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SEP 24 1954

Mr. J. C. Bowman
130 Maxwell Place
Tampa 6, Florida

Re: Docket No. DMEA-3430 - Mica
Henry Poteat Mine - Chalk Mountain
Mitchell County, North Carolina

Dear Mr. Bowman:

Your application for aid for an exploration project and other reports available to us in Washington relating to the subject property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information indicates to us that the probability of disclosing significant reserves of mica by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

LGHouk:gad 9/22/54
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region VII
Mr. Dietrich, 3061
Mr. Kiilsgaard, 5227
Mr. Houk

600

Hopkins

September 22, 1954

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report.

By: Walter C. Anderson

1. Docket No. DMEA-3430 - Mica
Property: Henry Poteat Mine
Mitchell County, North Carolina

Applicant: J. C. Bowman
130 Maxwell Place
Tampa 6, Florida

Application: Form MF-103, date received August 4, 1954.
Work proposed: Open cut work and shaft sinking.
Extent not given
Amount requested: Approximately $12,000.00
No contract: Application denied.

2. Comments:

Geological premise: No geological criteria are indicated on which to base a premise that the pegmatite containing small amounts of scrap mica will become richer below and beyond the exposures.

Geological criteria:
1. Vertical pegmatite 20 feet thick.
2. Mica sparsely distributed and of poor quality.
3. Swamp under large water collecting area.
4. Past production - scrap mica.

Future possibilities: As in the past, mining operations are likely to be unprofitable.

Recommendations: The Nonmetallic Minerals Division is in concurrence with the field team to deny the application. The Geological Survey and the Bureau of Mines also recommend denial.

WCAnderson:gad 9/22/54
Copy to: Admr. R. File
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 17 1954

September 16, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Donald R. Irving, Acting for, Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3430 (mica)

Applicant: J. C. Bowman

Name and Location of Property: Henry Poteat Mine
Mitchell County, North Carolina

Date of Field Team Report: September 1, 1954

Date Rec'd. by Ceramic and Fertilizer Mtls. Br.: September 10, 1954

Field Team Recommendation:
1. Denial

Comments:
1. Records show that the mica from this mine is of poor quality and during the life of the mine it has not been possible to operate at a profit.

Recommendation:

I concur in the field team's recommendation to deny this application on the basis that the mica is non-strategic and little possibility for conducting an economical exploration project at this mine.

Signed

Donald R. Irving

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 14 1954

September 13, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3430 (Mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: E. L. Newcomb, U. S. Geological Survey
Applicant: J. C. Bowman, 130 Maxwell Place, Tampa 6, Florida
Name of property: Henry Poteat Mine
Location of property: 2 miles SW of Spruce Pine, N. C.
Date of Field Team Report: September 1, 1954
Authorship of Field Team Report: K. H. Teague and D. H. Amos, USGS.
Field Team's recommendation:
Application should be denied.
Comments:
Unlikely that a significant discovery will be made.
Mica is sparsely distributed in the pegmatite.
Mica mining in past undoubtedly has not been profitable.

ACTION RECOMMENDED: Concur with Field Team, and deny the application.

E. L. Newcomb

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
W. F. Dietrich, 3061

UNITED STATES
DEPARTMENT OF THE INTERIOR

COPY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
Room 13, Post Office Building
~~WASHINGTON 25, D.C.~~
Knoxville 2, Tennessee
September 1, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: Field examination reports - DMEA-3427, T. J. McKenzie (mica)
DMEA-3430, J. C. Bowman (mica)

Enclosed are 4 copies of each of the subject examination reports. We recommend denial of both.

/s/ Robert A. Laurence

/s/ Wm. A. Beck, for V. J. Lynch
U. S. Bureau of Mines

RAL/zm

Reviewed by
DMEA OPERATING COMMITTEE
9-10-54
(date)

DEPARTMENT OF THE INT
Defense Minerals Administration
RECEIVED
SEP - 3 1954

UNITED STATES

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD EXAMINATION REPORT, REGION VII

On

DMEA-3430, HENRY POTEAT MINE (mica)

Mitchell County, N. C.

By

K. H. Teague and D. H. Amos, Geologists
U. S. Geological Survey

September 1, 1954

Reviewed by
DMEA OPERATING COMMITTEE

9-10-54
(date)

Department of the Interior
Defense Minerals Administration
RECEIVED
SEP - 3 1954

FIELD EXAMINATION REPORT
ON
DMEA-3430, HENRY POTEAT MINE
(mica)

Applicant: J. C. Bowman, 130 Maxwell Place, Tampa 6, Florida.

The examiners believe that the liklihood for the discovery of a worthwhile deposit of strategic mica at this place is poor; therefore, we recommend that the application be denied.

This deposit was examined on August 26, 1954. Messrs. J. C. Bowman, Jr., and J. C. Bowman, Sr., accompanied the examiners on the inspection which required two hours.

Much of the following information is from an unpublished U. S. G. S. report prepared March, 1945 by J. R. Wolfe, Jr.:

"The Potest feldspar and mica mine, in Mitchell County, North Carolina, is 2 miles S. 70° W. of Spruce Pine on both sides of U. S. Highway 19E. It consists of an extensive series of older workings on the northwest side of the road and smaller more recent ones to the southeast (the southeast area is included in this application). The older underground workings to the northwest are all inaccessible and were not mapped. They include six shafts and an open cut from which a 45 degree incline is reported to extend 200 feet to the southwest. This part of the mine was discovered about 1914 by J. H. Poteat. Most of the mining was done about 1917-1920 by J. E. Burleson who is reputed to have produced about $225,000 worth of mica. The mine was operated on a small scale in 1930 by W. Laughridge, Art and Corb Buchanan, and in 1939 by W. T. Hippy and C. T. Bailey."

"The newer part of the mine southeast of the highway (area of interest) consists of a deep open cut with drifts and a series of shallow pits which exploited a different pegmatite. This was started about 1932-33 by J. C. Pitman and was further worked in 1942 by the Whitehall Company. In 1944 G. W. Mason and R. W. Love operated for about 6 months, and were followed by Acme Mines, Inc. (Mrs. O.Spoon) for about 2 months and by Homer Hise from November until January 1945."

"The mine southeast of the road is in an area underlain by coarse-grained sodic granite containing geniss inclusions. The pegmatite is a vertical dike striking uniformly northeast and extending for at least 300 feet. It averages about 20 feet thick and seems to enlarge slightly with depth. Contacts are mostly definite though not sharp because of the similarity of the granite country rock and the pegmatite."

"The pegmatite is composed mainly of plagioclase, quartz and microcline with smaller amount of muscovite, sericite and garnet. Three lithologic zones are distinguishable. The border zone consists of medium

grained white plagioclase, quartz in small particles, with minor microcline and greenish brown muscovite. This zone is 3 to 13 feet thick, constitutes the bulk of the pegmatite and in places its entire width. Inside is a discontinuous zone as much as 6 feet thick of pink blocky perthitic microcline of commercial grade and minor plagioclase, with green "A" mica next to the core. The core, also discontinuous, consists of gray quartz pods as much as 5 feet thick. Fine green scaly sercite coats fracture surfaces. Garnet occurs as small dull red crystals.."

"Mica is sparsely distributed throughout the pegmatite with greenish brown muscovite more concentrated near the walls, especially the south wall, and green "A" muscovite next to the quartz pods. Many books have green edges and brown centers. Red, black and green stain spots about 1/20 inch across, possibly iron oxides, are moderately common. Flattened garnets (1/40 inch in diameter) and quartz particles (1/8 inch diameter) are included in some of the mica books, the garnet being especially common in the green "A" mica. Much of the mica is "tied", contains many cracks and reeves, is considerably ruled, and in part wedge-shaped. Most is scrap."

The work in 1944-45 resulted in the sale of 577.41 pounds of mica for $2,781.33 to the Colonial Mica Corporation. Of this amount 11% was No. 1, 68 % was No. 2, and 21% No. 3. Four different Operators ~~worked~~ worked the mine during this interval. Production of mica during 1942 by the Whitehall Company amounted to a little over $3,000.

From the above it is apparent that none of the operators, during World War II, operated the mine for mica at a profit. Furthermore, as it is located in a swamp below a large collecting area, efforts to clean it out and operate same will be expensive. Also, past records suggest that most of the mica is of poor quality. Therefore, it appears to the examiners that the proper action to take is to deny the application.

Sept. 1, 1954

K. H. Teague and D. H. Amos, Geologists
U. S. Geological Survey

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August 16, 1954

Senator Holland's office calling Mr. Houk
(Mrs. Pendleton talking)

Re: Docket No. DMEA-3430 - Mica
J. C. Bowman
Henry Poteat Mine
Chalk Mountain,
Mitchell County, N. C.

Mrs. Pendleton: I have a letter from Mr. J. C. Bowman, No. 3430 is your number, I believe. In his letter to the Senator he mentioned that he has made application for Government monetary aid.

Mr. Houk: Yes we have his application.

Mrs. Pendleton: Then I need the status of the application.

Mr. Houk: On August 12th we sent a letter to him advising that the field team is to make an examination of his property.

Mrs. Pendleton: That was sent out on the 12th of August? I will write and tell him you have contacted him.

Mr. Houk: Yes the letter went out on the 13th.

Mrs. Pendleton: Very well - that is fine, I appreciate your giving me the information. Thank you.

AUG 13 1954

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Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region VII
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Subject: Docket No. DMEA-3430 - Mica
J. C. Bowman
Henry Potent Mine - Chalk Mountain
Mitchell County, North Carolina

Dear Mr. Laurence:

Please review the subject application and arrange for a field examination if you deem it necessary.

Copies of memoranda from the Geological Survey, dated August 6, 1954, and from the Bureau of Mines, dated August 9, 1954, are enclosed for your information.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

Philip W. Guild

Member, Geological Survey

Enclosures 4

WCAnderson:gad 8/12/54
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Dietrich, 3061
Mr. Newcomb, 5227
Mr. Houk

600

AUG 13 1954

Mr. J. C. Bowman
130 Maxwell Place
Tampa 6, Florida

Re: Docket No. DMEA-3430 - Mica
Henry Potent Mine - Chalk Mountain
Mitchell County, North Carolina

Dear Mr. Bowman:

Your application for assistance in exploring the subject property has been reviewed by the Nonmetallic Minerals Division of the Defense Minerals Exploration Administration and has been referred to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region VII, Room 13, Post Office Building, Knoxville 2, Tennessee, for further consideration and possibly a field examination.

The Regional Office will contact you at an early date if an examination is to be made. Any assistance that you may give the members of the field team during the examination will be appreciated.

Sincerely yours,

C. O. Mittenderf

Administrator

WCAnderson:gad 8/12/54
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region VII
Mr. Dietrich, 3061
Mr. Newcomb, 5227
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 9 - 1954

August 9, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3430 (mica)

Applicant: J. C. Bowman

Name and Location of Property: Henry Poteat Mine - Chalk Mountain
Mitchell County, North Carolina

Date Application Rec'd. by Ceramic & Fertilizer Mtls. Br.: 8/4/54

Comments:

No data are available in this office regarding past production.

Recommendation:

It is recommended that the field team visit this mine when in that vicinity to ascertain if an exploration project is justified. If so, the field team and applicant should agree on a definite plan of exploration on a unit-cost basis.

W. F. Dietrich

IN REPLY REFER TO:

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

Defense Minerals Adm.
RECEIVED
AUG 6 - 1954

August 6, 1954

Memorandum

REVIEW OF APPLICATION DMEA-3430 (mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: E. L. Newcomb, U. S. Geological Survey
Applicant's name and address: J. C. Bowman, 130 Maxwell Place, Tampa 6, Florida
Name of property: Henry Poteat Mine
Location of property: 1½ mi. W. of Spruce Pine, Mitchell Co., N. C.
Summary of applicant's proposal: Apparently the proposal involves deep trenching, reopening old workings and drifting. The proposed work is not clearly outlined. Total - $17,300.
Sources of information on applicant's property:
U. S. G. S. unpublished report (1945), Poteat Feldspar and Mica Mine, Mitchell County, North Carolina.
Comments:
1. There are numerous old workings on property.
2. Pegmatite is 300 feet long, 20 feet thick, and enlarges with depth.
3. Mica sparsely distributed throughout peg.
4. Most of mica is scrap.
5. Considerable mica mined intermittently between 1917 and 1945.

RECOMMENDATION: Though more information about proposed work is desirable, it seems best to refer the application to the Field Team.

E. L. Newcomb

ELNewcomb:hlm
G-8/6/54

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
W. F. Dietrich