JUN 20 1956

Mr. Sam K. Vanse
President, Birch Mining
Company, Inc.
Plumtree, North Carolina

Re: Docket No. DMEA-3461 - Mica
Docket No. DMEA-4154 - Mica
Birch Mining Company, Inc.
Birch Mine
Mitchell County, North Carolina

Dear Mr. Vanse:

Reference is made to your letter of June 11, 1956, concerning our letter of June 1, 1956, denying your application for exploration assistance on the subject property.

You state that we had already advised you in this connection on February 27, and that you do not know of any reason for our latest letter since you have not recently asked for assistance. Our records show that on February 27, 1956, you were advised that your application for exploration assistance received in this office on February 2, 1956, was being referred to the field for a possible examination. Our letter of June 1, 1956, was also in reference to this application.

You further state that the third paragraph of our letter of June 1, indicates there is not sufficient promise of mica on your property to justify Government participation, and that you do not understand how this conclusion was reached because of the considerable production from your property in the past.

Your property has been examined by our field representatives on three different occasions, each examination resulting in a denial of your application. Our denials were based upon the information available concerning your property. This information indicated that the productive potential of your property was about exhausted, with possibly only uneconomical concentrations of mica remaining, chiefly localized around old stopes. Thus, your property appears to lack target areas of sufficient promise for finding additional mica reserves to warrant Government participation in the proposed work.

In connection with the request in your letter of June 11, 1956, for reconsideration of your application, we are aware that

you have expended considerable money in rehabilitating the old workings on your property, such work having been prosecuted primarily for mining or preparation for mining. However, under our regulations, exploration funds are not available for that purpose. Under the circumstances we feel that your proposed program would not result in making a significant discovery of mica and consequently our denial of your application is re-affirmed.

Sincerely yours,

S. O. Mittendorf

Administrator

FE:Johnson:LGHouk:gad 6/19/56
Copy to: Admr. R. File
Docket (2)
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Johnson

January 24, 1958

Mrs. Sam Vance calling Mr. Houk. Re: Docket No. DMEA-3481 - Mica
Vance & Odom Mining Company
The Birch Mine
Mitchell County, North Carolina

Mrs. Vance: I am calling relative to the application we had on the Birch Mine.

Mr. Houk: The Birch Mine was denied on January 20, 1955.

Mrs. Vance: We were wondering - Mr. Aldridge tells me that you or Mr. Knouse told him that when we cleaned the mine out and reached the bottom, if we put in an application you would consider the application.

Mr. Houk: At one time I said yes. On that adit level that came in from the other ground we would have the field team look at it. Then, as I recall, it was after that period that the exploration assistance was denied.

Mrs. Vance: Mr. Aldridge must have misunderstood the whole thing. We are at the bottom.

Mr. Houk: There is nothing to prevent you from putting in another application.

Mrs Vance: It has cost us so much we thought if we could get some money to continue down it might prove worthwhile.

Mr. Houk: You understand that I cannot tell you that an application will be approved or disapproved by a telephone conversation. I would not speculate on getting a contract. How does the bottom look.

Mrs. Vance: Many books show of mica and most of the men are of the opinion that the men did not go far enough they only went down 18 to 20 feet.

Mr. Houk: How much trouble will you have to keep the mine open.

Mrs. Vance: Not much trouble. It is a very large mine. We have had to pump it out.

Mr. Houk: You must have made fairly good headway.

Mrs. Vance: I want to ask if it would be worthwhile to put in another application.

Mr. Houk: The field team would have to go and take a look.

Mrs. Vance: Is it possible that we might get some money before we work any further.

Mr. Houk: It is possible that some assistance would be given.

Mrs. Vance: Mr. Aldridge understood that the lease was not satisfactory. The Asheville Mica Company's lease.

Mr. Houk: Yes. There were some conditions in there that the Legal Department felt at some future date would present a problem. Part of the money had to be spent on the Asheville Mica Company ground. However, you will have to have a lease on the upper part.

Mrs. Vance: The lien would have to cover both properties. I was going to get a

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Signed _____

Interior—Duplicating Section, Washington, D. C.

new lease and new application again.

Mr. Houk: If you make a new application refer to the previous application.

Mrs. Vance: Thank you very much. I wanted to understand.

Mr. Houk: I cannot make a decision on a telephone call and the fact that you have reached the bottom.

Mrs. Vance: Well ok we will try. Thank you.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

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Comments on Contract: _____

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Date sent to Legal Division _____

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Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

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NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior--Duplicating Section, Washington, D. C.

Signed _____

600

NOV 17 1955

Mr. Sam K. Vance
Vance & Odom Mining Company
Box 15
Plumtree, North Carolina

Re: Docket No. DMEA-3481 - Mica
Vance & Odom Mining Company
The Birch Mine
Mitchell County, North Carolina

Dear Mr. Vance:

Receipt is acknowledged of your letter of November 9 transmitting executed copies of lease dated November 7, 1955, and Consent to Lien dated November 2, 1955, in support of your request for reconsideration of your application for exploration assistance which was denied by letter of January 20, 1955.

The Defense Minerals Exploration Administration Field Team, Region V, Knoxville, Tennessee, reports that you have again requested exploration assistance based on recent work of rehabilitating the old mine workings.

Careful consideration of all of the additional information submitted does not in the opinion of the DMEA justify Government participation in the rehabilitation of this mine. Therefore, we regret to advise that the denial of your application for exploration assistance is reaffirmed.

Your interest in the DMEA exploration program and participation therein are fully appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

WCAnderson:gad 11/15/55
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

November 16, 1955

Mr. L. G. Houk calling Mr. R. A. Laurence, Knoxville, Tennessee

Docket No. DMEA-3481 - Mica
Vance & Odom Mining Company
The Birch Mine
Mitchell County, North Carolina

Mr. Houk: The Birch Mine -- it looks like that is going to be denied.

Mr. Laurence: There has been so much confusion on that one.

Mr. Houk: The lease is unacceptable and the royalty is only for feldspar and mica and that is not acceptable to Legal. It must be all minerals. We expect to get that through the Operating Committee today or Friday. Over $550,000 worth of mica there. It looks like the Balsom. It is fairly rich in mica and as long as you stay with that you have something. How are the applicants down there?

Mr. Laurence: Difficulties with the uranium people.....

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

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Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior—Duplicating Section, Washington, D. C.

Signed _____

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

600

November 22, 1955

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: Summary - Docket No. DMEA-3451 - Mica
Vance & Odom Mining Company
The Birch Mine
Mitchell County, North Carolina

9/8/54 Application received - Form MF-103 (April 1952)

Work proposed by applicants:

Location not clear - say they propose to bulldoze, drive a tunnel or incline 100 to 200 feet, parallel with old shaft at best location. Amount requested - $14,746.28

11/12/54 Report of examination by Field Team received. Recommend contract.

Location of proposed work - East of the only mica bearing "shoot" that has been found, in hope of locating another mica-bearing zone. Not directed toward opening the old incline.

Work proposed - In 3 stages. Stage I to advance an existing adit (portal of which is about 100 feet east beyond the property line, and the heading about 75 feet east of the old workings). If pegmatite is found, Stage II will consist of 50 feet of raises or inclines. If no pegmatite is found in Stage I, then Stage III will consist of driving 300 feet of long drill holes at 15 foot intervals.

Estimated total cost of project - $6,988.00.

1/3/55 Letter to the Field Team requesting supporting data to justify exploration for a parallel shoot.

1/10/55 Response from the Field Team to letter dated January 3, 1955. Failed to provide any supporting data on the geological probability that a parallel shoot might exist adjacent to the old stope.

1/20/55 Letter to applicants denying the application.

Comments:

Geological premise - To search for parallel shoots adjacent to the east of the old stope.

Geological criteria -

1. Steep hanging wall at eastern edge of old stope caused pegmatite to thin to 3 feet thickness, where mining stopped, and 75 feet to the east of this point at heading of adit the pegmatite is 1-1/2 feet thick.
2. A small amount of mica remains in the walls of the old stope.
3. The target size does not justify the rehabilitation expenditure.

8/19/55 Mr. Aldridge, a new partner, telephoned Mr. Knouse relative to the re-opening of this application and information on procedure. He was advised to contact the Field Office.

8/30/55 Field Team memorandum reporting on examination of 200 feet of old stope incline rehabilitation. They say, if further consideration is given, recommend 2 - 75 foot drifts along strike from the 3580 foot level, one to the northeast and the other to the southwest.
Cost - $35.00/ft. or a total of $5,250.00.

9/7/55 Mr. Hauk telephoned Mr. Laurence advising we are inclined to deny, but would like more information.

9/22/55 Letter to the Field Team advising concerning Mr. Aldridge's telephone call to this office on 9/16/55 regarding the status of the application and that Mr. Aldridge was advised that since the terminus of the inclined shaft will be several hundred feet outside the property boundary, we would require a lease and Consent to Lien covering this additional land.

9/29/55 Mr. Laurence telephoned explaining there is confusion among the partners as to what they want to do. Would try to resolve the differences.

10/11/55 Memo from the Field Team submitting a proposal for exploration which differs from the one submitted 8/30/55.

Work proposed:

1.	Recondition 900 feet of incline	$6,150.00
2.	200 feet of drifting on most favorable part of pegmatite	7,000.00
3.	Extend incline 50 feet	1,750.00
	Total cost of proposed project	$14,900.00

11/3/55 Memo from E. K. Nelson, USGS, making no recommendation on above proposal.

11/10/55 Received lease and Consent to Lien for additional land to cover lower part of incline.

11/16/55 Memo from W. F. Dietrich, USBM, making no recommendation on above proposal.

Comments:

The Field Team reports that the Operators undertook the task of re-opening this mine before the G.S.A. changed the "B" purchase program. Since then the Operators discovered they undertook too costly a program, and therefore are asking for Government assistance.

The Nonmetallic Minerals Division is of the opinion that this program was initiated for the purpose of mining out the remaining mica along the walls of the old stope to take advantage of the "B" purchase plan. There apparently was no intent at that time to ask for Government aid, as it was evident to the Operators that this is a mining venture and not an exploration project. It appears that the thought of initiating an exploration project originated when it was discovered by the Operators that this was a losing venture. Having gone as far as they have at this time, they will probably continue the work of recovering the mica remaining in the walls of the old stope.

The probability of finding other "shoots" by drifting along the strike beyond the walls of the old stope appears too remote to risk the expenditure of $14,900.00. Therefore, the Nonmetallic Minerals Division feels justified in recommending reaffirmation of denial.

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

RECEIVED
NOV 16 1955

November 16, 1955

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-3481 (mica)

Applicant: Vance and Odom Mining Co.

Name and Location of Property: Birch Mine, Mitchell Co., N. C.

Date of Field Team Supplemental Report: October 11, 1955

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: Nov. 15, 1955

Comments:

1. Some supplemental data are presented by the DMEA field team in a memorandum of October 11, 1955, but the field team does not make a recommendation for amending the work plan originally submitted in field team report of October 6, 1954.

2. No map was attached to the memo of October 11, 1955 when received in this office.

3. Action was completed on subject application and the applicant was advised that exploration assistance was denied. (See letter of Jan. 20, 1955.)

Recommendation: It appears that no further action is necessary at this time, so no recommendation is made.

Signed
W. F. Dietrich

November 9, 1955

Mrs. Sam Vance telephoning Mr. W. C. Anderson from Spruce Pine, N. C.

Re: Docket No. DMEA-3481 - Mica
Vance and Odom Mining Company
The Birch Mine
Mitchell County, North Carolina

Mrs. Vance: Mr. Vance asked me to call you about the loan on the Birch Mine. He said you are minus some leases and liens and we now have the necessary leases and liens signed. We have all the papers. My question is is it necessary for us to send five copies of the leases and five copies of the liens.

Mr. Anderson: You need only to send two copies of the lease and six copies of the Consent to Lien.

Mrs. Vance: This new lease ties in the new property.

Mr. Anderson: The property to the south for the extension of that incline.

Mrs. Vance: Our papers are in order on that.

Mr. Anderson: On the north property yes.

Mrs. Vance: Will we have everything in order?

Mr. Anderson: Yes. When we get those papers we will be in shape to give you our answer.

Mrs. Vance: Mr. Anderson, the field men have recommended this loan have they not?

Mr. Anderson: I don't recall whether they made a firm recommendation. I would have to look that up.

Mrs. Vance: We are mighty anxious on it. We have been spending a lot of money.

Mr. Anderson: We are processing it now and as soon as we have finished with it we will let you know immediately.

Mrs. Vance: I will mail the papers this afternoon.

Mr. Anderson: Thank you.

WCAnderson:gad 11/9/55
Copy to: Admr. R. File
Docket
Mr. Houk
Mr. Anderson

IN REPLY REFER TO:

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

RECEIVED
NOV - 4 1955

November 3, 1955

Re: DMEA 3481
Vance and Odom Mining Co.
Birch Mine
Mitchell Co., N. C.
$18,864.00 - Mica

Memorandum

To: L. O. Kouk, Defense Minerals Exploration Administration

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

Subject: Review of interim memorandum of Field Team.

This staged project, as outlined and recommended by the examiners, was estimated to cost:--

Stage I	$ 4,938.00
Stage II	6,938.00
Stage III	6,988.00
	$18,864.00

If Stage I work located pegmatite then Stage II work would be done.

If Stage I work did not locate pegmatite then Stage III work would be done. The application was denied.

The work program outlined in the Lynch-Teague memorandum of October 11, 1955, is not the same as that of the examiners and is taken to be a suggested alternate program, and is not put forth as a definite proposal.

Such being the case, no recommendation is made.

N. E. Nelson

N. E. Nelson

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

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DMEA-3481

DATE 10-2-55

REFERRED TO:

1. Mr. Hiilsgaard - Rm 5224
2. ~~[illegible]~~
3. Mr. Houk - Rm 4451
4.

FOR:

- ____ Action
- ____ Approval
- X Comment
- ____ Conference
- ____ Consideration
- ____ Filing
- ____ Instructions
- ____ Investigation
- ____ Initials
- ____ Mailing
- ____ Previous correspondence
- ____ Recommendation
- ____ Record of ____
- ____ Referring to ____
- ____ Reply for signature of ____
- ____ Rewriting
- ____ Signature
- ____ Suggestions
- ____ Your information

REMARKS: Please comment on the attached additional information and return to Nonmetallic Minerals

Check (X) before the items needing attention.

WCA
Initials of sender.

GPO 16—63815-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TEN

RECEIVED
0[illegible] 4 5

October 11, 1955

RECEIVED
OCT 14 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-3481 (mica) Vance & Odom Mining Co. Birch Mine, Mitchell County, N. C.

Reference is made to your letter of September 22, 1955 on the subject property.

Apparently considerable confusion exists as to what the applications are doing and plan to do, not only between the applicants and the Government, but among the applicants themselves.

The applicants have not reconditioned the old vertical shaft, but have, as pointed out in the Field Team memorandum dated August 30, reconditioned an old incline from the surface to a point down dip from the place the vertical shaft intersects the inclined stope. To date approximately 180-200 feet of reconditioning has been accomplished. The position of the reconditioning is shown on the attached map.

It is estimated that approximately 900 feet of incline remains to be reconditioned. An estimated 2,500,000 gallons of water will have to be removed, an unknown amount of muck, and track, water line and air line installed if reconditioning is extended to the bottom. It is estimated that 40-24 hour days will be needed to complete the reconditioning at an estimated cost as follows:

Hoist	$100.00
Compressor & pump	440/00
Track	675.00
Air & water lines	675.00
Labor	3,360.00
Gasoline and oil	600.00
Miscellaneous	200.00
Total	$6,150.00

After reconditioning is complete, if undertaken, at least 200 feet of levels should be driven on the most favorable part of the

pegmatite. Also the face in the bottom of the incline should be advanced at least 50 feet. Estimated cost of the level and incline work at $35 per foot is $8,750.00. Therefore, the total cost of the proposed project will be $14,900.00.

As the applicant is now in the process of obtaining a lease on the adjoining property the relation of the inclined stope and proposed work to the area under lease cannot be shown at this time. The applicant owns the property around the vertical shaft. Limits of this area are shown on the map attached to the original examination report dated October 6, 1954. Also they own mining and dumping rights on the area north of the vertical shaft of unknown extent, but sufficient for the purpose.

V. J. Lynch, Acting
EXECUTIVE OFFICER
DMEA REGION V

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

KHT/
sm.
cc:
Lynch
Shirley
Files

September 29, 1955

Mr. Robert A. Laurence, Knoxville, Tenn. calling Mr. F. L. Knouse.

Re: Docket No. DMEA-3481 - Mica
Vance & Odom Mining Co.
The Birch Mine
Mitchell County, N. C.

Mr. Laurence: There seems to be some confusion as to what the Operator wants to do. Mr. Lewis Aldridge and others - there also seems to be a number of people interested in this project. Lewis Aldridge and the others don't want to do that shaft rehabilitation. At some stage of the game they called you and we got a letter saying they should pick up the lease on the adjoining property. They are thinking of the DMEA work but on the property they described in the application.

Mr. Knouse: If this body continues down dip don't you think additional land should be included to protect the Government's interest?

Mr. Laurence: It is 950 feet down the inclined shaft and if it is to be considered on the same property maybe we should. Teague will get back next week and I think the best thing to do is not to do anything until we see him. See if they have changed their minds. Teague has arranged a meeting with them next Tuesday. We will possibly send you a memo the latter part of next week or the week following.

Mr. Knouse: Lewis Aldridge and Sam Vance called in on that and I talked with them both and told them the same thing regarding the property or additional property requirements. Our letter to you was to explain there is a difference in the proposal of the Field Team and the proposal of the operators. Therefore, we wrote to let you know what was going on. Apparently there are so many partners in this venture that they are not all in agreement.

Mr. Laurence: We will send you a memo to iron out the difference within a couple of weeks. I guess there are no more problems on this case.

FLKnouse:gad 9/29/55
Copy to: Admr. R. File
Mr. Houk
Mr. Knouse
Mr. Anderson
Docket

September ~~22~~ 16, 1955

Mr. Sam Vance telephoned this office re: Docket No. DMEA-3481 - Mica
Vance & Odom Mining Co.
The Birch Mine
Mitchell County, North Carolina

Mr. Vance inquired as to the status of the reactivated application.

Mr. Knouse and Mr. Anderson talked with Mr. Vance, and Mr. Anderson advised Mr. Vance that the Field Team would visit The Birch Mine on their next trip to that vicinity and report their findings to this office.

Mr. Anderson asked Mr. Vance if it is correct that they intend to rehabilitate the incline for a total distance of 950 feet as stated by Mr. Lewis Aldridge on September 16, 1955.

Mr. Vance replied that it was correct and his proposal would be given the Field Team on their visit to the mine. He said Mr. Teague had phoned on Monday last to say he would be at the mine the following day, but had not showed up yet.

Mr. Vance was further assured by Mr. Knouse that the Field Team would visit the mine for an examination.

File
wda

SEP 22 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-3481 - Mica
Vance & Odom Mining Co.
The Birch Mine
Mitchell County, North Carolina

Dear Mr. Laurence:

This is with reference to your telephone conversation with Mr. Houk of September 7, 1955, concerning a further field examination of the subject project.

Mr. Lewis Aldridge telephoned this office on September 16, 1955, and inquired about the status of the subject application. We explained to him that the field team would visit The Birch Mine on their next trip to that vicinity and report their findings to this office.

According to Mr. Aldridge, they plan to rehabilitate the inclined shaft from the vertical shaft to the bottom, a distance of about 950 feet, and that they have completed about 250 feet of this rehabilitation. Then from the inclined shaft they propose to drift along the pegmatites that are exposed on the incline. He further explained that the inclined shaft was reported to have exposed either a disconnected or a series of pegmatites and they plan to drift along the most favorable exposures from both sides of the incline. As this proposal differs somewhat from the one outlined in the field team report of August 30, 1955, we are forwarding it for your information.

Since the terminus of this inclined shaft will be several hundred feet outside of the property boundary, Mr. Aldridge was also advised we would require a lease and Consent to Lien covering this additional land provided a project to do the work he proposed is recommended by your office. He was also advised that sufficient land should be included in the lease so that none of the proposed work will be closer than 150 feet to the boundary.

If your office recommends an exploration program on this project we will require nine copies of a map showing the proposed work in relation to the property boundary.

Approved:

/s/ Robert W. Geehan

Member, Bureau of Mines

N. E. Nelson

Member, Geological Survey

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

WCAnderson:FLNcone:gad 9/19/55
Copy to: Adm. R. File
Docket Mr. Killegnard, 5222
Operating Committee Mr. Houk
Mr. Dietrich, 3061 Mr. Anderson

September 7, 1955

Mr. L. G. Houk calling Mr. R. A. Laurence, Knoxville, Tennessee

Re: Docket No. DMEA-3481 - Mica
Vance and Odom Mining Company
The Birch Mine
Mitchell County, North Carolina.

Mr. Houk: That is a pegmatite like the Balsam we denied it some time ago. The reasons were some of the work outside of the contract. Now these boys have gone ahead and rehabilitated the old adit and we are inclined to re-deny it. We wonder if you have too much objection to that.

Mr. Laurence: Is there anything new in the last couple of weeks.

Mr. Houk: They are dewatering it now and they want 75' each way for drifting. We are inclined to re-deny that. I was wondering if the field team saw anything there.

Mr. Laurence: Here is a letter from Teague saying we have not changed our minds on this deposit and we believe it can be a good producer. It doesn't say specifically. Let me ask Dewey Amos on that. Dewey says they had it dewatered and they are interested in exploring the strike rather than the dip and they feel it is a good bet.

Mr. Houk: We feel the pegmatite is strong but we doubt if it is too extensive. Will they be in the area again before too long.

Mr. Laurence: Teague is over there this week but does not plan to visit it.

Mr. Houk: They are going ahead on their own. Can the boys stop there next week?

Mr. Laurence: Yes. Dewey says yes.

Mr. Houk: They will take off what mica they get at easily. Well have another look at it.

Mr. Laurence: Maybe Teague will have another look at it. Dewey is leaving us. He is going to Southern Illinois on a teaching job. We are keeping him on WAE over there. Teague may be rather busy on his trips until we get another replacement.

Mr. Houk: We can drop Vance and Odom another letter.

Mr. Laurence: Have them get in touch with Teague.

LGHouk:gad 9/7/55
Copy to: Docket
Nonmetallic Minerals Divn.

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

RECEIVED
SEP - 1 1955

August 30, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-3481(mica) Vance & Odom Mining Company - Birch Mine, Mitchell County, N. C.

This application was denied by letter dated January 20, 1955. Since that time the applicants have added Lewis Aldridge to the Company and have done considerable reconditioning work at their expense.

According to a telephone call from Mr. Aldridge, August 18, 1955, he had visited Mr. Knouse's office and discussed the possibility of securing DMEA assistance on the deposit. Mr. Aldridge was informed assistance could be considered only after adequate justification was provided.

On August 23, 1955 the field examiners visited the Birch Mine, accompanied by Vance and Odom and inspected the reconditioning completed to date. Accomplishments consist of removing dump and the caved portal of an old incline and cleaning out, timbering, and installing track in approximately 150 feet of incline. Reconditioning has progressed to water level which is approximately the 3605-foot level. This is slightly down dip from the point where the vertical shaft intersects the incline.

The Operators apparently plan to continue reconditioning the incline to the level of the old sump (3580-foot level), then drive a drift to the northeast along the pegmatite. Point of turn-off of the drift from the incline will be about 200 feet from the incline portal. The reason for the drift to the northeast from the 3580-foot level is "Old Timers" report that good mica was left in this area when the deposit was worked during World War II. This statement is also made in the November 9, 1943 report on the mine by the U. S. G.S. Whether or not additional work was done in this area after 1943 is not known.

We believe the Operators undertook the task of reopening this mine so as to take advantage of the "B" purchase program as it has functioned since about April 1, 1955. Since G. S. A. has announced they will change this program in a short time to essentially the same

program as was in effect prior to April 1, 1955, the Operators apparently think that they have undertaken a too costly program. Therefore, they are asking for DMEA help.

The Field Team has not changed their opinion as to the merits of this deposit. We believe that this deposit can be a producer of significant amount of strategic mica.

If further consideration is given to this application, we recommend two - 75-foot drifts, one as planned by the applicants and another to the southwest from the same level. Costs estimates as given in the October 6, 1954 examination report are applicable, i. e., $35.00 per foot for drift. Apparently all dewatering and reconditioning will be completed by the time action can be taken on the requested assistance.

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

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

KHT/sm
cc:
Lynch
Shirley
Files
Knouse

Knouse

RECEIVED
SEP - 1 1955

August 30, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-3481(mica) Vance & Odom Mining Company - Birch Mine, Mitchell County, N. C.

This application was denied by letter dated January 20, 1955. Since that time the applicants have added Lewis Aldridge to the Company and have done considerable reconditioning work at their expense.

According to a telephone call from Mr. Aldridge, August 18, 1955, he had visited Mr. Knouse's office and discussed the possibility of securing DMEA assistance on the deposit. Mr. Aldridge was informed assistance could be considered only after adequate justification was provided.

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

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

KHT/sm
cc:
Lynch
Shirley
Files
Knouse

Mr. Aldridge telephoned on August 19, 1955 relative to re-opening this application

Wanted to reopen & inquired about procedure.

Advised ~~the~~ to ~~to~~ contact Knoxville office and explain what he wanted and advised we could not take any action until we had the field Team's recommendation on his proposal

JAN 2 0 1955

Mr. Sam K. Vance
Vance & Odom Mining Co.
Box 15
Plumtree, North Carolina

Re: Docket No. DMEA-3481 - Mica
Vance & Odom Mining Co.
The Birch Mine
Mitchell County, North Carolina

Dear Mr. Vance:

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

The proposed program to rehabilitate the lower adit, advance it to the Birch stope, and explore the intermediate ground by long-hole drilling hoping to encounter a parallel shoot is not sufficiently promising to justify Government participation. We regret to advise you, under those circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf

Administrator

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

January 19, 1955

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report.

By: Lawrence G. Houk

1. Docket No. DMEA-3481 - Mica
   Property: The Birch Mine
   Mitchell County, North Carolina

   Applicants: Vance & Odom Mining Co.
   Box 15, Plumtree, North Carolina

   Application: Form MF-103 received September 10, 1954.
   Work proposed: Two stages - Stage I, 75 feet of adit and follow with either Stage II or Stage III. Stage II, 50 feet of raise or incline. Stage III, 300 feet of drill holes.
   Estimated cost by Field Team $6,988.00
   Amount requested by applicant $14,746.28.
   No contract: Application denied.

2. Comments:

   Work proposal -

   Geologic premise: To search for parallel shoots immediately adjacent to old stope.

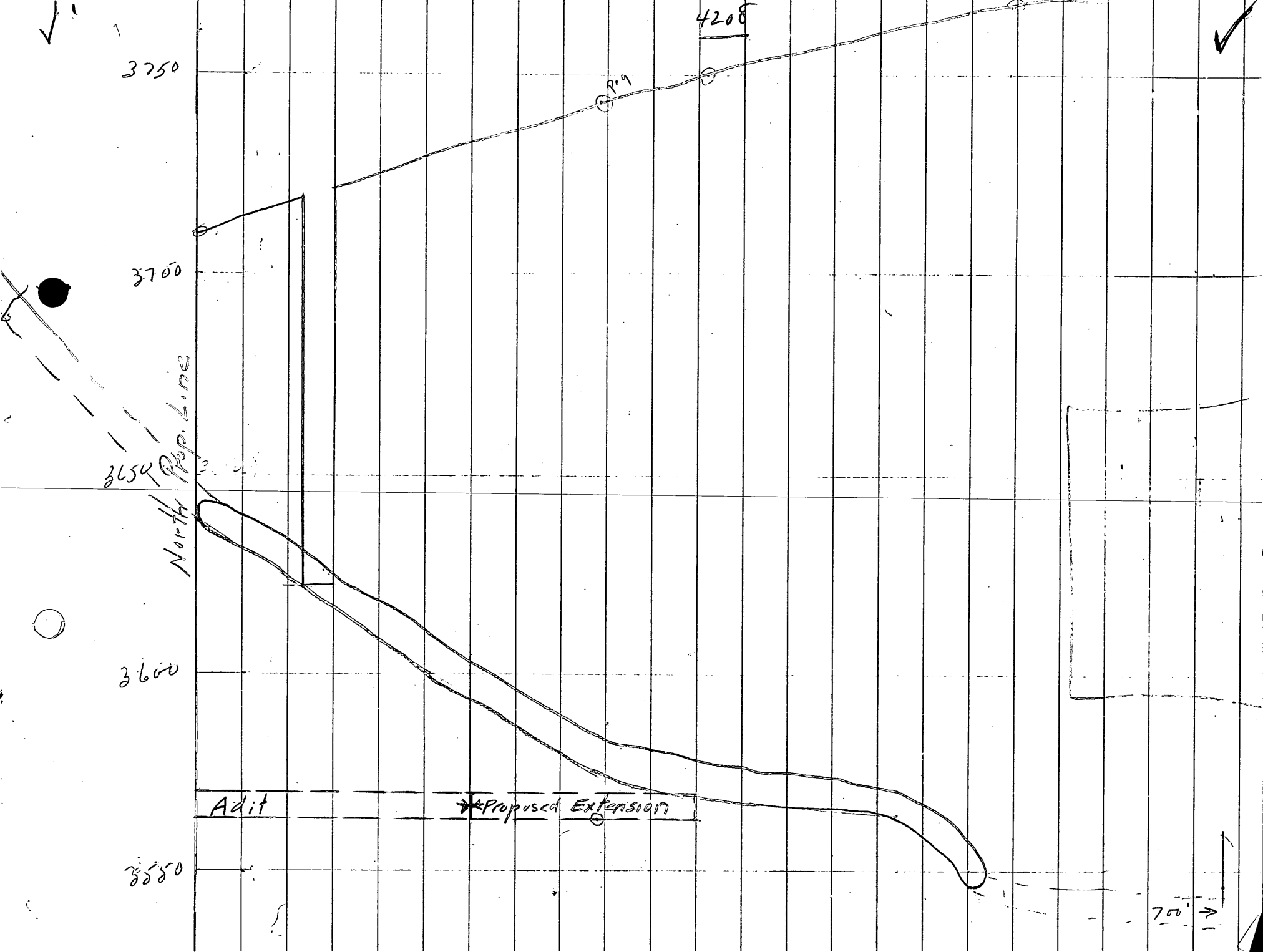
   (a) The existing 350 foot adit to be rehabilitated and extended 75 feet to the east wall of the old stope. There is some question this work may have been completed. Olsen states that the mining subsequent to May 1944 was conducted through a new incline or drift.

   Recommendations:

   Denial as the possibilities of a parallel shoot of mica seem remote. A discussion with Jerry Olsen, who mapped this mine in 1944, concurred in the above statement. The target size does not justify the rehabilitation expenditure. That a small amount of mica remains in the walls is granted, but

it is not felt the expenditure of exploration funds is justified to make it available for mining. An evaluation of the Field Team report indicated denial and we requested supporting data to justify exploration for a parallel shoot. The Field Team failed to provide any supporting data on the geological probability that a parallel shoot might exist adjacent to the old stope. While the Field Team and both commodity men have recommended a project, the Nonmetallic Minerals Division does not concur and recommends denial.

LGHouk:gad 1/19/55
Copy to: Admr. R. File
Mr. Houk


4208
3750
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3654
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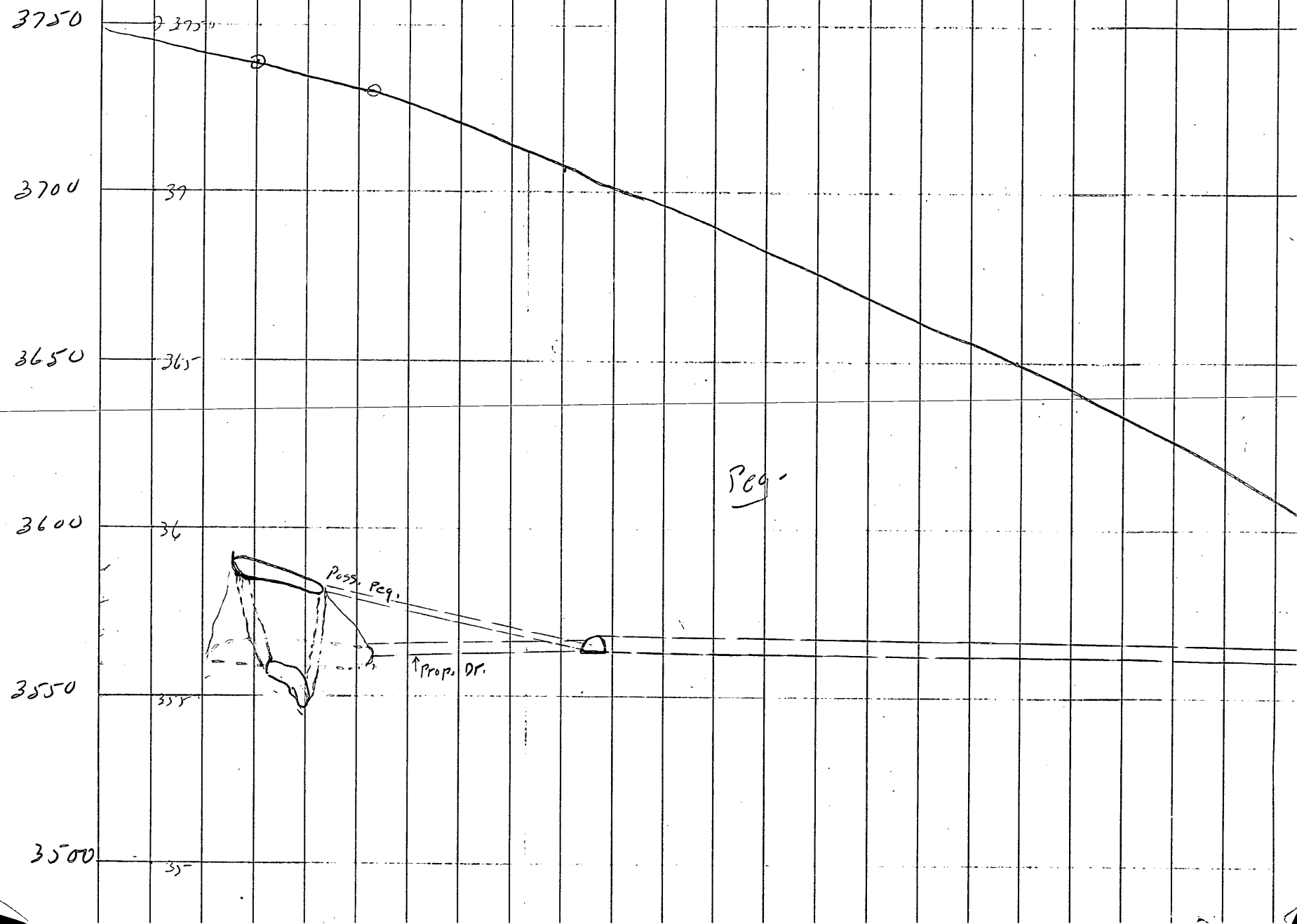
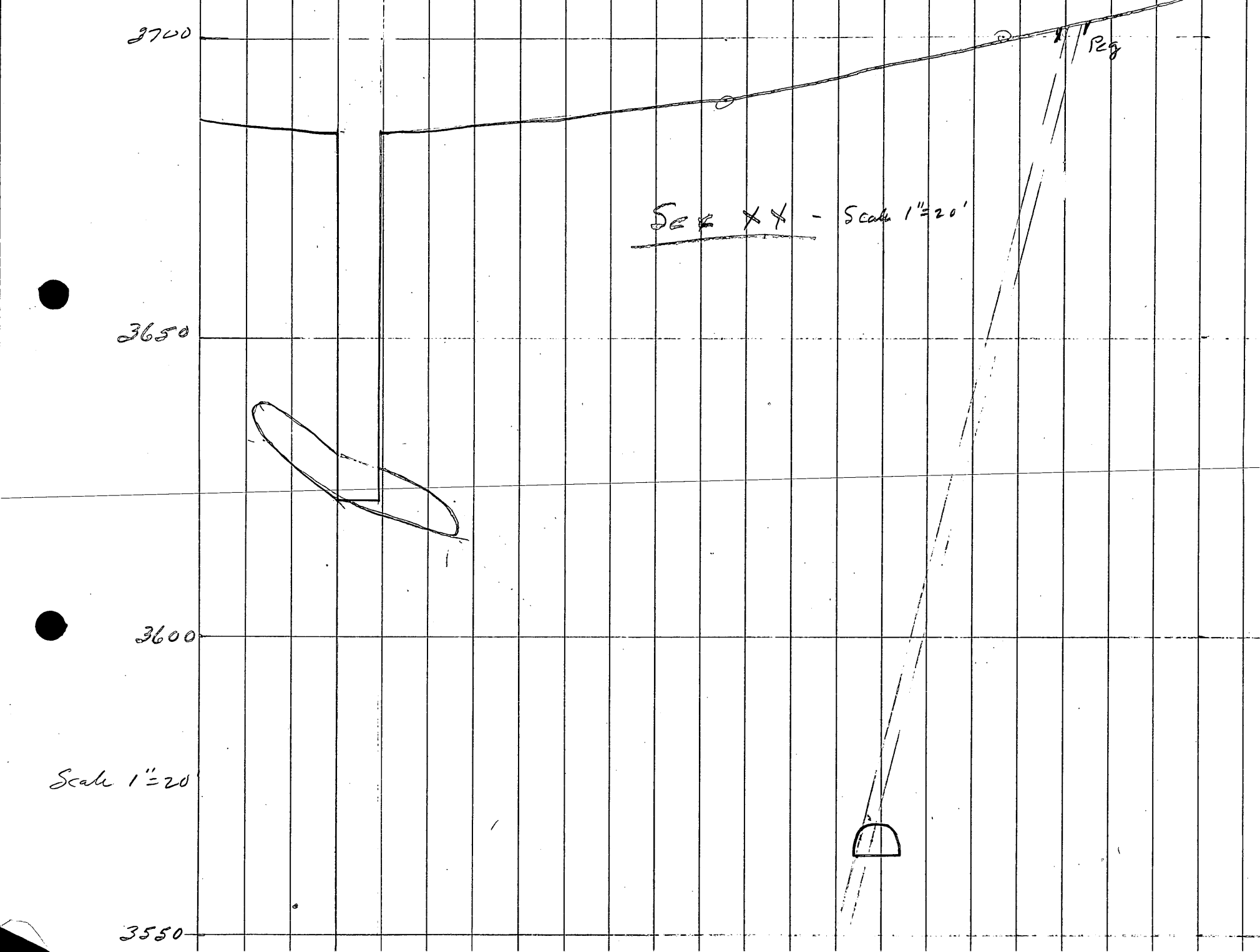
North Prop. Line
Adit
Proposed Extension
700'

May 11, 1944 east wall of main stope such example to main adit 2-3 pegmatite streaks ½ to 1½ ft thick small mica
eventually. Broad Pegmatite get under approaching stope

3585'

Sec ZZ Scale 1" = 40'

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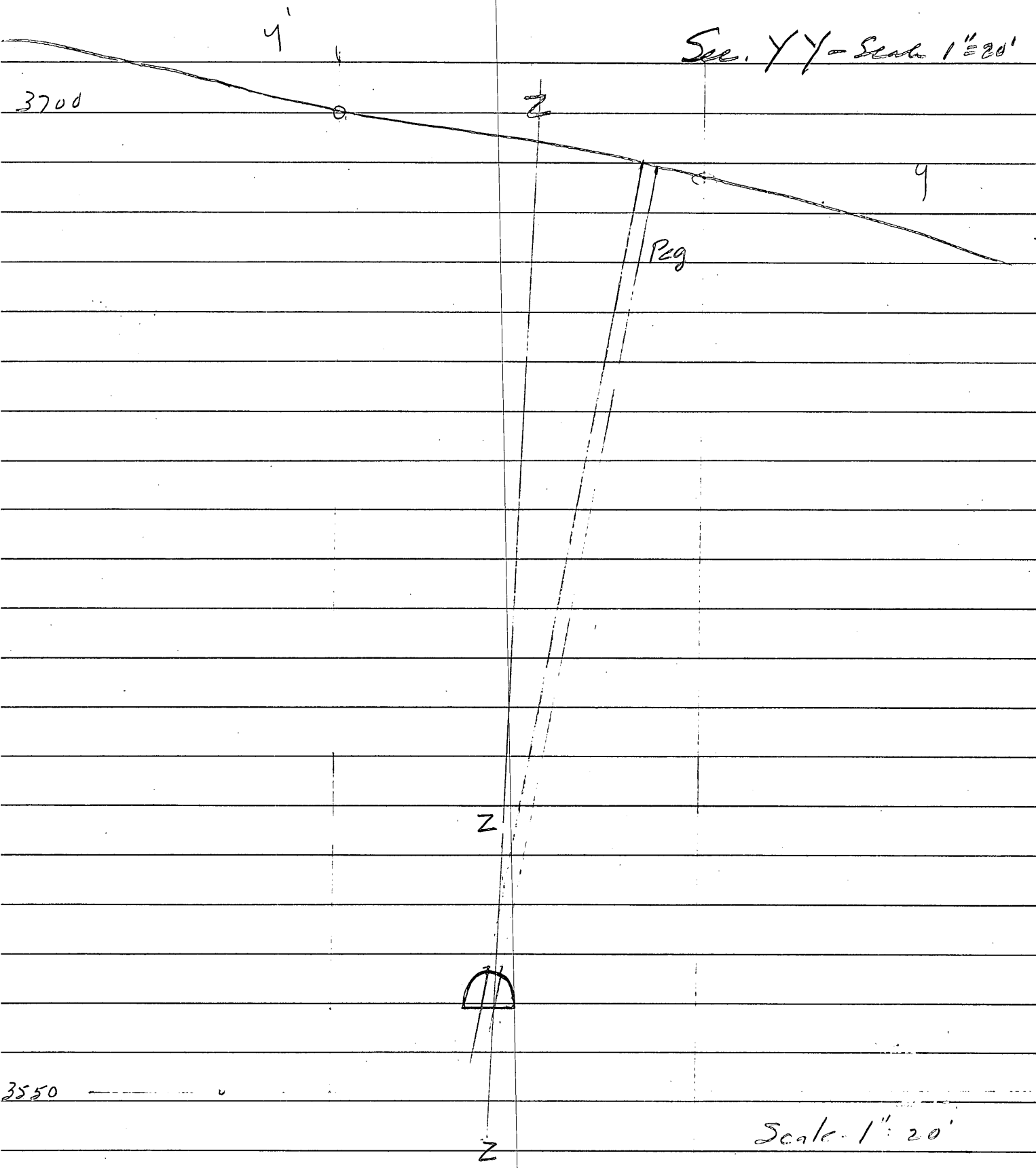


Scale 1" = 20'

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 25 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JAN 12 1955

January 10, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, D. M. E. A. - Region VII

Subject: DMEA-3481 (mica) Vance & Odom Mining Co. Birch Mine

Reference is made to your letter of Janaury 3, 1955 on the subject application.

The field examiners report contained all information available concerning the extent of the adit at this mine. W. S. Flynt, the last operator of the mine, reported to the examiners that the adit did not connect with the old workings and that to the best of his knowledge no work had been done in it since the map that was attached to the report was prepared.

The examiners do not know, and no one contacted who had been connected with the previous operation seemed to know whether or not the "shoot" pinches out completely east of the area worked. The only suggestion that another "shoot" exists, is the presence at the surface of two rather large dumps east of the dump that came from the large incline stope. These openings were made on or near the pegmatite outcrop. Relations of the pegmatite outcrop, 1½-foot pegmatite exposed in the adit, and the main Birch pegmatite are not known, although it is thought that they are all the same pegmatite. A map prepared by the U. S. G. S. on October 25, 1943 suggests to a certain extent, that this correlation may be correct.

We realize the above fails to answer many of the points presented in your letter. However, the problems are covered as well as possible with the data available. Our information is based almost entirely on the Geological Survey reports and maps by Olson, Fryklund and Larrabee, dated October 26, 1943 and May 4, 1944.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

KHT/xm

600

JAN - 3 1955

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

Subject: Docket No. DMEA-3481 - Mica
Vance & Odom Mining Co.
The Birch Mine
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to the field team examination report of October 6, 1954, concerning the subject property.

The field team recommends a contract to explore the block of ground east of the incline with the hope that other parallel mica-rich shoots may be encountered. We are inclined to deny the application because the adit may already have been driven to explore this area and the lack of geological support for a possible parallel mica zone. It would be appreciated if you could furnish more information regarding the geological criteria upon which the premise of occurrence of parallel mica shoots is based.

The report and the map and especially the cross-sections shown on the map indicate that the Birch Mine pegmatite thins out and possibly disappears along the east wall of the stope. We do not have a clear picture of the geological structure in the area east of the mined out pegmatite. We also lack information on the attitudes and relations between the pegmatite outcropping on the surface, the 1-1/2 foot pegmatite reported to exist in the adit, and the main Birch Mine pegmatite. It seems that the chance for discovery of a mica producing pegmatite is no better here than any other area lacking the necessary supporting geological evidence.

Action on the subject application will not be taken until we hear from you again. Possibly the field team has information not contained in the report that will enable us to make a better evaluation of the project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

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

WCAnderson:ad 12/28/54

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 9 1954

December 9, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3481 (mica)

Applicant: Vance and Odom Mining Company

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

Date of Field Team Report: November 9, 1954

Date Rec'd. by Ceramic & Fertilizer Mtls. Br.: November 19, 1954

Field Team Recommendation:

1. Approval of a three-stage exploration project.

Comments:

1. Strategic quality mica has been produced from this mine in the past.
2. Proposed exploration is in line with other DMEA projects in this area and costs are estimated to total $6,988 for the three-stage project.

Recommendation:

I concur in the field team's recommendation for a three-stage project in the amount of $6,988.

Signed

W. F. Dietrich

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 19 1954

November 18, 1954

Re: DMEA-3481
Vance & Odom Mining Co.
(Birch Mine)
Mitchell Co., N. C.
$6,988 - Mica

Memorandum

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

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

Subject: Review of Field Team examination report

The applicant requested assistance for bulldozing and 100-200 feet of drifting.

The Field Team has recommended a two-stage project for approval. Stage I will involve rehabilitation of 3563 level and 75 feet of drifting to intersect old workings. If no pegmatite is encountered a second stage will be used allowing 300 feet of hammer drill holes and 50 feet of crosscut or drift to explore pegmatite cut by hammer holes. On the other hand, if pegmatite is encountered by Stage I, then the second stage of work will consist of 50 feet of raising or winzing on the pegmatite.

The proposed staged project appears to have geologic merit, and I recommend this application be approved.

E. L. Newcomb

ELNewcomb:hlm
G-11/18/54

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

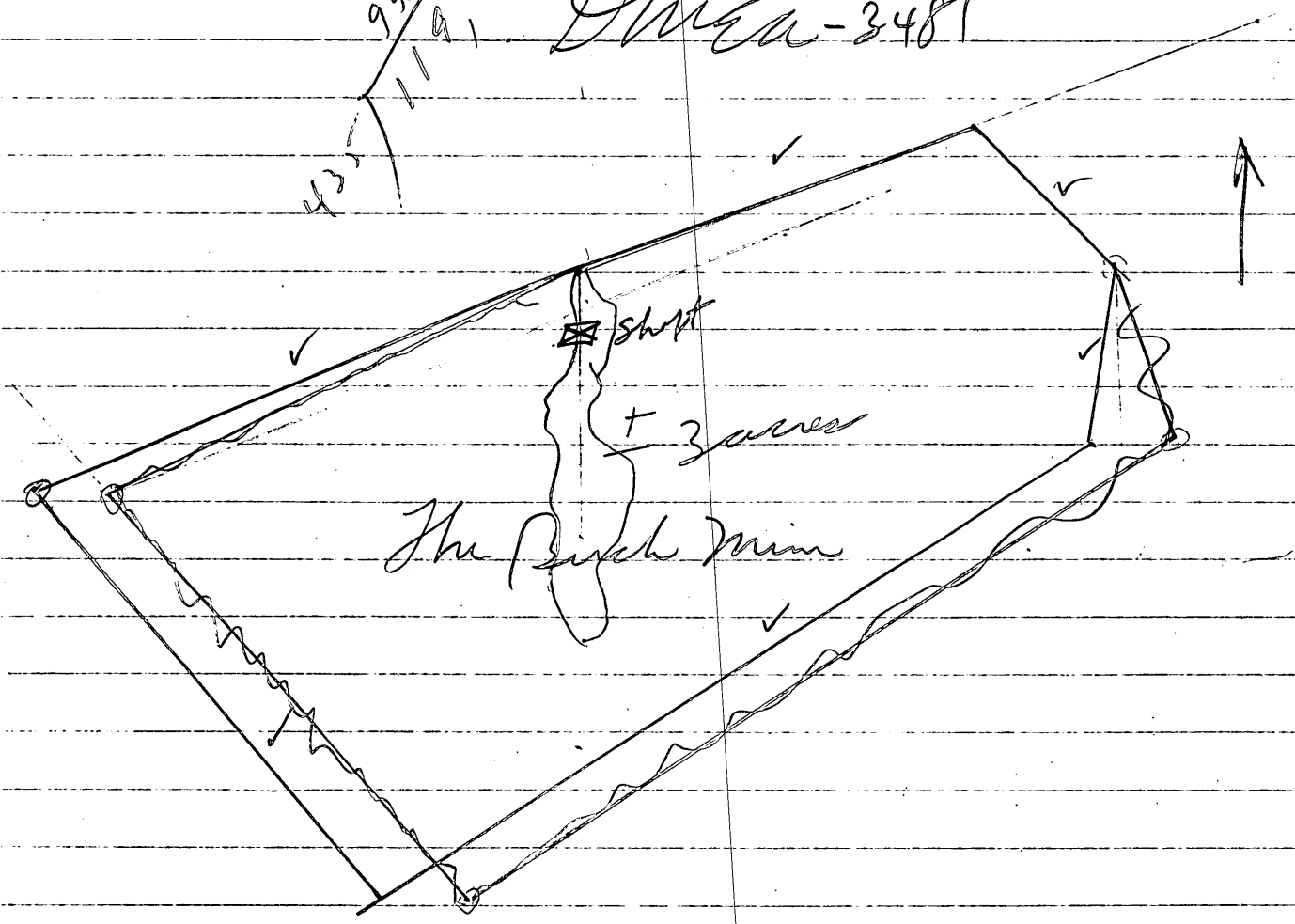
16.3'
495'
242
990
990
1980
990
1191

± 3 acres

147.1'
16.2
73
882
147
2427.3'

DMEA-3481

43'



UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

November 9, 1954

Department of the Interior
Bureau of Mines
RECEIVED
NOV 12 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: Field Examination Report on DMEA-3481, Vance & Odom Mining Co. (mica)

Transmitted are 4 copies of the Field Examiners report, with six extra copies of the map on the subject mine. This report recommends exploration assistance in which the Field Team concurs.

Also attached is a copy of a part of a deed which gives the applicants rights to the area around the portal of the lowest adit. This property was acquired in 1942 when work was begun on the adit, mainly for dumping purposes. The Field Team is of the opinion that the property rights of the applicants are adequate for the proposed project.

K. H. Teague, for R. A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

KHT/sm
cc:
Beck
Lynch
Opr. Com.
Files

Reviewed by
DMEA OPERATING COMMITTEE
11/17/54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

On

DMEA-3181, BIRCH MINE (Mica)
Mitchell County, N. C.

By

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

and

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

October 6, 1954

Reviewed by
DMEA OPERATING COMMITTEE
11/17/54
(date)

FIELD EXAMINATION REPORT
ON
DMRA-3481, BIRCH MINE (mica)

Applicant: Vance and Odom Mining Co., c/o Sam K. Vance, Box 15, Plumtree, N. C.

The Birch Mine has been one the largest producers of mica in the Spruce Pine District. Only one mica bearing "shoot" has been found, although the pegmatite is known to extend eastward from the existing workings. The examiners believe that exploration assistance is justified to attempt to locate another mica-bearing zone east of the existing workings.

The deposit was examined on October 6, 1954. Messrs. Sam K. Vance and Sam Odom accompanied the examiners on the inspection which required two hours. In addition to the inspection, several people were contacted who had been familiar with the mining operation.

The Birch Mine is 3 miles northwest of Spear, in Mitchell County North Carolina. It is accessible by an all weather road up Henson Creek.

The applicants are competent to conduct the proposed project. The property is owned by Sam K. Vance, area of which is sufficient for the proposed project. Property lines which are in the area of the proposed work are shown on the attached map.

There are no surface facilities on the property. The attached U. S. G. S. map shows the extent of workings as of May 4, 1944. From available reports work was continued without interruption until 1947. Apparently the "shoot" was followed along essentially the same angle and direction as shown on the map for approximately 550 feet beyond the area shown on the map. Therefore, the incline from which almost all mica has been obtained is estimated to be approximately 750 feet in length.

The following description of the pegmatite is taken from an unpublished U. S. G. S. manuscript report by J. C. Olson:

"The pegmatite body is conformable with the foliation of its wall rocks. Abrupt changes in thickness and in dip ("rolls") are the general rule. The shape of the pegmatite in the old original workings is not known, but that exposed in the accessible workings may best be described as two large lenses aligned in a direction nearly due south and pitching downward at an angle of 27 degrees. The upper lens has a maximum thickness of at least 25 feet; the lower probably about 15 feet. The upper lens was encountered at the base of the 100-foot shaft, and was mined down the pitch until its thickness was as little as 10 inches. The lower lens, developed entirely in 1943, succeeded the upper at this point. The average thickness removed in mining the lower lens is 10-12 feet, but its thickness in the lowest heading at the time of mapping was only about 3 feet. The pegmatite was removed to the footwall at almost all points, but not always to the hanging wall."

"The above description of the pegmatite as two main irregular lenses is true only for the portion mined out thus far. The stopes have the shape of two irregular lenses, but the extent of the pegmatite beyond the walls of the stopes is not known. The walls both up and down-dip and along the strike expose pegmatite at all points. In places this pegmatite is as much as 12 feet thick, suggesting that the pegmatite body as a whole is more or less tabular in form, extending outward along the strike from the stopes, and that the stopes merely delineate the mica-rich portion of the body. In the development of the mine, a rather uniform pitch has been followed, as shown on the longitudinal section. The mica-rich portion has not been completely mined out, for coarse mica blocks have been left on the walls of the stopes at some points. These will be removed later and might possibly lead to other mica shoots if the pegmatite actually continues as a tabular body."

"The "walls" in the hanging- and foot-walls can be correlated with the changes in thickness of the pegmatite body. Where the hanging wall contact dips steeply or vertical, the pegmatite may be expected to thin downward; where the hanging wall is relatively flat, the pegmatite body may be expected to thicken downward. ~~[illegible]~~ The changes in dip of the footwall do not take place directly opposite the changes in the hanging wall, causing the thickening and thinning. This is best shown at the point where work ceased in 1929. A steep hanging wall caused the pegmatite to thin; thickening of the pegmatite took place when the hanging wall contact flattened. A similar thinning of the pegmatite with a steep hanging wall was taking place in the heading at the time the mine was studied, but it is probable that thickening will take place at greater depth. The thickening and thinning, which has had an important effect on mining, is shown on the cross-sections accompanying this report."

"The pegmatite is composed of oligoclase, quartz, muscovite, microcline, and small amounts of garnet, apatite, epidote, and thulite. Graphic intergrowth of quartz and feldspar was found on the dump, but is rare. Four types of pegmatite are distinguished:

"(1) Barren oligoclase pegmatite, composed almost entirely of coarse oligoclase crystals, with a very little quartz, fine mica, and garnet. Most of the pegmatite mined in 1943 has been of this composition."

"(2) Sheet mica-bearing pegmatite occurs near the center, or slightly nearer the footwall, of the pegmatite mined in 1943. The mica zone is one to three feet thick commonly. It is composed of muscovite in coarse blocks a foot or more across, oligoclase, and quartz. A block of mica reported to weigh more than 600 lbs. was mined in the summer of 1943. The blocks within the main mica zone are oriented at random.

"(3) Gray quartz-oligoclase pegmatite is erratically distributed through the pegmatite mined in 1943. It is composed of blue-gray quartz with

variable amounts of fine-grained oligoclase. In the southernmost heading, this zone is as much as 5 feet thick. It is the general rule that where this quartz-oligoclase zone is present in the pegmatite, the mica zone is definitely leaner than otherwise. This is the case in the southernmost heading and is one of the reasons for abandonment of work for the present in this heading. The coarsest mica blocks and the thickest mica zone are found in the center of pegmatite composed of mostly oligoclase (type 1); less mica has been obtained where type 3 is present.

"(4) A coarse-grained mixture of microcline, quartz, and oligoclase makes up the entire exposed thickness of the pegmatite body at the base of the 100-foot shaft. This is unlike any pegmatite mined in 1943, in which microcline is very scarce or lacking. The coarse pegmatite at the base of the shaft is composed of relatively fine-grained oligoclase, quartz in irregular masses one to as much as 5 feet thick, and fairly coarse microcline. The plagioclase is white and kaolinized. Mica is small and irregularly distributed through this pegmatite, mostly associated with quartz, and some of it has "A" structure."

"The earliest history is now known, but about 1900 Steve Green, W. C. Green, and D. M. Young operated the mine. The earliest work was surficial, along the outcrop of the mica-rich zone which was probably only 100-150 feet in length. Later work was by drifts, adits, and shafts. The Steve Green shaft, presumably sunk about 1900, is now obscured by later dump. As work progressed, the mica shoot was found to be roughly pipe-like inform, pitching about 25° southward into the hillside. The mine was probably idle most of the time following the Steve Green operation, but was worked during the World War and until 1920. A shaft 100 feet deep was sunk to intersect the pitching pegmatite near the bottom of the old workings. J. E. Burleson operated the mine during this period. Mining from the shaft was resumed in 1929 by the McKinney brothers, who abandoned the mine soon at a point where the pegmatite was only 10 inches thick."

"In June, 1942, Jack Keller, Ira Vance and John Ellis began driving a new adit, which is still unfinished. In November 1942, work in the adit was stopped in favor of cleaning out the old 100-foot shaft. After the bottom of the old workings was reached, the pegmatite was found to thicken downard, and a rich mica zone was encountered. The 1943 work has all been from this shaft. For hoisting, a rough track of logs laid along the floor of the stope, and a cylindrical bucket dragged on its side about 200 feet up the inclined track and then vertically up the 100-foot shaft. Work has also been resumed in the lowest adit, which is now 235 feet long. The purpose of this adit is to provide another entry to the mine and for drainage, but will not be used for hoisting."

The best information available does not indicate that the lowest adit (3563 level on attached map) was ever completed, although the last 100 feet of the adit completed prior to May 1944 was on a thin pegmatite.

On October 17, 1944 the operators were notified by the Colonial Mica Corporation that the mica from the Birch Mine was non-ruby in color, thus would no longer be bought under the purchase program. The operation was continued by

Ira Vance and W. S. Flynt until 1947 at which time it was abandoned.

According to Flynt mica is present in the bottom of the incline. He states that mica valued at approximately $260,000 was sold to mica fabricators after 1944. During World War II, 60,000 pounds of mica was sold to the Colonial Mica Corporation for $271,774.38.

This application is not directed toward reopening the old incline. The applicants desire to explore the block of ground east of the incline with the hope that other parallel mica-rich sheets may be encountered. The field examiners believe that this approach has merit, thus we recommend the following exploration program:

The lowest adit (3563-foot level) is approximately 350 feet long, the last 100 feet of which follows a thin pegmatite (probably the Birch pegmatite). The portal of this adit is caved for an unknown distance (probably less than 100 feet). According to the best information available, this adit was not driven beyond the position shown on the map, thus its head is about 75 feet east of old workings. The examiners believe that the easist, fastest, and most economical method of exploration is to conduct work from the existing adit. This would involve cleaning out and timbering portal of adit for an unknown distance; installing track, water and air lines, and a ventilating system in existing adit; and advancing present face to point of intersection with old workings (75 ft.). If no pegmatite containing commercial grade mica is encountered by new advance in the adit, long jackhammer drill holes should be driven in both the footwall and hanging wall at 15-foot intervals from the point of pegmatite intersection to old works. If pegmatite is intersected by these holes, crosscuts should be driven from the adit to check the mica ~~xxxxxx~~ content of the pegmatite.

Should pegmatite containing commercial mica be encountered by advancing the existing adit, inclines or raises should be driven on it to check its character.

Estimated Cost : Stage I.

Clean out, timber, install track, airline, and ventilating system in existing 350-foot adit (25 shifts).

Labor:		
1	Miner - timberman @ $1.50/hr.	$ 300.00
1	Helper @ $1.25/ hr.	250.00
2	Laborers @ $1/hr.	400.00
Equipment (rental)		
	Blower for ventilating system @ $25/Mo.	31.25
Supplies:		
350	feet track @ 66¢ per ft.	231.00
350	" air & water line @ 75¢/ft.	262.50

Supplies (cont'd)		
Timber, 3000 B.F. @ $65/M	$195.00	
Hose for ventilating system, 350 ft. @ $1./ft.	350.00	
Small tools	75.00	
Miscellaneous	105.25	$2,200.00
Drive 75 feet of adit (30 shifts)		
Toolhouse		75.00
Powder Magazine		25.00
Exploder "		13.00
Labor:		
1 Miner @ $1.50/hr	360.00	
1 Helper @ $1.25/hr.	300.00	
2 Laborers @ $1.0/hr.	480.00	
Equipment (rental)		
Compressor, drill, jackles @ $240/Mo.	360.00	
Blower @ $25/Mo.	37.50	
Supplies:		
Track (75 ft) @ .66¢ per ft.	49.50	
Pipe (75 ft.) @ .75¢ " "	56.25	
Explosives	225.00	
Drill steel	150.00	
Gasoline and oil	150.00	
Small tools	100.00	
Miscellaneous, etc.	150.00	
Social Security, Insurance, etc.	206.75	$ 2,738.00
Estimated total cost Stage I		$4,938.00

STAGE II

If commercial pegmatite is encountered in Stage I, drive 50 feet of raise or incline on it.

Estimated cost:

50 ft. of raise or incline @ $40/ft. $ 2,000.00

Estimated cost of Stages I & II..... $6,938.00

STAGE III

If no commercial pegmatite is encountered in Stage I, drill 300 ft. of drill holes on 15 feet centers from last 150 feet of adit.

20 - 15-feet drill holes @ $1.00/ft.	$ 300.00

If pegmatite is encountered by the holes, drive not more than 50 feet of crosscut or drift to explore these pegmatites.

50 ft. of crosscut and drift @ $35/ft.	1,750.00
Estimated Cost of Stage III.	$2,050.00
Estimated Cost of Stages I & III	$ 6,988.00

October 6, 1954.

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

and

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

OCT 6 1954

Mr. Sam K. Vance
Vance & Glen Mining Co.
Box 15
Plumtree, North Carolina

Re: Docket No. DMEA-3481 - Mica
The Birch Mine
Mitchell County, North Carolina

Dear Mr. Vance:

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

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

Sincerely yours,

C. C. Mittendorf

Administrator

LGHouk:gad 10/4/54
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region VII
Mr. Dietrich, 3061
Mr. Kiilsgaard, 5227
Mr. Houk

OCT 6 1954

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

Subject: Docket No. DMEA-3481 - Mica
Vance & Olson Mining Co.
The Birch Mine
Mitchell County, North Carolina

Dear Mr. Lawrence:

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

Copies of memoranda from the Geological Survey, dated September 15, 1954, and from the Bureau of Mines, dated September 28, 1954, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

Enclosures 4

LGHouk:gad 10/4/54
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5227
Mr. Dietrich, 3061
Mr. Houk

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

Defense Minerals Administration
RECEIVED
SEP 29 1954

September 28, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

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

Subject: DMEA-3481 (mica)

Applicant: Vance & Odom Mining Company

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

Date Application Rec'd. by Ceram. & Fertilizer Mtls. Br.: 9/13/54

Comments:

1. Bureau of Mines records show that a monthly average of $9,301.80 worth of mica was sold to Colonial Mica from subject mine from May-Sept. 1944.

2. On the basis of past production, this mine possibly merits an examination to determine if an exploration program is justified.

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
Donald R. Irving

IN REPLY REFER TO:

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

September 15, 1954

Memorandum

REVIEW OF APPLICATION DMEA-3481 (Mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: E. L. Newcomb, U. S. Geological Survey
Applicant's name and address: Sam K. Vance, Plumtree, N. C.
Name of property: The Birch Mine
Location of property: 3 miles NW of Spear, N. C.
Summary of applicant's proposal:
Bulldozing - (unspecified amount)
Tunnel - 100-200 feet
Total cost -- $14,746
Sources of information on applicant's property:
U.S.G.S. Open-file report -- 1944, The Birch Mine, Mitchell County, North Carolina, by J. C. Olson

1. Birch mine in operation intermittently for 50 years.

2. Peg enclosed in hornblende gneiss and varies in thickness from 8-15 feet.

3. It is zoned with most mica found in middle of pegmatite body.

4. Old workings indicate mica zone pitches 27° southward.

5. Production in 1943 was largely light run mica of strategic quality.

Comments: In light of the favorable record of production from this mine during World War II, this property probably merits DMEA assistance.

RECOMMENDATION: I recommend the application be referred to the Field Team for review, possible examination, and their recommendation.

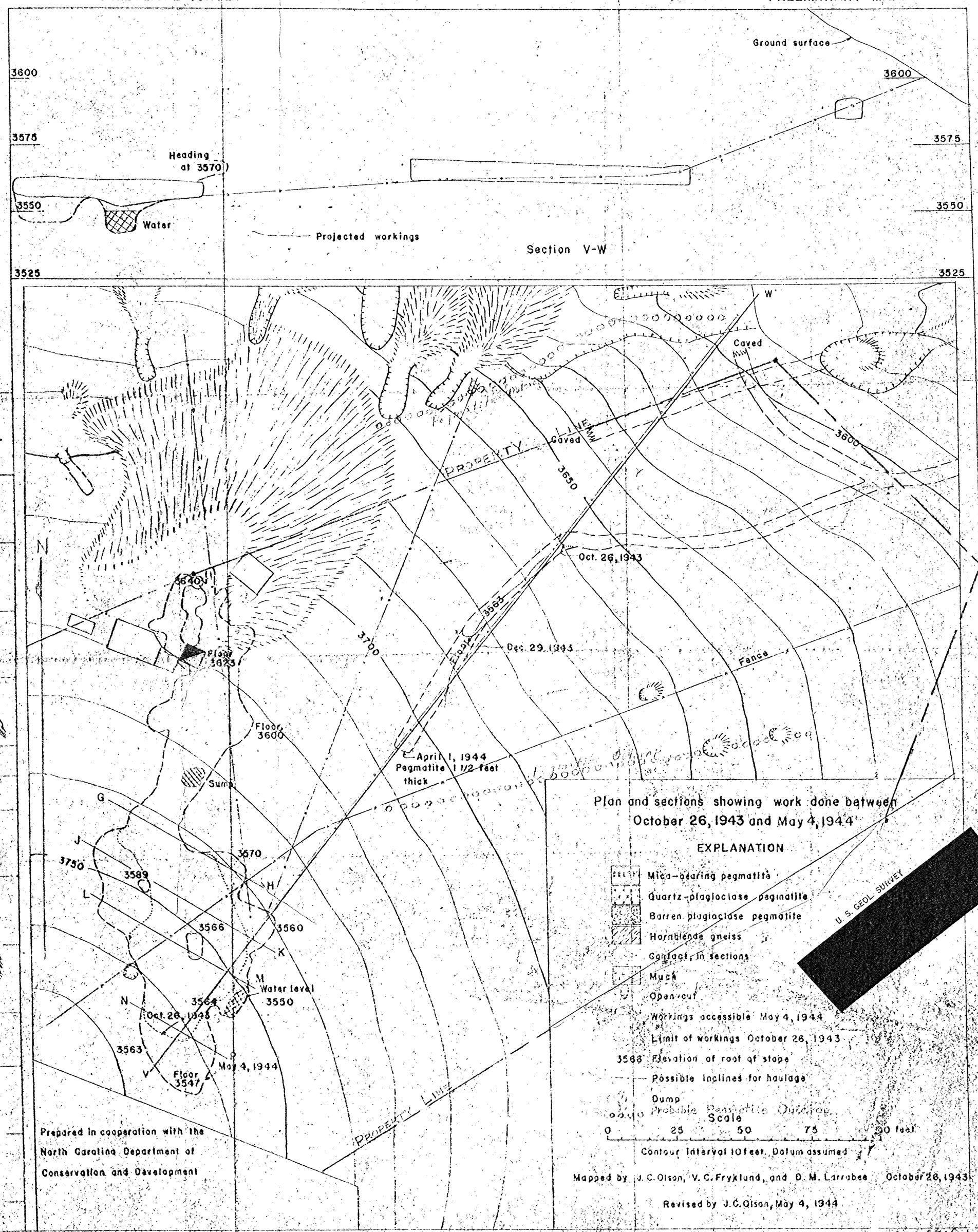
ELNewcomb:hlm
G-9/15/54

E. L. Newcomb

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

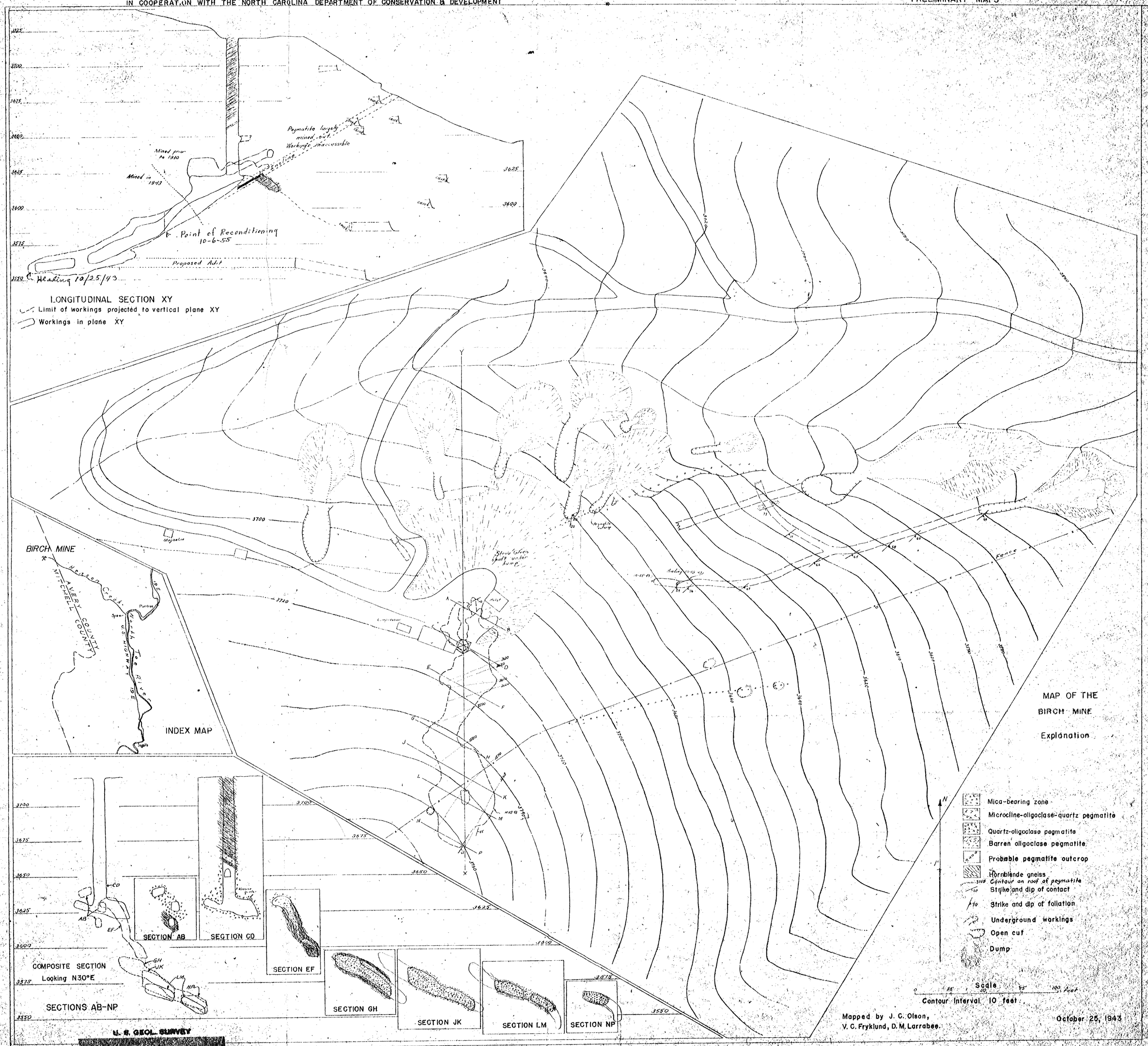
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STRATEGIC MINERALS INVESTIGATIONS
PRELIMINARY MAP



BIRCH MICA MINE, MITCHELL COUNTY, N.C.

DME A-3181 (misc)

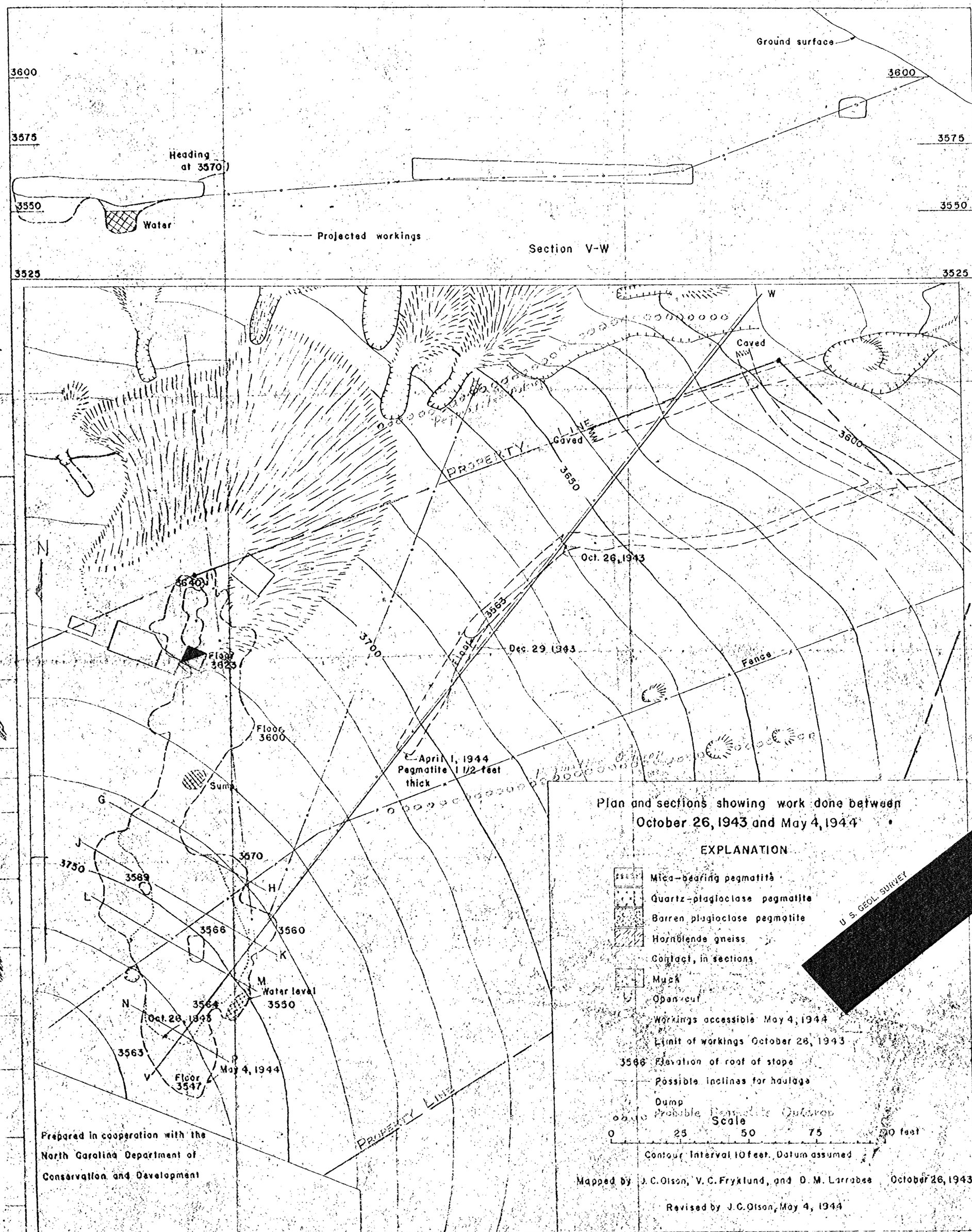


THE BIRCH MICA MINE, MITCHELL COUNTY, NORTH CAROLINA

U. S. GEOL. SURVEY
[redacted]
ONLY

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STRATEGIC MINERALS INVESTIGATIONS
PRELIMINARY MAP



BIRCH MICA MINE, MITCHELL COUNTY, N.C.

DMEA-3181 (Mica)