. These are as important as the presence of profitable orebodies. The members of the Syndicate are experienced business men so, no doubt, have given these matters the attention they deserve.

L O C A T I O N

Merced, the nearest railroad point is 66 miles by paved highway S 54 W from the property. The property is 27 miles over the same paved highway (the main entrance road to the Yosemite National Park) N 39 E from Mariposa, the county seat of Mariposa County where the mining claims are recorded. To these distances must be added .63 of a mile S 6 E up about an 8% graded 3 ft. wide trail to the mine workings.

E L E V A T I O N S

On Map I is shown the topograhpy of the immediate area of the claims. This is traced from an enlargement (from 1^{in} = 2000 ft. to 1^{in} = 400 ft.) of that portion of the topographic map of the El Portal Quadrangle of the U.S. Geological Survey which was printed in 1949. It shows steep hillsides. There is a difference of elevation on the property of 1330 feet. The main working is about 550 feet above the highway.

P R O P E R T Y

The property consists of three unpatented lode mining claims, Blue Star #1, 2 and 3, as shown on Map #1 attached hereto.

There are no buildings nor equipment on the property other than personal property owned by the lessees, consisting of drill steel, hammers, picks, shovels, etc.

W O R K I N G S

Map #2 was constructed from a tape and compass survey made by P. De MICHELIS and me. It was tied into the sharp turn in the Hite Cove trail at the southerly end of the Blue Star #1 Claim (See Map #1). Map #2 shows all the prospect workings, cuts, pits and winzes which were called to my attention while at the property. There are eight in number. Ore occurs in only three of them as labeled on the map.

G E N E R A L G E O L O G Y

The California State geological map (1916) shows a strip of metamorphosed Jurasic sediments about three miles wide extending about S 35 E from the City of Mariposa with large areas of granite outcroping on each side of it. These Jurasic rocks show on both sides of Merced River from Briceburg to Indian Flat just west of the area of Map I, and dominate in the ridge east of where the trail meets the highway. It is possibly a "roof pendant" underlain by the granite batholith. Beds strike and dip in many directions.

Besides the outcrop of the granite batholith on each side of the three mile wide strip of Jurasic metamorphic rocks, dikes of granite of considerable width (say 500 feet or so) cut into the metamorphic sedimentaries a mile or so before they terminate. The east wall of one of these dikes crosses the trail about where the trail enters the Blue Star #3 claim and probably continues under wash at least to a point 230 feet south of the

main working where the trail crosses the westerly side of the granite dike.

R O C K S

The Jurasic metamorphic sediments were originally deposited as a fine mud on the oceans continental shelf. On the outer reaches they were interdeposited with limy material which became limestone later. Closer to shore the mud was interdeposited with sometimes sand and sometimes with gravel. Geological processes converted the mud to shale, the sand to sandstone and the gravel to conglomerate. When the Tertiary granite lava which became the great Sierra Nevada batholith was intuded up towards the overlying sedimentary rocks, the whole mass of the latter were lifted several thousand feet, tilted, contorted, faulted, fractured and those nearest the granite magma were heated almost to a liquid and silicified to a hornstone. These geologic processes account for the complex nature of these rock occurrences. During the subsequent millions of years following down to the present, trillions of tons of the overlying sedimentary, metamorphic rocks and even much of the granite has been leached, weathered and transported towards the Nevada deserts and the sea by glaciers, rains and streams thus leaving the conditions which we see today.

The Granite lavas in such enormous masses remained covered by sedimentary rocks for millions of years until the Magmas

completely became coarsely crystalline solid granites. They solidified slowly from the outside towards their magmatic centers. This history accounted for fine grained granitic rocks near their contacts with the colder sedimentary rocks and increasing in coarseness towards the center of the mass. Some times the feldspar crystals, last to solidify, became as much as a foot in diameter which makes a good source of material for making porcelain. Also the varying chemical composition of the granite magma and the mixing action of the movement of it while still liquid cause hundreds of rock types to crystallize from it by the time it is completely solidified. These can range from dominant black biotite mica (called schlieren) to nearly white types such as aplite and alaskite which are composed of little more than quartz and feldspar. The probable average chemical composition of the Sierra Nevada batholith rocks would produce a rock type called quartz monzonite (sometimes called granodiorite).

The granites outcropping on the Blue Star group are dominantly a granite sand or granite laterite (disintegrated granite in place) due to weathering. This is dominantly only a few feet in thickness, varying to a semi-leached and thence to fresh fine-grained granite. The granites on these claims are parts of a dike which account for its finer texture.

Most of the Blue Star Claim #1 and the westerly half of #3 are covered with a foot or more of wash which conceals much geologic data which would be useful in determining all the

possibilities for commercial orebodies. The remaining half of the group expose outcrops of Jurasic partly metamorphosed sediments. No ore is found in them to date.

O R E

The developed ore is dominantly a dark gray mineralization with a microscopic silicious groundmass in which occur crystals of scheelite varying from ½ inch in diameter to almost microscopic size. There is also partially identifiable fine grained brassy colored mineral resembling pyrite. In all probabilities there are minute other minerals in the ore which are too fine to determine with a hand lens. The alteration of the host rock has been so complete by introduced minerals that it is impracticable to determine whether it was originally a granite or an altered shale rock. Although the gradation phases are dark gray in color, most of the evidence indicates that it originally was a granite. The evidence indicates that the ore occurs in discontinuous lenses completely surrounded by granite.

A S S A Y S

The ultra-violet light clearly indicates a dominant reaction of only scheelite present in an appreciable quantity. The weights of the different types indicate that the fine-grained compact ores with phenocrysts of scheelite less than one tenth of an inch in diameter may be a higher grade than those where the scheelite crystals are up to one half inch in diameter. The response to the ultra violet light is so positive that no sampling during mining will be necessary. After a limited experience, the operator can

determine what rock will pay to mine by use of the ultra-violet light.

Mr. P. DeMICHELIS says that the samples he has had assayed run from .59% WO_3 near the rim of the orebody to 3.08% WO_3 in the best concentration.

It is of interest to know that the syndicate received the first prize at a recent Mariposa County Fair for the best tungsten ore exhibit from new tungsten prospects during the past year.

U. S. GOVERNMENT ACTIVITY

On September 8, 1951 Chairman Lyndon B. Johnson (D. Tex.) of the Senate Arms Service Preparedness Subcommittee wrote a letter to W.C. Schroeder, Acting Administrator of the Defense Minerals Administration with a copy to Jess Larson, Director of the newly created Defense Minerals Procurement Agency in which he requested eleven sets of data concerning the marketing of ore produced by small operators whose ore assays from .3% to 1% tungsten. His inquiry especially requested data concerning what has been done in establishing depots and price quotations for the purchase by the U.S. Government of low grade tungsten ore. Also "9. What financial or other assistance has been recommended by the Defense Minerals Administration for the increase in nation's tungsten mill or refining capacity? Give us the details including the amount of money and capacity involved."

This offers a new alternative. If no market can be found for the ore already developed with a satisfactory profit from mining it, additional capital expenditures might be postponed

until the Syndicate can determine what the U.S. Government will do in the near future to assist the small operator. At least this evidence can be investigated still further while other plans are maturing.

ROAD TO MINE

The geological evidence indicates that the trail is in soil over hornstone for only about 1,200 feet down from the gulch just easterly of the barbwire fence gate. The balance of the trail of 2,100 feet probably is in soil over granite laterite which should be able to be removable by a bull dozer without drilling and blasting except where an occasional "nigger-head" of fresh granite is encountered. The probabilities are that the trail can be widened to a truck road for at least two thirds of the total length. Furthermore, it is possible that some of the trail over hornstone could be widened by the bull dozer.

CONCLUSIONS

1. The foot or so of soil which covers most of the westerly facing steep hillside materially reduced the ability of a geological engineer to secure the needed evidence with which to determine all of the ore-controls of this property in a one day reconnaissance examination.

2. The eight prospect workings driven to date does expose the best quality of tungsten (scheelite) ore I have seen in any of my field trips. The assay value will vary from one half to over three per cent. Mill values have been exposed for a length of forty feet in a N 40 W direction, for a depth of twenty-five feet

and a maximum horisontal width of twenty feet. (The maximum width at right angles to the dip may be not more than fifteen feet). Any tungsten prospect with such a showing is worthy of having more new capital spent cautiosly to determine more about the trend of its economic value.

3. The partly developed orebody is either an ore shoot in the form of a pitching chimney or a lens completely in a wide granite dike at least fifty feet from the nearest rock of sedimentary origin which contains some cherty limestone beds up to ten feet in width. So far, no other orebody has been exposed by prospecting which was called to my attention.

4. There are several other factors besides geological ore controls which have much to do with determining the profit nature of this enterprise. They are inter dependent. Some of them are itemized above under "U.S. GOVERNMENT ACTIVITY" and "LEGAL". The program to be followed is important.

R E C O M M E N D A T I O N S

1. Strip the soil from above the outcropping orebody so that all its exposed features can be evaluated to determine its commercial possibilites.

2. Investigate fully government aids to small tungsten miners both in practice and contemplated.

3. Make a survey of all ore buyers and treatment plants to which the Blue Star ore might be sent. The data needed from them should include per cent recovery of the mill, how much of your ore they can treat daily, what they will charge for milling a ton of ore, probable grade of your concentrates, what arrangement they

will make for your representative to check all steps in the process and the nature of the contract they are willing to sign.

4. Determine the cost of hauling and freight to each ore buyer, treatment plant or government stock-piling depots.

5. Cost of widening road from highway to mine.

6. Estimate cost of surface plant and equipment and cost of mining and delivering ore to trucks.

7. If from the above data and other cost factors you can calculate a satisfactory profit from the apparent developed ore now, then start truck road to the mine. In order to have bin room at the orebody of fifty feet, the switch-back road from the trail should start one hundred feet up the Hite Cove trail from the point the present foot trail to the workings starts.

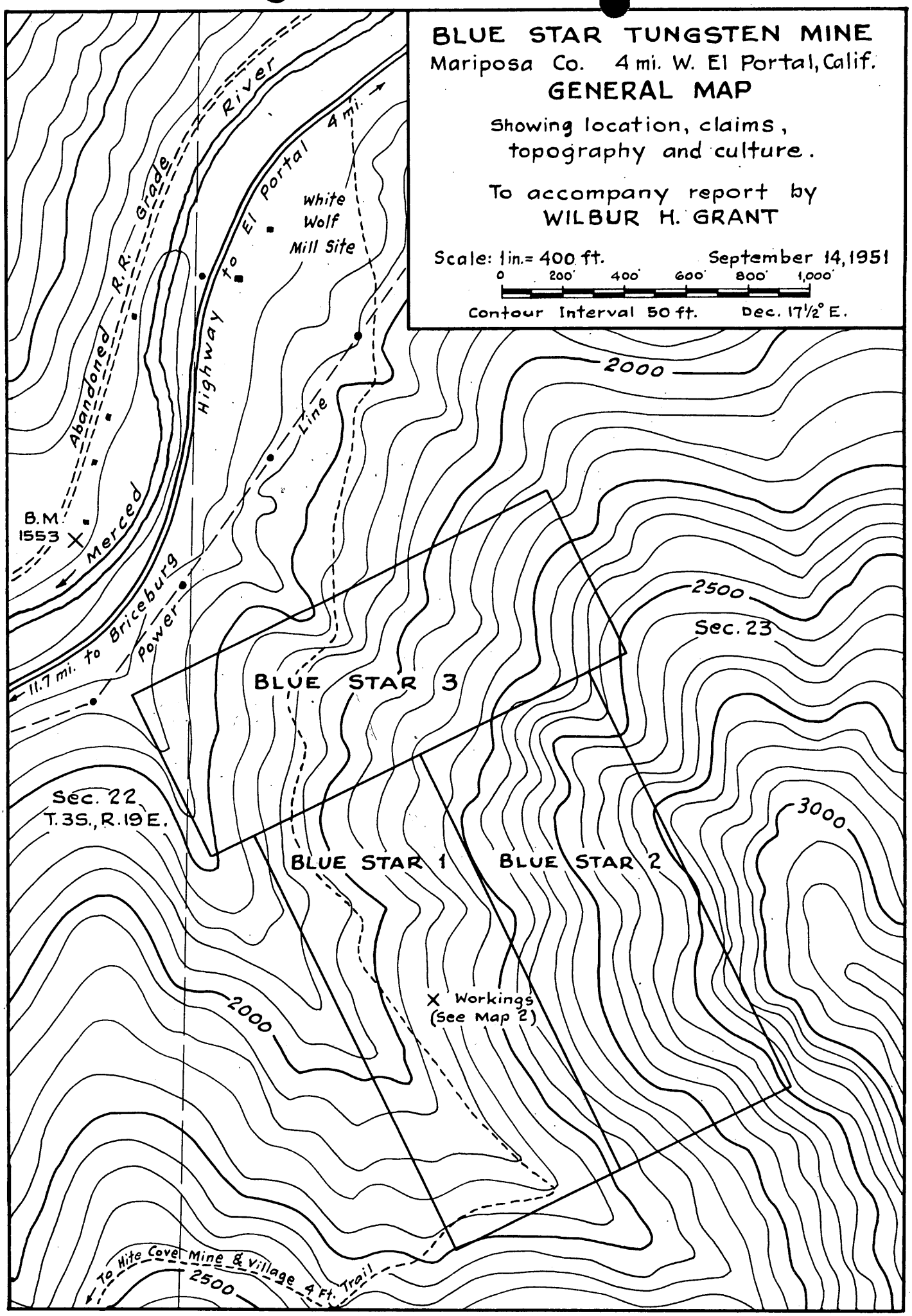
8. The best system for prospecting and development of this particular orebody is to use that followed by American pioneers and still used by Mexican miners. It is ~~to~~ either "follow the ore" or"stope-develop" it. By the latter method you will not miss any of the pay ore and at the same time you will have an income and need less new capital. Experience has shown that by these methods more ore will be marketed than can be estimated conservatively from the present available evidence.

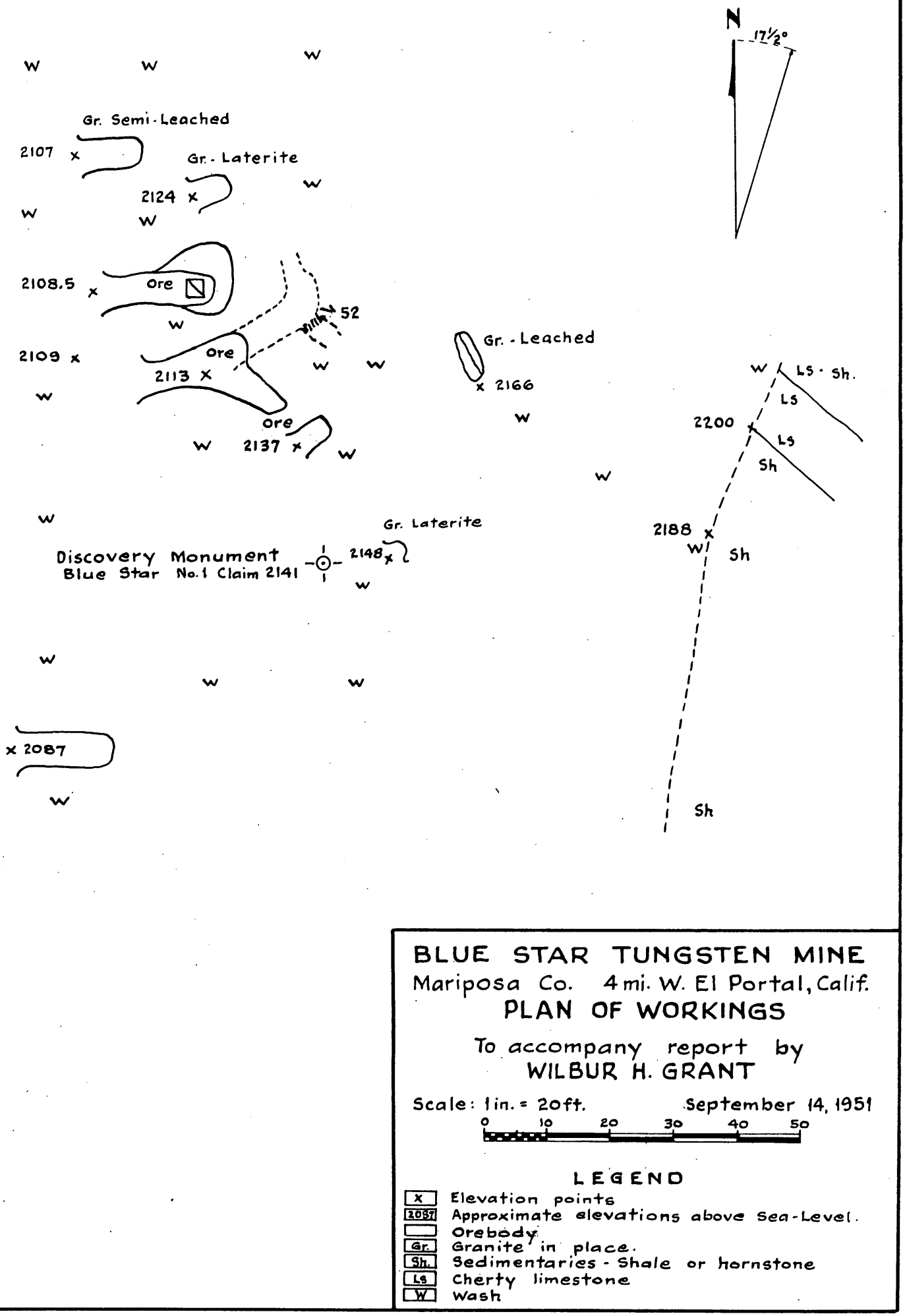
Respectfully submitted,

Wilbur H. Grant

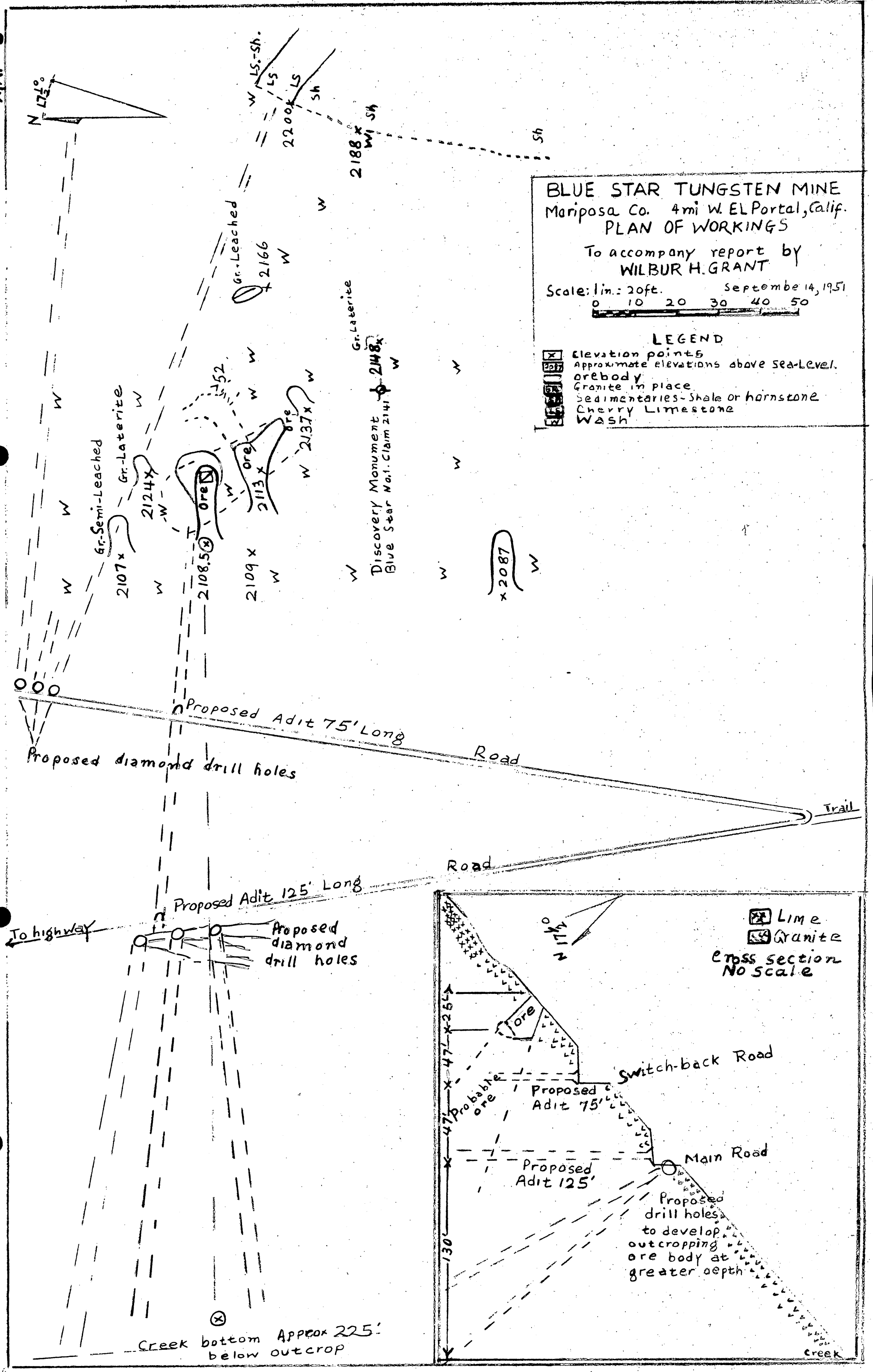
San Francisco 4, California,
September 14, 1951.

A P P E N D I X


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi. W. El Portal, Calif.
GENERAL MAP
Showing location, claims, topography and culture.
To accompany report by
WILBUR H. GRANT
Scale: 1 in. = 400 ft.
September 14, 1951
0 200' 400' 600' 800' 1,000'
Contour Interval 50 ft.
Dec. 17½° E.
Abandoned R.R. Grade
Merced River
Highway to El Portal 4 mi.
White Wolf Mill Site
Power Line
B.M. 1553
11.7 mi. to Briceburg
2000
2500
3000
Sec. 23
Sec. 22
T.3S., R.19E.
BLUE STAR 3
BLUE STAR 1
BLUE STAR 2
X Workings (See Map 2)
To Hite Cove Mine & Village 4 Ft. Trail


N
17½°
Gr. Semi-Leached
2107
Gr.-Laterite
2124
2108.5
Ore
52
2109
Ore
2113
Ore
2137
Gr.-Leached
2166
LS-Sh.
LS
2200
LS
Sh
2188
Sh
Sh
Gr. Laterite
Discovery Monument
Blue Star No.1 Claim 2141
2148
2087
W
BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi. W. El Portal, Calif.
PLAN OF WORKINGS
To accompany report by
WILBUR H. GRANT
Scale: 1 in. = 20 ft.
September 14, 1951
0 10 20 30 40 50
LEGEND
X Elevation points
2087 Approximate elevations above Sea-Level.
Orebody
Gr. Granite in place.
Sh. Sedimentaries - Shale or hornstone
Ls Cherty limestone
W Wash

MAP-3


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi W. El Portal, Calif.
PLAN OF WORKINGS
To accompany report by
WILBUR H. GRANT
Scale: 1 in.: 20 ft.
September 14, 1951
0 10 20 30 40 50
LEGEND
Elevation points
Approximate elevations above sea-Level.
orebody
Granite in place
Sedimentaries-Shale or hornstone
Cherry Limestone
Wash
N 17½°
LS.-Sh.
LS
Sh
2200
2188
Gr.-Leached
2166
Gr.-Laterite
2148
Discovery Monument
Blue Star No.1. Claim 2141
Gr.-Semi-Leached
Gr.-Laterite
2124
2107
2108.5
2109
2113
2137
ore
2087
Proposed Adit 75' Long
Road
Proposed diamond drill holes
Trail
Road
Proposed Adit 125' Long
To highway
Proposed diamond drill holes
Creek bottom Approx 225' below outcrop
Lime
Granite
cross section
No scale
N 17½°
ore
Switch-back Road
Probable ore
Proposed Adit 75'
Main Road
Proposed Adit 125'
Proposed drill holes to develop outcropping ore body at greater depth
25'
47'
47'
130'
Creek

MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMA-2192
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

Name and address of applicant

MICHAEL MINING CO
(Peter De Michelis and Paul Agliotti, Partners)
461 Market St.,
San Francisco 5, Calif.

Date October 10th 1951

If you have already filed MF-100, give date filed June 1951 not rec'd in DMA, type of assistance requested None,

DMA Docket Number (if available) ~~None~~ 2192

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

MIDLAND MINING CO.	X By Peter De Michelis
(Name of company)	(Signature of authorized official)
	Dr. Paul Ryan
October 10th 1952	Partners
(Date)	(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—64067-2

MIDLAND MINING CO., 461 MARKET ST., SAN FRANCISCO, 5, CALIFORNIA

RIDER TO FORM MF-103

---

1. (a) Those certain unpatented mining claims, in the Hites Cove mining district, more particularly described as follows:

BLUE STAR TUNGSTEN #1.
Located May 22nd 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 408, Mariposa County Records

BLUE STAR TUNGSTEN #2
Located May 22nd, 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 409, Mariposa County Records.

BLUE STAR TUNGSTEN #3
Located May 22nd, 1951
Recorded June 11th, 1951 in Vol. A-2 of Mining Records on page 418, Mariposa County Records

(b) See lease attached

(c) Section 22 - T. 3. S - R. 19 E.

Note 1 - Both areas are the same
Note 2 - See attached land lord suburdination agreement

2. (a) Tungsten (Wo 3)

(b) See attached reconnaissance report of Mr. Wilbur H Grant and Assay reports of Pittsburg and Abbott A Hanks Inc.

3. (a) Step 1. Finish road including switch-backs to terminate 50 ft. under present workings.

Step 2. Drive 75 ft adit from switch-back road level to intercept ore body and explore ore at this point. Adit approx. 50 ft. below present workings.

Step 3. Drive 125 ft. adit 50 ft. lower in elevation and on lower road level to intercept ore body at this point and explore same.

Step 4. Diamond drilling program:

1. Drill several holes from lower road level to develop ore body of present workings at greater depth (approx 225 ft).

2. Drill several holes from upper road level (approx. 50 ft. below present workings) and slightly to the north for the purpose of developing new ore bodies.

Total cost of the project: $28,050.00

Note: The above work to be done successively with little change, providing each step in program proves successfully. If not, then the necessary changes shall be made in accordance to necessity.

(b) Six months.

4. See attached Map No. 3

5. None

6. Small tool house, labor and material: $500.00

   3/4 of mile road: $2000.00

   Rock soot over road, labor and material $500.00

7. (a) Rental compressor, jack hammer at $200.00 per mo.: $1200.00

   (b) None

   (c) None

8. Three miners at $15.00 per day.

   One supervisor at $500.00 per month.

9. Recapitulation of costs based on a six months period of operation:

200 ft of tunnel at $25.00 per foot	$5000.00
2000 ft diamond drilling (contract) at $7.00 per ft	14000.00
Supervision at $500.00 per month	3000.00
Sampling and assaying	400.00
Gasoline and oil at $75.00 per month	450.00
Office stationary, clerical services etc at $100.00 per month	600.00
Small tool house, labor and material	500.00
3/4 mile road	2000.00
Rental of compressor, jack hammers at $200.00 per mo.	1200.00
Rock shoot over road	500.00
Compensation insurance, social security	400.00
Total costs based on a six months period of operation	$28050.00

10. (a) We are prepared to invest $7012.50

    (b) Yes

11. We have already spent over $2000.00 opening the property

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Mariposa, State of California, described in a certain Exploration Project Contract dated _____, 195__, between _____,

the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 22, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 18th day of October, 1951

William J. Barnett
Lemuel W. Barnett

United States Of America
Yosemite National Park

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

On this 18th day of October, 1951, before me, Gene J. Ottonello, U. S. Commissioner, in and for the said Yosemite National Park, Northern District of California, duly commissioned and sworn, personally appeared William J. Barnett and Lemuel W. Barnett, 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 say and year in this certificate first above written.

GENE J. OTTONELLO
UNITED STATES COMMISSIONER
YOSEMITE NATIONAL PARK
CALIFORNIA

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO

July 16, 1951

DEPOSITED BY P. J. Feykert
617 Bryant Street
San Francisco, California

SAMPLE OF ORE

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER Value @ $	Percentages	
32002	#1					Tungstic Oxide	0.67
03	#2					" "	2.55
04	#3					" "	0.74

We hereby certify that the above originates from ore samples drawn from Blue Star Tungsten Mine, as follows:

#1 - Outer edge - lenght of sample 9 ft
#2 Center ore - 10 tons on dump
#3 Inner edge - lenght of sample 7 ft

MIDLAND MINING CO.

By Paul Shiell

ABBOT A. HANKS, INC.
Original signed by
F. T. BEE

bob

LABORATORY REPORT
ABBOT A. HANKS, INC.
ENGINEERS, ASSAYERS, CHEMISTS, METALLURGISTS
CONSULTING - TESTING - INSPECTING
ESTABLISHED 1866
624 SACRAMENTO STREET
SAN FRANCISCO 11, CALIFORNIA
TELEPHONE GARFIELD 1-1697

Lab. No. 31738 Date July 9, 1951

Submitted by Fair Manufacturing Co.
617 Bryant Street
San Francisco, California

Sample Mark #2

QUALITATIVE SPECTROGRAPHIC ANALYSIS
Metals Found and Estimated Percentage Range

Less than .03%	.03% to .30%	.30% to 3%	3% to 30%	30% to 100%
Titanium Copper Molybdenum Vanadium Nickel Cobalt Chromium	Manganese Potassium	Aluminum Calcium Magnesium Sodium	Iron Silicon Tungsten	

We hereby certify that the above ore samples originate from BLUE STAR TUNGSTEN MINE.

MIDLAND MINING CO

By Paul Hylett

Remarks

RESPECTFULLY SUBMITTED,
ABBOT A. HANKS, INC.
Original Signed by
P. T. BEE
By _____
Spectro-Chemist

bob

FORM A-5

FORM 407-A

PITTSBURGH TESTING LABORATORY

ESTABLISHED 1881

PITTSBURGH, PA.

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS OR EXTRACTS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

651 HOWARD STREET
SAN FRANCISCO 5, CALIFORNIA

ORDER No.

LABORATORY No. 26907

CLIENT'S No.

FILE No.

REPORT

September 10, 1951

Midland Mining Company
461 Market Street
San Francisco, California

Subject: Samples (2)
Tungsten

Results:

Sample #1	Center of Ore	3.08% WO_3
Sample #2	Contact Zone, approx. 2 ft on outskirts of ore body	0.39% WO_3

Respectfully submitted,

PITTSBURGH TESTING LABORATORY

Clyde B. Gentle
District Manager

WPS/S:ml
cc: Above-5

MINING LEASE AND OPTION

THIS AGREEMENT, made this 22nd day of July, 1951 between W. J. BARNETT and L. W. BARNETT of El Portal, California, hereinafter called First Parties, and PETER J. De MICHELIS of San Francisco, California, hereinafter called Second Party,

WITNESSETH:

1. That for and in consideration of the rents, covenants, payments and agreements hereinafter contained, to be kept, paid and performed on the part of the Second Party, First Parties do hereby lease unto Second Party, the following described real property located in the County of Mariposa, State of California, to wit:

Those certain unpatented mining claims, in the Hites Cove Mining District, more particularly described as follows:

Blue Star Tungsten No. 1
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 408, Mariposa County Records.

Blue Star Tungsten No. 2
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 409, Mariposa County Records.

Blue Star Tungsten No. 3
Located May 22, 1951
Recorded June 11, 1951 in Vol. A-2 of Mining Records at page 418, Mariposa County Records.

First Parties warrant that there are no liens or encumbrances against said mining claims.

2. This lease shall run for a period of ten (10) years from date hereof and so long thereafter as minerals in paying quantities can be produced, saved and sold thereon.

3. Upon execution of this agreement, Second Party agrees to pay to First Parties the sum of Two Hundred Dollars ($200.00) and in consideration of this payment First Parties grant to Second Party the right to enter upon said above described properties for the purpose of prospecting and sampling same, surveying and

Checking property lines and any other work Second Party may deem necessary for proper development of the properties.

On or before thirty (30) days after signing of this agreement, subject to the term herein, Second Party agrees to pay to First Parties a further sum of Two Hundred Dollars ($200.00), per month for nine months, to be paid not later than the 5th day of each month from date of the first of said payments within which Second Party agrees to commence further prospecting and development of the above described mining property.

4. Commencing within one (1) month after the expiration of the above nine (9) months period, Second Party shall make minimum payments of Four Hundred Dollars ($400.00) per month to First Parties in the manner as hereinafter described.

5. Second Party agrees to pay to First Parties a royalty of Six Per Cent (6%) of the value of all minerals produced, shipped and sold from the above described leased premises. The 6% royalty means 6% of the net returns from proceeds of any ore or concentrates shipped and sold to a buyer and the net returns shall mean the total sum paid to Second Parties by any buyer. Said royalty payments to be made to First Parties within ten (10) days from and after receipt by Second Party of said proceeds from buyer. Second Party to furnish First Parties, at time of each payment, a duplicate statement of account between second Party and buyer covering such payment made by buyer.

6. Second Party agrees with First Parties as follows:

(a) To enter upon said properties and to work same as a mine for the production of tungsten and any other valuable minerals that may be found and produced profitably.

(b) All mining shall be done in a minerlike fashion and in conformity with all State and Federal laws and regulations pertaining to mining, with due regard to safety, development and preservation of said premises as a workable mine.

(c) To commit no waste and do no act thereon which will impede mining operations or impair the operating condition of said mining claims, and suffer no default which might in any manner involve the First Parties in liability of any kind or character.

(d) To permit the First Parties or their authorized representatives at all reasonable times to have access to any and all workings in or on said premises for the purpose of inspecting or sampling same.

(e) At all times to keep an accurate set of accounts and records of all production, shipments, and receipts, which accounts and records shall be available for inspection by First Parties at any reasonable time.

(f) To, at all times during the term hereof, keep and save First Parties and the premises free and clear of all costs, liens and encumbrances of every nature whatsoever made or suffered by Second Party, and to do no act or thing which shall constitute a cloud upon the First Parties title to the aforesaid property.

(g) To carry all necessary Workmens Compensation Insurance and to comply with all State and Federal laws pertaining to the safety of employees.

(h) If this lease be terminated before completion of all the terms thereof, the Second Party agrees to deliver to the First Parties the said premises in good condition and repais.

7. It is mutually understood and agreed as follows:

(a) That in the event Second Party fails to perform any covenants or any other provision of this lease, that all rights and privileges of the Second Party under the terms of this lease may, at the option of the First Parties, be terminated in the manner hereinafter set out.

(b) In the event of termination of this lease prior to the completion of all the terms hereof, the Second party shall have the right to remove all machinery and equipment from said property within a period of ninety (90) days after termination of the lease.

(c) That all State and County Taxes levied against the property and mining machinery and equipment and improvements be paid by the Second Party when they become due and before delinquency.

(d) The Second Party shall have an assignable right and interest in this lease to such responsible persons who shall assume this lease and the agreement for payment of overriding royalty made by second party with Hazel Ayers and Herbert Herrill this date and agree to be bound by the terms hereof. No assignment hereof to be made without the Second Party having first given to the First Parties at least ten (10) days written notice of his intention to assign his interest herein, said notice to containthe name and address of any proposed assignee hereof.

(e) In the event there is a default on the part of the Second Party in any of the covenants or terms of this lease and the default shall continue for a period of thirty (30) days thereafter First Party may serve written notice of default on Second Party, First Parties may finally terminate this lease by giving written notice of their final termination of this lease; and upon such final termination all rights of Second Party in and to said real property shall cease and terminate, save and except the right to remove their personal property, machinery and equipment within a period of ninety (90) days after such termination.

8. It is recognized by all parties hereto that tungsten prices have fluctuated and that there are times when tungsten cannot be mined except at a loss, and it is recognized by all parties hereto that at the present time a favorable market exists for tungsten; and it is expected that Second Party will use diligence in mining the maximum amount of tungsten that is reasonably possible under the circumstances during the period when tungsten price is high. Should the price of tungsten drop so that it is impossible to operate the property except at a loss, then Second Party need not operate said mine for a period of not to exceed six (6) months without any penalties and Second Party shall be

relieved of making the minimum monthly payments as specified. If the non-operation of said mine shall exceed a period of six (6) months, then Second Party must pay to First Parties the sum of One Hundred Dollars ($100.00) per month, provided further that the suspension of operations under this provision need not be permitted by First Parties for a period longer than twelve (12) months.

9. It is expressly agreed that delays or failure to operate said mine when caused by strikes, lock-outs, act of God, military orders or other government interference with operations, inability to get materials after due diligence, or any other cause beyond the control of Second Party, that during such period of time when mining operations have been suspended that Second Party shall not be penalized or held to be in default, and the obligation to pay the minimum monthly payments shall also be suspended, but as soon as with reasonable diligence said mine can again be operated, Second Party must again perform all the terms of this lease.

10. Second Party shall have the option of terminating this lease by the giving of written notice of such intention to First Parties, together with possession of said properties and thereupon be relieved of all future obligations hereunder, including the payment of any monies beconging due and payable thereafter, but such surrender shall not release Second Party from any obligations or liability theretofore incurred by them hereunder.

11. First Parties, in Consideration of this agreement, do hereby grant to the Second Party during the term of this agreement and so long as Second Party shall not be in default hereunder, the exclusive right and option to purchase the above described property for a total purchase price of Eighty Thousand ($80,000.00) and First Parties agree that all royalty payments of six per cent (6%) and any other payments of any kind made from any source by Second Party to First Parties shall be applied on the purchase price; and First Parties agree that when they have received the purchase price of $ 80,000.00 that they will,

by proper conveyance convey all of the above described premises to the Second Party.

12. It is understood and agreed between all parties hereto that the minimum monthly payment of Four Hundred Dollars ($400.00) mentioned in paragraph 4 hereof, may be covered by royalty payment or in the event the royalty payments required to be made hereunder shall not equal $400.00 per month then Second Party shall pay such additional amount as may be required to bring the total monthly payment up to $400.00 per month, the minimum monthly payment required to be made hereunder, and shall be paid to the First Parties at their address shown hereinafter.

13. Any notices, letters or other communications, required in connection with any matters arising under the within lease and option shall be directed to the respective parties here at the address following their respective names:

W. J. Barnett and L. W. Barnett,
P.O.Box 16,
El Portal, California

Peter J. De Michelis,
142 Oxford Street,
San Francisco, California

If any of the above parties change their addresses they shall give written notice to the other parties and upon receipt of notice of such change, the new address shall be controlling hereunder.

14. Second Party agrees that he will perform all assessment work on the above described property which is required by law of the United States and record proof of same, to keep said mining claims in good standing, at their expense and to do said work at least thirty (30) days prior to the time when said work must be performed and notify First Parties that same has been done.

15. Time is and shall be of the essence of this agreement. Every provision hereof shall inure to the benefit of and be binding

upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the respective parties have executed these presents the day and year first written above.

W. J. Barnett

L. W. Barnett
First Parties

Peter J. De Michelis
Second Party

STATE OF CALIFORNIA
COUNTY OF
Mariposa

On July 22, 1951 before me, the undersigned, a Notary Public in and for said County and State, Personally appeared: W. J. Barnett, L. W. Barnett and Peter J. De Michelis, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they excuted the same.
WITNESS my hand and official seal.

R. O. Curran

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

6

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

TABLE CONTENTS

	Page
Introduction	1
Legal	1
Location	2
Elevations	2
Property	2
Workings	3
General Geology	3
Rocks	4
Ore	6
Assays	6
U.S. Government Activity	7
Road to Mine	8
Conclusions	8
Recommendations	9

-------oOo-------

APPENDIX

Map I GENERAL MAP

Map 2 PLAN OF WORKINGS.

RECONNAISSANCE REPORT

BLUE STAR TUNGSTEN MINE

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951.

INTRODUCTION

At the request of Messrs. PAUL AGLIETTI and P. De MICHELIS, on September 13 and 14, 1951, I made a reconnaissance examination of their BLUE STAR TUNGSTEN MINE, spending one full day on their property. The purpose of the examination was essentially to interpret the economic geology and recommend procedure for future activities on the property.

LEGAL

In the short space of one day my time was devoted to the essential geological economic aspects of the ore occurrence. No time was devoted to checking such important legal data as claim locations, options, terms, titles, encumbrances, etc. These are as important as the presence of profitable orebodies. The members of the Syndicate are experienced business men so, no doubt, have given these matters the attention they deserve.

L O C A T I O N

Merced, the nearest railroad point is 66 miles by paved highway S 54 W from the property. The property is 27 miles over the same paved highway (the main entrance road to the Yosemite National Park) N 39 E from Mariposa, the county seat of Mariposa County where the mining claims are recorded. To these distances must be added .63 of a mile S 6 E up about an 8% graded 3 ft. wide trail to the mine workings.

E L E V A T I O N S

On Map I is shown the topograhpy of the immediate area of the claims. This is traced from an enlargement (from 1^{in} = 2000 ft. to 1^{in} = 400 ft.) of that portion of the topographic map of the El Portal Quadrangle of the U.S. Geological Survey which was printed in 1949. It shows steep hillsides. There is a difference of elevation on the property of 1330 feet. The main working is about 550 feet above the highway.

P R O P E R T Y

The property consists of three unpatented lode mining claims, Blue Star #1, 2 and 3, as shown on Map #1 attached hereto.

There are no buildings nor equipment on the property other than personal property owned by the lessees, consisting of drill steel, hammers, picks, shovels, etc.

W O R K I N G S

Map #2 was constructed from a tape and compass survey made by P. De MICHELIS and me. It was tied into the sharp turn in the Hite Cove trail at the southerly end of the Blue Star #1 Claim (See Map #1). Map #2 shows all the prospect workings, cuts, pits and winzes which were called to my attention while at the property. There are eight in number. Ore occurs in only three of them as labeled on the map.

G E N E R A L G E O L O G Y

The California State geological map (1916) shows a strip of metamorphosed Jurasic sediments about three miles wide extending about S 35 E from the City of Mariposa with large areas of granite outcroping on each side of it. These Jurasic rocks show on both sides of Merced River from Briceburg to Indian Flat just west of the area of Map I, and dominate in the ridge east of where the trail meets the highway. It is possibly a "roof pendant" underlain by the granite batholith. Beds strike and dip in many directions.

Besides the outcrop of the granite batholith on each side of the three mile wide strip of Jurasic metamorphic rocks, dikes of granite of considerable width (say 500 feet or so) cut into the metamorphic sedimentaries a mile or so before they terminate. The east wall of one of these dikes crosses the trail about where the trail enters the Blue Star #3 claim and probably continues under wash at least to a point 230 feet south of the

main working where the trail crosses the westerly side of the granite dike.

R O C K S

The Jurasic metamorphic sediments were originally deposited as a fine mud on the oceans continental shelf. On the outer reaches they were interdeposited with limy material which became limestone later. Closer to shore the mud was interdeposited with sometimes sand and sometimes with gravel. Geological processes converted the mud to shale, the sand to sandstone and the gravel to conglomerate. When the Tertiary granite lava which became the great Sierra Nevada batholith was intuded up towards the overlying sedimentary rocks, the whole mass of the latter were lifted several thousand feet, tilted, contorted, faulted, fractured and those nearest the granite magma were heated almost to a liquid and silicified to a hornstone. These geologic processes account for the complex nature of these rock occurrences. During the subsequent millions of years following down to the present, trillions of tons of the overlying sedimentary, metamorphic rocks and even much of the granite has been leached, weathered and transported towards the Nevada deserts and the sea by glaciers, rains and streams thus leaving the conditions which we see today.

The Granite lavas in such enormous masses remained covered by sedimentary rocks for millions of years until the Magmas

completely became coarsely crystalline solid granites. They solidified slowly from the outside towards their magmatic centers. This history accounted for fine grained granitic rocks near their contacts with the colder sedimentary rocks and increasing in coarseness towards the center of the mass. Sometimes the feldspar crystals, last to solidify, became as much as a foot in diameter which makes a good source of material for making porcelain. Also the varying chemical composition of the granite magma and the mixing action of the movement of it while still liquid cause hundreds of rock types to crystallize from it by the time it is completely solidified. These can range from dominant black biotite mica (called schlieren) to nearly white types such as aplite and alaskite which are composed of little more than quartz and feldspar. The probable average chemical composition of the Sierra Nevada batholith rocks would produce a rock type called quartz monzonite (sometimes called granodiorite).

The granites outcropping on the Blue Star group are dominantly a granite sand or granite laterite (disintegrated granite in place) due to weathering. This is dominantly only a few feet in thickness, varying to a semi-leached and thence to fresh fine-grained granite. The granites on these claims are parts of a dike which account for its finer texture.

Most of the Blue Star Claim #1 and the westerly half of #3 are covered with a foot or more of wash which conceals much geologic data which would be useful in determining all the

possibilities for commercial orebodies. The remaining half of the group expose outcrops of Jurasic partly metamorphosed sediments. No ore is found in them to date.

O R E

The developed ore is dominantly a dark gray mineralisation with a microscopic silicious groundmass in which occur crystals of scheelite varying from ½ inch in diameter to almost microscopic size. There is also partially identifiable fine grained brassy colored mineral resembling pyrite. In all probabilities there are minute other minerals in the ore which are too fine to determine with a hand lens. The alteration of the host rock has been so complete by introduced minerals that it is impracticable to determine whether it was originally a granite or an altered shale rock. Although the gradation phases are dark gray in color, most of the evidence indicates that it originally was a granite. The evidence indicates that the ore occurs in discontinuous lenses completely surrounded by granite.

A S S A Y S

The ultra-violet light clearly indicates a dominant reaction of only scheelite present in an appreciable quantity. The weights of the different types indicate that the fine-grained compact ores with phenocrysts of scheelite less than one tenth of an inch in diameter may be a higher grade than those where the scheelite crystals are up to one half inch in diameter. The response to the ultra violet light is so positive that no sampling during mining will be necessary. After a limited experience, the operator can

determine what rock will pay to mine by use of the ultra-violet light.

Mr. P. DeMICHELIS says that the samples he has had assayed run from .59% WO_3 near the rim of the orebody to 3.08% WO_3 in the best concentration.

It is of interest to know that the syndicate received the first prize at a recent Mariposa County Fair for the best tungsten ore exhibit from new tungsten prospects during the past year.

U. S. GOVERNMENT ACTIVITY

On September 8, 1951 Chairman Lyndon B. Johnson (D. Tex.) of the Senate Arms Service Preparedness Subcommittee wrote a letter to W.C. Schroeder, Acting Administrator of the Defense Minerals Administration with a copy to Jess Larson, Director of the newly created Defense Minerals Procurement Agency in which he requested eleven sets of data concerning the marketing of ore produced by small operators whose ore assays from .3% to 1% tungsten. His inquiry especially requested data concerning what has been done in establishing depots and price quotations for the purchase by the U.S. Government of low grade tungsten ore. Also "9. What financial or other assistance has been recommended by the Defense Minerals Administration for the increase in nation's tungsten mill or refining capacity? Give us the details including the amount of money and capacity involved."

This offers a new alternative. If no market can be found for the ore already developed with a satisfactory profit from mining it, additional capital expenditures might be postponed

until the Syndicate can determine what the U.S. Government will do in the near future to assist the small operator. At least this evidence can be investigated still further while other plans are maturing.

ROAD TO MINE

The geological evidence indicates that the trail is in soil over hornstone for only about 1,200 feet down from the gulch just easterly of the barbwire fence gate. The balance of the trail of 2,100 feet probably is in soil over granite laterite which should be able to be removable by a bull dozer without drilling and blasting except where an occasional "nigger-head" of fresh granite is encountered. The probabilities are that the trail can be widened to a truck road for at least two thirds of the total length. Furthermore, it is possible that some of the trail over hornstone could be widened by the bull dozer.

CONCLUSIONS

1. The foot or so of soil which covers most of the westerly facing steep hillside materially reduced the ability of a geological engineer to secure the needed evidence with which to determine all of the ore-controls of this property in a one day reconnaissance examination.

2. The eight prospect workings driven to date does expose the best quality of tungsten (scheelite) ore I have seen in any of my field trips. The assay value will vary from one half to over three per cent. Mill values have been exposed for a length of forty feet in a N 40 W direction, for a depth of twenty-five feet

and a maximum horizontal width of twenty feet. (The maximum width at right angles to the dip may be not more than fifteen feet). Any tungsten prospect with such a showing is worthy of having more new capital spent cautiously to determine more about the trend of its economic value.

3. The partly developed orebody is either an ore shoot in the form of a pitching chimney or a lens completely in a wide granite dike at least fifty feet from the nearest rock of sedimentary origin which contains some cherty limestone beds up to ten feet in width. So far, no other orebody has been exposed by prospecting which was called to my attention.

4. There are several other factors besides geological ore controls which have much to do with determining the profit nature of this enterprise. They are inter dependent. Some of them are itemized above under "U.S. GOVERNMENT ACTIVITY" and "LEGAL". The program to be followed is important.

R E C O M M E N D A T I O N S

1. Strip the soil from above the outcropping orebody so that all its exposed features can be evaluated to determine its commercial possibilites.

2. Investigate fully government aids to small tungsten miners both in practice and contemplated.

3. Make a survey of all ore buyers and treatment plants to which the Blue Star ore might be sent. The data needed from them should include per cent recovery of the mill, how much of your ore they can treat daily, what they will charge for milling a ton of ore, probable grade of your concentrates, what arrangement they

will make for your representative to check all steps in the process and the nature of the contract they are willing to sign.

4. Determine the cost of hauling and freight to each ore buyer, treatment plant or government stock-piling depots.

5. Cost of widening road from highway to mine.

6. Estimate cost of surface plant and equipment and cost of mining and delivering ore to trucks.

7. If from the above data and other cost factors you can calculate a satisfactory profit from the apparent developed ore now, then start truck road to the mine. In order to have bin room at the orebody of fifty feet, the switch-back road from the trail should start one hundred feet up the Hite Cove trail from the point the present foot trail to the workings starts.

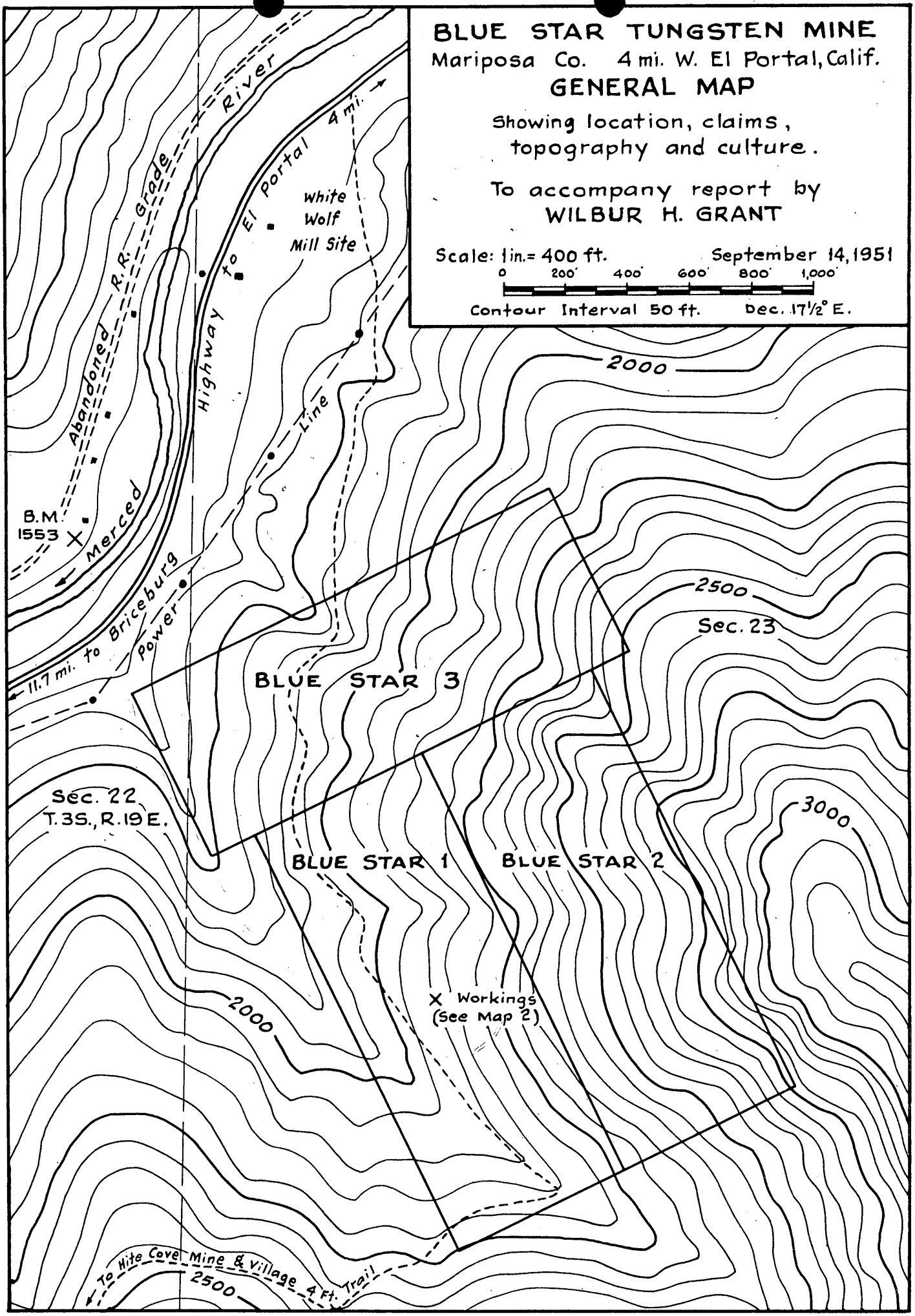
8. The best system for prospecting and development of this particular orebody is to use that followed by American pioneers and still used by Mexican miners. It is ~~to~~ either "follow the ore" or"stope-develop" it. By the latter method you will not miss any of the pay ore and at the same time you will have an income and need less new capital. Experience has shown that by these methods more ore will be marketed than can be estimated conservatively from the present available evidence.

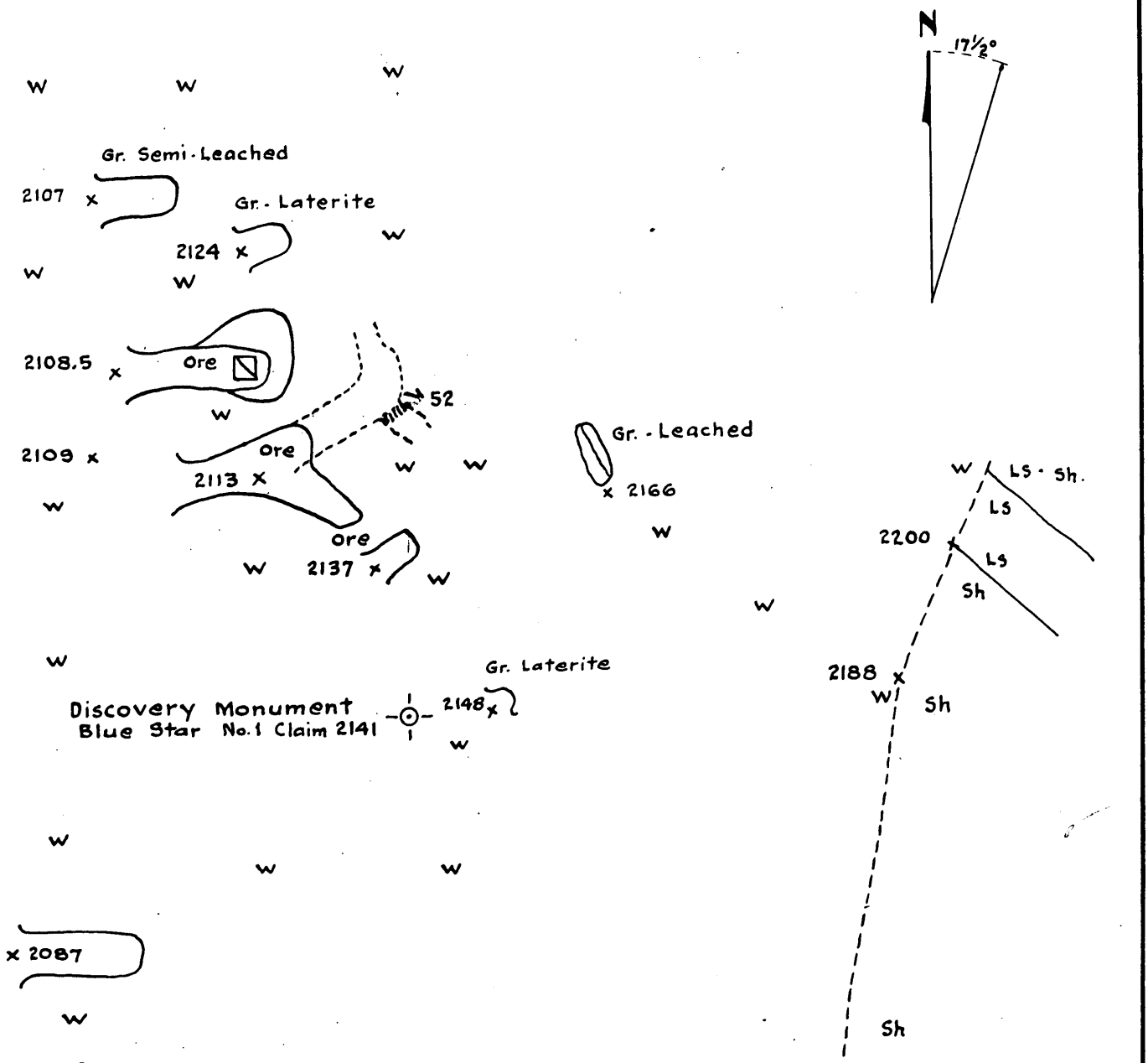
Respectfully submitted,

Wilbur H. Grant

San Francisco 4, California,
September 14, 1951.

A P P E N D I X


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi. W. El Portal, Calif.
GENERAL MAP
Showing location, claims, topography and culture.
To accompany report by
WILBUR H. GRANT
Scale: 1 in. = 400 ft.
September 14, 1951
0 200' 400' 600' 800' 1,000'
Contour Interval 50 ft.
Dec. 17½° E.
Merced River
Abandoned R.R. Grade
Highway to El Portal 4 mi.
White Wolf Mill Site
Power Line
B.M. 1553
11.7 mi. to Briceburg
2000
2500
3000
Sec. 23
Sec. 22
T.3S., R.19E.
BLUE STAR 3
BLUE STAR 1
BLUE STAR 2
X Workings (See Map 2)
To Hite Cove Mine & Village 4 Ft. Trail



BLUE STAR TUNGSTEN MINE

Mariposa Co. 4 mi. W. El Portal, Calif.

PLAN OF WORKINGS

To accompany report by
WILBUR H. GRANT

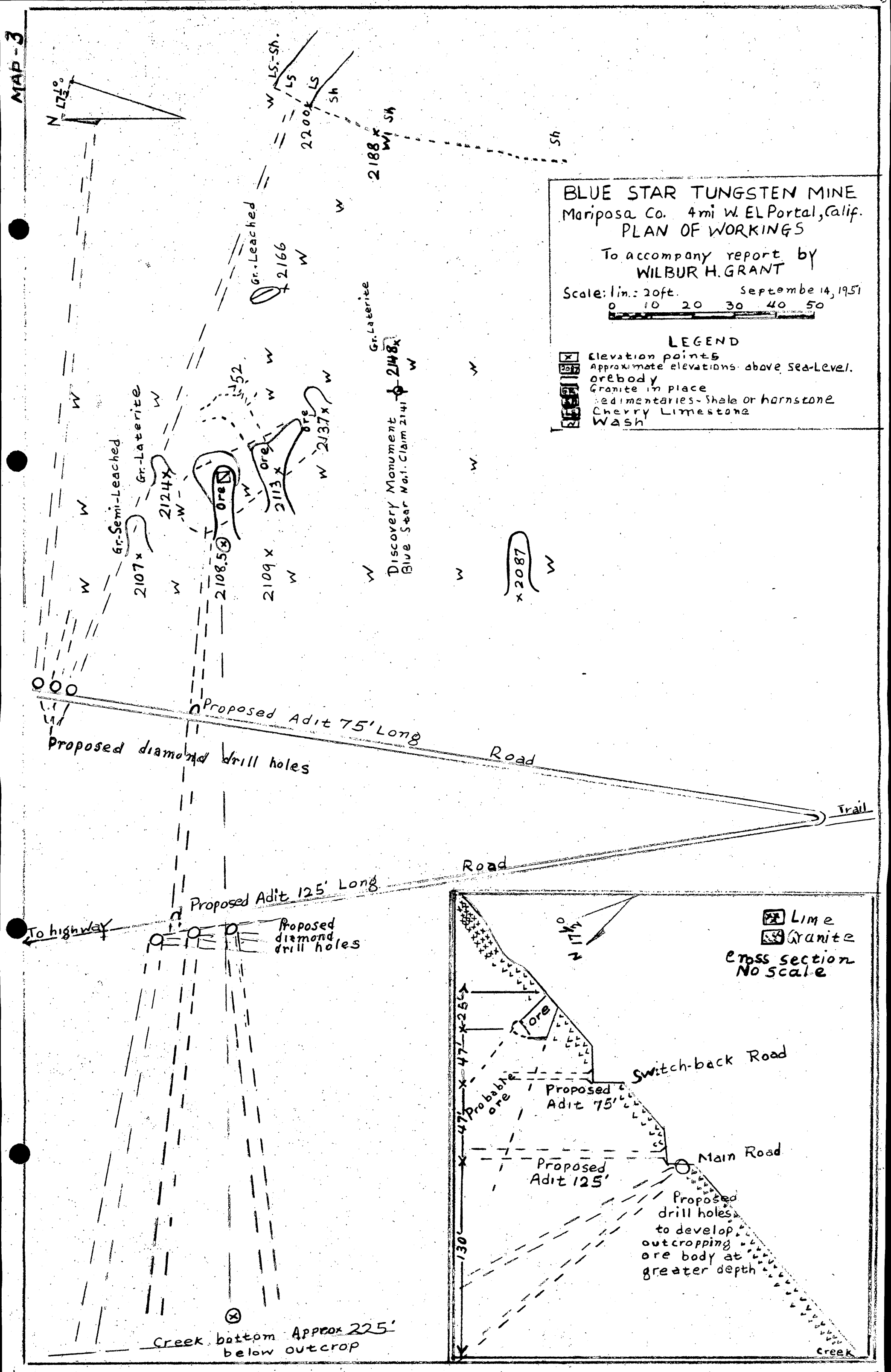
Scale: 1 in. = 20 ft. September 14, 1951

0 10 20 30 40 50

LEGEND

- X — Elevation points
- 2087 — Approximate elevations above Sea-Level.
- Orebody
- Gr. — Granite in place.
- Sh. — Sedimentaries - Shale or hornstone
- LS — Cherty limestone
- W — Wash

MAP - 3


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi W. EL Portal, Calif.
PLAN OF WORKINGS
To accompany report by
WILBUR H. GRANT
Scale: 1 in.: 20 ft.
September 14, 1951
0 10 20 30 40 50
LEGEND
Elevation points
Approximate elevations above sea-level.
orebody
Granite in place
Sedimentaries - Shale or hornstone
Cherry Limestone
Wash
N 17½°
Gr.-Leached
Gr.-Laterite
Gr.-Semi-Leached
Gr.-Laterite
Ore
Ore
Ore
2166
2148
2141
2124
2113
2137
2108.5
2109
2107
2087
2188
2200
LS.-Sh.
LS
LS
Sh
Sh
Sh
Discovery Monument
Blue Star No. 1. Claim
Proposed Adit 75' Long
Proposed diamond drill holes
Road
Trail
Road
Proposed Adit 125' Long
To highway
Proposed diamond drill holes
Creek bottom Approx 225' below outcrop
N 17½°
Lime
Granite
cross section
No scale
Ore
25'
47'
47'
130'
Switch-back Road
Probable ore
Proposed Adit 75'
Main Road
Proposed Adit 125'
Proposed drill holes to develop outcropping ore body at greater depth
Creek

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Mariposa, State of California, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 22, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 18th day of October, 195 1

William J. Barnett
Lemuel W. Barnett

United States Of America
Yosemite National Park

On this 18th day of October, 1951, before me, Gene J. Ottonello, U. S. Commissioner, in and for the said Yosemite National Park, Northern District of California, duly commissioned and sworn, personally appeared William J. Barnett and Lemuel W. Barnett, 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 say and year in this certificate first above written.

GENE J. OTTONELLO
UNITED STATES COMMISSIONER
YOSEMITE NATIONAL PARK
CALIFORNIA

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Mariposa, State of California, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated _____ July 23, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 18th day of October, 1951

William J. Barnett
Lemuel W. Barnett

United States of America
Yosemite National Park

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

On this 18th day of October, 1951, before me, Gene J. Ottonello, U.S. Commissioner, in and for the said Yosemite National Park, Northern District of California, duly commissioned and sworn, personally appeared William J. Barnett and Lemuel W. Barnett, 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.

GENE J. OTTONELLO
UNITED STATES COMMISSIONER
YOSEMITE NATIONAL PARK
CALIFORNIA

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMA-2192
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

RECEIVED
OCT 12 1951
Defense Minerals Administration
U.S. DEPT. OF THE INTERIOR

Name and address of applicant

MIDLAND MINING CO
(Peter De Michelis and Paul Aglietti, Partners)
461 Market St.,
San Francisco 5, Calif.

Date October 10th 1951

If you have already filed MF-100, give date filed June 1951 not rec in R&R., type of assistance requested none,

DMA Docket Number (if available) ~~none~~ 2192

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

MIDLAND MINING CO.
(Name of company)

X By Peter De Michelis
(Signature of authorized official)

By Paul Gabell

October 10th 1951
(Date)

Partners
(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—64067-2

1. (a) Those certain unpatented mining claims, in the Hites Cove mining district, more particularly described as follows:

BLUE STAR TUNGSTEN #1.
Located May 22nd 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 408, Mariposa County Records

BLUE STAR TUNGSTEN #2
Located May 22nd, 1951
Recorded May 23rd, 1951 in Vol. A-2 of Mining Records on page 409, Mariposa County Records.

BLUE STAR TUNGSTEN #3
Located May 22nd, 1951
Recorded June 11th, 1951 in Vol. A-2 of Mining Records on page 418, Mariposa County Records

(b) See lease attached

(c) Section 22 - T. 3. S - R. 19 E.

Note 1 - Both areas are the same
Note 2 - See attached land lord suburdination agreement

2. (a) Tungsten (Wo 3)

(b) See attached reconnaissance report of Mr. Wilbur H Grant and Assay reports of Pittsburg and Abbott A Hanks Inc.

3. (a) Step 1. Finish road including switch-backs to terminate 50 ft. under present workings.

Step 2. Drive 75 ft adit from switch-back road level to intercept ore body and explore ore at this point. Adit approx. 50 ft. below present workings.

Step 3. Drive 125 ft. adit 50 ft. lower in elevation and on lower road level to intercept ore body at this point and explore same.

Step 4. Diamond drilling program:

1. Drill several holes from lower road level to develop ore body of present workings at greater depth (approx 225 ft).

2. Drill several holes from upper road level (approx. 50 ft. below present workings) and slightly to the north for the purpose of developing new ore bodies.

Total cost of the project: $28,050.00

Note: The above work to be done successively with little change, providing each step in program proves successfully. If not, then the necessary changes shall be made in accordance to necessity.

(b) Six months.

4. See attached Map No. 3

5. None

6. Small tool house, labor and material: $500.00

   3/4 of mile road: $2000.00

   Rock soot over road, labor and material $500.00

7. (a) Rental compressor, jack hammer at $200.00 per mo.: $1200.00

   (b) None

   (c) None

8. Three miners at $15.00 per day.

   One supervisor at $500.00 per month.

9. Recapitulation of costs based on a six months period of operation:

200 ft of tunnel at $25.00 per foot	$5000.00
2000 ft diamond drilling (contract) at $7.00 per ft	14000.00
Supervision at $500.00 per month	3000.00
Sampling and assaying	400.00
Gasoline and oil at $75.00 per month	450.00
Office stationary, clerical services etc at $100.00 per month	600.00
Small tool house, labor and material	500.00
3/4 mile road	2000.00
Rental of compressor, jack hammers at $200.00 per mo.	1200.00
Rock shoot over road	500.00
Compensation insurance, social security	400.00
Total costs based on a six months period of operation	$28050.00

10. (a) We are prepared to invest $7012.50

    (b) Yes

11. We have already spent over $2000.00 opening the property

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Mariposa, State of California, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 22, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 18th day of October, 1951

William J. Barnett
Lemuel W. Barnett

United States of America
Yosemite National Park

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

On this 18th day of October, 1951, before me, Gene J. Ottonello, U.S. Commissioner, in and for the said Yosemite National Park, Northern District of California, duly commissioned and sworn, personally appeared William J. Barnett and Lemuel W. Barnett, 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.

GENE J. OTTONELLO
UNITED STATES COMMISSIONER
YOSEMITE NATIONAL PARK
CALIFORNIA

FORM 407-A

PITTSBURGH TESTING LABORATORY

ESTABLISHED 1881

PITTSBURGH, PA.

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS OR EXTRACTS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

ORDER No.

LABORATORY No. 26907

CLIENT'S No.

651 HOWARD STREET
SAN FRANCISCO 5, CALIFORNIA

FILE No.

REPORT

September 10, 1951

Midland Mining Company
461 Market Street
San Francisco, California

Subject: Samples (2)
Tungsten

Results:

Sample #1	Center of Ore	3.08% WO_3
Sample #2	Contact Zone, approx. 2 ft on outskirts of ore body	0.39% WO_3

Respectfully submitted,

PITTSBURGH TESTING LABORATORY

Clyde B. Gentle

District Manager

WPS/S:ml
cc: Above-5

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

July 16, 1951

DEPOSITED BY P. J. Feykert
617 Bryant Street
San Francisco, California

SAMPLE OF ORE

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD, per ton of 2,000 lbs. Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER, per ton of 2,000 lbs. Value @ $	Percentages	
32002	#1					Tungstic Oxide	0.67
03	#2					" "	2.55
04	#3					" "	0.74

We hereby certify that the above originates from ore samples drawn from Blue Star Tungsten Mine, as follows:

#1 - Outer edge - lenght of sample 9 ft
#2 Center ore - 10 tons on dump
#3 Inner edge - lenght of sample 7 ft

MIDLAND MINING CO.

By Paul Schlitt

ABBOT A. HANKS, INC.
Original Signed by
P. T. BEE

bob

LABORATORY REPORT
ABBOT A. HANKS, INC.
ENGINEERS, ASSAYERS, CHEMISTS, METALLURGISTS
CONSULTING - TESTING - INSPECTING
ESTABLISHED 1866
624 SACRAMENTO STREET
SAN FRANCISCO 11, CALIFORNIA
TELEPHONE GARFIELD 1-1697

Lab. No. 31738 Date July 9, 1951

Submitted by Fair Manufacturing Co.
617 Bryant Street
San Francisco, California

Sample Mark #2

QUALITATIVE SPECTROGRAPHIC ANALYSIS
Metals Found and Estimated Percentage Range

Less than .03%	.03% to .30%	.30% to 3%	3% to 30%	30% to 100%
Titanium Copper Molybdenum Vanadium Nickel Cobalt Chromium	Manganese Potassium	Aluminum Calcium Magnesium Sodium	Iron Silicon Tungsten	

We hereby certify that the above ore samples originate from BLUE STAR TUNGSTEN MINE.

MIDLAND MINING CO
By Paul Hyliett

Remarks

RESPECTFULLY SUBMITTED,
ABBOT A. HANKS, INC.
By Original Signed by P. T. BEE
Spectro-Chemist

bob

FORM A-5

MINING LEASE AND OPTION

THIS AGREEMENT, made this 22nd day of July, 1951 between W. J. BARNETT and L. W. BARNETT of El Portal, California, hereinafter called First Parties, and PETER J. De MICHELIS of San Francisco, California, hereinafter called Second Party,

WITNESSETH:

1. That for and in consideration of the rents, covenants, payments and agreements hereinafter contained, to be kept, paid and performed on the part of the Second Party, First Parties do hereby lease unto Second Party, the following described real property located in the County of Mariposa, State of California, to wit:

These certain unpatented mining claims, in the Hites Cove Mining District, more particularly described as follows:

Blue Star Tungsten No. 1
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 408, Mariposa County Records.

Blue Star Tungsten No. 2
Located May 22, 1951
Recorded May 23, 1951 in Vol. A-2 of Mining Records at page 409, Mariposa County Records.

Blue Star Tungsten No. 3
Located May 22, 1951
Recorded June 11, 1951 in Vol. A-2 of Mining Records at page 418, Mariposa County Records.

First Parties warrant that there are no liens or encumbrances against said mining claims.

2. This lease shall run for a period of ten (10) years from date hereof and so long thereafter as minerals in paying quantities can be produced, saved and sold thereon.

3. Upon execution of this agreement, Second Party agrees to pay to First Parties the sum of Two Hundred Dollars ($200.00) and in consideration of this payment First Parties grant to Second Party the right to enter upon said above described properties for the purpose of prospecting and sampling same, surveying and

Checking property lines and any other work Second Party may deem necessary for proper development of the properties.

On or before thirty (30) days after signing of this agreement, subject to the term herein, Second Party agrees to pay to First Parties a further sum of Two Hundred Dollars ($200.00), per month for nine months, to be paid not later than the 5th day of each month from date of the first of said payments within which Second Party agrees to commence further prospecting and development of the above described mining property.

4. Commencing within one (1) month after the expiration of the above nine (9) months period, Second Party shall make minimum payments of Four Hundred Dollars ($400.00) per month to First Parties in the manner as hereinafter described.

5. Second Party agrees to pay to First Parties a royalty of Six Per Cent (6%) of the value of all minerals produced, shipped and sold from the above described leased premises. The 6% royalty means 6% of the net returns from proceeds of any ore or concentrates shipped and sold to a buyer and the net returns shall mean the total sum paid to Second Parties by any buyer. Said royalty payments to be made to First Parties within ten (10) days from and after receipt by Second Party of said proceeds from buyer. Second Party to furnish First Parties, at time of each payment, a duplicate statement of account between Second Party and buyer covering such payment made by buyer.

6. Second Party agrees with First Parties as follows:

(a) To enter upon said properties and to work same as a mine for the production of tungsten and any other valuable minerals that may be found and produced profitably.

(b) All mining shall be done in a miner'like fashion and in conformity with all State and Federal laws and regulations pertaining to mining, with due regard to safety, development and preservation of said premises as a workable mine.

(c) To commit no waste and do no act thereon which will impede mining operations or impair the operating condition of said mining claims, and suffer no default which might in any manner involve the First Parties in liability of any kind or character.

(d) To permit the First Parties or their authorized representatives at all reasonable times to have access to any and all workings in or on said premises for the purpose of inspecting or sampling same.

(e) At all times to keep an accurate set of accounts and records of all production, shipments, and receipts, which accounts and records shall be available for inspection by First Parties at any reasonable time.

(f) To, at all times during the term hereof, keep and save First Parties and the premises free and clear of all costs, liens and encumbrances of every nature whatsoever made or suffered by Second Party, and to do no act or thing which shall constitute a cloud upon the First Parties title to the aforesaid property.

(g) To carry all necessary Workmens Compensation Insurance and to comply with all State and Federal laws pertaining to the safety of employees.

(h) If this lease be terminated before completion of all the terms thereof, the Second Party agrees to deliver to the First Parties the said premises in good condition and repair.

7. It is mutually understood and agreed as follows:

(a) That in the event Second Party fails to perform any covenants or any other provision of this lease, that all rights and privileges of the Second Party under the terms of this lease may, at the option of the First Parties, be terminated in the manner hereinafter set out.

(b) In the event of termination of this lease prior to the completion of all the terms hereof, the Second party shall have the right to remove all machinery and equipment from said property within a period of ninety (90) days after termination of the lease.

(c) That all State and County Taxes levied against the property and mining machinery and equipment and in revenue to be paid by the Second Party when they become due and before delinquency.

(d) The Second Party shall have an assignable right and interest in this lease to such responsible persons who shall assume this lease and the agreement for payment of overriding royalty made by second party with Hazel Ayers and Herbert Merrill this date and agree to be bound by the terms hereof. No assignment hereof to be made without the Second Party having first given to the First Parties at least ten (10) days written notice of his intention to assign his interest herein, said notice to contain the name and address of any proposed assignee hereof.

(e) In the event there is a default on the part of the Second Party in any of the covenants or terms of this lease and the default shall continue for a period of thirty (30) days thereafter First Party may serve written notice of default on Second Party, First Parties may finally terminate this lease by giving written notice of their final termination of this lease; and upon such final termination all rights of Second Party in and to said real property shall cease and terminate, save and except the right to remove their personal property, machinery and equipment within a period of ninety (90) days after such termination.

6. It is recognized by all parties hereto that tungsten prices have fluctuated and that there are times when tungsten cannot be mined except at a loss, and it is recognized by all parties hereto that at the present time a favorable market exists for tungsten; and it is expected that Second Party will use diligence in mining the maximum amount of tungsten that is reasonably possible under the circumstances during the period when tungsten price is high. Should the price of tungsten drop so that it is impossible to operate the property except at a loss, then Second Party need not operate said mine for a period of not to exceed six (6) months without any penalties and Second Party shall be

relieved of making the minimum monthly payments as specified. If the non-operation of said mine shall exceed a period of six (6) months, then Second Party must pay to First Parties the sum of One Hundred Dollars ($100.00) per month, provided further that the suspension of operations under this provision need not be permitted by First Parties for a period longer than twelve (12) months.

9. It is expressly agreed that delays or failure to operate said mine when caused by strikes, lock-outs, act of God, military orders or other government interference with operations, inability to get materials after due diligence, or any other cause beyond the control of Second Party, that during such period of time when mining operations have been suspended that Second Party shall not be penalized or held to be in default, and the obligation to pay the minimum monthly payments shall also be suspended, but as soon as with reasonable diligence said mine can again be operated, Second Party must again perform all the terms of this lease.

10. Second Party shall have the option of terminating this lease by the giving of written notice of such intention to First Parties, together with possession of said properties and thereupon be relieved of all future obligations hereunder, including the payment of any monies becoming due and payable thereafter, but such surrender shall not release Second Party from any obligations or liability theretofore incurred by them hereunder.

11. First Parties, in Consideration of this agreement, do hereby grant to the Second Party during the term of this agreement and as long as Second Party shall not be in default hereunder, the exclusive right and option to purchase the above described property for a total purchase price of Eighty Thousand ($80,000.00) and First Parties agree that all royalty payments of six per cent (6%) and any other payments of any kind made from any source by Second Party to First Parties shall be applied on the purchase price; and First Parties agree that when they have received the purchase price of $ 80,000.00 that they will,

by proper conveyance convey all of the above described premises to the Second Party.

12. It is understood and agreed between all parties hereto that the minimum monthly payment of Four Hundred Dollars ($400.00) mentioned in paragraph 4 hereof, may be covered by royalty payment or in the event the royalty payments required to be made hereunder shall not equal $400.00 per month then Second Party shall pay such additional amount as may be required to bring the total monthly payment up to $400.00 per month, the minimum monthly payment required to be made hereunder, and shall be paid to the First Parties at their address shown hereinafter.

13. Any notices, letters or other communications, required in connection with any matters arising under the within lease and option shall be directed to the respective parties here at the address following their respective names:

B. J. Barnett and L. U. Barnett,
P.O.Box 16,
El Portal, California

Peter J. De Michelis,
142 Oxford Street,
San Francisco, California

If any of the above parties change their addresses they shall give written notice to the other parties and upon receipt of notice of such change, the new address shall be controlling hereunder.

14. Second Party agrees that he will perform all assessment work on the above described property which is required by law of the United States and record proof of same, to keep said mining claims in good standing, at their expense and to do said work at least thirty (30) days prior to the time when said work must be performed and notify First Parties that same has been done.

15. Time is and shall be of the essence of this agreement. Every provision hereof shall inure to the benefit of and be binding

upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the respective parties have executed these presents the day and year first written above.

W. J. Barnett

L. W. Barnett
First Parties

Peter J. De Nicholis
Second Party

STATE OF CALIFORNIA
COUNTY OF
Mariposa

On July 22, 1951 before me, the undersigned, a Notary Public in and for said County and State, Personally appeared: W. J. Barnett, L. W. Barnett and Peter J. De Nicholis, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.
WITNESS my hand and official seal.

R. C. Carran

(page seven)

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

3

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951

TABLE CONTENTS

	Page
Introduction	1
Legal	1
Location	2
Elevations	2
Property	2
Workings	3
General Geology	3
Rocks	4
Ore	6
Assays	6
U.S. Government Activity	7
Road to Mine	8
Conclusions	8
Recommendations	9

-------oOo-------

APPENDIX

Map I GENERAL MAP

Map 2 PLAN OF WORKINGS.

RECONNAISSANCE REPORT

B L U E S T A R T U N G S T E N M I N E

Mariposa Co. 11.7 mi. N 80 E Briceburg, Calif.

WILBUR H. GRANT

September 14, 1951.

I N T R O D U C T I O N

At the request of Messrs. PAUL AGLIETTI and P. De MICHELIS, on September 13 and 14, 1951, I made a reconnaissance examination of their BLUE STAR TUNGSTEN MINE, spending one full day on their property. The purpose of the examination was essentially to interpret the economic geology and recommend procedure for future activities on the property.

L E G A L

In the short space of one day my time was devoted to the essential geological economic aspects of the ore occurrence. No time was devoted to checking such important legal data as claim locations, options, terms, titles, encumbrances, etc. These are as important as the presence of profitable orebodies. The members of the Syndicate are experienced business men so, no doubt, have given these matters the attention they deserve.

L O C A T I O N

Merced, the nearest railroad point is 66 miles by paved highway S 54 W from the property. The property is 27 miles over the same paved highway (the main entrance road to the Yosemite National Park) N 39 E from Mariposa, the county seat of Mariposa County where the mining claims are recorded. To these distances must be added .63 of a mile S 6 E up about an 8% graded 3 ft. wide trail to the mine workings.

E L E V A T I O N S

On Map I is shown the topograhpy of the immediate area of the claims. This is traced from an enlargement (from 1^{in} = 2000 ft. to 1^{in} = 400 ft.) of that portion of the topographic map of the El Portal Quadrangle of the U.S. Geological Survey which was printed in 1949. It shows steep hillsides. There is a difference of elevation on the property of 1330 feet. The main working is about 550 feet above the highway.

P R O P E R T Y

The property consists of three unpatented lode mining claims, Blue Star #1, 2 and 3, as shown on Map #1 attached hereto.

There are no buildings nor equipment on the property other than personal property owned by the lessees, consisting of drill steel, hammers, picks, shovels, etc.

W O R K I N G S

Map #2 was constructed from a tape and compass survey made by P. De MICHELIS and me. It was tied into the sharp turn in the Hite Cove trail at the southerly end of the Blue Star #1 Claim (See Map #1). Map #2 shows all the prospect workings, cuts, pits and winzes which were called to my attention while at the property. There are eight in number. Ore occurs in only three of them as labeled on the map.

G E N E R A L G E O L O GY

The California State geological map (1916) shows a strip of metamorphosed Jurasic sediments about three miles wide extending about S 35 E from the City of Mariposa with large areas of granite outcroping on each side of it. These Jurasic rocks show on both sides of Merced River from Briceburg to Indian Flat just west of the area of Map I, and dominate in the ridge east of where the trail meets the highway. It is possibly a "roof pendant" underlain by the granite batholith. Beds strike and dip in many directions.

Besides the outcrop of the granite batholith on each side of the three mile wide strip of Jurasic metamorphic rocks, dikes of granite of considerable width (say 500 feet or so) cut into the metamorphic sedimentaries a mile or so before they terminate. The east wall of one of these dikes crosses the trail about where the trail enters the Blue Star #3 claim and probably continues under wash at least to a point 230 feet south of the

main working where the trail crosses the westerly side of the granite dike.

R O C K S

The Jurasic metamorphic sediments were originally deposited as a fine mud on the oceans continental shelf. On the outer reaches they were interdeposited with limy material which became limestone later. Closer to shore the mud was interdeposited with sometimes sand and sometimes with gravel. Geological processes converted the mud to shale, the sand to sandstone and the gravel to conglomerate. When the Tertiary granite lava which became the great Sierra Nevada batholith was intruded up towards the overlying sedimentary rocks, the whole mass of the latter were lifted several thousand feet, tilted, contorted, faulted, fractured and those nearest the granite magma were heated almost to a liquid and silicified to a hornstone. These geologic processes account for the complex nature of these rock occurrences. During the subsequent millions of years following down to the present, trillions of tons of the overlying sedimentary, metamorphic rocks and even much of the granite has been leached, weathered and transported towards the Nevada deserts and the sea by glaciers, rains and streams thus leaving the conditions which we see today.

The granite lavas in such enormous masses remained covered by sedimentary rocks for millions of years until the magmas

completely became coarsely crystalline solid granites. They solidified slowly from the outside towards their magmatic centers. This history accounted for fine grained granitic rocks near their contacts with the colder sedimentary rocks and increasing in coarseness towards the center of the mass. Sometimes the feldspar crystals, last to solidify, became as much as a foot in diameter which makes a good source of material for making porcelain. Also the varying chemical composition of the granite magma and the mixing action of the movement of it while still liquid cause hundreds of rock types to crystallize from it by the time it is completely solidified. These can range from dominant black biotite mica (called schlieren) to nearly white types such as aplite and alaskite which are composed of little more than quartz and feldspar. The probable average chemical composition of the Sierra Nevada batholith rocks would produce a rock type called quartz monzonite (sometimes called granodiorite).

The granites outcropping on the Blue Star group are dominantly a granite sand or granite laterite (disintegrated granite in place) due to weathering. This is dominantly only a few feet in thickness, varying to a semi-leached and thence to fresh fine-grained granite. The granites on these claims are parts of a dike which accounts for its finer texture.

Most of the Blue Star Claim #1 and the westerly half of #3 are covered with a foot or more of wash which conceals much geologic data which would be useful in determining all the

possibilities for commercial orebodies. The remaining half of the group expose outcrops of Jurasic partly metamorphosed sediments. No ore is found in them to date.

O R E

The developed ore is dominantly a dark gray mineralisation with a microscopic silicious groundmass in which occur crystals of scheelite varying from ½ inch in diameter to almost microscopic size. There is also partially identifiable fine grained brassy colored mineral resembling pyrite. In all probabilities there are minute other minerals in the ore which are too fine to determine with a hand lens. The alteration of the host rock has been so complete by introduced minerals that it is impracticable to determine whether it was originally a granite or an altered shale rock. Although the gradation phases are dark gray in color, most of the evidence indicates that it originally was a granite. The evidence indicates that the ore occurs in discontinuous lenses completely surrounded by granite.

A S S A Y S

The ultra-violet light clearly indicates a dominant reaction of only scheelite present in an appreciable quantity. The weights of the different types indicate that the fine-grained compact ores with phenocrysts of scheelite less than one tenth of an inch in diameter may be a higher grade than those where the scheelite crystals are up to one half inch in diameter. The response to the ultra violet light is so positive that no sampling during mining will be necessary. After a limited experience, the operator can

determine what rock will pay to mine by use of the ultra-violet light.

Mr. P. DeMICHELIS says that the samples he has had assayed run from .59% WO_3 near the rim of the orebody to 3.08% WO_3 in the best concentration.

It is of interest to know that the syndicate received the first prize at a recent Mariposa County Fair for the best tungsten ore exhibit from new tungsten prospects during the past year.

U. S. GOVERNMENT ACTIVITY

On September 8, 1951 Chairman Lyndon B. Johnson (D. Tex.) of the Senate Arms Service Preparedness Subcommittee wrote a letter to W.C. Schroeder, Acting Administrator of the Defense Minerals Administration with a copy to Jess Larson, Director of the newly created Defense Minerals Procurement Agency in which he requested eleven sets of data concerning the marketing of ore produced by small operators whose ore assays from .3% to 1% tungsten. His inquiry especially requested data concerning what has been done in establishing depots and price quotations for the purchase by the U.S. Government of low grade tungsten ore. Also "9. What financial or other assistance has been recommended by the Defense Minerals Administration for the increase in nation's tungsten mill or refining capacity? Give us the details including the amount of money and capacity involved."

This offers a new alternative. If no market can be found for the ore already developed with a satisfactory profit from mining it, additional capital expenditures might be postponed

until the Syndicate can determine what the U.S. Government will do in the near future to assist the small operator. At least this evidence can be investigated still further while other plans are maturing.

ROAD TO MINE

The geological evidence indicates that the trail is in soil over hornstone for only about 1,200 feet down from the gulch just easterly of the barbwire fence gate. The balance of the trail of 2,100 feet probably is in soil over granite laterite which should be able to be removable by a bull dozer without drilling and blasting except where an occasional "nigger-head" of fresh granite is encountered. The probabilities are that the trail can be widened to a truck road for at least two thirds of the total length. Furthermore, it is possible that some of the trail over hornstone could be widened by the bull dozer.

CONCLUSIONS

1. The foot or so of soil which covers most of the westerly facing steep hillside materially reduced the ability of a geological engineer to secure the needed evidence with which to determine all of the ore-controls of this property in a one day reconnaissance examination.

2. The eight prospect workings driven to date does expose the best quality of tungsten (scheelite) ore I have seen in any of my field trips. The assay value will vary from one half to over three per cent. Mill values have been exposed for a length of forty feet in a N 40 W direction, for a depth of twenty-five feet

and a maximum horizontal width of twenty feet. (The maximum width at right angles to the dip may be not more than fifteen feet). Any tungsten prospect with such a showing is worthy of having more new capital spent cautiosly to determine more about the trend of its economic value.

3. The partly developed orebody is either an ore shoot in the form of a pitching chimney or a lens completely in a wide granite dike at least fifty feet from the nearest rock of sedimentary origin which contains some cherty limestone beds up to ten feet in width. So far, no other orebody has been exposed by prospecting which was called to my attention.

4. There are several other factors besides geological ore controls which have much to do with determining the profit nature of this enterprise. They are inter dependent. Some of them are itemized above under "U.S. GOVERNMENT ACTIVITY" and "LEGAL". The program to be followed is important.

R E C O M M E N D A T I O N S

1. Strip the soil from above the outcropping orebody so that all its exposed features can be evaluated to determine its commercial possibilites.

2. Investigate fully government aids to small tungsten miners both in practice and contemplated.

3. Make a survey of all ore buyers and treatment plants to which the Blue Star ore might be sent. The data needed from them should include per cent recovery of the mill, how much of your ore they can treat daily, what they will charge for milling a ton of ore, probable grade of your concentrates, what arrangement they

will make for your representative to check all steps in the process and the nature of the contract they are willing to sign.

4. Determine the cost of hauling and freight to each ore buyer, treatment plant or government stock-piling depots.

5. Cost of widening road from highway to mine.

6. Estimate cost of surface plant and equipment and cost of mining and delivering ore to trucks.

7. If from the above data and other cost factors you can calculate a satisfactory profit from the apparent developed ore now, then start truck road to the mine. In order to have bin room at the orebody of fifty feet, the switch-back road from the trail should start one hundred feet up the Hite Cove trail from the point the present foot trail to the workings starts.

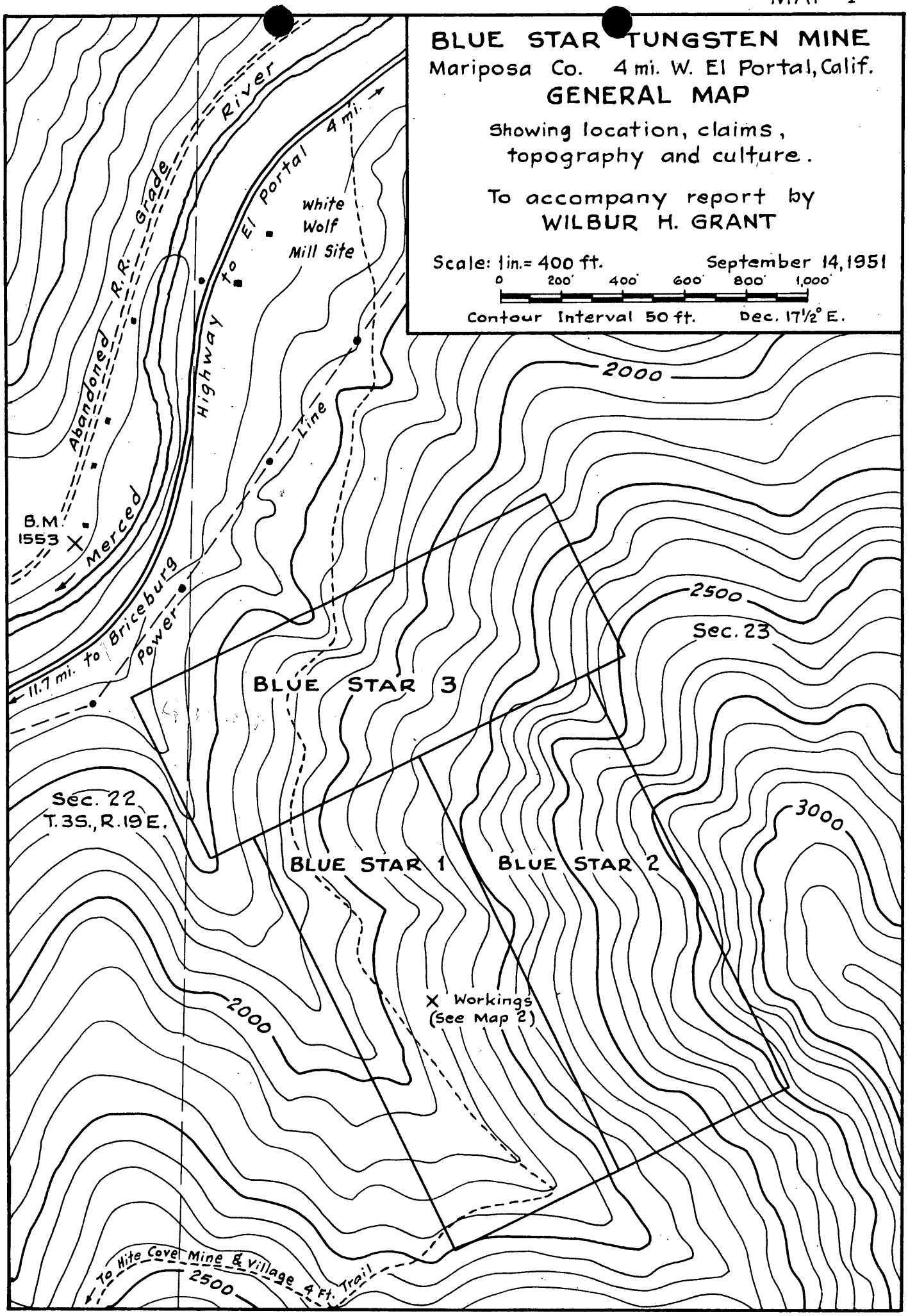
8. The best system for prospecting and development of this particular orebody is to use that followed by American pioneers and still used by Mexican miners. It is, ~~to~~ either "follow the ore" or "stope-develop" it. By the latter method you will not miss any of the pay ore and at the same time you will have an income and need less new capital. Experience has shown that by these methods more ore will be marketed than can be estimated conservatively from the present available evidence.

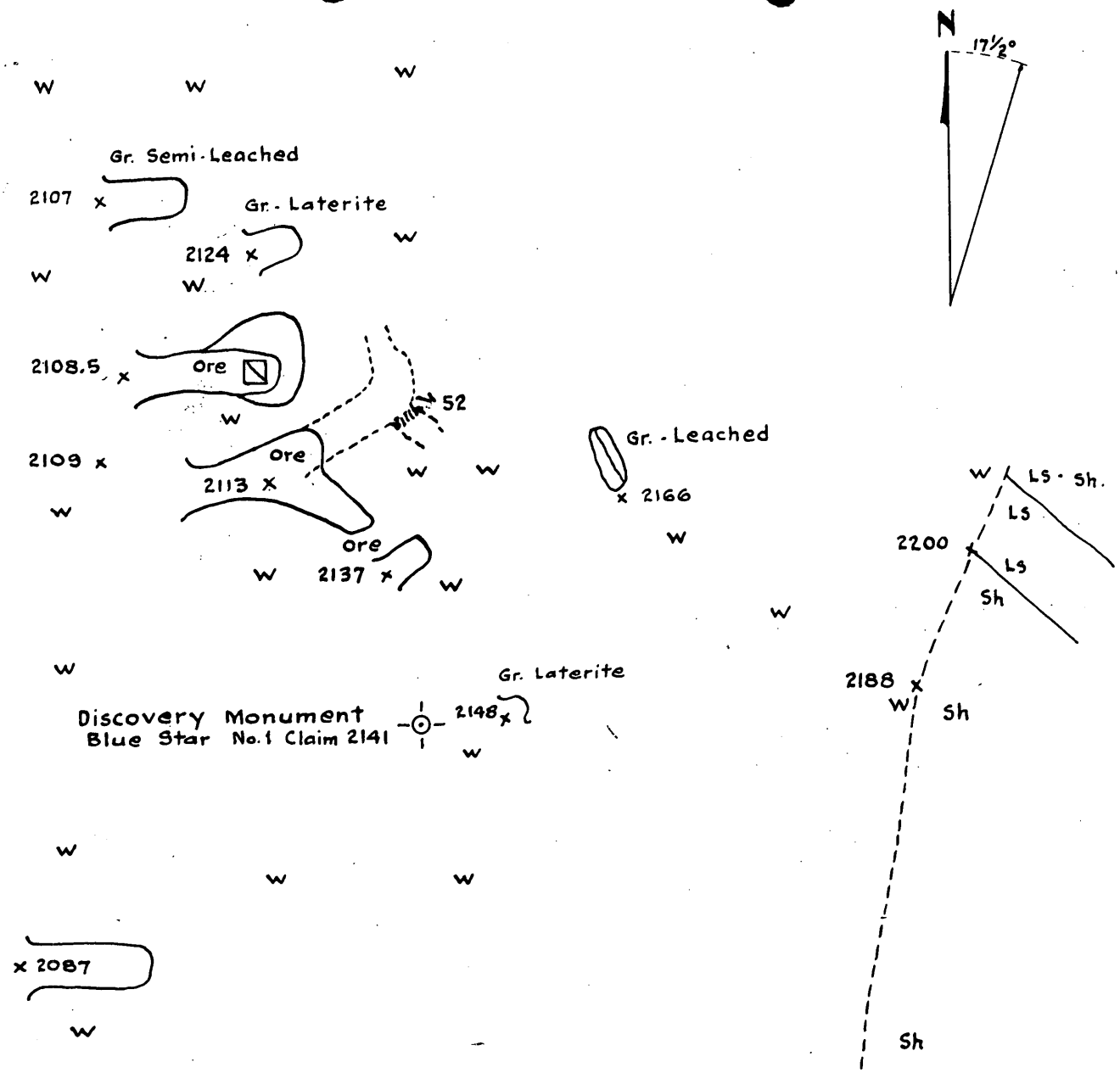
Respectfully submitted,

Wilbur H. Grant

San Francisco 4, California,
September 14, 1951.

A P P E N D I X


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4 mi. W. El Portal, Calif.
GENERAL MAP
Showing location, claims, topography and culture.
To accompany report by
WILBUR H. GRANT
Scale: 1 in. = 400 ft.
September 14, 1951
0 200' 400' 600' 800' 1,000'
Contour Interval 50 ft.
Dec. 17½° E.
Merced River
Abandoned R.R. Grade
Highway to El Portal 4 mi.
White Wolf Mill Site
Power Line
B.M. 1553
11.7 mi. to Briceburg
2000
2500
3000
Sec. 23
Sec. 22
T.3S., R.19E.
BLUE STAR 3
BLUE STAR 1
BLUE STAR 2
X Workings (See Map 2)
To Hite Cove Mine & Village 4 Ft. Trail



BLUE STAR TUNGSTEN MINE

Mariposa Co. 4 mi. W. El Portal, Calif.

PLAN OF WORKINGS

To accompany report by
WILBUR H. GRANT

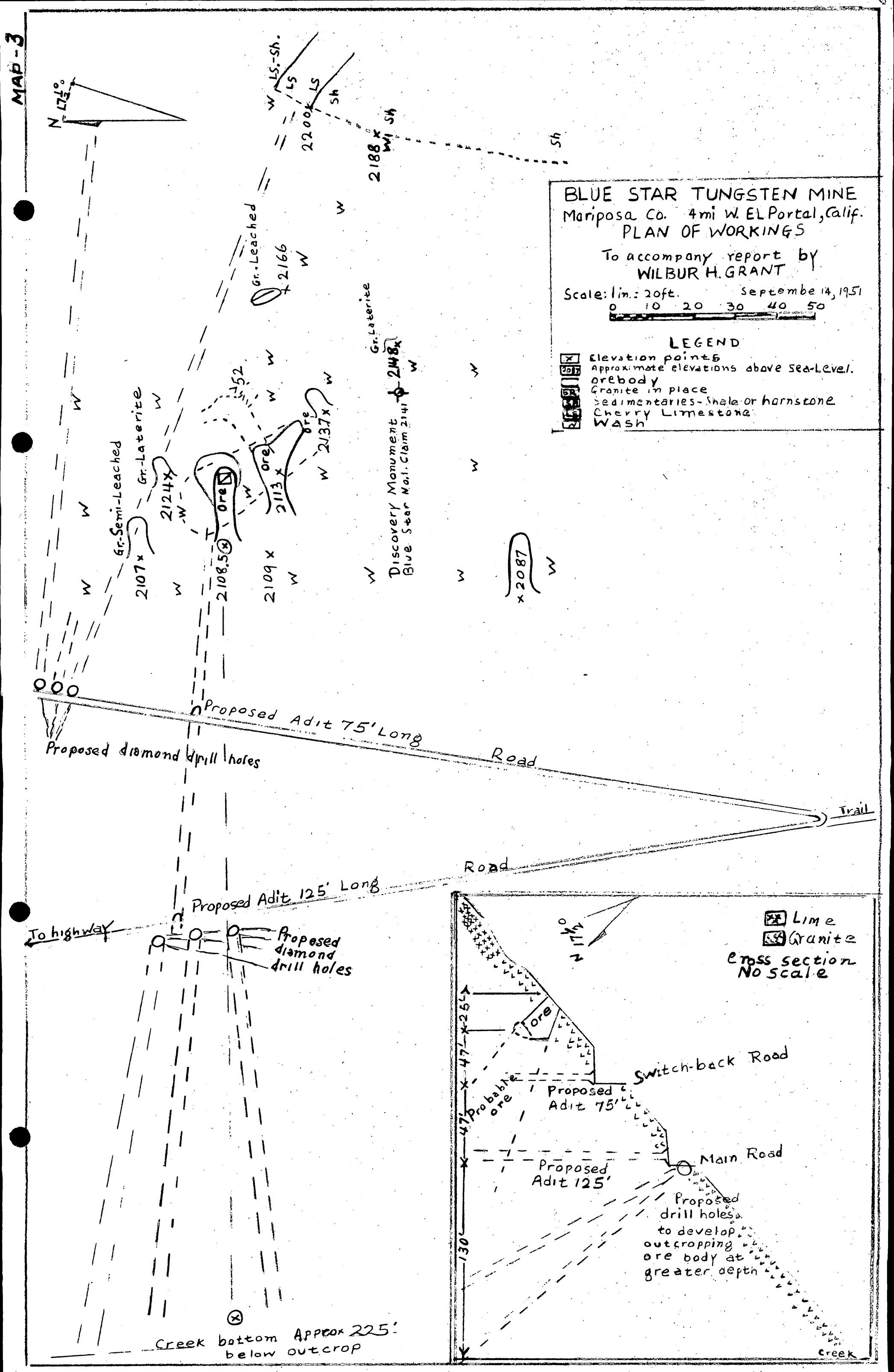
Scale: 1 in. = 20 ft. September 14, 1951

0 10 20 30 40 50

LEGEND

- X — Elevation points
- 2087 — Approximate elevations above Sea-Level.
- Orebody
- Gr. — Granite in place.
- Sh. — Sedimentaries - Shale or hornstone
- Ls — Cherty limestone
- W — Wash

MAP-3


BLUE STAR TUNGSTEN MINE
Mariposa Co. 4mi W. EL Portal, Calif.
PLAN OF WORKINGS
To accompany report by
WILBUR H. GRANT
Scale: 1in.: 20ft.
September 14, 1951
0 10 20 30 40 50
LEGEND
Elevation points
Approximate elevations above sea-Level.
orebody
Granite in place
Sedimentaries-Shale or hornstone
Cherry Limestone
Wash
N 17½°
LS.-Sh.
LS
Sh
2200
2188
Gr.-Leached
2166
Gr.-Laterite
2148
52
Semi-Leached
2124
2107
2108.5
2109
2113
2137
ore
Discovery Monument
Blue Star Mol. Claim 2141
2087
Proposed Adit 75' Long
Proposed diamond drill holes
Road
Trail
Proposed Adit 125' Long
To highway
Proposed diamond drill holes
Creek bottom Approx 225' below outcrop
Lime
Granite
cross section
No scale
N
25'
47'
47'
130'
ore
Switch-back Road
Proposed Adit 75'
Probable ore
Main Road
Proposed Adit 125'
Proposed drill holes to develop outcropping ore body at greater depth
creek