DMA Form 1

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DMA Docket No. 2767

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

JUN 15 1954

Hon. James E. Murray
United States Senate
Washington, D. C.

Re: Docket No. DMEA-2767 (Lead-Zinc)
Gilbert C. Holshue, Douglas A. DuBois (Partnership)
Morning and Midnight Claims
Jefferson County, Montana

My dear Senator Murray:

This will acknowledge your letter of June 9, in which you note that Douglas A. DuBois and Gilvert C. Holshue have requested a copy of the report submitted by the Geological Survey regarding their application for exploration assistance.

I regret that I am unable to furnish the applicant with a copy of the geological and engineering reports prepared by the Geological Survey and the Bureau of Mines for the DMEA since, as a matter of Department policy, they have always been considered as confidential information and, as such, are not available to the public.

Sincerely yours,

C. O. Mittendorf

Administrator

WRGriswold/bjl (6/14/54)

Copy to: Docket
Admr. R. File
Base Metals
Region II (2)
Chron.

R.C.G.

H. ALEXANDER SMITH, N. J., CHAIRMAN
IRVING M. IVES, N. Y.
WILLIAM A. PURTELL, CONN.
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ROY E. JAMES, STAFF DIRECTOR

United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE

Defense Minerals Administration
RECEIVED
JUN 10 1954

June 9, 1954

Re: DMEA-2767

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

Douglas A. DuBois and Gilbert C. Holshue, who last year filed the above-captioned application, have inquired whether or not it is possible for them to obtain from your agency the report which was submitted with reference to their application.

It is my understanding that such a report may have been provided you by the Geological Survey, and if a copy of that report is available, would you be good enough to forward it to me in order that I may in turn send it along to the applicants.

Sincerely yours,

Chas Murray

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

So. 157 Howard Street
Spokane 4, Washington

March 31, 1954

Mr. Gilbert C. Holshue
Basin
Montana

Re: DMEA Docket no. 2767 (lead-zinc)
Morning and Midnight Mine
Jefferson County, Montana
(denied April 27, 1953)

Dear Mr. Holshue:

In reply to your letter of March 25, asking whether your application for an exploration contract could not be reconsidered because the denial was made by reason of the fact that lead and zinc had been removed from the Defense Minerals critical list, we refer you to Mr. C. O. Mittendorf's letter to you of April 27, 1953, in which it is stated, "As a result of this study the conclusion has been reached that, although the area you propose to explore shows some mineralization, the discovery of a significant deposit of lead-zinc ore is too improbable to justify the expenditure of public funds. Therefore, we regret to advise you that your application is denied."

We also refer you to a letter dated May 27, 1953, from Felix E. Wormser, Assistant Secretary of the Interior, to Mr. Sidney G. Smith of Great Falls, Montana, who evidently wrote to the Secretary in your behalf, and in which this same statement is repeated, but in somewhat more detail.

Your application, therefore, cannot be revived on the basis that lead and zinc have been restored to the list.

However, should you have done additional work or have additional evidence which suggests that exploration of the property is warranted, we would be glad to consider a request for

DMEA

assistance from the DMEA. This would have to be in the form of an entirely new application, in which the new evidence is presented. If the above is the case, we will send application form MF-103 upon request.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
Geological Survey

Wing G. Agnew
Bureau of Mines

cc: DMSA (2) w/2 cys. encl.
USBM (2) w/2 cys. encl.
Becraft 3/1 cy. encl.

Basin, Montana.
March 25th, 1954.

Mr. A. E. Weissenborn,
Executive Officer, DMEA,
Field Team, Region II,
U. S. Department of the Interior,
S. 157 Howard Street,
Spokane 4, Washington.

Re: DMEA Docket No. 2767 (lead-zinc)
Morning and Midnight Mine
Jefferson County, Montana

Attention: Mr. George Becraft,
Geologist

Dear Mr. Weissenborn:

In the spring of 1953 we had pending with your office DMEA Application Docket No. 2767 (lead-zinc) for the Morning and Midnight lode mining claims. Following what we understood to be a complete field examination and survey by representatives of your office, we were advised by letter in June, 1953 that the application was not granted as of that time by reason of the fact that both metals lead and zinc had been removed from the defense minerals critical list.

In view of newspaper announcement on March 22, 1954, that these two metals may again be the subject of exploration projects, this is to inquire if our application may again be reviewed with view to consideration of granting loan application. We are still ready and willing to meet our share of expenses relating thereto.

Thanking you for a reply and any consideration you may give DMEA:2767,

Respectfully submitted,,

Gilbert C. Holshue & Douglas A. DuBois,
Partners

By Gilbert C. Holshue
Gilbert C. Holshue, Partner.

C O P Y

C O P Y

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

So. 157 Howard Street
Spokane 4, Washington

March 31, 1954

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Basin
Montana

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However, should you have done additional work or have additional evidence which suggests that exploration of the property is warranted, we would be glad to consider a request for

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Geological Survey

Wing G. Agnew
Bureau of Mines.

cc: DMEA(2)w/2 cys. encl.
USBM(2)w/2 cys. encl.
Becraft 3/1 cpy. encl.

FILE COPY
Surname:

DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

PRS No. 1085

DMEA 2767

MAY 27 1953

n.s. in R.s.R.

Dear Mr. Smith:

This is in reply to your letter of May 15, which was written in behalf of Mr. Gilbert C. Holdsen and concerns an application, docket DMEA-2767, made to the Defense Minerals Exploration Administration by the partnership of Holdsen and Dubois, of Helena, Montana. The application was for Government financial assistance to explore for lead and zinc on the Morning and Midnight Claims, located in Jefferson County, Montana, and was denied by the DMEA on April 27, 1953. You request that a copy of the geological and field data concerning this application be furnished to the applicants, that the language of the letter of denial dated April 27 be redrafted, and finally, that a review of the docket be made, with the hope that favorable consideration of the loan application might result.

A careful review of all the technical data available in this case has been made by the members of the Operating Committee, which is composed of representatives of the Geological Survey, the Bureau of Mines, and the DMEA. The decision reached by this committee to deny Government participation in the proposed project was based on the opinion that the mining property was situated in an area characterized by gold and silver mineralization, where numerous quartz veins occur in granitic rocks, many of which have been found to be barren. The geologic data at hand suggested that only sparse amounts of lead-zinc mineralization usually accompany the precious metal content of the veins, and that these base metals seldom occur in significant quantities. It was believed that the proposed exploration project was not well conceived and would be unduly tedious and expensive to carry out, in view of the small amount of added information which might be obtained by the proposed work. It was for these reasons that the application did not receive favorable consideration.

I regret that I am unable to furnish the applicant with a copy of the geological and engineering reports prepared by the Geological Survey and the Bureau of Mines for the DMEA mines, as a matter of Department policy, they have always been considered as confidential information and, as such, are not available to the public.

The language of the letter of denial which was furnished the applicants in this case was similar to that used in several hundred other applications for which the DMEA could not justify the expenditure of public funds. Two of the basic criteria used and weighted in passing upon all applications are the strategic importance of the mineral involved, and the geologic probability of making a significant discovery. The application of these criteria, of course, relates entirely to the purposes of exploration as contemplated under the Defense Production Act. The failure of any property to satisfy the regulations which were issued to encourage the exploration of strategic materials does not condemn the property as a potential producer of non-strategic metals, such as gold and silver.

Incidentally, effective April 15, 1953, the Office of Defense Mobilization restricted the use of exploration funds to certain specified metals and minerals which are still in short supply. Lead and zinc were not specified and consequently the DMEA has not had authority or funds to enter into new exploration contracts for lead and zinc since the date of that directive.

I wish to assure you of my appreciation for your bringing these matters to my attention.

Sincerely yours,

(sgd) F. E. Wormser

Assistant Secretary of the Interior

Mr. Sidney G. Smith
1700 - 1st Avenue South
Great Falls, Montana

CONittendorf/fw/esf
5/26/53
cc to: Secretary's Reading File
Asst. Sec'y for Mineral Resources
Mr. Imhoff
Admr. Reading File, DMEA
DMEA Region II (2)
Mails & Files, DMEA
Base Metals Div., DMEA
Mr. Mittendorf, DMEA

INTERIOR DEPT.
RECEIVED
MAY 18 1953
OFFICE OF
THE SECRETARY

Sidney O. Smith
1700 - 1st Avenue South
Great Falls, Montana

May 15, 1953

INTERIOR DEPARTMENT
RECEIVED

MAY 20 1953

DIVISION OF
MINERALS AND FUELS

Re: Docket No. DMEA-2767 (Lead-Zinc)
Gilbert C. Holshue, Douglas A. DuBois (Partnership)
Morning and Midnight Claims
Jefferson County, Montana

Honorable Douglas McKay
The Secretary of the Interior
Washington, D. C.

INTERIOR DEPARTMENT
SECRETARY'S
MAIL CENTER
MAY 21 1953
FORWARDED TO: Def Minerals
DEPT.
MAY 21 1953
PREPARE DRAFT
OF REPLY

Dear Secretary McKay:

It was a pleasure to receive your letter some time ago recalling our Army days at Camp Adair; and I have been very much interested in following your career in national affairs.

I have been requested by Mr. Gilbert C. Holshue in behalf of the above-named applicants to make this inquiry of the Defense Minerals Exploration Administration, so I trust it is in order for me to do so.

It would be appreciated if your advice and assistance is available with respect to the following:

1. furnishing to the applicants a copy of the geological and field data submitted by the field and district offices of Defense Minerals Exploration Administration, after first advising them, however, what the cost of same might be.

2. secure a re-drafting of paragraph 2 of the letter of April 27, 1953 from Defense Minerals Exploration Administration to applicant for the reason that in its present language it tends to condemn the claims from a geological viewpoint, when in truth and in fact it is as good an original showing as was ever made in the Greater Helena Mining Region, and the Butte Mining Region, and many other areas of lesser importance.

3. secure a review of the above-subject-matter with respect to the loan, which would become a lien upon the claims as described in the program and have considerable possibility of repayment (which other expenditures of public funds do not even require or have any possibility of repayment), and arriving at a favorable conclusion and decision based upon the following factors:

Honorable Douglas McKay: May 15, 1953

(a) -favorable recommendations and conclusions made by Government geologists as a result of actual field investigation;

(b) -favorable recommendations and conclusions made by Government geologists in the Spokane office on the basis of the geological and field data available;

(c) -new factors for consideration:

-last fall the Metals Milling Company new mill at Basin, Montana, which is 8 miles from above claims, was without ore until ore was supplied to it from these claims - lead-zinc ore and associated minerals.

-volume operation of the above-mentioned mill is essential for the milling of strategic minerals in that area - and the mill may or may not represent a Reconstruction Finance Corporation investment - which investment is only as good as the mining operations in the area. The operation of a small mill is a necessity in the area as the smelters are too far away at Helena and Butte, about 40 to 50 miles, to haul the raw ore at a profit, and those large smelters have penalties for lead.

-consideration of the factor that small operations of mining and milling are a necessity in most areas - and it was the small mine and the small mill which made the mining industry, and all of it was based upon the efforts of the prospector and explorations such as this matter.

-potential possibility of discovery at depth of uranium, manganese and many other strategic minerals in short supply.

-there are copper stains in these highly mineralized claims and one smelter return shows "Copper 0.40". It is a geologic fact that the famous copper mines in Butte originated with gold, silver, lead and zinc (the same as these claims) and at that time a geologist might have said "the discovery of a significant deposit of copper is too improbable * * *." The copper production in Butte began at around 300 feet in depth.

-the town of Basin, Montana, may qualify as a "chronic unemployment" area, which is a new factor of the Office of Defense Mobilization with respect to granting federal tax benefits to firms which operate in such areas.

-encouragement of private exploration for strategic minerals in this recognized highly mineralized region.

Honorable Douglas McKay: May 15, 1953

-actual physical facts show strong mineralization in small stringer veins about a foot in width and especially in a large vein or strike several feet wide, probably 6 to 12 feet wide from my personal observations, with a depth of 55 feet from which applicants have hoisted the ore by hand rope and bucket, and also considerable length is indicated - it being a true strike or vein running east and west with about a 70 degree dip to the north, and being of the same or similar geologic structure as other mines in the area which have been commercial producers of millions of dollars of wealth as the reports of the Bureau of Mines show in the printed pamphlet of the Greater Helena Mining Region.

-news dispatch from Washington under date of May 15, 1953, states: "President Eisenhower states that a strong domestic mining industry is vital to national security and to the continued prosperity of our Country", that he is impressed with the seriousness of the situation with respect to imports of lead and zinc, and says: "I hope the administration may find a way of relieving the depressed conditions that prevail within many mining districts."

4. It is understood that the Bureau of Mines intends to do some diamond drilling in the region of the above mentioned patented claims, and it would result in the development of strategic minerals if the strike or vein on said claims was drilled under such exploration.

With kindest regards and thanking you for such further consideration of this matter as might be possible,

Sincerely yours,

Sidney O. Smith

Sidney O. Smith
1700 - 1st Avenue South
Great Falls, Montana

Honorable Douglas McKay: May 15, 1953

Compilation of ore shipments made in the year 1952 from the Morning and Midnight patented claims which are the subject matter herein:

29,600 pounds gross weight, 3% water, dry 28,712,

Gold .06 $1.44, Silver 5.95 $4.00, Lead 1.675 $2.41,
Zinc 1.3 .78, making value of $8.63 per ton.

54,020 pounds gross weight, 2% water, dry 53,912,

Gold 0.155 $3.89, Silver 4.65 $2.95, Lead 1.275 $1.84,
Zinc 1.9 .85, making value of $9.54 per ton.

57,380 gross pounds, water 4% dry 54,520,

Gold 0.17 $4.89, Silver 8.85, $6.35, Lead 3.6 $5.10
Zinc 5.65 $2.58, making value of $18.92 per ton.

66,760 gross pounds weight, 4% water, dry 63,689:

Gold $8.11, Silver 3.78, Lead $4.00 penalty,
making value of $7.89 per ton.

Assays	Gold	Silver	Wet Lead	Copper	Insol	Iron	Manganese	Zinc
	0.255	5.2	1.7	0.40	65.6	9.2	0.1	0.5

Return from American Smelting & Refining Company,
East Helena, Montana.

18,390 gross pounds weight, 4.5 % water, 17,562 dry

Gold 0.230, $7.32, Silver $11.97, Lead $13.29,
making value of $22.09 after smelter deductions
on lead of $8.00 and Arsenic and Antimony of
2.49 or $10.49 deductions.

Assays	Gold	Silver	Wet Lead	Copper	Zinc	Arsenic	Antimony
	0.230	14.3	6.7	0.10	0	6.40	0.57

- - - -

UNITED STATES
DEPARTMENT OF THE INTERIOR

Defense Minerals Exploration Administration

Washington 25, D. C.

April 27, 1953

Mr. Gilbert C. Holshue
1065 North Ewing Street
Helena, Montana

Re: Docket No. DMEA-2767 (Lead-Zinc)
Gilbert C. Holshue, Douglas A. DuBois (Partnership)
Morning and Midnight Claims
Jefferson County, Montana

Dear Mr. Holshue:

With reference to your application for exploration project assistance, the Government has made a detailed study of all data submitted by you, together with the geological and field data available.

As a result of this study the conclusion has been reached that, although the area you propose to explore shows some mineralization, the discovery of a significant deposit of lead-zinc ore is too improbable to justify the expenditure of public funds. Therefore, we regret to advise you that your application is denied.

We appreciate your interest in the Government's exploration program and wish to thank you for bringing your property to the attention of the Government. It is with regret that we have to inform you of an unfavorable decision regarding your request.

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c/s/ C.O. Mittendorf

Administrator

-copy-

INTERIOR DEPT
RECEIVED
MAY 18 1953
OFFICE OF
THE SECRETARY

Sidney O. Smith
1700 - 1st Avenue South
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May 15, 1953

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DEPARTMENT OF THE INTERIOR

Defense Minerals Exploration Administration

Washington 25, D. C.

April 27, 1953

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1065 North Ewing Street
Helena, Montana

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Gilbert C. Holshue, Douglas A. DuBois (Partnership)
Morning and Midnight Claims
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We appreciate your interest in the Government's exploration program and wish to thank you for bringing your property to the attention of the Government. It is with regret that we have to inform you of an unfavorable decision regarding your request.

Sincerely yours,

c/s/ C.O. Mittendorf

Administrator

-copy-

DRAFT/WRGris~~wold~~
(5/22/53)

Dear Mr. Smith:

This is in reply to your letter of May 15, 1953, in which you refer to an application (Docket No. DMEA 2767) made to the Defense Minerals Exploration Administration by the par~~tner~~ship of Gilbert C. Holshue and Douglas A. DuBois of Helena, Montana. This application was with regard to a request for ~~receiving~~ Government financial assistance ~~on an~~ to explor~~ing this project~~ for Lead ~~&~~ Zinc, on the Morning and Midnight claims, located in Jefferson County, Montana, which request was denied by the DMEA on Apr 27, 1953.

~~This application was received on April 6, and on April 10 was cleared through the DMEA Operating Committee for distribution to the commodity members of the Geological Survey, the Bureau of Mines and the DMEA Base Metals Division for review and recommendation.~~

Out

A careful review ~~showed~~ of the application and field team reports to be of a borderline nature. The predominant value of the ~~ore~~ mineralization was in the precious metal content, the combined gold-silver value being $10.28 per ton, as contrasted to rather sparse amounts of lead and zinc ~~(average of 2.48 per cent lead and 2.20 per cent zinc)~~. Furthermore, it was believed that the ~~delineated~~ proposed exploration project was not well conceived and would be unduly tedious and expensive (to carry out) in view of the ~~possible~~ small amount of added information which might be obtained ~~thereby~~ by the work proposed.

However, the above questions ~~were~~ have since become of only academic importance in that on April 15, ~~we were~~ The Dept of Interior was notified by the Office of Defense Mobilization that, effective as of such date, no further funds would be available ~~to us~~ for new exploration projects involving lead and zinc, as well as ~~various~~ several other metals and minerals.

The Base Metals Division had contemplated suggesting to the applicants that they present a revised ~~work~~ project, but, of course, when the funds were ~~frozen~~, there was not point in doing so.

~~To cover the~~ points which you bring up in your letter;

1. Geological and engineering reports ~~from the Field~~ are considered as classified information and we may not release them.

2. ~~We can comply with your request to rewrite our letter of denial dated April 27~~. It so happened that, whereas ~~our~~ funds were ~~frozen~~ as of April 15, it was ~~some weeks~~ thereafter before all procedures ~~was~~ formalized and the proper form letters approved. Hence, to replace the denial letter sent to the Applicants we ~~shall~~ forward them the letter covering the withdrawal of our funds. I attach a copy for your information.

3. We would be pleased to re-open the question of the application if funds were still available. ~~We~~ would probably suggest to the Applicants that they ~~lopate~~ the open ground covering the site of an existing crosscut tunnel and that the tunnel portal (presently caved) be re-opened and made available for survey. It is quite possible that, after such work, a project could be ~~delineated~~, ~~at a much lesser expense~~, which would give more comprehensive data. However, in view of the withdrawal of our funds we, of course, can offer no encouragement.

You may be sure that I appreciate your bringing this matter to my attention and I greatly regret that there is nothing I can do further at this time.

Mr. Sidney O. Smith
1700 - 1st Avenue South
Great Falls, Montana

Sincerely yours,

Secretary of the Interior

DRAFT/WRGriswold
5/22/53/

Mr. Gilbert C. Holshue
1065 North Ewing Street
Helena, Montana

Re: Docket No. DMEA-2767 (Lead-Zinc)
Gilbert C. Holshue, Douglas A.
DuBois (Partnership)
Morning and Midnight Claims
Jefferson County, Montana

Dear Mr. Holshue:

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

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

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

Sincerly yours,

Administrator

FILE COPY
SURNAME:

500

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

Hodges
Jeffrey

Mr. Gilbert C. Holshue
1065 North Ewing Street
Helena, Montana

APR 27 1953

Re: Docket No. DMEA-2767 (Lead-Zinc)
Gilbert C. Holshue, Douglas A. DuBois (Partnership)
Morning and Midnight Claims
Jefferson County, Montana

g.c. 4/27/53

Dear Mr. Holshue:

With reference to your application for exploration project assistance, the Government has made a detailed study of all data submitted by you, together with the geological and field data available.

As a result of this study the conclusion has been reached that, although the area you propose to explore shows some mineralization, the discovery of a significant deposit of lead-zinc ore is too improbable to justify the expenditure of public funds. Therefore, we regret to advise you that your application is denied.

We appreciate your interest in the Government's exploration program and wish to thank you for bringing your property to the attention of the Government. It is with regret that we have to inform you of an unfavorable decision regarding your request.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

JWAlt/bjl (written 4/23/53)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Alt
Mr. Bishop
Mr. Kinkel
Region II (2)
Chron.

FILE COPY
SURNAME:

500

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

Memorandum

To: Administrator

From: Chief, Base Metals Division

Subject: Denial of application Docket No. DMTA-2767, Gilbert C. Helshue, Douglas DuBois (Partnership), Morning and Midnight Claims, Jefferson County, Montana, (Lead-Zinc)

The above-cited application was received by this office from the Field Team on November 5, 1952.

The Applicant's proposal was to reopen an old caved adit at 8,000-foot elevation and extend it 20 feet to intersect a mineralized quartz vein, then drift 200 feet and raise 100 feet on the vein. The Field Team did not favor this proposal but recommended the following exploration plan: Sink 100 feet of vertical shaft from the 8,060 adit near the footwall of the quartz vein, 50 feet of crosscutting to the vein from the bottom of the shaft, followed by 300 feet of drifting along the vein with 50 feet of parallel structures. A 100-foot raise is proposed contingent upon the findings in the 300 feet of drifting.

The estimated cost of the exploration plan as proposed by the Field Team would be $27,200.00.

The old workings consist of surface trenches, 3 adits, and a 27-foot shaft sunk in a narrow, mineralized quartz vein. Two of the adits are accessible and have cut a sparsely mineralized quartz vein which is locally 5-7 feet wide.

The quartz vein recommended for further exploration has been followed by drifting along the vein for 115 feet on the 8,060 and 8,093 adit levels. However, this work did not discover any mineable ore. The Field Team did not assay the vein in these drifts, but reports that sparse amounts of pyrite, galena and sphalerite were present.

Past production from the property probably totals about 50 tons. About 38 tons of ore have been mined from the 27-foot shaft and the 100feet of drifting from the bottom of this shaft with grade ranging from 0.17-0.23 oz. of gold, 8.85-14.3 oz. of silver, 3.6-6.7 percent of lead, and up to 5.6 percent of zinc. This ore was mined from a quartz vein 0.5-1.5 feet wide. A few tons of low-grade ore are reported to have been mined at the surface 100 feet east of the 27-foot shaft.

We concur with Mr. E. L. Newcomb, commodity specialist of the USGS that the application be denied on the basis that a significant discovery of lead-zinc ore is unlikely to be made on the property.

W. R. Griswold

W. R. Griswold

JWAlt/bjl (written 4/23/53

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Alt
Mr. Bishop
Mr. Kinkel
Region II (2)
Chron.

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

Memorandum

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W. R. Griswold

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

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W. R. Griswold

W. R. Griswold

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

Griswold
OMB

April 16, 1953

Memorandum

To: W. R. Griswold, Chief
Base Metals Branch, DMEA

From: O. M. Bishop,
Base Metals Branch

Subject: DMEA 2767 - Morning and Midnight Claims,
Jefferson County, Montana

A review of the exploration to date shows some bulldozing and trenching have been done on the outcrop of the vein, and that 2 adits with short drifts on the largest vein and a 27-foot shaft 4 ft. by 4 ft. in section are accessible. The vein exposed for 115 feet in the drifts from the adit is 5 to 7 feet wide and consists of quartz with pyrite and sparse galena and sphalerite. Adjacent to the vein the quartz monzonite country rock is intensely silicified and shows tourmaline. Another vein (possibly a split, or parallel structure) 0.5 to 1.5 feet wide is exposed in the 27-foot shaft. It was developed further by a 10-foot drift to the southeast at the 27-foot level.

No sample or assay results are given for the outcrop area or the 5-to 7-foot quartz vein. The narrow vein developed by the 27-foot winze and 10 feet of drifting yielded 2 small lots of ore which were shipped. The first lot of 9 tons from the upper 15 feet of the shaft contained .23 oz. gold, 14.3 oz. silver, 6.7 percent lead and 0.1 percent copper over a calculated width of 1.8 feet. The remaining 12 feet of shaft and 10 ft. of drift yielded 28.5 tons of ore analyzing .17 oz. gold, 8.85 oz. silver, 3.6 percent lead and 5.6 percent zinc over widths ranging from 2 to 5 feet. The range of values in the two sets of analyses suggests some leaching of zinc values at the outcrop and residual gold enrichment near the surface.

The proposal outlined by the field team consists of a 100-foot vertical winze to be sunk in the footwall of the larger quartz vein with a 50-foot x-cut to the vein from the bottom of the winze, followed by 300 feet of drifting along the vein with additional short crosscuts from the drift to check for parallel structures. Such drifting will presumably explore the vein structure

encountered in the 27-foot shaft and that exposed in surface trenching and will if successful develop as well as discover ore. A 100-foot raise is proposed by the field team contingent upon findings in the 300 feet of drifting.

Recommendation:

I concur with the field team and examiners, believing that the proposed exploration will adequately explore the known structures at sufficient depth to determine if the values observed on the outcrop and underground workings have requisite width and grade to support a mining operation.

O M Bishop

O. M. Bishop

Copy to: Base Metals Branch
A. R. Kinkel
George Keating
O. M. Bishop
Minerals Division
Files

Geo. Keating

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

April 16, 1953

Memorandum

To: W. R. Griswold, Chief
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O. M. Bishop

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OMBishop:ak

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A. R. Kinkel
✓George Keating
O. M. Bishop
Minerals Division
Files

Geo. Keating

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

April 16, 1953

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OMBishop:ak

Copy to: Base Metals Branch
A. R. Kinkel
✓George Keating
O. M. Bishop
Minerals Division
Files

IN REPLY REFER TO:

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

April 15, 1953

Memorandum

Re: IMEA-2767
Midnight Prospect
Jefferson County, Mont.
$29,000
Lead, gold, silver

To: Mr. W. R. Griswold

From: E. L. Newcomb

Subject: Recommendation for denial

This property contains a mineralized quartz vein in a shear zone in granitic rock. The applicant proposes to reopen an old caved adit at 8000-foot elevation and extend it 20 feet to intersect a mineralized quartz vein, then drift 200 feet and raise 100 feet on the vein.

The field team has recommended an alternate proposal involving 100 feet of vertical shaft driven from the 8060 adit near the footwall of the quartz vein, 50 feet of crosscutting to the vein from shaft bottom, and 450 feet of drifting, crosscutting and raising on a new 8160 level.

The old workings consist of surface trenches, 3 adits, and a 27-foot shaft sunk in a narrow, mineralized quartz vein. Two of the adits are accessible and have cut a sparsely mineralized quartz vein that is locally 5-7 feet wide.

Past production from the property probably totals about 50 tons. About 38 tons of ore have been mined from the 27-foot shaft with the grade ranging from 0.17-0.23 oz. of gold, 8.85-14.3 oz. of silver, 3.6-6.7 per cent of lead, and up to 5.6 per cent zinc. This ore was mined from a quartz vein 0.5-1.5 feet wide and probably represents hand-sorted material. A few tons of low-grade ore are reported to have been mined at the surface 100 feet east of the 27-foot shaft.

The quartz vein recommended for further exploration has been followed by drifting along strike for 115 feet on the 8060 and 8093 adit levels. However, none of this work discovered any minable ore. The field team did not assay the vein in these drifts, but reports that sparse amounts of pyrite, galena and sphalerite were present.

The Midnight property is in an area characterized by gold-silver-quartz mineralization. Numerous quartz veins occur in shear zones in quartz monzonite, but many of them are barren. Sparse

amounts of lead-zinc mineralization often accompany the precious metals, but are seldom found in significant quantities. The amount of lead-zinc mineralization on the Midnight does not indicate that Government exploration assistance is warranted.

I recommend that the application be denied on the basis that a significant discovery of lead-zinc ore is unlikely to be made on the property. Also, that past production has shown that the mine is primarily a precious metal producer.

E. L. Newcomb

E. L. Newcomb
Geologist

IN REPLY REFER TO:

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

April 15, 1953

Memorandum

Re: IMEA-2767
Midnight Prospect
Jefferson County, Mont.
$29,000
Lead, gold, silver

To: Mr. W. R. Griswold

From: E. L. Newcomb

Subject: Recommendation for denial

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Geologist

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

April 15, 1953

Re: DMEA-2767
Midnight Prospect
Jefferson County, Mont.
$29,000
Lead, gold, silver

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Geologist

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

March 31, 1953

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration
RECEIVED
APR 6 1953

Re: Docket No. DMEA-2767 (Lead-zinc)
Jefferson County, Montana

Dear Mr. Selfridge:

Enclosed are the following:

1. Original and 3 copies of a field report by George E. Becraft, U. S. Geological Survey with accompanying maps.
2. Original and 3 copies of a memorandum by E. W. Buel, U. S. Bureau of Mines, describing a cost breakdown of the proposed work together with 4 copies of a proposed Exhibit "A" to be attached to the contract if the contract is approved.

Field examiners recommend that an exploration contract be granted the applicants, although they recommend an alternative plan rather than the one submitted in the application. The proposed changes in the alternative program have been discussed with the applicants who have stated their agreement.

The plan presented by the applicants has not been favored because: 1) the ground on which the portal of their proposed adit is located is not held by the applicants, 2) neither the condition nor extent of the adit that they propose to rehabilitate is known and there is no way of estimating the cost of this proposed work.

The vertical winze proposed by field examiners will be collared in an old adit which will require little rehabilitation. The winze will have the advantage of being underground, thus, it should be less affected by adverse weather. It will be sunk in the footwall of the vein, yet it will be close enough to the vein on the 100-foot vein to reach the vein by a short crosscut. It

Reviewed by
DMEA OPERATING COMMITTEE
4-10-53
(date)

is realized that the alternative winzing plan will be more expensive than the adit work proposed by the applicant; however, by winzing, more actual exploration of the mineralized structure will be accomplished for the money expended.

The Field Team concurs with field examiners and recommends that the alternative exploration plan be approved.

By Field Team, Region II

A. E. Weissenborn

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

Acting for Thomas E Howard

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

Enclosures
cc: USBM (2)
Becraft

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

1201 North Division Street
Spokane 2, Washington

EWB 4/24/53

March 19, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work by DuBois and Holshue, Midnight and Morning claims, Jefferson County, Montana, Docket No. DMEA 2767.

Application for Government assistance for a production loan (DMPA Docket 1529) was submitted by Messrs. DuBois and Holshue. An examination by an Examining Team, August 1, 1952, showed only minor ore reserves of dump material. It was suggested to the applicants that they withdraw their production loan application and submit an exploration loan application. An application for an exploration loan was received by the Field Team, Region II, shortly after the DMPA examination.

It was necessary to change the exploration work program proposed by the applicants. Reasons for this change are discussed in a memorandum report of George Becraft, Geologist, U. S. Geol. Survey, on the subject property.

I have not visited the property and it is doubtful whether it will be accessible before May. An alternate exploration program, however, was worked out with George Becraft and Robert Hundhausen, Mining Engineer, Bureau of Mines, who have examined the property. This program is listed under Exhibit "A" attached. A cost estimate of the exploration is given below.

It is to be noted that the applicants' exploration loan application shows a total of $12,955 for the work originally proposed by them. As stated above, the applicants' work proposal had to be considerably altered. These changes were discussed with Mr. DuBois, applicant. He agreed that he and his partner, G. Holshue, would accept the modifications in the exploratory work and would accept a much higher cost program.

Reviewed by
DMEA OPERATING COMMITTEE
4-10-53
(Date)

COST ESTIMATE

Equipment

To be rented:

1 - "210" portable compressor	$290/mo.

To be furnished by Operator:

1 - Cleveland sinking hammer and shell	$450/new
1 - Ore bucket (900# capacity)	100/new
1 - Ore car (3/4 ton)	250/new
1 - Receiver	350/new
1 - FW-D truck	5000/new

To be purchased: 1/

1 - Ore car (3/4 ton)	$250/new
1 - Air hoist (1/2 ton) single drum	796/new
1 - Sump pump (125' head)	460/new
1 - Ventilation fan (5 HP) gas engine	347/new

Winze

A detailed breakdown of costs is based on a 100-foot, 4'x8' in the clear, 2-compartment, timbered, and completely lagged winze; at an average advance of 1 foot per shift, 1 working shift per day, and the work to be completed in 3 months.

Labor

2 - miners @ $14.11/shift	$ 28.22	
1 - hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. insurance, OAB, etc.	4.23	
	$ 46.56	
Total cost per foot		$46.56

Timber

2 - wall plates	(8"x8"x10')	107		
1 - end plate	(8"x8"x10')	53		
1 - divider	(8"x8"x 5')	27		
6 - posts	(8"x8"x 5')	162		
@ $63/1000 bd. ft.		349	=	$ 21.98
Wedges and lagging @ $12.72/5' set			=	12.72
				$ 34.70

$\frac{\$34.70}{5' \text{ set}}$ = $6.94

Timber cost per foot 6.94

1/ Equipment to be purchased by Operator, but only depreciation allowances are figured for unit price computations.

Equipment Depreciation

	Cost/ft	
1 - "210" compressor rental $290/mo.		
$\frac{3 \text{ mos.} \times 290}{100} = \$8.70$	$ 8.70	
1 - sump pump (125' head) $460/new		
$\frac{1}{60} \times \frac{3 \times 460}{100} = 0.23$	0.23	
1 - air hoist (1/2 ton) single drum $796/new		
$\frac{1}{60} \times \frac{3 \times 796}{100}$ 0.40	0.40	
1 - FW-D truck $5000/new		
$\frac{1 \times \$5000 \times 3 \text{ mos.}}{60 \text{ depreciation} \times 100 \text{ ft.}} = 2.50$	2.50	
1 - Ore car $250/new		
$\frac{1}{60} \times \frac{\$250}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.13$	0.13	
1 - Receiver $350/new $\frac{1}{60} \times \frac{350}{100} \times 3 \text{ mos.} =$	0.18	
1 - Sinking bucket $100/new		
$\frac{1}{60} \times \frac{\$100}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.05$	0.05	
1 - Sinking hammer and shell $450/new		
$\frac{1}{60} \times \frac{\$450}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.24$	0.24	
1 - Water tank $51/new		
$\frac{1}{60} \times \frac{\$51}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.03$	0.03	
Repairs @ $0.50/ft.	0.50	
Total	$12.96	$12.96

Supplies

15#/~~ft~~ 16. powder @ $20.50/100#	3.07	
20/4' round caps (fuse) @ $21.60/1000	0.10	
200'/4' round fuse @ $11.35/1000 ft.	0.57	
104'/4' round bits and steel @ $0.07/ft.	1.78	
50' air hose (1") @ $0.95/ft.	0.48	
350' air pipe (2") @ $0.34/ft.	1.19	
400' water pipe (3/4") @ $0.21/ft.	0.84	
50' water hose (3/4") @ $0.75/ft.	0.38	
150' hoisting cable (3/8") @ $0.13/ft.	0.20	
100' ladders (10') @ $0.30/ft.	0.30	
Power (gas, oil, lubrication) $5.40/shift	5.40	
Small tools and miscellaneous $100	1.00	
Total	$15.31	15.31

Total winze cost		$81.77
10% contingency		8.17
Winze cost per foot		$89.94
	SAY	$90.00

Crosscutting and Drifting

The following is a detailed breakdown of costs for 100 feet of crosscutting and 300 feet of drifting. Crosscuts and drifts estimated for a cross section of 5'x7' in the clear, assumed to advance at a rate of 3 feet per shift, and the work to be completed in 7 months. Timbering is estimated for a cross section 5'x7' in the clear, 5-foot sets, back lagged solid, side lagged halfway up.

Labor

2 - miners @ $14.11/shift	$28.22	
1 - hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. ins., OAB, etc.	4.23	
	$46.56	
$\frac{46.56}{3' \text{ round}}$ = $15.52		$15.52

Timber

2 - posts (8"x8"x8')	85.0		
1 - cap (8"x8"x7')	37.0		
2 - girts (4"x6"x5')	20.0		
@ $63/1000 bd. ft.	142.0	=	8.95
Wedges and lagging @ $4.34/5' set			4.34
			13.29
$\frac{13.29}{5' \text{ set}}$ = $2.66			2.66

Equipment

1 - "210" compressor rental @ $290/mo.

$\frac{7 \text{ mos.} \times \$290}{400 \text{ ft.}}$ = $5.08 — 5.08

1 - FW-D truck @ $5000/new

$\frac{1}{60} \times \frac{\$5000}{400 \text{ ft.}} \times 7 \text{ mos.} =$ — 1.46

2 - Ore cars @ $250/each

$\frac{1}{60} \times \frac{\$250}{400 \text{ ft.}} \times 7 \text{ mos.} \times 2 =$ — 0.14

Equipment - continued

1 - Ore bucket $100/new

$\frac{1}{60} \times \frac{\$100}{400 \text{ ft.}} \times 7 \text{ mos.} =$ $0.03

1 - Receiver $350/new

$\frac{1}{60} \times \frac{\$350}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.10

1 - Jackhammer and shell $450/new

$\frac{1}{60} \times \frac{\$450}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.13

1 - Water tank $51/new

$\frac{1}{60} \times \frac{\$51}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.02

1 - Air hoist $796/new

$\frac{1}{60} \times \frac{\$796}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.23

1 - Sump pump $460/new

$\frac{1}{60} \times \frac{\$460}{400} \times 7 \text{ mos.} =$ 0.13

1 - Ventilation fan $347/new

$\frac{1}{60} \times \frac{\$347}{400} \times 7 \text{ mos.} =$ 0.11

Repairs @ $0.50/ft. 0.50 $7.93

Supplies

15#/ft. powder @ $20.50/100#	3.07
20/4' round caps (fuse) @ $21.60/1000	0.10
200'/4' round fuse @ $11.35/1000 ft.	0.57
104'/4' round bits and steel @ $0.07/ft.	1.78
50 feet air hose (1") @ $0.95/ft.	
$\frac{\$0.95 \times 50'}{400'} = \$0.12$	0.12
300 feet air pipe (2") @ $0.34/ft.	
$\frac{\$0.34 \times 300'}{400'} = 0.26$	0.26
200 feet vent tubing @ $1/ft.	
$\frac{\$1.00 \times 200'}{400'} = 0.50$	0.50

Supplies - continued

450 feet ventilation pipe (8") @ $0.05/ft.

$\frac{\$0.50 \times 450'}{400'}$ = $0.56

350 feet water pipe (3/4") @ $0.21/ft.

$\frac{\$0.21 \times 350'}{400'}$ = 0.18

50 feet water hose (3/4") @ $0.75/ft.

$\frac{\$0.75 \times 50'}{400'}$ = 0.09

5950 lbs. rail (25#) 15' lengths $6./100#
(FOB Helena)

$\frac{5950\#}{100\#} \times \frac{\$6.00}{350 \text{ ft.}}$ = 1.02

1 switch $15/ea.

$\frac{\$15.00}{400 \text{ ft.}}$ = 0.04

200 lbs. spikes $7.98/200#

$\frac{\$7.98}{400 \text{ ft.}}$ = 0.02

175 ties (2') @ $0.40/ea.

$\frac{\$70.00}{350}$ = 0.20 $8.51

Total cost - crosscutting and drifting	$34.62
10% contingency	3.46
Timbered drift and crosscut per foot	$38.08
SAY	$38.00

Untimbered crosscut and drift

Labor 3/4 x $15.52 = $11.64/shift
Timber 2.66/ft.

$15.52 labor if timbered
11.64 labor if untimbered
3.88 less labor cost

3.88 less labor
2.66 less timber
6.54

$38.08 timbered/ft.
6.54
$31.54

SAY $31.50 untimbered drift and crosscut $31.50

Raising

Cost of "dog hole" raising is based on a maximum of 100 feet of raise(s), 4'x4' in the clear, timbered, 5 foot sets, lagged, assumed to advance at a rate of 4 feet per shift, and the work to be completed in a working time of 1 month.

Labor

2 miners @ $14.11/shift	$28.22	
1 hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. insurance, OAB, etc.	4.23	
	$46.56	
$\frac{46.56}{4 \text{ ft.}}$ = $11.64		$11.64

Timber

4 plates (8"x8"x5')	108		
4 posts (8"x8"x5')	108		
@ $63/1000 bd. ft.	216	= $13.61	
Wedges and lagging @ $6.36/5' set =		6.36	
		19.97	
$\frac{19.97}{5' \text{ set}}$ =			3.99

Equipment

1 - "210" portable compressor rental @ $290/mo.

$\frac{1 \text{ mo.} \times \$290}{100 \text{ ft.}}$ = 2.90

1 - sump pump $460/new

$\frac{1}{60 \text{ depreciation}} \times \frac{\$460}{100 \text{ ft.}} \times 1$ = 0.08

1 - air hoist @ $796/new

$\frac{1}{60} \times \frac{\$796}{100 \text{ ft.}} \times 1$ = 0.13

1 - FW-D truck @ $5000/new

$\frac{1}{60} \times \frac{\$5000}{100 \text{ ft.}} \times 1$ = 0.83

2 - Ore cars @ $250/ea.

$\frac{1}{60} \times \frac{\$250}{100 \text{ ft.}} \times 1 \times 2$ = 0.08

1 - Ore bucket @ $100/new

$\frac{1}{60} \times \frac{\$100}{100 \text{ ft.}} \times 1$ = 0.02

1 - Receiver @ $350/new

$\frac{1}{60} \times \frac{\$350}{100 \text{ ft.}} \times 1$ = 0.06

Equipment - continued

1 - Hammer and shell $450/new		
$\frac{1}{60}$ x $\frac{\$450}{100 \text{ ft.}}$ x 1 =	$0.08	
1 - Water tank $51/new		
$\frac{1}{60}$ x $\frac{\$51}{100}$ x 1 =	0.01	
1 - Ventilation fan $347/new		
$\frac{1}{60}$ x $\frac{\$347}{100}$ x 1 =	0.06	
Repairs $0.50/ft.	.50	$4.75

Supplies

15#/ft. powder	3.30	
20/4' round caps (fuse)	.11	
200'/4' round fuse	.52	
104'/4' round bits and steel	1.50	
100' ladders (10 ft.) @ $0.30/ft.	.30	
Power, (gas, oil, lubrication) $5.40/shift	1.35	
Tools and miscellaneous $20	0.20	7.28
Total raising costs		$27.65
10% contingency		2.77
Timber raise per foot		$30.43
	SAY	$30.00

Untimbered raise

Labor 4/5 x $15.52 = $12.41/shift
Timber 3.99/ft.

$15.52 labor if timbered
12.41 labor if untimbered
3.11 less labor cost

3.11 less labor
3.99 less timber
7.10

$30.43 timbered/ft.
7.10
23.33 untimbered raise

SAY 23.50/ft. 23.50

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
EWB

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

March 26, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 26 1953

Memorandum

To: DMEA Field Team, Region II

From: George E. Becraft, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-2767, Report on Morning and Midnight Claims, Jefferson County, Montana.

RECOMMENDATIONS

It is recommended that the application for an Exploration Project Contract on the Midnight and Morning claims, Jefferson County, Montana, submitted by Gilbert C. Holshue, 1065 N. Ewing, Helena, Montana, and Douglas A. Dubois, Box 107, Basin, Montana, be favorably considered. However, rather than the plan proposed by the applicants, an alternative exploration program is recommended.

INTRODUCTION

On August 1, 1952, the writer accompanied by D. R. Irving, Bureau of Mines, and the applicants made a brief visit to the property to examine it for a production loan (DMPA Docket 1529). The examination indicated only minor reserves of dump material and it was suggested that the applicants withdraw their application for a production loan and submit an application for an exploration loan.

On October 10 and 14, 1952, the writer and Samuel Rosenblum, U. S. Geological Survey, examined the property and made a brunton and tape survey of the principal workings.

PROPERTY AND LOCATION

The Midnight (Mineral Survey No. 8519) and Morning (Mineral Survey No. 8518) patented claims, both owned by the applicants, are in sec. 19, T. 7 N., R. 5 W., in the Cataract mining district about 10 miles by graded county road north of Basin,

Reviewed by
DMEA OPERATING COMMITTEE
4-10-53
(date)

Montana. The road is in fair condition, but because of winter conditions is passable only about 6 months of the year.

DESCRIPTION OF PROPERTY

The claims are situated at about 8,000 feet altitude near the top of the north slope of a rounded ridge. On the property are a cabin, storage shed, and compressor shed, all in good condition.

A considerable amount of bulldozing has been done along the outcrop of the vein. Most of the trenching is shown on the attached map. The underground workings consist of two accessible adits with short drifts along the largest vein, a caved adit, and a 27-foot shaft, 4 by 4 feet in the clear (see attached map).

Due to snow cover at the time of this examination, the claim corners were not located but it is believed that the claim line shown on the attached map is within a few feet of the correct position.

GEOLOGY

Most of the workings on the Midnight claim are in a slightly to intensely altered and sheared zone in quartz monzonite and alaskite; this zone ranges up to about 100 feet in width. Within this zone are many small barren quartz veins and small zones of very intensely sheared rock. In the two accessible adits, a quartz vein that ranges from 5 to 7 feet in width, and contains pyrite and sparse galena and sphalerite, has been explored for a total distance of 115 feet. Adjacent to this vein, the quartz monzonite has been intensely silicified. Post-mineralization faulting and shearing have somewhat obscured the attitude of this vein; however, it appears to conform approximately to the main sheared and altered zone--N. 75° W., 70°-75° NE.

The shaft was sunk on a small vein that ranges in width from 0.5 foot to 1.5 feet and contains abundant galena in a quartz gangue. At about 15 feet in depth, a poorly defined, intensely brecciated vein containing sphalerite and galena was intersected about 3 feet from the footwall of the galena vein (see section A-A'). The shaft was sunk to 27 feet and a 10-foot drift was driven to the southeast following this vein. The attitude of this vein was obscured by post mineralization faulting.

The presence of tourmaline in the altered country rock and the character of the sheared and altered zone indicate that this structure is similar to others in the Boulder batholith area from which a considerable amount of lead and zinc has been produced in the past.

PAST OPERATION

In the application under section 4 (b) the owners state that, "We mailed all of the settlement sheets for past production to your office. . . . . ." The writer has not seen these and believes that these sheets accompanied the original application for a production loan. In conversation with the applicants, however, it was learned that a few small shipments of low-grade ore were made from a small, very shallow adit and winze that was located about 100-120 feet southeast of the shaft, but which has since been destroyed by bulldozing. It is believed that these shipments were made sometime between 1928 and 1938.

Two settlement sheets and an assay report accompany the present application. The settlement sheet from the East Helena plant of the American Smelting and Refining Company dated September 22, 1952, was for a shipment of about 9 tons of ore from the small galena vein in the upper 15 feet of the shaft described above. It contained 0.23 ounces gold per ton, 14.3 ounces silver per ton, 6.7 percent lead, and 0.10 percent copper. The settlement sheet from the Metals Milling Company, Inc., a custom mill in Basin, Montana, dated October 12, 1952, was for a shipment of about 28.5 tons of ore from the vein at the bottom of the shaft. It contained 0.17 ounce gold per ton, 8.85 ounces silver per ton, 3.6 percent lead, and 5.6 percent zinc. The writer does not know where the sample was taken that is reported on the assay report that accompanied the application other than that it was taken in the vein near the bottom of the shaft.

DISCUSSION OF APPLICANTS' PROPOSAL

The applicants propose to reopen an old adit (the portal shown on the accompanying map at 8,000 feet elevation), extend it about 20 feet to intersect the large quartz vein, drift 200 feet along the vein, and do 100 feet of raising.

The alternate exploration plan outlined below is recommended for the following reasons: (1) the ground on which the portal of the 8,000 foot elev. adit is located is open ground and has not been claimed by the applicants and winter conditions would prevent filing a claim until at least May 1953; (2) there are no maps of the inaccessible 8,000 foot elev. adit to indicate its length and direction. The applicants believe that it is 400 feet long and driven directly toward the vein. This cannot be checked, however, and (3) there is no way of predicting the condition of the adit beyond the first cave near the portal.

In conference with Robert Hundhausen and E. W. Buel of the Bureau of Mines an alternative proposal was worked out. It is suggested (1) that a 100-foot, vertical winze be sunk at a point (see map) just beyond the large quartz vein in the adit marked

Elev. 8,060 on the attached map; (2) that a crosscut be driven (about 50 feet) to the large quartz vein; (3) that 300 feet of drift be driven along the vein, a few short crosscuts be driven into the hanging wall (total about 50 feet) of the vein; and (4) that 100 feet of raising be authorized contingent upon the results of the drifting. A small amount of cleaning and preparation of the 8,060 elev. adit will be necessary.

The collar of the proposed shaft is about 40 feet in elevation below the bottom of the old shaft, thus by sinking here, 40 feet in depth would be gained. The 300 feet of drifting with short crosscuts into the hanging wall will permit adequate exploration to determine whether the ore occurs as distinct veins in the sheared and altered zone or as lenses along the large quartz vein.

OPERATORS' ABILITY AND PROPERTY RIGHTS

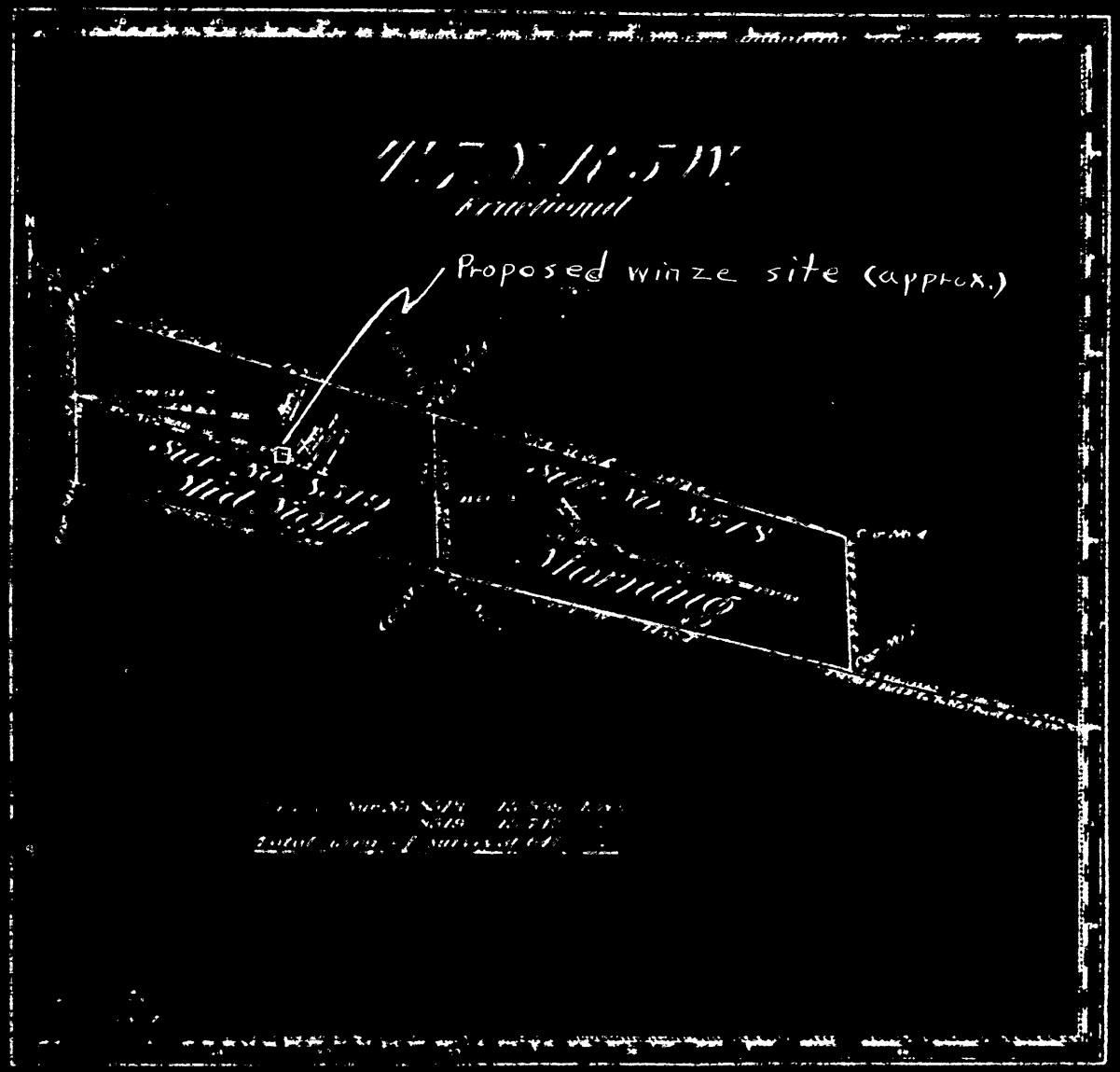
Mr. Dubois, who will direct the operations, has had considerable mining experience in the mines at Butte. Both applicants appear to be conscientious and responsible men, and it is believed that they would carry out the project in a workmanlike manner.

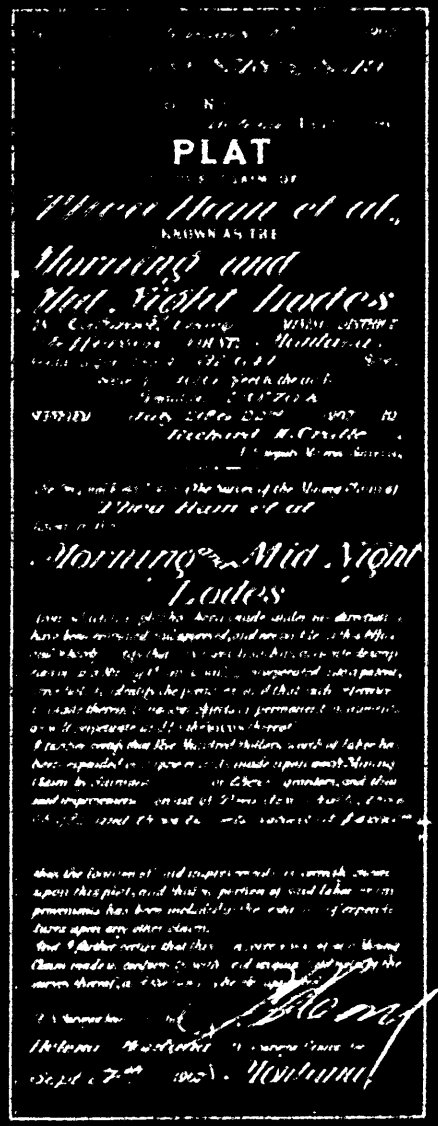
The applicants own the two patented claims, Morning and Midnight, that are shown on the plat, a copy of which is attached.

EXPLORATION PROJECT

The project could be started in May 1953 and should be completed within 24 months.

Enclosures 2
Distribution:
- DMEA (Orig. & 3)
- USBM (2)
- USGS (SRO)
- Docket
- Becraft


Proposed winze site (approx.)
Morning
Mid Night


PLAT
KNOWN AS THE
Morning and
Mid Night Lodes

Work

EXPLORATION PROJECT CONTRACT

Douglas DuBois and Gilbert Holshue
Midnight and Morning Claims
Docket No. DMEA 2767

EXHIBIT "A"

Description of the Work
(See attached map)

Time Schedule Months*		
1	(1)	Move compressor house.
Concurrent	(2)	Rehabilitate approximately 50 feet of drift on the 8060 level.
Concurrent	(3)	Excavate a winze station (approx. 2600 cu. ft.) on the 8060 level.
3	(4)	Sink a 2-compartment winze for 100 feet from the 8060 level.
7	(5)	Crosscut approximately 50 feet from the winze to the large quartz vein.
Concurrent	(6)	Drift 300 feet along the quartz vein, with a few short crosscuts (a maximum of 50 feet) to be driven into the hanging wall.
1	(7)	A maximum of 100 feet of raising to be authorized contingent upon the results of the drifting.

*Weather conditions may make it advisable to suspend operations for about 6 months each year; consequently, 24 months are allowed for completion.

Estimated Costs of the Project
*Indicates allowable maximum

Agreed Unit Costs

100 feet winze, 2-compartment, untimbered at $90.00*/ft.	$ 9,000.00
100 feet crosscutting and 300 feet of drifting at $31.50*/ft.	12,600.00
100 feet raising at $23.50*/ft.	2,350.00
Timbering drift and crosscut where needed, not to exceed 400 feet at $6.50*/ft.	2,600.00
Timbering raise(s) where needed, not to exceed 100 feet at $6.50*/ft.	650.00
	$27,200.00

Total Agreed Unit Costs

The Government will contribute to the costs of winze sinking, drifting, crosscutting, and raising, as they accrue, for units of work actually performed, on the basis of the agreed estimated unit cost per foot in lieu of actual costs.

The unit costs include all costs of the work except those costs scheduled below to which the Government will contribute on the basis of actual costs.

Scheduled Actual Costs

Rehabilitation and Repairs	
(1) Rehabilitate approximately 50 feet of drift	$ 300.00 1/
(2) Excavate a winze station (approx. 2600 cu. ft.), install headframe	500.00 1/
New Buildings, Improvements and Installations	
Move compressor house	175.00 1/
Labor, Supervision, Consultants	
Consultants	200.00
Miscellaneous	
Assays	200.00
Contingencies	425.00
Total	$1,800.00
Total estimated cost of project	$29,000.00
Government's participation @ 50%	$14,500.00

1/ To include labor, supervision, supplies and all other costs.

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

March 31, 1953

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

[illegible]
[illegible]
[illegible]
[illegible] 1953

Re: Docket No. DMEA-2767 (Lead-zinc)
Jefferson County, Montana

Dear Mr. Selfridge:

Enclosed are the following:

1. Original and 3 copies of a field report by George E. Becraft, U. S. Geological Survey with accompanying maps.
2. Original and 3 copies of a memorandum by E. W. Buel, U. S. Bureau of Mines, describing a cost breakdown of the proposed work together with 4 copies of a proposed Exhibit "A" to be attached to the contract if the contract is approved.

Field examiners recommend that an exploration contract be granted the applicants, although they recommend an alternative plan rather than the one submitted in the application. The proposed changes in the alternative program have been discussed with the applicants who have stated their agreement.

The plan presented by the applicants has not been favored because: 1) the ground on which the portal of their proposed adit is located is not held by the applicants, 2) neither the condition nor extent of the adit that they propose to rehabilitate is known and there is no way of estimating the cost of this proposed work.

The vertical winze proposed by field examiners will be collared in an old adit which will require little rehabilitation. The winze will have the advantage of being underground, thus, it should be less affected by adverse weather. It will be sunk in the footwall of the vein, yet it will be close enough to the vein on the 100-foot vein to reach the vein by a short crosscut. It

is realized that the alternative winzing plan will be more expensive than the adit work proposed by the applicant; however, by winzing more actual exploration of the mineralized structure will be accomplished for the money expended.

The Field Team concurs with field examiners and recommends that the alternative exploration plan be approved.

By Field Team, Region II

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

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

Enclosures
cc: USBM (2)
Becraft

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
[illegible] Howard Street
[illegible] 4, [illegible]

March [illegible], 1953

Memorandum

To: [illegible] Field Team, Region II

From: George [illegible] Kerlikowski, Geologist, U. S. Geological Survey

Subject: Docket No. [illegible], report on Morning and Midnight Claims, Jefferson County, Montana.

RECOMMENDATION

It is recommended that the application for an exploration project contract on the Midnight and Morning claims, Jefferson County, Montana, submitted by Gilbert F. Holmes, [illegible] W. Ewing, Helena, Montana, and Charles A. Dubois, Box 1[illegible], Butte, Montana, be favorably considered. However, rather than the plan proposed by the applicants, an alternative exploration program is recommended.

INTRODUCTION

On August [illegible], 1952, the writer accompanied by [illegible] Irvin, Bureau of Mines, and the applicants made a brief visit to the property to examine it for a production loan (Docket [illegible]). The examination indicated only minor reserves of dump material and it was suggested that the applicants withdraw their application for a production loan and submit an application for an exploration loan.

On October [illegible] and 14, 1952, the writer and [illegible] Rosenblum, U. S. Geological Survey, examined the property and made a brunton and tape survey of the principal workings.

PROPERTY AND WORKINGS

The Midnight (Mineral Survey No. [illegible]) and Morning (Mineral Survey No. [illegible]) patented claims, both owned by the applicants, are in Sec. [illegible], T. [illegible], R. [illegible], in the Cataract mining district about [illegible] miles by graded county road north of Basin,

Approved by
[illegible]

4-10-53
(Date)

Montana. The road is in fair condition, but because of winter conditions is passable only about 6 months of the year.

DESCRIPTION OF PROPERTY

The claims are situated at about 8,000 feet altitude near the top of the north slope of a rounded ridge. On the property are a cabin, storage shed, and compressor shed, all in good condition.

A considerable amount of bulldozing has been done along the outcrop of the vein. Most of the trenching is shown on the attached map. The underground workings consist of two accessible adits with short drifts along the largest vein, a caved adit, and a 27-foot shaft, 4 by 4 feet in the clear (see attached map).

Due to snow cover at the time of this examination, the claim corners were not located but it is believed that the claim line shown on the attached map is within a few feet of the correct position.

GEOLOGY

Most of the workings on the Midnight claim are in a slightly to intensely altered and sheared zone in quartz monzonite and aplite; this zone ranges up to about 100 feet in width. Within this zone are many small barren quartz veins and small zones of very intensely sheared rock. In the two accessible adits, a quartz vein that ranges from 5 to 7 feet in width, and contains pyrite and sparse galena and sphalerite, has been explored for a total distance of 115 feet. Adjacent to this vein, the quartz monzonite has been intensely silicified. Post-mineralization faulting and shearing have somewhat obscured the attitude of this vein; however, it appears to conform approximately to the main sheared and altered zone--N. 75° W., 70°-75° NE.

The shaft was sunk on a small vein that ranges in width from 0.5 foot to 1.5 feet and contains abundant galena in a quartz gangue. At about 15 feet in depth, a poorly defined, intensely brecciated vein containing sphalerite and galena was intersected about 3 feet from the footwall of the galena vein (see section A-A'). The shaft was sunk to 27 feet and a 10-foot drift was driven to the southeast following this vein. The attitude of this vein was obscured by post mineralization faulting.

The presence of tourmaline in the altered country rock and the character of the sheared and altered zone indicate that this structure is similar to others in the Boulder batholith area from which a considerable amount of lead and zinc has been produced in the past.

PAST OPERATION

In the application under section 4 (b) the owners state that, "We mailed all of the settlement sheets for past production to your office. . . . . ." The writer has not seen these and believes that these sheets accompanied the original application for a production loan. In conversation with the applicants, however, it was learned that a few small shipments of low-grade ore were made from a small, very shallow adit and winze that was located about 100-120 feet southeast of the shaft, but which has since been destroyed by bulldozing. It is believed that these shipments were made sometime between 1928 and 1938.

Two settlement sheets and an assay report accompany the present application. The settlement sheet from the East Helena plant of the American Smelting and Refining Company dated September 28, 1932, was for a shipment of about 9 tons of ore from the small galena vein in the upper 15 feet of the shaft described above. It contained 0.23 ounces gold per ton, 14.5 ounces silver per ton, 6.7 percent lead, and 0.10 percent copper. The settlement sheet from the Metals Milling Company, Inc., a custom mill in Basin, Montana, dated October 12, 1932, was for a shipment of about 28.5 tons of ore from the vein at the bottom of the shaft. It contained 0.17 ounce gold per ton, 8.83 ounces silver per ton, 3.6 percent lead, and 3.6 percent zinc. The writer does not know where the sample was taken that is reported on the assay report that accompanied the application other than that it was taken in the vein near the bottom of the shaft.

DISCUSSION OF APPLICANTS' PROPOSAL

The applicants propose to reopen an old adit (the portal shown on the accompanying map at 8,000 feet elevation), extend it about 20 feet to intersect the large quartz vein, drift 200 feet along the vein, and do 100 feet of raising.

The alternate exploration plan outlined below is recommended for the following reasons: (1) the ground on which the portal of the 8,000 foot elev. adit is located is open ground and has not been claimed by the applicants and winter conditions would prevent filing a claim until at least May 1953; (2) there are no maps of the inaccessible 8,000 foot elev. adit to indicate its length and direction. The applicants believe that it is 400 feet long and driven directly toward the vein. This cannot be checked, however, and (3) there is no way of predicting the condition of the adit beyond the first cave near the portal.

In conference with Robert Rundhausen and E. W. Buel of the Bureau of Mines an alternative proposal was worked out. It is suggested (1) that a 100-foot, vertical winze be sunk at a point (see map) just beyond the large quartz vein in the adit marked

Elev. 8,060 on the attached map; (2) that a crosscut be driven (about 30 feet) to the large quartz vein; (3) that 300 feet of drift be driven along the vein, a few short crosscuts be driven into the hanging wall (total about 30 feet) of the vein; and (4) that 100 feet of raising be authorized contingent upon the results of the drifting. A small amount of cleaning and preparation of the 8,060 elev. adit will be necessary.

The collar of the proposed shaft is about 40 feet in elevation below the bottom of the old shaft, thus by sinking here, 40 feet in depth would be gained. The 300 feet of drifting with short crosscuts into the hanging wall will permit adequate exploration to determine whether the ore occurs as distinct veins in the sheared and altered zone or as lenses along the large quartz vein.

OPERATORS' ABILITY AND PROPERTY RIGHTS

Mr. Dubois, who will direct the operations, has had considerable mining experience in the mines at Butte. Both applicants appear to be conscientious and responsible men, and it is believed that they would carry out the project in a workmanlike manner.

The applicants own the two patented claims, Morning and Midnight, that are shown on the plat, a copy of which is attached.

EXPLORATION PROJECT

The project could be started in May 1953 and should be completed within 24 months.

Enclosures 2
Distribution:
DMEA (Orig. & 3)
USBM (2)
USGS (RRO)
Becket
Beeraft

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

1201 North Division Street
Spokane 2, Washington

March 19, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work by DuBois and Holshue, Midnight and Morning claims, Jefferson County, Montana, Docket No. DMEA 2767.

Application for Government assistance for a production loan (DMPA Docket 1529) was submitted by Messrs. DuBois and Holshue. An examination by an Examining Team, August 1, 1952, showed only minor ore reserves of dump material. It was suggested to the applicants that they withdraw their production loan application and submit an exploration loan application. An application for an exploration loan was received by the Field Team, Region II, shortly after the DMPA examination.

It was necessary to change the exploration work program proposed by the applicants. Reasons for this change are discussed in a memorandum report of George Beecraft, Geologist, U. S. Geol. Survey, on the subject property.

I have not visited the property and it is doubtful whether it will be accessible before May. An alternate exploration program, however, was worked out with George Beecraft and Robert Hundhausen, Mining Engineer, Bureau of Mines, who have examined the property. This program is listed under Exhibit "A" attached. A cost estimate of the exploration is given below.

It is to be noted that the applicants' exploration loan application shows a total of $12,955 for the work originally proposed by them. As stated above, the applicants' work proposal had to be considerably altered. These changes were discussed with Mr. DuBois, applicant. He agreed that he and his partner, G. Holshue, would accept the modifications in the exploratory work and would accept a much higher cost program.

4-10-53

COST ESTIMATE

Equipment

To be rented:

1 - "210" portable compressor	$290/mo.

To be furnished by Operator:

1 - Cleveland sinking hammer and shell	$450/new
1 - Ore bucket (900# capacity)	100/new
1 - Ore car (3/4 ton)	250/new
1 - Receiver	350/new
1 - FM-D truck	5000/new

To be purchased: 1/

1 - Ore car (3/4 ton)	$250/new
1 - Air hoist (1/2 ton) single drum	796/new
1 - Sump pump (125' head)	460/new
1 - Ventilation fan (5 HP) gas engine	347/new

Winze

A detailed breakdown of costs is based on a 100-foot, 4'x8' in the clear, 2-compartment, timbered, and completely lagged winze; at an average advance of 1 feet per shift, 1 working shift per day, and the work to be completed in 3 months.

Labor

2 - miners @ $14.11/shift	$ 28.22	
1 - hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. insurance, OAS, etc.	4.23	
	$ 46.56	
Total cost per foot		$46.56

Timber

2 - wall plates	(8"x8"x10')	107		
1 - end plate	(8"x8"x10')	53		
1 - divider	(8"x8"x 5')	27		
6 - posts	(8"x8"x 5')	162		
@ $63/1000 bd. ft.		349	=	$ 21.98
Wedges and lagging @ $12.72/5' set			=	12.72
				$ 34.70
$34.70 / 5' set = $6.94				
Timber cost per foot				6.94

1/ Equipment to be purchased by Operator, but only depreciation allowances are figured for unit price computations.

Equipment Depreciation

	Cost/ft.	
1 - "210" compressor rental $890/mo.		
$\frac{3 \text{ mos.} \times 890}{100} = \$8.70$	$ 8.70	
1 - sump pump (125' head) $460/new		
$\frac{1}{60} \times \frac{3 \times 460}{100} = 0.23$	0.23	
1 - air hoist (1/2 ton) single drum $796/new		
$\frac{1}{60} \times \frac{3 \times 796}{100} = 0.40$	0.40	
1 - FW-D truck $5000/new		
$\frac{1 \times \$5000 \times 3 \text{ mos.}}{60 \text{ depreciation} \times 100 \text{ ft.}} = 2.50$	2.50	
1 - Ore car $250/new		
$\frac{1}{60} \times \frac{\$250}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.13$	0.13	
1 - Receiver $350/new $\frac{1}{60} \times \frac{350}{100'} \times 3 \text{ mos.} =$	0.18	
1 - Sinking bucket $100/new		
$\frac{1}{60} \times \frac{\$100}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.05$	0.05	
1 - Sinking hammer and shell $450/new		
$\frac{1}{60} \times \frac{\$450}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.24$	0.24	
1 - Water tank $51/new		
$\frac{1}{60} \times \frac{\$51}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.03$	0.03	
Repairs @ $0.50/ft.	0.50	
Total	$12.96	$12.96

Supplies

15#/ft. powder @ $20.50/100#	3.07	
20/4' round caps (fuse) @ $21.60/1000	0.10	
200'/4' round fuse @ $11.35/1000 ft.	0.57	
104'/4' round bits and steel @ $0.07/ft.	1.78	
50' air hose (1") @ $0.95/ft.	0.48	
350' air pipe (2") @ $0.34/ft.	1.19	
400' water pipe (3/4") @ $0.21/ft.	0.84	
50' water hose (3/4") @ $0.75/ft.	0.38	
150' hoisting cable (3/8") @ $0.13/ft.	0.20	
100' ladders (10') @ $0.30/ft.	0.30	
Power (gas, oil, lubrication) $5.40/shift	5.40	
Small tools and miscellaneous $100	1.00	
Total	$15.31	15.31

Total winze cost		$81.77
10% contingency		8.17
Winze cost per foot		$89.94
	SAY	$90.00

Crosscutting and Drifting

The following is a detailed breakdown of costs for 100 feet of crosscutting and 300 feet of drifting. Crosscuts and drifts estimated for a cross section of 5'x7' in the clear, assumed to advance at a rate of 3 feet per shift, and the work to be completed in 7 months. Timbering is estimated for a cross section 5'x7' in the clear, 5-foot sets, back lagged solid, side lagged halfway up.

Labor

2 - miners @ $14.11/shift	$28.22	
1 - hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. ins., OAB, etc.	4.23	
	$46.56	
$\frac{46.56}{3' \text{ round}}$ = $15.52		$15.52

Timber

2 - posts (8"x8"x6')	85.0		
1 - cap (8"x8"x7')	37.0		
2 - girts (4"x6"x5')	20.0		
@ $63/1000 bd. ft.	142.0	=	8.95
Wedges and lagging @ $4.34/5' set			4.34
			13.29
$\frac{13.29}{5' \text{ set}}$ = $2.66			2.66

Equipment

1 - "210" compressor rental @ $290/mo.

$\frac{7 \text{ mos.} \times \$290}{400 \text{ ft.}}$ = $5.08 — 5.08

1 - FW-D truck @ $5000/new

$\frac{1}{60} \times \frac{\$5000}{400 \text{ ft.}} \times 7 \text{ mos.} =$ — 1.46

2 - Ore cars @ $250/each

$\frac{1}{60} \times \frac{\$250}{400 \text{ ft.}} \times 7 \text{ mos.} \times 2 =$ — 0.14

Equipment - continued

1 - Ore bucket $100/new

$\frac{1}{60} \times \frac{\$100}{400 \text{ ft.}} \times 7 \text{ mos.} =$ $0.03

1 - Receiver $350/new

$\frac{1}{60} \times \frac{\$350}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.10

1 - Jackhammer and shell $450/new

$\frac{1}{60} \times \frac{\$450}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.13

1 - Water tank $51/new

$\frac{1}{60} \times \frac{\$51}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.02

1 - Air hoist $796/new

$\frac{1}{60} \times \frac{\$796}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.23

1 - Sump pump $460/new

$\frac{1}{60} \times \frac{\$460}{400} \times 7 \text{ mos.} =$ 0.13

1 - Ventilation fan $347/new

$\frac{1}{60} \times \frac{\$347}{400} \times 7 \text{ mos.} =$ 0.11

Repairs @ $0.50/ft. 0.50 $7.93

Supplies

15#/ft. powder @ $20.50/100# 3.07
20/4" round caps (fuse) @ $22.60/1000 0.10
200'/4' round fuse @ $11.35/1000 ft. 0.57
104'/4' round bits and steel @ $0.07/ft. 1.78
50 feet air hose (1") @ $0.95/ft.

$\frac{\$0.95 \times 50'}{400'} = \$0.12$ 0.12

300 feet air pipe (2") @ $0.34/ft.

$\frac{\$0.34 \times 300'}{400'} = 0.26$ 0.26

200 feet vent tubing @ $1/ft.

$\frac{\$1.00 \times 200'}{400'} = 0.50$ 0.50

Supplies - continued

450 feet ventilation pipe (8") @ $0.05/ft.

$\frac{\$0.50 \times 450'}{400'}$ = $0.56

350 feet water pipe (3/4") @ $0.21/ft.

$\frac{\$0.21 \times 350'}{400'}$ = 0.18

50 feet water hose (3/4") @ $0.75/ft.

$\frac{\$0.75 \times 50'}{400'}$ = 0.09

5950 lbs. rail (25#) 15' lengths $6./100#
(FOB Helena)

$\frac{5950\#}{100\#} \times \frac{\$6.00}{350 \text{ ft.}}$ = 1.02

1 switch $15/ea.

$\frac{\$15.00}{400 \text{ ft.}}$ = 0.04

200 lbs. spikes $7.98/200#

$\frac{\$7.98}{400 \text{ ft.}}$ = 0.02

175 ties (2') @ $0.40/ea.

$\frac{\$70.00}{350}$ = 0.20 $8.51

Total cost - crosscutting and drifting $34.68
10% contingency 3.46
Timbered drift and crosscut per foot $38.08
SAY $38.00

Untimbered crosscut and drift

Labor 3/4 x $15.52 = $11.64/shift
Timber 2.66/ft.

$15.52 labor if timbered
11.64 labor if untimbered
3.88 less labor cost

3.88 less labor
2.66 less timber
6.54

$38.08 timbered/ft.
6.54
$31.54

SAY $31.50 untimbered drift and crosscut $31.50

Raising

Cost of "dog hole" raising is based on a maximum of 100 feet of raise(s), 4'x4' in the clear, timbered, 5 feet sets, lagged, assumed to advance at a rate of 4 feet per shift, and the work to be completed in a working time of 1 month.

Labor

2 miners @ $14.11/shift	$28.22	
1 hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. insurance, OAB, etc.	4.23	
	$46.56	
$\frac{46.56}{4 \text{ ft.}}$ = $11.64		$11.64

Timber

4 plates (8"x8"x5')	108		
4 posts (8"x8"x5')	108		
@ $63/1000 bd. ft.	216	= $13.61	
Wedges and lagging @ $6.36/5' set =		6.36	
		19.97	
$\frac{19.97}{5' \text{ set}}$ =			3.99

Equipment

1 - "210" portable compressor rental @ $290/mo.	
$\frac{1 \text{ mo.} \times \$290}{100 \text{ ft.}}$ =	2.90
1 - sump pump $460/new	
$\frac{1}{60}$ depreciation $\times \frac{\$460}{100 \text{ ft.}} \times 1$ =	0.08
1 - air hoist @ $796/new	
$\frac{1}{60} \times \frac{\$796}{100 \text{ ft.}} \times 1$ =	0.13
1 - FW-D truck @ $5000/new	
$\frac{1}{60} \times \frac{\$5000}{100 \text{ ft.}} \times 1$ =	0.83
2 - Ore cars @ $250/ea.	
$\frac{1}{60} \times \frac{\$250}{100 \text{ ft.}} \times 1 \times 2$ =	0.08
1 - Ore bucket @ $100/new	
$\frac{1}{60} \times \frac{\$100}{100 \text{ ft.}} \times 1$ =	0.02
1 - Receiver @ $350/new	
$\frac{1}{60} \times \frac{\$350}{100 \text{ ft.}} \times 1$ =	0.06

Equipment - continued

1 - Hammer and shell $450/new		
$\frac{1}{60} \times \frac{\$450}{100 \text{ ft.}} \times 1 =$	$0.08	
1 - Water tank $51/new		
$\frac{1}{60} \times \frac{\$51}{100} \times 1 =$	0.01	
1 - Ventilation fan $347/new		
$\frac{1}{60} \times \frac{\$347}{100} \times 1 =$	0.06	
Repairs $0.50/ft.	.50	$4.75

Supplies

15#/ft. powder	3.30	
20/4' round caps (fuse)	.11	
220'/4' round fuse	.52	
104'/4' round bits and steel	1.50	
100' ladders (10 ft.) @ $0.30/ft.	.30	
Power, (gas, oil, lubrication) $5.40/shift	1.35	
Tools and miscellaneous $20	0.20	7.28

Total raising costs		$27.65
10% contingency		2.77
Timber raise per foot		$30.43
	SAY	$30.00

Untimbered raise

Labor 4/5 x $15.52 = $12.41/shift
Timber 3.99/ft.

$15.52 labor if timbered
12.41 labor if untimbered
3.11 less labor cost

3.11 less labor
3.99 less timber
7.10

$30.43 timbered/ft.
7.10
23.33 untimbered raise

SAY 23.50/ft. 23.50

Orig. & 3 cys - Wash.
USGS (2)
BMRA
R/D
RMB

EXPLORATION PROJECT CONTRACT

Douglas DuBois and Gilbert Melahue
Midnight and Morning Claims
Docket No. DMRA 2767

EXHIBIT "A"

Description of the Work
(See attached map)

4-10-53

Time Schedule Months*		
1	(1)	Move compressor house.
Concurrent	(2)	Rehabilitate approximately 50 feet of drift on the 8060 level.
Concurrent	(3)	Excavate a winze station (approx. 2600 cu. ft.) on the 8060 level.
3	(4)	Sink a 2-compartment winze for 100 feet from the 8060 level.
7	(5)	Crosscut approximately 50 feet from the winze to the large quartz vein.
Concurrent	(6)	Drift 300 feet along the quartz vein, with a few short crosscuts (a maximum of 50 feet) to be driven into the hanging wall.
1	(7)	A maximum of 100 feet of raising to be authorized contingent upon the results of the drifting.

*Weather conditions may make it advisable to suspend operations for about 6 months each year; consequently, 24 months are allowed for completion.

Estimated Costs of the Project
*Indicates allowable maximum

Agreed Unit Costs

100 feet winze, 2-compartment, timbered at $90.00*/ft.	$ 9,000.00
100 feet crosscutting and 300 feet of drifting at $31.50*/ft.	12,600.00
100 feet raising at $23.50*/ft.	2,350.00
Timbering drift and crosscut where needed, not to exceed 400 feet at $6.50*/ft.	2,600.00
Timbering raise(s) where needed, not to exceed 100 feet at $6.50*/ft.	650.00
	$27,200.00

Total Agreed Unit Costs

The Government will contribute to the costs of winze sinking, drifting, crosscutting, and raising, as they accrue, for units of work actually performed, on the basis of the agreed estimated unit cost per foot in lieu of actual costs.

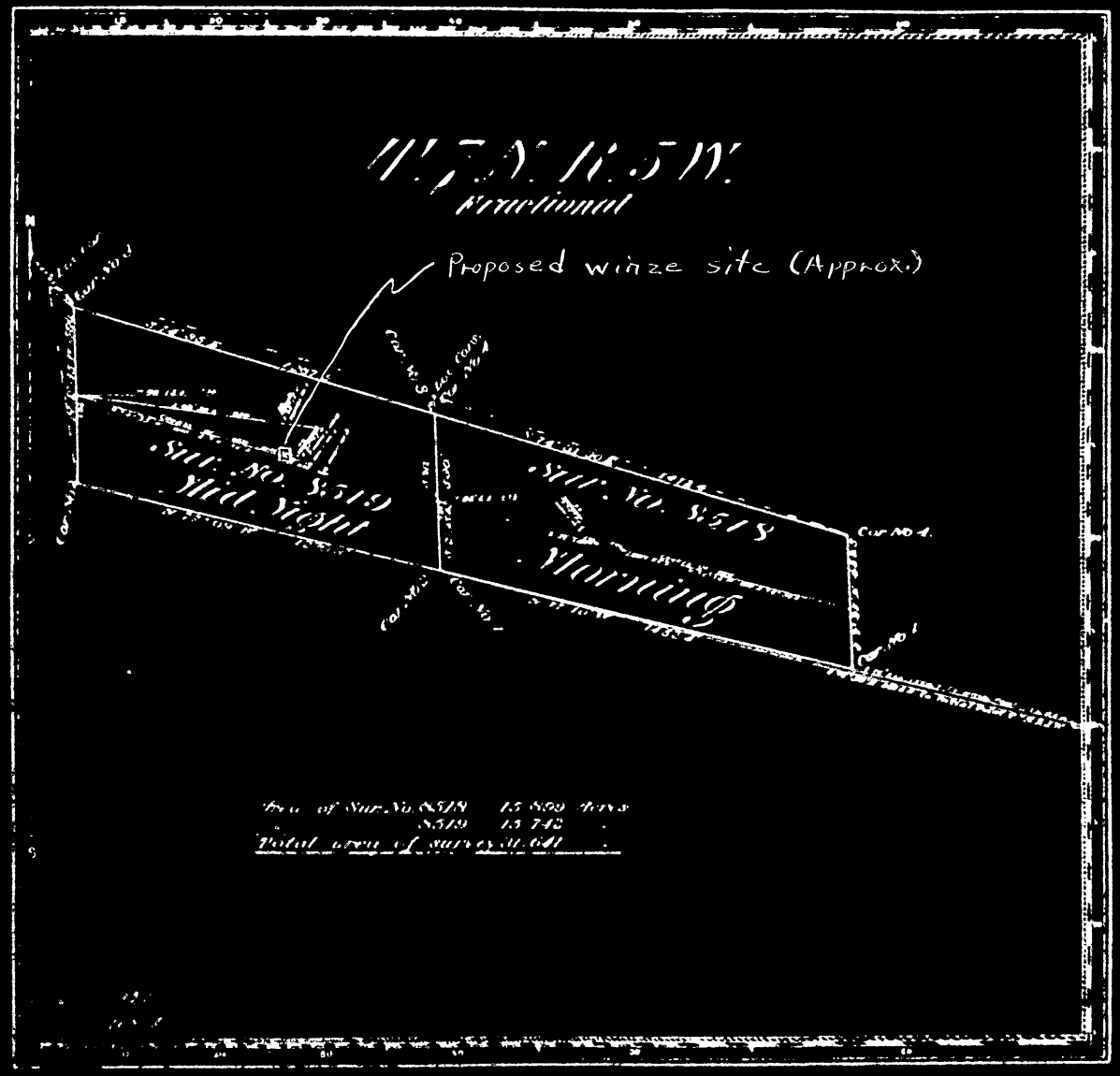
The unit costs include all costs of the work except those costs scheduled below to which the Government will contribute on the basis of actual costs.

Scheduled Actual Costs

Rehabilitation and Repairs		
(1) Rehabilitate approximately 50 feet of drift	$ 300.00	1/
(2) Excavate a winze station (approx. 2600 cu. ft.), install headframe	500.00	1/
New Buildings, Improvements and Installations		
Move compressor house	175.00	1/
Labor, Supervision, Consultants		
Consultants	200.00	
Miscellaneous		
Assays	200.00	
Contingencies	425.00	
Total	$1,800.00	
Total estimated cost of project	$29,000.00	
Government's participation @ 50%	$14,500.00	

1/ To include labor, supervision, supplies and all other costs.

(4 675)



Mineral survey No. 8518 & 8519

Lot No

Helena land district

PLAT

OF THE CLAIM OF

Theo Ham et al.,

KNOWN AS THE

Morning and Mid Night Lodes

in Cataract Mining District, Jefferson County, Montana.

Surveyed [illegible] 1906

Scale of 1" = 100' Spot to the inch

Variation [illegible]

Approved July 28th 1907 Richard M. Conte

U.S. Deputy Mineral Surveyor.

The original field notes of the survey of the Mining Claim of Theo Ham et al known as the Morning and Mid Night Lodes from which this plat has been made under my direction have been examined and approved, and are on file in this office, and I hereby certify that this plat is such an accurate delineation of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made thereon to natural objects or permanent monuments as will perpetuate and fix the status thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon each Mining Claim by themselves or their grantors, and that said improvements consist of Two tries, shafts, tunnels, shafts and drifts to a depth of [illegible] feet.

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the expenditure of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said mineral rights of the survey thereof, and the same is hereby approved.

U.S. Mineral Surveyor

Helena, Montana U.S. Surveyor General

Sept 27th 1907. Montana

No

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

1201 North Division Street
Spokane 2, Washington

March 19, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work by DuBois and Holshue, Midnight and Morning claims, Jefferson County, Montana, Docket No. DMEA 2767.

Application for Government assistance for a production loan (DMPA Docket 1529) was submitted by Messrs. DuBois and Holshue. An examination by an Examining Team, August 1, 1952, showed only minor ore reserves of dump material. It was suggested to the applicants that they withdraw their production loan application and submit an exploration loan application. An application for an exploration loan was received by the Field Team, Region II, shortly after the DMPA examination.

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To be purchased: 1/

1 - Ore car (3/4 ton)	$250/new
1 - Air hoist (1/2 ton) single drum	796/new
1 - Sump pump (125' head)	460/new
1 - Ventilation fan (5 HP) gas engine	347/new

Mines

A detailed breakdown of costs is based on a 100-foot, 4'x8' in the clear, 2-compartment, timbered, and completely lagged winze; at an average advance of 1 foot per shift, 1 working shift per day, and the work to be completed in 3 months.

Labor

2 - miners @ $14.11/shift	$ 28.22	
1 - hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. insurance, OAB, etc.	4.23	
	$ 46.56	
Total cost per foot		$46.56

Timber

2 - wall plates	(8"x8"x10')	107		
1 - end plate	(8"x8"x10')	53		
1 - divider	(8"x8"x 5')	27		
6 - posts	(8"x8"x 5')	162		
@ $63/1000 bd. ft.		349	=	$ 21.98
Wedges and lagging @ $12.72/5' set			=	12.72
$34.70 / 5' set = $6.94				$ 34.70
Timber cost per foot				6.94

1/ Equipment to be purchased by Operator, but only depreciation allowances are figured for unit price computations.

Equipment Depreciation

	Cost/ft	
1 - "210" compressor rental $290/mo.		
$\frac{3 \text{ mos.} \times 290}{100} = \$8.70$	$ 8.70	
1 - sump pump (125' head) $460/new		
$\frac{1}{60} \times \frac{3 \times 460}{100} = 0.23$	0.23	
1 - air hoist (1/2 ton) single drum $796/new		
$\frac{1}{60} \times \frac{3 \times 796}{100} = 0.40$	0.40	
1 - FM-D truck $5000/new		
$\frac{1 \times \$5000 \times 3 \text{ mos.}}{60 \text{ depreciation} \times 100 \text{ ft.}} = 2.50$	2.50	
1 - Ore car $250/new		
$\frac{1}{60} \times \frac{\$250}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.13$	0.13	
1 - Receiver $350/new $\frac{1}{60} \times \frac{350}{100} \times 3 \text{ mos.} =$	0.18	
1 - Sinking bucket $100/new		
$\frac{1}{60} \times \frac{\$100}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.05$	0.05	
1 - Sinking hammer and shell $450/new		
$\frac{1}{60} \times \frac{\$450}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.24$	0.24	
1 - Water tank $51/new		
$\frac{1}{60} \times \frac{\$51}{100 \text{ ft.}} \times 3 \text{ mos.} = 0.03$	0.03	
Repairs @ $0.50/ft.	0.50	
Total	$12.96	$12.96

Supplies

15#/ft. powder @ $20.50/100#	3.07	
20/4' round caps (fuse) @ $21.60/1000	0.10	
200'/4' round fuse @ $11.35/1000 ft.	0.57	
104'/4' round bits and steel @ $0.07/ft.	1.78	
50' air hose (1") @ $0.95/ft.	0.48	
350' air pipe (2") @ $0.34/ft.	1.19	
400' water pipe (3/4") @ $0.21/ft.	0.84	
50' water hose (3/4") @ $0.75/ft.	0.38	
150' hoisting cable (3/8") @ $0.13/ft.	0.20	
100' ladders (10') @ $0.30/ft.	0.30	
Power (gas, oil, lubrication) $5.40/shift	5.40	
Small tools and miscellaneous $100	1.00	
Total	$15.31	15.31

Total winze cost		$81.77
10% contingency		8.17
Winze cost per foot		$89.94
	SAY	$90.00

Crosscutting and Drifting

The following is a detailed breakdown of costs for 100 feet of crosscutting and 300 feet of drifting. Crosscuts and drifts estimated for a cross section of 5'x7' in the clear, assumed to advance at a rate of 3 feet per shift, and the work to be completed in 7 months. Timbering is estimated for a cross section 5'x7' in the clear, 5-foot sets, back lagged solid, side lagged halfway up.

Labor

2 - miners @ $14.11/shift	$28.22	
1 - hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. ins., OAB, etc.	4.23	
	$46.56	
$\frac{46.56}{5' \text{ round}}$ = $15.52		$15.52

Timber

2 - posts (8"x8"x8')	85.0		
1 - cap (8"x8"x7')	37.0		
2 - girts (4"x6"x5')	20.0		
@ $63/1000 bd. ft.	142.0	=	8.95
Wedges and lagging @ $4.34/5' set			4.34
			13.29
$\frac{13.29}{5' \text{ set}}$ = $2.66			2.66

Equipment

1 - "210" compressor rental @ $890/mo.

$\frac{7 \text{ mos.} \times \$890}{400 \text{ ft.}}$ = $5.08 — 5.08

1 - FM-D truck @ $5000/new

$\frac{1}{60} \times \frac{\$5000}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 1.46

2 - Ore cars @ $250/each

$\frac{1}{60} \times \frac{\$250}{400 \text{ ft.}} \times 7 \text{ mos.} \times 2 =$ 0.14

Equipment - continued

1 - Ore bucket $108/new

$\frac{1}{60} \times \frac{\$108}{400 \text{ ft.}} \times 7 \text{ mos.} =$ $0.03

1 - Receiver $350/new

$\frac{1}{60} \times \frac{\$350}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.10

1 - Jackhammer and shell $450/new

$\frac{1}{60} \times \frac{\$450}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.13

1 - Water tank $51/new

$\frac{1}{60} \times \frac{\$51}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.02

1 - Air hoist $796/new

$\frac{1}{60} \times \frac{\$796}{400 \text{ ft.}} \times 7 \text{ mos.} =$ 0.23

1 - Sump pump $460/new

$\frac{1}{60} \times \frac{\$460}{400} \times 7 \text{ mos.} =$ 0.13

1 - Ventilation fan $347/new

$\frac{1}{60} \times \frac{\$347}{400} \times 7 \text{ mos.} =$ 0.11

Repairs @ $0.50/ft. 0.50 $7.93

Supplies

15#/ft. powder @ $20.50/100# 3.07
20/4" round caps (fuse) @ $21.60/1000 0.10
200'/4' round fuse @ $11.35/1000 ft. 0.57
184'/4' round bits and steel @ $0.07/ft. 1.78
50 feet air hose (1") @ $0.95/ft.

$\frac{\$0.95 \times 50'}{400'} = \$0.12$ 0.12

300 feet air pipe (2") @ $0.34/ft.

$\frac{\$0.34 \times 300'}{400'} = 0.26$ 0.26

200 feet vent tubing @ $1/ft.

$\frac{\$1.00 \times 200'}{400'} = 0.50$ 0.50

Supplies - continued

450 feet ventilation pipe (8") @ $0.05/ft.

$\frac{\$0.20 \times 450'}{400'}$ = $0.56

350 feet water pipe (3/4") @ $0.21/ft.

$\frac{\$0.21 \times 350'}{400'}$ = 0.18

50 feet water hose (3/4") @ $0.75/ft.

$\frac{\$0.75 \times 50'}{400'}$ = 0.09

5950 lbs. rail (25#) 15' lengths $6./100#
(FOB Helena)

$\frac{5950\#}{100\#} \times \frac{\$6.00}{350 \text{ ft.}}$ = 1.02

1 switch $15/ea.

$\frac{\$15.00}{400 \text{ ft.}}$ = 0.04

200 lbs. spikes $7.98/200#

$\frac{\$7.98}{400 \text{ ft.}}$ = 0.02

175 ties (2') @ $0.40/ea.

$\frac{\$70.00}{350}$ = 0.20 $8.51

Total cost - crosscutting and drifting $34.62
10% contingency 3.46
Timbered drift and crosscut per feet $38.08
SAY $38.00

Untimbered crosscut and drift

Labor 3/4 x $15.52 = $11.64/shift
Timber 2.66/ft.

$15.52 labor if timbered
11.64 labor if untimbered
3.88 less labor cost

3.88 less labor
2.66 less timber
6.54

$38.08 timbered/ft.
6.54
$31.54

SAY $31.50 untimbered drift and crosscut $31.50

Raising

Cost of "dog hole" raising is based on a maximum of 100 feet of raise(s), 4'x4' in the clear, timbered, 5 feet sets, lagged, assumed to advance at a rate of 4 feet per shift, and the work to be completed in a working time of 1 month.

Labor

2 miners @ $14.11/shift	$28.22	
1 hoistman-trammer @ $14.11/shift	14.11	
	42.33	
Plus 10% comp. insurance, OAB, etc.	4.23	
	$46.56	
$\frac{46.56}{4 \text{ ft.}}$ = $11.64		$11.64

Timber

4 plates (8"x8"x5')	108		
4 posts (8"x8"x5')	108		
@ $63/1000 bd. ft.	216	=	$13.61
Wedges and lagging @ $6.36/5' set =			6.36
			19.97
$\frac{19.97}{5' \text{ set}}$ =			3.99

Equipment

1 - "210" portable compressor rental @ $290/mo.

$\frac{1 \text{ mo.} \times \$290}{100 \text{ ft.}}$ = 2.90

1 - sump pump $460/new

$\frac{1}{60}$ depreciation $\times \frac{\$460}{100 \text{ ft.}} \times 1$ = 0.08

1 - air hoist @ $796/new

$\frac{1}{60} \times \frac{\$796}{100 \text{ ft.}} \times 1$ = 0.13

1 - FM-D truck @ $5000/new

$\frac{1}{60} \times \frac{\$5000}{100 \text{ ft.}} \times 1$ = 0.83

2 - Ore cars @ $250/ea.

$\frac{1}{60} \times \frac{\$250}{100 \text{ ft.}} \times 1 \times 2$ = 0.08

1 - Ore bucket @ $100/new

$\frac{1}{60} \times \frac{\$100}{100 \text{ ft.}} \times 1$ = 0.02

1 - Receiver @ $350/new

$\frac{1}{60} \times \frac{\$350}{100 \text{ ft.}} \times 1$ = 0.06

Equipment - continued

1 - Hammer and shell $450/new		
$\frac{1}{60} \times \frac{\$450}{100 \text{ ft.}} \times 1 =$	$0.08	
1 - Water tank $51/new		
$\frac{1}{60} \times \frac{\$51}{100} \times 1 =$	0.01	
1 - Ventilation fan $347/new		
$\frac{1}{60} \times \frac{\$347}{100} \times 1 =$	0.06	
Repairs $0.50/ft.	.50	$4.75

Supplies

15#/ft. powder	3.30	
20/4' round caps (fuse)	.11	
200'/4' round fuse	.58	
104'/4' round bits and steel	1.50	
100' ladders (10 ft.) @ $0.30/ft.	.30	
Power, (gas, oil, lubrication) $5.40/shift	1.35	
Tools and miscellaneous $20	0.28	7.32
Total raising costs		$27.65
10% contingency		2.77
Timber raise per foot		$30.43
	SAY	$30.00

Untimbered raise

Labor 4/5 x $15.52 = $12.41/shift
Timber 3.99/ft.

$15.52 labor if timbered
12.41 labor if untimbered
3.11 less labor cost

3.11 less labor
3.99 less timber
7.10

$30.43 timbered/ft.
7.10
23.33 untimbered raise

SAY 23.50/ft. 23.50

Orig. & 3 cys - Wash.
USGS (2)
BMRA
M/D
BMB

EXPLORATION PROJECT CONTRACT

Douglas DuBois and Gilbert Holshue
Midnight and Morning Claims
Docket No. DMSA 2767

EXHIBIT "g"

Description of the Work
(See attached map)

Time Schedule Months*		
1	(1)	Move compressor house.
Concurrent	(2)	Rehabilitate approximately 50 feet of drift on the 8060 level.
Concurrent	(3)	Excavate a winze station (approx. 2600 cu. ft.) on the 8060 level.
3	(4)	Sink a 2-compartment winze for 100 feet from the 8060 level.
7	(5)	Crosscut approximately 50 feet from the winze to the large quartz vein.
Concurrent	(6)	Drift 300 feet along the quartz vein, with a few short crosscuts (a maximum of 50 feet) to be driven into the hanging wall.
1	(7)	A maximum of 100 feet of raising to be authorized contingent upon the results of the drifting.

*Weather conditions may make it advisable to suspend operations for about 6 months each year; consequently, 24 months are allowed for completion.

Estimated Costs of the Project
*Indicates allowable maximum

Average Unit Costs

100 feet winze, 2-compartment, timbered at $90.00*/ft.	$ 9,000.00
100 feet crosscutting and 300 feet of drifting at $31.50*/ft.	12,600.00
100 feet raising at $23.50*/ft.	2,350.00
Timbering drift and crosscut where needed, not to exceed 400 feet at $6.50*/ft.	2,600.00
Timbering raise(s) where needed, not to exceed 100 feet at $6.50*/ft.	650.00
	$27,200.00

Total Agreed Unit Costs

The Government will contribute to the costs of winze sinking, drifting, crosscutting, and raising, as they accrue, for units of work actually performed, on the basis of the agreed estimated unit cost per foot in lieu of actual costs.

The unit costs include all costs of the work except those costs scheduled below to which the Government will contribute on the basis of actual costs.

Scheduled Actual Costs

Rehabilitation and Repairs	
(1) Rehabilitate approximately 50 feet of drift	$ 300.00 1/
(2) Excavate a winze station (approx. 2600 cu. ft.), install headframe	500.00 1/
New Buildings, Improvements and Installations	
Move compressor house	175.00 1/
Labor, Supervision, Consultants	
Consultants	200.00
Miscellaneous	
Assays	200.00
Contingencies	425.00
Total	$1,800.00
Total estimated cost of project	$29,000.00
Government's participation @ 50%	$14,500.00

1/ To include labor, supervision, supplies and all other costs.

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

March 26, 1953

Memorandum

To: DMEA Field Team, Region II

From: George E. Becraft, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-2767, Report on Morning and Midnight Claims, Jefferson County, Montana.

RECOMMENDATIONS

It is recommended that the application for an Exploration Project Contract on the Midnight and Morning claims, Jefferson County, Montana, submitted by Gilbert C. Holshue, 1005 N. Ewing, Helena, Montana, and Douglas A. Dubois, Box 107, Basin, Montana, be favorably considered. However, rather than the plan proposed by the applicants, an alternative exploration program is recommended.

INTRODUCTION

On August 1, 1952, the writer accompanied by D. R. Irving, Bureau of Mines, and the applicants made a brief visit to the property to examine it for a production loan (DMPA Docket 1529). The examination indicated only minor reserves of dump material and it was suggested that the applicants withdraw their application for a production loan and submit an application for an exploration loan.

On October 10 and 14, 1952, the writer and Samuel Rosenblum, U. S. Geological Survey, examined the property and made a brunton and tape survey of the principal workings.

PROPERTY AND LOCATION

The Midnight (Mineral Survey No. 8519) and Morning (Mineral Survey No. 8518) patented claims, both owned by the applicants, are in sec. 19, T. 7 N., R. 5 W., in the Cataract mining district about 10 miles by graded county road north of Basin,

Montana. The road is in fair condition, but because of winter conditions is passable only about 6 months of the year.

DESCRIPTION OF PROPERTY

The claims are situated at about 8,000 feet altitude near the top of the north slope of a rounded ridge. On the property are a cabin, storage shed, and compressor shed, all in good condition.

A considerable amount of bulldozing has been done along the outcrop of the vein. Most of the trenching is shown on the attached map. The underground workings consist of two accessible adits with short drifts along the largest vein, a caved adit, and a 27-foot shaft, 4 by 4 feet in the clear (see attached map).

Due to snow cover at the time of this examination, the claim corners were not located but it is believed that the claim line shown on the attached map is within a few feet of the correct position.

GEOLOGY

Most of the workings on the Midnight claim are in a slightly to intensely altered and sheared zone in quartz monzonite and alaskite; this zone ranges up to about 100 feet in width. Within this zone are many small barren quartz veins and small zones of very intensely sheared rock. In the two accessible adits, a quartz vein that ranges from 5 to 7 feet in width, and contains pyrite and sparse galena and sphalerite, has been explored for a total distance of 115 feet. Adjacent to this vein, the quartz monzonite has been intensely silicified. Post-mineralization faulting and shearing have somewhat obscured the attitude of this vein; however, it appears to conform approximately to the main sheared and altered zone--N. 75° W., 70°-75° NE.

The shaft was sunk on a small vein that ranges in width from 0.5 foot to 1.5 feet and contains abundant galena in a quartz gangue. At about 15 feet in depth, a poorly defined, intensely brecciated vein containing sphalerite and galena was intersected about 3 feet from the footwall of the galena vein (see section A-A'). The shaft was sunk to 27 feet and a 10-foot drift was driven to the southeast following this vein. The attitude of this vein was obscured by post mineralization faulting.

The presence of tourmaline in the altered country rock and the character of the sheared and altered zone indicate that this structure is similar to others in the Boulder batholith area from which a considerable amount of lead and zinc has been produced in the past.

PAST OPERATION

In the application under section 4 (b) the owners state that, "We mailed all of the settlement sheets for past production to your office. . . . . ." The writer has not seen these and believes that these sheets accompanied the original application for a production loan. In conversation with the applicants, however, it was learned that a few small shipments of low-grade ore were made from a small, very shallow adit and winze that was located about 100-120 feet southeast of the shaft, but which has since been destroyed by bulldozing. It is believed that these shipments were made sometime between 1928 and 1938.

Two settlement sheets and an assay report accompany the present application. The settlement sheet from the East Helena plant of the American Smelting and Refining Company dated September 22, 1952, was for a shipment of about 9 tons of ore from the small galena vein in the upper 15 feet of the shaft described above. It contained 0.25 ounces gold per ton, 14.3 ounces silver per ton, 6.7 percent lead, and 0.10 percent copper. The settlement sheet from the Metals Milling Company, Inc., a custom mill in Basin, Montana, dated October 12, 1952, was for a shipment of about 28.5 tons of ore from the vein at the bottom of the shaft. It contained 0.17 ounce gold per ton, 8.85 ounces silver per ton, 3.6 percent lead, and 5.6 percent zinc. The writer does not know where the sample was taken that is reported on the assay report that accompanied the application other than that it was taken in the vein near the bottom of the shaft.

DISCUSSION OF APPLICANTS' PROPOSAL

The applicants propose to reopen an old adit (the portal shown on the accompanying map at 8,000 feet elevation), extend it about 20 feet to intersect the large quartz vein, drift 200 feet along the vein, and do 100 feet of raising.

The alternate exploration plan outlined below is recommended for the following reasons: (1) the ground on which the portal of the 8,000 foot elev. adit is located is open ground and has not been claimed by the applicants and winter conditions would prevent filing a claim until at least May 1953; (2) there are no maps of the inaccessible 8,000 foot elev. adit to indicate its length and direction. The applicants believe that it is 400 feet long and driven directly toward the vein. This cannot be checked, however, and (3) there is no way of predicting the condition of the adit beyond the first cave near the portal.

In conference with Robert Hundhausen and E. W. Buel of the Bureau of Mines an alternative proposal was worked out. It is suggested (1) that a 100-foot, vertical winze be sunk at a point (see map) just beyond the large quartz vein in the adit marked

Elev. 8,060 on the attached map; (2) that a crosscut be driven (about 50 feet) to the large quartz vein; (3) that 300 feet of drift be driven along the vein, a few short crosscuts be driven into the hanging wall (total about 50 feet) of the vein; and (4) that 100 feet of raising be authorized contingent upon the results of the drifting. A small amount of cleaning and preparation of the 8,060 elev. adit will be necessary.

The collar of the proposed shaft is about 40 feet in elevation below the bottom of the old shaft, thus by sinking here, 40 feet in depth would be gained. The 300 feet of drifting with short crosscuts into the hanging wall will permit adequate exploration to determine whether the ore occurs as distinct veins in the sheared and altered zone or as lenses along the large quartz vein.

OPERATORS' ABILITY AND PROPERTY RIGHTS

Mr. Dubois, who will direct the operations, has had considerable mining experience in the mines at Butte. Both applicants appear to be conscientious and responsible men, and it is believed that they would carry out the project in a workmanlike manner.

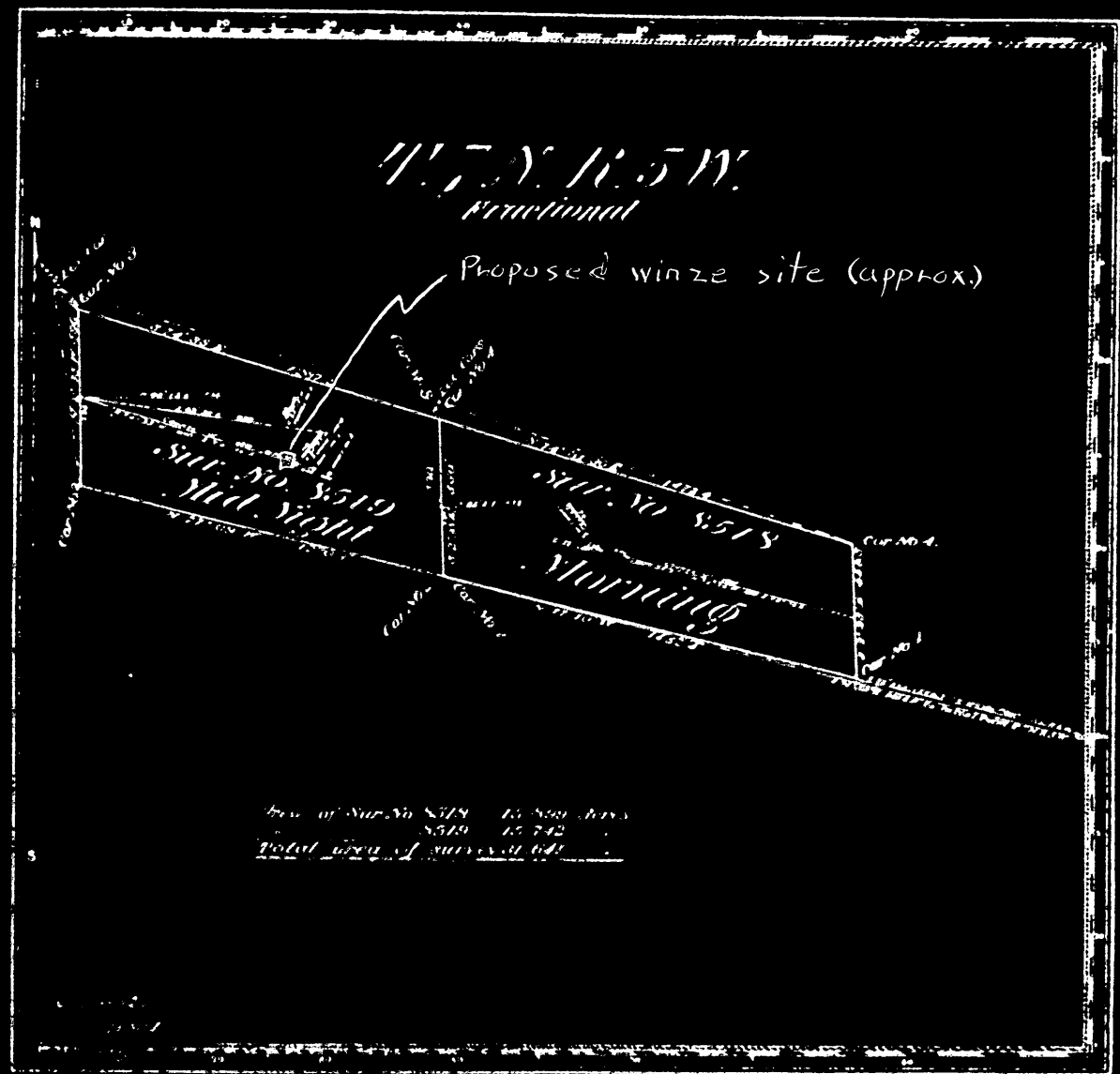
The applicants own the two patented claims, Morning and Midnight, that are shown on the plat, a copy of which is attached.

EXPLORATION PROJECT

The project could be started in May 1953 and should be completed within 24 months.

Enclosures 2
Distribution:
- DMEA (Orig. & 3)
- USBM (2)
- USGS (SRO)
- Docket
- Becraft

(4 675)



Mineral Survey No. 5518 & 5519

LOT No

Helena Land District

PLAT

OF THE CLAIM OF

Theo Ham et al.,

KNOWN AS THE

Morning and Mid Night Lodes

In Cataract Mining District, Jefferson County, Montana.

Containing an area of 37.654 Acres

Scale of 100 feet to the inch

Variation 20° 70 E

SURVEYED July 20th to 28th 1907 BY

Richard M. Crutte

U.S. Deputy Mineral Surveyor

The original field notes of the survey of the Mining Claim of Theo Ham et al known as the

Morning and Mid Night Lodes

from which this plat has been made under my direction, have been examined and approved, and are on file in this office, and I hereby certify that this contains such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made thereon to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant or their grantors, and that said improvements consist of Two Open Cuts, Three Shafts and Three Tunnels situated at Cataract

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said survey, and that the survey thereof, and the monuments thereto applied

Helena, Montana, this 28th day of Sept. 1907. Montana

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

March 12, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 19 1953

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

Re: Docket No. DMEA-2767 (Zinc-Lead)
Gilbert C. Holshue, Douglas A. Du Bois
Jefferson County, Montana

Dear Mr. Selfridge:

In reply to your letter of March 6, I am informed that costs are now being figured for the proposed contract on the subject property. Our field men have been busy and it has not been possible to complete the report. However, it is being given high priority.

Sincerely yours,

A. E. Weissenborn

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

cc: USBM (2)
Becraft

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

March 12, 1953

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

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Sincerely yours,

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

cc: USBM (2)
Becraft

2767

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 9 1953

1201 North Division Street
Spokane 2, Washington

February 17, 1953

MEMORANDUM

Docket

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Midnight and Morning Claims (DuBois & Holshue), Jefferson County, Montana, Docket No. DMEA 2767 (lead-zinc)

Mr. D. BuBois, part owner of the subject property, was contacted February 9, 1953. The exploratory work proposed by the applicant in the DMEA application for aid had to be considerably altered by the Examining Team. These changes were discussed with Mr. DuBois. He agreed that he and his partner, G. C. Holshue, would be willing to accept the modifications in the exploration program. A cost estimate is being prepared to include the modified exploration program. It is estimated that this program will cost about $23,000 which is about $10,000 more than the cost of the program submitted by the applicants. Mr. DuBois says that the higher cost program would be acceptable to him and Mr. Holshue.

Changes in the exploration are discussed in George E. Becraft's geologist, U. S. Geological Survey, memorandum to DMEA Field Team, Region II on the subject property.

E. W. Buel

E. W. Buel

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EWB/vf

FILE COPY
500 SURNAME:

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

Send Dft
Original
Selfridge.

MAR 6 1953

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

Re: Docket No. DMEA-2767 (Zinc-Lead
Gilbert C. Holshue, Douglas A. Du Boise
Jefferson County, Montana

Dear Mr. Weissenborn:

Will you please advise us regarding the status of the above referenced docket. Your letter of January 14, 1953 states:

> "The property has been examined and a favorable recommendation will probably be made. However, the plan of exploration will be somewhat different from that originally submitted. It will be about two weeks before the report will be ready in final form."

An early reply will be appreciated.

Sincerely yours,

George C. Selfridge (WB)

Chairman, Operating Committee

APPROVED:

C. N. Johnson (WB)
Member, Bureau of Mines

D. M. Lemmon (WB)
Member, Geological Survey

JWAlt/hmj
CC to: Docket
Admr. R. File
Op. Committee
Base Metals
J. W. Alt
Mr. Kinkel
Mr. Bishop
Chron.

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

1201 North Division Street
Spokane 2, Washington

Transmitted
~~Dell~~
Betty

February 17, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Midnight and Morning Claims (DuBois & Holshue), Jefferson County, Montana, Docket No. DMEA 2767 (lead-zinc)

Mr. D. DuBois, part owner of the subject property, was contacted February 9, 1953. The exploratory work proposed by the applicant in the DMEA application for aid had to be considerably altered by the Examining Team. These changes were discussed with Mr. DuBois. He agreed that he and his partner, G. C. Holshue, would be willing to accept the modifications in the exploration program. A cost estimate is being prepared to include the modified exploration program. It is estimated that this program will cost about $23,000 which is about $10,000 more than the cost of the program submitted by the applicants. Mr. DuBois says that the higher cost program would be acceptable to him and Mr. Holshue.

Changes in the exploration are discussed in George E. Becraft's geologist, U. S. Geological Survey, memorandum to DMEA Field Team, Region II on the subject property.

E. W. Buel

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EWB/vf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Keating
Betty
Docket

January 14, 1953

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 16 1953

Re: Docket No. DMEA-2767 (Zinc-Lead)
Gilbert C. Holshue, Douglas A. DuBois
Jefferson County, Montana

Dear Mr. Johnson:

This will acknowledge your letter of January 7 in which you inquire concerning the status of the subject application. The property has been examined and a favorable recommendation will probably be made. However, the plan of exploration will be somewhat different from that originally submitted. It will be about two weeks before the report will be ready in final form.

Sincerely yours,

A. E. Weissenborn

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

cc: USBM(2)
Becraft

FILE COPY
SURNAME:

Keating

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

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

JAN 7 1953

Re: Docket No. DMEA-2767 (Zinc-Lead)
Gilbert C. Holshue, Douglas A. DuBois,
Partnership
Jefferson County, Montana

Dear Mr. Weissenborn:

With regard to the above-referenced docket, the last correspondence in our files is a letter of October 3, 1952, written by Thor Kiilsgaard for you to Mr. Frank E. Johnson, Chairman, Operating Committee, in which you state:

> "Enclosed are 3 copies of an application submitted by Mr. Gilbert C. Holshue and Mr. Douglas A. DuBois concerning a lead-zinc property in Jefferson County, Montana. One copy of the application has been withheld at this office to facilitate field examination.
>
> "DMEA representatives are examining the subject property during the present week and should have a field report prepared within a short time. This report will be forwarded for consideration as soon as it is completed."

We would appreciate a reply at your earliest convenience regarding the status of this application.

1-7-53

Sincerely yours,

G.C.

Frank E. Johnson (GC)
Chairman, Operating Committee

APPROVED:

J. H. Hedge (GC)
Member, Bureau of Mines

A. R. Kinkel, Jr. (GC)
Member, Geological Survey

JWAlt/hmj (1-5-53)
CC to: Adm. Reading File
Operating Committee
Base Metals
Docket
Mr. Alt
Mr. Kinkel
Mr. Bishop

November 5, 1952

Mr. Gilbert C. Holshue
1065 North Ewing Street
Helena, Montana

Subject: IMEA-2767
Re: Exploration Assistance
Midnight & Morning Mines

My dear Mr. Holshue:

The receipt of your application dated October 20, 1952 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number IMEA-2767 and referred to the Base Metals Division.

Kindly refer to IMEA-2767 in any future correspondence relating to your application.

Sincerely yours,

R. E. ADAMS

Robert E. Adams
Chief, Operation Control
and Statistics Division

25451

November 5, 1952

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation Control and Statistics Division

Subject: Assignment of Docket Number

Listed below you will find the assigned docket number to an application recently submitted from Region II.

DMEA-2767 - Holshue, Gilbert C. and DuBois, Douglas A.

R. E. ADAMS
Robert E. Adams
Chief, Operation Control
and Statistics Division

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 31 1952

October 31, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed are 3 copies of an application submitted by Mr. Gilbert C. Holshue and Mr. Douglas A. DuBois concerning a lead-zinc property in Jefferson County, Montana. One copy of the application has been withheld at this office to facilitate field examination.

DMEA representatives are examining the subject property during the present week and should have a field report prepared within a short time. This report will be forwarded for consideration as soon as it is completed.

Sincerely yours,

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

Enclosure
cc: USBM (2)
Quinlan

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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. dmea 2767
Metal or Mineral
Date Received 11-3-52
Estimated Cost
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

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: Gilbert C. Holshue, 1065 North Ewing St., Helena, Montana
Douglas A. DuBois, Box 107, Basin, Montana
(Partnership)

(*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 We own two patented mining claims known as the Morning and Midnight, Survey 8518 and 8519 in Township one, Seven North, Range five West (T. 1, 7 N., R. 5 W) in Jefferson County, Montana.

(*b*) State any mine name by which the property is known. Midnight and Morning Miles.

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

(*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 None

(*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 Lead & Zinc

(*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 May, 1953 days and be completed within 12 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?

[X] Money [X] Use of equipment owned by you [X] Other (Labor)

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 Oct 20th, 1952

D.A. DuBois and G. C. Hebbe
(Applicant)

By G. C. Hebbe

1065 No. Evans St
Helena, Mont.

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

4. (a) We have a shaft 33 feet in depth from which we are doing ore. We are drifting east at this depth and have a six foot lead-zinc vein. The ore is being processed at the Butte Milling Co. in Basin, Mont. Mr. DuBois and I are doing all the work. We hoist with an old style windlass.

We have a road over which a passenger car can travel. Eight miles of this road is maintained by the County of Jefferson and the other two miles were built by my partner and me with the help of the County.

(b) We mailed all of the settlement sheets for past production to your office and enclosed are two settlement sheets of our last shipment and assay sheets showing the type and grade of ore we are now shipping.

(c) We have a large vein running through our property which averages around six feet in width. It runs east and west and dips to the north. We wish to drift both ways on this vein and to do some crosscutting to get a better idea on how much ore we have and the grade of ore. Your office has a plat on the property on file.

(d) We are ten miles from the mill which processes our rock and have a good road. The mill is located in the town of Basin, Montana, where we get our supplies.

(e) We have a good water supply. We use gasoline power, and manpower is plentiful. Supplies are easily available. We have most of the essential equipment--compressor, hammer, receiver, mine car, hoes, shovel and a dump truck.

9. (b) We would like to open an old drift and drive it another estimated [illegible] feet to intersect and cross our vein. This would give us enough depth to do a good job of exploring the vein. We have one drift that cuts the vein at about seventy foot depth which could be opened, however by opening the drift down the hill we would have more depth.

(c) D. A. DuBois has mined all of his life in the mines at Butte, Montana, starting as a miner and becoming a shift boss. He would supervise the exploration project.

G. C. Holshue, his partner, has been a miner for four years. Mr. DuBois and Mr. Holshue would do all the work.

c. 80ft. crosscutting to bypass two caved areas @ $25.00 per ft. all costs $ 2,000.00
[illegible] ft. crosscutting estimated to intersect and cross vein @ $24.00 all costs 960.00
200 ft. drifting on vein $25.00 all costs 5,000.00
350 ft. clean up to include cleaning out rock and placing rails and wire in present crosscut @ $4.00 per ft. 1,400.00
100 ft. raising include all costs @ $41.00 per ft. 4,100.00
Moving compressor house 175.00
Total $13,635.00

(a) None.

(b) By our own work

D. A. DuBois, Box 107, Basin, Mont.

G. C. Holshue, 1065 N. Ewing, Helena

(c) None.

(d) We have all the equipment to do the job and our option to isolation all costs.

(e) Having compressor bound [illegible] $195.00.

(f) None.

(g) Whatever kind of insurance the Government requires. We, the owners, could be the only persons working on the property.

(h) None.

7. We, the owners, have this equipment to do the job:

Compressor, receiver, hammer, hoses, nine car, drop break and the buildings.

We shall furnish all of this plus our labor and some money to take care of our part of the project.

Gilbert C. Hotchkiss, [illegible] D. Bolin, Roberta Hotchkiss,
Douglas A. Hotchkiss, Joe Lee, Dwain, Gordon

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
[illegible]
[illegible] 1952

October 31, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed are 3 copies of an application submitted by Mr. Gilbert C. Halstuc and Mr. Douglas A. DuBois concerning a lead-zinc property in Jefferson County, Montana. One copy of the application has been withheld at this office to facilitate field examination.

DMEA representatives are examining the subject property during the present week and should have a field report prepared within a short time. This report will be forwarded for consideration as soon as it is completed.

Sincerely yours,

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

Enclosure
cc: USBM (2)
Quinlan

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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. DMEA 2767
Metal or Mineral
Date Received 11-3-52
Estimated Cost
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

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: Gilbert C. Holshue, 1065 North Ewing St., Helena, Montana
Douglas A. DuBois, Box 107, Basin, Montana
(Partnership)

(*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 We own two patented mining claims known as the Morning and Midnight, Survey 8518 and 8519 in Township one seven north range five west (T. 1, 7 N., R. 5 W.) in Jefferson County, Montana

(*b*) State any mine name by which the property is known. Midnight and Morning Mines

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

(*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 None

(*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*) [redacted]e the mineral or minerals for which you wi[redacted] explore Lead & Zinc

(*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~~ May, 1953 days and be completed within 12 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)? Yes.

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

[X] Money [X] Use of equipment owned by you [X] Other (Labor)

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 Oct 20th, 1952

D. H. DuBois and G. L. Holshue
(Applicant)

By G. L. Holshue

1065 No. Ewing St.

Helena, Mont.

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

4. (a) We have a shaft 33 feet in depth from which we are taking ore. We are drifting east at this depth and have a six foot Lead-Zinc vein. The ore is being processed at the Metals Milling Co. In Basin, Mont. Mr. DuBois and I are doing all the work. We hoist with an old style windlass.

We have a road over which a passenger car can travel. Eight miles of this road is maintained by the County of Jefferson and the other two miles were built by my partner and me with the help of the County.

(b) We mailed all of the settlement sheets for past production to your office and enclosed are two settlement sheets of our last shipment and assay sheets showing the type and grade of ore we are now shipping.

(c) We have a large vein running through our property which averages around six feet in width. It runs east and west and dips to the north. We wish to drift both ways on this vein and to do some crosscutting to get a better idea on how much ore we have and the grade of same. Your office has a plat on the property on file.

(d) We are ten miles from the mill which processes our rock and have a good road. The mill is located in the town of Basin, Montana, where we get our supplies.

(e) We have a good water supply. We use gasoline power, and manpower is plentiful. Supplies are easily available. We have most of the essential equipment--compressor, hammer, receiver, mine car, hoses, steel and a dump truck.

5. (b) We would like to open an old drift and drive it another estimated 20 feet to intersect and cross our vein. This would give us enough depth to do a good job of exploring the vein. We have one drift that cuts the vein at about seventy foot depth which could be opened, however by opening the drift down the hill we would have more depth.

(d) D. A. DuBois has mined all of his life in the mines at Butte, Montana, starting as a miner and becoming a shift boss. He would supervise the exploration project.

G. C. Holshue, his partner, has been a miner for four years. Mr. DuBois and Mr. Holshue would do all the work.

6.

80ft. crosscutting to bypass two caved areas at $25.00 per ft. all costs	$ 2,000.00
20 ft. crosscutting estimated to intersect and cross vein @ $25.00 all costs	500.00
200 ft. drifting on vein $25.00 all costs	5,000.00
320 ft. clean up to include cleaning out muck and placing rails and pipe in present crosscut @ $4.00 per ft.	1,280.00
100 ft. raising include all costs @ $40.00 per ft.	4,000.00
Moving compressor house	175.00
Total	$12,955.00

(a) None.

(b) Do our own work

D. A. DuBois, Box 107, Basin, Mont.

G. C. Holshue, 1065 N. Ewing St., Helena, Montana

(c) None.

(d) We have all the equipment to do the job and our estimate includes all costs.

(e) Moving compressor house $175.00.

(f) None.

(g) Whatever kind of insurance the Government requires. We, the owners, would be the only persons working on the property.

(h) None.

7. We, the owners, have this equipment to do the job:

Compressor, receiver, hammer, hoses, mine car, dump truck and the buildings.

We shall furnish all of this plus our labor and some money to take care of our part of the project.

Gilbert C. Holthus, 1005 N. Ewing, Helena, Mont.
Douglas A. DuBois, Box 107, Basin, Montana

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

October 31, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed are 3 copies of an application submitted by Mr. Gilbert C. Holshue and Mr. Douglas A. DuBois concerning a lead-zinc property in Jefferson County, Montana. One copy of the application has been withheld at this office to facilitate field examination.

DMEA representatives are examining the subject property during the present week and should have a field report prepared within a short time. This report will be forwarded for consideration as soon as it is completed.

Sincerely yours,

Thor H. Kiilsgaard

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

Enclosure
cc: USBM (2)
Quinlan

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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. dmea 2767
Metal or Mineral
Date Received 11-3-52
Estimated Costs
Participation (Government %)

RECEIVED
NOV 3 1952

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: Gilbert C. Holshue, 1065 North Ewing St., Helena, Montana
Douglas A. DuBois, Box 107, Basin, Montana
(Partnership)

(*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 We own two patented mining claims known as the Morning and Midnight, Survey 8518 and 8519 in Township one, Seven North, Range five West (T. 1, 7 N., R. 5W) in Jefferson County, Montana

(*b*) State any mine name by which the property is known. Midnight and Morning Mines.

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

(*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 None

(*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*) S[redacted] the mineral or minerals for which you wish [redacted]xplore Lead & Zinc

(*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~~ May, 1953 days and be completed within 12 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?

[X] Money [X] Use of equipment owned by you [X] Other (Labor)

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 Oct 20th, 1952

D. H. DuBois and G. C. Holbrook
(Applicant)

By G. C. Holbrook

1065 No. Ewing St

Helena Mont

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

4. (a) We have a shaft 33 feet in depth from which we are taking ore. We are drifting east at this depth and have a six foot Lead-Zinc vein. The ore is being processed at the Metals Milling Co. In Basin, Mont. Mr. DuBois and I are doing all the work. We hoist with an old style windlass.

We have a road over which a passenger car can travel. Eight miles of this road is maintained by the County of Jefferson and the other two miles were built by my partner and me with the help of the County.

(b) We mailed all of the settlement sheets for past production to your office and enclosed are two settlement sheets of our last shipment and assay sheets showing the type and grade of ore we are now shipping.

(c) We have a large veing running through our property which averages around six feet in width. It runs east and west and dips to the north. We wish to drift both ways on this vein and to do some crosscutting to get a better idea on how much ore we have and the grade of same. Your office has a plat on the property on file.

(d) We are ten miles from the mill which processes our rock and have a good road. The mill is located in the town of Basin, Montana, where we get our supplies.

(e) We have a good water supply. We use gasoline power, and manpower is plentiful. Supplies are easily available. We have most of the essential equipment--compressor, hammer, receiver, mine car, hoses, steel and a dump truck.

5. (b) We would like to open an old drift and drive it another estimated 20 feet to intersect and cross our vein. This would give us enough depth to do a good job of exploring the vein. We have one drift that cuts the vein at about seventy foot depth which could be opened, however by opening the drift down the hill we would have more depth.

(d) D. A. DuBois has mined all of his life in the mines at Butte, Montana, starting as a miner and becoming a shift boss. He would supervise the exploration project.

G. C. Holshue, his partner, has been a miner for four years. Mr. DuBois and Mr. Holshue would do all the work.

6. - 80ft. crosscutting to bypass two caved areas at $25.00 per ft. all costs

20 ft. crosscutting estimated to intersect and cross vein @ $25.00 all costs	$ 2,000.00
200 ft. drifting on vein $25.00 all costs	500.00
320 ft. clean up to include cleaning out muck and placing rails and pipe in present crosscut @ $4.00 per ft.	5,000.00
100 ft. raising include all costs @ $40.00 per ft.	1,280.00
Moving compressor house	4,000.00
Total	175.00
	$12,955.00

(a) None.

(b) Do our own work

D. A. DuBois, Box 107, Basin, Mont.
G. C. Holshue, 1065 N. Ewing, Helena, Mont.

(c) None.

(d) We have all the equipment to do the job and our estimate includes all costs.

(e) Moving compressor house $175.00.

(f) None.

(g) Whatever kind of insurance the Goernment requires. We, the owners, would be the only persons working on the property.

(h) None.

7. We, the owners, have this equipment to do the job:

Compressor, receiver, hammer, hoses, mine car, dump truck and the buildings.

We shall furnish all of this plus our labor and some money to take care of our part of the project.

Gilbert C. Holshue, 1065 N. Ewing, Helena, Mont.
Douglas A. DuBois, Box 107, Basin, Montana

dmea 2767

AMERICAN SMELTING AND REFINING CO.

EAST HELENA PLANT

East Helena, Mont., September 22, 1952, 19

Bought of D. A. Du Bois & G. C. Holshue Mine Morning Our Lot No. 1723

Class Crude Shipping Point Basin, Montana Mine Lot No. 4

Quotations of Weeks Avg. Silver .90 Lead 16.0 Cathode Copper 24.075

ASSAYS	GOLD Oz. per ton	SILVER Oz. per ton	Wet Lead Per Cent	COPPER Per Cent	INSOL Per Cent	IRON Per Cent	Manganese Per Cent	Sulphur Per Cent	ZINC Per Cent	ARSENIC Per Cent	Antimony Per Cent	Bismuth Per Cent	LIME Per Cent
A. S. & R. Co.	0.230	14.3	6.7	0.10					0	6.40	0.57		
Umpire													
Settlement	0.230	14.3	6.7	0.10					0	6.40	0.57		

Car Number	Weight	VALUES PER TON			DEDUCTIONS PER TON		
		Gold 91.1371%	$35-1/4%	7.32	Base for 15.00 Value Lead	4.00	
~~Truck~~	18390	Silver 95% ~~xx~~ less 1 oz.	@ .90	11.97	25% of over 15.00	4.40	
		Lead Less 1.5 90%	@ 16.0-1.8	13.29		8.40	
		Copper, Less	@				
		Total Au. & Ag.		32.58			
		Lead (700-)				Maximum	8.00
		Copper (1400-)			Insoluble % @		
					Zinc % @		
		Deductions Per Ton			Arsenic % @		
					and Antimony 4.97 % @	.50	2.49
Weight of Lot		Bullion Frt. Per Ton			Bismuth % @		
Weight of Sacks					Debit		
Wet Weight		Valuation For Frt. ( )			Iron Lbs. @		
Less Moisture 4.50 %	828	Less Total Deduction		10.49	Total Deductions		10.49
Dry Weight	17562	Pounds	@	22.09	Per Ton	$	193.97

	Freight Per Wet Ton @	$	
	Hauling Per Wet Ton @	$	
	~~Xxxxx~~ Bullion frt. on 822# @ 24.24 ton 9.96 & 3% tax	$ .30	
Date of B/L	~~Less~~ " " on 822# @$19.04 ton 7.83	$ 2.13	
Date of Arrival 8-30-52	Advances	$	
Checked	Umpire	$	
Correct	Sampling When Less Than 10 Tons	$ 5.00	

Rates except on contract, subject to change without notice. TOTAL $ 7.43 $ 7.43

A minimum charge of $5.00 made on all lots under 10 dry tons. NET PROCEEDS $ 186.54

Metals Milling Company, Inc. dmw 2767

Basin, Montana, Oct 12, 1952

Received From Du Pont & Halloran

Address Basin, Montana

Mine Lot. No. 1

Mine Morning

Mill Lot No. 44

Lot Number	WEIGHTS Pounds Gross	Per Cent Water	Pounds Dry	ASSAYS			
1	57,380	4.96	54,520	Gold 0.17	@	32.00	$ 4.89
				Silver 8.85	@	.90	6.35
				Copper	@		
				Lead 3.6	@	.16	5.10
Freight per Ton			$	Lead (oxidized)	@		
Royalty				Zinc 5.65	@	.14	2.58
Advances				Zinc (oxidized)	@		
Sampling under 10 Tons					@		
Treatment Charge			109.04		@		
TOTAL DEDUCTIONS			$ 109.04				$ 18.92

Dry Weight 54,520 Pounds @ 18.92 per Ton 515.71 Less Deductions 109.04 Net $ 406.67

METALS MILLING CO., INC.

By

A. V. TRENT,
Owner-Manager

GOODALL BROTHERS

Assay 2767

ASSAYERS AND METALLURGICAL CHEMISTS

46 SO. MAIN ST., HELENA, MONTANA

TEL. 628
P. O. BOX 537

Date SEP 19 1952

UMPIRE ASSAY..... CONTROL ASSAY..... HAND SAMPLE.....

ASSAYED FOR: Morning Mine call

MARKS:

Sample No.	DESCRIPTION	GOLD Ozs. Per Ton	SILVER Ozs. Per Ton	WET LEAD Per Cent	COPPER Per Cent	ZINC Per Cent	IRON Per Cent	INSOL. Per Cent	Per Cent	Total Value Per Ton
		0.21	11.6	6.2		6.4				29.63
			Zinc values not figured							

Gold not deducted:

Charges $ 4.50 Paid

GOODALL BROS.

By A. V. Trent

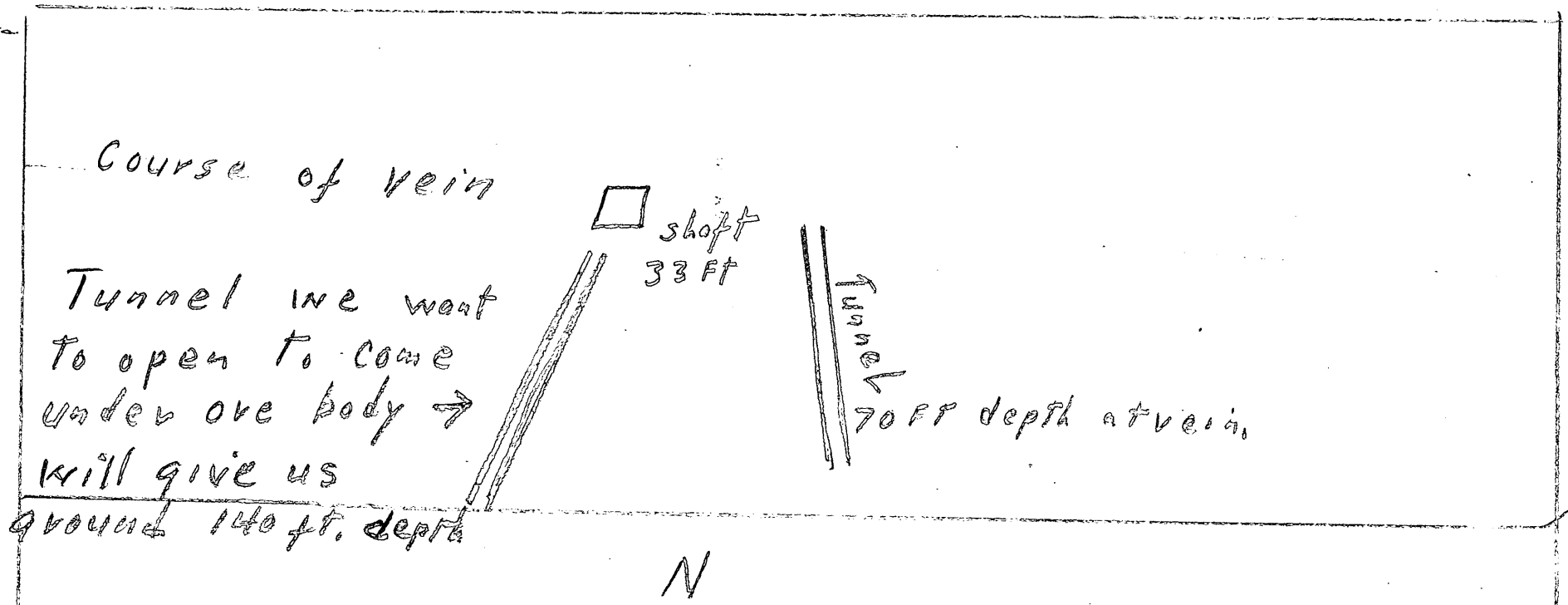
NPCo. B-8912—Form 1

b.

S

E

W



N

Midnite + Morning Mine.
D. A. Du Bois Basin, Mont.
G. C. Holsbye 1065 No Ewing – Helena, Mont.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
E. 157 HOWARD ST.
Spokane 8, Wash.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300
(PMGC)

SPOKANE
MAR 26
630PM
1952
WASH.

2

Chairman, Operating Committee

Defense Minerals Exploration Administration

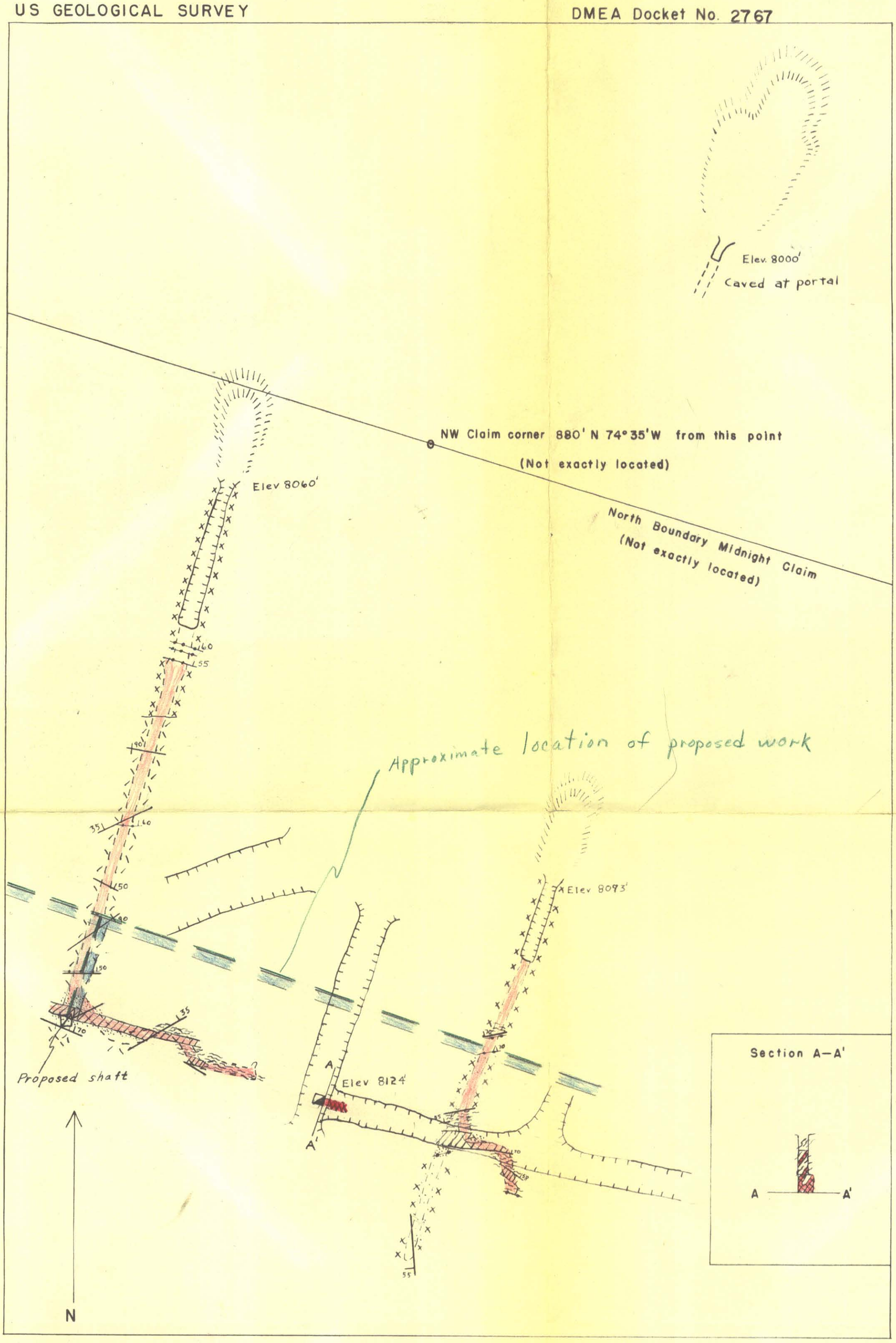
Department of the Interior

Washington 25, D. C.

dmea 2767

US GEOLOGICAL SURVEY

DMEA Docket No. 2767



EXPLANATION

Alaskite (slightly altered)

Quartz monzonite

Altered Rock

55

Small quartz veins

Large quartz vein (Sparse sulfides)

High grade veins

90

Faults

Shear zone

Adit (dashed underground)

Shaft

Trench

Datum assumed

Brunton & tape survey

Underground workings dashed

Geology shown at the levels of the workings

Part of the Midnight Claim

MORNING AND MIDNIGHT LODES

Jefferson County, Montana

by

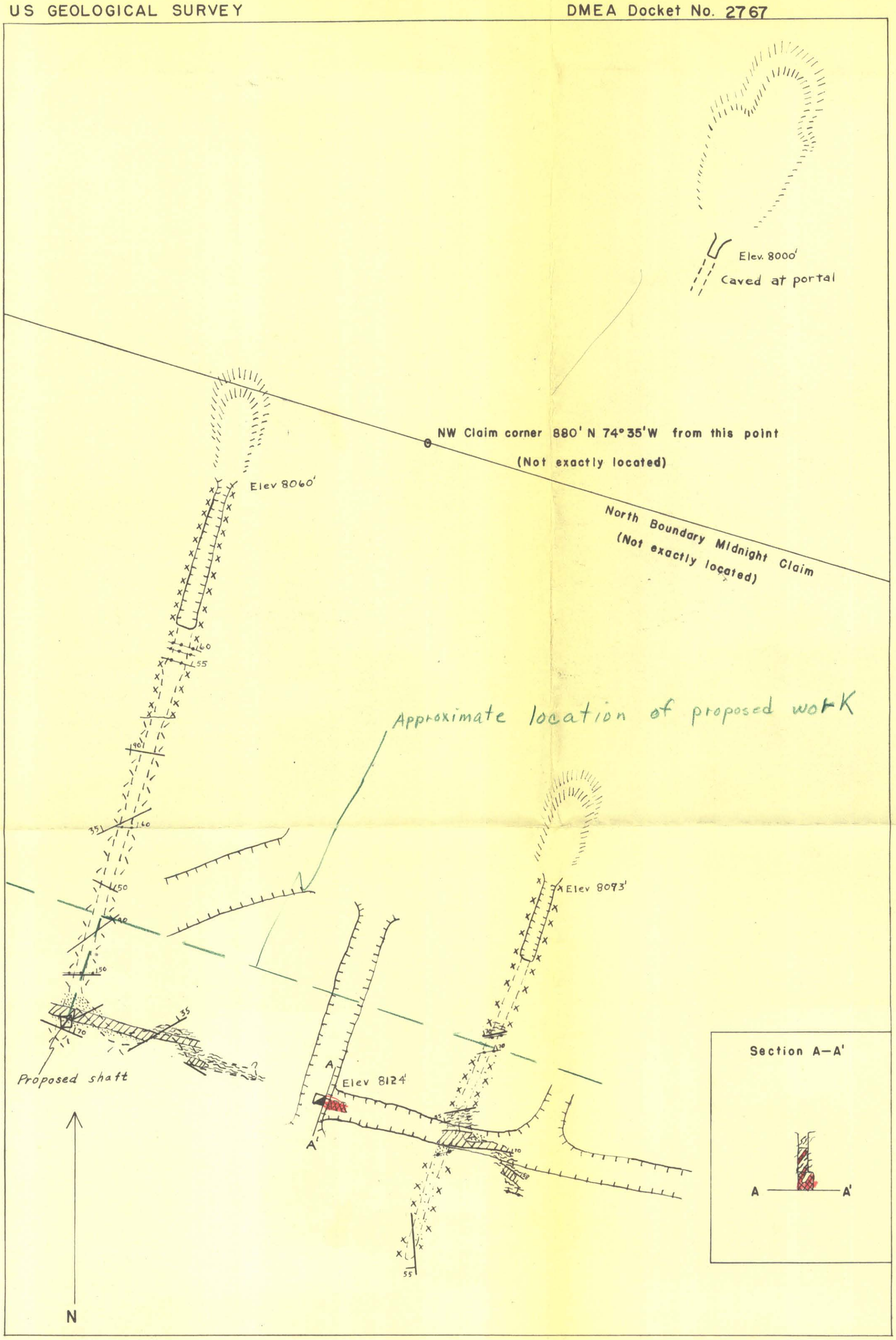
George E. Becraft & Samuel Rosenblum

1952

Scale 1" = 40'

US GEOLOGICAL SURVEY

DMEA Docket No. 2767



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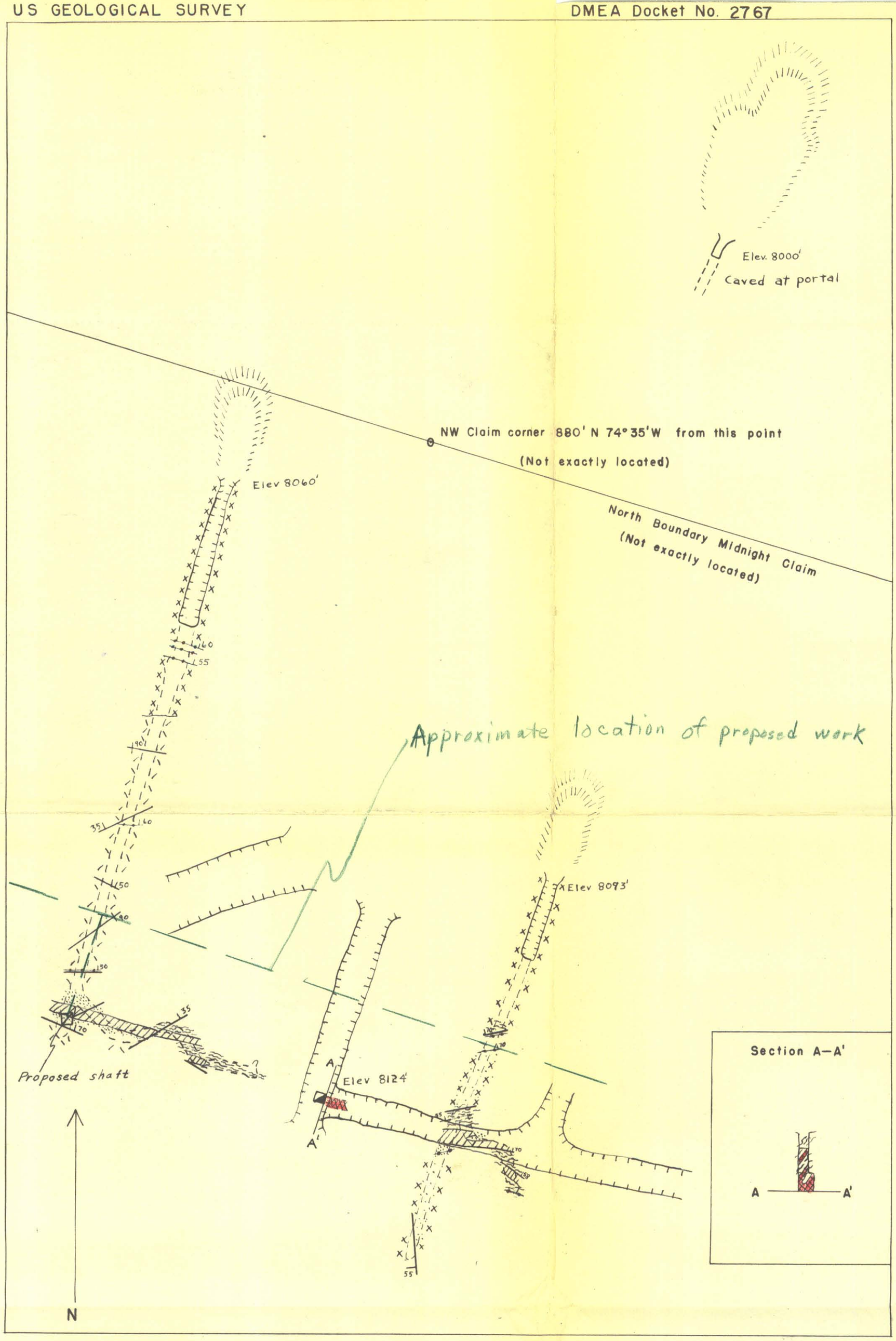

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