DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip Mica-Beryl.

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2056

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

An exploration Project.

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

Routing Slip

To:	P.E. Div.	Date	12/4/51
To:	Needleman Bureau of Mines	Date	12/13/51
To:	Dietrich - 3526 L.D.70. Bureau of Mines	Date	12/13/51
To:	Norton G-228 GS	Date	12/14/51
To:	Mr Hook	Date	12/26/51
To:		Date	
To:		Date	
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DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 2056

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
CODE 370

To:	Ind. Minerals	Date	9-10-51
To:	Mr Lyon	Date	10-31
To:	[illegible]	Date	NOV 8 1951
To:	Frank K Johnson	Date	
To:		Date	
To:		Date	
To:		Date	
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DO NOT DETACH

CONTROLLED DOCUMENT

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

August 24, 1954

Memorandum for the files

Subject: Docket No. DMEA-2056 - Mica-Beryl
A. I. Johnson and G. R. Jurisch
Ponca Mine
Pennington County, South Dakota

Docket No. DMEA-3434 - Mica-Beryl
B & M Corp.
Ponca Mine
Pennington County, South Dakota

An application for exploration assistance on the subject mine was submitted on September 4, 1951, by A. I. Johnson and G. R. Jurisch owners of the subject mine.

An examination was made on October 23, 1951, by our field team. The application was denied on the geologic possibility of making a significant discovery. The keel of the pegmatite is not observed from the mine workings but is believed that the western edge of the mine workings is within three feet of the keel. The muscovite is mostly scrap variety but apparently 78.68 lbs. valued at $393.40 was sold to the Colonial Mica Corporation between May 12, 1943, and October 22, 1943. Inasmuch as the application was denied because of lack of geologic evidence, it is not believed that a re-examination of the property is justified. On November 26, 1951, Mr. Johnson asked that the denied application be reconsidered, sending a copy of the settlement sheets of the Colonial Mica Corporation. On January 7, 1952, Mr. Johnson was informed that the denial was reaffirmed.

FILE COPY
SURNAME:

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

Robertson
Dietrick
Needleman
Norton
Hedges
Thayer

AIR MAIL

JAN 7 1952

Mr. A. J. Johnson
Consulting Mining Engineer
Keystone, South Dakota

Re: DMEA Docket No. 2056
Beryl & Mica
A. J. Johnson & J. R. Jurisch
Ponca Lode Mine

Dear Mr. Johnson:

Receipt is acknowledged of your letter of November 26, 1951, in which you ask for a reconsideration of denial of application for the above referred project.

Complying with this request we have again reviewed the case, particularly with respect to the first phase, or that part of your original project involving 300 feet of diamond drilling estimated to cost some $1,600. This part of the program, we find is no more desirable than the whole and would be inadequate to materially contribute to the program for National Defense. We therefore reaffirm the denial of your original application.

Sincerely yours,

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

JTRobertson/jem
12-14-51
cc to: Adm. Reading File
Mails and Files Br.
Docket
Messrs. Mittendorf
Needleman - Rm.1345
Dietrick - Rm. 3526
Norton, J.- Rm. G-228, G.S.
Robertson
Field Team, Region V

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

December 14, 1951

Memorandum

To: Operating Committee, DMEA

From: Non-metallic Minerals Branch, DMEA

Subject: Docket No. DMEA-2056
Beryl and Mica
A. J. Johnson and J. R. Jurisch
Ponca Lode Mine, South Dakota
Re: Recommendation of a reaffirmation of a previous denial

The applicant under date of November 26, 1951, requests a reconsideration of application which was denied November 14, 1951, pursuant to a letter of denial signed by the Director of Supply Division.

Applicant now requests that at least the first phase of the original overall program be considered. It involves 300 feet of diamond drilling costing $1,600 compared to the original total program of $11,558, involving both drilling and tunnelling.

After again reviewing the case and reconsidering the various aspects, there appears no more justification for the smaller project than for the larger one which was previously denied.

A reaffirmation of the original denial is recommended.

Jasper Robertson

600
FILE COPY
SURNAME:

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

Dietrick
Needleman
Robertson
Norton
Hedges
Hayes

December 14, 1951

Memorandum

To: Operating Committee, DMEA

From: Non-metallic Minerals Branch, DMEA

Subject: Docket No. DMEA-2056
Beryl and Mica
A. J. Johnson and J. R. Jurisch
Ponca Lode Mine, South Dakota
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After again reviewing the case and reconsidering the various aspects, there appears no more justification for the smaller project than for the larger one which was previously denied.

A reaffirmation of the original denial is recommended.

JTRobertson/jem
12-14-51
cc to: Adm. Reading File
Mails and Files Br.
Docket
Messrs. Mittendorf
Needleman - Rm.1345
Dietrick - Rm. 3526
Norton, J.- G-228, GS
Robertson
Field Team Reg V

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.
DEC 3 10 40 AM '51

ARTHUR I. JOHNSON
CONSULTING MINING ENGINEER
KEYSTONE, S. D.

November, 26, 1951

NONMETALLICS

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 3 1951
Defense Minerals Administration,
Production Expansion Division.

Mr. Frank E. Johnson,
Acting Administrator,
United States Dept. of the Interior,
Defense Minerals Administration,
Washington 25, D. D.

Dear Mr. Johnson:

We acknowledge receipt of your letter of November 14th. relative to DMA- 2056 X- Beryl & Mica Ponca Lode.

Relative to your reasons for denying the application we would submit the following information:

1. You state that a sound geologic basis for expecting to encounter significant amounts of strategic minerals in the depoist has not been demonstrated. This statement we feel is not in accord with the few facts available on the deposit. The occurrence of beryl in commercial amounts in the soda-feldspar,mica beryl zone has been demonstrated by the production of over a ton of beryl from a relatively small tonnage of mined material. Indications are that the pegmatite minerals are definitely segrated and hence we can expect the zoning to continue in depth. Other dikes in the Keystone district with no more showing than this in beryl have produced several hundred tons of this mineral. As an example the Ingersoll dike with an exposure at thesurface not much larger than this produced large tonnages of this mineral. The nature of the pegmatite is such as to warrant the expectation of sufficient depth to allow the mine to pay out. The Ingersoll Dikes doubled in length and width in a distance of less than 50 feet from the surface. Further substantial amounts of beryl were not indicated at the surface and it was not until a depth of some 75 feet had been reached on one of the dikes that substantial amounts of beryl were encountered. At the present time the Ponca dike has only been opened up for a depth of some 25 feet and it is hence impossible to state definitely that significant amounts of strategic minerals will not be encountered. Our application was based upon the assumption that a minimum amount of diamond drilling could prove the existence of sufficient amounts of strategic minerals to warrant the further program of develpment by tunnels and raises.

2. Relative to the fact that scrap mica has been classified as the principal product, we inclose sheets from Colonial Mica Corporation, the government buying agency during the last war to show that from the small amount of work done on the deposit a definite amount of strategic mica was realized. The mica as mined would produce scrap mica after the strategic mica had been removed by hand sorting.

3. In regard to the apparent limited size of the dike it was our object to prove this fact by drilling as it is impossible to make a definite statement at this time in view of conditions that have been indicated by the exploration

and operation of other dikes in the area. We felt that if all the facts had been outlined as indicated in your summary of the reasons for denying our application we could have obtained private financing to develop the property. If the diamond drilling could establish the facts relative to the deposit we could privately finance the operation of the property.

4. Hence based on the above information we feel that we are justified in asking your reconsideration at least of the first phase of our original application.

Very truly yours,

A. I. Johnson

1

1 – TO SELLER
2 – TO N. Y.
3 – TO N. Y.
4 – TO DIST. OFFICE
5 – TO DIST. OFFICE
6 – FOR BUYER

COLONIAL MICA CORPORATION

92 LIBERTY STREET • NEW YORK

Agent for METALS RESERVE COMPANY

MICA BUYING TICKET № 4395

258
40

Date of Purchase May 12, 1943

Name of Mine Ponca

Location of Mine 4 miles southeast of Keystone

Shipped Via Seller's Vehicle Received at Custer, South Dakota Date 5/12/43

Bought of Alton Leach

Keystone, South Dakota

Color White Quality No. 1&2 Minus 20% Trim India Plus 40% Bbl. Bags Boxes

POUNDS	GRADE	PRICE	DOLLARS	CENTS	CHECKED BY
	SCRAP				
	SKIMMINGS				
	WASHER				
37.50	PUNCH	.27	10	13	
	1" x 1"				
	1¼" x 1¼"				
1.94	1½" x 2"	2.88	5	59	
1.12	2" x 2"	4.22	4	73	
.19	2" x 3"	5.57	1	06	
	3" x 3"				
	3" x 4"				
	3" x 5"				
	4" x 6"				
	6" x 8"				
	Total Premium 40%				
	Total Penalty 20%				
	Net Premium 20%				
40.75	TOTALS		21	51	

Haulage Cost Allowed

TOTAL

DEDUCTIONS:

Rifting Cost

Rent On Equipment

Repayment On Advances

TOTAL DEDUCTIONS None

AMOUNT OF DRAFT 21 51

Draft No. S 185

Date Draft May 12, 1943

Approved by

The seller warrants that prices herein comply with General Maximum Price Regulations of the Office of Price Administration.
Wage and Hour Law: – Goods covered by this invoice were not produced under less than the minimum conditions required under the Wage and Hour Law.

ACCEPTED BY

Alton Leach

Per SELLER

COLONIAL MICA CORPORATION

Per Hubert O. DeBeck BUYER

1

1 – TO SELLER
2 – TO N. Y.
3 – TO N. Y.
4 – TO DIST. OFFICE
5 – TO DIST. OFFICE
6 – FOR BUYER

COLONIAL MICA CORPORATION

92 LIBERTY STREET • NEW YORK

Agent for METALS RESERVE COMPANY

Date of Purchase June 1, 1943

Name of Mine Ponca

Location of Mine 4 miles southeast of Keystone

Shipped Via Seller's Vehicle Received at Custer, South Dakota Date

Bought of Alton Leach

Keystone, South Dakota

Color White Quality No. 2 Minus % Trim Plus % Bbl. Bags

POUNDS		GRADE	PRICE	DOLLARS	CENTS	CH
		~~SCRAP~~ Schedule II C				
		SKIMMINGS				
		WASHER				
50	.50	PUNCH	.34	17	17	
		1" x 1"				
		1¼" x 1¼"				
		1½" x 2"				
		2" x 2"				
		2" x 3"				
		3" x 3"				
		3" x 4"				
		3" x 5"				
		4" x 6"				
		6" x 8"				
		Punch Penalty 15%				
50	.50	TOTALS		17	17	

Haulage Cost Allowed			
TOTAL			
DEDUCTIONS:			
Rifting Cost	6.08		
Rent On Equipment			
Repayment On Advances			
TOTAL DEDUCTIONS	6.08	6	08
AMOUNT OF DRAFT		11	09

Draft No. S 246

Date Draft June 1, 1943

Approved by

The seller warrants that prices herein comply with General Maximum Price Regulations of the Office of Price Administration.
Wage and Hour Law: – Goods covered by this invoice were not produced under less than the minimum conditions required under the Wage and Hour Law

ACCEPTED BY

Alton Leach

Per SELLER

COLONIAL MICA CORPORATION

Per Hubert O. De Beck BUYER

Memorandum

To: Reports and Records Unit, DMA

From: Chief, Industrial Minerals Branch, DMA

Subject: DMA-2056X - A. I. Johnson & J. R. Jurisch
Ponca Lode, Keystone, South Dakota
Commodity: Beryl & Mica
Amount: 90% of $11,558.50

Denial recommended because:

1. No sound basis for expecting to encounter significant amounts of strategic mineral in the deposit has been demonstrated.

2. The principal product which the deposit might yield is scrap mica, not classified as strategic.

3. The limited size of the deposit makes it very unlikely that a successful mining operation could be based on this pegmatite.

Attached:

1. Memo from Region V forwarding Field Report.
2. Field Report from Region V.
3. Form MF-103 in triplicate with additional information and maps.
4. Review of Application in Duplicate
5. Memo from Field Team, Region V, 9/7/51 in duplicate.
6. Copy of letter from W. R. Griffitts, 9/19/51.

James A. Barr, Sr.,

Approved:

Director, Supply Division
RWASKEY:MP
10-31-51
cc: Field Team, Region V (2)

Adm. Reading File, Mr. Barr
DMA Docket File

RWASKEY:MP
10-31-51

cc: Administrator's Reading File
DMA Docket File
Field Team, Region V (2)
Mr. Barr

A. I. Johnson & J. R. Jurisch
Keystone
South Dakota

Subject: DMA-2056X - Beryl & Mica
Ponca Lode

Gentlemen:

Your application for aid for an exploration project on beryl and mica deposit located near Keystone, South Dakota, and docketed as DMA-2056X, has been reviewed by this office.

Projects approved by the Defense Minerals Aministration must, in its judgment, show definite promise of yielding material of acceptable grade, physical character and specifications, in quantities that will significantly improve the mineral supply position for National Defense.

A very careful study of your proposal, including examination by DMA Field Team, revealed the following:

1. A sound geologic basis for expecting to encounter significant amounts of strategic minerals in the deposit, has not been demonstrated.

2. The principal product which might be obtained from mining the deposit would be scrap mica which is not classed as strategic.

3. The apparent limited size of the deposit makes it highly unlikely that a successful mining venture could be based on this pegmatite.

Under these circumstances, your application for exploration aid to the extent of 90% of $11,558.50 is denied. Should additional information become available, we would be glad to have you resubmit your proposal for consideration.

Unless we receive a request within 30 days, we will consider the case closed.

Sincerely yours,

Tom Lyon, Director
Supply Division

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

RWASKE:MP
10-31-51

370

cc: Administrator's Reading File
DMA Docket File
Field Team, Region V (2)
Mr. Barr

NOV 14 19

A. I. Johnson & J. R. Jurisch
Keystone
South Dakota

Subject: DMA-2256X - Beryl & Mica
Ponca Lode

Gentlemen:

Your application for aid for an exploration project on beryl and mica deposit located near Keystone, South Dakota, and docketed as DMA-2256X, has been reviewed by this office.

Projects approved by the Defense Minerals Administration must, in its judgment, show definite promise of yielding material of acceptable grade, physical character and specifications, in quantities that will significantly improve the mineral supply position for National Defense.

A very careful study of your proposal, including examination by DMA Field Team, revealed the following:

1. A sound geologic basis for expecting to encounter significant amounts of strategic minerals in the deposit, has not been demonstrated.

2. The principal product which might be obtained from mining the deposit would be scrap mica which is not classed as strategic.

3. The apparent limited size of the deposit makes it highly unlikely that a successful mining venture could be based on this pegmatite.

Under these circumstances, your application for exploration aid to the extent of 90% of $11,558.50 is denied. Should additional information become available, we would be glad to have you resubmit your proposal for consideration.

Unless we receive a request within 30 days, we will consider the case closed.

Sincerely yours,

(signed) FRANK E. JOHNSON

Frank E. Johnson
Acting Administrator

November 6, 1951

Memorandum

To: Reports and Records Unit, DMA

From: Chief, Industrial Minerals Branch, DMA

Subject: DMA-2056X - A. I. Johnson & J. R. Jurisch
Ponca Lode, Keystone, South Dakota
Commodity: Beryl & Mica
Amount: 90% of $11,558.50

Denial recommended because:

1. No sound basis for expecting to encounter significant amounts of strategic mineral in the deposit has been demonstrated.

2. The principal product which the deposit might yield is scrap mica, not classified as strategic.

3. The limited size of the deposit makes it very unlikely that a successful mining operation could be based on this pegmatite.

Attached:

1. Memo from Region V forwarding Field Report.
2. Field Report from Region V.
3. Form MF-103 in triplicate with additional information and maps.
4. Review of Application in Duplicate.
5. Memo from Field Team, Region V, 9/7/51 in duplicate.
6. Copy of letter from W. R. Griffitts, 9/19/51.

James A. Barr, Sr.

Approved:

Acting Administrator

RWASKEY:esf

cc: Field Team, Region V (2) Admr. Reading File DMA Docket File Mr. Barr

Messrs. A. I. Johnson and
J. R. Purisch
Keystone
South Dakota

Subject: DMA-2056X - Beryl-Mica

Gentlemen:

Your application is being referred to Mr. A. B. Needham, Executive Officer, Region V, 2908 Colfax Avenue, South, Minneapolis, Minnesota, for further information.

Sincerely yours,

Tom Lyon, Director
Supply Division

RWASKEY:mp
9-20-51
cc: Field Team, Region V (2)
DMA Docket File
Mr. Barr

Mr. A. B. Woodhead, Executive Officer
DMA Field Team, Region V
2908 Colfax Avenue, South
Minneapolis, Minn.

A.I. Johnson - J. R. Jurisch, Keystone, S.D.

DMA-2056X

Beryl-Mica

11,538.50

RWASKEY:mp
9-20-51

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2056

Commodity Beryl-Mica

Total Amount $11,538.50

Govt. Participation 90%

1. Name and Address of Applicant A.I. Johnson & J. R. Jurisch, Keystone S.D.

2. Location of Property Ponca Lode, Keystone, S.D.

3. Mineral or metal Beryl, Mica 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

b) Poor

c) None

d) Don't know—needs field examination Memo Attached

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

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? NO

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

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

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

Is a field check needed on this point? NO

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

a) Is the project adequately described? Yes

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

b) Is there an adequate map or sketch of the proposed work? Map provided but if Field Team OKs project a better sketch should be provided to attach to contract

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes - But Field Team should decide if this amount and type of work is justified by geological findings on examination

If not, what part of it is?

Is this part a worthwhile exploration project? Field Team Decide

d) Are the cost estimates detailed? Yes, Rather Well

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? See ques. 23 application If so, attach a draft.

e) Are the cost estimates reasonable? Appear so

f) Should more information be requested from applicant? By Team

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Apparently Not

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

c) Is a field check needed? Yes

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

a) Is it applicable? Yes

b) Sufficient data? NO If so, attach a draft.

c) Are rents and charges reasonable? Appears so but why an

d) Is a field check needed? hourly rental basis?

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

a) Are there sufficient data? Yes

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? Establish actual needs if program is to be revised

14. Exhibit E (question 23-c)*

a) Is it applicable? Apparently Not

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? Yes

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Report on geology of deposit - If necessary assist applicant to revise program & submit all necessary contract data & a more detailed map

Reviewed by: [illegible]

Date 9/20/67

97692

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-2056

Date received 9-10-51

Participation

A. I. Johnson
J. R. Juriech

Keystone, S. Dak.

Name and address of applicant

Date Sept. 4, 1951

FILL IN THIS BLOCK

Date of application Originally May 1951

Estimated cost 11,588.50

Mineral or metal Beryl & sheet mica

Percentage of Government participation 90%

Location of mine Keystone, S. Dak.

Date of filing MF-100 Same

DMA Docket Number, if available 2056

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

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

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

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

16—64967-1

THE PROPERTY

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

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

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

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

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

THE EXPLORATION

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

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

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

CERTIFICATION

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

(Name of company)	By [signature] (Signature of authorized official)
Sept. 4 1951 (Date)	Owner (Title)

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

*Same as footnote on page 1.

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

Application for Aid for an Exploration Project

The Applicant

1. The applicants are co-owners of the Ponca Lode MS. 1110.

2. Inapplicable.

3. Inapplicable.

4. Both owners have had a varied experience in mining pegmatite dikes similar to the Ponca Lode. At present Mr. J. R. Jurich is operating the property for beryl, mica and feldspar. A. I. Johnson has operated pegmatite mining properties since 1933.

5. We are the owners of the property.

6. There are no claims or liens against the property.

7. Inapplicable.

8. Do not have a financial statement to cover operations on the property.

9. The applicants are prepared to invest their ratio of the money necessary to complete the work outlined in this proposal.

Application for Aid for an Explor tion Project.

The Property.

10. (a) The property conists of two lode claims, the Ponca and Ponca No. 1, designated as M. S. 1110 consisted of 17.17 acres. It is located on Iron Creek about 3 miles South east of Keystone in Section 35, T. 2 S. R. 5 E. BHM. At the present time the property is developed by an oopen cut near the outcrop of the dike.

(b) Located In Section 35, T. 2 S R 6 E. B. H. M, designated as M.S. 1110.

11. The present name of the property is the Ponca and has been so designated always.

1.2. The mine is located about 4 miles from Keystone by road and the county road passes within 1/3 of a mile from the property and a road has been made to connect to t is highway from the mine. The C.B.&Q railroad comes to Keystone and is about 4 miles by road north west of the mine. The County highway has been graded and graveled to the point from which the mine road starts.

13. The mine is located on Iron Creek which is a good sized stream at all times. The claims abut the creek on the south. No power is available at the property and it will be necessary to use gasoline operated equipment.

14. There is one samall compressor building on the property that can be used but there is insufficient equipment to operate compressor and drills necessary to complete the proposed project. At present Mr. Jurisch has a portable compressor of about 60 cu. ft. capacity on the property for necessary mining that is being done.

15. The minerals could be shipped from Keystone by CB&W freight. The feldspar could be sold in Keystone. Bhe beryl and mica would have to be shipped by freight from the town of Keystone and trucked from the mine to shipping point.

16. The property was originally located and operated as a tin producing property. Atin mill was operated about 1/3 of a mile from the mine and ore was hauled to this plant for milling. This plant does not exist at present. It was later operated, during the last war by Mr Jurisch for beryl and sheet mica. They build a 100 foot loading chute and compressor building for the purpose of pursuing this work. These structures are still on the property. In July of 1946 A. I. Johnson started work for feldspar on the property, having purchased a 1/2 interest in the property. This was discontinued due to the low price for feldspar.

(b) The Glendale property to the south has been operated for beryl and feldspar and the Wood Tin Lode on Iron Creek below the mine has been operated for beryl, mica and feldspar.

(c) No. reports have been made on the property as far as we know, and only a cursory examination has been made by the Bureau of Mines during the last war.

Application for Aid for an Exploration Project.

The Property - Cont.

17. We do not have a proudcion record of the production during the war years and production has just been startedon theproperty by Mr. Jurisch hence no minerals have been sold to date.

18. The deposit is a pegmatite dike some 60 feet in length and width dipping southeasterly about 55 degrees and striking northwest- southeast.
(b) Map is submitted.
(c) The purpose of lean is to prove tonnages of beryl, mica. The dike has a mica beryl zone consisting of a soda feldspar matrix. It appears to be a quartz core type of a pegmatite deposit with potash feldspar as a segregated minerl on the foot-wall side. Tin in the form of cassiterite and also columbite occur as secondary minerals.

19. From the nature of the deposit it would appear that the deposit would develop tonnages of beryl and sheet mica to warrant its dewlopment with auxiliary production of feldspar and columbite.

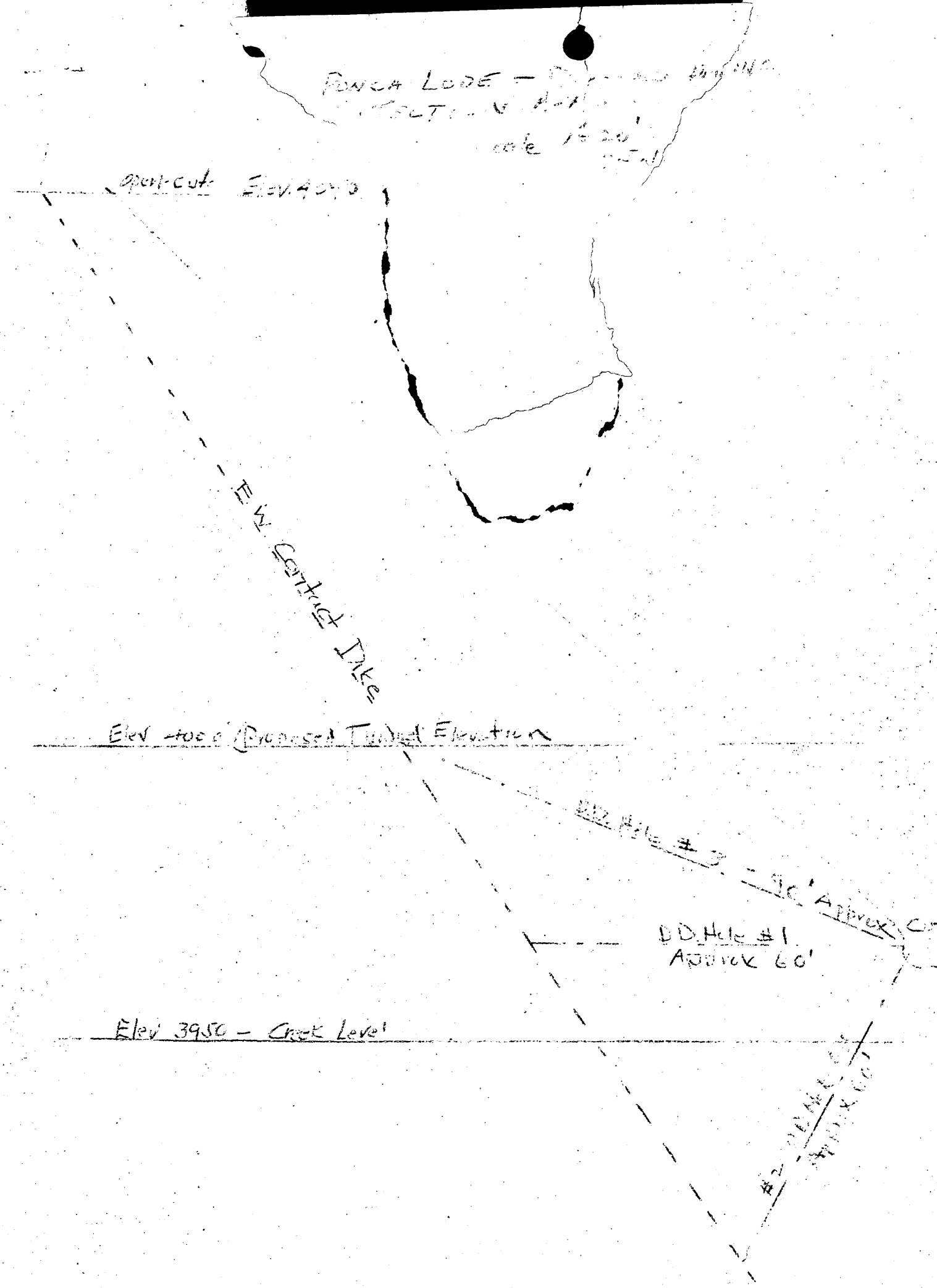
Application for Aid for an Exploration Project

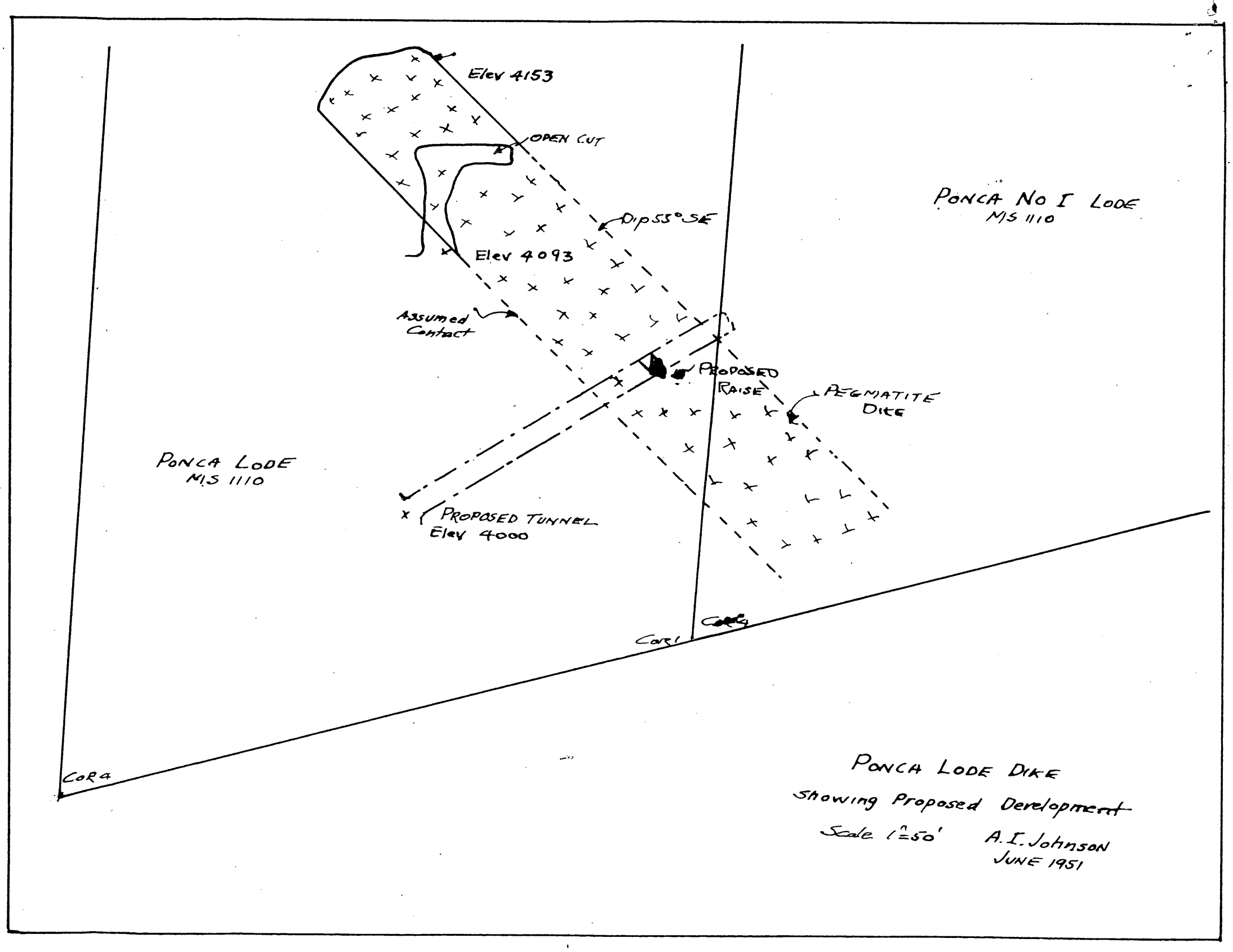
The Exploration.

20. The exploration will be conducted to develop tonnages of beryl and sheet mica and determine the extent and continuity of the Bonca pegmatite.

21. It is proposed to diamond drill the dike in order to determine the nature of the deposit and its continuity and to explore the deposit with a tunnel at a level approximately 100 feet from its present open cut workings, and also to drive a raise to this cut to explore the deposit along the dip and also to facilitate later operation for mining the deposit. It would require a minimum of 210 feet of drilling and a probable maximum of 300 feet in case of irregularities in the dip of the dike or changes in dip. It would require a tunnel of length of 175 feet and drifts on the 4,000 ' elevation of 100 feet and a raise of 120 feet to surface from this level. To complete the entire project would require a period of two weeks for diamond drilling and a period of 4½ months for drifting and raising or a total of 5 months to complete.

22. On the basis of past experience in the operation and development of pegmatite dikes the operators expect to find commercial deposits of beryl, mica and feldspar with auxiliary amounts of tin and columbite. The dike is a quartz core type and from exploration to date would indicate definite segregation of the economics minerals. Section and map accompanies this application.


Ponca Lode
Open-cut Elev. 4000
E½ Contact Dike
Elev 4000' (Proposed Tunnel Elevation
DD Hole #1
Approx 60'
Elev 3950 - Creek Level


Elev 4153
OPEN CUT
Dip 55° SE
Elev 4093
PONCA NO I LODE
MS 1110
Assumed Contact
PROPOSED RAISE
PEGMATITE DIKE
PONCA LODE
MS 1110
PROPOSED TUNNEL
Elev 4000
COR 1
COR 4
PONCA LODE DIKE
Showing Proposed Development
Scale 1"=50'
A. I. Johnson
JUNE 1951

The Requirements and Costs.

23. 300' of diamond drilling @ $4.50 per ft.	(contract)	$1350.00
Engineering and supervision		250.00
	Total	$1600.00

385' of tunneling and drifting and raising @ 22.23¢/ft	8558.55
Supervision- 70 days @ $20.00 per day	1400.00
Total	$9958.50

Requirements for Tunneling etc.

		Base wage	S. S. Ins	O.T.	Total¢/ hr	per day	per ft.
1 Driller		1.50	.10	.12½	1.72½		
1 Helper		1.25	.08	.11	1.44		
		Labor	Total drilling		3.16½	$25.32	6.33
Powder			50# @ 21.00/CWT			10.50	2.63
Caps			20 @ 2 ¢			.40	.10
Fuse			100' @ 1.33 /100'			1.33	.33
Air	Compressor rental $2.00 / Hr					16.00	4.00
	Gasoline		35 gal @ 30 ¢			10.50	2.63
	oil		2 gal @ 40 ¢			.80	.20
Drill rental			25¢ per hr			2.00	.50
			Total			$66.85	$16.72
2 muckers		1.25	.08	.11	2.88	22.04	5.51
					Total	$88.89	22.23
1 Supervision		$2.00	.30	.10	$2.40	19.20	4.80
			Totals			$108.09	$27.03

Summary

Diamond Drilling	$1600.00
Tunneling- drifting and raising	9958.50
Total	$11,558.50

24. Total time required 5 months for entire project.

IN REPLY REFER TO:

G-MD-WRG

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

September 19, 1951

Memorandum

To: Robert Waskey, Defense Minerals Administration

From: W. R. Griffitts, U. S. Geological Survey

Subject: Application DMA-2056 from A. I. Johnson and J. R. Jurisch for exploration of the Ponca beryl and mica deposits, Keystone, South Dakota.

This application, DMA-2056, is for an $11,558.50 exploration project on the Ponca Lode, Keystone, South Dakota. The Geological Survey has no file data on this property. The application should be referred to the field team to determine:

1. The shape, dimensions, and attitude of the pegmatite dike.

2. The position of the beryl and mica in the dike, and the grade.

3. The nature of the pegmatite unit enclosing the minerals sought.

4. The continuity of the beryl and mica-bearing units.

5. Estimate of possible reserves of beryl, mica, and feldspar.

6. Quality of the mica. Samples should be collected and sent to Washington unless the mica is so heavily air-stained or otherwise imperfect that it is clearly non-strategic.

7. The possibility of mining selectively.

8. The relation of the beryl and mica-bearing units to the hill slope. A topographic sketch map is needed.

There seems to be no point in diamond drilling the deposit if the entire dike is as close to the surface as the applicants' section indicates. There seems also to be no point in extending the tunnel so far beyond the pegmatite or in raising to the surface. On the basis of the information presented the deposit could be explored by an adit or pits costing $2,500 to $3,000, assuming that the present showing of beryl and mica is promising.

W. R. Griffitts

W. R. Griffitts

FILE COPY
SURNAME:

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

RWASKEY:MP
10-31-51
cc: Administrator's Rewrite
DMA Docket File
Field Team, Region V (2)
Mr. Barr

370

NOV 14 1951

A. I. Johnson & J. R. Jurisch
Keystone
South Dakota

Subject: DMA-2056X - Beryl & Mica
Ponca Lode

Gentlemen:

Your application for aid for an exploration project on beryl and mica deposit located near Keystone, South Dakota, and docketed as DMA-2056X, has been reviewed by this office.

Projects approved by the Defense Minerals Administration must, in its judgment, show definite promise of yielding material of acceptable grade, physical character and specifications, in quantities that will significantly improve the mineral supply position for National Defense.

A very careful study of your proposal, including examination by DMA Field Team, revealed the following:

1. A sound geologic basis for expecting to encounter significant amounts of strategic minerals in the deposit, has not been demonstrated.

2. The principal product which might be obtained from mining the deposit would be scrap mica which is not classed as strategic.

3. The apparent limited size of the deposit makes it highly unlikely that a successful mining venture could be based on this pegmatite.

Under these circumstances, your application for exploration aid to the extent of 90% of $11,558.50 is denied. Should additional information become available, we would be glad to have you resubmit your proposal for consideration.

Unless we receive a request within 30 days, we will consider the case closed.

Sincerely yours,
(signed) FRANK E. JOHNSON

Frank E. Johnson
Acting Administrator

11/14

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

370

November 6, 1951

Memorandum

To: Reports and Records Unit, DMA

From: Chief, Industrial Minerals Branch, DMA

Subject: DMA-2056X - A. I. Johnson & J. R. Jurisch
Ponca Lode, Keystone, South Dakota
Commodity: Beryl & Mica
Amount: 90% of $11,558.50

Denial recommended because:

1. No sound basis for expecting to encounter significant amounts of strategic mineral in the deposit has been demonstrated.

2. The principal product which the deposit might yield is scrap mica, not classified as strategic.

3. The limited size of the deposit makes it very unlikely that a successful mining operation could be based on this pegmatite.

Attached:

1. Memo from Region V forwarding Field Report.
2. Field Report from Region V.
3. Form MF-103 in triplicate with additional information and maps.
4. Review of Application in Duplicate.
5. Memo from Field Team, Region V, 9/7/51 in duplicate.
6. Copy of letter from W. R. Griffitts, 9/19/51.

James A. Barr, Sr.

Approved:

Acting Administrator
RWASKEY:esf
cc: Field Team, Region V (2) Admr. Reading File
DMA Docket File Mr. Barr

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

370

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James A. Barr, Sr.

Approved:

Acting Administrator
RWASKEY:esf
cc: Field Team, Region V (2)

Admr. Reading File
DMA Docket File
Mr. Barr

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

370 BL

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James A. Barr

James A. Barr, Sr.

Approved:

Acting Administrator

FILE COPY
SURNAME:

Barr
Lyon

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

370

November 6, 1951

Memorandum

To: Reports and Records Unit, DMA

From: Chief, Industrial Minerals Branch, DMA

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cc 11/14

James A. Barr, Sr.

Approved:

Acting Administrator

RWASKEY:esf
cc: Field Team, Region V (2)

Admr. Reading File
DMA Docket File
Mr. Barr

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2056

Commodity Beryl Mica

Total Amount $11,538.50

Govt. Participation 90%

1. Name and Address of Applicant A. I. Johnson & J. R. Johnson, Keystone S.D.

2. Location of Property Pence Lode, Keystone, S.D.

3. Mineral or metal Beryl Mica Is it listed in Section 9 of MQ-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

b) Poor

c) None

d) Don't know—needs field examination Mica Altered

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

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? NO

a) MF-201? _____

b) MF-202 _____

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

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

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

Is a field check needed on this point? NO

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

a) Is the project adequately described? Yes

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

b) Is there an adequate map or sketch of the proposed work? Map provided but at Full Term this project a better sketch should be provided to the A to contract

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

If not, what part of it is? Acceptance of this amount and type of work is satisfied by geological & geophysical exploration

Is this part a worthwhile exploration project? Field Team Decide

d) Are the cost estimates detailed? Yes, Rather well

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? See para. 23 application If so, attach a draft.

e) Are the cost estimates reasonable? Appear so

f) Should more information be requested from applicant? By Team

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Apparently Not

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

c) Is a field check needed? Yes

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

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? Appears so but what on

d) Is a field check needed? Monthly rental basis?

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

a) Are there sufficient data? Yes

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? Establish actual needs if

Per program is to be revised

14. Exhibit E (question 23-c)*

a) Is it applicable? Apparently Not

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? Yes

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Report on geology & deposit. If necessary assist applicant to prepare program & submit all necessary contract data & a more definite map

Reviewed by: [illegible]

Date [illegible]

97692

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

October 25, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, Defense Minerals Administration, Washington 25, D. C.

From: Executive Officer, DMA Field Team, Region V

Subject: Docket DMA-2056x - A. I. Johnson - J. R. Jurisch, Keystone, South Dakota

Returned is the subject application, review of application, and supporting data, together with four copies of the field team's report of the investigation which recommends the application be denied.

A. B. Needham
Executive Officer
DMA Field Team, Region V

Attachments

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
OCT 29 8 47 AM '51

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.

OCT 29 8 47 AM '51

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION V

DMA-2056X

Ponca Lode, Keystone District

Pennington County, South Dakota

Glen Walker, Mining Engineer
U. S. Bureau of Mines

J. A. Redden, Geologist
U. S. Geological Survey

October 23, 1951

DEFENSE MINERALS ADMINISTRATION
Report of Field Examination

by

Glen Walker, Mining Engineer
U. S. Bureau of Mines

J. A. Redden, Geologist
U. S. Geological Survey

Docket No.: DMA-2056X
Property: Ponca Lode
Applicants: A. I. Johnson and J. R. Jurisch
Commodity: Beryl, mica

Conclusions and Recommendations

The lack of geologic indications of worthwhile amounts of strategic or economic minerals obviate further exploration in this deposit. The distribution of marketable feldspar in narrow zones would raise the cost of underground mining to a point where no profit could be realized. The gross value of the feldspar in the deposit to a depth of 110 feet (point at which applicant's adit would intersect deposit) is estimated between $9,000 and $10,000. Certainly this pipe-like pegmatite can be explored in a cheaper manner than that outlined in the application, but the amount of strategic minerals is the limiting factor.

It is recommended the application be denied.

Geologic Report

The pegmatite is a pipe-like body, oval-shaped in cross-section, that has a true thickness of about 20 feet and a true length of about 35 feet. The pegmatite is exposed down the plunge for about 50 feet. The average strike of the pegmatite is about N. 65° W. and the dip in general is steep to the northeast. The pegmatite plunges about 60° due east at the surface, but it is believed that at depth the plunge steepens somewhat and trends more to the southeast.

An open cut and crosscut adit have exposed the center of the pegmatite at the 50-foot level. The adit turns eastward along the strike of the pegmatite and extends to the crest of the pegmatite. The keel of the pegmatite was not observed in the mine workings, but it is believed that the western edge of the adit is within 3 feet of the keel.

The pegmatite has an outer wall zone of quartz-plagioclase-muscovite pegmatite which ranges from 1 to 5 feet in thickness. Part of the plagioclase is of the cleavelandite variety. Within the wall zone is a core of quartz-perthite-plagioclase pegmatite. It is estimated that the core contains about 35 percent of perthite and 1 to 3 percent of muscovite. The wall zone probably averages 5 percent of muscovite, but the over-all distribution of the muscovite in the zone is very spotty. Small beryl crystals, the largest only 2 inches in diameter, were found in both zones. Beryl crystals observed in the wall zone were very small and probably averaged less than 1 inch in diameter. Jurisch reports that the largest recovered beryl crystal weighed only 25 pounds. The wall zone may have 0.5 percent beryl, but the core probably has only 0.2 to 0.3 percent beryl.

Reserves and recommendations

The muscovite is mostly of scrap quality, although a few pounds of sheet was sold during World War II. It is almost certain that less than 5 percent of the mine-run book mica is of good-stained or better quality.

It is estimated that 3,300 tons of pegmatite occur in the core of the pegmatite to a depth of 60 feet below the present workings (or 110 feet below the uppermost exposure of the pegmatite). Probably 35 percent of this tonnage would be recoverable perthite, and 0.2 percent recoverable beryl. The estimate of the beryl is based on a past production of 1 ton of beryl from 500 tons of mined rock. About 1 percent of the mined rock would be recoverable scrap mica.

Based on these estimates, the value of the minable pegmatite in the core would be approximately $3.15 per ton. Increased mining costs at depth would make the profit margin, if any, so small that there would be little hope of paying off a $11,000 loan with such a small tonnage. Probably the pegmatite could be explored by a 150-foot long adit, costing about $3,500, but it is believed that the geologic risk would be too great even to warrant this smaller loan.

It is recommended that the application be denied on the basis of lack of geologic evidence for making a discovery of sufficient reserves to repay the loan.

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.

OCT 29 8 48 AM '51

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2056

Commodity Beryl-Mica

Total Amount $11,538.50

Govt. Participation 90%

1. Name and Address of Applicant A. I. Johnson & J. R. Jurisch, Keystone S.D.

2. Location of Property Ponca Lode, Keystone, S.D.

3. Mineral or metal Beryl, Mica 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

b) Poor

c) None

d) Don't know—needs field examination Mem. Attached

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

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? NO

a) MF-201?

b) MF-202

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

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

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

Is a field check needed on this point? NO

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

a) Is the project adequately described? Yes

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

b) Is there an adequate map or sketch of the proposed work? Map provided but if Field Team does project a better sketch should be provided to attach to contract

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes - But Field Team should decide if this amount and type of work is justified by geological findings on examination

If not, what part of it is?

Is this part a worthwhile exploration project? Field Team Decide

d) Are the cost estimates detailed? Yes, Rather Well

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? See ques. 23 application If so, attach a draft.

e) Are the cost estimates reasonable? Appear so

f) Should more information be requested from applicant? By Team

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Apparently Not

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

c) Is a field check needed? Yes

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

a) Is it applicable? Yes

b) Sufficient data? NO If so, attach a draft.

c) Are rents and charges reasonable? Appears so but why on

d) Is a field check needed? hourly rental basis?

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

a) Are there sufficient data? Yes

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? Establish actual needs if program is to be revised

14. Exhibit E (question 23-c)*

a) Is it applicable? Apparently Not

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? Yes

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Report on geology of deposit - If necessary assist applicant to revise program & submit all necessary contract data & a more detailed map

Reviewed by: [illegible]

Date 9/20/57

97692

IN REPLY REFER TO:
G-MD-WRG

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

September 19, 1951

Memorandum

To: Robert Waskey, Defense Minerals Administration

From: W. R. Griffitts, U. S. Geological Survey

Subject: Application DMA-2056 from A. I. Johnson and J. R. Jurisch for exploration of the Ponca beryl and mica deposits, Keystone, South Dakota.

This application, DMA-2056, is for an $11,558.50 exploration project on the Ponca Lode, Keystone, South Dakota. The Geological Survey has no file data on this property. The application should be referred to the field team to determine:

1. The shape, dimensions, and attitude of the pegmatite dike.

2. The position of the beryl and mica in the dike, and the grade.

3. The nature of the pegmatite unit enclosing the minerals sought.

4. The continuity of the beryl and mica-bearing units.

5. Estimate of possible reserves of beryl, mica, and feldspar.

6. Quality of the mica. Samples should be collected and sent to Washington unless the mica is so heavily air-stained or otherwise imperfect that it is clearly non-strategic.

7. The possibility of mining selectively.

8. The relation of the beryl and mica-bearing units to the hill slope. A topographic sketch map is needed.

There seems to be no point in diamond drilling the deposit if the entire dike is as close to the surface as the applicants' section indicates. There seems also to be no point in extending the tunnel so far beyond the pegmatite or in raising to the surface. On the basis of the information presented the deposit could be explored by an adit or pits costing $2,500 to $3,000, assuming that the present showing of beryl and mica is promising.

W. R. Griffitts

WRGriffitts:jeh
G-9/19/51
copy to: Director's Reading file 4212
Branch Reading 4212
DMA files
Griffitts

Form MF-103
(April 1951)

U[redacted] DEPARTMENT OF THE INTER[redacted]
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-2056

Date received 9-10-51

Participation

A. I. Johnson
J. R. Jurisch

Keystone, S. Dak.

Name and address of applicant

Date Sept. 4, 1951

FILL IN THIS BLOCK

Date of application Originally May 1951

Estimated cost 11,558.50

Mineral or metal Beryl & sheet mica

Percentage of Government participation 90%

Location of mine Keystone, S. Dak.

Date of filing MF-100 Same

DMA Docket Number, if available 2056

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

*16. History:

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

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

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

*17. Production:

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

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

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

CERTIFICATION

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

(Name of company)

By C. A. Johnson
(Signature of authorized official)

Sept. 4 1951
(Date)

Owner
(Title)

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

*Same as footnote on page 1.

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

Application for Aid for an Exploration Project

The Applicant

1. The applicants are co-owners of the Ponca Lode MS. 1110.

2. Inapplicable.

3. Inapplicable.

4. Both owners have had a varied experience in mining pegmatite dikes similar to the Ponca Lode. At present Mr. J. R. Jurich is operating the property for beryl, mica and feldspar. A. I. Johnson has operated pegmatite mining properties since 1933.

5. We are the owners of the property.

6. There are no claims or liens against the property.

7. Inapplicable.

8. Do not have a financial statement to cover operations on the property.

9. The applicants are prepared to invest their ratio of the money necessary to complete the work outlined in this proposal.

Application for Aid for an Exploration Project.

The Property.

10. (a) The property conists of two lode claims, the Ponca and Ponca No. 1, designated as M. S. 1110 consisted of 17.17 acres. It is located on Iron Creek about 3 miles South east of Keystone in Section 35, T. 2 S. R. 6 E. BHM. At the present time the property is developed by an oopen cut near the outcrop of the dike.

(b) Located In Section 35, T. 2 S R 6 E. B. H. M, designated as M.S. 1110.

11. The present name of the property is the Ponca and has been so designated always.

1.2. The mine is located about 4 miles from Keystone by road and the county road passes within 1/3 of a mile from the property and a road has been made to connect to this highway from the mine. The C.B.&Q railroad comes to Keystone and is about 4 miles by road north west of the mine. The County highway has been graded and graveled to the point from which the mine road starts.

13. The mine is located on Iron Creek which is a good sized stream at all times. The claims abut the creek on the south. No power is available at the property and it will be necessary to use gasoline operated equipment.

14. There is one samall compressor building on the property that can be used but there is insufficient equipment to operate compressor and drills necessary to complete the proposed project. At present Mr. Jurisch has a portable compressor of about 60 cu. ft. capacity on the property for necessary mining that is being done.

15. The minerals could be shipped from Keystone by CB&W freight. The feldspar could be sold in Keystone. Bhe beryl and mica would have to be shipped by freight from the town of Keystone and trucked from the mine to shipping point.

16. The property was originally located and operated as a tin producing property. Atin mill was operated about 1/3 of a mile from the mine and ore was hauled to this plant for milling. This plant does not exist at present. It was later operated, during the last war by Mr Jurisch for beryl and sheet mica. They built a 100 foot loading chute and compressor building for the purpose of pursuing this work. These structures are still on the property. In July of 1946 A. I. Johnson started work for feldspar on the property, having purchased a 1/2 interest in the property. This was discontinued due to the low price for feldspar.

(b) The Glendale property to the south has been operated for beryl and feldspar and the Wood Tin Lode on Iron Creek below the mine has been operated for beryl, mica and feldspar.

(c) No. reports have been made on the property as far as we know, and only a cursory examination has been made by the Bureau of Mines during the last war.

Application for Aid for an Exploration Project.

The Property - Cont.

17. We do not have a proudcion record of the production during the war years and production has just been started on theproperty by Mr. Jurisch hence no minerals have been sold to date.

18. The deposit is a pegmatite dike some 60 feet in length and width dipping southeasterly about 55 degrees and striking northwest- southeast.

(b) Map is submitted.

(c) The purpose of leen is to prove tonnages of beryl, mica. The dike has a mica beryl zone consisting of a soda feldspar matrix. It appears to be a quartz core type of a pegmatite deposit with potash feldspar as a segregated mineral on the foot-wall side. Tin in the form of cassiterite and also columbite occur as secondary minerals.

19. From the nature of the deposit it would appear that the deposit would develop tonnages of beryl and sheet mica to warrant its dewlopment with auxiliary production of feldspar and columbite.

Application for Aid for an Exploration Project

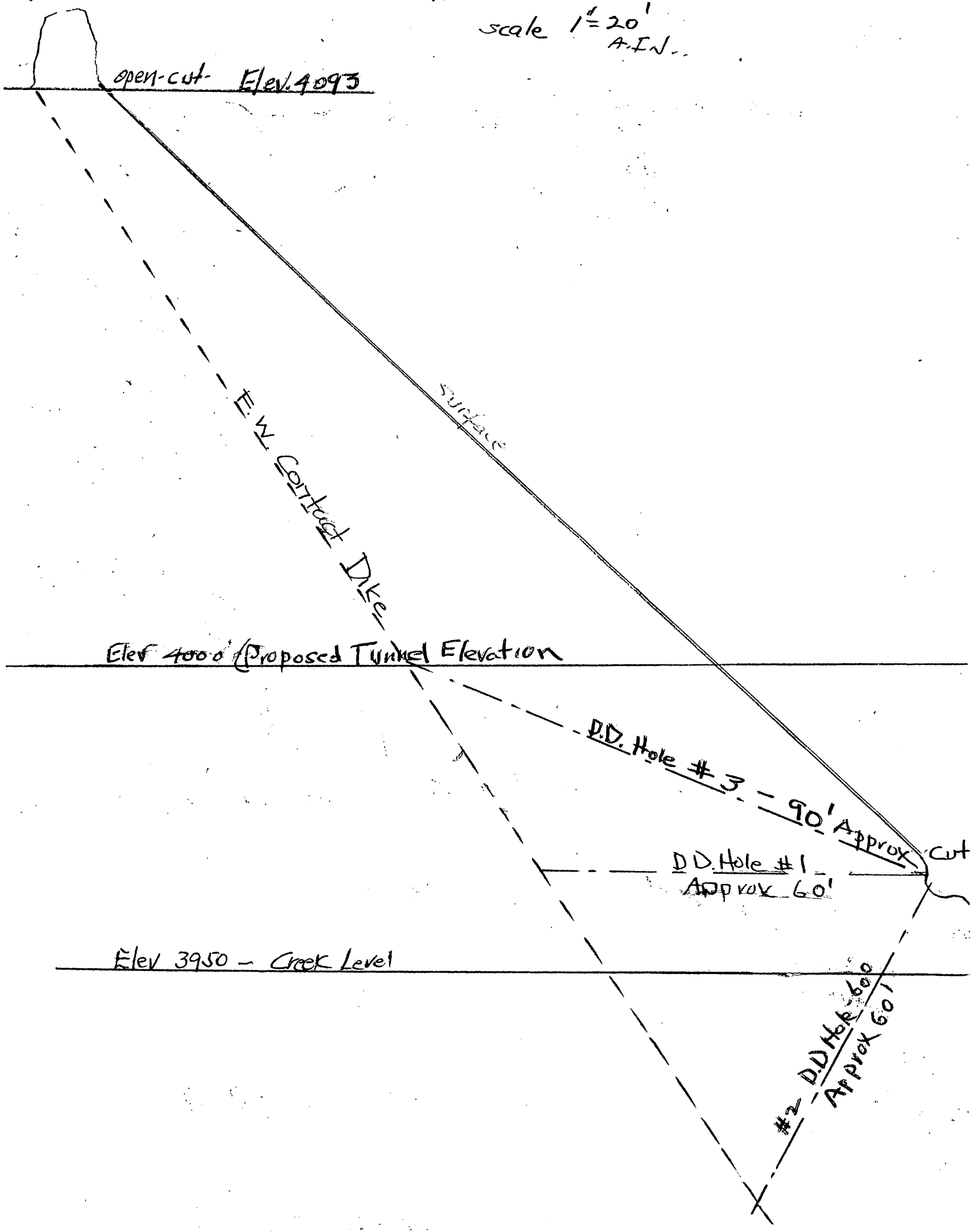
The Exploration.

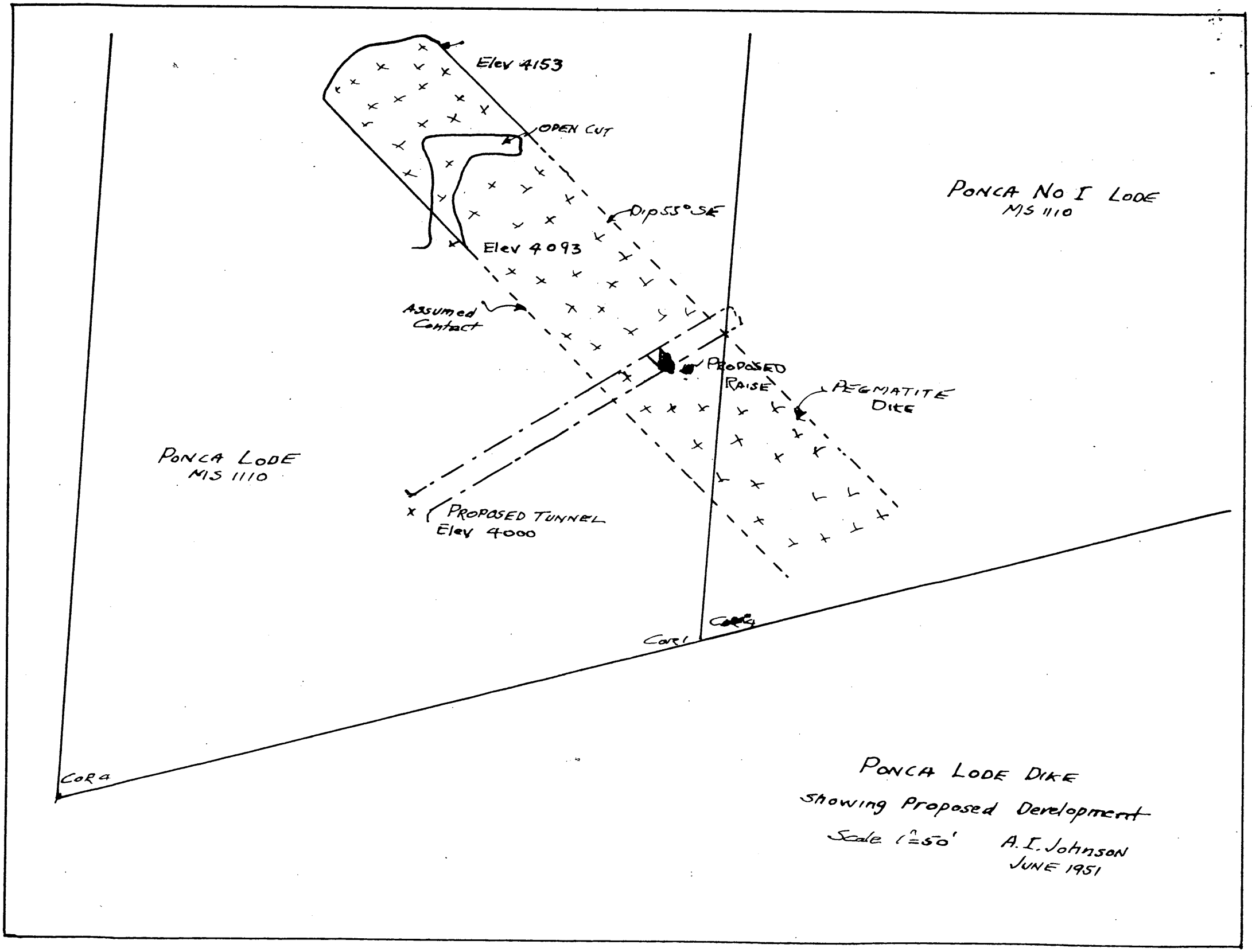
20. The exploration will be conducted to develop tonnages of beryl and sheet mica and determine the extent and continuity of the Bonca pegmatite.

21. It is proposed to diamond drill the dike in order to determine the nature of the deposit and its continuity and to explore the deposit with a tunnel at a level approximately 100 feet from its present open cut workings, and also to drive a raise to this cut to explore the deposit along the dip and also to facilitate later operation for mining the deposit. It would require a minimum of 210 feet of drilling and a probable maximum of 300 feet in case of irregularities in the dip of the dike or changes in dip. It would require a tunnel of length of 175 feet and drifts on the 4,000 ' elevation of 100 feet and a raise of 120 feet to surface from this level. To complete the entire project would require a period of two weeks for diamond drilling and a period of 4½ months for drifting and raising or a total of 5 months to complete.

22. On the basis of past experience in the operation and developmant of pegmatite dikes the operators expect to find commercial deposits of beryl, mica and feldspar with auxiliary amounts of tin and columbite. The dike is a quartz core type and from exploration to date would indicate definite segregation of the economica minerals. Section and map accompanies this application.

PONCA LODE – DIAMOND DRILLING
SECTION A-A-
scale 1" = 20'
A.I.N.




Elev 4153
OPEN CUT
Dip 55° SE
Elev 4093
Assumed Contact
PROPOSED RAISE
PEGMATITE DIKE
PONCA NO I LODE
MS 1110
PONCA LODE
MS 1110
PROPOSED TUNNEL
Elev 4000
CORA
CORA
CORA
PONCA LODE DIKE
Showing Proposed Development
Scale 1" = 50'
A. I. Johnson
JUNE 1951

The Requirements and Costs.

23. 300' of diamond drilling @ $4.50 per ft.	(contract)	$1350.00
Engineering and supervision		250.00
	Total	$1600.00

385' of tunneling and drifting and raising @ 22.23¢/ft	8558.55
Supervision- 70 days @ $20.00 per day	1400.00
Total	$9958.50

5 5/1 days

25 8/11.

Requirements for Tunneling etc.

	Base wage	S. S.	Ins.	O.T.	Total¢/ hr	per day	per ft.
1 Driller	1.50	.10		.12½	1.72½		
1 Helper	1.25	.08		.11	1.44		
	Labor	Total drilling			3.16½	$25.32	6.33
Powder			50# @ 21.00/CWT			10.50	2.63
Caps			20 @ 2 ¢			.40	.10
Fuse			100' @ 1.33 /100'			1.33	.33
Air	Compressor rental $2.00 / Hr					16.00	4.00
	Gasoline	35 gal @ 30 ¢				10.50	2.63
	oil	2 gal @ 40 ¢				.80	.20
Drill rental		25¢ per hr				2.00	.50
			Total			$66.85	$16.72
2 muckers	1.25	.08		.11	2.88	22.04	5.51
					Total	$88.89	22.23
1 Supervision	$2.00	.30		.10	$2.40	19.20	4.80
			Totals			$108.09	$27.03

Summary

Diamond Drilling	$1600.00
Tunneling- drifting and raising	9958.50
Total	$11,558.50

24. Total time required 5 months for entire project.

FILE COPY
SURNAME:

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

370

Wahey
Barr
Broom
Thayer

SEP 25 1951

Q.E.C.

Messrs. A. I. Johnson and
J. N. Jurisch
Keystone
South Dakota

Subject: DMA-2056X - Beryl-Mica

Gentlemen:

Your application is being referred to Mr. A. B. Needham, Executive Officer, Region V, 2908 Colfax Avenue, South, Minneapolis, Minnesota, for further information.

Sincerely yours,

SIGNED
Tom Lyon, Director
Supply Division

S.F.
9-26

RWASKEY:mp
9-20-51
cc: Field Team, Region V (2)
DMA Docket File
Mr. Barr

Mr. A. I. Johnson
Keystone
South Dakota

Subject: DMA-2056
Re: Exploration Loan
Ponca

My dear Mr. Johnson:

This will acknowledge receipt of your application dated September 4, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2056 and referred to the Industrial Minerals Branch.

Kindly refer to DMA-2056 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

2463

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
2908 Colfax Avenue South
Minneapolis 8, Minnesota
Region V

September 7, 1951

DMA-2056

Memorandum

To: Tom Lyon, Chairman - Coordinating Committee - Defense Minerals Administration - Interior Building - Washington 25, D. C.

From: Executive Officer - DMA Field Team, Region V

Subject: Exploration application - A. I. Johnson and J. R. Jurisch
Keystone, South Dakota

Enclosed are four copies of an application by Messrs. A. I. Johnson and J. R. Jurisch of Keystone, South Dakota, to explore the Ponca and Ponca No. 1 dikes near Keystone, South Dakota, for beryl and sheet mica by core drilling and, if promising, to be supplemented by underground work.

Forms MF-100, General Technical Data, on this partnership were forwarded to Washington today, also.

A. B. Needham

Enclosures: 4

A. B. Needham

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
SEP 10 10 16 AM '51

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
xxxxxxxxxxxxxxxx
2908 Colfax Avenue South
Minneapolis 8, Minnesota
Region V

September 7, 1951

Memorandum

To: Tom Lyon, Chairman - Coordinating Committee - Defense Minerals Administration - Interior Building - Washington 25, D. C.

From: Executive Officer - DMA Field Team, Region V

Subject: Exploration application - A. I. Johnson and J. R. Jurisch Keystone, South Dakota

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Enclosures: 4

A. B. Needham

Form MF-103
(April 1951)

U. 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-2056

Date received 9-10-51

Participation

A. I. Johnson
J. R. Jurisch

Keystone, S. Dak.

Name and address of applicant

Date Sept. 4, 1951

FILL IN THIS BLOCK

Date of application Originally May 1951

Estimated cost 11,558,50

Mineral or metal Beryl & sheet mica

Percentage of Government participation 90%

Location of mine Keystone, S. Dak.

Date of filing MF-100 Same

DMA Docket Number, if available 2056

INSTRUCTIONS

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16—64067-1

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State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
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    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
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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.

CERTIFICATION

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

(Name of company)	By [signature] (Signature of authorized official)
Sept. 4, 1957 (Date)	Owner (Title)

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

*Same as footnote on page 1.

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

Application for Aid for an Exploration Project

The Applicant

1. The applicants are co-owners of the Ponce Lode MS. 1110.

2. Inapplicable.

3. Inapplicable.

4. Both owners have had a varied experience in mining pegmatite dikes similar to the Ponce Lode. At present Mr. J. R. Jurich is operating the property for beryl, mica and feldspar. A. I. Johnson has operated pegmatite mining properties since 1933.

5. We are the owners of the property.

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7. Inapplicable.

8. Do not have a financial statement to cover operations on the property.

9. The applicants are prepared to invest their ratio of the money necessary to complete the work outlined in this proposal.

Application for Aid for an Exploration Project.

The Property.

10. (a) The property consists of two lode claims, the Ponca and Ponca No. 1, designated as M. S. 1110 consisted of 17.17 acres. It is located on Iron Creek about 3 miles South east of Keystone in Section 35, T. 2 S. R. 6 E. BHM. At the present time the property is developed by an oopen cut near the outcrop of the dike.

(b) Located In Section 35, T. 2 S R 6 E. B. H. M, designated as M.S. 1110.

11. The present name of the property is the Ponca and has been so designated always.

1.2. The mine is located about 4 miles from Keystone by road and the county road passes within 1/3 of a mile from the property and a road has been made to connect to this highway from the mine. The C.B.&Q railroad comes to Keystone and is about 4 miles by road north west of the mine. The County highway has been graded and graveled to the point from which the mine road starts.

13. The mine is located on Iron Creek which is a good sized stream at all times. The claims abut the creek on the south. No power is available at the property and it will be necessary to use gasoline operated equipment.

14. There is one samall compressor building on the property that can be used but there is insufficient equipment to operate compressor and drills necessary to complete the proposed project. At present Mr. Jurisch has a portable compressor of about 60 cu. ft. capacity on the property for necessary mining that is being done.

15. The minerals could be shipped from Keystone by CB&Q freight. The feldspar could be sold in Keystone. Bhe beryl and mica would have to be shipped by freight from the town of Keystone and trucked from the mine to shipping point.

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(b) The Glendale property to the south has been operated for beryl and feldspar and the Wood Tin Lode on Iron Creek below the mine has been operated for beryl, mica and feldspar.

(c) No. reports have been made on the property as far as we know, and only a cursory examination has been made by the Bureau of Mines during the last war.

Application for Aid for an Exploration Project.

The Property - Cont.

17. We do not have a proudcion record of the production during the war years and production has just been startedon theproperty by Mr. Jurisch hence no minerals have been sold to date.

18. The deposit is a pegmatite dike some 60 feet in length and width dipping southeasterly about 55 degrees and striking northwest- southeast.

(b) Map is submitted.

(c) The purpose of loan is to prove tonnages of beryl, mica. The dike has a mica beryl zone consisting of a soda feldspar matrix. It appears to be a quartz core type of a pegmatite deposit with potash feldspar as a segregated mineral on the foot-wall side. Tin in the form of cassiterite and also columbite occur as secondary minerals.

19. From the nature of the deposit it would appear that the deposit would develop tonnages of beryl and sheet mica to warrant its development with auxiliary production of feldspar and columbite.

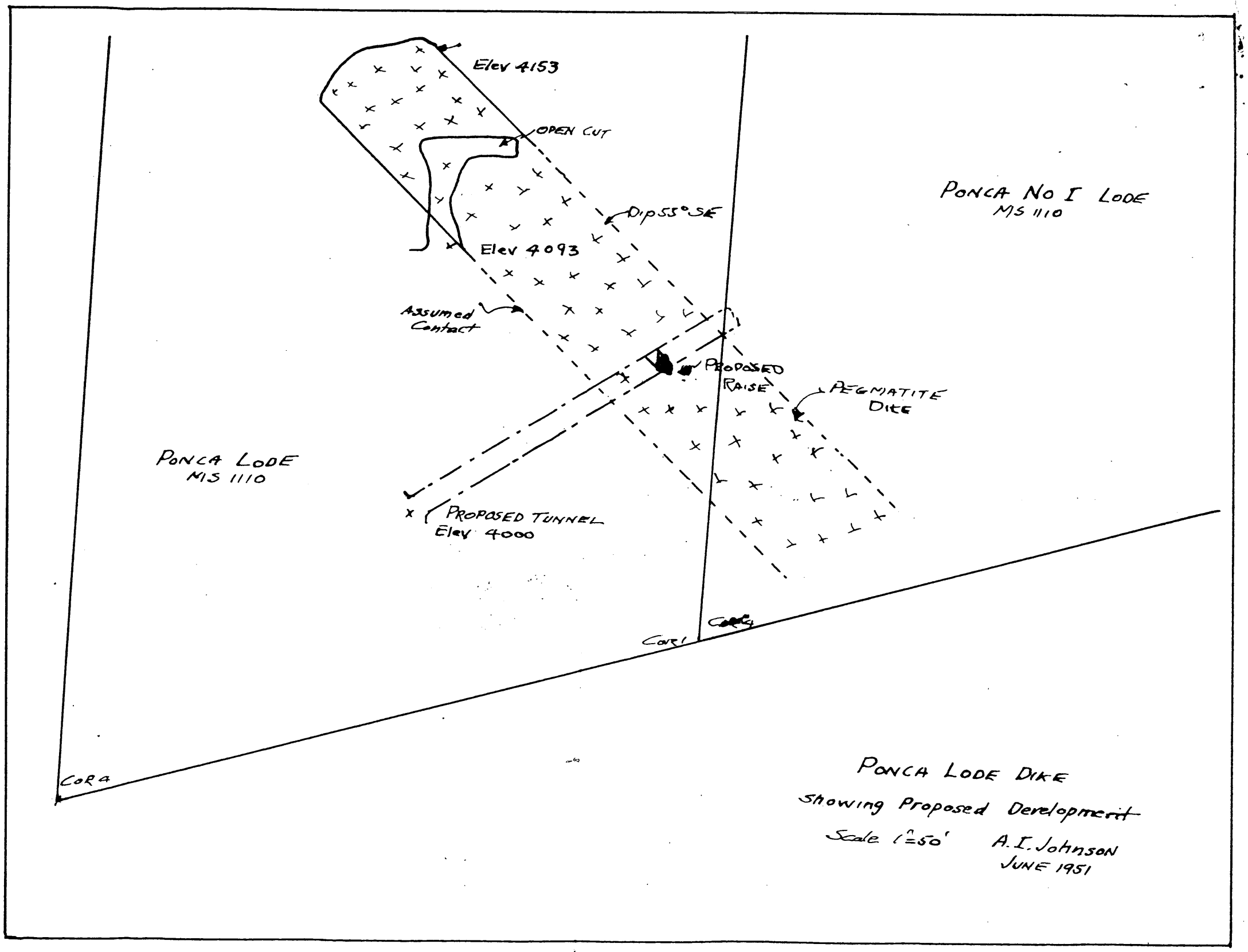
Application for Aid for an Exploration Project

The Exploration.

20. The exploration will be conducted to develop tonnages of beryl and sheet mica and determine the extent and continuity of the Bonce pegmatite.

21. It is proposed to diamond drill the dike in order to determine the nature of the deposit and its continuity and to explore the deposit with a tunnel at a level a proximately 100 feet from its present open cut workings, and also to drive a raise to this cut to explore the deposit along the dip and also to facilitate later operation for mining the deposit. It would require a minimum of 210 feet of drilling and a probable maximum of 300 feet in case of irregularities in the dip of the dike or changes in dip. It would require a tunnel of length of 175 feet and drifts on the 4,000 ' elevation of 100 feet and a raise of 120 feet to surface from this level. To complete the entire project would require a period of two weeks for diamond drilling and a period of 4½ months for drifting and raising or a total of 5 months to complete.

22. On the basis of past experience in the operation and development of pegmatite dikes the operators expect to find commercial deposits of beryl, mica and fel spar with auxiliary amounts of tin and columbite. The dike is a quartz core type and from exploration to date would indicate definite segregation of the economica minerals. Section and map accompanies this application.


Elev 4153
OPEN CUT
Dip 55° SE
Elev 4093
Assumed Contact
PROPOSED RAISE
PEGMATITE DIKE
PONCA NO I LODE
MS 1110
PONCA LODE
MS 1110
PROPOSED TUNNEL
Elev 4000
COR 1
COR 4
PONCA LODE DIKE
Showing Proposed Development
Scale 1"=50'
A. I. Johnson
JUNE 1951

The Requirements and Costs.

23. 300' of diamond drilling @ $4.50 per ft. (contract) $1350.00
Engineering and supervision 250.00
Total $1600.00

385' of tunneling and drifting and raising @ 22.23¢/ft 8558.55
Supervision- 70 days @ $20.00 per day 1400.00
Total $9958.50

Requirements for Tunneling etc.

	Base wage	S. S. Ins	O.T.	Total¢/ hr	per day	per ft.
1 Driller	1.50	.10	.12½	1.72½		
1 Helper	1.25	.08	.11	1.44		
	Labor	Total drilling		3.16½	$25.32	6.33
Powder		50# @ 21.00/CWT			10.50	2.63
Caps		20 @ 2 ¢			.40	.10
Fuse		100' @ 1.33 /100'			1.33	.33
Air	Compressor rental $2.00 / Hr				16.00	4.00
	Gasoline	35 gal @ 30 ¢			10.50	2.63
	oil	2 gal @ 40 ¢			.80	.20
Drill rental		25¢ per hr			2.00	.50
		Total			$66.85	$16.72
2 muckers	1.25	.08	.11	2.88	22.04	5.51
				Total	$88.89	22.23
1 Supervision	$2.00	.30	.10	$2.40	19.20	4.80
		Totals			$108.09	$27.03

Summary

Diamond Drilling	$1600.00
Tunneling- drifting and raising	9958.50
Total	$11,558.50

24. Total time required 5 months for entire project.

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-2056

Date received 9-10-51

Participation

A. I. Johnson
J. D. Juricch

Keystone, S. Dak.

Name and address of applicant

Date Sept. 6, 1951

FILL IN THIS BLOCK

Date of application Originally May 1951

Estimated cost 11,383.50

Mineral or metal Beryl & about other

Percentage of Government participation 90%

Location of mine Keystone, S. Dak.

Date of filing MF-100 Same

DMA Docket Number, if available 2056

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

THE EXPLORATION

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

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
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SECTION A-A

Scale 1" = 20'

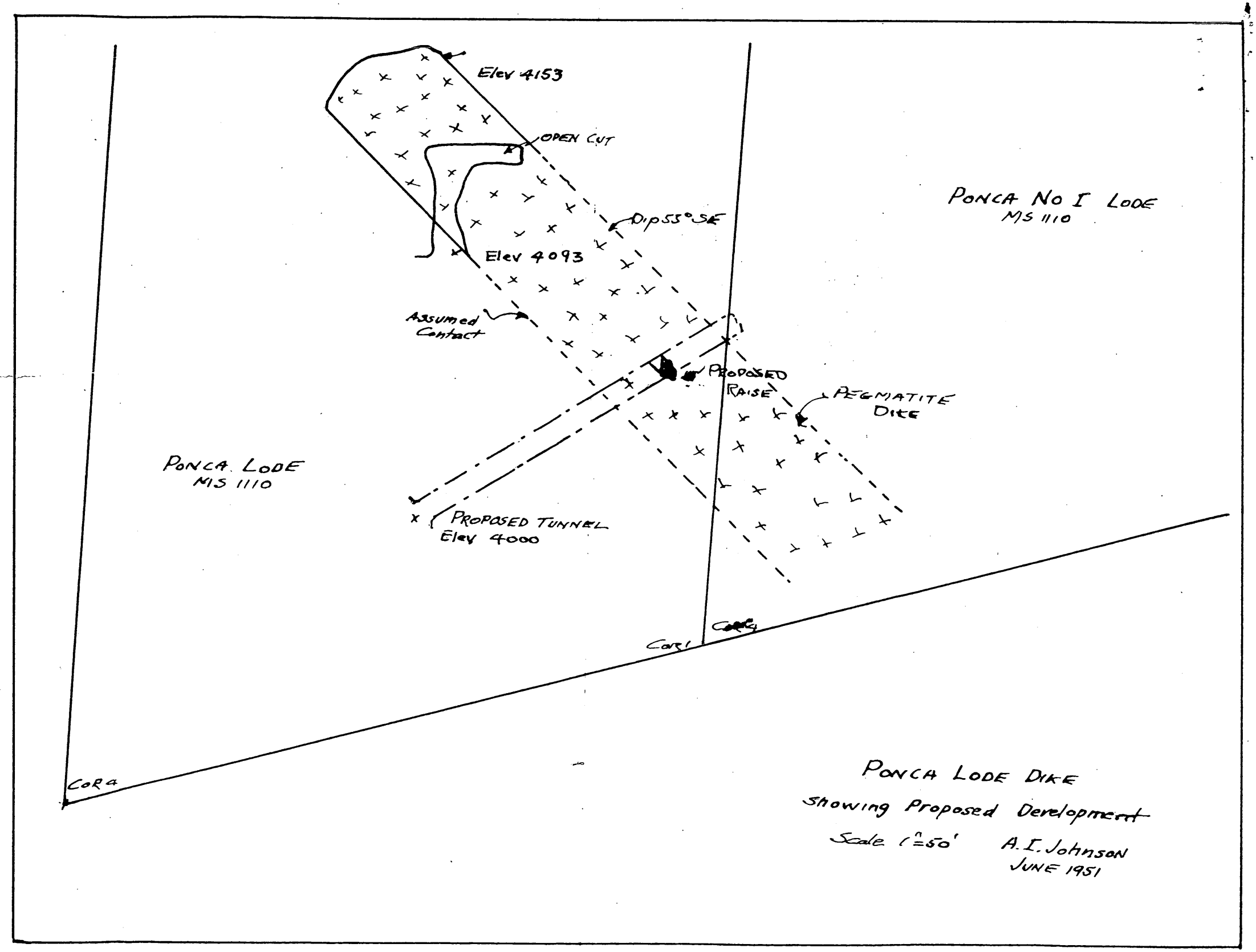
Opening Elev. 4003

Elevation Ground Surface

DD Hole #3

DD Hole #1

Elev. 3950 = Floor Level


Elev 4153
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PROPOSED RAISE
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PROPOSED TUNNEL
Elev 4000
PONCA NO I LODE
MS 1110
COR 1
COR 4
PONCA LODE DIKE
Showing Proposed Development
Scale 1" = 50'
A. I. Johnson
JUNE 1951

The Requirements and Costs.

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Engineering and supervision		250.00
	Total	$1600.00

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Total	$9958.50

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		Base wage	S. S. Ins.	O.T.	Total¢/ hr	per day	per ft.
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Caps			20 @ 2 ¢			.40	.10
Fuse			100' @ 1.33 /100'			1.33	.33
Air	Compressor rental $2.00 / Hr					16.00	4.00
	Gasoline		35 gal @ 30 ¢			10.50	2.63
	oil		2 gal @ 40 ¢			.80	.20
Drill rental			25¢ per hr			2.00	.50
			Total			$66.85	$16.72
2 muckers		1.25	.08	.11	2.88	22.04	5.51
					Total	$88.89	22.23
1 Supervision		$2.00	.50	.10	$2.40	19.20	4.80
			Totals			$108.09	$27.03

Summary

Diamond Drilling	$1600.00
Tunneling- drifting and raising	9958.50
Total	$11,558.50

24. Total time required 5 months for entire project.