DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip Tungsten

CONTROLLED DOCUMENT

DMA Docket No. ~~1967~~

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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
CODE-340 3624

To:	Tungsten Br.	Date	8-16-51
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CONTROLLED DOCUMENT

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

MAR 6 1952

Butte Tungsten Company
Messrs. H. T. Hall and Wm. Kleper
P.O. Box 1383
Butte, Montana

Re: Docket No. DMMA 1967X - Tungsten
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

Gentlemen:

Your application for aid for an exploration project and other data relating to your application available to us in Washington have been carefully reviewed.

This information, while noting a small amount of marginal ore on your property, indicates that, geologically, there is little probability of making a significant mineral discovery. We regret, therefore, to inform you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Program, and for bringing this property to our attention.

Sincerely yours,

C. O. Mittenderf

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry'lm
2/14/52

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

400

March 4, 1952

1967X — denied

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Robert W. Seeman's memorandum of February 28 on DMA 1967X - Tungsten

The basic reason for denying the subject application is as follows:

The veins average only 12 to 14 inches in width and the ore shoots rarely extend more than 15 to 20 feet along the strike. The tungsten minerals commonly occur in grissen on the vein walls and the grissen ranges from ½ inch to 1 inch in width. Previous sampling of the veins averaged only 0.3 percent WO_3. In all probability the samples were cut across the full width of the veins. These data indicate that geologically there is very little likelihood of making a significant mineral discovery. For further detail, see Mr. Leamon's memorandum of February 8.

George C. Selfridge

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

GCSelfridge'ls'lm
3/4/52

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

MAR 6 1952

400

February 14, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Denial of exploration project in the amount of $60,000.00 ~~[illegible]~~
Docket No. DMEA 1967X - Tungsten
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

The subject application was denied by this Division for the following reasons:

1. Narrow veins averaging from 12 inches to 14 inches in width, and ore shoots rarely extending more than 15 to 20 feet along the strike, with tungsten minerals commonly occurring in greisen ranging from 1/4 inch to 1 inch in width between the vein and the granite walls, indicate that geologically there is very little probability of making a significant mineral discovery.

2. The property is apparently a prospect, with the applicant offering no samples or analysis of the tungsten content to justify the proposed expenditure. Development has consisted of one, short adit; one, caved shaft of unknown depth and approximately 42 small surface cuts along the vein. The property has had no production.

3. The field geologist states: "Samples reported taken by the WPA Minerals Resources Survey assayed from 0.01 percent WO_3 to 3.46 percent WO_3 and averaged 0.3 percent WO_3", however, there is no record available as to how or where these samples were taken.

4. The field geologist estimated only 1,000 tons of inferred ore containing about 750 units of WO_3. However, no samples were taken by the geologist to substantiate his estimate of the grade.

5. The property is accessible only by trail and several miles of new road would have to be constructed prior to starting active mining operations.

6. The very limited widths and lengths of the ore sheets, and the small inferred tonnage do not justify the expenditure of the funds necessary to explore the property.

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

GGGentry'lm
2/14/52

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

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

400

February 28, 1952

Memorandum

To: G. C. Selfridge, D.M.E.A.

From: R. W. Geehan, Bureau of Mines

Subject: Exploration Loan
Butte Tungsten Company
Scheelite & Aplite Claims
Pipestone Mining District
Jefferson County, Montana

DMA 1967X
Tungsten

The subject docket is returned herewith, along with the letters to the applicant and the memo to the Acting Administrator. I have not surnamed the letter or the memo for the following reasons:-

(1) The only real reason for rejecting the small loan suggested by the Field Team is the location of the deposit coupled with the rather small tonnage that would be developed. The exploration could well be approved except for this factor, as there is no quest on that tungsten is present. The probable cost of a road rather than the probable cost of exploration as related to tons of ore is, to me, the governing factor. This is not covered in enough detail in the docket to enable an intelligent decision.

(2) In the memorandum, points 2 and 3 do not seem to be good reasons for rejection, particularly when considered together. Also, no reference is made to the favorable report of the Field Team.

I suggest the field team be asked to comment on the mill the applicant mentions as being five miles from the property, and on the condition of the road leading to the mill. The small amount of ore that could be expected would not justify extensive road construction if the exploration located ore in the maximum quantity that can be inferred from the numerous surface pits that expose the vein.

RWGeehan:elk
cc: Mr. Geehan
Ferrous M&A
Files
Mr. Kaitlin

Robert W. Geehan

~~Mr. Selfridge~~

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

February 28, 1952

1967

Memorandum

To: G. C. Selfridge, D.M.E.A.

From: R. W. Geehan, Bureau of Mines

Subject: Exploration Loan — DMA 1967X
Butte Tungsten Company — Tungsten
Scheelite & Aplite Claims
Pipestone Mining District
Jefferson County, Montana

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RWGeehan:elk
cc: Mr. Geehan
Ferrous M&A
Files
Mr. Kaelin

Robert W. Geehan

Mr. Selfridge

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

file

February 28, 1952

Memorandum

To: G. C. Selfridge, D.M.E.A.

From: R. W. Geehan, Bureau of Mines

Subject: Exploration Loan
Butte Tungsten Company
Scheelite & Aplite Claims
Pipestone Mining District
Jefferson County, Montana

DMA 1967X
Tungsten

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RWGeehan:elk
cc: Mr. Geehan
Ferrous M&A
Files
Mr. Kailin

Robert W. Geehan

Mr. Selfridge

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

G-MD-DML

File

February 8, 1952

Memorandum

To: George C. Selfridge, DMEA

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

Subject: Exploration application $15,580 DMEA 1967 - Tungsten
Butte Tungsten Co.
Scheelite and aplite claims
Elpestone Mining District
Jefferson County, Montana
Secs. 17, 18, 19, 20, T. 3 N., R. 6 W.
About 10 miles northeast from Butte, Montana

The applicant made no definite proposal for exploration, but requested $60,000 to produce tungsten (application received August 15, 1951).

The property was examined September 28, 1951 by Elton Youngberg for the Field Team. His report, dated January 28, 1952, recommends a program of surface sampling ($950) followed by 300 feet of drifting if the surface work is successful ($14,640).

S. W. Hobbs of the Geological Survey examined the claims in July 1944. He concluded that the vein contained 100 tons of indicated ore averaging 0.5 to 0.75 percent of WO_3, and 700 to 1,000 tons of inferred ore of the same grade to a depth of 200 feet.

According to Hobbs, scheelite is found in a steeply-dipping quartz vein 4 to 36 inches thick with an average thickness of 12 to 14 inches, in quartz monzonite. The vein can be traced for about 1,500 feet in 35 pits and trenches, mostly dug by the Montana WPA Mineral Resources Survey, and in 2 short adits and a shallow shaft. The vein is composed of milky to clear gray quartz with scheelite and minor amounts of mica, altered amphibole, and molybdenite. The scheelite is in well-formed crystals up to 1 inch across localized in definite shoots or pockets in the vein. About 5 areas of scheelite enrichment occur along the exposed portion of the vein, separated by more or less barren quartz. The shoots or pockets are usually quite small and rarely extend more than 15 or 20 feet along the strike of the vein.

A number of samples of the vein were taken by the WPA Mineral Resources Survey and analyzed for WO_3. No record is available as to how these samples were taken, where they were taken, or by whom. Assays ranged from 0.01 to 3.46 percent of WO_3, and averaged about 0.3 percent.

Conclusion:

The vein is narrow, and the distribution of scheelite is erratic. The locality is accessible only by trail, and several miles of new road would be required for a mining enterprise. The inferred ore reserves of only 1,000 tons containing 750 units or less of WO_3 are too small to warrant the expenditures proposed.

Recommendation:

It is recommended that the application be denied because the chance of making a significant discovery is poor.

DMLemmon:gt

Dm Lemmon

FILE COPY
SURNAME:

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

Geofrey
Selfridge
Hodges
Thayer
Jefferson

MAR 1952

E.L.

Butte Tungsten Company
Messrs. H. T. Hull and Wm. Kieper
P.O. Box 1343
Butte, Montana

Re: Docket No. MEA 1967X - Tungsten
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

Gentlemen:

Your application for aid for an exploration project and other data relating to your application available to us in Washington have been carefully reviewed.

This information, while noting a small amount of marginal ore on your property, indicates that, geologically, there is little probability of making a significant mineral discovery. We regret, therefore, to inform you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Program, and for bringing this propety to our attention.

Sincerely yours,

C. O. Mittendorf (for) E.L. 3/6/52

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry'lm
2/14/52

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

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

March 4, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Robert W. Geehan's memorandum of February 28 on DMA 1967X - Tungsten

The basic reason for denying the subject application is as follows:

The veins average only 12 to 14 inches in width and the ore shoots rarely extend more than 15 to 20 feet along the strike. The tungsten minerals commonly occur in greisen on the vein walls and the greisen ranges from ½ inch to 1 inch in width. Previous sampling of the veins averaged only 0.3 percent WO_3. In all probability the samples were cut across the full width of the veins. These data indicate that geologically there is very little likelihood of making a significant mineral discovery. For further detail, see Mr. Lemmon's memorandum of February 8.

G. C. Selfridge

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

FILE COPY
SURNAME:

Selfridge

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

March 4, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

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George C. Selfridge

S.L. 3/6/52

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

GCSelfridge'ls'lm
3/4/52

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

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

February 28, 1952

Memorandum

To: G. C. Selfridge, D.M.E.A.

From: R. W. Geehan, Bureau of Mines

Subject: Exploration Loan
Butte Tungsten Company
Scheelite & Aplite Claims
Pipestone Mining District
Jefferson County, Montana

DMA 1967X
Tungsten

The subject docket is returned herewith, along with the letters to the applicant and the memo to the Acting Administrator. I have not surnamed the letter or the memo for the following reasons:-

(1) The only real reason for rejecting the small loan suggested by the Field Team is the location of the deposit coupled with the rather small tonnage that would be developed. The exploration could well be approved except for this factor, as there is no question that tungsten is present. The probable cost of a road rather than the probable cost of exploration as related to tons of ore is, to me, the governing factor. This is not covered in enough detail in the docket to enable an intelligent decision.

(2) In the memorandum, points 2 and 3 do not seem to be good reasons for rejection, particularly when considered together. Also, no reference is made to the favorable report of the Field Team.

I suggest the field team be asked to comment on the mill the applicant mentions as being five miles from the property, and on the condition of the road leading to the mill. The small amount of ore that could be expected would not justify extensive road construction if the exploration located ore in the maximum quantity that can be inferred from the numerous surface pits that expose the vein.

Robert W. Geehan

Robert W. Geehan

1 copy [illegible]

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

February 14, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Denial of exploration project in the amount of $60,000.00
Docket No. DMA 1967X - Tungsten
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

The subject application was denied by this Division for the following reasons:

1. Narrow veins averaging from 12 inches to 14 inches in width, and ore shoots rarely extending more than 15 to 20 feet along the strike, with tungsten minerals commonly occurring in griesen ranging from 1/4 inch to 1 inch in width between the vein and the granite walls, indicate that geologically there is very little probability of making a significant mineral discovery.

2. The property is apparently a prospect, with the applicant offering no samples or analysis of the tungsten content to justify the proposed expenditure. Development has consisted of one, short adit; one, caved shaft of unknown depth and approximately 42 small surface cuts along the vein. The property has had no production.

3. The field geologist states: "Samples reported taken by the WPA Minerals Resources Survey assayed from 0.01 percent WO_3 to 3.46 percent WO_3 and averaged 0.3 percent WO_3", however, there is no record available as to how or where these samples were taken.

4. The field geologist estimated only 1,000 tons of inferred ore containing about 750 units of WO_3. However, no samples were taken by the geologist to substantiate his estimate of the grade.

5. The property is accessible only by trail and several miles of new road would have to be constructed prior to starting active mining operations.

6. The very limited widths and lengths of the ore shoots, and the small inferred tonnage do not justify the expenditure of the funds necessary to explore the property.

G. C. Selfridge.

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

Docket 400
FILE COPY
SURNAME:

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

February 14, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Denial of exploration project in the amount of $60,000.00 ~~[illegible]~~
Docket No. DMEA 1967X - Tungsten
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

The subject application was denied by this Division for the following reasons:

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5. The property is accessible only by trail and several miles of new road would have to be constructed prior to starting active mining operations.

6. The very limited widths and lengths of the ore shoots, and the small inferred tonnage do not justify the expenditure of the funds necessary to explore the property.

SIGNED E.L. 3/6/52

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

GGGentry'lm
2/14/52

cc: Admn. Reading File
✓ Docket
G. G. Selfridge
G. G. Gentry

Re Docket No. D.M.A 1967X
Tungsten, Jefferson County
Montana

.C. [redacted]ridge, Acting Chief
ron [redacted] Ferro-Alloy Division
Washington, D.C.

Dear Sir,

In regard to your last letter asking for cross sections and the work to be done this is as close to explaining it as one can get. I think this map will show all there is and I got in touch with Dr Perry at the Famous Butte School of Mines and a letter to you from him will arrive about the same time you get this. He says there is no regular map of this primitive area at all.

We received a proposed contract from the Spokane office some time ago. It was by Mr Youngberg and he was the man that came and looked at the lead last fall before the snow fell.

We hope this is all the information you will be needing so early work on the mine can get started.

Sincerely yours, Henry T Hull

Henry T. Hull
Butte Tungston Co
Box 1343 Butte Montana

On the Whitehall Ranger District Map the close location of the mine would be R 6 W and T 3 N, and about section 18

We got a copy of the letter that was written by Dr Perry at the school of mines and he has made a slight error in the direction. Please note that it should read," five or six miles NORTH EAST of Butte" instead of "North west".

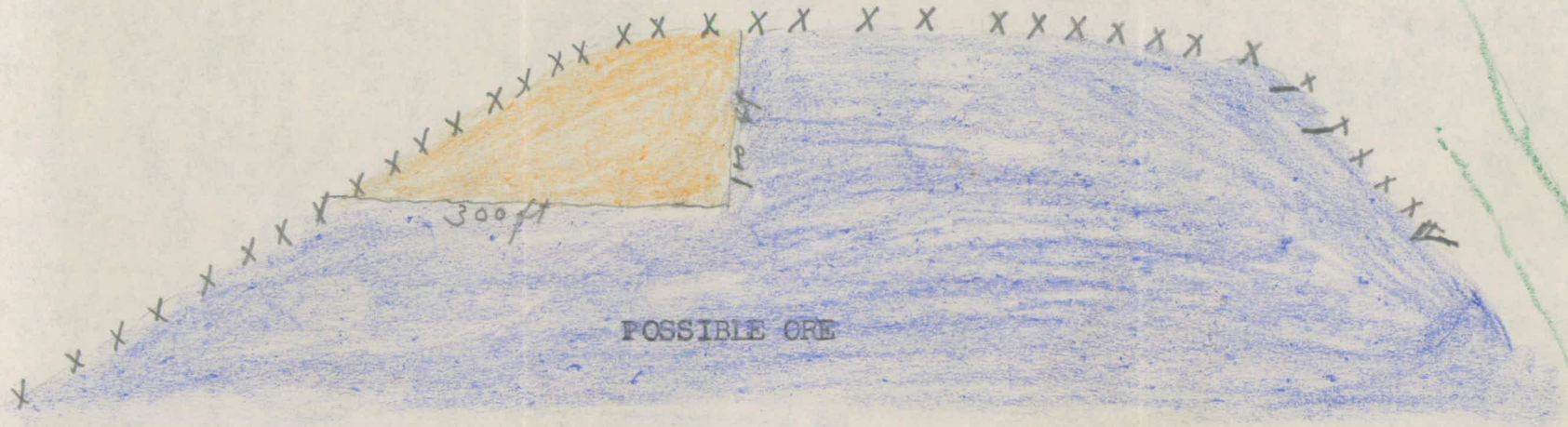
Thank you

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 12 1952

x's represent the discovery cuts to trace the lead. There are about 40 cuts.

This map represents the cross section of the ridge.

Yellow represents the proposed work by drifting 300 feet as stated on contract from the Spokane office



O'Niel Creek

Haney Creek

Butte Tungsten Co.

MONTANA SCHOOL OF MINES
BUTTE

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 11 1952

February 7, 1952

Mr. G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division
Defense Minerals Administration
Washington 25, D.C.

Re: Docket No. DMA-1967X
Tungsten
Jefferson Co., Mont.

Dear Sir:

Mr. Henry T. Hull, P. O. Box 1343, Butte, Montana, has written to this office asking about geologic maps, mine examinations, and any other information available on certain tungsten properties located about 5 or 6 miles northwest of Butte in what is known locally as the Delmo Lake area. In particular, information is asked concerning an investigation made by Professor Oscar A. Dingman, of Montana School of Mines, now deceased.

Information such as Professor Dingman may have gathered is not immediately at hand, and we are quite sure that such information as he may have obtained is only in note form. No report on this property was submitted by Professor Dingman.

We have heard that the U. S. Bureau of Mines (Albany, Oregon office now transferred to Spokane) examined certain tungsten properties in this general area in connection with a proposed loan. No doubt such reports as have been made by that office will be available to you.

The deposit in question is in a somewhat inaccessible mountainous region, and during winter months is snow covered. No detailed geologic maps have been made of the area, and we know of no published information concerning it. However, samples of material collected from this area indicate that there are definite commercial possibilities for the mining of tungsten ores.

Sincerely yours,

Eugene S. Perry

Eugene S. Perry
Head, Department of Geology

ESP:rr
cc: HTH

IN REPLY REFER TO:

G-MD-DML

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

February 8, 1952

Defense Minerals Administration
FEB 11 1952

Memorandum

To: George C. Selfridge, DMEA

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

Subject: Exploration application $15,580 DMEA 1967 - Tungsten
Butte Tungsten Co.
Scheelite and aplite claims
Pipestone Mining District
Jefferson County, Montana
Secs. 17, 18, 19, 20, T. 3 N., R. 6 W.
About 10 miles northeast from Butte, Montana

The applicant made no definite proposal for exploration, but requested $60,000 to produce tungsten (application received August 15, 1951).

The property was examined September 28, 1951 by Elton Youngberg for the Field Team. His report, dated January 28, 1952, recommends a program of surface sampling ($950) followed by 300 feet of drifting if the surface work is successful ($14,640).

S. W. Hobbs of the Geological Survey examined the claims in July 1944. He concluded that the vein contained 100 tons of indicated ore averaging 0.5 to 0.75 percent of WO_3, and 700 to 1,000 tons of inferred ore of the same grade to a depth of 200 feet.

According to Hobbs, scheelite is found in a steeply-dipping quartz vein 4 to 36 inches thick with an average thickness of 12 to 14 inches, in quartz monzonite. The vein can be traced for about 1,500 feet in 35 pits and trenches, mostly dug by the Montana WPA Mineral Resources Survey, and in 2 short adits and a shallow shaft. The vein is composed of milky to clear gray quartz with scheelite and minor amounts of mica, altered amphibole, and molybdenite. The scheelite is in well-formed crystals up to 1 inch across localized in definite shoots or pockets in the vein. About 5 areas of scheelite enrichment occur along the exposed portion of the vein, separated by more or less barren quartz. The shoots or pockets are usually quite small and rarely extend more than 15 or 20 feet along the strike of the vein.

1 copy removed for file

A number of samples of the vein were taken by the WPA Mineral Resources Survey and analyzed for WO_3. No record is available as to how these samples were taken, where they were taken, or by whom. Assays ranged from 0.01 to 3.46 percent of WO_3, and averaged about 0.3 percent.

Conclusion:

The vein is narrow, and the distribution of scheelite is erratic. The locality is accessible only by trail, and several miles of new road would be required for a mining enterprise. The inferred ore reserves of only 1,000 tons containing 750 units or less of WO_3 are too small to warrant the expenditures proposed.

Recommendation:

It is recommended that the application be denied because the chance of making a significant discovery is poor.

Dwight M. Lemmon

2/8

Mr. Lemon -

Herewith DNRC a 1967 - tungsten Scheelite + aplite Claims - Jefferson Co, Mont. for your opinion.

Note = Thayer's previous opinion of 8/28 -

The field team report herewith does not refer to the USGS publication noted by Thayer, nor to the sampling done at that time - The field team report most of the values at the vein - for Qtz-monzonite contact. - Never took a sample - Gives no estimate of values. (Not much substance in the field report).

The applicant Kieper (a refiner and broker of Green Village, N.J.) Sends in no assays, no maps, has done no work - relates ~~the~~ hearsay evidence relative to Butte School of Mines.

If you can check Thayer's data, it seems to me it should be denied on lack of value. - Also, the applicant should do enough sampling to warrant sending a field team to the property — In this instance the Field Team acted on their own as they were not requested to go out by us.

P L Bruce

Lemon has his copy of this memo

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1952

January 29, 1952

DMA 1967

MEMORANDUM

To: Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

From: Field Team, Region II

Subject: Butte Tungsten Company
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

Enclosed are four copies of a memorandum report on the Butte Tungsten Company tungsten prospect in the Pipestone mining district, Montana, by Elton A. Youngberg, Geologist, U. S. Geological Survey. A copy of a proposed exploration contract prepared by E. A. Magill, Mining Engineer of Bureau of Mines, and one copy of the application retained for use at this office is also enclosed.

The field team concurs with the recommendation of Mr. Youngberg that the property is worthy of a modest sampling program and further underground exploration if the results of the initial sampling program are favorable.

This report was prepared in advance of a referral from Washington as Mr. Youngberg was in the area in September and it was anticipated weather conditions would not again permit an examination until the Spring of 1952.

By DMEA Field Team, Region II

A. E. Weissenborn
A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

M. E. Volin
M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures
cc: USBM, Spokane
USBM, Albany

Mr Thayer

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No. 151 Howard Street
Spokane 4, Washington

January 29, 1952

MEMORANDUM

To: Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

From: Field Team, Region II

Subject: Butte Tungsten Company
Scheelite and Aplite Claims
Pipestone Mining District
Jefferson County, Montana

Enclosed are four copies of a memorandum report on the Butte Tungsten Company tungsten prospect in the Pipestone mining district, Montana, by Elton A. Youngberg, Geologist, U. S. Geological Survey. A copy of a proposed exploration contract prepared by E. A. Magill, Mining Engineer of Bureau of Mines, and one copy of the application retained for use at this office is also enclosed.

The field team concurs with the recommendation of Mr. Youngberg that the property is worthy of a modest sampling program and further underground exploration if the results of the initial sampling program are favorable.

This report was prepared in advance of a referral from Washington as Mr. Youngberg was in the area in September and it was anticipated weather conditions would not again permit an examination until the spring of 1952.

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A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

Enclosures
cc: USBM, Spokane
USGM, Albany

M. A. Yolin, Member
(U. S. Bureau of Mines)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1952

January 28, 1952

Reviewed by
DMEA OPERATING COMMITTEE
2-6-52
(date) (Rb)

Memorandum

To: A. E. Weissenborn, Executive Officer, DMEA-1967
Field Team, Region II

From: Elton Youngberg, Geologist, U. S. Geological Survey

Subject: Butte Tungsten Company, Scheelite and Aplite Claims, Pipestone Mining District, Jefferson County, Montana

INTRODUCTION

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RECOMMENDATIONS

It is recommended that the Butte Tungsten Company be given aid to explore the Scheelite and Aplite claims in an amount of $15,580.00.

It is further recommended that one of the requirements of the contract be the direction of the project by a competent engineer acceptable to the government.

PROPERTY

The Butte Tungsten Company owns the Scheelite and Aplite claims, which are recorded at Boulder, Jefferson County, Montana. The records were not checked nor searched to substantiate the company's title.

LOCATION

The Scheelite and Aplite claims are located in the Pipestone mining district, approximately $2\frac{1}{2}$ miles northeast of Lake Delmo. The claims are situated between a tributary of O'Neil Creek and Haney Creek, at an elevation of about 7,400 feet. The claims are not surveyed and have not been tied into any government land surveys. The claims are believed to be situated within sec. 17, 18, 19 and 20, T. 3 N., R. 6 W. at approximately the common corners of these sections.

DESCRIPTION OF PROPOSAL

The applicant does not make any definite proposal of work to be performed and appears to have exploration and production programs confused. The applicant indicates he expects to spend $30,000 developing the property.

Mr. William Kiefer, Manager of the Butte Tungsten Company, had returned to New Jersey for the winter months and was not available for discussion of a possible exploration program. Mr. Henry Hull, one of the owners, indicated they were considering driving a drift upon the vein from which they expected immediate production of ore.

The lack of systematic sampling has not definitely established the presence of commercial ore, and it appears desirable that a thorough sampling of the prospect pits should be made to approximate the grade of ore in the vein before underground exploration is undertaken. The examining geologist therefore proposes that a two-stage program be set up consisting of sampling, to be followed by a moderate underground program contingent upon Stage I.

MINE WORKINGS

The workings that explore the vein consist of one short adit, a caved shaft of unknown depth, and approximately forty-two cuts that have been dug by the present locators to prospect the tungsten-bearing veins for a distance of 1,300 feet along their strike.

GEOLOGY

The rocks underlying the area are quartz monzonites of the Butte batholith and associated aplite and pegmatitic dikes.

The tungsten minerals, scheelite and powellite, occur in two parallel echelon quartz veins 6 - 24 inches wide and 1,300 feet long striking N. 80 E. and dipping steeply to the north. The veins have characteristics of pegmatites, indicating high-temperature origin. The tungsten minerals occur commonly in a griesen zone, $\frac{1}{4}$ inch to 1 inch in width between the vein and the granite walls and less commonly as larger blebs or crystals within the quartz gangue.

Under the fluorescent lamp the tungsten mineral fluoresced a golden yellow, indicating that the mineral is powellite. An occasional blue-white fluorescent mineral also suggested the presence of small amounts of scheelite. The powellite occurs in crystals or blebs up to $\frac{1}{2}$ inch in diameter. The powellite is most common within the griesen zone along the vein. Within the vein itself, the distribution is highly erratic. Minor amounts of molybdenite and some pyrite were also present in the veins. A shaft on the Scheelite claim, from evidence of dump material, encountered pyrite and precious metal values. Sulfide mineralization in other exposures is negligible.

ORE POSSIBILITIES

The two veins now known have not been fully explored. Float and old prospect pits indicate the veins extend some distance to the east and west. There is also evidence that suggests the possibility of parallel veins.

The grade of ore could not be determined as sufficient time was not available to permit the required sampling program. The erratic occurrence of the powellite within the vein necessitates the cutting of numerous bulk samples and the services of a packer to remove them from the property. Lamping of the pits with a Mineralite indicates that the west portion of the vein on the Scheelite claim may be of commercial grade and that the remaining portion may be marginal or submarginal. However, accurate estimates of grade by lamping are difficult without guidance by sampling.

The persistence of the veins and tungsten mineralization indicate a potential ore target of such a size that, if proven to contain ore of commercial grade, a significant amount of tungsten will have been added to the Nation's reserves.

PROPOSED EXPLORATION

It is proposed, first, to bulk sample the vein outcrops in order to establish the tungsten content of the ore and, second to further explore the continuity of mineralization and structure at depth by drifting upon the vein. The underground work in the second stage is to be contingent upon the findings in Stage I. An initial underground program of 300 feet of drifting is believed adequate to indicate the economic possibilities of the veins. A second and more extensive exploration program might be considered after the completion of the program outlined above.

COST OF PROJECT

The total estimated cost of the project is estimated at $15,580.00.

STAGE I--Bulk sampling of vein outcrops

(1)	Engineering and sampling	650.00
(2)	Assaying 40 samples at $5.00	200.00
(3)	Transportation of samples	100.00
	Cost of Stage I	$950.00

STAGE II--Drifting on vein

(4)	300 feet of drifting at $30.00/ft.	$9,000.00
(5)	Equipment to be rented 160 cfm compressor at $250.00/mo. for 4 mos.	1,000.00
(6)	Equipment to be forwarded by operator. Drifter and accessories valued at $1,200.00--4 mos. at $20.00/mo.	80.00
	2 Mine cars valued at $600.00 for 4 mos. at $10.00/mo.	40.00
	Jackhammer valued at $250.00 4 mos. at $5.00/mo.	20.00
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	1½ miles of jeep road	2,500.00
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Total Cost of Project

Stage I	$ 940.00
Stage II	$14,640.00
	$15,580.00

TIME SCHEDULE

STAGE I

Sampling can be completed in six days. An additional fifteen days will be required to obtain assay results and prepare assay maps.

STAGE II

The underground drifting program can be completed in ninety days.

COMPETENCE OF APPLICANT

The applicant is believed to be competent to carry out the physical part of the proposed program. It is doubtful, however, if the applicant would be able to perform the engineering and sampling without technical supervision and assistance.

Elton Youngberg
Geologist

cc: USBM--Spokane
USBM--Albany

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1952

January 28, 1952

Reviewed by
DMEA OPERATING COMMITTEE
2/6/52
(date)

Memorandum

To: A. F. Weissenborn, Executive Officer, DMEA - 1967
Field Team, Region II

From: Elton Youngberg, Geologist, U. S. Geological Survey

Subject: Butte Tungsten Company, Scheelite and Aplite Claims, Pipestone Mining District, Jefferson County, Montana

INTRODUCTION

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Geologist

cc: USBM--Spokane
USBM--Albany

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1952

So. 157 Howard Street
Spokane 4, Washington

January 28, 1952

Reviewed by
DMEA OPERATING COMMITTEE
2-6-52
(date) (RL)

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Elton Youngberg
Geologist

cc: USBM--Spokane
USBM--Albany
AEW/EY/bh

400

FILE COPY
SURNAME:

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

Brewer
Selfridge
Mittendorf

JAN 7 1952

Mr. Henry Hull
P.O. Box 1343
Butte, Montana

Re: Docket No. DMA 1967X - Tungsten
Jefferson County, Montana

Dear Mr. Hull:

The Butte Tungsten Company was requested to send "maps, geological data, assays, cross sections, and exact proposal of work to be done" by letter of September 7, 1951, addressed to Mr. William Kieper.

In Mr. Kieper's application he states that the property had been investigated "by experts of Mining School of Butte under direction of Prof. Oscar Kingman". This statement suggests that maps and assays may be available from this source.

The Butte Tungsten Company has not specified the details of their proposed exploration program. Please inform us what exploratory work you intend to do, where and how you plan to proceed, what geological basis you have for expecting to make a significant discovery, and a summary of the costs of the work.

Your application will be held in abeyance until the foregoing information is received.

Sincerely yours,

1-7-52

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

QLBrewer'lm
1/5/52

cc: Admn. Reading File
✓ Mails and Files Br.
C. O. Mittendorf
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
Docket
G. C. Selfridge
Q. L. Brewer

J.a.

DMA 1967

Deposit known from WW II; 12" vein 1500 ft long, exposed to depth of 200 feet; 5 small shoots 15-20 ft long each, possibly averaging 0.5-0.75% WO_3, with spots up to 2%. About 35 pits + trenches at 25 ft intervals along vein; old workings include 2 adits, 1 caved shaft. No production. (USGS 1944)

Applicant says deposit has been recommended for exploration by experts from Butte School of Mines under Prof. Jingman. This suggests that maps + assay data might be available, but none are submitted. Applicant does not indicate, much less specify, work to be done.

More information required before field referral.

TPT 8/28/51

Shipping ore to Pine Creek seems questionable from this distance.

IRON + FERRO ALLOYS

BUTTE TUNGSTEN COMPANY

BOX 1343

BUTTE, MONTANA

Re D.M.A. 1967
Tungsten Branch

U. S. Dept of the Interior
D.M.A.
Washington 25 D.C.

DEPARTMENT OF THE INTERIOR
RECEIVED
NOV 1 9 1951
Defense Minerals Administration,
Production Expansion Division.

George B. Holderer
Chief, Tungsten Branch

Dear Sir,

I have just received some instructions to send in some maps of some sort and I am not just sure what kind you want. We sent in some Forest Service maps with our first application. The area is Primitive so I don't know if there are any [illegible] Geological maps of that territory. Please send me a letter airmail stating what all information you have to have.

Very Truly yours,

Henry Hull,
Acting for the Butte Tungsten Co.

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.
Nov 15 9 01 AM '51

Air Mail

Mr. William Kieper
Butte Tungsten Company
Box 1363
Butte, Montana

In reply please refer
to DMA-1967 Tungsten

Dear Mr. Kieper:

We have not received the maps, etc., which you stated were being furnished by Mr. F. Bull, in your letter of September 25.

Very truly yours,

George B. Holderer

George B. Holderer
Chief, Tungsten Branch

TJBallard:ec
10/22/51

CC: Adm. Reading File
DMA Docket File
Mr. Holderer

Air Mail

Mr. William Kieper
Butte Tungsten Company
Box 1343
Butte, Montana

In reply please refer
to DMA-1967 Tungsten

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Chief, Tungsten Branch

TJBallard:ec
10/22/51

CC: Adm. Reading File
DMA Docket File
Mr. Holderer

FILE COPY
SURNAME:

Holderer
Ballard

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

OCT 23 1951

Air Mail

a.E.C.

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Butte, Montana

In reply please refer
to DMA-1967 Tungsten

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George B. Holderer

cc
10/23

George B. Holderer
Chief, Tungsten Branch

TJBallard:ec
10/22/51

CC: Adm. Reading File
DMA Docket File
Mr. Holderer

BUTTE TUNGSTEN COMPANY

BOX 1343

BUTTE, MONTANA

DMA - 1967

Defense Minerals Administration.

Washington 25 DC

Dear Sir:

Answering your letter from September 7th I wish to state that a sample of ore was delivered with the original application To Seattle July 22. If another ore sample is required please let us know. Mr H. Hull, who is working in Butte and is ordered to supply your office with the complete maps, geological data, cross sections will mail a new sample of ore, if needed.

Very Truly yours

Wilhelm Kiefer

Sept. 25 - 1951

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
SEP 28 10 19 AM '51

FILE COPY
SURNAME:

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

SEP 7 1951

Holderer
Jacoby

AIR MAIL

Mr. William Kieper
Butte Tungsten Company
Box 1343
Butte, Montana

In reply please refer to
DMA-1967

Dear Mr. Kieper:

In answer to question 22 you say, " Map and assay data, McCarthy Laboratory, Butte Pipeston Mining District, County of Jefferson." It is necessary that we receive from you complete maps, geological data, assays, cross sections, and exact proposal of the work to be done.

The work to be done should be illustrated by cross sections. A detailed schedule of time and costs should be furnished to us. You infer that you have such data available so it should be an easy matter for you to supply us with all the necessary facts.

Upon receipt of this data we will give your application further attention.

Very truly yours,

George R. Holderer

George R. Holderer
Chief, Tungsten Branch

CHJacoby:ec

Sept. 7, 1951

CC: Adm. Reading File
Reports & Records Unit
Mr. Holderer

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

July 25, 1951

Mr. Landon F. Strobel
Executive Secretary
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Dear Mr. Strobel:

Enclosed herewith are four copies of Form MF-100 filed by the Butte Tungston Company on a Tungsten property in Jefferson County, Montana, and three copies of Form MF-103 which is an application for an exploration loan on the same property.

One copy of Form MF-103 is being retained at this office in order to expedite field appraisal of the above-mentioned property.

Very truly yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

Mr. William Keiper, Manager
Butte Tungsten Company
Box 1343
Butte, Montana

Subject: Scheelite
Re: Exploration Loan

My dear Mr. Kieper:

This will acknowledge receipt of your application dated August 15, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-1967 and referred to the Tungsten Branch.

Kindly refer to DMA-1967 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

ROY M. HAMMOND

WALTER F. EVERLY

McCARTHY LABORATORIES

ASSAYERS AND CHEMISTS

METAL AND NON-METALLIC ORE TESTING
ASSAYING AND CHEMICAL ANALYSIS

P. O. BOX 201 PHONE 2-1738
27 W. GRANITE ST. • BUTTE, MONTANA

SPECTROGRAPHIC ANALYSIS
SHIPPERS REPRESENTATIVES

Mr. Butte Tungsten Co. July 7, 1951

No.	DESCRIPTION	Per Ton of 2000 Lbs. Ozs. Gold	Gold at	Ozs. Silver	Per Cent Copper	Per Cent Lead	Per Cent Zinc	Per Cent Silica	Per Cent Iron	Per Cent WO_3	
	Scheelite - Tungsten				Tungstic oxide ==					64.68	
	Concentrate										

Charges $.....

Respectfully,

W. Everly

Form [illegible]-103
([illegible]51)

U[illegible]. DEPARTMENT OF THE INTER[illegible]R
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1967

Date received 8-15-51

Participation

Butte Tungsten Company
Butte Montana
Box 1343

Name and address of applicant

Date July 19 1951

FILL IN THIS BLOCK

Date of application July 19 1951

Estimated cost 60.000

Mineral or metal Tungsten

Percentage of Government participation 30.000

Location of mine Jefferson Co. Montana
Pipestone District 25½ miles south-east from Lake Helena

Date of filing MF-100 Number 10-75
June 19 - 1951 by Henry Hull
825 W. Broadway Butte Montana

DMA Docket Number, if available 1967

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Partnership

*2. If a partnership, state names and addresses of partners. See attached sheet W. Kiefer Butte Myron Bryant Newark N.J. H. Hull Box 1343 Frank Just Box 1343 Butte

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. See previous report

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

6. If owner, state what claims, liens, or encumbrances, if any, are against the property.

7. If lessee, attach a copy of the lease and state if it is in good standing.

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Company since 1950 (Butte) Working with a loss - Money spent on machinery (Diesel Water Trucks

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? building road - labor - no distinction

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Pioneer Min. Dist. Recorded Boulder Jefferson Co. Montana

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. 2½ miles from Lake Delano

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

*11. State the present and former names of the property, if any. Scheelite & Aplite Claims

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. Mill complete 5 miles from property on unfinished road — mill located on campground near from Butte

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

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. Lack of money

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Property inspection, assays, metallurgical investigations and recommendations by Prof. Oscar Dingman [School of Mines Butte]

*17. Production:

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

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

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data. 40-50 Tons Tungsten concentrates

(*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. 5 laborers — Union wages

(*b*) Supervisors, by numbers and positions, with salaries of each. 1 supervision — 500.00 per month

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. 15.000

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. 10.000

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. —

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. 2000.00

(*i*) Cost of power, water, utilities, and any other items not provided for above. 2000.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. 5 weeks.

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.

Butte Tungsten Co
(Name of company)

By William Kiefer
(Signature of authorized official)

July 19 1951
(Date)

Manager
(Title)

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

*Same as footnote on page 1.

BUTTE TUNGSTEN COMPANY

BOX 1343

BUTTE, MONTANA

July 19 51

The Applicant

1 partnership.

2 W. Kiefer: Refiner and Assayer in Green Village N.J. Butte: Box 1343.
Henry Hull: 30 years experience as miner & prospector: Butte: Box 1343
Myron Bryant: Better Finishing and Coating Co. Dorremus St 268 - Newark. N.J.
Francis Just: Cascade Copper Co Butte Box 1343.

4 W. Kiefer: Manager of Company.

5-8 Purpose of property. Company organized 1950 in Butte with 30.000 Capital worked with a loss by buying machinery and road building to property.

9 Most of money invested in paying labor, equipment, and maintenance

10 Map and assay data. McCarthy Laboratory Butte. Pipestone Mining District County of Jefferson, as recorded in Boulder Montana as Sheeelite and Aplite Claims. 24 miles from Lake Deluce.

11 Butte Tungsten Company, claims explored by H. Hull for many years

12 About 5 miles, unfinished road leading from mill to claims - about 5 miles from camp

13. Water available; but dam to be constructed.

14 & 15 Complete mill, diesel driven - 5 miles from claims. Used tractor.

16 Claims, explored for 10 years - lack of capital prevented claimant to produce

6 & 6 Property inspected & assayed; thoroughly metallurgical investigated and recommended for exploration & development by experts of mining school of Butte under direction of Prof. Oscar Bingman authorized by us.

12 At this time 10 tons ore per day - 1/2 - 1 ton concentrates p. day to be raised to

18 40 - 50 Tons concentrates. 64.02 tungsten p. ton.

Exploration: Tungsten - rich ore deposit - according to private estimate

21, 22 About 40 days to complete preliminary work and to start production.

Requirements: a. 5 laborers: Union wages for 3 miners & 1 laborer
b. 1 Supervisor 500.00 a month - c-d about 15.000 for mine
e about 10.000 f. about 2000.00
i - 2000.00 for dam construction

24 In about 5 weeks production should start

27 Money is available: Money to be spent as mentioned above

Signed: William Kiefer
Manager

Form [illegible]3
(April [illegible])

U[illegible]. DEPARTMENT OF THE INTER[illegible]R
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1967

Date received 8-15-51

Participation

Name and address of applicant

Butte Tungsten Company,
Butte Montana
Box 1343

Date July 19 1951

FILL IN THIS BLOCK

Date of application July 19 1951

Estimated cost 60,000 00

Mineral or metal Tungsten

Percentage of Government participation 30,000

Location of mine Jefferson Co Montana
Pipestone District. Dehmo Lake is
2 1/2 miles

Date of filing MF-100 ~~June 19-51~~ Number 10-75
by Henry Hull 825 W Broadway Butte Montana

DMA Docket Number, if available 1967

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? partnership
*2. If a partnership, state names and addresses of partners. see attached sheet
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. W. Hogan Butte H. Hull Butte Box 1343 Nevada, Ref Myron Bayard Francis Just Butte Box 1343
*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. See previous report
*5. Are you the owner or the lessee of the property? owner
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Company since 1950 (Butte) capital 30,000: working with loss. Spent money on machinery (Diesel tractor trucks)
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? building road - labor and maintenance -

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Upper Willow Dist. Near Boulder Jefferson Co. Montana

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. 2½ miles from Boulder

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

*11. State the present and former names of the property, if any. Shechita & Ashlar Claims

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. Complete mill - 5 miles from property - no finished road - mill located on camp - 5 miles from Butte

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

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. lack of capital

(*b*) State briefly the known history and production of adjoining and neighboring properties. —

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Property inspected & an expert metallurgist investigated & recommended by Prof Oskar Dingman (School of Mines) Butte

*17. Production:

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

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

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

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

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. 5 weeks

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

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

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. 5 laborers Union wages

(*b*) Supervisors, by numbers and positions, with salaries of each. 1 supervisor 500.00 a month

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings. 15,000

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. 10,000

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. 2000.00

(*i*) Cost of power, water, utilities, and any other items not provided for above. 2000.00

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. 5 weeks

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.

Butte Tungsten Comp.
(Name of company)

By William Liefer
(Signature of authorized official)

July 19 1951
(Date)

Manager
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense [illegible] of the United States as [illegible]

BUTTE TUNGSTEN COMPANY

BOX 1343

BUTTE, MONTANA

July 19 - 51

the Applicant: 1/ partnership

2. W. Kiefer: Refiner & Assayer in Green Village N.J. Butte Box 1343
Henry Hull: 30 years experience as miner & prospector Butte Box 1343
Myron Bryant: Better Finishing and Coating Co. Dreamers Th 268 Newark N.J.
Francis Just: Cascade Corporation Butte Box 1343.

4 W. Kiefer Manager of Company.

5-8 Owner of property. Company organized 1950 in Butte with 30.000 Capital worked with a loss by buying machinery and road building to property

9 Most of money invested in paying labor, equipment and maintenance

10. Map & assay data. Pipestone Mining District Co of Jefferson, as recorded in Boulder Montana as Scheelite and Aplite Claim. 2½ miles from Lake Delmo.

11 Butte Tungsten Company; explored by H. Hull for many years.

12 About 5 miles, unfinished road leading from mill to claim about 5 miles from camp

13 Water is always available but dam is to be constructed

14-15 Longslet mill, diesel driven, 5 miles from claim. Diesel tractor.

16 Claimed for 10 years; Explored - lack of capital unabled claimant to produce

17-18 Property inspected and assayed; thoroughly metallurgical investigation and recommended for exploration and development by experts of mining school of Butte under the direction of Prof. Oscar Dürgmann.

17 At this time 10 tons ore per day - 1/2-1 ton concentrates per day, to be sold to authorized buyers.

18/ 40-50 tons concentrates - 64.02 tungsten per ton

Exploration: Tungsten-rich ore deposit according to private estimate.

21-22 About 40 days to complete preliminary work and to start production

Enclosed assay & maps

Requirement: a. 5 laborers: Union wages for 3 miners & 1 laborer
b 1 supervisor - 500 $ p. month - total about 15.000 $ for work
c about 10.000 $ for about 2000 $

24 In about 5 weeks production should start i.e. construction work for dam 2000 $

If money is available: Money to be spent as mentioned above

Signed: William Kiefer
Manager

MF-103
(Rev. 1 1951)

U. S. DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1967

Date received 8-15-51

Participation

Butte Tungsten Company
Butte Montana
Box 1343

Name and address of applicant

Date July 19 1951

FILL IN THIS BLOCK

Date of application July 19 1951

Estimated cost 60.000

Mineral or metal Tungsten

Percentage of Government participation 30.000

Location of mine Jefferson Co Montana
Pipestone District - Deluse Lode
10 2 1/2 miles from claim in a southerly direction

Date of filing MF-100 Number 10-75
June 19, 1951 by Henry Hull
828 W. Broadway Butte, Montana

DMA Docket Number, if available 1967

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? partnership - see attached sheet

*2. If a partnership, state names and addresses of partners. - W. Kiefer Butte Box 1343 - H. Hull Butte Box 1343 - Myron Bryant Newark N.J. - Francis Just Butte Box 1343

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.

*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. See previous report

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

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. none

7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract. Company start 1950 - capital 30.000 - Working with a loan - money spent by buying

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? machinery (diesel tractor, truck - labor, maintenance.

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Pipestone Min. District - recorded Boulder Co of Jefferson Montana
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. 2 miles from Lake Dakota

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

*11. State the present and former names of the property, if any. —
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons. water brook - always available
State amount of power to be used, rate per hour or other cost, and source. gasoline power
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. complete mill - 5 miles from property - no maintained road -
15. State in detail how the ore could be shipped and how and where milled. mill located in camp - 5 miles from Butte
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. lack of capital.
    (*b*) State briefly the known history and production of adjoining and neighboring properties. —
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Property inspected + assayed - metallurgical investigation and recommended by Prof. Oscar Bergmann - School of Mines - Butte
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves. 40 - 50 Tons tungsten concentrates
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Tungsten concentrates,
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. 5 weeks

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

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

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. 5 laborers Union wages
    (*b*) Supervisors, by numbers and positions, with salaries of each. 1 supervisor 600 per month
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. } 15,000
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. about 10,000
    (*f*) Cost of rental for equipment which the operator proposes to rent. —
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. —
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. 2000.00
    (*i*) Cost of power, water, utilities, and any other items not provided for above. 2000.00
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. 5 weeks

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.

Butte Tungsten Co
(Name of company)

By William Kiefer
(Signature of authorized official)

July 19 1951
(Date)

Manager
(Title)

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

*Same as footnote on page 1.

BUTTE TUNGSTEN COMPANY

BOX 1343

BUTTE, MONTANA

July 19, 57.

Applicant. 1) partnership.

2. W. Kiefer Assayer + Refiner in Green Village N.J. Butte Box 1343

Henry Hull: 30 years experience as miner + prospector. Butte Box 1343

Myron Bryant Co Butte Finishing + Coating Co Drawer 268 Newark N.J.

Francis Jeest Lancaster Copper Co Butte Box 1343.

4. W. Kiefer: manager of Company.

5-8 Owner of Property. Company organized 1950 in Butte with 30 000 Capital. Worked with a loss by buying machinery and poor building to property

9. Most of money spent in paying labor, equipment and maintenance.

10 Map + assay later McCarthy Lateral Butte. Pipestone District County of Jefferson as recorded in Boulder Montana as Scheelite and Aplite Claim.

11 Butte Tungsten Company, claims explored by H. Hull for many years

12 about 5 miles, unfinished road leading from mill to claim; about 5 miles from camp

13 Water available; but dam site to be constructed

14-15 Complete mill - diesel driven - 5 miles from claims - Diesel tractor.

16 Claims explored for 10 years; lack of capital enabled claimant to prospect

Property inspected, assayed: thoroughly metallurgical investigated and recommended for exploration and development by experts of mining school of Butte under directions of Prof P. Dingmann

17. At this time 10 tons ore p. day. 1/2-1 ton concentr. p.d. to be sold to authorized buyers.

18 + 40-50 Tons concentrates - 68 % tungsten per ton

Exploration: Tungsten: rich ore deposits according to private estimate

21-22 About 40 days to complete preliminary work and to start production.

Requirements a. 5 laborers. Union wages for 3 miners + 2 labors

b. 1 supervisor. 500 $ a month c + d about 15 000 f. mon

e about 10 000 h about 2000 $.

i - 2000 $ for dam construction

24) In about 5 weeks production work should start if money is available

Money to be spent, as mentioned above.

Signed William Kiefer
Manager

MF-200
(June 1951)

Docket No. DMA 1967
Commodity WO3

Copy from Field
Team 2/7

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] _____

Butte Tungsten Company, Box 1343, Butte, Montana

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows: [3]
Scheelite and Aplite mining claims, unpatented, located in Pipestone mining district in secs. 17, 18, 19, and 20, T. 3 N., R. 6 W., B.M.

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: _____

(*b*) ~~That he is a lessee in possession and entitled to possession and the subordination agreement of the lessor is attached.~~

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] tungsten; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] six operating months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of proper*[illegible] All facilities, buildings, fixtures, equipment,[illegible] other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $ 11,692.50, which is 75 percent of the agreed estimated total cost of this project, $ 15,590.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

BUTTE TUNGSTEN COMPANY

Jefferson County, Montana

EXHIBIT "A"

Exploration Project

The exploration program is set up in two stages:

Stage I is to determine the grade of tungsten ore exposed in the outcrops.

Stage II will allow ~~200~~ 300 feet of drifting to determine continuity and grade at a depth of about 100 feet.

Stage II is to be undertaken if, in the opinion of the Government, the results of Stage I indicate the presence of ore.

Estimated cost of project

Stage I

(1)	Engineering and sampling	$ 650.00
(2)	Assaying 40 samples at $5.00	200.00
(3)	Transportation of samples	100.00
	Cost of Stage I	$ 950.00

Stage II

(4)	300 feet of drifting at $30/ft.	$9,000.00
(5)	Equipment to be rented	1,000.00
(6)	Equipment furnished by operator	140.00
(7)	Additional facilities to be constructed	3,000.00
(8)	Engineering and sampling	1,000.00
(9)	Supplies and miscellaneous expense	500.00
		$14,640.00

Total cost of project:	Stage I	$ 950.00
	Stage II	14,640.00
Total		$15,590.00

(4) Per foot costs are to include all labor, supervision, and any items of equipment or supplies which are not specifically listed elsewhere.

(5) Equipment to be rented consists of:

160 cfm compressor @ $250/mo. for 4 mos.	$1,000.00

(6) Equipment furnished by Operator:

Drifter and accessories valued @ $1200 4 months @ $20/mo.	80.00
2 mine cars valued @ $600 4 months @ $10/mo.	40.00
Jackhammer valued at $250 4 months @ $5/mo.	20.00
	$ 140.00

(7) Additional facilities to be constructed:

Temporary housing	$ 500.00
1-1/2 miles of jeep road	2,500.00
	$3,000.00

(8) Engineering and sampling to consist of detailed geologic mapping and adequate sampling to determine the grade of ore encountered.

Labor and supervision

Labor for the various items of work described above may be paid at shift rates or unit contract rates not to exceed rates generally paid for like work in the district in which the project is located, and the rates thereof shall be allowable to the extent approved by the Field Team, Region II. The maximum monthly wage rate of $450 for a superintendent shall be allowable.

No other construction, installation, purchase, rehabilitation or repair costs of facilities except as listed above, are allowable under this contract.

Engineering and sampling is to be performed by persons agreeable both to the operator and the Government.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dmea-1967

Date received 2-4-52

Participation

Butte Tungsten Company
Butte Montana
Box 1343

Name and address of applicant

Date July 19 1951

FILL IN THIS BLOCK

Date of application July 19 1951

Estimated cost 60,000

Mineral or metal Tungsten

Percentage of Government participation 30,000

Location of mine Jefferson Co Montana
Pipestone District
2½ miles south-east from Lake Delma

Date of filing MF-100 Number 10-95
Sent 19-1951 by Henry Hull
625 W Broadway Butte Montana

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? partnership
*2. If a partnership, state names and addresses of partners. See attached sheet
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. W. Kiefer, H. Hull, Wynnow Bryant - Butte, Francis Trust - Butte, Butte 327
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. S. previous person
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. owner
7. If lessee, attach a copy of the lease and state if it is in good standing.

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Company since 1950 (Butte) invested 30,000. Working with a loss - money spent on machinery (diesel truck & trucks)
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? building road, labor, maintenance

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Pipestone Min. District - recorded Butte & Jefferson Montana
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. 2½ miles from Enos Dillon

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

*11. State the present and former names of the property, if any. Scheelite and applied claims
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons. Water always available - brook - State amount of power to be used, rate per hour or other cost, and source. gas or. power
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. complete mill - 5 miles from property - unfinished road - mill located in camp - about 5 miles
15. State in detail how the ore could be shipped and how and where milled. from Butte
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. lack of capital
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Property inspected & assays & metallurgical investigated & recommended by Prof. Oscar Dingman of School of Mines (Butte)
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly. 40 - 50 tungsten concentrates
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Tungsten concentrates
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete. 5 weeks
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. 5 laborers union wage
    (*b*) Supervisors, by numbers and positions, with salaries of each. 1 supervisor 500.00 per month
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. } 15.000
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. value 60.000
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. - 2000 =
    (*i*) Cost of power, water, utilities, and any other items not provided for above. 2000 =
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. 5 weeks

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.

Butte Tungsten Co
(Name of company)

By William Kiefer
(Signature of authorized official)

July 19 - 51
(Date)

Manager
(Title)

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

*Same as footnote on page 1.

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

BUTTE TUNGSTEN COMPANY

BOX 1343

BUTTE, MONTANA

July 18-51

Th Applicant.

1) partnership
2 W. Kiefer Assayer & Refiner in Green Village N.J. — Butte Box 1343
Henry Hull 30 years experience as miner and prospector
Myron Bryant - To Better Finishing & Coating Doremus St 268 Newark. NJ
Francis Just Cascade Copper Co Butte Montana Butte Box 1343

4 W. Kiefer Manager of Company
5 owner of property

6-8 Company worked with a loss by buying machinery and road building to property.
9 Most of money invested in paying labor, equipment and maintenance
Company organized 1950 in Butte Montana with 30.000 capital.

10. original map - assay data. Pipestone Mining District County of Jefferson, as recorded in Boulder Montana as Scheelite and Aplite Quartz Lode Claims. 2 1/2 miles from Delmo Lake

11. Butte Tungsten Company, explored by H. Hull for many years
12 About 5 miles of rest of road leading from mill to claims has to be finished, 5 miles from c
13 Water is always available for concentrating, but dam is to be constructed 8 miles from Bu
14. Complete mill, diesel driven, 5 miles from claims. diesel tractor.
15 Ore will be milled and concentrated 5 miles from property.
16 Claimed for 10 years: explored, lack of capital enabled claimant to produce
b-c. Property inspected and assayed; thoroughly metallurgical investigated and recommended for exploration and development by Experts of Mining school of Butte under the direction of Prof. Oscar Dingmann.
17 At this time 10 tons ore per day — 1 ton concentrate per day to be sold to authorized buyers.
18 40 - 50 Tons concentrate - 64.02 tungsten per ton.
(10) Exploration: Tungsten - rich ore deposit according to private estimate
21 About 40 days to complete preliminary work and to start production. Enclosed assay and samples
22 - (166)
Requirement: a 5 laborers: Union wages for 3 miners & 1 helper
b 1 supervisor 500 per month
c-d about 15000 f - none i = construction work of dam 2000.
e about 10.000 h - about 2000 =
24. In about 5 weeks production should start
Money to be spent as mentioned.

signed: William Kiefer
Manager

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. DMA 1961

Date received 8-15-51

Butte Tungsten Company
Butte Montana
Box 1343

Number 10-75
June 19 1951 Mr Henry Hull mailed a notice indicating his willingness to participate in the Domestic Tungsten Program.

Name and address of applicant

Date July 19 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~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? Tungsten concentrate
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following: Complete mill 5 miles from property
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts. 6 crosscuts 20-40 feet
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). 9 openings

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district. Pipestone Mining District - 2½ miles from Lake Delano
   (*c*) Township, Section, Range.
   (*d*) County, State. Jefferson County, Montana
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production Ready for production if road is completed

   If not in production or operation, estimated date when production will begin 5 weeks
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. Butte Tungsten Comp. W. Kisper Assayer & Refiner Manager
   H. Hull 30 years experience as miner and prospector
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Prof. Oscar Dingman School of Mines Butte

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		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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

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

12. Ore or Mineral Reserves:

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

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

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

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

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)	40-50 tons of concentrate	Scheelite			

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

5 miles to miller (road not finished) and Camp 8 miles to Butte

14. Water Supply:

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

water always available - but brook has to be dammed.

15. Power:

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

Gasol. power

16. Labor:

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

5 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. complete mill 5 miles from property

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.

Butte Tungsten Company
(Name of company)

By William Kiefer
(Signature of authorized official)

July 19 1951
(Date)

Manager
(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. Dul A 1967

Date received 8-15-51

Name and address of applicant

Butte Tungsten Company
Butte Montana
Box 1343

Number 10-75
June 19-51 Henry Hull mailed a notice indicating the willingness to participate in the Domestic Tungsten Program.

Date July 19 1967

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district. Pipestone mining District 2½ miles from Lake Helena
   (*c*) Township, Section, Range.
   (*d*) County, State. Jefferson Co Montana
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production Ready for production if road is completed

   If not in production or operation, estimated date when production will begin 5 weeks
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. Prof. Oskar Siegmann School of Mines Butte

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		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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

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

12. Ore or Mineral Reserves:

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

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

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

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

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)	40 - 50	Concentrate. Tons of Scheelite			

(*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.

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

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5 miles to mill (road not finished) 8 miles to Butte

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

Water always available but brook must be dammed.

15. Power:

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

Elect. power

16. Labor:

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

5 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.

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CERTIFICATION

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Butte Tungsten Co
(Name of company)

By William Kiefer
(Signature of authorized official)

July 19 1951
(Date)

Manager
(Title)

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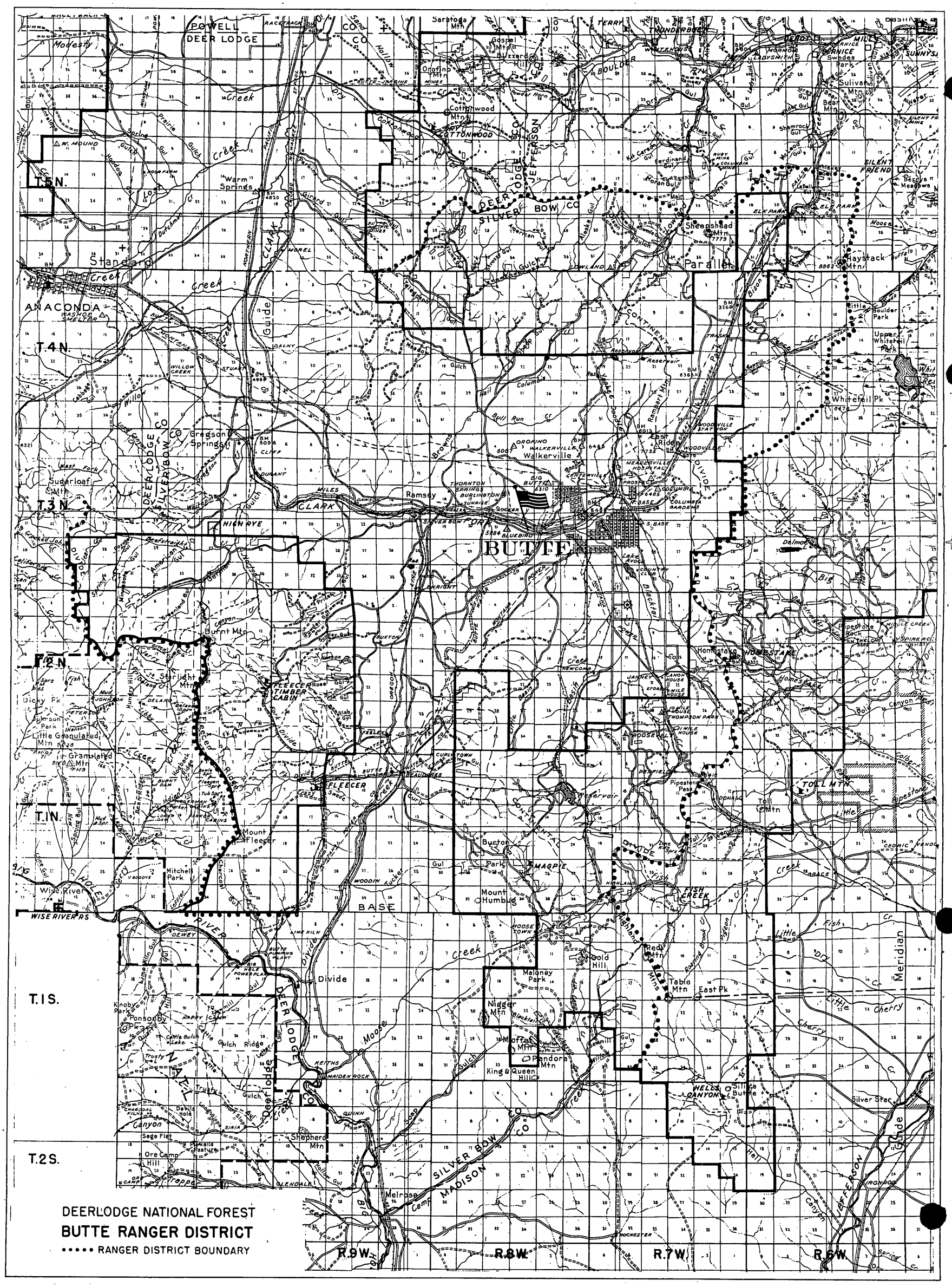
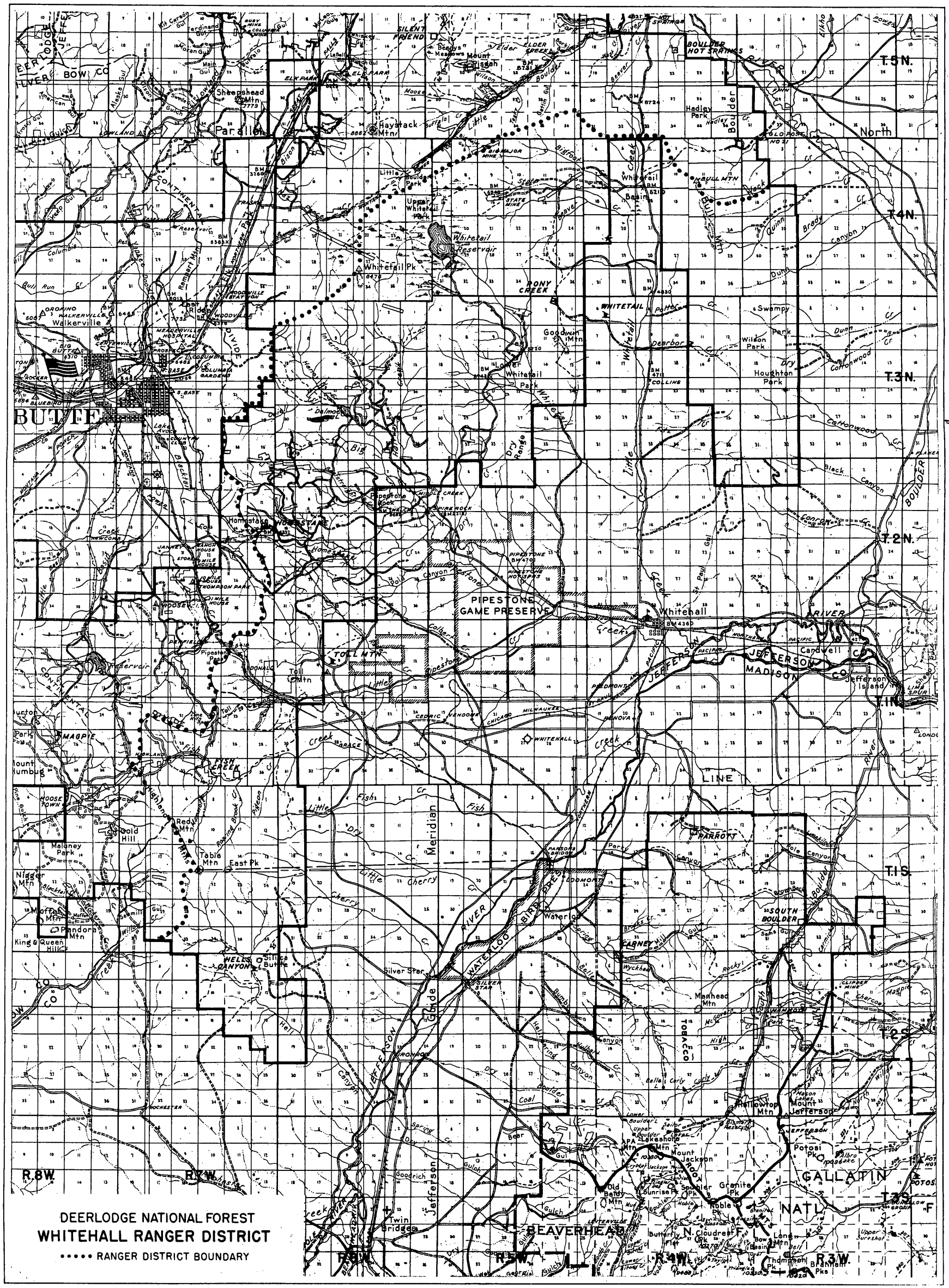
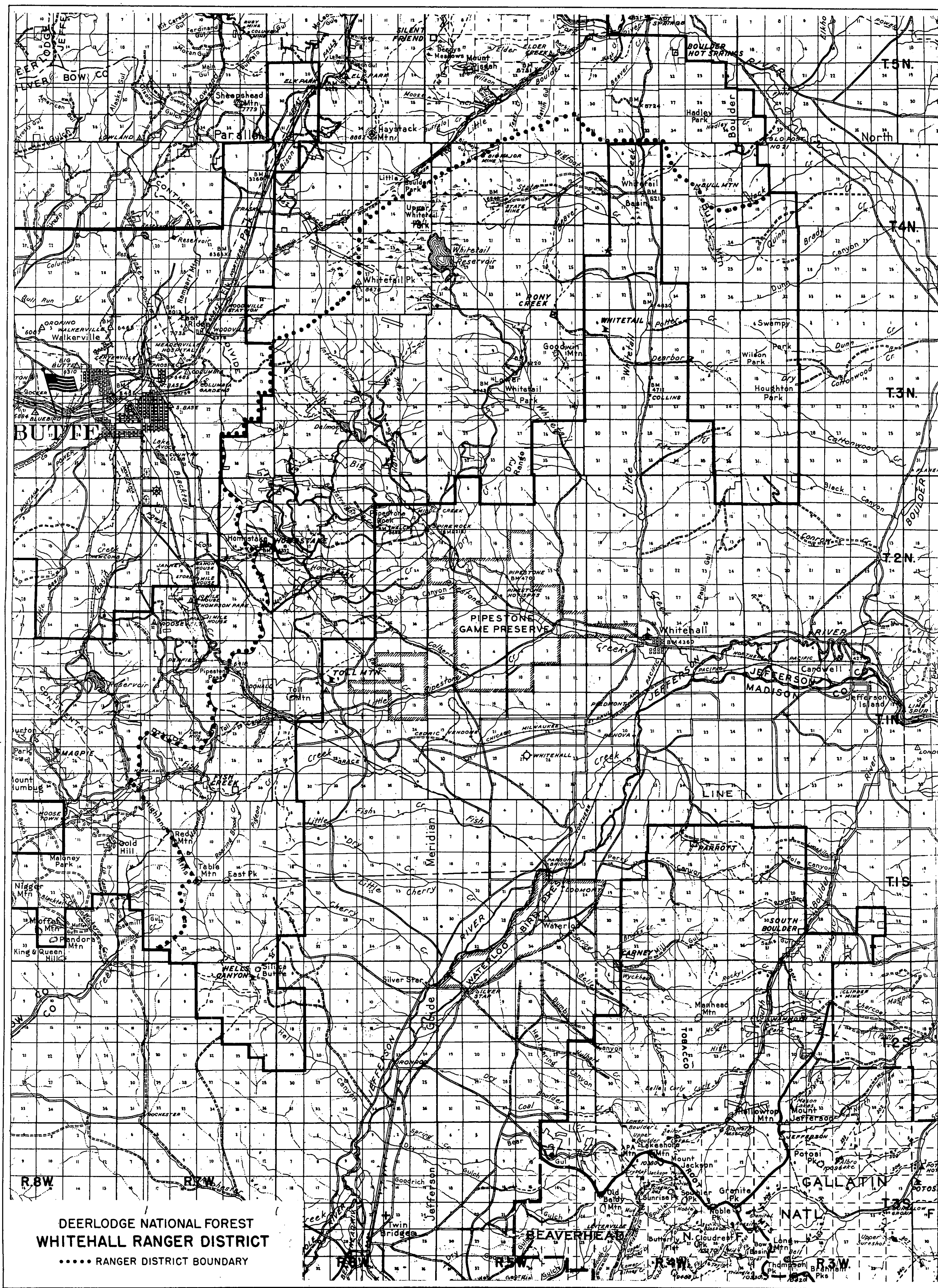
U. S. GOVERNMENT PRINTING OFFICE 16—63792-1


DEERLODGE NATIONAL FOREST
BUTTE RANGER DISTRICT
RANGER DISTRICT BOUNDARY
T.5N.
T.4N.
T.3N.
T.2N.
T.1N.
T.1S.
T.2S.
R.9W.
R.8W.
R.7W.
R.6W.
BUTTE
ANACONDA
Standard
Parallel
Ramsey
Walkerville
Sugarloaf Mtn
Burnt Mtn
Starlight Mtn
Mount Fleecer
Wise River
Mitchell Park
Divide
Maloney Park
Nigger Mtn
Moffat Mtn
Pandora Mtn
King & Queen Hill
Shepherd Mtn
Melrose
Mount Humbug
Burton Park
Homestake
Toll Mtn
Sheepshead Mtn
Haystack Mtn
Whitetail Pk
Warm Springs
Gregson Springs
Cottonwood Mtn
Orofino Mtn
Gospel Mtn
Sarsoga Mtn
Sullivan Mtn
Bear Mtn
Gold Hill
Red Mtn
Table Mtn
East Pk
Silver Star
Pipestone Pass
Little Granulated Mtn
Granulated Mtn
Dicky Pk
Ponsonby Pk
Knoby Park
Ore Camp Hill
Sage Flat
Trappe
Camp
Big Hole River
Silver Bow Co
Deerlodge Co
Jefferson Co
Madison Co
Continental Divide
Meridian


DEERLODGE NATIONAL FOREST
WHITEHALL RANGER DISTRICT
RANGER DISTRICT BOUNDARY
BUTTE
Walkerville
Parrott
Whitehall
Pipestone Pass
PIPESTONE GAME PRESERVE
Toll Mtn
Haystack Mtn
Sheepshead Mtn
Homestake
Silver Star
Twin Bridges
Waterloo
Cardwell
Jefferson Island
Manhead Mtn
Mount Jefferson
Hellgate Canyon
Boulder Hot Springs
Whitetail Reservoir
Whitetail Pk
Upper Whitetail Park
Lower Whitetail Park
Little Boulder Park
Hadley Park
Swampy Park
Wilson Park
Houghton Park
Goodwin Mtn
Dalmoch
Pipestone Rock
Spire Rock
Fish Creek
Magpie
Moffat Mtn
Pandora Mtn
King & Queen Hill
Maloney Park
Nigger Mtn
Gold Hill
Red Mtn
Table Mtn
East Pk
Silver Star
Silver Bow Co
Jefferson Co
Madison Co
Gallatin Co
Beaverhead Co
Tobacco Roots
Bull Mtn
Bull Mtn
Big Butte
Big Hole River
Jefferson River
Boulder River
Little Boulder River
Dry Range
Continental Divide
Meridian
T.5N.
T.4N.
T.3N.
T.2N.
T.1N.
T.1S.
T.2S.
R.8W.
R.7W.
R.6W.
R.5W.
R.4W.
R.3W.



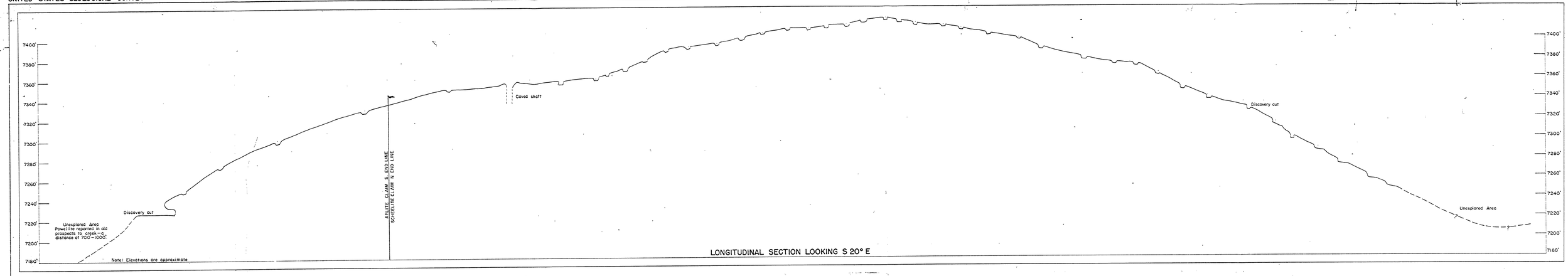
DEERLODGE NATIONAL FOREST

WHITEHALL RANGER DISTRICT

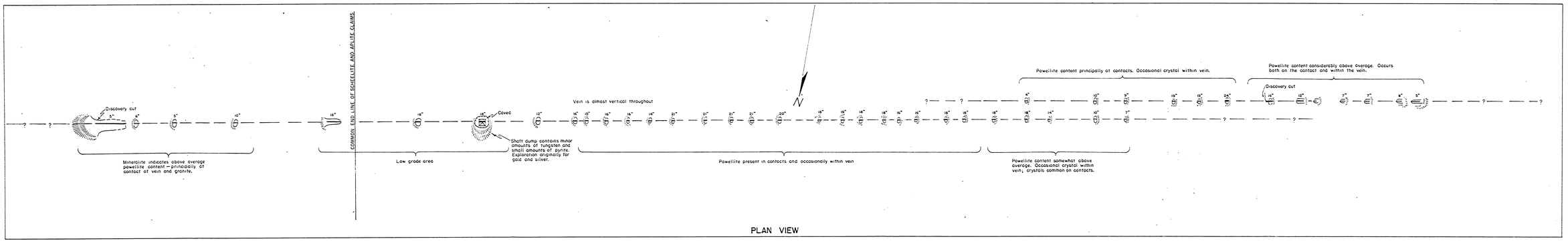
••••• RANGER DISTRICT BOUNDARY

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DEFENSE MINERALS ADMINISTRATION
DOCKET NO. 1267



LONGITUDINAL SECTION LOOKING S 20° E



PLAN VIEW

Brunton, tape and altimeter survey by E. A. Youngberg, U. S. G. S., Oct., 1951.

PLAN AND SECTION OF BUTTE TUNGSTEN CO., PIPESTONE MINING DISTRICT, JEFFERSON COUNTY, MONTANA

0 40 80 120 160 200 Feet