DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip Mica-Beryl.

CONTROLLED DOCUMENT

~~DMA~~ DMEA. Docket No. ~~2036~~

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EXPLORATION LOAN

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

Routing Slip

Code 370

To:	~~Ind. Minerals~~	Date	~~9-4-51~~
To:	Coordinating Com	Date	9-26
To:	R & R	Date	10-1-51
To:	NONMETALLICS	Date	11-23-51
To:		Date	
To:		Date	
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INT.-DUP. SEC., WASH., D.C. 98868

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

Mr. Julian Wetherbee
22 Wheelock Street
Wilmot, New Hampshire

Subject: Docket No. DMEA-2036 - Mica-Beryl
Wetherbee Prospects
Merrimack County, New Hampshire

Dear Mr. Wetherbee:

Your application for exploration assistance on the Wetherbee Prospects in Merrimack County, New Hampshire, has been reviewed by this office.

Projects for approval by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding mica of strategic quality in quantities that will significantly improve the minerals supply position of the National stockpile. Your request for exploration assistance is not granted because the probability of disclosing minable reserves is not sufficiently encouraging to justify Government participation.

The Defense Minerals Exploration Administration wishes to thank you for making this application, and regrets that we cannot approve the expenditure of United States Government funds for exploration on your property.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

LGHouk:gad
2/4/52
Copy to: Admin. Reading File
Docket File
Mr. Norton, G-228 GSA Bldg.
Mr. Dietrich, 3526
Region VIII (2)
Mr. Houk

Docket & letter of notification to USGS and Bur. Mines, etc.

600

FILE COPY
SURNAME:

F E Johnson

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

BJ

FEB 14 1952

Mr. Julian Wetherbee
22 Wheelock Street
Wilmot, New Hampshire

Re: Docket No. DMEA-2036 (Mica-Beryl)
Wetherbee Prospects
Merrimack County, N. H.

Dear Mr. Wetherbee:

Your application for aid for an exploration project on the Wetherbee Prospects in Merrimack County, New Hampshire, has been reviewed by this office.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding mica of strategic quality in significant quantities to be of importance in the National Defense Program. A review of available information fails to show the probability of disclosing minable reserves on your property, and hence Government participation in the proposed project is not justified.

The Defense Minerals Exploration Administration wishes to thank you for making this application, and regrets that we cannot approve the expenditure of United States Government funds for exploration on your property.

Sincerely yours,

C. O. Mittendorf (for) J.N. 2-14-52

Acting Administrator
Defense Minerals Exploration
Administration

LGHouk/FEJohnson/gad/bih
2/13/52
cc to: Admr's. Reading File
Docket
Mr. Norton, G-228 GSA Bldg.
Mr. Dietrich, 3626
Region VIII (2)
Mr. Houk

FILE COPY
SURNAME:

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

Houk
Norton
Dietrich
Hedges
Thayer

Mr. Julian Wetherbee
22 Wheelock Street
Wilmot, New Hampshire

Subject: Docket No. DMEA-2036 - Mica-Beryl
Wetherbee Prospects
Merrimack County, New Hampshire

Dear Mr. Wetherbee:

Your application for exploration assistance on the Wetherbee Prospects in Merrimack County, New Hampshire, has been reviewed by this office.

Projects for approval by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding mica of strategic quality in quantities that will significantly improve the minerals supply position of the National stockpile. Your request for exploration assistance is not granted because the probability of disclosing minable reserves is not sufficiently encouraging to justify Government participation.

The Defense Minerals Exploration Administration wishes to thank you for making this application, and regrets that we cannot approve the expenditure of United States Government funds for exploration on your property.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

LGHouk:gad
2/4/52
Copy to: Admin. Reading File
Docket File
Mr. Norton, G-228 GSA Bldg.
Mr. Dietrich, 3526
Region VIII (2)
Mr. Houk

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

November 13, 1951

Memorandum

To: Tom Lyon, Chairman
Coordinating Committee

From: Executive Officer
Bureau-Survey Field Team
Region VIII

Subject: Docket No. DMA-2036X - (Mica-Beryl),
Wetherbee Prospects, Merrimack County, N. H.

Attached in quadruplicate is the field report on DMA Docket No. 2036X, the Wetherbee mica-beryl prospects, Merrimack County, New Hampshire. This report was prepared jointly by Messrs. W. T. Millar (USBM) and Glenn W. Stewart (USGS) on an application for exploration.

Attached is correspondence, property map and review of application for exploration assistance which were forwarded with your request for a field investigation under date of October 1, 1951.

In the opinion of the Field Team further exploration is not justified at these prospects.

McHenry Mosier

McHenry Mosier

Attachments

RECEIVED
NOV 20 1951

REPORT ON EXAMINATION BY THE FIELD TEAM FOR EXPLORATORY ASSISTANCE

Wetherbee Prospects, Wilmot, N. H.

Docket No. DMA-2036X

November 1, 1951

Applicant: Mr. Julian Wetherbee
22 Wheelock Street
Keene, New Hampshire

Location: The Wetherbee prospects, approximately 2.9 and 3.3 miles N. 77° W. of the village of Wilmot, are in the town of Wilmot, Merrimack County, New Hampshire. The prospects may be reached from Wilmot village by traveling northwest on the Wilmot-Springfield road for 2.6 miles to a logging road on the left, then follow the logging road approximately 0.3 mile to another road on left and follow this road for 0.1 mile to the No. 1 prospect.

Geologic Summary of Prospect No. 1: Three prospect pits have been made in the pegmatite (see accompanying sketch map). The No. 1 pit, made along the hanging wall, is approximately 20 feet long, 20 feet wide, and ranges from 3 to 12 feet deep. The other two pits were made in step-fashion near the footwall. Pit No. 2 is 30 feet long, 10 to 15 feet wide and has a maximum depth of 8 feet. Pit No. 3 is approximately 15 feet long, 12 feet wide, and has a maximum depth of 5 feet.

The wall rock consists of a biotite-muscovite granite (Concord granite ?) and the Kinsman quartz monzonite. The strike of the foliation is N. 60° W. and dips 75° SW.

The pegmatite has a strike length of more than 100 feet and the outcrop width averages 40 to 50 feet. The pegmatite strikes N. 35° E. and dips northwest. The dip of the hanging wall contact is 45° NW. The footwall may have a gradational contact with the granitic wall rock. In general the pegmatite is composed of coarse-grained perthite, quartz, plagioclase, muscovite, and biotite. Accessary minerals are tourmaline, garnet, and beryl. In places fine-grained graphic granite is abundant. Much of the muscovite occurs with biotite in lath-shaped crystals. Patches of aplitic and granitic material occur irregularly in the pegmatite, but are most abundant along the footwall side where they may occur as remnants of the wall rock.

The pegmatite zones consist of a fine-grained border zone 1 to 4 inches thick, a coarse-grained perthite-quartz-plagioclase-muscovite-biotite wall zone, and a coarse-to very coarse-grained perthite-quartz core. The exact thickness of the wall zone and core cannot be determined. However, the core is at least 5 feet thick and about 15 feet long in Pits No. 2 and No. 3.

Economic Minerals: The books of muscovite mica average 2 to 3 inches and one-half inch thick. One book was 6 inches long and 1 inch thick. Most of the muscovite is intimately mixed with biotite in the small books and in the larger lath-shaped crystals which are as much as one foot long and 3 to 4

inches broad. The book mica is generally flat and hard, but is marred by ruling and reeving.

Approximately 20 to 30 crystals of blue-green beryl are reported to have been removed from Pit No. 3. The average length of the crystals was about 4 inches and the average diameter 1 to 2 inches. The beryl is associated with quartz in the perthite-quartz core.

Summary and Conclusions: Tests have not been made to determine the amount of recoverable sheet mica from the mine run mica, but due to the abundant biotite and structural imperfection, the estimated recovery of sheet mica would be less than one percent. Also, the estimated recovery of beryl would be a small fraction of one percent.

In accordance with the data obtained from this investigation, the geologic indications of the pegmatites on this property are not favorable for beryl and mica production in sufficient quantities to justify further exploration. The ratio of hand sorted feldspar recovered from the run of the mine in the most recent test made by the owner is estimated to be about 1:4. It is not considered that sufficient feldspar can be recovered to defray the expenses for mining the limited amount of beryl and mica which may be expected. Furthermore, it is considered that the previous exploratory work is sufficient for an experienced operator to determine the justification of development.

General Summary of Prospect No. 2: A prospect pit, approximately 0.4 mile west of the No. 1 prospect, was made in 1936. It is about 10 feet wide, 10 feet long, and is 5 feet deep. The pit appears to be located on the footwall of the pegmatite which strikes N. 50° E. and dips about 45° NW. The wall rock was not exposed near the pegmatite.

The pegmatite is at least 100 feet long and approximately 50 feet wide in places. It is composed of medium to coarse-grained perthite, quartz, plagioclase, muscovite, and biotite; and accessory tourmaline. The muscovite, commonly mixed with biotite, is irregularly distributed in the pegmatite. It is more abundant in the quartz-rich areas and near the isolated quartz pods which have a maximum length of 4 feet and a maximum width of 2 feet.

In 1936 approximately 50 tons of pegmatite were mined and 500 pounds of mine-run mica were reported to have been recovered, which is equivalent to one-half of one percent. No persistent mica zone is visible in the exposed parts of the pegmatite. The mica is flat and hard. The books average 3 by 3 by ½ inch. The presence of biotite and structural imperfections, ruling and reeving, will not permit a recovery of large sheets and the quantity mined would probably be very small.

Further exploration is not justified.

Recommendations: It is the opinion of the field team that this application for Government's participation in exploratory work on this property should be denied.

Submitted by:

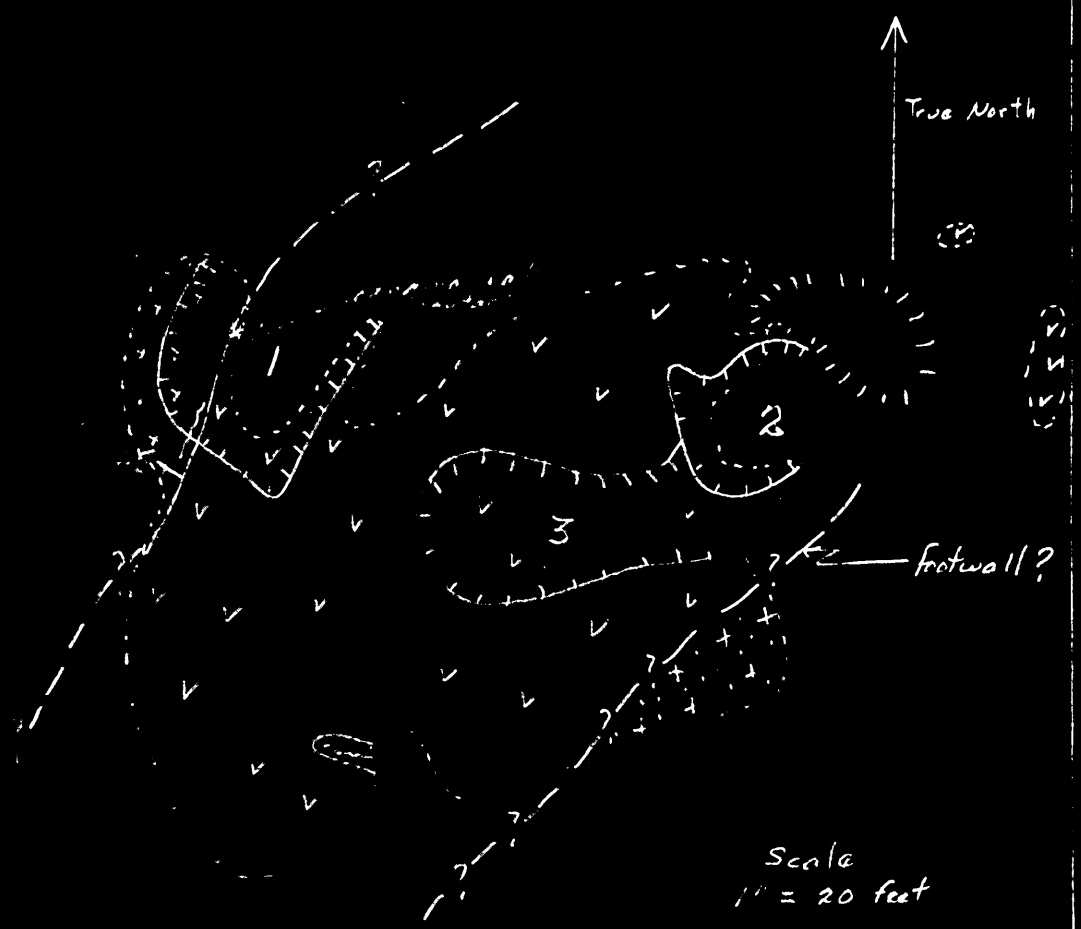
Glenn W Stewart

Glenn W. Stewart
U. S. Geological Survey

W. T. Millar

W. T. Millar
U. S. Bureau of Mines

SKETCH MAP



By pace + compass

[illegible] 17, 1951
Glenn M. Stewart

[illegible] Prospect No. 1
[illegible] 4.

V Conglomerate pebbles [illegible]

[illegible] quartz [illegible] material
Gneiss

REPORT ON EXAMINATION BY THE FIELD TEAM FOR EXPLORATORY ASSISTANCE

Wetherbee Prospects, Wilmot, N. H.

Docket No. DMA-2036X

November 1, 1951

Applicant: Mr. Julian Wetherbee
22 Wheelock Street
Keene, New Hampshire

Location: The Wetherbee prospects, approximately 2.9 and 3.3 miles N. 77° W. of the village of Wilmot, are in the town of Wilmot, Merrimack County, New Hampshire. The prospects may be reached from Wilmot village by traveling northwest on the Wilmot-Springfield road for 2.6 miles to a logging road on the left, then follow the logging road approximately 0.3 mile to another road on left and follow this road for 0.1 mile to the No. 1 prospect.

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The wall rock consists of a biotite-muscovite granite (Concord granite ?) and the Kinsman quartz monzonite. The strike of the foliation is N. 60° W. and dips 75° SW.

The pegmatite has a strike length of more than 100 feet and the outcrop width averages 40 to 50 feet. The pegmatite strikes N. 35° E. and dips northwest. The dip of the hanging wall contact is 45° NW. The footwall may have a gradational contact with the granitic wall rock. In general the pegmatite is composed of coarse-grained perthite, quartz, plagioclase, muscovite, and biotite. Accessary minerals are tourmaline, garnet, and beryl. In places fine-grained graphic granite is abundant. Much of the muscovite occurs with biotite in lath-shaped crystals. Patches of aplitic and granitic material occur irregularly in the pegmatite, but are most abundant along the footwall side where they may occur as remnants of the wall rock.

The pegmatite zones consist of a fine-grained border zone 1 to 4 inches thick, a coarse-grained perthite-quartz-plagioclase-muscovite-biotite wall zone, and a coarse-to very coarse-grained perthite-quartz core. The exact thickness of the wall zone and core cannot be determined. However, the core is at least 5 feet thick and about 15 feet long in Pits No. 2 and No. 3.

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Summary and Conclusions: Tests have not been made to determine the amount of recoverable sheet mica from the mine run mica, but due to the abundant biotite and structural imperfection, the estimated recovery of sheet mica would be less than one percent. Also, the estimated recovery of beryl would be a small fraction of one percent.

In accordance with the data obtained from this investigation, the geologic indications of the pegmatites on this property are not favorable for beryl and mica production in sufficient quantities to justify further exploration. The ratio of hand sorted feldspar recovered from the run of the mine in the most recent test made by the owner is estimated to be about 1:4. It is not considered that sufficient feldspar can be recovered to defray the expenses for mining the limited amount of beryl and mica which may be expected. Furthermore, it is considered that the previous exploratory work is sufficient for an experienced operator to determine the justification of development.

General Summary of Prospect No. 2: A prospect pit, approximately 0.4 mile west of the No. 1 prospect, was made in 1936. It is about 10 feet wide, 10 feet long, and is 5 feet deep. The pit appears to be located on the footwall of the pegmatite which strikes N. 50° E. and dips about 45° NW. The wall rock was not exposed near the pegmatite.

The pegmatite is at least 100 feet long and approximately 50 feet wide in places. It is composed of medium to coarse-grained perthite, quartz, plagioclase, muscovite, and biotite; and accessory tourmaline. The muscovite, commonly mixed with biotite, is irregularly distributed in the pegmatite. It is more abundant in the quartz-rich areas and near the isolated quartz pods which have a maximum length of 4 feet and a maximum width of 2 feet.

In 1936 approximately 50 tons of pegmatite were mined and 500 pounds of mine-run mica were reported to have been recovered, which is equivalent to one-half of one percent. No persistent mica zone is visible in the exposed parts of the pegmatite. The mica is flat and hard. The books average 3 by 3 by ½ inch. The presence of biotite and structural imperfections, ruling and reeving, will not permit a recovery of large sheets and the quantity mined would probably be very small.

Further exploration is not justified.

Recommendations: It is the opinion of the field team that this application for Government's participation in exploratory work on this property should be denied.

Submitted by:

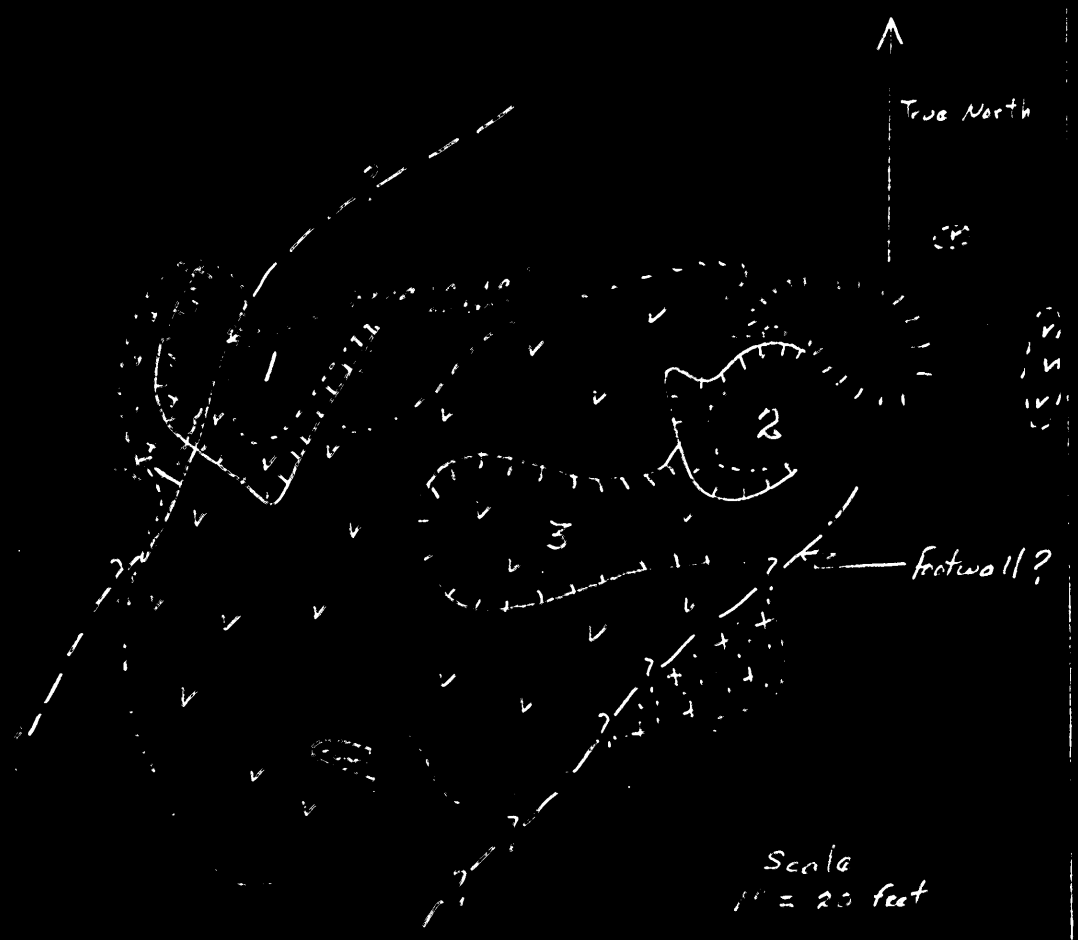
Glenn W Stewart

Glenn W. Stewart
U. S. Geological Survey

W. T. Millar

W. T. Millar
U. S. Bureau of Mines

SKETCH MAP



By paco + compass

[illegible] 17 1951
Grant M. Stewart

[illegible] Prospect No. 1

[illegible] Contact [illegible] pegmatite
[illegible]
[illegible]
Gneiss

Mr. Julian Wetherbee
22 Wheelock Street
Wilmot, New Hampshire

Subject: DMA-2036X
Mica-Beryl

Dear Mr. Wetherbee:

Your application is being referred to Mr. McHenry Mosier, Executive Officer, DMA Field Team, Region VIII, Eastern Experiment Station, College Park, Maryland, for further information.

Sincerely yours,

Tom Lyon, Director
Supply Division

RWASKEY:mp
9-26-51
cc: Field Team, Region VIII (2)
DMA Docket File
Mr. Barr

Mr. McHenry Mosier, Executive Officer
DMA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Julian Wetherbee, Keene, N. H.

DMA-2036X

Beryl-Mica

15,000

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2036

Commodity Mica- Beryl

Total Amount 15,000

Govt. Participation 90%

1. Name and Address of Applicant Julian Wetherbee
22 Wheelock St., Keene, N.H.

2. Location of Property Wilmot, N.H.

Note: Better Legal Description Needed—

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

If not, application will be rejected.

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

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

a) Good

b) Poor

c) None

d) Don't know—needs field examination SEE MEMO ATTACHED

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

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

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

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? NO

a) MF-201? —

b) MF-202 —

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

a) Available manpower yes

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

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* yes

Is a field check needed on any of these points? Yes (a) (b)

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? yes

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

a) Is the project adequately described? NO

If not, are there sufficient data given so that you can describe the project? NO 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? Yes but more definite

If not, what part of it is? program needed and should be worked out with Applicant by Field Team examiner —

Is this part a worthwhile exploration project? Field Team Decide

d) Are the cost estimates detailed? Insufficiently

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? Insufficient data

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

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Apparently it is

b) If so, are sufficient data furnished? NO If so, attach a draft.

c) Is a field check needed? Yes

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

a) Is it applicable? yes

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

c) Are rents and charges reasonable? Insufficient data

d) Is a field check needed? yes

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

a) Are there sufficient data? NO

b) Is the schedule adequate for the work proposed? Insufficient data

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

d) Are the proposed wages and salaries reasonable? ✓ ✓

e) Is a field check needed? yes - Why purchase so much equipment? Is not adaquate equipment available on a rental basis?

14. Exhibit E (question 23-c)*

a) Is it applicable? Apparently it is

b) Sufficient data? NO

c) Reasonable? Insufficient data

d) Field check needed? Yes

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? If geology favorable and exploration appears worthwhile work out a satisfactory program with Applicant & submit all necessary contract data & sketch map of proposed work.

Reviewed by R Wimbay

Date 9/26/51

97692

FILE COPY
SURNAME:

Yashay
Barr

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

370

SEP 19 1951

Mr. Julian Wetherbee
22 Wheelock Street
Keene, New Hampshire

Subject: DMA-2036X
Mica - Beryl

Dear Mr. Wetherbee:

Regarding your application for Exploration Aid on Mica-Beryl deposits, located in Wilmot, New Hampshire, will you please submit samples of mica from the deposit so that we may determine whether it qualifies as strategic grade material.

Sincerely yours,

SIGNED
James A. Barr, Sr., Chief
Industrial Minerals Branch

RWASKEY:mp
9-18-51
cc: Reports & Records-DMA Docket File
Mr Barr

OBL 9/18

Mr. Julian Westcott
22 Wheelock St.
Keene, N.H.

Permit: DNH-2036
Mica

Dear Mr. Westcott —

Regarding your application for exploration bid on mica-bearing deposit located in Wilmot, N.H., will you please send a sample of mica from the deposit so that we may determine whether it qualifies as strategic grade material

BAFRG

IN REPLY REFER TO:

G-MD-WRG

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

September 18, 1951

Memorandum

TO: Robert Waskey, Defense Minerals Administration

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

Subject: Application DMA-2036 from Julian Wetherbee for exploration in Merrimack County, New Hampshire.

There is no information in the U. S. Geological Survey files on the Wetherbee property or on the North Star mine on the adjoining property. There is information on five deposits in Merrimack County. Most of these yielded a little strategic quality mica but the recovery of sheet of that quality from the mine-run mica was very low. Most of the deposits yield only badly ruled and reeved books, several yield black stained mica with only small amounts of clear.

Because of the poor quality of the mica from the other deposits in the county, it is suggested that the applicant be asked to submit samples of mica from his deposits.

If the mica is found to be of good quality, the application could be referred to the field team.

W. R. Griffitts

copy to: Defense Minerals Administration

OFFICIAL FILE COPY

JULIAN WETHERBEE
22 WHEELOCK ST.
KEENE, NEW HAMPSHIRE

To	Init.	Date
370	QEC	9-27
210		

Sept. 22, 1951.

Defense Minerals Administration
Washington 25, D. C.

DMA-2036X
Mica-Beryl

Gentlemen:

In reply to your letter of the 19th I am enclosing a few small samples of Mica from my property at Wilmot, N. H. They are not very large but I assume that the determination of "Strategic Grade" would be based on quality and hope the samples are large enough for testing purposes. This is surface mica and may be somewhat mud stained.

Wilmot is about sixty miles from Keene so, to save time, am sending samples of pieces that I have here at home. As it happens my wife is somewhat of a mineral collector and whenever she goes to Wilmot with me she usually brings home numerous mineral specimens so I rifted the enclosed samples from pieces she has picked up on my peoperty. Her choice of specimens may not always be of the best from a "Strategic" view point.

Sincerely yours,
Julian Wetherbee
Julian Wetherbee

Samples of mica said was apparently good in quality
9/26 OKW

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
SEP 24 10 38 AM '51

Waskey

Mr. Julian Wetherbee
22 Wheelock Street
Keene, New Hampshire

Subject: DMA-2036X
Mica - Beryl

Dear Mr. Wetherbee:

Regarding your application for Exploration Aid on Mica-Beryl deposits, located in Wilmot, New Hampshire, will you please submit samples of mica from the deposit so that we may determine whether it qualifies as strategic grade material.

Sincerely yours,

James A. Barr, Sr., Chief
Industrial Minerals Branch

RWASKEY:mp
9-18-51
cc: Reports & Records-DMA Docket File
Mr Barr

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2036

Commodity Mica-Beryl

Total Amount 15,000

Govt. Participation 90%

1. Name and Address of Applicant Julian Metherbee
22 Wheelock St., Keene, N.H.

2. Location of Property Wilmot, N.H.

Note: Better Legal Description Needed—

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

If not, application will be rejected.

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

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

a) Good

b) Poor

c) None

d) Don't know—needs field examination SEE MEMO ATTACHED

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

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

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

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? NO

a) MF-201? —

b) MF-202 —

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes 500'

e) Power (question 13)* Yes

Is a field check needed on any of these points? Yes (a) (b)

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? Yes

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

a) Is the project adequately described? NO

If not, are there sufficient data given so that you can describe the project? NO 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? Yes- but more definite

If not, what part of it is? Program needed and should be worked out with Applicant by Field Team examiner -

not necessary

Is this part a worthwhile exploration project? Field Team Decide

d) Are the cost estimates detailed? Insufficiently

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? Insufficient data

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

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

11. Exhibit B (question 23-d)*

a) Is it applicable? Apparently it is

b) If so, are sufficient data furnished? NO If so, attach a draft.

c) Is a field check needed? Yes

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

a) Is it applicable? yes

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

c) Are rents and charges reasonable? Insufficient data

d) Is a field check needed? yes

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

a) Are there sufficient data? NO

b) Is the schedule adequate for the work proposed? Insufficient data

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

d) Are the proposed wages and salaries reasonable? ✓ ✓

e) Is a field check needed? Yes - Why purchase so much equipment? Is not adaguate equipment available on a rental basis?

14. Exhibit E (question 23-c)*

a) Is it applicable? Apparently it is

b) Sufficient data? NO

c) Reasonable? Insufficient data

d) Field check needed? Yes

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? If geology favorable and exploration appears worthwhile work out a satisfactory program with Applicant & submit all necessary contract data & sketch map of proposed work.

Reviewed by: P. Wanless

Date 9/26/51

97692

FILE COPY
SURNAME:

Waskey
Barr
Thayer
Lyon

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

370

OCT 1 1951

Mr. Julian Wetherbee
22 Wheelock Street
Wilmot, New Hampshire

Subject: DMA-2036B
Mica-Beryl

Dear Mr. Wetherbee:

Your application is being referred to Mr. McHenry Mosier, Executive Officer, DMA Field Team, Region VIII, Eastern Experiment Station, College Park, Maryland, for further information.

Sincerely yours,

SIGNED S.F. 10-1

Tom Lyon, Director
Supply Division

RWASKEY:mp
9-26-51
cc: Field Team, Region VIII (2)
DMA Docket File
Mr. Barr

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

370

OCT 1 1951

Mr. McHenry Mosier, Executive Officer
DMA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Dear Sir:

We attach "Review of Application for Exploration Assistance" on

Applicant Julian Wetherbee, Keene, N. H.

Contract No. DMA-2036X

Commodity Beryl-Mica

Amount $ 15,000

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

Very truly yours,

Ton Igan, Chairman
Coordinating Committee

Dep Bureau of Mines

Dep Geological Survey

IN REPLY REFER TO:

G-MD-WRG

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

September 18, 1951

Memorandum

TO: Robert Waskey, Defense Minerals Administration

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

Subject: Application DMA-2036 from Julian Wetherbee for exploration in Merrimack County, New Hampshire.

There is no information in the U. S. Geological Survey files on the Wetherbee property or on the North Star mine on the adjoining property. There is information on five deposits in Merrimack County. Most of these yielded a little strategic quality mica but the recovery of sheet of that quality from the mine-run mica was very low. Most of the deposits yield only badly ruled and reeved books, several yield black stained mica with only small amounts of clear.

Because of the poor quality of the mica from the other deposits in the county, it is suggested that the applicant be asked to submit samples of mica from his deposits.

If the mica is found to be of good quality, the application could be referred to the field team,

W. R. Griffitts

W. R. Griffitts

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
SEP 4 10 20 AM '51

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. Dm A-2036

Date received 9-3-51

Participation

Julian Wetherbee
22 Wheelock St.
Keene, N. H.

Name and address of applicant

Date August 25, 1951.

FILL IN THIS BLOCK

Date of application August 25, 1951

Estimated cost $15,000

Mineral or metal Mica and Beryl

Percentage of Government participation 90%

Location of mine Wilmot, Merrimack County New Hampshire

Date of filing MF-100 August 25, 1951

DMA Docket Number, if available 2036

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? Yes, 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. Not applicable
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)? $1500. Yes

*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 attached sheet
    (*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. 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. Brooks, suffiient
State amount of power to be used, rate per hour or other cost, and source. Gasoline or diesel
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. One building 20' x 16', condition fair
15. State in detail how the ore could be shipped and how and where milled. By truck to rail, 5½ miles
*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. see attached sheet
    (*b*) State briefly the known history and production of adjoining and neighboring properties. attached
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. none available
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.) Apparently large
    (*a*) Describe the ore or mineral deposits briefly. Some sheet mica and beryl has been produced
    (*b*) Submit available maps and assay data. attached
    (*c*) Give estimated tonnage and grade of each class of ore reserves. not applicable
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? Mica, Beryl
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. see attached

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

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. see attached
    (*b*) Supervisors, by numbers and positions, with salaries of each. see attached
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings. nominal
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. nominal
    (*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. see attached
    (*f*) Cost of rental for equipment which the operator proposes to rent. Bulldozer $600. (est.)
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. none
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. $1900.
    (*i*) Cost of power, water, utilities, and any other items not provided for above. Gasoline 1000.
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. About 10 months working time over a period of 18 months with total expenditure of $15000, ceiling

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 Julian Wetherbee (Signature of authorized official)

August 25, 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

Julian etherbee
22 Wheelock St.
Keene, N. H.
Attached to and part of Form MF-103

#4 I had a little experience in mining in Mexico, years ago, and some in the mining of feldspar and mica in N. H. I am 63 years of age and have had considerable business experience in logging and saw mill operation.

#10 (a) About 260 acres in Wilmot, N. H.

(b) All of Lot #89, 139 acres, owned in fee and adjoining to the West about 125 acres, described by meets and bounds, on which I own mineral rights only. All in town of Wilmot.

#11 The former owner of Lot 89 was Harry Barnes. Former owner of the 125 acre tract Herbert Powell.

#12 It is approximately 5½ miles to loading siding on the B. & M. R. R. at West Andover, N. H. Road passes through village of Wilmot which is about 3½ miles from the property. The first mile from property is dirt road, the last four oiled.

#16 Questions (a) and (b) answered in detail on sheet attached to Form MF-100.

~~#18~~x #21 I would like to do more surface stripping on two permatites. One of these is some 200' feet in width and probably over 600' in length. As I have not yet started and winter weather might delay things have applied for 18 month period but it, probably, would take much less. Should like to open up several test pits in each permatite so have put an over all ceiling cost of $15,000. but this again should be less.

#23 (a) Three to four miners and muckers at 1.00 to 1.25 per hr.

	Total labor	$6,000.
(b)	One supevisor @ $15. a day for days worked	2,000.
(c)	One air compressor (used)	1,500
	One dump truck (used)	1,000
	One hoist and accessories (used)	500
	One pump and hose (used)	200
	One jackhammer, hose and drill rods	300
		11,500
	Items (f)	600
	" (h)	1,900
	" (i)	1,000
	Total ceiling asked	$15,000.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
SEP 4 10 20 AM '51

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 - 2036

Date received 9-3-51

Participation

Julian Wetherbee
22 Wheelock St.
Keene, N. H.

Name and address of applicant

Date August 25, 1951.

FILL IN THIS BLOCK

Date of application August 25, 1951

Estimated cost $15,000

Mineral or metal Mica and Beryl

Percentage of Government participation 90%

Location of mine Wilmot, Merrimack County
New Hampshire

Date of filing MF-100 August 25, 1951

DMA Docket Number, if available 2036

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(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
SEP 4 10 20 AM '51

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-2037

Date received 9-3-51

Participation

Julian Netherbee
22 Wheelock St.
Keene, N. H.

Name and address of applicant

Date August 25, 1951.

FILL IN THIS BLOCK

Date of application August 25, 1951

Estimated cost $15,000

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Percentage of Government participation 90%

Location of mine Wilmot, Merrimack County New Hampshire

Date of filing MF-100 August 25, 1951

DMA Docket Number, if available 2037

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    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. $1500.
    (*i*) Cost of power, water, utilities, and any other items not provided for above. Gasoline 1,00.
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. About 10 months working time over a period of 18 months with total expenditure of $15000, ceiling

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 Julian Wetherbee (Signature of authorized official)

August 25, 1961 (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

Julian Netherbee
22 Wheelock St.
Keene, N. H.

Attached to and part of Form MF-103

#4 I had a little experience in mining in Mexico, years ago, and some in the mining of feldspar and mica in N. H. I am 63 years of age and have had considerable business experience in logging and saw mill operation.

#10 (a) About 260 acres in Wilmot, N. H.

(b) All of Lot #89, 139 acres, owned in fee and adjoining to the West about 125 acres, described by meets and bounds, on which I own mineral rights only. All in town of Wilmot.

#11 The former owner of Lot 89 was Harry Barnes. Former owner of the 125 acre tract Herbert Powell.

#12 It is approximately 5½ miles to loading siding on the B. & M. R. R. at West Andover, N. H. Road passes through village of Wilmot which is about 3½miles from the property. The first mile from property is dirt road, the last four½oiled.

#16 Questions (a) and (b) answered in detail on sheet attached to Form MF-100.

~~#18~~ #21 I would like to do more surface stripping on two permatites. One of these is some 200' feet in width and probably over 600' in length. As I have not yet started and winter weather might delay things have applied for 18 month period but it, probably, would take much less. Should like to open up several test pits in each permatite so have put an over all ceiling cost of $15,000. but this again should be less.

#23 (a) Three to four miners and muckers at 1.00 to 1.25 per hr.

Total labor	$6,000.
(b) One supevisor @ $15. a day for days worked	2,000.
(e) One air compressor (used)	1,500
One dump truck (used)	1,000
One hoist and accessories (used)	500
One pump and hose (used)	200
One jackhammer, hose and drill rods	300
	11,500
Items (f)	600
" (h)	1,900
" (i)	1,000
Total ceiling asked	$15,000.

September 4, 1951

Subject: DMA-2036
Re: Exploration Loan

Mr. Julian Wetherbee
22 Wheelock Street
Keene, New Hampshire

My dear Mr. Wetherbee:

This will acknowledge receipt of your application dated August 29, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2036 and referred to the Industrial Minerals Branch.

Kindly refer to DMA-2036 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

2463

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.

SEP 4 10 19 AM '51

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON, D.C.~~
College Park, Maryland

August 29, 1951

WMA-2036

Memorandum

To: Tom Lyon, Chairman
Coordinating Committee

From: Executive Officer
Bureau-Survey Field Team
Region VIII

Subject: Application for Aid for Exploration Project, Mica, Beryl and Feldspar mine, Wilmot, Merrimack County, New Hampshire

Attached is application on forms MF-100 and MF-103 from Julian Wetherbee with respect to his mica, beryl and feldspar mine in Merrimack County, New Hampshire.

McHenry Mosier

McHenry Mosier

Attachments

Info from

June 27, 1951

Mr. Julian Netherbee
c/o M. J. Hampert
811 Eton Road
Towson 4, Maryland

6/25

Dear Mr. Netherbee:

We have your letter of June 21 in regard to prospecting.

We regret that the hiring of men to do prospecting work does not come within the scope of the Defense Minerals Administration.

Sincerely yours,

James Barr

James A. Barr, Jr., Chief
Industrial Minerals Branch

JABARR:mp

cc: Mr. Strobel
Mr. Barr
DMA Files

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

January 24, 1951

Mr. Elmer A. Wetzel
% Fidelity State Bank
Dodge City, Kansas

Dear Mr. Wetzel:

Your letter of January 4, addressed to James Boyd and requesting information on the availability of government financial aid in developing your New Mexico property has been referred to me for reply.

It is impossible to state precisely whether your property would be eligible for financial assistance under the Defense Production Act of 1950 without having much more information available concerning the property than you have submitted in your letter. However, if the assay certificate which you enclosed with your letter is representative of the ore on your claims, it is doubtful if a loan could be negotiated. Both the copper and the lead content of the ore are too low-grade to be profitably recovered. Furthermore, the supply situation with respect to lead, which appears to be the principal ore metal at your property, is much less critical than with many other strategic metals and minerals. Unless the lead supply situation deteriorates, there will be little or no special funds made available to financing potential mining properties in which lead is the principal ore metal.

I regret that I cannot give you a more favorable reply to your letter at this time. If, however, you should have additional information which would indicate substantially higher metal content in the outcrops on your claims, I shall be pleased to consider further such data.

Very truly yours,

OTTO HERRES, Chief
Lead-Zinc Branch, DMA

RHMOTL/pps
Copy to - Base Metals Branch
R. H. Mote
Chief, Lead-Zinc Br., Otto Herres
J. H. Hedges, Minerals Div.
Ed McKnight, Geological Survey
C. O. Mittendorf
L. Strobel
Files

2 carbon copies to Field Team
Region VI
L. T. McIlvenny, Joplin, Mo.
David Gallagher, USGS
P. O. Box 431, Joplin, Mo.

B F ZIMMERMAN,
PRESIDENT
C M STATES
VICE PRESIDENT

FIDELITY STATE BANK

CAPITAL $100,000 SURPLUS $[illegible]

DODGE CITY, KANSAS

January 4, 1951

1-10-51
Herrod for reply.

Mr. James Boyd, Acting Director
Minerals Administration for Defense
Room 6412, Department of Interior Building
Washington 25, D. C.

Dear Sir:

I have received your name through the Reconstruction Finance Corp, Kansas City, Mo. in regard to obtaining a National Security Resources Board Loan in connection with the National Defense Program.

I am wondering if it were possible to secure a loan for the purpose of production of essential materials (including the exploration, development, and mining of strategic and critical metals and minerals)

I am enclosing herewith an assay report [illegible] from American Smelting and Refining Co, Amarillo, Texas, with [illegible] and let me know if it were possible to obtain a loan to develop this claim.

I have a 6 claim holding consisting of 132 acres which is located in New Mexico, with good Ore veins located in several places and prospects of many more to be located. Very little development has been done on this claim.

Please let me know as soon as possible, if a loan could be obtained for the development of these claims.

Very truly yours,

Elmer A. Wetzel

Elmer A. Wetzel
Fidelity State Bank
Dodge City, Kansas

Inter-Office Memo Form No. 1

CHARGED TO	RETD	DATE	SENDER'S INITIALS	DUAL NOS. 2036 X
Amendola				
Bannerman				
Barr				
Lord, Admin				
Bacon				
Bowles, Dr.				
Bourret				
Cadem				
Chandler				
Crain				
FIELD TEAM				
Gunnallus				
Harlan				
Jacobson				
Kemo				
Ivan				
Macdonald				
McCann				
Marsh				
Moon				
Mittendorf				
Mosier				
Norton				
Parsons				
Strobel				
Van Alstine				
Waggerman				
Wagley				
Watts				
Weber				

REMARKS:

9-26 To Field

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

SEP 4 10 19 AM '51

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dm A 2036

Date received 9-3-51

Name and address of applicant

Julian Netherbee
18 Wheeler St.
Keene, N. H.

Date August 25, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced: Beryl and Beryl
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any? Feldspar
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry(ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following: Quarries
   (*a*) Linear feet of shafts. none
   (*b*) Linear feet of drifts and crosscuts. none
   (*c*) Linear feet of tunnels or adits. none
   (*d*) Linear feet of other mine openings (explain briefly). approx. 100' open pits to 10' depth
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. not flooded
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. 3½ mi. N.E. Hill, 5 mi. N. from shipping point of Andover
   (*b*) Mining district. Grafton
   (*c*) Township, Section, Range. not applicable
   (*d*) County, State. Merrimack County, N. H.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. no
   (*b*) Are you operating this property as:
   - [x] Owner.
   - [ ] Lessee.
   - [ ] Contractor.
5. Number of years in production some production in 1936, none since
   If not in production or operation, estimated date when production will begin at termination of exploration
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project. one mining experience in beryl & sole feldspar in N. H.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation. see attached sheet
   (*b*) State briefly the known history and production of adjoining and neighboring properties. attached
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. none available

16—63792-2

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
	Not applicable						
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock None	$	$	$		
Preferred stock None	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	none 1948 through 1950				
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

apparently large for these minerals

Julian Netherbee
22 Wheelock St.
Keene, N. H.
Attached to and part of Form MF-100

#7 History

(a) In 1936 I purchased the mining rights on about 125 acres and did some mining on one small pegmatite and did recover and ship mica and feldspar. At that time price for mica was very low so I discontinued. Later on I discovered some larger and better pegmatites on this property and also bought, in fee, an adjoining lot of 139 acres on which I have also uncovered some good pegmatite areas. Have not done any more mining but have done a lot of surface stripping and blasted out rock areas finding mica and beryl.

(b) On adjoining property is an old mine know as the North Star that was mined for mica many years ago. Mica was rifted and trimmed at the mine and from scraps left the mica must have been large, good and abundant. Also adjoining is a mine that was worked by the Whitehall Co for feldspar but during their operation for feldspar they took out and sold more than $200,000. worth of mica and this at a time when mica was very low in price. I am inclined to think this was one of the most productive mica mines ever operated in our State and presume my figures can be verified. It was the production at the Whitehall mine that induced me to take the mining property in this section. I doubt that there are any heavy concentrations of beryl in this section such as were found at Beryl Mountain in Acworth but there are numerous beryls in the pegmatites which, in the aggregate, could amount to many tons. I have found beryl in two of the pegmatites on my own property.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve. not applicable

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	More than 1,000,000 tons of pegmatite figuring down to 100' feet of depth but this means nothing in relation to tons of mica and beryl.				
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads. 3½ miles to Andover.

14. Water Supply: Ample, residental; 5½ miles to rail shipping point at W. 4½ miles oiled and 1 mile dirt road.

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power: Brooks, ample year around

State amount of power used, rate per hour, and source thereof. Gasoline or deisel

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: Labor available

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation. No major equipment.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain. one building 20' x 16' in fair condition

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 Julian Wetherbee
(Signature of authorized official)

August 25, 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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

NEW YORK
SEP 19
1951
N. Y.

U.S. POSTAGE
PAID 3 CTS.
PERMIT 780

Mail from
Nutting property
Wilmot, N.H.

2072075

DMA 2036 X

112024

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF NEW HAMPSHIRE
HIGHWAY DEPARTMENT

NEW HAMPSHIRE
MOUNT KEARSARGE QUADRANGLE

Topography by C.H.Davey and F.H.Sargent
Culture and drainage in part compiled from aerial photographs taken by Air Corps U.S.Army
Surveyed in 1926

Polyconic projection. North American datum
5000 yard grid based upon U.S.zone system, A

Scale 1/62500

Contour interval 20 feet
Datum is mean sea level.

ROUTES USUALLY TRAVELED
HARD IMPERVIOUS SURFACES
OTHER SURFACE IMPROVEMENTS
U. S. ROUTE
STATE ROUTE
1943

MOUNT KEARSARGE, N.H.
Edition of 1928
reprinted 1943
N4315-W7145/15

Q 34

MF 103

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a series of standard topographic maps to cover the United States. This work has been in progress since 1882, and the published maps cover more than 47 percent of the country, exclusive of outlying possessions.

The maps are published on sheets that measure about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, the areas that they represent are of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, miles, and kilometers. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 of the same units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys and the resulting maps have for many years been of three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile) or $\frac{1}{24,000}$ (1 inch = 2,000 feet), with a contour interval of 1 to 100 feet, according to the relief of the particular area mapped.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 100 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, and the high mountain area of the northwest, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles) or $\frac{1}{250,000}$ (1 inch = nearly 4 miles), with a contour interval of 20 to 250 feet.

The aerial camera is now being used in mapping. From the information recorded on the photographs, planimetric maps, which show only drainage and culture, have been made for some areas in the United States. By the use of stereoscopic plotting apparatus, aerial photographs are utilized also in the making of the regular topographic maps, which show relief as well as drainage and culture.

A topographic survey of Alaska has been in progress since 1898, and nearly 44 percent of its area has now been mapped. About 15 percent of the Territory has been covered by maps on a scale of $\frac{1}{500,000}$ (1 inch = nearly 8 miles). For most of the remainder of the area surveyed the maps published are on a scale of $\frac{1}{250,000}$ (1 inch = nearly 4 miles). For some areas of particular economic importance, covering about 4,300 square miles, the maps published are on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile) or larger. In addition to the area covered by topographic maps, about 11,300 square miles of southeastern Alaska has been covered by planimetric maps on scales of $\frac{1}{125,000}$ and $\frac{1}{250,000}$.

The Hawaiian Islands have been surveyed, and the resulting maps are published on a scale of $\frac{1}{62,500}$.

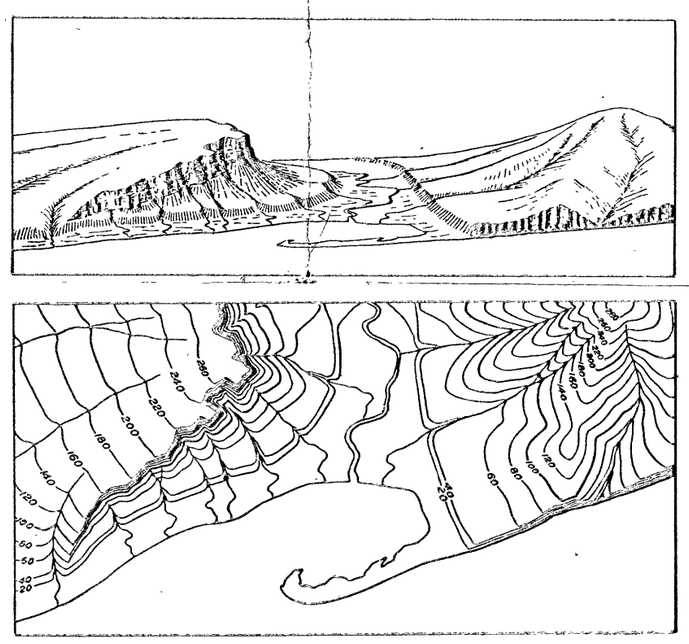
A survey of Puerto Rico is now in progress. The scale of the published maps is $\frac{1}{30,000}$.

The features shown on topographic maps may be arranged in three groups—(1) water, including seas, lakes, rivers, canals, swamps, and other bodies of water; (2) relief, including mountains, hills, valleys, and other features of the land surface; (3) culture (works of man), such as towns, cities, roads, railroads, and boundaries. The symbols used to represent these features are shown and explained below. Variations appear on some earlier maps, and additional features are represented on some special maps.

All the water features are represented in blue, the smaller streams and canals by single blue lines and the larger streams by double lines. The larger streams, lakes, and the sea are accentuated by blue water lining or blue tint. Intermittent streams—those whose beds are dry for a large part of the year—are shown by lines of blue dots and dashes.

Relief is shown by contour lines in brown, which on a few maps are supplemented by shading showing the effect of light thrown from the northwest across the area represented, for the purpose of giving the appearance of relief and thus aiding in the interpretation of the contour lines. A contour line represents an imaginary line on the ground (a contour) every part of which is at the same altitude above sea level. Such a line could be drawn at any altitude, but in practice only the contours at certain regular intervals of altitude are shown. The datum or zero of altitude of the Geological Survey maps is mean sea level. The 20-foot contour would be the shore line if the sea should rise 20 feet above mean sea level. Contour lines show the shape of the hills, mountains, and valleys, as well as their altitude. Successive contour lines that are far apart on the map indicate a gentle slope, lines that are close together indicate a steep slope, and lines that run together indicate a cliff.

The manner in which contour lines express altitude, form, and grade is shown in the figure below.



The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly enclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which it slopes gradually away and forms an inclined tableland that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

The contour interval, or the vertical distance in feet between one contour and the next, is stated at the bottom of each map. This interval differs according to the topography of the area mapped: in a flat country it may be as small as 1 foot; in a mountainous region it may be as great as 250 feet. In order that the contours may be read more easily certain contour lines, every fourth or fifth, are made heavier than the others and are accompanied by figures showing altitude. The heights of many points—such as road intersections, summits, surfaces of lakes, and benchmarks—are also given on the map in figures, which show altitudes to the nearest foot only. More precise figures for the altitudes of benchmarks are given in the Geological Survey's bulletins on spirit leveling. The geodetic coordinates of triangulation and transit-traverse stations are also published in bulletins.

Lettering and the works of man are shown in black. Boundaries, such as those of a State, county, city, land grant, township, or reservation, are shown by continuous or broken lines of different kinds and weights. Public roads suitable for motor travel the greater part of the year are shown by solid double lines; poor public roads and private roads by dashed double lines; trails by dashed single lines. Additional public road classification if available is shown by red overprint.

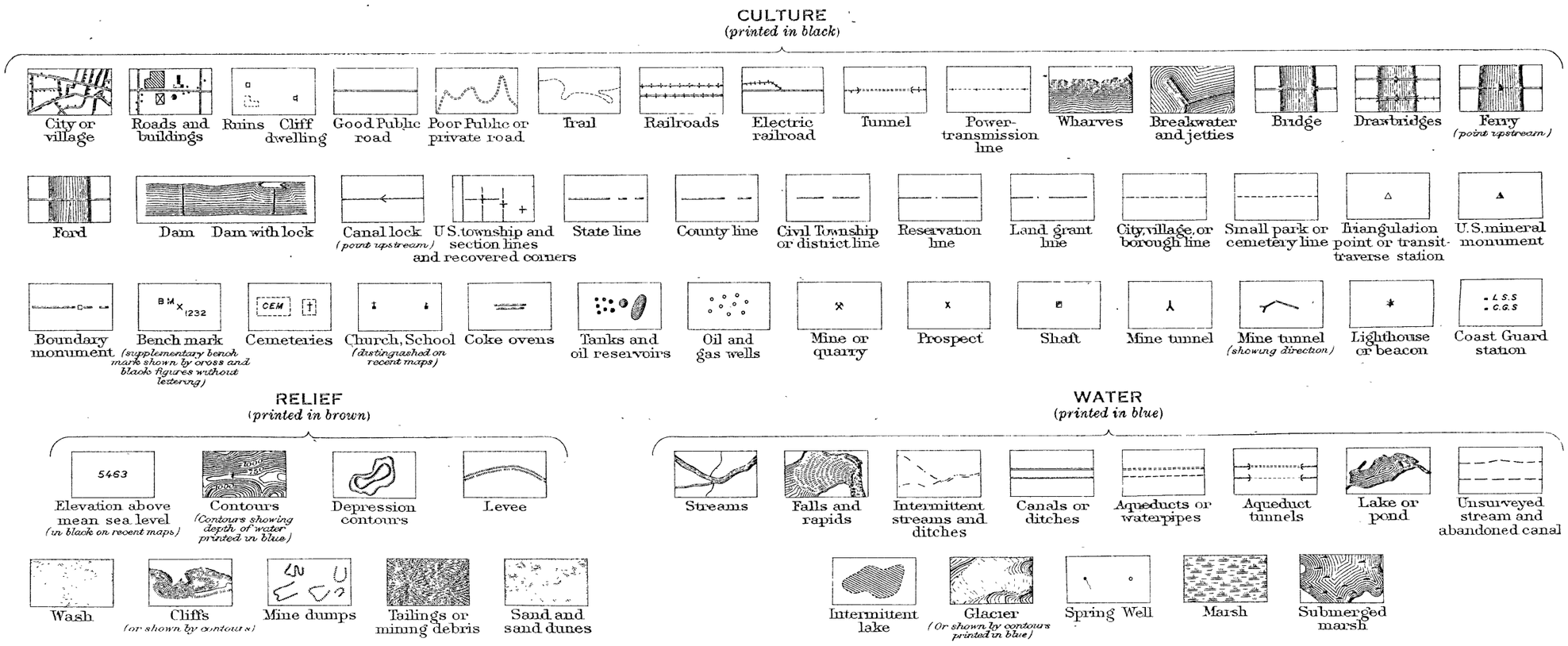
Each quadrangle is designated by the name of a city, town, or prominent natural feature within it, and on the margins of the map are printed the names of adjoining quadrangles of which maps have been published. More than 4,100 quadrangles in the United States have been surveyed, and maps of them similar to the one on the other side of this sheet have been published.

Geologic maps of some of the areas shown on the topographic maps have been published in the form of folios. Each folio includes maps showing the topography, geology, underground structure, and mineral deposits of the area mapped, and several pages of descriptive text. The text explains the maps and describes the topographic and geologic features of the country and its mineral products. Two hundred twenty-five folios have been published.

Index maps of each State and of Alaska and Hawaii showing the areas covered by topographic maps and geologic folios published by the United States Geological Survey may be obtained free. Copies of the standard topographic maps may be obtained for 10 cents each; some special maps are sold at different prices. A discount of 40 percent is allowed on an order amounting to $5 or more at the retail price. The discount is allowed on an order for maps alone, either of one kind or in any assortment, or for maps together with geologic folios. The geologic folios are sold for 25 cents or more each, the price depending on the size of the folio. A circular describing the folios will be sent on request.

Applications for maps or folios should be accompanied by cash, draft, or money order (not postage stamps) and should be addressed to

THE DIRECTOR,
United States Geological Survey,
Washington, D. C.

November 1937.

STANDARD SYMBOLS