DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2626

DO NOT DETACH THIS SLIP

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

This document has been recorded as

EXPLORATION PROJECT

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 **Copies to USBM and USGS. One copy retained by Region II.**

To: Code 500, Rm. 2616 Date 7-25-52

To: Op Com Date 8-6-52

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

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To: _____ Date _____

To: _____ Date _____

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME: 500

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

AUG 31 1953

Mr. Ludwig Beirwagen
Box 13
Niarada, Montana

Re: Docket No. [illegible] 2.26 (Lead-~~Zinc-Copper~~)
Ludwig Beirwagen
Battle Butte Mine
Flathead County, Montana

Dear Mr. Beirwagen:

As you have not replied to our letter of June 29, 1953, we assume that you do not wish to pursue the matter of your application for exploration assistance. Therefore, we will consider your application as withdrawn and will remove it from our active files.

We regret the necessity of this action, however, it is done without prejudice to your property.

Sincerely yours,

C. O. Mittendorf
Administrator

JWAlt/hmj (8/24/53)
CC to: Docket
Adj. R. File
Op. Committee
Base Metals Division
Region II (2)
Mr. Bishop
Mr. Kinkel
Chron.

R.C.G. 8-31-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

July 23, 1953

Docket

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2626 (lead-zinc-copper)
Ludwig Beirwagon
Battle Butte Mine
Flathead County, Montana

Dear Mr. Selfridge:

Reference is made to Mr. Mittendorf's letter of June 29 to Mr. Beirwagon regarding the necessity of submitting a copy of his lease agreement with the Northern Pacific Railroad and also the Owner's Consent to Lien forms on the subject property.

Enclosed is a copy of the lease agreement between Mr. Beirwagon and the Northern Pacific Railroad. This is probably the document which was recently requested of the applicant. It was apparently submitted with the application, but overlooked when the application was forwarded to Washington, and when subsequent checks were made for it.

Also enclosed is a copy of a letter to Mr. Beirwagon advising that we have located the lease agreement and it will not be necessary for him to furnish another copy. However, we have advised that it will be necessary for him to comply with Mr. Mittendorf's letter regarding submittal of the Owner's Consent to Lien agreement if he is still interested in an exploration loan.

It is doubtful whether we will hear from Mr. Beirwagon as he has failed in the past to answer any of our letters to him.

Sincerely yours,

James J. Quinlan

James J. Quinlan
Acting Member, DMEA
Field Team, Region II

Enclosures
cc: USBM (2)
Hosterman

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

No. 157 Howard Street
Spokane 4, Washington

July 23, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-[illegible] (lead-zinc-copper)
Ludwig Beirwagon
Battle Butte Mine
Flathead County, Montana

Dear Mr. Selfridge:

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Enclosed is a copy of the lease agreement between Mr. Beirwagon and the Northern Pacific Railroad. This is probably the document which was recently requested of the applicant. It was apparently submitted with the application, but overlooked when the application was forwarded to Washington, and when subsequent checks were made for it.

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Sincerely yours

James J. [illegible]
Acting Member, DMEA
Field Team, Region [illegible]

Enclosures
cc: USBM (2)
Masterman

V.a.g.

NORTHERN PACIFIC RAILWAY COMPANY

Montana Division

T&M Contract No. 3497

CONTRACT made this 25th day of February, 1952, between the NORTHERN PACIFIC RAILWAY COMPANY, a corporation of Wisconsin, grantor, and LUDWIG BEIRWAGEN, of Loma, Montana, grantee.

The grantor in consideration of the sum of One Dollar ($1.00) to it paid, the receipt whereof is acknowledged, hereby grants unto the grantee during the term commencing with the date of this contract and ending November 1, 1952, the right to prospect for, mine and remove all valuable metalliferous minerals except such as are recoverable by placer mining methods, which may be contained in the following described land situate in Flathead County, State of Montana, to-wit:

Southeast quarter of Northeast quarter of Southwest quarter (SE¼NE¼SW¼) and South half of Southwest quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25) North, Range Twenty-three (23) West of the Montana Principal Meridian, subject to right of way for ditches or canals constructed by authority of the United States, to an easement in the public for any public roads heretofore laid out or established or now existing over or across any part of the premises and to the rights of a lessee of the surface for grazing purposes.

The grantor reserves the right to cut and remove or allow others to cut and remove the timber upon the premises.

The grantee agrees that in the conduct of his exploratory work, he will not destroy any merchantable timber or valuable reproduction upon the premises, and the performance of this covenant is made a condition of this contract.

Should title to the premises fail the grantor shall not be liable for more than the amount received hereunder with interest at four (4) per cent per annum;

should title to a portion of the premises fail such liability is limited to the amount received from or on account of the portion as to which title fails.

The grantee will continue explorations upon the premises and will diligently and continuously prosecute such work during the term (unless temporarily interrupted by causes beyond grantee's control) or until valuable minerals are earlier discovered in paying quantities; the grantee will expand the sum of Three Hundred Dollars ($300.00) in such exploration work during the term of said contract.

The grantee will furnish to the grantor monthly reports showing the progress and results of all explorations upon the premises as well as upon adjoining lands controlled by the grantee.

Should the grantee discover minerals in paying quantities within the term of this permit, he may within thirty (30) days after such discovery demand and the grantor will execute and deliver to him a lease in the form hereto attached marked Exhibit "A".

For all ores or concentrates shipped from the premises during the term of this contract the grantee will pay to the grantor at its office in St. Paul, Minnesota, fifteen (15) per cent of the net smelter returns as defined in said Exhibit "A".

The grantor shall have the right by its agents and servants to enter upon the premises or upon the premises where the ore is being treated, at any time for the purpose of inspection and checking the operations of the grantee, not unnecessarily or unreasonably hindering or interrupting such operations, and shall have access at all times to all books and accounts of the grantee or other persons carrying on operations on the premises, or handling the ore removed therefrom, relative to the quantity and quality of ore mined or the value thereof.

Should the grantee fail to diligently and continuously prosecute the work

contemplated by this contract or should he fail to carry out any other agreement by him to be performed, this contract shall become null and void and the grantor may re-enter the premises and exclude therefrom the grantee and all persons claiming under him.

The rights hereby granted are personal and are not assignable.

IN WITNESS WHEREOF the parties have executed this instrument in duplicate.

Attest:

Assistant to the Land Commissioner

NORTHERN PACIFIC RAILWAY COMPANY,

By L. L. Schwam
Land Commissioner

Witnesses:

Grantee

Address: Loma, Montana

EXHIBIT "A"

NORTHERN PACIFIC RAILWAY COMPANY

Montana Division

T&M Contract No. 3497

CONTRACT made this _____ day of _____ 195__, between NORTHERN PACIFIC RAILWAY COMPANY, a corporation of Wisconsin, lessor, and LUDWIG BEIRWAGEN, of Loma, Montana, lessee.

The lessor in consideration of the sum of One Dollar ($1.00) to it paid by the lessee, the receipt whereof is acknowledged, and in further consideration of the covenants herein contained to be performed by the lessee, hereby grants unto the lessee for the term of ten (10) years commencing with the date of this contract, the right to mine and remove all valuable metalliferous minerals except such as are recoverable by placer mining methods, which may be contained in the following described land situate in Flathead County, State of Montana, to-wit:

Southeast quarter of Northeast quarter of Southwest quarter (SE¼NE¼SW¼) and the South half of Southwest quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25) North, Range Twenty-three (23) West of the Montana Principal Meridian, subject to right of way for ditches or canals constructed by authority of the United States, to an easement in the public for any public roads heretofore laid out or established or now existing over or across any part of the premises, and to the rights of a lessee of the surface for grazing purposes.

The lessor reserves the rights to cut and remove or to allow others to cut and remove the timber upon the premises.

1. The lessee forthwith will enter upon the premises and mine and remove therefrom the valuable metalliferous minerals contained therein, except such as are recoverable by placer mining methods, and will diligently and continuously pursue such work during the term.

2. The lessee will pay to the lessor as rental a royalty upon all direct shipping ores produced from the premises based upon the net smelter returns, as follows:

Where the net smelter returns shall be Fifteen Dollars ($15.00) per ton, or less, the royalty shall be ten (10) per cent of such returns; where the net smelter returns shall be in excess of Fifteen Dollars ($15.00) per ton, the royalty shall be increased one (1) per cent for each increase of Two Dollars ($2.00) per ton, or fraction thereof, of the net smelter returns of said ores, but in no event shall the royalty exceed thirty (30) per cent of such returns.

The lessee will pay a royalty of ten (10) per cent of the net smelter returns upon all concentrates, and a royalty of ten (10) per cent of the net bullion returns upon all gold and/or silver precipitates and gold and/or silver bullion produced from ores from the premises milled by him. The value of concentrates or bullion shall not be added to the value of smelter returns so as to increase the royalty rate dependent upon the amount of such returns.

"Net smelter returns" means the amount paid by the smelter after deducting the charges for railway freight and treatment and also after deducting charges for trucking ores and concentrates from the mine or mill to the railway. "Net bullion returns" means the amount received by the lessee from the mint or other lawful purchaser of gold and for all gold and/or silver bullion and gold and/or silver precipitates produced from milling ores from the premises milled by him. "Concentrates" means any other material resulting from treatment of ores from the premises which may be shipped.

Royalty payments shall be made to the lessor at St. Paul, Minnesota, on the 15th day of each month covering all operations of the preceding calendar month and shall be accompanied with a report of all such operations and duplicate copies

of smelter, refinery, mint or other statements relating to the sale of valuable metalliferous minerals produced from the premises.

The lessee will pay to the lessor semi-annually in advance a minimum royalty of One Hundred Dollars ($100.00) per annum during the first year of the term and One Thousand Dollars ($1,000.00) per annum thereafter, but such advance payments shall be credited on account of royalties inuring to the lessor during the year for which such advance payment is made.

3. Commencing with those for the year of the date of this lease, the lessee agrees to pay all taxes of every kind levied or imposed upon the lands hereby leased, and upon the improvements placed by him upon the premises; for the calendar year that this lease expires or in the event of earlier termination thereof, the lessee will pay such proportion of the taxes and assessments for that year as the number of months of the year the lease is in effect bears to twelve. The lessee will also pay all taxes levied or imposed upon the minerals produced, including all net proceeds taxes, and will refund and repay to the lessor any taxes which the lessor may be required to pay to the State of Montana on royalty received; it being the intention that the lessor shall be relieved from the payment of any and all taxes upon the lands, improvements of the lessee, net proceeds, and all other State and local taxes on account of any mining operations by the lessee hereunder.

4. Promptly on demand from time to time the lessee will furnish to the lessor maps and plats based on actual survey showing his workings on the premises and adjoining lands.

5. The lessee will conduct all mining and other operations in such manner only as is usual and customary in skillful and proper operations of similar character to produce the largest possible recovery of the metals, and so as not to cause or permit any unnecessary or unusual permanent injury to the mines or inconvenience or hindrance to subsequent operation of same, and will deposit all earth,

rocks and other useless material in such places and in such manner as will not conflict with or embarrass future mining operations.

6. The lessor shall have the right by its agents and servants to enter upon the premises at any time for the purpose of inspection and checking the operations of the lessee, not unnecessarily or unreasonably hindering or interrupting such operations, and shall have access at all times to all books and accounts of the lessee or other persons carrying on operations on the premises, or handling the ore removed therefrom, relating to the quantity and quality of ore mined or the value thereof.

7. The lessee shall not assign this lease or any interest therein, or sublet the right to work said mines or any part thereof, without the written consent of the lessor.

8. The uninterrupted right of the lessee to take, use and carry away the ore shall continue unsuspended notwithstanding any disagreement between the parties, provided payment, according to the terms hereof shall be duly made for all ore removed from the premises.

9. At the expiration of the term or upon the earlier termination of this agreement the lessee shall have ninety (90) days in which to remove all engines, tools, machinery and structures, but shall not remove or impair any supports placed in the mines or any timbers or frameworks necessary to the use and maintenance of the shafts or other approaches to the mines nor any tramways within the mines.

10. The lessee may at any time surrender this lease upon six (6) months written notice to the lessor served by mail addressed to it at St. Paul, Minnesota.

11. If the rent hereby reserved (the royalty being treated as rent), or any part thereof, shall remain unpaid after the time when same should be paid, or if the lessee shall fail to keep or perform any other covenant herein expressed to

be performed on his part and such default shall continue for ten (10) days, the lessor at its option after thirty (30) days written notice, served by mail addressed to the lessee at Loma, Montana, may enter upon the premises and exclude therefrom the lessee and all persons claiming under him, and the lessor on like notice may terminate this lease if mining operations upon the premises shall at any time cease for the period of six (6) consecutive months, for any reason other than strikes or accidents.

12. When this lease shall for any cause terminate, the lessee will cause to be entered a certificate of that fact upon the proper books of record, provided this lease shall have been recorded.

13. The lessor shall at all times have a lien upon all ore mined and upon all improvements of the lessee, as security for any unpaid balances due under this contract, such balances being treated as purchase money, which lien may be enforced in like manner as liens conferred by chattel mortgage under the laws of Montana or in any other proper and lawful manner.

14. Should title to the premises fail the lessor shall not be liable for more than the amount received hereunder with interest at four (4) per cent per annum; should title to a portion of the premises fail such liability is limited to the amount received from or on account of the portion as to which title fails.

15. A material consideration moving to the lessor, without which this lease would not be made is the covenant by the lessee for himself, his heirs and assigns, that all minerals and ores shipped from the premises shall be shipped over such railroad line as the lessor may designate, provided that the rates charged by such railroad, its available facilities and the service furnished by it shall be equal in all respects to those which could be furnished by any other competing railroad line; and provided that the cost per ton of haulage and shipment from the premises to the smelter is not greater than that of any other route.

16. Each obligation hereof shall be binding upon and every benefit hereof shall inure to the respective heirs, successors and assigns of the parties.

IN WITNESS WHEREOF, the parties have executed this instrument in duplicate.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

July 23, 1953

Mr. Ludwig Beirwagon
Box 13
Niarada, Montana

Re: Docket No. DMEA-2626 (lead-zinc-copper)
Ludwig Beirwagon
Battle Butte Mine
Flathead County, Montana

Dear Mr. Beirwagon:

This is to advise that we have located a copy of a lease agreement between you and the Northern Pacific Railroad. If this is the one in question, it will not be necessary for you to furnish the Government with another copy.

If you are still interested in the Government processing your application, it will be necessary for you to comply with that portion of Mr. Mittendorf's letter of June 29, 1953, regarding submittal of the Owner's Consent to Lien agreement.

Sincerely yours,

James J. Quinlan
Acting Member, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Hosterman

P.S. Enclosed is an ozalid copy of the lease agreement that we have. Is this the bona fide lease agreement?

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

So. 15, Howard Street
Spokane 4, Washington

July 23, 1953

Mr. Ludwig Beirwagon
Box 13
Niarada, Montana

Re: Docket No. DMEA-2626 (lead-zinc-copper)
Ludwig Beirwagon
Battle Butte Mine
Flathead County, Montana

Dear Mr. Beirwagon:

This is to advise that we have located a copy of a lease agreement between you and the Northern Pacific Railroad. If this is the one in question, it will not be necessary for you to furnish the Government with another copy.

If you are still interested in the Government processing your application, it will be necessary for you to comply with that portion of Mr. Mittendorf's letter of June 24, 1953, regarding submittal of the Owner's Consent to Lien agreement.

Sincerely yours

James J. Quinlan
Acting Member, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Masterman

P.S. Enclosed is an ozalid copy of the lease agreement that we have. Is this the bona fide lease agreement?

FILE COPY
SURNAME:

500

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

Mr. Ludwig Beirwagen
Box 13
Niarada, Montana

JUN 29 1953

Re: Docket No. DMEA-2626 (~~Lead-Zinc~~-
Copper
Ludwig Beirwagen
Battle Butte Mine
Flathead County, Montana

Dear Mr. Beirwagen:

Before your application for Government assistance for your exploration project can be processed, it will be necessary for us to have a copy of the lease agreement with the Northern Pacific Railroad and also the Owner's Consent to Lien, six copies of which are enclosed. These forms will have to be properly executed and signed by the lessor.

On March 13, 1953, Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II, Spokane, Washington wrote you requesting the lease agreement with the Northern Pacific Railroad. To date they apparently have not received this lease from you.

Unless we receive the copy of the lease and the Owner's Consent to Lien within thirty days, it will be necessary for us to remove your application from the active files and place it in the closed file.

Sincerely yours,

C. O. Mittendorf

Administrator

6-29-53

JWAlt/hmj
(6/29/53)
Enclosure

CC to: Docket
Adm. R. File
Base Metals Div.
Op. Committee
Region II (2)
Mr. Kinkel
Mr. Bishop

FILE COPY
SURNAME 500

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

JUN 8 1953

Mr. Ludwig Beirwagon
Niarada, Montana

Re: Docket No. DMEA-2626 (Lead-Zinc-Copper)
Battle Butte Mine
Flathead County, Montana

Dear Mr. Beirwagon:

On May 18, 1953, you were informed that a restricted program directive had obliged this Administration to deny your application for Government assistance in an exploration project.

However, a modifying directive dated June 1, 1953 has given us authority to continue processing your application. Therefore, we are reactivating your case. If you no longer desire to pursue your application, kindly advise accordingly.

Sincerely yours,

C. O. Mittendorf

Administrator

WRGriswold/hmj (written 6/5/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Div.
Region II (2)
Mr. Kinkel
Mr. Bishop
Chron.

6-8-53

FILE COPY
SURNAME:
500

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

MAY 19 1953

Mr. Ludwig Beirwagon
Niarada, Montana

Re: Docket No DMEA-2626 (Lead-Zinc-Copper)
Battle Butte Mine
Flathead County, Montana

Dear Mr. Beirwagon:

This is to inform you that, effective April 15, 1953, the commitment of funds allocated to the DMEA for exploration assistance under the Defense Production Act was restricted to certain specified metals and minerals still in short supply. Lead and zinc were not specified, and consequently were automatically removed from the list of metals or minerals eligible for exploration assistance.

I regret to advise you that, since your application relates to lead-zinc and was pending on the date of the restrictive order, we are without authority or funds to enter into a contract for exploration, and your application is accordingly denied. This action is taken without prejudice to the merits of your proposed project.

The staff of the DMEA wishes to express its appreciation for your interest in the exploration program and for your cooperation during the period your application has been under consideration.

Sincerely yours,

G. D. Mittendorf

Administrator

WRGriswold/hmj (written 5/18/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Div.
Region II (2)
Mr. Kinkel
Mr. Bishop
Chron.

FILE COPY
SURNAME:

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

Base Metals Div., DMEA

3669 JWAlt/bjl 2616

March 5, 1953

Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II, Spokane, Washington

Re Ludwig Beirwagen Application Docket No. DMEA-2626. Application cannot be processed until lease agreement with Northern Pacific Railroad requested in our letter August 7, 1952, is received. If you have lease, please forward it to us. If not, notify Applicant to supply it immediately.

W. R. Griswold, Chief
Base Metals Division, DMEA

Copy to: Docket
Admr. R. File
Base Metals
Mr. Alt
Mr. Bishop
Mr. Kinkle
Op. Committee
Accounts
Chron.
Confirmation

3/5/53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~XXXXXXXXXXXXXXXXXXXX~~

South 157 Howard St.
Spokane 4, Washington

March 13, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

Mr. Ludwig Beirwagon
Miarada, Montana

Dear Mr. Beirwagon:

We have received a teletype from our Washington office stating that your application for exploration assistance of your Battle Butte property in Lake County, Montana (Docket No. DMEA-2626) cannot be further processed until they have received the lease agreement with the Northern Pacific Railroad.

It would be appreciated if you would send this agreement to us immediately since your application has already been in process a considerable length of time.

Very truly yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Hosterman

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

South 157 Howard St.
Spokane 4, Washington

March 13, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

MAR 23 1953

Mr. Ludwig Beirwagon
Miarada, Montana

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Very truly yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Hosterman

IN REPLY REFER TO:

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

March 5, 1953

Memorandum

Re: Docket DMEA-2626
Ludwig Beirwagen
Battle Butte mine
Flathead County, Montana
Lead-zinc-copper

To: Mr. W. R. Griswold

From: Erwin J. Lyons, USGS
O. M. Bishop, USBM

Subject: Recommendation for approval

The field team report on the Battle Butte mine has been reviewed.

Geologically, exploration to determine the lateral and downward extensions of the ore body exposed on the 100-foot level and to search for other ore bodies on possible parallel structures appears warranted. Although much of the production from the district has been silver, as from the Flathead mine, past shipments and samples taken by the U. S. Bureau of Mines would indicate that the ore from the subject property is primarily lead-zinc.

The present reviewers believe that exploration in the third stage of the program, as set forth by H. T. Reno, should be done by deepening the shaft rather than drifting from the 300 level of the adjacent Martin mine. According to the report by B. Myers the mineralized zone along the latite-quartzite contact between the Martin mine and the Battle Butte mine did not look too promising as the field examiners failed to recognize any lead, zinc, or copper minerals in the workings and ten samples taken by the Great Northern Railway averaged only 2.4 oz. Ag and tr. Au per ton. Presumably, it is this zone that would be explored by the drift from the Martin mine.

It is recommended that the project be approved according to the conditions set forth by the field team in their covering letter of February 17, 1953 to George C. Selfridge, Chairman of the Operating Committee.

Erwin J. Lyons
Erwin J. Lyons
Geologist

O. M. Bishop
O. M. Bishop
Base Metals Branch

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

March 5, 1953

Memorandum

Re: Docket DMEA-2626
Ludwig Beirwagen
Battle Butte mine
Flathead County, Montana
Lead-zinc-copper

To: Mr. W. R. Griswold

From: Erwin J. Lyons, USGS
O. M. Bishop, USBM

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Erwin J. Lyons
Geologist

O. M. Bishop
Base Metals Branch

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

March 5, 1953

Memorandum

Re: Docket MMA-2626
Ludwig Beirwagen
Battle Butte mine
Flathead County, Montana
Lead-zinc-copper

To: Mr. W. C. Griswold

From: Erwin J. Lyons, USGS
O. M. Bishop, USBM

Subject: Recommendation for approval

The field team report on the Battle Butte mine has been reviewed.

Geologically, exploration to determine the lateral and downward extensions of the ore body exposed on the 100-foot level and to search for other ore bodies on possible parallel structures appears warranted. Although much of the production from the district has been silver, as from the Flathead mine, past shipments and samples taken by the U. S. Bureau of Mines would indicate that the ore from the subject property is primarily lead-zinc.

The present reviewers believe that exploration in the third stage of the program, as set forth by M. E. Kero, should be done by deepening the shaft rather than drifting from the 300 level of the adjacent Martin mine. According to the report by B. Myers the mineralized zone along the latite-quartzite contact between the Martin mine and the Battle Butte mine did not look too promising as the field examiners failed to recognize any lead, zinc, or copper minerals in the workings and ten samples taken by the Great Northern Railway averaged only 2.4 oz. Ag and tr. Au per ton. Presumably, it is this zone that would be explored by the drift from the Martin mine.

It is recommended that the project be approved according to the conditions set forth by the field team in their covering letter of February 17, 1953 to George C. Selfridge, Chairman of the Operating Committee.

Erwin J. Lyons
Geologist

O. M. Bishop
Base Metals Branch

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

February 17, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2626 (Lead-Zinc-Copper)
Ludwig Beirwagon
Battle Butte Mine
Flathead County, Montana

Dear Mr. Selfridge:

The following are enclosed:

1. Four copies of a report by John W. Hosterman, which includes copies of 3 maps, and also copies of a report by Bradley Myers, H. C. Rainey, and C. C. Popoff.

2. Four copies of a report by H. T. Reno, with which is included 2 copies of a sample contract.

3. Four copies of a report by H. T. Reno discussing an alternative shaft sinking program in lieu of a 1,000-foot crosscut.

The captioned application was forwarded to Washington on July 18, 1952. On August 12 we received a letter from the Operating Committee asking for additional maps and a geologic report missing from the application. We wrote the applicant on August 12 asking for this information but never received an answer. The applicant's property was examined on August 27 and the enclosed reports were subsequently prepared, but they were withheld at this office pending receipt of Owner's Consent to Lien Agreements which we understood were to have been immediately submitted. We have been in contact with the applicant several times during recent months and have repeatedly been told that the Owner's Consent to Lien Agreements would be immediately forthcoming, however, they have failed to materialize. We are therefore submitting the Field Team reports for consideration without the lien agreements. In this respect, we wish to point out that if exploration is confined to shaft sinking on the Battle Butte property one set of lien agreements will suffice; however, if crosscutting from the Martin mine is to be part of the contract work it may be necessary to obtain two separate Consent to Lien Agreements, and also a working agreement with the Martin Mining Company.

The applicant's property was originally examined in 1951 by Bradley Myers and party, who were in that area on other DMEA business, but who were informed that a DMEA application on the Battle Butte property would be submitted. On the strength of their limited examination they recommended denial of any application that might be forthcoming, their reasoning based largely on the incompetence of the applicant. The application, however, was never submitted; furthermore, the property has since come under different control and the current applicants are not those referred to in Myers' report.

The captioned application proposes exploration of the Battle Butte deposit. Participation in the exploration program is recommended by field examiners, who recommend a stage type of contract, each successive stage depending upon the success of the preceding stage. Stage IV would explore the deposit 150 feet below the 100 level by driving 1,000 feet of crosscut off the 300 level of the Martin mine. An alternative to this proposal would be to sink 175 feet of shaft off the 100 level of the Battle Butte mine, 25 feet to be used as a sump. The crosscut is favored in Mr. Reno's report as it would explore a possible mineralized area between the Martin and Battle Butte mines. However, the Field Team wishes to call attention to the fact that the crosscut would cost about $7,300 more than the shaft and that there is some question as to the applicant's finances; therefore, cheaper exploration would be to his benefit. Moreover, the character of the Battle Butte deposit, as brecciated, lenticular bodies which appear to be en echelon in habit, i.e., the ore body on the 44-foot level is not recognized on the 100-foot level, makes it more practicable to confine exploration to shafting near to or within the deposit thereby continuously exploring the deposit between the 100 level and the proposed lower level. If the deposit proves encouraging on the proposed lower level the applicant might want to connect that level, by crosscut, to the Martin mine at his own expense, or perhaps negotiate a DMEA contract to explore the intervening area.

The Field Team recommends that the applicant be advised by the Washington office to procure a Consent to Lien Agreement on the Battle Butte property. Failure to submit this agreement should result in denial of the application. If an agreement is obtained, the Field Team recommends the granting of a contract in which low level exploration, providing previous exploratory stages are successful, be done through a shaft in the Battle Butte mine.

By DMEA Field Team, Region II

M. E. Volin, Acting Exec. Officer
(U. S. Bureau of Mines)

Thor H. Kiilsgaard, Acting Member
(U. S. Geological Survey)

Enclosures
cc: USBM (2)
Hosterman

Wash
2 copy

MF-200 (A)
(February 1952)

DOCKET [redacted]. DMEA 2626

COMMODITY lead-zinc

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ludwig Beirwagen, Niarada, Montana

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Flathead, described as follows:[3] SE 1/4, NE 1/4, SW 1/4 and S 1/2 SW 1/4 of sec. 20, T. 25 N., R. 23 W., M.P.M.

the Operator represents and undertakes:[4]

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

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

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.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] _____

in or upon the described land; and shall bring the project to completion within a period of 2 years from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. 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.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $36,450.00, which is 50 percent of $72,900.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[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, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, 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. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *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 worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(Operator)

By _____

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

LUDWIG BEIRWAGEN
Docket No. DMEA 2836
(zinc-lead)

EXHIBIT "A"

Exploration Project

The project shall consist of a 5-stage program as follows:

Stage I - Drill four diamond drill holes a maximum of 600 lin. ft. of AX size hole at positions approximately as indicated on the attached sketch. The position of each hole shall be contingent upon the results of the preceding hole and the results of crosscutting and drifting specified in Stage II.

Stage II - Concurrent with Stage I, a maximum of 300 lin. ft. (min. section 5'x7') on two headings of drifts and/or crosscuts and 600 lin. ft. of 20-ft. lateral drill holes to probe the walls and control the direction of the drifts and crosscuts. Neither heading shall be continued more than 50 feet in barren ground.

Stage III - Contingent upon the success of Stages I and II, three diamond drill holes from the surface, a maximum of 1500 lin. ft. of minimum AX size hole, at locations determined from the results of Stages I and II.

Stage IV - Contingent upon the success and directed by the results of Stages I, II, and III, 1,000 lin. ft. of crosscut from the 300 level of the Martin mine.

Stage V - A maximum of 700 lin. ft. of drifts and/or crosscuts to be driven off the crosscut level at positions approved in writing by the Government.

Costs of Project

Crosscut	$30/lin. ft.
Drift	30/lin. ft.
Long hole laterals	$0.75/lin. ft.
Underground diamond drill hole	4.50/ft.
Surface diamond drill hole	6.50/ft.

MF-200 (A)
(February 1952)

DOCKET DMEA 2626

COMMODITY lead-zinc

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ludwig Beirwagen, Niarada, Montana

hereinafter called the "Operator," as follows:

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the Operator represents and undertakes:[4]

(*a*) ~~That the Operator is the owner, in possession and entitled to possession, and the property described above is free of the following claims, liens, or encumbrances as to each of which the Owner's Consent to Lien is attached:~~

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

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.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] _____

in or upon the described land; and shall bring the project to completion within a period of 2 years from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. 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.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $36,450.00, which is 50 percent of $72,900.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

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(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

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(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *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 worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(Operator)

By _____

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

LUDWIG BEIRWAGEN
Docket No. DMEA 2836
(zinc-lead)

EXHIBIT "A"

Exploration Project

The project shall consist of a 5-stage program as follows:

Stage I - Drill four diamond drill holes a maximum of 600 lin. ft. of AX size hole at positions approximately as indicated on the attached sketch. The position of each hole shall be contingent upon the results of the preceding hole and the results of crosscutting and drifting specified in Stage II.

Stage II - Concurrent with Stage I, a maximum of 300 lin. ft. (min. section 5'x7') on two headings of drifts and/or crosscuts and 600 lin. ft. of 20-ft. lateral drill holes to probe the walls and control the direction of the drifts and crosscuts. Neither heading shall be continued more than 50 feet in barren ground.

Stage III - Contingent upon the success of Stages I and II, three diamond drill holes from the surface, a maximum of 1500 lin. ft. of minimum AX size hole, at locations determined from the results of Stages I and II.

Stage IV - Contingent upon the success and directed by the results of Stages I, II, and III, 1,000 lin. ft. of crosscut from the 300 level of the Martin mine.

Stage V - A maximum of 700 lin. ft. of drifts and/or crosscuts to be driven off the crosscut level at positions approved in writing by the Government.

Costs of Project

Crosscut	$30/lin. ft.
Drift	30/lin. ft.
Long hole laterals	$0.75/lin. ft.
Underground diamond drill hole	4.50/ft.
Surface diamond drill hole	6.50/ft.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

February [illegible]

Received by
DMEA OPERATING COMMITTEE
2-27-53
(date)

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket [illegible] (Lead-Zinc-Copper)
Ludwig Beirnson
Battle Butte Mine
Flathead County, Montana

Dear Mr. Selfridge:

The following are enclosed:

1. Four copies of a report by John W. Masterson which includes copies of 3 maps and also copies of a report by Brandle, Myers, H. C. Palmer, and [illegible] Popoff.

2. Four copies of a report by S. T. [illegible] with which is included 2 copies of a sample contract.

3. Four copies of a report by [illegible] discussing an alternative shaft sinking program in lieu of a 1,000-foot crosscut.

The captioned application was forwarded to Washington on July 15, 1952. On August 12 we received a letter from the Operating Committee asking for additional maps and a geologic report missing from the application. We wrote the applicant on August 12 asking for this information but never received an answer. The applicant's property was examined on August 27 and the enclosed reports were subsequently prepared, but they were withheld at this office pending receipt of Owner's Consent to Lien Agreements which we understood were to have been immediately submitted. We have been in contact with the applicant several times during recent months and have repeatedly been told that the Owner's Consent to Lien Agreements would be immediately forthcoming; however, they have failed to materialize. We are therefore submitting the Field Team reports for consideration without the lien agreements. In this respect we wish to point out that if exploration is confined to shaft sinking on the Battle Butte property, one set of lien agreements will suffice; however, if crosscutting from the Martin Mine is to be part of the contract work it may be necessary to obtain two separate Consent to Lien Agreements and also a working agreement with the Martin Mining Company.

The applicant's property was originally examined in 1951 by Bradley Myers and party, who were in that area on other DMEA business, but who were informed that a DMEA application on the Battle Butte property would be submitted. On the strength of their limited examination they recommended denial of any application that might be forthcoming, their reasoning based largely on the incompetence of the applicant. The application, however, was never submitted; furthermore, the property has since come under different control and the current applicants are not those referred to in Myers' report.

The captioned application proposes exploration of the Battle Butte deposit. Participation in the exploration program is recommended by field examiners, who recommend a stage type of contract, each successive stage depending upon the success of the preceding stage. Stage IV would explore the deposit 150 feet below the 100 level by driving 1,000 feet of crosscut off the 300 level of the Martin mine. An alternative to this proposal would be to sink 175 feet of shaft off the 100 level of the Battle Butte mine, 25 feet to be used as a sump. The crosscut is favored in Mr. Russo's report as it would explore a possible mineralized area between the Martin and Battle Butte mines. However, the Field Team wishes to call attention to the fact that the crosscut would cost about $7,300 more than the shaft and that there is some question as to the applicant's finances; therefore, cheaper exploration would be to his benefit. Moreover, the character of the Battle Butte deposit, as brecciated, lenticular bodies which appear to be en echelon in habit, i.e., the ore body on the 44-foot level is not recognized on the 100-foot level, makes it more practicable to confine exploration to shafting near to or within the deposit thereby continuously exploring the deposit between the 100 level and the proposed lower level. If the deposit proves encouraging on the proposed lower level the applicant might want to connect that level, by crosscut, to the Martin mine at his own expense, or perhaps negotiate a DMEA contract to explore the intervening area.

The Field Team recommends that the applicant be advised by the Washington office to procure a Consent to Lien Agreement on the Battle Butte property. Failure to submit this agreement should result in denial of the application. If an agreement is obtained, the Field Team recommends the granting of a contract in which low level exploration, providing previous exploratory stages are successful, be done through a shaft in the Battle Butte mine.

By DMEA Field Team, Region II

M. E. Volin, Acting Exec. Officer
(U. S. Bureau of Mines)

Enclosures
cc: DMEA (2)
Masterman

Thor H. Kiilsgaard, Acting Member
(U. S. Geological Survey)

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

1201 N. Division St.
Spokane 2, Washington
October 15, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: H. T. Reno, Mining Engineer, Bureau of Mines

Subject: Application for exploration aid - Ludwig Beirwagen
Flathead County, Montana
Docket No. DMEA 2626 (lead-zinc)

Pursuant to your request for an alternative for the 1,000 feet of crosscut from the Martin shaft, recommended in my memorandum of October 14, 1952, there is attached a detailed estimate of the cost of deepening the present shaft at the Margarita (Battle Butte) property. The estimate includes rehabilitation of 42 feet of shaft above the adit level, construction of a headframe and facilities at the surface, and excavation of a sump and pocket below the proposed 250 level.

The present air hoist on the adit level will not conform to state mining laws if the hoisting distance exceeds 200 feet, and it will be cheaper to install an internal combustion engine hoist on the surface rather than to enlarge the station and provide power underground. The sump and pocket will be required for the proposed drifting.

H. T. Reno

Orig. & 3—Wash.
USGS (2)
DMEA
HTR:he
M/D

Received by
DMEA
2-27-53

LUDWIG BEIRWAGEN
Docket No. DMEA 2626
(lead-zinc)

SHAFT ESTIMATE

Rehabilitation		Cost/ft
42 ft. shaft above adit level		
2 compartment - 4-1/2 x 4-1/2		
10 timber sets		
1 set		
wall plates		
2 pcs. 8x8x10	107	
end plate		
2 pcs. 8x8x5	53	
divider		
1 pc. 8x8x5	26	
posts		
6 pcs. 8x8x5	160	
lagging @ 7 panels		
35 pcs. 2x12x5	350	
	696 fbm	
$\frac{696 \text{ fbm} \times \$65/m}{5}$ =	$9.05	
Guides, wedges, blocks and hangars - Say	.50	$9.55
Ladders		
4 - 10 ft. @ $2/ea.		.20
Labor - shaftman		
Scale = $15.14 per day		
+ 8-1/3% overtime	1.26	
	$16.40	
+ 11% OAB Comp. ins. & unempl.	1.80	
	$18.20	
1 man will frame 1 set timber per day		
$\frac{18.20}{5}$ =		3.64
3 men will install 1 set/day		10.92
Total		$24.31
42 ft. x $24.31 =		$1,021.02

Rehabilitation

100 feet shaft below adit level

Arbitrarily assumed @ $1.00			100.00

Head frame and surface plant

Minimum only required - Assume $1,000			1,000.00

Sinking (cost based on 100ft/mo.)

Timber (from rehabilitation)		9.55	
Framing (" ")		3.64	
Shaft labor - 2 ft/shift - 100 ft/mo.			
Underground			
Contract @		50.00	
Surface			
1 hoistman (small hoist)			
1 surface labor			
Scale =	14.34		
+ 8-1/3% overtime	1.19		
+ 11% comp. ins.; OAB & ins.	1.71		
Per shift	17.24		
$\frac{2 \times 17.24}{2}$ =		17.24	
Engr. and accounting $100/mo		1.00	
Supervision $500/mo		5.00	
Powder - 20#/ft @ $22.50/100		4.50	
Elec. delay caps - 32/4 ft. @ 24¢/ea.		1.92	
Steel and bits - assume		3.00	
Air pipe 3" @ $0.75		.75	
Water pipe 3" @ $0.75		.75	
1" @ $0.18		.18	
Fittings - Say $50		.29	
Hoist cable - 350 ft. @ $0.17/ft (175' shaft)		.34	
Power - 70 gal. gas & oil/day		5.00	
Repairs		1.50	
Small tools and misc. - $300 (175')		1.71	
Equipment purchase			
1 sinking bucket - $200 (175')		1.15	
Equipment rent			
Hoist $300/mo.		3.00	
Sinking pump $ 60/mo.		.60	

Equipment depreciation			
Compressor	$50/mo.	.50	
2 sinkers	$17/mo.	.17	
		111.79	
175 feet of shaft (incl 25' sump) @ $111.79			$19,563.25
Pocket			1,000.00
Total			$22,684.27

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

1201 N. Division St.
Spokane 2, Washington

October 14, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: H. T. Reno, Mining Engineer, Bureau of Mines

Subject: Application for exploration aid, Ludwig Beirwagen, Flathead County, Montana, Docket No. DMEA 2626 (lead-zinc-copper)

RECOMMENDATION

It is recommended that the DMEA enter into an exploration contract with the applicant in the amount of $72,900. The applicant is prepared to furnish half of the amount.

LOCATION AND OWNERSHIP

The property is in sec. 20, T. 25 N., R. 23 W., M.P.M., 7 miles by gravel road west of U. S. Highway No. 28, 2 miles north of Niarada, Montana. Niarada is 38 miles by oiled road north of the Northern Pacific Railroad at Penna, Montana. The property is accessible the year-round.

The property is the SE¼, NE¼, SW¼ and the S½, SW¼ of sec. 20, T. 25 N., R. 23 W., M.P.M., in the Hog Heaven mining district, Flathead County, Montana. It is owned by the Northern Pacific Railroad Company and leased to the applicant.

FINANCIAL AND ADMINISTRATIVE COMPETENCE OF APPLICANT

The applicant, Ludwig Beirwagen, a farmer of unquestioned honesty and integrity, has had no mining experience. Although the applicant has sufficient funds to finance the project he may take one or two fellow farmers in as partners. W. W. Lindom, apparently a competent mine manager, divides time between the property, the adjoining Martin Mining Company property, and the mill which will serve both operations. George Boulder, until recently geologist for the Northern Pacific Railroad, has indicated willingness to continue his interest in the property and accordingly will be available part-time for mapping and as a geological consultant.

2-27-53

PAST PRODUCTION

According to Bureau of Mines records, 4-1/2 tons containing .055 ounce gold, 8.2 ounces silver, and 6.87 percent copper was produced from the property by former operators. Brad Myers, U. S. Geological Survey, in a memorandum report on the property, records a shipment of 30 tons containing 2 percent lead and 10.6 percent zinc. The applicant has mined about 400 tons of milling ore during the last year. The grade, not verified, is reported as 11.0 percent combined lead and zinc.

DESCRIPTION OF DEPOSIT

The deposit is an irregular--shaped ore body characterized by fine grained sphalerite, galena, and pyrite in fracture openings along a brecciated zone in horizontal quartzite beds. In the richer portions the metallic minerals appear to replace the quartzite. The outline and continuity of the ore body is extremely obscure. It may not extend much beyond the limits exposed in the 100 level drift where it is about 40 feet long and averages 10 feet wide. Although the attitude cannot be determined a general impression of a vertical, or possibly a steep dip to the east is obtained from the overall appearance. Scattered metallic minerals in the fault zone on the adit level, sporadic pods of iron and copper minerals on the 40-level, and the concentration of ore minerals on the 100-level apparently indicate a trend of increasing mineralization downward. This trend also is noted in the 9 feet between the back and floor of the 100-level drift.

The recognized ore minerals are galena, sphalerite, enargite, and chalcopyrite. The gangue is quartzite, pyrite, and a white subtranslucent mineral tentatively identified as alunite.

George N. Bennet, Bureau of Mines, took a representative sample across 15 feet of the deposit in 1945 which was analyzed as follows:

Width	Gold-oz.	Silver-oz.	Lead-%	Copper-%	Zinc-%
15.0 ft.	0.05	1.0	2.4	0.1	8.1

Two grab samples representative of present mill feed were taken. The analyses have not been received.

The quartzite beds are strong. Excluding faulted areas a 20-feet wide opening can be mined safely without support.

ESTIMATE OF RECOVERABLE ORE RESERVES AND MINING GRADE

Considering the absence of recognized structure and the limited exposure, an estimate of ore reserves can include only the few tons in sight. If the mineralization persists a mining grade

of 10 percent combined lead and zinc can be predicted from the applicant's alleged mill feed grade, Bennet's sampling, and the smelter return on 30 tons of ore reported by Myers.

MINING COST

The mining cost (50 tons per day) is estimated at $6.00 a ton excluding development, depreciation, depletion, and taxes. Dilution will depend upon the supervision of mining. Under careful supervision it should be negligible.

MILLING COST

Milling cost, excluding amortization and taxes, at the present mill is estimated at $8.00 a ton. After installation of additional crushing and grinding equipment it is estimated at $4.00 a ton.

HAULAGE COST

Haulage of concentrates to the railroad at Penna, Montana, is estimated at $5.50 a ton.

EVALUATION OF APPLICANT'S PROPOSAL

The applicant proposes to deepen the shaft 175 feet, drive 1000 lin. feet of drifts and crosscuts, and drill 1000 lin. feet of diamond drill hole. The drifts, crosscuts, and drill holes are not planned to determine systematically the extent of the ore body. Furthermore, exploration from the nearby Martin mine shaft should be considered in preference to sinking. Items not properly part of an exploration project are included in the applicant's estimate.

SUGGESTED ALTERNATIVE TO APPLICANT'S PROPOSAL

A five-stage exploration campaign designed, insofar as physical features permit, to progressively expand the limits of the ore body, has been worked out with the applicant as follows: (refer to sketch)

1. Drill four diamond drill holes, a maximum of 600 lin. feet of AX size hole, at positions indicated on the sketch. However, the position of each hole should be contingent upon the results of the preceding hole and the results of crosscutting and drifting specified in Stage II.

2. Concurrent with Stage I, a maximum of 300 lin. feet on two headings of drift and/or crosscuts; 600 lin. feet of 20-foot lateral drill holes to probe the walls and control the direction of the drifts or crosscuts. The headings should not be continued more than 50 feet in barren ground.

3. Contingent upon the success of Stages I and II, three diamond drill holes from the surface, a maximum of 1500 lin. feet of AX size hole, at locations determined from the results of Stages I and II.

4. 1000 lin. feet of crosscut from the 300 level of the Martin mine to the ore body, the direction to be determined by the results of Stages I, II and III.

5. 700 lin. feet of drift and/or crosscut to be driven off the crosscut level.

DISCUSSION

Although this project is considered to be a good exploration risk, it is emphasized that Phase 1, 2 and 3 of the proposed program are designed only to extend the limits of a known ore body and therefore each phase of the exploration should be absolutely contingent upon the proved extension of these limits.

The crosscut from the Martin shaft is recommended rather than deepening the shaft on the property because the crosscut will explore a large block of ground in an area known to be mineralized. Furthermore, the operator's lack of equipment and the condition of the shaft are such that cost of the crosscut will not be much more than would be the cost of sinking.

The Martin Mining Company plans to be operating through their shaft within 60 days. Adequate equipment and facilities are on the property. Exploration through the Martin shaft will, of necessity, involve an interchange of equipment facilities and labor between the Martin Company and the applicant. Therefore, in order to avoid a complicated accounting procedure it is recommended that a contract, if approved, be on the short form and Government participation be on the basis of estimated unit costs.

The unit cost of the work can better be determined by comparison with the actual cost of similar work at the Highland Surprise mine under a cost incurred contract rather than by a detailed estimate. The cost of drifting without timber 969.5 feet in hard argillite on the 1300 level, Contract Idm-E63, Docket No. 390 (zinc-lead) has averaged $29.50 per lin. foot. Therefore, considering the remote location and the lack of power at the proposed project, $30.00 a lin. foot is considered a fair estimate for crosscutting and drifting.

A proposed contract is attached. The estimated cost of diamond drilling is based on a quotation from the R. S. McClintock Company, Spokane, Washington.

NTR:kt

H. T. Reno

CC: 3-Wash. /DMEA /M/D
2-USGS /HTR D/F

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

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[illegible]

The [illegible] 150 feet of [illegible] 102-foot vertical shaft. [illegible]

[illegible]

[illegible] Approximately 600 [illegible] contact between porphyritic [illegible] quartzite. According to [illegible] 1/ [illegible]

[illegible] development [illegible] level [illegible] horizontal section of the [illegible] elliptical [illegible] mineralized [illegible] average width of 5 feet [illegible] quartzite. [illegible] two parallel [illegible] a nearly vertical dip. [illegible] ing of the quartz [illegible] not confined to the [illegible] but occur in irregular pockets, [illegible] mineralization [illegible] associated with them. [illegible] association [illegible]

[illegible]

[illegible]

[illegible] 500 feet of drilling [illegible]

1/ [illegible] 17, 193[illegible].

[illegible]

[illegible]

[illegible]

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~

1201 N. Division St.
Spokane 2, Washington
October 15, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: H. T. Reno, Mining Engineer, Bureau of Mines

Subject: Application for exploration aid - Ludwig Beirwagen
Flathead County, Montana
Docket No. DMEA 2626 (lead-zinc)

Pursuant to your request for an alternative for the 1,000 feet of crosscut from the Martin shaft, recommended in my memorandum of October 14, 1952, there is attached a detailed estimate of the cost of deepening the present shaft at the Margarita (Battle Butte) property. The estimate includes rehabilitation of 42 feet of shaft above the adit level, construction of a headframe and facilities at the surface, and excavation of a sump and pocket below the proposed 250 level.

The present air hoist on the adit level will not conform to state mining laws if the hoisting distance exceeds 200 feet, and it will be cheaper to install an internal combustion engine hoist on the surface rather than to enlarge the station and provide power underground. The sump and pocket will be required for the proposed drifting.

H. T. Reno

H. T. Reno

Orig. & 3—Wash.
USGS (2)
DMEA
HTR:he
M/D

LUDWIG BEIRWAGEN
Docket No. DMEA 2626
(lead-zinc)

SHAFT ESTIMATE

Rehabilitation		Cost/ft
42 ft. shaft above adit level		
2 compartment - 4-1/2 x 4-1/2		
10 timber sets		
1 set		
wall plates		
2 pcs. 8x8x10	107	
end plate		
2 pcs. 8x8x5	53	
divider		
1 pc. 8x8x5	26	
posts		
6 pcs. 8x8x5	160	
lagging @ 7 panels		
35 pcs. 2x12x5	350	
	696 fbm	
$\frac{696 \text{ fbm} \times \$65/m}{5}$ =	$9.05	
Guides, wedges, blocks and hangars - Say	.50	$9.55
Ladders		
4 - 10 ft. @ $2/ea.		.20
Labor - shaftman		
Scale = $15.14 per day		
+ 8-1/3% overtime	1.26	
	$16.40	
+ 11% OAB Comp. ins. & unempl.	1.80	
	$18.20	
1 man will frame 1 set timber per day		
$\frac{18.20}{5}$ =		3.64
3 men will install 1 set/day		10.92
Total		$24.31
42 ft. x $24.31 =		$1,021.02

Rehabilitation

100 feet shaft below adit level

Arbitrarily assumed @ $1.00			100.00

Head frame and surface plant

Minimum only required - Assume $1,000			1,000.00

Sinking (cost based on 100ft/mo.)

Timber (from rehabilitation)		9.55	
Framing (" ")		3.64	
Shaft labor - 2 ft/shift - 100 ft/mo.			
Underground			
Contract @		50.00	
Surface			
1 hoistman (small hoist)			
1 surface labor			
Scale =	14.34		
+ 8-1/3% overtime	1.19		
+ 11% comp. ins.; OAB & ins.	1.71		
Per shift	17.24		
$\frac{2 \times 17.24}{2}$ =		17.24	
Engr. and accounting	$100/mo	1.00	
Supervision	$500/mo	5.00	
Powder - 20#/ft @ $22.50/100		4.50	
Elec. delay caps - 32/4 ft. @ 24¢/ea.		1.92	
Steel and bits - assume		3.00	
Air pipe 3" @ $0.75		.75	
Water pipe 3" @ $0.75		.75	
1" @ $0.18		.18	
Fittings - Say $50		.29	
Hoist cable - 350 ft. @ $0.17/ft (175' shaft)		.34	
Power - 70 gal. gas & oil/day		5.00	
Repairs		1.50	
Small tools and misc. - $300 (175')		1.71	
Equipment purchase			
1 sinking bucket - $200 (175')		1.15	
Equipment rent			
Hoist	$300/mo.	3.00	
Sinking pump	$ 60/mo.	.60	

Equipment depreciation			
Compressor	$50/mo.	.50	
2 sinkers	$17/mo.	.17	
		111.79	
175 feet of shaft (incl 25' sump) @ $111.79			$19,563.25
Pocket			1,000.00
Total			$22,684.27

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

So. 157 Howard Street
Spokane 4, Washington

September 26, 1952

Memorandum

To: DMEA Field Team, Region II

From: John W. Hosterman, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA 2626, Lead-Zinc. Field Examination of the Tunnel No. 3, Battle Butte Mine, Flathead County, Montana.

Applicant

Ludwig Beirwagon, Niarada, Montana

Recommendation

It is recommended that favorable consideration be given the application for aid to conduct exploration for lead-zinc ore in the Battle Butte Mine. This exploration should consist of drifting and long-hole drilling on the 100-foot level; diamond drilling from the 100-foot level to intersect the projection of the mineralized zone at the 150-foot level; and, providing previous exploration is successful, diamond drilling from the surface to intersect the ore zone at the 200-foot level. If as a result of the above outlined exploration, sufficient favorable evidence has been obtained, either an expansion of the original project or an entirely new project should be outlined to explore downward extensions of the ore by means of man-sized openings.

Summary of Field Examination

The No. 3 Tunnel of Battle Butte Mine was examined by myself and H. T. Reno, U. S. Bureau of Mines, on August 27, 1952. We were accompanied by Ludwig Beirwagon and W. W. Lindbom. During this examination the 100-foot level was mapped in detail.

Name and Location of Property

The No. 3 tunnel of the Battle Butte Mine is approximately nine miles by dirt road from Niarada, Montana, in Section 20, T. 24 N., R. 23 W. The region is known as the Hog Heaven Mining District and includes the Flathead Mine (Anaconda Copper Mining Company), Ole Mine, Martin Mine, and Battle Butte Mine. The Northern Pacific Railroad is accessible at Plains, 37 miles to the south, or at Polson, 28 miles to the southeast. The Great Northern Railroad is accessible at Kalispell, 45 miles to the northeast.

Geology

The No. 3 tunnel of the Battle Butte Mine consists of about 450 feet of workings on three levels (see composite plan map), connected by a 100-foot vertical shaft. A small amount of lead-zinc is being produced from the 100-foot level and milled at the neighboring Martin Mining Company mill.

The country rock at the No. 3 tunnel consists of light gray, fine-grained, impure quartzite belonging to the Ravalli formation of pre-Cambrian age. The beds lie almost horizontally with no bedding dips more than eight degrees having been observed.

Approximately 600 feet northeast of the mine is a contact between porphyritic latite of Tertiary age and the Ravalli Quartzite. According to P. J. Shenon 1/ this latite is believed to be intrusive rather than extrusive. It was from along this contact that high-grade silver ore was mined from the No. 1 tunnel of the Battle Butte Mine. (See Hog Heaven Mining District Map.)

Both the pyrite body on the 44-foot level and the galena-sphalerite body on the 100-foot level trend almost due north. Incomplete development work on the 44-foot level shows that the horizontal section of the pyrite body is roughly elliptical in shape. The galena-sphalerite mineralized zone is exposed for a distance of 30 feet with an average width of 5 feet, and it has irregularly replaced the highly brecciated quartzite. The pyrite body and the galena-sphalerite body are probably two parallel zones having a nearly vertical dip. Silification and bleaching of the quartzite is not confined to the fractures but occurs as irregular patches, and the mineralization seems to have been associated with them. The galena-sphalerite mineralization also seems to have been associated in some way with several small stringers, up to 1.5 inches wide, of porphyritic latite seen in the faults and fractures.

The present development is insufficient to predict what the ore reserves may be beyond the few tons showing in the back and walls of the 100-foot level.

Proposed Exploration

Both Mr. Reno and I feel that a project to delineate the galena-sphalerite ore should be given favorable consideration. This project should allow approximately 1400 feet of diamond drilling and a maximum of 300 feet of drifting and/or crosscutting. Holes should be

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1/ Shenon, P. J., and Taylor, A. V., Jr., Geology and Ore Occurrence of the Hog Heaven Mining District, Flathead County, Montana: Montana Bureau of Mines and Geology, Memoir No. 17, 1936.

diamond drilled from stations on the 100-foot level to intersect the project of the ore zone 50 feet lower in elevation. Inasmuch as some evidence exists that the ore zone is dipping away from the proposed drill stations, it is not considered feasible to set up the drilling to intersect the ore zone at a lower elevation from stations on the 100-foot level as a poor angle of intersection would be obtained. If favorable evidences are obtained in the core from these diamond drill holes, drilling from the surface should be done to intersect the projected extensions of the ore zone at the 200-foot level. Possible locations of the underground drill holes are shown on the plan map of the 100-foot level. It is understood, of course, that information obtained in the initial underground drill hole will indicate the dip of the ore zone and subsequent drill bearings will be adjusted accordingly.

Concurrent with the underground drilling, drifting should be done to explore lateral extension of the now-exposed ore. A minimum of 50 feet of drifting both north and south should be done and if justified a maximum of 300 feet of drifting should be allowed. Long-holing into the walls of the drift should be planned to check width of the presently known ore zone and possibly parallel mineralized zones.

If the above outlined exploration is successful, further exploration by man-sized openings at lower elevations may be justified. Two possibilities for this have been discussed. One includes deepening the shaft and drifting on the ore at a lower level; and the other is to crosscut 1000 feet from the Martin Mining Co. shaft to intersect the indicated ore below the 100-foot level. It has been shown that to retimber, sink the present shaft an additional 150 feet, and crosscut to the indicated ore would cost almost the same as the 1000-foot crosscut from the now existing better shaft. Furthermore, this west crosscut would explore at depth an area containing a north-trending latite porphyry-quartzite contact and other north-trending structures.

John W. Hosterman

Enclosures
cc: DMEA (Orig. & 3)
USBM (2)
USGS (SRO)
Hosterman
Docket

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

1201 N. Division St.
Spokane 2, Washington

October 14, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: H. T. Reno, Mining Engineer, Bureau of Mines

Subject: Application for exploration aid, Ludwig Beirwagen, Flathead County, Montana, Docket No. DMEA 2626 (lead-zinc-copper)

RECOMMENDATION

It is recommended that the DMEA enter into an exploration contract with the applicant in the amount of $72,900. The applicant is prepared to furnish half of the amount.

LOCATION AND OWNERSHIP

The property is in sec. 20, T. 25 N., R. 23 W., M.P.M., 7 miles by gravel road west of U. S. Highway No. 28, 2 miles north of Niarada, Montana. Niarada is 38 miles by oiled road north of the Northern Pacific Railroad at Penna, Montana. The property is accessible the year-round.

The property is the SE$\frac{1}{4}$, NE$\frac{1}{4}$, SW$\frac{1}{4}$ and the S$\frac{1}{2}$, SW$\frac{1}{4}$ of sec. 20, T. 25 N., R. 23 W., M.P.M., in the Hog Heaven mining district, Flathead County, Montana. It is owned by the Northern Pacific Railroad Company and leased to the applicant.

FINANCIAL AND ADMINISTRATIVE COMPETENCE OF APPLICANT

The applicant, Ludwig Beirwagen, a farmer of unquestioned honesty and integrity, has had no mining experience. Although the applicant has sufficient funds to finance the project he may take one or two fellow farmers in as partners. W. W. Lindom, apparently a competent mine manager, divides time between the property, the adjoining Martin Mining Company property, and the mill which will serve both operations. George Boulder, until recently geologist for the Northern Pacific Railroad, has indicated willingness to continue his interest in the property and accordingly will be available part-time for mapping and as a geological consultant.

PAST PRODUCTION

According to Bureau of Mines records, 4-1/2 tons containing .055 ounce gold, 8.2 ounces silver, and 6.87 percent copper was produced from the property by former operators. Brad Myers, U. S. Geological Survey, in a memorandum report on the property, records a shipment of 30 tons containing 2 percent lead and 10.6 percent zinc. The applicant has mined about 400 tons of milling ore during the last year. The grade, not verified, is reported as 11.0 percent combined lead and zinc.

DESCRIPTION OF DEPOSIT

The deposit is an irregular--shaped ore body characterized by fine grained sphalerite, galena, and pyrite in fracture openings along a brecciated zone in horizontal quartzite beds. In the richer portions the metallic minerals appear to replace the quartzite. The outline and continuity of the ore body is extremely obscure. It may not extend much beyond the limits exposed in the 100 level drift where it is about 40 feet long and averages 10 feet wide. Although the attitude cannot be determined a general impression of a vertical, or possibly a steep dip to the east is obtained from the overall appearance. Scattered metallic minerals in the fault zone on the adit level, sporadic pods of iron and copper minerals on the 40-level, and the concentration of ore minerals on the 100-level apparently indicate a trend of increasing mineralization downward. This trend also is noted in the 9 feet between the back and floor of the 100-level drift.

The recognized ore minerals are galena, sphalerite, enargite, and chalcopyrite. The gangue is quartzite, pyrite, and a white subtranslucent mineral tentatively identified as alunite.

George N. Bennet, Bureau of Mines, took a representative sample across 15 feet of the deposit in 1945 which was analyzed as follows:

Width	Gold-oz.	Silver-oz.	Lead-%	Copper-%	Zinc-%
15.0 ft.	0.05	1.0	2.4	0.1	8.1

Two grab samples representative of present mill feed were taken. The analyses have not been received.

The quartzite beds are strong. Excluding faulted areas a 20-foot wide opening can be mined safely without support.

ESTIMATE OF RECOVERABLE ORE RESERVES AND MINING GRADE

Considering the absence of recognized structure and the limited exposure, an estimate of ore reserves can include only the few tons in sight. If the mineralization persists a mining grade

of 10 percent combined lead and zinc can be predicted from the applicant's alleged mill feed grade, Bennet's sampling, and the smelter return on 30 tons of ore reported by Myers.

MINING COST

The mining cost (50 tons per day) is estimated at $6.00 a ton excluding development, depreciation, depletion, and taxes. Dilution will depend upon the supervision of mining. Under careful supervision it should be negligible.

MILLING COST

Milling cost, excluding amortization and taxes, at the present mill is estimated at $8.00 a ton. After installation of additional crushing and grinding equipment it is estimated at $4.00 a ton.

HAULAGE COST

Haulage of concentrates to the railroad at Penna, Montana, is estimated at $5.50 a ton.

EVALUATION OF APPLICANT'S PROPOSAL

The applicant proposes to deepen the shaft 175 feet, drive 1000 lin. feet of drifts and crosscuts, and drill 1000 lin. feet of diamond drill hole. The drifts, crosscuts, and drill holes are not planned to determine systematically the extent of the ore body. Furthermore, exploration from the nearby Martin mine shaft should be considered in preference to sinking. Items not properly part of an exploration project are included in the applicant's estimate.

SUGGESTED ALTERNATIVE TO APPLICANT'S PROPOSAL

A five-stage exploration campaign designed, insofar as physical features permit, to progressively expand the limits of the ore body, has been worked out with the applicant as follows: (refer to sketch)

1. Drill four diamond drill holes, a maximum of 600 lin. feet of AX size hole, at positions indicated on the sketch. However, the position of each hole should be contingent upon the results of the preceding hole and the results of crosscutting and drifting specified in Stage II.

2. Concurrent with Stage I, a maximum of 300 lin. feet on two headings of drift and/or crosscuts; 600 lin. feet of 20-foot lateral drill holes to probe the walls and control the direction of the drifts or crosscuts. The headings should not be continued more than 50 feet in barren ground.

3. Contingent upon the success of Stages I and II, three diamond drill holes from the surface, a maximum of 1500 lin. feet of AX size hole, at locations determined from the results of Stages I and II.

4. 1000 lin. feet of crosscut from the 300 level of the Martin mine to the ore body, the direction to be determined by the results of Stages I, II and III.

5. 700 lin. feet of drift and/or crosscut to be driven off the crosscut level.

DISCUSSION

Although this project is considered to be a good exploration risk, it is emphasized that Phase 1, 2 and 3 of the proposed program are designed only to extend the limits of a known ore body and therefore each phase of the exploration should be absolutely contingent upon the proved extension of these limits.

The crosscut from the Martin shaft is recommended rather than deepening the shaft on the property because the crosscut will explore a large block of ground in an area known to be mineralized. Furthermore, the operator's lack of equipment and the condition of the shaft are such that cost of the crosscut will not be much more than would be the cost of sinking.

The Martin Mining Company plans to be operating through their shaft within 60 days. Adequate equipment and facilities are on the property. Exploration through the Martin shaft will, of necessity, involve an interchange of equipment facilities and labor between the Martin Company and the applicant. Therefore, in order to avoid a complicated accounting procedure it is recommended that a contract, if approved, be on the short form and Government participation be on the basis of estimated unit costs.

The unit cost of the work can better be determined by comparison with the actual cost of similar work at the Highland Surprise mine under a cost incurred contract rather than by a detailed estimate. The cost of drifting without timber 969.5 feet in hard argillite on the 1300 level, Contract Idm-E63, Docket No. 390 (zinc-lead) has averaged $29.50 per lin. foot. Therefore, considering the remote location and the lack of power at the proposed project, $30.00 a lin. foot is considered a fair estimate for crosscutting and drifting.

A proposed contract is attached. The estimated cost of diamond drilling is based on a quotation from the R. S. McClintock Company, Spokane, Washington.

H. T. Reno

H. T. Reno

CC: 3-Wash. /DMEA /M/D
2-USGS /HTR D/F

JUL 1951

DMA Examining Team report on Battle Butte Mine,

Flathead County, Montana

By Bradley Myers and Henry C. Rainey, U. S. Geological Survey
Constantine C. Popoff, U. S. Bureau of Mines

RECOMMENDATIONS

It is recommended that the Battle Butte Company be refused any DMA assistance for production or exploration of strategic minerals.

APPLICANT

The mine is held by the Battle Butte Company of Hot Springs, Montana. The present officers of the company are Mr. P. L. Pitts, president, William Tibbles, John Camp, W. Ran and E. Maddux. Respectively they are a lumberman, a prospector, a beekeeper and owners of ranches near Hot Springs.

LOCATION OF DEPOSIT

The property is located in the Hog Heaven (Flathead) mining district, in the SE$\frac{1}{2}$ of the SW$\frac{1}{4}$, sec. 20, T. 25 N., R. 23 W., Flathead County, Montana. It is 35 miles from Polson, the last six and one-half miles by dirt road.

OWNERSHIP

The property is owned by the Northern Pacific Railway. It is held by the Battle Butte Mining Company under a prospecting permit with an option for lease for production on royalty basis.

HISTORY AND PRODUCTION

Discovery of the silver ore shoot on the Flathead property in 1928 stimulated prospecting of the adjoining areas in the Hog Heaven mining district; as a result the Battle Butte deposit was discovered by O. F. Martin in the thirties. In 1939 the Battle Butte Company was organized, and two carloads of silver ore worth more than $60.00 a ton were reportedly shipped from shallow workings.

During World War II a 100-foot winze was sunk from the principal working and short levels were driven at depths of 40 feet and 100 feet. A four and one-half ton truckload from the 44-foot level assayed: Cu - 6.89 percent, Ag - 8 oz. per ton, Au- 0.06 oz.

per ton. A 30-ton carload of ore shipped from the 100-foot level in 1948 to the American Smelting and Refining Company at East Helena, Montana assayed:

Pb - 2.0 percent		Au - 0.028 ~~percent~~	oz./ton
Zn - 10.6 percent		Ag - 1.2 ~~percent~~	oz./ton
Cu - 0.35 percent		Mn - 0.1 percent	
As - 0.1 percent		Fe - 13.3 percent	
Sb - 0.1 percent		CaO - 0.5 percent	
Bi - 0.035 percent		Ins. - 57.2 percent	

The Battle Butte Company from the time of its organization suffered from a lack of mining experience and intelligent management. In 1941 the company reduced the value of outstanding stock from $100,000 to $30,000 and sought new investors; more than half of the funds raised were applied on indebtedness. Public stock offerings for exploration were opposed by the Great Northern Railway, the owners of the property. Due to lack of finances, the exploration work was suspended several times, and eventually stopped in the winter of 1946.

DESCRIPTION OF PROPOSAL

No formal application for DMA assistance has yet been received. The property was examined because it was learned that six applications would be submitted and the property is near another mine for which an examination was scheduled. The company in the person of Mr. Pitts, the newly elected president, proposes to unwater the winze below tunnel no. 3; to mine the high grade ore believed to lie between the 44 and 100 foot levels; and to continue the development of the known ore shoot. Mining equipment would be rented and the ore trucked to the nearby flotation plant of the Martin Mining Company.

GEOLOGIC SETTING OF THE DEPOSIT; MINE WORKINGS

The Battle Butte mine is in gently-dipping Belt quartzite and interbedded argillite which has been locally intruded by latite porphyry.

In the southwest part of the property an intrusive latite porphyry breccia sill, locally about 60 feet thick, terminates easterly against a pre-existing irregular fault or fracture zone in the sediments. This zone trends about N. 35° E. and is very steep, probably dipping about 85° to the northwest. Post-intrusive movement, thought to be slight, has shattered the contact zone. Argillic and alunitic alteration of the intrusive is widespread and a zone several feet wide along the contact has been silicified and scantily mineralized.

Workings (Tunnel nos. 1 and 2; a winze and short sub-level) explore this zone along a strike length of 200 feet and down the dip for 87 feet. Both the roof and the floor of the irregular sill are locally exposed in the workings. The two car-loads of silver ore previously mentioned (page 2) came from stoping above the main level along a strike length of 70 feet. Ten samples taken by the Great Northern Railway along the level below the stope averaged only 2.4 oz. Ag. and a trace of gold to the ton for a width of 3.9 feet. The DMA field team failed to recognize any lead, zinc, or copper minerals in these workings.

In the eastern part of the property a second northeast-trending fault zone entirely in gently-dipping Belt quartzite and interbedded argillite is prospected by a 150-foot adit (Tunnel no. 2). This fault dips southeastward about 80° and is arcuate in plan, trending N. 35° E. near the portal but swinging to N. 15° E. near the face. Locally small amounts of latite porphyry have been intruded into the fault zone. A brecciated zone along the fault as much as two and one-half feet wide is silicified and contains disseminated pyrite for a distance of 100 feet in from the portal. Beyond this point the fault zone is not silicified. Locally a veinlet of argentite was seen, but no other ore minerals were recognized in the adit. Fifty feet from the portal a winze has been sunk on the mineralized fault zone for a depth of 100 feet. This winze is now filled with water to within 15 feet of the adit level.

Two short levels have been driven from the winze, one at 44 feet and the other at 100 feet below the adit. The 44-foot level extends 67 feet in a southeasterly direction from the winze, entirely in the hanging wall of the fault zone followed by the winze. The 100-foot level apparently follows the fault zone for 30 feet, then crosscuts the hanging wall for 63 feet.

Four and one-half tons of ore assaying 6.9 percent copper and 8 ozs. silver to the ton reportedly was taken from the 44-foot level. According to maps of the Great Northern Railway, the 44-foot level drifted along a N. 25° W.-trending mineralized zone in quartzite. Apparently, however, the ore mineralization is not continuous along the zone as a four foot sample taken by Great Northern assayed no copper, 0.5 oz. silver, and 0.02 oz. gold to the ton.

A 30-ton car of zinc ore was shipped from the 100-foot level (see page 2). According to Great Northern maps, the 100-foot level crosscut a 30-foot mineralized zone trending N. 35° E. which was contacted 30 feet in the hanging wall of the fault zone through the winze. Their sample across 23 feet carried no copper, no silver, and only a trace of gold. Bennett, of the Bureau of Mines, took a sample representing the best 15 feet of this mineralization which assayed 10.5 percent combined lead and zinc (see page 6). This agrees well with the car shipment.

The 60° variation in strike of the mineralized zones on the two lower levels suggests that they may be independent structures.

The available data indicate that the mineralization on the lower levels was much stronger than that observed in the adit.

Previous U. S. Bureau of Mines Examinations

During World War II the property was twice examined by engineers of the Bureau of Mines. Thomas W. Oster visited the mine on May 30, 1943, but then, as now, the winze below tunnel no. 3 was flooded.

The property was re-examined by G. N. Bennett on May 17, 1945. According to his Summary Report no. 13, a crosscut from the winze on the 100-foot level intersected a zone of mineralization 32 feet in width, containing pyrite, chalcopyrite, galena, sphalerite, and enargite. He believed that the last 15 feet of this zone was ore of milling grade. A representative sample taken from this part of the zone assayed Pb - 2.4 percent; Zn - 8.1 percent; Cu - 0.1 percent; Ag - 1.0 oz. per ton; and Au - 0.05 oz. per ton.

Bennett believed that enough ore might be developed to warrant the installation of a small selective flotation mill.

ORE RESERVES

No estimate of reserves could be made. The workings that could be examined by the DMA field team didn't disclose any lead, zinc or copper mineralization. According to Bennett, the lower levels of tunnel no. 3 were insufficiently developed for calculating any mining reserves.

FACILITIES AND EQUIPMENT

The buildings consist of two cabins and several old auxiliary sheds. A 50-ton ore bin is at the no. 3 adit.

All necessary equipment for mining will have to be rented or purchased.

DISCUSSION

As the lower workings of the Battle Butte mine could not be examined by the DMA field team, a complete appraisal of the deposit cannot be made. Available data regarding the size and grade of the mineralized zone on the 44-foot and the 100-foot levels of tunnel no. 3 are incomplete.

It is apparent, however, that even after unwatering, the property as present developed cannot produce ore in commercial quantity. It would not be entirely safe to discount the possibility of developing considerable reserves of ore at depth. The spectacular success of the A.C.M.'s Flathead mine, now down more than 1,100 feet below outcrop, came only after it had lain idle as an unpromising property for 15 years after discovery and initial development. Exploration of the ground below tunnel no. 3 might well be justified but the examining team doubts that the present management could initiate or supervise a successful exploration project even if it were capable or interested in matching Government funds for such exploration.

2626

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
120 Washington St.
Spokane 2, Washington
November 7, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 1 4 1952

Mr. Ludwig Beirwagen
Niarada, Montana

Subject: Docket No. DMEA 2626 (Lead-Zinc-Copper)
Flathead County, Montana

Dear Mr. Beirwagen:

We have been holding the field report on the Margarita mine pending receipt of the agreement with the Martin Mining Co. and the owner's consent to lien, discussed with your representative, Mr. George Boulder. On October 22, 1952 Mr. Boulder informed us that he was not empowered to act for you and that you intended to visit Spokane near the end of the week. He believed details of the proposed project could be worked out at that time.

Please let us know your plans regarding this project and do not hesitate to call on this office for any information you may require. We wish to complete processing of the application as soon as possible.

Sincerely yours,

M. E. Volin, Member
DMEA Field Team, Region II

HTR/MEV/vf

cc: Wash. - 2
USGS - 2
DMEA
M/D
D/F
HTR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
1201 N. Division St.
Spokane 2, Wash.

August 12, 1952

Mr. Ludwig Beirwagen
Niarada, Montana

Subject: Application for exploration assistance, Docket No. DMEA 2626 (zinc-lead-copper)

Dear Mr. Beirwagen:

In answer to question 7 of form MF--100 in the subject application, reference was made to geological reports and maps. One print each of eight maps were enclosed but apparently the reports were inadvertantly omitted.

In order that processing of the application may be expedited the Washington office has requested that three additional sets of the maps and three copies of each of the reports be furnished. Please forward the items to this office for transmittal to Washington.

Mr. H. T. Reno, Mining Engineer, attached to this office will contact you during the coming week to schedule an examination of the property concerned.

Sincerely yours,

Glenn C. Reed
Mining Engineer

CC: 2-Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
1201 N. Division St.
Spokane 2, Wash.

August 12, 1952

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Glenn C. Reed
Mining Engineer

CC: 2-Wash

FILE COPY
SURNAME:

500

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

AUG 7 1952

Mr. A. E. Weissenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2626 (Zinc-Lead-Copper)
Ludwig Beirwagen

Dear Mr. Weissenborn:

A review of the above-referenced docket, of which you have retained a copy, indicates that some of the material referred to by the Applicant was not received.

On page 7, in answer to question seven of Form MF-100, the Applicant states:

"Attached to the original form eight (8) geological reports and maps depicting all the necessary data mentioned as required in this form and reference to which is hereby specially made."

In answer to question one on Form MF-103, Applicant states:

"The lease agreement with the Northern Pacific Railroad is attached to original hereof and hereof made a part."

We did not receive the aforementioned geological reports and maps or a copy of the lease agreement. If you retained them in your office, kindly furnish us with the necessary copies; otherwise request the Applicant to furnish them.

On the receipt of the requested data we shall be pleased to continue processing the subject application.

S.N. 8-7-52

Sincerely yours,

(signed) FRANK E. JOHNSON
Chairman, Operating Committee

Copy to:
Docket
Admr. R. File
Op. Committee
H. F. Keller (2)
J. W. Alt
Mr. Bishop
Mr. McKnight
Chron.

APPROVED:

J. H. Hedges
Member, Bureau of Mines

D. M. Lemmon
Member, Geological Survey

JWAlt/bjl (written 8/5/52)

IN REPLY REFER TO:

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

August 1, 1952

Memorandum

Re: DMEA-2626
Beirwagen Property
Hog Heaven District
Flathead County, Mont.

To: Mr. H. F. Keller

From: E. L. Newcomb

Subject: Request for additional data

The applicant requests assistance to sink a 175 foot shaft, drive 1,000 feet of crosscuts and drifts, and to diamond drill 1,000 feet on his property. He states that lead, zinc, copper and traces of gold and silver are produced from the mine. However, the application lacks maps or sections of the geology, present workings, or the objectives of the proposed project.

We note under question 7, MF-100, the applicant states that geological reports and maps have been attached to the application. In answer to questions 10,11, and 12, he further states that geologists' reports are being prepared on the total ore reserves. However, none of these are with the docket material.

The applicant should be requested to submit maps or sections of the geology, present workings, the proposed exploration work, and any available private reports on the property.

We are returning the application to your office, but will further review the proposal after you receive the maps and reports.

E. L. Newcomb
E. L. Newcomb
Geologist

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

August 1, 1952

Memorandum

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E. L. Newcomb
Geologist

July 25, 1952

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned Docket Number to an application recently submitted from Region II.

DMEA-2626 - Ludwig Beirwagen

ROBERT E. ADAMS
Chief, Operation's Control
and Statistics Division

EXPLORATION

Subject: DMEA-2626
Re: Exploration Loan
July 25, 1952

Mr. Ludwig Beirwagen
Box 13
Niarada, Montana

My dear Mr. Beirwagen:

This will acknowledge receipt of your application dated July 9, 1952, for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2626 and referred to the Base Metals Division.

Kindly refer to DMEA-2626 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Operation's Control
and Statistics Division

7862

DMEA-2626

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

July 18, 1952

Memorandum

To: F. E. Johnson, Chairman, Operating Committee, DMEA

From: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

Subject: Exploration application for Ludwig Beirwagen, Niarada, Montana

Enclosed is an application for exploration contract from Mr. Ludwig Beirwagen, Niarada, Montana. A fourth copy of Form MF-100 and Form MF-103 is being retained for our files.

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

July 18, 1952

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Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

July 18, 1952

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A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2626
Metal or Mineral
Date Received 7-25-52
Amount $
Participation (Government %)

Ludwig Beiwagen
Box 13
Niarada, Montana

Name and address of applicant

Date July 9, 1952

If you have already filed MF-100, give date filed ....., type of assistance requested exploration projec

DMA Docket Number (if available) .....

INSTRUCTIONS

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

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

Margarita Mining Company
(Name of company)

By Ludwig Reinwagen
(Signature of authorized official)

July 9, 1952
(Date)

Sole Lessee
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ONE.

(a) The Southeast Quarter of the Northeast Quarter of the Southwest Quarter (SE¼NE¼SW¼) and the South One half of the Southwest Quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25) North Range Twenty-three (23) West of M.P.M. in Flathead County, Montana.

(b) The lease agreement with the Northern Pacific Railroad is attached to original hereof and hereof made a part.

QUESTION TWO.

(a) Lead, zinc, copper, with traces of gold and silver.
(b) Data and information attached to original of Form M F-100

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION THREE.

(a) It is contemplated that a shaft of one hundred seventy-five (175) feet will be sunk at a cost of one hundred sixteen ($116.00) dollars per foot, also there will be approximately one thousand (1000) feet of cross cut and drifts at a cost of Thirty (30.00) Dollars per foot. It is estimated that it will take approximately eighteen (18) months to complete this work. It is also indicated that diamond drilling will be necessary and essential in the approximate amount of one thousand (1000) feet at a cost of Nine ($9.00) Dollars per foot.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FOUR.

There is attached to and made a part of the original document in Form MF-100 all of the data and information required in this paragraph.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FIVE.

There is located on these premises a compressor house, a cook house, a bunk house and a tool shed.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SIX.

In the event this loan is granted additional bunk houses, toilet facilities and cook house facilities will be required for the employees necessary to operate this mine together with additional buildings for equipment, tools, stores and supplies of a cost of between Twelve Thousand ($12,000.00) Dollars and Fifteen Thousand ($15,000.00) Dollars.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SEVEN.

(a) There is rented the following equipment; one Gardiner-Denver air hoist; one sump pump-size 35-Ingersoll-Rand; One Ingersoll-Rand R58 Stopper and one Eimco mucker, size 11. The replacement value of the rented equipment in this paragraph is approximately Three Thousand ($3000.00) Dollars.

(b)(c) There is owned by the applicant at the time of making this application a Three hundred fifteen (315) cubic foot Leroi compressor and motor of gas driven operation; a twelve (12) inch outlet ventilating fan operated by a nine (9) horse power Bricks-Stratton gas motor; one new Atlas pneumatic air drill. The replacement value of this equipment is Six thousand five hundred ($6,500.00) Dollars.

COPY

Ludwig Beirwagen
Box 13
Hiarada, Montana

July 9, 1952

QUESTION EIGHT.

There will be required to operate two shifts, eighteen miners at a minimum of not less that fourteen($14.00) dollars per day, and two supervisors or foremen at a minimum of not less than Five Hundred ($500.00) Dollars per month. There will be required two carpenters at an hourly wage of $2.20 per hour.

COPY

Ludwig Beirwagen
Box 13
Nyarada, Montana

July 9, 1952

QUESTION NINE.

It is estimated that the cost of materials, supplies, engineering, assaying, accounting, power, water, utilities and other items not contemplated in the above cost figures will approximate the sum of One thousand five hundred ($1500.00) Dollars per month.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION TEN.

(a) The applicant has already invested the sum of Twenty thousand ($20,000.00) Dollars in this mining project on the property described herein and not otherwise and is willing to match money on the basis of an approved loan under the provisions of DMEA Order 1, Section 7, subparagraph (a) of said Order. Applicant will deposit in the Great Falls National Bank in Great Falls, Montana, his depository, a sum equal to any sum or sums allowed him by the Administrator of the DMEA.

(b) The amounts already paid by the applicant together with the amounts that he will deposit will adequately pay his part of the costs of the project in accordance with all government regulations.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ELEVEN.

There are no circumstances regarding this property not sufficiently and adequately covered in the foregoing questions.

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. DMEA-2626

Date received 7-25-52

Ludwig Beirwagen
Box 13
Miaraia, Montana

Name and address of applicant

Date July 9, 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

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

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

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

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		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.

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ONE.

The materials produced in this mine and mill are lead, zinc, copper with traces of gold and silver.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION TWO.

(a) The linear feet of the shaft is 142 feet.
(b) The linear feet of the drifts and cross cuts are 300 feet.
(c) The linear feet of the tunnels and adits are approximately 80 feet.
(d) The linear feet of other mine elements is none.

This mine is not flooded and is working. There are pumps and compressors installed, available and in working condition to meet any and all water conditions that might arise.

There is located approximately three quarters of a mile from this mine a selective flotation mill of a capacity of fifty (50) tons per day, which mill is ready for operation and is under the control of the applicant in that applicant holds notes and mortgages in the approximate amount of $25,000.00 against the mill.

It is estimated that this mine would produce approximately sixty (60) tons of ore each twenty-four hour period by working three shifts at eight hours each and there is presently approximately four hundred (400) tons of ore stock piled on top of the ground at this time.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION THREE.

(a) This mine is located approximately eight (8) miles Northeast of the town of Niarada in Flathead County which is known as the Hog Heaven Mining District and the mine is located on the property described as the,

> Southeast Quarter of the Northeast Quarter of the Southwest Quarter (SE¼NE¼SW¼) and the South One half of the Southwest Quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25), North Range Twenty-three (23) West of M.P.M. in Flathead County, Montana.

After the production of concentrates they must be transported over excellent all weather roads from the mine to the railhead at Perma, Montana, an approximate distance of forty-two (42) miles. The carrier at Perma is the Northern Pacific Railroad which is also the lessor of the property described herein.

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FOUR.

This mine is in operation and is operated by the applicant as lessee from the Northern Pacific Railroad.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FIVE.

This mine has been operated by the applicant since April 16, 1952, and production is and will be continuous.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SIX.

The applicant has had general business experience for the forty (40) years last past, being engaged in the operation and ownership of retail merchandising and has been engaged and interested in mines and mining exploration for about the twelve (12) years last past and will operate, oversee and superintend all the administration features in connection with this mine. The applicant is the sole owner of the lease on the premises described herein.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SEVEN:

Attached to the original form are eight (8) geological reports and maps depicting all the necessary data mentioned as required in this form and reference to which is hereby specifically made. The answers to the questions EIGHT and NINE are contained in the factual statements made on Page 6 of this application.

(8 geological reports + maps not received in Mails + Files)

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTIONS TEN, ELEVEN and ELEVEN.

The production of this mine is represented by the aproximately four hundred (400) tons on the ground and a comprehensive assay report will be furnished as soon as it is received by Mr. Raymond F. Robinson, Geologist for the Sunshine Mining Company of Kellogg, Idaho, and by Mr. George Boulder, Geologist for the Northern Pacific Railroad at Billings, Montana. The statements from the two geologists will also contain a statement of the total ore or mineral reserves measured and proven, together with the ore that is indicated and probable. If adequate financing is available the production of this mine will reflect approximately fifty (50) tons each, twanty (20) days a month or a total of One thousand (1000) tons per month.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTIONS THIRTEEN, FOURTEEN, FIFTEEN AND SIXTEEN.

The road distances to shipping, supplies and residence points together with the kind and condition of the roads to this mine are contained in the foregoing answers. There is an adequate water supply at all seasons of the year from a creek which is dammed just above the mine and mill and which is spring fed. The power is furnished by the use of Diesel and gasoline motors which produce direct power and there is and will be a surplus of labor because of the seasonal employment existing in the area contiguous to the mine and mill. The Question SEVENTEEN is comprehensively answered in the foregoing questions and there are no conditions or circumstances affecting either this mine or mill that are not mentioned in the context of this application.

COPY

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

Margarita Mining Company
(Name of company)

By Ludwig Beisiwagen
(Signature of authorized official)

July 9, 1952
(Date)

Sole Lessee
(Title)

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
No. 157 Howard Street
Spokane 4, Washington

July 18, 1952

Memorandum

To: F. E. Johnson, Chairman, Operating Committee, DMEA

From: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

Subject: Exploration application for Ludwig Beirwagen, Niarada, Montana

Enclosed is an application for exploration contract from Mr. Ludwig Beirwagen, Niarada, Montana. A fourth copy of Form MF-100 and Form MF-103 is being retained for our files.

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

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. DMEA-2626

Date received 7-26-52

Ludwig Beirwagen
Box 13
Niarada, Montana

Name and address of applicant

Date July 9, 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

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

   If not in production or operation, estimated date when production will begin _____
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.
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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.

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ONE.

The materials produced in this mine and mill are lead, zinc, copper with traces of gold and silver.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION TWO.

(a) The linear feet of the shaft is 142 feet.
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There is located approximately three quarters of a mile from this mine a selective flotation mill of a capacity of fifty (50) tons per day, which mill is ready for operation and is under the control of the applicant in that applicant holds notes and mortgages in the approximate amount of $25,000.00 against the mill.

It is estimated that this mine would produce approximately sixty (60) tons of ore each twenty-four hour period by working three shifts at eight hours each and there is presently approximately four hundred (400) tons of ore stock piled on top of the ground at this time.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION THREE.

(a) This mine is located approximately eight (8) miles Northeast of the town of Niarada in Flathead County which is known as the Hog Heaven Mining District and the mine is located on the property described as the,

> Southeast Quarter of the Northeast Quarter of the Southwest Quarter (SE¼NE¼SW¼) and the South One half of the Southwest Quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25), North Range Twenty-three (23) West of M.P.M. in Flathead County, Montana.

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COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FOUR.

This mine is in operation and is operated by the applicant as lessee from the Northern Pacific Railroad.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FIVE.

This mine has been operated by the applicant since April 16, 1952, and production is and will be continuous.

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SIX.

The applicant has had general business experience for the forty (40) years last past, being engaged in the operation and ownership of retail merchandising and has been engaged and interested in mines and mining exploration for about the twelve (12) years last past and will operate, oversee and superintend all the administration features in connection with this mine. The applicant is the sole owner of the lease on the premises described herein.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SEVEN:

Attached to the original form are eight (8) geological reports and maps depicting all the necessary data mentioned as required in this form and reference to which is hereby specifically made. The answers to the questions EIGHT and NINE are contained in the factual statements made on Page 6 of this application.

(8 geological reports and maps not received in Mails + Files)

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTIONS TEN, ELEVEN and ELEVEN.

The production of this mine is represented by the aproximately four hundred (400) tons on the ground and a comprehensive assay report will be furnished as soon as it is received by Mr. Raymond F. Robinson, Geologist for the Sunshine Mining Company of Kellogg, Idaho, and by Mr. George Boulder, Geologist for the Northern Pacific Railroad at Billings, Montana. The statements from the two geologists will also contain a statement of the total ore or mineral reserves measured and proven, together with the ore that is indicated and probable. If adequate financing is available the production of this mine will reflect approximately fifty (50) tons each, twenty (20) days a month or a total of One thousand (1000) tons per month.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTIONS THIRTEEN, FOURTEEN, FIFTEEN AND SIXTEEN.

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COPY

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

Margarita Mining Company
(Name of company)

By Ludwig Reinwagen
(Signature of authorized official)

July 9, 1952
(Date)

Sole Lessee
(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-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2626
Metal or Mineral
Date Received 7-25-52
Amount $
Participation (Government %)

Name and address of applicant

Ludwig Beihagen
Box 13
Niarada, Montana

Date July 9, 1952

If you have already filed MF-100, give date filed ....., type of assistance requested exploration projec

DMA Docket Number (if available) .....

INSTRUCTIONS

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

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

Margarita Mining Company
(Name of company)

By Ludwig Reinwagen
(Signature of authorized official)

July 9, 1952
(Date)

Sole lessee
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ONE.

(a) The Southeast Quarter of the Northeast Quarter of the Southwest Quarter (SE¼NE¼SW¼) and the South One half of the Southwest Quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25) North Range Twenty-three (23) West of M.P.M. in Flathead County, Montana.

(b) The lease agreement with the Northern Pacific Railroad is attached to original hereof and hereof made a part.

QUESTION TWO.

(a) Lead, zinc, copper, with traces of gold and silver.
(b) Data and information attached to original of Form M F-100

Ludwig Beirwagen
Box 13
Kiarada, Montana

July 9, 1952

QUESTION THREE.

(a) It is contemplated that a shaft of one hundred seventy-five (175) feet will be sunk at a cost of one hundred sixteen ($116.00) dollars per foot, also there will be approximately one thousand (1000) feet of cross cut and drifts at a cost of Thirty (30.00) Dollars per foot. It is estimated that it will take approximately eighteen (18) months to complete this work. It is also indicated that diamond drilling will be necessary and essential in the approximate amount of one thousand (1000) feet at a cost of Nine ($9.00) Dollars per foot.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FOUR.

There is attached to and made a part of the original document in Form MF-100 all of the data and information required in this paragraph.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FIVE.

There is located on these premises a compressor house, a cook house, a bunk house and a tool shed.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SIX.

In the event this loan is granted additional bunk houses, toilet facilities and cook house facilities will be required for the employees necessary to operate this mine together with additional buildings for equipment, tools, stores and supplies of a cost of between Twelve Thousand ($12,000.00) Dollars and Fifteen Thousand ($15,000.00) Dollars.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SEVEN.

(a) There is rented the following equipment; one Gardiner-Denver air hoist; one sump pump-size 35-Ingersoll-Rand; One Ingersoll-Rand R58 Stopper and one Limco mucker, size 11. The replacement value of the rented equipment in this paragraph is approximately Three Thousand ($3000.00) Dollars.

(b)(c) There is owned by the applicant at the time of making this application a Three hundred fifteen (315) cubic foot Leroi compressor and motor of gas driven operation; a twelve (12) inch outlet ventilating fan operated by a nine (9) horse power Bricks-Stratton gas motor; one new Atlas pneumatic air drill. The replacement value of this equipment is Six thousand five hundred ($6,500.00) Dollars.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION EIGHT.

There will be required to operate two shifts, eighteen miners at a minimum of not less that fourteen($14.00) dollars per day, and two supervisors or foremen at a minimum of not less than Five Hundred ($500.00) Dollars per month. There will be required two carpenters at an hourly wage of $2.20 per hour.

COPY

Ludwig Beirwagen
Box 13
Nyarada, Montana

July 9, 1952

QUESTION NINE.

It is estimated that the cost of materials, supplies, engineering, assaying, accounting, power, water, utilities and other items not contemplated in the above cost. figures will approximate the sum of One thousand five hundred ($1500.00) Dollars per month.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION TEN.

(a) The applicant has already invested the sum of Twenty thousand ($20,000.00) Dollars in this mining project on the property described herein and not otherwise and is willing to match money on the basis of an approved loan under the provisions of DMA Order 1, Section 7, subparagraph (a) of said Order. Applicant will deposit in the Great Falls National Bank in Great Falls, Montana, his depository, a sum equal to any sum or sums allowed him by the Administrator of the DMA.

(b) The amounts already paid by the applicant together with the amounts that he will deposit will adequately pay his part of the costs of the project in accordance with all government regulations.

COPY

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ELEVEN.

There are no circumstances regarding this property not sufficiently and adequately covered in the foregoing questions.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2626
Metal or Mineral
Date Received 7-25-52
Amount $
Participation (Government %)

Name and address of applicant

Ludwig Deifagon
Box 13
Miarada, Montana

Date July 9, 1952

If you have already filed MF-100, give date filed ....., type of assistance requested exploration project

DMA Docket Number (if available) .....

INSTRUCTIONS

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1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

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

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

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

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

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

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   (*c*) Furnished by you

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

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

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

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

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

CERTIFICATION

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

Margarita Mining Company
(Name of company)

By Ludwig Reinnagen
(Signature of authorized official)

July 9, 1952
(Date)

Sole lessee
(Title)

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U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ONE.

(a) The Southeast Quarter of the Northeast Quarter of the Southwest Quarter (SE¼NE¼SW¼) and the South One half of the Southwest Quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25) North Range Twenty-three (23) West of M.P.M. in Flathead County, Montana.

(b) The lease agreement with the Northern Pacific Railroad is attached to original hereof and hereof made a part.

QUESTION TWO.

(a) Lead, zinc, copper, with traces of gold and silver.
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COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

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COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FOUR.

There is attached to and made a part of the original document in Form MF-100 all of the data and information required in this paragraph.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

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There is located on these premises a compressor house, a cook house, a bunk house and a tool shed.

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Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

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In the event this loan is granted additional bunk houses, toilet facilities and cook house facilities will be required for the employees necessary to operate this mine together with additional buildings for equipment, tools, stores and supplies of a cost of between Twelve Thousand ($12,000.00) Dollars and Fifteen Thousand ($15,000.00) Dollars.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

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(b)(c) There is owned by the applicant at the time of making this application a Three hundred fifteen (315) cubic foot Leroi compressor and motor of gas driven operation; a twelve (12) inch outlet ventilating fan operated by a nine (9) horse power Bricks-Stratton gas motor; one new Atlas pneumatic air drill. The replacement value of this equipment is Six thousand five hundred ($6,500.00) Dollars.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

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COPY

Ludwig Beirwagen
Box 13
Naarada, Montana

July 9, 1952

QUESTION NINE.

It is estimated that the cost of materials, supplies, engineering, assaying, accounting, power, water, utilities and other items not contemplated in the above cost. figures will approximate the sum of One thousand five hundred ($1500.00) Dollars per month.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION TEN.

(a) The applicant has already invested the sum of Twenty thousand ($20,000.00) Dollars in this mining project on the property described herein and not otherwise and is willing to match money on the basis of an approved loan under the provisions of DMA Order 1, Section 7, subparagraph (a) of said Order. Applicant will deposit in the Great Falls National Bank in Great Falls, Montana, his depository, a sum equal to any sum or sums allowed him by the Administrator of the DMA.

(b) The amounts already paid by the applicant together with the amounts that he will deposit will adequately pay his part of the costs of the project in accordance with all government regulations.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION NINE.

There are no circumstances regarding this property not sufficiently and adequately covered in the foregoing questions.

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. DMEA-2626

Date received 7-25-52

Ludwig Beirwagen
Box 13
Niarada, Montana

Name and address of applicant

Date July 9, 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

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

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

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

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		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.

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION ONE.

The materials produced in this mine and mill are lead, zinc, copper with traces of gold and silver.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION TWO.

(a) The linear feet of the shaft is 142 feet.
(b) The linear feet of the drifts and cross cuts are 300 feet.
(c) The linear feet of the tunnels and adits are approximately 80 feet.
(d) The linear feet of other mine elements is none.

This mine is not flooded and is working. There are pumps and compressors installed, available and in working condition to meet any and all water conditions that might arise.

There is located approximately three quarters of a mile from this mine a selective flotation mill of a capacity of fifty (50) tons per day, which mill is ready for operation and is under the control of the applicant in that applicant holds notes and mortgages in the approximate amount of $25,000.00 against the mill.

It is estimated that this mine would produce approximately sixty (60) tons of ore each twenty-four hour period by working three shifts at eight hours each and there is presently approximately four hundred (400) tons of ore stock piled on top of the ground at this time.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION THREE.

(a) This mine is located approximately eight (8) miles Northeast of the town of Niarada in Flathead County which is known as the Hog Heaven Mining District and the mine is located on the property described as the,

> Southeast Quarter of the Northeast Quarter of the Southwest Quarter (SE¼NE¼SW¼) and the South One half of the Southwest Quarter (S½SW¼) of Section Twenty (20), Township Twenty-five (25), North Range Twenty-three (23) West of M.P.M. in Flathead County, Montana.

After the production of concentrates they must be transported over excellent all weather roads from the mine to the railhead at Perma, Montana, an approximate distance of forty-two (42) miles. The carrier at Perma is the Northern Pacific Railroad which is also the lessor of the property described herein.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FOUR.

This mine is in operation and is operated by the applicant as lessee from the Northern Pacific Railroad.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION FIVE.

This mine has been operated by the applicant since April 16, 1952, and production is and will be continuous.

Ludwig Beirwagen
Box 13
Naarada, Montana

July 9, 1952

QUESTION SIX.

The applicant has had general business experience for the forty (40) years last past, being engaged in the operation and ownership of retail merchandising and has been engaged and interested in mines and mining exploration for about the twelve (12) years last past and will operate, oversee and superintend all the administration features in connection with this mine. The applicant is the sole owner of the lease on the premises described herein.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTION SEVEN:

Attached to the original form are eight (8) geological reports and maps depicting all the necessary data mentioned as required in this form and reference to which is hereby specifically made. The answers to the questions EIGHT and NINE are contained in the factual statements made on Page 6 of this application.

(6 GEOLOGICAL REPORTS AND MAPS NOT RECEIVED IN MAILS + FILES)

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTIONS TEN, ELEVEN and ELEVEN.

The production of this mine is represented by the aproximately four hundred (400) tons on the ground and a comprehensive assay report will be furnished as soon as it is received by Mr. Raymond F. Robinson, Geologist for the Sunshine Mining Company of Kellogg, Idaho, and by Mr. George Boulder, Geologist for the Northern Pacific Railroad at Billings, Montana. The statements from the two geologists will also contain a statement of the total ore or mineral reserves measured and proven, together with the ore that is indicated and probable. If adequate financing is available the production of this mine will reflect approximately fifty (50) tons each, twenty (20) days a month or a total of One thousand (1000) tons per month.

COPY

Ludwig Beirwagen
Box 13
Niarada, Montana

July 9, 1952

QUESTIONS THIRTEEN, FOURTEEN, FIFTEEN AND SIXTEEN.

The road distances to shipping, supplies and residence points together with the kind and condition of the roads to this mine are contained in the foregoing answers. There is an adequate water supply at all seasons of the year from a creek which is dammed just above the mine and mill and which is spring fed. The power is furnished by the use of Diesel and gasoline motors which produce direct power and there is and will be a surplus of labor because of the seasonal employment existing in the area contiguous to the mine and mill. The Question SEVENTEEN is comprehensively answered in the foregoing questions and there are no conditions or circumstances affecting either this mine or mill that are not mentioned in the context of this application.

COPY

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

Margarita Mining Company
(Name of company)

By Ludwig Reinvagen
(Signature of authorized official)

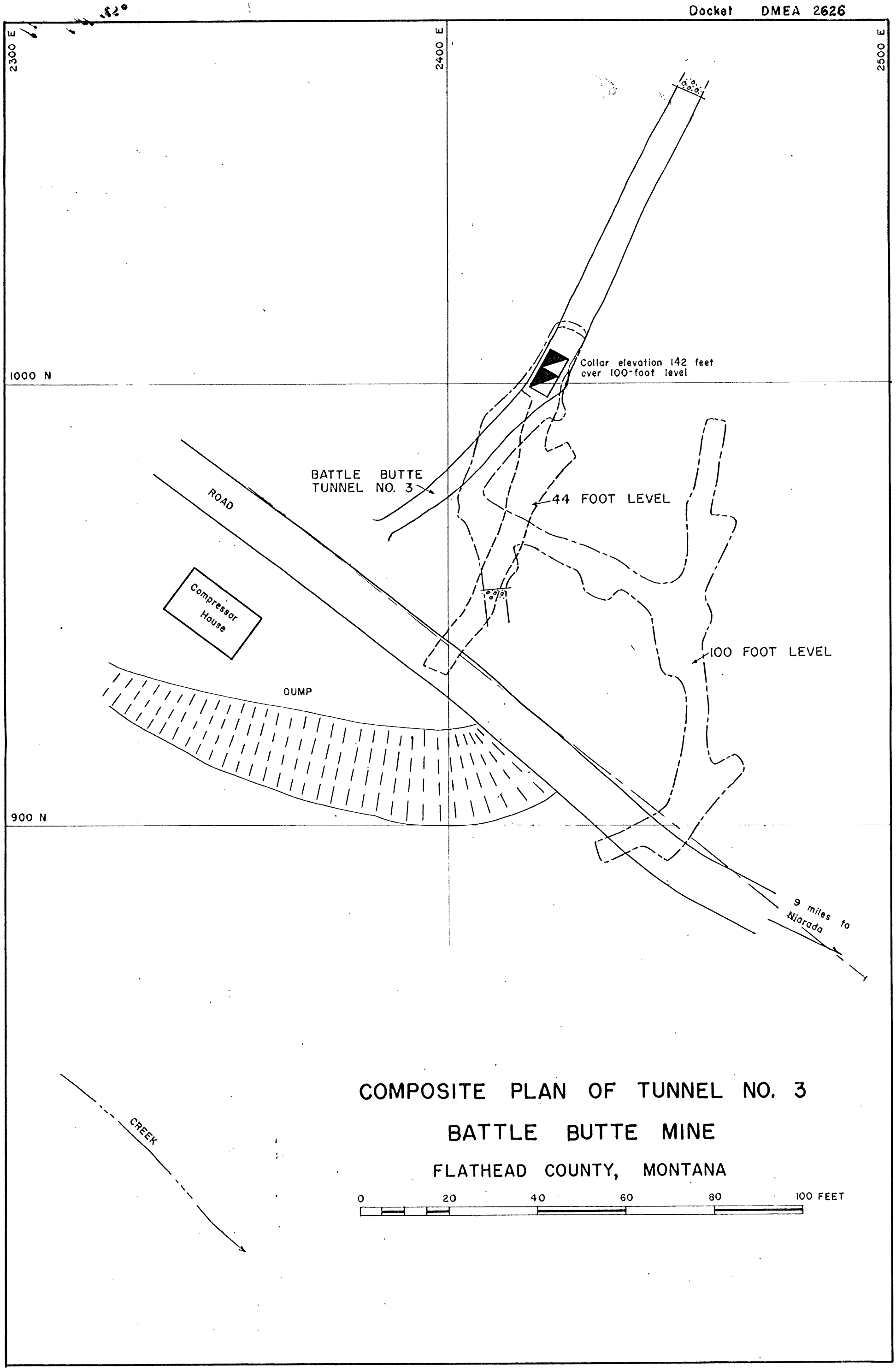
July 9, 1952
(Date)

Sole Lessee
(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

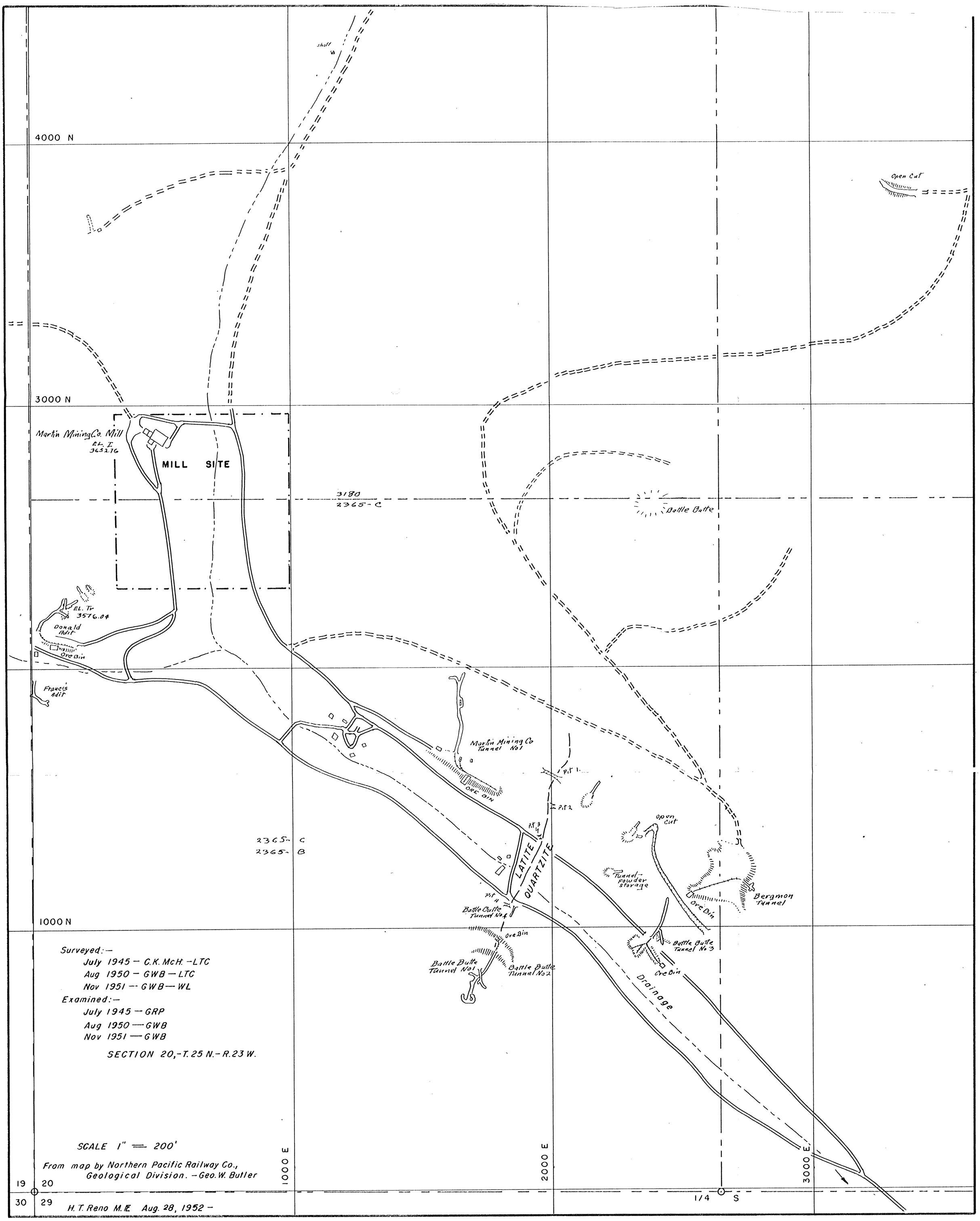
Docket DMEA 2626



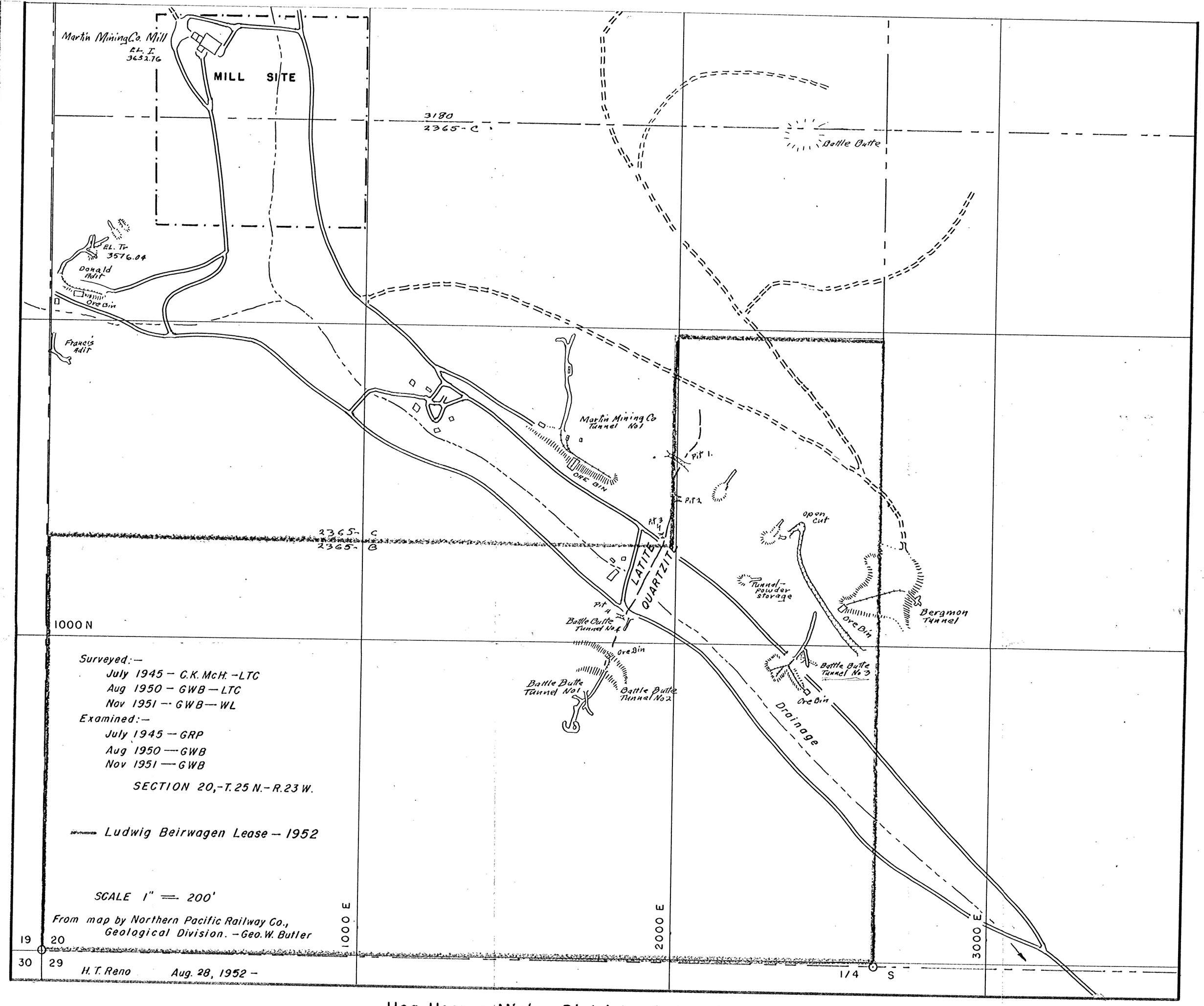
COMPOSITE PLAN OF TUNNEL NO. 3

BATTLE BUTTE MINE

FLATHEAD COUNTY, MONTANA



Hog Heaven Mining District — Flathead County, Montana.



Surveyed:—
July 1945 — C.K. McH. — LTC
Aug 1950 — GWB — LTC
Nov 1951 — GWB — WL
Examined:—
July 1945 — GRP
Aug 1950 — GWB
Nov 1951 — GWB

SECTION 20, - T. 25 N. - R. 23 W.

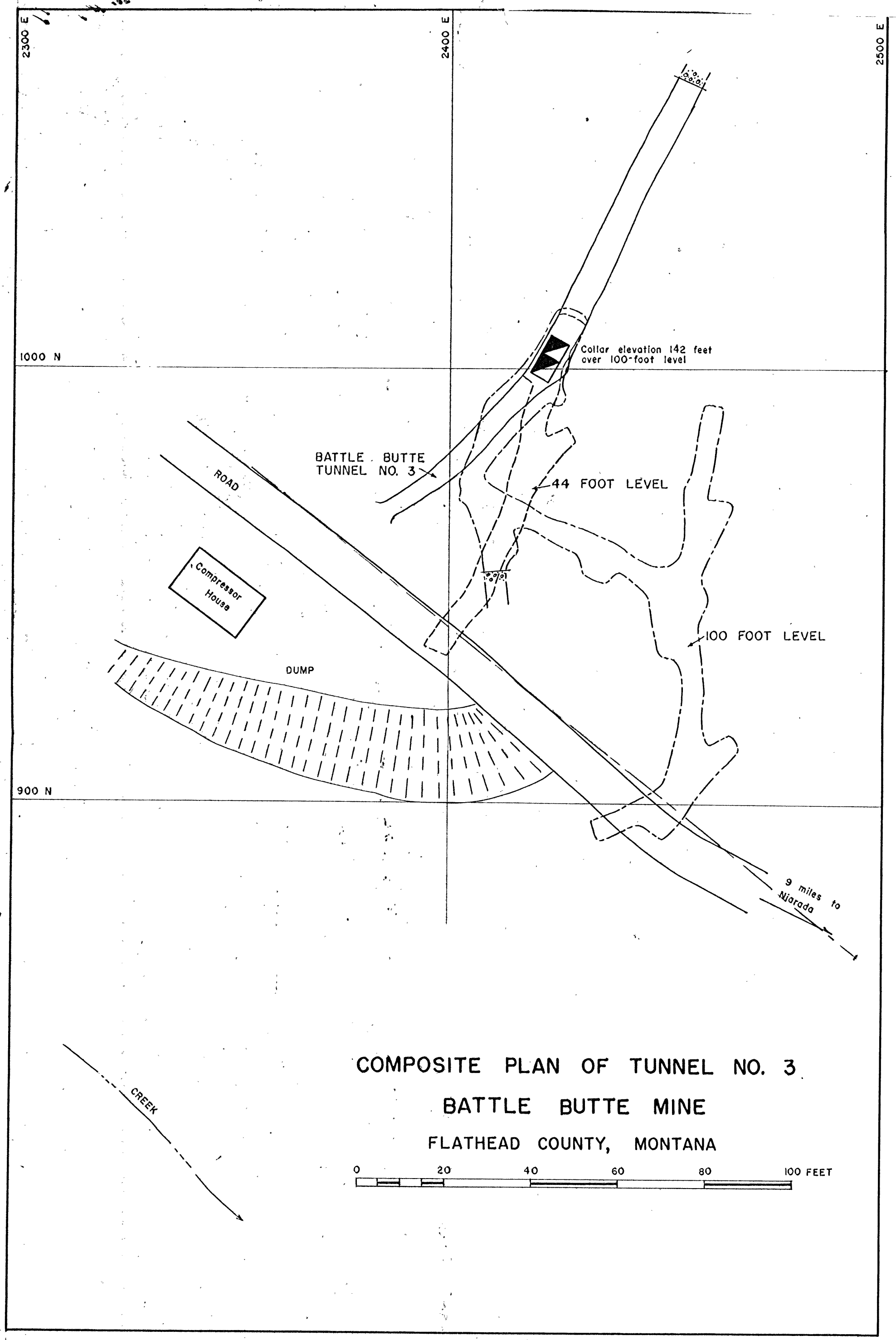
Ludwig Beirwagen Lease — 1952

SCALE 1" = 200'

From map by Northern Pacific Railway Co., Geological Division. — Geo. W. Butler

H. T. Reno Aug. 28, 1952 —

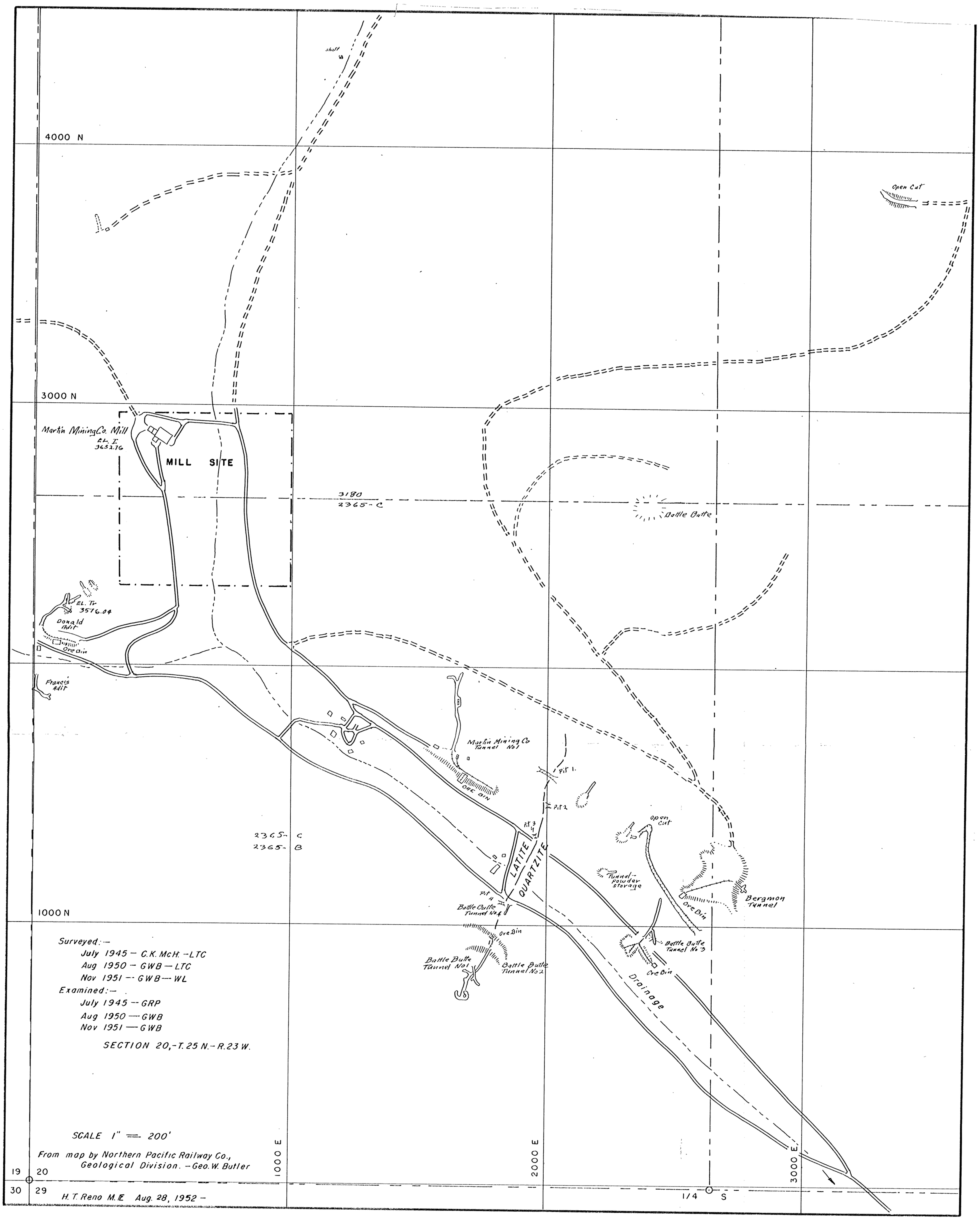
Hog Heaven Mining District — Flathead County, Montana.



COMPOSITE PLAN OF TUNNEL NO. 3

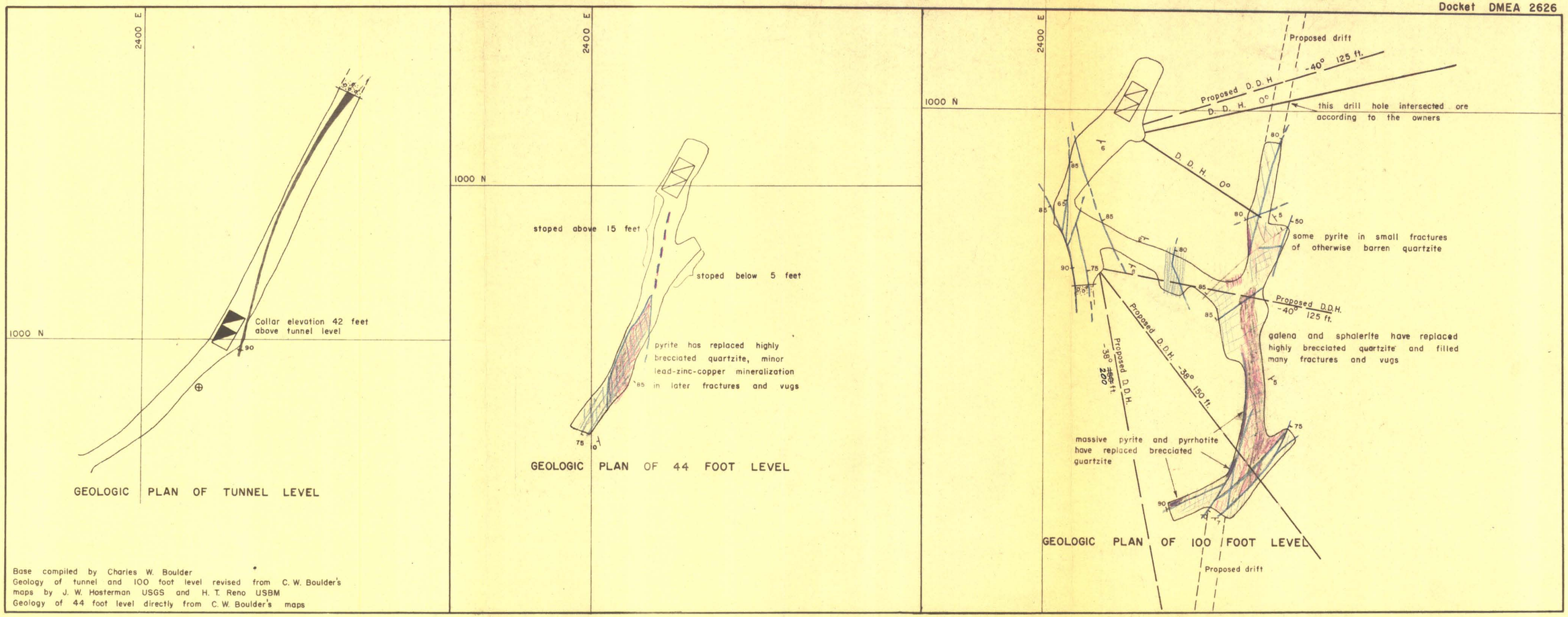
BATTLE BUTTE MINE

FLATHEAD COUNTY, MONTANA



Hog Heaven Mining District — Flathead County, Montana.

Docket DMEA 2626



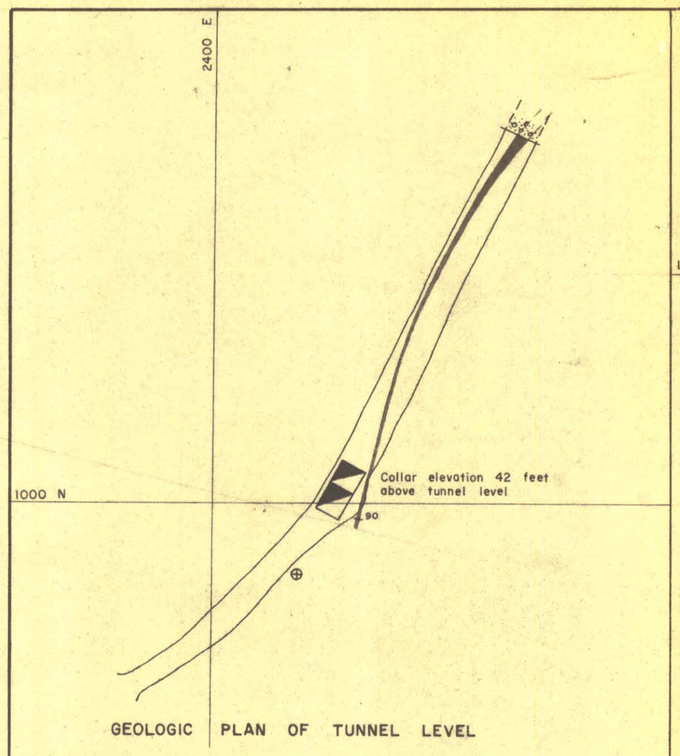
Base compiled by Charles W. Boulder
Geology of tunnel and 100 foot level revised from C. W. Boulder's maps by J. W. Hosterman USGS and H. T. Reno USBM
Geology of 44 foot level directly from C. W. Boulder's maps

GEOLOGY OF TUNNEL NO. 3 OF THE BATTLE BUTTE MINE

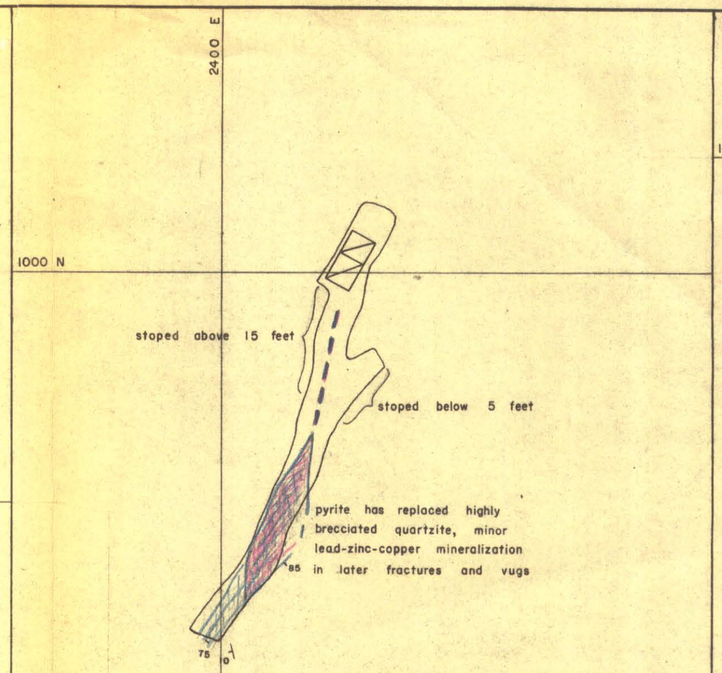
FLATHEAD COUNTY, , MONTANA

0 20 40 60 80 100 FEET

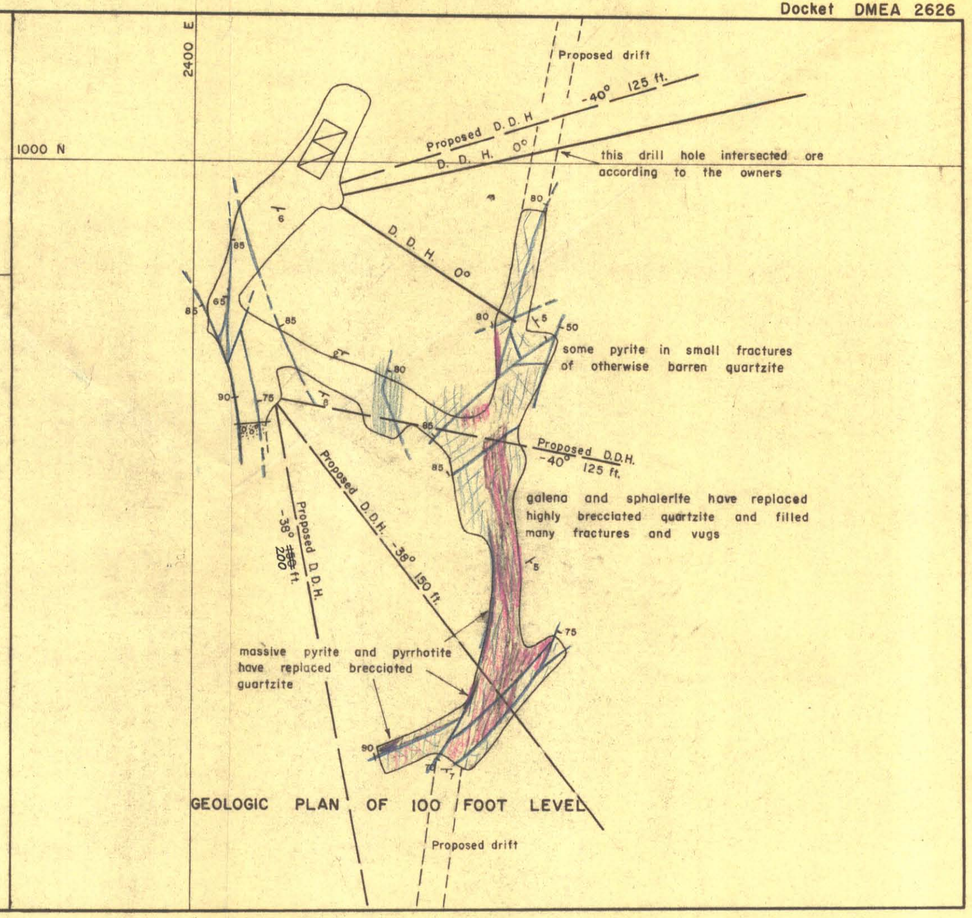
Docket DMEA 2626



GEOLOGIC PLAN OF TUNNEL LEVEL



GEOLOGIC PLAN OF 44 FOOT LEVEL



GEOLOGIC PLAN OF 100 FOOT LEVEL

Base compiled by Charles W. Boulder
Geology of tunnel and 100 foot level revised from C. W. Boulder's maps by J. W. Hosterman USGS and H. T. Reno USBM
Geology of 44 foot level directly from C. W. Boulder's maps

GEOLOGY OF TUNNEL NO. 3 OF THE BATTLE BUTTE MINE

FLATHEAD COUNTY, , MONTANA

0 20 40 60 80 100 FEET