☑ Audited 12/3/54 W[redacted]K ANALYSIS SHEET - DMEA PROJECT[redacted] ☐ Actual Cost

☐ Certified Analysis as of 12/20/54 ☑ Agreed Unit Costs

Incl. Voucher for Nov. 1954

Name Hefner Mining Company Docket No. 3283

State No. Carolina Commodity Mica Idm-E No. 693

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	75 Ft.	$2,400.00	75 Ft.	$2,388.00	$2,388.00
Raising					
Shafts	50 Ft.	$2,200.00	39½ Ft.	1,738.00	1,738.00
Winzes					
Drilling (Specify)					
Surface Excavation		54.00		54.00	54.00
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		38.00		—	—
Other (Specify)					
Totals		$4,692.00		$4,180.00	$4,180.00

Prepared by Walter C. Anderson

71626

Mr. Anderson

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Sam L. Phillips, Bascom Henline,
Dock Henline, and M. L. Swann
d/b/a Hafner Mining Company
Spruce Pine, North Carolina

pertaining to Exploration Project Contract No. Idm-E693, Docket No. DMEA-3283, for the months of September, 1954 to November, 1954, inclusive, covering a project for the exploration of mica on property, known as the Hafner Mine, located in Catawba 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 the Field Team's Final Report, 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 agreed estimated costs of units 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		$4,180.00
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$4,180.00

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 Three thousand one hundred thirty-five and no/100 Dollars,

$3,135.00

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

December 3, 1954

MF-200 (A)
(February 1952)

Received by the United States Mineral Lands Division
Recorded
AUG 26 1954

DOCKET NO. DMEA - 3283

COMMODITY Mica

Division copy
IDM - E 693

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

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 2nd day of August, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Sam L. Phillips, Barcom Henline, Dock Henline, and R. L. Shand, partners, doing business as Bafner Mining Company. Spruce Pine, North Carolina

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

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of North Carolina, County of Catawba, described[3] as follows: as set forth in Annex I.

the Operator represents and undertakes:[4]

(*a*) ~~That the Operator is the owner in possession and entitled to possession, and that the property is subject only to the encumbrances, if any, as to each of which the subordination agreement of the holder is attached.~~

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

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

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

in or upon the described land; and shall bring the project to completion within a period of Five(5)Months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $3,519.00, which is 75 percent of $4,692.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations. See Article 11, substituted for Article 6.

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

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

ARTICLE 9. *Changes and added provisions.*—That part of the second sentence in Article 7 beginning with the word "Provided" is deleted.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Meitzendorf
Administrator, Defense Minerals Exploration Administration

HEFNER MINING COMPANY

(SEAL)

Sam L. Phillips — Partner

Roscoe Werline — Partner

Dora Werline — Partner

M. L. Simms — Partner

Witnesses: Robert Hefner, Louis Anderson, Chrisman

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 16—66329-1

EXPLORATION PROJECT CONTRACT
SAM L. PHILLIPS, BASCOM HENLINE,
DOCK HENLINE, AND M. L. SWANN,
DOING BUSINESS AS HEFNER MINING COMPANY
DOCKET NO. DMEA-3283

ANNEX I

The land referred to in Article 2 of the contract form and in Annex II, attached to the Contract, is known as the Hefner Mine. The mine is located on land covered by separate leases on two adjoining tracts of land as follows:

1. Land leased for mining purposes for a period of five years to Sam L. Phillips, Bascom Henline, Dock Henline, and M. L. Swann, doing business as Hefner Mining Company, by Bascom Henline, Dock Henline, and M. L. Swann, by an instrument dated March 2, 1954, described as follows:

> Beginning at a stone Charles Hedrick's Corner, and runs South 10 rods and 6 feet and corners on Will Lail's line; thence East 11 rods to a stone, T. L. Hefner's corner; thence North 12 poles to a stone on John Lail's line; thence South 81 degrees West 184 feet to the beginning, containing 3/4 of an acre, more or less.

2. Land leased for mining purposes for a period of five years to Sam L. Phillips, Bascom Henline, Dock Henline, and M. L. Swann by C. E. Hedrick, by an instrument dated May 21, 1954:

> Beginning at a stone at Charles Hedrick's Corner and running West 100 feet to a stake, thence South 10 rods 6 feet to a stake, thence East 100 feet to corner of Will Lail's line, thence North with Bascom Henline, Dock Henline, M. L. Swann, and Charles Hedrick's line 10 rods 6 feet to the point of beginning, containing 0.4 acres, more or less.

The aforesaid tracts of land are located about 6 airline miles northwest of Conover, Catawba County, North Carolina.

RECEIVED AUG 26 1954

EXPLORATION PROJECT CONTRACT
SAM L. PHILLIPS, BASCOM HENLINE,
DOCK HENLINE, and M. L. SWANN,
DOING BUSINESS AS HEFNER MINING COMPANY
DOCKET NO. DMEA-3283
ANNEX II

The following provisions are in lieu of Article 6 :

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

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

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

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

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

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

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

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

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

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

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

EXPLORATION PROJECT CONTRACT
SAM L. PHILLIPS, BASCOM HENLINE,
DOCK HENLINE, and M. L. SWANN,
DOING BUSINESS AS HEFNER MINING COMPANY
DOCKET NO. DMEA-3283

EXHIBIT "A"

Description of the Work

Exploration for concentrations of strategic mica shall be accomplished in the area indicated on the attached map entitled "Sketch of Hefner Mine, Catawba Co., N. C. DMEA-3283 (mica)," as follows:

1. Construct a powder magazine and an exploder magazine.

2. Prepare shaft site by bulldozing.

3. Sink a 2-compartment shaft to a depth of not more than 50 feet.

4. From the bottom of the shaft, drive not more than an aggregate of 75 feet of drift and crosscut.

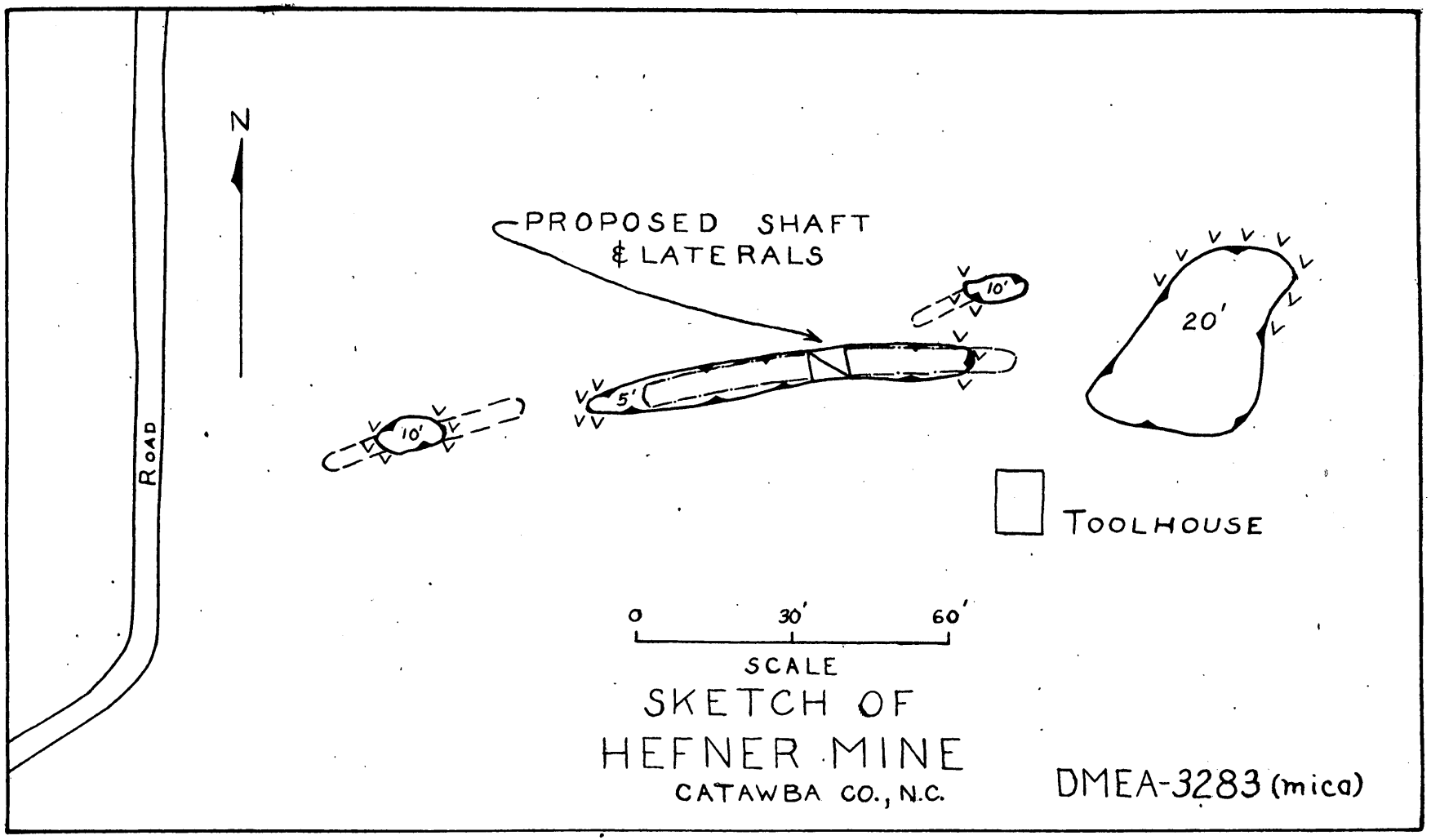
The shaft and the drifts and crosscuts shall be timbered as necessary, and shall be not less than 5 feet by 7 feet in cross section in the clear of timber.

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

Agreed Unit Costs

Construction of:	Powder magazine 1/	$25.00
	Exploder magazine 1/	13.00
Preparation of shaft site 4 hours of bulldozing @ $13.50/hr.		54.00
Sinking 50 feet of shaft @ $40.00/ft.		2,000.00
Shaft timbering - 50 feet @ $4.00/ft.		200.00
Driving 75 feet of drift and crosscut @ $28.00/ft		2,100.00
Drift timbering - 75 feet @ $4.00/ft.		300.00
Agreed estimated total cost of project		$4,692.00
Government Participation at 75%		$3,519.00

1/ The completed work constitutes the unit.



SKETCH OF
HEFNER MINE
CATAWBA CO., N.C.

DMEA-3283 (mica)

COPY

DEPARTMENT OF THE INTERIOR
Business Manager's Administration
RECEIVED
AUG 26 1954

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

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

Beginning at a stone at Charles Hedricks corner and running 100 feet to a stake, thence South 10 rods 6 feet to a stake, thence East 100 feet to corner of Will Lail's line, thence North with Bascom Heline, Dock Henline, M. L. Swan and Charles Hedrick's line 10 rods 6 feet to the point of BEGINNING, and containing 0.4 acres more or less.

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

2/ Sam L. Phillips, Bascom Henline, Dock Henline and M. L. Swann d/b/a Hefner Mining Co.

hereinafter called the "Operator"; and

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

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

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

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

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

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

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

(OVER)

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

4. Changes and added provisions _____

_____

_____

_____

Dated this 13th day of August, 1954.

x L E Hendrick [Seal] Conover, Rt 2, N.C.

_____ [Seal]

_____ [Seal]

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

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

Beginning at a stone in Charles Hedrick's corner, and runs South 10 rods and 6 feet and corners on Will Lail's line; thence East 11 rods to a stone, T. L. Hefner's corner; thence North 12 poles to a stone on John Lail's line; thence South 81 degrees West 184 feet to the Beginning. Containing 3/4 an acre, more or less.

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

2/ Sam L. Phillips, Bascom Henline, Dock Henline and M. L. Swann, d/b/a Hefner Mining Co.

hereinafter called the "Operator"; and

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

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

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

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

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

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

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

(OVER)

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

4. Changes and added provisions _____

_____

_____

_____

Dated this 13th day of August, 1954.

Bascom Henline [Seal] Spruce Pine, N. C.

Dock Henline [Seal] Spruce Pine, N. C.

M L Swann [Seal] Spruce Pine, N. C.

[redacted]

MAR 1 0 1955

Mr. Sam L. Phillips
Rainey Mining Company
Spruce Pine, North Carolina

Re: Contract No. [redacted] - Mica
Sam L. Phillips, Thomas Hudkins,
Jack Hudkins and R. L. Rainey d/b/a
Rainey Mining Company
Rainey Mine
Yancey County, North Carolina
Contract No. [redacted]

Dear Mr. Phillips:

This is with reference to the subject Exploration Contract between you and the Government.

It is not our intention to make a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and records with respect to this project. Your obligation is solely, however, to the provisions of the Contract which require the Operator to keep and preserve certain records for the period indicated.

We regret that the exploration work performed did not result in a certification of discovery or development. Your participation in this exploration program, however, is sincerely appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

WGAnderson:sd 3/8/55
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region V
Mr. Hillegeist, [redacted]
Mr. Metcalf, [redacted]
Mr. Chambers
Mr. Rook
Mr. G. E. Roberts, Route 2, Conover, North Carolina

Project Summary Report

By: Walter C. Andersen March 7, 1955

1. Docket No. DMEA-3283 - Mica
Contract No. Idm-8693
Hafner Mine
Catawba County, North Carolina

Operator: Sam L. Phillips, Bascom Henline,
Book Henline and M. L. Swann, d/b/a
Hafner Mining Company
Spruce Pine, North Carolina

Application: Form MF-103 (April, 1952) received March 19, 1954.
Work proposed: 50 feet of shaft and 100 feet of drift.
Amount requested: $6,000.00

Operator's property rights:
Mining lease for 5 years, dated March 2, 1954.
Owner's Consent to Lien, dated August 13, 1954.

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

Work authorized:

Construction-powder and exploder magazines	$38.00
Preparation shaft site	54.00
Sinking and timbering 50 feet of shaft @ $44.00/ft.	2,200.00
Driving and timbering 75 feet of drift @ $32.00/ft.	2,400.00
Total estimated cost of project	$4,692.00
Government participation @ 75%	$3,519.00

Amendments: none

Work completed:

Prepared shaft site	$54.00
39½ feet of shaft @ $40.00/ft.	1,580.00
75 feet of drift @ $28.00/ft.	2,100.00
111½ feet of timbering @ $4.00/ft.	446.00
Total accepted cost	$4,180.00
Government participation @ 75%	$3,135.00

Work began on September 2, 1954, and was completed November 12, 1954. An estimated 1000 pounds of inferior quality mica produced during operation. $25.00 worth of mica sold during operation for which a royalty of $1.25 was received.
Field Team Final report received November 26, 1954.
Operator's Final Engineering Report received November 26, 1954.

3. Audit: Report of Review issued December 3, 1954.

Accepted cost	$4,180.00
Government participation	$3,135.00

4. Certification of discovery - none issued since mica reserves discovered are negligible.

5. Comments:

H

How conducted: Efficiently and in a workmanlike manner. Good cooperation with the Government as shown by confining the work to the pegmatite all the way.

Operation: Good.

Engineering: Reports by Operator, especially the first report, were above average.

Geological premise: The premise that the pegmatite would continue was correct, but the mica discovered was of very poor quality.

Geological criteria upon which work was based:
1. Partly zoned, weathered pegmatite 10 feet thick.
2. Mica concentration along walls.
3. Past production.

Geological criteria developed during project:
1. Pegmatite continued.
2. Mica - green colored, badly cracked, ruled and warped.
3. Reserves of strategic mica - negligible.

Future possibilities: none

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

WCAnderson:ad 3/7/55
Copy to: Admr. R. File
Mr. Johnson
Mr. Houk

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 27 1955

January 26, 1955

Memorandum

To: Helen Miller, Region V - Knoxville, Tennessee

From: Acting Executive Officer, DMEA - Knoxville-Reg. V

Subject: Royalty check on DMEA-3283, Idm-5693, Hefner Mining Co. (Mica)
Spruce Pine, N. C.

Transmitted is a bill-of-sale for mica in the amount of $25.00, and a check representing 5 percent royalty amounting to $1.25 on the subject contract.

Wm. A. Beck

ZM.
cc:
Beck
Mittendorf
Shirley
Sam Phillips
Files

C
O
P
Y

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 27 1955

December 31, 1954

Sold to Empire Mica Company
Spruce Pine, N. C.

6 1/4 lbs. mica @ $4.00 per lb. $25.00

Hefner Mining Co.
By: Sam L. Phillips

(royalty check $1.25)

IN REPLY REFER TO:

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

Defense Minerals
REC'D
JAN 21 1955

January 20, 1955

Re: DMEA-3283
Hafner Mine
Catawba Co., N. C.
$4,180
Mica

Memorandum

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

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

Subject: Review of Final Field Team report

The Field Team has recommended a certificate of discovery not be issued.

All of the work under the contract was completed, except that the shaft was bottomed at 39.5 feet instead of 50 feet as pegmatite thinned rapidly at 35 foot depth.

The explored pegmatite was 15 feet thick at the surface, but within 35 feet it thinned to 3.5 feet. It is poorly zoned and the mica is mainly of poor quality. Out of 1,000 pounds recovered during exploration work only a very small amount is considered to be of strategic quality.

On basis of Field Team's estimates of "mine-run" mica, a certificate of discovery is not justified.

E. L. Newcomb

ELNewcomb:hlm
G-1/20/55

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

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

Defense Minerals Administration
RECEIVED
DEC 28 1954

December 27, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

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

Subject: DMEA-3283 (mica)

Applicant: Sam L. Phillips

Name and Location of Property: Hefner Mining Company
Catawba County, North Carolina

Contract Number: Idm-E 693

Date of Field Team Final Report: November 24, 1954

Date Rec'd. by Ceram. & Fert. Mat. Br.: December 11, 1954

Field Team Recommendation:

1. No certification.

Comments:

1. An estimated 1,000 pounds of "mine-run" mica was obtained during DMEA exploration. Most was green and badly cracked. Yield of strategic mica is reported to be small.

2. Expenditures -

Total approved	-	$4,692
Total cost	-	4,180
Gov't. share	-	3,135
Value of prod. during operation	-	?

3. Reserves of strategic mica are reported to be negligible.

Recommendation:

I concur in the field team's recommendation to deny certification.

SIGNED

Donald R. Irving

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

Budget Bureau No. 42-R1036.5

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

Month of November, 1954 Docket No. DMEA 3263 Contract No. Idm-5693

Operator's Name Sam L. Phillips, et al. Minerals Mica

Address Hefner Mining Co., Spruce Pine, N. C.

Contract Amount, $ 4692.00 Government Participation: 75 % Amount, $ 3519.00

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						
Bulldozing		54.00	54.00			
Crosscutting						
35' Drifting @ 28.00 ft.	980.00	1120.00	2100.00			
Shaft		1500.00	1500.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
32' Drift Timboring @ 4.00 ft.	128.00	160.00	288.00			
Timboring Shaft		158.00	158.00			
(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	1108.00	3072.00	4180.00	1108.00	3,072.00	4,180.00

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

Date 11/18/54 *Payee Sam L. Phillips, et al
Hefner Mining Co.

Per Sam L. 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:

$ 831.00

Signature Helen R. Mullen
(Authorized Certifying Officer)

Date NOV 23 1954 Vou. No. 82

(See other side)

3 of 7

@ 11/12

277.00

(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. Idm-E693 in accordance with the terms of the contract.

Signature Lawrence E. Shirley Title Mining Engr. U.S.B.M. Date Nov. 22, 1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER ~~DMEA REGION VII~~ Date NOV 23 1954

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-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Nov. 195 4 Docket No. DMEA 3203 Contract No. Ico-5503
Operator's Name Sam L. Phillips, et al. Minerals Mica
Address Hofmor Mining Co., 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
35 Drifting @ 28.00	Ft.	980.00	35	2100.00	75	28.00	75	28.00
Crosscutting								
Raising								
Shafts				1580.00	39½	40.00	50	40.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching Bulldozing	Hr.			54.00	4	13.50	4	13.50
Test Pits								
Roads and Trails								
32 Timbering @ 4.00	Ft.	128.00	32	446.00	111½	4.00	125	4.00
Total Distributed Costs		1108.00		4180.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1108.00		4180.00				

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 11/18/54 Operator Hofmor Mining Co.

Per Sam L. 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)

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 83-38475

OPERATOR'S

MONTHLY PROGRESS REPORT

November, 1954

DMEA-3283

Idm-E 693

Work Accomplished:

Completed 35' drifting, making the contract total of 75'. Timbered 32' of this drift. Recovered about 200 lbs. green mica, very poor quality.

Daily Notes:

Nov. 1 - 5 - Pumped water, timbered and dug.

Nov. 8 -12 - Pumped water, timbered. Recovered a few bags of green mica, very poor quality.

Nov. 12 - Completed the 75' of drift called for in contract.

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

Budget Bureau No. 42-R1036.5

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

Month of October, 1954 Docket No. DMEA 3263 Contract No. Idn-2693
Operator's Name Sam L. Phillips et al Minerals Mica
Address Hefner Mining Company, Spruce Pine, N. C.
Contract Amount, $ 4692.00 Government Participation: 75 % Amount, $ 3519.00

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						
Bulldozing		54.00	54.00			
Crosscutting						
40' Drifting @ 28.00 ft.	1120.00	-	1120.00			
40' Shaft @ 40.00 ft.	160.00	1400.00	1560.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
40' Timbering Shaft @ 4.00	10.00	140.00	150.00			
40' Timbering Drift @ 4.00	160.00	-	160.00			
(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	1478.00	1594.00	3072.00	1478.00	1,594.00	3,072.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 11-1-54 *Payee Sam L. Phillips
Hefner Mining Co.
Per Sam L. 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)

369.50

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

$ 1,108.50

Signature Helen R. Miller
(Authorized Certifying Officer)
Date NOV 23 1954 Vou. No. 82
(See other side)

(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. Tdm-E693 in accordance with the terms of the contract.

Signature Lawrence E. Shirley Title Mining Engr. U.S.B.M. Date Nov. 5, 1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION VII Date NOV 8 1954

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 October 195 4 Docket No. DMEA 3283 Contract No. Idm-D693

Operator's Name Sam L. Phillips et al Minerals Mica

Address Hefner Mining Co., 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
40' Drifting @ 28.00	Ft.	1120.00	40	1120.00	40	28.00	75	28.00
Crosscutting								
Raising								
43' Shafts @ 40.00	Ft.	160.00	4	1560.00	39	40.00	50	40.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching Bulldozing				54.00	4	13.50	4	13.50
Test Pits								
Roads and Trails								
44' Timbering @ 4.00 (Shaft and drift)	Ft.	176.00	44	316.00	79	4.00	125	4.00
Total Distributed Costs		1476.00		3072.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1476.00		3072.00				

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 11-1-54 Operator Sam L. Phillips et al. Hefner Mining Co.

Per Sam L. 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.

(Instructions on reverse)

Remarks:

(For Government use only)

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

OPERATOR'S
MONTHLY REPORT OF PROGRESS

DMEA-3283

Idm-E693

Work Accomplished:

We lowered the shaft 4½' during October, and upon the advice of the Field Team, we drifted off at the 39' level. We have drifted 40 feet, and have recovered about 200 lbs. scrap mica. We still have a lot of water and the vein material is very soft.

Daily Notes:

October 1 - Sank shaft, pumped water, and timbered.

October 4 - 8 - Shaft reached 39 ft. level and we hit water hole. Field team advised that we drift off shaft at the 32' level, and we began drift, timbering as we went.

October 11-15 - Pumped water, timbered, advanced with the drift. Vein is soft and must use digging to advance.

October 19-22 - Pumped water, continued drifting in same direction. Hit some scrap mica of poor quality, recovered small amount. Continued to timber.

October 23-29 - Timbered, pumped water, dug. Recovered more scrap, making a total of about 200 lbs.

Three men worked 50 hours per week most of this month, and made steady progress. No particular difficulties except excessive water.

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

November 24, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: Final Report - DMEA-3283, Idm-E693 (mica) Hefner Mining Co. Spruce Pine, N. C.

Enclosed are four copies of the Field Team final report on the subject exploration contract.

We recommend that certificate of discovery should not be issued.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

RAL/am
cc:
Beck
Lynch
Files

Reviewed by
DMEA OPERATING COMMITTEE
12-1-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINAL REPORT

On

DMEA-1283, HEFNER MINE (mica)
Catawba County, N. C.

BY

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

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

November 23, 1954

Reviewed by
DMEA OPERATING COMMITTEE
12-1-54
(date)

FINAL REPORT
ON
DMEA-3283, HEFNER MINE (mica)

Operator: Hefner Mining Company, c/o Sam L. Phillips, Spruce Pine, N. C.

Location: About 6 airline miles northwest of Conover, Catawba County, N. C.

Work completed under the contract consisted of bulldozing a shaft site, sinking a 39.5 feet timbered shaft and driving 75 feet of drift, 72-feet of which was timbered. Most of the mica discovered was not of strategic quality; therefore, a certification of discovery should not be issued. No additional exploratory work is warranted.

Work began on September 2, 1954 and ended November 12, 1954. A shaft site was prepared by bulldozing an 50' x 12' x 5' deep trench which trends east-west. A total of about 7 hours of dozer work was required to make this cut. From the bottom of this cut a 39.5-feet vertical 5' x 7' shaft (two-compartment) was sunk and timbered. A total of 75 feet of laterals were driven from the 32-foot level of the shaft; a 26-foot drift in a S. 60° W. direction and a 49-feet drift in a N. 80° E. direction. Timbering was completed in 72 feet of the laterals. The shaft was not sunk to the planned depth of 50 feet because the pegmatite begins to thin rapidly at about 35 feet below the collar and because of heavy ground water conditions.

A poorly-zoned pegmatite is exposed in the shaft and drifts. It is about 15 feet thick at the surface but thins to about 3.5 feet in the bottom of the shaft. The body strikes N. 60-80° E, and is vertical. Poorly defined zoning is present, consisting of a central zone up to 3 feet thick of coarse-grained perthite, quartz, and muscovite enclosed by a zone of medium-grained kaolinized feldspar, quartz, and minor scrap mica. Country rock, weathered mica schist, is exposed in the head of the southwest drift and along the southeast wall of the northeast drift. Numerous zones of closely-spaced post-pegmatite displacements are present in the drifts. These movements have badly damaged the mica with resulting cracks, ruling and warps.

An estimated 1000 pounds of "mine-run" mica were recovered during the project, chiefly from the northeast drift. Most is green-colored and is badly cracked, ruled and warped. Some is "flat-A" and "wedge-A". A small quantity of ruby mica was recovered from the shaft but all was small in size and badly cracked. Only a small proportion of the mica discovered will yield sheet of strategic quality.

Expenditures:

(a)	Total approved	$4,692.00
(b)	Total cost of project	4,180.00
(c)	Government's share of cost	3,135.00
(d)	" " unexpended	384.00
(e)	Value of production during opr. (?)	

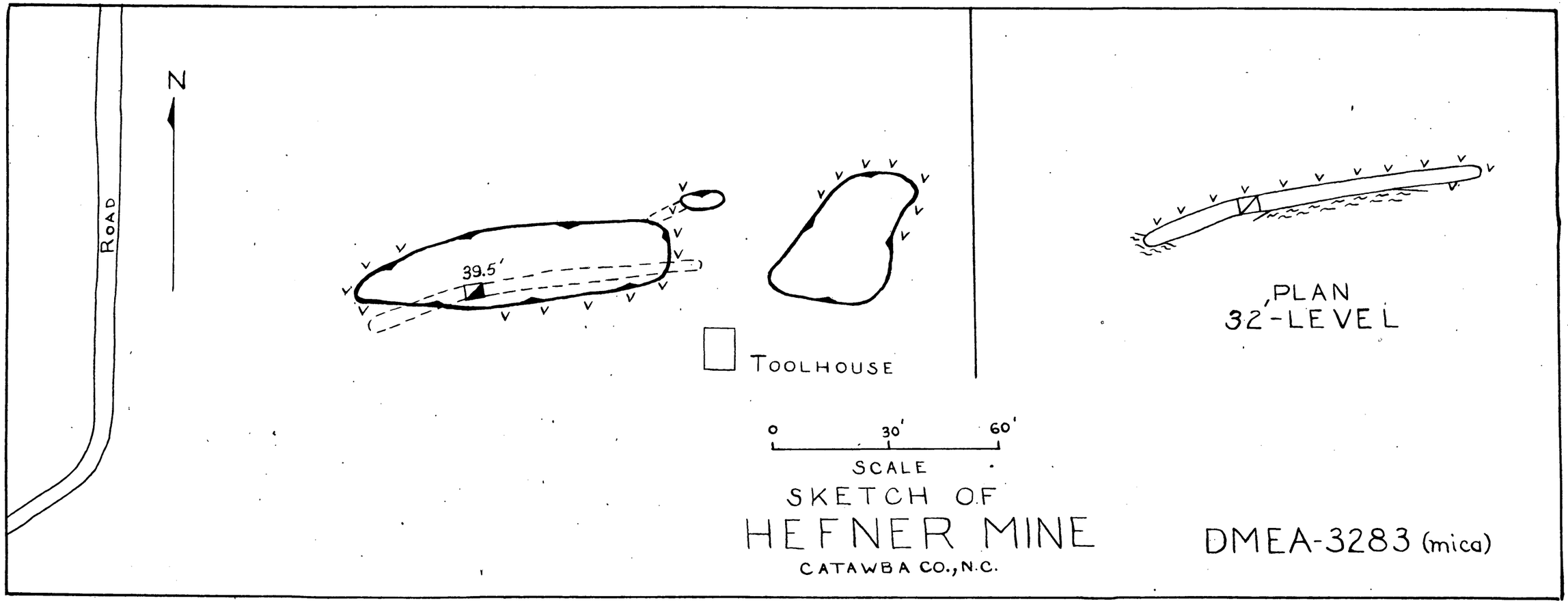
Importance of strategic mica revealed by the work done under the contract are negligible.

The work completed under the contract was conducted in an efficient and satisfactory manner. No equipment was purchased under the contract.

November 21, 1944

M. K. Teague and D. M. Ames, Geologists
U. S. Geological Survey

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



SKETCH OF
HEFNER MINE
CATAWBA CO., N.C.

DMEA-3283 (mica)

Spruce Pine, North Carolina
November 18, 1954

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

Re: DMEA-3283, Idm-E693
Hefner Mine, Catawba County, N. C.
Final Engineering Report

Dear Mr. Laurence:

Work began on September 2 on the above project, and was completed on November 12. About seven hours bulldozing was done on the surface in an effort to find the mica bearing vein. We uncovered one green streak of mica that was A-shaped, very small, and of no commercial value. We also located a streak of red flat mica, and sank a shaft 39½', in vein all the way. No mica was found in the shaft, other than small ruby blocks which were broken and very badly clay stained. We reocvered about 300 lbs. of this mica in the 39½' of shaft.

We contacted water at the 28' depth. The shaft was in digging material and was timbered all the way down.

From the 30' level of the shaft, we drove a drift to the East about 25'. At approximately 10' in the drift to the East we picked up some mica which was very small, broken and badly clay-stained.

At the request of the Field Team, we drifted from the 30' level to the West a distance of 50'. In the drift to the West we picked up some mica after going about 25'. This mica was slightly better than we had contacted before, but the quantity and quality were not sufficient to make it a commercial deposit. In the drift to the West at approximately 35' we found a small amount of green Wedge A mica, again of no commercial value.

We wish to express our appreciation to the DMEA Field Team for their assistance on this project.

If further details are necessary, please contact us.

Very truly yours,

HEFNER MINING COMPANY

Sam L. Phillips

Sam L. Phillips

P/b

Anderson

INTERIM REPORT

[illegible] (mica) [illegible] MINE

OPERATOR: Sam L. Phillips, Kenneth Hamline, Dock Hamline, M. L. Swann d/b/a Hafner Mining Company, Spruce Pine, N. C.

LOCATION: About 5 airline miles northwest of Conover, Catawba County, North Carolina.

This contract has been completed without making a sizeable discovery of strategic mica. The operator states that no additional drift work at his own expense will be attempted due to the poor quality of the mica.

Shafts totaling 77 feet were driven from the 28 ft. shaft lowab. The S 50° W drift was driven 26 feet and the N 70° E drift was driven 51 feet. Both drifts were driven in pegmatite composed of kaolinized feldspar, manganese and iron stained quartz zones, both ruby and green muscovite mica and containing occasional stringers of biotite schist. Mica recovered was of an inferior grade, most of which was cracked, broken and contained stain. Considerable movement was indicated along the pegmatite contacts and is indicative of large amounts of crushed and broken mica in the body.

This operation was conducted satisfactorily and all suggestions made by the Examiners were followed closely.

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

K. H. Teague & D. H. Ames, Geologist
U. S. Geological Survey

November 16, 1944

INTERIM REPORT

DMEA-[illegible] Idm-[illegible] (mica) HEFNER MINE

OPERATOR: Sam L. Phillips, Bascomb Hoalins, Dock Hoalins, M. L. Brown d/b/a Hefner Mining Company, Spruce Pine, N. C.

LOCATION: About 4 airline miles northeast of Conover, Catawba County, North Carolina.

Drifting continues from the 32-foot shaft level and is now at 47 feet. The operator was advised to discontinue the southwest drift, whose present face shows weathered country rock.

Drifts have been driven from the above shaft level along the strike of the body in both directions. The S 50° W drift was driven for 26 feet in kaolinized pegmatite containing mica which was badly crushed; work was stopped when country rock was encountered. Considerable movement along the drift is evident. Upon completion of this work turnoff was made from this same level and 21 feet of drift was driven N 70° E. Similar conditions exist in this drift, but larger mica, though badly crushed, has been recovered. The examiners believe that additional work is warranted to the northeast and work will continue until another examination can be made.

The shaft at the 32-foot level has not been fleeced to date. Both drifts have required solid top and side lagging and all uprights are placed on sills. Progress on this contract is satisfactory.

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

E. M. Teague & D. E. Amos, Geologists
U. S. Geological Survey

November 2, 1954

INTERIM REPORT

[illegible] (mica) [illegible] MINE

OPERATOR: Sam L. Phillips, Kenneth Hamline, Hook Hamline, M. L. Swann d/b/a Hoffner Mining Company, Spruce Pine, North Carolina

LOCATION: About 6 airline miles northwest of Gamaver, Gaston County, North Carolina

Shaft sinking has been completed on this contract to a total depth of 80 feet. The shaft has been flooded at 55 feet and turnoff to the west is underway. Permission was given for this action because of excessive water and heavy ground conditions. Material encountered in the short drift advance is kaolinized feldspar, thin quartz ribs and muscovite mica, much of which is badly ruled, bent and crushed. Considerable movement was noted along the north wall and roof of the drift.

Timber requirements for drift work were discussed with the foreman.

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

E. E. Teague & D. E. Amos, Geologists
U. S. Geological Survey

October 18, 1954

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1954 Docket No. DMEA 3283 Contract No. Idm-E693
Operator's Name Sam L. Phillips, et al. Minerals Mica
Address Hefner Mining Co., Spruce Pine, N. C.
Contract Amount, $ 4692.00 Government Participation: 75 % Amount, $ 3519.00

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						
4 hr. Bulldozing @ 13.50	54.00		54.00			
Crosscutting						
Drifting						
35' Shafting @ 40.00	1400.00		1400.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
35' Timbering Shaft @ 4.00	140.00		140.00			
(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	1594.00		1594.00	1594.00		1594.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 10-1-54 *Payee Hefner Mining Co.
Per Sam L. 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:

$ 1195.50

Signature Cora A. Pinson
(Authorized Certifying Officer)
Date OCT 8 1954 Vou. No. 68
(See other side)

1st
S 9/2/54

(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. Idm-E693 in accordance with the terms of the contract.

Signature Laurence E. Shirley Title Mining Engr. U.S.B.M. Date Oct. 5, 1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION VII Date OCT 7 1954

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 September 1954 Docket No. DMEA 3283 Contract No. Idm-E693

Operator's Name Sam L. Phillips, et al. Minerals Mica

Address Hefner Mining Co., 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
4 Hr. Bulldozing @ 13.50 Drifting	Hr.	54.00	4	54.00	4	13.50	4	13.50
Crosscutting								
Raising								
35' Shafts @ 40.00 '	Ft.	1400.00	35	1400.00	35	40.00	50	40.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
35' Timbering @ 4.00'	Ft.	140.00	35	140.00	35	4.00	50	4.00
Total Distributed Costs		1594.00		1594.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1594.00		1594.00				

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 10-1-54 Operator Hefner Mining Co.

Per Sam L. 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)

INSTRUCTION

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

OPERATOR'S
Monthly Report of Progress

Month of Sept., 1954

DMEA- 3283

Idm-E693 (Mica)

Work Accomplished:

We bulldozed the site, moved in equipment, and sank the shaft 35' during the month. In bulldozing we uncovered some small pieces of Wedge A mica. Located shaft a best location, timbered, and began lowering shaft. At about the 28' level we hit water, and find it necessary to install a pump. About 200 lbs. of mica recovered during the month; this mica is ruby and of a poor quality, but it improves as we get further down.

Daily Notes:

Sept. 2	-	Bulldozed site, began to move in machinery.
Sept. 3	-	Set up hoist, boom pole, mask pole.
Sept. 6 - 10	-	Began to sink shaft, timbering as we went along. We are in vein material, recovering a small amount of mica in the first few feet.
Sept. 13 - 17	-	Continued to timber, sink shaft and recover mica. Quality of mica improving slightly.
Sept. 20 - 24	-	Timbered, sank several feet, still in vein material which is becoming harder. Struck water but not enough as yet for pump. Mica still being recovered.
Sept. 27 - 30	-	Sank to a depth of 35', find slate now on either side of the shaft, and mica is of better quality. Will have to install pump before much more progress is made. A total of about 200 lbs. mica recovered during month.

Work done for Hefner Mining Company, Sept. 2, 1954:

4 hours Bulldozing at Hefner Mine Site @ $ 13.50 hr. $ 54.00

I certify that this is a true and correct account of bulldozing work done at Hefner Mine.

Sam L. Phillips

INTERIM REPORT

DMEA-3285 Idm-2083 (mica) HEFNER MINE

OPERATOR: Sam L. Phillips, Bascomb Benlins, Dock Benlins, M. L. Owens, d/b/a Hefner Mining Company, Spruce Pine, N. C.

LOCATION: About 6 airline miles northwest of Conover, Catawba County, N. C.

Starting date on this contract is September 2, 1954. A shaft site was prepared in the vicinity of an east-west trending open cut by bulldozer. The site was spotted and sinking is underway. A two-compartment shaft, 5' x 8' in cross section has been sunk to a depth of 21 feet in pegmatite. Country rock, a mica schist, is just beginning to make its appearance in the south side of the shaft. Material encountered is kaolinized feldspar, scattered quartz and small blocks of ruby mica. A few blocks of "A" mica of poor quality was recovered from the bulldozing west of the shaft site.

Equipment at the site consists of a gasoline powered hoist and necessary digging tools. Other equipment will be supplied as needed. Progress on this contract is satisfactory.

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

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

September 22, 1954

August 24, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region VII

Subject: Signed Contracts: DMEA-3283, Idm-E 693 (mica) Catawba Co.
Hefner Mining Company, Spruce Pine, N. C.

Transmitted are three signed copies of the subject contract, with forms MF-203 for two different tracts of land attached to each copy.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION VII

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

ZM.
cc:
Beck
Lynch
Finance Office
Files

600

AUG 2 - 1954

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

Subject: Docket No. DMEA-3283 - Mica
Sam L. Phillips, et al.
Hefner Mining Company
Hefner Mine
Catawba County, North Carolina

Dear Mr. Laurence:

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

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

After execution of the contract, the copies are to be distributed in the usual manner. Copies of memoranda from the Geological Survey, dated July 1, 1954, and from the Bureau of Mines, dated July 13, 1954, are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

Enclosures 10

WCAnderson:gad 7/28/54
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, 5216
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON 25, D. C.

July 22, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. L. G. Houk

From: Acting Assistant Solicitor, Defense Minerals

Subject: Sam L. Phillips, Bascom Henline, Dock Henline, and M. L. Swann, partners, doing business as Hefner Mining Company, Docket No. DMEA-3283 (Mica)

Attached is a contract covering the above-described project in satisfactory legal form for execution, subject to the attachment of an Owner's Consent to Lien on the form revised July 1, 1954.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

HCRubin: lm

Copies to: Solicitor Docket
DMEA docket
Mr. Houk (2)
Mr. Hofflund
Mr. Rubin
Chron.

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

July 13, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3283 (mica)

Applicant: S. L. Phillips, Bascomb Henline, Dock Henline and M. L. Swann

Name and Location of Property: Hefner Mine
Catawba County, North Carolina

Date of Field Team Report: June 28, 1954

Date Rec'd. by Ceramic & Fertilizer Materials Br.: July 8, 1954

Field Team Recommendation:

1. Approval of an exploration project on a unit-cost basis.

Comments:

1. Ruby mica of stockpile grade occurs in the pegmatite exposed on this property.

2. Proposed exploration project consists of a 50-foot shaft and 75-foot drift.

3. Proposed exploration program is consistent with good engineering practice, but the Field Team is of the opinion that the examiners' cost estimate of $4,700.50 is a little low and recommends that the contract be written on a unit-cost basis.

Recommendation:

I concur in the field team's recommendation that the proposed exploration program be written on a unit-cost basis.

W. F. Dietrich

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON 25, D. C.

July 22, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. L. G. Houk

From: Acting Assistant Solicitor, Defense Minerals

Subject: Sam L. Phillips, Bascom Henline, Dock Henline, and M. L. Swann, partners, doing business as Hefner Mining Company, Docket No. DMEA-3283 (Mica)

Attached is a contract covering the above-described project in satisfactory legal form for execution, subject to the attachment of an Owner's Consent to Lien on the form revised July 1, 1954.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

HCRubin: lm

Copies to: Solicitor Docket
DMEA docket
Mr. Houk (2)
Mr. Hofflund
Mr. Rubin
Chron.

IN REPLY REFER TO:
G-MB-CMK

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

July 1, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3283 (mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: S. L. Phillips, Beaucoup Hollow, Dock Healine and M. L. Swann, Spruce Pine, N. C.
Name of property: Hafner Mine.
Location of property: Catawba County, N. C.
Date of Field Team Report: June 25, 1954.
Authorship of Field Team Report: K. H. Teague, D. H. Amos, and L. E. Shirley.
Field Team's recommendation:

50' shaft
75' drift
$4700.50

Comments: Estimated mica content of peg 5-10%; 3% of which is strategic. This is better than average.

ACTION RECOMMENDED:
Follow Field Team's recommendation.

D. M. Larrabee

Larrabee:jeh
7/2/54
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee 5218 Interior

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

COPY

~~WASHINGTON 25, D.C.~~
Room 13, Post Office Bldg.
Knoxville 2, Tenn.

June 28, 1954

Memorandum

To: Operating Committee, D M E A - Washington

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

Subject: Field Examination Reports on:
DMEA-3283, Hefner Mine (mica)
DMEA-3366, Phillips Mine (mica)

Enclosed are 4 copies each of the subject examination reports, and four extra copies of the maps for each.

We are in agreement with the examiners' proposals, and recommend approval of contracts, using the short form and unit costs. We feel that the examiners' cost estimates may be a little low, as such items as stiff-leg, bucket, track, pipe, etc., have not been included.

/s/ Robert A. Lawrence
Executive Officer
DMEA Region VII

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

RAL/zm
cc:
Beck
Lynch
Files

Reviewed by
DMEA OPERATING COMMITTEE
7-7-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

ON

DMEA-3283, HENNER MINE
(mica)
Catawba County, N. C.

By

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

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

June 25, 1954

Reviewed by
DMEA OPERATING COMMITTEE

7-7-54
(date)

FIELD EXAMINATION REPORT
ON
DMEA-3283, HEFNER MINE(Mica).

Applicants: S. L. Phillips, Bascomb Heline, Dock Henline and M. L. Swann, all of Spruce Pine, North Carolina

A pegmatite containing mica of stockpile grade is present on this property. The possibility for discovery of a worthwhile deposit at this mine appears favorable; therefore, the field examiners recommend that limited exploration be granted.

The Hefner Mine is located about 6 airline miles northwest of Conover, Catawba County, N. C.

This deposit was examined on April 21, 1954. Messrs. Sam L. Phillips, C. J. Keller and W. S. Flynt accompanied the examiners on the inspection which required 1½ hours.

Access to the property is via an all-weather gravel road. Area covered by the lease appears to be adequate for the proposed project. In this connection, it should be noted the ownership of the land is held by three of the applicants;-Henline, Henline and Swann. All of the applicants have had varying amount of mica mining experience and are competent to conduct the proposed work.

The only present surface facility is a combination toolhouse-bunkhouse in poor repair. Workings consist of several pits and partially caved shallow shafts. Short drifts have been driven from two of the shafts and are accessible, (see attached map). The maximum depth of the old workings are reported to be about 30 feet.

A weathered pegmatite about ten feet thick is exposed in the pits and the underground workings. Distribution of the workings and the contacts indicates it strikes N.70-80°E. and probably dips steeply to the northwest. Massive quartz on the dumps suggests that the body is at least in part zoned. The pegmatite is composed of kaolinized feldspar, quartz, muscovite, and biotite. The mica tends to be concentrated along the walls.

Ruby mica occurs in the west end of the pegmatite and greenish brown mica in the east end. The mica is flat and flat-A, hard, and free-splitting. Some is ruled, wavy, and slightly mineral-stained. It is estimated that mica constitutes 8 - 10 percent of the pegmatite, 3 percent of which would yield sheet mica of strategic quality.

The mine was first opened in 1940 and was worked until the summer of 1944, chiefly by two of the present applicants, M. L. Swann and Dock Henline. Records of the Colonial Mica Corporation indicate that 378.05 pounds

of sheet mica were sold during this period for $2,013.11, 50 percent of which was stained or better.

The program of exploration proposed by the applicants is in the opinion of the field examiners the most practical and efficient approach. Limiting of drifting to 75 feet should be sufficient to adequately explore the pegmatite, rather than 100 feet as proposed by the applicants.

The major portion of the proposed work would probably be in weathered and semi-weathered material and will require timbering. Heavy ground water conditions can probably be expected.

The applicants have available the necessary equipment for the proposed project. Experienced miners would have to be obtained from the Spruce Pine district.

An estimate of costs is as follows:

Powder Magazine		$50.00
Cap Magazine		25.00
Shaft site preparation (4 hours of dozing with D-7 dozer at $13.50/hr.		54.00
Shaft (50 foot timbered 5' x 7') (25 shifts)		
Labor and Supervision:		
2 - Laborers @ $1.00/hr	$400.00	
1 - Hoist Oper. @ $1.25/hr	250.00	
1 - Foreman- miner @ $1.50/hr.	300.00	
Material and Supplies:		
Timber 4000 B. F. @ $70/M	280.00	
Explosives	100.00	
Gas and Oil	200.00	
Small tools and supplies	40.00	
Equipment rental:		
Compressor, pump and hammer @ $240/Mo.	300.00	
Hoist @ $50/Mo.	62.50	
Misc. (Insurance, Soc. Sec. and repairs)	200.00	$2,164.50

Drift 75 feet 5' x 7' (30 shifts)

Labor and Supervision:

2- Laborers @ $1.00/hr	$480.00	
1 - Hoist Opr. @ $1.25/hr	300.00	
1 - Foreman -miner @ $1.50/hr	360.00	

Material and Supplies:

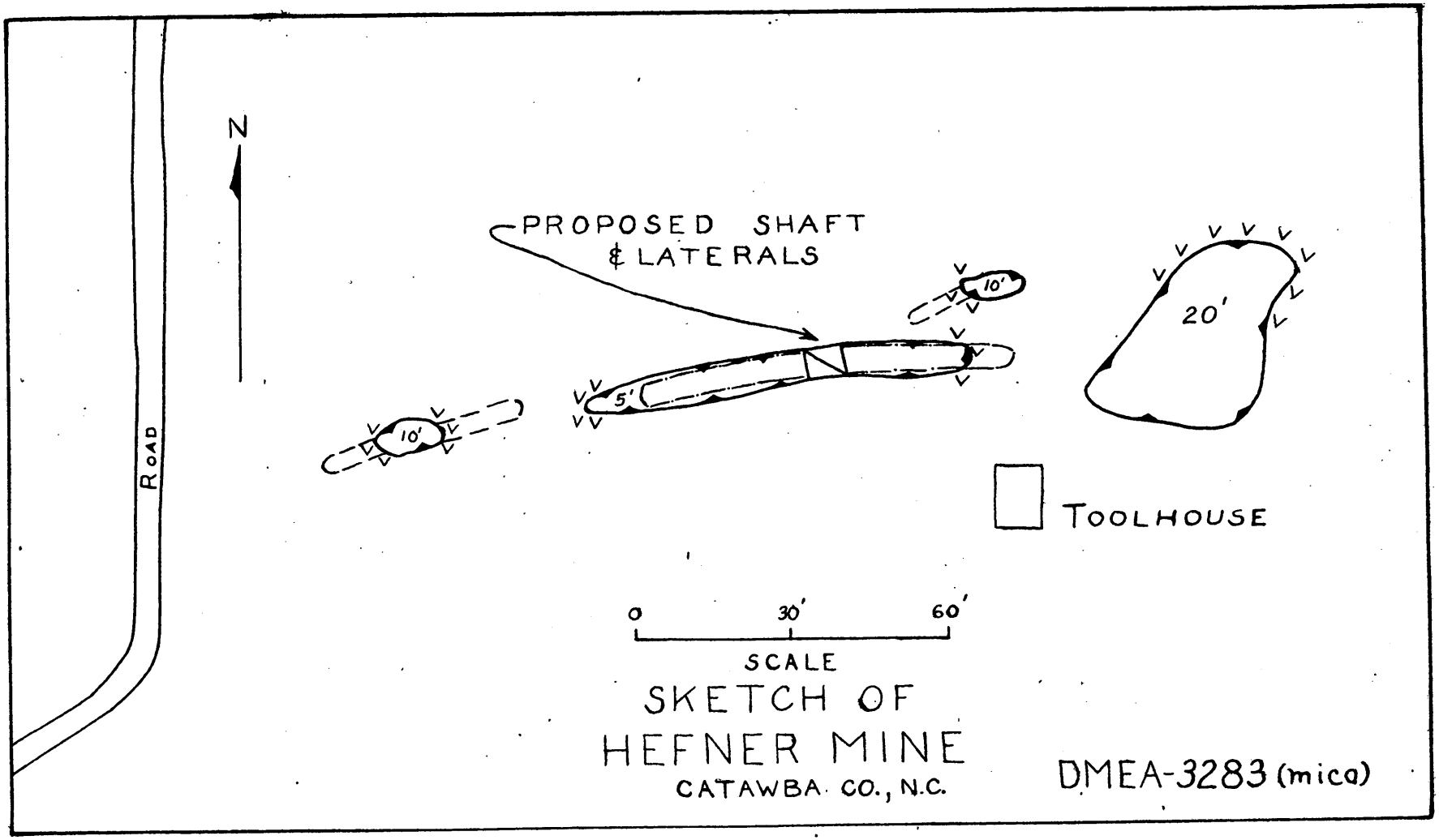
Timber 5000 B. F. @ $70/M	350.00	
Gas and Oil	150.00	
Drill Steel	32.00	
Small tools and supplies	50.00	

Operating Equipment rental:

Compressor, pump, & Hammer rental @ $240/Mo.	360.00	
Hoist @ $50/Mo.	75.00	
Miscellaneous (Ins. Sec. Sec., repairs, etc.)	200.00	$2,357.00
Contingencies		50.00
Total Estimated Cost		$4,700.50

June 25, 1954

N.



SKETCH OF
HEFNER MINE
CATAWBA CO., N.C.

DMEA-3283 (mica)

60C

JUN 18 1954

Mr. Sam L. Phillips
The Hafner Mining Co.
Spruce Pine, North Carolina

Re: Docket No. DMEA-3283 - Mica
Sam L. Phillips, Hasscomb Hensline,
Dock Hensline and M. L. Swann
Hafner Mine
Catawba County, North Carolina

Dear Mr. Phillips:

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

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

Sincerely yours,

C. O. Mitteadorf

Administrator

WCAnderson:gad 4/27/54

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

JUN 8 1954

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

Subject: Docket No. DSHA-3283 - Mine
Sam L. Phillips, Bascomb Hemline,
Beck Hemline and M. L. Sumner
Hefner Mine
Catawba County, North Carolina

Dear Mr. Lawrence:

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

Copies of memoranda from the Geological Survey, dated March 22, 1954, and from the Bureau of Mines, dated March 30, 1954, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

Philip W. Guild

Member, Geological Survey

Enclosures 4

WCAnderson:gad 4/27/54
Copy to: Admr. R. File
Docket File
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

Minerals Administration
RECEIVED
JUL 14 1954

June 30, 1954

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA, Region VII

Subject: DMEA-283 (mica) Harper Mine, Sam L. Phillips, et ux, d/b/a Harper Mining Company

Reference is made to your letter of June 7.

Mr. Teague reports that the present acreage under lease, totalling 3.15 acres, is sufficient for the proposed exploration contract. Mr. Teague is familiar with the boundaries of the enlarged lease.

Robert L. Lovejoy
EXECUTIVE OFFICER
DMEA REGION VII

Mr. A. Beck, Dr. V. J. Lynch
U. S. Bureau of Mines

RLL/ma
Div. Copy
Beck
Lynch
Files

600

JUN - 7 1954

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

Subject: Docket No. DMEA-3283 - Mica
Sam L. Phillips, et al. d/b/a
Hefner Mining Company
Catawba County, North Carolina
Hefner Mine

Dear Mr. Laurence:

Reference is made to our letter of May 14, 1954, to the applicants advising that the property was insufficient to support an exploration project.

They have secured a lease on an additional adjoining tract of land increasing the total acreage to 1.15 acres. If the Field Team has not already done so, kindly have them determine if this acreage is sufficient for an exploration project contrast.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

WCAnderson:gad 6/2/54
Copy to: Admr. R. File
Docket File
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

MAY 1 4 1954

Mr. Sam L. Phillips
The Hafner Mining Co.,
Spruce Pine, North Carolina

Re: Docket No. DMEA-3187 - Mica
Sam L. Phillips, Research Engineer,
Dock Hudgins, and M. E. Brown
Hafner Mine
Cabarrus County, North Carolina

Dear Mr. Phillips:

Reference is made to your application for assistance in exploring the subject property.

It is noted that the property described in the lease comprises only 3/4 acres. After careful consideration, it has been decided that this area is insufficient to support an exploration project. Unless arrangements can be made for a larger area, the Defense Minerals Exploration Administration will not consider exploration assistance on this property.

Sincerely yours,

SIGNED

Lawrence G. Hook, Chief
Nonmetallic Minerals Division

WCanderson:ag 5/11/54

Copy to: Admr. R. File
Docket File
Field Team, Region VII
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, G-232 GSA Bldg.
Mr. Hook

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

Defense Minerals Administration
RECEIVED
MAR 30 1954

March 30, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3283

Applicant: Sam Phillips, Bascomb and Dock Henline, and M. Swann

Name and Location of Property: Hefner Mine
Catawba County, North Carolina

Application Rec'd. by Ceramic & Fert. Mats. Branch: March 19, 1954

Comments:

1. Bureau of Mines records show an average monthly purchase from May to September 1944 of $280.06 worth of mica by Colonial Mica from subject mine.

2. The following is from the Geological Survey Professional Paper 248-D, pp. 230-31: "Three 30-ft. shafts were sunk, and the intervening pegmatite was mined to depths of 8 to 20 ft. The deposit is at least 5 ft. thick and probably strikes N 65° E."

3. The proposed program would explore ground adjacent to an area which previously produced mica.

Recommendation:

It is suggested that the field team visit this property to determine if an exploration program is justified.

Signed

W. F. Dietrich

IN REPLY REFER TO:
G-MD-CNM

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

March 22, 1954

Memorandum

REVIEW OF APPLICATION DMEA-3283 (mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant's name and address: Sam L. Phillips, Bascomb Henline, Jack Henline, and M. I. Swann, Spruce Pine, N. C.
Name of property: Hefner Mine.
Location of property: 7 miles from Hickory, N. C.
Summary of applicant's proposal: 5' x 7' shaft 50' deep
100' drift "on most promising pegmatite."
Sources of information on applicant's property: Colonial Mica records; U. S. G. S. Prof. Paper 248-D, p. 230.
"Three 30' shafts sunk and pegmatite worked to depths of from 8-20'. Deposit at least 5' thick and probably strikes N. 65 E. Mica books reddish brown and of rather small size."
Comments:
1. How many pegmatites are anticipated, and why.
2. 378 lbs. ruby mica sold to Colonial Mica Corporation for $2,013. Green also produced.

RECOMMENDATION:
Refer to Field Team for their examination, if necessary.

D. M. Larrabee

Larrabee:jeh
3/22/54
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-230