Mr. Latt Young
47 Carroll Avenue
Asheville, North Carolina

Re: Docket No. DMEA-3491 - Mica
Latt Young
G. D. Ray (Gray) Mine
Yancey County, North Carolina

Dear Mr. Young:

Reference is made to your application for Government assistance to explore the subject mine which was denied November 5, 1954, and re-denied December 23, 1954, and November 23, 1955.

As we pointed out in our letter of November 23, 1955, it is necessary that you do actual physical work which can be seen and examined by the Field Team. Until you have done sufficient work to expose pegmatite areas which show promise for the discovery of new mica reserves, we cannot reconsider your application.

There is no way to transfer your lease to the Government, as the Government does not operate mines.

Sincerely yours,

C. O. Mittendorf

Administrator

WCAnderson:gad 12/19/55
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Anderson

RECEIVED
NOV 28 1955

47 Carroll Ave.,
Asheville, N. C.
Nov. 26, 1955.

Mr. Frank E. Johnson,
Acting Administrator,
Washington 25, D. C

Re: Docket No. DMEA-3491-Mica
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Johnson :-

Reference is made to yours dated Nov. 23, regarding above Docket No. Mine.

The Burleson shaft was made approximately 75 feet south of Brina Shaft on East side of the slate and found to be poor pegmatite and scattered mica.

The Mica column of the Brina Shaft would be about 75 feet North of the Burleson shaft dipping to the west slate which is about 45 degrees. The East wall or slate dips almost vertical.

Taking the water out and running a drift to the west wall would not be much of an outlay in money. My opinion is that mica paying column would be hit in from a 5 to 30 feet drift. This is where the mine was left off when Burleson sank the new shaft.

The Back bone split the vein and the part being the pegmatite and mica is on west side.

Is there any way I could transfer my lease to the Government for operating as I would like to see this mine back of the map. This is one of the largest mica mines in the United States.

Yours very truly

Latt Young

Latt Young

600

NOV 23 1955

Mr. Lata Young
47 Carroll Avenue
Asheville, North Carolina

Re: Docket No. DMA-3491 - Mica
Lata Young
G. D. Ray (Gray) Mine
Yancey County, North Carolina

Dear Mr. Young:

Reference is made to your letter of September 20, 1955, requesting reconsideration of the subject application, denied November 5, 1954, and re-denied December 23, 1954.

We note that the Burleson shaft and the Brownie shaft are one and the same shaft. The Field Team in their re-examination of the Brownie shaft and workings found that no additional work has been done to expose new areas. We cannot re-consider your application until new areas have been exposed that show promise of discoveries of new deposits containing significant amounts of strategic mica.

Therefore, we regret to advise you that your request for reconsideration of your application for exploration assistance at the subject mine is denied.

Sincerely yours,

Frank [illegible]

ACTING Administrator

WCAnderson:ad 11/22/55
Copy to: Admr. R. File
Docket
Field Team, Region V
Operating Committee
Mr. Killaguard, 5222
Mr. Dietrich, 3061
Mr. Hook
Mr. Anderson

Confidential

IN REPLY REFER TO:

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

RECEIVED
NOV 21 1955

November 18, 1955

Re: DMEA 3491
Latt Young
Gray Mine
Yancey County, N. C.
No estimate - Mica

Memorandum

To: L. G. Houk, Defense Minerals Exploration Administration

From: N. K. Nelson, U. S. Geological Survey

Subject: Review of memorandum by the Field Team concerning the request of applicant for review of his application which was denied in November 1954.

As stated by the examiners, the re-examination and the review of published information justified the recommendation that the original application be denied.

I concur with the opinion of the Field Team.

N. K. Nelson

N. K. Nelson

NKNelson:jeh
G-11/18/55
cc:Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
W. F. Dietrich, 3061

Denied 11/5/54

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON OFFICE
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

RECEIVED
NOV 7 - 1955

November 7, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V

Subject: DMEA-3491, Latt Young, operator. G.D. Ray (Wray Mine, N. C. (mica)

The Field Examiners re-visited this property November 2, 1955 with Mr. Latt Young and a Mr. Riddle. Apparently Mr. Riddle has been taken in by Mr. Young as a partner.

No new exposures were available for inspection, nor was additional information available on extent or location of underground workings. The "Burleson shaft" mentioned in Mr. Young's letter of September 20, 1955 is the "Brownie shaft" shown on the map attached to the original examination which was denied by letter, dated November 5, 1954.

The information available on the "Brownie shaft"is as follows:

"The Brownie shaft, 90 feet southwest of the Briny Deep cut, is reported to be 210 feet deep. The upper hundred feet was examined by J. C. Olson on April 1, 1944, after mining there had ceased. Information concerning the rest of the workings was obtained from a sketch section (made by Herb Hall) in the Colonial Mica Corporation files and from verbal descriptions by Frank Fortner of the Asheville Mica Company. From a point about 160 feet below the surface an old incline extends northeast and downward to connect with the bottom of the Briny Deep incline. The last operators ran a 60-foot drift to the southwest at this level, with a short raise at the end. This proved unprofitable, so the shaft was deepened another 50 feet and a crosscut driven about 50 feet to the northwest; all these workings were in pegmatite. An 8-foot hole was drilled horizontally from the end of this crosscut, but the northwest wall of the pegmatite was not reached. Operations ceased in March, when mica in paying quantities was not found."

No other information is available. The examiners cannot recommend work at the new location proposed in Mr. Young's letter. Furthermore, there is considerable doubt as to the competence of Mr. Young and Mr. Riddle.

Reviewed by
DMEA OPERATING COMMITTEE
11-16-55
(date)

Both are over 65 years of age and neither have mining experience, except from observation.

The examiners recommend, and the Field Team concurs that the application should be denied.

V. J. Lynch, Acting
Executive Officer, DMEA Region V

K. H. Teague, Geologist
U. S. Geological Survey

KHT/sm
cc:
Lynch
Shirley
Files

SEP 29 1955 600

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

Subject: Docket No. DMEA-3491 - Mica
Latt Young
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Reference is made to the application for exploration assistance at the subject mine which was denied by letter of November 5, 1954, and re-denied by letter of December 23, 1954.

Enclosed is a copy of a letter, dated September 20,1955, with an enclosed specimen of mica from the applicant, Mr. Latt Young, in which he states: "I would like to take the water out of the Burleson shaft and run a drift 40 feet to the west slate". Please note that this is the third location on the Ray Property that the applicant has proposed for exploration work. It is not clear whether the applicant has actually exposed new areas that would merit re-examination.

It is suggested that your office contact or correspond with the applicant to ascertain whether he has actually found new worthwhile exposures, and if you deem it has merit, have the Field Team visit this mine for re-examination when they are in that vicinity.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

P. F. Yopes
Member, Bureau of Mines

N. E. Nelson
Member, Geological Survey

Enclosures 2

WCAnderson:gad 9/26/55
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Anderson

SEP 29 1955

Mr. Latt Young
47 Carroll Avenue
Asheville, North Carolina

Re: Docket No. DMEA-3491 - Miss
Latt Young
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Young:

Receipt is acknowledged of your letter of September 20, 1955.

Your letter has been referred to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville 2, Tennessee, for consideration. If you have done any work on the subject property which exposed new pegmatite areas, we suggest that you send Mr. Laurence a map or sketch showing these new exposures and relate your findings in detail.

Sincerely yours,

G. O. Mittendorf

Administrator

WCAnderson:gad 9/26/55
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Anderson

C
O
P
Y

47 Carroll Avenue
Asheville, N. C.
September 20th, 1955

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
United States Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3491 - Mica
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Mittendorf:

In my prospecting at the Ray Mine I find that the vein is forked and the works followed the east wall. I would like to take the water out of the Burleson shaft and run a drift 40 feet to the west slate. I find there is plenty of mica in my prospecting following the west wall.

It is my opinion there is considerable mica on the west wall from Buzzard's Roost down south to the Burleson shaft and beyond.

Enclosed is a sample of mica from the Ray Mine.

Very truly yours,

/s/ Lat Young

LAT YOUNG

LY/fl
Encl.

cc: Mr. Robert A. Laurence, Executive Officer
Defense Minerals Exploration Administration
Region VII
Post Office Building
Knoxville 2, Tennessee

C
O
P
Y

47 Carroll Avenue
Asheville, N. C.
September 20th, 1955

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
United States Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3491 - Mica
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Mittendorf:

In my prospecting at the Ray Mine I find that the vein is forked and the works followed the east wall. I would like to take the water out of the Burleson shaft and run a drift 40 feet to the west slate. I find there is plenty of mica in my prospecting following the west wall.

It is my opinion there is considerable mica on the west wall from Buzzard's Roost down south to the Burleson shaft and beyond.

Enclosed is a sample of mica from the Ray Mine.

Very truly yours,

/s/ Lat Young

LAT YOUNG

LY/fl
Encl.

cc: Mr. Robert A. Laurence, Executive Officer
Defense Minerals Exploration Administration
Region VII
Post Office Building
Knoxville 2, Tennessee

JAN 2

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

Subject: Docket No. DMEA-3491 - Mica
Latt Young
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Reference is made to the subject application denied on November 5, 1954.

Transmitted herewith are two copies of letters received from the applicant requesting reconsideration of the denial. Our second letter reaffirming the denial is transmitted to you for your consideration and forwarding to the applicant if you are in agreement.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

Enclosures 5

LGHouk:gad 1/24/55

Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

C O P Y

47 Carroll Ave.
Asheville, N. C.
Jan. 28, 1955

Mr. Robert A. Laurence
Executive Officer, DMEA Region VII
Post Office Building
Knoxville 2, Tenn.

Re: Docket No. DMEA-3491 - Mica
Latt Young
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Sir :-

I would like to make some exploration work in the Penland shaft, building a ladder and going down about 30 or 35 feet, which will show the pegmatite dipping north on the vein, if you will authorize your field men to make a further examination when this is done, as the field men were unable to get down in the shaft to make this examination.

When I was with Burleson 43 years ago there were no indication of any work being done of an exploration nature, if so it would have shown from the ground as the hill makes up to about 45 degrees.

W. Banks told me when I was with Burleson that the Buzzard Roost was the heart of the mine. There is approximately 160 feet between the Penland shaft and Buzzard Roost, which would tap more veins between the two shafts.

The Buzzard Roost was closed down in 1884 and it would be impossible to tell from the surface if these two mines had been cut together.

The Brina and Penland shafts are the same workings, a vertical shaft having been sunk for hoisting purposes.

Yours very truly,

/s/
Latt Young

cc
Mr. C. O. Mittendorf
Washington 25, D. C.

C O P Y

C
O
P
Y

47 Carroll Ave.
Asheville, N. C.
Dec. 28, 1954

Mr. C. O. Mittendorf, Administrator
United States Department of Interior,
Washington 25, D. C.

Re: Docket No. DMEA-3491 - Mica
Latt Young
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Mittendorf:

This will acknowledge yours dated Dec. 23, 1954.

There is a distance of approximately 160 feet between the Penland shaft and Buzzard Roost shaft, which show mica veins that has never had any exploration work done. The veins are located between two walls and should produce something like half million dollars worth of mica.

I believe that if the field men were authorized to re-examine this property, they would agree that working this property, is worth while.

I would be glad to have you consider this letter and that you can see your way clear to authorize your field men to make another examination of this property.

Yours very truly

/s/ Latt Young

Latt Young

DEC 23 1954

Mr. Latt Young
47 Carroll Avenue
Asheville, North Carolina

Re: Docket No. DMEA-3491 - Mica
Latt Young
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Young:

Reference is made to your letter of November 10, 1954, requesting reconsideration of the subject application which was denied November 5, 1954.

It is noted from your letter that you believe that drifting at another location would make your application sufficiently attractive for Government assistance. The Field Team's examination covered the entire area of the Ray property. The data in their report indicate that the proposed project does not meet the criteria necessary to qualify for exploration assistance, therefore, the denial of your application is reaffirmed.

However, if you still believe that your property can produce a significant amount of strategic mica, we suggest that you expose new areas for examination. Should this work indicate areas favorable for an exploration project contract we would consider a re-examination of the property.

Sincerely yours,

C. O. Mitzendorf

Administrator

LGHouk:gad 12/21/54
Copy to: Admr. R. File
Docket
Field Team, Region VII
Operating Committee
Mr. Dietrich, 3061
Mr. Kiilsgaard, 5222
Mr. Houk

47 Carroll Avenue
Asheville, N. C.
November 10th, 1954

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

RE: Docket No. DMEA-3491 - Mica
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Sir:

This will acknowledge receipt of your letter dated November 5th, 1954, advising my application for exploration assistance has been denied.

I would be glad to have you review this application for a sixty (60) foot, 5 x 7 foot, drift on a level from what is known as Penland Shaft located between Brina and Buzzard Roost Shafts. This drift would, I believe, produce mica in paying quantities.

This mine produces a very high quality ruby mica which will run eighty (80%) per cent good stained or better. The mine has been worked only by primitive methods heretofore, and with present working methods should be a large producer.

Any consideration given will be highly appreciated.

Very truly yours,

Lat Young

LAT YOUNG

LY/fl

NOV 5 - 1954 660

Mr. Latt Young
47 Carroll Avenue
Asheville, North Carolina

Re: Docket No. DMEA-3491 - Mica
G. D. Ray (Wray) Mine
Yancey County, North Carolina

Dear Mr. Young:

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

WCAnderson:gad 11/5/54
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region VII
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

November 5, 1954

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report.

By: Walter C. Anderson

1. DMEA Docket No. 3491 - Mica
   Property: G. D. Ray (Wray) Mine
   Yancey County, North Carolina

   Applicant: Latt Young
   47 Carroll Avenue
   Asheville, North Carolina

   Application: Form MP-103, date received September 17, 1954.
   Work proposed: Drive 100 feet of drift.
   Amount requested: Not given.
   No contract: Application denied.

2. Comments:

   Geological premise: The premise that the pegmatite will not continue is based on the unprofitable nature of the last operation, the results of which indicate that the old workings may have been sunk to the bottom of the pegmatite.

   Geological criteria:
   1. Conformable pegmatite from a few inches to 60 feet thick.
   2. Pinching out of pegmatite, upward and downward.
   3. Mica of good quality but of sparse occurrence throughout pegmatite.

   Future possibilities: Not good for discovery of strategic mica beyond limits of old workings.

   Recommendations: The Nonmetallic Minerals Division concurs in the Field Team's recommendation to deny the application. The Geological Survey and the Bureau of Mines are in agreement.

WCAnderson:gad 11/5/54
Copy to: Admr. R. File
Mr. Houk

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

November 1, 1954

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 2 - 1954

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3491 (mica)

Applicant: Latt Young

Name and Location of Property: Ray (Wray) Mine
Yancey County, North Carolina

Date of Field Team Report: October 13, 1954

Date Rec'd. by Ceramic & Fertilizer Mtls. Br.: October 20, 1954

Field Team Recommendation:

1. Denial.

Comments:

1. Considerable work has been done on this property since 1869 by numerous operators and the last operator, working during World War II, operated at a loss.

2. The examiners report that the area held under lease contains extensive old workings to considerable depth.

3. This mine appears to have been worked to the point where future operations probably would not encounter any sizable quantities of strategic mica.

Recommendation:

I concur in the field team's recommendation to deny this application on the basis that there is little possibility of obtaining strategic mica.

Signed

W. F. Dietrich

IN REPLY REFER TO:

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

October 20, 1954

Re: DMEA-3491
Latt Young
(Wray Mine)
Yancey Co., N. C.
Mica

Memorandum

To: L. G. Hauk, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of field examination report

The Field Team has recommended the applicant's request for exploration be denied.

According to the unpublished report, which was freely excerpted by the Field Team examiners, a tunnel exists in the area where the applicant proposed to carry out exploration. This property is reported to have ceased operations in 1944 because profitable mining was no longer feasible.

I believe the Field Team's recommendation for denial has been adequately justified in their report. It is their belief that the extensive old workings may have been sunk to the bottom of the pegmatite.

In light of the field examiners conclusions, I recommend this application be denied.

E. L. Newcomb

ELNewcomb:hlm
G-10/20/54

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

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

Department of the Interior
Defense Minerals Administration
RECEIVED
OCT 18 1954

October 15, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3491 (mica)

Applicant: Latt Young

Name and Location of Property: G. D. Ray
Yancey County, North Carolina

Date Application Rec'd. by Ceramic & Fertilizer Mtls. Br.: 9/21/54

Comments:

1. No data available in this office on subject mine.

2. Proposed exploration was not based on a unit-cost basis and more details are needed regarding the plan of exploration.

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.

Signed
W. F. Dietrich

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

October 13, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: Field Team Report on DMEA-3491, Latt Young, Applicant

Transmitted are four copies of the subject report.

The Field Team is in agreement with the field examiners that this application should be denied.

D. H. Amos, Acting
Executive Officer, DMEA
Region VII

Bej: gm
Wm. A. Beck, for W. J. Lynch
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
10-20-54
(date)

ZM.
cc:
Beck
Lynch
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

On

DMEA-3491, RAY (Wray) MINE
Yancey County, N. C.
(mica)

BY

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

K. H. Teague, Geologist
U. S. Geological Survey

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

D. H. Amos, Geologist
U. S. Geological Survey

October 8, 1954

Reviewed by
DMEA OPERATING COMMITTEE
10-20-54
(date)

FIELD EXAMINATION REPORT
ON
DMMA-3491, RAY (Wray) MINE (mica)

Applicant: Latt Young, 47 Carroll Ave., Asheville, N. C.

The Ray mine has been worked by many operators over a long period of time. Underground workings are extensive and their locations are not known. The block of ground proposed by the applicant to be explored contains old workings according to an unpublished report. It is recommended by the field examiners that the application be denied as the area held under lease by the applicant contains extensive old workings to considerable depth which may have been sunk to the bottom of the mica-bearing pegmatite. The last operation during World War II was unprofitable.

The Ray mine is 2.3 miles S. 31° E. of Burnsville, Yancey County North Carolina on a steep hillside one-half mile east of Bowlens Creek. Access to the mine is via one-half mile of jeep road.

The property was examined on October 8, 1954. Messrs. Latt Young, Fletcher Phillips, Wilson, Cook, Presnell, and Miller accompanied the examiners on the inspection which required two and one-half hours.

The following information is taken from an unpublished report of the U.S.G.S. by John M. Parker III:

"The Wray mine has been worked by a great many operators over a long period of time. It is reported to have been opened in 1869 by Garratt Ray, who worked until 1885, probably in the Briny Deep cut. During the seventies John Young and a Mr. Gear started working the Gear pit. W E. Burleson re-opened the mine about 1914, and sank a shaft from the Briny Deep cut at considerable expense. Oliver H. Hessell operated the mine in 1931-32. The dates of several other early operations are not accurately known. The Wray Mining Company (Asheville Mica Company) reopened the mine late in 1942, working first in the Jess Penland cut, then in the Brownie and the Dolph Hensley shafts, and finally sinking the new south shaft. The mine was abandoned as unprofitable on May 5, 1944.

The workings extend for 650 feet in a line trending N. 25° E. They lie on both sides of a small stream and extend high up a steep hill slope. Many of the older workings are muck-filled or inaccessible, hence probably less than half of the mine was mapped.

At the north end is a shallow, slumped cut about 120 feet long, in which is exposed about 40 feet of kaolinized pegmatite between gneiss walls. Little mica was noted.

Next in line to the southwest is the Jess Penland cut, a narrow slot about 60 feet long, 5 to 15 feet wide, and 170 feet deep; it dips 65° to 80° west. An unknown number of old muck-filled lofts extends north and south from this cut. The hanging wall of the pegmatite is exposed only for a short distance at the surface, so that the thickness is uncertain; its maximum, however, is more than 15 feet. At the north end of the cut the pegmatite pinches out upward and to the north, and at the south end of the lowest workings accessible, the pegmatite is reported to pinch out to the southeast and to bottom in country-rock "slate." Very little mica could be seen in these workings.

About 200 feet farther southwest are the Buzzards Roost workings, which were reached by a steep incline from the north, a vertical shaft, and a short tunnel from the south. Evidently these workings are large. No pegmatite is visible from the surface and nothing was learned of the geology below.

The Tampin incline, 20 feet southeast of the Buzzards Roost shaft, extends southeast from the floor of a narrow cut about 100 feet long. It is filled with muck to within 40 feet of the surface, so that its extent and possible connection with the Buzzard Roost workings are not known. The pegmatite exposed on the northeast wall pinches out upward at the head of the cut. Very little mica was seen.

The Gear cut is about 100 feet long, 60 feet wide, and 20 to 50 feet deep. A filled tunnel extends north from its upper end and probably connects with the Buzzards Roost workings. From its southwest corner a tunnel extends southwest to the head of the Briny Deep cut. An incline, now filled, apparently extends southward from the bottom of the cut at the south side. Pegmatite is exposed on the north and south sides of the cut and along part of its bottom. Though generally conformable with the gneiss, it cuts sharply across the foliation for 25 to 30 feet in two places.

The Briny Deep cut, largest of the surface openings, is 180 feet long, 70 feet wide, and 20 to 40 feet deep. A large inclined shaft is reported to plunge steeply south-southwest from the lower part of the cut. Mica-poor pegmatite is exposed at the northeast and southwest ends, and is conformable with the gneiss.

The Brownie shaft, 90 feet southwest of the Briny Deep cut, is reported to be 210 feet deep. From a point about 160 feet below the surface an old incline extends northeast and downward to connect with the bottom of the Briny Deep shaftline. The last operator ran a 60-foot drift to the southwest at this level, with a short raise at the end. This proved unprofitable, so the shaft was deepened another 50 feet and a crosscut driven about 50 feet to the northwest; all these workings were in pegmatite. An 8-foot hole was drilled horizontally from the end of this crosscut, but the northwest wall of the pegmatite was not reached. Operations ceased, when mica in paying quantities was not found.

The country rock at the Wary mine is a kyanitic mica gneiss, in general striking north-northeast and dipping moderately to steeply west. The gneiss contains abundant tourmaline near the pegmatite contact on the east side of the Jess Penland cut.

The pegmatite exposed in the various workings is probably all part of the same body. Its thickness ranges from a few inches in the Dolph Heasley workings to over 60 feet (reported) in the Brownie shaft. In at least three places (Jess Penland, Tampin, and Dolph Heasley workings) the pegmatite can be observed to pinch out upward, and in one (Jess Penland) it is reported to pinch out downward as well. Many of the workings are inclined to the south-southwest, reportedly following similarly oriented mica columns or "chimneys." These features give the impression that the pegmatite is a great pod, dipping steeply to the east-southeast and raking south-southwest. Its irregular upper edge apparently lies near the surface of the steep hillside, so that in places the pegmatite is exposed (as in the Briny Deep and Gear cuts) and in others its contact is beneath the surface (as at Buzzard Roost and the head of the Jess Penland cut). Too little of the underground geology could be accurately surveyed, however, to make certain of this interpretation.

For the most part the pegmatite is conformable with the foliation of the enclosing gneiss, but in several places, particularly in the Gear cut, it is sharply discordant. A few projections of gneiss were observed ~~within~~ in the pegmatite, but no detached inclusions were seen. The only observed effect of contact metamorphism is the tourmaline in the gneiss footwall at the Jess Penland cut.

The pegmatite consists chiefly of white plagioclase feldspar (albite-oligoclase) and blue-gray quartz, mostly in masses as much as 5 to 6 inches across. Some of the plagioclase is glassy. White microcline in large masses (1 1/2 feet) is sufficiently abundant to form a significant by-product of mining operations; some is pale green amazonstone. Biotite occurs ~~[illegible]~~ sparingly in scattered irregular aggregates of flakes. Black tourmaline in thin crystals as long as 2 inches is abundant; it occurs as individual crystals and in irregular clusters or radiating aggregates. It is commonly bent or broken, with the fractures filled by quartz. Pale green translucent to transparent beryl is also abundant and occurs as well-formed crystals 1 1/2 inches in maximum thickness. Small red garnet crystals and fine granular masses of garnet are plentiful. Autunite, thulite, and columbite-tantalite are present but rather rare.

The muscovite is of good grade, and is of clear, red rum color. Some is ruled or has "A" structure. What little mica can be seen in the mine seems to be most abundant near the walls. It is reported to be concentrated in "chimneys" or sheets, but this could not be checked by observation.

The conditions under which the survey was made were so unfavorable that sufficient data could not be obtained to form a sound opinion on the future prospects of the mine. The unprofitable nature of the last operation may indicate that the mica is worked out so far as mica is concerned."

The above report indicates the existence of a tunnel between the Briny Deep Cut and Gear Cut, the location where the applicant proposed to drive an exploratory shaft. (It should be noted that the sketch submitted by the applicant is not correct, the relative positions of the Buzzard Roost shaft and Gear shaft being reversed).

It is recommended that the application for exploration assistance be denied.

Date of inspection October 8, 1954.

Wm. A. Beck and
L. E. Shirley, Mining Engineers
U. S. Bureau of Mines

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

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 23 1954

September 22, 1954

Re: DMEA-3491
G. B. Ray Mine
Yancey Co., N. C.
Mica

Memorandum

To: L. G. Hunt, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

The applicant proposes to drift 100 feet from north side of Brian shaft. North end of new drift will be 150 feet below lowest level in the Bennard Boost shaft.

We have no available information on this property. Undoubtedly this property is included in file material in the U.S.G.S. Knoxville office.

The application should be referred to the Field Team for their review and comments. An examination may be needed, but this matter should be left to the discretion of the Field Team.

E. L. Newcomb

EL Newcomb:hlm
G-9/22/54

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

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
SEP 23 1954

September 22, 1954

Re: DMEA-3491
G. D. Ray Mine
Yancey Co., N. C.
Mica

Memorandum

To: L. G. Rook, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

The applicant proposes to drift 100 feet from north side of Brinn shaft. North end of new drift will be 150 feet below lowest level in the Buzzard Roost shaft.

We have no available information on this property. Undoubtedly this property is included in file material in the U.S.G.S. Knoxville office.

The application should be referred to the Field Team for their review and comments. An examination may be needed, but this matter should be left to the discretion of the Field Team.

E. L. Newcomb

ELNewcomb:hlm
G-9/22/54

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W. F. Dietrich, 3061

IN REPLY REFER TO:

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

September 22, 1954

Re: DMEA-3491
G. D. Ray Mine
Yancey Co., N. C.
Mica

Memorandum

To: L. G. Houk, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

The applicant proposes to drift 100 feet from north side of Brine shaft. North end of new drift will be 150 feet below lowest level in the Buzzard Roost shaft.

We have no available information on this property. Undoubtedly this property is included in file material in the U.S.G.S. Knoxville office.

The application should be referred to the Field Team for their review and comments. An examination may be needed, but this matter should be left to the discretion of the Field Team.

E. L. Newcomb

ELNewcomb:hlm
G-9/22/54

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

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

Defense Minerals
RECEIVED
OCT 18 1954

October 15, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3491 (mica)

Applicant: Latt Young

Name and Location of Property: G. D. Ray
Yancey County, North Carolina

Date Application Rec'd. by Ceramic & Fertilizer Mtls. Br.: 9/21/54

Comments:

1. No data available in this office on subject mine.

2. Proposed exploration was not based on a unit-cost basis and more details are needed regarding the plan of exploration.

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.

Signed

W. F. Dietrich

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

Defense Minerals Ad
RECEIVED
OCT 18 1954

October 15, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3491 (mica)

Applicant: Latt Young

Name and Location of Property: G. D. Ray
Yancey County, North Carolina

Date Application Rec'd. by Ceramic & Fertilizer Mtls. Br.: 9/21/54

Comments:

1. No data available in this office on subject mine.

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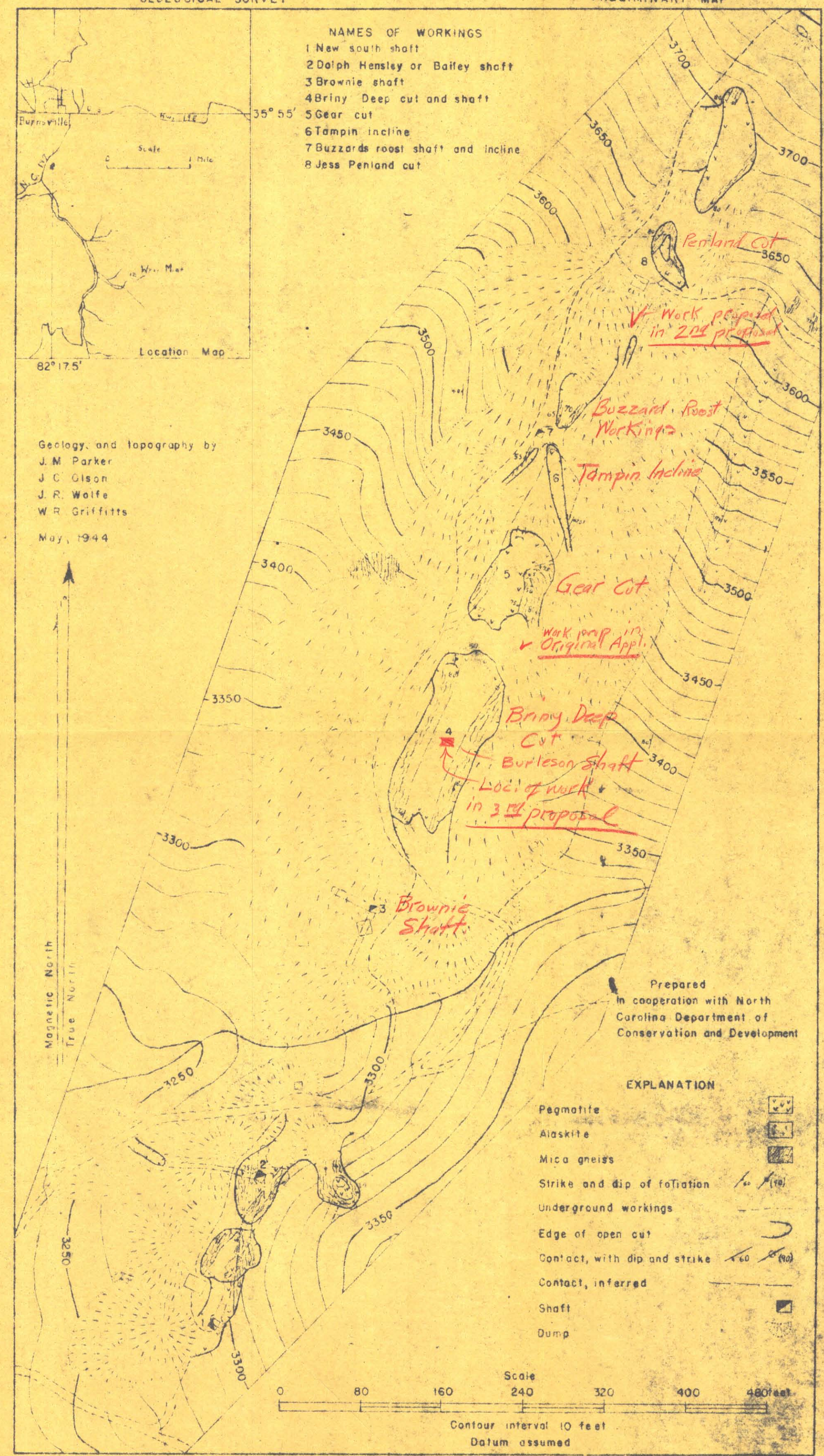
Signed

W. F. Dietrich

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STRATEGIC MINERALS INVESTIGATIONS
PRELIMINARY MAP



GEOLOGIC AND TOPOGRAPHIC MAP OF
THE WRAY MICA MINE, YANCEY COUNTY, NORTH CAROLINA