DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-19	Chapman	400
8-19	Martin	400
8/21	[illegible]	130
"	Johnson	110
		~~100~~
8-22	C	220
		400

AUG 21 1957

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

Re: Docket No. DMEA 3692 - Manganese
Riverside Mining Company
Big Timber mine
Jefferson County, Montana

Dear Mr. Weissenborn:

By letter of August 12, 1957, you enclosed copies of a letter to your office from Mr. S. H. Boeddeker dated August 7, 1957, requesting reconsideration of the subject application, and your reply of August 12, 1957, forwarding the request for our action.

Attached for your review are the original and three copies of a proposed letter to Mr. Boeddeker. If our suggestion meets with your approval, please forward our letter and enclosures to him. If representatives of the Field Team are in the vicinity, you might find it more convenient to have them visit the property without further word from us.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (HB)

APPROVED:

P. F. Yopes (HB)
Member, Bureau of Mines

W. P. Williams (HB)
Member, Geological Survey

TLCHAPMAN:foc 8-19-57
cc to: Docket
Code 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. DeHuff, USBM
Kiilsgaard, USGS

Enclosures

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-19	Chapman	400
8-19	Martin	400
8/21	Williams	130
		~~110~~
		~~100~~
		220
		400
	~~Williams~~	
8/21	Selfridge	130
8/21	Yokel	130

AUG 21 1957

Mr. S. H. Boeddeker
Hillsboro, North Dakota

Re: Docket No. DMEA 3692 - Manganese
Riverside Mining Company
Big Timber mine
Jefferson County, Montana

Dear Mr. Boeddeker:

Your letter of August 7, 1957, requesting reconsideration of our denial of the subject application, has been forwarded to us from Spokane, Washington.

We note that you have purchased the property from the Riverside Mining Company and have driven a tunnel and sunk a winze on the upper vein showing manganese, copper, silver and scheelite. Consequently, reconsidering the former application would not be appropriate. Instead, we would prefer to treat your request as a new application. It should, however, include a map showing the work you have done and its relationship to the prior work on the property, and assay returns from any samples you have taken.

Enclosed are five application blanks, Form MF-103, for you to fill out. Please return three to us and send one directly to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I, South 157 Howard Street, Spokane 4, Washington, who will advise you if a field examination is planned. Also enclosed are current copies of DMEA Order-1, Amended, and a "Question and Answer" booklet in which certain sections of the Order are explained more fully.

If an examination is made, any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

Frank E. Johnson
ACTING Administrator

TLCHAPMAN:foc
8-19-57
cc to: Code 400
Admr. R. File
Oper. Comm.

Enclosures
FT. REG. I
Messrs. DeHuff, USBM
Kiilsgaard, USGS

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 15 1957

DATE	INITIALS	CODE
8/15	G	220
		400

August 12, 1957

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

Re: Docket No. DMEA-3692 (Manganese)
Riverside Mining Company
Big Timber Mine
Jefferson County, Montana

Dear Mr. Selfridge:

Enclosed are three copies each of a letter dated August 7, 1957, from Mr. S. H. Boeddeker requesting reconsideration of an application for DMEA aid to explore for manganese, and our reply.

The original application, Docket No. DMEA-3692, was submitted by Riverside Mining Company February 12, 1955, and was denied July 14, 1955. According to the enclosed letter, Riverside Mining Company has since sold the property to Hank Talmo and S. H. Boeddeker, the present applicants.

No evidence of how much new work has been done since the last DMEA examination, or where it was done, and no assays, proposed exploration, or estimated cost, accompany Mr. Boeddeker's letter.

By Field Team, Region I

A. E. Weissenborn By [illegible]
A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
Geologist

8-15-57
I have ~~[illegible]~~ the file on 3692
[illegible]

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 15 1957

DATE	INITIALS	CODE

So. 157 Howard Street
Spokane 4, Washington

August 12, 1957

Mr. S. H. Boeddeker
Hillsboro, North Dakota

Re: Docket No. ~~DMEA~~ 3692 (Manganese)
Riverside Mining Company
Big Timber Mine
Jefferson County, Montana

Dear Mr. Boeddeker:

This will acknowledge receipt of your letter of August 7, 1957, requesting that a former DMEA application, made by Riverside Mining Company, be reconsidered.

We have forwarded your letter to our Washington, D. C. office from whom you should hear shortly.

By Field Team, Region 1

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

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USBM (2)
Geologist

Mac
of
USM
DMEA

United States Department of the Treasury
Office of Financial Evaluation and Institution
[illegible] South Howard Street
Baltimore 1, Washington

Dear Sir,

[illegible]

COPY
DMEA
RECEIVED
DA

[illegible] Doddeker
Williams, M.D.

400

DOCKET
Surname:
Chapman
Martin
DeHuff
Nelson
Keihan
Kiilsgaard
Selfridge
Fitzsimmons

JUL 14 1955

Riverside Mining Company
c/o C. E. Pew
314 Fuller Avenue
Helena, Montana

Re: Docket No. DMEA 3692, Manganese
Big Timber mine
(Helena-Jefferson mine)
Jefferson County, Montana

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington relating to the above-noted property have been carefully reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position of the National Defense Program.

Careful study of all our information, although noting the scattered occurrence of manganese-lead-zinc mineralization in narrow veins, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, therefore, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Adm. Read. File
Code 400
Oper. Comm.
T. Kiilsgaard, USGS
G. DeHuff, USBM
FT, Reg. I-Spokane

TLChapman/ls
7/12/55

Docket

IN REPLY REFER TO:

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

July 14, 1955

Re: DMEA 3692
Riverside Mining Co.
Big Timber Mine
Jefferson Co., Mont.
$27,500 - Manganese,
uranium, tungsten

Copy retained 400

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The report of the examining geologist checks reasonably well the information contained in U.S.G.S. Bulletin No. 842 as quoted in the application. The apparent sparseness of the manganese mineralization and utter lack of shows of uranium and tungsten minerals justify the conclusions of the Field Team.

I concur with the denial recommendation.

N. E. Nelson

N. E. Nelson

This denial written 7/13 & mailed out 7-14-55

RECEIVED
JUL 1 1955

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

July 13, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance to the amount of $27,200.00
Docket No. DMEA 3692, Manganese
Riverside Mining Company
Big Timber mine (Helena-Jefferson mine)
Jefferson County, Montana

Denial of the subject application is recommended by this Division and is based on the following information:

1. The applicant, Riverside Mining Company, c/o C. E. Pew, 314 Fuller Avenue, Helena, Montana, requested exploration assistance to the amount of $27,200.00 for 120 hours of bulldozer trenching, 500 feet of drifting, and 100 feet of sinking.

2. The applicant is the owner of seven unpatented lode mining claims known as the Big Timber and Big Timber No. 2 to No. 7 inclusive, located in Sections 12 and 13, T. 7 N., R. 4 W., Jefferson County, Montana.

3. A number of veins occur in the steeply dipping shear zones that cut the quartz monzonite of the Boulder batholith. In parts of the district the veins show some lenticular ore bodies including galena, sphalerite, chalcopyrite, pyrite, arsenopyrite, and tetrahedrite in a quartz gangue, with the carbonates of iron, calcium and manganese. The veins where cut in this property show only a small amount of iron and manganese oxides.

4. There has been no production from this property and there are no ore reserves.

5. With so little evidence of a worthwhile target on the property, the Field Team recommends that the application be denied. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the recommendation.

W S Martin
W. S. Martin, Chief
Iron and Ferro-Alloys Division

DOCKET
Surname:
Chapman
Martin
Bert
Nelson

July 13, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance to the amount of $27,200.00
Docket No. DMEA 3692, Manganese
Riverside Mining Company
Big Timber mine (Helena-Jefferson mine)
Jefferson County, Montana

Denial of the subject application is recommended by this Division and is based on the following information:

1. The applicant, Riverside Mining Company, c/o C. E. Pew, 314 Fuller Avenue, Helena, Montana, requested exploration assistance to the amount of $27,200.00 for 120 hours of bulldozer trenching, 500 feet of drifting, and 100 feet of sinking.

2. The applicant is the owner of seven unpatented lode mining claims known as the Big Timber and Big Timber No. 2 to No. 7 inclusive, located in Sections 12 and 13, T. 7 N., R. 4 W., Jefferson County, Montana.

3. A number of veins occur in the steeply dipping shear zones that cut the quartz monzonite of the Boulder batholith. In parts of the district the veins show some lentieular ore bodies including galena, sphalerite, chalcopyrite, pyrite, arsenopyrite, and tetrahedrite in a quartz gangue, with the carbonates of iron, calcium and manganese. The veins where cut in this property show only a small amount of iron and manganese oxides.

4. There has been no production from this property and there are no ore reserves.

5. With so little evidence of a worthwhile target on the property, the Field Team recommends that the application be denied. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the recommendation.

cc: Docket
Adm. Read. File
Code 400
Oper. Committee
TLChapman/ls

W. S. Martin, Chief
Iron and Ferro-Alloys Division

Docket

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

RECEIVED
JUL - 6 1955

June 30, 1955

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

Re: Docket No. DMEA-3692 (manganese)
Riverside Mining Company
Big Timber Mine
Jefferson County, Montana

Dear Mr. Selfridge:

Enclosed are four copies of a memorandum by Darrell M. Pinckney, Geological Survey, on the cited application. This property was inspected by Mr. Pinckney and J. J. Quinlan also of the Survey on June 2, 1955.

The Field Team concurs with the recommendation in the memorandum that the application be denied, as there is too little evidence of a worthwhile target on the property to justify Government participation in the proposed exploration.

By Field Team, Region I, NW District

Wing G. Agnew
Wing G. Agnew, Acting Exec. Officer
(U. S. Bureau of Mines)

Verne C. Fryklund Jr.
Verne C. Fryklund, Jr., Member
(U. S. Geological Survey)

Enclosures
cc: DMEA(Orig.&3)
USBM(2)
Pinckney
Quinlan

Reviewed by
DMEA OPERATING COMMITTEE
7-10-55
(date)

Dmea

UNITED STATES
Department of the Interior
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
JUL - 6 1955

June 11, 1955

Memorandum

To: DMEA Field Team, Region I, Northwest District

From: Darrell M. Pinckney, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-3692 (manganese), Examination Report, Riverside Mining Company, Big Timber mine, Jefferson County, Montana

The Big Timber property was inspected by J. J. Quinlan and Darrell M. Pinckney of the Geological Survey accompanied by Mr. W. M. Jeffers of the Riverside Mining Company on June 2, 1955. Exposed parts of the Helena vein, Manganese vein, New York vein, and other smaller veins on the Big Timber and Big Timber No. 5 claims were examined.

Recommendations

The author recommends that the Riverside Mining Company's application for exploration assistance in exploring the Big Timber property be denied.

Location and accessibility

The property is near the eastern edge of the Wickes mining district about 2 miles southwest of Jefferson City, Montana, and U. S. Hiway 91 crosses the eastern part of the property. It is on the southeast side of the steep northeast trending ridge between Beavertown and Spring Creeks.

The property

The property consists of seven unpatented mining claims in secs. 12 and 13, T. 7 N., R. 4 W., in Jefferson County, Montana. A map submitted by the applicant shows 11 northeast trending veins within the claim boundaries.

Reviewed by
DMEA OPERATING COMMITTEE
7-10-55
(date)

Mine workings

Mine workings consist of: (1) a crosscut 350 feet long which intersects the Helena vein and two unnamed veins; (2) a caved inclined shaft from the surface on the Helena vein to below the level of the crosscut, and workings of unknown extent from this shaft; (3) a drift extending 40 feet along the New York vein.

Proposed project

The applicant proposes to explore the New York vein by 500 feet of drifting, 100 feet of sinking on the vein, and about 120 hours of bulldozer work to cut trenches across the southwestern extension of the vein.

Geology

Veins in the Wickes mining district are located in steeply dipping shear zones that cut the quartz monzonite of the Boulder batholith or a roof pendant of prebatholithic late Cretaceous volcanic rocks. The shear zones in the central and western part of the district trend eastward, whereas those in the eastern and northeastern part of the district trend northeast. Most of the ore of the district has been produced from veins occupying east-trending shear zones. The veins are mostly of quartz, but along them valuable lens-shaped ore bodies have been found. The ore bodies contain galena, sphalerite, chalcopyrite, pyrite, arsenopyrite, and tetrahedrite in a gangue of quartz, and the carbonates of iron, calcium, and manganese. The relative amounts of the different ore and gangue minerals vary in different places within the district.

Many small inactive mines and prospects are located in northeast-trending veins to the southwest of the applicant's property along the ridge between Beavertown and Spring Creeks. The dominant mineralogy of these veins is pyrite with minor amounts of chalcopyrite and molybdenite in a quartz gangue. Probably only small amounts of ore have ever been produced from any of these veins. No manganese or tungsten has ever been produced from the Wickes district. Uranium produced nearby is from veins having an entirely different mineralogy and probably a slightly different age than the New York vein. Careful checking with an ultraviolet lamp and a geiger counter failed to show any indication of uranium or scheelite in the New York vein, the Helena vein, or the two unnamed veins exposed in the crosscut.

The New York vein, as exposed in the applicant's adit is along the footwall of a shear zone which cuts medium-grained quartz monzonite of the Boulder batholith. The vein is from 2 to 6 inches wide and consists of black and brown oxides of iron and manganese.

Copy

The shear zone consists of a strong footwall fracture and a weaker hanging wall fracture spaced about 12 feet apart. Both fractures strike about N. 62° E. and dip 70° to 80° northwest. The rock between the two main fractures is cut by many minor fractures which contain small amounts of manganese and iron oxides. The quartz monzonite within or near the shear zone is altered to sericite, clay, and chlorite. The richest part of the vein is at the portal of the adit and is a pod consisting largely of black and brown secondary minerals. According to the applicant's assays this pod contains 29.8 percent manganese and 0.5 ounce of silver. The pod is about 5 feet wide at the portal but pinches to several inches 10 feet from the portal. The pod is a residual gossan produced by weathering and does not indicate a commercial manganese deposit.

Copy

The outcrop of the New York vein could not be found in the vicinity of the proposed trenches. This may be accounted for by the vein being concealed under a heavy cover of alaskite float or because the vein may be weak and extend only a short distance. Many of the veins to the southwest along the ridge are so weak that almost no outcrops can be found along them.

No samples were taken; the applicant's samples were considered to be reliable.

Distribution:
DMEA(4)
USBM(2)
USGS(SRO)
Docket
Pinckney
Quinlan

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

May 24, 1955

Copy retained 400

Mr. Charles E. Pew
314 Fuller Avenue
Helena, Montana

WGM

Re: Docket No. DMEA-3692 (manganese)
Riverside Mining Co.
Big Timber Mine
Jefferson County, Montana

Dear Mr. Pew:

Thank you for your letter of May 20, 1955, regarding the accessibility of the Riverside Mining Co. property.

Mr. James Quinlan and I will be in Montana next week and hope to be able to examine your client's manganese property on Wednesday, June 1, 1955. I will call you in Helena Tuesday, May 31, to let you know the exact date when we can make the examination. I hope this date will be satisfactory with you.

Sincerely yours,

Darrell M. Pinckney
Geologist

cc: DMEA (2)
USBM (2)
Pinckney

Docket

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

April 1, 1955

WSM

Mr. C. R. Pew
Attorney at Law
314 Fuller Avenue
Helena, Montana

Re: Docket No. DMEA-3692 (manganese)
Riverside Mining Company
Big Timber Mine
Jefferson County, Montana

Dear Mr. Pew:

Thank you for your letter of March 22, 1955. If you will be good enough to let us know when the property becomes accessible enough so that an examination is practicable, we will endeavor to arrange for an examination as soon thereafter as possible.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

cc: DMEA (2)
USBM (2)
Kellum

DOCKET
SURNAME
Martin
DeHuff
400 Rutledge
Kiilsgaard
Hedges

MAR 11 1955

Riverside Mining Company
c/o Mr. C. E. Rew
314 Fuller Avenue
Helena, Montana

Re: Docket No. DMEA 3692 - Manganese,
Uranium, and Tungsten
Big Timber mine (Helena-Jefferson mine)
Jefferson County, Montana

Gentlemen:

The above-designated application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I - Northwest District, South 157 Howard Street, Spokane 4, Washington, for a field examination of the property.

Any assistance that you can render the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

FARutledge:fcc
3-7-55
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. I - N.W. Dist.
Gilbert DeHuff, USBM
T. H. Kiilsgaard, ~~BMM~~ USGS

RJ

DOCKET
SURNAME

400

Martin
DeHuff
Rutledge

MAR 11 1955

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

Re: Docket No. DMEA 3692 - Manganese, Uranium, and Tungsten
Riverside Mining Company
Big Timber Mine (Helena-Jefferson Mine)
Jefferson County, Montana

Dear Mr. Weissenborn:

Reference is made to the subject docket and Mr. Vhay's letter of February 17, 1955, which states that a field examination of the property will be scheduled.

We will hold this application in abeyance until the report and recommendations by the Field Team are received.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee (JLB)

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JLB)

Thor H. Kiilsgaard
Member, Geological Survey (JLB)

FARutledge:fcc
3-7-55
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. I - N.W. Dist.
Gilbert DeHuff, USBM
Thor H. Kiilsgaard, USBM

RJ

February 23, 1955
Subject: DMEA 3692
Re: Exploration Assistance
Big Timber

Riverside Mining Company
C/o Mr. C. E. Pew
314 Fuller Avenue
Helena, Montana

Gentlemen:

The receipt of your application dated February 12, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 3692 and referred to the Iron and Ferro-Alloys Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

February 23, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region I Nw.

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region I Northwest.

DMEA - 3692 Riverside Mining Company

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
FEB 21 1955

February 17, 1955

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

Re: New application
Riverside Mining Company
Big Timber Mine
Jefferson County, Montana

Dear Mr. Selfridge:

Enclosed are the original and two copies of an application submitted by S. J. Giulio in behalf of the Riverside Mining Company of Helena, Montana. The application proposes to explore the Big Timber property (formerly known as the Helena-Jefferson property) in Jefferson County, Montana, for manganese and possibly uranium and tungsten; silver-lead-zinc ores reportedly were produced in the past. The application appears to be well prepared.

A field examination will be scheduled in the future when winter is over and a man is available in that part of the state.

Sincerely yours,

John S. Vhay

John S. Vhay
Acting Member, DMEA
Field Team, Region I
Northwest District

Enclosure

cc: USBM (2)
Kellum

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED

RECEIVED
FEB 14 1955
U. S. G. S.
SPOKANE, WASH.

RECEIVED
FEB 21 1955

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3692
Metal or Mineral Manganese, Uranium, Tungsten
Date Received 2-21-55
Estimated Cost $27,200
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

RIVERSIDE MINING COMPANY
c/o C. E. Pew
314 Fuller Avenue, Helena, Montana

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

(*b*) State any mine name by which the property is known.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore .....

.....

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within ..... days and be completed within ..... months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated FEB 12 1955, 195...

RIVERSIDE MINING COMPANY
(Applicant)

By Wilson M. Jeffers

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—66551-1

1. Name of Applicant:-

(a) RIVERSIDE MINING COMPANY.

314 Fuller Avenue, Helena, Montana.

(b) A Montana Corporation.

(c) Director & President: Chester Leirness, Hillsboro, N. D.

Director & Vice Pres: Jerome Nesvig, Buxton, N. D.

Director & Secretary: Lloyd Sondreal, Buxton, N. D.

Director & Treasurer: Norman Thune, Climax, Minnesota.

Director & Gen. Mgr.: W. M. Jeffers, Jefferson, Montana.

Director: Harold J. Spittler, Helena, Montana.

Director: John D. Johnson, Helena, Montana.

Director: Gabriel Gunderson, Buxton, N. D.

2. General:- The original and three copies of this application are mailed to Defense Minerals Exploration Administration, Department of the Interior, South 157 Howard Street, Spokane 4, Washington.

3. Applicant's Property Rights:-

(a) Seven unpatented mining claims situated in Sections twelve and thirteen, Township 7 North, Range 4 West, Jefferson County, Montana, known as BIG TIMBER, BIG TIMBER NO. 2, BIG TIMBER NO. 3, BIG TIMBER NO. 4, BIG TIMBER NO. 5, BIG TIMBER NO. 6 and BIG TIMBER NO. 7.

(b) Old name "Helena-Jefferson", new name "Big Timber" mine.

(c) Owners by right of location.

(d) Not applicable.

(e) No liens or incumbrances. Exclude shaded portion of claims as shown on attached sketch "Map of Claims" where they conflict with the Madison Homestead. The company has a verbal agreement to enter the conflicting areas.

(f) Certificates of Location filed in the Recorders office, Jefferson County, Montana, as follows: BIG TIMBER, Book 49, page 125 (Amended location); BIG TIMBER NO. 2, BIG TIMBER NO. 3, BIG TIMBER NO. 4, BIG TIMBER NO. 5, BIG TIMBER NO. 6 and BIG TIMBER NO. 7, in Book 48, pages 305 to 310 respectively.

4. Physical Description:-

(a) Old workings on the Helena-Jefferson vein were partly rehabilitated during the past several months and some new tunnel work (drifting and cross-cutting) performed. The old workings were so badly caved, for the most part, as to prohibit a complete examination thereof, geologically or otherwise. A limited rehabilitation program is yet under way in this area and some new work is also contemplated. This area can provide a means of cross-cutting by diamond-drill and/or tunnel, if desired, to intersect manganese veins, the surface indications of which suggest the probable development of commercial ore. At present the most promising vein is shown upon the attached "Map of Claims" as the "New York Vein" where it is proposed to carry forward the program set forth within this application. The attached "Plan" map of the "Helena Vein" area is being presented to suggest the possibilities of future exploration and development in the event the presently contemplated program so justifies. Incidentally, this area is reported to have been explored and developed for the production of silver-lead-zinc ores. It is not known whether or not any manganese ores that may presently be of commercial value, were encountered in the old workings. U. S. Geological Survey

Bulletin No. 842 entitled "Metalliferous Deposits of the Greater Helena Mining Region, Montana" sets forth some interesting information relating to the "Helena-Jefferson" mine on pages 238 to 240. The following excerpt taken from the above bulletin is quoted herewith inasmuch as it apparently refers to the area which is being covered by this application:

> "Alabandite occurs in the New York vein, which, like the Helena Vein, dips steeply northwestward between a footwall of quartz monzonite and a hanging wall of aplite. As exposed near the surface the vein is several feet thick. It is opened by an old inclined shaft and a short tunnel, which at the time of examination could be entered for only a few feet and afforded no information regarding the extent and character of the deposit in the sulphide zone. Considerable material on the dump of the workings is composed of rhodochrosite 90 per-cent, alabandite 5 per-cent, and other minerals 5 per-cent."

Incidentally, since the above report was made it is quite apparent that some small scale exploratory work has disturbed the probable location of the old inclined shaft, which is presently not discernible; but the tunnel apparently was in about the same condition as reported until this company removed sufficient of the debris and obstructions in order to obtain the samples, assays of which appear on the attached sketch map. The old dumps were also pretty well dissipated. The present vein material (in place) is observed to be mostly oxides with some indication of the carbonate. It is expected that the manganese content of this particular vein, at depth, will be present as rhodochrosite; thus the proposed program to sink and also gain depth -from surface- by continuation of the present drift, southwesterly.

Further reference to the above Geological Survey report that may be pertinent to this application and of interest, is the following:

> "At distances about 300 feet and 800 feet northwest of the Helena vein there are two other veins called the Manganese vein and the New York vein. The dumps of old shafts and a tunnel show that these veins carry considerable of the manganese carbonate, rhodochrosite, with more or less of the silicate, rhodonite, and the sulphide, alabandite."

We thus identify quite definitely the so-called "New York" vein; but the surface indication of the "Manganese" vein referred to is rather difficult to perceive, possibly due to erosion.

(b) Past production is reportedly silver-lead-zinc ores. There is presently no production. The current program is primarily for the exploration and development of manganese ores, with the possibility of encountering uranium or tungsten of commercial value. The presence of these minerals is shown by "counter" and "light". ?

(c) Briefly, the veins are true-fissures, striking northeasterly and dipping steeply to the northwest, having aplite hangingwalls and quartz-monzonite footwalls; although some extreme faulting appears to have altered this sequence in several of the veins which show beyond the original underground workings - those more recently exposed - where the fissures are entirely within the aplite. Reference is made to the attached maps for limited geological data and relative vein positions.

(d) The property is readily accessible to U. S. Highway No. 91. (See Map of Claims). Workmen are available at close

by towns of Corbin, Jefferson City and Clancy. The railroad shipping point loading ramp is near Corbin. Manganese ore will be purchased at the Butte depot according to a presently available government schedule.

(e) There is no apparent lack of manpower for a small operation. Present power is gasoline and diesel. The Montana Power Company will install transformers for power take-off from their near-by power line. Reference is made to the "Map of Claims" which shows the exact location of the power line.

5. <u>The Exploration Project:-</u>

(a) The principal mineral presently considered is manganese with the possible discovery of commercial uranium and tungsten.

(b) The proposed work is shown upon the maps herewith submitted and is further detailed on the attached schedules.

(c) The work would start within 30 days and should be completed within six months from the date of an exploration project contract.

(d) The applicant is in a position to furnish competent operating personel.

6. <u>Estimate of Costs:-</u>

Please refer to the accompanying sheets.

(a) Independent Contracts:-

DETAIL OF TOTALS:-

DESCRIPTION	DETAIL	TOTAL
AMOUNT OF LOAN APPLICATION:		$ 27200.00
Accounted For As Follows:		
Sinking (100' @ $75)	$ 7500.00	
Drifting (500' @ $30)	15000.00	
Road Construction (1/2 Mile)	1200.00	
Surface Trenching	2000.00	
Incidentals (Accounting, Assays Engineering Etc)	1500.00	

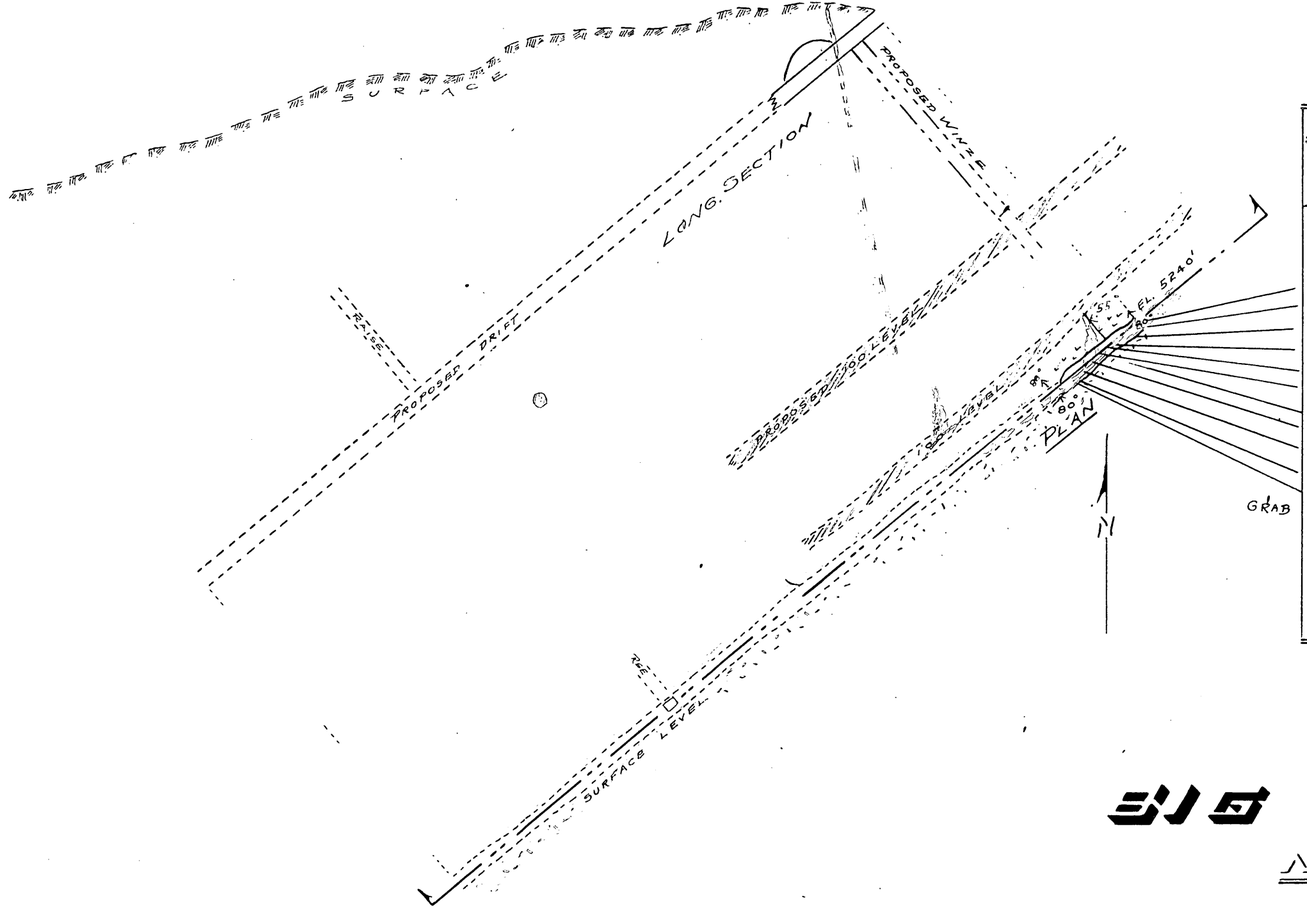
Road construction estimated 120 hours dozer work @ $10.00
Surface trenching on vein outcroppings estimated 200 hours dozer work @ $10.00

UNIT COSTS:

DESCRIPTION	DETAIL PER FOOT	TOTAL PER FOOT
SINKING:		$ 75.00
Accounted For As Follows:		
Labor	$ 50.00	
Payroll Taxes (ss-uc-ind ins)	6.25	
Pipe & Fittings	2.00	
Timber (Stulls)	4.00	
Explosives (Powder-caps-fuse)	5.00	
Power (Gasoline & Diesel)	5.00	
Incidentals (Repairs Etc)	2.75	
DRIFTING:		$ 30.00
Accounted For As Follows:		
Labor	$ 15.00	
Payroll Taxes (ss-uc-ind ins)	1.88	
Pipe & Rail	3.00	
Timber (Occasional)	1.00	
Explosives (Powder-caps-fuse)	4.00	
Power (Gasoline & Diesel)	4.00	
Incidentals (Repairs Etc)	1.12	

7. (a) The company is prepared to furnish its share of the cost of the proposed project in accordance with DMEA requirements and regulations.

(b) It is proposed that the company's share be furnished partly in "cash" and partly by the use of equipment owned either by the company or one or more of its individual stockholders under company agreement.



ASSAYS

Sample No.	Width Feet	Gold Oz.	Silver Oz.	Manganese %	Iron %
A	1.3	TR	0.5	29.8	7.4
B	4.5	TR	0.3	8.1	3.0
C	5.0	TR	0.2	11.5	4.2
D	5.0	TR	0.4	20.6	7.2
E	1.5	0	0.3	2.8	4.0
F	1.5	TR	0.2	1.2	4.3
F-1	2.0	TR	0.1	1.9	2.8
G	1.0	TR	0.4	1.5	11.8
H	1.0	TR	0.3	14.2	4.8
I	1.5	TR	0.2	15.3	10.0
J	3.0	TR	0.3	0.5	3.2
K		TR	0.2	0.2	3.8
H-I	3.0	TR	0.2	18.2	4.0

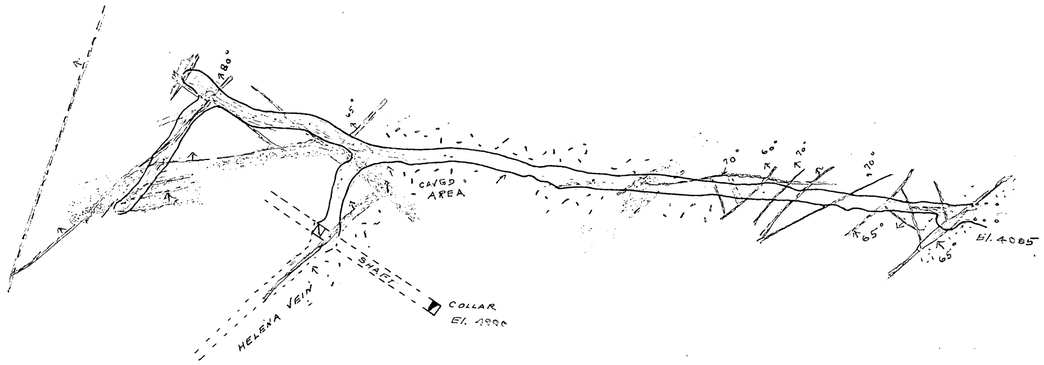
APLITE

QUARTZ MONZONITE

BIG TIMBER MINE

NEW YORK VEIN

50 SCALE

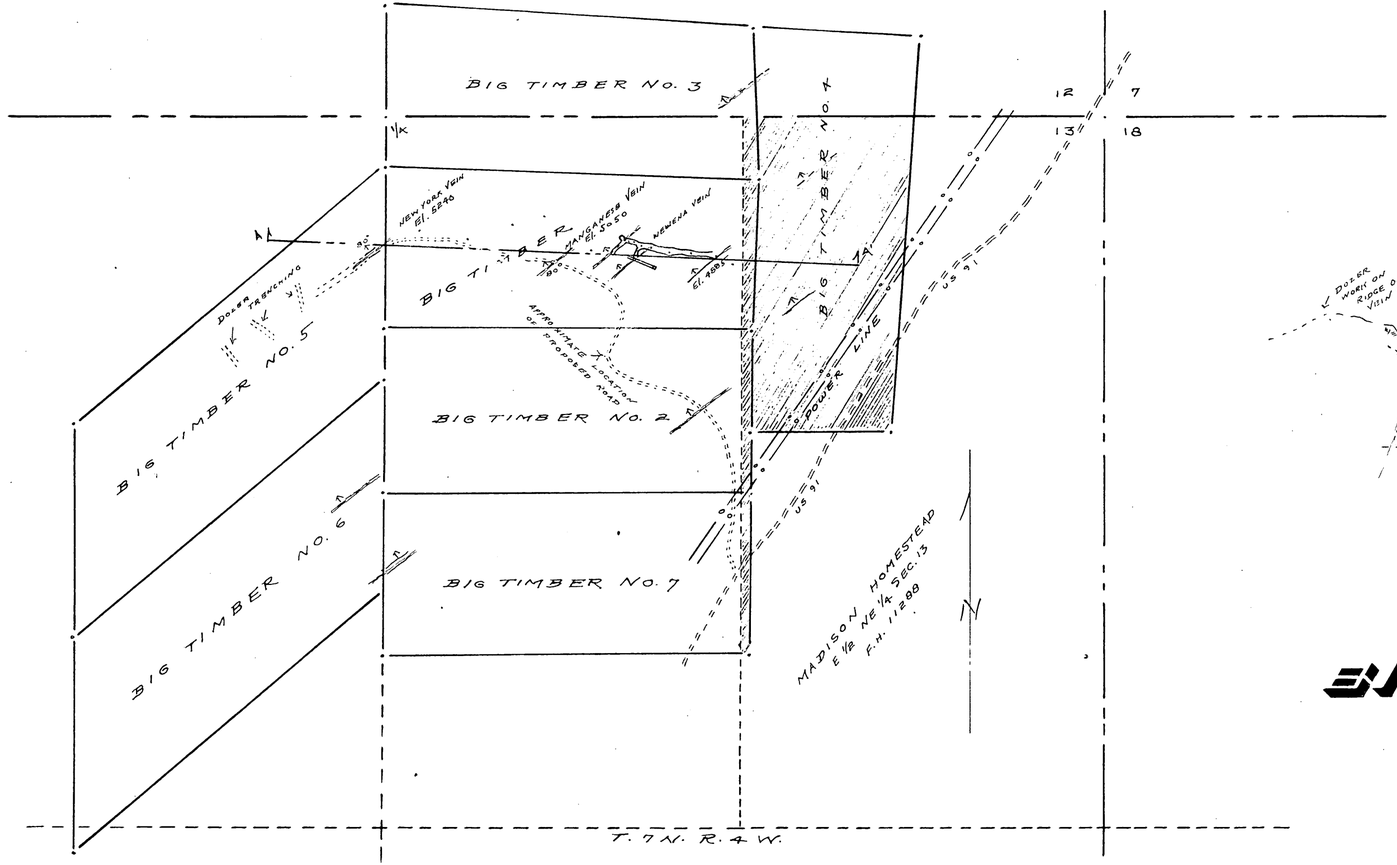


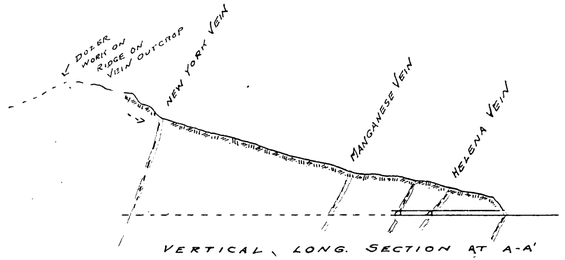
PLAN MAP

BIG TIMBER MINE

HELENA VEIN

50 SCALE





VERTICAL LONG. SECTION AT A-A'

BIG TIMBER MINE

MAP OF CLAIMS

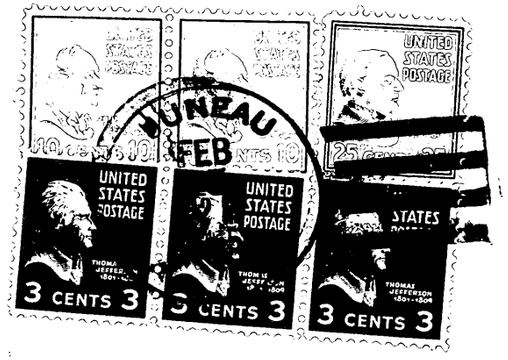
400 SCALE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
METAL ECONOMICS BRANCH
JUNEAU, ALASKA

OFFICIAL BUSINESS

P. O. Box 560
Juneau, Alaska

PAYMENT OF POSTAGE, $300
(PMGC)



VIA AIR MAIL

Operating Committee,
Defense Minerals Exploration Admin.,
Department of the Interior,
Washington 25, D.C.

VIA AIR MAIL