DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 3491

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Exploration Assistance

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Cys to UDBM, USGS, & Reg.

Routing Slip

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DO NOT DETACH

CONTROLLED DOCUMENT

Docket Copy
Surname:
Anderson
Houk

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

DEC 19 1955

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 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. C. Kilgore
(By EST)
Administrator

Coe

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

DOCKET FILE
Surname:
Anderson
Houk
Nelson
Gechon
Selfridge

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

Mr. Latt Young
47 Carroll Avenue
Asheville, North Carolina

NOV 23 1955

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 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 E. Johnson

ACTING Administrator

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

P.S.

IN REPLY REFER TO:

RECEIVED
NOV 21 1955

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

November 18, 1955

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

Memorandum

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

From: N. E. 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. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
KNOXVILLE, TENNESSEE

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

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

K. H. Teague

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

Docket Copy
Surname:
Anderson
Nelson
Selfridge
Yoder
Johnson

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

600

SEP 29 1955

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:

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,

C. O. Mittendorf (for)

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

Docket Copy
Surname:
Anderson
J. L. Kassner
Selfridge
L. Johnson

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

SEP 29 1955

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 (2/6)

Approved:

P. F. Yopes (2/6)
Member, Bureau of Mines

N. E. Nelson (2/6)
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

R.G.S.

RECEIVED

SEP 23 1955

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,

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

Received

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

Mr. Robert A. Laurence
Executive Officer DMEA Region V11
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.

Mr. 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

Latt Young

Latt Young

cc
Mr. C.C.Withenorf
Washington 25, D. C.

DOCKET FILE
Surname:
Houk
Hodges
Kiilsgaard
Selfridge
Johnson

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

600

JAN 24 1955

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 second request for reconsideration of your application for exploration assistance denied on November 5, 1954.

Our letter of denial and the reaffirmation of denial of December 23, 1954, were made after a careful study of the factual data available to this office. The examination report by two geologists and two mining engineers covered the Wray Mine geology and potentialities from the extreme southwest end to the northeast cut.

In the opinion of the DMEA a field re-examination is not justified until new pertinent information is received or new work on the property discloses geological information of a favorable nature.

Sincerely yours,

SIGNED
Administrator

LGHouk:ad 1/21/55
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

Docket Copy
Surname: Houk
Selfridge
Johnson

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

600

JAN 24 1955

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 (JG)

Approved:

J. H. Hedges
Member, Bureau of Mines (JB)

Thor H. Kiilsgaard
Member, Geological Survey (JG)

Enclosures 5

LGHouk:gad 1/24/55

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 29 1954

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 Country, 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. These 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 proprty, 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

Latt Young

Latt Young

Docket Copy
Surname:
Anderson
Houk
Kiilsgaard
Selfridge
Johnson

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

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. Mittendorf
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

R.C.S.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 12 1954

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

Docket Copy
Surname:
Houk
Hedges
Newcomb
Selfridge

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

NOV 5 - 1954

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. Mi[illegible]dorf

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

R.C.S.

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

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 MF-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.

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

November 1, 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 2 - 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: 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.

W F Dietrich
W. F. Dietrich

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
OCT 21 1954

October 20, 1954

Re: DMEA-3491
Latt Young
(Wray 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 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

E. L. Newcomb

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.

W. F. Dietrich

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

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

Wm A. Beck - By: gm

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

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

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
DMEA-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. J. E. Burleson reopened the mine about 1914, and sank a shaft from the Briny Deep cut at considerable expense. Oliver H. Howell operated the mine in 1931-32. The dates of several other early operations are not accurately known. The Wray Mining Company (Asheville Mica Company) reppened 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 unprofiable 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 incline. 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 new inches in the Dolph Hensley workings to over 60 feet (reported) in the Brownie shaft. In at least three places (Jess Penland, Tampin, and Dolph Hensley 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 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 cheifly 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 anazonstone. Biotite occurs 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 shoots, 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.

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. 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 Brina 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

E. L. Newcomb

September 21, 1954

Mr. Latt Young
47 Carroll Ave.
Asheville, N. C.

Subject: DMEA-3491
Re: Exploration Assistance
G. D. Ray Mine

Dear Sir:

The receipt of your application dated September 15, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3491 and referred to the Non-Metallic Minerals Division.

Kindly refer to in any future correspondence relating to your application.

Sincerely yours,

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3491
Metal or Mineral MICA
Date Received
Estimated Cost $
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: LATT YOUNG
47 Carroll Avenue
Asheville, North Carolina

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Lease

(*b*) State any mine name by which the property is known. G.D. RAY MINE

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Mica

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 60 days and be completed within 8 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated 9 — 15 —, 1954

(Applicant)

By Patty Young

47 Carroll Avenue

Asheville, North Carolina

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—66551-1

LATT YOUNG
47 Carroll Avenue
Asheville, North Carolina

UNITED STATES DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

FORM MF-103

No. 3 (d):
I was with the J. E. Burleson Mica Company, Spruce Pine, North Carolina, for 18 years as a Supervisor of Mines for that concern. I was with W. E. DeBell six years as a mica inspector. I was mica inspector for Asheville Mica Company for nine years. I plan to hire experienced mica men to help with the operation. Now operating Cox Mine at Cullowhee, Jackson County, North Carolina.

No. 6. (b):
Supervisor $2.50 per hour; drill operator $2.00 per hour; laborers $1.25 per hour.

No. 6. (C):
Picks, shovels and steel for drills . . $ 350.00

No. 6. (d):
I plan to rent Air Compressor at $150.00 per month. I also plan to buy 300 feet track and mine compressor drill. . $ 350.00

No. 6. (f):
I plan to erect a small building 10 x 14 feet for storage of tools and mica . . . . . $ 200.00

Will carry Employers Liability Insurance.

NOTE: There is an all weather road, excepting of one-half (1/2) mile, which is accessable by truck. This mine is located 3-1/2 miles East of Burnsville, N. C., and this would be both the shipping and supply points. I reside in Asheville. Man-power, materials, supplies and equipment are available locally. Water is about 50 feet within where I propose to start drilling. Power can be obtained by running a line approximately one-half (1/2) mile.

ly

R. W. WILSON
LAWYER
BURNSVILLE, N. C.

RECEIVED
SEP 17 1954

September 9, 1954.

Mr. Lat Young,
47 Carroll Avenue,
Asheville, N.C.,

Dear Mr. Young:

When I recived your letter about the G. D.Ray Heirs' signing a waiver of lien on Government rights for exploration development of the Ray old mine, Mr. D. R. Fouts who is representing, and is spokesman for, the Ray heirs, was out of town. He retruned yesterday, and has just informed me that they will sign the waivers.

If you will send me the necessary number of copies, seven, preferably, I shall have them signed and returned to you as soon as possible. One copy will have to go to the State of Washington, which will take some time.

Yours very truly,

R.W. Wilson

R. W. Wilson

Note:

"Owners Consent to Lien" will be sent to Washington as soon as Signatures are Complete.

HISTORY OF ~~W~~RAY MINE
BURNSVILLE TOWNSHIP
YANCEY COUNTY, N. C.

SEP 17 1974

THIS MINE was worked prior to 1884, closing down during the 1884 depression. The Brina Shaft was reopened in 1910 by the J. E. Burleson Mica Company, Spruce Pine, North Carolina, and worked until 1914, closing down due to a depression at that time and no further work has been done since. The Brina Shaft was worked to a depth of 222 feet, This was measured by Charlie McClurd and Latt Young.

W. B. Banks and Charlie McClurd, now deceased, who worked in Buzzard Roost Shaft, approximately 50 feet deep, and Gear Shaft, approximately 40 feet deep, said both shafts were very rich when closed down.

My lease only covers North of branch and does not include the Dolph Hensley shaft as shown on U.S.G.S. Map on ~~W~~ray Mine by J. M. Parker and J. R. Wolfe.

The Brina, Buzzard Roost and Gear Shafts have produced 99% of all mica taken from this property, which is the finest quality of ruby mica and will run 80% good stained and better.

I propose to begin on North end of the Brina Shaft and drift on vein 100 feet North on a level with a 5 x 7 foot drift. The Brina Shaft is in a low place at branch and the hill makes up very steep to Buzzard Roost Shaft. Starting driftat North end of Brina at the Grass Root would be approximately 150 feet under Buzzard Roost Shaft on level. There are two solid permanent walls with a vertical vein between walls approximately seven feet wide.

Latt Young

North Carolina
Yancey County

This mining lease made August 23rd, 1954, between Mrs. J. A. Higgins, a widow, Mrs. Pansy Ray, a widow, Dover R. Fouts, executor under the will of CharlesF. Byrd, Nu-Wray, Inc., of the State and County aforesaid, and Ruby Mae Ray, a widow, of Walla-Walla, State of Washington, of the first part, and herein after throughout called "lessors" to Lat Young, of Asheville, N. C., of the second part, and herein throughout called "lessee":

W I T N E S S E T H

That in consideration of the sum of $1.00 in hand paid, receipt whereof is hereby acknowledged by the lessors, and the further consideration of full compliance with the lease, and the payment of the royalties hereinafter specified, the parties of the first part, the lessors, have, and by these presents do lease unto the party of the second part for mining purposes only the exclusive right to mine and remove and sellminerals from the tract of land located in North Carolina, in Yancey County, in Burnsville Township, or waters of Bolens Creek, and on what is known as the G.D. Ray boundary, and described as follows:

Beginning at a stake 40 feet south of the southernmargin of the shaft known as "Brinie" and runs E. 300 feet to a stake; thence N. 1200 feet to a stake; thence W. 600 feet to a stake; thence S. 1200 feet to astake; thence E. 300 feet to the beginning:

Together with the right of ingress, egress and re-gress convenient or necessary for the mining and removing of the minerals, and the right to set up machinery, pipe lines, transmission lines, and construct such houses, sheds and structures as may necessary for the proper mining, storing and protection of tools, machinery and the mineral products, and remove same at will of lessee.

The terms and conditions of this lease are that:

1. It is for a period of five years, with the right of renwal for an additional five years if all conditions of this lease have been complied with by the lessee up to the time of renewal.

2. That the lessee is granted full mining rights and privileges through the terms of this lease including the the right of ingress, egress and re-gress, and to construct roads, ways, flumes power lines, tram roads, erecting of machinery and buildings, and the use of timber on the leased property except timber such as is fit for saw timber, and the right to use timber up to 15 inches in diameter for the purpose of upright posts and loft stringers.

3. In consideration of the mining privileges leased as above specified the lessee agrees with the lessors that he will throughout the terms of this lease:

Pay on or before the 15th of each calendar month for all minerals sold during the previous month a royalty for mica of 1/8 or 12½ percent of value of sale price, for feldspar $0.50 per long ton, and for all other minerals the usual and customary royalty prevailing for such minerals in Yancey County at the time, and will furnish with each payment an invoice showing the weights, measures and prices of the minerals, and the prices received, and the names and addresses of the purchasers.

4. That he will begin mining operations within 60 days after the deliver of this lease to him properly executed, and acknowledged and will continue to mine with reasonable regularity thereafter, and if he fails to mine for 60 consecutive working days unless hindred by weather conditions, and such other occurances as or termed acts of God, or by conditions of war or acts of the public enemy, and if he fails so to mine he will forfeit all rights under this lease at the option of the lessors, or any one of them.

5. If the lessee fails to pay the royalties as above specified when due, that he will forfeit all rights under the terms of this lease, at the option of the lessors or any one of them.

6. That if the lessee breaches or fails to comply with the terms of this lease in any respect, or any renewal of this lease, he will at the option of the lessors or any one of them forfeit all rights granted by this lease, and the lessors or any one of them may enter into possession of the leased premises without any action at law, and all property of lessee not moved off the premises within 45 days after such entry by the lessors or any one of them, may be removed by the lessors from the premises without claim for damages by the lessee.

7. The lessee may not, and will not, assign or sublet the rights granted by this lease without the written consent of the lessors in writing signed by each lessor, or his personal representatives.

8. He will work the mine in a workman like, and miner like manner, and save all minerals of whatever kind known to be of commercial quantity and quality, and prepare same for market in the usual way, and market them at the best obtainable price in the usual market and usual manner and condition, throughout the life of this lease.

In testimony whereof the named lessors and the lessee have hereunto set their hands and seals the day and year first above written.

Mrs J. A. Higgins (Seal)
Mrs. J. A. Higgins

Mrs. Pansy Ray (Seal)
Mrs. Pansy Ray

Dover R. Fouts (Seal)
Dover R. Fouts, Executor

Mrs Ruby Mae Ray (Seal)
Mrs. Ruby Mae Ray

Attest
Ruth T. Wray
Secretary

Nu-Wray, Inc., By
Julia Wray (Seal)
Presidnet

Lessors
Lat Young (Seal)
Les Lat Young

Lessee.

North Carolina
Yancey County

North Carolina
Yancey County

Personally came before me this day Mrs. J. A. Higgins, Mrs. Pansy Ray and D. R.(Dover R. Fouts) Fouts, each personally known to me to be the person who signed the foregoing lease by that name, who each acknowledged the due execution of mining lease for the purposes therein set forth.
This the 26 day of August, 1954.

L M. Angel
Notary Public

My Commission Expires on the
5 day of April, 1955

North Carolina
Yancey County

Personally came before me this day Mrs. Julia Wray, who being duly sworn, says:
That she is president of Nu-Wray, Inc, which corporation is one of the lessors in the foregoing mining lease, and that Rush Wray is secr secretary of said corporation; that she knows the corporate seal of said corporation, and that she, the said Julia Wray, signed said lease as president of said corporation for and on behalf of said corporation by authority duly given by the directors of said corporation, and that Rush Wray signed said lease as secretary of said corporation for the purpose of attesting the due execution thereof, and that he the said Rush Wray impressed the seal of said corporatiion thereon in the presents of Julia Wray, and that said lease is the act and deed of said corporation

Julia Wray,
~~Notary Public~~ Julia Wray,

Subscribed and sworn to be fore me this August 26, 1954

L M Angel
Notary Public

My Commission Expires on the 5
day of April 1955.

State of Washington
County of Walla Walla

Personally came before me this day Ruby Mae Ray, a widow, who acknowledged the due exceution of the foregoing mining lease for the purposes therein set forth.
This ~~August~~ Sept 4, 1954.

Iris Giordano
Notary Public

My Commission Expires on the
4th day of Oct, 1954.

North Carolina
Buncombe County

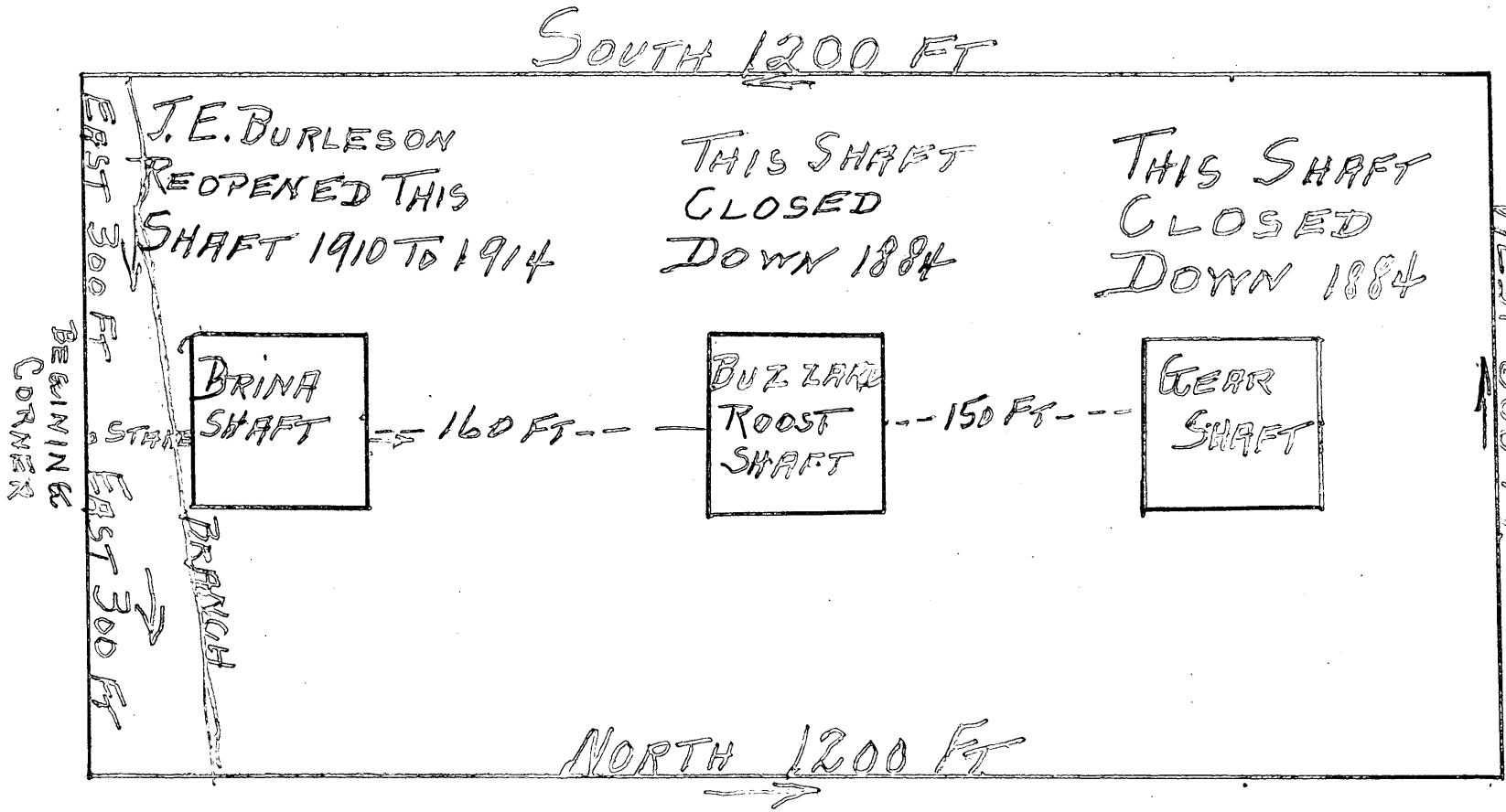
Personally came before me this day, Lat Young, personally known by me to be the person who signed the foregoing mining lease by that name, and who acknowledged the due execution of said lease for the purposes therein set forth.

This August 23, 1954. Frances A. Lasater

Notary Public

My Commission Expires on the 30th day of March 19 56

G.D. RAY MICA MINE
YANCEY COUNTY N.C.



ALL WORKING OPERATIONS WERE PRIMITIVE METODS.

EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

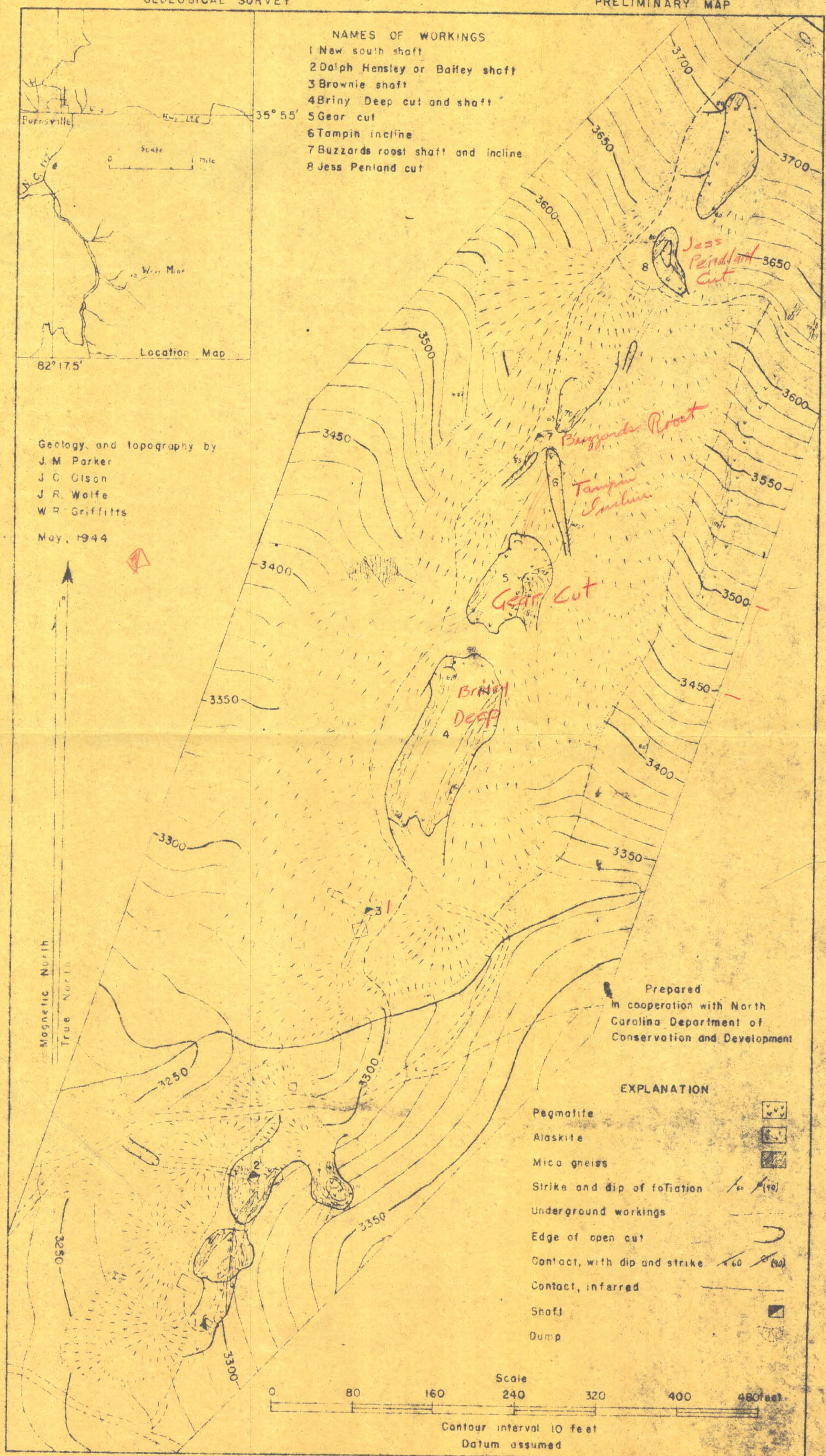
OFFICIAL BUSINESS

U. S. GEOLOGICAL SURVEY
SOUTH 157 HOWARD STR
SPOKANE 4, WASHINGTON

Mr. George C. Selfridge, Chairman
Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

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