FILE COPY
SURNAME:

400

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

Memorandum

August 20, 1951

a.e.c.

TO: Mrs. Edith N. Terry
Chief, Finance Section

Mr. Robert E. Adams
Chief, Reports and Records Unit

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

SUBJECT: Docket No. DMA-1557X - Gladys Wells
Commodity: Mica-Beryl
Idm-E96

Advice has been received by the Executive Officer of Region V to the effect that the applicant has refused to execute the contract furnished covering the subject project, since she is not in accord with the revisions made by the Field Team and concurred in by the DMA Commodity Branch. The docket in this case, together with the six unsigned contracts, is being transmitted to the Reports and Records Unit for filing. The Government funds obligated for the project, namely, $8100, are to be withdrawn.

I assume that you will make the appropriate remarks on your records indicating the reasons for the withdrawal of the project, and that you will not assign the docket number to a new case. Your confirmation is requested.

COMittendorf/fw

cc: Reports & Records
Mr. Barr
Mr. Josephson
Mr. Norton
Mr. Mittendorf, Mr. Olund
Mr. Knouse
Docket
Field Team, Reg. V

MF-250
(June 1951)

Docket No. DMA 1557X
Commodity Beryl-Mica
Idm-E 96

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 2nd day of August, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Gladys Wells
Custer, South Dakota

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of South Dakota, County of Custer described as follows: [3] known as the Warren Draw Pegmatite - located about nine miles west of Custer, consisting of two full claims and a fraction. Recorded as Warren Draw #1, Warren Draw #2, and Warren Draw #3 lode mining claims in the North East Quarter (NE¼) of Section 35, Township 3 South, Range 3 East B.H.M. Recorded in Book 17 of locations, pp. 95 and 96, Custer County, South Dakota
with respect to which the Operator represents and undertakes: [4]

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

None

(*b*) ~~That he is the sole owner, in possession and entitled to possession, and the subordination agreement of the holder is attached:~~

3. *Exploration project.* The Operator, within Thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] Beryl - Mica; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 6½ Months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

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

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

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

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

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

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

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of ---90- percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $--8,100.00-----, which is -----90------ percent of the agreed estimated total cost of this project, $--9,000.00---------.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Gladys Wells
(Operator)

By C O Mutterdorf
Director
Production Expansion Division
Defense Minerals Administration

By ----------

Owner

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

EXHIBIT "A"

Performance of work:

Sub-Project 1: One pegmatite dike is to be explored by diamond drilling to determine the continuity in depth, lateral extent and mineral content to a depth of 100 to 150 feet below the outcrop. This program will consist of three diamond drill holes averaging about 250 feet long of BX size or larger, but is not to exceed a total of 725 feet of hole. The total cost of this sub-project is not to exceed $3,750.00.

The location, extent, and direction of all diamond drill holes to have the prior approval of the Government field engineers.

This work in Sub-Project 1 to be completed within 3½ months from the date of the contract.

Sub-Project 2: If the exploration program in Sub-Project 1 encounters mineralization which in the opinion of the Government field engineers justifies additional exploration of this pegmatite, then with their approval a part or all of the following work will be done. Three additional diamond drill holes (of BX size or larger) averaging about 350 feet in length to determine further extension of this pegmatite and mineral content. The total length of these three drill holes is not to exceed 1000 feet or the cost to exceed a total of $5,250.00. The work in Sub-Project 2 is to be completed within three months after the completion of Sub-Project 1.

The diamond drilling is to be done by a contractor. All sampling is to be supervised by the Government field engineers.

Cost of the Project:

Sub-Project 1:	725 feet contracted diamond drill hole @ $5/ft.	$3,625	
	Misc. expense, supervision, engineering, core box, and core box handling, transportation, etc.	125	
	Total Cost of Sub-Project 1		$ 3,750
Sub-Project 2:	1000 feet contracted diamond drill hole @ $5/ft.	$5,000	
	Misc., expense, supervision, engineering, core box, and core handling, transportation, etc.	250	

Total Cost of Sub-Project 2	$ 5,250
Total Cost of the Project	$ 9,000

The attached map indicates the location of the diamond drill holes for Sub-Project No. 1. The location of the diamond drill holes for Sub-Project 2 will be determined when Sub-Project 1 is completed.

Fixtures and Improvements:

Does not apply to this contract. Diamond drilling contractor will supply what is required.

Operating Equipment:

Does not apply to this contract. Diamond drilling contractor will supply what is required.

Labor and Supervision:

Sub-Project 1:

1 - Engineer-Superintendent - 2 months @ $50/mo.

Sub-Project 2:

1 - Engineer-Superintendent - 3 months @ $50/mo.
All other labor will be supplied by the Diamond drilling contractor.

Rehabilitation and Repairs:

Does not apply to this contract. All of this work will be done by the diamond drilling contractor.

WARREN DRAW PEGMATITE
NE¼ SE¼ SEC. 35, NW¼ SW¼ SEC. 36
CUSTER COUNTY, S. DAK.
FROM U.S.G.S. SCALE 1" = 100'

AUG 17 1951

370

MICA
FELDSPAR
SPODUMENE
ROSE QUARTZ
AMBLYGONITE

MRS. GLADYS WELLS
MINING
NON-METALLIC AND RARE MINERALS
BOX 664
CUSTER, SOUTH DAKOTA

BERYL
COLUMBITE
LEPIDOLITE
SILLAMANITE
ANDALUSITE

August 20, 1951

Defense Minerals Administration
Washington 25, D. C.

Gentlemen: Ref. DMA 1557X and DMA 1558X

I thought best to enlarge upon my letter of the 9th instant, which, perhaps, was a little abrupt.

Before filing my applications for Exploratory Loans, I carefully studied the United States Department of the Interior, Defense Minerals Administrations's instructions MO-5, April 6,1951, and the Questions and Answers On The Mineral Exploration Program, Sherman - Int. 3337, and it seemed to me that the program was predicated upon the possibility of a goodly share of this loan money being returned to the government. This being true, a diamond drill core hole would be of no value as a means of producing strategic minerals.

The plan of work upon which I based my applications for this loan would open up the area for visual inspection of the formations and mineral deposits. It would produce about 250 tons of ore per one hundred feet of tunnel or drift that would permit comprehensive tests of the material so obtained, and it would greatly expedite the production of the needed minerals.

If I were to enter into a full program of core drilling, I would impoverish my resources to such an extent that I would not be able to proceed with mining operations when said core drilling was completed.

It is my personal opinion that a diamond drill core does not tend to prove or to disprove the presense of minerals in a pegmatite dike, and that such drilling would only be of value in determining the width and depth of dike. No where in the data available to me can I find anything that would indicate that these determinations are required.

I have talked to Mining Engineers who have core drilled pegmatite deposits, and to miners who have mined dikes that have been core drilled, and I can find no one who beleives that such drilling affords either essential or pertinent information.

I trust that I have clarified my position. I would like to say that if you would care to reexamine this case and offer a modified program, I will be pleased to give it ernest consideration.

Yours truly,
Gladys Wells
Gladys Wells

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

August 13, 1951

Memorandum

To: Robert Waskey, Defense Minerals Administration, New Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Dockets D.M.A. 1557X and 1558X

Referring to our telephone conversation about the refusal of Mrs. Gladys Wells of Custer, South Dakota, to sign the two exploratory contracts resulting from field team reports be advised that the matter was taken up with the examiners at Rapid City and the following information obtained.

The field team concluded the original application was more along the development rather than exploratory line and rather than approve it as such, suggested core drilling, and because of the rush job of trying to get in before the June 30 deadline sent it along as their suggestion. The only hitch was that, contrary to procedure, they did not consult with Mrs. Wells on the proposed change.

In view of this fact, that the core drilling program was a suggestion of the examiners and not of the applicant and that she is not now in accord with core drilling as suggested, please cancel the two contracts.

The examiners were emphatically reminded that applications for exploration are the proposals of private interests and that any suggestions, modifications, or complete changes have to be concurred in by applicant. This office has been advised that Mrs. Wells is to be approached to submit new applications based on ways she would propose to explore other than by core drilling.

A. B. Needham

COPY

Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

August 13, 1951

Memorandum

To: Robert Waskey, Defense Minerals Administration, New Interior Building, Washington 25, D.C.

FROM: Executive Officer, Field Team, Region V

SUBJECT: Dockets D.M.A. 1557X and 1558X

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/s/A. B. Needham

COPY

MRS. GLADYS WELLS

MINING
Non-Metallic And Rare Minerals
105 No. 5th Street

Custer, South Dakota

Aug 9th. 1951

Defense Minerals Administration
Executive Director, Regi n V.

Enclosed please find the copies of Mineral Exploration Program, as you requested.
I do not feel that we want to enter into the Diamond Drilling Program.

I applied for the Mineral Exploration Loan, to go into this mine at a lower level where I feel sure we will strike both beryl & mica.

I do not feel that Diamond Drilling would help on a pegmatite dyke of this kind.

Very Sincerely,

/s/Gladys Wells

Department of the Interior
Defense Minerals Administration
RECEIVED
Aug 13, 1951

MICA
FELDSPAR
SPODUMENE
ROSE QUARTZ
AMBLYGONITE

MRS. GLADYS WELLS

MINING
NON-METALLIC AND RARE MINERALS
~~XXXXXX~~ I05 No. 5th. St.
CUSTER, SOUTH DAKOTA

BERYL
COLUMBITE
LEPIDOLITE
SILLAMANITE
ANDALUSITE

Aug 9th. I95I

DefenseMinerals Administration
Executive Director, Region V.

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Very Sincerely

Gladys Wells

Gladys Wells

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1951

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

August 2, 1951

Mrs. Gladys Wells
Custer, South Dakota

Re: Docket No. DMA 1557X - Idm-E96
Gladys Wells
Exploration Contract

Dear Mrs. Wells:

We are enclosing the original and five copies of Exploration Contract No. DMA 1557X - Idm-E96, Gladys Wells, signed by me, together with five copies of Form MF-104 Monthly Progress Reports, and one copy of Int. 3337 "Questions and Answers on the Mineral Exploration Program."

If the terms of this contract meet with your approval, please sign all six copies, retain one copy, and return the original and four copies to this office. If any part of this contract does not meet with your approval, all of the copies of the contract must be returned to this office together with your proposed change, so it can be considered.

If the contract is signed by you, it will be in effect and four copies of Form MF-104 are to be completed and transmitted monthly to the office of the Executive Director, Region V, 2908 Colfax Avenue, Minneapolis 8, Minnesota. Additional copies of Form MF-104 may be obtained from the office of Region V.

In accordance with Article 4 of your contract, the contract to do the diamond drilling as outlined in this contract is subject to the approval of the Government field engineers.

Sincerely yours,

C O Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

Enclosures-12

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1951

FILE COPY
SURNAME:

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

F.L. Knouse

August 2, 1951

Mrs. Gladys Wells
Custer, South Dakota

Re: Docket No. DMA 1557X - Idm-E96
Gladys Wells
Exploration Contract

Dear Mrs. Wells:

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Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

Enclosures-12

FLKnouse/bjs
cc to: Admr. Reading File
Reports and Records
Docket copy
Mr. Mittendorf, Mr. Olund
Mr. Barr
Mr. Norton
Region V (2)
Mr. Knouse
Chron. copy

FILE COPY 410
SURNAME:

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

July 30, 1951

Mrs. Gladys Wells
Custer, South Dakota

Re: Docket No. DMA-1558X - IdmE89
Gladys Wells
Exploration Contract

Dear Mrs. Wells:

We are enclosing the original and five copies of Exploration Contract No. DMA-1558X - Idm-E89, Gladys Wells, signed by me, together with five copies of Form MF-104 Monthly Progress Reports, and one copy of Int. 3337 "Questions and Answers on the Mineral Exploration Program."

If the terms of this contract meet with your approval, please sign all six copies, retain one copy, and return the original and four copies to this office. If any part of this contract does not meet with your approval, all of the copies of the contract must be returned to this office together with your proposed change, so it can be considered.

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FLKnouse/ecl
cc to: Admr's. Reading File
Messrs. Mittendorf - Olund
Reports & Records
Docket
Barr
Norton
Reg. V (2)
Knouse

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

FILE COPY
SURNAME:

Barr

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

July 13, 1951

Memorandum

To: Chief, Industrial Minerals Branch, DMA

From: Chief, Programming and Planning, DMA

Subject: DMA-1558X, Gladys Wells
Commodity: Mica and Beryl
Amount approved: $4,000
Government participation - 90%

The prospective available supply of mica and beryl is far short of meeting defense requirements. Consequently, it is highly desirable that exploration for new domestic deposits be stimulated by any reasonable Government assistance to private interests. Any exploration project that holds promise of finding significant new reserves, merits consideration by the Defense Minerals Administration.

SIGNED

A. E. Parsons

JABARR:mp
cc: Mr. Barr
Reports and Records
Mr. Parsons
Mr. Norton
Mr. Mittendorf
DMA Files

FILE COPY
SURNAME: 140

Author

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

August 1, 1951

A. E. C.

Memorandum

del'd by hand

To: Director, Production Expansion Division

From: General Counsel

Subject: Gladys Wells exploration contract -- Docket No. DMA-1557X

The contract in the captioned case is approved as to legal form and sufficiency subject to:

1. Insertion of the word "None" in paragraph 2(a), if there are no encumbrances upon the property.

2. Correction of the total cost of Sub-Project 1 to $3,750.

3. Proper signature by the prospective operator.

4. Government approval of the subcontracts under which the work is to be performed.

5. Dating as of the day of signature by the Government.

Your file is returned herewith.

J. L. Hofflund

not stuffed here

J. L. Hofflund
General Counsel

Attachment

RRGuthrie/ema

Copy to: R. R. Guthrie
J. L. Hofflund } del'd by hand
Chron.
~~Files~~ Reports + record section

P.E.D. file

140

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

August 1, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Gladys Wells exploration contract -- Docket No. DMA-1557X

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Your file is returned herewith.

J. L. Hofflund
General Counsel

Attachment

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Gladys Wells
Custer
South Dakota

[illegible] 1557-X

[illegible] Mica & Beryl

[illegible] $ 22,100

[illegible] $ $9000 ~~5,670~~

[illegible] 90 $ $ 8,100 ~~5,103~~

Tomlyon
[illegible]

Docket EXA-1557X

RECOMMENDATION

That an Exploration Aid Contract in the amount of $5,670 be granted, Government Participation 90%, according to exhibits attached.

Docket DMA-1557-X

EXHIBIT "A"

Work will consist of deamond drilling by contract, Operator to handle cores, testing, etc. Two stages are contemplated, the second stage to be undertaken subject to sastisfactory completion of state 1 (as judged by Field Team).

Stage 1. A total of 700' of diamond drilling (NX) core, individual holes to range from 150' to 225' each. Location subject to approval by Field Team Member. Allowable cost $4250, time limit 6 months.

Stage 2. An additional 250' of drilling in one or more holes as mutually agreed to by Operator & Field Team Member after completion of Stage 1. Allowable cost $1420, time limit 2 months.

EXHIBIT "B"

NOT APPLICABLE

Docket DMA-1557-X

EXHIBIT "C"

Step 1.			
Diamond drill contract ~~750'~~ 725 @ $5		$ 3750.00	3625
Core boxes, handling assays, etc.		100.00	125
Car rental, transportation		50.00	
	Total	$ 3900.00	3750
Stage 2.			
Diamond drill contract 200' 1000 @ $5		$ 1250.00	— 5000
Core boxes, handling, assays, etc.		35.00	— 200
Car rental, transportation		15.00	
	Total	$ 1300.00	— 5250
			9000

EXHIBIT "D"

Stage 1.		
Supt--engineer--part time @ $15 per day	$	300.00
Contingencies		50.00
Total	$	350.00
Stage 2.		
supt.--engineer--part time@ $15	$	90.00
Contingencies		30.00
Total	$	120.00

EXHIBIT "E"

Not applicable

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUL 13 1951
Executive Secretary

July 12, 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: DMA Dockets 1557-X, 812-X and 1554-X

Enclosed are the subject dockets as follows:

Docket No. 1557-X - Gladys Wells, Custer, South Dakota, application to explore the Warren Draw pegmatite by core drilling to determine continuity and composition of the pegmatite, with related review papers and four copies of the Field Team report revising the original proposal and thereby recommending the project.

Docket No. 812-X - Black Hills Keystone Corporation, application and related documents proposing to explore at the Ingersoll Mine near Keystone, South Dakota after certain revisions in the program. The Field Team recommends a project and the report is attached in quadruplicate.

Docket No. 1554-X - Jack Stewart and Carl Roseberry, application and related papers, together with four copies of the sketch of proposed exploration. Four copies of the report were sent you on July 9, at which time the application and other papers had not been forwarded to us from Rapid City. They inadvertently left them out of the mailing envelope.

If you will refer to our telegram of July 9, 1951, you will note there are two more applications and resulting reports to be returned to you. They are: Docket No. 1556-X - Walter Clifford, which it is understood will be approved according to the original application, and Docket 1652-X - an application and report on the Edward C. Rogers property, which report had to be deferred because Mr. Rogers was in the hospital at the time the verbal notice to examine was given.

The above two will complete all referrals to this Region to date.

A. B. Needham

Enclosures:

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

DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 13 1951
LANDON F. STROBEL
Executive Secretary

REPORT OF EXAMINATION BY FIELD TEAM
REGION V

DMA-158YX

Warren Draw Pegmatite, Custer District

Custer County, South Dakota

L. E. Shaffer, Minerals Technologist
U. S. Bureau of Mines

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

July 10, 1951

DEFENSE MINERALS ADMINISTRATION
Report of Field Examination

by

L. E. Shaffer, Minerals Technologist
U. S. Bureau of Mines

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

Docket No.: DMA-1557X
Property: Warren Draw
Applicant: Gladys Wells
Commodity: Beryl, mica

Conclusions and Recommendations

As outlined the project is a development project. Both the drift and the raise would serve only to open the main mass of pegmatite for mining. The Bureau of Mines suggests instead that the deposit be explored by diamond drill holes. This drilling would be in two phases. The first phase, consisting of about 750 feet of drill holes, would show the continuity and composition of the pegmatite at a depth of 100 to 150 feet below the outcrop. If, as a result of this drilling, additional information is needed, the second phase of drilling could be started.

The first part of the program would include three drill holes totaling 750 feet, and would cost about $3,750. The second part, if undertaken, also would consist of three drill holes totaling about 1,050 feet. This drilling would cost about $5,250. The total cost of the project if both phases are undertaken is $9,000.

All drill holes would be Bx (or larger) and would be located by engineers of the Bureau of Mines, who would supervise the project.

Exhibit A

The Warren Draw pegmatite has been examined briefly by the U. S. Geological Survey and a sketch map prepared. Most of the geological data that follow were abstracted from a preliminary report by J. A. Redden of the Geological Survey, who wrote on July 6, 1951: ". . . evidence . . . indicated . . . there is a better chance for exploration work than I had previously thought . . . there is enough evidence to warrant exploration."

The Warren Draw deposit is a large irregular angle-shaped pegmatite. The main body of the pegmatite is about 400 feet by 200 feet; limbs extend for several hundred feet northwest and southeast from the main mass.

At least four zones have been distinguished. These include a border zone of quartz, plagioclase, and muscovite; a wall zone of plagioclase, quartz, perthite, and muscovite; an intermediate zone of quartz and muscovite; and an apparent core of perthite and quartz.

Most of the beryl is found in the wall zone, usually associated with pod-like masses of muscovite. Beryl may amount to 0.2 percent of the zone; muscovite content ranges from 10 to 15 percent. A small amount of beryl also is found in both the intermediate zone and the apparent core, again usually associated with muscovite or quartz. Most of the muscovite in all three zones is suitable only for scrap mica.

Production from the deposit is at least 6,000 tons of feldspar, 100 tons of scrap mica, and 2 or 3 tons of beryl.

The Bureau of Mines suggests that the deposit be explored by drilling about 1,800 feet of Bx (or larger) diamond drill holes. This drilling would be done in two phases; the second phase to be dependent on the results of the first.

The first part of the suggested exploration involves drilling three holes totaling about 750 feet. These holes would be drilled as indicated on the accompanying sketch. Hole 1 should be drilled vertically downward from the floor of an existing open cut to determine the attitude of the deposit. Holes 2 and 3 probably would be drilled on the northeast side of the deposit and inclined to intersect the pegmatite on the dip. Hole locations would be determined by an engineer of the Bureau of Mines, and the project would be under his direction.

This first phase of the drilling should be completed in about 2½ or 3 months from the time the drilling equipment arrives at the property. Drilling could start soon after the project was approved.

If warranted by the results of this first phase, three additional holes totaling 1,050 feet should be drilled. This second phase of the work would require about 3 months to complete.

Tabulating both phases:

Phase 1:

750 feet of diamond drill holes @ $5.00 a foot	$ 3,750

Phase 2:

1,050 feet of diamond drill holes @ $5.00 a foot	$ 5,250
Total	$ 9,000

It is emphasized that the second phase of the project will not be undertaken without the advice and approval of engineers of the Bureau of Mines, after consideration of the results of the drilling in phase one.

Exhibit B

No buildings or structures will be needed for the project as outlined above.

Exhibit C

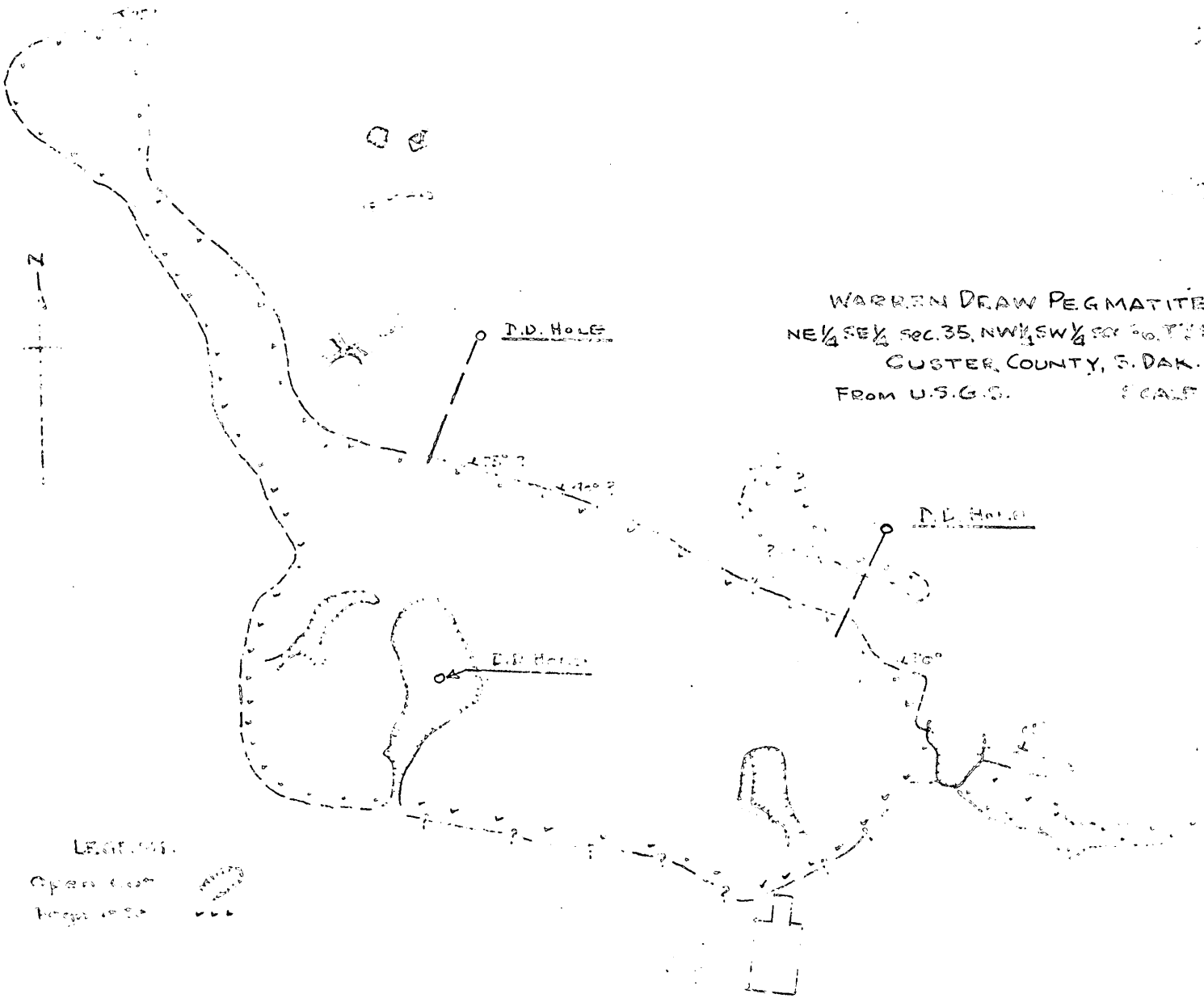
Inasmuch as the drilling would be contracted, no equipment need be purchased or rented.

Exhibit D

Labor, other than the drill crew furnished by the drill contractor, would be supervisory and engineering. The engineer of the Bureau of Mines would include this work with his normal direction of the project.

Exhibit E

No repairs are necessary for the existing buildings or facilities.



WARREN DRAW PEGMATITE
NE¼ SE¼ Sec. 35, NW¼ SW¼ Sec. 36, T. 7 S. R. 1 E.
CUSTER COUNTY, S. DAK.
FROM U.S.G.S. SCALE 1" = 100'

G. E. P.

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

DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 13 1951
LAWSON F. STROBEL
Executive Secretary

REPORT OF EXAMINATION BY FIELD TEAM
REGION V

DMA-1557X Gladys Wells

Warren Draw Pegmatite, Custer District

Custer County, South Dakota

L. F. Shaffer, Minerals Technologist
U. S. Bureau of Mines

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

July 10, 1951

DEFENSE MINERALS ADMINISTRATION
Report of Field Examination

by

L. E. Shaffer, Minerals Technologist
U. S. Bureau of Mines

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

Docket No.: DMA-1557X
Property: Warren Draw
Applicant: Gladys Wells
Commodity: Beryl, mica

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Total	$ 9,000

It is emphasized that the second phase of the project will not be undertaken without the advice and approval of engineers of the Bureau of Mines, after consideration of the results of the drilling in phase one.

Exhibit B

No buildings or structures will be needed for the project as outlined above.

Exhibit C

Inasmuch as the drilling would be contracted, no equipment need be purchased or rented.

Exhibit D

Labor, other than the drill crew furnished by the drill contractor, would be supervisory and engineering. The engineer of the Bureau of Mines would include this work with his normal direction of the project.

Exhibit E

No repairs are necessary for the existing buildings or facilities.

WARREN DRAW PEGMATITE
NE¼ SE¼ sec. 35, NW¼ SW¼ sec. 36, T 3S
CUSTER COUNTY, S. DAK.
FROM U.S.G.S.
SCALE 1" = 100'
N
D.D. HOLE
D.D. HOLE

DEFENSE MINERALS ADMINISTRATION

97022

PRODUCTION EXPANSION DIVISION

EXPLORATION LOANS

Name of Company and Address: Gladys Wells, Custer, South Dakota

Name of Mine and Location Warren Draw Property, Custer Co, South Dakota

Docket No. D.M.A. 1557-X Date received by P.E.D. 7/9/51

Metals or Minerals involved Mica & Beryl

Amount of Total Project: $9,000.00

Government participation, percent and amount 90% $8100.00

Number of subprojects in total application

Type of Exploration	Feet	Cost per foot	Total cost
Preparatory & Rehabilitation			
Equipment			
Shaft sinking & winzes			
Drifts and crosscuts			
Raises			
Diamond or churn drilling	1725	$5	$8625.00
Other Misc Expenses, supervision, cook handling etc.			$375.00

Comments on Contract

Date sent to Applicant for signature 8/2/51

Date returned to P.E.D.

Date sent to Legal 7/30/51

Date signed by Administrator 8/2/51

Additional remarks:

Interior—Duplicating Section, Washington, D. C.

Signed F L Krouse

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

July 2, 1951

To: Mr. James A. Barr, Sr.

From: Mr. A.B. Parsons

Subject: Docket DMA-1557X; Mica & Beryl
Gladys Wells
Custer
South Dakota

The prospective available supply of Mica is far short of meeting defense requirements. Consequently it is highly desirable that explorations for new domestic deposits by stimulated by any reasonable Government assistant to private interests. Any exploration project that holds promise of finding significant new reserves, merits consideration by the Defense Minerals Administration.

A.B. Parsons
Assistant Director
Supply Division

FILE COPY
SURNAME:

Barr

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

Packet mailed 6/26/51

June 21, 1951

Gladys Wells
Custer, So. Dak.

Subject: DMA-15371
Beryl, Mica

Madam:

Your application is being referred to Mr. A.B. Needham, 2908 Colfax Ave. So., Minneapolis 8, Minnesota, Executive Officer of the Field Team, Region V, for further information.

Sincerely yours,

Tom Lyon, Director
Supply Division

RW:mas

cc: Administrator's Reading File
Mr. Strobel
Field Team
Mr. Barr
DMA Files

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

Mailed
JAN 26 1951

Mr. A.B. Needham
2908 Colfax Ave. So.
Minneapolis 8, Minn.

Dear Sir:

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

Applicant Gladys Wells, Custer, South Dakota

Docket No. DMA-1557X

Commodity Beryl, Mica

Amount $ 22,100.00

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

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

RW:mas

cc: Mr. Moon
Mr. Barr

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

June 21, 1951

Gladys Wells
Custer, So. Dak.

Subject: [illegible]

Madam: Beryl, Mica

Your application is being referred to Mr. [illegible] Southern, [illegible] Dolphin Ave. So., Minneapolis 8, Minnesota, Executive Officer of the Field Team, Region V, for further information.

Sincerely yours,

Tom Lyon, Director
Supply Division

Ewimas

cc: Administrator's Reading File
Mr. Strobel
Field Team
Mr. Barr
DMA Files

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1557 X

Commodity Beryl, Mica

Total Amount $22,100.00

Govt. Participation 90%

1. Name and Address of Applicant Gladys Wells
Custer, So. Dakota

2. Location of Property 9 mi. west of Custer, Custer County, So. Dak

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 See attached sheet for details

d) Don't know—needs field examination Yes. JAR 6/15/51

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

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

6. If applicant is a lessee, is a copy of the lease attached? No - owner

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

*question numbers are those of MF-103

Question 4.

Application DMA-1557X Gladys Wells, Custer, South Dakota.

This application for exploration of the Warren Draw pegmatite has little information on the pegmatite, or the exploration.

I have examined this pegmatite to a limited extent. Since the pegmatite is considerably different from the "usual" pegmatites I hope to map it by plane table this summer.

There are several disagreeable features concerning the deposit which should be concerned in considering an exploration loan. The feldspar of the main (western) body of the pegmatite is high in iron content and may not be acceptable for grinding. Past production of beryl per ton of pegmatite is low. There is an inferred cobbable reserve of beryl in the several parts of the pegmatite amounting to 26 tons according to calculations that were based on incomplete past production figures. The information I have from Miss Wells indicated that the amount of sheet mica recovered was very low.

The pegmatite is a large body and is apparently well-zoned. Large reserves of easily minable feldspar are present. Spodumene and amblygonite occupy shear zones in the upper part of the pegmatite and possibly form a significant deposit at depth. Scrap mica is abundant in the eastern part of the pegmatite.

In my opinion, one of the more interesting parts of the pegmatite is a segment, in part separated?? from the main body of the pegmatite, which lies about 100 feet east-northeast from the main open-cut. This segment has "knotty" quartz-mica pegmatite containing small beryl crystals. It is unexplored and may represent the outer part of a possible beryl-containing inner zone. I personally think that this segment warrants a small amount of exploration--probably not more than one or two small prospects four or five feet deep.

I recommend that the field team visit the property and the applicant. They should determine if the Consolidated Feldspar Company will purchase all, or part of, the feldspar. The success of this exploration will depend largely on whether or not the feldspar can be sold. They should also determine if the applicant's intended exploration is feasible. If other factors are favorable they should consider the possibility of a limited amount of diamond drilling which might reveal the extent of the deposit and would cost considerably less.

JAR

J. A. Redden

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 – equipment if applicant may be rented but not included in his investment.
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Must use gasoline or diesel engines

Is a field check needed on any of these points? No

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? _____ If so, attach a draft.

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

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

If not, what part of it is? The drilling to prove downward extension of orebody is exploration but the opening of a new open pit is production preparation & thus not allowable

Is this part a worthwhile exploration project? Drafting - yes.

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? Wages reasonable - bookkeeper not allowable

f) Should more information be requested from applicant? Yes

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? No

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

a) Is it applicable? Yes

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

c) Are rents and charges reasonable? Yes - if in good condition

d) Is a field check needed? Yes

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

a) Are there sufficient data? No (see draft)

b) Is the schedule adequate for the work proposed? Yes - eliminate bookkeeper

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? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No – no structures or other facilities

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Distance to be driven not given – probably can be done in time limit

(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? Check the location of the proposed tunnel & the condition of the equipment to be furnished by the applicant. Also check with applicant, whether the exploration can be done better & quicker by other means, diamond drilling etc.

Reviewed by: [illegible]

[illegible]

Date 6/13/57

97692

6/13/51 Docket No - DMA 1557 X

Question 9 of Application -

The crediting of the value of applicants equipment as part of his participation in the project is not allowable - it can be rented for use on the project & this should be included in question 23 - "g" (Exhibit C)

Section 10 Exhibit "A" -

No map of the proposed work is enclosed. The drifting to test for a downward extension of orebodies previously mined is exploration - the location of this work should be checked by a field team - but the open pit work is preparation for production & thus not allowable

The wage scale quoted is reasonable although the drifting will require a miner & the bookkeeper is not an exploration employee

The field team should get further detail about the project before final decision on the application is made

Section 11 - Exhibit "B"

A protective shelter is necessary for the equipment to be used compressor etc. & the cost is not excessive

Section 12 - Exhibit "C"

The purchase of a diesel engine is requested but the need for it is not given. The price appears reasonable for a used machine but its condition should be ascertained.

The rental of equipment, either from the applicant or others

6/13/51 DMA. 1557 X.

Exhibit C (cont)

is allowable with the rates dependent on its condition.

The equipment of the owner, including compressor, is allowable but it cannot be included in the investment (participation) of the applicant. The rental given appears reasonable

Section 13 Exhibit D.

The wage scale is reasonable but the bookkeeper is not needed on an exploration program of this size. The supervisor should also do some of the work & may be intended to act as the driller (miner). A miner will be needed in the drifting & it is not clear whether the muckers will do this work or not

Section 16 Recommendations.

This application should be referred to the field team which should visit the property & in conversation with the applicants representative look into the exploration possibilities of the program. They should study the possibilities of the suggested program as compared to other methods, for instance diamond drilling, which might obtain better + quicker results.

The differentiation of exploration + development work should be explained + the ~~present~~ program modified accordingly. Also the question of proper labor should be explained.

The project has sufficient merit to warrant investigation by the field team.

DMB

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1557 X

Commodity Beryl, Mica

Total Amount $22,100.00

Govt. Participation 90%

1. Name and Address of Applicant Gladys Wells
Custer, So. Dakota

2. Location of Property 9 mi. west of Custer, Custer County, So. Dak

3. Mineral or metal Beryl, Mica Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

a) Good

b) Poor

c) None See attached sheet for details

d) Don't know—needs field examination Yes JAR 6/15/51

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

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

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J. A. Redden

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

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a) Available manpower Yes

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(Question 14 plus general knowledge of availability)*

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e) Are the cost estimates reasonable? wages reasonable - bookkeeper not allowable

f) Should more information be requested from applicant? Yes

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

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

c) Is a field check needed? No

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

a) Is it applicable? Yes

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

c) Are rents and charges reasonable? Yes - if in good condition

d) Is a field check needed? Yes

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

a) Are there sufficient data? No (see draft)

b) Is the schedule adequate for the work proposed? Yes - eliminate bookkeeper

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? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No – no structures or other facilities

b) Sufficient data? —

c) Reasonable? —

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Distance to be driven not given - probably can be done in time limit

(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? Check the location of the proposed tunnel & the condition of the equipment to be furnished by the applicant. Also check with applicant, whether the exploration can be done better & quicker by other means, diamond drilling etc.

Reviewed by: Donald M. Bandy

B.J.M.

Date 6/13/51

97692

6/13/51 . . . .

Docket No - DMA 1557 X

Question 9 of Application -

The crediting of the value of applicants' equipment as part of his participation in the project is not allowable - it can be rented for use on the project & this should be included in question 23-"g" (Exhibit C)

Section 10 Exhibit "A" -

No map of the proposed work is enclosed. The drifting to test for a downward extension of orebodies previously mined is exploration - the location of this work should be checked by a field team - but the open pit work is preparation for production & thus not allowable

The wage scale quoted is reasonable although the drifting will require a miner & the bookkeeper is not an exploration employee

The field team should get further detail about the project before final decision on the application is made

Section 11 - Exhibit "B"

A protective shelter is necessary for the equipment to be used compressor etc. & the cost is not excessive

Section 12 - Exhibit "C"

The purchase of a diesel engine is requested but the need for it is not given. The price appears reasonable for a used machine but its condition should be ascertained.

The rental of equipment, either from the applicant or others

Exhibit C (cont)

is allowable with the rates dependent on its condition.

The equipment of the owner, including compressor, is allowable but it cannot be included in the investment (participation) of the applicant. The rental given appears reasonable

Section 13 Exhibit D.

The wage scale is reasonable but the bookkeeper is not needed on an exploration program of this size. The supervisor should also do some of the work + may be intended to act as the driller (miner). A miner will be needed in the drifting & it is not clear whether the muckers will do this work or not

Section 16 Recommendations.

This application should be referred to the field team which should visit the property & in conversation with the applicants representative look into the exploration possibilities of the program. They should study the possibilities of the suggested program as compared to other methods, for instance diamond drilling, which might obtain better + quicker results.

The differentiation of exploration + development work should be explained + the ~~[illegible]~~ program modified accordingly. Also the question of proper labor should be explained.

The project has sufficient merit to warrant investigation by the field team

RMG

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-1557 X

Date received 6/4/51

Participation

GLADYS WELLS
CUSTER,
SOUTH DAKOTA

Name and address of applicant

Date May 29, 1951

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $22,100.00

Mineral or metal Mineral (beryl, mica and other pegmatite products)

Percentage of Government participation 90%

Location of mine Nine Miles West of Custer, S.D.

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual

*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 experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. (See attached Sheet)

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

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

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

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. (See attached Sheet)

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 application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? $2000.00 Yes (See attached Sheet)

*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. (See attached Sheet)

*11. State the present and former names of the property, if any. (See attached Sheet)

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Spring near.
State amount of power to be used, rate per hour or other cost, and source. None

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

15. State in detail how the ore could be shipped and how and where milled. (See attached Sheet)

*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. (See attached Sheet)

*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				

Not in production at present.

*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. (See attached Sheet)

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. (See attached Sheet)

THE EXPLORATION

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

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. (See attached Sheet)
    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. (See attached Sheet)

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. (See attached Sheet)

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

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 Gladys Wells (Signature of authorized official)
May 29, 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

May 29, 1951
GLADYS WELLS
CUSTER, SOUTH DAKOTA
ATTACHED SHEET NO. 1.

THE APPLICANT

4. (a) The applicant has been engaged in buying minerals and mining for about 14 years, having had a great deal of experience with mining of strategic mica and beryl, and generally engaged also, in prospecting and exploring for and mining all types of minerals which are produced in the area, particularly with reference to pegmatites. Applicant established the first commercial mica rifting and trimming plant in Custer, South Dakota, and operated the same for four years on an extensive basis, and to a limited extent, for about eight years, and has been engaged in buying and selling of non-metallic minerals, including beryl, tantalite, mica, amblygonite, and other rare minerals ordinarily produced from pegmatite dikes, for about 13 years.

(b) The Manager is to be Wiley Reed, who has had about 20 years experience in prospecting for and exploring of mineral deposits in this area, mining and production of minerals. Mr. Reed has mined several different mines in this area, from which a great deal of mica and beryl were produced.

8. Financial Statement

ASSETS:

Cash on deposit in Custer County Bank, Custer, So. Dak.	$ 2,000.00
Real Estate in Custer, So. Dak.	$ 20,000.00
Bonds - U. S.	$ 600.00
Mining Machinery and Equipment	$ 6,000.00
Ores and Minerals for sale	$ 1,000.00
Miscellaneous personal property	$ 1,000.00
TOTAL ASSETS	$ 30,600.00

LIABILITIES: (None)

9. Applicant has on hand for use in the operation of the mine, the following mining machinery and equipment of a value in excess of $2000.00, which machinery is proposed to be used as Applicant's share of the cost of the project, the said machinery and equipment being as follows:

Compressor (Ingersoll-Rand)	$ 1,500.00
Jackhammer (Ingersoll)	$ 300.00
Stoper	$ 300.00
Steel, Track, Cars, Hose, Pipe, and other miscellaneous mining tools and equipment	$ 600.00
TOTAL	$ 2,700.00

THE PROPERTY

10. (a) This mine has been mined on the higher level and has produced beryl, feldspar, mica, amblygonite, tantalum, and spodumen, but the higher level is hearly worked out, and Applicant wants to go in about 40 feet lower and open pit and drift to the main ore body, which we think we will reach this way.

(b) Two full mining claims and a fraction, joining the Tin Mountain Lode Claim 554° on the South and East, in Warren Gulch, known as the Warren Draw #1, Warren Draw #2, and Warren Draw #3 Lode Mining Claims, in the Northeast Quarter (NE¼) of Section 35, Township 3 South, Range 3 East, B.H.M., Custer County, South Dakota, as the same are more particularly described in the Location Certificates thereof all recorded in Book 17 of Locations, Pages 95, 95, & 96, respectively, in the office of the Register of Deeds of Custer County, South Dakota.
Exploration will be done on the West side joining the Tin Mountain Lode Claim.

11. Warren Draw #1, Warren Draw #2, and Warren Draw #3.

12. This mining property is located about nine miles West of Custer, South Dakota, on Highway 16 about eight miles, then northerly about one mile over a graveled road.

14. The equipment described in Item No. 9, and in addition thereto a blacksmith shop.

15. All of the ores and minerals can be sold in Custer.

16. History:

(a) This property has been mined for mica, beryl, feldspar, and tantalum, mostly mica. Applicant had a reclaiming plant for reclaiming mica located therefor several years, then when there was no market for mica and no market available Applicant sold part of the machinery. The building still stands. Applicant sold several hundred tons of scrap mica from this mine.

(b) The Tin Mountain Mine, which joins, has produced Spodumen, Beryl, Mica and Feldspar. The same is owned by the Maywood Chemical Co., and held for reserve.

(c) None

18. (a) (b) and (c) Property is not in production at present, however, the assay on Beryl runs 11% B.O., and shows promise of a considerable amount of mica, and some tantalum. No maps available.

19. Conditions and circumstances sufficiently brought out by foregoing questions.

THE EXPLORATION

20. Mina & Beryl.

21. Open cut and tunnel to a lower level, starting on West side of mine. Estimated time required to complete proposed work: 1 Year.

May 29, 1951
GLADYS WELLS
CUSTER, SOUTH DAKOTA
ATTACHED SHEET NO. 3

22. See Item No. 10 (a). A considerable amount of rare minerals have been taken from the higher level and Applicant has reason to believe that more will be found on the lower level.

23. THE REQUIREMENTS AND COSTS

(a)	Three Muckers @ $10.00 each per day for 264 days	$ 7,920.00
	One part time Bookkeeper & Secretary @ $1.00 per hour	$ 1,056.00
(b)	One Supervisor @ $16.00 per day for 264 days	$ 4,224.00
(c)	None	None
(d)	Construction of Power House	$ 500.00
(e)	Diesel Engine	$ 1,500.00
(f)	None	None
(g)	Rental value of Compressor, Jackhammer, Stoper, Steel, Track and other miscellaneous mining tools and equipment @ $75.00 per mo.	$ 900.00
(h)	Powder, Fuse, Caps, and Diesel Fuel, and Steel, bits, and Machinery Repairs @ $500.00 per month	$ 6,000.00
(i)	None	None
	Total	$22,100.00

24. The project expected to be completed in 12 months after approval
Progress expected to be accomplished: 2 feet per day.
Money expected to be spent: As set out in Item No. 23.

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-1557X

Date received 6/4/51

Participation

GLADYS WELLS
CUSTER,
SOUTH DAKOTA

Name and address of applicant

Date May 29, 1951

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $22,100.00

Mineral or metal Mineral (beryl, mica & other pegmatite products)

Percentage of Government participation 90%

Location of mine Nine Miles West of Custer, S.D.

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual

*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. (See attached Sheet)

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

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

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

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. (See attached Sheet)

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)? $2000.00 - Yes (See attached Sheet)

*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. (See attached Sheet)

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Spring near.
State amount of power to be used, rate per hour or other cost, and source. None

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

15. State in detail how the ore could be shipped and how and where milled. (See attached Sheet)

*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. (See attached Sheet)

*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				

Not in production at present.

*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. (See attached Sheet)

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. (See attached Sheet)

THE EXPLORATION

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

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. (See attached Sheet)

    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. (See attached Sheet)

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. (See attached Sheet)

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

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 Gladys Wells (Signature of authorized official)
May 29, 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

May 29, 1951
GLADYS WELLS
CUSTER, SOUTH DAKOTA
ATTACHED SHEET NO. 1.

THE APPLICANT

4. (a) The applicant has been engaged in buying minerals and mining for about 14 years, having had a great deal of experience with mining of strategic mica and beryl, and generally engaged also, in prospecting and exploring for and mining all types of minerals which are produced in the area, particularly with reference to pegmatites. Applicant established the first commercial mica rifting and trimming plant in Custer, South Dakota, and operated the same for four years on an extensive basis, and to a limited extent, for about eight years, and has been engaged in buying and selling of non-metallic minerals, including beryl, tantalite, mica, amblygonite, and other rare minerals ordinarily produced from pegmatite dikes, for about 13 years.

(b) The Manager is to be Wiley Reed, who has had about 20 years experience in prospecting for and exploring of mineral deposits in this area, mining and production of minerals. Mr. Reed has mined several different mines in this area, from which a great deal of mica and beryl were produced.

8. Financial Statement

ASSETS:

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Real Estate in Custer, So. Dak.	$ 20,000.00
Bonds - U. S.	$ 600.00
Mining Machinery and Equipment	$ 6,000.00
Ores and Minerals for sale	$ 1,000.00
Miscellaneous personal property	$ 1,000.00
TOTAL ASSETS	$ 30,600.00

LIABILITIES: (None)

9. Applicant has on hand for use in the operation of the mine, the following mining machinery and equipment of a value in excess of $2000.00, which machinery is proposed to be used as Applicant's share of the cost of the project, the said machinery and equipment being as follows:

Compressor (Ingersoll-Rand)	$ 1,500.00
Jackhammer (Ingersoll)	$ 300.00
Stoper	$ 300.00
Steel, Track, Cars, Hose, Pipe, and other miscellaneous mining tools and equipment	$ 600.00
TOTAL	$ 2,700.00

May 29, 1951
CLAIMS MINES
CUSTER, SOUTH DAKOTA
ATTACHED SHEET NO. 2

THE PROPERTY

10. (a) This mine has been mined on the higher level and has produced beryl, feldspar, mica, amblygonite, tantalum, and spodumen, but the higher level is nearly worked out, and Applicant wants to go in about 40 feet lower and open pit and drift to the main ore body, which we think we will reach this way.

(b) Two full mining claims and a fraction, joining the Tin Mountain Lode Claim 554° on the South and East, in Warren Gulch, known as the Warren Draw #1, Warren Draw #2, and Warren Draw #3 Lode Mining Claims, in the Northeast Quarter (NE¼) of Section 35, Township 3 South, Range 3 East, B.H.M., Custer County, South Dakota, as the same are more particularly described in the Location Certificates thereof all recorded in Book 17 of Locations, Pages 95, 95, & 96, respectively, in the office of the Register of Deeds of Custer County, South Dakota.
Exploration will be done on the West side joining the Tin Mountain Lode Claim.

11. Warren Draw #1, Warren Draw #2, and Warren Draw #3.

12. This mining property is located about nine miles West of Custer, South Dakota, on Highway 16 about eight miles, then northerly about one mile over a graveled road.

14. The equipment described in Item No. 9, and in addition thereto a blacksmith shop.

15. All of the ores and minerals can be sold in Custer.

16. History:

(a) This property has been mined for mica, beryl, feldspar, and tantalum, mostly mica. Applicant had a reclaiming plant for reclaiming mica located therefor several years, then when there was no market for mica and no market available Applicant sold part of the machinery. The building still stands. Applicant sold several hundred tons of scrap mica from this mine.

(b) The Tin Mountain Mine, which joins, has produced Spodumen, Beryl, Mica and Feldspar. The same is owned by the Maywood Chemical Co., and held for reserve.

(c) None

18. (a) (b) and (c) Property is not in production at present, however, the assay on Beryl runs 11% B.O., and shows promise of a considerable amount of mica, and some tantalum. No maps available.

19. Conditions and circumstances sufficiently brought out by foregoing questions.

THE EXPLORATION

20. Mica & Beryl.

21. Open cut and tunnel to a lower level, starting on West side of mine. Estimated time required to complete proposed work: 1 Year.

22. See Item No. 10 (a). A considerable amount of rare minerals have been taken from the higher level and Applicant has reason to believe that more will be found on the lower level.

23. THE EXPENDITURES AND COSTS

(a)	Three Muckers @ $10.00 each per day for 264 days	$ 7,920.00
	One part time Bookkeeper & Secretary @ $1.00 per hour	$ 1,056.00
(b)	One Supervisor @ $16.00 per day for 264 days	$ 4,224.00
(c)	None	None
(d)	Construction of Power House	$ 500.00
(e)	Diesel Engine	$ 1,500.00
(f)	None	None
(g)	Rental value of Compressor, Jackhammer, Stoper, Steel, Frank and other miscellaneous mining tools and equipment @ $75.00 per mo.	$ 900.00
(h)	Powder, Fuse, Caps, and Diesel Fuel, and Steel, bits, and Machinery Repairs @ $500.00 per month	$ 6,000.00
(i)	None	None
	Total	$22,100.00

24. The project expected to be completed in 12 months after approval
Progress expected to be accomplished: 2 feet per day.
Money expected to be spent: As set out in Item No. 23.

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-1557X

Date received 6/4/51

Participation

GLADYS WELLS
CUSTER,
SOUTH DAKOTA

Name and address of applicant

Date May 29, 1951

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $22,100.00

Mineral or metal Mineral (beryl, mica and other pegmatite products)

Percentage of Government participation 90%

Location of mine Nine Miles West of Custer, S.D.

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual

*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. (See attached Sheet)

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

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

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

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. (See attached Sheet)

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)? $2000.00 - Yes (See attached Sheet)

*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. (See attached Sheet)

*11. State the present and former names of the property, if any. (See attached Sheet)

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Spring near.
State amount of power to be used, rate per hour or other cost, and source. None

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

15. State in detail how the ore could be shipped and how and where milled. (See attached Sheet)

*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. (See attached Sheet)

*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				

Not in production at present.

*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. (See attached Sheet)

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. (See attached Sheet)

THE EXPLORATION

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

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. (See attached Sheet)

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. (See attached Sheet)

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. (See attached Sheet)

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

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 Gladys Wells (Signature of authorized official)
May 29, 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

THE APPLICANT

4. (a) The applicant has been engaged in buying minerals and mining for about 14 years, having had a great deal of experience with mining of strategic mica and beryl, and generally engaged also, in prospecting and exploring for and mining all types of minerals which are produced in the area, particularly with reference to pegmatites. Applicant established the first commercial mica rifting and trimming plant in Custer, South Dakota, and operated the same for four years on an extensive basis, and to a limited extent, for about eight years, and has been engaged in buying and selling of non-metallic minerals, including beryl, tantalite, mica, amblygonite, and other rare minerals ordinarily produced from pegmatite dikes, for about 13 years.

(b) The Manager is to be Wiley Reed, who has had about 20 years experience in prospecting for and exploring of mineral deposits in this area, mining and production of minerals. Mr. Reed has mined several different mines in this area, from which a great deal of mica and beryl were produced.

8. Financial Statement

ASSETS:

Cash on deposit in Custer County Bank, Custer, So. Dak.	$ 2,000.00
Real Estate in Custer, So. Dak.	$ 20,000.00
Bonds - W. S.	$ 600.00
Mining Machinery and Equipment	$ 6,000.00
Ores and Minerals for sale	$ 1,000.00
Miscellaneous personal property	$ 1,000.00
TOTAL ASSETS	$ 30,600.00

LIABILITIES: (None)

9. Applicant has on hand for use in the operation of the mine, the following mining machinery and equipment of a value in excess of $2000.00, which machinery is proposed to be used as Applicant's share of the cost of the project, the said machinery and equipment being as follows:

Compressor (Ingersoll-Rand)	$ 1,500.00
Jackhammer (Ingersoll)	$ 300.00
Stoper	$ 300.00
Steel, Track, Cars, Hose, Pipe, and other miscellaneous mining tools and equipment	$ 600.00
TOTAL	$ 2,700.00

THE PROPERTY

10. (a) This mine has been mined on the higher level and has produced beryl, feldspar, mica, amblygonite, tantalum, and spodumen, but the higher level is hearly worked out, and Applicant wants to go in about 40 feet lower and open pit and drift to the main ore body, which we think we will reach this way.

(b) Two full mining claims and a fraction, joining the Tin Mountain Lode Claim 554° on the South and East, in Warren Gulch, known as the Warren Draw #1, Warren Draw #2, and Warren Draw #3 Lode Mining Claims, in the Northeast Quarter (NE¼) of Section 35, Township 3 South, Range 3 East, B.H.M., Custer County, South Dakota, as the same are more particularly described in the Location Certificates thereof all recorded in Book 17 of Locations, Pages 95, 95, & 96, respectively, in the office of the Register of Deeds of Custer County, South Dakota.
Exploration will be done on the West side joining the Tin Mountain Lode Claim.

11. Warren Draw #1, Warren Draw #2, and Warren Draw #3.

12. This mining property is located about nine miles West of Custer, South Dakota, on Highway 16 about eight miles, then northerly about one mile over a graveled road.

14. The equipment described in Item No. 9, and in addition thereto a blacksmith shop.

15. All of the ores and minerals can be sold in Custer.

16. History:

(a) This property has been mined for mica, beryl, feldspar, and tantalum, mostly mica. Applicant had a reclaiming plant for reclaiming mica located therefor several years, then when there was no market for mica and no market available Applicant sold part of the machinery. The building still stands. Applicant sold several hundred tons of scrap mica from this mine.

(b) The Tin Mountain Mine, which joins, has produced Spodumen, Beryl, Mica and Feldspar. The same is owned by the Maywood Chemical Co., and held for reserve.

(c) None

18. (a) (b) and (c) Property is not in production at present, however, the assay on Beryl runs 11% B.O., and shows promise of a considerable amount of mica, and some tantalum. No maps available.

19. Conditions and circumstances sufficiently brought out by foregoing questions.

THE EXPLORATION

20. Mina & Beryl.

21. Open cut and tunnel to a lower level, starting on West side of mine. Estimated time required to complete proposed work: 1 Year.

May 29, 1951
GLADYS WELLS
CUSTER, SOUTH DAKOTA
ATTACHED SHEET NO. 3

22. See Item No. 10 (a). A considerable amount of rare minerals have been taken from the higher level and Applicant has reason to believe that more will be found on the lower level.

23. THE REQUIREMENTS AND COSTS

(a)	Three Muckers @ $10.00 each per day for 264 days	$ 7,920.00
	One part time Bookkeeper & Secretary @ $1.00 per hour	$ 1,056.00
(b)	One Supervisor @ $16.00 per day for 264 days	$ 4,224.00
(c)	None	None
(d)	Construction of Power House	$ 500.00
(e)	Diesel Engine	$ 1,500.00
(f)	None	None
(g)	Rental value of Compressor, Jackhammer, Stoper, Steel, Track and other miscellaneous mining tools and equipment @ $75.00 per mo.	$ 900.00
(h)	Powder, Fuse, Caps, and Diesel Fuel, and Steel, bits, and Machinery Repairs @ $500.00 per month	$ 6,000.00
(i)	None	None
	Total	$22,100.00

24. The project expected to be completed in 12 months after approval
Progress expected to be accomplished: 2 feet per day.
Money expected to be spent: As set out in Item No. 23.

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION V

DMA-1557X

Warren Draw Pegmatite, Custer District

Custer County, South Dakota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 13 1951
LANDON F. SINGBEL
Executive Secretary

L. E. Shaffer, Minerals Technologist
U. S. Bureau of Mines

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

July 10, 1951

DEFENSE MINERALS ADMINISTRATION
Report of Field Examination

by

L. E. Shaffer, Minerals Technologist
U. S. Bureau of Mines

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

Docket No.: DMA-1557X
Property: Warren Draw
Applicant: Gladys Wells
Commodity: Beryl, mica

Conclusions and Recommendations

As outlined the project is a development project. Both the drift and the raise would serve only to open the main mass of pegmatite for mining. The Bureau of Mines suggests instead that the deposit be explored by diamond drill holes. This drilling would be in two phases. The first phase, consisting of about 750 feet of drill holes, would show the continuity and composition of the pegmatite at a depth of 100 to 150 feet below the outcrop. If, as a result of this drilling, additional information is needed, the second phase of drilling could be started.

The first part of the program would include three drill holes totaling 750 feet, and would cost about $3,750. The second part, if undertaken, also would consist of three drill holes totaling about 1,050 feet. This drilling would cost about $5,250. The total cost of the project if both phases are undertaken is $9,000.

All drill holes would be Bx (or larger) and would be located by engineers of the Bureau of Mines, who would supervise the project.

Exhibit A

The Warren Draw pegmatite has been examined briefly by the U. S. Geological Survey and a sketch map prepared. Most of the geological data that follow were abstracted from a preliminary report by J. A. Redden of the Geological Survey, who wrote on July 8, 1951: ". . . evidence . . . indicated . . . there is a better chance for exploration work than I had previously thought . . . there is enough evidence to warrant exploration."

The Warren Draw deposit is a large irregular angle-shaped pegmatite. The main body of the pegmatite is about 400 feet by 200 feet; limbs extend for several hundred feet northwest and southeast from the main mass.

At least four zones have been distinguished. These include a border zone of quartz, plagioclase, and muscovite; a wall zone of plagioclase, quartz, perthite, and muscovite; an intermediate zone of quartz and muscovite; and an apparent core of perthite and quartz.

Most of the beryl is found in the wall zone, usually associated with pod-like masses of muscovite. Beryl may amount to 0.2 percent of the zone; muscovite content ranges from 10 to 15 percent. A small amount of beryl also is found in both the intermediate zone and the apparent core, again usually associated with muscovite or quartz. Most of the muscovite in all three zones is suitable only for scrap mica.

Production from the deposit is at least 6,000 tons of feldspar, 100 tons of scrap mica, and 2 or 3 tons of beryl.

The Bureau of Mines suggests that the deposit be explored by drilling about 1,800 feet of Bx (or larger) diamond drill holes. This drilling would be done in two phases; the second phase to be dependent on the results of the first.

The first part of the suggested exploration involves drilling three holes totaling about 750 feet. These holes would be drilled as indicated on the accompanying sketch. Hole 1 should be drilled vertically downward from the floor of an existing open cut to determine the attitude of the deposit. Holes 2 and 3 probably would be drilled on the northeast side of the deposit and inclined to intersect the pegmatite on the dip. Hole locations would be determined by an engineer of the Bureau of Mines, and the project would be under his direction.

This first phase of the drilling should be completed in about $2\frac{1}{2}$ or 3 months from the time the drilling equipment arrives at the property. Drilling could start soon after the project was approved.

If warranted by the results of this first phase, three additional holes totaling 1,050 feet should be drilled. This second phase of the work would require about 3 months to complete.

Tabulating both phases:

Phase 1:	
750 feet of diamond drill holes @ $5.00 a foot	$ 3,750
Phase 2:	
1,050 feet of diamond drill holes @ $5.00 a foot	$ 5,250
Total	$ 9,000

It is emphasized that the second phase of the project will not be undertaken without the advice and approval of engineers of the Bureau of Mines, after consideration of the results of the drilling in phase one.

Exhibit B

No buildings or structures will be needed for the project as outlined above.

Exhibit C

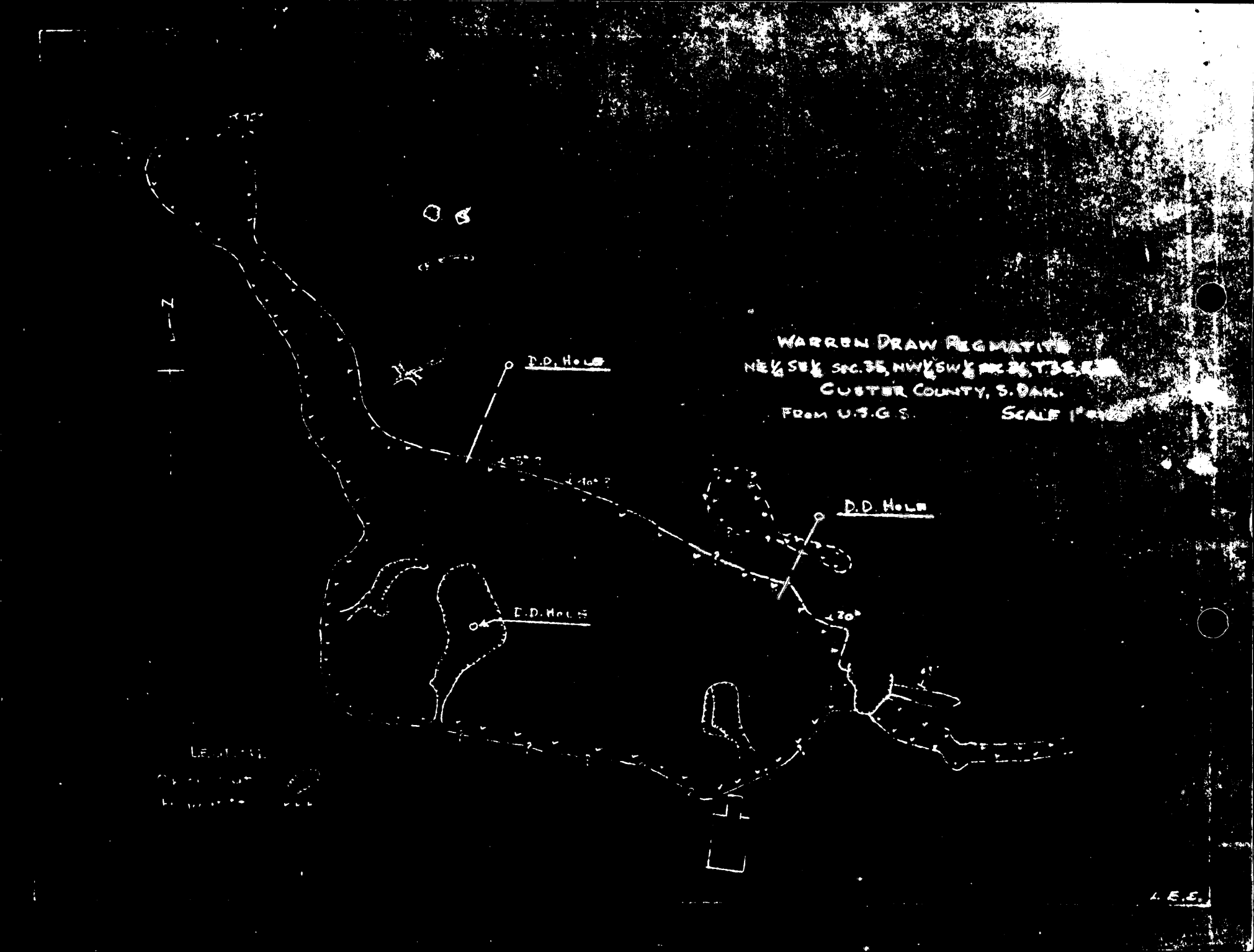
Inasmuch as the drilling would be contracted, no equipment need be purchased or rented.

Exhibit D

Labor, other than the drill crew furnished by the drill contractor, would be supervisory and engineering. The engineer of the Bureau of Mines would include this work with his normal direction of the project.

Exhibit E

No repairs are necessary for the existing buildings or facilities.


WARREN DRAW PEGMATITE
NE¼ SE¼ SEC. 35, NW¼ SW¼
CUSTER COUNTY, S. DAK.
FROM U.S.G.S.
SCALE 1"
N
D.D. HOLE
D.D. HOLE
D.D. HOLE
20°
L. E. E.

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-1557X

Date received 6/4/51

Participation

GLADYS WELLS
CUSTER,
SOUTH DAKOTA

Name and address of applicant

Date May 29, 1951

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $22,100.00

Mineral or metal Mineral (beryl, mica and other pegmatite products)

Percentage of Government participation 90%

Location of mine Nine Miles West of Custer, S.D.

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Individual

*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. (See attached Sheet)

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

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

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

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. (See attached Sheet)

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)? $2000.00 - Yes (See attached Sheet)

*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. (See attached Sheet)

*11. State the present and former names of the property, if any. (See attached Sheet)

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Spring near.
State amount of power to be used, rate per hour or other cost, and source. None

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

15. State in detail how the ore could be shipped and how and where milled. (See attached Sheet)

*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. (See attached Sheet)

*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				

Not in production at present.

*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. (See attached Sheet)

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. (See attached Sheet)

THE EXPLORATION

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

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. (See attached Sheet)

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. (See attached Sheet)

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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.

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

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 Gladys Wells (Signature of authorized official)
May 29, 1951 (Date)	owner (Title)

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*Same as footnote on page 1.

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

THE APPLICANT

4. (a) The applicant has been engaged in buying minerals and mining for about 14 years, having had a great deal of experience with mining of strategic mica and beryl, and generally engaged also, in prospecting and exploring for and mining all types of minerals which are produced in the area, particularly with reference to pegmatites. Applicant established the first commercial mica milling and trimming plant in Custer, South Dakota, and operated the same for four years on an extensive basis, and to a limited extent, for about eight years, and has been engaged in buying and selling of non-metallic minerals, including beryl, tantalite, mica, columbite, and other rare minerals ordinarily produced from pegmatite dikes, for about 13 years.

(b) The Manager is to be Riley Reed, who has had about 20 years experience in prospecting for and exploring of mineral deposits in this area, mining and production of minerals. Mr. Reed has mined several different mines in this area, from which a great deal of mica and beryl were produced.

5. Financial Statement

ASSETS:

Cash on deposit in Custer County Bank, Custer, So. Dak.	$ 2,000.00
Real Estate in Custer, So. Dak.	$ 20,000.00
Bonds - U. S.	$ 500.00
Mining Machinery and Equipment	$ 6,000.00
Ores and Minerals for sale	$ 1,000.00
Miscellaneous personal property	$ 1,000.00
TOTAL ASSETS	$ 30,500.00

LIABILITIES: (None)

6. Applicant has on hand for use in the operation of the mine, the following mining machinery and equipment of a value in excess of $2000.00, which machinery is proposed to be used as Applicant's share of the cost of the project, the said machinery and equipment being as follows:

Compressor (Ingersoll-Rand)	$ 1,500.00
Jackhammer (Ingersoll)	$ 300.00
Stoper	$ 300.00
Steel, Drill, Bars, Hose, Pipe, and other miscellaneous mining tools and equipment	$ 600.00
TOTAL	$ 2,700.00

THE PROPERTY

10. (a) This mine has been mined on the higher level and has produced beryl, feldspar, mica, allanite, tantalite, and spodumene, but the higher level is heavily worked out, and Applicant wants to go in about 40 feet lower and open pit and drift to the main ore body, which we think we will reach this way.

(b) Two full mining claims and a fraction, joining the Tin Mountain Lode Claim 554[2] on the South and East, in Warren Gulch, known as the Warren Draw #1, Warren Draw #2, and Warren Draw #3 Lode Mining Claims, in the Northeast Quarter (NE¼) of Section 35, Township 3 South, Range 3 East, B.H.M., Custer County, South Dakota, as the same are more particularly described in the Location Certificates thereof all recorded in Book 17 of Locations, Pages 95, 95, & 96, respectively, in the office of the Register of Deeds of Custer County, South Dakota.
Exploration will be done on the West side joining the Tin Mountain Lode Claim.

11. Warren Draw #1, Warren Draw #2, and Warren Draw #3.

12. This mining property is located about nine miles West of Custer, South Dakota, on Highway 16 about eight miles, then northerly about one mile over a gravel road.

14. The equipment described in Item No. 9, and in addition thereto a blacksmith shop.

15. All of the ores and minerals are to sell in Custer.

16. History:

(a) This property has been mined for mica, beryl, feldspar, and tantalite, mostly mica. Applicant had a rockbinding plant for selecting mica located thereon several years, then when there was no market for mica and no market available Applicant sold part of the machinery. The building still stands. Applicant sold several hundred tons of scrap mica from this mine.

(b) The Tin Mountain Mine, which joins, has produced spodumene, beryl, mica and feldspar. The ores is owned by the Haywood Chemical Co., and held for reserve.

(c) None

18. (a) (b) and (c) Property is not in production at present, however, the assay on Beryl runs 11% B.O., and shows promise of a considerable amount of mica, and some tantalite. No ores available.

19. Conditions and circumstances sufficiently brought out by foregoing questions.

THE INVESTMENT

20. None to Beryl.

21. Open cut and tunnel to a lower level, starting on West side of mine. Estimated time required to complete proposed work: 1 Year.

22. See Item No. 10 (a). A considerable amount of rare minerals have been taken from the higher level and Applicant has reason to believe that more will be found on the lower level.

23. [illegible]

(a)	Three Miners @ $11.00 each per day for 214 days	$ 7,020.00
	One part time Bookkeeper & Secretary @ $3.00 per hour	$ 1,056.00
(b)	One Supervisor @ $16.00 per day for 214 days	$ 3,424.00
(c)	None	None
(d)	Construction of Power House	$ 500.00
(e)	Diesel Engine	$ 2,500.00
(f)	None	None
(g)	Rental value of Compressor, Jackhammer, Stoper, Steel, Drill and other miscellaneous mining tools and equipment @ $75.00 per mo.	$ 900.00
(h)	Powder, Fuse, Caps, and Diesel Fuel, and Steel, Bits, and Machinery Repairs @ $500.00 per month	$ 6,000.00
(i)	None	None
	Total	$22,100.00

24. The project expected to be completed in 12 months after approval
Progress expected to be accomplished 2 feet per day.
Money expected to be spent: As set out in Item No. 23.