Docket Copy

TERMINATION AGREEMENT

It is agreed this 28 day of February 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and South Tee Mining Company, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-K705, Docket No. DMEA-3046, dated September 9, 1954, hereinafter called the "Contract," that:

1. Effective February 4, 1955, the Contract and all obligations of the parties thereunder shall be and are hereby terminated.

2. The Government shall contribute only to the fixed unit costs of work performed prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

4. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

IN WITNESS THEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By W. A. Beck
ACTING Executive Officer, DMEA
Field Team, Region V

SOUTH TEE MINING COMPANY, INC.

By [illegible]
Treas

Butrin
Hoffland
Anderson
Tony
Selfridge
Feldman
Mastendorf

Docket Copy

FILED

EXPLORATION PROJECT CONTRACT
SOUTH TOE MINING CO.
DOCKET NO. DMEA-3248

AMENDMENT NO. 1

WITNESSETH:

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and South Toe Mining, Company, Inc., hereinafter called the "Operator," are parties to Exploration Project Contract Idm-K705 (Docket No. DMEA-3248), dated September 9, 1954, hereinafter called the "Contract." Exhibit "A" of the Contract provided for not to exceed 40 feet of crosscut and not to exceed 100 feet of drift. In late November the Operator had performed the 40 feet of crosscut without striking the main pegmatite zone, as expected, although some pegmatite was showing in the heading. In advance of performing any further crosscutting, the Operator was authorized by the Field Team, over the phone, to continue the crosscut until the main pegmatite was cut, but not to exceed 60 feet of crosscutting. The additional crosscutting was to be taken care of by deleting footage from the drifting. A mica-bearing pegmatite was intersected between 41 to 45 feet in the pegmatite, but as the Operator did not consider this to be the main pegmatite, he crosscut an additional 10 feet beyond the 40 feet point, or a total of 50 feet, as was informally authorized. Subsequently the Field Team examiners visited the mine and determined that the main pegmatite had been reached between 41 and 45 feet, and advised the Operator to begin the drift from that point. The purpose of this amendment is to formalize the allowance of the additional 10 feet of crosscutting, informally authorized by the Field Team.

NOW THEREFORE, it is agreed that effective September 9, 1954, the contract is amended as follows:

In Exhibit "A" of the Contract, paragraphs numbered 1 and 2 are deleted and the following new paragraphs numbered 1 and 2 are substituted:

1. From the 60 foot level in the existing slope, crosscut to the northwest, not more than 50 feet, to intersect the pegmatite.

2. Drift on the pegmatite not more than 90 feet.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the agreed unit cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Robert A. Lawrence
ROBERT A. LAWRENCE, Executive Officer, DMEA Field Team, Region VII

Boykin
H. Flurup
"Appd. Sol. Off."
Anderson
Hook
Talbot
Selfridge
Bjorman

SOUTH TOE MINING COMPANY, INC.

By J. Pres.
Pres.

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 3248

COMMODITY Mica

IDM - E 705

Docket copy

Defense Minerals Administration
RECEIVED
OCT 1954

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 9th day of September, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] South Ice Mining Company, Inc., a North Carolina Corporation, Burnsville, North Carolina

hereinafter called the "Operator," as follows: as set forth in Annexes I and II, attached hereto and made a part hereof, and as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of North Carolina, County of Yancey, described as set forth in Annex I.

the Operator represents and undertakes:[4]

[redacted] the following claims, liens, or encumbrances as to each of which [redacted] is interested:

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] Mica

in or upon the described land; and shall bring the project to completion within a period of Six (6) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $3,675.00, which is 75 percent of $4,900.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations. **See Annex II substituted for Article 6**

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; (*Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance.) Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions*

That part of the second sentence in Article 7 beginning with the word "Provided" is deleted.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

South Toe Mining Company, Inc.
(Operator)

By [signature]

By [signature]
Administrator, Defense Minerals Exploration Administration

Boring
Hult
Anderson
Chandler
Selfridge
Johnson

I, ALBERT J. LEVIN, certify that I am the secretary of the corporation named as Operator herein; that ROBERT MOOS, who signed this contract on behalf of the Operator, was then PRESIDENT of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[signature] [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

OCT - 8 1954

EXPLORATION PROJECT CONTRACT
SOUTH TOE MINING COMPANY, INC.
DOCKET NO. DMEA-3248

ANNEX I

The land referred to in Article 2 of the contract and in Annex II is known as the Carson Rock Mica Mine, and was leased for mining purposes to the South Toe Mining Company, Inc. for a period of three years with option to renew for an additional three years by Frank Bowditch and wife, Edna Bowditch, and Ruth C. Gibbs and husband Lawrence Gibbs by an instrument dated December 21, 1953. The Carson Rock Mica Mine is 11.0 miles south of Micaville on North Carolina Highway 80 in Pisgah National Forest. The lease is recorded in Deed Book 112, page 169, Public Registry of Yancey County, North Carolina, and the property is described as follows:

> "BEGINNING on a white oak marked with three hacks and a nail and bottle cap, standing on the East bank of South Toe River; thence N. 35 degrees 55 minutes E. 257 feet to a large hemlock marked with three hacks; thence S. 63 degrees 30 minutes E. 278 feet to a large twin hemlock marked with three hacks; thence S. 20 degrees 45 minutes W. 396 feet, crossing Highway and South Toe River, to a pile of stones and stake on West bank of said river; thence downstream with the meanders of the West Bank of said river 400 feet, more or less to a stake on said bank, a straight line course between points being N. 57 degrees 00 W. 379 feet; thence crossing said river N. 35 degrees 55 minutes E. 99 feet to the BEGINNING, being a part of the lands described and conveyed by a deed from D. E. Hudgins, et al, to John A. Bowditch, recorded in Book 38, page 33, Registry of Yancey County, containing 2.8 acres, more or less."

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 7 1954

EXPLORATION PROJECT CONTRACT
SOUTH TOE MINING COMPANY, INC.
DOCKET NO. DMEA-3248

ANNEX II

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

58694

EXPLORATION PROJECT CONTRACT
SOUTH TOE MINING COMPANY, INC.
DOCKET NO. DMEA-3248

EXHIBIT "A"

Description of the Work

Exploration for concentrations of strategic mica shall be accomplished in the area indicated on the attached map entitled "Sketch of Carson Rock Mine, Yancey Co., N.C. DMEA-3248 (mica)," as follows:

1. From the 60-foot level in the existing stope, crosscut to the northwest, not more than 40 feet, to intersect the pegmatite.

2. Drift on the pegmatite not more than 100 feet.

The crosscut and/or drifts shall be timbered where necessary and shall have cross-sectional dimensions of not less than 5 feet by 7 feet in the clear of timber.

The location, inclination, direction, and extent of all work are subject to the approval of the Government

Agreed Unit Costs

Driving 140 feet of crosscut and/or drift @ $35.00/ft.	$4,900.00	
AGREED ESTIMATED TOTAL COST OF PROJECT		$4,900.00
GOVERNMENT PARTICIPATION @ 75%		$3,675.00

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
OCT - 7 1954

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of ~~North Carolina~~, County of Yancey, described as ~~follows~~ In a lease recorded in Deed Book 112, page 169, Public Registry of Yancey County, North Carolina. Lease dated December 21, 1953.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

_____

_____

_____

Dated this 18th day of September, 1954.

Frank W. Bowditch [Seal] **Address** Hamlick N.C.
Hamlick, N.C.

Edna Bowditch [Seal]

Ruth Gibbs [Seal] Burnsville N.C.
Rt 2

Lawrence Gibbs

DMA Form

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 3248

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

Exploration Assistance

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

1 cy each to USBM and USGS

Routing Slip

To:	600	Date	2/3/54
To:	Anderson	Date	2/3/53
To:	Open Conn	Date	2-15-54
To:	Open Conn	Date	4-12-54
To:	Open Conn	Date	5-5-54
To:	Open Conn	Date	7-8-54
To:	600	Date	9-10
To:	220	Date	10-11-54
To:	Open Conn	Date	1-7-55
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

INT.-DUP. SEC., WASH., D.C. 98868

IN REPLY REFER TO:

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

RECEIVED
JUL 5 - 1956

July 3, 1956

Re: DMEA 3248, Idm-E705
South Toe Mining Co.,
Carson Rock Mine
Yancey Co., N. C.
Approved $4,900.00
Expended 3,097.50
Mica

Memorandum

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

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

Subject: Review of Field Team Final Report

The contract approved the expenditure of $4,900 for exploration of one of three pegmatites by crosscutting from a stope in the "middle" pegmatite to a parallel northwesterly pegmatite and drifting on the latter.

The middle pegmatite has produced considerable mica through the past 60-70 years. The work had shown the middle or main pegmatite to change dip and strike causing "bellies". Less appears to have been known of the southeast and northwesterly pegmatites, but little or no production of mica is credited to them.

A crosscut was driven from the stope and intersected 5 pegmatites. Four are narrow. The fifth regarded as the target is 2 to 4.5 feet thick in the crosscut but fingers out 7 or 8 feet to the southwest of the crosscut. It was followed about 25 feet northeast of the crosscut and some "mine-run" mica was produced but due to 'pitch' it could not be followed upward on account of a highway.

The work was stopped, $3,097.50 of the approved $4,900 having been expended. Reserves of strategic mica revealed by the work completed are negligible, and the examiners and Field Team recommend that no certificate of discovery be issued.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

Docket Copy
Surname:
Anderson
Talfut
Selfridge

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

SEP 15 1955

Mr. Robert Moes, President
South Toe Mining Company, Inc.
226 South 16th Street
Philadelphia, Pennsylvania

Re: Docket No. DMEA-324[illegible] - Mica
South Toe Mining Company, Inc.
Carson Rock Mica Mine
Yancey County, North Carolina
Contract No. I[illegible]-[illegible]705

Dear Mr. Moes:

Reference is made to your terminated exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the contract. In the absence of such certification, the Government retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this project. Your attention, however, is called to the provisions of the contract which require the operator to keep and preserve certain records for the period indicated.

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

Sincerely yours,

C. O. Mittendorf

Administrator

WCAnderson:gad 9/14/55
Copy to: Mr. Frank W. Bowditch and Mrs. Edna Bowditch, Hamrick, N. C.
Mr. Lawrence Gibbs and Mrs. Ruth Gibbs, Route 2, Burnsville, N. C.
Admr. R, File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Anderson
Mr. Chambers

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

Project Summary Report

By: Walter C. Anderson WCA September 14, 1955

1. Docket No. DMEA-3248 - Mica
Contract No. Idm-E705
Carson Rock Mine
Yancey County, North Carolina

Application: Form MF-103 (April 1952) received February 3, 1954.
Work proposed: 75 ft. of incline shaft and 225 ft. of drifts.
Amount requested: $12,312.60.

Operator: South Toe Mining Company, Inc.
Burnsville, North Carolina

Operator's property rights:
Mining lease for three years on the Frank Bowditch property comprising 2.8 acres, dated December 21, 1953.
Owner's Consent to Lien, dated December 22, 1953.

2. Contract: Form MF-200(A)(February,1952), dated September 9,1954.

Work authorized:

140 ft. of crosscuts and/or drifts @ $35.00/ft.	$4,900.00
Estimated total cost of project	$4,900.00
Government participation @ 75%	$3,675.00

Amendments - none

Work completed:

88.5 ft. of crosscuts and/or drifts @ $35.00/ft.	$3,097.50
Total accepted cost	$3,097.50
Government participation	$2,323.12

Work began on October 14, 1954, and was terminated by mutual consent on February 28, 1955.
Final Field Team report received March 11, 1955.
Operator's Final report received March 11, 1955.
Field Team reports that about 500 pounds of "mine-run" mica was produced during project, value unknown. As this contract had royalty provisions regardless of certification, an effort was made to arrive at an estimate of the value agreeable to the Operator. Operator says the results of sheeting were so poor that no sale could be made.
No equipment was purchased under the contract.

3. Audit: Report of Review issued March 24, 1955.

Accepted cost	$3,097.50
Government participation	$2,323.12

4. Certification of Discovery - none issued.

5. Comments:

How conducted - all of the work in which the Government participated was acceptable.

Operation - good.

Engineering - Only as much work was done as was necessary to establish that no concentrations of mica existed in this deposit. Operator submitted satisfactory reports.

Geological premise - The premise that a mica-rich pegmatite exposed at the surface would be encountered by a crosscut at depth was not proven.

Geological criteria upon which work was based:

1. Zoned pegmatite 10 feet thick, enclosed in muscovite-kyanite schist and gneiss.
2. Books of mica up to 12 inches in diameter and 10 inches thick.
3. Past production - $8,000 worth of mica.

Criteria developed during project:

1. Pegmatite - 5 unzoned pegmatites, all enclosed in biotite gneiss, and ranging in thickness from 1.6 to 4.5 feet.
2. Mica - poor quality, reserves negligible.

Future possibilities - None because of poor quality of mica and sparse occurrence.

Recommendations: The Nonmetallic Minerals Division concurs in the Field Team's recommendation not to issue a certification. The commodity members of the Bureau of Mines and Geological Survey agree.

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

RECEIVED
JUL 28 1955

July 26, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tenn.

Subject: Royalty payments: DMEA-3248, Idm-E705 (mica) and DMEA-2909, Imd-E524 (mica)

Reference is made to your letter of June 27, inquiring about royalty payments due on mica produced during exploratory work on the two above completed non-certified projects.

Enclosed are letters from the Operators in response to our inquiry about this production. It would appear that no sales have been made, and that the value of mica on hand is negligible. If any further action on our part is required, please let us know.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

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

RAL/am
cc:
Lynch
Stoler
Files

HASSETT MINING COMPANY, INC.

BURNSVILLE, N. C.

July 21st. 1955.

(DMEA 3248)

Mr. Robert A. Laurence,
DMEA, Field Team, Region V,
Post Office Bldg.,
Knoxville 2, Tenn.

Dear Mr. Laurence:-

In reply to your letter to Mr. Moos, of the South Toe Mining Co., this note is to clarify the question of mica sales from the Carson Rock Mine.

The quantity of block mica referred to in my report proved to be much too high. It was necessary to cob this down considerably before having it sheeted, and results of the sheeting were so disappointing that in the end we paid the sheeting bill, turned the few pounds of small sheet mica over to the Lessees, Bowditch et al. and have no record of its sale, if it in fact proved saleable.

If it is your wish to pursue this further, I will try to find how much the mica brought (it must of necessity have been sold with mica from another mine) and arrange to pay your office the five percent.

Yours truly,

Hassett Mining Co.,

b. [signature]

RECEIVED
JUL 25 1955
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

(DMEA-3248)

SOUTH TOE MINING CO.
c/o Superior Zinc Corp.
121 North Broad St.
Philadelphia 7, Penna.

July 13, 1955

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

Dear Mr. Laurence:

I have just received your letter of July 6, 1955 in connection with the royalty which might be due the Government from sales of less than four pounds from the Carson Rock Mine. I do not recall where the proceeds from such a sale was ever tendered to this Company and the $15.00 grade which you mention is surprising in view of the low grade which was encountered in our exploratory work.

Certainly if we owe you anything in royalties such will be paid you promptly. I have referred your letter to our Mr. Ralph Adair in Burnsville, N.C. and I am sure that he will immediately look into the matter and advise you promptly.

If we have overlooked sending you anything that might be due, I am truly sorry to have inconvenienced you.

Very truly yours,

SOUTH TOE MINING COMPANY

R. A. Moos, Pres.

RAM:hj

RECEIVED
1 1955

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

RECEIVED
JUL - 8 1955

July 6, 1955

Mr. Robert Hoos, President
South Toe Mining Co., Inc.
226 South 16th Street
Philadelphia, Penna.

Re: Docket No. DMEA-3248 (mica)
Contract No. Idm-E705
Carson Rock Mica Mine
Yancey County, N. C.

Dear Mr. Hoos:

Under item (b) of Annex II to the subject contract you are obligated to pay the Government a royalty on all minerals mined or produced from the land "regardless of any certification of discovery or development, from the date of the contract until the lapse of time within which the Government may make such certification or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first;" According to the Final Report present by Mr. Ralph Adair, about 400 pounds of block mica was recovered from which less than four pounds of pattern mica of possibly $15.00 grade was sheeted.

If this mica and any other has been sold it would be appreciated if you would send this office a check for the Government's royalty which in the case of mica would be 5 percent. The check should be made payable to the Defense Minerals Exploration Administration and should be accompanied by certified copies of the sale slips.

Please give this matter your earliest attention so that we may close close our records on this contract.

Very truly yours,

Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V

RAL/am
cc:
R. Adair
Lynch
Opr. Con.
Files

Docket Copy
Surname:
Anderson
Houk
Talbot
Selfridge

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

JUN 27 1955

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

Dear Mr. Laurence:

Reference is made to a number of uncertified projects which have been completed or terminated, but no closing letters have been written because of the unsettled situation with regard to royalties.

Under the following contracts, having royalty provisions regardless of certification, the Field Team reported production, either of known or unknown values:

Docket No.	Contract No.	Value of production during project
DMEA-2909	Idm-5524	Unknown
DMEA-3248	Idm-5705	Unknown
DMEA-3329	Idm-5714	$70.00
DMEA-3356	Idm-5711	Unknown
DMEA-3391	Idm-5704	$40.00
DMEA-3432	Idm-5702	Unknown

In order to close out these contracts it will be appreciated if you will take whatever action you deem appropriate for collection of these royalties. It is suggested in the case of unknown values of production during the project that an estimate be made agreeable to the Government and the Operators.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

Approved:

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

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

WCAnderson:gad 6/22/55

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

R.C.S.

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

March 23, 1955

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-3248 (mica)

Applicant: South Toe Mining Company

Name and Location of Property: Carson Rock Mine
Yancey County, North Carolina

Contract Number: Idm-E-705

Date of Field Team Final Report: March 10, 1955

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

Field Team Recommendation:

1. No certification of discovery or development.

Comments:

1. About 500 pounds of mine-run mica were recovered. The mica was of poor quality.

2. Expenditures -

Total approved	$4,900.00
Total cost	3,097.50
Gov't. share of cost	2,323.12
Value of production during operation	?

Recommendation:

I concur with the field team recommendation to not issue a certificate of discovery or development on this project.

W. F. Dietrich

W. F. Dietrich

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

MAR 2 5 1955

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

Dear Mr. Laurence:

Enclosed are the originals and two copies of Reports of Review covering the following completed or terminated Exploration Project Contracts:

Contract No.	Docket No.	Operator
Idm-2495	DMEA-2793	Burns-Spangler Construction Co.
Idm-2705	DMEA-3248	South Tom Mining Co., Inc.
Idm-2714	DMEA-3329	Henry Lee Robinson
Idm-2694	DMEA-3244	Alex Teague

If you concur with the facts stated therein, the original and one copy of each Report of Review should be forwarded to the Certifying Officer and one copy of each should be retained in your files. If, for any reason, a Report of Review does not have your concurrence please return all copies to this Division with your comments thereon.

The Report of Review covering Contract Idm-2495 was drafted by Mr. Fisher during his recent visit to Region V. Copies of Field Team reports and correspondence received in this office have provided a means of verification of the work performed under the other three contracts for which Reports of Review have been prepared.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Acting Chief
Contract Administration
and Audit Division

Enclosures

EDTalbert/ama
March 25, 1955

Copy to: Docket - 3248
~~Morris~~
Mr. Chambers
Helen Mil
Admr. de

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

COPY

ROOM 13, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

March 10, 1955

Memorandum

TO: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region V - Knoxville, Tenn.

Subject: Final Reports, DMEA-3248, Idm-E705 (mica) South Toe Mining Co. Carson Rock Mine, Burnsville, Yancey County, N.C.

Enclosed are four copies each of the Operator's and Field Team final reports on the subject contract, which was terminated by mutual consent. We are in agreement with the recommendation that certification should not be issued.

/s/ ROBERT A. LAURENCE
Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

/s/ V. J. LYNCH
V. J. LYNCH, Member
DMEA Field Team
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
3-16-55
(date)

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 1 1955

FINAL REPORT

D. M. E. A. Field Team, Region V

On

DMEA-3248, CARSON ROCK MINE (mica)
Yancey County, N. C.

BY

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

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

March 7, 1955

Reviewed by
DMEA OPERATION COMMITTEE
3-16-55
(Date)

MAR 7 1955

EXPLORATION PROJECT CONTRACT

FINAL REPORT
On
DMEA-3248, Idm-E705 CARSON ROCK MINE
(mica)

DEPARTMENT OF THE INTERIOR
Bureau of Mines
Mineral Administration
RECEIVED
MAR 1 1 1955

Operator: South Toe Mining Company, Burnsville, North Carolina

Location: 11.0 miles south of Micaville, Yancey County, North Carolina on N. C. Highway No. 80 in Pisgah National Forest.

Work completed under this contract consisted of driving a 50-foot crosscut and a total of 38.5 feet of drifts. As the small amount of mica discovered by this work was mostly not of strategic quality, the contract was terminated by mutual agreement effective February 4, 1955. No certification of discovery should be issued. Additional exploratory work on this property is not warranted because of the poor quality of the mica.

Work began on October 14, 1954 and ended February 2, 1955. A 50-foot crosscut was driven in a N. 45° W. direction from the 60-foot level of an existing stope. A total of 38.5 feet of drifts were driven from this crosscut as follows: (1) 30 feet in a N. 30° E. direction from a point 41 feet from the portal of the crosscut, (2) 6 feet in a S. 30° W. direction from the same point, and (3) 2.5 feet in a northeast direction from a point 27.5 feet from the portal of the crosscut.

A total of five pegmatites were intersected by the crosscut. They are:

(1) 1.6-foot thick pegmatite 9 feet from the portal,
(2) 2.5 to 3-foot thick pegmatite 17 feet from the portal,
(3) 1.7-foot thick pegmatite 27.5 feet from the portal,
(4) 2-foot thick pegmatite 32.5 feet from the portal,
(5) 2 to 4.5 foot thick pegmatite 41 feet from the portal.

All are conformable to the enclosing wall rock, biotite gneiss, and none show any apparent zoning. The pegmatite strike N. 30-50° E. and dip 50-65° to the southeast. They consist of plagioclase, quartz, perthite, muscovite and garnet, in varying amounts. In addition, clots of kyanite are abundant in pegmatites (1) and (5); minor amounts of sulphides (pyrite and chalcopyrite) occur in pegmatites (2) and (5); and tourmaline is present in pegmatite (3). Pegmatite (5) in the southwest drift plunges about 30° to the southwest and "fingers-out" in the head of the drift driven in this direction.

About 500 pounds of "mine-run" mica were recovered by work done under the contract, most from the northeast drift on pegmatite (5). It was considerably cracked and heavily mineral-stained; little was of strategic quality. The mica in pegmatite (5) occurs in a poorly-defined shoot which

rakes about 30° to the southwest. Any future work northeast up the shoot would come up under the state highway (see attached map).

Reserves of strategic mica revealed by the work completed under this contract are negligible.

Expenditures:

(a)	Total approved	$4,900.00
(b)	Total cost of project	3,097.50
(c)	Government's share of cost	2,323.12
(c)	Government's share unexpended	1,351.88
(e)	Value of production during opr.	?

The work was done in an efficient and satisfactory manner.

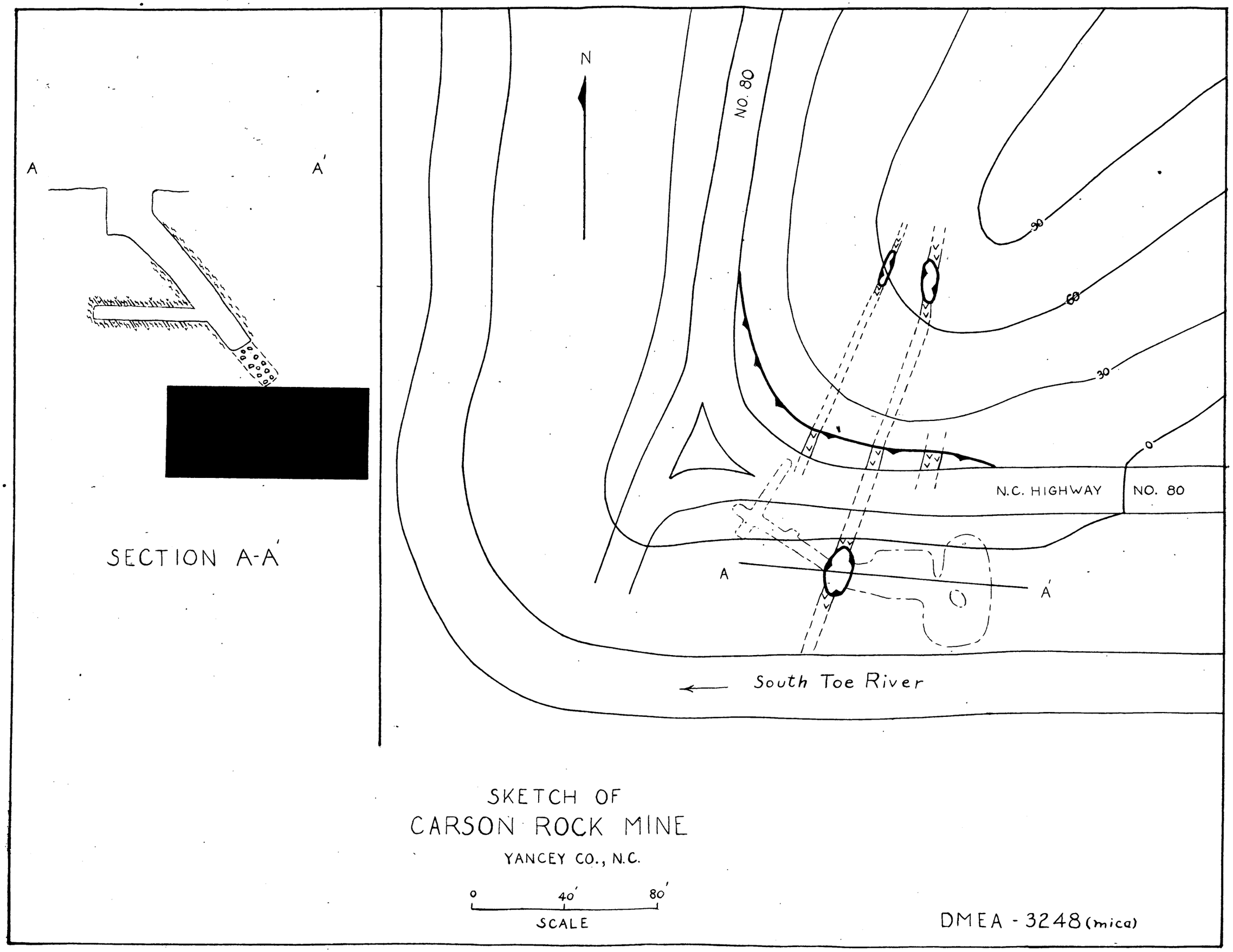
No equipment was purchased under the contract.

March 7, 1955.

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

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

z


A
A'
SECTION A-A'
N
NO. 80
90
60
30
0
N.C. HIGHWAY
NO. 80
A
A'
South Toe River
SKETCH OF
CARSON ROCK MINE
YANCEY CO., N.C.
0
40'
80'
SCALE
DMEA - 3248 (mica)

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

March 10, 1955

RECEIVED

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region V - Knoxville, Tennessee

Subject: Termination Agreement - Idm-E705, DMEA-3248 (mica)
South Toe Mining Company, Burnsville, N. C.

Transmitted are three signed copies of the subject termination agreement.

The usual distribution of the other signed copies has been made by this office.

Robert A. Laurence

Robert A. Laurence

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 11 1955

March 10, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region V - Knoxville, Tenn.

Subject: Final Reports, DMEA-3248, Idm-E705 (mica) South Toe Mining Co. Carson Rock Mine, Burnsville, Yancey County, N. C.

Enclosed are four copies each of the Operator's and Field Team final reports on the subject contract, which was terminated by mutual consent. We are in agreement with the recommendation that certification should not be issued.

Robert A. Laurence

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

V. J. Lynch

V. J. Lynch, Member
DMEA Field Team,
U. S. Bureau of Mines

SOUTH TOE MINING COMPANY

Burnsville, N. C.
Feb. 11th. 1955

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 11 1955

Defense Minerals Exploration Administration,
Knoxville, Tenn.

No.DMEA-3248 IDM-E 705
Mica. Carson Rock Mine.

Gentlemen:-

Work on the subject contract terminated on Febraary second, 1955.

The following work was completed and measured by your examining engineer:

50 Feet of Crosscut from present or old workings to intercept parallel dykes, with particular reference to a dyke outcropping above the road.

36½ Feet of Drifting on the dyke cut by this crosscut.

2 Feet of Drift on a parallel dyke.

The drift encountered small block mica (A) for a distance of twenty feet. The ore-shoot in the dyke was found to be dipping steeply to the south, and the drift passed under it to the north and over it to the south. Since the dip and plunge of this orebody would have brought it up under the highway, and since the quality of the mica was so poor, it was agreed that further work on it was not justified.

Some 400 lbs. of rough block mica was recovered from this drift. This sheeted out less than four pounds of pattern mica of possibly $15.00 grade. After paying for the sheeting, this will yield very little. No sale has been made of pattern, punch or scrap.

Yours truly,

SOUTH TOE MINING COMPANY

by R. Adair
Ralph Adair, Manager.

RECEIVED
FEB 14 1955
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

DOCKET COPY
Surname:
Anderson
Houk
Selfridge
Johnson
McHenry

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

600

FEB 28 1955

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

Subject: Docket No. DMEA-3248 - Mica
South Toe Mining Company, Inc.
Carson Rock Mica Mine
Yancey County, North Carolina
Contract No. Idm- E705

Dear Mr. Laurence:

Reference is made to Field Team memorandum of February 7, 1955, recommending termination of the subject contract by mutual agreement.

Please find herewith the original and five copies of this Termination Agreement. If it meets with your approval please sign it in behalf of the Government and present it to the Operator for approval and signature.

After execution of the Termination Agreement, the copies are to be distributed in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Approved:

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

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

Enclosures 6

WCAnderson:ad 2/24/55
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

R.C.G.

Docket File
Surname:
Anderson

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

600

February 16, 1955

Memorandum

To: Mr. John L. Hofflund, Acting Assistant Solicitor

From: Lawrence G. Houk, Chief, Nonmetallic Minerals Division

Subject: Termination Agreement - Docket No. DMEA-3248 - Mica
South Toe Mining Company, Inc.
Carson Rock Mica Mine
Yancey County, North Carolina
Contract No. Idm-E705

Pursuant to the Field Team's recommendation in its interim report of examination of the subject mine on February 4, 1955, please prepare a termination agreement for the signature of the Executive Officer, DMEA Field Team, Region V.

WCAnderson:gad 2/16/55
Copy to: Admr. R. File
Docket
Mr. Houk

3248

SOUTH TOE MINING COMPANY

Burnsville, N. C.
Feb. 1th. 1955

Defense Minerals Exploration Administration,
Knoxville, Tenn.

No.DMEA-3248 IDM-E 705
Mica. Carson Rock Mine.

Gentlemen:-

Work on the subject contract terminated on February second, 1955.

The following work was completed and measured by your examining engineer:

50 Feet of Crosscut from present or old workings to intercept parallel dykes, with particular reference to a dyke outcropping above the road.

36 Feet of Drifting on the dyke cut by this crosscut.

2 Feet of Drift on a parallel dyke.

The drift encountered small block mica (A) for a distance of twenty feet. The ore-shoot in the dyke was found to be dipping steeply to the south, and the drift passed under it to the north and ov r it to the south. Since the dip and plunge of this orebody would have brought it up under the highway, and since the quality of the mica was so poor, it was agreed that further work on it was not justified.

Some 400 lbs. of rough block mica was r covered from this drift. This sheeted out less than four pounds of pattern mica of possibly $15.00 grade. After paying for the sheeting, this will yield very little. No sale has been made of pattern, punch or scrap.

Yours truly,

SOUTH TOE MINING COMPANY

by R Adair
Ralph Adair, Manager.

RECEIVED
FEB 14 1955

RECEIVED
FEB 14 1955
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

SOUTH TOP MINING COMPANY

Burnsville, N. C.
Feb. 1th. 1955

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 11 1955

Defense Minerals Exploration Administration,
Knoxville, Tenn.

No. DMEA-3248 ITEM 705
Mica. Carson Rock Mine.

Gentlemen:-

Work on the subject contract terminated on February second, 1955.

The following work was completed and measured by your examining engineers:

50 Feet of Crosscut from present or old workings to intercept parallel dykes, with particular reference to a dyke outcropping above the road.

36½ Feet of Drifting on the dyke cut by this crosscut.

2 Feet of Drift on a parallel dyke.

The drift encountered small black mica (A) for a distance of twenty feet. The ore-shoot in the dyke was found to be dipping steeply to the south, and the drift passed under it to the north and over it to the south. Since the dip and plunge of this orebody would have brought it up under the highway, and since the quality of the mica was so poor, it was agreed that further work on it was not justified.

Some 400 lbs. of rough black mica was recovered from this drift. This sheeted out less than four pounds of pattern mica of possibly $15.00 grade. After paying for the sheeting, this will yield very little. No sale has been made of pattern, punch or scrap.

Yours truly,

SOUTH TOP MINING COMPANY

by R Adair
Ralph Adair, Manager.

RECEIVED
FEB 11 1955

RECEIVED
FEB 14 1955
U. [illegible] vey
Geology [illegible]
Knoxville, Tenn.

INTERIM REPORT
(Mica)

DMEA-3248, Idr-F705, CARSON ROCK MINE

FEB 14 1955

Operator: South Toe Mining Company, Burnsville, North Carolina

Location: 11.0 miles south of Micaville, Yancey County, N. C. It is on N. C. Highway No. 80 in the Pisgah National Forest.

A total of 38.5 feet of drift has been driven on this contact; 30 feet in a N. 30° E. direction and 5 feet S. 30° W. on the pegmatite intersected 41 feet from the portal of the crosscut and 2.5 feet to the northeast on the pegmatite cut at 27.5 feet in the crosscut. Mica in both bodies is sparse, small, cracked and very badly mineral-stained. None is of strategic quality. It is recommended that the contract be terminated by mutual agreement. The Operator is agreeable.

Examined: February 4, 1955.

K. H. Teague D. H. Amos

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

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

February 10, 1955

Mr. R. B. Adair, Mgr.
South Toe Mining Co.
P.O. Box 417
Burnsville, N. C.

Re: Docket No. DMEA-3248, Idm-E 705
(mica) Carson Rock Mine
Yancey County, N. C.

Dear Mr. Adair:

We have requested our Washington office to grant permission to terminate the subject contract by mutual agreement, as our examiners report that additional work does not appear justified. It is our understanding that you are in agreement with this decision.

As we have no reason to believe that Washington will not grant this request, may we suggest that you render your final geological and engineering report in quintuplicate as specified in Article 5 (b) and (d) of the contract form. This report should give the date of completion, summarize the work completed, give a statement of the pounds of block mica recovered, and an estimate of the value when sheeted, also a record of any sales made to the Mica Buying Depot or anyone else. This also includes punch, scrap, feldspar or any other sales from the property covered in the contract.

Very truly yours,

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

RAL/sm
cc:
Lynch
Allsman
Opr. Com.
Files

Shirley

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

February 7, 1955

Memorandum

To: Operating Committee, DMEA- Washington

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

Subject: DMEA-3248, Idm-E 705 (mica) South Toe Mining Co. Inc., Carson Rock Mine.

Our field examiners report that drifting on the most promising pegmatites cut in the crosscut has progressed far enough to indicate that a significant body of strategic mica does not exist there. The Operator is in agreement with this and has suspended work pending your decision as to whether it should be terminated.

We recommend termination of this contract by mutual agreement. We do not intend to recommend certification.

Robert A. Laurence
Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

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

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

January 21, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: Acting Executive Officer, DMEA - Region V - Knoxville

Subject: DMEA-3248, Idm-E705 (mica) South Toe Mining Co. Amendment No. 1

Transmitted are three signed copies of the subject amendment.

The usual distribution of the other copies has been made from this office.

Wm. A. Beck

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 27 1955

INTERIM REPORT
(mica)

DMEA-3248, Idm-E705, CARSON ROCK MINE

Operator: South Toe Mining Company, Burnsville, North Carolina

Location: 11.0 miles south of Micaville, Yancey County, N. C. It is on N. C. Highway No. 80 in the Pisgah National Forest.

Drifting continues on this contract and now totals 35 feet; 30 feet in a N. 30° E. direction and 5 feet S. 30° W. A pegmatite 1-2 feet thick with scattered books of mica is present in the head of the northeast drift. The Operator was advised to discontinue the northeast drift but to pull one more heading in the southwest and to pull two headings on the pegmatite intersected 32.5 feet from the portal of the crosscut.

Examined: January 21, 1955.

K. H. Teague D. H. Amos

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

z

DOCKET FILE
Surname:
Anderson
Houk
Talbot
Selfridge
Johnson
Whitenack

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

600

JAN 11 1955

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

Subject: Docket No. DMEA-3248 - Mica
South Tee Mining Company, Inc.
Carson Rock Mica Mine
Yancey County, North Carolina
Contract No. Idm-E705

Dear Mr. Laurence:

Reference is made to your memorandum of December 23, 1954, recommending an amendment to the subject contract to provide for 50 feet of crosscut and 90 feet of drifting.

Please find herewith the original and five copies of Amendment No. 1, prepared pursuant to recommendation. If it meets with your approval please sign it and present it to the Operator for his approval and signature.

After execution of the amendment, the copies are to be distributed in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

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

Thor H. Kiilsgaard (THK)
Member, Geological Survey

Enclosures 6

WCAnderson:ad 1/6/54
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

RCA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 26 1955

INTERIM REPORT

DMEA-3248, Idm-E705, CARSON ROCK MINE (mica)

Operator: South Toe Mining Company, Burnsville, N. C.

Location: 11.0 miles south of Micaville on N. C. Highway No. 80 in Pisgah National Forest.

Drifting continues on this contract and is now at 24.5 feet. The drift continues to follow a body of varying thickness composed of massive quartz surrounded by narrow zones of pegmatite containing small blocks of muscovite mica. Occasional pods of biotite gneiss are contacted in the heading. In the roof area on the southeast side of the drift a large mass of bladed kyanite has been followed for about 6 feet. The Operator was advised to pull at least one additional heading being drilled at the time of this visit, and then start a new drift to the southwest.

Progress on this contract is satisfactory.

January 6, 1955

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

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

z

DOCKET FILE
Surname:
Anderson

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

INTERIOR DEPT.
JAN- 3 1955
SOLICITOR

December 31, 1954

Memorandum

To: Mr. J. L. Hofflund, Acting Assistant Solicitor

From: Nonmetallic Minerals Division

Subject: Amendment No. 1 - Docket No. DMEA-3248 - Mica
South Toe Mining Company, Inc.
Carson Rock Mica Mine
Yancey County, North Carolina
Contract No. Idm-E705

Pursuant to the field team's recommendation in memorandum of December 23, 1954, please prepare Amendment No. 1 to the subject contract for the signature of the Executive Officer, DMEA Region VII, to provide the following:

In Exhibit "A" under Description of Work, change crosscutting to "not more than 50 feet" and drifting on the pegmatite to "not more than 90 feet."

There is no change in the total cost of the project.

Walter C. Anderson
Nonmetallic Minerals Division

WCAnderson:ad 12/31/54
Copy to: Admr. R. File
Docket
Mr. Houk

ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 28 1954

December 27, 1954

Mr. Robert Ross, President
South Tom Mining Company
c/o Superior Tiles Corp.
121 South Broad Street
Philadelphia 7, Pennsylvania

Re: DMRA- XMA, Ida-2 705
Carbon Rock Mine (mica)
Yancey County, N. C.

Dear Mr. Ross:

This is in reply to your letter of December 24, enclosing the check for your December voucher.

It was necessary to request an amendment to the contract to provide for the low cost of crosscutting beyond 40 feet, at the contract unit price "A", item 1, stated "a + b" expected to be sufficient, but more than 40 feet a + b + c. We have requested this amendment and assume that it will be processed, but until it is processed and executed we are unable to approve payment of more than 40 feet for crosscutting.

I have explained this to Mr. Bailey and told him that, as soon as the amendment is executed, he may then claim the approved footage by excess of 40 feet on the same voucher monthly numbers.

Very truly yours,

Robert A. Lawrence
Executive Officer
DMRA Field Team, Region VII

RAL/mg
cc
Beck
Lynch
Joe Bailey
Division file-DMRA
Operating Committee
Files

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 27 1954

December 23, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII - Knoxville, Tenn.

Subject: DMEA-3248, Idm-E 705 (mica). South Toe Mining Co., Inc. Carson Rock Mine, Yancey County, N. C.

Please refer to interim report of December 2, 1954 and Operator's November voucher and narrative report.

Late in November, Mr. Joe Bailey, Supt., telephoned this office and stated that the crosscut was at 40 feet, had intersected some pegmatite stringers but had not hit the main pegmatite zone; some pegmatite was showing in the heading. He was advised to continue the crosscut until the main pegmatite was cut, but not to exceed 60 feet if that distance was reached before our next visit.

A mica-bearing pegmatite, 1 to 3 feet thick according to the Operator's measurements, and 2 to 4.5 according to our geologists' measurements was intersected at 41 to 45 feet in the crosscut. Mr. Bailey did not consider this to be the main pegmatite, and extended the crosscut an additional 5 feet for a total length of 50 feet. When our examiners visited the mine on Dec. 2, they advised the Operator to drift on the pegmatite at 41 to 45 feet.

In authorizing the Operator to continue beyond 40 feet, it was our intention to prepare an amendment authorizing the necessary amount of crosscutting in excess of 40 feet by reducing the drift footage a corresponding amount. The only alternative would have been to shut down the project until an amendment was approved. It is the Operator's opinion that conditions are sufficiently different from the predicted conditions that the full 50-feet of crosscutting was justified, and we are inclined to agree that, on an exploration job of this kind, it is not possible to adhere precisely to a pre-supposed set of conditions; in other words although hindsight indicates that 5 feet was driven into foot wall,

it was not so clear when the heading stood at 45 feet and the Operator has that point in his favor.

On December 20, we wrote the Operator explaining the deletion from his voucher, and offering an amendment providing for 45 feet of cross-cutting. The Operator refused to sign this amendment, and after a conference with Mr. Bailey, we are satisfied that he was acting in good faith and following what he thought was our instruction.

Therefore, we recommend approval of an amendment providing for 50 feet of crosscut and 90 feet of drifting. If you agree, please prepare the amendment and forward it to us.

Robert A. Laurence

Robert A. Laurence
Executive Officer, DMEA
Region VII

Wm. A. Beck

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

C

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN - 5 1955

INTERIM REPORT

DMEA-3248, Idm-E 705, CARSON ROCK MINE (mica)

Operator: South Toe Mining Co. Burnsville, North Carolina

Location: 11.0 miles South of Micaville on N. C. Highway No. 80 in Pisgah National Forest.

Drifting continues on this contract and is now at 16 feet. The foreman was advised to continue drifting in this direction until another visist can be made.

Material encountered is pegmatite, which varies in thickness from 1 foot at the top of the face, to 3 feet in the floor of the drift. The body strikes N. 30° E and dips 50° Southeast, and is composed of quartz feldspar and muscovite mica, some of which is badly stained. Progress on this contract is satisfactory.

Mr. Robert A. Laurence, Executive Officer, DMEA-Region VII accompanied the Examiners on this visist to the mine.

December 16, 1954.

Lawrence E. Shirley By: zm
Lawrence E. Shirley, Mining Engineer
U. S. Bureau of Mines

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

z

INTERIM REPORT

DMEA-3248 Idm-E705 (mica) CARSON ROCK MINE

Bureau of Mines Administration
RECEIVED

OPERATOR: South Toe Mining Company, Burnsville, N. C.

LOCATION: 11.0 miles south of Micaville on N. C. Highway No. 80 in Pisgah National Forest.

Crosscutting on this contract is complete. Instructions were given the mine foreman for turnoff to the northeast at a point 40 feet from crosscut beginning and discussions were held with the operators representatives concerning future work.

Upon request, the walls of the crosscut were washed down and several narrow pegmatite bodies were revealed; at 9 feet a body with an average thickness of 1.6 feet composed of quartz, kyanite and small muscovite mica; at 17 feet a body 2.5 to 3.0 feet in thickness, composed of feldspar, quartz and narrow veinlets of sulphides; at 27.5 feet a body 1.7 feet in thickness, composed of quartz containing tourmaline, feldspar and small mica; at 32.5 feet a 2.0 ft. thickness composed of quartz, feldspar and disseminated garnet; at 40.0 feet a body varying in thickness from 2.5 to 4.5 feet, composed of quartz, feldspar, occasional sulphides and good hard muscovite mica in variable sizes, some of which contained black specks. At 50 feet the crosscut terminates in hard biotite schist. The examiners are of the opinion that the best material is contained in the body at the 40-ft. point in the crosscut and the operators were advised to start a drift at this point. The average strike of this body is N 40° E and dips 55-60° SE. It is conformable with the strike of the country rock.

This operation has been conducted very satisfactorily and safely to date.

L. E. Shirley

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

K. H. Teague D. H. Amos

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

December 2, 1954

DEPARTMENT OF ...
Defense Minerals
DEC 2 19..

INTERIM REPORT

DMEA-3248 Idm-E705 (mica) CARSON ROCK MINE

OPERATOR: South Toe Mining Company, Burnsville, N. C.

LOCATION: 11.0 miles south of Micaville on N. C. Highway 80 in Pisgah National Forest.

Crosscutting continues on this contract and is now at 24 ft. The mine foreman was advised to continue driving in the same direction until another visit can be made.

Material encountered consists of feldspathic pods or stringers containing occasional small blocks of mica associated with quartz, and country rock, a biotite gneiss. The crosscut is being driven in a N 45° W direction and an advance of 3 feet has been made since November 5, 1954.

L. E. Shirley

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

K. H. Teague D. H. Amos

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

November 15, 1954

RECEIVED

INTERIM REPORT

DMEA-3248 Idm-E705 (mica) CARSON ROCK MINE

OPERATOR: South Toe Mining Company, Burnsville, N. C.

LOCATION: 11.0 miles south of Micaville on N. C. Highway 80 in Pisgah National Forest.

Crosscutting continues on this contract from the 60-foot stope level and is now at 21 feet. The mine was not working at the time of this visit because of severe winter weather. Crosscutting will continue until another examination can be made.

Material encountered in the last 11 feet of advance consists of country rock, a biotite gneiss, and some pegmatite material. The present face and northeast wall shows a 2-foot zone of quartz containing small blocks of muscovite mica and chalcopyrite in abundance. No change was noted in the country rock.

Handrails have been installed along the inclined ladderway and is an asset for access to the working level. Progress on this contract is satisfactory.

L. E. Shirley

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

K. H. Teague /mg D. H. Amos

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

November 5, 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1954

INTERIM REPORT

DMEA-3248 Idm-E705 (mica) CARSON ROCK MINE

OPERATOR: South Toe Mining Company, Burnsville, N. C.

LOCATION: 11.0 miles south of Micaville on N. C. Highway 80 in Pisgah National Forest.

Starting date on this contract is October 17, 1954. Unwatering of the mine is complete and crosscutting from the 60 ft. level in the existing stope is underway. An advance of 10 feet in biotite gneiss in a N 47° W direction has been made.

Some new ladder sections have been installed to the present working level. The foreman was advised to repair old ladders, especially handrailings, and tie down and install handrails on the new sections. Progress on this contract is satisfactory.

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

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

October 22, 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 5 HINGSTON FED. BLDG.
KNOXVILLE 2, TENN.

Department of the Interior
Defense Minerals Administration
RECEIVED
OCT - 7 1954

October 6, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region VII

Subject: Signed Contract: DMEA-3248, Idm-E 705, South Toe Mining Co., Inc. (mica) Yancey County, N. C.

Transmitted are three signed copies of the subject contract. The usual distribution of the other copies has been made.

Robert A. Laurence

Robert A. Laurence

Sept. 8, 1954

Mr. Robert A. Laurence, Reg. 7, calling Mr. Houk

Re: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Mr. Laurence: I am calling about DMEA-3248 - Carson Rock Mica Mine.

Mr. Houk: The contract is going to the Operating Committee today we just got it from them.

Mr. Laurence: Ralph Adair called and said they are paying a big royalty and they are anxious about getting it through.

Mr. Houk: The contract is going through the Committee today - $4,900.00.

Mr. Laurence: That is essentially as recommended. Ok, I will notify them so they can rest easy.

Mr. Houk: Ok.

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.

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

September 2, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region VII - Knoxville

Subject: DMEA-3248, (mica) South Toe Mining Co. Yancey County, N. C.

Today we had a telephone call from Joe Bailey, a representative of the subject Company requesting information as to the status of their application. They are anxious to get started on the job as it is costing them money for they must pay a minimum monthly royalty to hold their lease.

Robert A. Laurence

Robert A. Laurence

Docket Copy
Surname:
Anderson
Houk
Chandler
Selfridge
Johnson

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

SEP 9 1954

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

Subject: Docket No. DMEA-3248 - Mica
South Toe Mining Company, Inc.
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Please find herewith the original and five copies of a contract covering the subject exploration project which have been signed by the Government with register number and effective date as shown. It is subject to the attachment of Owner's Consent to Lien on the form revised July 1, 1954. A copy of a memorandum from the Legal Division, dated August 26, 1954, is enclosed.

If the contract meets with your approval present it to the Operator for approval and signature. Please explain to the Operator that the contract, when executed, is a firm commitment under the terms of which it is obligated to complete the work outlined at the agreed unit cost. If any part of this contract does not have either your approval or that of the Operator and cannot be amended within your delegated authority, then the original and all copies of the contract are to be returned to this office, together with the proposed changes for consideration.

After execution of the contract, the copies are to be distributed in the usual manner. Copies of memoranda from the Geological Survey, dated March 23, 1954, and from the Bureau of Mines, dated April 2, 1954, are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (24B)

Approved:

J. H. Hedges

Member, Bureau of Mines (24B)

Thor H. Kiilsgaard

Member, Geological Survey (24B)

Enclosures 11

WCAnderson:gad 9/3/54
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Dietrich, 3061
Mr. Kiilsgaard, 5227
Mr. Houk

R.C.S.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 45 FED. BLDG.
KNOXVILLE 2, TENN.

August 11, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Acting Executive Officer, DMEA - Region VII

Subject: DMEA-3248, Carson Rock Mine, South Toe Mining Co., Applicant
Yancey County, N. C.

Attached is a copy of an agreement betwden the North Carolina State Highway and Public Works Commission and the subject Mining Company which allows the Company to carry on mining operations below the surface of the highway.

Wm. A. Beck

ROUTE N.C. 80 SECTION 13-3-90-80 PROJECT _____ COUNTY OF Yancey

STATE HIGHWAY & PUBLIC WORKS

COMMISSION

—AND—

South Toe Mining Company

CONTRACT

ENCROACHMENT

RIGHT OF WAY

THIS AGREEMENT, made and entered into this the 13th day of July, 1954, by and between the State Highway and Public Works Commission, party of the first part, and South Toe Mining Company party of the second part,

WITNESSETH:

THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated as Route N.C. 80, Section 13-3-90-80 Project _____, between Micaville and Buck Creek Gap approximately 11 miles south of Micaville at property locally known as Carson Rock Mine with the excavation of a mine shaft angling under N.C. 80. Shaft to be at such depth as will not endanger road. Party of the second part obligates itself to reimburse the State Highway and Public Works Commission for the cost of repairing any damage to the highway that might result from the said excavation ~~with the construction and/or maintenance~~ and operation of the mine, and further binds and obligates itself to indemnify, protect and save harmless the Commission from and against any and all claims arising from any damage or injury suffered by any person in the use of the highway caused by or in connection with said encroachment,

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part, in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the condition of this agreement;

NOW THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment not closer than the distance of 40 feet ~~from the center of the said highway~~ below the surface of said highway, upon the following conditions, to wit:

That the said party of the second part binds and obligates himself to erect and maintain the encroaching structure in such reasonably safe and proper condition that it will not interfere with or endanger travel upon said highway, nor obstruct nor interfere with the proper maintenance thereof, and if at any time the party of the first part shall require the removal of or changes in the location of the said structure, that the said party of the second part binds himself, his successors and assigns, to promptly remove or alter the said structure, in order to conform to the said requirement, without any cost to the party of the first part.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed in the day and year above written.

ATTEST:

Dora S. Ferrell
SECRETARY

STATE HIGHWAY & PUBLIC WORKS COMM.

BY C. H. Graham
CHAIRMAN

~~WITNESS~~ ATTEST

Allen Jeeves
Secretary

South Toe Mining Company Inc.

By: Paul A. Moss
President

SECOND PARTY

APPROVED AS TO FORM & LEGALITY:

J. Brooks Peters
GENERAL COUNSEL STATE HIGHWAY & PUBLIC WORKS COMMISSION

RECOMMENDED:

T. B. Cullen
PRINCIPAL RIGHT OF WAY ENGINEER

FORM R/W-6

HASSETT MINING COMPANY
Mica Products for Industry
P. O. BOX 417
BURNSVILLE, N. C.

July 16, 1954

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

Re: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Sir:

Your letter of July 14 to Mr. Levin has been forwarded to the writer for attention, as our staff has been called in as consultants to the South Toe Mining Co. For your information, the writer is also president of the South Toe Mining Co. and any further information that you might require, please be good enough to address your correspondence to the following address:

Robert Moos
City Centre Bldg.
121 North Broad St.
Phila. 7, Penna.

In connection with your inquiry originally addressed to Mr. Joe Bailey, we have since that time been quite busy processing our request to the State Highway Department, who have delayed their final answer for many weeks and only yesterday did we hear from them and the documents should be in your hands within a matter of days. If you do not receive them shortly, please be good enough to advise.

Sincerely yours,

HASSETT MINING COMPANY

Robert Moos

Robert Moos, President

RAM:hj

FILE COPY
Surname:
Anderson
Houk

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

JUL 14 1954

Mr. Albert J. Levin, President
South Toe Mining Company
226 S. 16th St.,
Philadelphia, Pennsylvania

Re: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Levin:

On May 12, 1954, the Executive Officer, DMEA Field Team, Region VII, wrote Mr. Joe Bailey with regard to your application for assistance in exploring the Carson Rock Mica Mine. A copy of the letter is enclosed. To date no answer to this letter has been forwarded to this office.

In the interest of expediting the Defense Minerals Program, it will be appreciated if you will provide us promptly with the requested information.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

WCAnderson:ag 7/13/54
Copy to: Admr. R. File
Docket File
Operating Committee
Field Team, Region VII
Mr. Dietrich, 3061
Mr. Larrabee, 5216
Mr. Houk

R.C.H.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 10, POST OFFICE BLDG.
WASHINGTON 25, D.C.
KNOXVILLE 2, TENN.

May 14, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: DMEA-3248, Carson Rock Mine (mica) South Toe Mining Co.
Burnsville, North Carolina

As requested in your letter of May 6, we submit the following breakdown of estimated costs:

Driving 140 feet of crosscut and/or drift (60 shifts)

Labor and Supervision

2 Laborers @ $1.00/hr.	$960.00
1 Hoistman @ $1.25/hr.	600.00
1 Driller-foreman @ $1.25/hr	600.00

Operating Materials & Supplies

Explosives	600.00
Gas and Oil	500.00
Drill Steel	200.00
Small tools & supplies	100.00

Operating Equipment

Compressor, pump and hammer, rental @ $240/Mo.	720.00
Hoist rental @ $50/Mo.	150.00

Miscellaneous

Insurance, Soc. Sec., repairs, etc	220.00
Contingencies	250.00
Total	$4,900.00

We have written the applicant, requesting that he provide a statement from the North Carolina Highway Department granting permission to work under the highway.

The map submitted by the applicant with the application shows all property corners and boundaries, accurately surveyed. These corners can be readily transferred to the sketch map which accompanies the field examination report by use of points common to both maps, but we suggest that, instead, the applicant's map be used as the contract map, with pertinent data for the contract added to it.

The headframe and skids were included in the original field report because there is no present equipment for hoisting in the old incline. However, considering that much of the muck can probably be disposed of in the old stopes, we believe the headframe can be omitted, and adequate provision for hoisting is made in the above cost estimated.

Robert A. Laurence

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

Wm. A. Beck

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

May 14, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: DMEA-3248, Carson Rock Mine (mica) South Toe Mining Co.
Burnsville, North Carolina

As requested in your letter of May 6, we submit the following breakdown of estimated costs:

Driving 140 feet of crosscut and/or drift (60 shifts)

Labor and Supervision

2 Laborers @ $1.00/hr.	$960.00
1 Hoistman @ $1.25/hr.	600.00
1 Driller-foreman @ $1.25/hr	600.00

Operating Materials & Supplies

Explosives	600.00
Gas and Oil	500.00
Drill Steel	200.00
Small tools & supplies	100.00

Operating Equipment

Compressor, pump and hammer, rental @ $240/Mo.	720.00
Hoist rental @ $50/Mo.	150.00

Miscellaneous

Insurance, Soc. Sec., repairs, etc	220.00
Contingencies	250.00
Total	$4,900.00

We have written the applicant, requesting that he provide a statement from the North Carolina Highway Department granting permission to work under the highway.

The map submitted by the applicant with the application shows all property corners and boundaries, accurately surveyed. These corners can be readily transferred to the sketch map which accompanies the field examination report by use of points common to both maps, but we suggest that, instead, the applicant's map be used as the contract map, with pertinent data for the contract added to it.

The headframe and skids were included in the original field report because there is no present equipment for hoisting in the old incline. However, considering that much of the muck can probably be disposed of in the old stopes, we believe the headframe can be omitted, and adequate provision for hoisting is made in the above cost estimated.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

RAL/sm
cc:
Beck
Lynch
Opr. Com. Div. File
Docket File

RECEIVED
MAY 17 1954

May 14, 1954

Memorandum

To: Operating Committee, MSHA - Washington

From: Field Team, MSHA - Region VII

Subject: MSHA-3240, Carson Rock Mine (sic) South Tar Mining Co.
Greenville, South Carolina

As requested in your letter of May 6, we submit the following breakdown of estimated costs:

Driving 140 feet of crosscut and/or drift (no timber)

Labor and Supervision

2 laborers @ $1.00/hr.	$160.00
1 helper @ $1.25/hr.	240.00
1 drilling foreman @ $1.25/hr	200.00

Operating Materials & Supplies

Explosives	[illegible]
Gas and Oil	[illegible]
Drill Steel	[illegible]
Drill bits & supplies	200.00
	100.00

Operating Equipment

Compressor, pump and hammer, rental @ $[illegible]/hr.	750.00
Total rental @ $50/hr.	150.00

Miscellaneous

Insurance, Soc. Sec., repairs, etc	125.00
Contingencies	150.00
Total	$[illegible]

We have written the applicant, requesting that he provide a statement from the South Carolina Highway Department granting permission to work under the highway.

The map submitted by the applicant with the application shows all property corners and boundaries, accurately surveyed. These corners can be readily transferred to the sketch map which accompanies the field examination report by use of points common to both maps, but we suggest that, instead, the applicant's map be used as the contact map, with pertinent data for the contract added to it.

The headframe and adits were included in the original field report because there is no present equipment for hoisting in the old workings. However, considering that much of the adits can probably be disposed of in the old stopes, we believe the headframe can be omitted, and adequate provision for hoisting is made in the above sketch suggested.

Robert A. Lawrence
EXECUTIVE OFFICER
DMEA REGION VII

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

RAL/ms
Wat
Peck
Lynch
Opr. Con. Mgr. File
Docket File

FILE COPY
Surname:
Anderson
Houk
Selfridge
Hedges
Guild

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

MAY 6 - 1954

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

Subject: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Reference is made to your memorandum of April 20, 1954, concerning our alternate proposal for exploring the subject mine.

A study of the map attached to the field team report reveals that the area of proposed mining is not very extensive, being limited by the State highway and flood hazards of the South Toe River. Before making a decision on proposed exploration we would like to have more information.

The map does not show the relationship of property lines to the proposed exploration work. Kindly furnish us a map with property lines or corners placed thereon.

Also we would like to have information on the easement rights of the State of North Carolina, which will have a bearing on the size of mining operations that can be carried on in this area.

At the same time, please submit unit costs broken down to the items of supervision, labor, materials, equipment and supplies. Why is a headframe recommended in this case?

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Approved:

J. H. Hedges
Member, Bureau of Mines

Philip W. Guild
Member, Geological Survey

WCAnderson:ag 5/3/54

Copy to: Admr. R. File
Docket File
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 15, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

April 20, 1954

Memorandum

To: Operating Committee, D M E A - Washington

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

Subject: DMEA-3248, South Toe Mining Co. (mica) Carson Rock Mine - Yancey County, North Carolina

Reference is made to your letter of April 12.

The plan proposed in the examination report of March 17 was selected as the only one feasible, largely because of the close proximity of the road, river, and steep slope above the road. The proposed bulldozing would be in the floodplain, practically at river level and a large open cut there would greatly increase inflow into a shaft located on the pegmatite there, especially in time of flood stage on the river.

It would also be difficult to sink on the west pegmatite from a point above the road, as there would be no place to dump muck, and work might interfere with traffic on the highway.

For these reasons, we agree with the field examiners that the best way to explore the west pegmatite would be from the old workings. The strong showing of the west pegmatite in the road cut is regarded as favorable evidence for its continuity.

Robert A. Laurence
Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

FILE COPY
SURNAME:

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

APR 12 1954

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

Re: Docket No. DMEA-3248 (Mica)
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Reference is made to the Field Team's report of examination of March 17, 1954, on the subject property.

The examiners' proposal is to explore by driving a crosscut from an existing stope in the middle pegmatite for a distance of about 40 feet to intersect the west pegmatite, then drive not more than 100 feet of drift in the pegmatite. Based upon the information in your report, it appears that crosscutting in the country rock as proposed might not be the most expedient means for exploring the west pegmatite. As an alternate proposal, which would confine the exploration work to the ~~north~~west pegmatite, it is suggested that consideration be given to bulldozing so as to expose the pegmatite on the surface and then sink a 5' x 7' incline on the pegmatite for the desired depth from which point drifting would be done if the pegmatite continued.

If you concur in our proposal, please have the Field Team submit a supplemental proposal embodying the above suggestion. Unit costs should be broken down to the items of supervision, labor, materials, equipment, and supplies.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

WCAnderson/FEJohnson/gad/bih
4/9/54

cc to: Docket
Admr. Reading File
Operating Committee
Region VII
Messrs. Dietrich - Room 3061
Larrabee - Room G-232 GSA
Houk
Selfridge - FEJohnson

R.C.S.

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

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

April 2, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3248

Applicant: South Toe Mining Company

Name and Location of Property: Carson Rock Mine
Yancey County, North Carolina

Date of Field Team's Report: March 19, 1954

Date Rec'd. by Ceramic & Fertilizer Materials Branch: March 29, 1954

Field Team's Recommendation:

1. Exploration program is justified on the southwestern extension of the northwest pegmatite dike.

Comments:

1. No previous effort has been made to explore the southwestern extension of the northwest pegmatite dike.

2. The pegmatite has been exposed and appears to be about 10 feet thick containing mica.

3. Proposed exploration by 40-foot crosscut and 100-foot drift is consistent with good engineering practices.

Recommendation:

I concur in the field team's recommendation for an exploration project in the amount of $5,400.

W. F. Dietrich

W. F. Dietrich

IN REPLY REFER TO:
G-MD-CNM

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

Defense Min... Re...
MAR 24 1954

March 23, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3248 (mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: South Toe Mining Company
Name of property: Carson Rock Mine.
Location of property: Pisgah National Forest, Yancey County, N. C.
Date of field team report: March 17, 1954.
Authorship of field team report: K. H. Teague, L. E. Shirley, and D. H. Amos.
Field team's recommendation:

1. No work justified on "middle" pegmatite.
2. Exploration to be on northwest pegmatite.
3. 40' crosscut and 100' drift
   $5400

Comments:

1. Set up in 2 stages, with crosscut first.
2. Some pegmatites containing abundant sulfides also contain sulfides interlayered with mica sheets in the books (Tilley mine, when examined by D. M. Larrabee and E. Wm. Heinrich, was such an example).

ACTION RECOMMENDED:

Follow field team's recommendation.

D M Larrabee

D. M. Larrabee

FOR THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 22 1954

gcl
4/9/54

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

ON

DMEA-3248, CARSON ROCK MINE (mica)
Pisgah National Forest
Yancey County, N. C.

By

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

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

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

March 17, 1954

Reviewed by
DMEA OPERATING COMMITTEE
3-26-54
(date)

22 1954

FIELD EXAMINATION REPORT
On
DMEA-3248, CARSON ROCK MINE (Mica)

Applicant: South Toe Mining Company, c/o Albert J. Levin, President
226 S. 16th St. Philadephia, Penna.

Some work appears justified on this deposit, but no work is warranted on the "Middle" pegmatite which has been extensively worked in the past. Work is recommended on the northwest pegmatite.

The property was examined on March 12, 1954. Messrs. Joe Bailey and Ralph Adair accompanied the examiners on the inspection which required two hours.

The Carson Rock mine is 11.0 miles south of Micaville on N. C. Highway 80 in Pisgah National Forest. The mine extends from the South Toe River across the highway and slightly beyond the crest of the adjacent ridge. Area covered in the lease is adequate for the proposed project.

The workings consist of a partly caved, inacessible stope extending from slightly north of the crest of the ridge to the highway; a pit or enlarged shaft about 20 feet deep connected to a stope about 80 feet deep between the highway and the river; and a gently sloping incline just south of the crest of the ridge and west of the upper stope. The stope north of the road is reported to have been worked a maximum of about 14 feet below the road level.

The country rock is mainly muscovite-kyanite schist and gneiss containing local concentrations of graphite. Graphite is most concentrated in schist containing no kyanite. Near the east side of the area there is a layer of fine-grained hornblende-quartz amphibolite about 2.5 feet wide; all the country rock contains considerable fine grained sulfides. The country rock strikes uniformly N. 10-50° E. and dips 45-75° S.E. A moderate number of joints are found in the vicinity of the mine, most of which strike northwest and dip northeast. The joints range in strike from N. 55° E. to N. 30° W. and dip from 55° to 85° N. E., S. E., and S. W.

At least three sill-like pegmatite bodies striking northeast and dipping steeply southeast are exposed at the mine, only two of which have been exploited. The central pegmatite has been mined in the upper and south stopes. It is about 6 feet wide near the bottom of the south stope and about 13 feet wide in the stope that opens at the highway and at the south end of the south stope. The pegmatite body appears to pitch gently southward. Very few inclusions were noted in the pegmatite. One inclusion in the lower stope graded at one end into a concentration of sheet mica in the pegmatite. The pegmatite is fine to medium grained and is composed essentially of plagioclase and quartz with muscovite. Sulfide minerals are abundant.

Three zones are distinguished in this pegmatite, namely a quartz core, a wall zone, and a border zone. The quartz core in the lower stope is about 4 feet thick at the southwest end and pinches out 5-6 feet from the northeast end. Its thickness in the upper stope is indeterminate as most of it has been mined out. The wall zone is composed of plagioclase and quartz with sheet mica. The hanging wall part of the wall zone in the lower stope contains more sheet mica than the footwall part, and the southwest heading is richer than the narrower northeast heading. The footwall contains curved streaks of fine grained scaly sercitic muscovite. The hanging wall side of the wall zone is 1.5 to 2 feet wide at the ends of the lower stope, but widens in the center and south end. The footwall side is 2 feet wide at the northeast end of the lower stope and widens to an indeterminate thickness near the southwest end. The border zone is about 4 to 5 inches thick and consists of fine grained plagioclase and small (1 inch and less) books of muscovite with random orientation. The footwall portion of the border zone contains fewer of these books than the hanging wall side.

West of the main pegmatite a pegmatite body is exposed for about 19 feet in the road cut. This is probably the same pegmatite body mined in the incline near the crest of the ridge. The top of the pegmatite body is exposed in the road cut indicating a moderate steep pitch to the south. This pegmatite is also composed of plagioclase, quartz, some microcline, and muscovite with abundant fine grained sulfide minerals. Some graphic texture was noted. The sheet mica in this pegmatite is a maximum of about 12 inches in diameter. West

East of the main pegmatite body is another exposed for about 35 feet in the road cut. At 10 to 15 feet above the road level the country rock rolls over the pegmatite with wedge shaped protrusions into it. The pegmatite crosscuts the country rock in places along the top and impregnates the gneiss for several inches at such places. The composition of this pegmatite is the same as the other two, but the muscovite appears to be all scrap.

The mica in the middle pegmatite is ruby colored "A", some being slightly iron stained. The maximum diameter of the blocks in the south stope was 18 inches, but the average size is about 6 inches. Other defects are: wedge shaped blocks, reeves, ruling, biotite inclusions, and iron sulfide (pyrite) sheets in the cleavage planes.

During the current mica program considerable work has been carried on in the stope in the middle pegmatite south of the highway. The stope has been enlarged and is now about 50 feet long and 80 feet on the dip of the pegmatite. Reports indicate that $8,000 worth of mica was sold from this operation. The examiners believe that further work on the middle pegmatite-

would be more nearly development than exploration.

There has been no effort to explore the southwestern extension of the northwest pegmatite. The only work on it has been at the northeastern end. Recently the State Highway Department has widened the highway and benched the north bank of the road in the pegmatite. It is well exposed, being about 10 feet thick and contains considerable mica. Books of mica up to 12 inches in diameter and 10 inches thick are exposed. This pegmatite is 30 feet northwest of the middle one.

The examiners believe that exploration is justified on the northwest pegmatite. This work can best be conducted from the existing stope by driving a crosscut to the northwest from about the 60 feet level. A crosscut not more than 40 feet long should intersect the pegmatite if it is present. After the pegmatite is intersected, not more than 100 feet of laterals should be driven on the pegmatite. Before this work could begin, it would be necessary to install a headframe on the surface and skids in the incline.

Estimated Cost:

Install skids and construct headframe	$500.00
40 feet crosscut @ $35/ft.	1400.00
100 ft. drift @ $35/ft.	3500.00
Estimated total cost.....	$5400.00

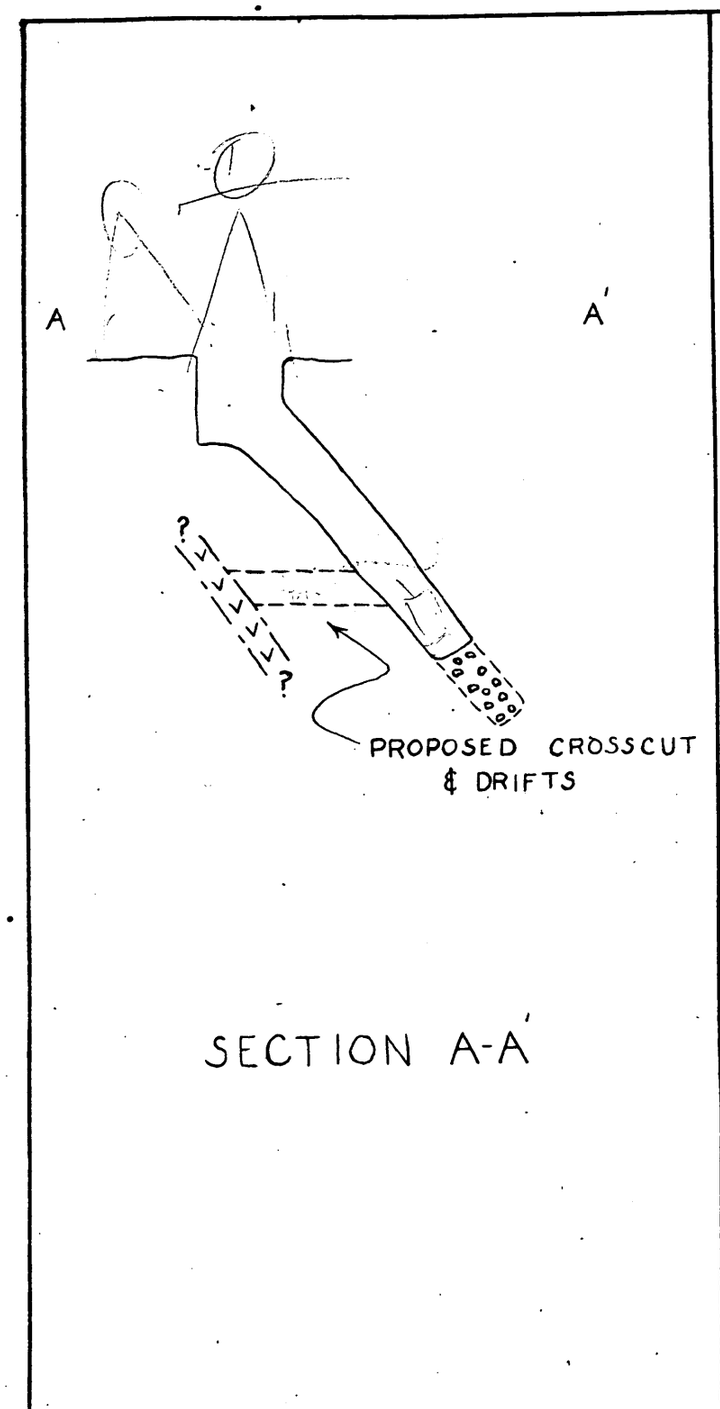
Estimated time required --5 months

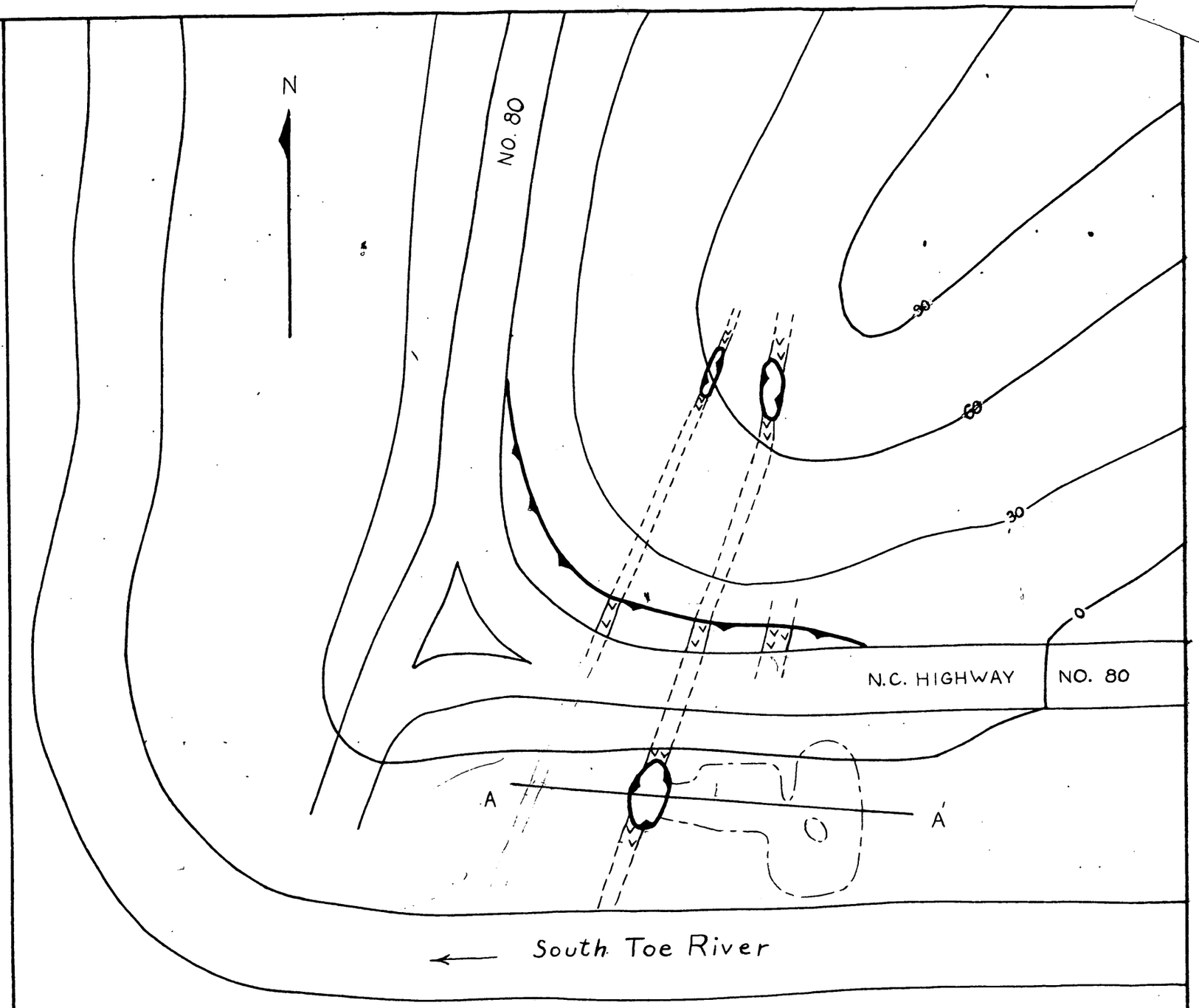
K. H. Teague and D. H. Amos, Geologists
U. S. G. S.

L. E. Shirley, Mining Engineer
U. S. B. M.

March 12, 1954.

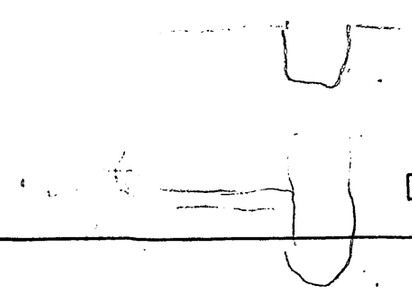
zm





SKETCH OF
CARSON ROCK MINE
YANCEY CO., N.C.

0 40' 80'
SCALE



DMEA - 3248 (mica)

FILE COPY
Surname:

Houk
Selfridge
Johnson

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

FEB 15 1954

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

Subject: Docket No. DMEA-3246 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Laurence:

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

Copies of memoranda from the Geological Survey, dated February 4, 1954, and from the Bureau of Mines, dated February 8, 1954, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

J. H. Hedges (GCS)

Member, Bureau of Mines

Philip W. Guild (GCS)

Member, Geological Survey

Enclosures 4

WCAnderson:ag 2/12/54

Copy to: Admr. R. File
Docket File
Operating Committee
Mr. Dietrich, 3526
Mr. Larrabee, G-232
GSA Bldg.
Mr. Houk

R.C.J.
2-16-54

FILE COPY
Surname:

Houk
Guild
Hedges
Hylton

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

FEB 15 1954

Mr. Albert J. Levin, President
South Toe Mining Company
226 S. 16th St.,
Philadelphia, Pennsylvania

Re: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Levin:

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

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

Sincerely yours,

C. O. Mittendorf

Administrator

WCAnderson:ag 2/12/54

Copy to: Admr. R. File
Docket File
Field Team, Region VII
Operating Committee
Mr. Dietrich, 3526
Mr. Larrabee, G-232, GSA Bldg.
Mr. Houk

R.C.B. 2-16-54

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

Defense Minerals Administration
RECEIVED
FEB 9 1954

February 8, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3248

Applicant: South Toe Mining Company

Name and Location of Property: Carson Rock Mica Mine
Yancey County, North Carolina

Application Rec'd by Ceramic & Fertilizer Mats. Br.: February 3, 1954

Comments:

1. Up to August 20, 1953, a total of 949 pounds of full-trimmed mica from this mine were sold to the GSA Mica Purchasing Depot.

2. Estimated cost of project - $16,075.35.

Recommendation:

It is suggested the field team be requested to visit this property when a member of the field team is in the vicinity to ascertain if an exploration program is justified. Some of the costs appear to be considerably higher than those allotted for other projects in North Carolina.

W. F. Dietrich

W. F. Dietrich

Mr. Anderson

IN REPLY REFER TO:
G-MD-CNM

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

FEB 5 1954

Memorandum

February 4, 1954

REVIEW OF APPLICATION DMEA-3248 (MICA)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. A. Brobst, U. S. Geological Survey
Applicant's name and address: A. J. Levin, 226 S. 16th St., Philadelphia, Pennsylvania; R. J. Oberfield (same address).
Name of property: Carson Rock Mine.
Location of property: Along N. C. highway 80, about 1.7 mi. N. of Busick, Yancey County.
Summary of applicant's proposal:

A. Extend main 6' x 6' inclined shaft 75' farther down dip.
B. 150' of 6' x 6' drift from extension of shaft.
C. 75' of 6' x 6' adit on westernmost peg. of property.

Total cost: $16,075.35.

Sources of information on applicant's property:

A short, undated report in the file indicates that the mica is of good quality. The mine has a long history. During World War II, 1,532 pounds of mica were sold to the Colonial Mica Corporation for $9,448. The main peg. contains 3 zones; sheet mica occurs in the wall zone, and more in the hanging than foot wall of the body. The SE. heading of the main working is considered richer than the NE heading.

Comments:

1. The cost of this project is about twice what it should be when compared to other contracts for similar work in the area. (See letter 2/1/54 by R. A. Laurence.)

2. The descriptive geology of the main working is very detailed considering that the hole is full of water. The applicants, incidentally, are willing to dewater the mine for the field team to inspect it. What is the source of this geologic information? The wall rock also includes graphitic mica schist, according to our report.

3. Previous miners have had trouble with water seeping in from the river. This trouble may persist.

RECOMMENDATION: Have the field team examine the property. At that time the matter of high cost should be discussed. It would be wise to have the mine de-watered prior to the visit, if the applicants are still willing to do it.

D. A. Brobst

D. A. Brobst

Mr. Albert J. Levin, Pres.
South Toe Mining Co.
226 S. 16th St.
Philadelphia, Pa.

February 3, 1954
Subject: DMEA-3248
Re: Exploration Assistance
Carson Rock Mica Mine

Dear Sirs:

The receipt of your application dated January 28, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3248 and referred to the NonMetallic Minerals Division.

Kindly refer to DMEA-3248 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Operation's Control
and Statistics Division

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

February 3, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region VII

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region VII.

DMEA
- 3248

ROBERT E. ADAMS
Robert E. Adams
Chief, Operation's Control
and Statistics Division

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 3 1954

February 1, 1954

Memorandum

To: Operating Committee, D M E A - Washington

From: Field Team, Region VII

Subject: Application from South Toe Mining Co., of Burnsville, N. C.
Carson Rock Mine, Yancey Co., N. C. (mica)

Enclosed are 3 copies of form MF-103, with attachments, received in this office today from Bailey and Van Horn, representing the applicants. It will be noted that, under item 7, the applicants have indicated that they are aware that the Government's contribution will be 75%, if a contract is approved.

Item 5 indicates that supervision will be by E. C. Van Horn and Joe W. Bailey, consultants, and Ralph Adair as Resident Manager. All three are experienced and capable, but is questionable whether so much talent is needed to direct a small job of sinking and drifting. Also, the total cost of $16,075 for 75 feet of inclined shaft-sinking and 225 feet of drifting and crosscutting works out to a unit cost of $72.00 per foot for sinking and $43.00 per foot for the level work. Both are far above what we are paying on other contracts. It should be pointed out that the Carson Rock Mine is one of the best located mines in Yancey County with respect to highway access being directly on a paved highway, which should favor a lower unit cost as compared to some of the inaccessible localities in the Spruce Pine district.

Although Geological Survey reports on this mine are available to us, we think a field examination will be needed before a recommendation can be made. At that time, the basis for the high unit-costs can be discussed with the applicant's consultants.

Robert A. Laurence
Robert A. Laurence, Executive Officer
DMEA Field Team, Reg. 7

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

RECEIVED
FEB 2 1954

February 1, 1954

Mr. Joe Bailey
Bailey & Van Horn
Box 221
Murphy, N. C.

Dear Mr. Bailey:

This will acknowledge receipt of 4 copies of form MF-103, with attachments, in application for aid in exploration of the Carson Rock Mine. The application has been forwarded to our Washington office in accordance with established procedure.

The costs as detailed under item 6 work out to a much higher cost per foot than we are paying on other contract in the SprucePine district, and will require justification if it is to be approved. A field examination will probably be requested, and the costs will be discussed with you at that time.

Sincerely,

Robert A. Laurence

RAL/xm
Opr. Com.
Lynch
Beck

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.4

Defense Minerals Administration
RECEIVED
FEB 3 1954

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. 3248
Metal or Mineral Mica
Date Received
Estimated Cost $16,075
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: South Toe Mining Co. Burnsville, N.C.
Incorporated in state of North Carolina
Albert J. Levin, President 226 S. 16th St., Philadelphia, Pa.
Richard J. Oberfield, Sec'y. and Treas., 226 S. 16th St., Philadelphia, Pa

(*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 is recorded in Deed Book 112, page 169, Public Registry of Yancey County, N.C. See supplementary sheet #1 and copy of lease attached.

(*b*) State any mine name by which the property is known. Carson Rock Mica 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. (Not Applicable)

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 STRATEGIC QUALITY SHEET 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 30 days and be completed within 10 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)? ~~XX~~% by Operator 25 ~~XX~~% by Gov't. 75 For Strategic Mica

(*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 ~~**********~~ 3, 195--

January 28, 1954

(Applicant)

By Albert Greene President

South Toe Mining Co.

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

3.(a) Beginning on a white oak marked with three hacks and a nail and bottle cap, standing on the East Bank of South Toe River; thence North 35 degrees 55 minutes East 257 feet to a large hemlock marked with three hacks; thence South 63 degrees 30 minutes East 278 feet to a large twin hemlock marked with three hacks; thence South 20 degrees 45 minutes West 396 feet, crossing Highway N.C. 80 and South Toe River to a pile of stones and a stake on the West bank of said River; thence downstream with the meanders of the West Bank of said River 400 feet more or less to a stake on said bank, a straight line course between points being North 57 degrees 00 Minutes West 379 feet; thence crossing said River North 35 degrees 55 minutes East 99 feet to the beginning, being a part of the lands described and conveyed by a deed from D.E. Hudgins et al to John A. Bowditch, recorded in Book 38, page 33, Registry of Yancey County, containing 2.8 acres, more or less.

4.(a) The Carson Rock property was operated for sheet mica prior to World War I, and supplied mica under the Colonial Program of World War II. The property was reopened in 1952 by the Carson Rock Mining Co. of Burnsville, N.C., producing sheet mica for the current Government purchase program, but was closed in late August 1953. The older work consisted of small scale trenching and "gophering" in the Northern portions of the pegmatites shown on the accompanying map, and ultimately of mining at the principal location South of Highway 80. The most recent work involved widening the main mine. The present mining plant consists of a hoist house, storage house, a gasoline-powered portable 105 cu. ft. air compressor, air drills, and a small double-drum hoist, gasoline-powered.

The principal mine is in reasonably good condition, and although now filled with water, on request the applicant will pump out the mine for inspection. The present applicant has not been connected with previous operations.

4.(b) It is reported that mica has been produced from this property intermittently for the past 60 or 70 years. It produced strategic quality mica during World War II (see Geological Survey Professional Paper 225), and in the six-month period of March through August, 1953, 519.7 lbs. of strategic quality ruby mica was sold to the Government Purchasing Depot at Spruce Pine, bringing a total of $8,141.19.

Grade and quantity of ore reserves are unknown.

4.(c) The Carson Rock property has three pegmatites, from 50 to 60 feet apart, the middle one being the only pegmatite extensively worked. The country rock comprises of hornblende-chlorite-biotite gneiss in which augens of sub-angular hornblende nodules are wrapped with chlorite-biotite laminae. Disseminated iron and copper-iron sulfides are present in the country rock near the pegmatite material. Pegmatite is of a quartz-mica type containing little feldspar, and generally includes three types of quartz. Most of the mica, as well as the sulfides, is contained in a fine-granular, milky quartz which in places contains large quantities of greenish sericite in place of block mica. A dense white quartz, barren of mica, occurs in the Southwest end of the mine, and a quantity of dense, translucent, barren quartz is present in parts of the Southwest half of the mine. The block-mica content of the pegmatite consists of books ranging in size from a fraction of an inch to as much as 18 inches across, and up to 8 inches thick. The mica is of good ruby color, relatively free of spots, and includes "A", rule, and bend structures. The peg-

4.(c) continued

matites occur in well-defined veins lying more or less parallel to the country rock. The general trend strikes N 35 E and dips about 45° SE, but local variations in the main opening reflect strikes ranging from N10E to N 40 E, and dips ranging from 32° to 70° SE. These variations result in a distinct "bellying" of the walls. It is possible that the two most western pegmatites converge in the main mine, but definite evidence of this possibility is not present.

The present applicant has been encouraged to explore the Carson Rock property because of the large quantity of book mica which is currently visible in pegmatite exposures on the property, and because of the known prior production of strategic sheet mica as evidenced by tabulations in U.S. Geological Survey Professional Paper 225 and by records of the recent sales to the Purchase Depot at Spruce Pine. In addition, the mine is easily accessible, the pegmatite is of apparent uniform thickness and composition, and ground conditions are conducive to safe and efficient mining procedures.

4(d) The Carson Rock Property is situated on N.C. Highway 80 about 8 miles from Micaville in Yancey County, N.C. The property is crossed by the paved highway and thus is accessible to all necessary transportation in any kind of weather.

4 (e) The property is bounded on one side by the South Toe River, and is serviced by REA electric power. Satisfactory material, equipment, supplies and labor are available in the immediate area.

5(b) Referring to the accompanying map of the property, it is proposed that (a) the present mine be explored down dip with an inclined shaft 75 feet long and a cross section of 6 X 6 feet; (b) a total of 150 feet of 6 X 6 drifts from the new shaft extension; and (c) 75 feet of 6 X 6 adit northeastwardly along the strike into the westernmost pegmatite on the property.

5 (d) The proposed exploration work will be carried on under the supervision of E.C. Van Horn and Joe W. Bailey as geologic and mining consultants. These men have had responsible operating experience in at least eight strategic sheet mica mines during World War II and the present Government purchase program, and are thoroughly familiar with all phases of exploring, developing, mining and processing sheet mica for the market.

Ralph B. Adair, a Mining Engineer residing in Burnsville, N.C., will act as Resident Manager of operations, and experienced labor will be employed to perform the mining and mica shop work.

South Toe Mining Co. is properly organized and adequately financed to be able to carry its part of the proposed exploration program.

Sup

6. ESTIMATE OF COSTS

6.(a) INDEPENDENT CONTRACTS
There will be no independent contract work.

(b) LABOR, SUPERVISION, CONSULTANTS

(45 hour work-week)

1 Foreman @ $1.50/hr.	$71.25	
1 Driller @ 1.25/hr.	59.38	
2 Muckers @ 1.00/hr.	95.00	
1 Hoist Man @1.00/hr.	47.50	
Engineering and Consulting Supervision	125.00	
		$398.13

(c) OPERATING MATERIALS AND SUPPLIES
(Weekly Basis)

Electric Power	20.00	
Gasoline for hoist & compressor	30.00	
Explosives	40.00	
Drill Steel & Bits	30.00	
Hose & pipe fittings	5.00	
Hand tools, shovels, picks, bars, etc.	5.00	
Grease and oil for lubrication of equip.	5.00	
Transportation and haulage	10.00	
		$145.00

(d) OPERATING EQUIPMENT
(To be furnished by applicant)

1- Air Compressor
2- Jackhammers
1 - Air Pump
1 - Electric Pump
1 - 2 drum ~~xxxxxxx~~ hoist (gasoline driven)
1 - Mine Car
1 - Air leg for drill
1 - Drill column
2 - Wheelbarrows

Weekly rental allowance for above equipment $60.00

Weekly costs, 6 (b), (c), & (d) - $603.13

Estimated completion time
for project - 20 weeks X $603.13 $12,062.60

(e) REHABILITATION AND REPAIRS

Scale and stull hanging wall over mine
workings to be used for access 250.00

Subtotal carried fwd. $12,312.60

SUPPLEMENTARY SHEET #4

6. ESTIMATE OF COSTS (continued)	Brought fwd.	$12,313.60
6.(f) NEW BUILDINGS, IMPROVEMENTS, INSTALLATIONS		
Dynamite and Exploder Magazine		300.00
Ship track, tipple, and dump trestle		700.00
Self-dumping skip, sheaves, & hoist rope		400.00
Move and reinstall hoist and hoist house		100.00
(g) MISCELLANEOUS		
Repairs and maintenance to equipment		200.00
Accounting, time keeping, report making, etc., @ $25/week		500.00
Workmens Compensation and Liability Insurance, Social Security taxes, unemployment compensation insurance, etc. @ 10% of payroll (see 6.(b))		796.26
		$15,309.86
(h) CONTINGENCIES		
5% of above		765.49
	Total	$16,075.35

FILE COPY
Surname:
Anderson
Houk

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

JUL 1 4 1954

Mr. Albert J. Levin, President
South Toe Mining Company
226 S. 16th St.,
Philadelphia, Pennsylvania

Re: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Levin:

On May 12, 1954, the Executive Officer, DMEA Field Team, Region VII, wrote Mr. Joe Bailey with regard to your application for assistance in exploring the Carson Rock Mica Mine. A copy of the letter is enclosed. To date no answer to this letter has been forwarded to this office.

In the interest of expediting the Defense Minerals Program, it will be appreciated if you will provide us promptly with the requested information.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

WCAnderson:ag 7/13/54
Copy to: Admr. R. File
Docket File
Operating Committee
Field Team, Region VII
Mr. Dietrich, 3061
Mr. Larrabee, 5216
Mr. Houk

R.C.H.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 10, POST OFFICE BLDG.
WASHINGTON 25, D.C.
KNOXVILLE 2, TENN.

May 14, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: DMEA-3248, Carson Rock Mine (mica) South Toe Mining Co.
Burnsville, North Carolina

As requested in your letter of May 6, we submit the following breakdown of estimated costs:

Driving 140 feet of crosscut and/or drift (60 shifts)

Labor and Supervision

2 Laborers @ $1.00/hr.	$960.00
1 Hoistman @ $1.25/hr.	600.00
1 Driller-foreman @ $1.25/hr	600.00

Operating Materials & Supplies

Explosives	600.00
Gas and Oil	500.00
Drill Steel	200.00
Small tools & supplies	100.00

Operating Equipment

Compressor, pump and hammer, rental @ $240/Mo.	720.00
Hoist rental @ $50/Mo.	150.00

Miscellaneous

Insurance, Soc. Sec., repairs, etc	220.00
Contingencies	250.00
Total	$4,900.00

We have written the applicant, requesting that he provide a statement from the North Carolina Highway Department granting permission to work under the highway.

The map submitted by the applicant with the application shows all property corners and boundaries, accurately surveyed. These corners can be readily transferred to the sketch map which accompanies the field examination report by use of points common to both maps, but we suggest that, instead, the applicant's map be used as the contract map, with pertinent data for the contract added to it.

The headframe and skids were included in the original field report because there is no present equipment for hoisting in the old incline. However, considering that much of the muck can probably be disposed of in the old stopes, we believe the headframe can be omitted, and adequate provision for hoisting is made in the above cost estimated.

Robert A. Laurence

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

Wm. A. Beck

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

May 14, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: DMEA-3248, Carson Rock Mine (mica) South Toe Mining Co.
Burnsville, North Carolina

As requested in your letter of May 6, we submit the following breakdown of estimated costs:

Driving 140 feet of crosscut and/or drift (60 shifts)

Labor and Supervision

2 Laborers @ $1.00/hr.	$960.00
1 Hoistman @ $1.25/hr.	600.00
1 Driller-foreman @ $1.25/hr	600.00

Operating Materials & Supplies

Explosives	600.00
Gas and Oil	500.00
Drill Steel	200.00
Small tools & supplies	100.00

Operating Equipment

Compressor, pump and hammer, rental @ $240/Mo.	720.00
Hoist rental @ $50/Mo.	150.00

Miscellaneous

Insurance, Soc. Sec., repairs, etc	220.00
Contingencies	250.00
Total	$4,900.00

We have written the applicant, requesting that he provide a statement from the North Carolina Highway Department granting permission to work under the highway.

The map submitted by the applicant with the application shows all property corners and boundaries, accurately surveyed. These corners can be readily transferred to the sketch map which accompanies the field examination report by use of points common to both maps, but we suggest that, instead, the applicant's map be used as the contract map, with pertinent data for the contract added to it.

The headframe and skids were included in the original field report because there is no present equipment for hoisting in the old incline. However, considering that much of the muck can probably be disposed of in the old stopes, we believe the headframe can be omitted, and adequate provision for hoisting is made in the above cost estimated.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

RAL/sm
cc:
Beck
Lynch
Opr. Com. Div. File
Docket File

May 14, 1954

Memorandum

To: Operating Guidelines, MSHA - Washington

From: Field Team, MSHA - Region VII

Subject: MSHA-9148, Corona Rock Mine (mica) South Tom Mining Co. Spruceville, North Carolina

As requested in your letter of May 6, we submit the following breakdown of estimated costs:

Driving 140 feet of crosscut sampler drift (40 birts)

Labor and Supervision

2 laborers @ $1.00/hr.	$560.00
1 helper @ $1.25/hr.	640.00
1 drilling foreman @ $1.25/hr	600.00

Operating Materials & Supplies

Explosives	600.00
Gas and O2	500.00
Drill Steel	200.00
Drill bits & supplies	100.00

Operating Equipment

Compressor, pump and hoses, rental @ $40/hr.	750.00
Jack rental @ $50/hr.	150.00

Miscellaneous

Insurance, Soc. Sec., repairs, etc	250.00
Contingencies	350.00
Total	$4,300.00

We have written the applicant, requesting that he provide a statement from the North Carolina Highway Department granting permission to work under the highway.

The map submitted by the applicant with the application shows all property corners and boundaries, accurately surveyed. These corners can be readily transferred to the sketch map which accompanies the field examination report by use of points common to both maps, but we suggest that, instead, the applicant's map be used as the contract map, with pertinent data for the contract added to it.

The headframe and adits were included in the original field report because there is no present equipment for hoisting in the old workings. However, considering that much of the adit can probably be disposed of in the old stopes, we believe the headframe can be omitted, and adequate provision for hoisting is made in the above text substituted.

Robert A. Lawrence
EXECUTIVE OFFICER
DMEA REGION VII

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

RAL/wm
Wat
Deak
Lynch
Opr. Cons. Div. File
DOrchard File

FILE COPY
Surname:
Anderson
Houk
Selfridge
Guild
Hedges

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

MAY 6 - 1954

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

Subject: Docket No. DMEA-3248 - Mica
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Reference is made to your memorandum of April 20, 1954, concerning our alternate proposal for exploring the subject mine.

A study of the map attached to the field team report reveals that the area of proposed mining is not very extensive, being limited by the State highway and flood hazards of the South Toe River. Before making a decision on proposed exploration we would like to have more information.

The map does not show the relationship of property lines to the proposed exploration work. Kindly furnish us a map with property lines or corners placed thereon.

Also we would like to have information on the easement rights of the State of North Carolina, which will have a bearing on the size of mining operations that can be carried on in this area.

At the same time, please submit unit costs broken down to the items of supervision, labor, materials, equipment and supplies. Why is a headframe recommended in this case?

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Approved:

J. H. Hedges
Member, Bureau of Mines

Philip W. Guild
Member, Geological Survey

WCAnderson:ag 5/3/54

Copy to: Admr. R. File
Docket File
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

April 20, 1954

Memorandum

To: Operating Committee, D M E A - Washington

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

Subject: DMEA-3248, South Toe Mining Co. (mica) Carson Rock Mine - Yancey County, North Carolina

Reference is made to your letter of April 12.

The plan proposed in the examination report of March 17 was selected as the only one feasible, largely because of the close proximity of the road, river, and steep slope above the road. The proposed bulldozing would be in the floodplain, practically at river level and a large open cut there would greatly increase inflow into a shaft located on the pegmatite there, especially in time of flood stage on the river.

It would also be difficult to sink on the west pegmatite from a point above the road, as there would be no place to dump muck, and work might interfere with traffic on the highway.

For these reasons, we agree with the field examiners that the best way to explore the west pegmatite would be from the old workings. The strong showing of the west pegmatite in the road cut is regarded as favorable evidence for its continuity.

Robert A. Laurence
Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

FILE COPY
SURNAME:

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

APR 12 1954

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

Re: Docket No. DMEA-3248 (Mica)
South Toe Mining Company
Carson Rock Mica Mine
Yancey County, North Carolina

Dear Mr. Laurence:

Reference is made to the Field Team's report of examination of March 17, 1954, on the subject property.

The examiners' proposal is to explore by driving a crosscut from an existing stope in the middle pegmatite for a distance of about 40 feet to intersect the west pegmatite, then drive not more than 100 feet of drift in the pegmatite. Based upon the information in your report, it appears that crosscutting in the country rock as proposed might not be the most expedient means for exploring the west pegmatite. As an alternate proposal, which would confine the exploration work to the ~~northwest~~ west pegmatite, it is suggested that consideration be given to bulldozing so as to expose the pegmatite on the surface and then sink a 5' x 7' incline on the pegmatite for the desired depth from which point drifting would be done if the pegmatite continued.

If you concur in our proposal, please have the Field Team submit a supplemental proposal embodying the above suggestion. Unit costs should be broken down to the items of supervision, labor, materials, equipment, and supplies.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

WCAnderson/FEJohnson/gad/bih
4/9/54
cc to: Docket
Admr. Reading File
Operating Committee
Region VII
Messrs. Dietrich - Room 3061
Larrabee - Room G-232 GSA
Houk
Selfridge - FEJohnson

R.C.S.

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

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

April 2, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3248

Applicant: South Toe Mining Company

Name and Location of Property: Carson Rock Mine
Yancey County, North Carolina

Date of Field Team's Report: March 19, 1954

Date Rec'd. by Ceramic & Fertilizer Materials Branch: March 29, 1954

Field Team's Recommendation:

1. Exploration program is justified on the southwestern extension of the northwest pegmatite dike.

Comments:

1. No previous effort has been made to explore the southwestern extension of the northwest pegmatite dike.

2. The pegmatite has been exposed and appears to be about 10 feet thick containing mica.

3. Proposed exploration by 40-foot crosscut and 100-foot drift is consistent with good engineering practices.

Recommendation:

I concur in the field team's recommendation for an exploration project in the amount of $5,400.

W. F. Dietrich

W. F. Dietrich

IN REPLY REFER TO:
G-MD-CNM

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

Defense Min
MAR 24 1954

March 23, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3248 (mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: South Toe Mining Company
Name of property: Carson Rock Mine.
Location of property: Pisgah National Forest, Yancey County, N. C.
Date of field team report: March 17, 1954.
Authorship of field team report: K. H. Teague, L. E. Shirley, and D. H. Amos.
Field team's recommendation:

1. No work justified on "middle" pegmatite.
2. Exploration to be on northwest pegmatite.
3. 40' crosscut and 100' drift
   $5400

Comments:

1. Set up in 2 stages, with crosscut first.
2. Some pegmatites containing abundant sulfides also contain sulfides interlayered with mica sheets in the books (Tilley mine, when examined by D. M. Larrabee and E. Wm. Heinrich, was such an example).

ACTION RECOMMENDED:

Follow field team's recommendation.

D M Larrabee

D. M. Larrabee

DEPT. OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 22 1954

GCL
4/9/54

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

ON

DMEA-3248, CARSON ROCK MINE (mica)
Pisgah National Forest
Yancey County, N. C.

By

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

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

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

March 17, 1954

Reviewed by
DMEA OPERATING COMMITTEE
3-26-54
(date)

Received
22 1954

FIELD EXAMINATION REPORT
On
DMEA-3248, CARSON ROCK MINE (Mica)

Applicant: South Toe Mining Company, c/o Albert J. Levin, President
226 S. 16th St. Philadephia, Penna.

Some work appears justified on this deposit, but no work is warranted on the "Middle" pegmatite which has been extensively worked in the past. Work is recommended on the northwest pegmatite.

The property was examined on March 12, 1954. Messrs. Joe Bailey and Ralph Adair accompanied the examiners on the inspection which required two hours.

The Carson Rock mine is 11.0 miles south of Micaville on N. C. Highway 80 in Pisgah National Forest. The mine extends from the South Toe River across the highway and slightly beyond the crest of the adjacent ridge. Area covered in the lease is adequate for the proposed project.

The workings consist of a partly caved, inacessible stope extending from slightly north of the crest of the ridge to the highway; a pit or enlarged shaft about 20 feet deep connected to a stope about 80 feet deep between the highway and the river; and a gently sloping incline just south of the crest of the ridge and west of the upper stope. The stope north of the road is reported to have been worked a maximum of about 14 feet below the road level.

The country rock is mainly muscovite-kyanite schist and gneiss containing local concentrations of graphite. Graphite is most concentrated in schist containing no kyanite. Near the east side of the area there is a layer of fine-grained hornblende-quartz amphibolite about 2.5 feet wide; all the country rock contains considerable fine grained sulfides. The country rock strikes uniformly N. 10-50° E. and dips 45-75° S.E. A moderate number of joints are found in the vicinity of the mine, most of which strike northwest and dip northeast. The joints range in strike from N. 55° E. to N. 30° W. and dip from 55° to 85° N. E., S. E., and S. W.

At least three sill-like pegmatite bodies striking northeast and dipping steeply southeast are exposed at the mine, only two of which have been exploited. The central pegmatite has been mined in the upper and south stopes. It is about 6 feet wide near the bottom of the south stope and about 13 feet wide in the stope that opens at the highway and at the south end of the south stope. The pegmatite body appears to pitch gently southward. Very few inclusions were noted in the pegmatite. One inclusion in the lower stope graded at one end into a concentration of sheet mica in the pegmatite. The pegmatite is fine to medium grained and is composed essentially of plagioclase and quartz with muscovite. Sulfide minerals are abundant.

Three zones are distinguished in this pegmatite, namely a quartz core, a wall zone, and a border zone. The quartz core in the lower stope is about 4 feet thick at the southwest end and pinches out 5-6 feet from the northeast end. Its thickness in the upper stope is indeterminate as most of it has been mined out. The wall zone is composed of plagioclase and quartz with sheet mica. The hanging wall part of the wall zone in the lower stope contains more sheet mica than the footwall part, and the southwest heading is richer than the narrower northeast heading. The footwall contains curved streaks of fine grained scaly sercitic muscovite. The hanging wall side of the wall zone is 1.5 to 2 feet wide at the ends of the lower stope, but widens in the center and south end. The footwall side is 2 feet wide at the northeast end of the lower stope and widens to an indeterminate thickness near the southwest end. The border zone is about 4 to 5 inches thick and consists of fine grained plagioclase and small (1 inch and less) books of muscovite with random orientation. The footwall portion of the border zone contains fewer of these books than the hanging wall side.

West of the main pegmatite a pegmatite body is exposed for about 19 feet in the road cut. This is probably the same pegmatite body mined in the incline near the crest of the ridge. The top of the pegmatite body is exposed in the road cut indicating a moderate steep pitch to the south. This pegmatite is also composed of plagioclase, quartz, some microcline, and muscovite with abundant fine grained sulfide minerals. Some graphic texture was noted. The sheet mica in this pegmatite is a maximum of about 12 inches in diameter. West

East of the main pegmatite body is another exposed for about 35 feet in the road cut. At 10 to 15 feet above the road level the country rock rolls over the pegmatite with wedge shaped protrusions into it. The pegmatite crosscuts the country rock in places along the top and impregnates the gneiss for several inches at such places. The composition of this pegmatite is the same as the other two, but the muscovite appears to be all scrap.

The mica in the middle pegmatite is ruby colored "A", some being slightly iron stained. The maximum diameter of the blocks in the south stope was 18 inches, but the average size is about 6 inches. Other defects are: wedge shaped blocks, reeves, ruling, biotite inclusions, and iron sulfide (pyrite) sheets in the cleavage planes.

During the current mica program considerable work has been carried on in the stope in the middle pegmatite south of the highway. The stope has been enlarged and is now about 50 feet long and 80 feet on the dip of the pegmatite. Reports indicate that $8,000 worth of mica was sold from this operation. The examiners believe that further work on the middle pegmatite-

would be more nearly development than exploration.

There has been no effort to explore the southwestern extension of the northwest pegmatite. The only work on it has been at the northeastern end. Recently the State Highway Department has widened the highway and benched the north bank of the road in the pegmatite. It is well exposed, being about 10 feet thick and contains considerable mica. Books of mica up to 12 inches in diameter and 10 inches thick are exposed. This pegmatite is 30 feet northwest of the middle one.

The examiners believe that exploration is justified on the northwest pegmatite. This work can best be conducted from the existing stope by driving a crosscut to the northwest from about the 60 feet level. A crosscut not more than 40 feet long should intersect the pegmatite if it is present. After the pegmatite is intersected, not more than 100 feet of laterals should be driven on the pegmatite. Before this work could begin, it would be necessary to install a headframe on the surface and skids in the incline.

Estimated Cost:

Install skids and construct headframe	$500.00
40 feet crosscut @ $35/ft.	1400.00
100 ft. drift @ $35/ft.	3500.00
Estimated total cost.....	$5400.00

Estimated time required --5 months

K. H. Teague and D. H. Amos, Geolggists
U. S. G. S.

L. E. Shirley, Mining Engineer
U. S. B. M.

March 12, 1954.

zm

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of North Carolina, County of Yancey, described as follows:1/

BEGINNING on a white oak marked with three hacks and a nail and bottle cap, standing on the East bank of South Toe River; thence N. 35 degrees 55 minutes E 257 feet to a large hemlock marked with three hacks; thence S. 63 degrees 30 minutes E. 278 feet to a large twin hemlock marked with three hacks; thence S. 20 degrees 45 minutes W. 396 feet, crossing Highway and South Toe River, to a pile of stones and stake on W. bank of said river; thence downstream with the meanders of the W. bank of said river 400 feet, more or less to a stake on said bank, a straight line course between points being N. 57 degrees 00 W. 379 feet; then crossing said river N. 35 degrees 55 min. E. 99 feet to the BEGINNING, contains 2.8 acres, more or less.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ SOUTH TOE MINING CO., INC.

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production (as set forth on the reverse side hereof) and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

Dated this 22 day of December, 1953.

Frank Bowditch [Seal]
Edna Bowditch [Seal]
Ruth C. Gibbs [Seal]
Lawrence Gibbs (SEAL)

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

Defense Materials Administration
RECEIVED

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of North Carolina, County of Yancey, described as follows:1/ BEGINNING on a white oak marked with three hacks and a nail and bottle cap, standing on the E. bank of South Toe River; thence N. 35 degrees 55 minutes E. 257 feet to a large hemlock marked with three hacks; thence S. 63 degrees 30 minutes E. 278 feet to a large twin hemlock marked with three hacks; thence S. 20 degrees 45 minutes W. 396 feet, crossing Highway and South Toe River, to a pile of stones and stake on West bank of said river; thence downstream with the meanders of the West bank of said river 400 feet, more or less to a stake on said bank, a straight line course between points being N. 57 degrees 00 W. 379 feet; thence crossing said river N. 35 degrees 55 minutes E. 99 feet to the BEGINNING, containing 2.8 acres more or less.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ SOUTH TOE MINING CO., INC.

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production (as set forth on the reverse side hereof) and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

Dated this 22 day of December, 1953.

Frank Bowditch [Seal]
Edna Bowditch [Seal]
Ruth C. Gibbs [Seal]
Lawrence Gibbs (SEAL)

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

Bureau of Mines
Bureau Mines's Administration
RECEIVED
FEB 3 1954

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of North Carolina, County of Yancey, described as follows:1/ BEGINNING on a white oak marked with three hacks and a nail and bottle cap, standing on the E. bank of South Toe River; thence N. 35 degrees 55 minutes E. 257 feet to a large hemlock marked with three hacks; thence S. 63 degrees 30 minutes E. 278 feet to a large twin hemlock marked with three hacks; thence S. 20 degrees 45 minutes W. 396 feet, crossing Highway and South Toe River, to a pile of stones and stake on West bank of said river; thence downstream with the meanders of the West bank of said river 400 feet, more or less to a stake on said bank, a straight line course between points being N. 57 degrees 00 W. 379 feet; thence crossing said river N. 35 degrees 55 minutes E. 99 feet to the BEGINNING, containing 2.8 acres more or less.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ SOUTH TOE MINING CO., INC.

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production (as set forth on the reverse side hereof) and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

Dated this 22 day of December, 1953.

Frank Bowditch [Seal]
Edna Bowditch [Seal]
Ruth C. Gibbs [Seal]
Lawrence Gibbs (SEAL)

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

STATE OF NORTH CAROLINA

COUNTY OF YANCEY

THIS MICA MINING LEASE made and entered into this the 21st day of December, 1953 by and between FRANK BOWDITCH and wife, RONA BOWDITCH and RUTH C. GIBBS and husband, LAWRENCE GIBBS, of Yancey County, North Carolina, parties of the first part, hereinafter referred to as OWNERS, and SOUTH TOE MINING CO., INC., a North Carolina Corporation, party of the second part, hereinafter referred to as LESSEE,

W I T N E S S E T H:

That the OWNERS, for and in consideration of the performance of the conditions and agreements and the payment of royalties as hereinafter set forth, have bargained and leased and by these presents do lease, grant and demise unto the Lessee, its successors and assigns, for the period of time fixed in paragraph 1 below, a certain tract of land for mica mining purposes located in South Toe Township, Yancey County, North Carolina, on which is located what is known as the "Old Carson Rock Mine", said tract more particularly described as follows:

> BEGINNING on a white oak marked with three hacks and a nail and bottle cap, standing on the East bank of South Toe River; thence N. 35 degrees 55 minutes E. 257 feet to a large hemlock marked with three hacks; thence S. 63 degrees 30 minutes E. 278 feet to a large twin hemlock marked with three hacks; thence S. 20 degrees 45 minutes W. 396 feet, crossing Highway and South Toe River, to a pile of stones and stake on West bank of said river; thence downstream with the meanders of the West Bank of said river 400 feet, more or less to a stake on said bank, a straight line course between points being N. 57 degrees 00 W. 379 feet; thence crossing said river N. 35 degrees 55 minutes E. 99 feet to the BEGINNING, being a part of the lands described and conveyed by a deed from D. E. Hudgins, et al, to John A. Bowditch, recorded in Book 38, page 33, Registry of Yancey County, containing 2.8 acres, more or less.

TO HAVE AND TO HOLD said real property, together with the mining rights and privileges incident to mica mining and operating said mica mine, unto the said Lessee, its successors and assigns, for the period of time fixed in Paragraph 1 below, upon full compliance with each and all of the following conditions and agreements;

1. PERIOD OF TIME. This lease shall begin as of the date hereof and be in full force and effect for a period of three (3) years, ending on the 21st day of December, 1956, unless sooner terminated as hereinafter stated. However, this lease may be renewed by the Lessee, its successors and assigns, at the end of the three (3) year period for additional period of three (3) years

upon the same terms and condition provided the Lessee, its successors and assigns, fully comply with all the terms of this lease and may be renewed thereafter for the period of time not exceeding three (3) years as long as said mica mine proves profitable and provided the Lessee has fully complied with all the conditions of this lease.

It is understood between the parties hereto that the Lessee shall begin operations at said mica mine on the above described property on or before January 2, 1954 and failure to begin operations on or before that time shall render this lease null and void, at the option of the owners, and give them the right to re-enter and take possession unless the Lessee pays in advance on or before January 2, 1954 a minimum royalty of $50.00 and a like sum of $50.00 in advance each thirty days thereafter until said operation begins; and after said mine has been in operation and said operation ceases for as long as thirty (30) consecutive days then said $50.00 minimum royalty shall be paid before the end of said first thirty (30) days period and for each thirty (30) days thereafter so long as said mine is not in operation, and the failure to pay said minimum royalty when due and the failure to pay the regular royalty as hereinafter provided when due, then in either event, the Owners, at their option, may declare this lease null and void and have the right to re-enter and take possession of the premises without further notice to the Lessee.

2. MINING RIGHTS. The Lessee shall have a right to search for, dig, quarry, blast and obtain mica from said lands and any other minerals found while mining for mica and in so doing, may use such tools, machinery and equipment as the Lessee may elect.

The Lessee shall have a right of ingress and egress to said mica mine over other lands of the Owners and a right to construct and maintain any road or ways over the lands of the Owners as may be reasonably necessary for the operating of said mine and removing the products therefrom.

The Lessee shall have a right to dump waste from said mica mine onto the lands of the Owners as may be reasonably necessary in the operation of said mine.

3. MANNER OF WORK. The Lessee shall use sufficient tools, machinery, equipment and labor so as to operate said mica mine in a workman-like manner and to obtain all mica reasonably obtainable and shall keep the mine in a clean, safe and workable condition and shall do no mining known as "hogging".

4. ROYALTIES. The Lessee shall and hereby expressly agrees to pay to the Owner a royalty for all mica mined and removed from said premises as follows:

One-eighth (1/8) of the sale price of all mica of every grade and kind.

Fifty cents (.50) per ton of 2240 pounds for all feldspar mined and removed from said premises while mining for mica.

The prevailing royalty in this locality for all other minerals mined and removed from said premises while mining for mica.

The payment of royalty shall be paid by the Lessee to the Owners on or before the 10th day of each month for all minerals mined and sold from said premises during the previous calendar month.

5. SHEETING AND TRIMMING. The Lessee shall have the right to remove the mica from said mine and premises for the purpose of sheeting but that same shall not be removed a greater distance from said operation for this purpose than Micaville, North Carolina and in no event removed out of Yancey County for the purpose and the Owners shall have the right to inspect said mica however at all times where said mica is being trimmed and sheeted.

6. RECORDS AND STATEMENTS. The Lessee shall keep accurate records of all the weights and selling prices of all mica mined and removed from said mine and, at the time of payment of royalty, shall furnish to the Owners a statement showing the amount, weights and prices of such mica with the duplicate of the sale and weight tickets or invoices of said mica or other minerals sold.

The Owners, or their agent, shall have the right to inspect the books and records of the Lessee as to all mica mined and removed from said mine.

7. TIMBER. The Lessee shall have the right to use timber from the lands of the Owners of non commercial value as may be reasonably necessary for mining purposes at the aforesaid mine, but no timber shall be used for any other purpose.

8. ASSIGNMENT. It is expressly understood and agreed that this lease shall not be transferred or assigned and is not transferrable without the written consent of the Owners.

9. COVENANTS. It is understood between the parties hereto that between the highway and South Toe River on the above described lands, is located a sand and gravel operation and this lease is made subject to said sand and gravel operation with the understanding that the Lessee, his successors and assigns, in carrying on the mining operations on said property shall not interfere with said sand and gravel operations located upon said lands.

It is also understood between the parties hereto that the Owners on March 15, 1952 executed a Mining Lease to Ben Blalock, et al, which lease was never recorded but in December 1952 was transferred and assigned to R. E. Tippett and that on December 17, 1952 the Owners executed a lease to R. E. Tippett which lease was to supersede the aforesaid lease to Ben Blalock, which lease is duly recorded in the Office of the Register of Deeds of Yancey County in Deed Book 110 at page 403; that on December 18, 1952, R. E. Tippett transferred and assigned said leases to Samuel Genel which assignment appears in the Public Registry of Yancey County in Deed Book 110 at page 406. That on November 16, 1953 Samuel Genel transferred and assigned said leases to the Owners, namely, Frank Bowditch and Edna Bowditch, Ruth C. Gibbs and Lawrence Gibbs, which assignment is recorded in the Public Registry of Yancey County in Deed Book ____ at page ____; That on November 2, 1953 said Owners executed a lease to Albert J. Levin, the original and one copy was signed by said owners and said Lessee but has never been recorded and same has been returned by the said Lessee to the said Owners in order that this lease may be executed to the South Toe Mining Co. Inc., of which company the said Albert J. Levin is a stockholder; That this lease to the South Toe Mining Co., Inc. supersedes all other leases and is now the only lease on said Carson Rock Mica Mine.

This lease is also made subject to the easement of the State highway through said leased premises and the said Lessee shall be liable to the State Highway and Public Works Commission of the State of North Carolina for all damages to said highway caused by mining operation under this lease; otherwise the Owners warrant that they are seized of said lands in fee, that they have a right to convey the same under this lease and subject to the conditions thereof and that they will forever warrant and defend the title to said lands against all the claims of all persons whomsoever.

IN WITNESS WHEREOF, the said Owners and the said Lessee have hereunto signed their signatures and affixed their seals, in duplicate, the day and year first above written.

_____(SEAL)

_____(SEAL)

_____(SEAL)

_____(SEAL)

OWNERS

ATTESTED

BY: _____

secretary

SOUTH TOE MINING CO. INC.

By: _____ (SEAL)

STATE OF NORTH CAROLINA

COUNTY OF YANCEY

I, _____, a Notary Public, do hereby certify that Frank Bowditch and wife, Edna Bowditch and Ruth C. Gibbs and husband, Lawrence Gibbs, OWNERS, personally appeared before me this day and acknowledged the due execution of the foregoing MINING LEASE for all the purposes therein expressed.

WITNESS my hand and official seal this the _____ day of December, 1953.

_____
NOTARY PUBLIC

My commission expires_____.

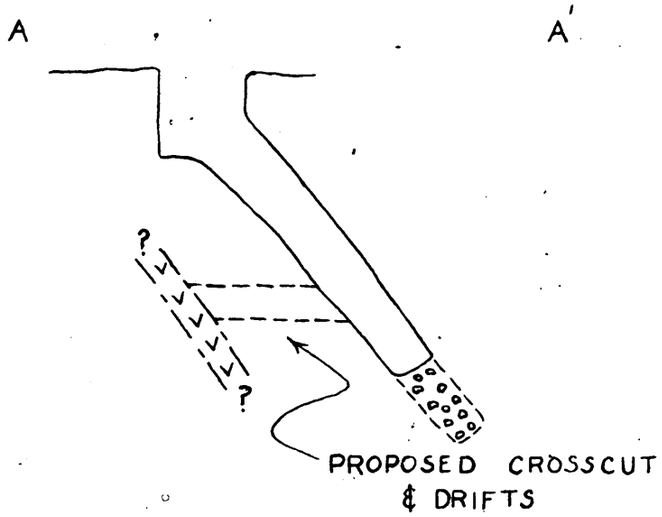
STATE OF PENNSYLVANIA

COUNTY OF _____

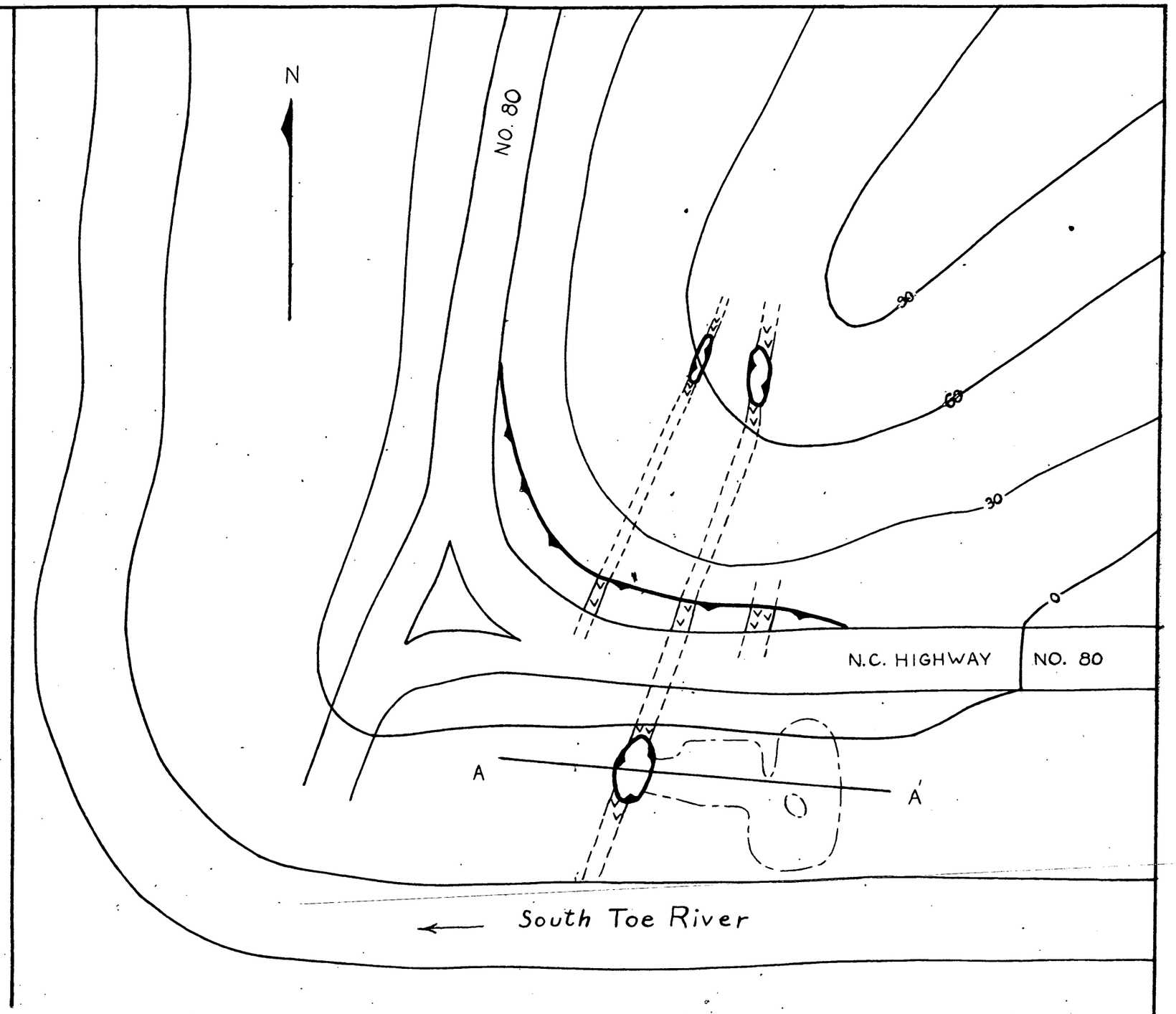
This _____ day of December, 1953, personally came before me _____, who, being by me duly sworn says that he is president of the South Toe Mining Co. Inc., and that the seal affixed to the foregoing MINING LEASE is the corporate seal of said company, and that said MINING LEASE was signed and sealed by him in behalf of said corporation, as LESSEE, by its authority duly given. And the said _____, as President, acknowledged the said MINING LEASE to be the act and deed of said corporation.

_____
NOTARY PUBLIC

My commission expires _____.



SECTION A-A'



SKETCH OF
CARSON ROCK MINE
YANCEY CO., N.C.

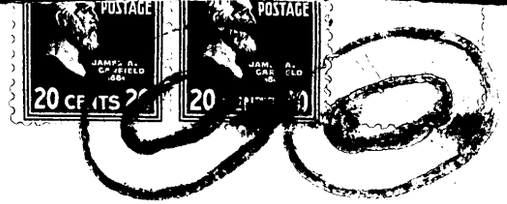
0 40' 80'
SCALE

DMEA - 3248 (mica)

BUREAU OF MINES

OFFICIAL BUSINESS

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO



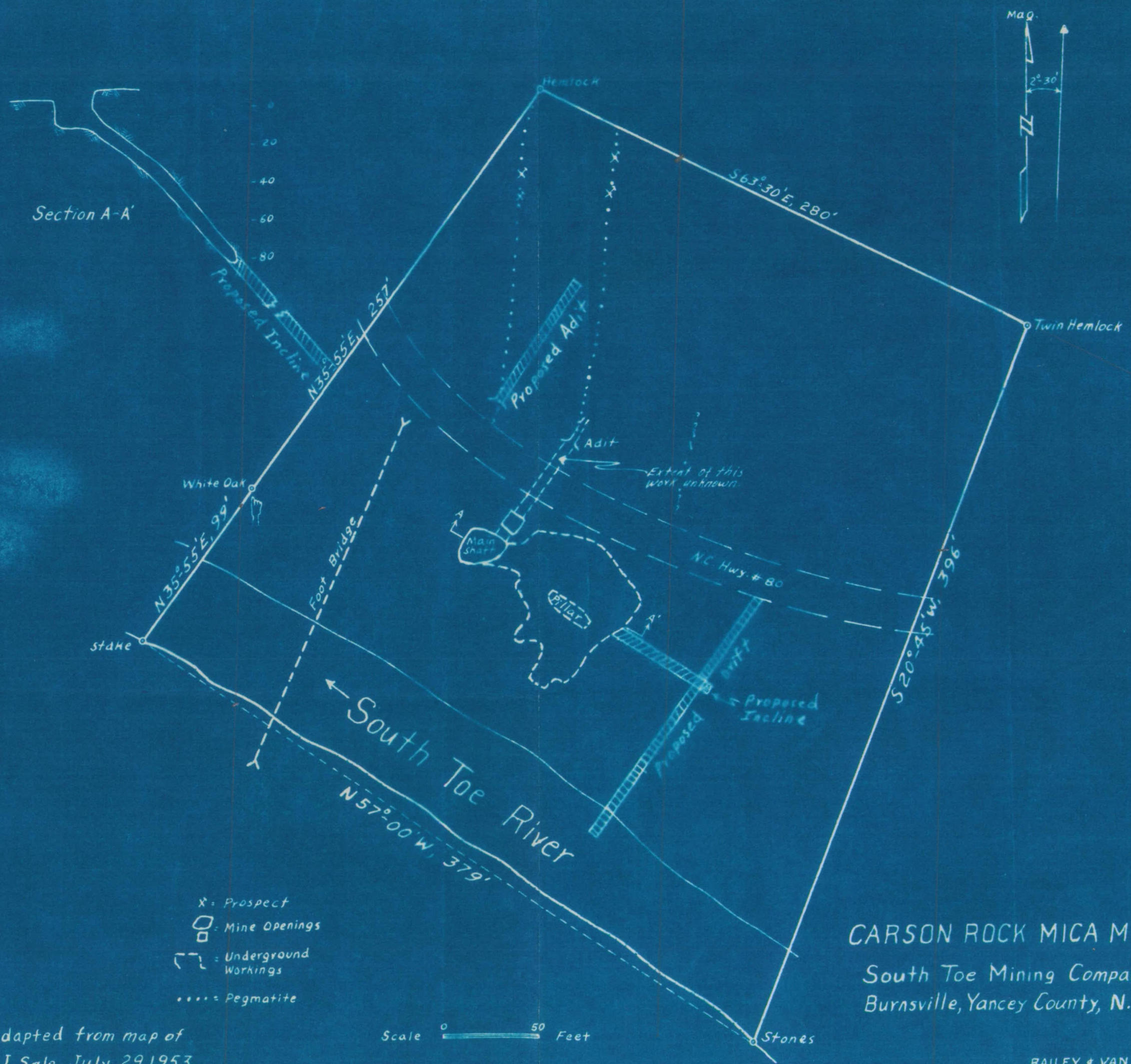
REGISTERED
RETURN RECEIPT

52933

Registered Mail
Return Receipt Requested

Mr. C.O.Mittendorf, Administrator
Defense Minerals Exploration Administration
Interior Building
Washington 25, D.C.

DMEA - 3248
South Joe Mining Co.



CARSON ROCK MICA MINE

South Toe Mining Company
Burnsville, Yancey County, N.C.

Adapted from map of
A.J. Sale, July 29, 1953

BAILEY & VAN HORN
Murphy, N.C., 12/18/53