Mr. George V. Bland
Hill City, South Dakota

Subject: DMA 1433-X
DMA 1460-X

Dear Mr. Bland:

Replying to your letter of September 17, 1951, requesting reopening of subject applications, we regret that we cannot grant your request for the following reasons:

DMA 1433-X Beecher Mine

1. Data presented in application indicates the deposit to contain substantial developed reserves. Need for and justification of additional exploration work have not been shown.

2. The work program proposed is mining or preparation for mining and would not qualify under MO-5.

As pointed out in our letter of June 14th an application for a production loan on this property would be considered should you so wish to apply.

DMA 1460-X Pleasant Valley Mine

1. As pointed out in our letter of June 26th extensive exploration and development have been accomplished on this deposit. Need for additional exploration has not been shown.

2. Work proposed is essentially mining or preparation for mining and would not qualify under MO-5.

Both the Beecher Mine and the Pleasant Valley Mine have been examined by the U. S. Geological Survey and the U. S. Bureau of Mines. We have reviewed their findings and do not find justification for additional field examination until and unless new evidence to justify such action is presented by applicants.

Sincerely yours,

Tom Lyon, Director
Supply Division

RWASKEY;esf
10/1/51
cc: DMA Docket File (2)
Mr. Barr
Mr. Lyon

IN REPLY REFER TO:
G-MD-WRG

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

September 26, 1951

Memorandum

To: Robert Waskey, Defense Minerals Administration

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

Subject: Application DMA-1433X from George C. Bland for exploration of the Beecher Mine, Custer County, South Dakota.

This application was denied on June 14, 1951 because the work proposed was entirely development. In a letter of September 17, Mr. George V. Bland, the father and partner of George C. Bland, the applicant, protested this decision and requested that the application be reconsidered and that a field examination be made.

An examination of the application will show that Mr. Bland's position is untenable. He states, (MF-103, no. 18) that "Blocked out or semi-blocked out reserves are about 22,000 tons of 4 percent spodumene worth approximately $550,000 at present market value." He also implies that the reserves of amblygonite, beryl, columbite, and mica are large. The reserve estimates in the Geological Survey files substantiate this, with 18,000 to 25,000 tons of spodumene, 7,000 pounds of sheet mica, 14,000 tons of amblygonite, and 1,400 tons of beryl above the 35' depth that was assumed by Mr. Bland. Not all of this may be recoverable, however.

With over ½ million dollars in known reserves, there seems to be little reason for further exploration. Mr. Bland shouldn't expect to have any exploration approved unless he can show that the known reserves are inadequate for some reason or other. I doubt that he could do this.

Even if one were to assume that further exploration is needed, the program outlined by Mr. Bland would be inacceptable for the following reasons:

1. The digging of two 100-foot long cuts, 18 feet deep would be nothing but open cut mining with the Government paying 90% of the costs.

2. The 50-foot shaft near the south end could not be considered exploration, as the dike has already been shown by means of excavations and drill holes to persist to at least 50 feet.

3. The deepening of the 75-foot shaft to 125 feet might be classified as exploration, but such exploration seems entirely unnecessary considering the known reserves.

There seems to be no reason to consider the proposed work to be exploration. There still seems to be no reason to refer the application to the field, as the data in the application itself justify a denial.

Mr. Bland is a graduate engineer and presumably understands the difference between exploration and development as stated in the letter of denial. His request for re-consideration of the application probably results from something other than ignorance. Perhaps a letter pointing out the Government's objections to his program, taken item by item, would quiet him.

W R Griffitts

W. R. Griffitts

IN REPLY REFER TO:

G-MD-WRG

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

September 26, 1951

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copy to: DMA files

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W. R. Griffitts

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

a.E.C.

June 14, 1951

Memorandum

To: Executive Secretary, DMA

From: Chief, Industrial Minerals Branch, DMA

Subject: DMA-1433X, $38,940 90% Beryl and Columbite
Geo. C. Bland
Hill City, South Dakota

It is recommended that subject application be denied for the following reason:

1. Program prepared by applicant is entirely development and production, or preparation for production, and does not come within the scope of exploration as defined in Section 8 of MO-5.

James A. Barr

James A. Barr, Sr.

Approved:

Tom Lyon

Tom Lyon, Director
Supply Division

FILE COPY
SURNAME:

Work Barr

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

RWASKEY:mp
cc: Mr. Strobel
Mr. Barr
DMA Files

June 14, 1951

Mr. Geo. C. Bland
Hill City, South Dakota

Dear Mr. Bland:

Subject: DMA-1433X

Your application for aid for an exploration project on Beryl and Columbite deposits located near Custer, South Dakota, and docketed as DMA-1433X, has been reviewed by this office.

Exploration projects as defined in MO-5, Regulations Governing Government Aid in Defense Exploration Projects, must be confined to work necessary to search for unknown or undeveloped sources of strategic minerals: the work must be confined to a reasonable delineation and sampling of the ore and may not include work prosecuted primarily for mining or preparation for mining.

A very careful study of your proposal revealed the following:

1. The property has been extensively explored, developed and mined in the past and apparently is in production at this time. Need for and justification of additional exploration work has not been shown.

2. The work program proposed is entirely development, mining or preparation for mining, and does not come within the scope of Exploration under MO-5.

Under these circumstances, your application for exploration aid to the extent of 90% of $38,940 is denied. Should additional information become available, we would be glad to have you resubmit your proposal for consideration.

You perhaps know that Government loans are available under certain circumstances for Development and Mining purposes. Your project might merit consideration for this type of aid providing sufficient reserves can be substantiated. Appropriate forms are enclosed should you so wish to apply.

Sincerely yours,
Tom Lyon
Tom Lyon, Director
Supply Division

Enclosures

FILE COPY
SURNAME:

Barr

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

June 14, 1951

Memorandum

To: Executive Secretary, DMA

From: Chief, Industrial Minerals Branch, DMA

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Geo. C. Bland
Hill City, South Dakota

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1. Program prepared by applicant is entirely development and production, or preparation for production, and does not come within the scope of exploration as defined in Section 8 of MO-5.

James Barr
M. P.
James A. Barr, Sr.

Approved:

Tom Lyon
Tom Lyon, Director
Supply Division

JABARR:mp

cc: Mr. Barr
DMA Files

FILE COPY
SURNAME:

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

June 11, 1951

Mr. George C. Bland
Hill City, South Dakota

Subject: DMA-1433X
Re: Exploration Loan
Beecher Mine

Dear Mr. Bland:

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

The application was assigned Docket Number DMA-1433X and referred to Mr. James A. Barr, Chief, Industrial Minerals Branch on June 4, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1433X.

Sincerely yours,

LANDON F. STROBEL
JHB

Landon F. Strobel
Executive Secretary

LFSTROBEL:hb

Copy to: Mr. Strobel
Mr. Barr
Mr. Lyon
Files

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 1433X

Date received 5-31-51

Participation

Geo. C. Bland.
Hill City. So. Dak.

Name and address of applicant

Date 5/28/51.

FILL IN THIS BLOCK

Date of application 5/28/51.

Estimated cost $38,940

Mineral or metal Beryl and columbite

Percentage of Government participation 90%

Location of mine Five miles s-s.ea of Custer, So. Dak. In Custer County.

Date of filing MF-100

DMA Docket Number, if available 1433X

## 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? ~~Individuals~~ Partnership.

*2. If a partnership, state names and addresses of partners. Geo. V. Bland. (Father).

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

*4. Describe the mining and geological experience of (a) the applicant, and (b) the person or persons who will manage the project. See appended statement.

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

6. If owner, state what claims, liens, or encumbrances, if any, are against the property.

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

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

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

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

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

16—64067-1

## THE PROPERTY

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

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

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

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

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

## THE EXPLORATION

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

    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. Appended.

## 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. Appended.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. Appended.

## 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 George C Bland (Signature of authorized official) |
| 5/28/51. (Date) | Lessee and Miner (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

#1.

APPENDED STATEMENT.
Beecher Mine. Geo. C. Bland. Lessee.

4 (a). Mining pegmatite deposits a total of approximately ten years since 1937. (b).

(b). Now engaged on a partnership basis with father, Geo. V. Bland who is a graduate of the Mo. School of Mines (1904) and has many years mining experience in Mo., Alaska, Colo., NewMexico, and So. Dak. Has engaged in pegmatite mining in Black Hills since 1926 in the Tinton and Southern Hills areas. Also has been engaged in successful mercantile operations at Hill City for 20 years up to 1950.

10 (b). Patented property, M. S. 2028.

12. 5 miles s. e. of Custer, S. D. nearest accessible shipping point on C. B. and Q. R. R. County road into Custer, partially gravelled, well graded and usable throughout the year.

13. Water needs limited to perhaps 500 gals. per ~~year~~ day and provided by a well on the property. Anticipated amount of power approximately 400 used intermittently by various units, costing approximately $15 per day.

14. Log cabin 15x30. Small frame cabin 12x15, another 10x10, a shaft house 15x25

15. Ore is sorted out and trucked to Custer. No milling required except in cleaning of scrap mica and projected cleaning of sorted spodumene.

16 (a). Property has been worked intermittently since 1923, due to wide fluctuations in markets for pegmatite minerals. Has been in operation most of the time. Work on the property has been nearly all open cut from which some 30,000 tons of material has been removed. Some underground work has been done from the bottom of a 75 ft. shaft, consisting of a short drift and some stoping. Production has been approximately;

| | | |
|---|---|---|
| Amblygonite..... | 1200 tons. | |
| BERYL. ..... | 250 " . | |
| Spodumene ..... | 150 " | |
| COLUMBITE..... | 25 " . | (50,000 lbs.) |
| Scrap mica ..... | 4000 " . | |
| Strategic mica. ..... | 50 lbs. | |

Large quanities of iron stained lepidolite and feldspar are present, but are unsalable until they can be processed for the elimination of the iron oxide.

(b). Neglible. Large scale operations are planned on the adjoining Beecher Two claim- an immense body of disseminated spodumene ore- by the Lithium Corporation, Inc., of Minneapolis.

17. New operations just getting underway. Production so far in 1951, 25 tons of Spodumene (4%), value $600. Beryl 3000 lbs, value $420. COLUMBITE (75% combined oxides of Cb, and Ta.) 190 lbs. Value $150. Cost of production hard to assess as much of expense has gone to getting underway.- no separate accounts have been set up as yet on development, operation, etc. At present, operations are on a better than sustaining basis.

18. (c). Blocked out or semi-blocked out reserves are about 22,000 tons of 4% spodumene worth approximately $550,000 at present market value. This is figured on abasis of 100 ft. in width, 800 ft. in length, and 35 ft. depth, the whole averaging 10 % Spodumene containing 4% Lithia for which we are now receiving $6.00 per unit on a five year contract. We have a shaft 75 ft. deep ~~which shows Spodumene fully as~~

referred to under 16 (a) with small stope where the spodumene is fully as abundant as in the open cuts, and of a better grade. We believe that it is not unreasonable to expect a tonnage of not less than 50,000 tons of spodumene worth $1,200,000 at our present contract price. As to reserves of BERYL, COLUMBITE, amblygonite, etc. it is out of the question to make any estimates, but certainly a very substantial quanity of these ores will be encountered in taking out the spodumene referred to above. Based on past production and ~~xxxxx18x(a)xxx~~The present peices the mine has produced per ton out of the 33,000 tons mined, the following:-

| | | | |
|---|---|---|---|
| RECOVERED | Amblygonite | $2.40 | per ton of ore mine |
| | Spodumene | 2.40 | " " " " " |
| | BERYL | 2.10 | " " |
| | COLUMBITE | 1.33 | " " |
| | Mica | .16 | " " |
| | Miscellaneous | .02 | " " |
| | | $8.41 | " " |
| | Less 15% royalty | 1.26 | |
| | | 7.15 | " " |

We do not anticipate nearly as heavy a production of amblygonite in the future, but we do expect the production of lepidolite to more than offset this as many thousands of tons of lepidolite are indicated. The cost of mining, a purely quarrying operation, can be held to a very low cost. The cost of sorting will probably be the larger item.

18 (a). The deposit is a typical pegmatite dike, opened up more or less over its outcrop of 800 feet and averages over 100 feet wide being that much or more in width at all points.

20. Areas hitherto producing the bulk of beryl and columite will be favored, with spodumene being a heavy supporting mineral. Also Lepidolite Spodumene occurs fairly uniform throughout the dike except for a 15,000 ton block of iron stained feldspar.

21. See end of this statement. Page 3.

22. The geology of this ore bearing pegmatite dike has been well covered by Dr. D, Jerome Fisher of ~~Northwestern~~ Chicago Univ. Univiversity in a report to the So. Dak. Geological Survey entitled "Preliminary Report on some pegmatites of the Custer District." "Report of Investigation No. 44. University of S. D. , Vermillion, S. D. June 1942 " (Pages 26-32). Also contains maps of property.

23 (a). 5 men. One loader operator at $2.00 per hour. 2 $2.00
Two miners..... " 1.60 " " . 3.20
Two ore sorters and
miscellaneous chores " 1.25 " " . 2.50
$7.70

(b). Supervisor " 2.25 " " .

(c). Repairs to present buildings. ..... $300.00

(d). Sorting and processing building. ....$1500.00

(e). Jack Hammer .....$400.00
Sump pump ..... 500.00
Hough mechanical loader..... 4500.00
Air hose ..... 100.00
Picking belt..... 500.00
$6000.00

23 (e). (cont).

| | | |
|---|---|---|
| (f). | Sullivan air compressor (portable). 240 cu. ft. | $50/mo. |
| | 1½ ton International truck. ..... | 100/mo. |
| | Electric welder and light plant..... | 10/mo. |
| | Tools, drill steel, pipe, etc. ..... | 10/mo. |
| (h). | Dynamites, caps and fuse ..... | 100/mo. |
| | Gasoline, Diesel oil, etc... ..... | 250/mo. |
| | Miscellaneous supplies ..... | 75/mo. |
| (i). | Cost of power... fuel listed under (h). | |
| | Repairs to equipment, upkeep, etc..... | 100/mo. |

24. It is estimated that it will require a years time to complete the work specified.

| | |
|---|---|
| Labor for 12 months..... | $24,000. |
| Repairs..(23c)..... | 300. |
| New facilities (23 d)..... | 1500.. |
| Machinery.... (23 e) ..... | 6000.00 |
| Rent on equipment (23g) ..... | 2,040. |
| Supplies. (23 h) ..... | 3,900. |
| Additional power cost (23 i) ..... | 1,200. |
| | $38,940 |

21. The work contemplated consists of two 100 ft. long cuts along the center of the dike eighteen feet deep in the two areas most favorable for BERYL and COLUMBITE. One shaft near south end where COLUMBITE HAS BEEN MOST ABUNDANT and deepening of 75 ft. shaft near north end where BERYL is abundant to a depth of 125 feet (50 feet of new additional sinking). 50 ft. deep.

Time limit- 12 months.

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 1433X

Date received 5-31-51

Participation

Geo. C. Bland.
Hill City. So. Dak.

Name and address of applicant

Date 5/28/51.

FILL IN THIS BLOCK

Date of application 5/28/51.

Estimated cost $38,940

Mineral or metal Beryl and columbite

Percentage of Government participation 90%

Location of mine Five miles s-s.ew of Custer, So. Dak. In Custer County.

Date of filing MF-100

DMA Docket Number, if available 1433X

## 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? ~~Individually~~ Partnership.

*2. If a partnership, state names and addresses of partners. Geo. V. Bland. (Father).

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

*4. Describe the mining and generally business experience of (a) the applicant, and (b) the person or persons who will manage the project. See appended statement.

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

6. If owner, state what claims, liens, or encumbrances, if any, are against the property.

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

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

16—84067-1

## THE PROPERTY

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

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

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

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

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

## THE EXPLORATION

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

    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. **Appended.**

## 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. **Appended.**
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. **Appended.**

## 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.

By George G. Bland
(Signature of authorized official)

(Name of company)

5/28/51.
(Date)

Lessee and Miner.
(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

#1.

# APPENDED STATEMENT.

Beecher Mine. Geo, C. Bland. Lessee.

4 (a). Mining pegmatite deposits a total of approximately ten years since 1937. (b).

(b). Now engaged on a partnership basis with father, Geo. W. Bland who is a graduate of the Mo. School of Mines (1904) and has many years mining experience in Mo., Alaska, Colo., NewMexico, and So. Dak. Has engaged in pegmatite mining in Black Hills since 1926 in the Tinton and Southern Hills areas. Also has been engaged in successful mercantile operations at Hill City for 20 years up to 1950.

10 (b). Patented property, M. S. 2038.

12. 5 miles s. e. of Custer, S. D. nearest accessable shipping point on C. B. and Q. R. R. County road into Custer, partially gravelled, well graded and usable throughout the year.

13. Water use is limited to perhaps 500 gals. per day and provided by a well on the property. Anticipated amount of power approximately 100 HP used intermittently by various units, costing approximately $25 per day.

14. Log cabin 15x30. Small frame cabin 12x15, another 12x10, a shaft house 15x25

15. Ore is sorted out and trucked to Custer. No milling required except in cleaning of scrap mica and projected cleaning of sorted spodumene.

16 (a). Property has been worked intermittently since 1923, due to wide fluctuations in markets for pegmatite minerals. Has been in operation most of the time. Work on the property has been nearly all open cut from which some 30,000 tons of material has been removed. Some underground work has been done from the bottom of a 75 ft. shaft, consisting of a short drift and some stoping. Production has been approximately;

| | | |
|---|---|---|
| Amblygonite..... | 1200 tons. | |
| BERYL. ..... | 250 " . | |
| Spodumene ..... | 150 " . | |
| COLUMBITE..... | 25 " . | (50,000 lbs.) |
| Horse mica ..... | 400 " . | |
| Strategic mica. ..... | 50 lbs. | |

Large quantities of iron stained lepidolite and feldspar are present, but are unsalable until they can be processed for the elimination of the iron oxide.

(b). Negligible. Large scale operations are planned on the adjoining Beecher Two claim- an immense body of disseminated spodumene ore- by the Lithium Corporation, Inc., of Minneapolis.

17. New operations just getting underway. Production so far in 1951, 25 tons of Spodumene (4%), value $500. Beryl 3000 lbs, value $420. COLUMBITE (75% combined oxides of Cb, and Ta.) 190 lbs. Value $150. Cost of production hard to assess as much of expense has gone to getting underway.- no separate accounts have been set up as yet on development, operation, etc. At present, operations are on a better than sustaining basis.

18.(c) Blocked out or semi-blocked out reserves are about 22,000 tons of 4% spodumene worth approximately $550,000 at present market value. This is figured on abasis of 100 ft. in width, 800 ft. in length, and 35 ft. depth, the whole averaging 10 % Spodumene containing 4% Lithia for which we are now receiving $6.00 per unit on a five year contract. We have a shaft 78 ft. deep which has been exploited successfully as

referred to under 16 (a) with small stope where the spodumene is fully as abundant as in the open cuts, and of a better grade. We believe that it is not unreasonable to expect a tonnage of not less than 50,000 tons of spodumene worth $1,200,000 at our present contract price. As to reserves of BERYL, COLUMBITE, amblygonite, etc. it is out of the question to make any estimates, but certainly a very substantial quanity of these ores will be encountered in taking out the spodumene referred to above. Based on past production and xxxxxx(a) The present prices the mine has produced per ton out of the 33,000 tons mined, the following;-

| | | | |
|---|---|---|---|
| RECOVERED | Amblygonite | $2.40 | per ton of ore mine |
| | Spodumene | 2.40 | " " " " |
| | BERYL | 2.10 | " " |
| | COLUMBITE | 1.33 | " " |
| | Mica | .16 | " " |
| | Miscellaneous | .02 | " " |
| | | $8.41 | " " |
| | Less 15% royalty | 1.26 | |
| | | 7.15 | " " |

We do not anticipate nearly as heavy a production of amblygonite in the future, but we do expect the production of lepidolite to more than offset this as many thousands of tons of lepidolite are indicated. The cost of mining, a purely quarrying operation, can be held to a very low cost. The cost of sorting will probably be the larger item.

18 (a). The deposit is a typical pegmatite dike, opened up more or less over its outcrop of 800 feet and averages over 100 feet wide being that much or more in width at all points.

20. Areas hitherto producing the bulk of beryl and columbite wil be favored, with spodumene being a heavy supporting mineral. Spodumene occurs fairly uniform throughout the dike except for a 15,000 ton block of iron stained feldspar. Also Lepidolite.

21. – See end of this statement. Page 3.

22. The geology of this ore bearing pegmatite dike has been well covered by Dr. D. Jerome Fisher of ~~Northwestern~~ Chicago University in a report to the So. Dak. Geological Survey entitled "Preliminary Report on some pegmatites of the Custer District." "Report of Investigation No. 34. University of S. D., Vermillion, S. D. June 1942" (Pages 26-32). Also contains maps of property.

23 (a). 5 men. One loader operator at $2.00 per hour. $ 2.00
Two miners..... " 1.60 " " . 3.20
Two ore sorters and
miscellaneous chores " 1.25 " " . 2.50
$7.70

(b). Supervisor " 2.25 " " .

(c). Repairs to present buildings. ..... $300.00

(d). Sorting and processing building. .... $1500.00

(e). Jack Hammer ..... $400.00
Sump pump ..... 500.00
Hough mechanical loader..... 4500.00
Air hose ..... 100.00
Picking belt..... 500.00
$6000.00

23 (e). (cont).

(g). Sullivan air compressor (portable). 240 cu. ft. $50/mo.
1½ ton International truck. ..... 100/mo.
Electric welder and light plant..... 10/mo.
Tools, drill steel, pipe, etc. ..... 10/mo.

(h). Dynamite, caps and fuse ..... 100/mo.
Gasoline, Diesel oil, etc... ..... 250/mo.
Miscellaneous supplies ..... 75/mo.

(i). Cost of power... fuel listed under (h).
Repairs to equipment, upkeep, etc..... 100/mo.

24. It is estimated that it will require a years time to complete the work specified.

fix

| | |
|---|---|
| Labor for 12 months..... | $24,000. |
| Repairs..(23c)..... | $ 300. |
| New facilities (23 d)..... | 1500.. |
| Machinery.... (23 e) ..... | 6900.00 |
| Rent on equipment (23g) ..... | 2,000. |
| Supplies. (23 h) ..... | 3,900. |
| Additional power cost (23 i) ..... | 1,200. |
| | 138,940 |

21. The work contemplated consists of two 100 ft. long cuts along the center of the dike eighteen feet deep in the two areas most favorable for BERYL and COLUMBITE. One shaft near south end where COLUMBITE HAS BEEN MOST ABUNDANT and deepening of 75 ft. shaft near north end where BERYL is abundant to a depth of 125 feet (50 feet of new additional sinking). 50 ft. deep.

Time limit- 12 months.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 31 1951
LAUREN F. STROBEL
Executive Secretary

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA-1433X

Date received 5-31-51

Participation

Geo. C. Bland.
Hill City. So. Dak.

Name and address of applicant

Date 5/28/51.

FILL IN THIS BLOCK

Date of application 5/28/51.

Estimated cost $38,940

Mineral or metal Beryl and columbite

Percentage of Government participation 90%

Location of mine Five miles s-s.~~ee~~ of Custer, So. Dak. In Custer County.

Date of filing MF-100

DMA Docket Number, if available 1433X

## 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? ~~Individuals~~ Partnership.

*2. If a partnership, state names and addresses of partners. Geo. V. Bland. (Father).

*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 appended statement.

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

6. If owner, state what claims, liens, or encumbrances, if any, are against the property.

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

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

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

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

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

## THE PROPERTY

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

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

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

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

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

## THE EXPLORATION

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

    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. Appended.

## 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. Appended.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. Appended.

## 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 George C. Bland (Signature of authorized official) |
| 5/28/51. (Date) | Lessee & Miner. (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

#1.

APPENDED STATEMENT.

Beecher Mine. Geo. C. Bland. Lessee.

4 (a). Mining pegmatite deposits a total of approximately ten years since 1937. (b).

(b). Now engaged on a partnership basis with father, Geo. V. Bland who is a graduate of the Mo. School of Mines (1904) and has many years mining experience in Mo., Alaska, Colo., NewMexico, and So. Dak. Has engaged in pegmatite mining in Black Hills since 1926 in the Tinton and Southern Hills areas. Also has been engaged in successful mercantile operations at Hill City for 20 years up to 1950.

10 (b). Patented property, M. S. 2028.

12. 5 miles s. e. of Custer, S. D. nearest accessible shipping point on C. B. and Q. R. R. County road into Custer, partially gravelled, well graded and usable throughout the year.

13. Water needs limited to perhaps 500 gals. per day and provided by a well on the property. Anticipated amount of power approximately 400 H.P. used intermittently by various units, costing approximately $15. per day.

14. Log cabin 15x30. Small frame cabin 12x15, another 10x10, a shaft house 15x25

15. Ore is sorted out and trucked to Custer. No milling required except in cleaning of scrap mica and projected cleaning of sorted spodumene.

16 (a). Property has been worked intermittently since 1923, due to wide fluctuations in markets for pegmatite minerals. Has been in operation most of the time. Work on the property has been nearly all open cut from which some 30,000 tons of material has been removed. Some underground work has been done from the bottom of a 75 ft. shaft, consisting of a short drift and some stoping. Production has been approximately;

| | | |
|---|---|---|
| Amblygonite..... | 1200 tons. | |
| BERYL. ..... | 250 " . | |
| Spodumene ..... | 150 " | |
| COLUMBITE..... | 25 " . | (50,000 lbs.) |
| Scrap mica ..... | 400 " . | |
| Strategic mica. ..... | 50 lbs. | |

Large quanities of iron stained lepidolite and feldspar are present, but are unsalable until they can be processed for the elimination of the iron oxide.

(b). Neglible. Large scale operations are planned on the adjoining Beecher Two claim- an immense body of disseminated spodumene ore- by the Lithium Corporation, Inc., of Minneapolis.

17. New operations just getting underway. Production so far in 1951, 25 tons of Spodumene (4%), value $600. Beryl 3000 lbs, value $420. COLUMBITE (75% combined oxides of Cb, and Ta.) 190 lbs. Value $150. Cost of production hard to assess as much of expense has gone to getting underway.- no separate accounts have been set up as yet on development, operation, etc. At present, operations are on a better than sustaining basis.

18. (c) Blocked out or semi-blocked out reserves are about 22,000 tons of 4% spodumene worth approximately $550,000 at present market value. This is figured on a basis of 100 ft. in width, 800 ft. in length, and 35 ft. depth, the whole averaging 10 % Spodumene containing 4% Lithia for which we are now receiving $6.00 per unit on a five year contract. We have a shaft 75 ft. deep ~~which shows Spodumene fully as~~

referred to under 16 (a) with small stope where the spodumene is fully as abundant as in the open cuts, and of a better grade. We believe that it is not unreasonable to expect a tonnage of not less than 50,000 tons of spodumene worth $1,200,000 at our present contract price. As to reserves of BERYL, COLUMBITE, amblygonite, etc. it is out of the question to make any estimates, but certainly a very substantial quanity of these ores will be encountered in taking out the spodumene referred to above. Based on past production and ~~xxxxx18 (a) xxx The~~ present prices the mine has produced per ton out of the 33,000 tons mined, the following;-

| | | | |
|---|---|---|---|
| RECOVERED | Amblygonite | $2.40 | per ton of ore mine |
| | Spodumene | 2.40 | " " " " " |
| | BERYL | 2.10 | " " |
| | COLUMBITE | 1.33 | " " |
| | Mica | .16 | " " |
| | Miscellaneous | .02 | " " |
| | | $8.41 | " " |
| | Less 15% royalty | 1.26 | |
| | | 7.15 | " " |

We do not anticipate nearly as heavy a production of amblygonite in the future, but we do expect the production of lepidolite to more than offset this as many thousands of tons of lepidolite are indicated. The cost of mining, a purely quarrying operation, can be held to a very low cost. The cost of sorting will probably be the larger item.

18 (a). The deposit is a typical pegmatite dike, opened up more or less over its outcrop of 800 feet and averages over 100 feet wide being that much or more in width at all points.

20. Areas hitherto producing the bulk of beryl and columbite wil be favored, with spodumene being a heavy supporting mineral. Spodumene occurs fairly uniform throughout the dike except for a 15,000 ton block of iron stained feldspar. also lepidolite.

21 - See end of this statement. Page 3.

22. The geology of this ore bearing pegmatite dike has been well covered by Dr. D. Jerome Fisher of ~~Northwestern~~ Chicago University ~~University~~ in a report to the So. Dak. Geological Survey entitled "Preliminary Report on some pegmatites of the Custer District." "Report of Investigation No. 44. University of S. D., Vermillion, S. D. June 1942" (Pages 26-32). Also contains maps of property.

23 (a). 5 men. One loader operator at $2.00 per hour. 2 $2.00
Two miners..... " 1.60 " " . 3.20
Two ore sorters and
miscellaneous chores " 1.25 " " . 2.50
$7.70

(b). Supervisor " 2.25 " " .

(c). Repairs to present buildings. ..... $300.00

(d). Sorting and processing building. ....$1500.00

(e). Jack Hammer .....$400.00
Sump pump ..... 500.00
Hough mechanical loader..... 4500.00
Air hose ..... 100.00
Picking belt..... 500.00
$6000.00

23 (e). (cont).

| | | |
|---|---|---|
| (g). | Sullivan air compressor (portable). | 240 cu. ft. $50/mo. |
| | 1½ ton International truck. ..... | 100/mo. |
| | Electric welder and light plant..... | 10/mo. |
| | Tools, drill steel, pipe, etc. ..... | 10/mo. |
| (h). | Dynamite, caps and fuse ..... | 100/mo. |
| | Gasoline, Diesel oil, etc... ..... | 250/mo. |
| | Miscellaneous supplies ..... | 75/mo. |
| (i). | Cost of power... fuel listed under (h). | |
| | Repairs to equipment, upkeep, etc..... | 100/mo. |

24. It is estimated that it will require a years time to complete the work specified.

| | |
|---|---|
| Labor for 12 months..... | $24,000. |
| Repairs..(23c)..... | 300. |
| New facilities (23 d)..... | 1500.. |
| Machinery.... (23 e) ..... | 6000.00 |
| Rent on equipment (23g) ..... | 2,040. |
| Supplies. (23 h) ..... | 3,900. |
| Additional power cost (23 i) ..... | 1,200. |
| | $38,940 |

21. The work contemplated consists of two 100 ft. long cuts along the center of the dike, eighteen feet deep, in the two areas most favorable for BERYL and COLUMBITE. One shaft near south end where COLUMBITE HAS BEEN MOST ABUNDANT and deepening of 75 ft. shaft near north end where BERYL is abundant, to a depth of 125 feet (50 feet of new additional sinking). 50 ft. deep.

Time limit- 12 months.

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 1/33X

Date received 5-31-51

Participation

Geo. C. Bland.
Hill City. So. Dak.

Name and address of applicant

Date 5/28/51.

FILL IN THIS BLOCK

Date of application 5/28/51.

Estimated cost $38,940

Mineral or metal Beryl and columbite

Percentage of Government participation 90%

Location of mine Five miles s-s.ea of Custer, So. Dak. In Custer County.

Date of filing MF-100

DMA Docket Number, if available 1/33X

## 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? Individuaix Partnership.

*2. If a partnership, state names and addresses of partners. Geo. V. Bland. (Father).

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

*4. Describe the m[illegible] and [illegible] of (a) the applicant, and (b) the person or persons who will manage the project. See appended statement.

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

6. If owner, state what claims, liens, or encumbrances, if any, are against the property.

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

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

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

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

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

16—64067-1

## THE PROPERTY

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

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

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

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

*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 appended statement.

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

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

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

*16. History: appended.

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

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

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

*17. Production: Appended.

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

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

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

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

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

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

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

## THE EXPLORATION

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

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

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. Appended.

## 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: Appended.

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

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

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

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

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

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

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

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

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

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

## 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 George C. Bland
(Signature of authorized official)

5/28/51
(Date)

Lessee and Miner
(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

APPENDED #1. STATEMENT.
Beecher Mine. Geo. C. Bland. Lessee.

4 (a). Mining pegmatite deposits a total of approximately ten years since 1937. (b).

(b). Now engaged on a partnership basis with father, Geo. V. Bland who is a grad te of the Mo. School of Mines (1904) and has many years mining experience in Mo., Alaska, Colo., New Mexico, and So. Dak. Has engaged in pegmatite mining in Black Hills since 1923 in the Custer and Northern Hills areas. Also has been engaged in successful mercantile operations as Hill City for 20 years up to 1930.

10 (b). Patented property. M. S. 5078.

12. 8 miles s. e. of Custer, S. D. nearest accessible shipping point on C. B. and Q. R. R. County road into Custer, partially travelled, well graded and usable throughout the year.

13. Water near limited to perhaps 500 gals. per day and provided by a well on the property. Anticipated amount of power approximately 400 HP used intermittently by various units, costing approximately $15 per day.

14. Log cabin 15x30. Small frame cabin 12x16, another 10x10, a shaft house 16x25

15. Ore is sorted out and trucked to Custer. No milling required except in cleaning of scrap mica and projected cleaning of sorted spodumene.

16 (a). Property has been worked intermittently since 1923, due to wide fluctuations in markets for pegmatite minerals. Has been in operation most of the time. Work on the property has been nearly all open cut from which some 30,000 tons of material has been removed. Some underground work has been done from the bottom of a 75 ft. shaft, consisting of a short drift and some stoping. Production has been approximately:

| | | |
|---|---|---|
| Amblygonite..... | 1200 tons. | |
| Beryl. ..... | 200 " . | |
| Spodumene ..... | 150 " | |
| Columbite..... | 26 " . | (56,000 lbs.) |
| Scrap mica ..... | 4000 " . | |
| Strategic mica. ..... | 50 lbs. | |

Large quantities of iron stained lepidolite and feldspar are present, but are unsalable until they can be processed for the elimination of the iron oxide.

(b). Negligible. Large scale operations are planned on the adjoining Beecher Two claim- an immense body of disseminated spodumene ore- by the Lithium Corporation, Inc., of Minneapolis.

17. New operations just getting underway. Production so far in 1951, 20 tons of Spodumene (4%), value $600. Beryl 3000 lbs, value $420. COLUMBITE (75% combined oxides of Cb, and Ta.) 190 lbs. Value $150. Cost of production hard to assess as much of expense has gone to getting underway.- no separate accounts have been set up as yet on development, operation, etc. At present, operations are on a better than sustaining basis.

18. (c) Blocked out or semi blocked out reserves are about 22,000 tons of 4% spodumene worth approximately $550,000 at present market value. This is figured on basis of 100 ft. in width, 600 ft. in length, and 35 ft. depth, the whole averaging 10% Spodumene containing 4% lithia for which we are now receiving $6.00 per unit on a five year contract. We have a shaft 75 ft. deep ~~which has been spodumene fully an~~

referred to under 16 (a) with small stope where the spodumene is fully as abundant as in the open cuts, and of a better grade. We believe that it is not unreasonable to expect a tonnage of not less than 50,000 tons of spodumene worth $1,200,000 at our present contract price. As to reserves of BERYL, COLUMBITE, amblygonite, etc. it is out of the questiàn to make any estimates, but certainly a very substantial quanity of these ores will be encountered in taking out the spodumene referred to above. Based on past production and ~~xxxxx8x(x)xx~~The present prices the mine has produced per ton out of the 33,000 tons mined, the following;-

| | | | |
|---|---|---|---|
| R | Amblygonite .......................... | $2.40 | per ton of ore mine |
| E | Spodumene ........................ | 2.40 | " " " " " |
| C | BERYL............................. | 2.10 | " " |
| O | COLUMBITE ........................ | 1.33 | " " |
| V | Mica.............................. | .16 | " " |
| E | Miscellaneous..................... | .02 | " " |
| R | | $8.41 | " " |
| E | Less 15% royalty .................. | 1.26 | |
| D | | 7.15 | " " |

We do not anticipate nearly as heavy a production of amblygonite in the future, but we do expect the production of lepidolite to more than offset this as many thousands of tons of lepidolite are indicated. The cost of mining, a purely quarrying operation, can be held to a very low cost. The cost of sorting will probably be the larger item.

18 (a). The deposit is a typical pegmatite dike, opened up more or less over its outcrop of 800 feet and averages over 100 feet wide being that much or more in width at all points.

20. Areas hitherto producing the bulk of beryl and columbite wil be favored, with spodumene being a heavy supporting mineral. Spodumene → *Also Lepidolite.* occurs fairly uniform throughout the dike except for a 15,000 ton block of iron stained feldspar.

*21. See end of this statement. Page 3.*

22. The geology of this ore bearing pegmatite dike has been well covered by Dr. D. Jerome Fisher of ~~Northwestern~~ *Chicago Univ.* ~~Unixiversity~~ ~~in a~~ report to the So. Dak. Geological Survey entitled "Preliminary Report on some pegmatites of the Custer District." "Report of Investigation No. 44. University of S. D. , Vermillion, S. D. June 1942 " (Pages 26-32). *Also contains maps of property.*

23 (a). 6 men. One loader operator at $2.00 per hour. $2.00
Two miners......... " 1.60 " " . 3.20
Two ore sorters and
miscellaneous chores " 1.25 " " . 2.50
$7.70

(b). Supervisor " 2.25 " " .

(c). Repairs to present buildings. .......... $300.00

(d). Sorting and processing building. ....$1500.00

(e). Jack Hammer ...........................$400.00
Sump pump ........................ 500.00
Hough mechanical loader.......... 4500.00
Air hose ......................... 100.00
Picking belt...................... *500.00*
*$6000.00*

23 (e). (cont).

(g). Sullivan air compressor (portable). 240 cu. ft. $50/mo.
1½ ton International truck. ..... 100/mo.
Electric welder and light plant..... 10/mo.
Tools, drill steel, pipe, etc. ..... 10/mo.

(h). Dynamites, caps and fuse ..... 100/mo.
Gasoline, Diesel oil, etc... ..... 250/mo.
Miscellaneous supplies ..... 75/mo.

(i). Cost of power... fuel listed under (h).
Repairs to equipment, upkeep, etc..... 100/mo.

24. It is estimated that it will require a years time to complete the work specified.

| | |
|---|---|
| Labor for 12 months..... | $24,000. |
| Repairs..(23c)..... | 3 300. |
| New facilities (23 d)..... | 1500.. |
| Machinery.... (23 e) ..... | 6000.00 |
| Rent on equipment (23g) ..... | 2,040. |
| Supplies. (23 h) ..... | 3,900. |
| Additional power cost (23 i) ..... | 1,200. |
| | $38,940 |

21. The work contemplated consists of two 100 ft. long cuts along the center of the dike eighteen feet deep in the two areas most favorable for BERYL and COLUMBITE. One shaft near south end where COLUMBITE HAS BEEN MOST ABUNDANT and deepening of 75 ft. shaft near north end where BERYL is abundant. to a depth of 125 feet (50 feet of new additional sinking). 50 ft. deep.
Time limit- 12 months.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 31 1951
LANDON F. STROBEL
Executive Secretary

Copy.

REFERENCE IS HEREBY MADE TO A CERTAIN LEASE, made and entered into on the 28th day of June, 1946, by and between Ewing C. Bland, party of the first part and George C. Bland, party of the second part, and to an extension of time of said lease to June 28, 1952, dated Dec. 26th, 1946.

It is hereby agreed by both parties hereto that said lease shall be extended from said June 28, 1952 for an additional period of four years or until June 28, 1956.

It is hereby understood that this extension shall be considered as a part of said agreement and that all other stipulations and conditions are to remained unchanged.

In testimony whereof both parties have hereunto set their hands and seals as below indicated, this 24th day of August, 1948.

( Signed) Ewing C. Bland.
George C. Bland.

COPY.

LEASE.

This agreement made and entered into this 28th day of June, 1945, by and between EWING C. BLAND, party of the first part, and GEORGE C. BLAND, party of the second part, WITNESSETH:

WHEREAS, it is the desire of the party of the first part to lease to party of the second part, the mining property known as the ~~Beecher Lode~~ BEECHER LODE NO. ONE or COLLINGWOOD & GREEN MINE, situated in CUSTER COUNTY, SOUTH DAKOTA.

NOW, THEREFORE, the party of the first part, in consideration of the rents, royalties and covenants herein specified, does hereby lease to the party of the second part, said property for a term ending on June 28, 1948.

It is agreed by and between the parties hereto that the party of the second part shall pay promptly to the party of the first part royalties of FIFTEEN PERCENT (15%) on all sales of products from the mine. This agreement, however, shall not cover the removal or the sale of approximately 20,000 tons of feldspar known to be present in the mine and now partly uncovered and also the feldspar in the dumps, and the mica on hand or that which is now exposed and partly uncovered or in the dumps, none of which shall be removed or sold except by the written consent of first party. A royalty of FIFTY (50) CENTS per ton shall be paid on all other Feldspar provided the royalty on such feldspar shall not be less than TEN (10%) PERCENT. All products of the mine as soon as severed from the ground, to the extent of the royalties due therefrom, shall immediately be the property of the party of the first part and shall not be subject to any lien or claim of any person or corporation whatsoever. All products of the mine shall be sold promptly after being extracted therefrom unless the party of the first part shall elect, in the particular instance, to take the royalties in such products themselves.

It is further agreed that the party of the second part will make no sales of the products from the mine except for cash and for less than the highest market price obtainable in the United states, unless by the written consent of the party of the first part and, in no event, shall amblygonite be sold for less than FORTY (40.00) DOLLARS per ton, Spodumene THIRTY (30.00) DOLLARS per ton, Columbite TWENTY FIVE (25) CENTS per pound, Beryl THIRTY (30.00) DOLLARS per ton and Mica EIGHTEEN (18.00) DOLLARS per ton, all f. o. b. railwaycars at CUSTER OR SANATOR, SOUTH DAKOTA. However, lessor shall have the election to take payment of such royalties in ore or products of the mine at any and such times as he shall notify lessee in writing of such election.

IT IS FURTHER AGREED that the party of the second part shall employ not less than 100 man days labor per month for the operation of the mine, from May 1st to December 1st each year and 60 man days labor per month from December 1st to May 1st, during the term of this lease and that he will operate it in a skillful, workmanlike and scientific manner and in a manner necessary to carry on good mining practices and with due regard to the preservation and development of the mining property as a workable mine. Workings shall be kept reasonably clean of rock, rubbish and muck.

All work, labor, improvements, development, construction, and operations of all kinds in or by the terms of this agreement, shall be performed by the lessee in a good and workmanlike manner, and the shafts,

drifts and openings, as well as improvements, shall be adapted to the further and continued operation of said properties, and all such work, development, improvements, construction and operation of said property, and all of the work of mining developing and operating the same shall be at the sole cost, charge and expense of the lessee and the lessor may post and maintain notice of his non-responsibility in and upon said properties in the manner provided by law, if any.

All work shall be done to yield a maximum output of the mine, due regard to the development of the ore bodies, and safety to both miners and workings.

Lessor, by his authorized agents or representatives, shall at all reasonable times during the life of this agreement, have free access to the property herein described, and to the mills or works where ores therefrom may be milled, worked or reduced, for the purpose of examination or inspection, and shall have the right to examine and make copies of all shipping receipts, bills of lading, settlement sheets, correspondence and of all mint and smelter returns, and of assays of ores, concentrates or shipment of products of the mine. A copy of each account of sales or receipts for ore sold shall be furnished by the lessee at lessor's office in the County Court House in Kansas City, Missouri, thirty days after the sale is made.

The lessor agrees to pay all State and County taxes that may be levied or assessed upon, or become a lien upon said property, commencing with the first installment of taxes for the fiscal year 1946, and the lessee shall pay all other taxes.

The lessee covenants and agrees that he will keep, maintain and carry, at their own cost and expense adequate compensation, accident and liability insurance, and such as is required by law and the rules of the Compensation Commission of the State of South Dakota, upon the lives and persons of employees and upon the public, and will pay the premiums for such insurance when the same shall become due and payable, and said lessee in the mining of said property, will at all times, comply fully with all laws regulating or limiting such mining properties.

In the event that the lessee make default in any of the provisions of this lease then the lessor may terminate the lease and lessee, without delay, shall deliver to lessor or his agent or representatives the peaceable possession of all said properties, without liens or encumbrances of any kind.

It is further agreed that the party of the first part shall have no right to control or manage the work of operating the mine, but that such right shall be solely in the party of the second part; that the first party shall have no right to participate in the choice of the means and methods of operating the mine and shall have no voice in the selection of employees, the method by which the mine is worked or any control whatever over the mining property or the activities carried on under this lease thereat or in connection therewith

It is further agreed that the party of the second part will assume all liabilities of any kind that may arise during the period of this lease both as to compensation for injuries to men employed by or through the efforts of the party of the second part, and as to any other obligation incurred by or through the party of the second part directly or indirectly

It is the intention of the parties hereto that the relationship

between the party of the first part and the party of the second part is that of lessor and lessee and not that of partners. It is expressly agreed that the party of the first part shall not pay any losses incurred by the party of the second part in connection with the carrying out the terms of this lease by him and that neither the party of the first part or the party of the second part shall have the power to make any contracts so as to bind either of the parties hereto, except himself, individually.

This lease shall not be assigned by the party of the second part without the written consent of the party of the first part.

IN WITNESS WHEREOF, the parties hereto have set their hands, the day and year first above written.

(Signed). Ewing C. Bland.
Party of the first part.

(Signed). George C. Bland.
Party of the second part.