DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1411 X

DO NOT DETACH THIS SLIP

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

This document has been recorded as

EXPLORATION LOAN

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

Routing Slip

To:	~~SUPPLY DIVISION~~	Date	JUL 31 1951
To:	Mullendorf	Date	8-2-51
To:	P.E. Div.	Date	8-13-51
To:	R & R	Date	8-14-51
To:	Supply Div.	Date	8-28-51
To:	Reports & Records	Date	8/29/36
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
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To:		Date	

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359 FILE COPY
SURNAME:

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

Johnson
McKnight
Mote (for note)
Bill Moses

DMA-1411 AUG 29 1951
Ariadne Mining Claims and Bee Claim
Jefferson County, Montana

Hon. Mike Mansfield
House of Representatives
Washington 25, D. C.

My dear Mr. Mansfield:

I have your letter of August 21 with attached communication from Mr. A. W. Berge regarding an exploration loan for his mining claims in Montana. We are returning Mr. Berge's letter herewith.

A review of the application reveals that there is some ore reported in the mine which the applicant company proposes to recover by rehabilitating the mine. This ore is gold-silver-lead ore in a narrow vein which has produced from time to time in small lots since 1870-75. However, the project proposed is not eligible for assistance under the exploration program as the regulations governing this program require that the work financed shall be for exploration and not in preparation for mining.

There is a subsidiary proposal in the application to explore a drift separate from the main mine but the report from a field examination indicates that this prospect holds little promise for new discovery. The application has therefore been denied and the applicant is being so informed.

Sincerely yours,

8/29 cc.

Acting Administrator

Enclosure
GRJOHNSON:ks
8/28/51

cc: Administrator
Reports & Records
Mote
McKnight
Billings
DMA Docket File

FILE COPY
SURNAME:
350

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

AUG 29 1951

McKnight
Memo to Corporate
Johnson

Memorandum

To: Reports and Records Unit
Administrative Management Div.

From: Chief, Lead-Zinc Branch

Subject: Denial of loan

Re: DMA-1411X
A. W. Berge Company
Ariadne and Bee claims
Wickes district, Montana
Exploration loan $21,850
Lead, zinc

Although mine is not now accessible, field team reports that the ore is a quartz vein in quartz monzonite and andesite. The vein varies up to 4 feet in width but averages 1 foot. Production has been carried on sporadically by lessees since the original location in 1870-75. Shipments have apparently been in small lots of hand sorted ore, the average of 36 tons of ore mined between 1900 and 1922 being 0.51 oz. gold, 15.9 oz. silver, 16% lead, 1% copper and 6.2% zinc; and of 11 tons of ore mined in 1936-37 being 0.23 oz. gold, 15.6 oz. silver, 33.2% lead and 5.7% zinc. It is not clear from the field team report whether the above is total production since 1900, but the mine was not important enough to be mentioned in a Geological Survey report published in 1933.

A private geologic report made in 1929 and supplied by applicant, shows following reserves:

	Tons	Au. (ozs.)	Ag. (ozs.)	Pb. (%)	Zn. (%)
Blocked out	3,000	0.3	10 to 30	18	15
Probable	23,000	0.2	10	10	10
Possible	33,000	0.06	1.75	1	4

Most of applicant's proposal, to extent of $20,350 is to rehabilitate mine road, rehabilitate 170 feet of shaft and 700 feet of drift, to purchase operating equipment, construct buildings, and connect power line. Remaining part of proposal is for 250 feet of exploratory crosscutting at a different site, 800 feet away.

Field team recommended against the exploratory crosscut as holding no promise, but recommended approval of the rehabilitation proposal. The Lead-Zinc Branch endorsed this recommendation to Production Expansion Division. However, the Production Expandion Division does not consider the application as qualifying for an exploration loan because there is no search for unknown or undeveloped sources of strategic or critical metals or minerals; and further recommends that the file be

returned to the field team to discuss with operator the possibility of working out an actual exploration contract in accord with the intent of the Defense Minerals Administration regulations.

Upon reconsideration of this docket, the Lead-Zinc Branch concludes that a one foot quartz vein in igneous rock is not a good lead-zinc prospect. The cost of further exploration on the vein would probably exceed the cost of the rehabilitation proposed by application, and the amount of lead and zinc that could be expected would be an insignificant contribution to the national supply. It is therefore recommended that the application be denied without proposing further exploration to applicant.

Returned herewith are:

2 copies of memo from Production Expansion Division dated Aug. 14.
1 Carbon of memo, Ault to Mittendorf, July 14.
2 copies of review of application by Lead-Zinc Branch. Copy of field team report dated July 12.
2 Transmittal letters from field team and 3 copies of same dated July 12.
3 Copies Form MF-103
1 Smelter settlement sheet
1 Copy of lease
6 copies of proposed contract
6 copies of Landlard's Subordination agreement

T. P. Billings by [illegible] 8/29

T. P. Billings, Chief
Lead-Zinc Branch

Approved:
Tom Lyon

Director, Supply Division

E.T.McKnight:emp
G 8-28-51
Copies to: A.E. Weissenborn Region II (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
R. H. Mote
Reports & Records
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

FILE COPY
SURNAME:

350

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

McKnight
Mentzer
(for Mote)
Johnson

AUG 29 1951

Re: DMA-1411X

a.e.c.

A. W. Berge Company
502 Fuller Avenue
Helena, Montana

Dear Mr. Berge:

Your application for an exploration loan on the Ariadne and Bee claims near Wickes has been reviewed by the Defense Minerals Administration. We have a report of a field investigation prepared on this property at our request.

The information available to us indicates that the Ariadne ore deposit is a narrow quartz vein in quartz monzonite and andesite which has produced a hand-picked shipping grade ore, of value for its gold, silver, and lead. Your proposal consists mainly of rehabilitation of the Ariadne mine to recover ore which is not now accessible but which is described in a report that you have on the property. However, this type of work cannot be approved under the exploration program, for section 8 (a) of the enclosed regulations states that the work shall not include work prosecuted primarily for mining or preparation for mining. If the known ore is economic, it should be minable under present conditions. Our field examination has indicated that the proposed work in the adit that lies east-northeast of the shaft holds little promise for discovery of new ore. I regret, therefore, that your application must be denied.

We wish to thank you for bringing this property to our attention.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

ETMcKnight:emp
G 8-28-51

Copies to: A. E. Weissenborn Region II (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
R.H. Mote
Reports & Records
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

MIKE MANSFIELD
1ST DISTRICT, MONTANA

COMMITTEE:
FOREIGN AFFAIRS

Congress of the United States
House of Representatives
Washington, D. C.

DMA-1411
Ariadne Mining Claims and Bee Claim,
Colorado Mining District,
Jefferson County, Montana.

August 21, 1951.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 22 1951

Mr. W. C. Schroeder, Administrator,
DMA,
Washington, D. C.

Dear Mr. Schroeder:

In reference to your letter of July 31, I am enclosing herewith letter I have received from A. W. Berge of Helena.

I would appreciate hearing further from you on this matter. Please return the enclosure for my files.

Thanking you and with best personal wishes, I am

Sincerely yours,

Mike Mansfield

AUG 23 1951

AUG 22 2 47 PM '51
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:
410

Corr-le.
Mittendorf

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

August 14, 1951

Memorandum

TO: C. O. Mittendorf, Director
Production Expansion Division

FROM: J. W. Alt

SUBJECT: Assistance for Exploration Project, A. W. Berge Co., 502 Fuller Avenue, Helena, Montana
Docket No. DMA 1411X, Commodity, Lead-Zinc

In reviewing this application I do not consider it a qualified exploration project. The applicant proposes to use the money to: rehabilitate mine road, rehabilitate 170 feet of mine shaft, the opening and rehabilitating 700 feet of drift, fixtures and improvements, and to purchase operating equipment. There is no exploration work to be done for the search for unknown or undeveloped sources of strategic or critical metals or minerals.

Jacob W. Alt

Attachments

JWAlt/meh
cc to: Reports and Records
Mr. Alt
Docket

FILE COPY
SURNAME:
410

Mittendorf

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

August 14, 1951

Memorandum

TO: Tom Lyon, Director
Supply Division

FROM: C. O. Mittendorf, Director
Production Expansion Division

SUBJECT: Assistance for Exploration Project, A. W. Berge Co., 502 Fuller Avenue, Helena, Montana
Docket No. DMA 1411X, Commodity, Lead-Zinc

In reviewing this application, we do not consider it a qualified exploration project. The applicant proposes to use the money to rehabilitate mine road, rehabilitate 170 feet of mine shaft, the opening and rehabilitating 700 feet of drift, fixtures and improvements and to purchase operating equipment. There is no exploration work to be done for the search for unknown or undeveloped sources of strategic or critical metals or minerals.

We are herewith returning the file covering the subject project and suggest that the Field Team discuss with the operator the possibility of a contract which would provide for the actual exploration work in accord with the intent of the DMA regulations.

Attachments

C. O. Mittendorf (J. A.)

JWAlt/meh
cc to: Reports and Records
Messrs. Mittendorf, Olund
Mr. Alt
Docket

COPY

A. W. BERGE CO.
502 Fuller Ave. Phone 477-W
Helena - Montana
A. W. Berge, Prop.

Aug. 12, 1951

Hon. Mike Mansfield
House of Representatives
Washington, 25 D. C.

Dear Mr. Mansfield:

I sincerely appreciate the efforts you are making in assisting me in obtaining something in the line of defense work for the shop and in expediting the Exploration Loan for the mine operation. I have received your many letters and should either or both of my plans materialize it would help conditions here. We do need help in Montana. If the small mine operators would receive some assistance it would help to turn the tide of slow business, bring all of our state back into it's own. In the mining business, it just has been dead.

Sometime ago I saw an item where you were sponsor or cosponsor of a bill to stabilize the price of metals. This certainly is a step in the right direction. From my experience as a dealer in mining equipment, the interest in mining fluctuates with the price of metals. A few years ago the price of lead was 21¢ a pound during the month of January. I had so many inquiries for equipment at that time that I would have bet I would have sold all of my stock within sixty days. This interest died as quickly as it started as the price of lead dropped. I believe it went to 9¢ a pound within thirty days. There should be some way to stabilize the price to prevent such changes.

We are very anxious to receive the Exploration Loan as soon as possible inasmuch as it will be necessary to get located and well started before snow and winter starts. We can operate all winter if we are properly housed and under cover.

Thanking you for all your efforts, I remain

Respectfully yours

/s/ A. W. Berge

P.S.
I would like to see you on your first trip to Helena. I met you sometime back at the Eagles Club. You may not remember me.

AWB

6/5/51

Defense Minerals Administration 7-31-51

Review of Application for Exploration Assistance

Docket No. 1411X

To: Production Expansion Division

Commodity Lead, zinc

From: Director, Supply Division

Total Amount $20,350.00

Govt. Participation 50%

1. Name and Address of Applicant A. W. Berge Co., 502 Fuller Avenue, Helena, Montana

2. Location of Property Ariadne and Bee Claims, secs. 4 to 5, T. 7 N., R. 4 W., Jefferson County, Montana

3. Mineral or metal Lead, zinc, copper Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good See field team report

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project? No
(If so, attach an explanation)

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes

a) MF-201? _____

b) MF-202 Enclosed herewith

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

a) Available manpower Yes

b) Equipment and supplies None on property as of application date
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

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

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Applicant has limited mining experience. Must have competent assistance.

Is a field check needed on this point? _____

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

a) Is the project adequately described? Yes. See attached field team report

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

b) Is there an adequate map or sketch of the proposed work? Yes

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

If not, what part of it is? _____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? All but labor

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? See exhibits attached to proposed contract If so, attach a draft.

e) Are the cost estimates reasonable? Appear low

f) Should more information be requested from applicant? No

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes. See Exhibit "B" of proposed contract

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

c) Is a field check needed? No

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

a) Is it applicable? Yes

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

c) Are rents and charges reasonable? Appear low

d) Is a field check needed? No See Exhibit "C" of proposed contract

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

a) Are there sufficient data? Yes. See attached draft.

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

c) Is the schedule excessive for the work proposed? No

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? Done

13. Exhibit "D".

Wage rates -

Although there is no known fixed scale in the area, the following rates will probably be minimum.

Shaft timbermen	$ 14.50	per day
Foreman.....	16.00	" "
Drift miners.....	12.50	" "

Since it is contemplated that all the labor performed under this project will be on a contract basis, no time element is given for this portion of the exhibit.

The schedule for supervision as outlined by the field team in the proposed contract is considered ample to include accounting and other necessary clerical work.

Supervision and accounting,
9 months at $400.00..... $ 3,600.00

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? _____

Reviewed by: B. Gildersleeve - GS

F. W. Hanson - DMA

Date 7-31-51

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

16. It is recommended that the application be approved with the exception of the proposed crosscut from an old exploration adit, located 800 feet N. 78 E. from the main shaft.

Total amount of project..... $ 20,350.00

Government's share..... 10,175.00

B. Gildersleeve

F. W. Hanson

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

July 31, 1951

DMA-1411
Ariadne Mining Claims
and Bee Claim
Colorado Mining District
Jefferson County, Montana

Hon. Mike Mansfield
House of Representatives
Washington 25, D. C.

My dear Mr. Mansfield:

This will acknowledge receipt of your letter of July 24, 1951, respecting the status of exploration loan request of the Ariadne Mining Claims and Bee Claim, Colorado Mining District, Jefferson County, Montana.

This project has been reviewed by the Lead-Zinc Branch and with their approval has been sent to the Production Expansion Division for further reviewing. Everything possible is being done to expedite the processing of this application for final action.

If I can be of further assistance to you at any time, please do not hesitate to call upon me.

Sincerely yours,

W. C. SCHROEDER
Actg. Administrator

TPBILLINGS:ks

cc: Administrator
Reports & Records
Mote
McKnight
Billings
Files

FILE COPY
SURNAME:

DMA
Billings
OTLEY
(FOR NOTE)
McKnight
Moe
Schneider

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

July 30, 1951

DMA-1411
Ariadne Mining Claims
and Bee Claim
Colorado Mining District
Jefferson County, Montana

Hon. Mike Mansfield
House of Representatives
Washington 25, D. C.

My dear Mr. Mansfield:

This will acknowledge receipt of your letter of July 24, 1951, respecting the status of exploration loan request of the Ariadne Mining Claims and Bee Claim, Colorado Mining District, Jefferson County, Montana.

This project has been reviewed by the Lead-Zinc Branch and with their approval has been sent to the Production Expansion Division for further reviewing. Everything possible is being done to expedite the processing of this application for final action.

If I can be of further assistance to you at any time, please do not hesitate to call upon me.

Sincerely yours,

W. C. SCHNEIDER

Acting Administrator

TPBILLINGS:ks

cc: Administrator
Reports & Records
Moe
McKnight
Billings
Files

MIKE MANSFIELD
1ST DISTRICT, MONTANA

~~LANDON F. STROBEL~~

Billings

COMMITTEE:
FOREIGN AFFAIRS

Congress of the United States
House of Representatives
Washington, D. C.

DMA 1411x

July 24, 1951.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 26 1951
LANDON F. STROBEL
Executive Secretary

RECEIVED
JUL 25 1951
DEFENSE MINERALS ADMINISTRATION
OFFICE OF ADMINISTRATOR

Mr. James Boyd, Administrator,
Defense Minerals Administration.

Dear Jim:

I understand that the A. W. Berge Co.,Helena, Montana, has filed an application for an exploration loan for two mining claims.

Would you please look into this application and advise me what action has been taken on this and when it may be finally considered.

Thanking you and with best personal wishes, I am

Sincerely yours,

Mike Mansfield

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.
JUL 26 12 22 PM '51
JUL 27 1951

L

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

July 12, 1951

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

Dear Mr. Strobel:

Enclosed herewith are six copies of a signed contract, six copies of Exhibits "A" through "E" inclusive and a map for an exploration project at the Ariadne mine, Jefferson County, Montana, DMA Docket 1411 X. Also enclosed are four copies of a report by Mr. Edward T. Ruppel. Will you please forward the above to the Chairman of the Lead-Zinc Commodity Committee.

Also enclosed is the fourth copy of the original application is also enclosed.

Yours very truly,

Verne C. Fryklund, Jr.

Verne C. Fryklund, Jr.
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: U.S.B.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
LANDON F. STROBEL
Executive Secretary

JUL 20 1951

5

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

July ~~21~~ 12, 1951

Memorandum

To: Otto Herres, Chairman
Lead-Zinc Commodity Committee
Defense Minerals Administration
Through: L. F. Strobel

From: Field Team, Region II

Subject: Ariadne Mine, Jefferson County, Montana
DMA Docket No. 1411X

Enclosed herewith are 6 copies of a signed contract and 6 copies of Exhibits "A", "B", "C", "D", and "E", and a map for an exploration project at the Ariadne mine, Jefferson County, Montana, DMA Docket No. 1411X. Also enclosed are 4 copies of a memorandum report by Mr. E. Ruppel, U.S. Geological Survey.

On the basis of the enclosed memorandum report, it is recommended that the application for exploration contract be approved.

By Field Team, Region II

Alton A. Youngberg
E. A. Youngberg
For: A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
L. F. STROBEL
Executive Secretary

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

July ~~21~~ 12, 1951

Memorandum

To: Otto Herres, Chairman
Lead-Zinc Commodity Committee
Defense Minerals Administration
Through: L. F. Strobel

From: Field Team, Region II

Subject: Ariadne Mine, Jefferson County, Montana
DMA Docket No. 14llX

Enclosed herewith are 6 copies of a signed contract and 6 copies of Exhibits "A", "B", "C", "D", and "E", and a map for an exploration project at the Ariadne mine, Jefferson County, Montana, DMA Docket No. 14llX. Also enclosed are 4 copies of a memorandum report by Mr. E. Ruppel, U.S. Geological Survey.

On the basis of the enclosed memorandum report, it is recommended that the application for exploration contract be approved.

By Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
LAWSON F. STROBEL
Executive Secretary

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

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

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

July ~~21~~ 12, 1951

Memorandum

To: Otto Herres, Chairman
Lead-Zinc Commodity Committee
Defense Minerals Administration
Through: L. F. Strobel

From: Field Team, Region II

Subject: Ariadne Mine, Jefferson County, Montana
DMA Docket No. 14llX

Enclosed herewith are 6 copies of a signed contract and 6 copies of Exhibits "A", "B", "C", "D", and "E", and a map for an exploration project at the Ariadne mine, Jefferson County, Montana, DMA Docket No. 14llX. Also enclosed are 4 copies of a memorandum report by Mr. E. Ruppel, U.S. Geological Survey.

On the basis of the enclosed memorandum report, it is recommended that the application for exploration contract be approved.

By Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
1 8 1951

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

E. E. Velin, Member
(U. S. Bureau of Mines)

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No. 157 Howard Street
Spokane 4, Washington

July 12, 1951

Memorandum

To: Otto Herres, Chairman
Lead-Zinc Commodity Committee
Defense Minerals Administration
Through: L. F. Strobel

From: Field Team, Region II

Subject: Ariadne Mine, Jefferson County, Montana
DMA Docket No. 14111

Enclosed herewith are 6 copies of a signed contract and 6 copies of Exhibits "A", "B", "C", "D", and "E", and a map for an exploration project at the Ariadne mine, Jefferson County, Montana, DMA Docket No. 14111. Also enclosed are 4 copies of a memorandum report by Mr. W. Ruppel, U.S. Geological Survey.

On the basis of the enclosed memorandum report, it is recommended that the application for exploration contract be approved.

By Field Team, Region II

DEPARTMENT OF THE
Defense Minerals Admin.
RECEIVED
JUL 16 1951
LANDON F. STROBEL
Executive Secretary
DEPT. OF THE INTERIOR

W. A. Youngberg
For: A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

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

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

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

July 12, 1951

Memorandum

To: A. E. Weissenborn, Executive Officer, DMA, Field Team, Region II

From: Edward T. Ruppel

Subject: Ariadne mine, Jefferson County, Montana
DMA Docket No. 1411 X

Recommendations

On the basis of a former report, smelter returns, and the field examination it is recommended that the application for an exploration loan be approved.

Basis of report

None of the workings were accessible when the examination was made on June 27, 1951. For this reason most of this report is based upon one made by G. S. Kearney on the Ariadne-Minnesota mine group for the Associated Metals Corporation (now defunct) in 1929. The remainder is based on information furnished by the applicant and which could be observed at the time of the examination. The report of Kearney's is comprehensive and in general is conservative, and from what checking that could be done it is believed that it is competent.

Location and Accessibility

The Ariadne mine is 4½ miles by road from Corbin, Montana, which is on a branch line of G.N.R.R., and lies within the NW¼ sec. 4 and NE¼ sec. 5, T. 7 N., R. 4 W., Montana Principal Meridian.

History and Production

The Ariadne claim was originally located between 1870-75 and mining operations have been carried on sporadically since then, mostly by lessees. The applicant states that the property has produced $650,000 worth of metal.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
LANDON F. STROBEL
Executive Secretary

Geological Setting and Reserves

The deposit is a fissure-filling quartz vein in quartz monzonite and andesite trending N. 80° - 85° W. and dipping 85° north. According to the applicant, it has a maximum thickness of 4 feet and averages about 1 foot. Quartz with minor amounts of country rock make up the major part of the vein with varying amounts of pyrite, galena, and sphalerite, plus small amounts of copper, silver, and gold-bearing minerals. The vein is similar in both the monzonite and andesite, but in the workings ends abruptly against dacite on the east. Kearney believed the dacite to be a later flow that covered the eastward extension of the vein.

Average smelter returns on shipment from the Ariadne mine are as follows:

Date	Dry Weight lbs	Au(ozs)	Ag.(ozs)	Pb(%)	Cu(%)	Zn(%)	Fe(%)	Ins(%)	As(%)
1900-22	71,172 1/	0.51	15.9	16.0	1.05	6.2	7.7	5.6	
1936-37	21,178 2/	0.23	15.6	33.2	0.2	5.7	20.0	14.0	1.6

1/ Reported to have come from shaft and 65 foot level.

2/ Reported to have come from shaft below 65 foot level and from the 165 foot level.

Kearney in 1929 estimated the reserves as follows:

		Au (ozs.)	Ag(ozs.)	Pb(%)	Zn(%)
Blocked out	3,000 tons	0.3	10 to 30	18	15
Probable	23,000 tons	0.2	10	10	10
Possible	33,000 tons	0.06	1.75	1	4

Mine Workings

The original workings consisted of an adit driven southeast to intersect the Ariadne vein and then along the vein for a total distance of about 650 feet (see map). A 70-foot shaft was later sunk sometime between 1900 and 1929 on the vein from the surface, and 350 feet of drift driven along the vein at the 65-foot level. In the period from 1934 to 1937, the shaft was deepened to 170 feet, and another 350 to 375 feet of drift was driven on the vein at the 165-foot level. Also during this period, a 400-foot adit, located 800 feet N. 78 E. from the shaft, was driven SW to explore an andesite-dacite contact; no ore was encountered in the adit. All workings are now inaccessible.

According to G. S. Kearney total development work on the Ariadne property in 1929 consisted of 70 feet of shaft and 1,100 linear feet of adit, drift, and crosscut. Total development work at present consists of 170 feet of shaft and about 1,450 feet of adit, drift, and crosscut, excluding the 400 feet exploration adit. The portal of the discovery adit is now completely covered by dump material and its location is uncertain; it was inaccessible in 1929. The shaft is filled with lagging and caved earth at about the 40-foot level and is probably flooded below that level. There are no indications of the condition of the shaft below the 40-foot level nor of the condition of the drifts from the shaft. It is the opinion of the examining geologist that all the workings which the applicant proposes to reopen will require extensive rehabilitation.

Proposed Exploration Program

The applicant proposes to reopen and rehabilitate the Ariadne mine by cleaning out, and retimbering the present shaft and by cleaning out and repairing the 65-foot and 165-foot level drifts. He also proposes to reopen the exploration adit located 800 feet N. 78 E. from the shaft and to drive about 250 feet of new exploration crosscut S. 40 E. from a point about 150 feet from the portal.

Although the lower 100 feet of shaft is reported to be a full size two compartment shaft, the upper 70 feet is undersize and will require extensive enlarging and retimbering. The present head frame is improperly constructed and too small; it will have to be replaced before any work in the shaft can be started.

Nothing is known of the condition of the drifts, but they will probably require extensive repairs, particularly the 65-foot level drift.

In the opinion of the examining geologist, no further exploration is warranted on the exploration adit, and that part of the applicant's exploration program should be abandoned.

The Applicant

The applicant, Mr. A. W. Berge, has had very limited mining experience, and is not particularly familiar with the Ariadne mine or with any of the surrounding mines. In the opinion of the examining geologist, Mr. Berge is not capable of carrying out the proposed exploration program unless he obtains the services of a competent mine foreman or supervisor. It is understood that a competent foreman is to be hired.

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

A, E.C.

July ~~21~~ 12, 1951

A. W. Berge Co.

~~Memorandum~~

To: Otto Herres, Chairman
Lead-Zinc Commodity Committee
Defense Minerals Administration
Through: L. F. Strobel

From: Field Team, Region II

Subject: Ariadne Mine, Jefferson County, Montana
DMA Docket No. 1411X

Enclosed herewith are 6 copies of a signed contract and 6 copies of Exhibits "A", "B", "C", "D", and "E", and a map for an exploration project at the Ariadne mine, Jefferson County, Montana, DMA Docket No. 1411X. Also enclosed are 4 copies of a memorandum report by Mr. E. Ruppel, U.S. Geological Survey.

On the basis of the enclosed memorandum report, it is recommended that the application for exploration contract be approved.

By Field Team, Region II

DEPARTMENT OF THE INTERIOR

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
LANDON F. STROBEL
Executive Secretary

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
No. 157 Howard Street
Spokane 4, Washington

July 17, 1951

Memorandum

To: [illegible], Executive Officer, [illegible], Salt Lake City, Section II

From: Edward F. Aspinal

Subject: [illegible] Mine, Silverton County, Colorado
[illegible] No. [illegible]

Recommendations

[illegible] the [illegible] report, [illegible] report, and the field examination it is recommended that the [illegible] line lease or an exploration lease be approved.

Main of report

Some of the workings were accessible when the examination was made on June 27, 1951. For this reason most of this report is based upon one made by [illegible] earlier on the property in connection with a group for the Associated Metals Corporation [illegible] in 1929. The remainder is based on information furnished by the [illegible] and should be accepted at face value. The reports of [illegible] are somewhat [illegible] in general in good position, and from what should [illegible] have it is believed [illegible] report.

Problems and [illegible]

The property [illegible] is [illegible] from [illegible], [illegible], [illegible] in a [illegible] line [illegible], and lies [illegible] in [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

Injury and [illegible]

The [illegible] claims were originally located between [illegible] and [illegible] [illegible] have been worked on [illegible] [illegible], mostly by lessees [illegible] [illegible] that the reserves are [illegible] [illegible] of metal.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
[illegible]
Executive Secretary

Geological Setting and Reserves

The deposit is a fissure-filling quartz vein in quartz monzonite and andesite trending N. 50° - 65° W. and dipping 75° north. According to the applicant, it has a maximum thickness of 4 feet and averages about 1 foot. Quartz with minor amounts of country rock make up the major part of the vein with varying amounts of pyrite, galena, and sphalerite, plus small amounts of copper, silver, and gold-bearing minerals. The vein is similar in both the monzonite and andesite, but in the workings ends abruptly against dacite on the east. Kearney believed the dacite to be a later flow that covered the eastward extension of the vein.

Average smelter returns on shipment from the Cristina mine are as follows:

Mine	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]-77	[illegible]	[illegible]	11.9	16.[illegible]	[illegible]	[illegible]	7.7	[illegible]	
1930-37	21,[illegible]	[illegible]	[illegible]	33.2	[illegible]	1.7	[illegible]	15.0	[illegible]

1/ Reported to have come from shaft and 28 foot level.

2/ Done too to have come from shaft below 28 foot level and from the 100 foot level.

Kearney in 1929 estimated the reserves as follows:

	[illegible] tons	[illegible]	[illegible]	[illegible]	[illegible]
Blocked out	[illegible] tons	[illegible]	10 to 30	16	15
Probable	[illegible] tons	[illegible]	[illegible]	[illegible]	[illegible]
Possible	[illegible] tons	[illegible]	[illegible]	[illegible]	[illegible]

The Workings

The original workings consisted of an adit driven southeast to intersect the Cristina vein and then along the vein for a total distance of about 650 feet [illegible]. A 70-foot shaft was later sunk [illegible] between [illegible] and 1929 on the vein from the surface, and [illegible] of drift driven along the vein at the 28-foot level. In the period [illegible] to 1937, the shaft was deepened to 17[illegible] feet, and another [illegible] feet of drift was driven on the vein at the 100-foot level. Also during this period, a [illegible]-foot adit, located [illegible] feet [illegible] from the shaft, was driven [illegible] in an [illegible] hoping to cut ore was encountered in the adit. All workings are now inaccessible.

According to [illegible] total development work on the Viadno property in 1919 consisted of 70 feet of shaft and 1,[illegible] linear feet of adit, drift, and crosscut. Total development work at present consists of 170 feet of shaft and about 1,[illegible] feet of adit, drift, and crosscut, excluding the [illegible] feet exploration adit. The portal of the discovery adit is now completely covered by fine material and its location is uncertain; it was inaccessible in 1[illegible]. The shaft is filled with lagging and caved earth at about the 40-foot level and is usually flooded below that level. There are no indications of the condition of the shaft below the 40-foot level nor of the condition of the drifts from the shaft. It is the opinion of the examining geologist that all the workings which the applicant proposes to recover will require extensive rehabilitation.

Proposed exploration program

The applicant proposes to reopen and rehabilitate the Viadno mine by clearing [illegible] and rehabilitating the present shaft and by clearing out and repairing the 60-foot and 40-foot level drifts. He also proposes to recover the [illegible] adit located [illegible] feet [illegible] from the shaft and to drive about 300 feet of new adit [illegible] crosscut [illegible] from a point about 100 feet from the portal.

Although the upper 100 feet of shaft is recorded to be a full size two compartment shaft, the upper 70 feet is unlocated and will require extensive enlarging and timbering. The present head frame is improperly constructed and too small; it will have to be replaced before any work in the shaft can be started.

Nothing is known of the condition of the drifts, but they will probably require extensive repairs, particularly the 40-foot level drift.

In the opinion of the examining geologist, no further exploration is warranted on the exploration adit, and that part of the applicant's exploration program should be abandoned.

The applicant

The applicant, Mr. [illegible] Arge, has had very limited mining experience, and is not particularly familiar with the Viadno mine or with any of the surrounding [illegible]. In the opinion of the [illegible] mining geologist, Mr. Arge is not capable of carrying out the proposed exploration program unless he obtains the services of a competent mine foreman or superintendent. It is understood that a competent foreman is being hired.

Mailed
JUN 13 1951

Docket DMA-1411X
A. W. Morgan Company
Ariadne & Zoe Claims
Near Wicks, Montana
Lead-zinc-copper
Exploration loan

Q. E. C.

Mr. A. E. Weissenborn
Executive Officer, DMA Field Team
Region II
South 157 Howard Street
Spokane 3, Washington

Dear Mr. Weissenborn:

This application gives no information on the ore deposit. The proposed work is inadequately described and details of the expenses are very poorly stated. The property needs a field examination unless information is available in the regional office on the geology of the deposit. If the exploration possibilities seem favorable, other phases of the deficiencies in the application should be supplied.

Very truly yours,

Tom Lyon
Chairman
Coordinating Committee

Lowell B. Moon
For Bureau of Mines

Olaf N. Rove
For Geological Survey

ETMcKNIGHT:emp
G 6/12/51
Copies to: Chief, Lead-Zinc Br.
E. T. McKnight 4214 GSA
R. H. Mote
L. F. Strobel
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

JUN 13 1951

Re: Docket DMA-1411X

A. W. Berge Company
502 Fuller Avenue
Helena, Montana

Gentlemen:

Your application (Docket DMA-1411X) for a Government loan under the provisions of the Defense Production Act of 1950 has been reviewed by the Lead-Zinc Branch of the Defense Minerals Administration. Before final decision can be taken on your request it will be necessary to obtain additional information on your property. Your application, therefore, has been referred to Mr. A. E. Weissenborn Executive Officer of the Field Team, South 157 Howard Street, Spokane, Washington, with the request that the needed information be supplied to us.

Very truly yours,

Tom Lyon, Director
Supply Division

ATMcKNIGHT:emp
6/13/51

Copies to: Chief, Lead-Zinc Br.
A. E. Weissenborn Region II (2)
E. T. McKnight 4204 GSA
R. H. Mote
L. F. Strobel
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

6/5/51
McKnight

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1411X

To: Production Expansion Division

Commodity Lead, zinc

From: Director, Supply Division

Total Amount $20,350.00

Govt. Participation 50%

1. Name and Address of Applicant A. W. Berge Co., 502 Fuller Avenue, Helena, Montana

2. Location of Property Ariadne and Bee Claims, Secs. 4 to 5, T. 7 N., R. 4 W., Jefferson County, Montana

3. Mineral or metal Lead, zinc, copper Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good See field team report

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project? No
(If so, attach an explanation)

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? _____

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower _____

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

c) Accessibility (question 12)* _____

d) Water (question 13)* _____

e) Power (question 13)* _____

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

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

_____

Is a field check needed on this point? _____

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

a) Is the project adequately described? Yes. See attached field team report

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

b) Is there an adequate map or sketch of the proposed work? Yes

_____

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

If not, what part of it is? _____

_____

_____

_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

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

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

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

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

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

c) Is a field check needed?_____

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

a) Is it applicable?_____

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

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____ _____

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

a) Are there sufficient data?_____

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

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

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

14. Exhibit E (question 23-c)*

a) Is it applicable? _____

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? _____

Reviewed by: B. Gildersleeve GS

Date 7-25-51

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

16. It is recommended that the application be approved with the exception of the proposed crosscut from an old exploration adit, located 800 feet N. 78 E., from the main shaft.

B. Gildersleeve

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1411X

To: Production Expansion Division

Commodity Lead, zinc

From: Director, Supply Division

Total Amount $20,350.00

Govt. Participation 50%

1. Name and Address of Applicant A. W. Berge Co., 502 Fuller Avenue, Helena, Montana

2. Location of Property Ariadne and Bee Claims, Secs. 4 to 5, T. 7 N., R. 4 W., Jefferson County, Montana

3. Mineral or metal Lead, zinc, copper Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good See field team report

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project? No
(If so, attach an explanation)

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary?_____

a) MF-201?_____

b) MF-202_____

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

a) Available manpower_____

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

c) Accessibility (question 12)*_____

d) Water (question 13)*_____

e) Power (question 13)*_____

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

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

Is a field check needed on this point?_____

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

a) Is the project adequately described? Yes. See attached field team report

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

b) Is there an adequate map or sketch of the proposed work? Yes

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

If not, what part of it is?_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

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

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

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

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

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

c) Is a field check needed?_____

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

a) Is it applicable?_____

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

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____ _____

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

a) Are there sufficient data?_____

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

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

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

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

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation. **See attached statement.**

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?_____

Reviewed by: **B. Gildersleeve GS**

Date **7-25-51**

97692

16. It is recommended that the application be approved with the exception of the proposed crosscut from an old exploration adit, located 800 feet N. 78 E., from the main shaft.

B. Gildersleeve

FILE COPY
SURNAME:

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

McKnight
Mote
Hughes
Lyon
Moon

JUN 13 1951 Re: Docket DMA-1411X

6-13

A. W. Berge Company
502 Fuller Avenue
Helena, Montana

Gentlemen:

Your application (Docket DMA-1411X) for a Government loan under the provisions of the Defense Production Act of 1950 has been reviewed by the Lead-Zinc Branch of the Defense Minerals Administration. Before final decision can be taken on your request it will be necessary to obtain additional information on your property. Your application, therefore, has been referred to Mr. A. E. Weissenborn Executive Officer of the Field Team, South 157 Howard Street, Spokane, Washington, with the request that the needed information be supplied to us.

Very truly yours,

Tom Lyon, Director
Supply Division

ETMcKNIGHT:emp
G 6/13/51
Copies to: Chief, Lead-Zinc Br.
A. E. Weissenborn Region II (2)
E. T. McKnight 4204 GSA
R. H. Mote
L. F. Strobel
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

FILE COPY
SURNAME:

McKnight
Mote
Hayes

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

JUN 13 1951

Docket DMA-1411X
A. W. Berge Company
Ariadne & Bee Claims
Near Wicks, Montana
Lead-zinc-copper
Exploration loan

M. A. E. Weissenborn
Executive Officer, DMA Field Team
Region II
South 157 Howard Street
Spokane 8, Washington

Dear Mr. Weissenborn:

This application gives no information on the ore deposit. The proposed work is inadequately described and details of the expenses are very poorly stated. The property needs a field examination unless information is available in the regional office on the geology of the deposit. If the exploration possibilities seem favorable, other phases of the deficiencies in the application should be supplied.

Very truly yours,

Tom Lyon

Chairman
Coordinating Committee

Lowell B. Moon

For Bureau of Mines

Olaf N. Rove

For Geological Survey

ETMcKNIGHT:emp
G 6/12/51
Copies to: Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
R. H. Mote
L. F. Strobel
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

FILE COPY
SURNAME:

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

June 8, 1951

Mr. A. W. Berge
Property Manager
A. W. Berge Company
502 Fuller Avenue
Helena, Montana

Subject: DMA-1411X
Re: Exploration Loan
Bee and Ariadne claims

My dear Mr. Berge:

Receipt is acknowledged of your application and attachments of May 28, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1411X and was referred to Mr. Otto Herres, Chief, Lead-Zinc Branch on June 4, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1411X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
>Files
Herres
Lyon

LEASE AGREEMENT

THIS AGREEMENT, made this 28th day of May, 1951, by and between JOSEPH M. GABEL and ETHEL M. GABEL, husband and wife, of Helena, Montana, First Parties, and A. W. BIRGE, of Helena, Montana, Second Party, WITNESSETH;

That for, and in consideration of the sum of one dollar ($1.00), in hand paid by the Second Party, the receipt whereof is hereby acknowledged, and the agreements and covenants herein contained, to be done, and performed by the Second Party, the First Parties lease unto the Second Party, the BEE and ARIADNE Quartz Lode Mining Claims owned by First Parties, exclusively, situated in the Colorado (unorganized) mining district, in Sections 4 and 5, Township 7, North of Range 4, West of the Montana Principal Meridian, Jefferson County, State of Montana, for the term of six years from this date.

The Second Party agrees to pay the First Parties a royalty of 10% on all the ores extracted or removed from the above described claims, property, or premises, or any thereof, including any and all dumps thereon. Such royalties shall be based on the net smelter returns from any and all ores, of whatever description, taken or extracted from said property and premises. In computing such net smelter returns, the only deduction to be allowed from gross returns shall consist of sampling and smelting charges, and hauling or transportation charges, not to exceed the sum of $2.50 per ton.

All royalties payable, pursuant to this agreement, to be withheld by the mill or smelter, treating such ores, and paid by such mill or smelter directly to the First Parties herein.

The Second Party shall have the right to enter into possession of said property and premises, and all thereof, immediately upon the execution of this agreement; and on or before November 1,

1951, said Second Party shall commence, or cause to be commenced, mining operations in and upon said premises; and he shall thereafter continue to work the same, and shall perform or cause to be performed, at least 40, eight hour shifts of work upon said property and premises, per month. All mining work done in, or upon said property, to be done in a good, miner-like fashion, and in accordance with generally recognized mining practices; provided that in the event of extreme weather conditions, or acts of God, or conditions beyond control of Second Party, said Second Party shall have the right to discontinue or suspend working upon said property and premises, for a period of not to exceed 30 days. In addition to the aforementioned work requirements, said Second Party agrees, also, to keep the mine on the above described premises pumped out at all times during the term of this agreement.

In addition to being a lease, this agreement shall also be, and become, an option to purchase, to the extent that Second Party is hereby given the right and option to purchase the above described mining claims and premises at any time during the term of this lease, for the total sum as purchase price of twenty-five thousand dollars ($25,000.00), to be paid at the time, and in the manner, as hereinafter specified.

All royalties paid pursuant to the aforementioned lease, upon ores extracted or removed from the above described premises, shall be credited and applied upon the purchase price, and shall be credited upon the current, or next maturing or unpaid installment, of said purchase price as hereinafter set forth. In accordance with said option to purchase, the full or total purchase price shall be paid in the installments as follows: Two thousand five hundred dollars ($2,500.00) on, or before, September 1st, 1954; Three thousand dollars ($3,000.00) on, or before, September 1st, 1955; Eight thousand dollars ($8,000.00) on, or before, September 1st, 1956; Eleven thousand, five hundred dollars ($11,500.00) on, or before May 1st, 1957.

agreement, or in said above described premises, or any thereof. In such event, said First Parties shall have the right to keep and retain all monies theretofore received by them, whether as royalties, or payments on purchase price, pursuant to terms of this agreement as rental for the use of said property or premises and as fixed and settled damages.

The First Parties may at any time, enter and inspect the said mining property for the purpose of inspection and to satisfy themselves that the terms of this lease are being complied with.

It is further agreed that time is of the essence of this agreement, and all of the covenants and agreements herein contained shall extend to and be obligatory on the heirs, executors, administrators and assigns of the parties hereto. It is understood and agreed that this is a mining lease and option to purchase, and that said property, during the life hereof, shall be used and enjoyed by the Second Party for mining purposes, and such other purposes ~~are~~ as are naturally incidental thereto, and for no other purpose.

All permanent improvements made upon the said property by the Second Party, such as piping, rails, and timbering and wiring including power lines, shall be and remain the property of the First Parties, and all machinery and tools, and other equipment purchased or contracted for or rented shall remain the property of the Second Party, or the legal owners thereof.

The Second Party agrees to pay all labor and material bills contracted and to post and keep posted a notice on the property that it holds the property under the lease, and that as a lessee, is responsible for all such labor and material bills.

In the case of the termination of this lease and/or option, the Second Party shall have sixty (60) days after termination to remove from the aforedescribed property, any and all machinery which it may own, and is located thereon, at the time of such notice, provided, however, that if due solely to weather conditions Second Party is not able to remove such machinery within such period, they may have additional time, not to exceed sixty days

within which to remove the same.

It is further agreed ~~that~~ the ~~Second~~ Party will comply with the laws of the State of Montana, with respect to workmen's compensation, and will carry such compensation upon all employees employed in connection with said mining property in Montana, and will pay when due, all premiums for such workmen's compensation.

It is further agreed that during the term of this agreement, and as a part of the consideration for this lease and option, said Second Party shall, in addition to the purchase price and payments therein to be paid and made by him, as herein specified; and in addition to all other conditions and covenants herein provided for, also pay all taxes assessed upon the above described property and premises, beginning with the taxes thereon, for the year, 1951.

This agreement, and all of the terms and conditions thereof, shall extend to and be binding upon the executors, administrators, heirs, or assigns of either of the parties hereto.

IN WITNESS WHEREOF, the said parties have hereunto set their hands the day and year in this agreement first above written.

Joseph M. Gabel

Ethel M. Gabel
First Parties

A. N. Berge
Second Party

STATE OF MONTANA)
ss.
County of Lewis and Clark)

On this 28th day of May, in the year nineteen hundred and fifty-one, before me, FLOYD O. SMALL, a Notary Public for the State of Montana, personally appeared JOSEPH M. GABEL and ETHEL M. GABEL, husband and wife, First Parties and A. W. BERGE, Second Party, known to me to be the persons whos names are subscribed to the within instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Floyd O. Small

Notary Public for the State of Montana. Residing at Helena, Montana, My commission expires January 6, 1952.

It is understood and agreed that the aforementioned installments, to be paid upon said purchase price, are minimum payments to be made within the times specified by Second Party, in order to keep this agreement, and said option to purchase, in force and effect; and in event that Second Party does not extract, or remove from the above described premises, sufficient ore so that the royalties paid therefrom are of an amount sufficient to make up said installment payments, then said Second Party shall be required to pay the amount necessary in addition to the royalty payments, received by First Parties, so that the total amount of said installment payments, as above designated, will be paid to First Parties at the times herein specified.

Time is of the essence of this agreement; and in event of failure by Second Party to make the payments in the installments, and amounts, as herein provided, when the same are due, or in event of failure of Second Party to keep and perform any or all of the covenants or conditions of this agreement to be kept or performed, by him, then and in such event, this agreement shall, at the option of First Parties, be subject to termination and forfeiture; and in such event, if First Parties shall desire to declare a termination or forfeiture of this agreement, for any default on the part of Second Party, said First Parties shall first give to Second Party, a notice in writing of their intention to so terminate said agreement, and the default, or defaults, upon which they propose to base such action; and Second Party shall, thereafter, have a grace period of 30 days from the date of the giving of such notice, in which to cure or remedy the specified default, or defaults; and in event of failure of said Second Party to thus cure, or remedy the default, or defaults, within such 30 day grace period, said agreement shall, at the expiration of the 30 day notice, or grace period, be or become cancelled and terminated; and Second Party shall not thereafter have any further right or interest in

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERI
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1411X

Date received 5-31-51

Participation

A.W.Berge Co.
502-Fuller Ave.
Helena Montana.

Name and address of applicant

Date May, 28th, 1951.

FILL IN THIS BLOCK

Date of application May, 28th, 1951.

Estimated cost 21850.00

Mineral or metal Lead, Zinc, Copper

Percentage of Government participation

Location of mine See Smelter returns 4/2/36 attached, also may find uranium, is in district Ariadne Mining Claims and Bee Claim, located in the Colorado Mining District, near Wicks (Jefferson County) Montana. Near Minnesota, Gregory and Alta Mines.

Date of filing MF-100 None filed

DMA Docket Number, if available none

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual venture to start Will be Incorporated if loan approved

*2. If a partnership, state names and addresses of partners.

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

*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. A.W.Berge mgr. 6 yrs, mining eq. business. Some Butte School of Mines. Foreman--35 yrs of mining experience.

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

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

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

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

*11. State the present and former names of the property, if any. Ariadne and Bee mining Claims.

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. None

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

*16. History: see supplement

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

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

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information: Not in production now. Last operated in 1936.

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

*18. Ore or mineral reserves: (If property is or has been operating.) no report available at this time

(*a*) Describe the ore or mineral deposits briefly. see smelter returns attached.

(*b*) Submit available maps and assay data. can be furnished at later date

(*c*) Give estimated tonnage and grade of each class of ore reserves. none available

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.
Mine not developed completely-Closed down because price of lead and other metals. No returns on zinc.

EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Lead Zinc copper, uranium

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Retimber caved shaft. Clean, repair drifts, construct 250 ft. tunnel-estimated 18 mo. 4 men.
NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. U.S.Mineral survey #10738

THE REQUIREMENTS AND COSTS See suplement

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

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

(*b*) Supervisors, by numbers and positions, with salaries of each.

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

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

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

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

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

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

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

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

CERTIFICATION

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

A.W.Berge Co. (Name of company) By A. W. Berge (Signature of authorized official)

May, 28, 1951 (Date) Prop. Mgr. (Title)

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

*Same as footnote on page 1.

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

A. W. BERGE CO
502 Fuller Ave. Phone 477-W
HELENA. MONTANA
A. W. BERGE, Prop.

Supplement to
form MF-103

8. Assets-Cash $2000.00
Mining Mchy. 3500.00
Labor pledged 6500.00
Total Assets for exploration work--$12000.00

Additional Mchy if needed 5000.00
Total available assets ----------$17000.00

Liabilities---None.

Original venture,no profit and loss statement.

9. Aproximately $10000.00 in cash and labor.

10. (a) Ariadne consists of two claims,300 ft wide and 1500 ft long of approximately 18.56 acres. The Bee claim is 400 ft wide and 1100 ft long,joining the Ariadne. Both claims are located in the Colorado Mining District near Wicks Montana,Jefferson County,section 4 and 5,Township 7,North of Range 4,West of the Montana Principal Meridian.

(b) same.

12. Wicks Montana on the Great Northern RR 4½ miles,Corbin 3½miles, and Clancy 9 miles from mine. All the above are shipping points. East Helena Montana is approximately 28 miles from mine as smelter shipping point. There will be a custom mill at Basin Montana on the Great Northern RR about 25 miles from the mine. From mine to Wicks,Corbin and Clancy is graveled country road most of the way. From Clancy the road is hard top.

13. Gasoline power will be used to start operation,costing approximately $1.00 per hour for the time used on the compressor and approximately .60 per hour for the gasoline hoist.

15. Ore will in all probability be shipped to the custom mill at Basin Montana. The East Helena Smelter does not pay for the zinc contents.

16(a) The Ariadne mine has produced $650,000.00 of ore. Adjoining on
(b) the south is the Minnesota mine which has produced 2 million and the Gregory on the north has produced 8 million. The Alta to the east is now producing.
(c) None available at this time.

Supplement #2.
form MF-103

A. W. BERGE CO.
502 Fuller Ave. Phone 477-W
HELENA. MONTANA
A. W. BERGE, Prop.

23-	(a)	Working Foremen	$15.00 per day	(8 hrs)	
		2 miners	12.50 " "	8	$ 7200.00
	(b)	1 Mgr.	12.00	6 hrs.	2160.00
	(c)	----------			1770.00
	(d)	----------			2250.00
	(e)	----------			2150.00
	(f)	none planned at present			
	(g)	----------			2160.00
	(h)	----------			1000.00
	(i)	----------			3160.00
		Total----------			$21,850.00

24. Expect to complete work within a period of 12 months after project approved and operation started. We will schedule work for 9 months for three to four men. If work progresses satisfactoryly and additional men available we will add other shifts. present schedule is one shift per day. Expenditure will be approximately 2450.00 per month, except the first month may be near $5000.00 due to purchase of materials and equipment.

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTER R

DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1411X

Date received 5-31-51

Participation

A.W.Berge Co.
502-Fuller Ave.
Helena Montana.

Name and address of applicant

Date May,28th,1951.

FILL IN THIS BLOCK

Date of application May,28th,1951.

Estimated cost 21 850.00

Mineral or metal Lead,Zinc,Copper

Percentage of Government participation

Location of mine See Smelter returns 4/2/36 attached,also may find uranium,is in district Ariadne Mining Claims and Bee Claim,located in the Colorado Mining District,near Wicks(Jefferson County)Montana. Near Minnesota, Gregory and Alta Mines.

Date of filing MF-100 None filed

DMA Docket Number, if available none

INSTRUCTIONS

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THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual venture to start Will be Incorporated if loan approved

*2. If a partnership, state names and addresses of partners.

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

*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. A.W.Berge mgr.6 yrs,mining eg. business.Some Butte School of Mines. Foreman--35 yrs of mining experience.

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

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9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the expenses of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? See supplement

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

16—64067-1

THE PROPERTY

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. None

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

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

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

*18. Ore or mineral reserves: (If property is or has been operating.) no report available at this time
    (*a*) Describe the ore or mineral deposits briefly. see smelter returns attached.
    (*b*) Submit available maps and assay data. can be furnished at later date
    (*c*) Give estimated tonnage and grade of each class of ore reserves. none available

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.
Mine not developed completely-Closed down because price of lead and other metals. No returns on zinc

EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Lead Zinc, Copper, Uranium

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. timber caved
Clean, repair drifts, construct 250 ft tunnel-estimated 18 mo. 4 men.
NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. U.S.Mineral survey #10736

THE REQUIREMENTS AND COSTS See suplement

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
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    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
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24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. see supplement

CERTIFICATION

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

A.W.Berge Co. (Name of company) By A. W. Berge (Signature of authorized official)

May, 26, 1951 (Date) Prop. Mgr. (Title)

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

*Same as footnote on page 1.

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

A. W. BERGE CO.
502 Fuller Ave. Phone 417-W
HELENA. MONTANA
A. W. BERGE, Prop.

Supplement to
form MF-103

8. Assets-Cash $2000.00
Mining Moby. 3500.00
Labor pledged 6500.00
Total Assets for exploration work--$12000.00

Additional Moby if needed 5000.00
Total available assets ----------$17000.00

Liabilities---None.

Original venture, no profit and loss statement.

9. Aproximately $10000.00 in cash and labor.

10. (a) Ariadne consists of two claims, 300 ft wide and 1500 ft long of approximately 18.56 acres. The Bee claim is 400 ft wide and 1100 ft long, joining the Ariadne. Both Claims are located in the Colorado Mining District near Wicks Montana, Jefferson County, section 4 and 5, Township 7, North of Range 4, West of the Montana Principal Meridian.

(b) same.

12. Wicks Montana on the Great Northern RR 44 miles, Corbin 3½ miles, and Clancy 9 miles from mine. All the above are shipping points. East Helena Montana is approximately 26 miles from mine an smelter shipping point. There will be a custom mill at Basin Montana on the Great Northern RR about 25 miles from the mine. From mine to Wicks, Corbin and Clancy is graveled country road most of the way. From Clancy the road is hard top.

13. Gasoline power will be used to start operation, costing approximately $1.00 per hour for the time used on the compressor and approximately .60 per hour for the gasoline hoist.

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16(a) The Ariadne mine has produced $650,000.00 of ore. Adjoining on
(b) the south is the Minnesota mine which has produced 2 million and the Gregory on the north has produced 8 million. The Alta to the east is now producing.
(c) None available at this time.

Supplement #2
form MF-103

A. W. BERGE CO.
502 Fuller Ave. Phone 477-W
HELENA. MONTANA
A. W. BERGE, Prop.

23- Working

(a)	Foremen	$15.00 per day (8 hrs)		
	2 miners	12.50 " " "		$ 7200.00
(b)	1 Mgr.	12.00	6 hrs.	2160.00
(c)	————			1770.00
(d)	————			2250.00
(e)	————			2150.00
(f)	none planned at present			
(g)	————			2160.00
(h)	————			1000.00
(i)	————			3160.00
	Total			$21,850.00

24. Expect to complete work within a period of 12 months after project approved and operation started. We will schedule work for 9 months for three to four men. If work progresses satisfactoryly and additional men available we will add other shifts. present schedule is one shift per day. Expenditure will be approximately 2450.00 per month, except the first month may be near $5000.00 due to purchase of materials and equipment.

AMERICAN SMELTING AND REFINING CO.

EAST HELENA PLANT

East Helena, Mont., April 2, 1936 193

Bought of Wickes-Corbin Gold & Silver Mining Co. Mine Ariadne Our Lot No. 527

Class Cts Shipping Point Wickes, Montana Mine Lot No. 1

Quotations of Weeks Avg. Silver .77 Lead 4.60 Cathode Copper 8.90

ASSAYS	GOLD Oz. per ton	SILVER Oz. per ton	LEAD Per Cent	COPPER Per Cent	INSOL Per Cent	IRON Per Cent	MANGANESE Per Cent	ZINC Per Cent	SULPHUR Per Cent	ARSENIC Per Cent	ANTIMONY Per Cent	BISMUTH Per Cent
A. S. & R. Co.	0.295	13.0	27.0	0.30	12.4	21.6	0.3	5.3		1.75	0.02	
Umpire												
Settlement	0.295	13.0	27.0	0.30	12.4	21.6	0.3	5.3		1.75	0.02	

Car Number	Weight
	Truck 5097

VALUES PER TON		
Gold 91.1371%	@35.00-1/4%	9.39
Silver less 1 oz	@ .77	9.24
Lead Less 1.50%	@ 4.60-1.50	14.25
Copper, Less	@	
		32.86
Less Total Deductions		5.45

DEDUCTIONS PER TON		
Base for 20 % dry Lead	6.00	
Over " "	.bL-	
		5.45
Insoluble % @		
Zinc % @		
Sulphur % @		
Arsenic % @		
Antimony % @		
Bismuth Lbs. @		
Debit		
Iron % @		
Total Deductions	$	5.45

Weight of Lot

Weight of Sacks

Wet Weight

Less Moisture 4.8 % 245

Dry Weight 4852 Pounds @ 27.41 Per Ton $ 66.50

Freight Per Wet Ton @	$	
Hauling Per Wet Ton @ to Wickes-Corbin Gold & S M Co @ $2 ton	$ 5.10	
Royalty 10% to J.M.Cable, Helena	$ 5.64	
Advances	$	
Umpire	$	
Sampling When Less Than 10 Tons	$ 5.00	
TOTAL	$ 15.74	$ 15.74
NET PROCEEDS		$ 50.76

Date of B/L

Date of Arrival 3-27-36

Checked

Correct JMac

Rates except on contracts, subject to change without notice.

A charge of $5.00 made on all lots under 10 dry tons.

25M—10-35.

INDEPENDENT PUBLISHING CO

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1411 X

Date received 5-31-51

Participation

A.W.Berge Co.
502-Fuller Ave.
Helena Montana.

Name and address of applicant

Date May,28th,1951.

FILL IN THIS BLOCK

Date of application May,28th,1951.

Estimated cost 21850.00

Mineral or metal Lead,Zinc,Copper

Percentage of Government participation

See Smelter returns 4/2/36 attached,also may find uranium,is in district

Location of mine Ariadne Mining Claims and Bee Claim,located in the Colorado Mining District,near Wicks(Jefferson County)Montana. Near Minnesota, Gregory and Alta Mines.

Date of filing MF-100 None filed

DMA Docket Number, if available none

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual venture to start Will be Incorporated if loan approved

*2. If a partnership, state names and addresses of partners.

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

*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. A.W.Berge mgr.6 yrs,mining eq. business.Some Butte School of Mines.

*5. Are you the owner or the lessee of the property? Foreman--35 yrs of mining experience. Lessee

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

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

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

*11. State the present and former names of the property, if any Ariadne and Bee Mining Claims.

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. None

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

*16. History: see supplement

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

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

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information: Not in production now. Last operated in 1936.

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

*18. Ore or mineral reserves: (If property is or has been operating.) no report available at this time

(*a*) Describe the ore or mineral deposits briefly. see smelter returns attached.

(*b*) Submit available maps and assay data. can be furnished at later date

(*c*) Give estimated tonnage and grade of each class of ore reserves none available

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. Mine not developed completely-Closed down because price of lead and other metals. No returns on zinc

EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Lead, Zinc, Copper, uranium

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Timber caved Clean, repair drifts, construct 250 ft tunnel-estimated 18 mo. 4 men.

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

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. U.S.Mineral survey #10738

THE REQUIREMENTS AND COSTS See suplement

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

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

(*b*) Supervisors, by numbers and positions, with salaries of each.

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

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

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

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

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

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

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

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

CERTIFICATION

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

A.W.Berge Co. (Name of company) By A. W. Berge (Signature of authorized official)

May, 28, 1951 (Date) Prop. Mgr. (Title)

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

*Same as footnote on page 1.

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

A. W. BERGE CO.
502 Fuller Ave. Phone 477-W
HELENA. - MONTANA
A. W. BERGE, Prop.

Supplement to
form MF-103

8. Assets-Cash $2000.00
Mining Moby. 3500.00
Labor pledged 6500.00
Total Assets for exploration work--$12000.00

Additional Moby if needed 5000.00
Total available assets ----------$17000.00

Liabilities---None.

Original venture,no profit and loss statement.

9. Aproximately $10000.00 in cash and labor.

10. (a) Ariadne consists of two claims,300 ft wide and 1500 ft long of approximately 18.56 acres. The Bee claim is 400 ft wide and 1100 ft long,joining the Ariadne. Both claims are located in the Colorado Mining District near Wicks Montana,Jefferson County,section 4 and 5,Township 7,North of Range 4,West of the Montana Principal Meridian.

(b) same.

12. Wicks Montana on the Great Northern RR 4½ miles,Corbin 3½miles, and Clancy 9 miles from mine. All the above are shipping points. East Helena Montana is approximately 25 miles from mine as smelter shipping point. There will be a custom mill at Basin Montana on the Great Northern RR about 25 miles from the mine. From mine to Wicks,Corbin and Clancy is graveled country road most of the way. From Clancy the road is hard top.

13. Gasoline power will be used to start operation,costing approximately $1.00 per hour for the time used on the compressor and approximately .60 per hour for the gasoline hoist.

15. Ore will in all probability be shipped to the custom mill at Basin Montana. The East Helena Smelter does not pay for the zinc contents.

16(a)The Ariadne mine has produced $650,000.00 of ore. Adjoining on
(b)the south is the Minnesota mine which has produced 2 million and the Gregory on the north has produced 8 million. The Alta to the east is now producing.
(c) None available at this time.

Supplement #2
form MF-103

A. W. BERGE CO.
502 Fuller Ave. Phone 477-77
HELENA. - MONTANA
A. W. BERGE, Prop.

23- Working

(a)	Foremen	$15.00 per day	(8 hrs)	
	2 miners	12.50 " "	"	$ 7200.00
(b)	1 Mgr.	12.00	6 hrs.	2160.00
(c)	----------			1770.00
(d)	----------			2250.00
(e)	----------			2150.00
(f)	none planned at present			
(g)	----------			2160.00
(h)	----------			1000.00
(i)	----------			3160.00
	Total----------			$21,850.00

24. Expect to complete work within a period of 12 months after project approved and operation started. We will schedule work for 9 months for three to four men. If work progresses satisfactoryly and additional men available we will add other shifts. present schedule is one shift per day. Expenditure will be approximately 2450.00 per month, except the first month may be near $5000.00 due to purchase of materials and equipment.

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERI

DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1411X

Date received 5-31-51

Participation

A.W.Berge Co.
502-Fuller Ave.
Helena Montana.

Name and address of applicant

Date May,28th,1951.

FILL IN THIS BLOCK

Date of application May,28th,1951.

Estimated cost 21,350.00

Mineral or metal Lead,Zinc,Copper

Percentage of Government participation

Location of mine See Smelter returns 4/2/36 attached,also may find uranium,is in district Ariadne Mining Claims and Bee Claim,located in the Colorado Mining District,near Wicks(Jefferson County)Montana. Near Minnesota, Gregory and Alta Mines.

Date of filing MF-100 None filed

DMA Docket Number, if available none

INSTRUCTIONS

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

THE AP Individual venture to start

*1. Is applicant an individual, partnership, or corporation? Will be Incorporated if loan approved
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. A.W.Berge mgr.6 yrs,mining eng. business. Some Butte School of Mines. Foreman--35 yrs of mining experience.
*5. Are you the owner or the lessee of the property? Lessee
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. Good standing---Lease attached.

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

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

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

16—64067-1

JUN 4 1951

THE PROPERTY

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

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

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

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

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. None

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

*16. History: see supplement

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

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

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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(*a*) If mine is in production, furnish the following information: Not in production now. Last operated in 1926.

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

*18. Ore or mineral reserves: (If property is or has been operating.) no report available at this time

(*a*) Describe the ore or mineral deposits briefly. see smelter returns attached.

(*b*) Submit available maps and assay data. Can be furnished at later date

(*c*) Give estimated tonnage and grade of each class of ore reserves. none available

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. Mine not developed completely-Closed down because price of lead and other metals. No returns on time.

EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Lead, Zinc, Copper, Gold

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Timber caved Clean, repair drifts, construct 250 ft tunnel-estimated 18 mo. 4 men.

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

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. U.S. Mineral survey #10738

THE REQUIREMENTS AND COSTS See suplement

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

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

CERTIFICATION

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

A. W. Berge Co. (Name of company)

By A. W. Berge (Signature of authorized official)

May, 26, 1951 (Date)

Prop. Mgr. (Title)

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

*Same as footnote on page 1.

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

A. W. BERGE CO
502 Fuller Ave. Phone 477-W
HELENA. - MONTANA
A. W. BERGE, Prop.

Supplement to
form MF-103

8. Assets-Cash $2000.00
Mining Mchy. 3500.00
Labor pledged 6500.00
Total Assets for exploration work--$12000.00

Additional Mchy if needed 5000.00
Total available assets ----------$17000.00

Liabilities---None.

Original venture, no profit and loss statement.

9. Aproximately $10000.00 in cash and labor.

10. (a) Ariadne consists of two claims, 300 ft wide and 1500 ft long of approximately 18.56 acres. The Bee claim is 400 ft wide and 1100 ft long, joining the Ariadne. Both Claims are located in the Colorado Mining District near Wicks Montana, Jefferson County, section 4 and 5, Township 7, North of Range 4, West of the Montana Principal Meridian.

(b) same.

12. Wicks Montana on the Great Northern RR 4½ miles, Corbin 3½ miles, and Clancy 9 miles from mine. All the above are shipping points. East Helena Montana is approximately 24 miles from mine as smelter shipping point. There will be a custom mill at Basin Montana on the Great Northern RR about 25 miles from the mine. From mine to Wicks, Corbin and Clancy is graveled country road most of the way. From Clancy the road is hard top.

13. Gasoline power will be used to start operation, costing approximately $1.00 per hour for the time used on the compressor and approximately .60 per hour for the gasoline hoist.

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(b) the south is the Minnesota mine which has produced 2 million and the Gregory on the north has produced 8 million. The Alta to the east is now producing.
(c) None available at this time.

Supplement #2
form MF-103

A. W. BERGE CO.
502 Fuller Ave. Phone 477-W
HELENA. MONTANA
A. W. BERGE, Prop.

23-

	Working			
(a)	Foremen	$15.00 per day	(8 hrs)	
	2 miners	12.50 " "	"	$ 7200.00
(b)	1 Mgr.	12.00	6 hrs.	2160.00
(c)	----------			1770.00
(d)	----------			2250.00
(e)	----------			2150.00
(f)	none planned at present			
(g)	----------			2160.00
(h)	----------			1000.00
(i)	----------			3160.00
	Total----------			$21,850.00

24. Expect to complete work within a period of 12 months after project approved and operation started. We will schedule work for 9 months for three to four men. If work progresses satisfactoryly and additional men available we will add other shifts. present schedule is one shift per day. Expenditure will be approximately 2450.00 per month, except the first month may be near $5000.00 due to purchase of materials and equipment.

MF-200
(April 1951)

Docket No. DMA 1411X
Commodity Pb, Zn

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] A. W. Berge Co.
502 Fuller Avenue
Helena, Montana

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows: [3] Ariadne and Bee claims, Colorado mining district, Secs. 4 to 5, T. 7 N., R. 4 W., Montana Principal Meridian

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

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

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

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] lead and zinc, copper; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

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

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

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

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule of existing facilities, buildings, installations, and fixtures, with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition, which cost shall be allowed as a cost of the project.

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

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 50 percent of the sum of such costs incurred; *Provided*, That the aggregate total of all sums paid by the Government under this agreement shall not exceed $10,175.00, which is 50 percent of the agreed estimated total cost of this project, $20,350.00.

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

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in triplicate the day and year first above written.

A. W. Berge Co
(Operator)

By A. W. Berge, Pres

THE UNITED STATES OF AMERICA

By

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "A"

The objective of this exploration is to determine if a substantial block of ore remains in the Ariadne vein above 65 and 165 foot levels.

Exploration Project

Time Schedule

Month		
1st	1.	Rehabilitate mine road, construct buildings, move in equipment.
2nd,3rd, 4th,5th	2.	Rehabilitate 170 feet of shaft.
6th,7th, 8th,9th	3.	Open and rehabilitate approximately 700 feet of drift.

Work to be done and the costs are as follows:

1.	Rehabilitate mine road. (Includes all costs.)	$ 520.00
2.	Rehabilitate 170 feet shaft at $50.00/foot. (Includes all costs not specified elsewhere.)	8,500.00
3.	Opening and rehabilitating 700 feet of drift at $7.00/foot. (Includes all costs not specified elsewhere.)	4,900.00
4.	Fixtures and improvements.	3,000.00
5.	Operating equipment to be purchased.	3,430.00
	Total.....	$20,350.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "B"

Fixtures and Improvements

Construct compressor and tool house	$1,000.00
Cabin, living quarters for two	1,250.00
Connect power line	750.00
	$3,000.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "C"

Operating Equipment

To be rented

1 bulldozer for 4¾ days at $120.00/day	$ 520.00

To be purchased

1 electric hoist and cable (used)	650.00
1 electric compressor 170 cu. ft. (including receiver) (used)	1,350.00
1 Jackhammer (used)	175.00
1 stoper (used)	275.00
submarine cable and connections (used)	50.00
2 mine cars (used) at $45.00 each	90.00
1 forge and blower, anvil and tools	120.00
1 welding torch (used)	75.00
2 transformers at $75.00 each	150.00
1 pump, electric 20 H.P.	495.00
Total....	$3,430.00

To be furnished by operator

	Rental Period	Estimated Replacement Value	Monthly Rental Allowance	Total
1 hoist and cable (gasoline powered)*	3 mos.	2,000	60.00	180.00
1 compressor, 160 cfm (gasoline)*	3 mos.	4,500	150.00	450.00

* Will be used prior to installation of electric power, and on standby basis thereafter to be paid for on a pro rata basis only when used.

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "D"

Labor and Supervision

	Rate per shift
Miners	$12.50
Foreman	15.00
Manager, $600.00 per month part time*	

* To include accounting, etc., and not to exceed $3,600.00 for project.

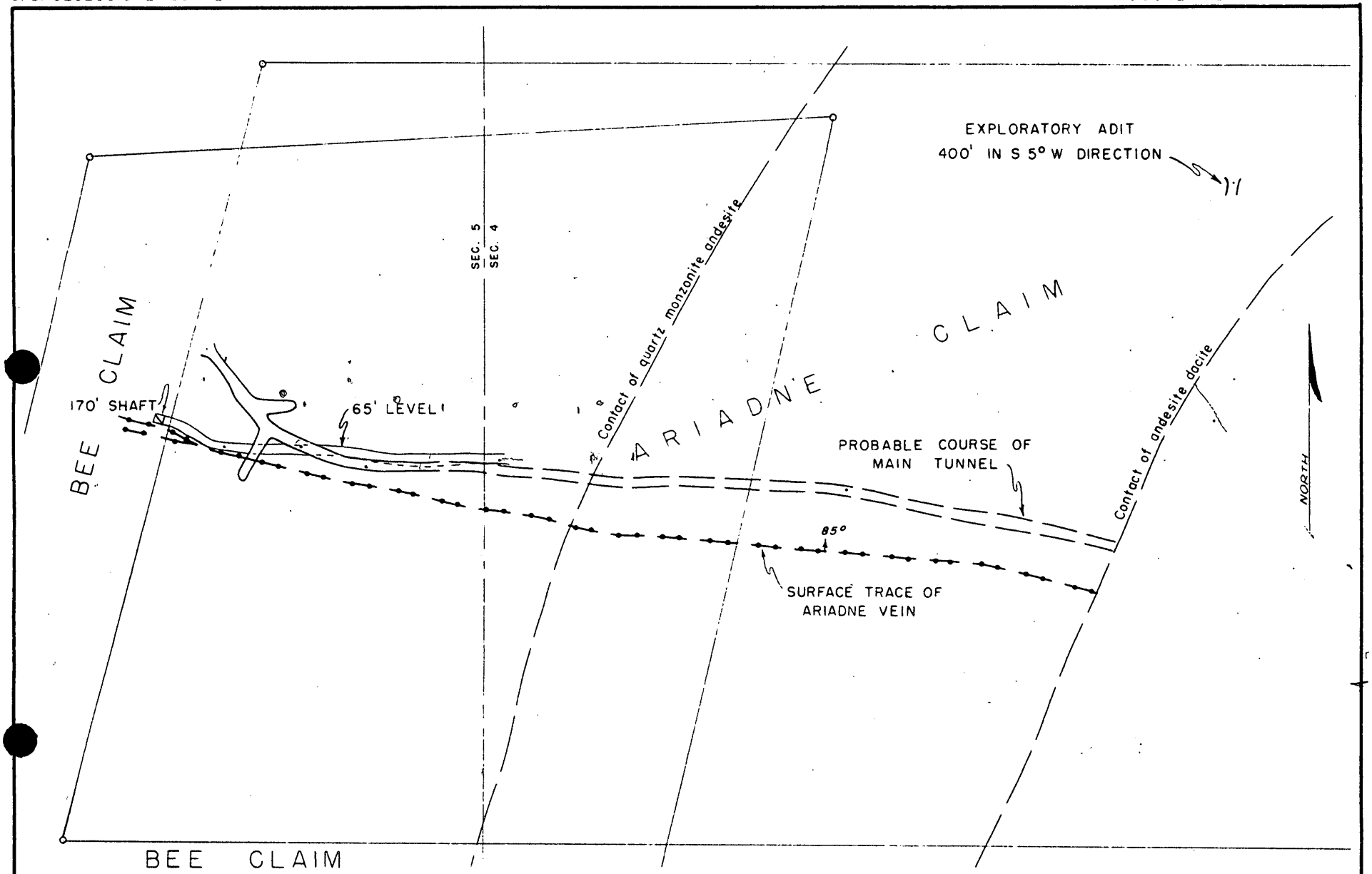
DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "E"

None



SKETCH MAP OF ARIADNE MINE
JEFFERSON CO. MONTANA

SCALE
100' 75' 50' 25' 0 100 200 300

After G. S. Kearney 1929

MF-200
(April 1951)

Docket No. DMA 1411X

Commodity _____

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

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

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of _____, County of _____ described as follows: [3] _____

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

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

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

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

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

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

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

---

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

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

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

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule of existing facilities, buildings, installations, and fixtures, with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition, which cost shall be allowed as a cost of the project.

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

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator ..... percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $....., which is ..... percent of the agreed estimated total cost of this project, $.....

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

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in triplicate the day and year first above written.

A. W. Berge Co
(Operator)

By A. W. Berge, Pres.

THE UNITED STATES OF AMERICA

By .....

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

DPA Docket No. 14111
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "A"

The objective of this exploration is to determine if a substantial block of ore remains in the Ariadne vein above 65 and 165 foot levels.

Exploration Project

Time Schedule

Month	
1st	1. Rehabilitate mine road, construct buildings, move in equipment.
2nd, 3rd, 4th, 5th	2. Rehabilitate 170 feet of shaft.
6th, 7th, 8th, 9th	3. Open and rehabilitate approximately 700 feet of drift.

Work to be done and the costs are as follows:

1.	Rehabilitate mine road. (Includes all costs.)	$ 520.00
2.	Rehabilitate 170 feet shaft at $50.00/foot. (Includes all costs not specified elsewhere.)	8,500.00
3.	Opening and rehabilitating 700 feet of drift at $7.00/foot. (Includes all costs not specified elsewhere.)	4,900.00
4.	Fixtures and improvements.	3,000.00
5.	Operating equipment to be purchased.	3,430.00
	Total.....	$20,350.00

DMA Docket No. 14114
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "B"

Fixtures and Improvements

Construst compressor and tool house	$1,000.00
Cabin, living quarters for two	1,250.00
Connect power line	750.00
	$3,000.00

RMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "C"

Operating Equipment

To be rented

1 bulldozer for 4½ days at $120.00/day	$ 520.00

To be purchased

1 electric hoist and cable (used)	650.00
1 electric compressor 170 cu. ft. (including receiver) (used)	1,350.00
1 Jackhammer (used)	175.00
1 stoper (used)	275.00
submarine cable and connections (used)	50.00
2 mine cars (used) at $45.00 each	90.00
1 forge and blower, anvil and tools	120.00
1 welding torch (used)	75.00
2 transformers at $75.00 each	150.00
1 pump, electric 20 H.P.	495.00
Total....	$3,430.00

To be furnished by operator

	Rental Period	Estimated Replacement Value	Monthly Rental Allowance	Total
1 hoist and cable (gasoline powered)*	3 mos.	2,000	60.00	180.00
1 compressor, 160 cfm (gasoline)*	3 mos.	4,500	150.00	450.00

* Will be used prior to installation of electric power, and on standby basis thereafter to be paid for on a pro rata basis only when used.

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "D"

Labor and Supervision

	Rate per shift
Miners	$12.50
Foremen	15.00
Manager, $600.00 per month part time*	

* To include accounting, etc., and not to exceed $3,600.00 for project.

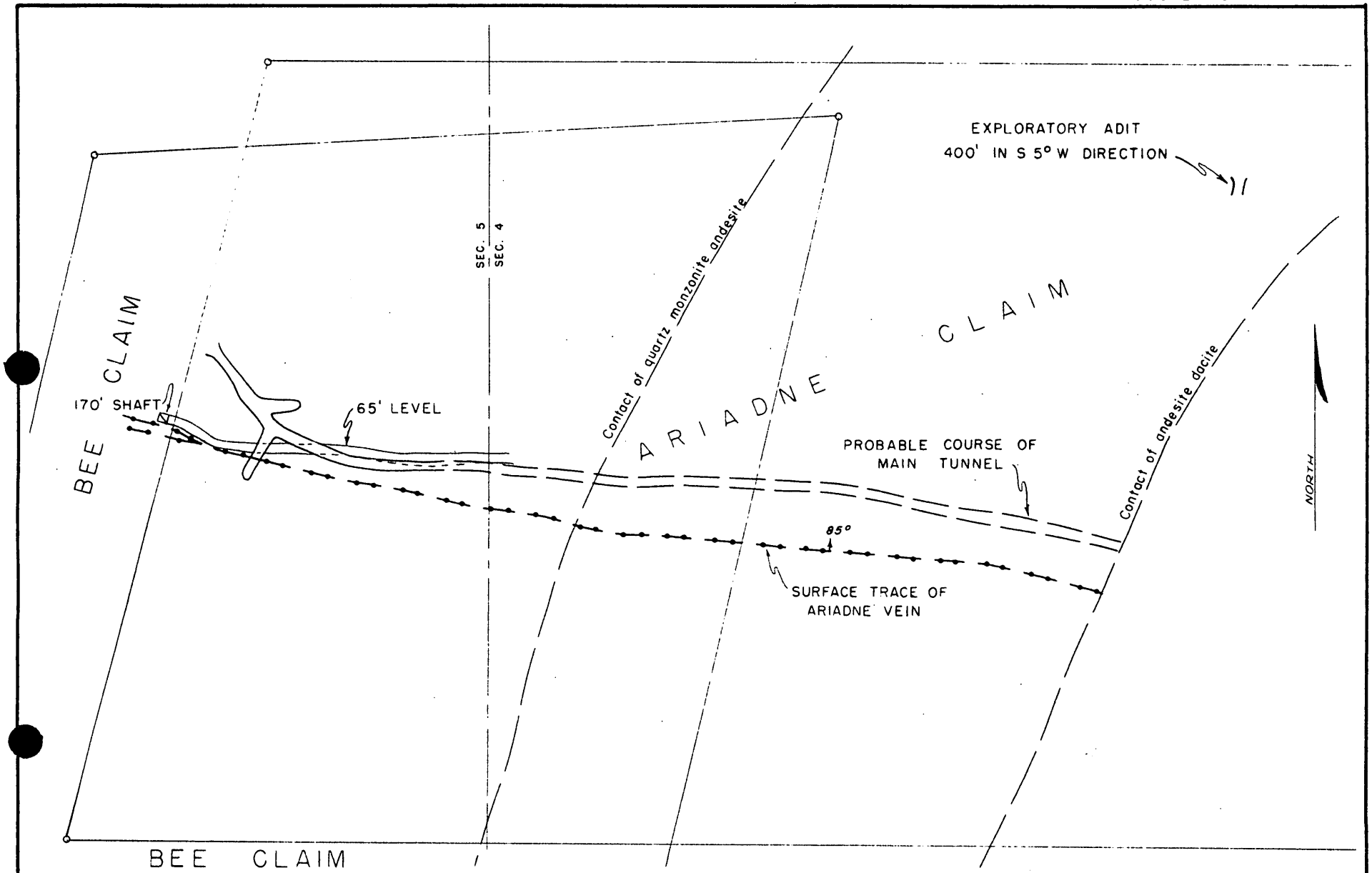
DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "E"

None



SKETCH MAP OF ARIADNE MINE
JEFFERSON CO. MONTANA

SCALE

100' 75' 50' 25' 0 100 200 300

After G. S. Kearney 1929

200
(April 1951)

Docket No. DMA 1411X
Commodity [illegible]

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

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

A. M. Paige Co.
[illegible] Butte Avenue
Helena, Montana

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows: [3] Helena and Joe claims, Colorado mining district, Secs. 4 to 9, T. 7 N., R. 4 W., Montana Principal Meridian

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

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

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

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] lead and zinc, copper; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

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

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

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

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule of existing facilities, buildings, installations, and fixtures, with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition, which cost shall be allowed as a cost of the project.

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

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator [illegible] percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $[illegible], which is [illegible] percent of the agreed estimated total cost of this project, $[illegible].

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

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in triplicate the day and year first above written.

A. W. Berge Co.
(Operator)

By A. W. Berge, Pres.

THE UNITED STATES OF AMERICA

By

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

DMA Docket No. 14111
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "A"

The objective of this exploration is to determine if a substantial block of ore remains in the Ariadne vein above 65 and 165 foot levels.

Exploration Project

Time Schedule

Month	
1st	1. Rehabilitate mine road, construct buildings, move in equipment.
2nd, 3rd, 4th, 5th	2. Rehabilitate 170 feet of shaft.
6th, 7th, 8th, 9th	3. Open and rehabilitate approximately 700 feet of drift.

Work to be done and the costs are as follows:

1.	Rehabilitate mine road. (Includes all costs.)	$ 520.00
2.	Rehabilitate 170 feet shaft at $50.00/foot. (Includes all costs not specified elsewhere.)	8,500.00
3.	Opening and rehabilitating 700 feet of drift at $7.00/foot. (Includes all costs not specified elsewhere.)	4,900.00
4.	Fixtures and improvements.	3,000.00
5.	Operating equipment to be purchased.	3,430.00
	Total.....	$20,350.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "B"

Fixtures and Improvements

Construct compressor and tool house	$1,000.00
Cabin, living quarters for two	1,250.00
Connect power line	750.00
	$3,000.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "C"

Operating Equipment

To be rented

1 bulldozer for 4¼ days at $120.00/day	$ 520.00

To be purchased

1 electric hoist and cable (used)	650.00
1 electric compressor 170 cu. ft. (including receiver) (used)	1,350.00
1 Jackhammer (used)	175.00
1 stoper (used)	275.00
submarine cable and connections (used)	50.00
2 mine cars (used) at $45.00 each	90.00
1 forge and blower, anvil and tools	120.00
1 welding torch (used)	75.00
2 transformers at $75.00 each	150.00
1 pump, electric 20 H.P.	495.00
Total....	$3,430.00

To be furnished by operator

	Rental Period	Estimated Replacement Value	Monthly Rental Allowance	Total
1 hoist and cable (gasoline powered)*	3 mos.	2,000	60.00	180.00
1 compressor, 160 cfm (gasoline)*	3 mos.	4,500	150.00	450.00

* Will be used prior to installation of electric power, and on standby basis thereafter to be paid for on a pro rata basis only when used.

DMA Docket No. 14111
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "D"

Labor and Supervision

	Rate per shift
Miners	$12.50
Foreman	15.00
Manager, $600.00 per month part time*	

* To include accounting, etc., and not to exceed $3,600.00 for project.

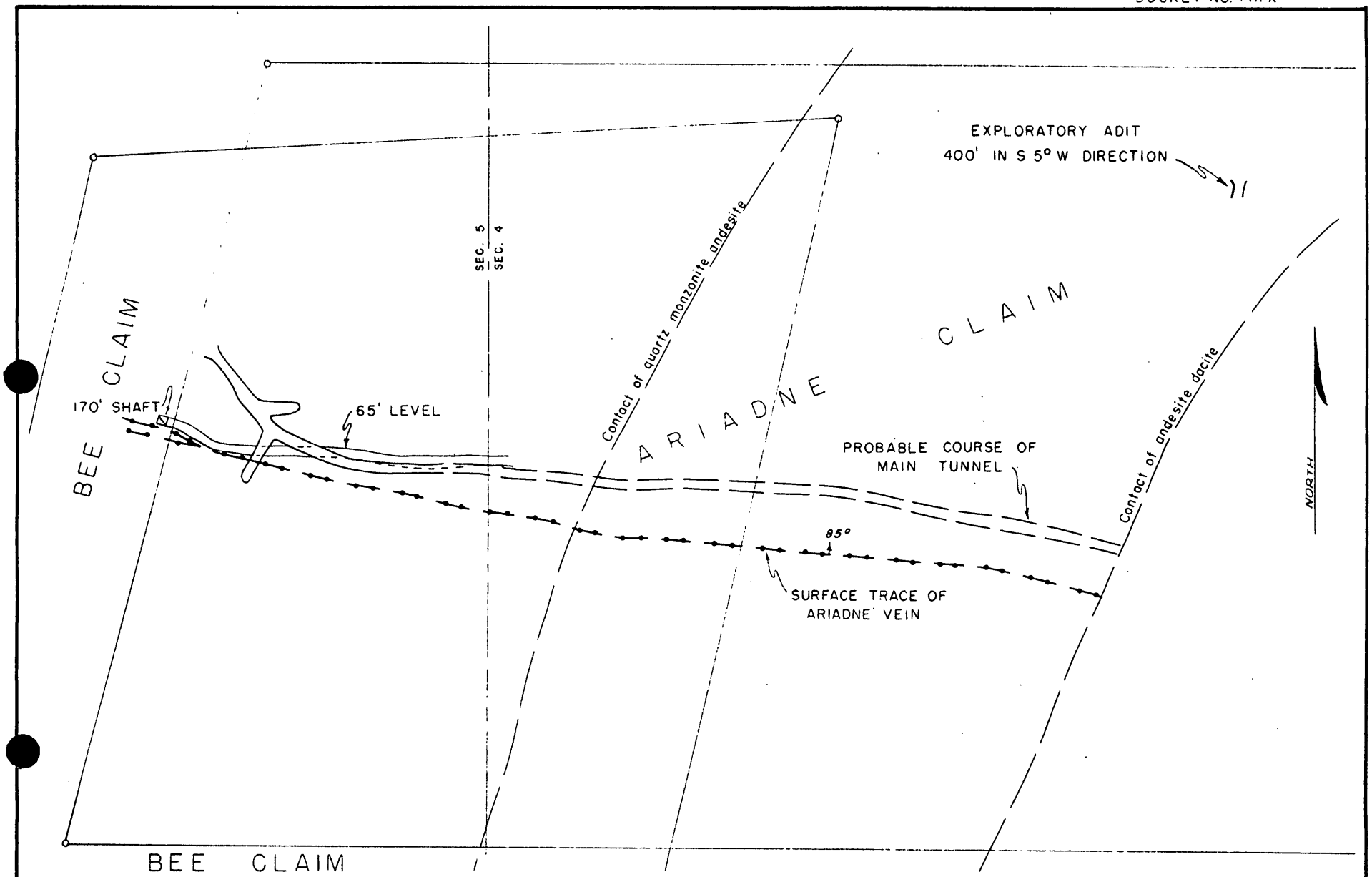
DMA Docket No. 14[illegible]X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "E"

None



SKETCH MAP OF ARIADNE MINE
JEFFERSON CO. MONTANA

SCALE

100' 75' 50' 25' 0 100 200 300

After G. S. Kearney 1929

MF-200
(April 1951)

Docket No. DMA 1411X
Commodity Pb, Zn

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and[2] A. W. Berge Co.
502 Fuller Avenue
Helena, Montana

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows:[3] Friedno and Poe claims, Colorado mining district, Secs. 4 to 5, T. 7 N., R. 4 W., Montana Principal Meridian

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

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

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

3. *Exploration project.* The Operator, within 90 days from the date of this contract shall commence work on a project of exploration for[5] lead and zinc, copper; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of[6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

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

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

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

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule of existing facilities, buildings, installations, and fixtures, with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition, which cost shall be allowed as a cost of the project.

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

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator ---50--- percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $---10,000.00---, which is ---50--- percent of the agreed estimated total cost of this project, $---20,000.00---.

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

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in triplicate the day and year first above written.

A. M. Berge Co.
(Operator)

By A. M. Berge, Pres.

THE UNITED STATES OF AMERICA

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "A"

The objective of this exploration is to determine if a substantial block of ore remains in the Ariadne vein above 65 and 165 foot levels.

Exploration Project

Time Schedule

Month	
1st	1. Rehabilitate mine road, construct buildings, move in equipment.
2nd, 3rd, 4th, 5th	2. Rehabilitate 170 feet of shaft.
6th, 7th, 8th, 9th	3. Open and rehabilitate approximately 700 feet of drift.

Work to be done and the costs are as follows:

1.	Rehabilitate mine road. (Includes all costs.)	$ 520.00
2.	Rehabilitate 170 feet shaft at $50.00/foot. (Includes all costs not specified elsewhere.)	8,500.00
3.	Opening and rehabilitating 700 feet of drift at $7.00/foot. (Includes all costs not specified elsewhere.)	4,900.00
4.	Fixtures and improvements.	3,000.00
5.	Operating equipment to be purchased.	3,430.00
	Total.....	$20,350.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT #9#

Fixtures and Improvements

Construct compressor and tool house	$1,000.00
Cabin, living quarters for two	1,250.00
Connect power line	750.00
	$3,000.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "C"

Operating Equipment

To be rented

1 bulldozer for 4½ days at $120.00/day	$ 520.00

To be purchased

1 electric hoist and cable (used)	650.00
1 electric compressor 170 cu. ft. (including receiver) (used)	1,350.00
1 Jackhammer (used)	175.00
1 stoper (used)	275.00
submarine cable and connections (used)	50.00
2 mine cars (used) at $45.00 each	90.00
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2 transformers at $75.00 each	150.00
1 pump, electric 20 H.P.	495.00
Total....	$3,430.00

To be furnished by operator

	Rental Period	Estimated Replacement Value	Monthly Rental Allowance	Total
1 hoist and cable (gasoline powered)*	3 mos.	2,000	60.00	180.00
1 compressor, 160 cfm (gasoline)*	3 mos.	4,500	150.00	450.00

* Will be used prior to installation of electric power, and on standby basis thereafter to be paid for on a pro rata basis only when used.

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "D"

Labor and Supervision

	Rate per shift
Miners	$12.50
Foreman	15.00
Manager, $600.00 per month part time*	

* To include accounting, etc., and not to exceed $3,600.00 for project.

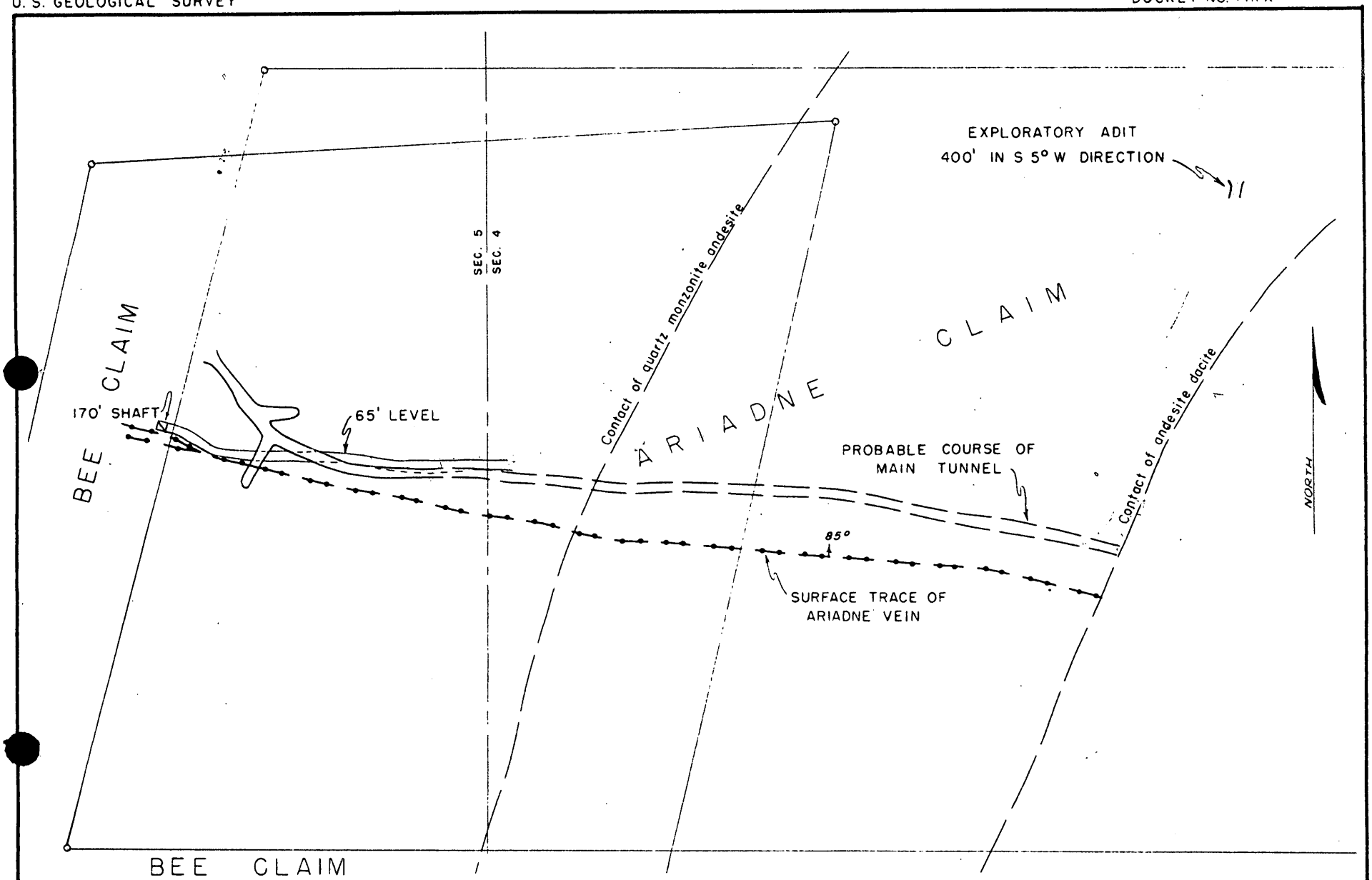
DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "E"

None



SKETCH MAP OF ARIADNE MINE
JEFFERSON CO. MONTANA

SCALE
100' 75' 50' 25' 0 100 200 300

After G. S. Kearney 1929

MF-200
(April 1951)

Docket No. DMA 1411X
Commodity ~~Pb, Zn~~

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and[2] A. H. Berge Co.
502 Fuller Avenue
Helena, Montana
hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows:[3] Ariadne and Bee claims, Colorado mining district, Secs. 4 to 5, T. 7 N., R. 4 W., Montana Principal Meridian
with respect to which the Operator represents and undertakes:[4]

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

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

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for[5] lead and zinc, copper; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of[6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

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

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

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

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule of existing facilities, buildings, installations, and fixtures, with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition, which cost shall be allowed as a cost of the project.

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

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 50 percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $10,175.00, which is 50 percent of the agreed estimated total cost of this project, $20,350.00.

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

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in triplicate the day and year first above written.

A. W. Berge Co.
(Operator)

By A. W. Berge, Pres.

THE UNITED STATES OF AMERICA

By

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

DMA Docket No. 14,112
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "A"

The objective of this exploration is to determine if a substantial block of ore remains in the Ariadne vein above 65 and 165 feet levels.

Exploration Project

Time Schedule

Month	
1st	1. Rehabilitate mine road, construct buildings, move in equipment.
2nd, 3rd, 4th, 5th	2. Rehabilitate 170 feet of shaft.
6th, 7th, 8th, 9th	3. Open and rehabilitate approximately 700 feet of drift.

Work to be done and the costs are as follows:

1.	Rehabilitate mine road. (Includes all costs.)	$ 520.00
2.	Rehabilitate 170 feet shaft at $50.00/foot. (Includes all costs not specified elsewhere.)	8,500.00
3.	Opening and rehabilitating 700 feet of drift at $7.00/feet. (Includes all costs not specified elsewhere.)	4,900.00
4.	Fixtures and improvements.	3,000.00
5.	Operating equipment to be purchased.	3,430.00
	Total.....	$20,350.00

DPA Project No. [illegible]
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "B"

Fixtures and Improvements

Construct compressor and tool house	$1,000.00
Cabin, living quarters for two	1,250.00
Connect power line	750.00
	$3,000.00

DMA Docket No. 14111
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "C"

Operating Equipment

To be rented

1 bulldozer for 4½ days at $120.00/day	$ 520.00

To be purchased

1 electric hoist and cable (used)	650.00
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Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "D"

Labor and Supervision

	Rate per shift
Miners	$12.50
Foreman	15.00
Manager, $600.00 per month part time*	

* To include accounting, etc., and not to exceed $3,600.00 for project.

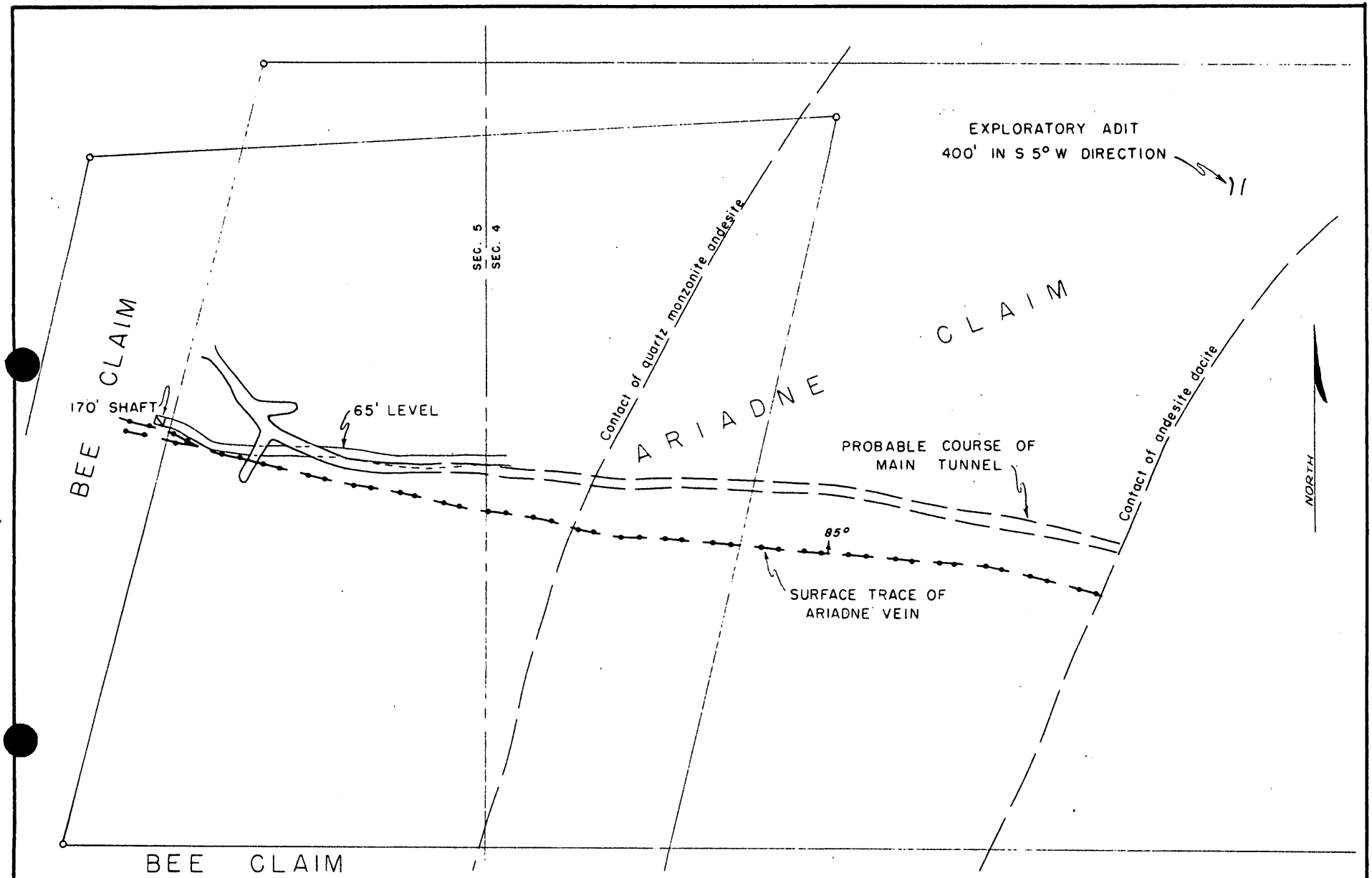
DMA Docket No. 14,111
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "B"

None



SKETCH MAP OF ARIADNE MINE

JEFFERSON CO. MONTANA

SCALE

100' 75' 50' 25' 0 100 200 300

After G. S. Kearney 1929

MF-200
(April 1951)

Docket No. DMA 1411X
Commodity Pb, Zn

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] A. W. Berge Co.
502 Fuller Avenue
Helena, Montana

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows: [3] Ariadne and Bee claims, Colorado mining district, Secs. 4 to 5, T. 7 N., R. 4 W., Montana Principal Meridian

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

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

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

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] lead and zinc, copper; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

6. *Operating equipment.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. As to equipment purchased for the project, the Government will contribute its agreed pro-rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro-rata share.

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

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

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

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule of existing facilities, buildings, installations, and fixtures, with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition, which cost shall be allowed as a cost of the project.

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

11. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator .....50..... percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $...10,175.00....., which is ...50..... percent of the agreed estimated total cost of this project, $20,350.00.....

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

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in triplicate the day and year first above written.

A. W. Berge Co.
(Operator)

By A. W. Berge, Pres

THE UNITED STATES OF AMERICA

By .....

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "A"

The objective of this exploration is to determine if a substantial block of ore remains in the Ariadne vein above 65 and 165 feet levels.

Exploration Project

Time Schedule

Month	
1st	1. Rehabilitate mine road, construct buildings, move in equipment.
2nd, 3rd, 4th, 5th	2. Rehabilitate 170 feet of shaft.
6th, 7th, 8th, 9th	3. Open and rehabilitate approximately 700 feet of drift.

Work to be done and the costs are as follows:

1.	Rehabilitate mine road. (Includes all costs.)	$ 520.00
2.	Rehabilitate 170 feet shaft at $50.00/foot. (Includes all costs not specified elsewhere.)	8,500.00
3.	Opening and rehabilitating 700 feet of drift at $7.00/foot. (Includes all costs not specified elsewhere.)	4,000.00
4.	Fixtures and improvements.	3,000.00
5.	Operating equipment to be purchased.	3,430.00
	Total.....	$20,350.00

DMA Docket No. 1411X
Commodity: Lead-Zinc

Exploration Project Contract, Arizona Zinc

Jefferson County, Montana

EXHIBIT "B"

Fixtures and Improvements

Construct compressor and tool house	$1,000.00
Cabin, living quarters for two	1,250.00
Connect power line	750.00
	$3,000.00

DMA Docket No. 14111
Commodity: Lead-Zinc

Exploration Project Contract, Arizona Mine

Jefferson County, Montana

EXHIBIT "C"

Operating Equipment

To be rented

1 bulldozer for 4½ days at $120.00/day	$ 520.00

To be purchased

1 electric hoist and cable (used)	650.00
1 electric compressor 170 cu. ft. (including receiver) (used)	1,350.00
1 Jackhammer (used)	175.00
1 stoper (used)	275.00
submarine cable and connections (used)	50.00
2 mine cars (used) at $45.00 each	90.00
1 forge and blower, anvil and tools	120.00
1 welding torch (used)	75.00
2 transformers at $75.00 each	150.00
1 pump, electric 20 H.P.	425.00
Total....	$3,430.00

To be furnished by operator

	Rental Period	Estimated Replacement Value	Monthly Rental Allowance	Total
1 hoist and cable (gasoline powered)*	3 mos.	2,000	60.00	180.00
1 compressor, 160 cfm (gasoline)*	3 mos.	4,500	150.00	450.00

* Will be used prior to installation of electric power, and on standby basis thereafter to be paid for on a pro rata basis only when used.

Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT "B"

Labor and Supervision

	Rate per shift
Miners	$12.50
Foreman	15.00
Manager, $500.00 per month part time*	

* To include accounting, etc., and not to exceed $3,600.00 for project.

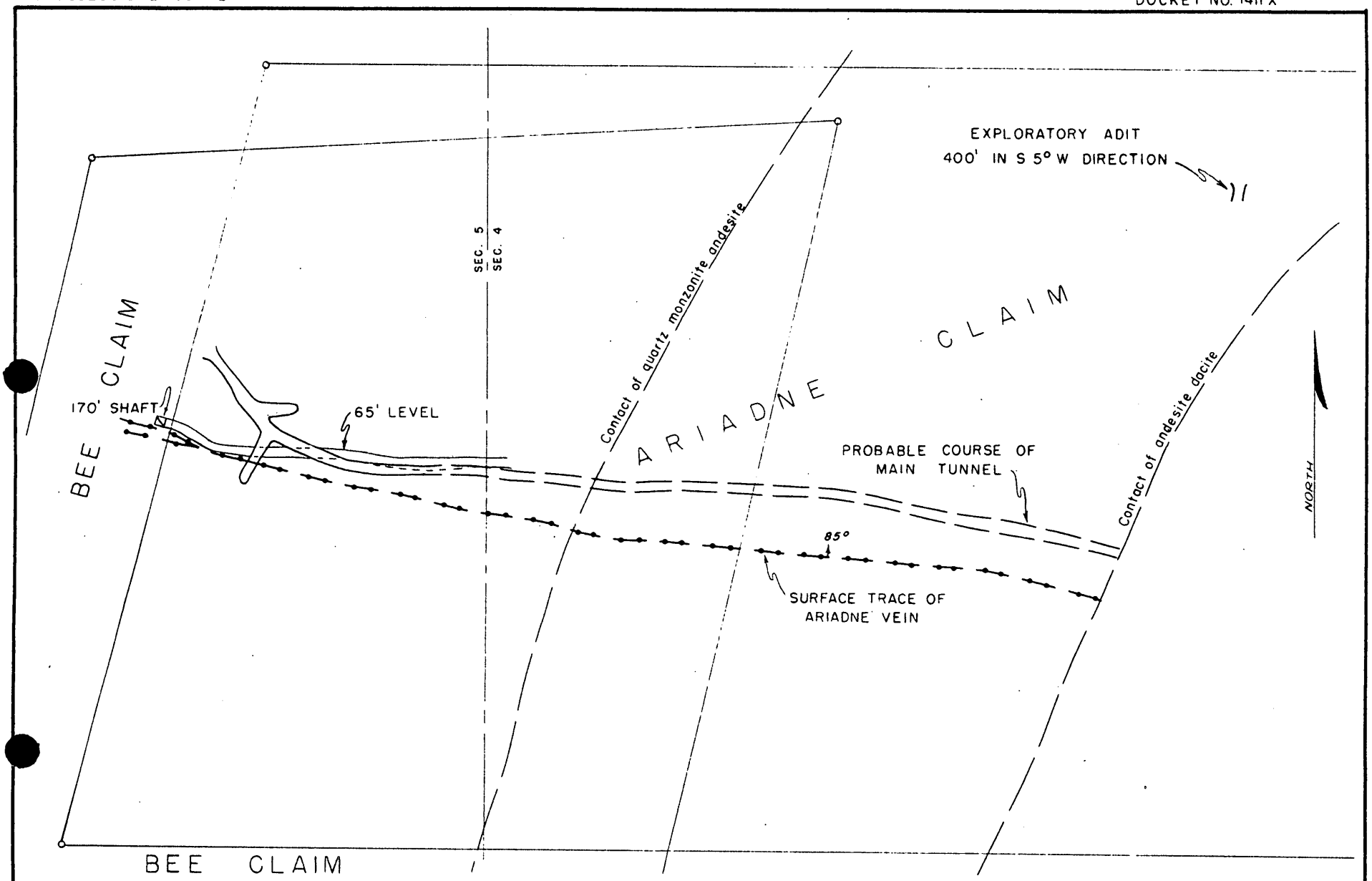
DMA Docket No. 14111
Commodity: Lead-Zinc

Exploration Project Contract, Ariadne Mine

Jefferson County, Montana

EXHIBIT #[illegible]

None



SKETCH MAP OF ARIADNE MINE
JEFFERSON CO. MONTANA

SCALE

100' 75' 50' 25' 0 100 200 300

After G. S. Kearney 1929

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Jefferson, State of Montana, described in a certain Exploration Project Contract dated _____, 195__, between A. W. Berge, 502 Fuller Ave., Helena, Montana, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated May 28, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 3rd day of July, 1951

Joseph M. Gabel

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

MF-202

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