DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1930

DO NOT DETACH THIS SLIP

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

This document has been recorded as

EXPLORATION LOAN

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

Routing Slip

To:	340 - Holdeer ~~Manganese Br.~~	Date	~~8-7-51~~
To:	Oper Com	Date	7-7-55
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INT.-DUP. SEC., WASH., D.C. 98868

DOCKET
SURNAME
Martin
Kjan
Mullaney

400

JUL 29 1955

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMA 1930 - Manganese,
Lead and Zinc
Hale Ranch
Flint Creek Mining District
Granite County, Montana

Dear Mr. Weissenborn:

Reference is made to the subject docket and your letter of July 15, 1955, informing us that no copies of our reply to Mr. Olson's letter regarding the release of assay results were attached to our letter of July 11.

We are therefore enclosing two copies as requested.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (HB)

Enclosure

WSMartin/fee
7-27-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. I - NW DIST.
Mr. DeHuff, USBM
Mr. Kiilsgaard, USGS

APPROVED:

/s/ Robert W. Geehan (HB)
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey (HB)

R.G.S.

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

RECEIVED
JUL 25 1955

July 15, 1955

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

Re: Docket No. DMA 1930 (manganese, lead, zinc)
Nels Broman
Flint Creek Mining District
Granite County, Montana

Dear Mr. Selfridge:

Copies of your reply to Mr. Olson's letter regarding the release of assay results on the captioned property were not enclosed with your letter of July 11 to Mr. Weissenborn. We should appreciate receiving copies at your convenience.

Sincerely yours,

James J. Quinlan
James J. Quinlan
for A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, N.W. Dist.

cc: USBM (2)
Quinlan

DOCKET
SURNAME
400 Chapman
Martin
Kiilsgaard
Geehan
Selfridge
Johnson

JUL 11 1955

Mr. Ray B. Olson
Consulting Geologist
130 North Wilson
Casper, Wyoming

Re: Docket No. DMA 1930 - Manganese,
Lead and Zinc
Nels Bremsen
Flint Creek Mining District
Granite County, Montana

Dear Mr. Olson:

This will acknowledge your letter of June 28, 1955, requesting information on the subject property.

The owner, Mr. Bremsen, should apply either personally or by letter to Mr. A. E. Weissenborn, Executive Officer, Region I - Northwest District, South 157 Howard Street, Spokane 4, Washington, in order to obtain the assay results you desire. Our engineer's report is, however, considered confidential and is not available for use by anyone outside the Government.

Sincerely yours,

C. O. Mittendorf

Administrator

TLChapman:foc
7-7-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. I - NW DIST.
Messrs. Kiilsgaard, USGS
DeMuff, USBM

cc

DOCKET
SURNAME
Chapman
400 Martin
Selfridge
Hefelmann

JUL 21 1955

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 1, Washington

Re: Docket No. MM 1930 - Manganese,
Lead and Zinc
Bale Brunson
Flint Creek Mining District
Granite County, Montana

Dear Mr. Weissenborn:

Enclosed are copies of letter of June 28, 1955, from Mr. Ray B. Olson, Consulting Geologist, 110 North Wilson, Casper, Wyoming, requesting information concerning the subject property, and of our reply thereto.

As you will note, we are advising Mr. Olson that Mr. Brunson should apply to you either personally or by letter for the assay results, but our engineer's report is not available for use outside the Government.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SHB)

Enclosure

TLCHAPMAN:foc 7-7-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. I - NW DIST.
Messrs. Kiilsgaard, USGS
DeHuff, USBM

APPROVED:

/s/ Robert W. Gesher
Member, Bureau of Mines (SHB)

Thor H. Kiilsgaard
Member, Geological Survey (SHB)

PHILIPSBURG, MONTANA

[redacted]e 28, 1955 400

U.S. Dept. of Interior
Defense Minerals Adm.
Wash. 25, D.C.
Attn. Director

DMA-1930
denied 1-18-52

Dear Sir.

We desire some information which we believe you may have regarding the claims of Mr. N.G. Broman, located in Granite County, Montana. Mr. Broman applied to the DMA for ~~[illegible]~~ any exploration loan in August of 1951, his application was assigned Docket Number D.M.A.-1930 and referred to Mr. Geo. Holderer, Chief, Ferro Alloys Branch, on Aug. 7, 1951. The application was subsequently referred to Mr. Weisenborn, Executive Officer, DMA Field Team, Region II, Spokane, Wash. for examination. A field examination was made and a map made and samples were taken of the ore. Mr. Broman has a preliminary map made by the Geologist who examined the property. The map is incomplete and lacks information on the assays of samples taken.

We would appreciate very much ~~[illegible]~~ your sending Mr. Broman a copy of the map constructed and results of the assays.

PHILIPSBURG, MONTANA

(2)

Mr. Bromans address is:

Nels G. Broman,
Box 134
Philipsburg, Mont.

Mr. Broman, owner of the claims, will in turn forward this information to me for my consideration, which will assist in evaluating his property. It would appear from a preliminary examination, that his property has merit.

Ray B. Olson
Consulting Geologist
110 N. Wilson
Casper, Wyoming.

FILE COPY
SURNAME:

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

Mayer
Hedges
F. Johnson

JAN 28 1952

BA.

Mr. Nels Broman
Philipsburg
Montana

Re: Docket DMA 1930 - Manganese
Flint Creek Mining District
Philipsburg, Montana

Dear Mr. Broman:

We have reviewed your application for an exploration project and other related data available to us in Washington.

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

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

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

FEJohnson/GGGentry/ls/bih
1/25/52
cc to: Admr's. Reading File
1-28 Docket
5.17
Field Team, Region II
Messrs. Selfridge
Gentry
N.B.Melcher, USBM
MDCrittenden, USGS

FILE COPY
SURNAME:

400

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

Mr. Nels Broman
Philipsburg, Montana

Re: Docket DMA 1930 - Manganese
Flint Creek Mining District
Philipsburg, Montana

Dear Mr. Broman:

We have now reviewed your application for an exploration loan and other data recently made available to us in Washington.

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

We wish to thank you for your interest in the Defense Minerals Program, and for your patience and effort in this respect.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry:ls
1-24-52

Copy to: Admn. ~~Reading~~ File
Docket
Field Team, Region 2
G C. Selfridge
G. G. Gentry
N. B. Melcher, USBM
M. D. Crittenden, USGS

FILE COPY
SURNAME:

400

Selfridge

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

January 24, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

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

Subject: Denial of exploration project in the amount of $5,650.00
Docket No. DMA 1930 - Lead - Zinc - Silver - Manganese
Five unpatented load claims: West Exposure
Emma
West Exposure Extension
Lookout
Lookout Extension

Granite County, Montana

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

1. The U. S. Bureau of Mines' report on sampling, dated November 23, 1951, states: "There is no indication that ore of commercial grade and tonnage can be developed."

2. On November 29, 1951, the Field Team reports as follows: "The West Exposure vein structure, however, is characteristic of the numerous veins in granodiorite fringing the productive zone. These veins explored extensively by earlier operations have been found devoid of minable or base metal ore bodies."

3. The underground workings are inaccessible and the applicant's hopes are apparently based upon information originating from one of the old miners in the district.

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

GGGentry:ls
1-24-52

Copy to: Admn. Reading File
Docket
G. C. Selfridge
G. G. Gentry

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

January 24, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

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

Subject: Denial of exploration project in the amount of $5,650.00
Docket No. DMA 1930 - Lead - Zinc - Silver - Manganese
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Emma
West Exposure Extension
Lookout
Lookout Extension

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3. The underground workings are inaccessible and the applicant's hopes are apparently based upon information originating from one of the old miners in the district.

G. C. Selfridge

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

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

January 21, 1952

Memorandum

To: George C. Selfridge

From: Norwood B. Melcher

Subject: DMA-1930

The Field Team report offers no encouragement as to the possible occurrence of manganese.

It is recommended that the application be denied.

The file is attached herewith.

Norwood B. Melcher

Attachment

January 15, 1952

Memorandum

To: D. E. Moulds, Base Metals Branch, DMEA

From: O. M. Bishop, Base Metals Branch, USBM

Subject: Exploration proposal DMEA Docket No. 1930 (West Exposure Prospect, Granite County, Montana.)

The application deals with a request for assistance in reopening an adit level and sampling a fissure vein that occurs on the applicant's property. Fissure strikes N 50° W and is approximately vertical. It has been explored by two adits, one 750 feet long at an elevation of 7,589 feet, and another lower adit 115 feet long at an elevation of 7,500 feet. The field team report makes no mention of finding mineralization in the dump from the lower adit, and is quite pointed in noting that the dump from the 750-foot adit "appears to be composed almost entirely of barren granit." The applicants have never seen the vein matter in the adit, their information being based on the statement of an old miner. On the basis of this information they believe the vein was of commercial grade at 300 to 600 feet in from the portal. At present the adit is caved, and the three shafts sunk on the strike of the vein at 250, 330 and 515 feet respectively from the portal are unusable. The applicant proposes to reopen the 750-foot adit by spiling through whatever caved ground there is, timbering and repairing existing timber so as to give access from the portal to a point 600 feet in.

In summation it can be said that the field team report recommends denial on the grounds that there have never been any ore shipments, and there is no evidence on the dumps that mineralization was at any time of commercial or near-commercial nature. A few chunks of oxidized lead-zinc ore, obviously hand sorted, are piled up at the portal of the 750-foot adit and at the collar of the old shaft 330 feet southeast of the portal. They are insignificant in volume with the tonnage that should have come from the 300 to 600-foot section of the adit which was reported as commercial ore.

The applicant has not presented, nor did the field team find any evidence that would indicate a liklihood of discovery if the proposed work were undertaken.

O. M. Bishop

O. M. Bishop

1951

1201 N. Division St.
Spokane 2, Wash.
November 29, 1951

MEMORANDUM

To: C. O. Mittendorf, Administrator, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Docket No. 1930, West Exposure Prospect, Granite Co., Mont.

The Field Team, upon reviewing the attached examination report concerning the West Exposure prospect, Granite County, Mont., recommends that the application for exploration assistance be denied.

Although the Philipsburg district is the major domestic source of manganese dioxide ores, the aggregate output to date has been derived entirely from ore bodies enclosed in calcareous sedimentary rocks.

The West Exposure vein structure, however, is characteristic of the numerous veins in granodiorite fringing the productive zone. These veins, explored extensively by earlier operations, have been found devoid of minable manganese or base metal ore bodies.

All docket material together with an amended application pertaining to the prospect is returned herewith.

By Field Team, Region II

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

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

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1201 N. Division St.
Spokane 2, Wash.
November 29, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 10 1951

DMA 1930

20 Operating Com.
on 12/24/51 AB

MEMORANDUM

To: C. O. Mittendorf, Administrator, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Docket No. 1930, West Exposure Prospect, Granite Co., Mont.

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By Field Team, Region II

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

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

Enclosures

1201 N. Division St.
Spokane 2, Wash.
November 29, 1951

MEMORANDUM

To: C. O. Mittendorf, Administrator, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Docket No. 1930, West Exposure Prospect, Granite Co., Mont.

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All docket material together with an amended application pertaining to the prospect is returned herewith.

By Field Team, Region II

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

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

Enclosures

1201 N. Division St.
Spokane 2, Wash.
November 29, 1951

MEMORANDUM

To: C. C. Rittendorf, Administrator, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Docket No. 1930, West Exposure Prospect, Granite Co., Mont.

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All docket material together with an amended application pertaining to the prospect is returned herewith.

By Field Team, Region II

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

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

Enclosures

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Geo. Selfridge DATE:

FROM : Mac D. Crittenden Jr.

SUBJECT: DMA 1930.

The ~~attached~~ F. I. report is approved and the negotiation recommendation is sustained so far as manganese is concerned.

M. D. Crittenden

Return to Wash.

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

Mr. A. E. Weissenborn, Executive Officer
DMA Field Team, Region II
South 15th Howard Street
Spokane, Washington

AUG 31 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 1 1951

Dear Sir:

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

Docket No. 1930
Commodity Manganese
Applicant Nels Brennan

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

Very truly yours,

Tom Lyon
Tom Lyon, Chairman
Coordinating Committee

Lowell B. Moon
For Bureau of Mines

Oliver E. Rove
For Geological Survey

6/5/51

8/24/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1930

Field Referral

Commodity Manganese

Total Amount $46,000

75%

Govt. Participation 34,500

1. Name and Address of Applicant Nels Broman, Philipsburg, Montana

2. Location of Property Flint Creek Mining District, Philipsburg, Montana

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

If not, application will be rejected.

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

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

a) Good

b) Poor

c) None

d) Don't know—needs field examination Determine

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

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

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

Does the lease have sufficient time to run to cover a future

productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Determine

d) Water (question 13)* Yes

e) Power (question 13)* Determine

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Determine

_____

Is a field check needed on this point? Yes

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

_____

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

If not, what part of it is? _____

_____

_____

_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? Fair

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable? Check

f) Should more information be requested from applicant?_____

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? Check

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

a) Is it applicable? Check

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

c) Are rents and charges reasonable?_____

d) Is a field check needed? Yes

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

a) Are there sufficient data? No

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

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

d) Are the proposed wages and salaries reasonable? Check

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? If property merits exploration - determine best method of exploration and assist applicant in completing the contract forms and exhibits.

Reviewed by: D. J. Ballard

Lord B. Holden

Max D. Crittenden Jr.

Date 8/24/51

INT.-DUP. SEC., WASH., D.C. 99009

List of File to Field

DMA-1930 Manganese

1. MF-103
2. one copy letter to Broman 6/10/47
3. 4 pages answers to questions

8/27/51

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1930

Date received 8-6-51

Participation

U. S. Department of Interior
Geological Survey
Sol 157 Howard Street
Spokane, Washington

Nels Broman,
Philipsburg, Montana

Name and address of applicant

Date July 30, 1951

FILL IN THIS BLOCK

Date of application July 30, 1951

Estimated cost $46,000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Flint Creek Mining District
Philipsburg, Montana.

Date of filing MF-100 None filed

DMA Docket Number, if available 1930

INSTRUCTIONS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

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

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

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

THE EXPLORATION

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

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

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

THE REQUIREMENTS AND COSTS

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

CERTIFICATION

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

(Name of company)	By Nels Broman (Signature of authorized official)
July 30, 1951 (Date)	Nels Broman an owner (Title)

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

*Same as footnote on page 1.

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

C O P Y

Butte, Montana, June 10, 1947

Mr. Nels Broman
Philipsburg, Montana

Dear Nels:

I am enclosing a copy of the assayer's report on the samples taken during the recent visit to your mine.

You will note that the No. 112 covers the pile of heavy rock that was up by the shaft that was supposed to be down 80 feet. It runs 4.8 ounces silver and .020 ounces gold.

No. 113 is the sorted ore on the tunnel dump by that little shack. This runs about as stated, being 13.3 ounces silver, .020 ounces gold, 23.4 per cent lead, and 0.7 per cent zinc.

No. 114 covers the black manganese from the tunnel. This runs 0.4 ounces silver, .005 ounces gold, and 34.8 per cent manganese.

ANNEX TO FORM MF-103

Application For Aid For An Exploration Project Pursuant to Mineral Order No. 5, Under Defense Production Act of 1950.

1. Partnership

2. Nels Broman and Henry Kistle, Philipsburg, Montana.

3.

4. Nels Broman: 20 years as a miner; 4 years mine leasing experience; 7 years building contractor.

   Henry Kistle: 35 years as a miner.

5. Yes

6. None

7. None

8. Real Estate and property $4000.00; liability none, other than current monthly living expenses.

9. $12,000.00

10. a. The following mining claims:

    Lookout
    Lookout Extension
    West Exposure
    West Exposure Extension
    Emma

    b. Legal descriptions to above mining claims:

    Lookout Mining Claim Lode: Situated in the Granite Mining District (unorganized). Course of said vein or lode is East and West along which the undersigned claim 1100 feet in a Easternly direction and 400 feet in a westernly direction from the discovery _____, together with surface area 300 feet on the North Side and 300 feet on the South side of the center of said vein, comprising a tract 1500 by 600 feet in size. Beginning at _____, corner No. 1, which is a Squared tree, running thence,
    First Course: Direction _____, distance 1500 feet to _____ corner No. 2, which is a squared tree and running thence,
    Second Course: Direction _____, distance 600 feet, to corner No. 3, which is a squared tree and running thence,
    Third Course: Direction _____, distance 1500 feet, to ____ corner No. 4, which is a squared tree and running thence,
    Fourth Course: Direction _____, distance 600 feet, to corner No. 1, the place of beginning.

    Lookout Extension Lode Mining Claim: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit:
    Squared tree is distant 1500 feet in an Easterly direction; 600 feet is distant 600 feet in a North & South Direction. The course of said vein or lode is East and West along which the undersigned claim 150 feet in a Easternly direction and 0 feet in a Westernly direction from the discovery _____ together with surface area 300 feet on the North side and 300

feet on the South side of the center of said vein, comprising a tract 600 by 1500 feet in size:
Beginning at _____Corner No. 1, which is a squared and Rock monument and running thence:
First Course: Direction East, distance 1500 feet, to _____ Corner No. 2, which is a squared and Rock monument and running thence,
Second Course: Direction North, distance 600 feet, to _____ Corner No. 3, which is a squared and Rock Monument and running thence,
Third Course: Direction West, distance 1500 feet, to _____ Corner No. 4, which is a squared tree and Rock monument and running thence,
Fourth Course: Direction South, distance 600 feet, to corner No. 1, the place of beginning.

WEST EXPOSURE LODE MINING CLAIM: Flint Creek Mining District (unorganized). Course of said vein or lode is East and West along which the undersigned claim 750 feet in a Easternly direction and 750 feet in a Westernly direction from discovery 200 feet, together with surface area 400 feet on the _____side and 600 feet on the _____side of the center of said vein, comprising a tract 600 by 1500 feet in size.
Beginning at Corner No. 1, which is a squared tree and Rock Monument and running thence,
First Course: Direction East, distance 1500 feet, to corner No. 2, which is a squared tree and running thence,
Second Course: Direction North, distance 600 feet to corner No. 3, which is a squared tree and Rock Monument and running thence,
Third Course: Direction West, distance 1500 feet to corner No. 4, which is a squared tree and Rock Monument and running thence,
Fourth Course: Direction South distance 600 feet, to corner No. 1, the place of beginning.

WEST EXPOSURE EXTENSION NO 2 LODE MINING CLAIM: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit: _____is distant 1500 feet in an Easternly direction; Rock monument and Blazed tree is distant 0 feet in a westernly direction. The course of said vein or lode is East and west along which the undersigned claim 1500 feet in a Easternly direction and 0 feet in a westernly direction from the discovery _____, together with surface area 300 feet on the North side and 300 feet on the South side of the center of said vein, comprising a tract 1500 ft by 600 feet in size.
Beginning at _____Corner No. 1, which is a squared tree Rock monument and running thence,
First Course: Direction East, distance 1500 feet, to _____ Corner No. 2, which is a Squared tree Rock monument and running thence,
Second Course: Direction Southh, distance 600 feet, to _____ Corner No. 3, which is a Squared tree Rock monument and running thence,
Third Course: Direction North, distance 600 feet, to _____ Corner No. 4, which is a Squared tree Rock Monument and running thence,
Fourth Course: Direction West, distance 1500 feet, to Corner No. 1, the place of beginning.

EMMALODE MINING CLAIM: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permenant monuments are distant as follows, to-wit:_____ is distant 1500 feet in a westernly direction; _____is distant _____feet in a _____direction. The course of said vein or lode is Eastern and western along which the under signed claim 1500 feet in a western direction and 0 feet in a Eastern direction from the discovery _____together with Surface area 300 feet on the South side and 300 feet on the North side of the center of said vein, comprising a tract 600 by 1500 feet in size.

Beginning at _____Corner No. 1, which is a Blazed tree and Rock Monument and running thence,

First Course: Direction West, distance 1500 feet to _____ corner No. 2, which is a Blazed tree & Rock Monument and running thence,

S Second Course: Direction North, distance 600 feet, to_____ Corner No. 3, which is a squared tree and Rock Monument and running thence,

Third Course: Direction East, distance 1500 feet, to _____ Corner No. 4, which is a Blazed tree and Rock Monument and running thence,

Fourth Course: Direction South, distance 600 feet, to Corner No. 1, the place of beginning.

11. None

12. 4½ miles SE of Philipsburg. County road to within 1/2 mile of project. N. P. Railway at Philipsburg, Montana. Road will need 1/2 miles of new construction and some repair on County Road.

13. Plenty of water available from Fred Burr Creek at all seasons. Will need approximately one mile of power line.

14. 700 foot tunnel now on project. No equipment, buildings or structures.

15. Manganese ore can be shipped by truck to Philipsburg and milled either at the Trout mill or Taylor Knapp mill. Lead and zinc can be shipped from Philipsburg by N. P. Railway to Tooele, Utah.

16. (a) Previous exploration consists of one 300 foot tunnel and one 700 foot tunnel opening up manganese, lead, ainc, and silver ore bodies. Property has never had any commercial production but has always been a prospect.

1 (b) The property is in the Granite formation, North of Philipsburg, and being less than 1/2 miles North of the old Granite and Bi Metallic mines which produced over twenty-five million dollars in silver. While the Granite and Bi Metallic mines were silver producers, all reports indicate strong veins of manganese in these properties. The vein of applicants is in the Philipsburg Botholith about one mile East of the Contact Mine and about one mile East of the Trout Mine and the Taylor Knapp and Moorlight properties.

(c) None

17. None.

18. None

19. None

20. Manganese.

21. Applicants desire to extend 300 foot tunnel 500 feet East to get under manganese vein showing in 700 foot tunnel on Lookout claim. There is also a strong lead about 3 feet wide in the Lookout. Estimated time of driving tunnel is six months.

22. Applicants rely on the records of production of the Philipsburg district and all present reports concerning the same. The particular property has never been examined by Engineers or Geologists.

23.

(a)	10 miners	$ 15,000.00
(b)	2 Supervisors	4,200.00
(c)		
(d)	2 cabins	500.00
	Compressor) Shops	
	Blacksmith)	500.00
	Dry	500.00
	Framing Shed	100.00
(e)	2 Jackhammers	900.00
	1 Stoper	500.00
	1200 ft. 2" pipe	720.00
	6 ton 12' rail	1,000.00
	2 mine cars	350.00
	1 mucker	2,800.00
	1 compressor	1,500.00
	1 bulldozer	12,000.00
(h)	Forge - Anvil)	
	Blower - Blacksmith Tools)	500.00
	Carpenter tools	100.00
	3 tons Powder	1,300.00
	6000 ft. fuze	73.00
	1000 caps	22.00
	1 doz. shovels	40.00
	1/2 doz. picks	25.00
	steel bars	50.00
	250 bits	250.00
	200 ft. drill steel	200.00
	1000 ft. 1" hose	250.00
	Receiver tank	50.00
	10 lamps	50.00
(i)	1 mile power line	1,500.00
		$ 46,030.00

24.

(a)	First three months - building road, power line; cleaning and re-timbering 300' tunnel; laying track:-	$ 25,000.00
(b)	Next six months driving drift at average of 20 feet per week, 5 day week, 2 shifts per day:	$ 21,000.00

UNITED STATES
DEPARTMENT OF INTERIOR
OSCAR L. CHAPMAN-SECRETARY

DEFENSE MINERALS ADMINISTRATION

Report by Examination Team
Region II

1951

DMA No. 1930 West Exposure Prospect

Granite County, Mont.

Peter H. Toepfer
U. S. Bureau of Mines

November 23, 1951

WEST EXPOSURE PROSPECT
Granite County, Mont.

DMA Docket No. 1930

By Peter H. Toepfer

RECOMMENDATIONS

This property is not recommended for favorable action as there appears little evidence that ore of commercial grade and width can be discovered through the proposed program.

APPLICANTS

The applicants are Nels Broman and Henry Kistle of Philipsburg, Montana. These men are equal partners in the venture and will do the proposed work.

LOCATION

The property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extension, the Erma, the Lookout, and the Lookout Extension, located along the line dividing sections 28 and 33, T. 7 N. R. 13 W., Granite County, Montana. The claims are in the Philipsburg Mining District and within the boundary of the Deer Lodge National Forest.

OWNERSHIP

The property is held by location by the applicants.

HISTORY AND PAST PRODUCTION

The West Exposure prospect first was opened about 1904. Work was done intermittently until 1939 by a prospector known as Skookum Jim. There are no records of production during this period, and as no road was built to the deposit and no provision was made for separate piling of ore, there is no evidence that ore was shipped.

Since relocation by the applicants in 1940 work has been confined to reopening an old adit along a narrow manganese vein in another part of the property and in reopening a lower adit below the lead-zinc-silver prospect.

The original application proposed driving the lower adit to undercut the supposed ore-body in the caved adit. However, this would require about 980 feet of drifting and would only develop 87 feet of backs. The original application, based on the ore's manganese content, requested 75% participation of costs by the government. The manganese content, however, is insignificant.

The revised application proposes the reopening of the old caved adit for a distance of 600 feet. The interval from 300 feet to 600 feet from the portal is claimed to have been driven on commercial ore. A roadway is to be built to the portal, the cut leading to the portal is to be cleaned out, an estimated 150 feet of caved ground is to

be retimbered and cleaned out, and the remainder of the drift is to be made safe. All work will be with hand tools. The vein then will be sampled.

GEOLOGIC SETTING

The deposit is a replacement and fissure filling in granodiorite striking about N. 50°W. and dipping vertically.

The underground workings currently are inaccessible Knowledge of the vein is limited to an evaluation of ore on the dump, together with statements of men acquainted with the workings. The applicants have based their opinion upon the statement of an old miner acquainted with the area. According to this source, the adit followed a barren vein for 300 feet from the portal and then followed ore of commercial grade and width for the next 300 feet. The last 150 feet of the old adit is said to be on uncommercial ore. However, if commercial ore actually was discovered, it presumably would have been stoped. Furthermore, if 300 feet of the adit was driven on ore, the adit dump should show abundant evidence of ore minerals. This dump appears to be composed almost entirely of barren granite. When this apparent discrepency was pointed out, the applicants offered the opinion that the ore was narrow in the back but wide on the floor of the drift.

Chunks of oxidized ore dumped at the collar of the caved shaft indicate the vein attained at least a 2-foot width somewhere in the old adit. Sample #51-117, chipped from these

chunks, assayed lead 3.274, zinc 0.40 percent, silver 2.303 ounces, gold 0.03 ounces. A small pile of coarse ore dumped near the portal of the caved adit was sampled and assayed with the following results: lead 6.00 percent, zinc 0.26 percent, silver 1.2 ounces, gold 0.04 ounces. These samples are from oxidized ore. Somewhat higher values may be expected in the sulfide zone.

The smelter value shown by the sampling would be $13.25 and $6.53 per ton. Inasmuch as the ore would have to stand a hauling charge of $2.00, a freight charge of $6.00, and a smelter charge of $8.00 per ton in addition to the mining costs, it is apparent that the ore would have to have a value of at least $25.00 per ton to return an operating profit. There is no indication that ore of commercial grade and tonnage can be developed.

DESCRIPTION OF MINE WORKINGS

The elevation at the mine is about 7,600 feet. Mine timber is abundant. Operations can probably be conducted for 9 months of the year.

The ground surface at the prospect slopes about 10° to the northwest, conforming to the strike of the vein. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater in depth as the granite country rock is practically impervious.

The prospect originally was developed by an adit which drifted on the vein for a distance of 700 feet. A shaft said to be 85 feet deep reached this adit from the surface. These workings are now inaccessible. About 500 feet to the northwest and at 87 feet greater depth, a new adit was started and driven about 115 feet.

RESERVES, GRADE AND CLASSIFICATION

An ore reserve estimate cannot be made until the proposed work has been completed.

MINING METHODS AND COSTS

Very likely, the mining method used will be cut-and-fill stoping. This will allow separate blasting of ore, with wall rock waste and sorted waste being used for fill. Stulled stoping may be possible if the ore has sufficient width and the wall rock is firm.

No estimate of the cost can be made at present.

MILLING METHODS AND COSTS

No milling is contemplated. Ore will be shipped direct to the smelter.

RATE OF PRODUCTION

Production rate cannot be estimated on the basis of available information.

TIME SCHEDULE TO ATTAIN OBJECTIVES

The proposed exploration would begin on May 1, 1952 and probably could be completed in December, 1952.

Should commercial ore be found in opening the old adit, work would begin on May 1, 1953, opening and retimbering the old shaft, stoping any ore above the adit level, and sinking the shaft to develop the ore at greater depth. Due to the 10° slope of the area, mining would have to be done from vertical shafts.

MARKETING FACILITIES

If the proposed exploration is successfully completed, 4 miles of forest service road must be repaired and 1 mile of access road must be built over relatively level ground. The property is 8 miles by road from the railhead at Philipsburg, Mont. Maximum grades over this road seldom exceed 10 percent.

From Philipsburg, the ore presumably would be shipped via the Northern Pacific railroad to either the East Helena, Mont., smelter or to the Tooele, Utah, smelter.

EQUIPMENT AND FACILITIES

Installed

The property is completely unequipped.

Required

The equipment required will consist mainly of mine rail, a mine car, and small tools weighing about 3 tons and costing about $750.00. Used material will be purchased.

LABOR SUPPLY

Availability

Two miners will be required to accomplish the proposed exploration project. The applicants intend to do the work without additional labor.

Should the prospect attain production following an exploration project probably four men would be required, two as miners, one as an outside man for timber framing, and one for trucking and general work.

Current Wage Scale

The current local wage scale for miners is $14.00 per day. Union affiliation would be of no consequence in the small operation planned.

POWER, TYPE AND AVAILABILITY

As all work connected with the proposed project will be done with hand tools power equipment will not be required. A high tension electric power line is 1-1/2 miles distant from the prospect.

ADEQUACY OF REQUESTED FUNDS

The funds requested are considered adequate to complete the project. The cost of services and of materials purchased and rented is as follows:

1,600 ft. of 8 lb. mine rail	$400.00
Track spikes, fish plates, and hardware	50.00
Truck rental, 1-1/2 ton, 2 days	40.00
Small tools	60.00
Hand steel	15.00
Sharpening charges	50.00
Mine car, 1/2 ton	125.00
Powder, caps and fuse	100.00
Assays	64.00
	$904.00

The project will require the services of two men. Clearing of a one mile temporary roadway through the thin forest growth will consume about 30 man-shifts. Clearing out ground and blasting boulders choking the 66-foot cut leading to the old portal will require an additional 44 man-shifts.

It is estimated that 150 feet of drift has caved in the old adit, at least half of which will have to be reopened by driving, and spiling. The remainder probably will require timbering.

The old adit is to be reopened for a distance of 600 feet, and the remaining 450 feet will probably require barring down, some cleaning, and some retimbering. Ten days is estimated for this purpose and the subsequent sampling of the vein.

The labor costs are listed as follows:

Labor, clearing roadway, 2 men 15 days	$ 420.00
Labor, clearing portal cut, 2 men 22 days	616.00
Labor, reopening caved adit, 2 men 105 days	2,940.00
Labor, clearing open drift, 2 men 10 days	280.00
Industrial Accident Insurance	426.00
Social Security	64.00
	$4,746.00

COMPETENCE OF APPLICANTS

Both applicants are experienced miners about 60 years old. According to local advice, however, neither men are considered reliable workers. Although it considered that they are capable of doing the proposed work, fiscal difficulties are anticipated.

DISCUSSION OF THE PROPOSAL

The present proposal has been revised downward from the $40,000 exploration project originally requested. The evidence of econonic ore of $25.00 grade is slight. Furthermore, evidence that a commercial tonnage of ore can be developed is lacking.

UNITED STATES
DEPARTMENT OF INTERIOR
OSCAR L. CHAPMAN-SECRETARY

DEFENSE MINERALS ADMINISTRATION

Report by Examination Team
Region II

DMA No. 1930 West Exposure Prospect

Granite County, Mont.

Peter H. Toerfer
U. S. Bureau of Mines

November 23, 1951

WEST EXPOSURE PROJECT DM Docket No. 1980
Granite County, Mont.

By Peter H. Toepfer

RECOMMENDATION

This property is not recommended for favorable action as there appears little evidence that ore of commercial grade and width can be discovered through the proposed program.

APPLICANT

The applicants are Nels Broman and Henry Kistle of Philipsburg, Montana. These men are equal partners in the venture and will do the proposed work.

LOCATION

The property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extension, the Emma, the Lookout, and the Lookout Extension, located along the line dividing sections 28 and 33, T. 7 N. R. 13 W., Granite County, Montana. The claims are in the Philipsburg Mining District and within the boundary of the Deer Lodge National Forest.

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be retimbered and cleaned out, and the remainder of the drift is to be made safe. All work will be with hand tools. The vein then will be sampled.

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DESCRIPTION OF MINE WORKINGS

The elevation at the mine is about 7,600 feet. Mine timber is abundant. Operations can probably be conducted for 9 months of the year.

The ground surface at the prospect slopes about 10° to the northwest, conforming to the strike of the vein. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater in depth as the granite country rock is practically impervious.

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RESERVES, GRADE AND CLASSIFICATION

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UNITED STATES
DEPARTMENT OF INTERIOR
OSCAR L. CHAPMAN-SECRETARY

DEFENSE MINERALS ADMINISTRATION

Report by Examination Team
Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 1 1951

DMA No. 1930 West Exposure Prospect

Granite County, Mont.

Peter H. Toepfer
U. S. Bureau of Mines

November 23, 1951

WEST EXPOSURE PROSPECT
Granite County, Mont.

DMA Docket No. 1930

By Peter H. Toepfer

RECOMMENDATIONS

This property is not recommended for favorable action as there appears little evidence that ore of commercial grade and width can be discovered through the proposed program.

APPLICANTS

The applicants are Nels Broman and Henry Kistle of Philipsburg, Montana. These men are equal partners in the venture and will do the proposed work.

LOCATION

The property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extension, the Emma, the Lookout, and the Lookout Extension, located along the line dividing sections 28 and 33, T. 7 N. R. 13 W, Granite County, Montana. The claims are in the Philipsburg Mining District and within the boundary of the Deer Lodge National Forest.

OWNERSHIP

The property is held by location by the applicants.

HISTORY AND PAST PRODUCTION

The West Exposure prospect first was opened about 1904. Work was done intermittently until 1939 by a prospector known as Skookum Jim. There are no records of production during this period, and as no road was built to the deposit and no provision was made for separate piling of ore, there is no evidence that ore was shipped.

Since relocation by the applicants in 1940 work has been confined to reopening an old adit along a narrow manganese vein in another part of the property and in reopening a lower adit below the lead-zinc-silver prospect.

The original application proposed driving the lower adit to undercut the supposed ore-body in the caved adit. However, this would require about 980 feet of drifting and would only develop 87 feet of backs. The original application, based on the ore's manganese content, requested 75% participation of costs by the government. The manganese content, however, is insignificant.

The revised application proposes the reopening of the old caved adit for a distance of 600 feet. The interval from 300 feet to 600 feet from the portal is claimed to have been driven on commercial ore. A roadway is to be built to the portal, the cut leading to the portal is to be cleaned out, an estimated 150 feet of caved ground is to

be retimbered and cleaned out, and the remainder of the drift is to be made safe. All work will be with hand tools. The vein then will be sampled.

GEOLOGIC SETTING

The deposit is a replacement and fissure filling in grandiorite striking about N. 50°W. and dipping vertically.

The underground workings currently are inaccessible Knowledge of the vein is limited to an evaluation of ore on the dump, together with statements of men acquainted with the workings. The applicants have based their opinion upon the statement of an old miner acquainted with the area. According to this source, the adit followed a barren vein for 300 feet from the portal and then followed ore of commercial grade and width for the next 300 feet. The last 150 feet of the old adit is said to be on uncommercial ore. However, if commercial ore actually was discovered, it presumably would have been stoped. Furthermore, if 300 feet of the adit was driven on ore, the adit dump should show abundant evidence of ore minerals. This dump appears to be composed almost entirely of barren granite. When this apparent discrepency was pointed out, the applicants offered the opinion that the ore was narrow in the back but wide on the floor of the drift.

Chunks of oxidized ore dumped at the collar of the caved shaft indicate the vein attained at least a 2-foot width somewhere in the old adit. Sample #51-117, chipped from these

chunks, assayed lead 3.274, zinc 0.40 percent, silver 2.303 ounces, gold 0.03 ounces. A small pile of coarse ore dumped near the portal of the caved adit was sampled and assayed with the following results: lead 6.00 percent, zinc 0.26 percent, silver 1.2 ounces, gold 0.04 ounces. These samples are from oxidized ore. Somewhat higher values may be expected in the sulfide zone.

The smelter value shown by the sampling would be $13.25 and $6.58 per ton. Inasmuch as the ore would have to stand a hauling charge of $2.00, a freight charge of $6.00, and a smelter charge of $8.00 per ton in addition to the mining costs, it is apparent that the ore would have to have a value of at least $25.00 per ton to return an operating profit. There is no indication that ore of commercial grade and tonnage can be developed.

DESCRIPTION OF MINE WORKINGS

The elevation at the mine is about 7,600 feet. Mine timber is abundant. Operations can probably be conducted for 8 months of the year.

The ground surface at the prospect slopes about 10° to the northwest, conforming to the strike of the vein. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater in depth as the granite country rock is practically impervious.

The prospect originally was developed by an adit which drifted on the vein for a distance of 750 feet. A shaft said to be 85 feet deep reached this adit from the surface. These workings are now inaccessible. About 500 feet to the northwest and at 87 feet greater depth, a new adit was started and driven about 115 feet.

RESERVES, GRADE AND CLASSIFICATION

An ore reserve estimate cannot be made until the proposed work has been completed.

MINING METHODS AND COSTS

Very likely, the mining method used will be cut-and-fill stoping. This will allow separate blasting of ore, with wall rock waste and sorted waste being used for fill. Stulled stoping may be possible if the ore has sufficient width and the wall rock is firm.

No estimate of the cost can be made at present.

MILLING METHODS AND COSTS

No milling is contenplated. Ore will be shipped direct to the smelter.

RATE OF PRODUCTION

Production rate cannot be estimated on the basis of available information.

TIME SCHEDULE TO ATTAIN OBJECTIVES

The proposed exploration would begin on May 1, 1952 and probably could be completed in December, 1952.

Should commercial ore be found in opening the old adit, work would begin on May 1, 1953, opening and retimbering the old shaft, stoping any ore above the adit level, and sinking the shaft to develop the ore at greater depth. Due to the 10° slope of the area, mining would have to be done drom vertical shafts.

MARKETING FACILITIES

If the proposed exploration is successfully completed, 4 miles of forest service road must be repaired and 1 mile of access road must be built over relatively level ground. The property is 8 miles by road from the railhead at Philipsburg, Mont. Maximum grades over this road seldom exceed 10 percent.

From Philipsburg, the ore presumably would be shipped via the Northern Pacific railroad to either the East Helena, Mont., smelter or to the Tooele, Utah, smelter.

EQUIPMENT AND FACILITIES

Installed

The property is completely unequipped.

Required

The equipment required will consist mainly of mine rail, a mine car, and small tools weighing about 3 tons and costing about $750.00. Used material will be purchased.

LABOR SUPPLY

Availability

Two miners will be required to accomplish the proposed exploration project. The applicants intend to do the work without additional labor.

Should the prospect attain production following an exploration project probably four men would be required, two as miners, one as an outside man for timber framing, and one for trucking and general work.

Current Wage Scale

The current local wage scale for miners is $14.00 per day. Union affiliation would be of no consequence in the small operation planned.

POWER, TYPE AND AVAILABILITY

As all work connected with the proposed project will be done with hand tools power equipment will not be required. A high tension electric power line is 1-1/2 miles distant from the prospect.

ADEQUACY OF REQUESTED FUNDS

The funds requested are considered adequate to complete the project. The cost of services and of materials purchased and rented is as follows:

1,600 ft. of 8 lb. mine rail	$400.00
Track spikes, fish plates, and hardware	50.00
Truck rental, 1-1/2 ton, 2 days	40.00
Small tools	60.00
Hand steel	15.00
Sharpening charges	50.00
Mine car, 1/2 ton	125.00
Powder, caps and fuse	100.00
Assays	64.00
	$904.00

The project will require the services of two men. Clearing of a one mile temporary roadway through the thin forest growth will consume about 30 man-shifts. Clearing out ground and blasting boulders choking the 66-foot cut leading to the old portal will require an additional 44 man-shifts.

It is estimated that 150 feet of drift has caved in the old adit, at least half of which will have to be reopened by driving, and spiling. The remainder probably will require timbering.

The old adit is to be reopened for a distance of 600 feet, and the remaining 450 feet will probably require barring down, some cleaning, and some retimbering. Ten days is estimated for this purpose and the subsequent sampling of the vein.

The labor costs are listed as follows:

Labor, clearing roadway, 2 men 15 days	$ 420.00
Labor, clearing portal cut, 2 men 22 days	616.00
Labor, reopening caved adit, 2 men 105 days	2,940.00
Labor, clearing open drift, 2 men 10 days	280.00
Industrial Accident Insurance	426.00
Social Security	64.00
	$4,746.00

COMPETENCE OF APPLICANTS

Both applicants are experienced miners about 60 years old. According to local advice, however, neither men are considered reliable workers. Although it considered that they are capable of doing the proposed work, fiscal difficulties are anticipated.

DISCUSSION OF THE PROPOSAL

The present proposal has been revised downward from the $46,000 exploration project originally requested. The evidence of economic ore of $25.00 grade is slight. Furthermore, evidence that a commercial tonnage of ore can be developed is lacking.

MF-103
(Rev. 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. .....
Metal or Mineral .....
Date Received .....
Amount $.....
Participation (Government %)
.....

Nels Broman & Henry Kistle
Philipsburg, Montana

Name and address of applicant

Date 13 October 1951

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

DMA Docket Number (if available) 1930

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, 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.

(Name of company)	By Nels Broman (Signature of authorized official)
13 October 1951 (Date)	Henry T Kistle Owners (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

Answers to MF-103. West Exposure lead-silver prospect.

Docket No. 1930

Metal or Mineral. Pb - Zn - Ag

Date Received. _____

Amount. $5,650.00

Participation. 50%

West Exposure lead-silver prospect.
Granite County, Montana.
Nels Broman and Henry Kistle.

Sept. 18, 1951.

MF-100 filed _____

Assistance requested: DMA exploration loan.

DMA Docket No. 1930

(1a) Property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extention, the Emma, the Lookout, and the Lookout Extension, located along the section line between sections 28 and 33, T-7-N, R-13-W, Granite County, Montana.

(1b) Applicants are owners of the property.

(1c) Proposed exploration is to be conducted within the above mentioned claims, and in the S 1/2 of the S 1/2 of section 28 and the N 1/2 of the N 1/2 of section 33, T-7-N, R-13-W, Granite County, Montana.

(2a) Ore is expected to carry commercial values of lead, silver, and possibly zinc and gold.

(2b) The deposit is a fissure vein in granodiorite. The vein strikes about N 50° W and presumably has a nearly vertical dip. The Philipsburg district has been subjected to successive vein fracturing with a wide variation in the metallizing solutions accompanying the separate periods of fracturing. Thus the veins show a wide variation in mineral content. It appears that the West Exposure vein was subjected to a lead-zinc-silver metallization and later reopened and subjected to a slight manganese metallization. The manganese is not of economic grade.

At present, the underground workings are inaccessible, and knowledge of the vein must be gained from ore on the dump and from verbal statements of men who have been in the workings. An old miner having an honest and reliable reputation, has stated that the adit followed a narrow vein for 300 ft and the next 300 ft followed ore of commercial width and grade. The last 150 ft of drift was said to be uncommercial. Ore on the dump shows part of the vein to have a minimum width of 2 ft. A sample taken from ore on the dump assayed 23% lead, 4% zinc, 14 oz silver, and a small amount of gold.

The ground surface at the prospect slopes about 10° to the northwest. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater

in depth as the granite country rock is practically impervious.

The elevation at the mine is about 7,500 ft. Operations can probably be conducted for 8 months of the year.

(3a) The plan of the proposed work is as follows. Two men will work 3 weeks clearing timber, blasting boulders, and filling holes in the roadway to the mine. This road will be temporary and simply sufficient to allow transportation of mine rail, a mine car, and miscellaneous tools to the mine. Only hand tools will be used in this work. The timber cut for the roadway will later be used for mine timber.

The portal of the old adit is reached at a distance of 66 ft by way of a tranch cut in the gently sloping ground surface. This trench is now blocked by earth and large boulders will require blasting. With two men working with hand tools, this work can be done and track can be laid at a rate of 3 ft per day, or 22 days work for two men.

Surface caving ahead of the old portal shows the ground to be caved for a distance of 75 ft, and very likely another 75 ft of caving will be encountered in reopening the old adit. Part of the drift will have to be driven with spiling and heavily timbered, and part of the caved area may be found to require only cleaning out and retimbering. Such work will require the work of two men 3 1/2 days to advance a 5 ft set, so the work of driving through caved ground is estimated to require two men 105 days.

The old adit is to be reopened for a distance of 600 ft to the far end of the reported ore-body. 450 ft of this distance should be found to be standing open. Very likely, 10 days work by two men will make this part of the old adit safe and ready for sampling.

The total cost of this work is estimated to be a maximum of $5,650.00.

(3b) The work can begin on May 1, 1952, and while the work may be interrupted by occasional heavy snowfalls during the first two months, the lost time can be made up by the men. The work is estimated to require 152 working days or a little over 7 months. The work would thus be completed soon after Dec. 1, 1952. The usual weather conditions should allow the work to be carried on until this date.

(4) The required maps are being prepared for the DMA examination engineer's report.

(5) No facilities, buildings, installations, nor fixtures are present on the property.

(6) The following fixture is to be installed:	
1600 ft of 8 lb mine rail.	$400.00
Track spikes, fish plates, and hardware.	50.00
	$450.00
(7a) Operating equipment to be rented:	
Truck rental, 1½ ton. 2 days:	$ 40.00
(7b) Operating equipment to be purchased:	
Small tools	60.00
Hand Steel	15.00
Sharpening charges	50.00
Mine car (½ ton)	125.00
Powder, caps, and fuse.	100.00
	$ 350.00

Answers to MF-103. West Exposure lead-silver prospect.

(7c) Operating equipment furnished by applicants:
The applicants will furnish the use of a 1/2 ton truck and whatever small tools they have in their possession.

(8) The proposed work will require the work of two miners, the applicants intending to carry out this work themselves. The accepted rate of pay is $14.00 per day of 8 hours, and the work will be done on a 40 hour week basis.

Labor, clearing roadway. 2 men 15 days	$ 420.00
Labor, clearing portal cut. 2 men 22 days	616.00
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Industrial Accident Insurance.	426.00
Social Security	64.00
	$ 4,746.00

(9) Cost of Assays:

Allowance will be made for about 15 assays to be made, most of which will be run simply for lead and silver, and composites to be run for zinc, gold, and germanium.

Assays:

(10) The applicants are prepared to invest $2,825.00 in the proposed project, which is one-half of the total maximum estimated cost of $5,650.00.

(11) Allconditions and circumstances regarding the property have been sufficiently brought out by the above answers.

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(Revised June 1951)

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Docket No. 1930

Metal or Mineral. Pb - Zn - Ag

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Mine car (½ ton)	125.00
Powder, caps, and fuse.	100.00
	$ 350.00

Answers to MF-103. West Exposure lead-silver prospect.

(7c) Operating equipment furnished by applicants:
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(8) The proposed work will require the work of two miners, the applicants intending to carry out this work themselves. The accepted rate of pay is $14.00 per day of 8 hours, and the work will be done on a 40 hour week basis.

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Labor, clearing open drift. 2 men 10 days	280.00
Industrial Accident Insurance.	426.00
Social Security	64.00
	$ 4,746.00

(9) Cost of Assays:

Allowance will be made for about 15 assays to be made, most of which will be run simply for lead and silver, and composites to be run for zinc, gold, and germanium.

Assays:

(10) The applicants are prepared to invest $2,825.00 in the proposed project, which is one-half of the total maximum estimated cost of $5,650.00.

(11) Allconditions and circumstances regarding the property have been sufficiently brought out by the above answers.

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. .....
Metal or Mineral .....
Date Received .....
Amount $.....
Participation (Government %)
.....

Nels Broman & Henry Kistle
Philipsburg, Montana

Name and address of applicant

Date 13 October 1951

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

DMA Docket Number (if available) 1930

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.

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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.

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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—

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(Name of company)	By Mels Brosman (Signature of authorized official)
13 October 1951 (Date)	Henry Kistle Owners (Title)

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

Answers to MF-103. West Exposure lead-silver prospect.

Docket No. 1930

Metal or Mineral. Pb - Zn - Ag

Date Received. _____

Amount. $5,650.00

Participation. 50%

West Exposure lead-silver prospect.
Granite County, Montana.
Nels Broman and Henry Kistle.

Sept. 18, 1951.

MF-100 filed _____

Assistance requested: DMA exploration loan.

DMA Docket No. 1930

(1a) Property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extention, the Emma, the Lookout, and the Lookout Extension, located along the section line between sections 28 and 33, T-7-N, R-13-W, Granite County, Montana.

(1b) Applicants are owners of the property.

(1c) Proposed exploration is to be conducted within the above mentioned claims, and in the S 1/2 of the S 1/2 of section 28 and the N 1/2 of the N 1/2 of section 33, T-7-N, R-13-W, Granite County, Montana.

(2a) Ore is expected to carry commercial values of lead, silver, and possibly zinc and gold.

(2b) The deposit is a fissure vein in granodiorite. The vein strikes about N 50° W and presumably has a nearly vertical dip. The Philipsburg district has been subjected to successive vein fracturing with a wide variation in the metallizing solutions accompanying the separate periods of fracturing. Thus the veins show a wide variation in mineral content. It appears that the West Exposure vein was subjected to a lead-zinc-silver metallization and later reopened and subjected to a slight manganese metallization. The manganese is not of economic grade.

At present, the underground workings are inaccessible, and knowledge of the vein must be gained from ore on the dump and from verbal statements of men who have been in the workings. An old miner having an honest and reliable reputation, has stated that the adit followed a narrow vein for 300 ft and the next 300 ft followed ore of commercial width and grade. The last 150 ft of drift was said to be uncommercial. Ore on the dump shows part of the vein to have a minimum width of 2 ft. A sample taken from ore on the dump assayed 23% lead, 4% zinc, 14 oz silver, and a small amount of gold.

The ground surface at the prospect slopes about 10° to the northwest. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater

in depth as the granite country rock is practically impervious.

The elevation at the mine is about 7,500 ft. Operations can probably be conducted for 8 months of the year.

(3a) The plan of the proposed work is as follows. Two men will work 3 weeks clearing timber, blasting boulders, and filling holes in the roadway to the mine. This road will be temporary and simply sufficient to allow transportation of mine rail, a mine car, and miscellaneous tools to the mine. Only hand tools will be used in this work. The timber cut for the roadway will later be used for mine timber.

The portal of the old adit is reached at a distance of 66 ft by way of a tranch cut in the gently sloping ground surface. This trench is now blocked by earth and large boulders will require blasting. With two men working with hand tools, this work can be done and track can be laid at a rate of 3 ft per day, or 22 days work for two men.

Surface caving ahead of the old portal shows the ground to be caved for a distance of 75 ft, and very likely another 75 ft of caving will be encountered in reopening the old adit. Part of the drift will have to be driven with spiling and heavily timbered, and part of the caved area may be found to require only cleaning out and retimbering. Such work will require the work of two men 3 1/2 days to advance a 5 ft set, so the work of driving through caved ground is estimated to require two men 105 days.

The old adit is to be reopened for a distance of 600 ft to the far end of the reported ore-body. 450 ft of this distance should be found to be standing open. Very likely, 10 days work by two men will make this part of the old adit safe and ready for sampling.

The total cost of this work is estimated to be a maximum of $5,550.00.

(3b) The work can begin on May 1, 1952, and while the work may be interrupted by occasional heavy snowfalls during the first two months, the lost time can be made up by the men. The work is estimated to require 152 working days or a little over 7 months. The work would thus be completed soon after Dec. 1, 1952. The usual weather conditions should allow the work to be carried on until this date.

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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. .....
Metal or Mineral .....
Date Received .....
Amount $.....
Participation (Government %) .....

Nels Broman & Henry Kistle
Philipsburg, Montana

Name and address of applicant

Date 13 October 1951

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

DMA Docket Number (if available) 1930

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(Name of company)	By Nels Brosman (Signature of authorized official)
13 October 1951 (Date)	Owners Henry Kistle (Title)

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

Answers to MF-103. West Exposure lead-silver prospect.

Docket No. 1930

Metal or Mineral. Pb - Zn - Ag

Date Received. _____

Amount. $5,650.00

Participation. 50%

West Exposure lead-silver prospect.
Granite County, Montana.
Nels Broman and Henry Kistle.

Sept. 18, 1951.

MF-100 filed _____

Assistance requested: DMA exploration loan.

DMA Docket No. 1930

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(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

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Not To Be Filled in by Applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Amount $.....
Participation (Government %)
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Nels Broman & Henry Kistle
Philipsburg, Montana

Name and address of applicant

Date 13 October 1951

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DMA Docket Number (if available) 1930

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Metal or Mineral. Pb - Zn - Ag

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Amount. $5,650.00

Participation. 50%

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Granite County, Montana.
Nels Broman and Henry Kistle.

Sept. 18, 1951.

MF-100 filed _____

Assistance requested: DMA exploration loan.

DMA Docket No. 1930

(1a) Property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extention, the Emma, the Lookout, and the Lookout Extension, located along the section line between sections 28 and 33, T-7-N, R-13-W, Granite County, Montana.

(1b) Applicants are owners of the property.

(1c) Proposed exploration is to be conducted within the above mentioned claims, and in the S 1/2 of the S 1/2 of section 28 and the N 1/2 of the N 1/2 of section 33, T-7-N, R-13-W, Granite County, Montana.

(2a) Ore is expected to carry commercial values of lead, silver, and possibly zinc and gold.

(2b) The deposit is a fissure vein in granodiorite. The vein strikes about N 50° W and presumably has a nearly vertical dip. The Philipsburg district has been subjected to successive vein fracturing with a wide variation in the metallizing solutions accompanying the separate periods of fracturing. Thus the veins show a wide variation in mineral content. It appears that the West Exposure vein was subjected to a lead-zinc-silver metallization and later reopened and subjected to a slight manganese metallization. The manganese is not of economic grade.

At present, the underground workings are inaccessible, and knowledge of the vein must be gained from ore on the dump and from verbal statements of men who have been in the workings. An old miner having an honest and reliable reputation, has stated that the adit followed a narrow vein for 300 ft and the next 300 ft followed ore of commercial width and grade. The last 150 ft of drift was said to be uncommercial. Ore on the dump shows part of the vein to have a minimum width of 2 ft. A sample taken from ore on the dump assayed 23% lead, 4% zinc, 14 oz silver, and a small amount of gold.

The ground surface at the prospect slopes about 10° to the northwest. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater

in depth as the granite country rock is practically impervious.

The elevation at the mine is about 7,500 ft. Operations can probably be conducted for 8 months of the year.

(3a) The plan of the proposed work is as follows. Two men will work 3 weeks clearing timber, blasting boulders, and filling holes in the roadway to the mine. This road will be temporary and simply sufficient to allow transportation of mine rail, a mine car, and miscellaneous tools to the mine. Only hand tools will be used in this work. The timber cut for the roadway will later be used for mine timber.

The portal of the old adit is reached at a distance of 66 ft by way of a trench cut in the gently sloping ground surface. This trench is now blocked by earth and large boulders will require blasting. With two men working with hand tools, this work can be done and track can be laid at a rate of 3 ft per day, or 22 days work for two men.

Surface caving ahead of the old portal shows the ground to be caved for a distance of 75 ft, and very likely another 75 ft of caving will be encountered in reopening the old adit. Part of the drift will have to be driven with spiling and heavily timbered, and part of the caved area may be found to require only cleaning out and retimbering. Such work will require the work of two men 3 1/2 days to advance a 5 ft set, so the work of driving through caved ground is estimated to require two men 105 days.

The old adit is to be reopened for a distance of 600 ft to the far end of the reported ore-body. 450 ft of this distance should be found to be standing open. Very likely, 10 days work by two men will make this part of the old adit safe and ready for sampling.

The total cost of this work is estimated to be a maximum of $5,650.00.

(3b) The work can begin on May 1, 1952, and while the work may be interrupted by occasional heavy snowfalls during the first two months, the lost time can be made up by the men. The work is estimated to require 152 working days or a little over 7 months. The work would thus be completed soon after Dec. 1, 1952. The usual weather conditions should allow the work to be carried on until this date.

(4) The required maps are being prepared for the DMA examination engineer's report.

(5) No facilities, buildings, installations, nor fixtures are present on the property.

(6) The following fixture is to be installed:	
1600 ft of 8 lb mine rail.	$400.00
Track spikes, fish plates, and hardware.	50.00
	$450.00
(7a) Operating equipment to be rented:	
Truck rental, 1½ ton. 2 days:	$ 40.00
(7b) Operating equipment to be purchased:	
Small tools	60.00
Hand Steel	15.00
Sharpening charges	50.00
Mine car (½ ton)	125.00
Powder, caps, and fuse.	100.00
	$ 350.00

Answers to MF-103. West Exposure lead-silver prospect.

(7c) Operating equipment furnished by applicants:
The applicants will furnish the use of a 1/2 ton truck and whatever small tools they have in their possession.

(8) The proposed work will require the work of two miners, the applicants intending to carry out this work themselves. The accepted rate of pay is $14.00 per day of 8 hours, and the work will be done on a 40 hour week basis.

Labor, clearing roadway. 2 men 15 days	$ 420.00
Labor, clearing portal cut. 2 men 22 days	616.00
Labor, reopening caved adit. 2 men 105 days	2,940.00
Labor, clearing open drift. 2 men 10 days	280.00
Industrial Accident Insurance.	426.00
Social Security	64.00
	$ 4,746.00

(9) Cost of Assays:

Allowance will be made for about 15 assays to be made, most of which will be run simply for lead and silver, and composites to be run for zinc, gold, and germanium.

Assays:

(10) The applicants are prepared to invest $2,825.00 in the proposed project, which is one-half of the total maximum estimated cost of $5,650.00.

(11) Allconditions and circumstances regarding the property have been sufficiently brought out by the above answers.

FILE COPY
SURNAME:

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

Holderer
Ballard
Broman

a. E. C

AUG 31 1951

Mr. Nels Broman
Philipsburg, Montana

In reply please refer to
DMA-1930 Manganese

Dear Mr. Broman:

Your application for an exploration loan is being referred to Mr. A. E. Weissenborn, Executive Officer, DMA Field Team, Region II, South 157 Howard Street, Spokane, Washington for a field examination.

Please contact Mr. Weissenborn and offer your co-operation.

Very truly yours,

SIGNED

Tom Lyon
Director, Supply Division

TJBallard:ec
August 27, 1951

CC: Adm. Reading File
Reports & Records Unit
Mr. Holderer
Field Team Region II
Coord. Comm.
Files

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

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

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

AUG 31 1951

Dear Sir:

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

Docket No. 1930
Commodity Manganese
Applicant Nels Broman

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

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

8/24/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1930

Field Referral

Commodity Manganese

Total Amount $46,000

75%

Govt. Participation 34,500

1. Name and Address of Applicant Nels Brennan, Philipsburg, Montana

2. Location of Property Flint Creek Mining District, Philipsburg, Montana

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

If not, application will be rejected.

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

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

a) Good

b) Poor

c) None

d) Don't know—needs field examination Determine

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

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Determine

d) Water (question 13)* Yes

e) Power (question 13)* Determine

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Determine

_____

Is a field check needed on this point? Yes

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

_____

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

If not, what part of it is? _____

_____

_____

_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? Fair

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable? Check

f) Should more information be requested from applicant?_____

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? Check

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

a) Is it applicable? Check

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

c) Are rents and charges reasonable?_____

d) Is a field check needed? Yes

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

a) Are there sufficient data? No

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

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

d) Are the proposed wages and salaries reasonable? Check

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? If property merits exploration - determine best method of exploration and assist applicant in completing the contract forms and exhibits

Reviewed by: D. J. Wallace

Date 8/24/51

INT.-DUP. SEC., WASH., D.C. 99009

August 8, 1951

Mr. Nels Broman
Philipsburg
Montana

Subject: DMA-1930
Re: Exploration Loan - Lookout Extension, West Exposure Extension, Emma Mines

My dear Mr. Broman:

Receipt is acknowledged of your application and attachments of August 2, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1930 and referred to Mr. George Holderer, Chief, Ferro Alloys Branch on August 7, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1930.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Reports & Records Unit

REAdams:jc
cc: Holderer
Lyon
Reports & Records File

List of File to Field

DMA-1930 Manganese

1. MF-103
2. one copy letter to Broman 6/10/47
3. 4 pages answers to questions

8/27/51

Mr. Nels Broman
Philipsburg, Montana

In reply please refer to
DMA-1930 Manganese

Dear Mr. Broman:

Your application for an exploration loan is being referred to Mr. A. E. Weissenborn, Executive Officer, DMA Field Team, Region II, South 157 Howard Street, Spokane, Washington for a field examination.

Please contact Mr. Weissenborn and offer your co-operation.

Very truly yours,

Tom Lyon
Director, Supply Division

TJBallard:ec
August 27, 1951

CC: Adm. Reading File
Reports & Records Unit
Mr. Holderer
Field Team Region II
Coord. Comm.
Files

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

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

Dear Sir:

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

Docket No. 1930

Commodity Manganese

Applicant Nels Broman

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

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

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

Mr. A. E. Weissenborn, Executive Officer
DMA Field Team Region II
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Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

8/24/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1930

Field Referral

Commodity Manganese

Total Amount $46,000

75%

Govt. Participation 34,500

1. Name and Address of Applicant Nels Broman, Philipsburg, Montana

2. Location of Property Flint Creek Mining District, Philipsburg, Montana

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

If not, application will be rejected.

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

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

a) Good

b) Poor

c) None

d) Don't know—needs field examination Determine

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

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

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

Does the lease have sufficient time to run to cover a future

productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202 _____

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a) Available manpower Yes

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

c) Accessibility (question 12)* Determine

d) Water (question 13)* Yes

e) Power (question 13)* Determine

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Determine

_____

Is a field check needed on this point? Yes

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

_____

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

If not, what part of it is? _____

_____

_____

_____

Is this part a worthwhile exploration project? _____

d) Are the cost estimates detailed? Fair

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? _____ If so, attach a draft.

e) Are the cost estimates reasonable? Check

f) Should more information be requested from applicant? _____

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? Check

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

a) Is it applicable? Check

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

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d) Is a field check needed? Yes

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

a) Are there sufficient data? No

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

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

d) Are the proposed wages and salaries reasonable? Check

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? If property merits exploration-determine best method of exploration and assist applicant in completing the contract forms and exhibits.

Reviewed by: J. J. Ballard
Geo. R. Holden

Date 8/24/51

INT.-DUP. SEC., WASH., D.C. 99009

8/24/51

List of File to Field

DMA-1930 Manganese

1-MF-103
1- copy letter to Broman 6/10/47
4-pages answers to questions

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George B. Holderer DATE: August 21, 1951

FROM : Max D. Crittenden

SUBJECT: DMA-1930 Nels Broman

The Geological Survey has no information about the manganese deposits described by Mr. Broman. These deposits are located within the granite areas a mile or so east of the well-known manganese mines of the Philipsburg district, and past experience in the camp indicates the prospects for valuable deposits in the granite are considerably less encouraging than in adjoining sediments. It is thought, however, to be worth a field check to determine whether the veins discussed have sufficient promise to be worth additional exploration.

George B. Holderer

August 21, 1951

Max D. Crittenden

DMA-1930 Nels Broman

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MDCrittenden:gt

August 8, 1951

Mr. Nels Broman
Philipsburg
Montana

Subject: DMA-1930
Re: Exploration Loan -
Lookout Extension, West
Exposure Extension, Emma
Mines

My dear Mr. Broman:

Receipt is acknowledged of your application and attachments of August 2, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1930 and referred to Mr. George Holderer, Chief, Ferro Alloys Branch on August 7, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1930.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Reports & Records Unit

REAdams:jc
cc: Holderer
Lyon
✓Reports & Records File

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

So. 157 Howard Street
Spokane 4, Washington

August 2, 1951

DMA 1930

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

Dear Mr. Strobel:

Enclosed are three copies of an application for an exploration contract submitted by Mr. Nels Broman on a manganese property, Granite County, Montana. One copy of the application is being retained in this office in order to expedite the field investigation.

This office has no geologic information on the property in question, but will conduct a field examination as soon as possible.

Very truly yours,

Thor H. Kiilsgaard

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

Enclosures

cc: U.S.B.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1930

Date received 8-6-51

Participation

U. S. Department of Interior
Geological Survey
Sol 157 Howard Street
Spokane, Washington

Nels Broman
Philipsburg, Montana

Name and address of applicant

Date July 30, 1951

FILL IN THIS BLOCK

Date of application July 30, 1951

Estimated cost $46,000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Flint Creek Mining District
Philipsburg, Montana.

Date of filing MF-100 None filed

DMA Docket Number, if available 1930

INSTRUCTIONS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

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

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

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

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

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

CERTIFICATION

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

(Name of company)	By Nels Broman (Signature of authorized official)
July 30, 1951 (Date)	Nels Broman an owner (Title)

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

*Same as footnote on page 1.

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

C O P Y

Butte, Montana, June 10, 1947

Mr. Nels Broman
Philipsburg, Montana

Dear Nels:

I am enclosing a copy of the assayer's report on the samples taken during the recent visit to your mine.

You will note that the No. 112 covers the pile of heavy rock that was up by the shaft that was supposed to be down 80 feet. It runs 4.8 ounces silver and .020 ounces gold.

No. 113 is the sorted ore on the tunnel dump by that little shack. This runs about as stated, being 13.3 ounces silver, .020 ounces gold, 23.4 per cent lead, and 0.7 per cent zinc.

No. 114 covers the black manganese from the tunnel. This runs 0.4 ounces silver, .005 ounces gold, and 34.8 per cent manganese.

ANNEX TO FORM MF-103

Application For Aid For An Exploration Project Pursuant to Mineral Order No. 5, Under Defense Production Act of 1950.

1. Partnership

2. Nels Broman and Henry Kistle, Philipsburg, Montana.

3.

4. Nels Broman: 20 years as a miner; 4 years mine leasing experience; 7 years building contractor.

   Henry Kistle: 35 years as a miner.

5. Yes

6. None

7. None

8. Real Estate and property $4000.00; liability none, other than current monthly living expenses.

9. $12,000.00

10. a. The following mining claims:

    Lookout
    Lookout Extension
    West Exposure
    West Exposure Extension
    Emma

    b. Legal descriptions to above mining claims:

    Lookout Mining Claim Lode: Situated in the Granite Mining District (unorganized). Course of said vein or lode is East and West along which the undersigned claim 1100 feet in a Easternly direction and 400 feet in a westernly direction from the discovery _____, together with surface area 300 feet on the North Side and 300 feet on the South side of the center of said vein, comprising a tract 1500 by 600 feet in size. Beginning at _____, corner No. 1, which is a Squared tree, running thence,
    First Course: Direction _____, distance 1500 feet to _____ corner No. 2, which is a squared tree and running thence,
    Second Course: Direction _____, distance 600 feet, to corner No. 3, which is a squared tree and running thence,
    Third Course: Direction _____, distance 1500 feet, to ____ corner No. 4, which is a squared tree and running thence,
    Fourth Course: Direction _____, distance 600 feet, to corner No. 1, the place of beginning.

    Lookout Extension Lode Mining Claim: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit:
    Squared tree is distant 1500 feet in an Easterly direction; 600 feet is distant 600 feet in a North & South Direction. The course of said vein or lode is East and West along which the undersigned claim 150 feet in a Easternly direction and 0 feet in a Westernly direction from the discovery _____ together with surface area 300 feet on the North sade and 300

feet on the South side of the center of said vein, comprising a tract 600 by 1500 feet in size:
Beginning at _____ Corner No. 1, which is a squared and Rock monument and running thence:
First Course: Direction East, distance 1500 feet, to _____ Corner No. 2, which is a squared and Rock monument and running thence,
Second Course: Direction North, distance 600 feet, to _____ Corner No. 3, which is a squared and Rock Monument and running thence,
Third Course: Direction West, distance 1500 feet, to _____ Corner No. 4, which is a squared tree and Rock monument and running thence,
Fourth Course: Direction South, distance 600 feet, to corner No. 1, the place of beginning.

WEST EXPOSURE LODE MINING CLAIM: Flint Creek Mining District (unorganized). Course of said vein or lode is East and West along which the undersigned claim 750 feet in a Easternly direction and 750 feet in a Westernly direction from discovery 200 feet, together with surface area 400 feet on the _____ side and 600 feet on the _____ side of the center of said vein, comprising a tract 600 by 1500 feet in size.
Beginning at Corner No. 1, which is a squared tree and Rock Monument and running thence,
First Course: Direction East, distance 1500 feet, to corner No. 2, which is a squared tree and running thence,
Second Course: Direction North, distance 600 feet to corner No. 3, which is a squared tree and Rock Monument and running thence,
Third Course: Direction West, distance 1500 feet to corner No. 4, which is a squared tree and Rock Monument and running thence,
Fourth Course: Direction South distance 600 feet, to corner No. 1, the place of beginning.

WEST EXPOSURE EXTENSION NO 2 LODE MINING CLAIM: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit: _____ is distant 1500 feet in an Easternly direction; Rock monument and Blazed tree is distant 0 feet in a westernly direction. The course of said vein or lode is East and west along which the undersigned claim 1500 feet in a Easternly direction and 0 feet in a westernly direction from the discovery _____, together with surface area 300 feet on the North side and 300 feet on the South side of the center of said vein, comprising a tract 1500 ft by 600 feet in size.
Beginning at _____ Corner No. 1, which is a squared tree Rock monument and running thence,
First Course: Direction East, distance 1500 feet, to _____ Corner No. 2, which is a Squared tree Rock monument and running thence,
Second Course: Direction South, distance 600 feet, to _____ Corner No. 3, which is a Squared tree Rock monument and running thence,
Third Course: Direction North, distance 600 feet, to _____ Corner No. 4, which is a Squared tree Rock Monument and running thence,
Fourth Course: Direction West, distance 1500 feet, to Corner No. 1, the place of beginning.

EMMALODE MINING CLAIM: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit_____ is distant 1500 feet in a westernly direction; _____ is distant _____ feet in a _____ direction. The course of said vein or lode is Eastern and western along which the under signed claim 1500 feet in a western direction and 0 feet in a Eastern direction from the discovery _____ together with Surface area 300 feet on the South side and 300 feet on the North side of the center of said vein, comprising a tract 600 by 1500 feet in size.

Beginning at _____ Corner No. 1, which is a Blazed tree and Rock Monument and running thence,

First Course: Direction West, distance 1500 feet to _____ corner No. 2, which is a Blazed tree & Rock Monument and running thence,

Second Course: Direction North, distance 600 feet, to_____ Corner No. 3, which is a squared tree and Rock Monument and running thence,

Third Course: Direction East, distance 1500 feet, to _____ Corner No. 4, which is a Blazed tree and Rock Monument and running thence,

Fourth Course: Direction South, distance 600 feet, to Corner No. 1, the place of beginning.

?

11. None

12. 4½ miles SE of Philipsburg. County road to within 1/2 mile of project. N. P. Railway at Philipsburg, Montana. Road will need 1/2 miles of new construction and some repair on County Road.

13. Plenty of water available from Fred Burr Creek at all seasons. Will need approximately one mile of power line.

14. 700 foot tunnel now on project. No equipment, buildings or structures.

15. Manganese ore can be shipped by truck to Philipsburg and milled either at the Trout mill or Taylor Knapp mill. Lead and zinc can be shipped from Philipsburg by N. P. Railway to Tooele, Utah.

16. (a) Previous exploration consists of one 300 foot tunnel and one 700 foot tunnel opening up manganese, lead, zinc, and silver ore bodies. Property has never had any commercial production but has always been a prospect. ?

1 (b) The property is in the Granite formation, North of Philipsburg, and being less than 1/2 miles North of the old Granite and Bi Metallic mines which produced over twenty-five million dollars in silver. While the Granite and Bi Metallic mines were silver producers, all reports indicate strong veins of manganese in these properties. The vein of applicants is in the Philipsburg Botholith about one mile East of the Contact Mine and about one mile East of the Trout Mine and the Taylor Knapp and Moorlight properties.

(c) None

17. None.

18. None

19. None

20. Manganese.

21. Applicants desire to extend 300 foot tunnel 500 feet East to get under manganese vein showing in 700 foot tunnel on Lookout claim. There is also a strong lead about 3 feet wide in the Lookout. Estimated time of driving tunnel is six months.

22. Applicants rely on the records of production of the Philipsburg district and all present reports concerning the same. The particular property has never been examined by Engineers or Geologists.

23.

(a)	10 miners	$ 15,000.00
(b)	2 Supervisors	4,800.00
(c)		
(d)	2 cabins	500.00
	Compressor } Shops	
	Blacksmith } Shops	500.00
	Dry	500.00
	Framing Shed	100.00
(e)	2 Jackhammers	900.00
	1 Stoper	500.00
	1200 ft. 2" pipe	720.00
	6 ton 12# rail	1,000.00
	2 mine cars	350.00
	1 mucker	2,800.00
	1 compressor	1,500.00
	1 bulldozer	12,000.00
(h)	Forge - Anvil }	
	Blower - Blacksmith Tools }	500.00
	Carpenter tools	100.00
	3 tons Powder	1,300.00
	6000 ft. fuze	73.00
	1000 caps	22.00
	1 doz. shovels	40.00
	1/2 doz. picks	25.00
	steel bars	50.00
	250 bits	250.00
	200 ft. drill steel	200.00
	1000 ft. 1" hose	250.00
	Receiver tank	50.00
	10 lamps	50.00
(i)	1 mile power line	1,500.00
		$ 46,030.00

24. (a) First three months - building road, power line; cleaning and re-timbering 300' tunnel; laying track:- $ 25,000.00

(b) Next six months driving drift at average of 20 feet per week, 5 day week, 2 shifts per day: $ 21,000.00

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1930

Date received 8-6-51

Participation

U. S. Department of Interior
Geological Survey
Sol 157 Howard Street
Spokane, Washington

Nels Broman
Philipsburg, Montana

Name and address of applicant

Date July 30, 1951

FILL IN THIS BLOCK

Date of application July 30, 1951

Estimated cost $46,000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Flint Creek Mining District
Philipsburg, Montana.

Date of filing MF-100 None filed

DMA Docket Number, if available 1930

INSTRUCTIONS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

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

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

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

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

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

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

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

CERTIFICATION

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

(Name of company)	By Nels Broman (Signature of authorized official)
July 30, 1951 (Date)	Nels Broman an owner (Title)

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

*Same as footnote on page 1.

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

C O P Y

Butte, Montana, June 10, 1947

Mr. Nels Broman
Philipsburg, Montana

Dear Nels:

I am enclosing a copy of the assayer's report on the samples taken during the recent visit to your mine.

You will note that the No. 112 covers the pile of heavy rock that was up by the shaft that was supposed to be down 80 feet. It runs 4.8 ounces silver and .020 ounces gold.

No. 113 is the sorted ore on the tunnel dump by that little shack. T is runs about as stated, being 13.3 ounces silver, .020 ounces gold, 23.4 per cent lead, and 0.7 per cent zinc.

No. 114 covers the black manganese from the tunnel. This runs 0.4 ounces silver, .005 ounces gold, and 34.8 per cent manganese.

ANNEX TO FORM MF-103

Application for Aid For Exploration Project Pursuant to Mineral Order No. 5, Under Defense Production Act of 1950.

1. Partnership

2. Nels Broman and Henry Kistle, Philipsburg, Montana.

3.

4. Nels Broman: 20 years as a miner; 4 years mine leasing experience; 7 years building contractor.

   Henry Kistle: 35 years as a miner.

5. Yes

6. None

7. None

8. Real Estate and property $4000.00; liability none, other than current monthly living expenses.

9. $12,000.00

10. (a) the following mining claims:

    Lookout
    Lookout Extension
    West Exposure
    West Exposure Extension
    Emma

    (b) Legal descriptions to above mining claims:

    LOOKOUT MINING CLAIM LODE: Situated in the Granite Mining District (unorganized). Course of said vein or lode is East and West along which the undersigned claim 1100 feet in a Easternly direction and 400 feet in a westernly direction from the discovery _____, together with surface area 300 feet on the North Side and 300 feet on the South side of the center of said vein, comprising a tract 1500 by 600 feet in size. Beginning at _____, corner No. 1, which is a Squared tree, running thence,
    First Course: Direction _____, distance 1500 feet to _____ corner No. 2, which is a squared tree and running thence,
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    Third Course: Direction _____, distance 1500 feet, to __ corner No. 4, which is a squared tree and running thence
    Fourth Course: Direction _____, distance 600 feet, to corner No. 1, the place of beginning.

    LOOKOUT EXTENSION LODE MINING CLAIM: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit:
    Squared tree is distant 1500 feet in an Easternly direction;
    600 feet is distant 600 feet in a North & South Direction.
    The course of said vein or lode is East and West along which the undersigned claim 150 feet in a Easternly direction and 0 feet in a Westernly direction from the discovery _____ together with surface area 300 feet on the North side and 300

feet on the South side of the center of said vein, comprising a tract 600 by 1500 feet in size:
Beginning at _____ Corner No. 1, which is a squared and Rock monument and running thence:
First Course: Direction East, distance 1500 feet to _____ corner No. 2, which is a squared and Rock monument and running thence,
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WEST EXPOSURE LODE MINING CLAIM: Flint Creek Mining District (unorganized). Course of said vein or lode is East and West along which the undersigned claim 750 feet in a Easternly direction and 750 feet in a Westernly direction from discovery 200 feet, together with surface area 400 feet on the _____ side and 600 feet on the _____ side of the center of said vein, comprising a tract 600 by 1500 feet in size.
Beginning at Corner No. 1, which is a squared tree and Rock Monument and running thence,
First Course: Direction East, distance 1500 feet, to corner No. 2, which is a squared tree and running thence,
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Third Course: Direction West, distance 1500 feet to corner No. 4, which is a squared tree and Rock Monument and running thence,
Fourth Course: Direction South distance 600 feet, to corner No. 1, the place of beginning.

WEST EXPOSURE EXTENSION NO 2 LODE MINING CLAIM: Situated in Flint Creek Mining District (unorganized). Measured from the discovery _____ of this claim as a starting point, the following natural objects and permanent monuments are distant as follows, to-wit: _____ is distant 1500 feet in an Easternly direction; Rock monument and Blazed tree is distant 0 feet in a westernly direction. The course of said vein or lode is East and west along which the undersigned claim 1500 feet in a Easternly direction and 0 feet in a westernly direction from the discovery _____, together with surface area 300 feet on the North side and 300 feet on the South side of the center of said vein, comprising a tract 1500 ft by 600 feet in size.
Beginning at _____ Corner No. 1, which is a squared tree Rock monument and running thence,
First Course: Direction East, distance 1500 feet, to _____ Corner No. 2, which is a squared tree and Rock Monument and running thence,
Second Course: Direction South, distance 600 feet, to _____ Corner No. 3, which is a Squared tree Rock Monument and running thence,
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Beginning at _____ Corner No. 1, which is a Blazed tree and Rock Monument and running thence,

First Course: Direction West, distance 1500 feet to _____ corner No. 2, which is a Blazed tree & Rock Monument and running thence,

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Third Course: Direction East, distance 1500 feet, to _____ Corner No. 4, which is a Blazed tree and Rock Monument and running thence,

Fourth Course: Direction South, distance 600 feet, to Corner No. 1, the place of beginning.

11. None

12. 4½ miles SE of Philipsburg. County road to within 1/2 mile of project. N. P. Railway at Philipsburg, Montana. Road will need 1/2 miles of new construction and some repair on County Road.

13. Plenty of water available from Fred Burr Creek at all seasons. Will need approximately one mile of power line.

14. 700 foot tunnel now on project. No equipment, buildings or structures.

15. Manganese ore can be shipped by truck to Philipsburg and milled either at the Trout mill or Taylor Knapp mill. Lead and zinc can be shipped from Philipsburg by N. P. Railway to Tooele, Utah.

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(b) The property is in the Granite formation, North of Philipsburg, and being less than 1/2 miles North of the old Granite and Bi Metallic mines which produced over twenty-five million dollars in silver. While the Granite and Bi Metallic mines were silver producers, all reports indicate strong veins of manganese in these properties. The vein of applicants is in the Philipsburg Botholith about one mile East of the Contact Mine and about one mile East of the Trout Mine and the Taylor Knapp and Moorlight properties.

(c) None

17. None.

18. None

19. None

20. Manganese.

21. Applicants desire to extend 300 foot tunnel 500 feet East to get under manganese vein showing in 700 foot tunnel on Lookout claim. There is also a strong lead about 3 feet wide in the Lookout. Estimated time of driving tunnel is six months.

22. Applicants rely on the records of production of the Philipsburg district and all present reports concerning the same. The particular property has never been examined by Engineers or Geologists.

23.

(a)	10 miners	$ 15,000.00
(b)	2 Supervisors	4,200.00
(c)		
(d)	2 cabins	500.00
	Compressor } Shops	
	Blacksmith } Shops	500.00
	Dry	500.00
	Framing Shed	100.00
(e)	2 Jackhammers	900.00
	1 Stoper	500.00
	1200 ft. 2" pipe	720.00
	6 ton 12' rail	1,000.00
	2 mine cars	350.00
	1 mucker	2,800.00
	1 compressor	1,500.00
	1 bulldozer	12,000.00
(h)	Forge - Anvil)	
	Blower - Blacksmith Tools)	500.00
	Carpenter tools	100.00
	3 tons Powder	1,300.00
	6000 ft. fuze	73.00
	1000 caps	22.00
	1 doz. shovels	40.00
	1/2 doz. picks	25.00
	steel bars	50.00
	250 bits	250.00
	200 ft. drill steel	200.00
	1000 ft. 1" hose	250.00
	Receiver tank	50.00
	10 lamps	50.00
(i)	1 mile power line	1,500.00
		$ 46,030.00

24.

(a)	First three months - building road, power line; cleaning and re-timbering 300' tunnel; laying track:-	$ 25,000.00
(b)	Next six months driving drift at average of 20 feet per week, 5 day week, 2 shifts per day:	$ 21,000.00

JUL 29 1955

Mr. A. R. Weinzweburg, Executive Officer
DMEA Field Team, Region X - Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMA 1930 - Manganese,
Lead and Zinc
Hale Property
Flint Creek Mining District
Granite County, Montana

Dear Mr. Weinzweburg:

Reference is made to the subject docket and your letter of July 15, 1955, informing us that no copies of our reply to Mr. Olson's letter regarding the release of assay results were attached to our letter of July 11.

We are therefore enclosing two copies as requested.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee

Enclosure

WSMartin/fcc
7-27-55
cc to: Docket
Code 400
Adm. Rend. File
Operating Comm.
FT. REG. I - NW DIST.
Mr. DeHuff, USBM
Mr. Kiilsgaard, USGS

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

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

400

RECEIVED
JUL 25 1955

July 15, 1955

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

WSM

Re: Docket No. DMA 1930 (manganese, lead, zinc)
Nala Brosman
Flint Creek Mining District
Granite County, Montana

Dear Mr. Selfridge:

Copies of your reply to Mr. Olson's letter regarding the release of assay results on the captioned property were not enclosed with your letter of July 11 to Mr. Weissenborn. We should appreciate receiving copies at your convenience.

Sincerely yours,

James J. Quinlan
for A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, N.W. Dist.

cc: USBM (2)
Quinlan

400

JUL 11 1955

Mr. Ray B. Gibson
Consulting Geologist
120 North Wilson
Casper, Wyoming

Re: Docket No. DM 1930 - Manganese,
Lead and Zinc
Mike Brennan
Flint Creek Mining District
Granite County, Montana

Dear Mr. Gibson:

This will acknowledge your letter of June 28, 1955, requesting information on the subject property.

The owner, Mr. Brennan, should apply either personally or by letter to Mr. A. E. Weissenborn, Executive Officer, Region I - Northwest District, South 157 Howard Street, Spokane 4, Washington, in order to obtain the survey results you desire. Our engineer's report is, however, considered confidential and is not available for use by anyone outside the Government.

Sincerely yours,

C. O. Mittendorf

Administrator

TLChapman:fcc
7-7-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. I - NW DIST.
Messrs. Killsgaard, USGS
DeHuff, USBM

400

JUL 1955

Mr. A. R. Weinzweberm, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 1, Washington

Re: Docket No. DMA 1930 - Manganese,
Lead and Zinc
Nels Bremsen
Flint Creek Mining District
Granite County, Montana

Dear Mr. Weinzweberm:

Enclosed are copies of letter of June 28, 1955, from Mr. Ray B. Olson, Consulting Geologist, 130 North Wilson, Casper, Wyoming, requesting information concerning the subject property, and of our reply thereto.

As you will note, we are advising Mr. Olson that Mr. Bremsen should apply to you either personally or by letter for the assay results, but our engineer's report is not available for use outside the Government.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

TLCHAPMAN:fcc 7-7-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. I - NW DIST.
Messrs. Kiilsgaard, USGS
DeRuff, USBM

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

COPY

PHILIPSBURG, MONTANA

June 28, 1955

U. S. Dept. of Interior
Defense Minerals Adm.
Wash. 25, D. C.

Attn: Director

Dear Sir:

We desire some information which we believe you may have regarding the claims of Mr. N. G. Broman, located in Granite County, Montana. Mr. Broman applied to the DMEA for an exploration loan in August of 1951, his application was assigned Docket Number DMA-1930 and referred to Mr. Geo. Holderer, Chief, Ferro-Alloys Branch, on Aug. 7, 1951. The application was subsequently referred to Mr. Weissenborn, Executive Officer, DMA Field Team, Region II, Spokane, Wash. for examination. A field examination was made and a map made and samples were taken of the ore. Mr. Broman has a preliminary map made by the Geologist who examined the property. The map is incomplete and lacks information on the assays of samples taken.

We would appreciate very much your sending Mr. Broman a copy of the map constructed and results of the assays.

Mr. Broman's address is:

Nels G. Broman,
Box 134
Philipsburg, Mont.

Mr. Broman, owner of the claims, will in turn forward this information to me for my consideration, which will assist in evaluating his property. It would appear from a preliminary examination, that his property has merit.

Ray B. Olson
Consulting Geologist
110 N. Wilson
Casper, Wyoming

JAN 28 1952

Mr. Nels Broman
Philipsburg
Montana

Re: Docket CHA 1930X - Manganese
Flint Creek Mining District
Philipsburg, Montana

Dear Mr. Broman:

We have reviewed your application for an exploration project and other related data available to us in Washington.

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

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

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

FEJohnson/GCGentry/ls/bih
1/25/52
cc to: Admr's. Reading File
Docket
Field Team, Region II
Messrs. Selfridge
Gentry
N.B.Melcher, USBM
MDCrittenden, USGS

January 24, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

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

Subject: Denial of exploration project in the amount of $5,650.00 1930
Docket No. DMA 1930 - Lead - Zinc - Silver - Manganese
Five unpatented lead claims: West Exposure
Emma
West Exposure Extension
Lookout
Lookout Extension
Granite County, Montana

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

1. The U. S. Bureau of Mines' report on sampling, dated November 23, 1951, states: "There is no indication that ore of commercial grade and tonnage can be developed."

2. On November 29, 1951, the Field Team reports as follows: "The West Exposure vein structure, however, is characteristic of the numerous veins in granodiorite fringing the productive zone. These veins explored extensively by earlier operations have been found devoid of minable or base metal ore bodies."

3. The underground workings are inaccessible and the applicant's hopes are apparently based upon information originating from one of the old miners in the district.

G. G. Selfridge

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

GGGentry:ls
1-24-52

Copy to: Admn. Reading File
Docket
G. G. Selfridge
G. G. Gentry

January 15, 1952

Memorandum

To: D. E. Moulds, Base Metals Branch, DMEA

From: O. M. Bishop, Base Metals Branch, USBM

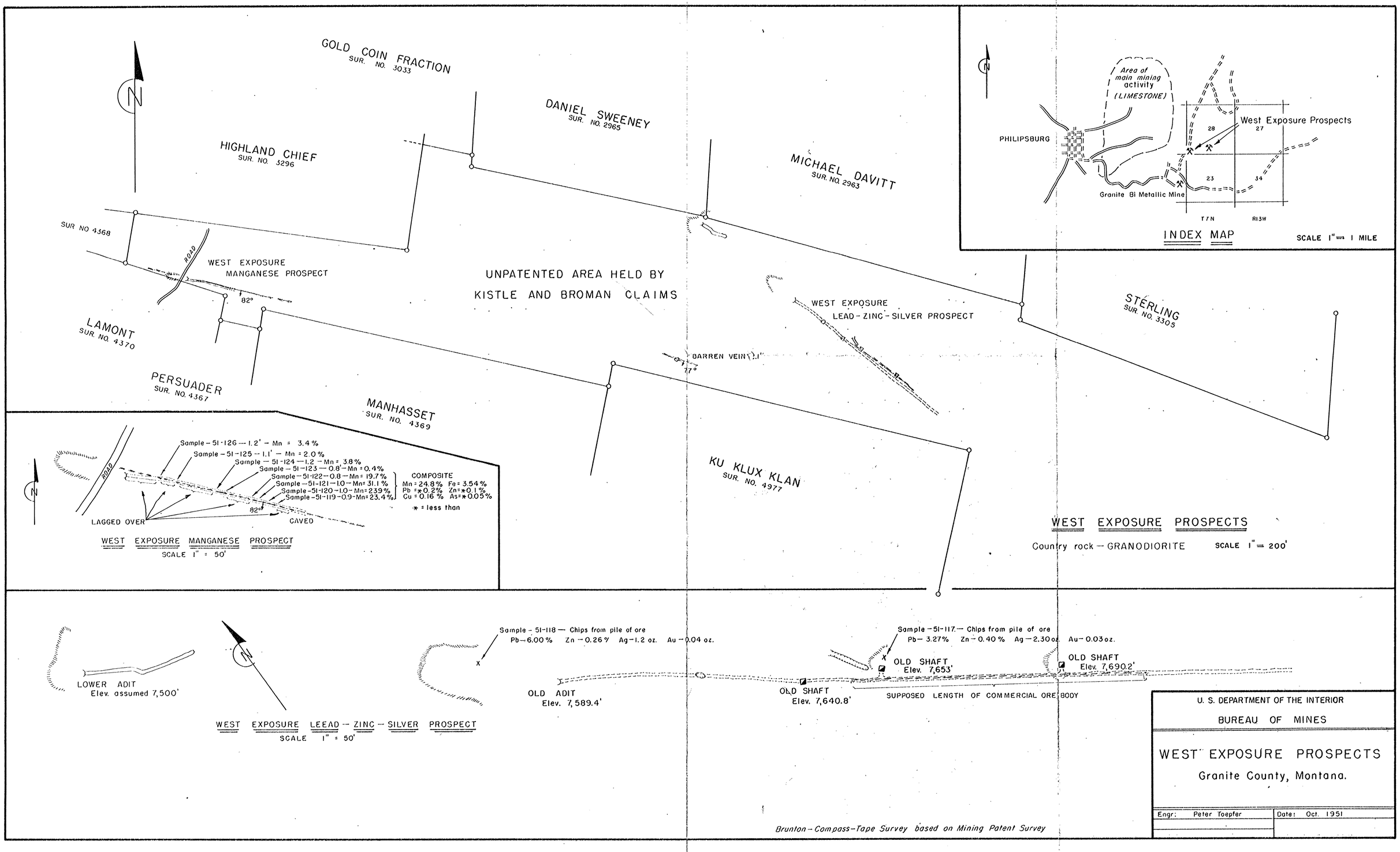
Subject: Exploration proposal DMEA Docket No. 1930 (West Exposure Prospect, Granite County, Montana.)

The application deals with a request for assistance in reopening an adit level and sampling a fissure vein that occurs on the applicant's property. Fissure strikes N 50° W and is approximately vertical. It has been explored by two adits, one 750 feet long at an elevation of 7,589 feet, and another lower adit 115 feet long at an elevation of 7,500 feet. The field team report makes no mention of finding mineralization in the dump from the lower adit, and is quite pointed in noting that the dump from the 750-foot adit "appears to be composed almost entirely of barren granit." The applicants have never seen the vein matter in the adit, their information being based on the statement of an old miner. On the basis of this information they believe the vein was of commercial grade at 300 to 600 feet in from the portal. At present the adit is caved, and the three shafts sunk on the strike of the vein at 250, 330 and 515 feet respectively from the portal are unusable. The applicant proposes to reopen the 750-foot adit by spiling through whatever caved ground there is, timbering and repairing existing timber so as to give access from the portal to a point 600 feet in.

In summation it can be said that the field team report recommends denial on the grounds that there have never been any ore shipments, and there is no evidence on the dumps that mineralization was at any time of commercial or near-commercial nature. A few chunks of oxidized lead-zinc ore, obviously hand sorted, are piled up at the portal of the 750-foot adit and at the collar of the old shaft 330 feet southeast of the portal. They are insignificant in volume with the tonnage that should have come from the 300 to 600-foot section of the adit which was reported as commercial ore.

The applicant has not presented, nor did the field team find any evidence that would indicate a liklihood of discovery if the proposed work were undertaken.

O. M. Bishop


GOLD COIN FRACTION
SUR. NO. 3033
DANIEL SWEENEY
SUR. NO. 2965
HIGHLAND CHIEF
SUR. NO. 3296
MICHAEL DAVITT
SUR. NO. 2963
SUR NO 4368
ROAD
WEST EXPOSURE
MANGANESE PROSPECT
82°
UNPATENTED AREA HELD BY
KISTLE AND BROMAN CLAIMS
WEST EXPOSURE
LEAD-ZINC-SILVER PROSPECT
STERLING
SUR. NO. 3305
LAMONT
SUR. NO. 4370
BARREN VEIN 1.1'
77°
PERSUADER
SUR. NO. 4367
MANHASSET
SUR. NO. 4369
KU KLUX KLAN
SUR. NO. 4977
Area of main mining activity (LIMESTONE)
PHILIPSBURG
West Exposure Prospects
28
27
23
34
Granite Bi Metallic Mine
T7N
R13W
INDEX MAP
SCALE 1" = 1 MILE
Sample - 51-126 — 1.2' - Mn = 3.4%
Sample - 51-125 - 1.1' - Mn = 2.0%
Sample - 51-124 — 1.2 - Mn = 3.8%
Sample - 51-123 — 0.8' - Mn = 0.4%
Sample - 51-122 - 0.8 - Mn = 19.7%
Sample - 51-121 - 1.0 - Mn = 31.1%
Sample - 51-120 - 1.0 - Mn = 23.9%
Sample - 51-119 - 0.9 - Mn = 23.4%
COMPOSITE
Mn = 24.8% Fe = 3.54%
Pb = *0.2% Zn = *0.1%
Cu = 0.16% As = *0.05%
* = less than
ROAD
82°
LAGGED OVER
CAVED
WEST EXPOSURE MANGANESE PROSPECT
SCALE 1" = 50'
WEST EXPOSURE PROSPECTS
Country rock — GRANODIORITE
SCALE 1" = 200'
LOWER ADIT
Elev. assumed 7,500'
WEST EXPOSURE LEEAD - ZINC - SILVER PROSPECT
SCALE 1" = 50'
Sample - 51-118 — Chips from pile of ore
Pb - 6.00% Zn - 0.26% Ag - 1.2 oz. Au - 0.04 oz.
OLD ADIT
Elev. 7,589.4'
Sample - 51-117 — Chips from pile of ore
Pb - 3.27% Zn - 0.40% Ag - 2.30 oz. Au - 0.03 oz.
OLD SHAFT
Elev. 7,653'
OLD SHAFT
Elev. 7,640.8'
OLD SHAFT
Elev. 7,690.2'
SUPPOSED LENGTH OF COMMERCIAL ORE BODY
Brunton - Compass - Tape Survey based on Mining Patent Survey
U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WEST EXPOSURE PROSPECTS
Granite County, Montana.
Engr: Peter Toepfer
Date: Oct. 1951

4828

UNITED STATES
DEPARTMENT OF INTERIOR
OSCAR L. CHAPMAN-SECRETARY

DEFENSE MINERALS ADMINISTRATION

Report by Examination Team
Region II

DMA No. 1930 West Exposure Prospect

Granite County, Mont.

Peter H. Toepfer
U. S. Bureau of Mines

November 23, 1951

WEST EXPOSURE PROSPECT
Granite County, Mont.

DMA Docket No. 1930

By Peter H. Toepfer

RECOMMENDATIONS

This property is not recommended for favorable action as there appears little evidence that ore of commercial grade and width can be discovered through the proposed program.

APPLICANTS

The applicants are Nels Broman and Henry Kistle of Philipsburg, Montana. These men are equal partners in the venture and will do the proposed work.

LOCATION

The property consists of five unpatented lode mining claims, the West Exposure, the West Exposure Extension, the Emma, the Lookout, and the Lookout Extension, located along the line dividing sections 28 and 33, T. 7 N. R. 13 W, Granite County, Montana. The claims are in the Philipsburg Mining District and within the boundary of the Deer Lodge National Forest.

OWNERSHIP

The property is held by location by the applicants.

HISTORY AND PAST PRODUCTION

The West Exposure prospect first was opened about 1904. Work was done intermittently until 1939 by a prospector known as Skookum Jim. There are no records of production during this period, and as no road was built to the deposit and no provision was made for separate piling of ore, there is no evidence that ore was shipped.

Since relocation by the applicants in 1940 work has been confined to reopening an old adit along a narrow manganese vein in another part of the property and in reopening a lower adit below the lead-zinc-silver prospect.

The original application proposed driving the lower adit to undercut the supposed ore-body in the caved adit. However, this would require about 980 feet of drifting and would only develop 87 feet of backs. The original application, based on the ore's manganese content, requested 75% participation of costs by the government. The manganese content, however, is insignificant.

The revised application proposes the reopening of the old caved adit for a distance of 600 feet. The interval from 300 feet to 600 feet from the portal is claimed to have been driven on commercial ore. A roadway is to be built to the portal, the cut leading to the portal is to be cleaned out, an estimated 150 feet of caved ground is to

be retimbered and cleaned out, and the remainder of the drift is to be made safe. All work will be with hand tools. The vein then will be sampled.

GEOLOGIC SETTING

The deposit is a replacement and fissure filling in grandiorite striking about N. 50°W. and dipping vertically.

The underground workings currently are inaccessible Knowledge of the vein is limited to an evaluation of ore on the dump, together with statements of men acquainted with the workings. The applicants have based their opinion upon the statement of an old miner acquainted with the area. According to this source, the adit followed a barren vein for 300 feet from the portal and then followed ore of commercial grade and width for the next 300 feet. The last 150 feet of the old adit is said to be on uncommercial ore. However, if commercial ore actually was discovered, it presumably would have been stoped. Furthermore, if 300 feet of the adit was driven on ore, the adit dump should show abundant evidence of ore minerals. This dump appears to be composed almost entirely of barren granite. When this apparent discrepency was pointed out, the applicants offered the opinion that the ore was narrow in the back but wide on the floor of the drift.

Chunks of oxidized ore dumped at the collar of the caved shaft indicate the vein attained at least a 2-foot width somewhere in the old adit. Sample #51-117, chipped from these

chunks, assayed lead 3.274, zinc 0.40 percent, silver 2.303 ounces, gold 0.03 ounces. A small pile of coarse ore dumped near the portal of the caved adit was sampled and assayed with the following results: lead 6.00 percent, zinc 0.26 percent, silver 1.2 ounces, gold 0.04 ounces. These samples are from oxidized ore. Somewhat higher values may be expected in the sulfide zone.

The smelter value shown by the sampling would be $13.25 and $6.58 per ton. Inasmuch as the ore would have to stand a hauling charge of $2.00, a freight charge of $6.00, and a smelter charge of $8.00 per ton in addition to the mining costs, it is apparent that the ore would have to have a value of at least $25.00 per ton to return an operating profit. There is no indication that ore of commercial grade and tonnage can be developed.

DESCRIPTION OF MINE WORKINGS

The elevation at the mine is about 7,600 feet. Mine timber is abundant. Operations can probably be conducted for 8 months of the year.

The ground surface at the prospect slopes about 10° to the northwest, conforming to the strike of the vein. The outcrop is occupied by a small stream and surface water penetrates the old adit. The water problem is not expected to become greater in depth as the granite country rock is practically impervious.

The prospect originally was developed by an adit which drifted on the vein for a distance of 750 feet. A shaft said to be 85 feet deep reached this adit from the surface. These workings are now inaccessible. About 500 feet to the northwest and at 87 feet greater depth, a new adit was started and driven about 115 feet.

RESERVES, GRADE AND CLASSIFICATION

An ore reserve estimate cannot be made until the proposed work has been completed.

MINING METHODS AND COSTS

Very likely, the mining method used will be cut-and-fill stoping. This will allow separate blasting of ore, with wall rock waste and sorted waste being used for fill. Stulled stoping may be possible if the ore has sufficient width and the wall rock is firm.

No estimate of the cost can be made at present.

MILLING METHODS AND COSTS

No milling is contemplated. Ore will be shipped direct to the smelter.

RATE OF PRODUCTION

Production rate cannot be estimated on the basis of available information.

TIME SCHEDULE TO ATTAIN OBJECTIVES

The proposed exploration would begin on May 1, 1952 and probably could be completed in December, 1952.

Should commercial ore be found in opening the old adit, work would begin on May 1, 1953, opening and retimbering the old shaft, stoping any ore above the adit level, and sinking the shaft to develop the ore at greater depth. Due to the 10° slope of the area, mining would have to be done drom vertical shafts.

MARKETING FACILITIES

If the proposed exploration is successfully completed, 4 miles of forest service road must be repaired and 1 mile of access road must be built over relatively level ground. The property is 8 miles by road from the railhead at Philipsburg, Mont. Maximum grades over this road seldom exceed 10 percent.

From Philipsburg, the ore presumably would be shipped via the Northern Pacific railroad to either the East Helena, Mont., smelter or to the Tooele, Utah, smelter.

EQUIPMENT AND FACILITIES

Installed

The property is completely unequipped.

Required

The equipment required will consist mainly of mine rail, a mine car, and small tools weighing about 3 tons and costing about $750.00. Used material will be purchased.

LABOR SUPPLY

Availability

Two miners will be required to accomplish the proposed exploration project. The applicants intend to do the work without additional labor.

Should the prospect attain production following an exploration project probably four men would be required, two as miners, one as an outside man for timber framing, and one for trucking and general work.

Current Wage Scale

The current local wage scale for miners is $14.00 per day. Union affiliation would be of no consequence in the small operation planned.

POWER, TYPE AND AVAILABILITY

As all work connected with the proposed project will be done with hand tools power equipment will not be required. A high tension electric power line is 1-1/2 miles distant from the prospect.

ADEQUACY OF REQUESTED FUNDS

The funds requested are considered adequate to complete the project. The cost of services and of materials purchased and rented is as follows:

1,600 ft. of 8 lb. mine rail	$400.00
Track spikes, fish plates, and hardware	50.00
Truck rental, 1-1/2 ton, 2 days	40.00
Small tools	60.00
Hand steel	15.00
Sharpening charges	50.00
Mine car, 1/2 ton	125.00
Powder, caps and fuse	100.00
Assays	64.00
	$904.00

The project will require the services of two men. Clearing of a one mile temporary roadway through the thin forest growth will consume about 30 man-shifts. Clearing out ground and blasting boulders choking the 66-foot cut leading to the old portal will require an additional 44 man-shifts.

It is estimated that 150 feet of drift has caved in the old adit, at least half of which will have to be reopened by driving, and spiling. The remainder probably will require timbering.

The old adit is to be reopened for a distance of 600 feet, and the remaining 450 feet will probably require barring down, some cleaning, and some retimbering. Ten days is estimated for this purpose and the subsequent sampling of the vein.

The labor costs are listed as follows:

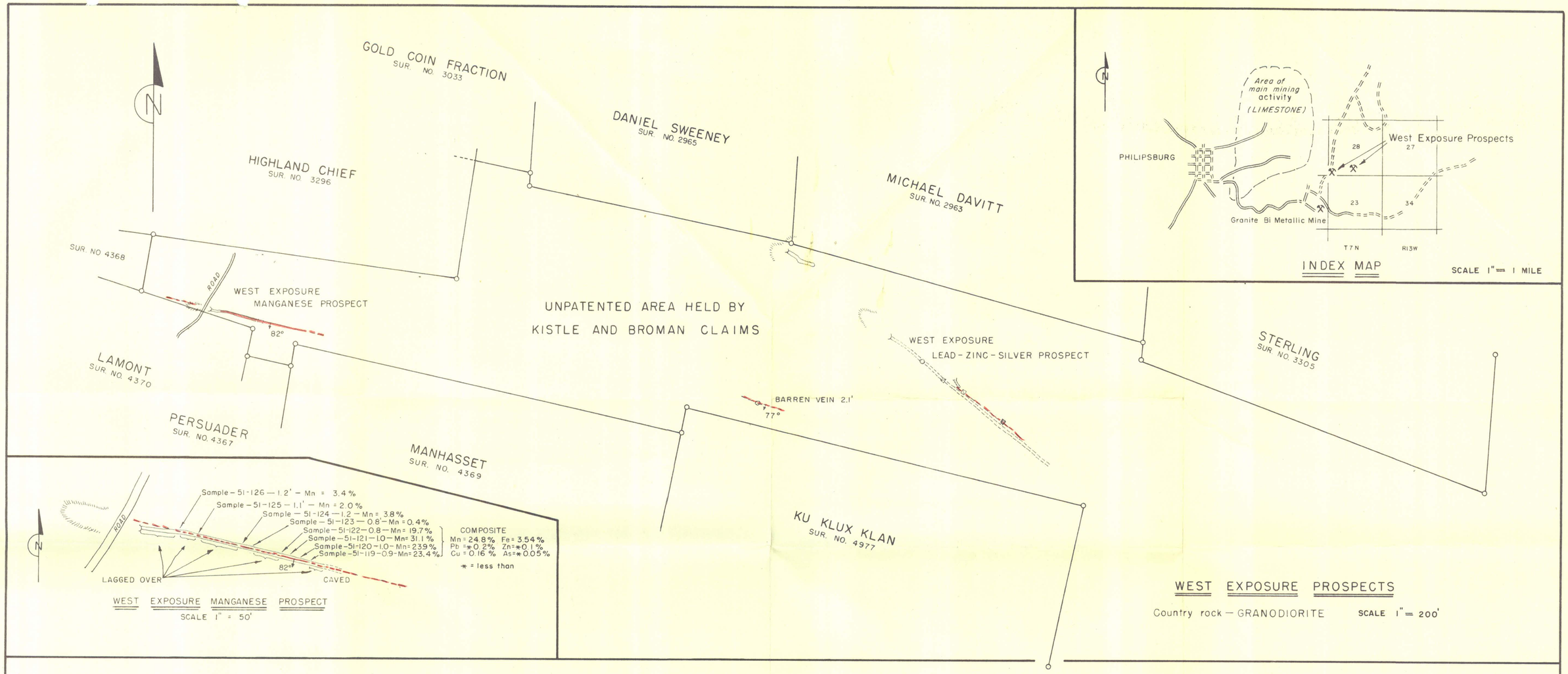
Labor, clearing roadway, 2 men 15 days	$ 420.00
Labor, clearing portal cut, 2 men 22 days	616.00
Labor, reopening caved adit, 2 men 105 days	2,940.00
Labor, clearing open drift, 2 men 10 days	280.00
Industrial Accident Insurance	426.00
Social Security	64.00
	$4,746.00

COMPETENCE OF APPLICANTS

Both applicants are experienced miners about 60 years old. According to local advice, however, neither men are considered reliable workers. Although it considered that they are capable of doing the proposed work, fiscal difficulties are anticipated.

DISCUSSION OF THE PROPOSAL

The present proposal has been revised downward from the $46,000 exploration project originally requested. The evidence of economic ore of $25.00 grade is slight. Furthermore, evidence that a commercial tonnage of ore can be developed is lacking.



Brunton-Compass-Tape Survey based on Mining Patent Survey

U. S. DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

WEST EXPOSURE PROSPECTS

Granite County, Montana.

Engr: Peter Toepfer	Date: Oct. 1951