DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO. 1085 DMEA NO. 4388

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [x] Royalty Audits
- [ ] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [x] Project summary (final)
- [ ] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [x] Operator's Final Report (Tab)
- [x] Interim Field Team Reports
- [x] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab)x
- [x] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No. 1 : Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty material

17963

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/10	Anderson	600
3/11	Houk	600
3-11	Chambers	800
3/17	Selbredge	130
"	Johnson	110
"	[illegible]	100
3/18	[illegible]	220
3/17	Kiilsgaard	130
3/17	Young	130
		600

600

MAR 17 1958

Arnold Young Mining Company
c/o Mr. Frank W. Phillips
Spruce Pine, North Carolina

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina
Contract No. Idm-E1085

Gentlemen:

Reference is made to your completed 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 (for)

Administrator

WCAnderson:rsi 3/10/58
Copy to: Admr. R. File
Mr. Chambers
Field Team, Region V
Mr. Kiilsgaard, 5222
Operating Committee
Mr. Dietrich, 3061
Mr. Houk
Mr. Arnold Young

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/10	Anderson	600
3/11	Houk	600
3-11	Chambers	800
3/17	GCS	130
"	Johnson	110
"	Mitchell	100
		220

600

MAR 17 1958

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

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina
Contract No. Idm-E1085

Dear Mr. Laurence:

Enclosed is a letter to be forwarded to the signer of the Consent to Lien under the subject contract.

Kindly complete the address and forward, retaining your copies and returning the remaining copies.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (HB)

Approved:

P. F. Yopes (HB)
Member, Bureau of Mines

Thor H. Kiilsgaard (HB)
Member, Geological Survey

Enclosure

WCAnderson:rsi 3/10/58
Copy to: Admr. R. File
Mr. Chambers
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Operating Committee
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/10	Anderson	600
3/11	Houk	600
3-14	Chambers	800
3/17	Selbrede	130
"	[illegible]	110
"	[illegible]	100
3/24	"	220
		600
3/17	Kiilsgaard	130
3/17	Yoges	130

600

Mr. Arnold Young

MAR 17 1958

Bakersville, North Carolina

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina
Contract No. Idm-E1085

Dear Mr. Young:

Enclosed is a copy of a self-explanatory letter of today to the Operators under the above-cited contract.

This correspondence relates to the two Consents to Lien signed by you, one undated and the other signed July 2, 1956.

Sincerely yours,

Administrator

Enclosure

WCAnderson:rsi 3/10/58
Copy to: Admr. R. File
Mr. Chambers
Field Team, Region V
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the records of the Executive Officer, DMEA Field Team, Region V, Knoxville, Tennessee, pertaining to Contract Ldm-X1085, Docket No. DMEA-4388 (Mica), dated May 1, 1957, with

Arnold Young Mining Company
Spruce Pine, North Carolina

for the purpose of determining the amount of royalty due the U. S. Government on sales of mica from property referred to as Arnold Young Prospect, located in Mitchell County, North Carolina, during the period May 1, 1957, to February 19, 1958.

Certification of discovery or development has not been issued in connection with this exploration project. However, in accordance with the provisions of Article 6 of the contract, a royalty is due to the Government on the net proceeds realized from production from the land described in the contract until the lapse of time within which the Government may make such certification (within 6 months after the Operator has rendered a sufficient final report) or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. Such final report had not been received to the date of this review. A report of review in lieu of final audit dated October 1, 1957, indicated accepted costs under the exploration contract amounting to $7,049.20 with the Government's contribution, on a 75 percent basis, being $5,286.90. The scope of this royalty review and the reasons therefor are stated on Schedule "A" attached.

My review established the total sales of mica to be $6,269.92. Royalty due the Government at the 5 percent rate specified in the contract is $313.50. The royalty paid and balance due are as follows:

Total Royalty Due	$313.50
Total Royalty Paid	313.25
Balance of Royalty Due per Schedule "A"	$ .25

March 13, 1958

C. E. Fisher, Auditor

Schedule "A"

Contract Idm-E1085, Docket No. DMTA-4368 (Mica)

Report of Royalty Review

This review was limited to the listing of sales of sheet mica to the Mica Purchase Depot, Spruce Pine, North Carolina, and sales of scrap and punch mica to various local dealers in connection with production from Arnold Young Prospect on which royalty was paid as indicated by the records of the DMTA Region V office. Such list, which is filed with my audit work papers, was also checked with the purchase records of the Depot. A summary of the indicated production, sales, and royalty paid to the Government follows:

Item	Production (Pounds)	Sales
Sheet mica	351.18	$5,910.24
Punch mica	2,255.75	270.73
Scrap mica	5,930.00	88.95
Totals	8,536.93	$6,269.92
Royalty Due @ 5%		$ 313.50
Royalty Paid		313.25
Balance of Royalty Due		$ .25

Royalty paid in connection with Lot No. 496 was based on $1,733.14 proceeds, whereas the Depot actually paid $1,735.14 on which the royalty should have been computed.

At the time of this review, the Depot had made preliminary settlements in connection with two lots of hand-cobbed mica. When final settlements are accomplished, the royalty due to the Government should be promptly paid including the above balance due.

An on-mine royalty audit was not made at this time because the administrative cost to the Government would be excessive in relation to the amount of possible additional royalty which might be disclosed.

Check Sheet of Examining Engineer

Operator's Name Arnold Young Mining Co.

Address c/o Frank W. Phillips, Spruce Pine, N.C.

Arnold Young Mine

Exploration Contract No. Idm-E1085 Docket No. DMEA-4388

	Check One Yes	No
1. (a) Does the Operator stockpile ore subject to royalty repayment?		x
(b) If so, is segregation and identification procedure adequate?		
2. (a) Does Operator commingle production subject to DMEA royalties with exempt production?		x
(b) If so, do you consider the allocation of the commingled production equitable?		
3. (a) Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?	xx	
(b) If so, are adequate records maintained on such material to protect the Government's interest?	x	
4. Do you consider the assay controls in effect are adequate?	x	
5. Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	x	
6. Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA royalties?	x	
7. Does the Operator buy from or sell to other Operators?		
8. Comment on any item 2 (b) to 6 if answer is No.		

3. (a) Operator stockpiles mica scrap until a sufficient amount is obtained to make a sale.

Wm. A. Beck, Mining Engineer

Date 2-20-58

82448

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Arnold Young Mining Company

Spruce Pine, North Carolina

pertaining to Exploration Project Contract No. Idm-E1085, DMEA No. 4388, for the months of May 1957 to July 1957, inclusive, covering a project for the exploration of mica on property, known as the Arnold Young Mine located in Mitchell County, North Carolina.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reason:

all of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$7,049.20
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$7,049.20

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Five thousand two hundred eighty-six and 90/100 Dollars

$5,286.90

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

E. D. Talbert

E. D. Talbert, Auditor

October 1, 1957

Government's copy

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 22 1957

DATE	INITIALS	CODE

MF-200A
(Rev. April 1956)

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT
(Short Form)

DMEA No.	*Commodity*	*Contract No. Idm-E*	*County*	*State*
4388	Mica	1085	Mitchell	North Carolina

It is agreed 1 MAY 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and ARNOLD YOUNG MINING COMPANY, a partnership composed of Frank W. Phillips, Sam W. Thompson, Roy Grindstaff, and Allen Parseley

whose mailing address is Spruce Pine, North Carolina

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF–200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before JUN 15 1957, and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 7 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $7,600.00. The Government will contribute 75 percent of the fixed unit cost of the work performed, not exceeding $5,700.00, in accordance with the provisions of Articles 4 and 5.

(c) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: Interest of landowner.

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached, as follows: Consents to Lien of landowner.

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. *Performance of the work.*—(a) Operator's responsibility.—The work shall be performed diligently, efficiently, expertly, in a workmanlike manner, and in accordance with good mining standards and State regulations governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work, as specified in Article 1 (a).

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after certification of discovery or development, to inspect production operations and underground workings. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. *Contribution by the Government.*—The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5 (b); but all payments by the Government are provisional only, subject to audit, and until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been rendered, the Government may withhold such sums as it sees fit but not in excess of 10 percent of the estimated total cost of the work. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

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 a sufficient final report (see Article 5), 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 (for example, if the Operator either transfers or fails to retain his interest in the land), 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, 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, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(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 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 (1½) 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 (½) 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 (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this Article.

(g) *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.

(h) *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.

(i) *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 production operations.

(j) *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.

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—

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Executed in sextuplicate the day and year first above written.

ARNOLD YOUNG MINING COMPANY

By Frank W. Phillips (Partner)

By Sam W. Thompson (Partner)

By R. O. Grindstaff (Partner)

By Allen Parsley (Partner)

THE UNITED STATES OF AMERICA

By O. M. Mittendorf

Administrator, Defense Minerals Exploration Administration

Burton
Lawyer
Anderson
Appr. Con. Off.
Hook
Chambers
Fehrbach
Johnson

I, ..., certify that I am the ..... secretary of the corporation named as Operator herein; that ....., who signed this contract on behalf of the Operator, was then ..... 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.

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 22 1957

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
ARNOLD YOUNG MINING COMPANY
DOCKET NO. DMEA-4388

ANNEX I

The land referred to in Article 2 of the contract is known as the Arnold Young Mine, and is composed of two areas covered by two separate leases, as follows:

1. A lease dated October 18, 1956, between Arnold Young and all the partners of the Operator; and

2. A lease dated July 2, 1953, between Arnold Young and all the partners of the Operator.

The land is located on Burns Mountain at an elevation of approximately 3400 feet. It is 0.56 airline miles S. 72° W. from the intersection of State Highway 26 (104) and the Mine Creek Road, Mitchell County, North Carolina. The land is shown on the attached Map No. 1, entitled "Contour Map and Boundary Lines ...," and is described as follows:

Land tract under lease dated October 18, 1956 (Lease No. 1)

Beginning on a white oak on Duncan Knob, and runs South 60-00 East 99 feet to a stake, thence North 80-00 East 660 feet to a hickory by a large poplar, thence North 48-00 East 306 feet to a stake, thence North 60-00 West 272 feet to a stake thence South 71-00 West 622 feet to a stake, thence South 35-00 West 250 feet to the beginning.

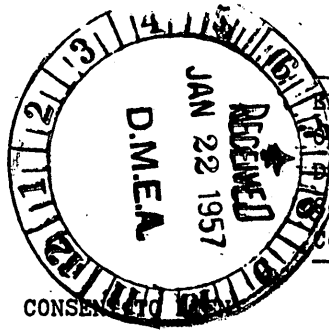
Land tract under lease dated July 2, 1953 (Lease No. 2)

A four and a quarter acre tract adjoining the above-described property on the east, and which has been carved out of the 23-acre land tract described in lease dated July 2, 1953. This four and a quarter acre tract is described as follows:

Beginning at the stake which is at the southeast corner of tract under lease No. 1 and running South 78-00 East 231 feet to a chestnut, thence South 65-00 East 132 feet to a chestnut, thence South 78-00 East 462 feet to a chestnut, thence North 30-00 East 490 feet, thence North 60-00 West 190 feet, thence following line of tract under lease No. 1 as follows: South 48-00 West 306 feet to a

hickory by a large poplar, thence South 80-00 West 660 feet to the stake at the point of Beginning.

MF-203
Revised March 24, 1955



Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E 1085
Contract Date 1 MAY 1957

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Mitchell, State of North Carolina, described as follows:1/

Begin ning on a White oak on Duncan Knob and runs South 60-00 East 99 feet to a stake, thence North 80-00 East 660 feet to a hickory by a large poplar, thence North 48-00 East 306 feet to a stake, thence North 60-00 West 272 feet to a stake, ~~thence South 71-00 West 622 feet to a stake, thence South 35-00 West 250 feet to the beginning.~~,

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

None

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

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

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this _____ day of _____, 195__.

Russell Jones [Seal]

_____ [Seal]

_____ [Seal]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E 1085
Contract Date 1 MAY 1957

RECEIVED
JUL 19 1956

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Mitchell, State of N.C., described as follows:1/ Beginning on a chestnut tree, an old corner, and runs with the top of the Pitman Gap Ridge north 38 degrees east 41½ poles to a locust tree in the George Buchanan line on top of the ridge, Thence with said line north 55 degrees west 52 poles to a stake in the Branch. Thence south 45 degrees west 2 poles to a Beech Wm. McNeills corner, Thence with said line south 48 degrees west ~~48 poles to ahickory at a big poplar stump. Thence south 80 degrees west 42 poles to~~ a locust tree in Phillips' old line on top of a ridge, Thence south 78 degrees east 14 ~~poles to a small chestnut tree, Thence south 78 degrees east 28 poles to a chestbut~~ Thence South 45° East 8 poles to a Chestnut Tree. tree, Thence south 54 degrees east 17 poles to a Spanish-oak on top of a Knob. Thence east 25 poles to the beginning containing 23 acres.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

None

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

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

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this 2 day of July, 1956.

Arnold Jensen [Seal]

_____ [Seal]

_____ [Seal]

I, _____ certify that I am the _____ (Secretary, etc.) of the corporation named herein; that _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 22 1952
DATE | INITIALS | CODE

EXPLORATION PROJECT CONTRACT
ARNOLD YOUNG MINING COMPANY
DOCKET NO. DMEA-4388

EXHIBIT A

Description of the Work

Exploration for concentrations of strategic mica shall be accomplished by diamond drilling, as indicated on the map attached hereto, entitled "Contour Map and Boundary Lines of Lands of Mining Lease owned by Arnold Young, Leased by Arnold Young Mining Co., Mitchell County, N. C."

The work is divided into two stages, as described below. The Operator shall complete Stage I, and shall perform as much of Stage II as the Government approves in writing.

The work is intended to establish the northeast extension of the adjoining R. B. Phillips pegmatite, and consists of drilling NX diamond-drill holes to penetrate the pegmatite. When ground conditions are encountered that make it impossible to complete a hole with NX bit, the hole may be completed with BX bits or with BX and AX bits, in lieu of NX bit, but reduction in hole size shall be made from NX to BX to AX. Holes shall be drilled only with rods of the same size as bit and core barrel.

Holes shall be reamed and cased, and cemented and redrilled as necessary.

The Government shall not contribute to the cost of an incompleted hole, or to the cost of any hole that does not produce 80% core in the pegmatite zone. Wooden core boxes shall be used for core storage.

Records of each hole drilled shall be submitted with the Operator's monthly progress report, which shall also include a map showing the location of all holes drilled during the reporting period. All cores shall be properly identified as to drill hole number and the depths represented, and shall be retained for inspection and logging by the Government.

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

Stage I

Stage I consists of drilling two diamond core holes, Nos. 1 and 2, approximately as indicated on the attached map . The drill holes shall average approximately 200 feet in length, and the total drilling for the two holes shall not exceed 400 feet.

Stage II

Stage II consists of drilling two diamond core holes, Nos. 3 and 4, as indicated on map . These holes shall average approximately 200 feet in length and the total drilling for the two holes shall not exceed 400 feet.

Fixed Unit Costs[1/]

Stage I

Diamond drilling for NX size core - $10.00/ft.		
BX size core - 9.60/ft.		
AX size core - 9.00/ft.		
Diamond drilling with NX bit 400 feet @ $10.00/ft.	$4,000.00	

Stage II

Diamond drilling for NX size core - $ 9.00/ft.		
BX size core - 8.60/ft.		
AX size core - 8.00/ft.		
Diamond drilling with NX bit 400 feet @ $9.00/ft.	3,600.00	
Estimated Total Cost of Project[1/]		$7,600.00
Government Participation @ 75%		$5,700.00

1/ Includes labor, supervision, reaming, setting and pulling casing, cementing and drilling out, transportation of men and equipment in and out, materials and supplies, boxing all core, road and drill site preparation, and all other costs whatsoever connected with the drilling.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

JUL 10 1956

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. 4388
Metal or Mineral mica
Date Received 7-19-56
Estimated Cost not given
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: ARNOLD YOUNG MINING COMPANY, Frank W Phillips, Sam W. Thompson, Roy Grindstaff, Allen Parseley (partners) Spruce Pine, N C.

(*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 (see attached sheet)

(*b*) State any mine name by which the property is known.

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

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

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

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

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. none

(*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. Roads built with DMEA aid are sufficient.

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

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

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

(*c*) The work will start within ---10--- days and be completed within ---3--- 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)? yes

(*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 ---July 11---, 1956

ARNOLD MINING COMPANY
(Applicant)

By Frank W. Phillips

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

RECEIVED
JUL 1 9 1966

3. (a) Beginning on a chestnut tree, an old corner, and runs with the top of the Pittman Gap Ridge North 38 degrees 41½ poles to a locust tree in the George Buchanan line on top of the ridge. Thence with said line North 55 degrees West 52 poles to a stake in the Branch. Thence South 45 degrees West 2 poles to a beech, Wm. McNiells's corner. Thence with said line South 48 degrees West 48 poles to a hickory at a big poplar stump. Thence South 80 degrees West 42 poles to a locust tree in Phillips' old line on top of a ridge. Thence South 78 degrees East 14 poles to a small chestnut tree. Thence South 65 degrees East 8 poles to a chestnut tree. Thence South 78 degrees East 20 poles to a chestnut tree. Thence South 54 degrees East 17 poles to a spanish-oak on top of a Knob. Thence East 25 poles to the beginning containing 25 acres.

4. (a) Tool house built, road graded and tunnel driven. This work was done by Sparks and Phillips with DMEA aid.

4. (c) We are interested in core drilling deep on this property, because the same vein can be traced from about 200 ft. of the R. B. Phillips mine and on the same lead. We believe the work was done with DMEA aid was not deep enough to strike good mica.

5.(b) Core drilling from 2 to 4 holes, stopping when and if core is satisfactory enough to justify sinking shaft or cutting a tunnel.

5. (d) All partners have had several years of experience.

6. Estimated cost for core drilling on the amount of feet and location (to be decided by D M E A) $6.00 per foot.

MINING LEASE

RECEIVED JAN 22 1957 D.M.E.A.

State of North Carolina ~~Mitchell~~ County:

This indenture made this ~~18~~ day of ~~October~~ ~~1956~~, 1958,

between Arnold Young

of Mitchell County and State of North Carolina as party of the first part, and known as lessor, and Frank W. Phillips, Roy Grindstaff, Allen Parsley, and Sam W. Thompson

of Mitchell County and State of North Carolina, party of the second part and known as lessee.

WITNESSETH, That the part of the first part in consideration of One Dollar in hand received and hereby acknowledged by the lessor, and in consideration of the agreements hereinafter contained, on the part of the party of the second part to be performed, hereby bargains, leases and grants to the party of the second part, and his heirs and assigns, for the period of five years from the date of this agreement, the following described real property, for mining purposes, in the County and State first above written to wit:

Beg in ning on a white oak on Duncan Knob, and runs South 60-00 East 99 feet to a stake, thence North 80-00 East 660 feet to a hickory by a large poplar, thence North 48-00 East 306 feet to a stake, tythence North 60-00 West 272 feet to a stake ~~thence South 71-00 West 622 feet to a stake, thence South 35-00 West 250 feet to the~~ beginning.

TO HAVE AND TO HOLD the said lands to him, for mining purposes, the said lessee and his heirs and assigns for the aforesaid period of five years in compliance with the condition of this instrument, for the purpose and with the right to dig, quarry, search, explore for, obtain, and remove any kind of minerals, metals or fossils, and particularly mica, and to conduct the same to any extent the said party of the second part, the lessee, may desire. And it is hereby agreed between the parties to this agreement that the party of the second part is to have the use of any unoccupied buildings on said lands for mining purposes, and that he shall have the right to erect such buildings as he needs to carry on such mining operatins during the period of this lease, and that the party of the second part shall keep the same in as good condition as when received, unavoidable accidents excepted. And it is also agreed by the party of the second part that no unnecessary damage is to be done to the lands herein leased during the period of this lease and the continuance of said lease, but the said party of the second part shall have the right to take from said lands leased to the party of the second part any wood or timber the party of the second part may need to carry on said mining operations or which may be needed to carry on the addition to existing buildings or to erect new buildings or sheds on said lands. (Timber of high or special market value is excepted and shall not be used by the lessee.) And it is hereby agreed that the party of the second part, the lessee, is to have right-of-way of ingress and egress to said mines or land upon which exploration is being conducted.

AND IT IS FURTHER AGREED That the party of the second part, the lessee hereby agrees to pay to the said part of the first part, or his or their heirs or assigns, a rental royalty of 1/8

on the minerals taken and sold from said mines which shall be for the use of the said lands for the aforesaid period of five years. The said amounts shall be payable on the computation of selling bills on the tenth day of each month covering sales made during the previous month. Any minerals other than those set forth above which may be taken and sold shall be paid for and at the usual royalty rate of the minerals taken.

AND IT IS FURTHER AGREED That the lessee, the party of the second part, his heirs or assigns, shall have the option to renew this lease and to extend the period of its running for an additional five years from the date of its present termination. The option shall be exercised by giving formal written notice to the party of the first part or by the continuation of any mining operations then being conducted. The lessor reserve the right to use the land, or convey the same not conflicting with this lease, but under any conveyance the terms of this lease must be recognized by the grantee, purchaser, or assigns thereof. And it is agreed that the lessee may assign this mining lease or any part thereof and that he may sublease.

AND IT IS FURTHER AGREED That the lessee, the party of the second part, his heirs or assigns, is hereby given an option to purchase all the right, title and interest, legal and equitable to and in the real estate described and set forth in this lease for a total purchase price of _____, said purchase price to be paid in full within three years from the date of this instrument and it is agreed that all rental royalties paid to the party of the first part shall apply toward and be a part of the total purchase price above set forth, and that at such time that the total purchase price is paid in the form of royalties or a lump sum payment or a combination of both, the party of the first part will execute a special warranty deed to the party of the second part and that a tender of the remaining purchase price at any time within the next three years shall entitle the party of the second part to specific performance of this option contract.

BUT IT IS EXPRESSLY AGREED That unless mineral or fossil material of practical value for mining purposes shall be found within a period of two years from the date of this instrument, the lease may be terminated by the lessee at any time thereafter on thirty days notice to the lessor. The lessee agrees that during the period of this lease or the continuance of this lease work in said mines or exploration for new mines within the area leased shall not cease longer than ninety days at any one time, unavoidable accidents excepted.

WITNESS our hands and seals the day and year first above written.

Witness:

Frank W. Phillips

Arnold Young (Seal)

_____ (Seal)

_____ (Seal)

DMEA-4388 Arnold Young Mining Co.

March 18, 1957

I certify that the Field Team's measurement of 198 feet from the R. B. Phillips Mine shaft to property corner is correct.

Frank W. Phillips

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DMEA
RECEIVED MAR 21 1957

DATE	INITIALS	CODE
3/21	C	220
		600

EXPLOSIVES SUPPLY COMPANY

INCORPORATED

DuPont Explosives
Blasting Accessories

Carset Jackbits
Drill Steel

SPRUCE PINE, N. C.

March 16, 1957

Arnold Young Mining Co.
Spruce Pine, N. C.

Proposed Diamond Core Drilling in
Mitchell County, North Carolina

Gentlemen:

We are pleased to have the opportunity to quote prices on your Diamond Core Drilling job in Mitchell County, N. C.

This job to consist of a minimum of 400 total footage, a maximum of 800 total footage, a minimum of two holes and depending upon results a third or fourth hole will be drilled. Drill site is in a wooded area on a 45 degree slope ½ mile from a State maintained road. Holes to be drilled will be in medium to hard slate material with very little overburden. Water upply for drilling is at a 1500 ft. distance with a 400 ft. lift. Payment will be made at the completion of each hole.

Under the conditions outlined above we propose to furnish the following:

All drilling equipment including the necessary pipe and pumps for water to the operations.
Skilled labor to operate drill.
Insurance such as Workman's Compensation, Liability, etc.
Bulldozing for roads and drill sites.
Labor for moving drilling equipment.
Reaming and casing.
Core boxes.

NX size $11.40 per foot
BX size 10.60 per foot
AX size 10.20 per foot

If you accept our above proposal we will be able to start work within two weeks.

Very truly yours,

EXPLOSIVE SUPPLY CO.

C E Boone

C. E. Boone, VICE-Pres.

ACCEPTED:
ARNOLD YOUNG MINING CO.

BY: _____

Date: _____

MITCHELL DISTRIBUTING COMPANY
INCORPORATED
CONSTRUCTION AND INDUSTRIAL EQUIPMENT

FRANKLIN 6-7555
3535 HUTCHISON AVE.
CHARLOTTE, N. C.
TEMPLE 4-6276
5405 HILLSBORO ST. EXT.
RALEIGH, N. C.
POPLAR 5-4205
SPRUCE PINE, N. C.

ADDRESS REPLY TO:
SPRUCE PINE, N. C.

March 19, 1957

Arnold Young Mining Company
Spruce Pine, N. C.

Subject: Core Drilling in Mitchell County, N. C.

Dear Sirs:

Conditions

A maximum of 800 total footage
A minimum of 400 total footage
A maximum of 4 Holes
A minimum of 2 Holes

The material to be drilled is medium hard slate overlain by very little overburden.

Drill site is in wooded area on about a 45 degree slope approximately one-half mile from a State maintained road.

Water supply sufficient for drilling is available within approximately 1500 feet, and has a 400 foot lift.

Depending on results of the first and second hole, a third or fourth hole will be drilled.

MITCHELL DISTRIBUTING COMPANY

Arnold Young Mining Company
Spruce Pine, N. C.

Proposal

We will furnish all necessary drilling equipment, build roads to drill sites, set up and dismantle drilling equipment, reaming and casing.

We furnish all labor with Workman's Compensation and Liability Insurance.

We furnish necessary core boxes.

We furnish necessary pipe and pumps for water drill.

Total price per foot as follows:

NX Size	$11.00
BX Size	10.50
AX Size	10.00

We understand payment will be made at the completion of each hole.

We are pleased to have an opportunity to bid the above prices on this job and we are in a position to start work within two (2) weeks notice.

MITCHELL DISTRIBUTING COMPANY

W. A. Farrington

W. A. Farrington

Accepted:
Arnold Young Mining Company

BY_____

DATE_____

MINING LEASE

RECEIVED
JUL 19 1956

State of North Carolina Mitchell County:

This indenture made this 2 day of July, 1953,

between Arnold Young

of Mitchell County and State of North Carolina as party of the first part, and known as lessor, and Roy Grindstaff, Allen Parseley, Sam W. Thompson and Frank W. Phillips

of Mitchell County and State of North Carolina, party of the second part and known as lessee.

WITNESSETH, That the part of the first part in consideration of One Dollar in hand received and hereby acknowledged by the lessor, and in consideration of the agreements hereinafter contained, on the part of the party of the second part to be performed, hereby bargains, leases and grants to the party of the second part, and his heirs and assigns, for the period of five years from the date of this agreement, the following described real property, for mining purposes, in the County and State first above written to wit: Beginning on a chestnut tree, an old corner, and runs with the top of the Pittman Gap Ridge North 38 degrees 41½ poles to a locust tree in the George Buchanan line on top of the ridge. ~~Thence with said line North 55 degrees West 52 poles~~ to a stake in the Branch. Thence South 45 degrees West 2 poles to a beech, Wm. McNeills' ~~corner. Thence with said line South 48 degrees West 48~~ poles to a hickory at a big poplar stump. Thence South 80 degrees West 42 poles to a locust tree in Phillips' old line on top of a ridge. Thence Sourh 78 degrees East 14 poles to asmall chestnut tree. Thence South ~~65 degrees East 8 poles to a chestnut tree. Thence South 78 degrees East 29 poles to a chestnut~~ tree. Thence South 54 degrees East 17 poles to a spanish-oak on top of a Knob. Thence ~~East 25 poles to the beginning containing 23 acres~~.

TO HAVE AND TO HOLD the said lands to him, for mining purposes, the said lessee and his heirs and assigns for the aforesaid period of five years in compliance with the condition of this instrument, for the purpose and with the right to dig, quarry, search, explore for, obtain, and remove any kind of minerals, metals or fossils, and particularly mica, and to conduct the same to any extent the said party of the second part, the lessee, may desire. And it is hereby agreed between the parties to this agreement that the party of the second part is to have the use of any unoccupied buildings on said lands for mining purposes, and that he shall have the right to erect such buildings as he needs to carry on such mining operatins during the period of this lease, and that the party of the second part shall keep the same in as good condition as when received, unavoidable accidents excepted. And it is also agreed by the party of the second part that no unnecessary damage is to be done to the lands herein leased during the period of this lease and the continuance of said lease, but the said party of the second part shall have the right to take from said lands leased to the party of the second part any wood or timber the party of the second part may need to carry on said mining operations or which may be needed to carry on the addition to existing buildings or to erect new buildings or sheds on said lands. (Timber of high or special market value is excepted and shall not be used by the lessee.) And it is hereby agreed that the party of the second part, the lessee, is to have right-of-way of ingress and egress to said mines or land upon which exploration is being conducted.

AND IT IS FURTHER AGREED That the party of the second part, the lessee hereby agrees to pay to the said part of the first part, or his or their heirs or assigns, a rental royalty of one eighth on mica (punch or pattern) and $1.00 per ton (2000 poinds) for scrap mica on the minerals taken and sold from said mines which shall be for the use of the said lands for the aforesaid period of five years. The said amounts shall be payable on the computation of selling bills on the tenth day of each month covering sales made during the previous month. Any minerals other than those set forth above which may be taken and sold shall be paid for and at the usual royalty rate of the minerals taken.

AND IT IS FURTHER AGREED That the lessee, the party of the second part, his heirs or assigns, shall have the option to renew this lease and to extend the period of its running for an additional five years from the date of its present termination. The option shall be exercised by giving formal written notice to the party of the first part or by the continuation of any mining operations then being conducted. The lessor reserve the right to use the land, or convey the same not conflicting with this lease, but under any conveyance the terms of this lease must be recognized by the grantee, purchaser, or assigns thereof. And it is agreed that the lessee may assign this mining lease or any part thereof and that he may sublease.

~~AND IT IS FURTHER AGREED That the lessee, the party of the second part, his heirs or assigns, is hereby given an option to purchase all the right, title and interest, legal and equitable to and in the real estate described and set forth in this lease for a total purchase price of _____, said purchase price to be paid in full within three years from the date of this instrument and it is agreed that all rental royalties paid to the party of the first part shall apply toward and be a part of the total purchase price above set forth, and that at such time that the total purchase price is paid in the form of royalties or a lump sum payment or a combination of both, the party of the first part will execute a special warranty deed to the party of the second part and that a tender of the remaining purchase price at any time within the next three years shall entitle the party of the second part to specific performance of this option contract.~~

BUT IT IS EXPRESSLY AGREED That unless mineral or fossil material of practical value for mining purposes shall be found within a period of two years from the date of this instrument, the lease may be terminated by the lessee at any time thereafter on thirty days notice to the lessor. The lessee agrees that during the period of this lease or the continuance of this lease work in said mines or exploration for new mines within the area leased shall not cease longer than ninety days at any one time, unavoidable accidents excepted.

WITNESS our hands and seals the day and year first above written.

Witness: Frank W. Phillips

Arnold Young (Seal)

_____ (Seal)

_____ (Seal)

FRANK W. PHILLIPS, Pres. CLING W. ELLIS, Vice Pres. SAM W. THOMPSON, Sec'y-Treas.

MITCHELL LUMBER COMPANY

INCORPORATED

SPRUCE PINE, N. C.

March 18, 1957

Arnold Young Mining Co.
Spruce Pine, M. C.

Proposed diamond Core Drilling in
Mitchell County, N. C.

Gentlemen:

We understand this drilling will consist of a minimum of 2 holes, a maximum of 4 holes; a minimum of 400 total footage, a maximum of 800 total footage. That the rock to be drilled is of medium to hard slate under a small amount of overburden and that the drilling site is in a wooded area on about a 45 degree slope, a sufficient supply of water is available within approximately 1500 feet of the drill site (with a 400 ft. lift) which is about one-half mile from a State maintained road. We also understand that depending upon results of the first two holes, a third or a fourth hole will be drilled.

Based upon the above conditions we propose the following:

(a) to furnish all necessary equipment
(b) to bulldoze roads to drill sites
(c) to mobilize and demobilize equipment
(d) supply necessary pipe and pumps to furnish water for drilling
(e) reaming and casing
(f) Cementing and waiting for cement to set and drilling out cement
(g) to furnish all labor with the proper insurance to cover work
(h) to furnish necessary core boxes

Prices per foot:

NX size	$10.00
BX size	9.60
AX size	9.00

These prices are based on the 400 minimum, any footage over the 400 ft. total we will deduct $1.00 per foot respectively.

Statements to cover the work will be sent as soon as possible after each hole has been completed. We appreciate the opportunity to figure on this work and we can begin the job within two weeks after you notify us.

ACCEPTED:
ARNOLD YOUNG MINING CO.

BY: _____

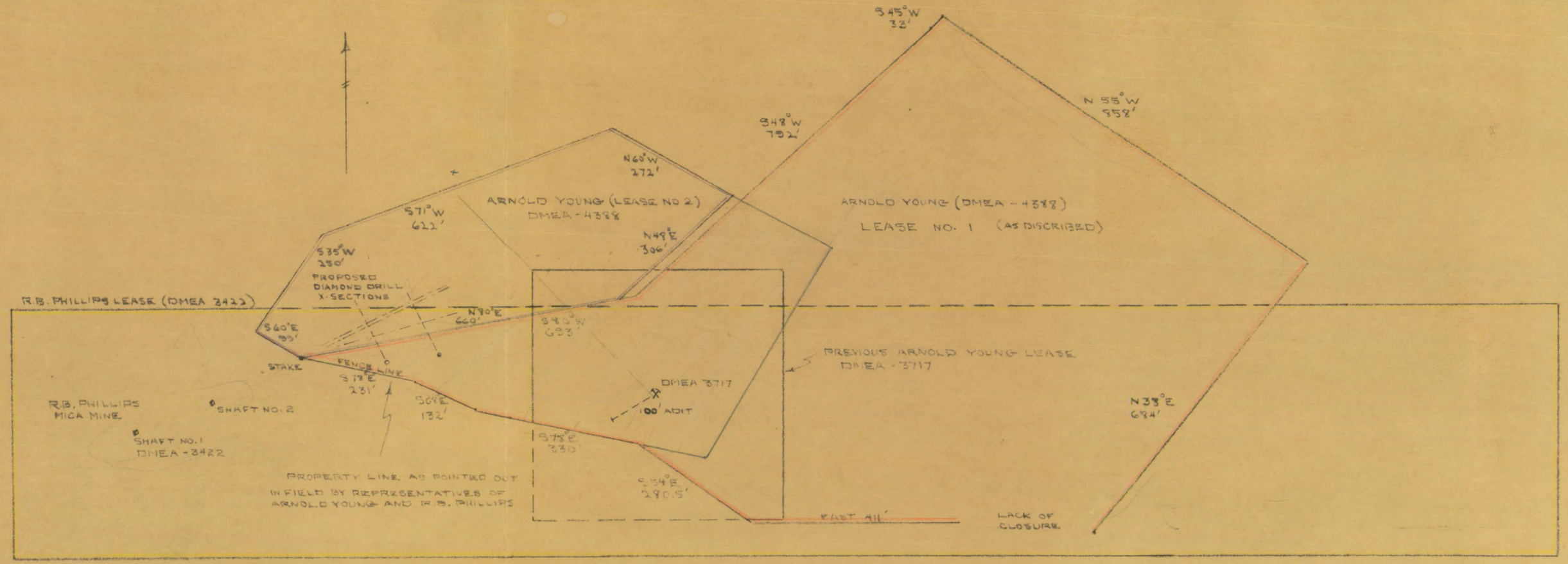
Date: _____

Yours very truly,

Mitchell Lumber Co.

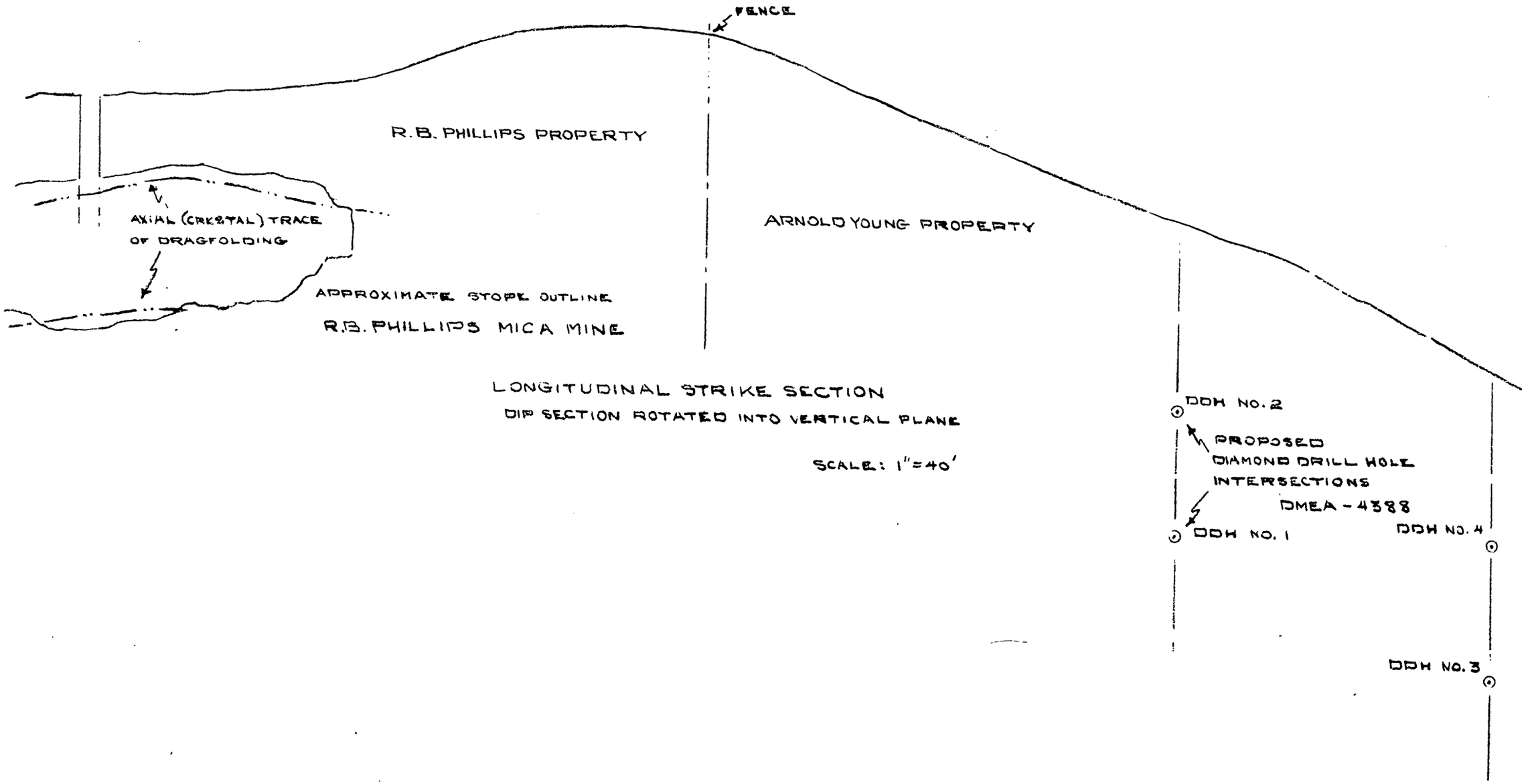
Albert L. Conipe

General Manager


S45°W
32'
N 55°W
958'
S48°W
792'
N60°W
272'
ARNOLD YOUNG (LEASE NO 2)
DMEA-4388
ARNOLD YOUNG (DMEA - 4388)
LEASE NO. 1 (AS DISCRIBED)
S71°W
622'
N49°E
306'
S35°W
250'
PROPOSED
DIAMOND DRILL
X-SECTIONS
R.B. PHILLIPS LEASE (DMEA 3422)
N90°E
660'
S40°E
95'
S80°W
623'
STAKE
FENCE LINE
S 17°E
231'
PREVIOUS ARNOLD YOUNG LEASE
DMEA - 3717
DMEA 3717
100' ADIT
R.B. PHILLIPS
MICA MINE
SHAFT NO. 2
S6°E
132'
N33°E
684'
SHAFT NO. 1
DMEA - 3422
S73°E
330'
PROPERTY LINE AS POINTED OUT
IN FIELD BY REPRESENTATIVES OF
ARNOLD YOUNG AND R.B. PHILLIPS
S34°E
280.5'
EAST 411'
LACK OF
CLOSURE

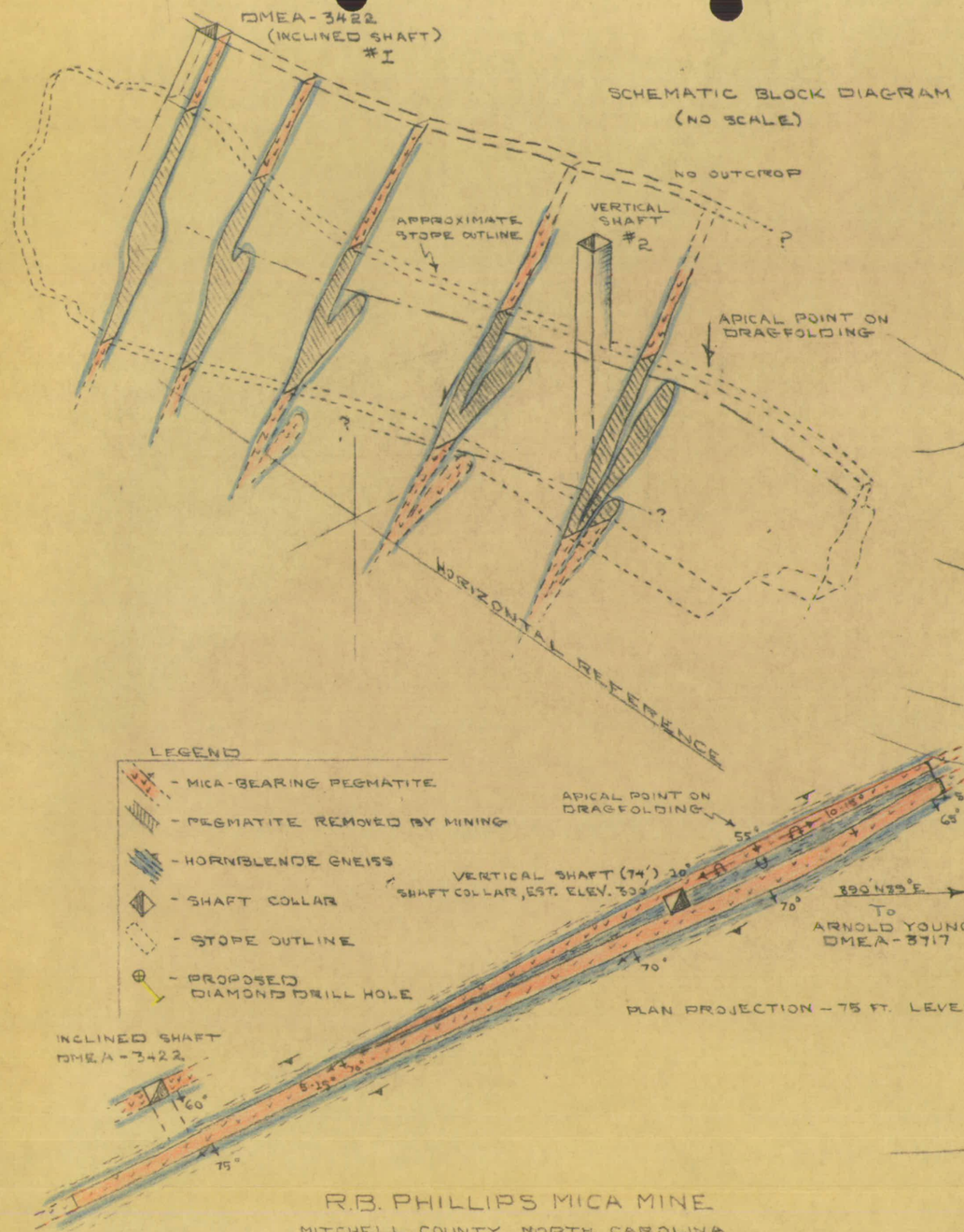
SCALE: 1" = 200'

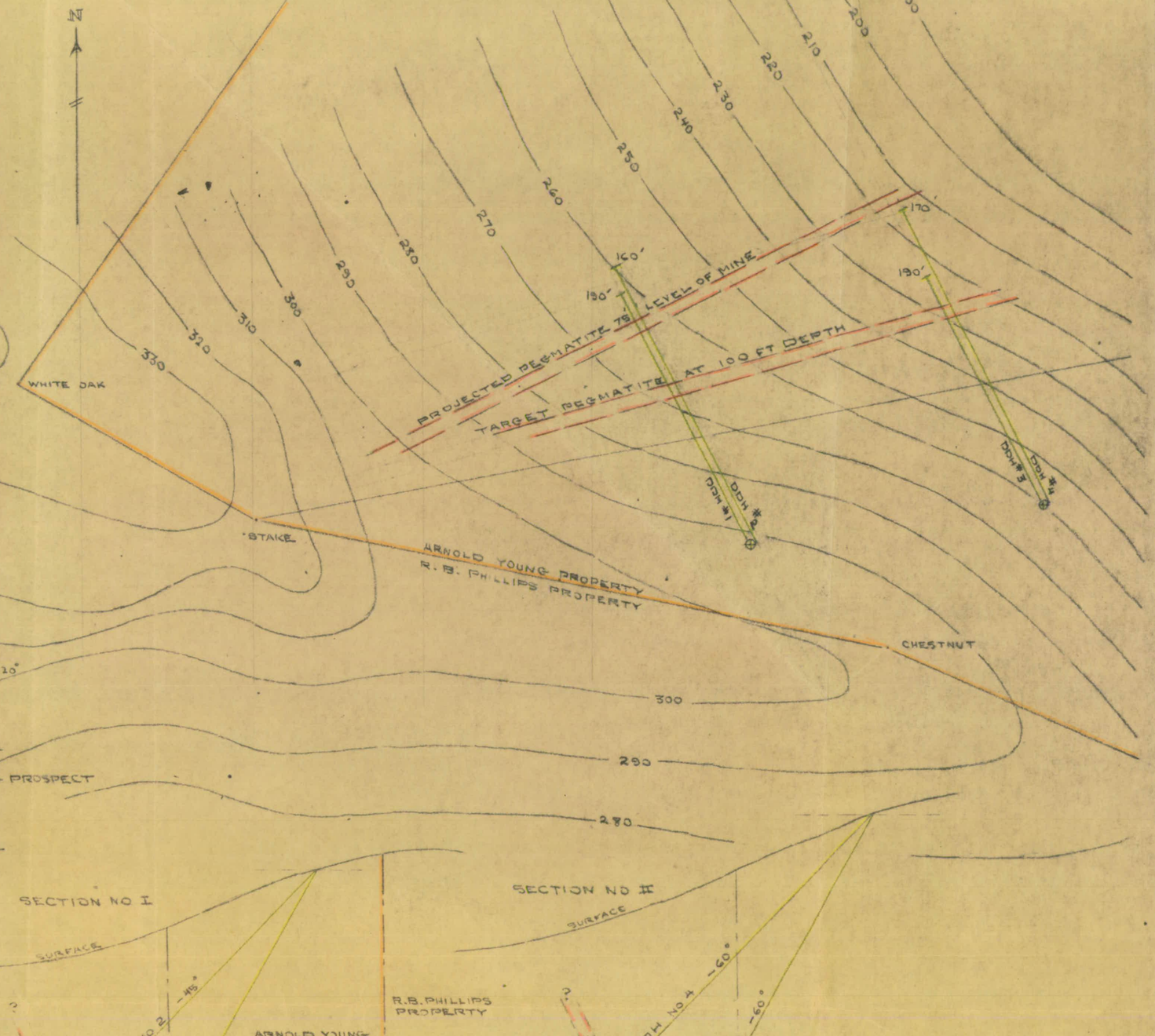
RECEIVED
JAN 22 1957
D.M.E.A.

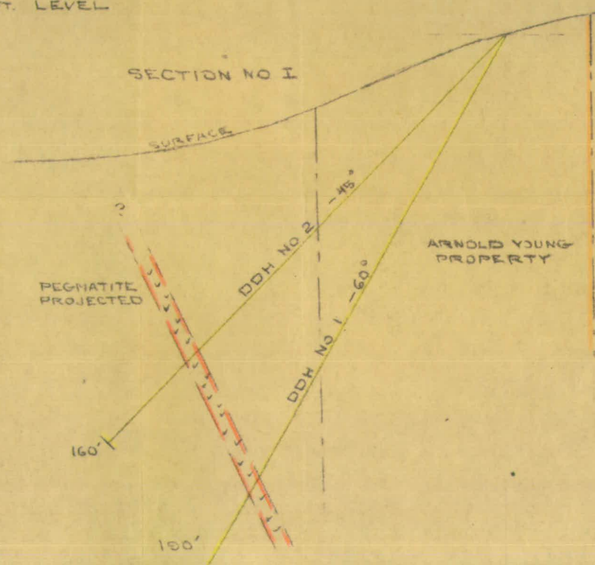

FENCE
R.B. PHILLIPS PROPERTY
AXIAL (CRESTAL) TRACE
OF DRAGFOLDING
APPROXIMATE STOPE OUTLINE
R.B. PHILLIPS MICA MINE
ARNOLD YOUNG PROPERTY
LONGITUDINAL STRIKE SECTION
DIP SECTION ROTATED INTO VERTICAL PLANE
SCALE: 1"=40'
DDH NO. 2
PROPOSED
DIAMOND DRILL HOLE
INTERSECTIONS
DMEA - 4388
DDH NO. 1
DDH NO. 4
DDH NO. 3

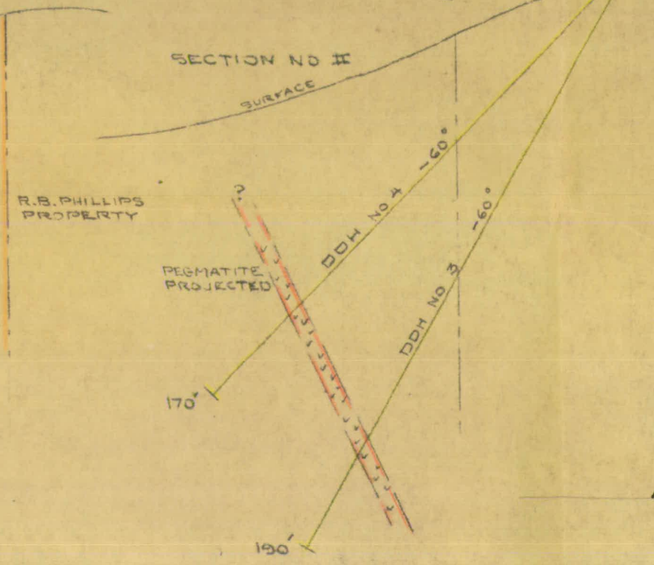
MAP NO. 3

RECEIVED
JAN 22
D.A.E.A.









R.B. PHILLIPS MICA MINE

MITCHELL COUNTY, NORTH CAROLINA

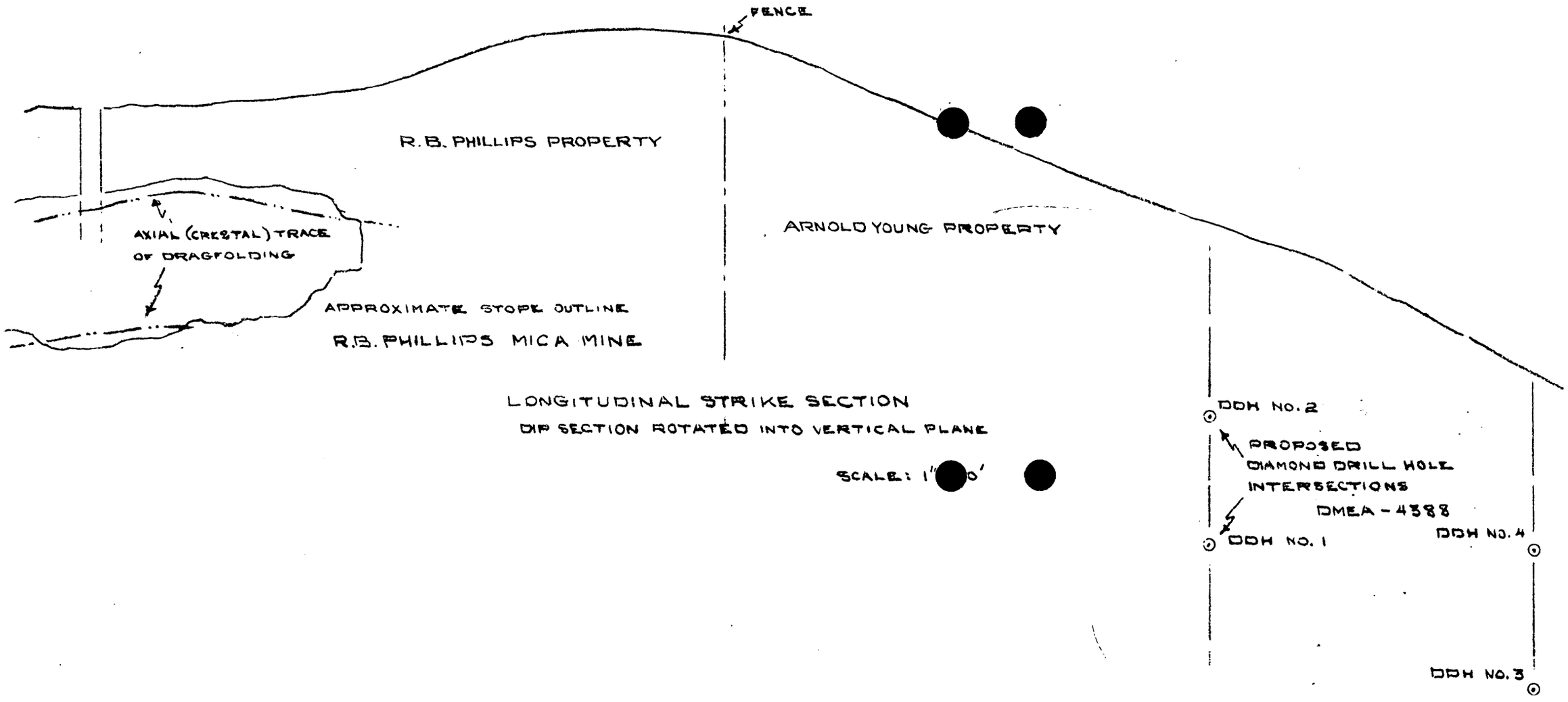
PROPOSED DRILLING ON THE ADJACENT
ARNOLD YOUNG PROPERTY
DMEA - 4388 (MICA)

SCALE: 1" = 40'

MAP NO. 2

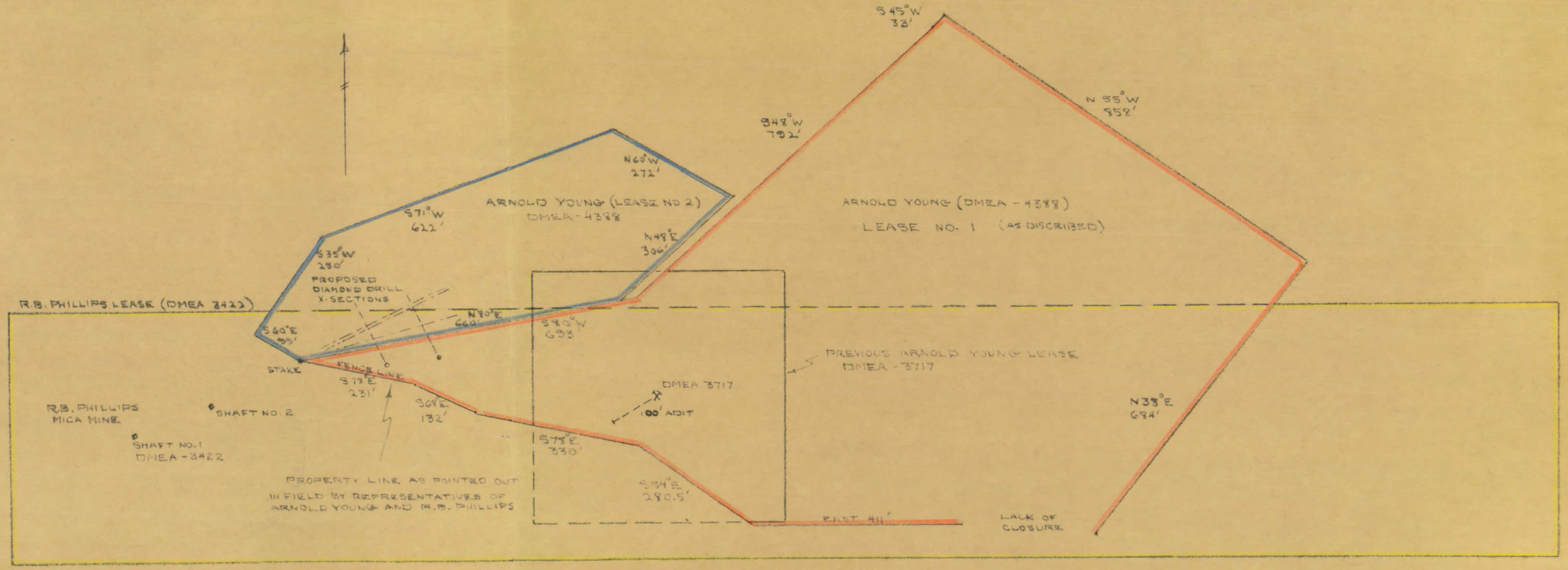
SCB 11/56

RECEIVED
DEC 27 1956
D.M.E.A.


FENCE
R.B. PHILLIPS PROPERTY
AXIAL (CRESTAL) TRACE
OF DRAGFOLDING
ARNOLD YOUNG PROPERTY
APPROXIMATE STOPE OUTLINE
R.B. PHILLIPS MICA MINE
LONGITUDINAL STRIKE SECTION
DIP SECTION ROTATED INTO VERTICAL PLANE
SCALE: 1"
0'
DDH NO. 2
PROPOSED
DIAMOND DRILL HOLE
INTERSECTIONS
DMEA - 4388
DDH NO. 1
DDH NO. 4
DDH NO. 3

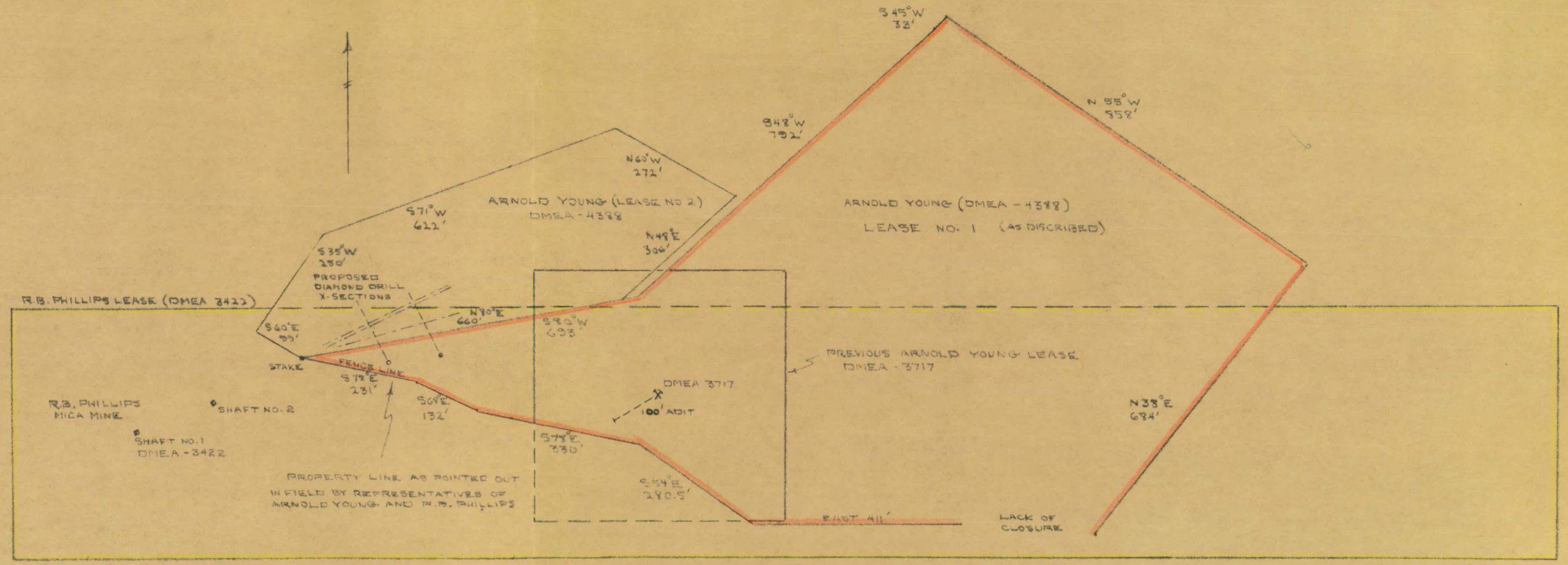
MAP No. 3

RECEIVED
JAN 22 19
D.M.F.


S 45° W
33'
N 55° W
858'
S 48° W
792'
N 60° W
272'
ARNOLD YOUNG (LEASE NO 2)
DMEA - 4388
S 71° W
622'
N 48° E
306'
ARNOLD YOUNG (DMEA - 4388)
LEASE NO. 1 (AS DISCRIBED)
S 35° W
250'
PROPOSED
DIAMOND DRILL
X-SECTIONS
R.B. PHILLIPS LEASE (DMEA 3422)
N 90° E
660'
S 60° E
93'
S 80° W
693'
STAKE
FENCE LINE
S 72° E
231'
S 68° E
132'
PREVIOUS ARNOLD YOUNG LEASE
DMEA - 3717
DMEA 3717
100' ADIT
N 38° E
684'
R.B. PHILLIPS
MICA MINE
SHAFT NO. 2
SHAFT NO. 1
DMEA - 3422
S 78° E
330'
PROPERTY LINE AS POINTED OUT
IN FIELD BY REPRESENTATIVES OF
ARNOLD YOUNG AND R.B. PHILLIPS
S 54° E
280.5'
EAST 411'
LACK OF
CLOSURE

SCALE: 1" = 200'

RECEIVED
JAN 22 1957
D.M.E.A.


S 45° W
33'
N 55° W
352'
S 48° W
792'
N 60° W
272'
ARNOLD YOUNG (LEASE NO 2)
DMEA - 4388
S 71° W
622'
N 49° E
306'
ARNOLD YOUNG (DMEA - 4388)
LEASE NO. 1 (AS DISCRIBED)
S 35° W
250'
PROPOSED
DIAMOND DRILL
X-SECTIONS
R.B. PHILLIPS LEASE (DMEA 3422)
N 80° E
660'
S 80° W
693'
S 40° E
95'
STAKE
FENCE LINE
S 72° E
231'
PREVIOUS ARNOLD YOUNG LEASE
DMEA - 3717
DMEA 3717
100' ADIT
R.B. PHILLIPS
MICA MINE
SHAFT NO. 2
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PROPERTY LINE AS POINTED OUT
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S 54° E
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LACK OF
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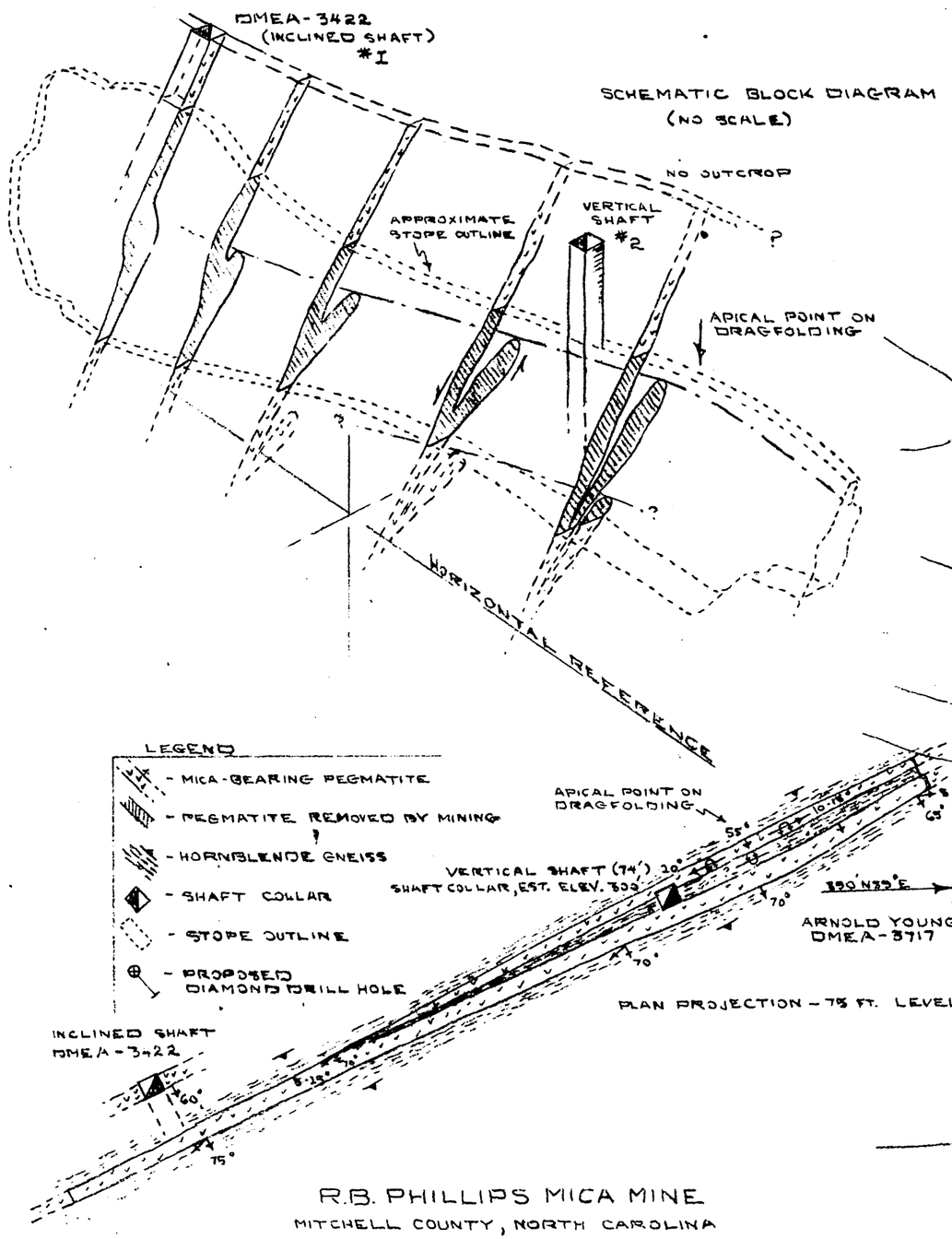
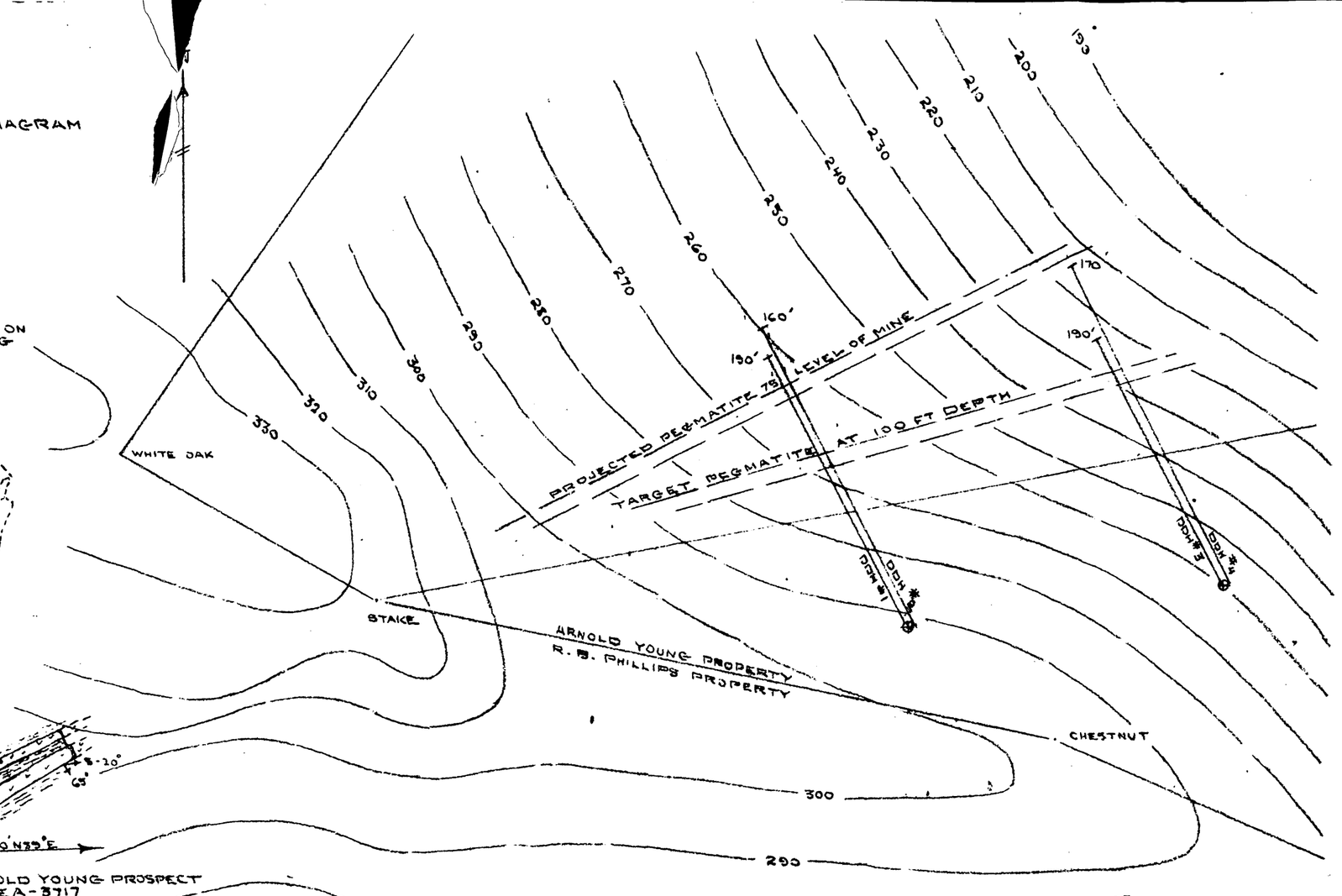
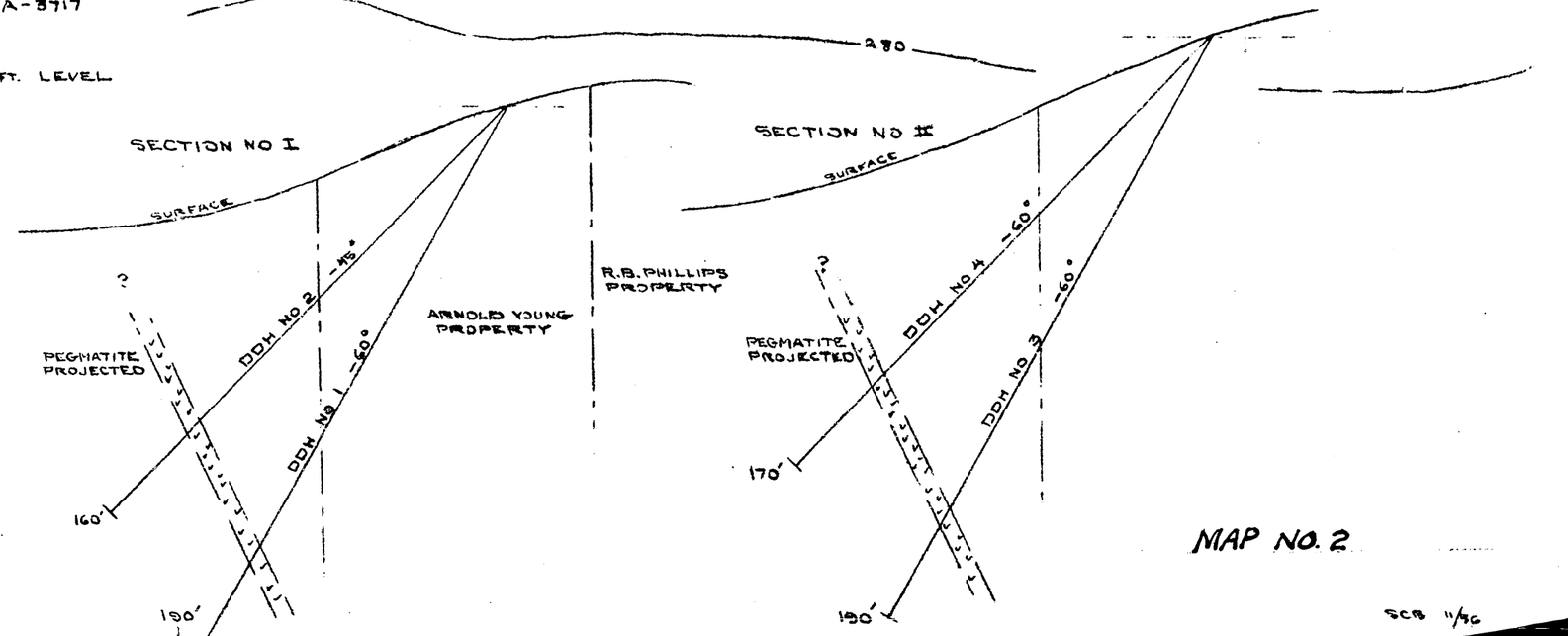
SCALE: 1" = 200'







R.B. PHILLIPS MICA MINE

MITCHELL COUNTY, NORTH CAROLINA

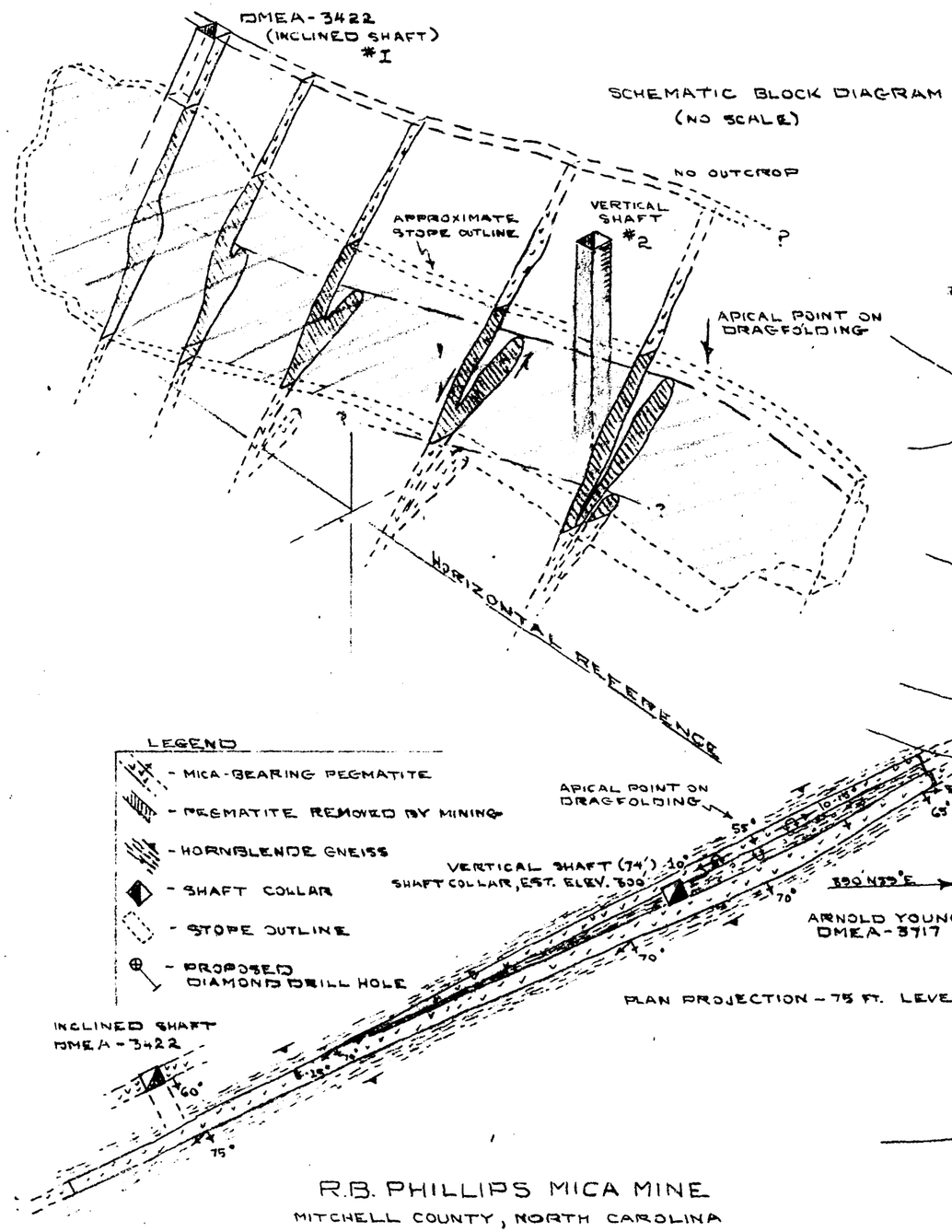
PROPOSED DRILLING ON THE ADJACENT
ARNOLD YOUNG PROPERTY
DMEA - 4388 (MICA)

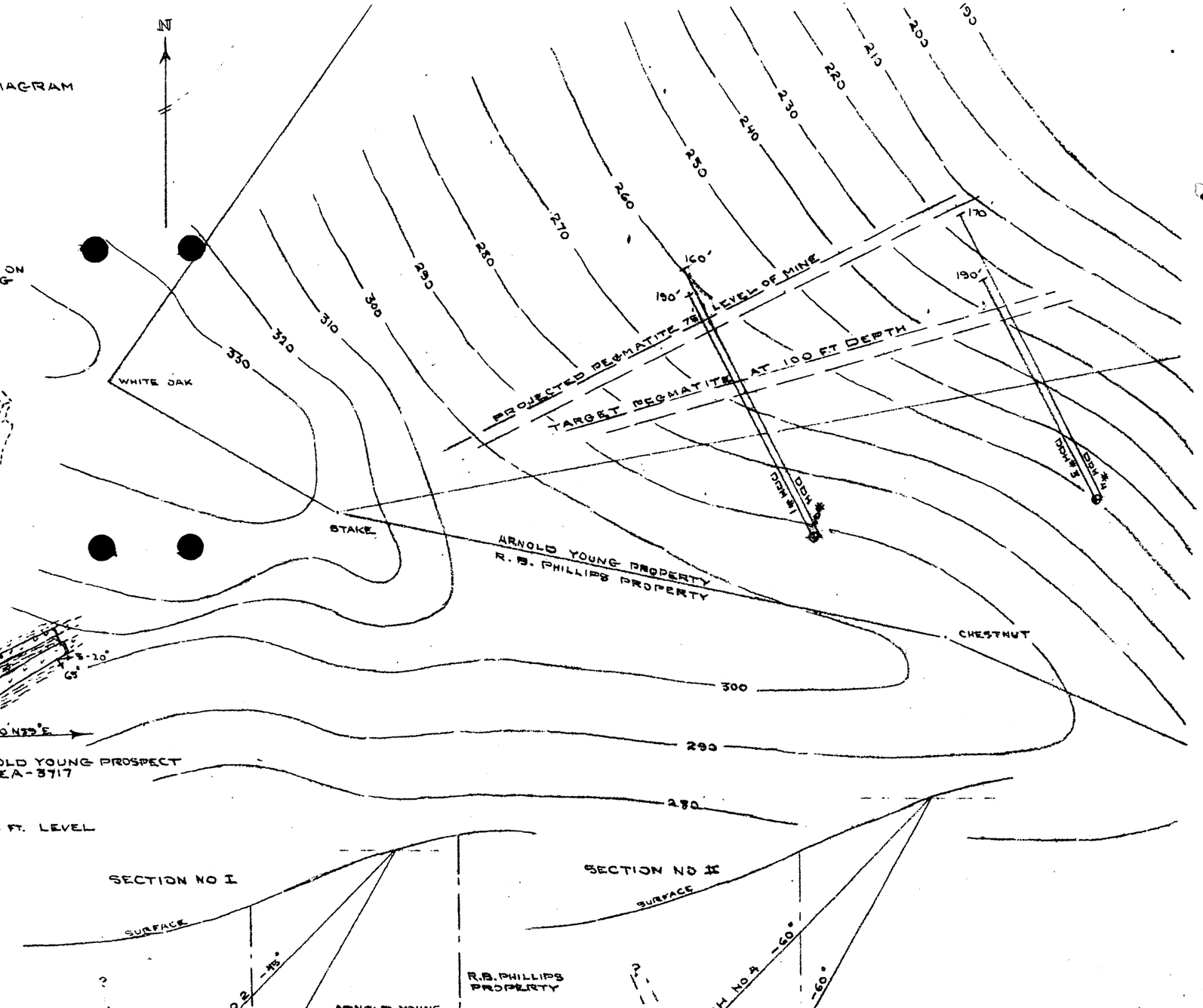
SCALE: 1" = 40'

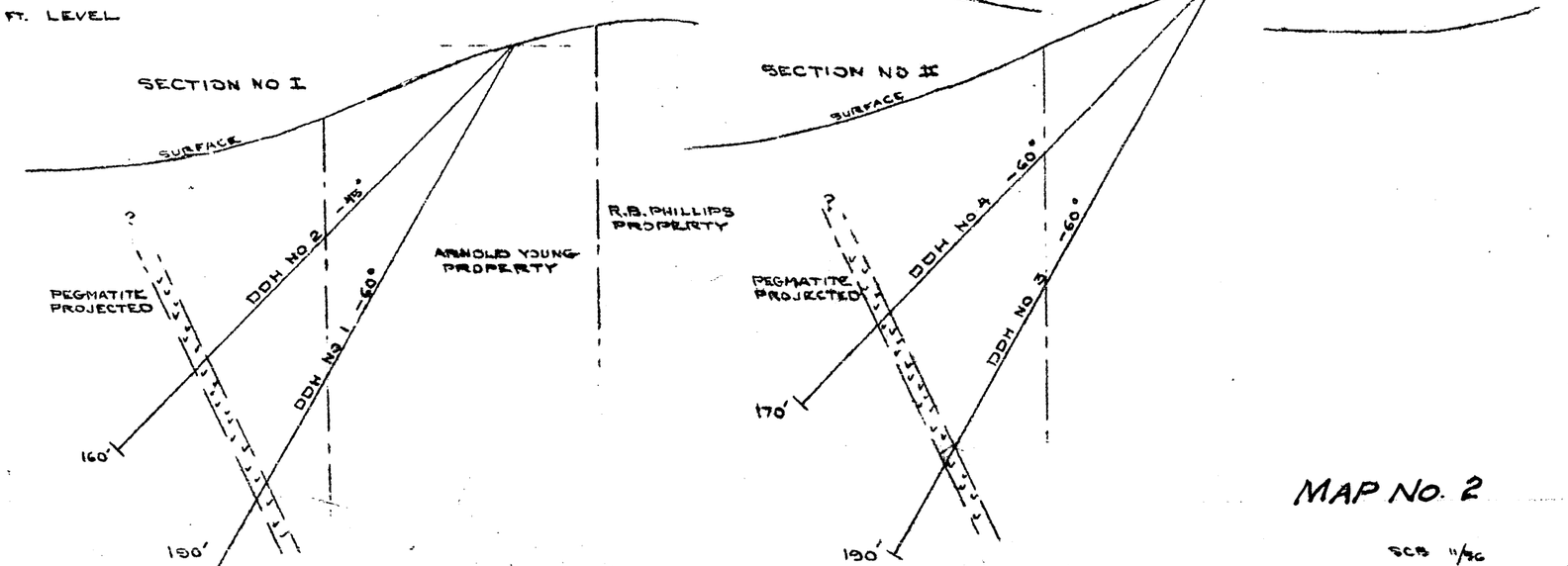
MAP NO. 2

SCB 11/86

RECEIVED
DEC 17 1956
D.M.E.A.







R.B. PHILLIPS MICA MINE

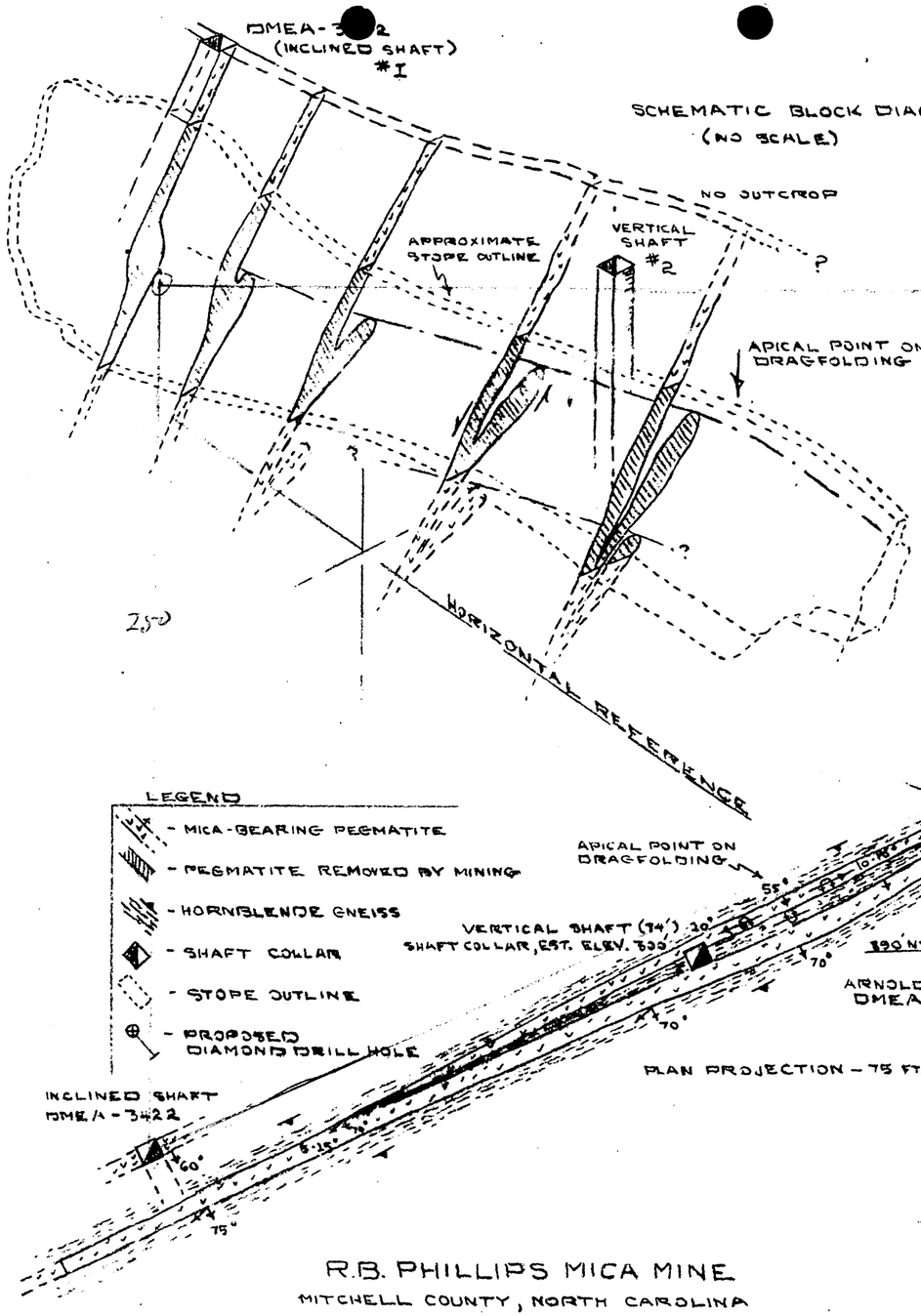
MITCHELL COUNTY, NORTH CAROLINA

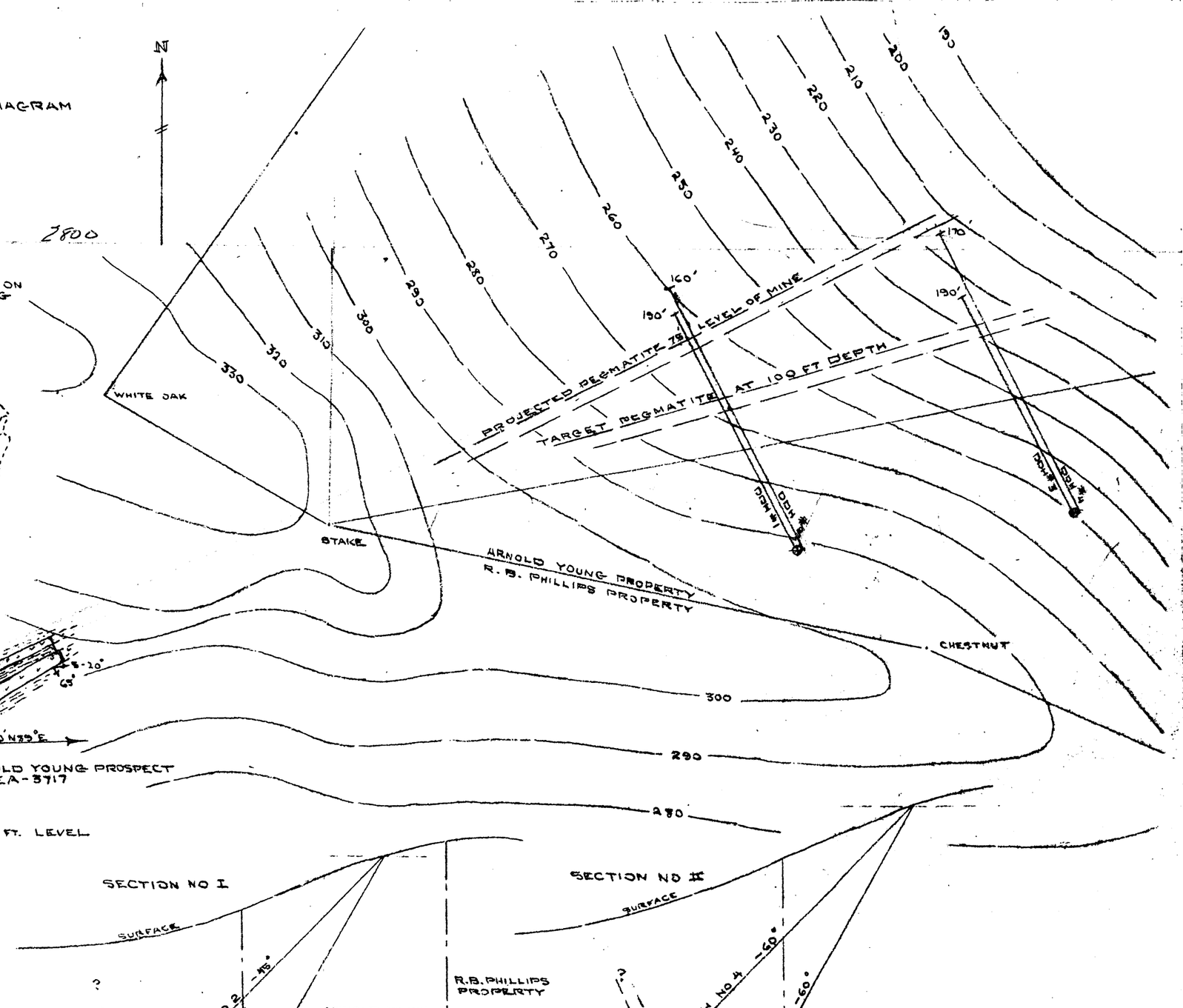
PROPOSED DRILLING ON THE ADJACENT
ARNOLD YOUNG PROPERTY
DMEA - 4388 (MICA)

SCALE: 1" = 40'

MAP NO. 2

SCB 11/80





R.B. PHILLIPS MICA MINE

MITCHELL COUNTY, NORTH CAROLINA

PROPOSED DRILLING ON THE ADJACENT ARNOLD YOUNG PROPERTY

DMEA - 4388 (MICA)

SCALE: 1" = 40'

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/10	Anderson	600
3/12	[illegible]	600
		110
		100
		220

600

Project Summary Report

March 10, 1958

By: Walter C. Anderson, Division of Nonmetallic Minerals

1. Docket No. DMEA-4388-Mica
Contract No. Idm-E1085
Arnold Young Mine
Mitchell County, North Carolina

Application: Form MF-103(April 1952) received July 19, 1956.
Work proposed by Applicant:
Core drilling - 2 to 4 holes @ $6.00/ft.
Total estimated cost - not given.

Operator: Arnold Young Mining Company, a partnership composed of Frank W. Phillips, Sam W. Thompson, Roy Grindstaff, and Allen Parseley, Spruce Pine, North Carolina

Operator's Property Rights: Two five year mining leases on two adjoining Arnold Young properties, dated July 2, 1953 and October 18, 1956, respectively. Two Consents to Lien covering the two leased properties, one dated July 2, 1956, and one undated.

2. Contract: Form MF-200A(April 1956) dated May 1, 1957.
Work authorized:- diamond drilling for NX core.

Stage I	
2 holes totalling 400 feet @ $10.00/ft.	$4,000.00
Stage II	
2 holes totalling 400 feet @ $9.00/ft.	3,600.00
Total estimated cost of project	$7,600.00
Government participation @ 75%	$5,700.00

Amendments: None.
Work completed: - 4 diamond drill holes - 2 on same vertical section.

Section	Hole No.	Inclination	Total depth, ft.	NX	BX
Section 1	1	-60 degrees	200	25	175
Section 1	2	-45 "	170	61	109
Section 2	3	-60 "	232	30	202
Section 2	4	-45 "	195	27	168
Total footage drilled			797	143	654
*Deduct 27 ' not paid for			770	143	627

* Excess footage in Section 2 not authorized in contract.

8623

86 ft. (Section 1) NX hole @ $10.00/ft.	$860.00
57 ft. (Section 2) NX hole @ $9.00/ft.	513.00
284 ft. (Section 1) BX hole @ $9.60/ft.	2,726.40
343 ft. (Section 2) BX hole @ $8.60/ft.	2,949.80
Total accepted cost	$7,049.20
Government participation @ 75%	$5,286.90

Work started on May 22, 1957, and completed by July 23, 1957. Field Team Final Report received February 7, 1958. Operator's Final Report received August 28, 1957. No equipment purchased under contract. Production: None during the time of contract. About $5000 worth produced after completion of the contract from a shaft to the southwest located about 100 feet from R. B. Phillips property line.

3. Audit: Report of Review issued October 1, 1957.

Total accepted cost	$7,049.20
Government participation	$5,286.90

4. Certification of Discovery or Development - None issued.

5. Comments:

How Conducted: All of the work in which the Government participated was acceptable.

Geologic Premise: The extension of the strong pegmatite in the adjacent R. B. Phillips was proven by the drilling to be only a very thin pegmatite.

Geologic Criteria upon which the work was based:

1. Pegmatite: Extension of a strong, dike-like pegmatite (R.B. Phillips Mine), mined over a strike length of 285 feet and to depths of 74 to 120 feet, and from 4 to 7 feet thick, which up to the time of this application, had produced about $360,000 worth of mica.
2. Mica: Grass to brownish green in color, flat to flat "A", occasionally reeved, bent, or cracky, some staining. Abundance of occurrence offsets the not best quality feature.

Geologic Criteria developed during project:

1. Pegmatite: Intersected by 3 of the 4 holes and varying in thickness from 6 to 12 inches, concordantly emplaced in a well-banded quartz-muscovite-biotite gneiss, unzoned and consisting of an aggregate of euhedral, medium-grained plagioclase, quartz, and muscovite.
2. Mica: Light brownish green, no staining, and small amounts of cracking, reeving, and ruling.

Future Possibilities: To the southwest and closer to the R. B. Phillips workings, the Operator sank a shaft from which he produced about $5000 worth of mica. However, the area with a commercially mineable width of pegmatite is limited. Pegmatite is too thin for profitable mining north of this limited area.

Recommendations: The Division of Nonmetallic Minerals and the Commodity Members of the Bureau of Mines and Geological Survey concur in the Field Team's recommendation not to certify. However, any production from the leased area up to February 28, 1958 is subject to royalty.

Walter C. Anderson

Walter C. Anderson
Division of Nonmetallic Minerals

WCAnderson:rsi 3/10/58
Copy to: Admr. R. File
Mr. Houk

Note: See following sheet concerning the reluctance of the Division of Non-Metallic Minerals to concur with the Field Team's recommendation for a diamond drilling project.

6. Additional Comments:

The Division of Nonmetallic Minerals was reluctant to agree to a contract for diamond drilling on this property because of the improbability of the pegmatite persisting to the northeast. In our letter of December 12, 1956, we stated that the exploration work recommended by the Field Team in their report did not appear to be justified, because we believed that projecting the R. B. Phillips pegmatite an additional 265 feet in the case of Drill Holes 1 and 2, and 370 feet in the case of Drill Holes 3 and 4, was not sound practice. We believed that projecting the back of the stope at minus 10 to 15 degrees to the northeast would place the proposed drill holes above the projected pegmatite.

Walter C. Anderson

Walter C. Anderson
Division of Nonmetallic Minerals

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/14	Fisher	800
3/17	C	220
/		600

MAR 14 1958

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

Re: Docket No. DMEA-4388 (Mica)
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina
Contract No. Idm-E1085

Dear Mr. Laurence:

I am enclosing the original and two copies of Mr. Fisher's Report of Royalty Review dated March 13, 1958, pertaining to the subject contract.

If you concur with the findings, the original should be forwarded to the Regional Finance Officer, a copy should be retained in your files, and a copy should be sent to the Operator.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

Enclosures

CEFisher/ama
March 14, 1958

Copy to: Docket
Admr. Reading File
Helen R. Miller
Mr. Chambers

8623

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

February 25, 1958

RECEIVED FEB 26 1958

DATE		CODE
2/26	C	220
2/27	WCA	600

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4388 (mica)

Applicant: Arnold Young Mining Company

Name and Location of Property: Arnold Young Mine, Mitchell County, N. C.

Contract Number: Idm-E 1085

Date of Field Team Final Report: 2/5/58

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 2/12/58

Field Team Recommendation: Recommend no certification be issued, based on results of contract work.

Comments:

1. Contract work, consisting of 4 diamond-drill holes, in search of the extension of a mica-rich pegmatite failed to locate indications of strategic mica.

2. Subsequent work consisting of a fifth drill hole and some shaft work at the applicants expense resulted in the production of nearly $5,000 worth of mica.

3. Although the time for certification has expired, the $5,000 worth of mica was recovered within the 6-months interval and is subject to royalty. DMEA supported work guided the applicant into the "find."

4. Expenditures -

Total approved	$7,600.00
Total cost	7,049.20
Gov't. share of the cost	5,286.90
Value of production during operation	None
Value of production since contract expired	4,689.77

Recommendation:

I concur with the recommendation of the field team that the project not be certified; but that royalty be collected on production within the 6-months interval.

W. F. Dietrich

W. F. Dietrich

Mr. Mittendorf

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

February 17, 1958

RECEIVED FEB 19 1958

DATE	INITIALS	CODE
2/19	C	220
2/21	Hook	600

Memorandum

To: Finance Officer - Region V - Norris, Tenn. (DMEA)

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

Subject: Royalty Payment - Idm-E1085, DMEA-4388-mica.
Arnold Young Mining Co., Arnold Young Mine,
Mitchell County, N.C.

Attached are settlement sheets from the Operator in the amount of 5,905.24 and a certified statement of the scrap sold in the amount of $359.68; making a total of $6,269.92. A check dated Feb. 14, 1958 in the amount of $313.25 for royalty is also attached.

The Operator misread a total on Lot No.496(a) dated 1-22-58, it was listed on his statement as $1733.14 and it should have been $1738.14. He is being advised of this error.

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

zm.
cc
Mittendorf
Lynch
Files

ARNOLD YOUNG MINING CO.
Spruce Pine, N. C.
Feb. 14, 1958

Mica Sold:

Date	Lot. No.	Total Yield	Total Value	
11-21-57	370	98.94 lbs.	$1,711.19	
11-26-57	386	84.59 "	1,500.53	
12-26-27	452	57.74 "	960.38	
1-22-58	496	109.91 "	1,733.14	s/b 1738.14 Jon

Scrap Mica:

11-23-57	sold to Oakley Buchanan,	1161½ lbs. @ 12¢ (punch)	139.38
12- 6-57	" " " "	786 3/4 " " (")	94.41
12-10-57	" " English Mica Co.,	5,930 lbs @ $30.00 Ton	88.95
1- 7-58	" " Oakley Buchanan,	187½ lbs. @ 12¢ (punch)	22.50
2 - 3-58	" " " "	120 " " (")	14.44
			$6,264.92 s/b 6,269.92

5% of $6,264.92 ---------- $313.25

I certify that this is true and correct.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	CODE

ARNOLD YOUNG MINING CO.
Spruce Pine, N. C.
Feb. 14, 1958

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Date	Lot. No.	Total Yield	Total Value
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2 - 8-58	" " " "	120 " " (")	14.44
			$6,264.92

5% of $6,264.92 ---------- $313.25

I certify that this is true and correct.

Sam W. Young

EXTRA COPY
DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	COPY

FORM APPROVED BY COMP. GEN. OF U.S. MARCH 25, 1957

GENERAL SERVICES ADMINISTRATION

FINAL SETTLEMENT - MICA PURCHASE

MICA PURCHASE DEPOT - Spruce Pine, N. C.

PROGRAM: [X] A [ ] B

DATE PURCHASED: 12-20-57

ACCEPTANCE NUMBER: A02-452 (a)

CERTIFICATE AUTHORIZATION NUMBER: DMS-3-32 A

LOT NUMBER: SPA-452 (a)

VOUCHER NUMBER:

SCHEDULE NUMBER:

EVALUATION DATA

RUBY

QUALITY	HALF TRIM POUNDS	HALF TRIM PRICE PER LB.	HALF TRIM AMOUNT	FULL TRIM POUNDS	FULL TRIM PRICE PER LB.	FULL TRIM AMOUNT
GOOD STAINED AND BETTER						
GRADES NO. 3 AND LARGER		$	$		$ 10.00	$
GRADES NO. 4 AND 5					40.00	
GRADES NO. 5½ AND 6					17.70	
STAINED						
GRADES NO. 3 AND LARGER					[illegible]	
GRADES NO. 4 AND 5					[illegible]	
GRADES NO. 5½ AND 6		8.00			7.55	
HEAVY STAINED						
GRADES NO. 3 AND LARGER		8.00			14.80	
GRADES NO. 4 AND 5		[illegible]			[illegible]	
GRADES NO. 5½ AND 6		2.00			[illegible]	
TOTALS			$			$

NONRUBY

QUALITY	HALF TRIM POUNDS	HALF TRIM PRICE PER LB.	HALF TRIM AMOUNT	FULL TRIM POUNDS	FULL TRIM PRICE PER LB.	FULL TRIM AMOUNT
GOOD STAINED AND BETTER						
GRADES NO. 3 AND LARGER		$	$	.03	$ 70.00	$ 2.10
GRADES NO. 4 AND 5				5.71	40.00	228.40
GRADES NO. 5½ AND 6				32.41	17.70	573.66
STAINED						
GRADES NO. 3 AND LARGER		[illegible]		.19	[illegible]	4.69
GRADES NO. 4 AND 5		4.00		1.72	14.00	24.31
GRADES NO. 5½ AND 6		2.40		15.34	6.55	87.38
HEAVY STAINED						
GRADES NO. 3 AND LARGER		6.40			11.85	
GRADES NO. 4 AND 5		3.20		.22	5.45	1.20
GRADES NO. 5½ AND 6		1.60		2.12	4.00	8.48
TOTALS			$			$

8.48

TOTAL YIELD AND VALUE [ ] RUBY [X] NONRUBY (Half trim plus full trim) 57.74 LBS. $ 968.38

968.38

ADJUSTED VALUE WHEN LESS THAN 16% GS & B (ABOVE VALUE $ _____ X _____ ÷ 18) $

FOR PROGRAM B, DEDUCT $4.00 PER POUND FOR RIFFLING AND TRIMMING

FINAL BASIS FOR PAYMENT $ 968.38

LESS: INITIAL PAYMENT VOUCHER NUMBER SCHEDULE NUMBER 583.94

583.94

BALANCE DUE [X] SELLER [ ] GOVERNMENT $ 376.44

376.44

NAME AND LOCATION OF MINE

Arnold Young, Mitchell County, N. C.
2 GS & B 66.07

PAYMENT (LBS.)	57.74
PROCESSED - NO PAYMENT (LBS.) THING	
BLACK (Dots, Spots, Stained)	
UNDERSIZED	
PROCESSING LOSS	.20
TOTAL POUNDS PURCHASED	57.94

SELLER'S NAME AND ADDRESS (Type or print)

Arnold Young Mining Co.
% Roy Grindstaff, Route 3
Bakersville, N. C.

RECEIVED FEB 18 1958 D.M.E.A.

APPROVED

DEPOT SUPERINTENDENT

DATE 1-9-58

GSA WASH D C 58-5127

GSA FORM 1013a SEPTEMBER 1957

FORM APPROVED BY COMP. GEN. U.S. MARCH 25, 1957

GENERAL SERVICES ADMINISTRATION

FINAL SETTLEMENT - MICA PURCHASE

MICA PURCHASE DEPOT - Spruce Pine, N. C.

PROGRAM: [X] A [ ] B

DATE PURCHASED: 1-22-38

ACCEPTANCE NUMBER: 403-646 (a)

CERTIFICATE AUTHORIZATION NUMBER: [illegible]-3-38 A

LOT NUMBER: [illegible]-646 (a)

VOUCHER NUMBER:

SCHEDULE NUMBER:

EVALUATION DATA

RUBY

QUALITY	HALF TRIM POUNDS	HALF TRIM PRICE PER LB.	HALF TRIM AMOUNT	FULL TRIM POUNDS	FULL TRIM PRICE PER LB.	FULL TRIM AMOUNT
GOOD STAINED AND BETTER						
GRADES NO. 3 AND LARGER		$	$		$ 70.00	$
GRADES NO. 4 AND 5					40.00	
GRADES NO. 5½ AND 6					[illegible]	
STAINED						
GRADES NO. 3 AND LARGER		12.00			31.50	
GRADES NO. 4 AND 5		5.00			18.55	
GRADES NO. 5½ AND 6		3.00			7.55	
HEAVY STAINED						
GRADES NO. 3 AND LARGER		8.00			14.80	
GRADES NO. 4 AND 5						
GRADES NO. 5½ AND 6						
TOTALS			$			$

NONRUBY

QUALITY	HALF TRIM POUNDS	HALF TRIM PRICE PER LB.	HALF TRIM AMOUNT	FULL TRIM POUNDS	FULL TRIM PRICE PER LB.	FULL TRIM AMOUNT	
GOOD STAINED AND BETTER							
GRADES NO. 3 AND LARGER		$	$		$ 70.00	$	
GRADES NO. 4 AND 5				11.03	40.00	[illegible]	442.00
GRADES NO. 5½ AND 6				55.86	17.70	[illegible]	988.72
STAINED							
GRADES NO. 3 AND LARGER				4.81	[illegible]		
GRADES NO. 4 AND 5		4.80		6.01	[illegible]	[illegible]	70.23
GRADES NO. 5½ AND 6		2.40		32.88	[illegible]	[illegible]	215.36
HEAVY STAINED							
GRADES NO. 3 AND LARGER		6.40			11.80		
GRADES NO. 4 AND 5		3.20		.41	5.45	[illegible]	2.23
GRADES NO. 5½ AND 6		1.60		4.90	4.00	[illegible]	19.60
TOTALS			$			$	

TOTAL YIELD AND VALUE [ ] RUBY [X] NONRUBY (Half trim plus full trim)	[illegible] LBS. $ [illegible]	1738.14
ADJUSTED VALUE WHEN LESS THAN 18% GS & B (ABOVE VALUE $ ____ X ____ : 18)	$	
FOR PROGRAM B, DEDUCT $4.00 PER POUND FOR REJECTING AND TRIMMING	1738.14	
FINAL BASIS FOR PAYMENT	$ [illegible]	1738.14
LESS: INITIAL PAYMENT VOUCHER NUMBER SCHEDULE NUMBER	[illegible]	1086.48
BALANCE DUE [X] SELLER [ ] GOVERNMENT	$ [illegible]	651.66

NAME AND LOCATION OF MINE: Arnold Young, Mitchell County, N. C. R. R. 4 B. [illegible]

AMOUNT PAID FOR PAYMENT (LBS.)	109.91
PRODUCT NOT PAYMENT (LBS.)	
BLACK (Dots, Spots, Stained)	
UNDERSIZED	[illegible]
PROCESSING LOSS	[illegible]
TOTAL POUNDS PURCHASED	109.60

109.91

109.64

SELLER'S NAME AND ADDRESS (Type or print)

Arnold Young Mining Co.
Route 3, 2 Ray Grindstaff
Bakersville, N. C.

RECEIVED FEB 16 [illegible]

APPROVED

DEPOT SUPERINTENDENT: [signature]

DATE: 2-3-38

GSA WASH D C 58-3177

GSA FORM 1013a SEPTEMBER 1957

FORM APPROVED BY COMP. GEN. U.S. MARCH 25, 1957

GENERAL SERVICES ADMINISTRATION

FINAL SETTLEMENT - MICA PURCHASE

MICA PURCHASE DEPOT - [illegible]

CERTIFICATE AUTHORIZATION NUMBER: [illegible]	LOT NUMBER: [illegible]	PROGRAM: [illegible] A, B	DATE PURCHASED: 11-26-57
		VOUCHER NUMBER:	ACCEPTANCE NUMBER: [illegible]
			SCHEDULE NUMBER:

EVALUATION DATA

QUALITY	RUBY HALF TRIM POUNDS	RUBY HALF TRIM PRICE PER LB.	RUBY HALF TRIM AMOUNT	RUBY FULL TRIM POUNDS	RUBY FULL TRIM PRICE PER LB.	RUBY FULL TRIM AMOUNT
GOOD STAINED AND BETTER						
GRADES NO. 3 AND LARGER		$	$		$ 70.00	$
GRADES NO. 4 AND 5					40.00	
GRADES NO. 5½ AND 6					17.70	
STAINED						
GRADES NO. 3 AND LARGER		12.00			31.90	
GRADES NO. 4 AND 5		5.00			18.25	
GRADES NO. 5½ AND 6		3.00			7.55	
HEAVY STAINED						
GRADES NO. 3 AND LARGER		8.00			14.80	
GRADES NO. 4 AND 5		4.00			5.95	
GRADES NO. 5½ AND 6		2.00			4.00	
TOTALS			$			$

QUALITY	NONRUBY POUNDS	NONRUBY PRICE PER LB.	NONRUBY AMOUNT			
GOOD STAINED AND BETTER						
GRADES NO. 3 AND LARGER		$	$	.26	$ 70.00	$ 18.20
GRADES NO. 4 AND 5				7.01	40.00	280.40
GRADES NO. 5½ AND 6				51.67	17.70	914.56
STAINED						
GRADES NO. 3 AND LARGER		[illegible]			[illegible]	
GRADES NO. 4 AND 5		4.00		3.66	14.60	50.22
GRADES NO. 5½ AND 6		2.40		15.65	6.55	102.53
HEAVY STAINED						
GRADES NO. 3 AND LARGER		6.40			11.85	
GRADES NO. 4 AND 5		3.20			5.45	
GRADES NO. 5½ AND 6		1.60		.78	4.00	3.12
TOTALS			$			$

TOTAL YIELD AND VALUE ☐ RUBY ☒ NONRUBY (Half trim plus full trim) 84.50 LBS. $ 1500.53

ADJUSTED VALUE WHEN LESS THAN 18% GS & B (ABOVE VALUE $ _____ X _____ = 18) $

FOR PROGRAM B, DEDUCT $4.00 PER POUND FOR RIFTING AND TRIMMING $

FINAL BASIS FOR PAYMENT $ 1500.53

LESS INITIAL PAYMENT VOUCHER NUMBER SCHEDULE NUMBER 735.73

BALANCE DUE ☒ SELLER ☐ GOVERNMENT 764.80

NAME AND LOCATION OF MINE

Arnold Young-Mitchell County, N. C.
R GS & B 72.

PROCESSED FOR PAYMENT (LBS.)	84.50
PROCESSED - NO PAYMENT (LBS.) THINS	
BLACK (Dots, Spots, Stained)	
UNDERSIZED	
PROCESSING COST	.00
TOTAL POUNDS PURCHASED	84.50

84.50

SELLER'S NAME AND ADDRESS (Type or print)

Arnold Young Mica
Route 3, R. Roy Grandstaff
Micaville, N. C.

RECEIVED FEB 2[illegible]

APPROVED

DEPOT SUPERINTENDENT

DATE 12-12-57

GSA FORM 1013a SEPTEMBER 1957

FORM APPROVED BY COMP. GEN. [illegible] MARCH 25, 1957

GENERAL SERVICES ADMINISTRATION

FINAL SETTLEMENT - MICA PURCHASE

MICA PURCHASE DEPOT - Spruce Pine, N. C.

PROGRAM: [X] A [ ] B

DATE PURCHASED: 11-21-57

ACCEPTANCE NUMBER: A-3-370 (a)

CERTIFICATE AUTHORIZATION NUMBER: [illegible]-3-52 A

LOT NUMBER: SPAU-370 (a)

VOUCHER NUMBER:

SCHEDULE NUMBER:

EVALUATION DATA

RUBY

QUALITY	HALF TRIM POUNDS	HALF TRIM PRICE PER LB.	HALF TRIM AMOUNT	FULL TRIM POUNDS	FULL TRIM PRICE PER LB.	FULL TRIM AMOUNT
GOOD STAINED AND BETTER						
GRADES NO. 3 AND LARGER		$	$		$ 70.00	$
GRADES NO. 4 AND 5					40.00	
GRADES NO. 5½ AND 6					[illegible]	
STAINED						
GRADES NO. 3 AND LARGER		[illegible]			[illegible]	
GRADES NO. 4 AND 5		5.00			18.[illegible]	
GRADES NO. 5½ AND 6		[illegible]			7.5[illegible]	
HEAVY STAINED						
GRADES NO. 3 AND LARGER		6.00			14.80	
GRADES NO. 4 AND 5		[illegible]			[illegible]	
GRADES NO. 5½ AND 6		[illegible]			[illegible]	
TOTALS			$			$

NONRUBY

QUALITY	HALF TRIM POUNDS	HALF TRIM PRICE PER LB.	HALF TRIM AMOUNT	FULL TRIM POUNDS	FULL TRIM PRICE PER LB.	FULL TRIM AMOUNT	
GOOD STAINED AND BETTER							
GRADES NO. 3 AND LARGER		$	$	.72	$ 70.00	$ 50.40	50.40
GRADES NO. 4 AND 5				16.33	40.00	653.20	661.20
GRADES NO. 5½ AND 6				36.41	17.70	644.46	644.46
STAINED							
GRADES NO. 3 AND LARGER		[illegible]		.33	[illegible]	5.62	5.62
GRADES NO. 4 AND 5		4.[illegible]		8.22	14.6[illegible]	120.01	120.01
GRADES NO. 5½ AND 6		3.40		37.00	6.55	209.60	209.60
HEAVY STAINED							
GRADES NO. 3 AND LARGER		6.4[illegible]			11.8[illegible]		
GRADES NO. 4 AND 5		7.[illegible]		.37	5.4[illegible]	2.02	2.02
GRADES NO. 5½ AND 6		1.6[illegible]		1.47	4.[illegible]0	17.88	17.88
TOTALS			$			$	

TOTAL YIELD AND VALUE [ ] RUBY [X] NONRUBY (Half trim plus full trim) 98.93 LBS. $ 1711.10 — 1711.19

ADJUSTED VALUE WHEN LESS THAN 18% GS & B (ABOVE VALUE $ _____ X _____ [illegible]) $

FOR PROGRAM B, DEDUCT $4.00 PER POUND FOR RIFFLING AND TRIMMING

FINAL BASIS FOR PAYMENT $ 1711.19 — 1711.19

LESS: INITIAL PAYMENT [illegible] NO. [illegible] 932.55 — 932.55

BALANCE [illegible] $ 778.64 — 758.64

NAME AND ADDRESS OF PAYEE

Arnold Young-Mitchell County, N. C.
S OS & B 56.25

SELLER'S NAME AND ADDRESS (Type or print)

Arnold Young Mine
Barry Grindstaff, Route 3
Bakersville, N. C.

PROCESSED FOR PAYMENT (LBS.)	98.94 98.93
PROCESSED - NO PAYMENT (LBS.)	
THINS	
BLACK (Dots, Spots, Stained)	
UNDERSIZED	
PROCESSING LOSS	.11
TOTAL POUNDS PURCHASED	99.05 99.05

APPROVED

DEPOT SUPERINTENDENT

DATE 12-9-57

GSA FORM 1013a SEPTEMBER [illegible]

ORIGINAL FILE COPY
DMEA
RECEIVED FEB 14 1958

DATE		
2/14	C	220
2/14	Houk	600

IN REPLY REFER TO:

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

February 13, 1958
Re: DMEA 4388 Idm-E1085
Arnold Young Mining Co.
" " Property
Mitchell County, N. C.
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 $7,600 on a search, by drilling, for the extension northeasterly of the mica-rich R. B. Phillips pegmatite. No outcrop of the pegmatite had been found, but it appeared possible the pegmatite might have plunged under a ridge and had not reappeared at surface.

Drilling costing $7,049.20, of which the Government furnished $5,286.90, failed to locate a sizable vein exactly where the R. B. Phillips' pegmatite was expected to be, but 3 holes did intersect a narrow pegmatite within about 25-30 feet of the projected location, if the strike and dip (80°) of the most northeasterly outcrop of the R. B. Phillips pegmatite are used for projecting. Such a construction means the dip of the pegmatite is not concordant with the recorded dips of the enclosing country rock as shown on the sketch map. Also, if the drill holes, 1 and 2, are straight, the pegmatite appears to dip less steeply at depth.

The operator, using the geologic information gained from the DMEA drill holes, drilled Hole No. 5 higher and nearer the R. B. Phillips mine. An intersection was obtained probably 20-25 feet below the surface. Through a shaft sunk to the pegmatite nearly $5,000 worth of royalty-liable mica was recovered from a 3-4 foot pegmatite within the six-months post-contract period.

Certification is not recommended. As the term for certification has probably expired, I concur with the recommendation.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

February 5, 1958

2/7	C	220
	ey	130
2/10	RO	110
2/12	JHB	130
2-12	C	220
2/14	Com	100.
2/14	Jackson	800.
	Hand	600

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

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

Subject: Final Report - DMEA-4388, Idm-E1085 (Mica)
Arnold Young Mining Company, Spruce Pine, North Carolina
Arnold Young Mine, Mitchell County, North Carolina

Enclosed are the original and two copies of the subject report.

We agree with the report's conclusion that the four DMEA drill holes did not establish a certifiable ore discovery. However, on the basis of the thin pegmatite which thickens toward the west, the Operator (at his own expense) has drilled a fifth hole, sunk a shaft and recovered nearly $5,000 worth of mica from this newly-discovered pegmatite. The DMEA drilling could thus be said to have led to the discovery of commercial ore, even though the discovery was made at the Operator's expense after completion of the contract work.

No royalties have been received, but we have written to the Operator requesting payment on the production to date.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

Enclosures 3

Reviewed by
DMEA OPERATING COMMITTEE
2-12-58
(date)

Field Team
Final Rpt

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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DMEA
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220

FINAL REPORT

FIELD TEAM - REGION V

DMEA-4388, Idm-E1085, ARNOLD YOUNG PROPERTY (Mica)
Mitchell County, North Carolina

S. C. Bergman, Geologist
U. S. Geological Survey

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

Reviewed by
DMEA OPERATING COMMITTEE
2-12-58
(date)

February 5, 1958

FIELD TEAM FINAL REPORT

DMEA-4388, Idm-E1085, ARNOLD YOUNG PROPERTY (Mica)
Mitchell County, North Carolina

Operator: Arnold Young Mining Company, partnership composed of Frank W. Phillips, Sam W. Thompson, and Allen Parseley, Spruce Pine, North Carolina

SUMMARY

The northeast strike projection of the R. B. Phillips pegmatite was diamond drilled on two 2-hole cross sections. Holes were inclined 45 to 60° northwest and total 797 feet in depth. Nine to twelve inch pegmatite intersections, similar in composition and texture to the R. B. Phillips pegmatite were made in three of the four holes, but occurring 45 to 60 feet lower "stratigraphically" than its expected projection. It is believed that the intersections represent a previously unknown parallel and/or en echelon structure which pinches out just northeast of the second drill section and thickens to the southwest. No reserves can be outlined because of the structural thinness, although the Operator has reportedly sunk a shaft and is producing from a 3 to 4 foot thick structure near or at the property line. No certification can be recommended based on the results of the contract work.

INTRODUCTION

Location

The drill site is located near the crest of an east-southeast trending spur of Burns Mountain, on its steep, heavily wooded northeast slope. It is 2500 feet S. 72° W. of the intersection of State Highway 26 (formerly 19) and the Mine Creek Road. Drill holes 1 and 2 are collared 360 feet N. 78° E. of the northeasternmost shaft of the R. B. Phillips mine, and can be located in the northeast 1/9th of the Micaville, North Carolina Quadrangle, USGS-TVA Ed. 1934 (209-NW), 1:24,000.

Previous Work

Other attempts to locate the non-outcropping strike projection of the R. B. Phillips pegmatite are represented by three shallow, northwest-

trending bulldozer trenches and minor test-pitting. They are of recent, but unknown origin and are shown on the accompanying plan map.

As pointed out in the examination report, the previous Arnold Young contract work (DMEA-3717) was on a parallel structure occurring far to the east-northeast, and on projection, 250 to 300 feet stratigraphically higher than the R. B. Phillips pegmatite.

The R. B. Phillips pegmatite itself was only surficially trenched and test pitted prior to DMEA work in the winter of 1954-55 (DMEA-3422). Since the successful completion of that contract (as of 7/1/57), a total of 564,817.11 pounds of sheet, punch, and scrap valued at $559,968.58 has been recovered from a continuously stoped area over 300 feet long. The northeast end of the stope is estimated to be within 75 feet of the R. B. Phillips-Arnold Young property line. From sales and surficial mapping of the stope area, it is estimated that the R. B. Phillips pegmatite has an average value of $45.00 per ton of rock in place.

Contract Work

Two 2-hole diamond drill cross sections, totaling 797 feet of NX and BX size drill hole were completed. All contract costs were inclusive in the unit cost per foot of drilling. The construction of access road was started on May 22, 1957, and all contract drilling completed by July 23, 1957. A large capacity, skid mounted, gasoline driven, Longyear diamond drill rig was used. About 1000 feet of road was completed from the end of the R. B. Phillips mine road, over the ridge top to the drill sites. Drilling water had to be lifted in three pump stages, at least 200 feet vertically, and about 1800 feet horizontally from a creek in R. B. Phillips' orchard.

Drill sections 1 and 2 are located as shown on the report plan map. Section No. 1 (holes 1 and 2) is oriented N. 28° W. Drill Hole No. 2 was drilled on a -45° inclination to 170 feet (61 feet NX size, 109 feet BX size) and Drill Hole No. 1 drilled on a -60° inclination to 200 feet (25 feet NX size, 175 feet BX size). Section No. 2 (holes 3 and 4) is oriented N. 23° W. On this section, Drill Hole No. 4 was drilled on a -45° inclination to 195 feet (27 feet NX size, 168 feet BX size), and Drill Hole No. 3 drilled to 232 feet on a -60° inclination (30 feet NX size, and 202 feet BX size). On Section No. 2, 27 feet of hole was drilled in excess of the contract limitation of 400 feet per cross section, The Operator, however, has not claimed 28 feet of footage drilled.

Core recovery was for all purposes 100% except for the following intervals; hole no. 2- no core, 0-15 feet, hole no. 1- 72% recovery, 0-25 feet, no core, 45-47 feet, hole no. 3- no core, 0-14 feet, hole no. 4- 26% recovery, 0-19 feet. Drilling progress was good, and all work done efficiently and satisfactorily.

Post Contract Work

Upon completion of the contract, the Operator drilled a fifth angle hole 85 feet west-southwest of the collar of drill holes 1 and 2 (see plan map). No log of this hole is available, and no inspection of the property made since the completion of the drilling, but it is reported that, on the basis of an intersection made in the fifth hole, a shaft has been sunk near the property line and considerable mica recovered from a 3 to 4-foot thick pegmatite, presumably the one cut in holes 1, 2, and 4. Sales are recorded from this operation at the GSA depot in Spruce Pine (11/21/57 to 1/17/58), which total 241.49 pounds of sheet valued at

$4,172.10 and 3,765 pounds of hand-cobbed block with preliminary payments totaling $517.67. The Operator was been requested to pay the royalty due on the above amounts, which were produced within the six month post-contract period.

GEOLOGY

No recognizable extension of the R. B. Phillips pegmatite was cut in the contract drilling. What is believed to be a previously unknown and non-outcropping parallel structure was intercepted in drill holes 1, 2, and 4. Twelve inches of mica-bearing pegmatite was cut from 178 to 179 feet in hole no. 1, 11½ inches from 161.5 to 162.5 feet in hole no. 2, two 3-inch segments separated by 3 inches of gneiss from 176 to 176.75 feet in hole no. 4 and none of significance in hole no. 3 (see cross sections). The intercepted pegmatite projects 45 to 60 feet "stratigraphically" below the R. B. Phillips pegmatite. The 3-point drill hole intercepts indicate a strike of N. 70° E. and a dip of 55° southeast, although an actual dip of between 48 and 70° could be expected due to possible deflection of the drill holes, and expected contortions of the pegmatite. Pegmatite thickens from near extinction at Drill Section No. 2 to a reported 3 to 4 feet near the property line, 250 feet southwestward.

Country rock in which pegmatite is concordantly emplaced is the same in all holes. Its thin banded members are too repetitiously interlayered to describe in detail. Two thirds to three fourths of the section is composed of a well-banded quartz-muscovite-biotite gneiss, commonly garnetiferous. This unit varies in texture from a fine grained aplitic quartz-rich phase to a relatively coarse crenulated muscovite-rich phase. These textural differences probably represent both compositional and selective

alteration variations now indecipherable. Interlayered with the above unit are thin (1/16 inch to 18 inch thick) layers of chloritic hornblende schist. Lineation of the mica and hornblende is locally noticeable. Surface observations indicate a rough parallelism between minor dragfolds and lineation, suggestive of an equivalent age. Outside of the main pegmatite intercepts, a number of incorrelatable intervals of quartz, and quartz-plagioclase, three fourths to 4 inches thick were logged in the core (pods, lenses, or stringers). Minor intervals several inches to several feet thick of fine-grained post-pegmatite siliceous alteration were logged in all holes. Very minor fine-grained disseminated pyrite is present in the quartz-mica gneiss and occasionally in the siliceous alteration.

Pegmatite cut in the drill holes is identical in composition and texture to the R. B. Phillips pegmatite. It is an unzoned aggregate of euhedral, medium-grained plagioclase (oligoclase), interstitial quartz, flat, clear, light brownish green muscovite, and minor garnet. Albite twinning is well developed in the plagioclase. Muscovite in the core is presumably of good quality, as indicated by the lack of staining, and minimal amounts of cracking, reeving, and ruling. Sales figures from the Operator's recent work suggest that strategic muscovite of above average size exists in the pegmatite. The average value of sheet sales is $17.45 per pound. All production was obtained after completion of the contract.

CONCLUSIONS AND RECOMMENDATIONS

The contract drilling indicated conclusively that the R. B. Phillips pegmatite, although still strong in the northeast stope heading, does not extend to drill Section No. 1 (see plan map). The contract and post-contract work outlined a previously unknown, non-outcropping, mica-rich pegmatite which

is parallel and compositionally identical to the R. B. Phillips pegmatite. The structure pinches out northeastward at or near cross section No. 1, thickening to 3 or 4 feet, 250 feet southwestward at or near the property line.

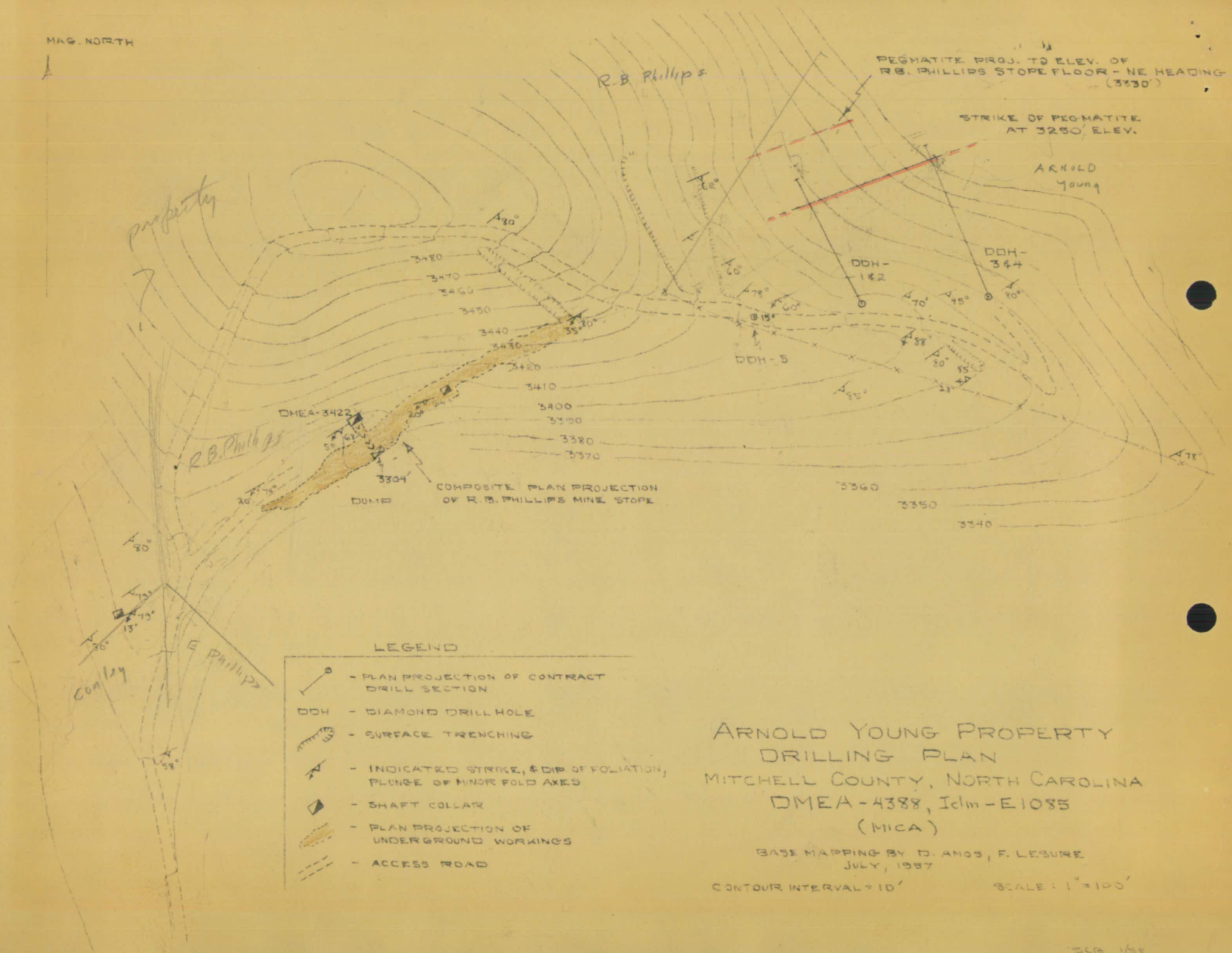
The contract drill intersections are considered to be too thin and uninterpretative by themselves, on which to base a reserve calculation. Because of this, certification is not recommended.

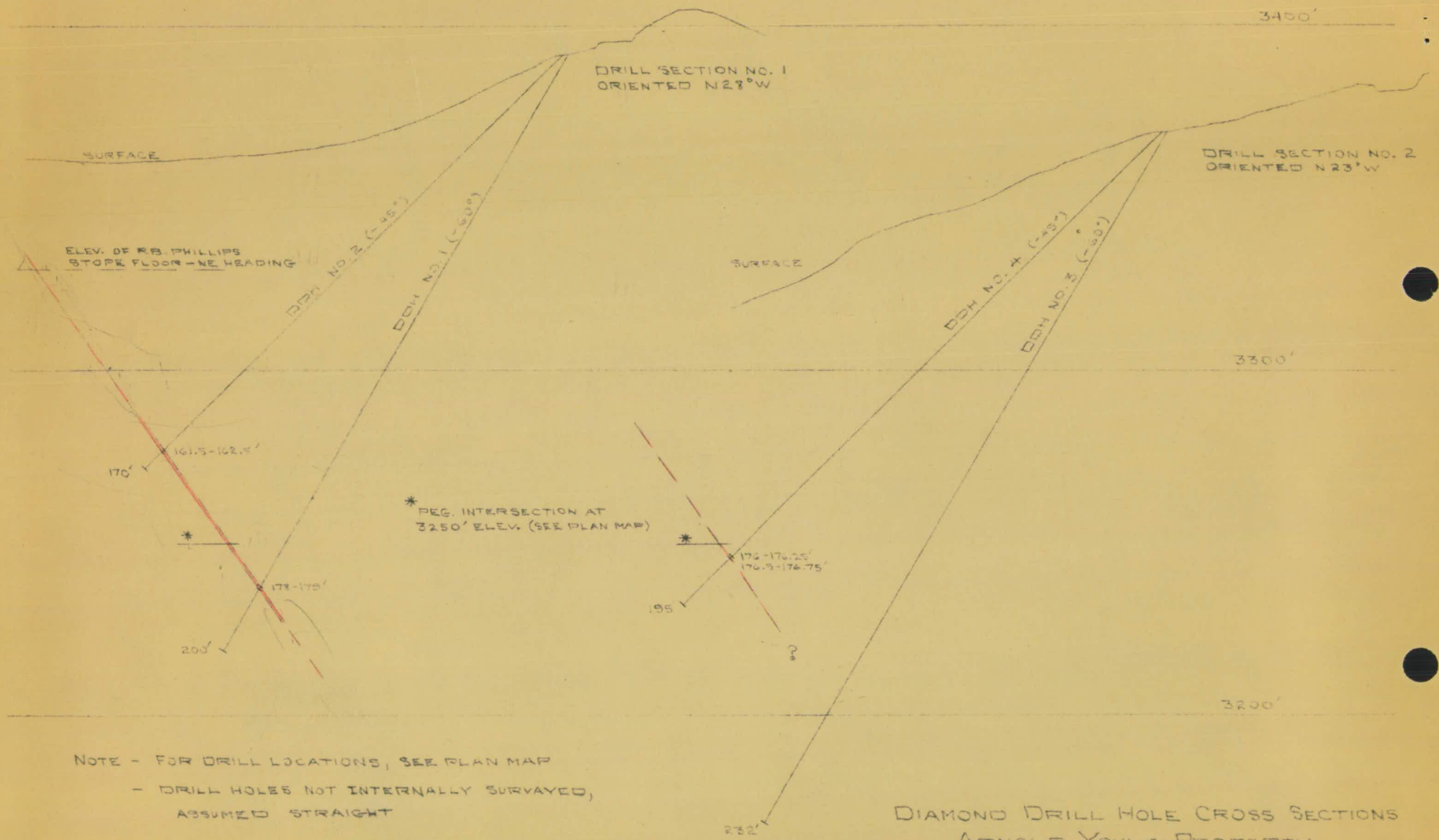
EXPENDITURES

(a)	Total approved	$7600.00
(b)	Total cost of project	7049.20
(c)	Government's share of cost	5286.90
(d)	Government's share unexpended	413.10
(e)	Value of production during contract	0.00
(f)	Value of production since contract over	4689.77

S. C. Bergman, Geologist
U. S. Geological Survey

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


MAG. NORTH
R.B. Phillips
PEGMATITE PROJ. TO ELEV. OF R.B. PHILLIPS STOPE FLOOR - NE HEADING (3330')
STRIKE OF PEGMATITE AT 3250' ELEV.
ARNOLD Young
property
DDH-1&2
DDH-3&4
DDH-5
DMEA-3422
3304'
DUMP
COMPOSITE PLAN PROJECTION OF R.B. PHILLIPS MINE STOPE
3480
3470
3460
3450
3440
3430
3420
3410
3400
3390
3380
3370
3360
3350
3340
R.B. Phillips
E Phillips
Conley
LEGEND
- PLAN PROJECTION OF CONTRACT DRILL SECTION
DDH - DIAMOND DRILL HOLE
- SURFACE TRENCHING
- INDICATED STRIKE, & DIP OF FOLIATION, PLUNGE OF MINOR FOLD AXES
- SHAFT COLLAR
- PLAN PROJECTION OF UNDERGROUND WORKINGS
- ACCESS ROAD
ARNOLD YOUNG PROPERTY
DRILLING PLAN
MITCHELL COUNTY, NORTH CAROLINA
DMEA-4388, Idm-E1085
(MICA)
BASE MAPPING BY D. AMOS, F. LESURE
JULY, 1987
CONTOUR INTERVAL = 10'
SCALE: 1" = 100'



NOTE - FOR DRILL LOCATIONS, SEE PLAN MAP

- DRILL HOLES NOT INTERNALLY SURVAYED, ASSUMED STRAIGHT

DIAMOND DRILL HOLE CROSS SECTIONS
ARNOLD YOUNG PROPERTY
MITCHELL COUNTY, NORTH CAROLINA

DMEA-4388, Idm-E1085
(MICA)

SCALE: 1" = 40'

February 10, 1958

Mr. L. G. Houk telephoned Mr. R. A. Laurence in Knoxville, Tenn.

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Co.
Arnold Young Mine
Mitchell County, N. C.
Contract No. Idm-E1085

Mr. Anderson and Mr. Houk both talked and were advised that they sunk a vertical shaft close to the R. B. Phillips mine and mined out $5,000.00 worth of mica. It is 20 feet from the 5th drill hole which was put down on Arnold Young Company's lease. The Field Team will visit the property sometime after the 25th of February and spot the shaft, diamond drill hole 5 location and the Arnold Young-R. B. Phillips' property line.

RECEIVED FEB 3 1958
DATE | INITIALS | CODE
2/3 | C | 220
2/3 | also | 800
2/4 | Hmb | 600

January 31, 1958

Arnold Young Mining Co.
c/o Frank W. Phillips
Spruce Pine, North Carolina

Re: DMEA-4388, Idm-K1085-mica
Arnold Young Prospect
Mitchell County, N.C.

Dear Mr. Phillips:

It has come to our attention that mica is being produced from the land covered by the subject contract. Your attention is called to Article 6(b) of the contract which is as follows:

> Royalty on production:- The Operator, as principal if the Operator is the producer or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain his interest in the land), 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.

Under the above terms the Government is entitled to royalty on any production you have made to date. The records at the Spruce Pine Mica Buying Depot reveal that you have received $4,688.77 on five sales. The royalty due the Government at 5 percent on these sales amounts to $234.44.

Lookup records - Feb 28

Below is a summary of the sales for which we have a record:

Date	Lot No.	Pounds	Initial Pay't	Final Pay't	Total
11-21-57	370	99.05	$952.55	$758.64	$1,711.19
11-26-57	386	84.50	735.73	764.80	1,500.53
12-26-57	452	57.94	583.94	376.44	960.38
Total		241.49	$2,272.22	$1,899.88	$4,172.10

Hand cobbed Mica

12-6-57	92	1315.00	$150.01
1-17-58	103	2450.00	366.66
Total		3765.00	$516.67

Please send your royalty check together with copies of the settlement sheets on the above sales and when you receive final settlement on the two sales of hand cobbed mica listed above, we would appreciate the royalty on them. Royalty is also due on any sales of scrap or punch.

In the future please make royalty payments promptly rather than having us writing you for them.

Very truly yours,

Robert A. Laurence
Executive Officer, DMEA
Region V

WAB/mm
cc
Opr. Com.-2
Lynch
Files

Form MF-104 (Rev.)
(April 1952)

RECEIVED

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 17

Month of July, 1957 Docket No. DMEA 4588 Contract No. Idm E-1085
Operator's Name Arnold Young Mining Co. Minerals mica
Address c/o Frank W. Phillips, Spruce Pine, N. C.
Contract Amount, $ 7600.00 Government Participation: 75 % Amount, $ 5,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	$1775.00	$5274.20	$ 7,049.20			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1775.00	$5274.20	$ 7,049.20	1775.00	5274.20	7049.20

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 9-25-57 *Payee Arnold Young Mining Co.

Per Frank W Phillips Title partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1331.25

Signature Helen R. Mullin
(Authorized Certifying Officer)

Date OCT 4 1957 Vou. No. 63
(See other side)

443.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1085 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date OCT 3 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date OCT 3 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July, 195 7 Docket No. DMEA 4388 Contract No.

Operator's Name Arnold Young Mining Co. Minerals Idm E-1085 mica

Address c/o Frank W. Phillips, Spruce Pine, N. C.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	$270.00	30	$1373.00	143			
Auger	ft.	$1505.00	175	$5676.20	627			
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		$1775.00		$7049.20				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 9-25-57 Operator Arnold Young Mining Co.

Per Frank W. Phillips Title partner

Remarks:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

W. J. Lynch

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

ARNOLD YOUNG MINING CO.

July 1957 Docket No. 4388 Contract No. E-1085

Date	From	to	Footage	Core	Material Drilled
7-10-57	0	17	17	3	Surface and slate
7-11-57	17	30	13	13	Slate
7-11-57	30	39	9	9	Slate (changed from NX to BX)
7-12- 57	39	95	56	56	Slate
7-16-57	95	153	59	59	Slate
7-17-57	153	210	57	57	Slate
7-18-57	210	230	20	20	Slate

Narrative:

This Hole was drilled on a 60 degree, started on country rock for 3 feet and then in loose rock and surface for 14 feet, then back into country rock down to 230 feet. We did not get any vein material but had good success drilling. Worked twelve-hour days with no break downs and rock cut easily.

I certify that the above information is correct.

Frank W. Phillips operator

EXTRA COPY
D M E A
RECEIVED OCT 9 1957

DATE	INITIALS	CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/1	Talbert	800
10/1	B	220
10/2	Hunt	600

OCT 1 1957

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

Re: Docket No. DMFA-4388 (Mica)
Arnold Young Mining Company
Arnold Young Mine
Mitchell County, N. C.
Contract No. Idm-E1085

Dear Mr. Laurence:

As requested in your memorandum of September 26, 1957, a Report of Review in lieu of a final audit of the referenced project has been prepared. The original and three copies thereof, together with the original of the final MF-104 submitted with your memorandum, are enclosed.

If you concur with the facts stated in this Report of Review, the original and one copy should be released to the regional finance officer, one copy should be forwarded to the Operator, and one copy should be retained in your files. If for any reason you do not concur, please return the original and both copies to this Division with your comments.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

Enclosure

EDTalbert/wb
October 1, 1957

Copy to: Docket
Admr. Reading File
Helen R. Miller
Mr. Chambers

8623

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

EXTRA COPY
RECEIVED

DATE		CODE
10/1	Hoch	600

September 26, 1957

Memorandum

To: Jay L. Chambers, Director, Contract Administration and Audit Division - DMEA

From: Executive Officer, DMEA - Region V - Knoxville, Tenn.

Subject: Request for Report of Review on DMEA-4388, Idm-E1085. Arnold Young Mine, Mitchell County, North Carolina

All work on the subject contract has been completed and a Report of Review is requested.

An acceptable final engineering and geologic report has been received and the Field Team verified the following units of completed work:

Stage I

86 feet of NX drilling
284 feet of BX drilling

Stage II

57 feet of NX drilling
370 feet of BX drilling — 2' in excess of drop Gaskins 9/20/57

It is noted the total footage drilled under Stage II exceeds the allowable maximum of 400 feet, however, the Operator claims no more than this amount.

Attached are the original of forms MF-104 and MF-104A, and the narrative on the final hole. Work began May 20, 1957 and was completed July 18, 1957.

RAL/zm
cc
Finance Office
Lynch
Shirley
Files
Finance Office

Robert A. Laurence

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 23, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON FIELD

OFFICIAL FILE COPY DMEA RECEIVED SEP 25 1957		
DATE	INITIALS	CODE
9/25	B	220
9/25	[illegible]	600

September 23, 1957

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4388, Idm-E1085(mica) Arnold Young Mining Co.
Arnold Young Mine, Mitchell County, N.C.

Reference is made to our memorandum of August 9.

Actual depth of Hole No. 1, is 200 feet, this is verified by Mr. Bergman and Mr. Shirley. This depth was approved by them in advance and they have seen the last 16 feet of core. Therefore, there has been no overpayment on this project.

Robert A. Lawrence

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 28, FED. BLDG.
KNOXVILLE 2, TENN.

August 28, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 30 1957

DATE	INITIALS	CODE
8/30	G	220
		800
9/3	Hoch	600

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Operator's final Engineering & Geological Report DMEA-4388, Idm-E1085, (mica) Arnold Young Mine, North Carolina

Transmitted are three copies of the subject report.

Robert A. Laurence

Robert A. Laurence

zm

Operator's Final Rpt.

Arnold Young Mine DMEA No. 4388 Contract No. Idm-E 1085

Final Report

Narrative:

We started drilling on May 22, 1957. This was Hole No. 1 and drilled on a 45 degree. The first 10 feet was surface and then 152 feet of country rock. At 162 feet we got 11 inches of vein material. We drilled on to 170 feet in country rock.

With the core drill in the same location we set on 60 degrees and drilled Hole No. 2, the first 8 feet being surface then into country rock to 178 feet where we got 12 inches of vein and back into country rock to 200 feet.

Core drill was moved to location where Holes No. 3 and 4 were to be drilled and set up the equipment. Hole No. 3 was drilled on a 45 degree and started in country rock for 4 feet and in surface and rocks to 18 feet, then back into country rock to 195 feet.

Hole No. 4 was drilled on a 60 degree, started in country rock for 3 feet, then in surface and rocks for 14 feet, then back into country rock to 230 feet.

I certify that the above information is correct.

Frank W. Phillips operator

OFFICIAL FILE COPY
5 DMEA
RECEIVED AUG 1957
DATE CODE
Apr Hmk 600

RECEIVED
AUG 28 1957
Knoxville, Tenn.

August 19, 1957

Mr. Frank Phillips telephoned Mr. L. G. Houk from Spruce Pine, N. C.

Subject: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Mine
Mitchell County, North Carolina
Contract No. Idm-E1085

Mr. Frank Phillips called on the Arnold Young property stating he was completed with the four drill holes and wanted to know if the Field Team's final report had been received. He was told it has not been received as yet. He wanted to know if he drilled an additional hole and found pegmatite and developed it would the DMEA certify on the results of his work. Mr. Phillips was told that the Field Team's recommendation on certification had not been received but that certification of discovery was dependent upon the results of the DMEA work and if the DMEA work did not give worthwhile results then the project would not be certified and the results of his work would not be combined with the DMEA results to make certification.

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

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DMEA
RECEIVED AUG 15 1957

DATE	INITIALS	CODE
8/15	G	220
8/19	[illegible]	800
8/19	[illegible]	600

August 13, 1957

Arnold Young Mining Co.
c/o Frank W. Phillips
Spruce Pine, N.C.

Re: DMEA-4388, Idm-E1085-mica
Arnold Young Prospect
Mitchell County, N.C.

Dear Mr. Phillips:

We have received your final monthly report and voucher on the subject contract. However, it cannot be approved for payment until we receive your final engineering and geologic report, as provided in Article 5c of the contract.

Please send me the final report at your earliest convenience. It should contain a description of work accomplished, thickness and nature of the pegmatite bodies, estimate of reserves discovered, and your evaluation of the results and your plans for future work, if any, at this prospect.

Sincerely yours,

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

RAL/zm
cc
Lynch
Shirley
Files
Opr. Com.-2

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

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 12 1957

DATE	INITIALS	CODE
8/12	Q	220
8/12	WRa	600

X

August 9, 1957

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

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

Subject: Docket No. DMEA-4388, Contract Idm-E1085 (Mica)
Arnold Young Mining Company, Spruce Pine, N. C.
Arnold Young prospect, Mitchell County, North Carolina

Reference: Your letter of August 7, 1957

The Operator's final voucher has not yet been received, and when it is received, approval will be withheld until the total footage drilled and approved is verified.

According to available records, it appears that hole no. 1 was drilled to 184 feet on June 20, remained inactive until June 26 when drilling was resumed and carried to 200 feet. Thus, the June 25 interim report is correct in reporting 184 feet on that date.

When the Field Examiners return from North Carolina next week, we will inquire as to the 16 feet in question, which is not mentioned in the July 11 interim report, apparently through oversight. We will notify you at that time.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/6	Houk	600
8-6	Chambers	800
8/7	Martin	130
"	Johnson	110
"	[illegible]	100
8/8	P.K.	220
		600

600

AUG - 7 1957

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

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina
Contract No. Idm-E1035

Dear Mr. Laurence:

Reference is made to the June, 1957, Operator's Monthly Report and Voucher (Form MF-104), making claim for 200 feet of drilling in Hole No. 1, 25 feet of NX and 175 feet of BX. This voucher was approved and paid in the amount claimed.

The Field Team's Interim Report of June 25, 1957, states that Diamond Drill Hole No. 1 was drilled to 184 feet and stopped, 25 feet of NX and 159 feet of BX. If the amount of BX drilling, 175 feet claimed by the Operator on the MF-104A, is correct please submit a correction for the Interim Report of June 25, 1957. If the Operator's claim is incorrect please deduct 16 feet of drilling at $9.60 per foot or $153.60 from his next voucher.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

Approved:

P. F. Yopes

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

LGHouk:gad 8/6/57
Copy to: Admr. R. File
Operating Committee
Mr. Chambers
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

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DMEA
RECEIVED AUG 5 1957
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8/5 | | 100
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INTERIM REPORT

DMEA-4388, Idm-E1085 (mica) ARNOLD YOUNG PROPERTY

Operator: Arnold Young Mining Company, c/o Frank W. Phillips, Spruce Pine, N. C.

Location: On Burns Mountain, 0.56 airline mile S72°W from the Intersection of State Highway 26 and the Mine Creek Road, Mitchell Co., N. C.

Stages I and II of this contract has been completed. Diamond drill hole No. 3 has been bottomed at a depth of 232 feet. Direction and inclination of the hole was checked and found to be satisfactory. The hole was drilled NX size from 0 to 30 feet and BX size from 30 to 232 feet. There was no recovery from 0 to 14 feet which was in weathered surface material, but 100 percent recovery was obtained from 14 to 232 feet. No pegmatite was cut in this hole. Core material generally consisted of interlayered hornblende and biotite gneiss, muscovite-biotite gneiss, garnet, sulphides and chlorite as accessory minerals in the gneiss, and occasional thin stringers or lenses of quartz and quartz-feldspar material. A detailed log of this hole was made.

This completes the contract. D.D.H. Holes 1,2, and ~~3~~ 4 cut pegmatite not exceeding 12 inches in thickness. Hole No. ~~4~~ 3 cut no pegmatite. The operator has indicated an interest in sinking a shaft to intercept pegmatite cut in Holes 1 and 2.

L. E. Shirley

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

F. G. Lesure, Geologist
U. S. Geological Survey

Date inspected:

July 23, 1957

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July 1957 Docket No. DMEA 4388 Contract No. E 1088
Operator's Name ARNOLD YOUNG MINING CO. Minerals mica
Address Spruce Pine, N. C.
Contract Amount, $ 7,600.00 Government Participation: 75 % Amount, $ 5,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1687.80	3,586.40	5,274.20			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1687.80	3,586.40	5,274.20	1687.80	3586.40	5274.20

RECEIVED AUG 1 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 7-16-57 *Payee Arnold Young Mining Co.
Per Frank W. Phillips Title partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1265.85
Signature Helen R. Moeller
(Authorized Certifying Officer)
Date JUL 30 1957 Vou. No. 18
(See other side)

421.95

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1085 in accordance with the terms of the contract.

Signature S. C. Bergman Title GEOLOGIST, U. S. G. S. Date JUL 22 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUL 29 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1957 Docket No. DMEA 4388 Contract No. X-1085

Operator's Name ARNOLD YOUNG MINING CO Minerals mica

Address Spruce Pine, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core XX	ft.	245.00	27	1103.00	113			
Churn								
Auger XX	"	1444.80	166	4171.20	452			
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1689.80		5274.20				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date 7-16-57 Operator Arnold Young Mining Co.

Per Frank W. Oliver Title partner

NOTE.—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.

(Instructions on reverse)

(For Government use only)

S. C. Bergman

GEOLOGIST, U. S. G. S. JUL 22 1957

RECEIVED AUG 1 1957 D.M.E.A.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

ARNOLD YOUNG MINE

July 1957 Docket No. 4588 Contract No. E 1085

Date	From	To	Footage	Core	Material Drilled
7-2-57	0	4	4	4	Slate
7-3-57	4	27	23	9	slate and surface
7-4-57	27	37	10	10	slate
7-5-57	37	93	56	55	"
7-8-57	93	149	56	56	"
7-9-57	149	195	46	46	" and vein

Narrative:

Changed from NX to EX at 27 feet because we lost the water in surface below the first five feet of rock.

I certify that the above information is correct.

Frank W. Phillips operator

OFFICIAL FILE COPY
OMEA
RECEIVED AUG 1 1957

DATE	INITIALS	CODE

RECEIVED
JUL 22 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 22 1957

DATE	INITIALS	CODE
7-22	C	220
	Com	100
23	A	600

INTERIM REPORT

DMEA-4388, Idm-E 1085, Arnold Young (mica)

Operator: Arnold Young Mining Company, c/o Frank W. Phillips, Spruce Pine, N.C.

Location: On Burns Mountain, 0.56 airline miles S. 72° W. from the intersection of State Highway 26 (104) and the Mine Creek Road, Mitchell County, North Carolina

Diamond drill hole No. 4 (-45°), has been completed at a depth of 195 feet. The hole was drilled NX size from 0 to 27 feet and BX size from 27 to 195 feet. Only 5 feet of core was recovered from intermittently weathered material in the first 19 feet while from 19 to 195 feet core recovery was for all purposes, 100%. What is considered to be the target pegmatite was cut from 176 to 176 3/4 feet, 9 inches of pegmatite zone with about 3 inches of muscovite-biotite gneiss inclusion. The pegmatite is texturally favorable and consists of a mixture of oligoclase, quartz and muscovite. Coupled with the intersections made in the other two holes, there is evidence of strong structural continuity, and a very favorable mineralogical environment, but to date because of the structural thinness, its potential is practically nil.

Hole No. 3 (-60°) has been started and will probably be completed by the next inspection. Recommendations by the examiners will depend on the significance of any intersections made in this last drill hole. Based on the results of the drilling to date, no certifiable structure can be defined.

All drilling to date has cut a repetitiously interlayered, thin to thick bedded sequence of quartz-biotite-muscovite, gneiss and schist, and chloritic hornblende schist.

Inspected: July 11, 1957

S. C. Bergman and F. G. Lesure, Geologists
U. S. Geological Survey

Interim Report 6/25/57

INTERIM REPORT

DMEA-4388, Idm-E 1085, Arnold Young (mica)

Operator: Arnold Young Mining Company, c/o Frank W. Phillips, Spruce Pine, N.C.

Location: On Burns Mountain, 0.56 airline miles S. 72° W. from the intersection of State Highway 26 (104) and the Mine Creek Road, Mitchell County, North Carolina

Diamond drill hole No. 1 (-60°) has been drilled to 184 feet and stopped. From 0 to 25 feet was drilled NX size and from 25 to 184 feet was drilled BX size. What is believed to be the target pegmatite was cut from 178 to 179 feet, 11½ inches of Oligoclase, quartz, muscovite pegmatite. The general texture, composition and quality of contained muscovite is very good, but the two sections cut are not considered to be thick enough to be minable. On the basis of these two intersections, however, Stage II work was considered to be justified and the second section of drill holes was located and oriented. Work on drill holes 3 and 4 is expected to begin immediately. The country rock drilled in the above described hole is about the same as described in the previous interim reports.

Inspected: June 25, 1957

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DMEA
RECEIVED JUL 22 1957

DATE	INITIALS	CODE
7/22	C	220
22	Com	100
23	Hwk	

S. C. Bergman, Geologist
U. S. Geological Survey

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

June MF-104

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 2

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1957 Docket No. DMEA 4369 Contract No. R 1035
Operator's Name Arnold Young Mining Co. Minerals mica
Address Spruce Pine, N. C.
Contract Amount, $ 7,600.00 Government Participation: 75 % Amount, $ 5,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1930.00	1656.40	3586.40			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1930.00	1656.40	3586.40	1950.00	1656.40	3586.40

RECEIVED JUL 15 1957 D.M.E.A.

RECEIVED JUL 5 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 6-29-57 *Payee Arnold Young Mining Co.

Per [signature] Title

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1447.50

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUL 12 1957 Vou. No. 9
(See other side)

482.50

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1085 in accordance with the terms of the contract.

Signature S. C. Bergman Title GEOLOGIST, U. S. G. S. Date JUL 1 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Norman Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUL 2 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1957 Docket No. DMEA 4566 Contract No. E 1065

Operator's Name Arnold Young Mining Co.

Minerals mica

Address Spruce Pine, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	250.00	25	860.00	86	10.00		
Churn								
Auger		1600.00	175	2726.40	284	9.60		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1850.00		3586.40				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 6-29-57 Operator Arnold Young Mining Co.

Per Frank W. Phillips Title partner

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

S. C. Bergman
GEOLOGIST, U. S. G. S. JUL 1 1957

RECEIVED JUL 15 1957 DMEA

RECEIVED JUL 5 1957 D.M.E.A.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

ARNOLD YOUNG MINE

What hole

June 1957 Docket No. 0388 Contract No. E-1088

Date	From	To	Footage	Core	Material Drilled
6- 7-57	0	14	14	6	surface & slate
6-10-57	14	25	11	11	Slate
6-11-57	25	55	30	28	slate
6-12-57	55	74	19	19	slate
6-13-57	74	91	17	17	slate
6-14-57	91	111	20	20	slate
6-17-57	111	150	39	39	slate
6-18-57	150	160	10	10	slate
6-19-57	160	175	15	15	slate
6-20-57	175	183	8	8	slate & vein
6-26-57	183	197	17	17	slate
6-27-57	197	200	3	3	slate

#1

Narrative:

Changed from NX to BX at 25 feet because of seams and lost water on 6-11-57

I certify that the above information is correct,

Frank W. Phillips operator

EXTRA COPY
D M E A
RECEIVED JUL 15 1957

DATE	INITIALS	CODE

EXTRA COPY
D M E A
RECEIVED JUL 5 1957

DATE	INITIALS	CODE

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 5 1957

DATE	INITIALS	CODE
7-5	C	220
7/8	[illegible]	800
7/8	[illegible]	600

July 3, 1957

Arnold Young Mining Company
c/o Frank W. Phillips
Spruce Pine, North Carolina

Re: DMEA-4388, Idm-E1085-mica
Arnold Young Property
Mitchell County, N.C.

Dear Mr. Phillips:

This will confirm the verbal approval given by our field examiners to begin work on Stage II of the subject exploration contract.

Very truly yours,

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

RAL/zm
cc
Opr. Com.-2

Finance Office
Lynch
Shirley
Files

July 2, 1957

Mr. Houk calling Mr. Laurence, Knoxville, Tennessee

Mr. Laurence:
That pegmatite is very thin ($1\frac{1}{2}$) at the Arnold Young.
We are going ahead with the remaining two holes as there is a chance it might thicken. It has the same type of pegmatite as the R. B. Phillips.

INTERIM REPORT

DMEA-4388, Idm-E 1085, Arnold Young (mica)

Operator: Arnold Young Mining Company, c/o Frank W. Phillips, Spruce Pine, N.C.

Location: On Burns Mountain, 0.56 airline miles S. 72° W. from the intersection of State Highway 26 (104) and the Mine Creek Road, Mitchell County, North Carolina

Diamond Drill Hole No. 2 has been drilled to a depth of 170 feet (-45°) at which point the hole was stopped. The hole was drilled NX size from 0 - 61 feet and BX size from 61 - 170 feet. Twelve inches of oligoclase-quartz-muscovite pegmatite were cut from 161 to 162 feet. Although thin, the composition and texture are favorable for the occurrence of strategic muscovite.

Drill Hole No. 1 (-60°) has been collared and drilled NX size to a depth of 25 feet at the time of inspection. Core recovery in semiweathered quartz-biotite-muscovite gneiss and interlayered hornblende schist is about 72 %. Core recovery in hole no. 2 is 100 % from 15 - 170 feet. Drill Hole No. 1 is expected to be drilled the maximum allowable footage in order to fully define what may be a previously unknown pegmatite rather than a projection of a known structure.

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DMEA
RECEIVED JUN 24 1957

DATE	NOTES	CODE
6-24	C	220
25	Com	100
6/27	wza	600

Inspected: June 11, 1957

S. C. Bergman

S. C. Bergman, Geologist
U. S. Geological Survey

L. E. Shirley

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

[redacted] 4 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE
OF PAYMENTS K 78

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4388 Contract No. E-1085
Operator's Name Arnold Young Mine (c/o Frank W. Phillips) Minerals mica
Address Spruce Pine, N. C.
Contract Amount, $ 7,600.00 Government Participation: 75% Amount, $ 5,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1656.40	-	1656.40			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1656.40		1656.40	1656.40	-	1656.40

RECEIVED JUN 24 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 6-15-57 *Payee Arnold Young Mining Co.
Per Frank W. Phillips Title partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1242.30
Signature Peter R. Miller (Authorized Certifying Officer)
Date JUN 20 1957 Vou. No. 209
(See other side)

414.10

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1081 in accordance with the terms of the contract.

Signature S. C. Benjamin Title GEOLOGIST, U. S. G. S. Date JUN 19 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature N. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date JUN 19 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 195 7 Docket No. DMEA 4388 Contract No. E 1085

Operator's Name Arnold Young Mine (c/o Frank W. Phillips) Minerals Mica

Address Spruce Pine, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core NX bit	ft.	610.00	61	610.00	61	10.00		
Churn BX "	"	1046.40	109	1046.40	109	9.60		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1656.40	170	1656.40				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 6-15-57 Operator Arnold Young Mine

Per Frank W. Phillips Title partner

NOTE.—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.

REMARKS:

(Instructions on reverse)

(For Government use only)

S. C. Bergman GEOLOGIST, U. S. G. S.

JUN 19 1957

RECEIVED JUL 24 1957 D.M.E.A.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

ARNOLD YOUNG MINE

May 1957 Docket No. DMEA 4388 Contract No. E-1085

Date	From	To	Footage	Core	Material Drilled
5-22-57	0	10	10	0	surface
5-23-57	10	25	15	15	slate
5-24-57	25	35	10	10	"
5-27-57	35	55	20	20	"
5-28-57	55	72	17	17	" changed from BX to BX at 61 ft.
5-29-57	72	112	40	40	"
5-30-57	112	142	30	30	"
5-31-57	142	160	18	18	"
6-3 -57	160	170	10	10	

Narrative:

After the road was made to Core Drill site and Drill moved in by help of bull-dozer, a gasoline pump was placed in the R. B. Phillips orchard at his water reservoir Pipe, line was laid 600 ft. to old mine shaft with an elevation of approximately 275 ft. From this shaft an electric pump was installed, another electric pump was installed about 100 ft. from the first pump. The distance from this pump being approximately 550 ft. from the Core Drill. Another pump (electric) was installed at the Drill. After the Drill was set up a log of operation is above.

At 61 feet we hit a seam and lost the water and it was necessary to case down to hold the water, so we changed to BX bit.

I certify that the above information is correct:

Frank W. Phillips

Hole # 2

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 24 1957

DATE	INITIALS	CODE

INTERIM REPORT

DMEA-4388, Idm-E 1085, Arnold Young (mica)

Operator: Arnold Young Mining Company, c/o Frank W. Phillips, Spruce Pine, N.C.

Location: On Burns Mountain, 0.56 airline miles S. 72° W. from the intersection of State Highway 26 (104) and the Mine Creek Road, Mitchell County, North Carolina

At the time of the inspection, the Operator had completed an entry road from the R. B. Phillips mine road, excavated a drill site at the point previously agreed upon, and completed 61 feet of NX size drilling on hole No. 2. The direction of the hole is N. 27° W. and the inclination -45° NW. The entry road and drill site were started on Saturday, May 18, and drilling started on Monday, May 20. The first 15 feet of hole is drilled in overburden so that there is no core recovery. From 15 to 61 feet, core recovery has been 100%.

A summary log of Diamond Drill Hole No. 2 is as follows:

Depth	Remarks
0-15'	Overburden, no core recovery
15-61'	Fine grain, well banded garnetiferous, quartz-biotite-muscovite gneiss with thin interlayered bands of fine grain hornblende schist.
	Thin altered, silicified zones with a little fine disseminated pyrite at 47.5', 49', 50', and 56-60'.

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 7 1957

DATE	INITIALS	CODE
6/7	JWZ	DZO
10	Com	100
12	Hawk	600

Inspected: May 28, 1957

S. C. Bergman, Geologist
U. S. Geological Survey

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

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 22 1957

DATE	INITIALS	CODE
5/23	C	220
5/24	B	215
5/24	H	600

May 20, 1957

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Acting Executive Officer, DMEA Field Team, Region V

Subject: Signed Contract - Idm-E1085, DMEA-4388 (Mica)
Arnold Young Mining Company, Spruce Pine, North Carolina

Enclosed are three copies of the subject contract. The usual distribution of the other signed copies has been made by this office.

V. J. Lynch

V. J. Lynch

Enclosures (3)

INTERIM REPORT

DMEA-4388, Idm-E1085(mica) ARNOLD YOUNG PROPERTY

Operator: Arnold Young Mining Company, c/o Frank W. Phillips, Spruce Pine, North Carolina

Location: On Burns Mountain, 0.56 airline miles S 72° W from the intersection of State Highway 26 (104) and the Mine Creek road, Mitchell County, North Carolina.

Accompanied by Sam Thompson, one of the partners in the company, the property was visited by the examiners and the location and orientation of the first two holes were mutually agreed upon. Drill site preparation is expected to begin immediately.

Inspected May 15, 1957

Wm. A. Beck, Mining Engineer
Bureau of Mines

S. C. Bergman, Geologist
Geological Survey

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DMEA
RECEIVED MAY 23 1957

DATE	INITIALS	CODE
5/23	C	220
"	COW	100
5/27	[illegible]	600

z

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 6 1957

DATE	MINERALS	CODE
5/6	C	220
5/6	mica	600
		220

May 3, 1957

Memorandum

To: Operating Committee, D.M.E.A. Washington

From: Executive Officer, DMEA - Region V - Knoxville

Subject: DMEA-4388 (mica) Arnold Young Mining Company
Arnold Young Property, Mitchell County, N.C.

As discussed in my telephone call to Mr. Houk and Mr. Selfridge, we have deleted Maps Nos. 2 and 3 from the proposed contract, and substituted a new paragraph in exhibit "A". The revised contract has been sent to the Operator for signature.

Enclosed herewith are the deleted page and 2 maps from each of the six copies of the contract, and 2 copies of the revised pages.

Robert A. Laurence

Robert A. Laurence

EXPLORATION PROJECT CONTRACT
ARNOLD YOUNG MINING COMPANY
DOCKET NO. DMEA-4388

EXHIBIT A

Description of the Work

Exploration for concentrations of strategic mica shall be accomplished by diamond drilling, as indicated on the map attached hereto, entitled "Contour Map and Boundary Lines of Lands of Mining Lease owned by Arnold Young, Leased by Arnold Young Mining Co., Mitchell County, N. C."

The work is divided into two stages, as described below. The Operator shall complete Stage I, and shall perform as much of Stage II as the Government approves in writing.

The work is intended to establish the northeast extension of the adjoining R. B. Phillips pegmatite, and consists of drilling NX diamond-drill holes to penetrate the pegmatite. When ground conditions are encountered that make it impossible to complete a hole with NX bit, the hole may be completed with BX bits or with BX and AX bits, in lieu of NX bit, but reduction in hole size shall be made from NX to BX to AX. Holes shall be drilled only with rods of the same size as bit and core barrel.

Holes shall be reamed and cased, and cemented and redrilled as necessary.

The Government shall not contribute to the cost of an incompleted hole, or to the cost of any hole that does not produce 80% core in the pegmatite zone. Wooden core boxes shall be used for core storage.

Records of each hole drilled shall be submitted with the Operator's monthly progress report, which shall also include a map showing the location of all holes drilled during the reporting period. All cores shall be properly identified as to drill hole number and the depths represented, and shall be retained for inspection and logging by the Government.

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

Stage I

Stage I consists of drilling two diamond core holes, Nos. 1 and 2, approximately as indicated on the attached map. The drill holes shall average approximately 200 feet in length, and the total drilling for the two holes shall not exceed 400 feet.

Stage II

Stage II consists of drilling two diamond core holes, Nos. 3 and 4, as indicated on map. These holes shall average approximately 200 feet in length and the total drilling for the two holes shall not exceed 400 feet.

Fixed Unit Costs[1/]

Stage I

Diamond drilling for NX size core - $10.00/ft.
BX size core - 9.60/ft.
AX size core - 9.00/ft.

Diamond drilling with NX bit
400 feet @ $10.00/ft. $4,000.00

Stage II

Diamond drilling for NX size core - $ 9.00/ft.
BX size core - 8.60/ft.
AX size core - 8.00/ft.

Diamond drilling with NX bit
400 feet @ $9.00/ft. 3,600.00

Estimated Total Cost of Project[1/] $7,600.00

Government Participation @ 75% $5,700.00

1/ Includes labor, supervision, reaming, setting and pulling casing, cementing and drilling out, transportation of men and equipment in and out, materials and supplies, boxing all core, road and drill site preparation, and all other costs whatsoever connected with the drilling.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/3	Anderson	600
4/3	Houk	600
4-4	Chambers	800
5/1	Selfridge	130
"	Johnson	110
"	Blutstedorf	100
5/2	C	220
		600

600

MAY - 1 1957

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

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Enclosed are the original and five copies of a proposed short-form contract signed by the Administrator for the Government. It consists of the form, Annex I (2 pages), two Consents to Lien, Exhibit A (2 pages), and three maps. Also enclosed are two extra copies of Annex I, Exhibit A, and two maps for Field Team use.

If the proposed contract meets with your approval, present it to the applicant for execution. Please explain to the applicant that the contract is a firm commitment to complete the work outlined at the agreed cost. Copies of the executed contract are to be distributed in the usual manner.

If any part of this proposed contract does not have either your approval or that of the applicant and cannot be amended within your delegated authority, then the original and all copies of the contract and the two extra copies of Annex I, Exhibit A, and the two maps are to be returned to this office, together with the proposed changes for consideration.

Copies of memoranda dated December 13 and 17, 1956, by Mr. N. E. Nelson, USGS, and Mr. W. F. Dietrich, USBM, respectively, relating to the project are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

Frank D. Lamb

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

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

Enclosures 12

WCAnderson:gad 4/3/57

8623

Spruce Pine, N. Carolina

April 26, 1957

Lawrence G. Houk

Defense Minerals Exploration Administration

Washington 25, D. C.

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Co.
Arnold Young Prospect
Mitchell County, N. C.

Dear Mr. Houk:

In reply to your letter of April 5, 1957, I wish to state that I, Frank W. Phillips and Sam W. Thompson are partners in the Arnold Young Mining Co. and that we own the larger part of stock in Mitchell Lumber Company. However none of the partners have any interest of any discription in either of the other two bidders on the core drilling for this mine.

The reason for this late reply is that we have been trying to obtain other bids, which we have been unable to do. This is due to the fact that the footage is too small for the amount of cost that will be incurred in building roads and getting water close to the top of the mountain where the holes are expected to be spotted.

I have called a number of companies who have diamond drills and do core drilling, only to have them refuse the work. I have talked to Mr. Boyd of Carolina Pyrophyllite Company, 1104 E. Veendover Ave., Box 2414, Greensboro, N. C. and he was not interested. I also talked to J. B. Lambert of Lambert Brothers Construction Co. Inc., Knoxville, Tenn. and he gave me the same answer.

Mr. Young, owner of the prospect, says he will not let us hold the lease much longer unless we start to work. So we will greatly appreciate your giving this your immediate attention.

Thanking you for your past DMEA assistance and for anticipated aid on this prospect, I am,

Very sincerely yours,

Frank W. Phillips

Frank W. Phillips

OFFICIAL FILE COPY
DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
4/29	C	220
4/29		600

DMEA Form 7
(12-56)

4/4 Anderson 600
OFFICIAL FILE COPY

Date	Surname	Code
4/5	Hash	600
"	Chamberlin	800
"	Johnson	110
"	Bartlesday	100
4/8	C	220
		600

600

APR 5 - 1957

Arnold Young Mining Company
c/o Mr. Frank W. Phillips
Spruce Pine, North Carolina

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina

Gentlemen:

Reference is made to your application for exploration assistance on the subject property.

It is understood by the Contract Administration and Audit Division that one of the partners of the Arnold Young Mining Company is the principal owner of the Mitchell Lumber Company, one of the bidders. They also say that there are indications that a partner has some financial interest in the other two bidders. If such is the case, it will be necessary that you obtain two additional bids from independent contractors before further consideration can be given to your application.

It is noted that the lowest bid was $10.00 a foot for NX size hole, when your estimate in the application was $6.00 per foot.

Sincerely yours,

SIGNED

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

WCAnderson:gad 4/4/57
Copy to: Admr. R. File
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

April 4, 1957

Mr. Robert A. Laurence, Region V, telephoning Mr. L. G. Houk.

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Co.
Arnold Young Prospect
Mitchell County, North Carolina

Mr. Laurence was advised by Mr. Houk that Mr. Chambers had intimated that the Mitchell Lumber Company, Explosives Supply Company and the Mitchell Distributing Company are interlocking firms and some of the group are among the applicants in the Arnold Young Mining Co. case. In such cases it is necessary to get two (2) bids from independent contractors before further consideration is given the application.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1019 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE
1-22	C	220
1-22	W.GH	600

January 16, 1957

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4388, Frank W. Phillips, Arnold Young Property, Mitchell County, N. C. (mica)

We wish to make the following comments on points brought up in your letter of December 12, concerning the subject application:

There is no inference in the examination report that the back of the stope or the axial trace of dragfolding represents the upward extent of the pegmatite. Strong dike-like pegmatite is exposed in the back of the stope, throughout its length, with no sign of upward termination. The lack of surface exposures can be partially explained by soil creed and talus cover on the steeper slopes. As pointed out in the examination report the strongest part of the containing structure is northeast of the No.2 shaft and its projectability should be fully as far to the northeast as it has been mined to the southwest. A longitudinal section is enclosed to illustrate the belief that the pegmatite will not plunge below the proposed sections. The topography carries the drill hole intersections well below the elevation of the floor of the stope. We, therefore, see no reason for changing our recommendations for exploration as outlined in the Field Examination Report.

The land ownership picture is confused and we believe it is a matter to be cleared up by the Applicants.

For your information there is enclosed a property map which shows the locations of the various leases. This map was plotted from legal descriptions given in the various leases. After studying this map we have come to the following

conclusion:

1. The location of the Arnold Young lease No. 1, DMEA-4388 (outlined in red) is correct according to the legal description.

2. The location of the Arnold Young No.2, DMEA-4388 (outlined in blue) is as shown. Both Arnold Young properties has been leased to Frank Phillips, et al.

3. The R. B. Phillips lease, DMEA-3422,(outlined in yellow) was not proper in the first place because it overlapped the original Arnold Young property.

4. The previous Arnold Young lease, DMEA-3717, was also improper because it overlapped the R. B. Phillips property.

5. The fence along the southwest boundary of the Arnold Young lease No.1, has been declared by representatives of both the Arnold Young and R. B. Phillips properties to be the boundary between the two properties.

6. The two Arnold Young properties are probably correctly shown on the enclosed map.

Also enclosed is a copy of the lease on the Arnold Young No.2, and seven copies of the Consent to Lien.

Robert A. Laurence

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

V. J. Lynch

V. J. Lynch, Member
U. S. Bureau of Mines

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 14 1957

DATE	INITIALS	CODE
3/14	C	220
3/15	Hook	600

March 12, 1957

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4388(mica) Arnold Young Mining Co.
Arnold Young Prospect, Mitchell County, N.C.

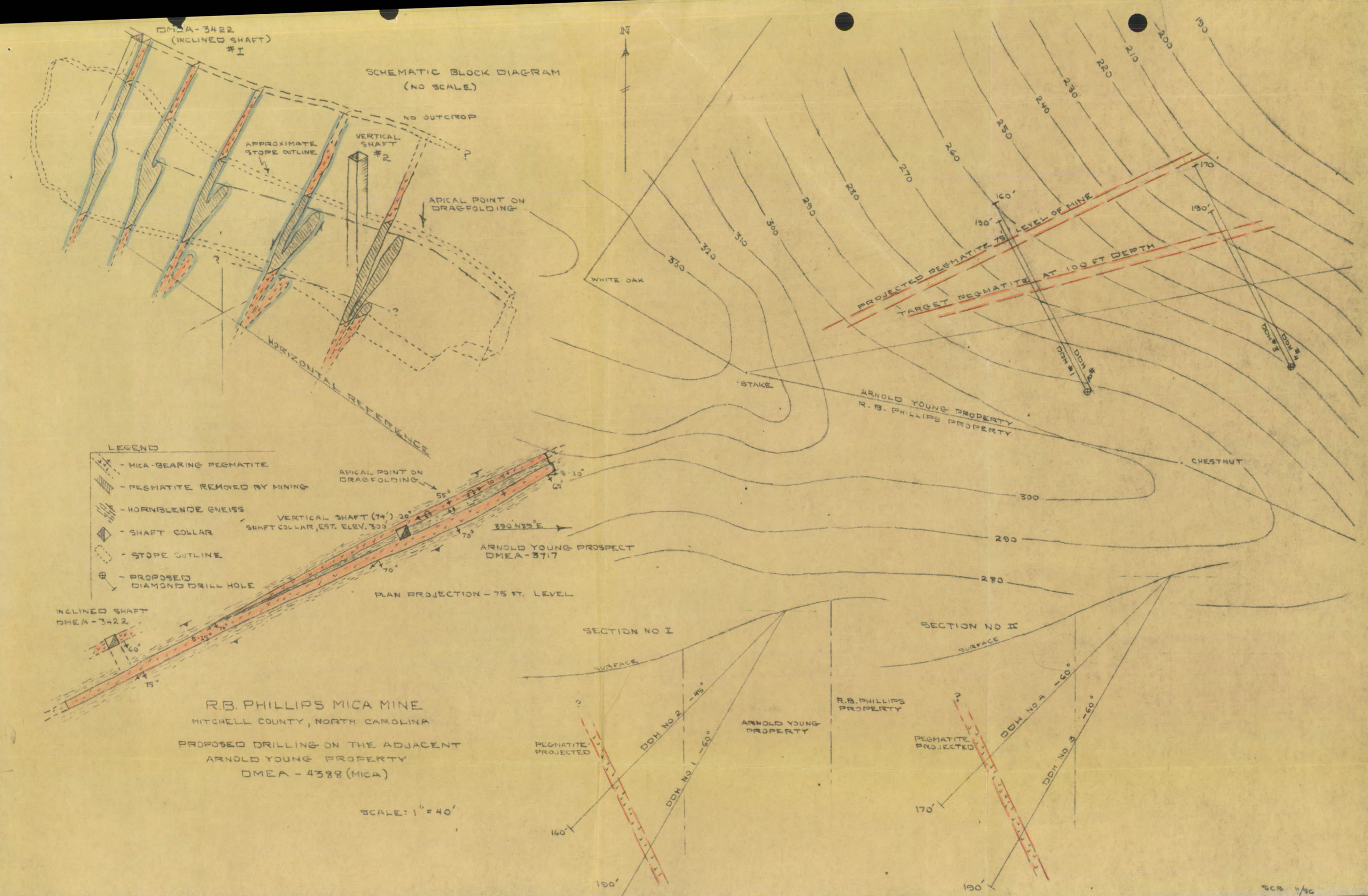
The applicants were recently contacted and the committee's letter of February 1 explained to them. They have supplied a certification of the property boundry in question between R. B. Phillips and Arnold Young. This is enclosed with this memorandum.

A visit was made to the R. B. Phillips Mine Feb.19 at which time the northeast stope heading had advanced 124 feet north eastof the new vertical shaft, or 72 feet southwest of the stake in the R. B. Phillips-Arnold Young property line. The pegmatite pinches and swells along strike but, in the heading is still from 6 to 8 feet thick and extremely rich in muscovite.

The Field Examiners believe that the original recommendations are valid and the outlined projection is supported by the recent stope advance toward the northeast.

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

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines


DMEA-3422
(INCLINED SHAFT)
#I
SCHEMATIC BLOCK DIAGRAM
(NO SCALE)
NO OUTCROP
APPROXIMATE STOPE OUTLINE
VERTICAL SHAFT #2
APICAL POINT ON DRAGFOLDING
HORIZONTAL REFERENCE
N
WHITE OAK
STAKE
ARNOLD YOUNG PROPERTY
R.B. PHILLIPS PROPERTY
CHESTNUT
PROJECTED PEGMATITE 75' LEVEL OF MINE
TARGET PEGMATITE AT 100 FT DEPTH
DDH #1
DDH #2
DDH #3
DDH #4
LEGEND
- MICA-BEARING PEGMATITE
- PEGMATITE REMOVED BY MINING
- HORNBLENDE GNEISS
- SHAFT COLLAR
- STOPE OUTLINE
- PROPOSED DIAMOND DRILL HOLE
VERTICAL SHAFT (74')
SHAFT COLLAR, EST. ELEV. 300
390' N75°E
ARNOLD YOUNG PROSPECT
DMEA-3717
PLAN PROJECTION - 75 FT. LEVEL
INCLINED SHAFT
DMEA-3422
SECTION NO I
SECTION NO II
SURFACE
PEGMATITE PROJECTED
DDH NO 1 -60°
DDH NO 2 -45°
DDH NO 3 -60°
DDH NO 4 -60°
ARNOLD YOUNG PROPERTY
R.B. PHILLIPS PROPERTY
R.B. PHILLIPS MICA MINE
MITCHELL COUNTY, NORTH CAROLINA
PROPOSED DRILLING ON THE ADJACENT
ARNOLD YOUNG PROPERTY
DMEA - 4388 (MICA)
SCALE: 1" = 40'
SCB 11/56

3/12

Frank Phillips called and we asked him to get bids for 400' of & 800 max 4 hole -
verify distance between #2 shaft and stake.

OK for Contract

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 4, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 7 1957

DATE	INITIALS	CODE
2/8	C	220
2/11	Hawk	600

February r, 1957
~~January xxxxxxxx~~

Memorandum

To: Operating Committee, DMEA- Washington

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

Subject: DMEA-4388-Mica. Arnold Young Mining Co., Spruce Pine, N.C. Arnold Young Prospect, Mitchell County, N.C.

Reference is made to your letter of February 1.

Mr. Bergman and Mr. Beck are in Spruce Pine today, and they will ask the Applicant to submit the map you have requested.

We have no objections to delaying the contract to observe northeastward progress on the R. B. Phillips Mine, but the Applicant probably will want to start drilling as soon as the contract at the Hawk Mine, where his drill is now accupied, is completed.

We agree that applicants should be required to present adequate evidence of ownership and relation of proposed work to property boundaries. But it is difficult to educate people to do something in a different way from that in which it has been done for the past 100 or 150 years. Judging by applications currently received, our efforts to do so are only slightly successful.

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

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

February 4, 1957

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

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, N. C.

Mr. Houk: Are they through with the Hawk yet? Is it costing a great deal to drill.

Mr. Laurence: They are trying to train a man.

Mr. Houk: It takes a man two or three years to make a diamond driller.

Mr. Laurence: I feel like it is a fair chance. The Bob Phillips is still going strong.

Mr. Houk: How come Bob Phillips gave that land and they did not own it?

Mr. Laurence: They own the beginning part where they want to do the work. The square runs over their boundaries. There are no accurate surveys and no corners marked.

Mr. Laurence: I am making it plain to the Phillips' that we want to see those iron stakes. I told the boys to make them point it out on the ground. They must hold until it is designated.

Mr. Houk: I think we have been lenient with those boys. Did you see my letter on the R. B. Phillips? We will have to inaugurate that procedure down there.

Mr. Laurence: The big difficulty is that after they submit it on paper we still do not believe it. On the Pitman they pointed out a stake on the ground different from the deed. Our fellows must go out and confirm it on the ground. Unless we check we don't know whether it is right or not.

Mr. Houk: We could start requiring them to give us the total acreage in the tract.

Mr. Laurence: We try to explain that we need the description. They just give us a lease tieing in, we dont know whether to believe them or not. People have bought and sold land like that for over 150 years over there.

Mr. Houk: If you are sold on it we will go along but we prefer to wait until they extend that line northeastward. We will write up a contract if they want to go ahead. Did you get our letter on the Arnold Young?

Mr. Laurence: I got that letter on the Arnold Young.

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.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/30	Houk	600
2/1	Selfridge	130
"	Johnson	110
"	Whittenberg	100
2-4	C	220
		600

600

FEB 1 1957

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

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Arnold Young Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to your memorandum of January 16, 1957, relating to the confused land picture. This case points out the need for the Field Team to verify on the ground the ownership of the land to be included in a contract. We should require the Arnold Young Mining Company to supply a correct map showing the relationship of the two shafts with respect to their common boundary lines shown on the Shales Map (S. 60 E., 99' and S. 78° E. 231'). The map should be signed and certified by Arnold Young and R. B. Phillips.

In the future after a contract is recommended we will require the applicant to show an accurate measurement and compass bearing from the proposed DMEA work to the closest identifiable corner. The minimum acceptable area should be a 600 foot square or the entire tract when less than eight acres. No work shall be prosecuted within 100 feet of a property boundary. Exceptions would be rare. The applicant should be required to give a metes and bounds description of the total acreage within which the leased parcel of land is located. The bounding owners should also be shown. We feel that we have been most lenient in accepting the applicants representations that they have a sufficient interest in the land but, because of the several cases of conflict, we believe that the new procedures should be put into effect immediately to safeguard the Government's interest.

We would prefer to await future northeastward developments of R. B. Phillips toward the property line before drilling here. However, if the ownership of the land can be clarified, we shall prepare a contract along the lines you have suggested.

Approved:

Frank D. Lamb (24B)
Member, Bureau of Mines

N. E. Nelson (24B)
Member, Geological Survey

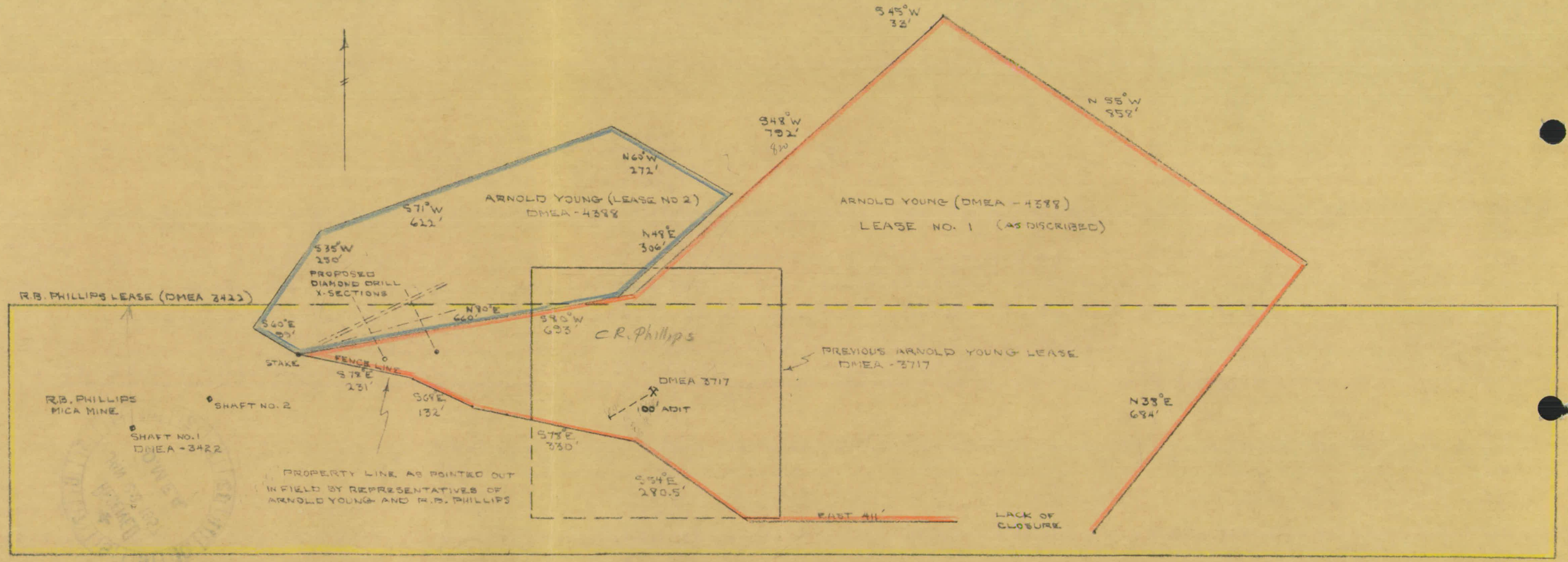
Sincerely yours,

George C. Selfridge (24B)
Chairman, Operating Committee

LGHouk:gad 1/30/57

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

8623


S 45° W
33'
N 55° W
858'
S 48° W
792'
N 65° W
272'
ARNOLD YOUNG (LEASE NO 2)
DMEA - 4388
S 71° W
622'
N 48° E
306'
S 35° W
250'
PROPOSED
DIAMOND DRILL
X-SECTIONS
ARNOLD YOUNG (DMEA - 4388)
LEASE NO. 1 (AS DISCRIBED)
R.B. PHILLIPS LEASE (DMEA 3422)
N 80° E
660'
S 60° E
80'
S 80° W
693'
C.R. Phillips
STAKE
FENCE LINE
S 78° E
231'
S 68° E
132'
PREVIOUS ARNOLD YOUNG LEASE
DMEA - 3717
DMEA 3717
100' ADIT
R.B. PHILLIPS
MICA MINE
SHAFT NO. 2
SHAFT NO. 1
DMEA - 3422
S 78° E
330'
N 33° E
684'
PROPERTY LINE AS POINTED OUT
IN FIELD BY REPRESENTATIVES OF
ARNOLD YOUNG AND R.B. PHILLIPS
S 34° E
280.5'
EAST 411'
LACK OF
CLOSURE
SCALE: 1" = 200'

RECEIVED
JAN 22 1957
D.M.E.A.

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

December 17, 1956

RECEIVED
DEC 17 1956
D.M.E.A.

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: W. F. Dietrich, Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4388 (mica)

Applicant: Arnold Young Mining Company

Name and Location of Property: Arnold Young Property, Mitchell County, North Carolina

Date of Field Team Report: 12/5/56

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 12/10/56

Field Team Recommendation: Recommend approval of a diamond-drilling contract.

Comments:

1. This prospect is on the projected strike of the R. B. Phillips prospect (DMEA 3422) from which 11,558.45 pounds of full-trim strategic mica valued at $361,713.91, was sold to GSA depot between December 1954 and April 1956.

2. There appears to be a good opportunity of locating a reserve of strategic-mica-bearing pegmatite at reasonable cost.

3. Total estimated costs are in the amount of $3,692.00

Recommendation:

I concur with the recommendation of the field team that a diamond-drilling contract be approved.

W. F. Dietrich

W. F. Dietrich

IN REPLY REFER TO:

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

RECEIVED DEC 14 1956 DMEA

December 13, 1956
Re: DMEA 4388
Arnold Young Mining Co.
Arnold Young Property
Mitchell County, North Carolina
Applied for: Not given
Recommended - Mica

Memorandum

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

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

Subject: Review of Field Team Report

The applicant requested assistance in searching by diamond drilling for the projected extension of a strategic mica-bearing pegmatite, 270 feet on strike from the place it is presently being mined in the R. B. Phillips mine. An attempt was made to find the extension by drifting, under contract Idm-E820 DMEA 3717. That work resulted in failure to find a strategic mica-bearing pegmatite. The relationship of that work to that now recommended by the examiners and Field Team is not shown on the map, unless the Old Mine is the scene of the work, but it is reasonably certain the pegmatite drifted upon is not the same as that in the Phillips Mine.

The present recommendation is based upon the belief that the drag fold with which the mica in the Phillips Mine is associated is well below the surface, and, so far as known, the pegmatite does not crop out. The hypothesis appears to be reasonable. Vertical or near vertical holes should be effective and involve less drilling, (or more holes, if needed) assuming the position of the pegmatite is established by an early hole.

I accept the new construction and concur with the recommendation of the examiners and the Field Team.

N. E. Nelson

N. E. Nelson

Docket Copy
Surname:
Hourly
Selfridge
F. Johnson
Mittendorf

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

DEC 12 1956

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

Re: Docket No. DMEA-4388-Mica
Arnold Young Mining Company
Frank W. Phillips, et al.
Arnold Young Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to the subject field examination report of December 5, 1956, by Messrs. S. C. Bergman and V. J. Lynch.

The recommendation of the examining engineers, concurred in by the Field Team, does not appear to be justified by the information in the examination report. It is not believed that projecting this pegmatite an additional 265 feet in the case of Drill Holes 1 and 2, and 370 feet in the case of Drill Holes 3 and 4 is sound practice. It would appear from an inspection of the schematic diagram that the projection of the back of the stope from the apical point on the drag folding at minus 10 to 15 degrees to the northeast would place the proposed drill holes above the projected pegmatite. We are reluctant to write a contract on this application for the following reasons:

(1) The improbability of the pegmatite persisting to the northeast.
(2) The confused land ownership picture.
(3) The leased area is too small for a project as part of the proposed drilling appears outside the leased area.

The ".....reluctance on the part of the Operators to hire or invest in competent personnel or methods" is regretable but the DMEA examining engineers are not to act as consultants for the applicant.

The area proposed for DMEA-4388 and the completed project DMEA-3717 (Arnold Young Mining Company), appear to be within the tract owned by R. B. Phillips and explored under DMEA-3422. Copies of a map are enclosed showing our plotting of the leased areas.

In view of the foregoing, we will defer action on the subject application until we have your comments on the above points.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GHB)

Approved:

Frank D. Lamb (GHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GHB)
Member, Geological Survey

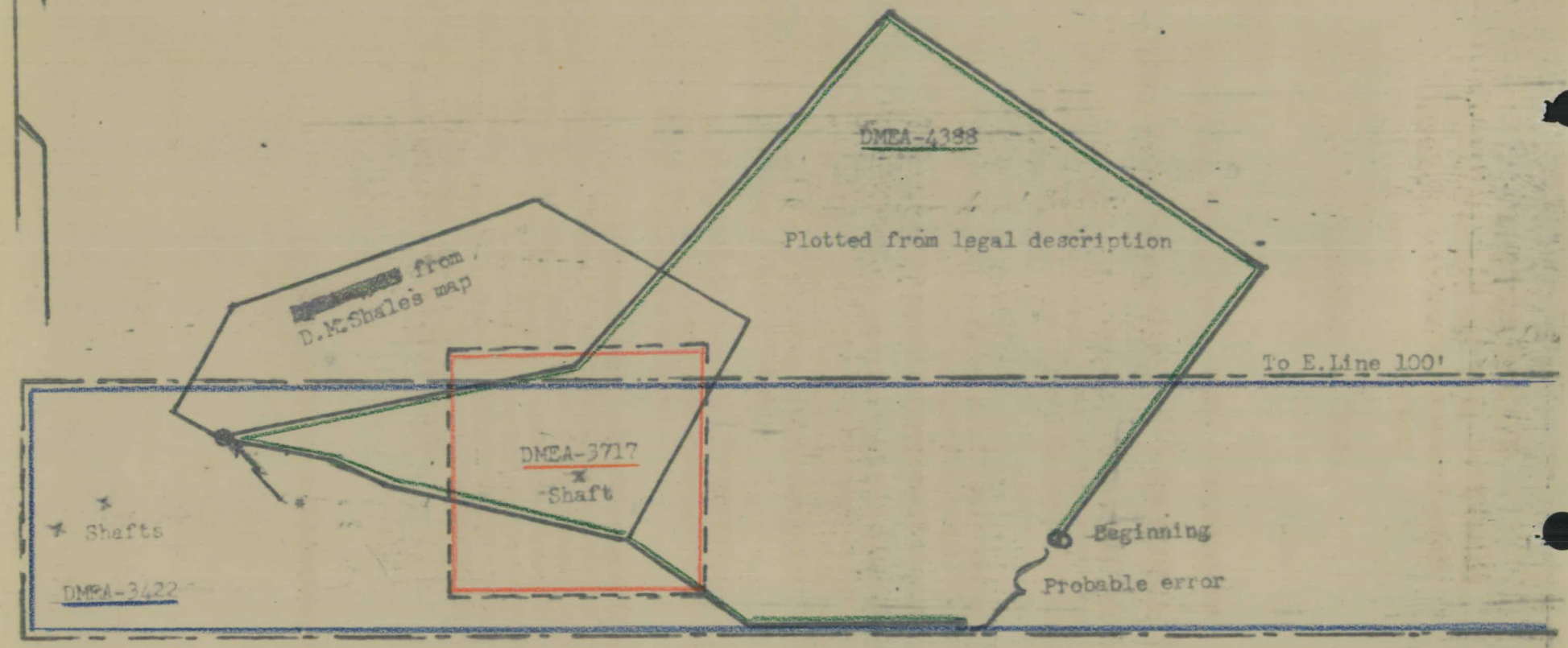
Enclosures 2

LGHouk:gad 12/12/56
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

Sketch Showing
Overlapping property boundaries

Dockets Nos. 3422 - 3717 - 4388

Scale 1" = 300 feet



*Common point in survey and map.

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

RECEIVED
DEC 12 1956
D.M.E.A.

December 5, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Field Examination Report, DMEA-4388 (mica)
Arnold Young Mining Co., Spruce Pine, N.C.
Arnold Young Property, Mitchell County, N.C.

Enclosed are four copies of the subject report, nine extra copies of the map prepared by our field examiners and a copy of the Applicant's topographic map attached to each copy of the report.

We believe this affords a good opportunity to indicate a substantial reserve of strategic-mica-bearing pegmatite with a few diamond drill holes. Therefore, we recommend approval of a contract providing for drilling four holes, as shown on the report map.

Please note that the R. B. Phillips shaft is incorrectly located on the applicant's map. It is correctly shown on the field examiners' map.

It is our understanding that the applicant plans to use Mitchell Lumber Company's drill rig, which is now on the Hawk mine job. However, the job will presumably be contracted to the Mitchell Lumber Company, although Frank W. Phillips is a principal owner of that company as well as the Arnold Young Mining Company. He has not submitted bids of other drilling contractors, although such bids were obtained in connection with the Hawk mine drilling proposal.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

V. J. Lynch
V. J. LYNCH
MEMBER, BUREAU OF MINES

Reviewed by
DMEA OPERATING COMMITTEE
12-10-56
(date)

Rec'd maps in envelope.

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
DEC 24 1956
D.M.E.A.

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD EXAMINATION REPORT

On

DMEA-4388 (mica) ARNOLD YOUNG PROSPECT
Mitchell County, N. C.

By

S. C. Bergman, Geologist
U. S. Geological Survey

and

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
12-10-56
(date)

December 5, 1956

Ch - Site Exam Rpt

FIELD EXAMINATION REPORT

ON

DMEA-4388 (Mica) ARNOLD YOUNG PROSPECT

Applicant: The Arnold Young Mining Company, Spruce Pine, N.C.

Summary

In a poorly prepared application, the above partnership proposes to explore for the northeast extension of the highly productive R. B. Phillips pegmatite. A proposal for drilling 4-angle diamond drill holes, totaling 710 feet has been prepared by the Examiners based on a topographic map supplied by the applicant.

The previous unsuccessful Arnold Young Prospect (DMEA-3717) as shown on the enclosed map is clearly on a different structure than the subject pegmatite.

Introduction

Location:

The proposed drill site is near the crest of a northwest-southeast trending ridge on Burns Mountain at an elevation of approximately 3400 feet. It is 0.56 airline miles S 72° W from the intersection of State Highway 26(104) and the Mine Creek Road, Mitchell County, North Carolina (Micaville, N.C. Quad. TVA Ed.1934 1/24,000).

No formal examination was made by the Field Examiners, except for several side trips to the R. B. Phillips Mine for check measurements of the relationship between the existing shafts and the property line. Some cursory mine mapping was done underground in an attempt to outline the gross geological relationships (see schematic diagram). Instead of 128 feet from shaft No.2, to the nearest property corner as indicated on the Applicant's map, it is found to be 198 feet. The spacing and orientation of shaft No. 1 to shaft No.2 was found to be in error. The topography on which the proposal is based was not carried far enough to tie in the collar elevation of shaft No. 2. The collar elevation was estimated by extrapolating from the nearest control for purposes of orienting and locating the drill hole sections.

The R. B. Phillips stope is a continuous opening about 285-feet along strike, about 120 feet downdip from the collar of shaft No.1 and 74 feet vertically below the collar of shaft No.2. The

northeast heading is about 85 feet northeast of shaft No.2 and about 110 feet along strike southwest of the Arnold Young property line (stake corner).

Full trimmed strategic mica sold to the GSA depot from the R. B. Phillips Mine between December 1954 and April 1956 has amounted to 11,558.45 pounds valued at $361,713.91. In the block 5,630 pounds were sold for $1520.00. Sales of trimming scrap indicate a recovery from the block of about 4.2 percent.

Geology (R. B. Phillips Mine)

A strong dike-like pegmatite has been continuously mined over a strike length distance of about 285 feet and to depths of from 74 to 120 feet from the surface (see schematic block diagram). The pegmatite strikes N 58 to 62° E and dips 60 to 70° southeast. It is from 4 to 7 feet thick with well developed footwall drag-folding providing local duplication of the pegmatite up to a gross thickness of 17 feet including the intervening rib of country rock. The structure is emplaced concordantly in a fine-grained well-banded hornblende gneiss with a 6 to 12 inch contact zone of coarsely crystalline biotite schist.

An asymmetrically developed footwall dragfold is exposed most of the length of the stope. The dragfold carries a larger proportion of muscovite than the tabular portion of the pegmatite. It is represented at the DMEA shaft (No.1) by a local thickening and "rolling" of the contacts developing asymmetrically to the northeast until an apical point is reached about 30 feet northeast of shaft No.2 (see map). From this point the axial trace plunges away to the southwest (-20°) and to the northeast (-10°). About 5 feet of a second major dragfold is exposed in the floor of the stope near shaft No.2 indicating a desirable repetition of such structures in the vertical plane. This structure seems to be as rich in muscovite as is the one above it. The footwall folding represents pre-existant or contemperaneous differential movements along weak steeply-inclined foliate planes amounting to almost a complete decollement of the two walls. It is thought that the structure developed from stresses contemporaneous with the regional injection of magmatic elements. The contemporaneous nature of the structure is indicated by the asymmetrical and generally incompetent, irregular nature of the folding, formed in a highly mobile state. The presence of marginal fold structures and their vertical repetition contributes greatly to the volume of minable pegmatite as well as providing a good structural locus for the occurrence of muscovite.

The pegmatite itself is essentially unzoned, although

locally, mineral layering is noticeable especially adjacent to the hanging wall. Pegmatite consists of coarsely crystalline oligoclase, disseminated clear to smoky quartz, and 2 to 8 inch books of green to brownish-green muscovite. Accessory minerals consist of red garnet, and apatite, with considerable sericite being present. The apatite fluoresces a dark red under short wave ultraviolet and occurs in crystals up to 6 inches long usually oriented perpendicular and adjacent to the hanging wall. The pegmatite is as uniformly abundant in muscovite as any pegmatite of its size in the Spruce Pine Area.

Considerable crosscut bulldozer trenching has been done on both sides of the R. B. Phillips-Arnold Young property line with absolutely no success in exposing the strike-extensions of the pegmatite. This does not mean that the pegmatite cannot be found at depth. (At shaft No.2, 30 feet southwest of the strongest structural developmemt on the pegmatite, no outcroping is present) Because of the strong structural development at the northeast end of the stope, there is reason to believe that pegmatite can be projected at least as far northeast of the present heading as it has been mined southwest (285 ft). This projection would carry pegmatite past the first proposed drill hole section as shown on the enclosed map.

The muscovite in the R. B. Phillips mine is a grass to brownish green in color and flat to flat "A" in character. Occasional to rare reeved, bent, cracked or "locky" books are found as well as some mineral "staining" or intergrowth, usually biotite and rarely apatite quartz and garnet. Although not the best quality muscovite, it is uniformly abundant in the pegmatite, a feature which more than offsets its other defects.

Conclusions and Recommendations

Geological mapping in the R. B. Phillips Mine indicates a pegmatite of strong projectability to the northeast and of uniform and abundant strategic muscovite content. A good picture of the lateral reserves of the R. B. Phillips pegmatite can be gained by diamond drill cross-sections. Interception of pegmatite in holes as outlined would indicate reserves of considerable magnitude and reliability

The competent outlining of the reserve picture cannot be left to Operators, land owners, lessees, etc., because inherent uncertanties in the mica-buying program as well as the occurence of muscovite have ingrained a reluctance on the part of the Operators to hire or invest in competent personal or methods.

Exploration or development outside the DMEA program is seldom done on more than a day by day basis and does not give a sound reserve picture.

It is proposed that 4 diamond drill holes totaling 710 feet be drilled in numerical succession as outlined on the map. The holes are targeted to explore to a depth of 100 feet downdip from the surface.

DDH No.1	- 60°;	190 ft	oriented	N 27° W
No.2	- 45°;	160 ft	"	N 27° W
No.3	- 60°;	190 ft	"	N 27° W
No.4	- 45°;	170 ft	"	N 27° W

All holes should be started at NX size and reduced to BX or AX size as necessary, but only in sucession. From past experience with the Operator it is recommended that he be required to drill only with rods of the same size as his bit and core barrel.

Costs

The applicant has not submitted bids as is usually required for such projects. If this is not required and the applicant is allowed to use his own drill (Mitchell Lumber Co.), it is recommended that unit costs be the same as allowed for the Hawk Mine drilling (DMEA-4337)

$5.20/ft for NX size core
4.70/ft for BX size core
4.25/ft for AX size core

Diamond drill with NX size bit, 710 ft @ $5.20/ft.

$3,692.00

Holes to be reamed, cemented, and cased as necessary. Costs include : Supervision, reaming, cementing, setting and pulling casing, transportation of men and equipment in and out, boxing all core a and all other costs whatsoever connected with the drilling.

Estimated Cost of Project.. $3,692.00

December 5, 1956

S. C. Bergman, Geologist
U. S. Geological Survey

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

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

RECEIVED
OCT 29 1956

October 25, 1956

Memorandum

To: Operating Committee, DMEA - Region V - Washington

From: Executive Officer, DMEA - Region V - Knoxville

Subject: DMEA-4388(mica) Arnold Young Mining Co., Spruce Pine, Arnold Young Prospect, Mitchell County, N. C.

Reference is made to your letter of October 19.

Immediately after we wrote you August 13, we advised the Applicants that no consideration could be given to the request for drill holes between the R. B. Phillips and Arnold Young mines until a map of the area was furnished to us. Last week, the Applicants gave us a topographic map of the Arnold Young property and some adjacent area. We now plan to revisit the property, using this map as a basis for an examination.

The map clearly shows that the Arnold Young and R. B. Phillips mines are on different pegmatites. However, it does not show any geology, any proposed drill sites, or angles or inclinations of proposed holes. Further, we doubt that the Applicants can provide such information.

Thus, as we think there probably is a suitable exploration target here, the only way to set up a project is for our geologists to do it. If this is not too lengthy a chore,

we will attempt to do it and submit some recommendations shortly thereafter, but we are reluctant to devote a great deal of time in the field to doing what is really the Applicnt's work.

When the field men report the results of their visit, we will advise you.

Robert A. Laurence

Robert A. Laurence

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

DOCKET COPY
Surname:
Hopkins
Houk
Selfridge
Mittenthal

OCT 25 1956

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

Re: Docket No. DMEA-4388-nice
Arnold Young Mining Company
Frank W. Phillips, et al.
Arnold Young Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to your memorandum dated August 13, 1956, in which it was implied that a re-examination of the subject property would be made.

If another examination of the property has been completed, we will appreciate receiving the Field Team's report and recommendations at an early date.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

Frank D. Lamb (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

JHopkins:ms 10/18/56
Copy to: Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Admr. R. File

R.C.L.

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

August 13, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

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

Subject: DMEA-4388 (Mica)
Arnold Young Mining Company, Spruce Pine, N. C.
Arnold Young prospect, Mitchell County, North Carolina

Reference is made to your letter of August 9.

No work has been done at the original Arnold Young mine (DMEA-3717) since completion of the work under contract Idm-E820. Mica at that mine was neither abundant enough nor good enough to justify any more work.

The present applicants propose to core-drill for the extension of the R. B. Phillips pegmatite along its strike projection from the adjacent R. B. Phillips property (DMEA-3422).

According to Mr. Frank W. Phillips the present heading of the R. B. Phillips mine is 170 feet from the Arnold Young property line, and at that point the pegmatite is 12 to 14 feet wide and vertical. We have not verified these data, and are inclined to think the distance is nearer 300 than 170 feet. Mr. Phillips further states that pegmatite is exposed at two or three places between the R. B. Phillips and original Arnold Young mine and it is his opinion that both mines and the intervening exposures (a total strike length of about 1000 feet) are on the same pegmatite. We are skeptical of this, though it does seem probable that the R. B. Phillips pegmatite may extend across to and on the Arnold Young property.

When asked where he wanted to drill, Mr. Phillips was indefinite, saying that anywhere we approved would be all right.

Until we have re-examined the Arnold Young property with this proposal in mind, we can not make a definite recommendation.

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AUG 15 1956

However, we do not see how an intelligent drilling program could be laid out to explore for a pegmatite at least 300 feet beyond its nearest known occurrence, without a detailed topographic and geologic map. This is a responsibility of the applicant, not the Government, since there is not an available open-file map of the area involved, as there was at the Hawk, Sinkhole, and other mines where drilling was done under DMEA contracts.

Robert A. Laurence
Executive Officer

V. J. Lynch
Member, Bureau of Mines

Docket Copy
Surname:
Houk
Martin
Johnson
Whitenburg

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

AUG - 9 1956

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

Subject: Docket No. DMEA-4388 - Mica
Arnold Young Mining Company
Frank W. Phillips, et al.
Arnold Young Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to the application for exploration assistance by the Arnold Young Mining Company on land previously explored by C. R. Phillips and Brown Sparks under DMEA-3717.

Without making a field examination, can you tell us whether any work has been done on the subject property since the completion of DMEA-3717? We would also be pleased to receive your comments on the merits of the applicant's request for diamond drilling.

Copies of memoranda dated July 23 and 24, 1956, by Mr. N. E. Nelson, USGS, and Mr. W. F. Dietrich, USBM, respectively, relating to the project are enclosed.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (WB)

Approved:

FRANK D. LAMB (WB)
Member, Bureau of Mines

N. E. Nelson (WB)
Member, Geological Survey

Enclosures 4

LGHouk:gad 8/7/56
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

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

RECEIVED
JUL 25 1956

July 24, 1956

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: W. F. Dietrich, Chief
Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4388 (mica)

Applicant: Arnold Young Mining Co. (Phillips-Thompson-Grindstaff-Parseley)

Name and Location of Property: _____, _____, N. C.

Date Application Rec'd. by Br. of Ceramic & Fertilizer Materials: 7/19/56

Comments:

1. The application, as submitted by the applicant, is inadequate to determine the location of the property, geologic features, proposed exploration, or amount desired to conduct exploration.

2. Although it would be desirable for the applicant to furnish more complete information, it appears that a visit by an examiner would furnish more useful data.

Recommendation:

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

W. F. Dietrich

W. F. Dietrich

Attachment

IN REPLY REFER TO:

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

RECEIVED
JUL 24 1956

July 23, 1956

Re: DMEA 4388
Arnold Young Mining Co.,
(Partnership)
Arnold Young prospect
Mitchell Co., N. C.
No estimate of cost. Mica

Memorandum

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

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

Subject: Review of Application.

The applicant requests assistance in diamond drilling a narrow and split pegmatite, which under contract E820 (DMEA 3717) was explored by an adit drift 100 feet long, at a cost, including bulldozing and buildings, of $3,364.00.

"The work accomplished under this contract did not expose a deposit of strategic mica, additional work is not warranted, nor should a certification of discovery be issued." Final report, Sept. 20, 1955. Underlining by writer.

The operators now think the mica potential of the pegmatite is higher at depth as it may be the same lead as that at the R. B. Phillips mine. The Field Team Final report does not support the opinion of the operators.

I concur with that definite opinion and recommend denial of this application.

N. E. Nelson

N. E. Nelson

July 19, 1956

Arnold Young Mining Co.
Spruce Pine,
North Carolina

Subject: DMEA-4388
Re: Exploration Assistance
Arnold Young Mine

Gentlemen

The receipt of your application dated July 11, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4388 and referred to the Nonmetallic Minerals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

July 19, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region V

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 V.

DMEA
-4388 Arnold Young Mining Co.
Arnold Young Mine

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

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

RECEIVED
JUL 19 1956

July 17, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

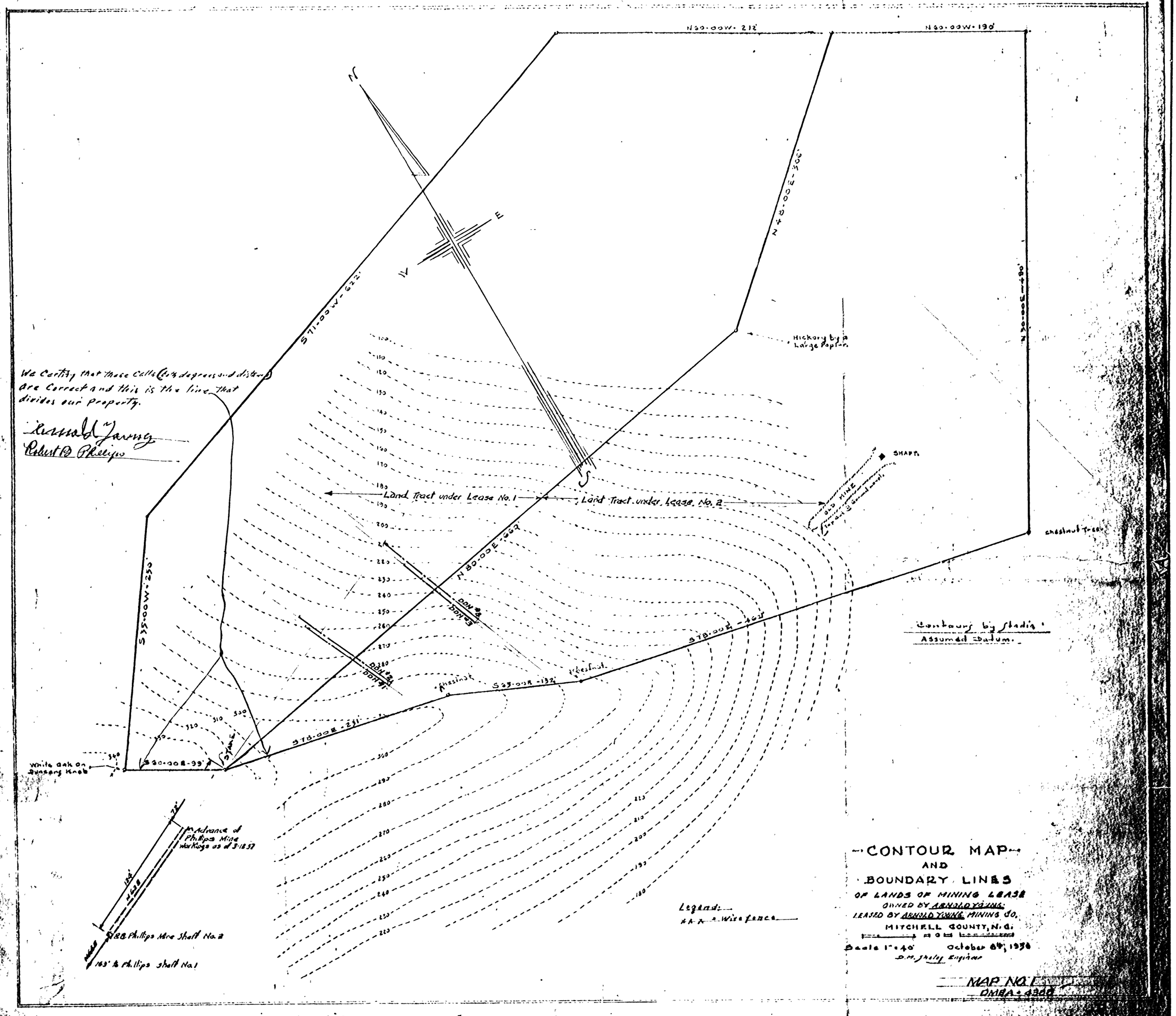
Subject: Application from Arnold Young Mining Co. Spruce Pine, N.C.
Arnold Young Mine, Mitchell County, N. C. (mica)

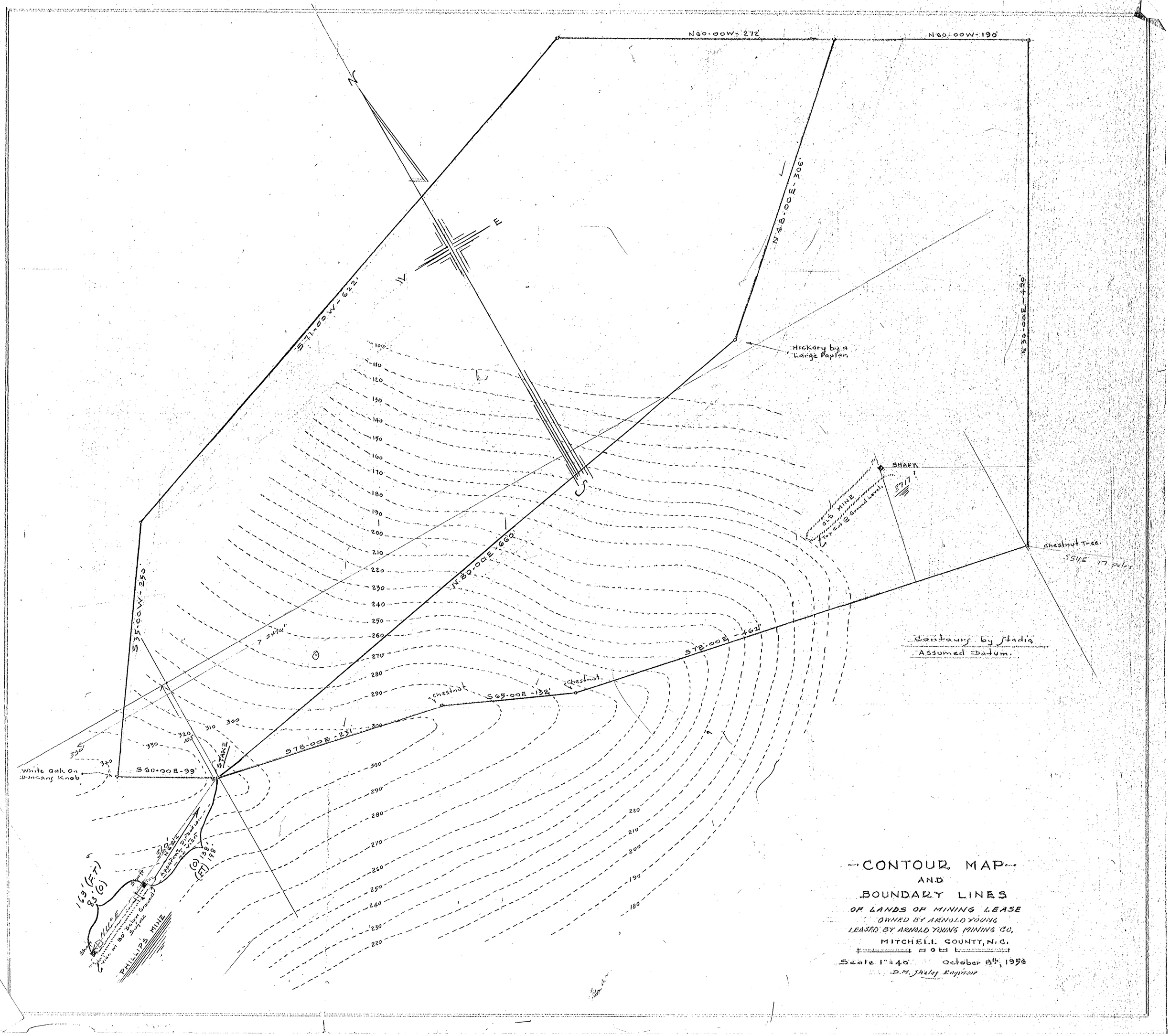
Enclosed are three copies of the subject application, with a copy of the lease and six signed copies of the Consent to Lien. We are keeping the fourth copy of the application.

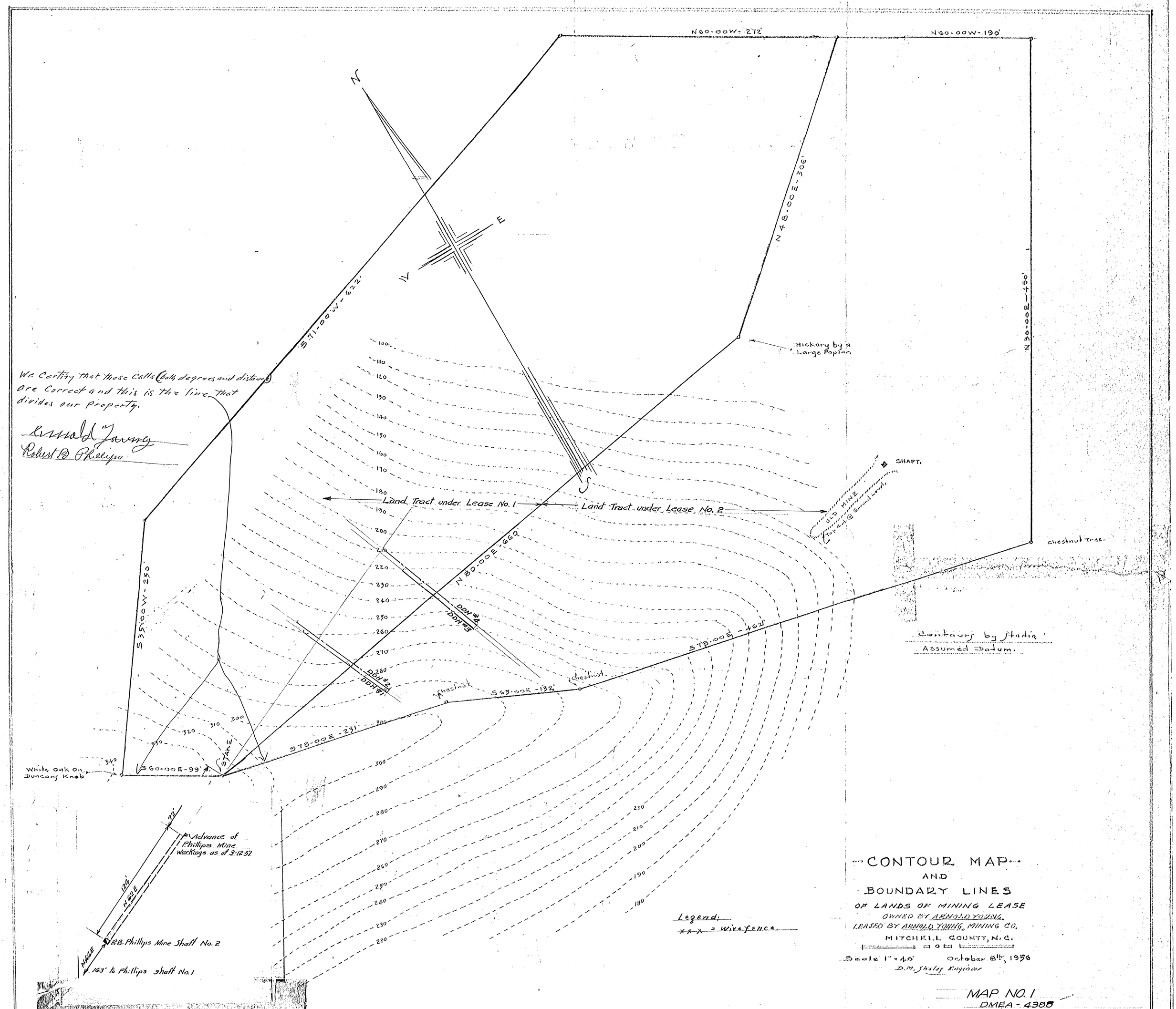
This Property was explored under a previous contract - DMEA-3717, Idm-E820.

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

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines


N 60-00W-212'
N 60-00W-190'
N 30-00E-480'
N 48-00E-300'
S 11-00W-622'
N
E
W
S
Hickory by a Large Poplar
We Certify that these Calls (bearings and distances) are Correct and this is the line that divides our Property.
Arnold Young
Robert B. Phillips
Land Tract under Lease No. 1
Land Tract under Lease No. 2
SHAFT
OLD MINE
Chestnut Tree
N 80-00E-662'
S 35-00W-250'
Dump
S 78-00E-402'
S 65-00E-132'
Chestnut
S 78-00E-231'
S 30-00E-99'
White oak on Dunsang Knob
Contours by Stadia
Assumed Datum
Advance of Phillips Mine Workings as of 3-1957
72'
124'
163' to Phillips Shaft No. 1
Legend:
x x x = Wire fence
CONTOUR MAP
AND
BOUNDARY LINES
OF LANDS OF MINING LEASE
OWNED BY ARNOLD YOUNG
LEASED BY ARNOLD YOUNG MINING CO.
MITCHELL COUNTY, N.C.
Scale 1" = 40'
October 8th, 1958
D.M. Shelby Engineer
MAP NO. 1
DMBA-4300


N 60-00W-272'
N 60-00W-190'
N 48-00E-306'
N 30-00E-490'
S 71-00W-622'
S 35-00W-250'
N 80-00E-660'
S 78-00E-462'
S 65-00E-132'
S 78-00E-231'
S 80-00E-99'
Hickory by a Large Poplar.
chestnut Tree.
S54E 17 poles
SHAFT
Old MINE
Top cut @ Ground Level
chestnut
chestnut
STAKE
White oak on Duncans Knob
PHILLIPS MINE
Shaft
Vein at 80' below Ground Surface
Contours by Stadia
Assumed Datum.
CONTOUR MAP
AND
BOUNDARY LINES
OF LANDS OF MINING LEASE
OWNED BY ARNOLD YOUNG
LEASED BY ARNOLD YOUNG MINING CO.
MITCHELL COUNTY, N.C.
Scale 1"=40'
October 8th, 1958
D.M. Staley Engineer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Hickory by a Large Poplar.
We Certify that these Calls (both degrees and distance) are Correct and this is the line that divides our Property.
Arnold Young
Robert B. Phillips
Land Tract under Lease No. 1
Land Tract under Lease No. 2
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OLD MINE
Top Cut @ Ground Level
chestnut Tree.
N80-00E-662'
S55-00W-250'
DDH #4
DDH #3
DDH #2
DDH #1
S78-00E-462'
chestnut
S65-00E-132'
chestnut
S78-00E-231'
SHAFT
S80-00E-99'
White oak on Duncans Knob
Contours by Stadia
Assumed Datum.
Advance of Phillips Mine workings as of 3-12-57
72'
124'
N62E
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R.B. Phillips Mine Shaft No. 2
163' to Phillips Shaft No. 1
Legend:
xxx = Wire fence
CONTOUR MAP
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OF LANDS OF MINING LEASE
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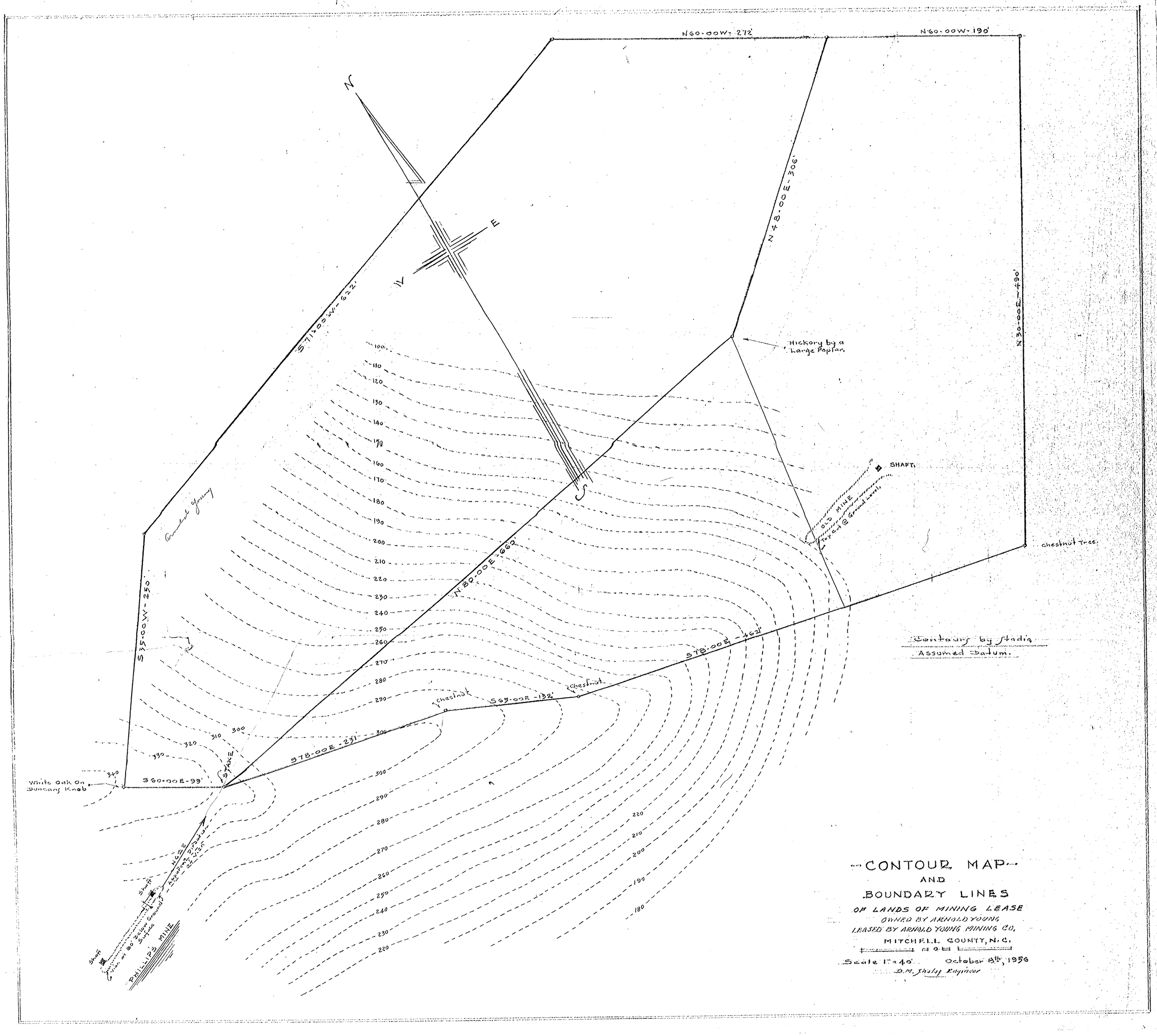
LEASED BY ARNOLD YOUNG MINING CO.
MITCHELL COUNTY, N.C.
Scale 1" = 40'
October 8th, 1956
D.M. Shaley Engineer
MAP NO. 1
DMEA - 4388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Hickory by a Large Poplar.
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Top at Ground Level.
chestnut Tree.
Contours by Stadia
Assumed Datum.
Chestnut
Chestnut
STAKE
White oak on Duncans Knob
Shaft
Shaft
N6°E
Apparent Dip of Vein 21°
Vein at 90' below Ground Surface
PHILLIP'S MINE
CONTOUR MAP
AND
BOUNDARY LINES
OF LANDS OF MINING LEASE
OWNED BY ARNOLD YOUNG
LEASED BY ARNOLD YOUNG MINING CO.
MITCHELL COUNTY, N.C.
Scale 1"=40'
October 8th, 1956
D.M. Shelby Engineer