UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

~~Terminated~~ Withdrawn (or cancelled) without certification. DMEA No. 1657

This is the official contract file containing all official records of the project. Duplicate material has been removed. The records contained in the files are checked and are arranged in this manner:

Left Side

Certificate of Audit (Final).

Interim Audit(s).

Report of Review.

✓ Termination Notice or Agreement.

Recision Notice.

Assignment of Contract.

Contract Amendments (latest on top).

✓ Contract with all exhibits and annexes.

Owner's Consent to Lien.

✓ Subordination Agreement.

✓ Leases and assignments of leases.

✓ Application and attachments.

Schedule of Collections.

Operator's monthly reports and all attachments (latest on top).

Right Side

Project summary.

Work completed analysis.

✓ All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report. (Tab)

Operator's Final Report.

Interim Reports.

✓ On-site Exam Report(s). (Tab)

Settlement Sheets.

If additional folders are required because of volume of records, show folder numbers and contents below:

Maps in folder number_____

Operator's Monthly Reports in folder number _____

CW
Reviewer's Initials

7973

FILE COPY
SURNAME:

Robertson

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

April 17, 1952

Memorandum

To: Mr. Robert W. Adams, Administrative Officer, DMEA

From: Mr. Lawrence G. Houk, Chief
Non-Metallic Minerals Division, DMEA

Subject: Docket No. DMEA-1657X - Mica
Return of unsigned Contract Idm-M106 from James F. Sullins
Mason County, North Carolina

Enclosed find letter dated April 15, 1952, from Mr. James F. Sullins and attached thereto one copy of unsigned Contract Idm-M106, which we had requested that he return. You have already received the other copies which were returned by Mr. Laurence, Executive Officer, Region VII. The case is now terminated and the last of the unsigned copies of the contract are now returned to you.

Lawrence G. Houk

JTRobertson:mp 4/17/52
Enclosure - 1

cc: Docket File
Adm. Reading File
Field Team, Region VII (2)
Mr. Dietrich, 3526
Mr. Norton, G-232, GSA Bldg.
Mr. Houk
Mr. Robertson

MF-200
(June 1951)

Docket No. DMA 1657X
Commodity Sheet Mica
Idm-E106

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 13th day of August, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and[2] W. K. Hunter and Jas. M. Sullins (Individuals) 719 13th Street, Knoxville, Tenn.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of North Carolina, County of Franklin described as follows:[3] 11 acres described on attachment.

(a) [illegible] Operator [illegible] lease [illegible] and [illegible]

BEGINNING at a stake on the road, K. Elias' corner, and runs with his line South 21½ West 41 poles to a stake and pointers on top of mountain; thence South 50 East 21 poles to a stake; thence South 10 East 25 poles to a sourwood; thence South 55 East 5 poles to a hickory; then North 26 East with Leach's line 1 pole to the road; thence with the road to the BEGINNING, containing 11 acres, more or less.

(b) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 20 days from the date of this contract shall commence work on a project of exploration for[5] sheet mica; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of[6] 60 days from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. 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.

5. *Fixtures and improvements.* 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. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[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.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, 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.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 90 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $ 450.00, which is 90 percent of the agreed estimated total cost of this project, $ 500.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *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 worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C Mettendorf
Director, Production Expansion Division

_____ and
(Operator)

By _____ jointly and severally.
(Operator)

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

EXHIBIT A - Exploration Project

This project is composed of two parts as follows:

(1) A bulldozer trench will be cut along the strike of the pegmatite for a distance of 200' to 400' and to a depth of about 5'. The cut will be 6' to 10' wide depending on width of blade available; that is it will be cut in a single pass. The location and direction of the cut will be mutually agreeable to Operator and Field Team Member.

(2) Shallow test pits (2 or 3 feet deep) will be dug with hand tools and samples taken therefrom.

The above work is to be accomplished in about 60 days at a total cost of $500.

Fixtures and Improvements: None

Operating Equipment:

Rental of bulldozer with operator, fuel etc., 30 hours at $10 per hour	$300.00
Purchase miscellaneous hand tools	40.00
	$340.00

Labor and Supervision:

1 working foreman, 5 days at $12 per day	$ 60.00
2 laborers, 5 days at $10 per day	100.00
	$160.00

Rehabilitation and Repairs: None

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. SIMMEL
Executive Secretary

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner ~~in fee simple~~ of mineral rights ~~and mineral~~ privileges of that certain parcel of ground in the county of Macon, State of North Carolina, described in a certain Exploration Project Contract dated ~~May 29~~ Aug. 13, 195~~0~~1, between Munday heirs, as shown below, and J. M. Sullins and W. K. Hunter, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated 24th day of May, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 24 day of May, 1951.

Ethel M. Sullins
Bonnie M. Byson
Bronson M. Clayton
Louise M. Cotter
Amelia M. Fowler
B. G. Munday

U. S. GOVERNMENT PRINTING OFFICE 830705

NORTH CAROLINA
MACON COUNTY

THIS LEASE, Made this the 24th day of May, 1951, by and between ETHEL SULLINS and husband J. M. SULLINS, LOUISE COTTER, widow, AMELIA FOWLER and husband JIM FOWLER, BONNIE BROWN and husband JOHN BROWN, B. C. MUNDAY and wife IRENE MUNDAY, BRONSON [illegible] and husband [illegible], and ~~IRENE MUNDAY~~, wife ~~of Earl~~ Munday, parties of the first part, to W. K. HUNTER and J. M. SULLINS, parties of the second part,

WITNESSETH:

That the said parties of the first part do hereby lease unto the parties of the second part, their heirs and assigns, the mica and mica mining privileges upon the two following described tracts of land in Macon County, North Carolina, towit:

> FIRST TRACT: BEGINNING at a chestnut oak, runs South 25 West 160 poles to a stake; then S. 65 E. 75 poles to a stake; then N. 25 E. 160 poles to the BEGINNING, containing 75 acres, more or less.
>
> SECOND TRACT: BEGINNING at a stake on the road, K. Elias' corner, and runs with his line South 21½ West 41 poles to a stake and pointers on top of mountain; thence South 50 East 21 poles to a stake; thence South 10 East 25 poles to a sourwood; thence South 55 East 5 poles to a hickory; then North 26 East with Leach's line 1 pole to the road; thence with the road to the BEGINNING, containing 11 acres, more or less.

The terms and conditions of this lease are as follows:

1. Parties of the second part agree to pay parties of the first part a royalty of 12½% of the gross selling price of all mica recovered from said property, and all royalty payments shall be due and payable within ten days from the date of sale.

2. The parties of the second part agree to keep a record of all sales which shall be open for inspection of parties of the first part at all times.

3. The duration of this lease shall be twelve months from the date hereof, but it is understood and agreed that if mining operations upon said property shall prove profitable that parties of the second part shall have the right and privilege to renew this lease from year to year as long as said mining operations are profitable.

4. It is understood and agreed between the parties hereto that if any time parties of the second part shall discontinue operations for as long as six months, the parties of the first part, at their option, may declare this lease to be terminated and of no further force and effect.

TO HAVE AND TO HOLD said mica and mica mining privileges hereunto set forth, according to the terms hereof, unto the said parties of the second part, their heirs and assigns, to their own use and behoof.

IN TESTIMONY WHEREOF, the said parties of the first part have hereunto set their hands and affixed their seals, the day and year first above written.

B. C. Munday (SEAL)

Irene Munday (SEAL)

Bonnie M. Brown (SEAL)

J. C. Brown (SEAL)

BY ATTORNEY IN FACT Bronson M. Clayton (SEAL)

BY ATTORNEY IN FACT Claude Clayton (SEAL)

AN INDIVIDUALLY Amelia M. Fowler (SEAL)

Jim A. Fowler (SEAL)

Mrs. Ethelyn M. Sullins (SEAL)

Jas. M. Sullins (SEAL)

BY ATTORNEY IN FACT Louise M. Cotter (SEAL)

and W K Hunter (SEAL)

Jas. M. Sullins (SEAL)

STATE OF TENNESSEE

COUNTY OF KNOX

Personally appeared before me, W. K. Hunter and James M. Sullins, who acknowledged the execution of the foregoing instrument, for the purpose therein expressed.

WITNESS my hand and seal, this the 29th day of May, 1951.

Earl Street
Notary Public

My commission expires July 7 1954

STATE OF TENNESSEE
COUNTY OF KNOX

Personally appeared before me this day ETHEL SULLINS and husband J. M. SULLINS, and BONNIE BROWN and husband JOHN BROWN, and AMELIA FOWLER and husband JIM FOWLER, who acknowledged the due execution of the foregoing instrument for the purposes therein expressed.

WITNESS my hand and notarial seal, this 29 day of May, 1951.

(SEAL)

H. L. Vineyard
Notary Public

My Commission Expires: April 7, 1954

STATE OF TENNESSEE
COUNTY OF Knox

Personally appeared before me this day LOUISE COTTER, widow, who acknowledged the due execution of the foregoing instrument for the purposes therein expressed.

WITNESS my hand and notarial seal, this 29 day of May, 1951.

(SEAL)

H. L. Vineyard
Notary Public

My Commission Expires: April 7, 1954

NORTH CAROLINA
MACON COUNTY

Personally appeared before me this day B. C. MUNDAY and wife IRENE MUNDAY, who acknowledged the due execution of the foregoing instrument for the purposes therein expressed.

WITNESS my hand and notarial seal, this 24 day of May, 1951.

(SEAL) Cecile Ginson
Notary Public, Macon County, N. C.

My Commission Expires: December 22, 1951

STATE OF Tenn
COUNTY OF Smot

Personally appeared before me this day BRANSON M. Clayton and husband Claude Clayton, who acknowledged the due execution of the foregoing instrument for the purposes therein expressed.

WITNESS my hand and notarial seal, this 29 day of May, 1951.

(SEAL) H. L. Vineyard
Notary Public

My Commission Expires: April 7, 1954

STATE OF _____
COUNTY OF _____

Personally appeared before me this day IRENE MUNDAY, widow of Earl Munday, who acknowledged the due execution of the foregoing instrument for the purposes therein expressed.

WITNESS my hand and notarial seal, this _____ day of _____, 1951.

Notary Public
My Commission Expires: _____

Form MF-103
(August 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1657X

Date received 6-4-51

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

W. K. Hunter and Jas.M. Sullins
719 13th Street
Knoxville, Tennessee

Calloway and Munday Property--SECOND TRACT

Name and address of applicant

Date May 29, 1951

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $7,500.00

Mineral or metal Sheet Mica

Percentage of Government participation 90%

Location of mine Franklin, North Carolina

Date of filing MF-100 May 29, 1951

DMA Docket Number, if available 1657X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

Wm. K. Hunter & Jas. McMullen
(Name of company)

By Jas. McMullen
(Signature of authorized official)

May 29, 1957
(Date)

Wm. K. Hunter
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Suppliment to Form MF-103
U. S. Department of the Interior
Defense Minerals Administration

Calloway and Munday Property--SECOND TRACT

Sheet 1

Item 5. Lessee

Item 6. Not owner

Item 7. After securing the attached lease it developed that there might possibly be one or two additional heirs. These heirs ~~are~~ or possible heirs are not available for contact at the present time. One of them is out of the United States, the other in the hospital. We have been assured, however, by the other heirs that there will be no trouble in securing their signature to the lease. Communications have been sent to the person out of the states and the other person will be contacted on return from the hospital.

Item 8. Not operating.

Item 9. Hunter and Sullins are prepared to invest 10% of estimated cost of the exploration as shown above.

Item 10. No mine operation on property. See description on lease and map attached.

Item 15. Mica transported by truck to Franklin, North Carolina, where there are s everal mills to process sheet Mica.

Item 20. ~~The [illegible] of the property will be by a [illegible] on the [illegible] the [illegible] the [illegible] the [illegible]~~

The exploration will be conducted for sheet Mica.

Item 21. The development of this property will be by benching on the ore body, 8 ft. in and 6 ft. high and for the full width of the vein. The ore body from the out crop runs nearly east and west on the point a ridge. The estimated length of this development on the ore body will be from 400 to 500 ft. The indications are very favorable for sheet Mica on this property. It is estimated that this exploratory work will require about 60 days.

Item 22. The Pigmitite on this property can be traced by out cropping and by some old pits. There will have to be some further development to determine the width of this formation. There is considerable evidence of sheet Mica in the dumps from these old pits and it was estimated that this property is worthy exploratory work.

Item 23.

(a)

1	Engineer and Superintendent	2 months @ $400.00	$ 800.00
1	Foreman	2 months @ 250.00	500.00
1	Bookkeeper	2 months @ 200.00	400.00
8	Laborers	8 hr. day @ 8.00	3840.00
1	Carpenter and helper	2 days	50.00
	Workmen's compensation insurance		224.00
	Public liability insurance		15.00
	Unemployment compensation insurance, approximately		167.00

(c)
None

(d) Tool house 10'x12' 100.00

(e) None

(f) Compressor and Jack Hammer 2 months 525.00

(g) None

(h) cont. on next sheet.

Suppliment to Form MF-103
U. S. Department of the Interior
Defense Minerals Administration

Calloway and Munday Property--SECOND TRACT

Sheet 2
Item 23.

(h) 10 Short H. Shovels S. P.	$ 22.00
4 Long H. Shovels	7.46
1 Axe D Blade	4.00
10 Picks Miners	14.40
2 Picks Heavy R. R.	3.75
1½ doz. Pick Handles	10.60
4 Wheelbarrows Rubber Tire	89.56
2 Buckets	3.00
2 Dippers	.50
1 Saw	4.00
1 Hammer	2.25
Dynamite 40%	40.50
Exploders	27.50
Battery	43.50
Miscellaneous and emergency	603.28
Total	$7500.00

(i) None required at this time

Item 24. Project expected to be completed in a maximum of two months.
$7,500.00 or less.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMA 1657X

Date received MAY 31 1951 6-4-51

W. K. Hunter and Jas. M. Sullins
719 13th Street
Knoxville, Tennessee

Calloway and Munday Property--SECOND TRACT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Name and address of applicant

May 29, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~Necessity Certificate pursuant to the provisions of Sec. 124 A (Amortization Deduction) of Internal Revenue Code 1950~~, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

X
5

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production None

   If not in production or operation, estimated date when production will begin Depends on results of exploration.
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Wm. K. Hunter (partner)	Engineer						
719 Thirtienth Street							
Knoxville, Tennessee							
Jas. M. Sullins (Partner)	Bookkeeper						
719 Thirtienth Street							
Knoxville, Tennessee							
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock None	$	$	$		
Preferred stock None	$	$	$		

*Indicate period covered.

10. Production: None

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

Suppliment to Form MF-100
U. S. Department of the Interior
Defense Mineral Administration

Calloway and Munday Property--Second Tract

Sheet 1

Item 1.
(a) Prospect for sheet Mica.
(b) Prospect for scrap Mica.

Item 2. Prospect: Calloway and Munday Property--Second Tract.

Item 8.
(a) Bench and open cut. Jack hammer, new operation.
(b) 400 ft.
(c) None
(d) None

Item 3.
(a) .8 mile from Franklin depot.
(b) Franklin--Sylva, North Carolina
(c) Franklin, North Carolina
(d) Macon County, North Carolina

Item 4.
(a) Not in operation
(b) Lessee

Item 6. W. K. Hunter, Ehgineer, Tennessee Copper Company, Copper Hill, Tennessee--6 years. American Zinc Company, Mascot, Tennessee--6 years. Other mining operations in Nevada, Arizona, Tennessee, South Carolina, and Alabama.

Jas. M. Sullins, Forty years in business and keeping business records and books. At present, secretary, Civil Service Board, City of Knoxville.

Item 7.
(a) The vein is indicated by the out croppings of a Pegmitite dyke carrying Mica, which extends through the property some 400 to 500 ft. There are some five or six old pits on or near this vein and one old shaft that is now some 20 ft. deep both the pits and the shaft were put down some years ago and are filled in to some extent. All of which show some evidence of sheet Mica.
There is no authenic record of any production on this property.
(b) Macon County, North Carolina, has long been recognized as a large producer of strategic sheet Mica. For more details and authorative information, please refer to PHYSICAL CHARACTERISTICS OF COMMERCIAL SHEET MUSCOVITE IN THE SOUTHEASTERN UNITED STATES. Geological survey professional paper 225.
(c) Hunter and Sullins visited the property and found sufficient indication of Mica which would evidently justify further explorration and possible development of this property.

Item 12.
(a) No ore or mineral reserves determined. Judging by observation of other mines in this area, it would be reasonable to ~~purpose~~ believe that in case the exploration proves satisfactory there would be a large tonnage of sheet Mica over a period of years from this prospect.

Item 13. The property is located between U. S. Highway No. 64 and Cat Creek Road on Sloans Branch Road, a Macadam road, about a half to three quarters mile long, connecting highway 64 and Cat Creek Road. The distance to shipping point and Mica mills is approximately .8 of a mile, about 1 mile from the center of Franklin, or Macon County Court House.

Item 14. No water required, however, Sloans Branch nearby across the road.

Item 15. Plenty of Power available but no required at this time.

Item 16. None at this time. Plenty available.

Item 17. None

Item 18. None

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

Wm. H. Hunter & Jas. McWilliams
(Name of company)

By Jas McWilliams
(Signature of authorized official)

May 29, 1957
(Date)

W. K. Hunter
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STRUBEL
Executive Secretary

Calloway-Brumley Property
Second Beach

April 15, 1952

U. S. Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Att: Mr.C. M. Mithendorf
Acting Administrator

Re: Docket No. DMEA-1657 - Mica
Contract Idm-E106
W. K. Hunter & J. M. Sullins
Macon County, North Carolina

Dear Mr. Mithendorf:

Your letter of April 8th was received while I was in North Carolina last week or it would have had more prompt attention.

As requested, project contract Idm-E106 covering project DMEA-1657 is returned, attached hereto.

As to our intentions with respect to project DMEA-1656 in Macon County on the Mica City Creek, it was in connection with this project that I spent several days in Macon County, North Carolina, last week and every effort is being made to rush this work up in order to obtain a lease from the Forest Service on some 75 to 100 acres adjoining the tract on which we now hold a lease.

Also the Forest Service and the United States District Attorney's office in Asheville have advised that all details will be completed in a very short time.

Sincerely yours,

James M. Sullins

719 13th Street
Knoxville, Tennessee

4/16 - Copy of contract (unsigned) & L.S.A.
rec'd by Mr. Mitchell
Min. Div. M.P.

FILE COPY
SURNAME:

Robertson
Dietrich
Norton
Thayer
John
K Johnson

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

600

APR 8 1952

Mr. J. M. Sullins
M. K. Hunter & J. M. Sullins
719 - 13th Street
Knoxville, Tennessee

Subject: Docket No. DMA-1657 - Vice
Contract Idm-M106
M. K. Hunter & J. M. Sullins
Mason County, North Carolina

Dear Mr. Sullins:

Our records show that an exploration project contract Idm-M106, was prepared for project DMA-1657 and transmitted August 13, 1951, to Mr. Robert A. Laurence, Field Team Executive Officer, for the purpose of obtaining your signatures.

We are informed by Mr. Laurence that the contracts were never signed. He has returned all unsigned copies to this office except one copy which he handed to you August 17, 1951. The project is now considered terminated and we would appreciate your returning to this office the unsigned copy of contract which you hold.

We would also like to hear from you as to your intentions with respect to project DMA-1656. It has been in abeyance several months awaiting definite lease arrangements. If there is no longer a desire to proceed with this case we would be pleased to be so advised, so that we may terminate it also and thereby close the files on both cases.

Sincerely yours,

C. O. Mittendorf (for)
Acting Administrator
Defense Minerals Exploration
Administration

JTRobertson:mp 4/3/52

cc: Docket File
Adm. Reading File
Mr. Dietrich, 3526
Mr. Norton, G-232, GSA Bldg.
Mr. Houk
Field Team, Region VII (2)

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

Room 13, Post Office Building
Knoxville, Tennessee

March 28, 1952

MAR 3 - 1952

Memorandum

To: Operating Committee, DMEA

From: Executive Officer, DMEA- Region VII

Subject: DMEA-1656K, 1657K, W. K. Hunter & J. M. Sullins (mica)

In reply to your letter of March 21 concerning the subject dockets, we doubt if these operators will ever do anything with either of them, or that they will be able to show valid ownership of mineral rights on 1656K in the near future. The contracts have run out long ago and should be considered terminated. In response to a telephone inquiry from Mr. Houk, we wrote him a memo on March 25 which you have probably seen by now, suggesting the same thing.

Robert A. Laurence

Robert A. Laurence

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

Room 13, Post Office Building
Knoxville 02, Tennessee

March 25, 1952

Memorandum

To: Mr. L. G. Houk
Through: Operating Committee

From: Robert A. Laurence, Executive Officer, Region VII

Subject: DMA-1657X, Idm-E106, W. H. Hunter and J. M. Sullins (mica)

In response to your recent telephone call, I return herewith 5 copies of the subject contract. It seems to us quite unlikely that the applicants will ever do any work on this prospect.

The fourth copy was given to Mr. Sullins on August 17, 1951 and is presumably still in his possession. If it should be returned, I suggest that you request it when you write to him. It will save time to do that, rather than for us to request it from him.

Robert A. Laurence

Robert A. Laurence

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 27 1952

FILE COPY
SURNAME:

Robertson
Houk

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

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region VII
Room 13, Post Office Building
Knoxville 1, Tennessee

Subject: Docket No. DMEA-1656X
Docket No. DMEA-1657X
Mica
W. K. Hunter and J. M. Sullins

Dear Mr. Laurence:

The question of what final action should be taken on the above two cases has been in abeyance for six or seven months.

We would like to have your recommendation as to whether or not the two applications should be withdrawn or whatever suggestions you may have to offer respecting them.

Referring to your last letter addressed to Mr. C. O. Mittendorf, dated September 5, 1951, on DMEA-1657X you write in part:

> "They have not yet signed, giving reason that this job is so small they prefer to wait until approval can be obtained for 1656X and do both at once."

Please check over your files and bring us up-to-date on the status of the two cases giving this office your suggestions as to proper action to take with respect to them.

Sincerely yours,

(signed) FRANK E. JOHNSON

3/21

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Approved:

J. H. Hodges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

JTRobertson:gad 3/19/52
Copy to: Admin. Reading File
Docket File (DMEA1656)
" " (DMEA1657)
Mr. Norton, G-232, GSA Bldg.
Mr. Dietrich, 3526
Operating Committee
Mr. Houk

DMA-1656 was exmanined by Field Team and denied, see letter to applicant dated 11/13/51

Francisco Bay 10-8-7

Note:

Hold up the following until signed copies of contract are returned.

1. Mac Allen letter (words missing)

~~2. Congressman [illegible] letters.~~

AP

Mr. Gell

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~[illegible]~~
DEFENSE MINERALS ADMINISTRATION
Room 13, Post Office Building
Knoxville 2, Tennessee

DEPARTMENT OF THE INTERIOR
RECEIVED
SEP 7 1951
Defense Minerals Administration,
Production Expansion Division.

September 5, 1951

PED File

DMA-1657x

Memorandum

To: Mr. C. O. Mittendorf, Director
Production Expansion Division

From: Executive Officer

Subject: DMA - 1657X, Contract I-dm-E106

The above contract was received on August 16, and applicants were contacted for signature on August 17. They have not yet signed, giving reason that this job is so small they prefer to wait until approval can be obtained for 1656X and do both at once.

As we intend to recommend some work at 1656X when the applicants can show a lease from Bureau of Land Management, this request seems reasonable, but it will require an indefinite postponement of starting and completion dates for 1657X, as obtaining leases on National Forest land seems to require a long time.

Robert A. Laurence

Robert A. Laurence
Executive Officer
Field Team, Region VII

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.
SEP 7 8 40 AM '51

IN REPLY REFER TO:

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

"RD:RLW"

AUG 31 1951

Mr. James M. Sullins
719 13th Street
Knoxville, Tennessee

My dear Mr. Sullins:

Reference is made to your letter of August 17, and the copy of your letter of July 25, relative to an application with the Defense Minerals Authority for an exploration lease on Tract No. 228 II, Nantahala National Forest, Macon County, North Carolina.

This office has no record of your letter of July 25. Your correspondence has been referred to the Administrator, Defense Minerals Administration for consideration.

If you desire to prospect for, mine and remove minerals from lands in National Forests owned by the United States, you should file an application therefor as provided by the regulations contained in the enclosed copy of Circular No. 1668. No application form is furnished, but the application should contain information as required in Section 200.5 of the circular. In addition, you should give your address, and furnish a statement showing whether you are a native born or a naturalized citizen of the United States. The application should be filed with the Director, Bureau of Land Management, Washington 25, D. C. No money is required until a permit or lease is offered you.

An application for mineral permit or lease is not the same as the application for lease mentioned in your letters.

Sincerely yours,

For the Director:

R. E. Hoffman

Chief, Branch of Minerals
Division of Adjudication

RLWilkinson:dvw
8/27/51

copy to: Defense Minerals Admin.
Enclosure

Encs
For Gen Serv Adm

RECEIVED
BUREAU LAND MANAGEMENT
WASHINGTON, D. C.

AUG 21 10 05 AM 1951

Knoxville, Tennessee

August 17, 1951

Hoffman
ADM

Department of Interior
Bureau of Land Management
Washington 25, D. C.

Att: Mr. L. E. Hoffman, Director

Dear Mr. Hoffman:

Enclosed for your convenience is copy of a letter sent you under date of July 25, 1951 by registered, air mail.

Will you please let me have reply at your earliest possible convenience and oblige.

Yours truly,

J. M. Sullins

719 - 13th Street
Knoxville, Tennessee

Wilkins

Knoxville, Tennessee

July 25, 1951

Department of Interior
Bureau of Land Management
Washington, 25, D. C.

Att: Mr. L. E. Hoffman, Director

Dear Mr. Hoffman:

Wm. K. Hunter and J. M. Sullins, the writer, have filed application with the Defense Minerals Authority for a sheet mica exploration loan on Tract No. 228 II, located in the Nantahala National Forest in Macon County, North Carolina.

It has developed that the most favorable showing of sheet mica so far on this tract is approximately on the eastern line of Tract No. 228 II, indicated by line 3 to 4 and at approximately point X as indicated on the plot sheet attached. The dip of the pegmatite is to the southeastern and away from Tract No. 228 II.

Wm. K. Hunter and J. M. Sullins wish to make application for mining and exploration lease on the plot as indicated by drawing and call sheet attached for the purposes stated.

It will be greatly appreciated if you will advise as to what further action or information you will require, if any, to complete the lease.

As we have been advised that the time for approval of these applications for exploratory loans is getting short, we will appreciate any advise you may give us at your earliest convenience.

Yours truly,

J. M. Sullins

719 - 13th Street
Knoxville, Tennessee

FILE COPY
SURNAME:

Ellis
Olund
Mittendorf (JH)

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

August 13, 1951

AIR MAIL

Mr. Robert Laurence
Executive Officer, Region VII
Room 13, Post Office Building
Knoxville, Tennessee

Re: Docket No. DMA- 1657X
W.K. Hunter and Jas. M. Sullins
719 13th Street
Knoxville, Tennessee
(Sheet Mica)

Dear Mr. Laurence:

Enclosed find six (6) copies of the Hunter-Sullins exploration project contract.

This contract has been signed and given a project number with effective date as shown. Kindly have the contract signed by the Applicants in the presence of yourself or other member of your Region VII office.

Upon completion of signatures one copy is to be given the Contractor and one copy retained by your office. The remaining four copies, including the original, are to be returned to this office as soon as possible. The field finance section's copy will be forwarded to that office by the Washington Finance Officer.

Sincerely yours,

BF 8-15

C. O. Mittendorf (JH)

C. O. Mittendorf, Director
Production Expansion Division

Enclosures- 6

EWEllis/jem
cc to: Adm Reading File
Reports & Records
Docket
Mr. Mittendorf-Olund
Mr. Lyon
Mr. Moon
Mr. Bove
Mr. Barr
Mr. Ellis
Mr. Arundale
Mr. Norton

APPROVED:

Tom Lyon
Chairman, Coordinating Committee

Lowell B. Moon
Member, Bureau of Mines

Olaf N. Rove
Member, Geological Survey

FILE COPY
SURNAME: 140

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

August 9, 1951

Q.E.C.

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: W. K. Hunter and Jas. M. Sullins exploration contract -- Docket No. DMA-1657X

The contract in the captioned case is approved as to legal form and sufficiency subject to proper execution by the operator and dating as of the day of delivery to the operator.

Your file is returned herewith.

J. L. Hofflund

J. L. Hofflund
General Counsel

Delivered by hand 8/9/51, em

Attachment

CJKoontz/ema

Copy to: Reports & Records Unit
C. J. Koontz
J. L. Hofflund
Chron.

FILE COPY
SURNAME:

Ellis
Olund

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

This letter did not go out

August , 1951

Mr. Frank McAtee, Jr.
Contract Service Section
General Accounting Office
Washington 25, D.C.

Re: Docket DMA- 1657X
Exploration Project Contract
W.K. Hunter and Jas. M. Sullins
Knoxville, Tennessee

Dear Mr. McAtee:

Enclosed for recording in your office is the original, signed copy of an Exploration Project Contract executed between the operator named in the above reference and the Government of the United States.

Sincerely yours,

C. O. Mittendorf, Director
Production Expansion Division

Enclosure-1

EWEllis/jem

cc to: Adm. Reading File
Mr. Barr
Mr. Norton
Mr. Arundale
Mr. Mittendorf-Olund
Mr. Ellis
Reports & Records
Docket

Mr. Barr
Waskey

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
Room 13, Post Office Building
Knoxville 01, Tennessee

July 6, 1951

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LANDON F. STROBEL
Executive Secretary

To: Mr. Tom Lyon
Chairman, Coordinating Committee
Defense Minerals Administration

From: DMA Field Team, Region VII

Subject: DMA 1656X and 1657X - W. K. Hunter and J. M. Sullins

Attached herewith are four copies each of reports on field investigation of the above-designated applications. Results and recommendations were given to Mr. Waskey by phone on June 22.

The original files on these applications were returned to Mr. Waskey at his request several days ago, as they contained the only copy of the lease.

Robert A. Laurence
Robert A. Laurence
U. S. Geological Survey

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

This has been temporarily withdrawn because definite reason-also [illegible]

Enclosures

ON-SITE RPT.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION
REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

DMA-1657X, Calloway & Monday Prospect
Macon County, N. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1951
LANDON F. STAPEL
Executive Secretary

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

L. G. Marshall, Engineer
U. S. Bureau of Mines

June 21, 1951

Report of Field Examination on
Calloway and Nonday Prospect, Macon County
North Carolina

June 21, 1951

NNA-1657K

A pegmatite, trending in an east-west direction with a vertical dip, occurs along the crest of a small ridge one mile northeast of Franklin, (Corlein Knob, N. C., 167 NE). Several old pits have been dug in the pegmatite but only one at present exposes the pegmatite in place. The exposed pegmatite is about 18 inches in thickness, containing mica mostly in small sizes.

Mica in the dumps around the caved openings appears to be of strategic quality. Pieces of mica up to 4 inches in diameter occur in the old dumps.

It is recommended that the pegmatite be explored by cutting a bulldozer trench along the strike of the pegmatite to a depth of 6 to 7 feet for a distance of approximately 425 feet.

Estimated Costs:

1 bulldozer (contract) @ $100 per day for 4 days	$400.
1 supervisor @ $12 per day for 5 days	60
1 laborer @ 90¢ an hr. for 3 days	21.60
Supplies	18.40
Total	$500.00

Memorandum

To: Director, Economic Expansion Division
Defense Materials Administration

From: Director, Supply Division
Defense Materials Administration

Subject: Recommendation for Certificate Approval

Name of Applicants: W.K. Hunter and Jas. M. Sullins
719 13th St., Knoxville, Tenn.

DMA No. 1657X

Commodity: Mica

Amount Requested: $ 7500

Amount Approved: $ 500

Commitment Ceiling: 90 % $ 450

Director

Docket DMA-1657X

EXHIBIT "A"

A bulldozer trench will be cut along the strike of the pegmatite for a distance of 200' to 400' and to a depth of about 5'. The cut will be 6' to 10' wide depending on width of blade available; that is it will be cut in a single pass. The location and direction of the cut will be mutually agreeable to Operator and Field Team Member.

Shallow test pits (2 or 3 feet deep) will be dug with hand tools and samples taken therefrom.

Docket DMA-1657X

EXHIBIT "B"

Not Applicable

EXHIBIT "C"

Rental of bulldozer with Operator, fuel etc., 30 hours @ $10		$ 300.00
Purchase miscellaneous hand tools		40.00
	Total	$ 340.00

EXHIBIT "D"

1 working foreman 5 days @ $12		$ 60.00
2 laborers 5 days @ $10		100 .00
	Total	$ 160.00

EXHIBIT "E"

Not Applicable

Docket DMA-1657

Recommendation

That an Exploration Aid Contract in the amount of $500 be granted, Government Participation 90% be granted as follows:

1. Work will consist of bulldozer trenching along the strike of the pegmatite to remove overburden and expose a fresh surface for sampling.

2. Minor test pitting along the trench will be done with hand tools to permit samples to be taken.

Total cost $500, time limit 60 days

July 6, 1951

Hon. Howard H. Baker
House of Representatives
Washington 25, D. C.

My dear Mr. Baker:

We have your letter of June 29 in regard to exploration loan application of Mica City Creek Property, docketed DMA-1656X and DMA 1657X.

One of the applications has been processed and sent forward for completion of the contract.

One item withdrawn as it was found necessary to change boundaries of the property. This will be resubmitted and will be processed as rapidly as possible.

We trust that the above information is satisfactory.

Sincerely yours,

JAMES BOND

Administrator

JABARR:mp

cc: Administrator's Reading File
Reports & Records Unit File
Mr. Barr
DMA Files

FILE COPY
SURNAME:

Barr
Parsons / Kay

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 27, 1951

Memorandum

To: Mr. James A. Barr, Sr.

From: Mr. A.B. Parsons

Subject: Docket DMA-1657X; Mica
W.K. Hunter and Jas. M. Sullins

The prospective available supply of Mica is far short of meeting defense requirements. Consequently, it is highly desirable that exploration for new domestic deposits be stimulated by any reasonable Government assistance to private interests. Any exploration project that holds promise of finding significant new reserves, merits consideration by the Defense Minerals Administration.

A.B. Parsons
Assistant Director
Supply Division

RWASKEY:mas

cc: Mr. Strobel
Mr. Barr
Mr. Parsons
Mr. Norton
Mr. Mittendorf
DMA Files

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-1657X

Commodity Sheet Mica

Total Amount $7,500

Govt. Participation 90%

1. Name and Address of Applicant W. K. Hunter and Jas. M. Sullins
719 13th Street, Knoxville, Tennessee

2. Location of Property 1 mile from Franklin, N. Caro.
Macon County

3. Mineral or metal Mica Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor Probably N.G. but

c) None insufficient evidence. to deny.

d) Don't know—needs field examination Yes - to field

e) Is there an alternative and favorable project? Jas. Sullins 5/15/51
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes, Lease
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future

productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes - MF 202

a) ~~MF-201~~? MF-202 Furnished by Applicant has been altered to add to Mineral in this sale - Is Lessee owner of record?

b) ~~MF-202~~ Applicant must claim this point.

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Yes

b) Equipment and supplies yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* yes

Is a field check needed on any of these points? NO

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* yes

Is a field check needed on this point? NO

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is?

Is this part a worthwhile exploration project? Yes, Subject Field Exm.

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? _____ If so, attach a draft.

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? Probably couldn't give it.

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? Yes If so, attach a draft.

c) Is a field check needed? NO

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? NO If so, attach a draft.

c) Are rents and charges reasonable? Insufficient data

d) Is a field check needed? Yes - Size and Type Compressor? Condition?

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? Yes

b) Is the schedule adequate for the work proposed? Yes

c) Is the schedule excessive for the work proposed? Yes

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? Yes - Why a Full Time Supt. & a Bookkeeper on such a small Job?

165-7-7

14. Exhibit E (question 23-c)*

a) Is it applicable? NOT Applicable

b) Sufficient data?

c) Reasonable?

d) Field check needed? NO

15. In your judgment, can the proposed work be done in the proposed time? yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Applicant's Description of Proposed Work is Sampling Work - If Field Examination is a worthwhile project then help applicant lay out "Benches" or trenches so that they will provide a maximum of information

JJM
6/18/81

MF-202 Forms for this Rev 165-6-7 are attached. If Project is recommed for contract try to get these replaced by standard (unchanged by Applicant) MF-202s. If there is a distinction between surface & sub-surface rights on these properties have Applicant send in a full Explanation JJM

Reviewed by: Julian Fisher USGS

Date

97692

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

June 27, 1951

Memorandum

To: Mr. James A. Barr, Sr.

From: Mr. A.B. Parsons

Subject: Docket DMA-1657X; Mica
W.K. Hunter and Jas. M. Sullins

The prospective available supply of Mica is far short of meeting defense requirements. Consequently, it is highly desirable that exploration for new domestic deposits be stimulated by any resonable Government assistance to private interests. Any exploration project that holds promise of finding significant new reserves, merits consideration by the Defense Minerals Administration.

A.B. Parsons

A.B. Parsons
Assistant Director
Supply Division

FILE COPY
SURNAME:

Barr
McKnight for Rice

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

June 19, 1951

docket mailed 6/25/51

W.K. Hunter & Jas. M. Sullins
719 13th Street
Knoxville, Tenn.

Subject: DMA-1657X; DMA-1656 X

Gentlemen:

Your application has been referred to Mr. Robert Laurence, Room 13, Post Office Building, Knoxville, Tennessee, Executive Officer of the Field Team, Region VII, for further information.

Sincerely yours,

Tom Lyon, Director
Supply Division

RW:mas

cc: Administrator's Reading File
Mr. Strobel
Field Team
Mr. Barr
DMA Files

FILE COPY
SURNAME:

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

June 19, 1951

Mr. W. K. Hunter
719 13th Street
Knoxville, Tennessee

Subject: DMA-1657X
Re: Exploration Loan
Calloway and Munday
Property (Second Tract)

My dear Mr. Hunter:

Receipt is acknowledged of your application and attachments of May 31, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1657X and was referred to Mr. James A. Barr, Chief, Industrial Minerals Branch on June 12, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1657X.

Sincerely yours,

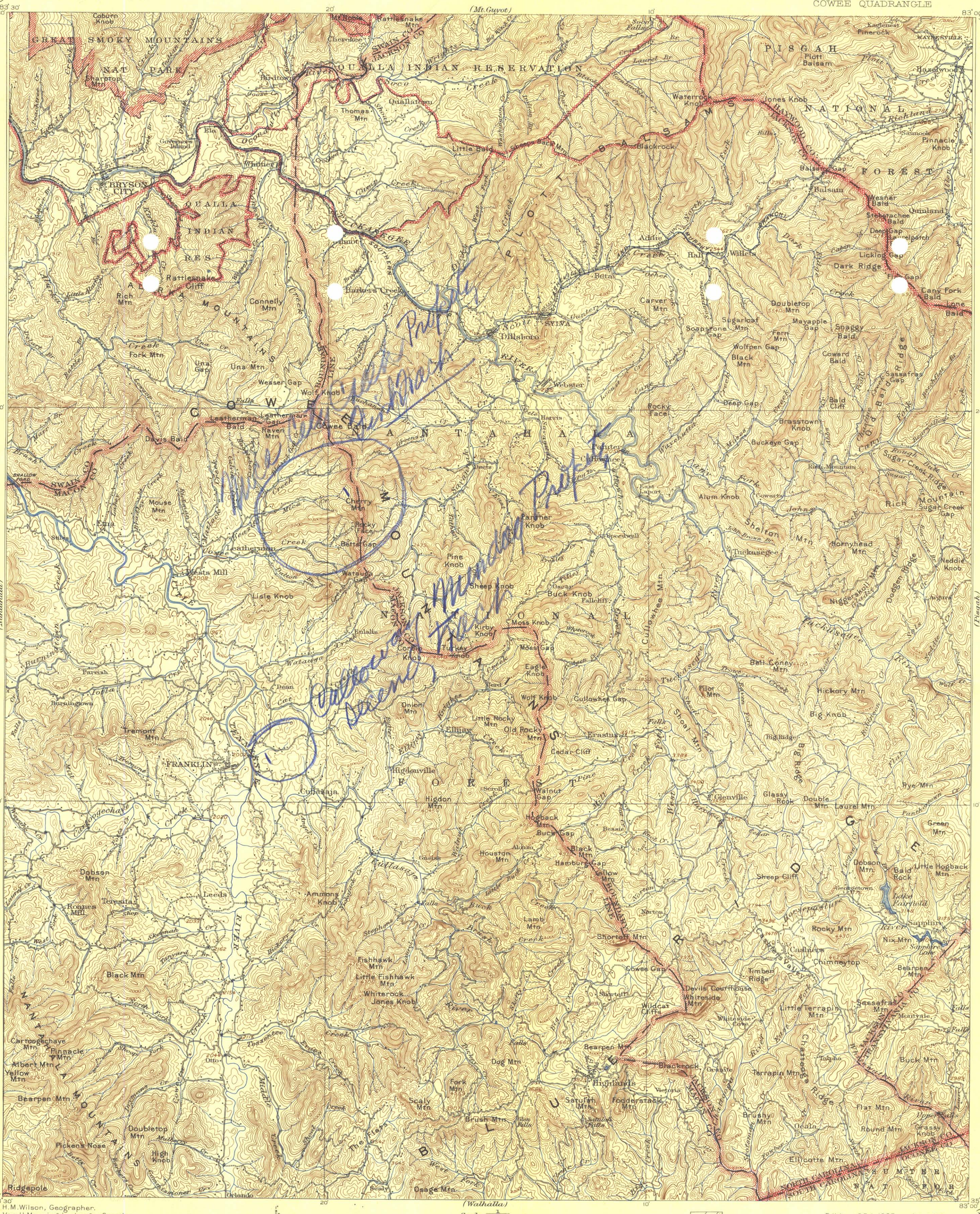
LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
>Files
Barr
Lyon

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NORTH CAROLINA-SOUTH CAROLINA
COWEE QUADRANGLE



H.M.Wilson, Geographer.
Van.H.Manning, in charge of section.
Topography by C.E.Cooke, G.S.Smith, C.C.Bassett, W.N.Brown, and Duncan Hannegan. Assistant, C.C.Gardner.
Control by S.S.Gannett, C.M.Yeates, Arthur Keith, and H.S.Gale.
Surveyed in 1885-1905.

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION 1908.

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 100 feet.
Datum is mean sea level.

G. C.C.G.S. Hannegan W.N.B.

Edition of Feb. 1907, reprinted 1943
Polyconic projection
Surveyed by reconnaissance methods

Map of the Great Smoky Mountains Park (East Half), scale 1:62.500, contour interval 50 feet, from a later and more detailed survey of the area north of Bryson, is available.

N.C.-S.C.
COWEE

N3500—W8300/30

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a series of standard topographic maps to cover the United States. This work has been in progress since 1882, and the published maps cover more than 47 percent of the country, exclusive of outlying possessions.

The maps are published on sheets that measure about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, the areas that they represent are of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, miles, and kilometers. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 of the same units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys and the resulting maps have for many years been of three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile) or $\frac{1}{24,000}$ (1 inch = 2,000 feet), with a contour interval of 1 to 100 feet, according to the character of the particular area mapped.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 4 1951
... STROBEL
Executive Secretary

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 100 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, and the high mountain area of the northwest, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles) or $\frac{1}{250,000}$ (1 inch = nearly 4 miles), with a contour interval of 20 to 250 feet.

The aerial camera is now being used in mapping. From the information recorded on the photographs, planimetric maps, which show only drainage and culture, have been made for some areas in the United States. By the use of stereoscopic plotting apparatus, aerial photographs are utilized also in the making of the regular topographic maps, which show relief as well as drainage and culture.

A topographic survey of Alaska has been in progress since 1898, and nearly 44 percent of its area has now been mapped. About 15 percent of the Territory has been covered by maps on a scale of $\frac{1}{500,000}$ (1 inch = nearly 8 miles). For most of the remainder of the area surveyed the maps published are on a scale of $\frac{1}{250,000}$ (1 inch = nearly 4 miles). For some areas of particular economic importance, covering about 4,300 square miles, the maps published are on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile) or larger. In addition to the area covered by topographic maps, about 11,300 square miles of southeastern Alaska has been covered by planimetric maps on scales of $\frac{1}{125,000}$ and $\frac{1}{250,000}$.

The Hawaiian Islands have been surveyed, and the resulting maps are published on a scale of $\frac{1}{62,500}$.

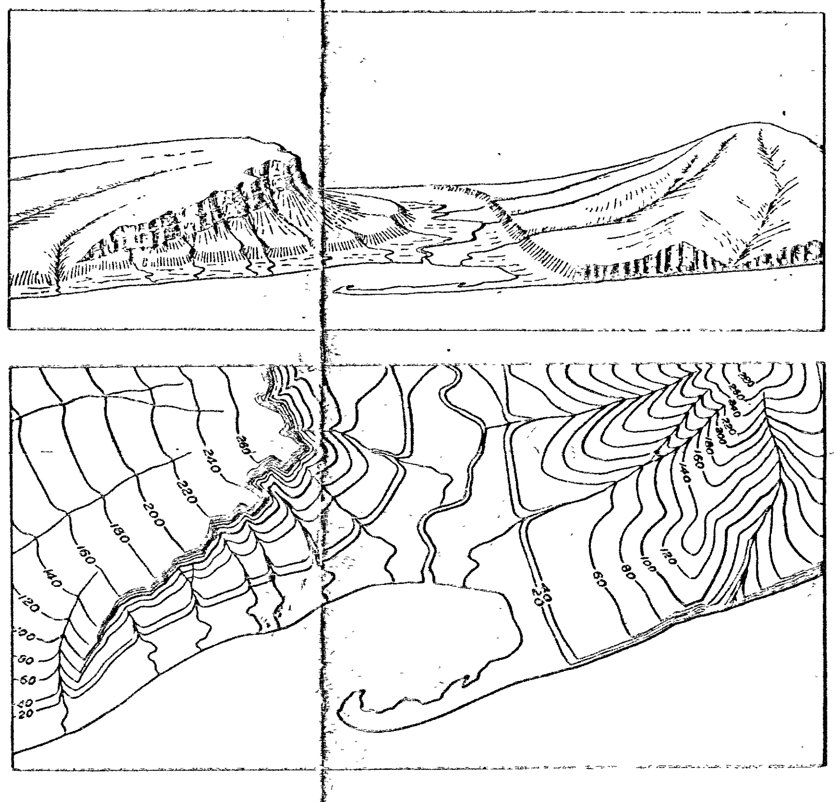
A survey of Puerto Rico is now in progress. The scale of the published maps is $\frac{1}{30,000}$.

The features shown on topographic maps may be arranged in three groups—(1) water, including seas, lakes, rivers, canals, swamps, and other bodies of water; (2) relief, including mountains, hills, valleys, and other features of the land surface; (3) culture (works of man), such as towns, cities, roads, railroads, and boundaries. The symbols used to represent these features are shown and explained below. Variations appear on some earlier maps, and additional features are represented on some special maps.

All the water features are represented in blue, the smaller streams and canals by single blue lines and the larger streams by double lines. The larger streams, lakes, and the sea are accentuated by blue water lining or blue tint. Intermittent streams—those whose beds are dry for a large part of the year—are shown by lines of blue dots and dashes.

Relief is shown by contour lines in brown, which on a few maps are supplemented by shading showing the effect of light thrown from the northwest across the area represented, for the purpose of giving the appearance of relief and thus aiding in the interpretation of the contour lines. A contour line represents an imaginary line on the ground (a contour) every part of which is at the same altitude above sea level. Such a line could be drawn at any altitude, but in practice only the contours at certain regular intervals of altitude are shown. The datum or zero of altitude of the Geological Survey maps is mean sea level. The 20-foot contour would be the shore line if the sea should rise 20 feet above mean sea level. Contour lines show the shape of the hills, mountains, and valleys, as well as their altitude. Successive contour lines that are far apart on the map indicate a gentle slope, lines that are close together indicate a steep slope, and lines that run together indicate a cliff.

The manner in which contour lines express altitude, form, and grade is shown in the figure below.



The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly enclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which it slopes gradually away and forms an inclined tableland that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

The contour interval, or the vertical distance in feet between one contour and the next, is stated at the bottom of each map. This interval differs according to the topography of the area mapped: in a flat country it may be as small as 1 foot; in a mountainous region it may be as great as 250 feet. In order that the contours may be read more easily certain contour lines, every fourth or fifth, are made heavier than the others and are accompanied by figures showing altitude. The heights of many points—such as road intersections, summits, surfaces of lakes, and benchmarks—are also given on the map in figures, which show altitudes to the nearest foot only. More precise figures for the altitudes of benchmarks are given in the Geological Survey's bulletins on spirit leveling. The geodetic coordinates of triangulation and transit-traverse stations are also published in bulletins.

Lettering and the works of man are shown in black. Boundaries, such as those of a State, county, city, land grant, township, or reservation, are shown by continuous or broken lines of different kinds and weights. Public roads suitable for motor travel the greater part of the year are shown by solid double lines; poor public roads and private roads by dashed double lines; trails by dashed single lines. Additional public road classification if available is shown by red overprint.

Each quadrangle is designated by the name of a city, town, or prominent natural feature within it, and on the margins of the map are printed the names of adjoining quadrangles of which maps have been published. More than 4,100 quadrangles in the United States have been surveyed, and maps of them similar to the one on the other side of this sheet have been published.

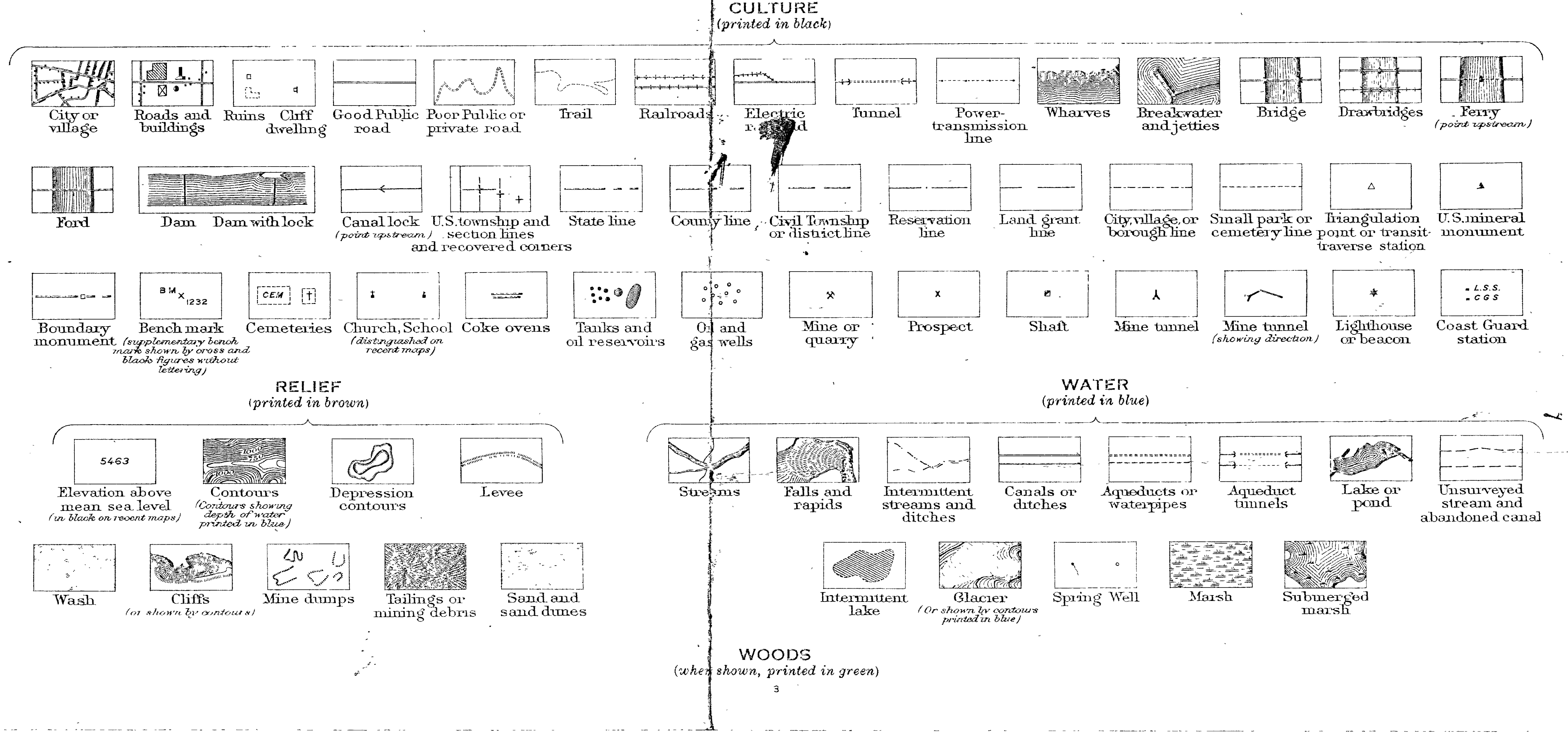
Geologic maps of some of the areas shown on the topographic maps have been published in the form of folios. Each folio includes maps showing the topography, geology, underground structure, and mineral deposits of the area mapped, and several pages of descriptive text. The text explains the maps and describes the topographic and geologic features of the country and its mineral products. Two hundred twenty-five folios have been published.

Index maps of each State and of Alaska and Hawaii showing the areas covered by topographic maps and geologic folios published by the United States Geological Survey may be obtained free. Copies of the standard topographic maps may be obtained for 10 cents each; some special maps are sold at different prices. A discount of 40 percent is allowed on an order amounting to $5 or more at the retail price. The discount is allowed on an order for maps alone, either of one kind or in any assortment, or for maps together with geologic folios. The geologic folios are sold for 25 cents or more each, the price depending on the size of the folio. A circular describing the folios will be sent on request.

Applications for maps or folios should be accompanied by cash, draft, or money order (not postage stamps) and should be addressed to

THE DIRECTOR,
United States Geological Survey,
November 1937. *Washington, D. C.*

STANDARD SYMBOLS



WOODS
(when shown, printed in green)