OPERATING AGREEMENT

THE UNDERSIGNED own interests in mineral leases and mineral options on privately owned lands in the States of NORTH CAROLINA and TENNESSEE, and mineral prospecting permits and applications therefor on Federally-owned acquired lands in the States of NORTH CAROLINA and TENNESSEE, all of which are more specifically described and set forth in Exhibit A (Schedule of Lease Acreage) attached hereto and made a part hereof. All the undersigned owners agree that in order to effect the greatest possible economy in operating and to provide an orderly program of operation, a single Operator should have charge of all the operations of the properties covered by this agreement.

1

DEFINITIONS: These words have the following meanings when used in this agreement:

a. **Party** means someone who signs this agreement as an owner.

b. **Joint property** means the property set out in Exhibit A. This phrase includes both productive and non-productive acreage.

c. **Operator** means the party managing, supervising, and having control of the joint property.

d. **Joint owner** means one of the owners of the joint property.

e. **Notice** means a written message sent by United States mail or by telegraph.

f. **Reply** means a written message sent by United States mail or by telegraph.

g. **Sale** means an agreement whereby a part or all of the joint property is assigned to others for a cash consideration only.

h. **Farm-out** means an agreement other than a sale whereby a part or all of the joint property is assigned to others for a consideration.

2

OBLIGATIONS OF JOINT PROPERTY: The parties shall bear the costs, burdens, and obligations of the joint property in accordance with the ownership percentages set out below:

Owner	Percentage of Interest
John D. Ames	8%
Jay N. Whipple	5%
Spencer M. Butler	1%
Peter Berkey	8%
Richard B. Capps	2%
Adolph R. Floreen	2%
John G. Searle	10%
Benjamin H. Putnam	40%
W. Stanton Barbour	1%
B. C. Gould	5%
Charles H. Mayne	4%
John G. Bulla	1%
Andrew M. Mras	4%
Donald J. Jaffar	2%
Robert N. Babbish	2%
Thomas E. Sheehan	1%
Charles U. Harvey	2%
Ellwood L. Cushing	2%

3

TRANSFERS: Except as set forth in Sections 4 and 5 of this agreement, it is understood and agreed that no transfer of interest by a Joint Owner in the properties covered by this agrement shall be made unless said transfer covers an undivided interest in all the properties covered by this agreement and, no transfer shall be made for less than an undivided one percent (1%) interest in the whole. Any such transfer of interest shall be made subject to all the terms of this agreement and to any contractual obligations affecting the property. In addition, the transferor shall guarantee

the financial responsibility of the transferee unless the transferee's financial responsibility is approved by sixty-six and two-thirds percent (66⅔%) of the ownership, which action shall relieve the transferor of any further financial responsibility.

The party transferring his interest must give written notice of the transfer to Operator, together with the name and address of the transferee, and the exact interest transferred. All expenses and costs of the transfer of interests shall be charged against the interest transferred.

All transfers shall be made in accordance with the provisions of this agreement and shall result in a proportionate change in the manner of bearing its costs, burdens, and obligations. No transfer shall be made effective except as of the 1st day of the calendar month following written notice of such transfer as provided above.

The Operator may not dispose of his entire interest in the joint property without the approval of Fifty Per Cent (50%) of the ownership other than his own.

4

PROSPECTS: In the event Operator determines that any property, or any part thereof, covered by this agreement is a prospect requiring machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations, Operator shall make a recommendation, together with an estimate of the costs involved, to Joint Owners with respect to said prospect. Each Joint Owner shall notify Operator of his approval or disapproval of said recommendation within fifteen (15) days from receipt thereof at the address as set forth herein for the giving of notices. Failure to do so shall constitute approval of the recommendation as submitted.

If said recommendation is to perform any of the operations set forth above, the approval of all of the ownership in said prospect shall be required.

If said recommendation is to farm-out the prospect, then, approval of Joint Owners representing at least sixty-six and two-thirds percent (66⅔%) of the ownership of said propect shall be required. Said approval of the recommendation, whether in its original form or amended, shall constitute full authority for Operator to proceed in accordance therewith.

It is understood and agreed that farm-outs may be made to a group consisting in whole or in part of members who are parties to this agreement.

5

SALE OF PROPERTY: Any bona fide proposal to purchase any part or all of the properties covered by this agreement shall be communicated by Operator in writing to Joint Owners together with his recommendation. Each Joint Owner shall have thirty (30) days from receipt of such recommendation to reply thereto and, if seventy percent (70%) of the ownership of said properties are in favor of the sale under the terms and conditions of the offer communicated, then, the sale shall be effected. All parties shall be bound by such decision and Operator shall forthwith proceed to complete the transaction with due diligence.

As an alternative, Operator may call a meeting of Joint Owners on written notice of not less than five (5) days for the purpose of considering said proposal and, if seventy percent (70%) of the ownership of said properties approve the sale at said meeting, in person or by proxy, the sale shall be completed as set forth above. Notice of the meeting shall set forth the time and place of the meeting and the terms of the proposal to purchase.

It is understood and agreed that sales may be made to a group consisting in whole or in part of members who are parties to this agreement.

6

DURATION AND EFFECT OF AGREEMENT: This agreement runs with the land and binds the parties and all their respective heirs, executors, administrators, successors, and assigns, and remains in force for the duration of the mineral leases, mineral op-

tions, mineral prospecting permits and applications for prospecting permits covering the joint property, or leases or permits pooled or unitized with any part of the joint property and made subject to this agreement and any renewals or extensions.

7

OPERATOR: BENJAMIN H. PUTNAM is named first Operator and shall be Operator until he resigns or becomes unable to act or is removed under the terms of this agreement.

In consderation of services rendered by Operator under this agreement, he shall be paid the sum of two thousand dollars ($2,000) per month beginning July 1, 1955, and as long thereafter as he continues to act as Operator and, in addition thereto, his traveling expenses incurred in connection with his duties as Operator.

In consideration of said salary, the Operator shall devote as much of his time as is necessary to carry out the purposes of this agreement, but shall not be required to spend all of his time in such endeavors.

Nothing contained herein shall prevent Operator from acquiring or otherwise dealing for his own account in properties of a like kind or nature.

8

DUTIES OF OPERATOR: Operator shall occupy and shall have full and exclusive charge of the joint property and shall have exclusive right to manage, supervise, and control all operations. Operator shall give Joint Owner access to the joint property at all reasonable times, shall keep Joint Owner informed about operating problems, and shall render such reports to Joint Owner as may be reasonably necessary.

9

LIABILITY OF OPERATOR: Operator shall maintain the standards of a reasonably prudent Operator at all times, but Operator shall not be liable to Joint Owner for mistakes in judgment but shall be liable only for bad faith, fraud, or gross negligence, or expenditures in excess of the budget not approved as herein provided.

10

PAYMENTS BY OPERATOR: Operator shall enter into all contracts for all joint account operations authorized by the owners to the joint property under the terms of this agreement, shall pay all costs, expenses, charges, and all other obligations of the joint account in accordance with the terms of this agreement and attached Exhibit B (Joint Accounting Procedure).

11

PERSONNEL: Operator shall provide all personnel necessary for the operation and development of the joint property, who shall be employees of Operator, or independent contractors, as the case may be, and who shall not be employees of Joint Owner; the compensation for such personnel shall be paid by Operator and charged to the joint account.

12

TAXES: Operator shall pay all taxes affecting the joint property except those agreed to be paid by others.

13

INSURANCE: Operator shall provide, but shall not be limited to, the following insurance, which he may charge to the joint account.

a. Workmen's Compensation Insurance as required by the laws of the state in which operations take place.

b. Public Liability Insurance, with contractual coverage in the amount of $50,000 for each person and $250,000 for each accident, for personal injuries and death, and in the amount of $40,000 for each accident for damages to property.

c. Automobile Public Liability Insurance in the amount of $100,000 for each person and $300,000 for each accident, for personal injuries and death, and $40,000 for each accident for damages to property.

If requested, Operator shall furnish Joint Owner with certificates of insurance showing that such insurance is in full force and effect and containing a provision that the insurance company may not alter materially or cancel any of such insurance without ten (10) days' notice in advance to Operator.

14

RECORDS: Operator shall keep full and accurate books and records covering the joint account and Joint Owner shall have access to all such books and records at all reasonable times. During the first month of each calendar quarter Operator shall furnish each Joint Owner with a statement for the preceding calendar quarter of all charges and credits to the joint account, summarized by appropriate classification indicative of the nature thereof. At the close of each business year, Operator shall have a recognized certified public accountant or firm of certified public accountants make a thorough audit of all the books and records of the joint account and shall furnish each party with a copy of a written audit report. Operator shall charge the cost of this audit to the joint account in accordance with the terms of this agreement.

15

COMPLIANCE WITH LAW: Operator shall comply with the requirements of law and with the orders of any regulatory body.

16

BUDGET FOR OPERATION: The operating budget to carry out the provisions of this agreement for the year ending June 30, 1956, in the amount of One Hundred Sixty Thousand Dollars ($160,000) for operating expenses and Thirty-two Thousand Dollars ($32,000) for lease rentals has been approved. Said budget includes all operating expenses and lease rentals but does not include those expenditures for machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations, for which specific approval is required from time to time, as provided for in Section 17 hereof.

Future annual operating budgets necessary to carry out the provisions of this agreement shall be prepared annually by Operator and submitted to Joint Owners on or before the 15th day of May each year this agreement is in effect. Said budget shall likewise include all operating expenses and rentals but shall not include expenditures for machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations, for which specific approval is required from time to time, as provided for in Section 17 hereof. Each Joint Owner shall notify Operator of his approval or disapproval of the submitted budget within fifteen (15) days from the receipt thereof at the address set forth herein for the giving of notices. Failure to do so within the time specified shall constitute approval. Sixty-six and two-thirds percent (66⅔%) of the ownership shall be required for approval. If a budget cannot be agreed upon by the required percentage of ownership, Operator shall have the right to proceed with the operation of this agreement, using the same budget as was in effect for the calendar quarter ending June 30, and said budget shall apply until a new budget is approved.

If at any time Operator is of the opinion the annual budget is not sufficient to meet the costs of operations, he may submit a supplemental budget to Joint Owners for their approval upon the same terms and conditions as provided for the submission and approval of the annual budget. Upon its approval, the supplemental budget shall be in addition to the annual budget.

On or before the 15th day of the last month in each calendar quarter, Operator shall send to each Joint Owner, a statement of his percentage share of the budget for the succeeding calendar quarter and, each shall pay to Operator the amount due not

EXHIBIT C

ADDRESSES FOR PURPOSE OF NOTICE

Ames, John D.
135 S. La Salle Street
Chicago 3, Ilinois

Babbish, Robert N.
16833 Muirland Avenue
Detroit 21, Michigan

Barbour, W. Stanton
152 Market Street
Paterson, New Jersey

Berkey, Peter
589 E. Illinois Street
Chicago 11, Illinois

Bulla, John G.
2720 N. 10th Street
Phoenix, Arizona

Butler, Spencer M.
14 E. Jackson Boulevard
Chicago 4, Illinois

Capps, Richard B.
122 S. Michigan Avenue
Chicago 3, Illinois

Cushing, Ellwood L.
2205 Melrose Road
Ann Arbor, Michigan

Floreen, Adoph R.
208 S. La Salle Street
Chicago 90, Illinois

Gould, B. C.
20420 Woodward Avenue
Detroit 3, Michigan

Harvey, Charles U.
116 E. 66th Street
Apt. 11C
New York 21, N. Y.

Jaffar, Donald J.
630 Merrick Street
Detroit 2, Michigan

Mayne, Charles H.
15823 West McNichols Road
Detroit 35, Michigan

Mras, Andrew M.
19557 Renfrew
Detroit 21, Michigan

Putnam, Benjamin H.
512 Third Street
Marietta, Ohio

Searle, John G.
P. O. Box 5110
Chicago 80, Illinois

Sheehan, Thomas E.
593 Fairfax Road, North
Birmingham, Michigan

Whipple, Jay N.
135 S. La Salle Street
Chicago 3, Illinois

3. **Good Used Material**
Good used material (Condition "B"), being used material in sound and serviceable condition, suitable for reuse without reconditioning.
A. At 75% of current new price if material was charged to joint account as new, or
B. At 75% of current new price less depreciation consistent with their usage on and service to the joint property, if material was originally charged to the joint property as secondhand at 75% of new price.

4. **Other Used Material**
Used Material (Condition "C"), being used material which
A. After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
B. Is serviceable for original function but substantially not suitable for reconditioning, at 50% of current new price.

5. **Bad-Order Material**
Used material (Condition "D"), being material which cannot be classified as Condition "B" or Condition "C", shall be priced at a value commensurate with its use.

6. **Junk**
Junk (Condition "E"), being obsolete and scrap material, at prevailing prices.

7. **Temporarily Used Material**
When the use of material is of a temporary nature and its service to the joint account does not justify the reduction in price as provided in Paragraph 3B, above, such material shall be priced on a basis that will leave a net charge to the joint account consistent with the value of the service rendered.

VI. INVENTORIES

1. **Periodic Inventories**
Periodic inventories shall be taken by Operator of the joint account material, which shall include all such material as is ordinarily considered controllable by operators of mineral properties.

2. **Notice**
Notice of intention to take inventory shall be given by Opeator at least ten days before any inventory is to begin, so that Joint Owner may be represented when any inventory is taken.

3. **Failure to be Represented**
Failure of Joint Owner to be represented at the physical inventory shall bind Joint Owner to accept the inventory taken by Operator, who shall in that event furnish Joint Owner with a copy thereof.

4. **Reconciliation of Inventory**
Reconciliation of inventory with charges to the joint account shall be made by each party at interest, and a list of overages and shortages shall be jointly determined by Operator and Joint Owner.

5. **Adjustment of Inventory**
Inventory adjustments shall be made by Operator with the joint account for overages and shortages, but Operator shall only be held accountable to Joint Owner for shortages due to lack of reasonable diligence.

6. **Special Inventories**
Special inventories may be taken, at the expense of the purchaser, whenever there is any sale or change of interest in the joint property, and it shall be the duty of the party selling to notify all other parties hereto as quickly as possible after the transfer of interest takes place. In such cases both the seller and the purchaser shall be represented and shall be governed by the inventory so taken.

later than ten (10) days after the receipt of said statement.

Any expense incurred by Operator pursuant to Section 20 hereof shall be in addition to the amounts provided for in the annual budget and Operator may immediately send statements to Joint Owners for their percentage share thereof, which shall be paid within ten (10) days after the receipt thereof.

17

BUDGET FOR EXPLORATORY WORK: Upon approval by all Joint Owners of a recommendation by Operator to do machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations as provided in Section 4 hereof, the estimated costs set forth in said recommendation shall be budgeted by Operator and each Joint Owner shall pay his percentage share thereof upon ten (10) days' notice from Operator.

18

FUNDS OF OPERATOR: All funds received by Operator from Joint Owners shall be deposited in an accredited depository in an account properly designated for this agreement and said funds shall only be disbursed by him for the costs and expenses, then due and payable, incurred in accordance with the provisions of this agreement or the express direction of all Joint Owners.

19

EFFECT OF APPROVAL OF JOINT OWNER: Approval by Joint Owner of any plan of operations, or any machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operation includes approval of all costs, equipment, and other personal property necessary for completion of the approved project.

20

EMERGENCY POWERS OF OPERATOR: Notwithstanding any limitation in any other part of this agreement, if any emergency arises, Operator may, upon securing the approval of Twenty-five Per Cent (25%) of the ownership other than his own, do any act or incur any expense in order to preserve the joint property which Operator considers reasonably necessary under the circumstances, and such costs shall be charged to the joint account.

21

FAILURE TO COMPLY: If Joint Owner fails to comply with Operator's notice, the following results take place:

a. If Joint Owner fails to reply, Joint Owner's consent to the matters in the notice is conclusively presumed.

b. If Joint Owner fails to pay his share of budget items as set forth in Sections 16 and 17 hereof, Operator may enforce Operator's lien.

22

LIEN OF OPERATOR: In connection with operations under this agreement, Joint Owner hereby grants to Operator a specific lien upon all of Joint Owner's interest in the joint property and production from the joint property to the extent of any unpaid items, and Joint Owner hereby consents that Operator may enforce Operator's lien at Operator's option, as follows:

a. By foreclosure proceedings as authorized by law.

b. By filing a copy of this agreement with the purchaser of the production from the joint property, and thereafter receiving from said purchaser the proceeds of such production accruing to the interest of Joint Owner until the amount so received equals the amount owed by Joint Owner, including interest at the rate of six percent (6%); and each such purchaser shall be fully protected in making payment to Operator on the basis of Operator's written statement of the amount owned by Joint Owner.

23

ABANDONMENT: Any Joint Owner desiring to abandon any property or part thereof shall notify Operator of his desire to abandon. Operator shall forthwith notify each Joint Owner of said action, together with his recommendation relating thereto. Each Joint Owner shall have thirty (30) days from receipt of such notice and recommendation to reply thereto and, if seventy percent (70%) of the ownership of said property are in favor of the abandonment, Operator shall proceed therewith as early as practicable and all parties shall be bound by such action.

As an alternative, Operator may call a meeting of Joint Owners on written notice of not less than five (5) days for the purpose of considering said proposed abandonment and, if seventy percent (70%) of the ownership of said properties approve the abandonment at said meeting, in person or by proxy, the abandonment shall be made. Notice of the meeting shall set forth the time and place of the meeting and the properties proposed to be abandoned.

If the required seventy percent (70%) approval is not obtained, said party wishing to abandon any property shall be immediately notified of such action and advised that his percentage obligations under this agreement shall continue to be subject to all the terms and conditions of this agreement.

Any party may abandon his interest in all of the properties covered by this agreement on July 1, 1956, or at any time thereafter upon sixty (60) days' written notice to Operator and execution of an assignment, in form satisfactory to Operator, transferring all of his right, title and interest in all of the properties pro rata to all of the other joint owners. Party wishing to abandon shall pay the cost of effecting such abandonment, including but not limited to, legal expenses and recording fees for the preparation and recording of the necessary assignments.

Provided, however, that in the event all other parties decide to abandon their interests at the same time as the date specified in the notice, then the party giving notice shall be required to pay his proportionate share of all abandonment costs of the properties.

Nothing contained in this section shall relieve any party of his obligation to pay his proportionate share of all budgeted costs applicable to the properties up to and including the date of abandonment nor shall it in any way alter the provisions of this section relating to abandonment of a portion of the property covered by this agreement.

24

ADDITIONAL INTERESTS: This agreement is restricted to the properties described herein. Upon approval in writing of all Joint Owners, additional properties may be added to this agreement.

25

TERMINATION OF OPERATING RIGHTS: Operator may not assign his operating rights under this agreement and if Operator sells his entire interest in the joint property, he shall automatically cease to be Operator. Operator may resign at any time by giving six (6) months' notice to Joint Owners. Operator may name a deputy, who will automatically become Temporary Operator upon the death or disability of Operator. Temporary Operator will have full powers of Operator until replaced by an elected Operator.

26

CHANGE OF OPERATOR: The parties owning a majority interest in the joint property may elect a new Operator upon giving six (6) months written notice to Operator, but without the consent of Operator there shall be no change of Operator for a period of one (1) year following the effective date of this agreement. Within four weeks after the death or disability of Operator, Joint Owners will elect another Operator.

27

ADDRESSES: All parties shall send notices or replies to addresses given on at-

(b) Is serviceable for original function but substantially not suitable for reconditioning, shall be classed as Condition "C" and priced at 50% of new price.

(3) Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value commensurate with its use.

(4) Tanks, derricks, buildings, and other equipment involving erection costs shall be charged at applicable percentage of knock-down new price.

3. **Warranty of Material Furnished by Operator**
Operator does not warrant the material furnished beyond or back of the dealer's or manufacturer's guaranty; and, in case of defective material, credit shall not be passed until adjustment has been received by Operator from the manufacturers or their agents.

4. **Operator's Exclusively Owned Facilities**
The following rates shall apply to service rendered to the joint account by facilities owned exclusively by Operator:
   A. Water service, fuel gas, power, and compressor service: At rates commensurate with cost of providing and furnishing such service to the joint account but not exceeding rates currently prevailing in the field where the joint property is located.
   B. Automotive Equipment: Rates commensurate with cost of ownership and operation. Such rates should generally be in line with schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against joint account operations and revised from time to time. Automotive rates shall include cost of oil, gas, repairs, insurance, and other operating expense and depreciation; and charges shall be based on use in actual service on, or in connection with, the joint account operations. Truck, tractor, and pulling unit rates shall include wages and expenses of driver.
   C. A fair rate shall be charged for the use of drilling tools and core drilling equipment and any other items of Operator's fully owned machinery or equipment, which shall be ample to cover maintenance, repairs, depreciation, and the service furnished the joint property.
   D. Whenever requested, Operator shall inform Joint Owner in advance of the rates it proposes to charge.
   E. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

IV. DISPOSAL OF LEASE EQUIPMENT AND MATERIAL

The Operator shall be under no obligation to purchase interest of Joint Owner in surplus new or secondhand material. Major items shall not be removed by Operator from the joint property without the approval of Joint Owner. Operator shall not sell major items of material to an outside party without giving Joint Owner an opportunity either to purchase same at the price offered or to take Joint Owner's share in kind.

1. **Material Purchased by Operator**
Material purchased by Operator shall be credited to the joint account and included in the quarterly statement of operations for the month in which the material is removed from the joint property.

2. **Material Purchased by Joint Owner**
Material purchased by Joint Owner shall be invoiced by Operator and paid for by Joint Owner to Operator immediately following receipt of invoice. The Operator shall pass credit to the joint account and include the same in the monthly statement of operations.

3. **Division in Kind**
Division of material in kind, if made between Operator and Joint Owner, shall be in proportion to their respective interests in such material. Each party will thereupon be charged individually with the value of the material received or receivable by each party and corresponding credits will be made by the Operator to the joint account, and such credits shall appear in the quarterly statement of operations.

4. **Sales to Outsiders**
Sales to outsiders of material from the joint property shall be credited by Operator to the joint account at the net amount collected by Operator from Vendee. Any claims by Vendee for defective material or otherwise shall be charged back to the joint account, if and when paid by Operator.

V. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

Material purchased by either Operator or Joint Owner or divided in kind, unless otherwise agreed, shall be valued on the following basis:

1. **New Price Defined**
New price as used in the following paragraphs shall have the same meaning and application as that used above in Section III, "Basis of Charges to Joint Account."

2. **New Material**
New material (Condition "A"), being new material procured for the joint account but never used thereon, at 100% of current new price.

to Operator's warehouse or other storage point for a distance greater that the distance to the nearest reliable supply store or railway receiving point, except by special agreement with Joint Owner; and no charge shall be made to the joint account for moving material to other properties belonging to Operator, except by special agreement with Joint Owner.

6. **Use of Operator's Equipment and Facilities**
Use of and service by Operator's exclusively owned equipment and facilities as provided in Paragraph 4, of Section III, "Basis of Charges to Joint Account."

7. **Damages and Losses**
Damages or losses incurred by fire, flood, storm, or any other cause not controllable by Operator through the exercise of reasonable diligence. Operator shall furnish Joint Owner written notice of damage or losses incurred by fire, storm, flood, or other natural or accidental causes as soon as practicable after report of the same has been received by Operator.

8. **Litigation, Judgments, and Claims**
All costs and expenses of litigation, or legal services otherwise necessary or expedient for the protection of the joint interests, including attorney's fees and expenses as hereinafter provided, together with all judgments obtained against the joint account or the subject matter of this agreement; actual expenses incurred by any party or parties hereto in securing evidence for the purpose of defending against any action or claim prosecuted or urged against the joint account or the subject matter of this agreement.
   A. If a majority of the interests hereunder shall so agree, actions or claims affecting the joint interests hereunder may be handled by the legal staff of one or more of the parties hereto, and a charge commensurate with the services rendered may be made against the joint account, but no such charge shall be made until approved by the legal department of or attorneys for the respective parties hereto.

9. **Taxes**
All taxes of every kind and nature assessed upon or in connection with the properties which are the subject of this agreement, the production therefrom or the operation thereof, and which taxes have been paid by the Operator for the benefit of the parties hereto.

10. **Insurance**
   A. Premiums paid for insurance carried for the benefit of the joint account, together with all expenditures incurred and paid in settlement of any and all losses, claims, damages, judgments, and other expenses, including legal services, not recovered from insurance carrier.
   B. If no insurance is required to be carried, all actual expenditures incurred and paid by Operator in settlement of any and all losses, claims, damages, judgments, and any other expenses, including legal services, shall be charged to the joint account.

11. **District and Camp Expense**
A proportionate share of the salaries and expenses of Operator's District Superintendent and other general district or field employees serving the joint property, whose time is not allocated direct to the joint property, and a proportionate share of maintaining and operating a district office and all necessary camps, including housing facilities for employees if necessary, in conducting the operations on the joint property and other leases owned and operated by Operator in the same locality. The expense of, less any revenue from, these facilities shall include depreciation or a fair monthly rental in lieu of depreciation on the investment. Such charges shall be apportioned to all leases served on some equitable basis consistent with Operator's accounting practice.

12. **Other Expenditures**
Any other expenditure incurred by Operator for the necessary and proper development, maintenance, and operation of the joint property.

III. BASIS OF CHARGES TO JOINT ACCOUNT

1. **Purchases**
Material and equipment purchased and service procured shall be charged at price paid by Operator.

2. **Material Furnished by Operator**
Material required for operations shall be purchased for direct charge to joint account whenever practicable, except that Operator may furnish such material from Operator's stocks under the following conditions:
   A. New Material (Condition "A")
      (1) New material transferred from Operator's warehouse or other properties shall be priced f. o. b. the nearest reputable supply store or railway receiving point, where such material is available, at current replacement cost of the same kind of material.
      (2) Cash discount shall not be allowed.
   B. Used Material (Condition "B" and "C")
      (1) Material which is in sound and serviceable condition and is suitable for reuse without reconditioning shall be classed as Condition "B" and priced at 75% of new price.
      (2) Material which cannot be classified as Condition "B" but which,
         (a) After reconditioning will be further serviceable for original function as good second hand material (Condition "B", or

tached Exhibit C (Addresses for Purpose of Notice).

28

FURTHER ASSURANCES: All parties shall do all acts and execute all instruments necessary to carry out the terms of this agreement, whether or not this agreement specifically calls for them.

29

STATUS OF PARTIES: This agreement does not make the parties partners, mining or otherwise. Each party keeps his own separate interest in the joint property. The parties have entered into this agreement only in order to make the operation and development of the joint property simpler and more economical.

30

LIABILITY OF PARTIES: The parties are liable severally, and not jointly.

31

DISPOSAL OF PRODUCTS: Each party reserves the right to receive, dispose of, and market his proportionate share of the products of the joint property separately and in kind. Any party exercising this right, shall, if necessary, provide all equipment for this purpose at his own cost and expense.

32

MODIFICATIONS: The parties may modify this agreement only by an instrument in writing, signed and acknowledged by all parties, setting out the modifications explicitly. Oral modifications shall have no effect. A course of conduct inconsistent with the terms of this agreement does not constitute a waiver or modification of any of its provisions.

33

CONSTRUCTION: The laws of the State of Illinois, which are in force at the date of execution of this agreement, shall govern its construction.

34

THIS AGREEMENT may be signed in any number of copies but does not take effect until all parties owning an interest in the joint property have signed one copy.

35

THE EFFECTIVE DATE of this agreement is the 1st day of July, 1955.

IN WITNESS WHEREOF the parties have signed this agreement on the 1st day of July, 1955.

Witnesses:

Josephine E. Dubin Robert V. Benjamin	John D. Ames
Josephine E. Dubin Robert V. Benjamin	W. Stanton Barbour
Josephine E. Dubin Robert V. Benjamin	John D. Searle

Mary Serpless Edithe K. Doty	Jay N. Whipple
William Richardson Josephine E. Dubin	Spencer M. Butler
Grace E. Vonder Lehr Josephine E. Dubin	Peter Berkey
Clare Q. Troutman Josephine E. Dubin	A. R. Floreen
Josephine E. Dubin Robert M. George	B. H. Putnam
Josephine E. Dubin Ethel M. Lamplough	Thomas E. Sheehan
Josephine E. Dubin William Richardson	John Bulla
Alfred C. Gaston Albert W. Stanton	B. C. Gould
Alfred C. Gaston Albert W. Stanton	C. H. Mayne
Andrew C. Jarvis Alexander A. Dolega	Andrew M. Mras
Alfred C. Gaston Albert W. Stanton	Donald J. Jaffar, M.D.
Alfred C. Gaston Albert W. Stanton	Robert N. Babbish
Florence E. Williams Josephine E. Dubin	Richard B. Capps
Alfred C. Gaston Albert W. Stanton	Charles U. Harvey
Harold F. Reinecke Marguerite Meyer	Ellwood L. Cushing

EXHIBIT B

Attached to and made a part of AGREEMENT COVERING INTERESTS IN MINERAL PROPERTIES LOCATED IN NORTH CAROLINA AND TENNESSEE

ACCOUNTING PROCEDURE
(Unit and Joint Lease Operations)

I. GENERAL PROVISIONS

1. **Definitions**
The term "joint property" as herein used shall be construed to mean the subject area covered by the agreement to which this "Accounting Procedure" is attached.
The term "Operator" as herein used shall be construed to mean the party designated to conduct the development and operation of the leased premises for the joint account.
The term "Joint Owner" means one or more of the owners of the joint property.

2. **Statements and Billings**
Operator shall bill Joint Owner in accordance with the budget provisions of the operating agreement.

3. **Payments by Joint Owner**
Each party shall pay its proportion of all such bills within ten (10) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest at the rate of six per cent (6%) per annum until paid.

4. **Audits**
Payment of any such bills shall not prejudice the right of Joint Owner to protest or question the correctness thereof. All statements rendered to Joint Owner by Operator during any calendar year shall be conclusively presumed to be true and correct after eighteen months following the close of any calendar year, unless within said eighteen months period Joint Owner takes written exception thereto and makes claim on Operator for adjustment. Failure on the part of Joint Owner to make claim on Operator for adjustment within such period shall establish the correctness thereof and preclude the filing of exceptions thereto or the making of claims for adjustment thereon. A Joint Owner, upon notice in writing to Operator and all other Joint Owners, shall have the right to audit Operator's accounts and records relating to the accounting hereunder, within eighteen months next following the close of any calendar year. Joint Owner shall have six months next following the examination of the Operator's records within which to take written exception to and make any and all claims on Operator. The provisions of this paragraph shall not prevent adjustments resulting from the physical inventory of property as provided for in Section VI, Inventories, hereof.

II. DEVELOPMENT AND OPERATING CHARGES

Subject to limitations hereinafter prescribed, Operator shall charge the joint account with the following items:

1. **Rentals and Royalties**
Delay or other rentals, when such rentals are paid by Operator for the joint account; royalties, when not paid direct to royalty owners by the purchaser of the minerals.

2. **Labor, Transportation, and Services**
Labor, transportation, and other services necessary for the development, maintenance, and operation of the joint property. Labor shall include (A) Operator's cost of vacation, sickness and disability benefits of employees, and expenditures or contributions imposed or assessed by governmental authority applicable to such labor, and (B) Operator's current cost of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of like nature, applicable to Operator's field payroll; provided that the charges under part (B) of this paragraph shall not exceed five per cent (5%) of the total of such labor charged to the joint account.

3. **Material**
Material, equipment, and supplies purchased or furnished by Operator, for use of the joint property. So far as it is reasonably practical and consistent with efficient and economical operation, only such material shall be purchased for or transferred to the joint property as required for immediate use, and the accumulation of surplus stocks shall be avoided.

4. **Moving Material to Joint Property**
Moving material to the joint property from Vendor's or from Operator's warehouse in the district or from the other properties of Operator, but in either of the last two events no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point where such material is available, except by special agreement with Joint Owner.

5. **Moving Surplus Material from Joint Property**
Moving surplus material from the joint property to outside vendees, if sold f.o.b. destination, or minor returns to Operator's warehouse or other storage point. No charge shall be made to the joint account for moving major surplus material

EXHIBIT A—SUPPLEMENT

SCHEDULE OF LEASE ACREAGE

Additional Mineral Leases and Mineral Options On Private Lands

Lease No.	Date	LESSOR	Acres	State	County	Township or District	Term of Lease
X-234	May 16, 1954	Don and Maxine Cornett, et al.	42	North Carolina	Watauga	Beaver Dam	5
X-235	May 11, 1954	Baker and Leta Mae Edmister	15	" "	"	" "	"
X-236	May 9, 1954	Burlie and Ida Cornett	86	" "	"	" "	"
X-237	May 6, 1954	John and Madge Cornett	14	" "	"	" "	"
X-238	May 31, 1954	Grady and Selma McGuire	46	" "	"	" "	"
X-239	May 31, 1954	Homer and Mildred Cornett	22	" "	"	" "	"
X-240	May 31, 1954	Roby and Lillie N. Cornett	25	" "	"	" "	"
X-241	June 24, 1954	Donley and Charlotte Rominger	28	" "	"	" "	"
X-242	May 31, 1954	Dean and Carrie Reese	100	Tennessee	Johnson	4th	"
X-243	June 10, 1954	Louise and Albert Cornett	45	North Carolina	Watauga	Beaver Dam	"
X-244	May 31, 1954	Dean and Carrie Reese	110	" "	"	" "	"
X-245	Jan. 18, 1956	Cleo and Wallace Cope, et al.	160	Tennessee	Grainger	4th	3
X-246	Jan. 24, 1956	Thomas Edward and Reba Kincaid	100	"	"	"	"
X-247	Jan. 23, 1956	Belle Kincaid, widow, et al	125	"	"	"	"
X-248	Jan. 17, 1956	W. N. and Margaret Dalton, et al	40	"	Hancock	1st	"
X-249	Jan. 17, 1956	Dorsie and Thomas Scearce	35	"	Grainger	4th	"
X-250	Jan. 18, 1956	Eliza Antrican, et al.	15	"	"	"	"
X-251	Jan. 21, 1956	Claude Wolfenbarger	20	"	"	"	"
X-252	Jan. 27, 1956	A. B. and Pearley Dalton	50	"	"	"	"
X-253	Jan. 18, 1956	Starling Scearce, single	35	"	"	"	"
X-254	Jan. 18, 1956	Lou Coffey, widow	8	"	"	"	"
X-255	Jan. 17, 1956	John and Ida Wolfenbarger	70	"	"	"	"
X-256	Jan. 20, 1956	Hubert and Dollie Dalton	122	"	"	"	"
X-257	Jan. 20, 1956	Calvin and Pearl Berry	128	"	"	"	"
X-258	Jan. 20, 1956	Cass and Inez Myers	50	"	"	"	"
X-259	Jan. 16, 1956	Lester and Artha Scearce	100	"	"	"	"
X-260	Jan. 14, 1956	J. C. Myers, widower	67	"	"	"	"
X-261	Jan. 14, 1956	Robert Wolf, single	300	"	Hancock	"	"
X-262	Jan. 23, 1956	Lissie Scearce, widow, et al.	140	"	Grainger	"	"
X-263	Jan. 23, 1956	Ora C. Wilkinson, et al.	300	"	"	"	"
X-264	Apr. 7, 1956	W. N. and Dorsia Jackson	600	"	"	"	"
X-265	Mar. 16, 1956	L. F. and Ida Mallicoat	150	"	"	"	"
X-266	Apr. 7, 1956	Herbert and Mertie Nicley	175	"	"	5th	"
X-267	Feb. 29, 1956	Henry L. Wolfe, et al.	82	"	"	4th	4
X-268	Apr. 9, 1956	Dewey Smith, et al.	255	"	Monroe	5th	10
X-269	Apr. 25, 1956	Clure Smith, single	40	"	"	"	"
T-90	Feb. 13, 1956	Roy F. and Lulu S. Hammer	55	"	Jefferson	1st	5
T-91	Feb. 13, 1956	Luther W. and Nola L. Woods	11	"	"	"	"
T-92	Feb. 16, 1956	Robert C. and Ruth Percival	11	"	Claiborne	"	"

EXHIBIT A

NATIONAL FOREST LANDS IN NORTH CAROLINA AND TENNESSEE

Bureau of Land Management's No.	Location	Acres Applied for	Estimated Acres to be Granted
BLM-A-038475	North Carolina	6,341.75	6,200.00
BLM-A-038476	North Carolina	5,224.72	5,224.72
BLM-A-038477	North Carolina	3,025.33	2,300.00
BLM-A-038478	North Carolina	2,056.00	1,850.00
BLM-A-038479	Tennessee	1,155.63	—
BLM-A-038480	Tennessee	1,043.74	—
BLM-A-038481	Tennessee	302.70	302.70
BLM-A-038714	Tennessee	3,274.84	—
BLM-A-038715	Tennessee	640.66	—
BLM-A-038716	Tennessee	342.00	342.00
BLM-A-038808	North Carolina	56,984.60	50,000.00
BLM-A-038809	Tennessee	2,559.78	2,559.78
BLM-A-038810	Tennessee	3,458.00	3,458.00
BLM-A-038811	Tennessee	2,260.00	2,260.00
BLM-A-038812	Tennessee	12,301.63	7,000.00
BLM-A-039765	North Carolina	419.70	60.00
BLM-A-039766	North Carolina	984.07	984.07
Total		102,375.15	82,541.27

EXHIBIT A

SCHEDULE OF LEASE ACREAGE

Mineral Leases on Private Lands

TENNESSEE—CARTER COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-1	Oct. 6, 1954	Will and Lena Hill	10	Tennessee	Carter	3	5
X-2	Oct. 2, 1954	Dayton W. and Molly Whitehead	37	"	"	"	"
X-3	Oct. 4, 1954	Maude and Lloyd Cole	12	"	"	"	"
X-4	Oct. 4, 1954	Etta McCoury, widow	19	"	"	"	"
X-5	Sept. 29, 1954	A. H. and Helen Miller	129	"	"	11	"
X-6	Sept. 30, 1954	Norman and Sarah Gates	6	"	"	3	"
X-7	Sept. 30, 1954	Willard and Nola Gates	35	"	"	"	"
X-8	Sept. 30, 1954	Velma Honeycutt, et al.	20	"	"	"	"
X-9	Sept. 30, 1954	Conley and Rosalee Stevens	38	"	"	"	"
X-10	Oct 4, 1954	J. H. Simerly, single	12	"	"	"	"
X-11	Sept. 29, 1954	Sarah Honeycutt, widow, et al.	79	"	"	"	"
X-12	Sept. 29, 1954	Paul and Maxine Honeycutt	10	"	"	"	"
X-13	Sept. 30, 1954	Dana Largent, widower	25	"	"	"	"
X-14	Sept. 29, 1954	A. H. and Helen Miller	10	"	"	"	"
X-15	Oct. 5, 1954	William N. and Zemma Gates	40	"	"	"	"
X-16	Sept. 30, 1954	J. D. and Daisy M. Simerly	20	"	"	"	"
X-17	Sept. 30, 1954	J. D. and Daisy M. Simerly	60	"	"	"	"
X-18	Sept. 28, 1954	W. H. and Mary Ada Horton	2	"	"	11	"
X-19	Oct. 1, 1954	Wade and Laura Sluder	30	"	"	3	"
X-20	Oct. 1, 1954	Dont Street, widower	49	"	"	"	"
X-21	Oct. 1, 1954	John and Minnie Stevens	40	"	"	"	"
X-22	Sept. 30, 1954	Romules S. and Ethel Miller	60	"	"	"	"
X-23	Sept. 29, 1954	Efford and Alma Hill	17	"	"	"	"
X-24	Oct. 5, 1954	C. S. and Delia Stevens	80	"	"	"	"
X-25	Oct. 5, 1954	Donley and Lucille Lyans	8	"	"	"	"
X-26	Oct. 5, 1954	Reece and Hattie Hill	20	"	"	"	"
X-27	Sept. 28, 1954	Roy and Alma Gates	111	"	"	"	"
X-28	Oct. 7, 1954	W. M. and Bessie Winters	35	"	"	"	"
X-29	Oct. 4, 1954	Luther and Elsi Whitehead	11	"	"	"	"
X-30	Oct. 4, 1954	Jason and Leona Honeycutt	4	"	"	"	"
X-31	Oct. 5, 1954	Mary Ellison, widow	200	"	"	"	"
X-32	Oct. 28, 1954	David A. and Maxine Campbell	30	"	"	4	"
X-33	Oct. 28, 1954	Brady Banner, single	59	"	"	"	"
X-34	Oct. 28, 1954	Pardee Banner, single	55	"	"	"	"
X-35	Oct. 28, 1954	Iva Lee and Robert Hathaway	80	"	"	"	"
X-36	Oct. 29, 1954	Roy S. and Lula Banner	40	"	"	"	"
X-37	Oct. 30, 1954	Alvin E. and Orla Hicks	57	"	"	"	"
X-38	Oct. 27, 1954	L. A. and Carrie Street	5	"	"	3	"
X-39	Oct. 14, 1954	William J. and Lockie Lyons	48	"	"	"	"
X-40	Oct. 16, 1954	Charlie and Sarah Whitehead	12	"	"	"	"
X-41	Oct. 22, 1954	Charlie C. and Mary Whitehead	64	"	"	"	"
X-42	Oct. 18, 1954	Clifford and Mannie Stevens	25	"	"	"	"
X-43	Oct. 14, 1954	Marvin Whitehead, single	9	"	"	"	"
X-44	Oct. 20, 1954	George and Mary Edwards	12	"	"	"	"
X-45	Oct. 16, 1954	M. C. and Effie Street	12	"	"	"	"
X-46	Oct. 20, 1954	Sam and Vicie Simerly	6	"	"	"	"
X-47	Oct. 18, 1954	Mollie Little, widow	40	"	"	"	"
X-48	Oct. 20, 1954	Hattie B. Whitehead, single	18	"	"	"	"
X-49	Oct. 15, 1954	Eugene and Amandy Porter	12	"	"	"	"
X-50	Oct. 22, 1954	Roy and Minnie Robinson	25	"	"	"	"
X-51	Oct. 22, 1954	David and Dealie Hughes	30	"	"	"	"
X-52	Oct. 15, 1954	John and Maxie Gouge	13	"	"	"	"
X-53	Oct. 14, 1954	John R. and Mattie Head	3	"	"	"	"
X-54	Oct. 21, 1954	Ethel Ingram, sole heir	24	"	"	"	"

TENNESSEE—KNOX COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-1	July 23, 1952	J. B. Kelly, Jr., Frances Kelly	120	Tennessee	Knox	8	5
T-2	July 19, 1952	Lola Wikoff, widow	45	"	"	"	"
T-3	July 21, 1952	Glenn and Gladys Birdwell	36	"	"	"	"
T-4	July 19, 1952	Earl H. and Esther Hickman	40	"	"	14	"
T-5	July 19, 1952	Floyd and Edna C. Sharp	23	"	"	8	"
T-6	Aug. 11, 1952	Chas. E. and Bertha C. Hankin	12	"	"	"	"
T-8	July 23, 1952	H. H. Norman and Fennie Norman	30	"	"		"
T-9	July 24, 1952	Emily M. Graves, widow, et al.	100	"	"	8	"
T-10	July 24, 1952	Roy E. and Jewell H. Onks	13	"	"	"	"
T-11	July 24, 1952	Allen L. and Jona J. Cardwell	35	"	"	"	"
T-12	July 24, 1952	Edgar and Virgie Bridges	18	"	"	"	"
T-13	July 24, 1952	Bruce G. and Rose L. Sharp	11	"	"	"	"
T-14	July 25, 1952	Jesse and Cora E. Chesney	48	"	"	"	"
T-16	July 19, 1952	Carol O. and Leola Clark	46	"	"	"	"
T-56	Sept. 16, 1952	Lee Etherton and Lillie Etherton	23	"	"	"	"
T-57	Sept. 17, 1952	J. M. King and Anna King	7	"	"	"	"
T-58	Sept. 16, 1952	Carl Sharp and Maybelle Sharp	5	"	"	"	"

TENNESSEE—SEVIER COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-18	Aug. 7, 1952	A. E. and Ruth F. Elder	100	Tennessee	Sevier	3	5
T-19	Aug. 7, 1952	R. L. and Julia May Mize	225	"	"	"	"
T-20	Aug. 7, 1952	R. L. Mize, et al.	100	"	"	"	"
T-21	Aug. 12, 1952	Frank and Pearl Carr	8	"	"	"	"
T-22	Aug. 12, 1952	Shirley and Ellen Carr	39	"	"	"	"
T-23	Aug. 12, 1952	J. O. and Cassie E. Parrott	116	"	"	"	"
T-24	July 30, 1952	J. L. and Amma Layman	100	"	"	"	"
T-25	Aug. 14, 1952	Rex and Anna M. Rainwater	33	"	"	4	"
T-28	Aug. 16, 1952	J. Robert and Audra Ownby	119	"	"	5	3
T-52	Aug. 28, 1952	Milo M. and Ethel Ellis	45	"	"	4	5
T-53	Aug. 28, 1952	Roy W. and Della Fox	15	"	"	"	"
T-54	Aug. 28, 1952	Pearl and Martha Finchum	16	"	"	5	"
T-55	Aug. 28, 1952	Gladys Fox Rawlings, et al.	11	"	"	4	"
T-85	Apr. 15, 1955	Parlin and Anna Trentham	103	"	"	"	3
T-86	Apr. 15, 1955	Glenn and Florita B. McMahan	195	"	"	"	"

TENNESSEE—GREENE COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-29	Aug. 9, 1952	Emory W. and Alice I. Bible	45	Tennessee	Greene	19	5
T-30	July 31, 1952	G. P. and Mildred Brown	47	"	"	"	"
T-31	July 31, 1952	Guy and Agnes Keifer	26	"	"	"	"
T-35	Aug. 20, 1952	John and Ennis Morrison	18	"	"	25	"
T-88	Apr. 18, 1955	Charles J. and Bertha M. Clayton, et al.	104	"	"	"	3
T-89	Apr. 18, 1955	Grant and Bernice Seay	32	"	"	"	"

NORTH CAROLINA—WATAUGA COUNTY —MABEL TOWNSHIP (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-216	Dec. 31, 1954	R. A. and Eliza Thomas	75	North Carolina	Watauga	Mabel	5
X-217	Dec. 31, 1954	G. H. Thomas	100	" "	"	"	"
X-225	Jan. 8, 1955	F. R. and Lillie Critcher	60	" "	"	"	"
X-227	Jan. 8, 1955	F. R. and Lillie Critcher, et al.	120	" "	"	"	"

NORTH CAROLINA—AVERY COUNTY—BEACH MT. TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-125	Nov. 11, 1954	Nora Greenwell	45	North Carolina	Avery	Beach Mt.	5
X-140	Oct. 3, 1954	Willie and Merttie Trivett, et al.	37	" "	"	" "	"
X-143	Oct. 5, 1954	Nola Mae Presnell, et al.	40	" "	"	" "	"
X-144	Oct. 7, 1954	Craft S. and Delphia Presnell	42	" "	"	" "	"
X-156	Oct. 29, 1954	Ted R. and Norma Ruth Reece	90	" "	"	" "	"
X-159	Nov. 11, 1954	Cecil D. Isaacs	55	" "	"	" "	"

TENNESSEE—JOHNSON AND CARTER COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-160	Oct. 29, 1954	Ted R. and Norma Ruth Reece	54	Tennessee	Johnson and Carter	4 and 10	5

Mineral (Zinc) Leases on Private Lands

TENNESSEE—JEFFERSON COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-41	July 25, 1952	I. E. and Margaret Cody	100	Tennessee	Jefferson	8	5
T-42	July 26, 1952	Cecil and Reba O. Seaton	65	"	"	"	"
T-43	July 24, 1952	W. T. and Mary Seay	98	"	"	"	"
T-44	July 24, 1952	Darius Hensley, et al.	136	"	"	"	"
T-76	Mar. 23, 1953	Roy F. and Lulu S. Hammer	55	"	"	1	3
T-77	Mar. 23, 1953	J. M. Williford, widow	11	"	"	"	"
T-78	Mar. 23, 1953	Luther W. and Nola L. Woods	11	"	"	"	"
T-82	Apr. 13, 1955	James and Frankie Townsend	164	"	"	"	"
T-83	Apr. 19, 1955	Mabel Hill and A. D. Burchfiel	288	"	"	"	"
T-84	Apr. 14, 1955	W. F. and Minnie Dawn	184	"	"	"	"

TENNESSEE—CLAIBORNE COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-45	Aug. 11, 1952	James and Oneal Coffey	75	Tennessee	Claiborne	1	5
T-46	Aug. 11, 1952	Wade and Merlee Evans	30	"	"	"	"
T-47	Aug. 11, 1952	Fielden and Donna Cook	35	"	"	"	"
T-48	Aug. 19, 1952	G. B. and Ocie Lee Percival	60	"	"	"	"
T-49	Aug. 20, 1952	Roberta and Howard C. Crowe	19	"	"	"	"
T-50	Aug. 19, 1952	C. M. and Cecil Percival	30	"	"	"	"
T-51A	Aug. 21, 1952	Viola McBee Harmon, et al.	110	"	"	3	"
T-51	Aug. 21, 1952	Viola McBee Harmon, et al.	110	"	"	"	"
T-59	Aug. 30, 1952	David A. Kivett and Nora Kivett	100	"	"	10	"
T-60	Sept. 6, 1952	Robert Esco and Nelle Rogers	50	"	"	"	"
T-61	Sept. 6, 1952	Dewey and Lena Mayer	45	"	"	"	"
T-62	Aug. 30, 1952	D. F. and Ann Kivett	13	"	"	"	"
T-63	Sept. 18, 1952	E. W. and Laura May Mountain	60	"	"	3	"
T-64	Sept. 6, 1952	Jack and Imogene Hopper	8	"	"	10	"
T-73	Oct. 11, 1952	James H. and Edna Loope	70	"	"	3	"
T-74	Oct. 10, 1952	James Bradford and Betty Davis	15	"	"	"	"
T-75	Oct. 10, 1952	B. M. Davis, single	125	"	"	"	"
T-79	Mar. 25, 1953	Robert G. and Ruth Percival	11	"	"	1	3

TENNESSEE—ANDERSON COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-67	Sept. 9, 1952	Charles Wier Hillon, widower	47	Tennessee	Anderson	2	5
T-68	Sept. 6, 1952	Ed. Virla M. Braden	50	"	"	"	"
T-69	Sept. 3, 1952	Mrs. W. R. Herman, widow	40	"	"	"	"
T-70	Oct. 11, 1952	Lee and May Irwin	30	"	"	"	"
T-71	Oct. 11, 1952	J. O. Worthington, single	68	"	"	"	"
T-72	Sept. 24, 1952	Everette and Louise Worthington	62	"	"	"	"

TENNESSEE—CARTER COUNTY (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-55	Oct. 26, 1954	Thomas R. and Dalie Arnett	5	Tennessee	Carter	3	5
X-56	Oct. 25, 1954	John C. and Etta Byrd	25	"	"	"	"
X-57	Oct. 25, 1954	Blake G. and Beatrice R. Byrd	49	"	"	"	"
X-58	Oct. 25, 1954	Willie and Lottie Deloach	50	"	"	"	"
X-59	Oct. 25, 1954	Willard J. and Evelyn Byrd	30	"	"	"	"
X-60	Oct. 28, 1954	David A. and Maxine Campbell	20	"	"	4	"
X-61	Oct. 27, 1954	D. B. Montgomery	236	"	"	"	"
X-62	Oct. 27, 1954	D. B. Montgomery	295	"	"	"	"
X-63	Oct. 30, 1954	Frank and Belle Gouge	75	"	"	3	"
X-64	Oct. 28, 1954	J. T. and Viola Montgomery	150	"	"	4	"
X-65	Oct. 28, 1954	John and Margie Ashley	40	"	"	"	"
X-66	Dec. 13, 1954	Nat J. and Martha Potter	30	"	"	3	"
X-67	Dec. 14, 1954	Brady and Birtie Wise	21	"	"	"	"
X-68	Dec. 14, 1954	D. S. Morton	23	"	"	"	"
X-69	Dec. 11, 1954	Jerome and Luster Stevens	25	"	"	"	"
X-70	Dec. 11, 1954	James and Lora McKinney	45	"	"	"	"
X-71	Dec. 11, 1954	Daunt and Inez Stevens	5	"	"	"	"
X-72	Dec. 11, 1954	Walter and Verna Stevens	10	"	"	"	"
X-73	Dec. 13, 1954	Merit and Cinda McKinney	75	"	"	"	"
X-74	Dec. 13, 1954	Will and Ruth Tolley	25	"	"	"	"
X-75	Dec. 14, 1954	Lizzie McKinney	39	"	"	"	"
X-76	Dec. 13, 1954	Nelson and Martha Lee Stevens	50	"	"	"	"
X-77	Dec. 13, 1954	S. W. and Sadie Bentley	30	"	"	"	"
X-78	Dec. 13, 1954	Clay and Genieve Stevens	30	"	"	"	"
X-79	Oct. 27, 1954	Paul R. and Willie H. Cates	34	"	"	"	"
X-80	Dec. 11, 1954	C. F. and Cela Tolley	40	"	"	"	"
X-81	Nov. 22, 1954	Clay and Leona Street	50	"	"	"	"
X-82	Nov. 6, 1954	Ernest L. and Roxie Johnson	8	"	"	"	"
X-83	Nov. 13, 1954	Clyde and Gladys Johnson	50	"	"	"	"
X-84	Nov. 11, 1954	Lorena and G. A. Franklin	10	"	"	"	"
X-85	Nov. 11, 1954	M. G. and Millie Ashley	44	"	"	"	"
X-86	Nov. 8, 1954	Hensley John & Mary Ann Whithead	6	"	"	"	"
X-87	Nov. 20, 1954	Malone and Georgie Ingram	15	"	"	"	"
X-88	Nov. 29, 1954	James S. and Hester Roberson	31	"	"	"	"
X-89	Nov. 17, 1954	Hobert H. and Hattie Jane Miller	105	"	"	4	"
X-90	Dec. 2, 1954	Alfred Heaton	65	"	"	"	"
X-91	Dec. 4, 1954	Dallas and Anna Irick	38	"	"	"	"
X-92	Nov. 30, 1954	B. and Emma J. Irick	63	"	"	"	"
X-93	Dec. 1, 1954	Thomas M. and Etta Irick	50	"	"	"	"
X-94	Nov. 30, 1954	Emma J. and B. Irick	30	"	"	"	"
X-95	Nov. 16, 1954	John and Emiley Hampton	71	"	"	"	"
X-96	Nov. 1, 1954	Claude and Viola Banner	52	"	"	"	"
X-97	Nov. 1, 1954	Claude T. and Onis L. Irick	37	"	"	"	"
X-98	Dec. 9, 1954	Ernest and Mary S. Guinn	92	"	"	3	"
X-99	Nov. 20, 1954	Clarence and Maud Roberson	66	"	"	"	"
X-100	Nov. 19, 1954	Clifford and Viola Morgan	13	"	"	"	"
X-101	Nov. 13, 1954	Grant and Pearl Carnett	26	"	"	"	"
X-102	Nov. 23, 1954	M. D. and Tessie Lyons	29	"	"	"	"
X-103	Nov. 24, 1954	Grant and Pearl Ingram Townsend	55	"	"	"	"
X-104	Dec. 8, 1954	Lester and Laura Brewer	12	"	"	"	"
X-105	Nov. 24, 1954	Janie Turner	12	"	"	"	"
X-106	Nov. 29, 1954	Floyd and Kathleen Miller	30	"	"	"	"
X-182	Nov. 24, 1954	Carrie and Granville Townsend	9	"	"	"	"
X-186	Dec. 18, 1954	Henry and Gladys McClain	10	"	"	"	"

TENNESSEE—UNICOI COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-183	Dec. 15, 1954	Dewey and Lila Corn	100	Tennessee	Unicoi	1	5
X-184	Dec. 17, 1954	Hubert F. and Verta M. Haynes	50	"	"	9	"

TENNESSEE—UNICOI COUNTY (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-185	Dec. 17, 1954	Eliza E. Ramsey	20	Tennessee	Unicoi	9	5
X-187	Dec. 23, 1954	Arthur Lloyd & Linnie Mae Floyd	84	"	"	1	"
X-188	Dec. 28, 1954	Ervin and Theore Shelton	34	"	"	"	"
X-189	Dec. 28, 1954	Jess Shelton	4	"	"	"	"
X-190	Dec. 30, 1954	Everett O. and Ella Higgins	70	"	"	"	"
X-191	Jan. 4, 1955	Horace R. and Ruby M. Chandler	35	"	"	"	"
X-192	Jan. 4, 1955	F. A. and Elizabeth Chandler	76	"	"	"	"
X-193	Jan. 5, 1955	Vernie Metcalf	15	"	"	"	"

NORTH CAROLINA—WATAUGA COUNTY—BEAVER DAM TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-107	Oct. 1, 1954	George and Elfa Smitherman	28	North Carolina	Watauga	Beaver Dam	5
X-108	Nov. 30, 1954	D. F. and Hattie Greene	117	" "	"	" "	"
X-109	Oct. 1, 1954	George and Elfa Smitherman	264	" "	"	" "	"
X-110	Sept. 28, 1954	N. E. Tester	80	" "	"	" "	"
X-111	Oct. 21, 1954	Richard and Chloe Presnell	60	" "	"	" "	"
X-112	Oct. 29, 1954	Lewis and Ora Glenn	67	" "	"	" "	"
X-113	Dec. 1, 1954	A. C. and Etta C. Greene	70	" "	"	" "	"
X-114	Dec. 1, 1954	A. C. and Etta C. Greene	130	" "	"	" "	"
X-115	Dec. 8, 1954	Loyd and Verna Mae Hagaman	95	" "	"	" "	"
X-116	Sept. 27, 1954	Joe A. and Lillie Keller	140	" "	"	" "	"
X-117	Sept. 28, 1954	C. R. and Victoria Dishman	25	" "	"	" "	"
X-118	Sept. 28, 1954	Fred A. and Rose McGuire	164	" "	"	" "	"
X-119	Sept. 28, 1954	C. R. and Victoria Dishman	103	" "	"	" "	"
X-120	Sept. 28, 1954	W. C. and Bertha McGuire	40	" "	"	" "	"
X-121	Sept. 30, 1954	Robert and Polly Miller	16	" "	"	" "	"
X-122	Sept. 30, 1954	Clyde and Maggie Perry	30	" "	"	" "	"
X-123	Nov. 4, 1954	I. H. Main and Loy Main	73	" "	"	" "	"
X-124	Nov. 4, 1954	P. S. and Nancy Presnell	75	" "	"	" "	"
X-126	Nov. 12, 1954	Riley and Vinie Harmon	15	" "	"	" "	"
X-127	Nov. 15, 1954	Mabel Guy	6	" "	"	" "	"
X-128	Nov. 16, 1954	E. F. Vines	100	" "	"	" "	"
X-129	Nov. 18, 1954	Harvey and Burlie Smitherman	10	" "	"	" "	"
X-130	Nov. 19, 1954	Clyde and Eureka Harmon, et al.	15	" "	"	" "	"
X-131	Nov. 19, 1954	Linville and Edith Norris	11	" "	"	" "	"
X-132	Nov. 19, 1954	Howard and Sophia Harmon	40	" "	"	" "	"
X-133	Nov. 19, 1954	Jack and Pearl Forthing	25	" "	"	" "	"
X-134	Nov. 20, 1954	Harlie Cornett	25	" "	"	" "	"
X-135	Nov. 22, 1954	Max and Celia Trivett	50	" "	"	" "	"
X-136	Nov. 22, 1954	W. W. and Lora Wilson	106	" "	"	" "	"
X-137	Nov. 23, 1954	John Glenn and Vivian Ward	15	" "	"	" "	"
X-138	Oct. 1, 1954	Tracy L. and Beulah Bentley	59	" "	"	" "	"
X-139	Oct. 2, 1954	Nina Parks	27	" "	"	" "	"
X-141	Oct. 3, 1954	John F. and Mary A. Wood	65	" "	"	" "	"
X-145	Oct. 8, 1954	Joseph and Ida Farthing	72	" "	"	" "	"
X-146	Oct. 14, 1954	Don and Mary Trivett	90	" "	"	" "	"
X-147	Oct. 14, 1954	Don and Mary Trivett	84	" "	"	" "	"
X-148	Oct. 14, 1954	Don and Mary Trivett	55	" "	"	" "	"
X-149	Oct. 15, 1954	Lonie and Lona Guy	119	" "	"	" "	"
X-150	Oct. 15, 1954	Fonzo and Leona Tester	61	" "	"	" "	"
X-151	Oct. 15, 1954	Edgar and Genieve Farthing	35	" "	"	" "	"
X-152	Oct. 16, 1954	Edna Ward	32	" "	"	" "	"
X-153	Oct. 16, 1954	Clyde and Margaret Perry	300	" "	"	" "	"
X-154	Dec. 1, 1954	Spencer and Lucy May	30	" "	"	" "	"
X-155	Sept. 27, 1954	Graden and Pearl Harmon	20	" "	"	" "	"
X-157	Dec. 14, 1954	Howard and Addie Mae Love	35	" "	"	" "	"
X-158	Dec. 14, 1954	Collis and Gladys Greene	35	" "	"	" "	"
X-161	Nov. 17, 1954	Evander and Margaret S. Isaacs	46	" "	"	" "	"
X-162	Dec. 13, 1954	Clyde and Mae E. Robinson	24	" "	"	" "	"

NORTH CAROLINA—WATAUGA COUNTY—BEAVER DAM TOWNSHIP (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-163	Dec. 13, 1954	Clyde and Mae E. Robinson	50	North Carolina	Watauga	Beaver Dam	5
X-164	Dec. 13, 1954	Millie S. Wilson	124	" "	"	" "	"
X-165	Dec. 13, 1954	Stacy and Sarah M. Moody	118	" "	"	" "	"
X-166	Dec. 13, 1954	Frank P. and Ada Wilson	120	" "	"	" "	"
X-167	Dec. 13, 1954	Ray and Fay Stout	148	" "	"	" "	"
X-168	Dec. 13, 1954	John W. Covington	31	" "	"	" "	"
X-169	Dec. 11, 1954	R. R. and Nellie L. Stout	30	" "	"	" "	"
X-170	Dec. 10, 1954	Ray and Leota Swift	50	" "	"	" "	"
X-171	Dec. 10, 1954	A. R. and Daisy Davis	20	" "	"	" "	"
X-172	Dec. 10, 1954	Troy B. and Ida Fletcher	56	" "	"	" "	"
X-173	Dec. 9, 1954	C. B. and Margaret Reese, Sr.	200	" "	"	" "	"
X-174	Dec. 9, 1954	George W. and Drilla Robinson	27	" "	"	" "	"
X-175	Dec. 9, 1954	George W. and Drilla Robinson	28	" "	"	" "	"
X-176	Dec. 9, 1954	Asa L. and Kate S. Reese	45	" "	"	" "	"
X-177	Dec. 9, 1954	Asa L. and Kate S. Reese	60	" "	"	" "	"
X-178	Dec. 7, 1954	Clay and Mae Robinson	75	" "	"	" "	"
X-179	Dec. 14, 1954	Will and Mollie Wilson	20	" "	"	" "	"
X-180	Dec. 14, 1954	Mrs. Nellie Pope	45	" "	"	" "	"
X-181	Dec. 15, 1954	Baker and Louiva Ward	35	" "	"	" "	"
X-194	Jan. 1, 1955	Sanford S. and Stella Creed	54	" "	"	" "	"
X-195	Dec. 31, 1954	J. S. and Delia Snyder	182	" "	"	" "	"
X-196	Dec. 22, 1954	Burl Glenn	40	" "	"	" "	"
X-197	Dec. 22, 1954	Hugh and Elizabeth Davis	120	" "	"	" "	"
X-198	Dec. 22, 1954	Hugh and Elizabeth Davis	10	" "	"	" "	"
X-199	Dec. 22, 1954	Hugh and Elizabeth Davis	46	" "	"	" "	"
X-200	Dec. 14, 1954	Mrs. Ina Wilson, Adm.	90	" "	"	" "	"
X-201	Dec. 24, 1954	Don Shell	83	" "	"	" "	"
X-202	Dec. 17, 1954	Raleigh and Ruby Hodges	20	" "	"	" "	"
X-203	Dec. 17, 1954	Raleigh and Ruby Hodges	100	" "	"	" "	"
X-204	Dec. 17, 1954	Hugh and Bess Wilson	48	" "	"	" "	"
X-205	Dec. 16, 1954	Orville and Anna Lee Hageman	53	" "	"	" "	"
X-206	Dec. 16, 1954	Paul H. and Josephine Isaacs	20	" "	"	" "	"
X-207	Dec. 16, 1954	Milliard and Nellie Rominger	92	" "	"	" "	"
X-208	Dec. 16, 1954	Roy and Brodie Younce	112	" "	"	" "	"
X-209	Dec. 17, 1954	G. D. and Ruth Matheson	36	" "	"	" "	"
X-210	Dec. 24, 1954	Clay and Nell Phillips	34	" "	"	" "	"
X-211	Nov. 19, 1954	Dolph and Bessie Combs	20	" "	"	" "	"
X-218	Dec. 31, 1954	Howard and Marian Lawrence	32	" "	"	" "	"
X-219	Dec. 22, 1954	Roy and Dorothy Braswell	50	" "	"	" "	"
X-220	Dec. 27, 1954	Henry and Mamie Waters	16	" "	"	" "	"
X-221	Dec. 2, 1954	Frank and Bessie Proffitt	45	" "	"	" "	"
X-222	Dec. 27, 1954	Arlie B. and Hazel V. Eggers	73	" "	"	" "	"
X-223	Dec. 31, 1954	J. S. and Delia Snyder	118	" "	"	" "	"
X-224	Jan. 10, 1955	Laney and Edna Henson	55	" "	"	" "	"
X-226	Jan. 1, 1955	Woodrow and Carrie Lee Wilson	43	" "	"	" "	"
X-228	Jan. 4, 1955	S. G. and Lunda Lawrence	20	" "	"	" "	"
X-229	Jan. 6, 1955	Cecil and Fannie Swift	30	" "	"	" "	"
X-230	Jan. 6, 1955	Cecil and Fannie Swift	76	" "	"	" "	"
X-231	Apr. 25, 1955	Lillie and Edith Morris	8	" "	"	" "	"
X-232	Apr. 30, 1955	Letha Moody, Widow	24	" "	"	" "	"
X-233	Apr. 30, 1955	Fred and Louise Moody	26	" "	"	" "	"

NORTH CAROLINA—WATAUGA COUNTY—LAUREL CREEK TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-142	Oct. 5, 1954	Nola Mae Presnell, et al	80	North Carolina	Watauga	Laurel Creek	5

NORTH CAROLINA—WATAUGA COUNTY—MABEL TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-212	Dec. 31, 1954	Bert and Hazel F. Most	30	North Carolina	Watauga	Mabel	5
X-213	Dec. 31, 1954	Clay and Wilmetta Thomas	2	" "	"	"	"
X-214	Dec. 31, 1954	Clay and Wilmetta Thomas	26	" "	"	"	"
X-215	Dec. 31, 1954	R. A. and Eliza Thomas	82	" "	"	"	"

OPERATING AGREEMENT

THE UNDERSIGNED own interests in mineral leases and mineral options on privately owned lands in the States of NORTH CAROLINA and TENNESSEE, and mineral prospecting permits and applications therefor on Federally-owned acquired lands in the States of NORTH CAROLINA and TENNESSEE, all of which are more specifically described and set forth in Exhibit A (Schedule of Lease Acreage) attached hereto and made a part hereof. All the undersigned owners agree that in order to effect the greatest possible economy in operating and to provide an orderly program of operation, a single Operator should have charge of all the operations of the properties covered by this agreement.

1

DEFINITIONS: These words have the following meanings when used in this agreement:

a. **Party** means someone who signs this agreement as an owner.

b. **Joint property** means the property set out in Exhibit A. This phrase includes both productive and non-productive acreage.

c. **Operator** means the party managing, supervising, and having control of the joint property.

d. **Joint owner** means one of the owners of the joint property.

e. **Notice** means a written message sent by United States mail or by telegraph.

f. **Reply** means a written message sent by United States mail or by telegraph.

g. **Sale** means an agreement whereby a part or all of the joint property is assigned to others for a cash consideration only.

h. **Farm-out** means an agreement other than a sale whereby a part or all of the joint property is assigned to others for a consideration.

2

OBLIGATIONS OF JOINT PROPERTY: The parties shall bear the costs, burdens, and obligations of the joint property in accordance with the ownership percentages set out below:

Owner	Percentage of Interest
John D. Ames	8%
Jay N. Whipple	5%
Spencer M. Butler	1%
Peter Berkey	8%
Richard B. Capps	2%
Adolph R. Floreen	2%
John G. Searle	10%
Benjamin H. Putnam	40%
W. Stanton Barbour	1%
B. C. Gould	5%
Charles H. Mayne	4%
John G. Bulla	1%
Andrew M. Mras	4%
Donald J. Jaffar	2%
Robert N. Babbish	2%
Thomas E. Sheehan	1%
Charles U. Harvey	2%
Ellwood L. Cushing	2%

3

TRANSFERS: Except as set forth in Sections 4 and 5 of this agreement, it is understood and agreed that no transfer of interest by a Joint Owner in the properties covered by this agrement shall be made unless said transfer covers an undivided interest in all the properties covered by this agreement and, no transfer shall be made for less than an undivided one percent (1%) interest in the whole. Any such transfer of interest shall be made subject to all the terms of this agreement and to any contractual obligations affecting the property. In addition, the transferor shall guarantee

the financial responsibility of the transferee unless the transferee's financial responsibility is approved by sixty-six and two-thirds percent (66⅔%) of the ownership, which action shall relieve the transferor of any further financial responsibility.

The party transferring his interest must give written notice of the transfer to Operator, together with the name and address of the transferee, and the exact interest transferred. All expenses and costs of the transfer of interests shall be charged against the interest transferred.

All transfers shall be made in accordance with the provisions of this agreement and shall result in a proportionate change in the manner of bearing its costs, burdens, and obligations. No transfer shall be made effective except as of the 1st day of the calendar month following written notice of such transfer as provided above.

The Operator may not dispose of his entire interest in the joint property without the approval of Fifty Per Cent (50%) of the ownership other than his own.

4

PROSPECTS: In the event Operator determines that any property, or any part thereof, covered by this agreement is a prospect requiring machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations, Operator shall make a recommendation, together with an estimate of the costs involved, to Joint Owners with respect to said prospect. Each Joint Owner shall notify Operator of his approval or disapproval of said recommendation within fifteen (15) days from receipt thereof at the address as set forth herein for the giving of notices. Failure to do so shall constitute approval of the recommendation as submitted.

If said recommendation is to perform any of the operations set forth above, the approval of all of the ownership in said prospect shall be required.

If said recommendation is to farm-out the prospect, then, approval of Joint Owners representing at least sixty-six and two-thirds percent (66⅔%) of the ownership of said propect shall be required. Said approval of the recommendation, whether in its original form or amended, shall constitute full authority for Operator to proceed in accordance therewith.

It is understood and agreed that farm-outs may be made to a group consisting in whole or in part of members who are parties to this agreement.

5

SALE OF PROPERTY: Any bona fide proposal to purchase any part or all of the properties covered by this agreement shall be communicated by Operator in writing to Joint Owners together with his recommendation. Each Joint Owner shall have thirty (30) days from receipt of such recommendation to reply thereto and, if seventy percent (70%) of the ownership of said properties are in favor of the sale under the terms and conditions of the offer communicated, then, the sale shall be effected. All parties shall be bound by such decision and Operator shall forthwith proceed to complete the transaction with due diligence.

As an alternative, Operator may call a meeting of Joint Owners on written notice of not less than five (5) days for the purpose of considering said proposal and, if seventy percent (70%) of the ownership of said properties approve the sale at said meeting, in person or by proxy, the sale shall be completed as set forth above. Notice of the meeting shall set forth the time and place of the meeting and the terms of the proposal to purchase.

It is understood and agreed that sales may be made to a group consisting in whole or in part of members who are parties to this agreement.

6

DURATION AND EFFECT OF AGREEMENT: This agreement runs with the land and binds the parties and all their respective heirs, executors, administrators, successors, and assigns, and remains in force for the duration of the mineral leases, mineral op-

tions, mineral prospecting permits and applications for prospecting permits covering the joint property, or leases or permits pooled or unitized with any part of the joint property and made subject to this agreement and any renewals or extensions.

7

OPERATOR: BENJAMIN H. PUTNAM is named first Operator and shall be Operator until he resigns or becomes unable to act or is removed under the terms of this agreement.

In consderation of services rendered by Operator under this agreement, he shall be paid the sum of two thousand dollars ($2,000) per month beginning July 1, 1955, and as long thereafter as he continues to act as Operator and, in addition thereto, his traveling expenses incurred in connection with his duties as Operator.

In consideration of said salary, the Operator shall devote as much of his time as is necessary to carry out the purposes of this agreement, but shall not be required to spend all of his time in such endeavors.

Nothing contained herein shall prevent Operator from acquiring or otherwise dealing for his own account in properties of a like kind or nature.

8

DUTIES OF OPERATOR: Operator shall occupy and shall have full and exclusive charge of the joint property and shall have exclusive right to manage, supervise, and control all operations. Operator shall give Joint Owner access to the joint property at all reasonable times, shall keep Joint Owner informed about operating problems, and shall render such reports to Joint Owner as may be reasonably necessary.

9

LIABILITY OF OPERATOR: Operator shall maintain the standards of a reasonably prudent Operator at all times, but Operator shall not be liable to Joint Owner for mistakes in judgment but shall be liable only for bad faith, fraud, or gross negligence, or expenditures in excess of the budget not approved as herein provided.

10

PAYMENTS BY OPERATOR: Operator shall enter into all contracts for all joint account operations authorized by the owners to the joint property under the terms of this agreement, shall pay all costs, expenses, charges, and all other obligations of the joint account in accordance with the terms of this agreement and attached Exhibit B (Joint Accounting Procedure).

11

PERSONNEL: Operator shall provide all personnel necessary for the operation and development of the joint property, who shall be employees of Operator, or independent contractors, as the case may be, and who shall not be employees of Joint Owner; the compensation for such personnel shall be paid by Operator and charged to the joint account.

12

TAXES: Operator shall pay all taxes affecting the joint property except those agreed to be paid by others.

13

INSURANCE: Operator shall provide, but shall not be limited to, the following insurance, which he may charge to the joint account.

a. Workmen's Compensation Insurance as required by the laws of the state in which operations take place.

b. Public Liability Insurance, with contractual coverage in the amount of $50,000 for each person and $250,000 for each accident, for personal injuries and death, and in the amount of $40,000 for each accident for damages to property.

c. Automobile Public Liability Insurance in the amount of $100,000 for each person and $300,000 for each accident, for personal injuries and death, and $40,000 for each accident for damages to property.

If requested, Operator shall furnish Joint Owner with certificates of insurance showing that such insurance is in full force and effect and containing a provision that the insurance company may not alter materially or cancel any of such insurance without ten (10) days' notice in advance to Operator.

14

RECORDS: Operator shall keep full and accurate books and records covering the joint account and Joint Owner shall have access to all such books and records at all reasonable times. During the first month of each calendar quarter Operator shall furnish each Joint Owner with a statement for the preceding calendar quarter of all charges and credits to the joint account, summarized by appropriate classification indicative of the nature thereof. At the close of each business year, Operator shall have a recognized certified public accountant or firm of certified public accountants make a thorough audit of all the books and records of the joint account and shall furnish each party with a copy of a written audit report. Operator shall charge the cost of this audit to the joint account in accordance with the terms of this agreement.

15

COMPLIANCE WITH LAW: Operator shall comply with the requirements of law and with the orders of any regulatory body.

16

BUDGET FOR OPERATION: The operating budget to carry out the provisions of this agreement for the year ending June 30, 1956, in the amount of One Hundred Sixty Thousand Dollars ($160,000) for operating expenses and Thirty-two Thousand Dollars ($32,000) for lease rentals has been approved. Said budget includes all operating expenses and lease rentals but does not include those expenditures for machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations, for which specific approval is required from time to time, as provided for in Section 17 hereof.

Future annual operating budgets necessary to carry out the provisions of this agreement shall be prepared annually by Operator and submitted to Joint Owners on or before the 15th day of May each year this agreement is in effect. Said budget shall likewise include all operating expenses and rentals but shall not include expenditures for machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations, for which specific approval is required from time to time, as provided for in Section 17 hereof. Each Joint Owner shall notify Operator of his approval or disapproval of the submitted budget within fifteen (15) days from the receipt thereof at the address set forth herein for the giving of notices. Failure to do so within the time specified shall constitute approval. Sixty-six and two-thirds percent (66⅔%) of the ownership shall be required for approval. If a budget cannot be agreed upon by the required percentage of ownership, Operator shall have the right to proceed with the operation of this agreement, using the same budget as was in effect for the calendar quarter ending June 30, and said budget shall apply until a new budget is approved.

If at any time Operator is of the opinion the annual budget is not sufficient to meet the costs of operations, he may submit a supplemental budget to Joint Owners for their approval upon the same terms and conditions as provided for the submission and approval of the annual budget. Upon its approval, the supplemental budget shall be in addition to the annual budget.

On or before the 15th day of the last month in each calendar quarter, Operator shall send to each Joint Owner, a statement of his percentage share of the budget for the succeeding calendar quarter and, each shall pay to Operator the amount due not

EXHIBIT C

ADDRESSES FOR PURPOSE OF NOTICE

Ames, John D.
135 S. La Salle Street
Chicago 3, Ilinois

Babbish, Robert N.
16833 Muirland Avenue
Detroit 21, Michigan

Barbour, W. Stanton
152 Market Street
Paterson, New Jersey

Berkey, Peter
589 E. Illinois Street
Chicago 11, Illinois

Bulla, John G.
2720 N. 10th Street
Phoenix, Arizona

Butler, Spencer M.
14 E. Jackson Boulevard
Chicago 4, Illinois

Capps, Richard B.
122 S. Michigan Avenue
Chicago 3, Illinois

Cushing, Ellwood L.
2205 Melrose Road
Ann Arbor, Michigan

Floreen, Adoph R.
208 S. La Salle Street
Chicago 90, Illinois

Gould, B. C.
20420 Woodward Avenue
Detroit 3, Michigan

Harvey, Charles U.
116 E. 66th Street
Apt. 11C
New York 21, N. Y.

Jaffar, Donald J.
630 Merrick Street
Detroit 2, Michigan

Mayne, Charles H.
15823 West McNichols Road
Detroit 35, Michigan

Mras, Andrew M.
19557 Renfrew
Detroit 21, Michigan

Putnam, Benjamin H.
512 Third Street
Marietta, Ohio

Searle, John G.
P. O. Box 5110
Chicago 80, Illinois

Sheehan, Thomas E.
593 Fairfax Road, North
Birmingham, Michigan

Whipple, Jay N.
135 S. La Salle Street
Chicago 3, Illinois

3. **Good Used Material**
Good used material (Condition "B"), being used material in sound and serviceable condition, suitable for reuse without reconditioning.
A. At 75% of current new price if material was charged to joint account as new, or
B. At 75% of current new price less depreciation consistent with their usage on and service to the joint property, if material was originally charged to the joint property as secondhand at 75% of new price.

4. **Other Used Material**
Used Material (Condition "C"), being used material which
A. After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
B. Is serviceable for original function but substantially not suitable for reconditioning, at 50% of current new price.

5. **Bad-Order Material**
Used material (Condition "D"), being material which cannot be classified as Condition "B" or Condition "C", shall be priced at a value commensurate with its use.

6. **Junk**
Junk (Condition "E"), being obsolete and scrap material, at prevailing prices.

7. **Temporarily Used Material**
When the use of material is of a temporary nature and its service to the joint account does not justify the reduction in price as provided in Paragraph 3B, above, such material shall be priced on a basis that will leave a net charge to the joint account consistent with the value of the service rendered.

VI. INVENTORIES

1. **Periodic Inventories**
Periodic inventories shall be taken by Operator of the joint account material, which shall include all such material as is ordinarily considered controllable by operators of mineral properties.

2. **Notice**
Notice of intention to take inventory shall be given by Opeator at least ten days before any inventory is to begin, so that Joint Owner may be represented when any inventory is taken.

3. **Failure to be Represented**
Failure of Joint Owner to be represented at the physical inventory shall bind Joint Owner to accept the inventory taken by Operator, who shall in that event furnish Joint Owner with a copy thereof.

4. **Reconciliation of Inventory**
Reconciliation of inventory with charges to the joint account shall be made by each party at interest, and a list of overages and shortages shall be jointly determined by Operator and Joint Owner.

5. **Adjustment of Inventory**
Inventory adjustments shall be made by Operator with the joint account for overages and shortages, but Operator shall only be held accountable to Joint Owner for shortages due to lack of reasonable diligence.

6. **Special Inventories**
Special inventories may be taken, at the expense of the purchaser, whenever there is any sale or change of interest in the joint property, and it shall be the duty of the party selling to notify all other parties hereto as quickly as possible after the transfer of interest takes place. In such cases both the seller and the purchaser shall be represented and shall be governed by the inventory so taken.

later than ten (10) days after the receipt of said statement.

Any expense incurred by Operator pursuant to Section 20 hereof shall be in addition to the amounts provided for in the annual budget and Operator may immediately send statements to Joint Owners for their percentage share thereof, which shall be paid within ten (10) days after the receipt thereof.

17

BUDGET FOR EXPLORATORY WORK: Upon approval by all Joint Owners of a recommendation by Operator to do machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operations as provided in Section 4 hereof, the estimated costs set forth in said recommendation shall be budgeted by Operator and each Joint Owner shall pay his percentage share thereof upon ten (10) days' notice from Operator.

18

FUNDS OF OPERATOR: All funds received by Operator from Joint Owners shall be deposited in an accredited depository in an account properly designated for this agreement and said funds shall only be disbursed by him for the costs and expenses, then due and payable, incurred in accordance with the provisions of this agreement or the express direction of all Joint Owners.

19

EFFECT OF APPROVAL OF JOINT OWNER: Approval by Joint Owner of any plan of operations, or any machine augering, shooting and pitting, bull dozing, core drilling, cable-tool drilling, or mining operation includes approval of all costs, equipment, and other personal property necessary for completion of the approved project.

20

EMERGENCY POWERS OF OPERATOR: Notwithstanding any limitation in any other part of this agreement, if any emergency arises, Operator may, upon securing the approval of Twenty-five Per Cent (25%) of the ownership other than his own, do any act or incur any expense in order to preserve the joint property which Operator considers reasonably necessary under the circumstances, and such costs shall be charged to the joint account.

21

FAILURE TO COMPLY: If Joint Owner fails to comply with Operator's notice, the following results take place:

a. If Joint Owner fails to reply, Joint Owner's consent to the matters in the notice is conclusively presumed.

b. If Joint Owner fails to pay his share of budget items as set forth in Sections 16 and 17 hereof, Operator may enforce Operator's lien.

22

LIEN OF OPERATOR: In connection with operations under this agreement, Joint Owner hereby grants to Operator a specific lien upon all of Joint Owner's interest in the joint property and production from the joint property to the extent of any unpaid items, and Joint Owner hereby consents that Operator may enforce Operator's lien at Operator's option, as follows:

a. By foreclosure proceedings as authorized by law.

b. By filing a copy of this agreement with the purchaser of the production from the joint property, and thereafter receiving from said purchaser the proceeds of such production accruing to the interest of Joint Owner until the amount so received equals the amount owed by Joint Owner, including interest at the rate of six percent (6%); and each such purchaser shall be fully protected in making payment to Operator on the basis of Operator's written statement of the amount owned by Joint Owner.

23

ABANDONMENT: Any Joint Owner desiring to abandon any property or part thereof shall notify Operator of his desire to abandon. Operator shall forthwith notify each Joint Owner of said action, together with his recommendation relating thereto. Each Joint Owner shall have thirty (30) days from receipt of such notice and recommendation to reply thereto and, if seventy percent (70%) of the ownership of said property are in favor of the abandonment, Operator shall proceed therewith as early as practicable and all parties shall be bound by such action.

As an alternative, Operator may call a meeting of Joint Owners on written notice of not less than five (5) days for the purpose of considering said proposed abandonment and, if seventy percent (70%) of the ownership of said properties approve the abandonment at said meeting, in person or by proxy, the abandonment shall be made. Notice of the meeting shall set forth the time and place of the meeting and the properties proposed to be abandoned.

If the required seventy percent (70%) approval is not obtained, said party wishing to abandon any property shall be immediately notified of such action and advised that his percentage obligations under this agreement shall continue to be subject to all the terms and conditions of this agreement.

Any party may abandon his interest in all of the properties covered by this agreement on July 1, 1956, or at any time thereafter upon sixty (60) days' written notice to Operator and execution of an assignment, in form satisfactory to Operator, transferring all of his right, title and interest in all of the properties pro rata to all of the other joint owners. Party wishing to abandon shall pay the cost of effecting such abandonment, including but not limited to, legal expenses and recording fees for the preparation and recording of the necessary assignments.

Provided, however, that in the event all other parties decide to abandon their interests at the same time as the date specified in the notice, then the party giving notice shall be required to pay his proportionate share of all abandonment costs of the properties.

Nothing contained in this section shall relieve any party of his obligation to pay his proportionate share of all budgeted costs applicable to the properties up to and including the date of abandonment nor shall it in any way alter the provisions of this section relating to abandonment of a portion of the property covered by this agreement.

24

ADDITIONAL INTERESTS: This agreement is restricted to the properties described herein. Upon approval in writing of all Joint Owners, additional properties may be added to this agreement.

25

TERMINATION OF OPERATING RIGHTS: Operator may not assign his operating rights under this agreement and if Operator sells his entire interest in the joint property, he shall automatically cease to be Operator. Operator may resign at any time by giving six (6) months' notice to Joint Owners. Operator may name a deputy, who will automatically become Temporary Operator upon the death or disability of Operator. Temporary Operator will have full powers of Operator until replaced by an elected Operator.

26

CHANGE OF OPERATOR: The parties owning a majority interest in the joint property may elect a new Operator upon giving six (6) months written notice to Operator, but without the consent of Operator there shall be no change of Operator for a period of one (1) year following the effective date of this agreement. Within four weeks after the death or disability of Operator, Joint Owners will elect another Operator.

27

ADDRESSES: All parties shall send notices or replies to addresses given on at-

(b) Is serviceable for original function but substantially not suitable for reconditioning, shall be classed as Condition "C" and priced at 50% of new price.

(3) Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value commensurate with its use.

(4) Tanks, derricks, buildings, and other equipment involving erection costs shall be charged at applicable percentage of knock-down new price.

3. **Warranty of Material Furnished by Operator**
Operator does not warrant the material furnished beyond or back of the dealer's or manufacturer's guaranty; and, in case of defective material, credit shall not be passed until adjustment has been received by Operator from the manufacturers or their agents.

4. **Operator's Exclusively Owned Facilities**
The following rates shall apply to service rendered to the joint account by facilities owned exclusively by Operator:
A. Water service, fuel gas, power, and compressor service: At rates commensurate with cost of providing and furnishing such service to the joint account but not exceeding rates currently prevailing in the field where the joint property is located.
B. Automotive Equipment: Rates commensurate with cost of ownership and operation. Such rates should generally be in line with schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against joint account operations and revised from time to time. Automotive rates shall include cost of oil, gas, repairs, insurance, and other operating expense and depreciation; and charges shall be based on use in actual service on, or in connection with, the joint account operations. Truck, tractor, and pulling unit rates shall include wages and expenses of driver.
C. A fair rate shall be charged for the use of drilling tools and core drilling equipment and any other items of Operator's fully owned machinery or equipment, which shall be ample to cover maintenance, repairs, depreciation, and the service furnished the joint property.
D. Whenever requested, Operator shall inform Joint Owner in advance of the rates it proposes to charge.
E. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

IV. DISPOSAL OF LEASE EQUIPMENT AND MATERIAL

The Operator shall be under no obligation to purchase interest of Joint Owner in surplus new or secondhand material. Major items shall not be removed by Operator from the joint property without the approval of Joint Owner. Operator shall not sell major items of material to an outside party without giving Joint Owner an opportunity either to purchase same at the price offered or to take Joint Owner's share in kind.

1. **Material Purchased by Operator**
Material purchased by Operator shall be credited to the joint account and included in the quarterly statement of operations for the month in which the material is removed from the joint property.

2. **Material Purchased by Joint Owner**
Material purchased by Joint Owner shall be invoiced by Operator and paid for by Joint Owner to Operator immediately following receipt of invoice. The Operator shall pass credit to the joint account and include the same in the monthly statement of operations.

3. **Division in Kind**
Division of material in kind, if made between Operator and Joint Owner, shall be in proportion to their respective interests in such material. Each party will thereupon be charged individually with the value of the material received or receivable by each party and corresponding credits will be made by the Operator to the joint account, and such credits shall appear in the quarterly statement of operations.

4. **Sales to Outsiders**
Sales to outsiders of material from the joint property shall be credited by Operator to the joint account at the net amount collected by Operator from Vendee. Any claims by Vendee for defective material or otherwise shall be charged back to the joint account, if and when paid by Operator.

V. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

Material purchased by either Operator or Joint Owner or divided in kind, unless otherwise agreed, shall be valued on the following basis:

1. **New Price Defined**
New price as used in the following paragraphs shall have the same meaning and application as that used above in Section III, "Basis of Charges to Joint Account."

2. **New Material**
New material (Condition "A"), being new material procured for the joint account but never used thereon, at 100% of current new price.

to Operator's warehouse or other storage point for a distance greater that the distance to the nearest reliable supply store or railway receiving point, except by special agreement with Joint Owner; and no charge shall be made to the joint account for moving material to other properties belonging to Operator, except by special agreement with Joint Owner.

6. **Use of Operator's Equipment and Facilities**
Use of and service by Operator's exclusively owned equipment and facilities as provided in Paragraph 4, of Section III, "Basis of Charges to Joint Account."

7. **Damages and Losses**
Damages or losses incurred by fire, flood, storm, or any other cause not controllable by Operator through the exercise of reasonable diligence. Operator shall furnish Joint Owner written notice of damage or losses incurred by fire, storm, flood, or other natural or accidental causes as soon as practicable after report of the same has been received by Operator.

8. **Litigation, Judgments, and Claims**
All costs and expenses of litigation, or legal services otherwise necessary or expedient for the protection of the joint interests, including attorney's fees and expenses as hereinafter provided, together with all judgments obtained against the joint account or the subject matter of this agreement; actual expenses incurred by any party or parties hereto in securing evidence for the purpose of defending against any action or claim prosecuted or urged against the joint account or the subject matter of this agreement.
   A. If a majority of the interests hereunder shall so agree, actions or claims affecting the joint interests hereunder may be handled by the legal staff of one or more of the parties hereto, and a charge commensurate with the services rendered may be made against the joint account, but no such charge shall be made until approved by the legal department of or attorneys for the respective parties hereto.

9. **Taxes**
All taxes of every kind and nature assessed upon or in connection with the properties which are the subject of this agreement, the production therefrom or the operation thereof, and which taxes have been paid by the Operator for the benefit of the parties hereto.

10. **Insurance**
   A. Premiums paid for insurance carried for the benefit of the joint account, together with all expenditures incurred and paid in settlement of any and all losses, claims, damages, judgments, and other expenses, including legal services, not recovered from insurance carrier.
   B. If no insurance is required to be carried, all actual expenditures incurred and paid by Operator in settlement of any and all losses, claims, damages, judgments, and any other expenses, including legal services, shall be charged to the joint account.

11. **District and Camp Expense**
A proportionate share of the salaries and expenses of Operator's District Superintendent and other general district or field employees serving the joint property, whose time is not allocated direct to the joint property, and a proportionate share of maintaining and operating a district office and all necessary camps, including housing facilities for employees if necessary, in conducting the operations on the joint property and other leases owned and operated by Operator in the same locality. The expense of, less any revenue from, these facilities shall include depreciation or a fair monthly rental in lieu of depreciation on the investment. Such charges shall be apportioned to all leases served on some equitable basis consistent with Operator's accounting practice.

12. **Other Expenditures**
Any other expenditure incurred by Operator for the necessary and proper development, maintenance, and operation of the joint property.

III. BASIS OF CHARGES TO JOINT ACCOUNT

1. **Purchases**
Material and equipment purchased and service procured shall be charged at price paid by Operator.

2. **Material Furnished by Operator**
Material required for operations shall be purchased for direct charge to joint account whenever practicable, except that Operator may furnish such material from Operator's stocks under the following conditions:
   A. New Material (Condition "A")
      (1) New material transferred from Operator's warehouse or other properties shall be priced f. o. b. the nearest reputable supply store or railway receiving point, where such material is available, at current replacement cost of the same kind of material.
      (2) Cash discount shall not be allowed.
   B. Used Material (Condition "B" and "C")
      (1) Material which is in sound and serviceable condition and is suitable for reuse without reconditioning shall be classed as Condition "B" and priced at 75% of new price.
      (2) Material which cannot be classified as Condition "B" but which,
         (a) After reconditioning will be further serviceable for original function as good second hand material (Condition "B", or

tached Exhibit C (Addresses for Purpose of Notice).

28

FURTHER ASSURANCES: All parties shall do all acts and execute all instruments necessary to carry out the terms of this agreement, whether or not this agreement specifically calls for them.

29

STATUS OF PARTIES: This agreement does not make the parties partners, mining or otherwise. Each party keeps his own separate interest in the joint property. The parties have entered into this agreement only in order to make the operation and development of the joint property simpler and more economical.

30

LIABILITY OF PARTIES: The parties are liable severally, and not jointly.

31

DISPOSAL OF PRODUCTS: Each party reserves the right to receive, dispose of, and market his proportionate share of the products of the joint property separately and in kind. Any party exercising this right, shall, if necessary, provide all equipment for this purpose at his own cost and expense.

32

MODIFICATIONS: The parties may modify this agreement only by an instrument in writing, signed and acknowledged by all parties, setting out the modifications explicitly. Oral modifications shall have no effect. A course of conduct inconsistent with the terms of this agreement does not constitute a waiver or modification of any of its provisions.

33

CONSTRUCTION: The laws of the State of Illinois, which are in force at the date of execution of this agreement, shall govern its construction.

34

THIS AGREEMENT may be signed in any number of copies but does not take effect until all parties owning an interest in the joint property have signed one copy.

35

THE EFFECTIVE DATE of this agreement is the 1st day of July, 1955.

IN WITNESS WHEREOF the parties have signed this agreement on the 1st day of July, 1955.

Witnesses:

Josephine E. Dubin
Robert V. Benjamin — John D. Ames

Josephine E. Dubin
Robert V. Benjamin — W. Stanton Barbour

Josephine E. Dubin
Robert V. Benjamin — John D. Searle

Mary Serpless Edithe K. Doty	Jay N. Whipple
William Richardson Josephine E. Dubin	Spencer M. Butler
Grace E. Vonder Lehr Josephine E. Dubin	Peter Berkey
Clare Q. Troutman Josephine E. Dubin	A. R. Floreen
Josephine E. Dubin Robert M. George	B. H. Putnam
Josephine E. Dubin Ethel M. Lamplough	Thomas E. Sheehan
Josephine E. Dubin William Richardson	John Bulla
Alfred C. Gaston Albert W. Stanton	B. C. Gould
Alfred C. Gaston Albert W. Stanton	C. H. Mayne
Andrew C. Jarvis Alexander A. Dolega	Andrew M. Mras
Alfred C. Gaston Albert W. Stanton	Donald J. Jaffar, M.D.
Alfred C. Gaston Albert W. Stanton	Robert N. Babbish
Florence E. Williams Josephine E. Dubin	Richard B. Capps
Alfred C. Gaston Albert W. Stanton	Charles U. Harvey
Harold F. Reinecke Marguerite Meyer	Ellwood L. Cushing

EXHIBIT B

Attached to and made a part of AGREEMENT COVERING INTERESTS IN MINERAL PROPERTIES LOCATED IN NORTH CAROLINA AND TENNESSEE

ACCOUNTING PROCEDURE
(Unit and Joint Lease Operations)

I. GENERAL PROVISIONS

1. **Definitions**
The term "joint property" as herein used shall be construed to mean the subject area covered by the agreement to which this "Accounting Procedure" is attached.
The term "Operator" as herein used shall be construed to mean the party designated to conduct the development and operation of the leased premises for the joint account.
The term "Joint Owner" means one or more of the owners of the joint property.

2. **Statements and Billings**
Operator shall bill Joint Owner in accordance with the budget provisions of the operating agreement.

3. **Payments by Joint Owner**
Each party shall pay its proportion of all such bills within ten (10) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest at the rate of six per cent (6%) per annum until paid.

4. **Audits**
Payment of any such bills shall not prejudice the right of Joint Owner to protest or question the correctness thereof. All statements rendered to Joint Owner by Operator during any calendar year shall be conclusively presumed to be true and correct after eighteen months following the close of any calendar year, unless within said eighteen months period Joint Owner takes written exception thereto and makes claim on Operator for adjustment. Failure on the part of Joint Owner to make claim on Operator for adjustment within such period shall establish the correctness thereof and preclude the filing of exceptions thereto or the making of claims for adjustment thereon. A Joint Owner, upon notice in writing to Operator and all other Joint Owners, shall have the right to audit Operator's accounts and records relating to the accounting hereunder, within eighteen months next following the close of any calendar year. Joint Owner shall have six months next following the examination of the Operator's records within which to take written exception to and make any and all claims on Operator. The provisions of this paragraph shall not prevent adjustments resulting from the physical inventory of property as provided for in Section VI, Inventories, hereof.

II. DEVELOPMENT AND OPERATING CHARGES

Subject to limitations hereinafter prescribed, Operator shall charge the joint account with the following items:

1. **Rentals and Royalties**
Delay or other rentals, when such rentals are paid by Operator for the joint account; royalties, when not paid direct to royalty owners by the purchaser of the minerals.

2. **Labor, Transportation, and Services**
Labor, transportation, and other services necessary for the development, maintenance, and operation of the joint property. Labor shall include (A) Operator's cost of vacation, sickness and disability benefits of employees, and expenditures or contributions imposed or assessed by governmental authority applicable to such labor, and (B) Operator's current cost of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of like nature, applicable to Operator's field payroll; provided that the charges under part (B) of this paragraph shall not exceed five per cent (5%) of the total of such labor charged to the joint account.

3. **Material**
Material, equipment, and supplies purchased or furnished by Operator, for use of the joint property. So far as it is reasonably practical and consistent with efficient and economical operation, only such material shall be purchased for or transferred to the joint property as required for immediate use, and the accumulation of surplus stocks shall be avoided.

4. **Moving Material to Joint Property**
Moving material to the joint property from Vendor's or from Operator's warehouse in the district or from the other properties of Operator, but in either of the last two events no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point where such material is available, except by special agreement with Joint Owner.

5. **Moving Surplus Material from Joint Property**
Moving surplus material from the joint property to outside vendees, if sold f.o.b. destination, or minor returns to Operator's warehouse or other storage point. No charge shall be made to the joint account for moving major surplus material

EXHIBIT A—SUPPLEMENT

SCHEDULE OF LEASE ACREAGE

Additional Mineral Leases and Mineral Options On Private Lands

Lease No.	Date	LESSOR	Acres	State	County	Township or District	Term of Lease
X-234	May 16, 1954	Don and Maxine Cornett, et al.	42	North Carolina	Watauga	Beaver Dam	5
X-235	May 11, 1954	Baker and Leta Mae Edmister	15	" "	"	" "	"
X-236	May 9, 1954	Burlie and Ida Cornett	86	" "	"	" "	"
X-237	May 6, 1954	John and Madge Cornett	14	" "	"	" "	"
X-238	May 31, 1954	Grady and Selma McGuire	46	" "	"	" "	"
X-239	May 31, 1954	Homer and Mildred Cornett	22	" "	"	" "	"
X-240	May 31, 1954	Roby and Lillie N. Cornett	25	" "	"	" "	"
X-241	June 24, 1954	Donley and Charlotte Rominger	28	" "	"	" "	"
X-242	May 31, 1954	Dean and Carrie Reese	100	Tennessee	Johnson	4th	"
X-243	June 10, 1954	Louise and Albert Cornett	45	North Carolina	Watauga	Beaver Dam	"
X-244	May 31, 1954	Dean and Carrie Reese	110	" "	"	" "	"
X-245	Jan. 18, 1956	Cleo and Wallace Cope, et al.	160	Tennessee	Grainger	4th	3
X-246	Jan. 24, 1956	Thomas Edward and Reba Kincaid	100	"	"	"	"
X-247	Jan. 23, 1956	Belle Kincaid, widow, et al	125	"	"	"	"
X-248	Jan. 17, 1956	W. N. and Margaret Dalton, et al	40	"	Hancock	1st	"
X-249	Jan. 17, 1956	Dorsie and Thomas Scearce	35	"	Grainger	4th	"
X-250	Jan. 18, 1956	Eliza Antrican, et al.	15	"	"	"	"
X-251	Jan. 21, 1956	Claude Wolfenbarger	20	"	"	"	"
X-252	Jan. 27, 1956	A. B. and Pearley Dalton	50	"	"	"	"
X-253	Jan. 18, 1956	Starling Scearce, single	35	"	"	"	"
X-254	Jan. 18, 1956	Lou Coffey, widow	8	"	"	"	"
X-255	Jan. 17, 1956	John and Ida Wolfenbarger	70	"	"	"	"
X-256	Jan. 20, 1956	Hubert and Dollie Dalton	122	"	"	"	"
X-257	Jan. 20, 1956	Calvin and Pearl Berry	128	"	"	"	"
X-258	Jan. 20, 1956	Cass and Inez Myers	50	"	"	"	"
X-259	Jan. 16, 1956	Lester and Artha Scearce	100	"	"	"	"
X-260	Jan. 14, 1956	J. C. Myers, widower	67	"	"	"	"
X-261	Jan. 14, 1956	Robert Wolf, single	300	"	Hancock	"	"
X-262	Jan. 23, 1956	Lissie Scearce, widow, et al.	140	"	Grainger	"	"
X-263	Jan. 23, 1956	Ora C. Wilkinson, et al.	300	"	"	"	"
X-264	Apr. 7, 1956	W. N. and Dorsia Jackson	600	"	"	"	"
X-265	Mar. 16, 1956	L. F. and Ida Mallicoat	150	"	"	"	"
X-266	Apr. 7, 1956	Herbert and Mertie Nicley	175	"	"	5th	"
X-267	Feb. 29, 1956	Henry L. Wolfe, et al.	82	"	"	4th	4
X-268	Apr. 9, 1956	Dewey Smith, et al.	255	"	Monroe	5th	10
X-269	Apr. 25, 1956	Clure Smith, single	40	"	"	"	"
T-90	Feb. 13, 1956	Roy F. and Lulu S. Hammer	55	"	Jefferson	1st	5
T-91	Feb. 13, 1956	Luther W. and Nola L. Woods	11	"	"	"	"
T-92	Feb. 16, 1956	Robert C. and Ruth Percival	11	"	Claiborne	"	"

EXHIBIT A

NATIONAL FOREST LANDS IN NORTH CAROLINA AND TENNESSEE

Bureau of Land Management's No.	Location	Acres Applied for	Estimated Acres to be Granted
BLM-A-038475	North Carolina	6,341.75	6,200.00
BLM-A-038476	North Carolina	5,224.72	5,224.72
BLM-A-038477	North Carolina	3,025.33	2,300.00
BLM-A-038478	North Carolina	2,056.00	1,850.00
BLM-A-038479	Tennessee	1,155.63	—
BLM-A-038480	Tennessee	1,043.74	—
BLM-A-038481	Tennessee	302.70	302.70
BLM-A-038714	Tennessee	3,274.84	—
BLM-A-038715	Tennessee	640.66	—
BLM-A-038716	Tennessee	342.00	342.00
BLM-A-038808	North Carolina	56,984.60	50,000.00
BLM-A-038809	Tennessee	2,559.78	2,559.78
BLM-A-038810	Tennessee	3,458.00	3,458.00
BLM-A-038811	Tennessee	2,260.00	2,260.00
BLM-A-038812	Tennessee	12,301.63	7,000.00
BLM-A-039765	North Carolina	419.70	60.00
BLM-A-039766	North Carolina	984.07	984.07
Total		102,375.15	82,541.27

EXHIBIT A

SCHEDULE OF LEASE ACREAGE

Mineral Leases on Private Lands

TENNESSEE—CARTER COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-1	Oct. 6, 1954	Will and Lena Hill	10	Tennessee	Carter	3	5
X-2	Oct. 2, 1954	Dayton W. and Molly Whitehead	37	"	"	"	"
X-3	Oct. 4, 1954	Maude and Lloyd Cole	12	"	"	"	"
X-4	Oct. 4, 1954	Etta McCoury, widow	19	"	"	"	"
X-5	Sept. 29, 1954	A. H. and Helen Miller	129	"	"	11	"
X-6	Sept. 30, 1954	Norman and Sarah Gates	6	"	"	3	"
X-7	Sept. 30, 1954	Willard and Nola Gates	35	"	"	"	"
X-8	Sept. 30, 1954	Velma Honeycutt, et al.	20	"	"	"	"
X-9	Sept. 30, 1954	Conley and Rosalee Stevens	38	"	"	"	"
X-10	Oct 4, 1954	J. H. Simerly, single	12	"	"	"	"
X-11	Sept. 29, 1954	Sarah Honeycutt, widow, et al.	79	"	"	"	"
X-12	Sept. 29, 1954	Paul and Maxine Honeycutt	10	"	"	"	"
X-13	Sept. 30, 1954	Dana Largent, widower	25	"	"	"	"
X-14	Sept. 29, 1954	A. H. and Helen Miller	10	"	"	"	"
X-15	Oct. 5, 1954	William N. and Zemma Gates	40	"	"	"	"
X-16	Sept. 30, 1954	J. D. and Daisy M. Simerly	20	"	"	"	"
X-17	Sept. 30, 1954	J. D. and Daisy M. Simerly	60	"	"	"	"
X-18	Sept. 28, 1954	W. H. and Mary Ada Horton	2	"	"	11	"
X-19	Oct. 1, 1954	Wade and Laura Sluder	30	"	"	3	"
X-20	Oct. 1, 1954	Dont Street, widower	49	"	"	"	"
X-21	Oct. 1, 1954	John and Minnie Stevens	40	"	"	"	"
X-22	Sept. 30, 1954	Romules S. and Ethel Miller	60	"	"	"	"
X-23	Sept. 29, 1954	Efford and Alma Hill	17	"	"	"	"
X-24	Oct. 5, 1954	C. S. and Delia Stevens	80	"	"	"	"
X-25	Oct. 5, 1954	Donley and Lucille Lyans	8	"	"	"	"
X-26	Oct. 5, 1954	Reece and Hattie Hill	20	"	"	"	"
X-27	Sept. 28, 1954	Roy and Alma Gates	111	"	"	"	"
X-28	Oct. 7, 1954	W. M. and Bessie Winters	35	"	"	"	"
X-29	Oct. 4, 1954	Luther and Elsi Whitehead	11	"	"	"	"
X-30	Oct. 4, 1954	Jason and Leona Honeycutt	4	"	"	"	"
X-31	Oct. 5, 1954	Mary Ellison, widow	200	"	"	"	"
X-32	Oct. 28, 1954	David A. and Maxine Campbell	30	"	"	4	"
X-33	Oct. 28, 1954	Brady Banner, single	59	"	"	"	"
X-34	Oct. 28, 1954	Pardee Banner, single	55	"	"	"	"
X-35	Oct. 28, 1954	Iva Lee and Robert Hathaway	80	"	"	"	"
X-36	Oct. 29, 1954	Roy S. and Lula Banner	40	"	"	"	"
X-37	Oct. 30, 1954	Alvin E. and Orla Hicks	57	"	"	"	"
X-38	Oct. 27, 1954	L. A. and Carrie Street	5	"	"	3	"
X-39	Oct. 14, 1954	William J. and Lockie Lyons	48	"	"	"	"
X-40	Oct. 16, 1954	Charlie and Sarah Whitehead	12	"	"	"	"
X-41	Oct. 22, 1954	Charlie C. and Mary Whitehead	64	"	"	"	"
X-42	Oct. 18, 1954	Clifford and Mannie Stevens	25	"	"	"	"
X-43	Oct. 14, 1954	Marvin Whitehead, single	9	"	"	"	"
X-44	Oct. 20, 1954	George and Mary Edwards	12	"	"	"	"
X-45	Oct. 16, 1954	M. C. and Effie Street	12	"	"	"	"
X-46	Oct. 20, 1954	Sam and Vicie Simerly	6	"	"	"	"
X-47	Oct. 18, 1954	Mollie Little, widow	40	"	"	"	"
X-48	Oct. 20, 1954	Hattie B. Whitehead, single	18	"	"	"	"
X-49	Oct. 15, 1954	Eugene and Amandy Porter	12	"	"	"	"
X-50	Oct. 22, 1954	Roy and Minnie Robinson	25	"	"	"	"
X-51	Oct. 22, 1954	David and Dealie Hughes	30	"	"	"	"
X-52	Oct. 15, 1954	John and Maxie Gouge	13	"	"	"	"
X-53	Oct. 14, 1954	John R. and Mattie Head	3	"	"	"	"
X-54	Oct. 21, 1954	Ethel Ingram, sole heir	24	"	"	"	"

TENNESSEE—KNOX COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-1	July 23, 1952	J. B. Kelly, Jr., Frances Kelly	120	Tennessee	Knox	8	5
T-2	July 19, 1952	Lola Wikoff, widow	45	"	"	"	"
T-3	July 21, 1952	Glenn and Gladys Birdwell	36	"	"	"	"
T-4	July 19, 1952	Earl H. and Esther Hickman	40	"	"	14	"
T-5	July 19, 1952	Floyd and Edna C. Sharp	23	"	"	8	"
T-6	Aug. 11, 1952	Chas. E. and Bertha C. Hankin	12	"	"	"	"
T-8	July 23, 1952	H. H. Norman and Fennie Norman	30	"	"		"
T-9	July 24, 1952	Emily M. Graves, widow, et al.	100	"	"	8	"
T-10	July 24, 1952	Roy E. and Jewell H. Onks	13	"	"	"	"
T-11	July 24, 1952	Allen L. and Jona J. Cardwell	35	"	"	"	"
T-12	July 24, 1952	Edgar and Virgie Bridges	18	"	"	"	"
T-13	July 24, 1952	Bruce G. and Rose L. Sharp	11	"	"	"	"
T-14	July 25, 1952	Jesse and Cora E. Chesney	48	"	"	"	"
T-16	July 19, 1952	Carol O. and Leola Clark	46	"	"	"	"
T-56	Sept. 16, 1952	Lee Etherton and Lillie Etherton	23	"	"	"	"
T-57	Sept. 17, 1952	J. M. King and Anna King	7	"	"	"	"
T-58	Sept. 16, 1952	Carl Sharp and Maybelle Sharp	5	"	"	"	"

TENNESSEE—SEVIER COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-18	Aug. 7, 1952	A. E. and Ruth F. Elder	100	Tennessee	Sevier	3	5
T-19	Aug. 7, 1952	R. L. and Julia May Mize	225	"	"	"	"
T-20	Aug. 7, 1952	R. L. Mize, et al.	100	"	"	"	"
T-21	Aug. 12, 1952	Frank and Pearl Carr	8	"	"	"	"
T-22	Aug. 12, 1952	Shirley and Ellen Carr	39	"	"	"	"
T-23	Aug. 12, 1952	J. O. and Cassie E. Parrott	116	"	"	"	"
T-24	July 30, 1952	J. L. and Amma Layman	100	"	"	"	"
T-25	Aug. 14, 1952	Rex and Anna M. Rainwater	33	"	"	4	"
T-28	Aug. 16, 1952	J. Robert and Audra Ownby	119	"	"	5	3
T-52	Aug. 28, 1952	Milo M. and Ethel Ellis	45	"	"	4	5
T-53	Aug. 28, 1952	Roy W. and Della Fox	15	"	"	"	"
T-54	Aug. 28, 1952	Pearl and Martha Finchum	16	"	"	5	"
T-55	Aug. 28, 1952	Gladys Fox Rawlings, et al.	11	"	"	4	"
T-85	Apr. 15, 1955	Parlin and Anna Trentham	103	"	"	"	3
T-86	Apr. 15, 1955	Glenn and Florita B. McMahan	195	"	"	"	"

TENNESSEE—GREENE COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-29	Aug. 9, 1952	Emory W. and Alice I. Bible	45	Tennessee	Greene	19	5
T-30	July 31, 1952	G. P. and Mildred Brown	47	"	"	"	"
T-31	July 31, 1952	Guy and Agnes Keifer	26	"	"	"	"
T-35	Aug. 20, 1952	John and Ennis Morrison	18	"	"	25	"
T-88	Apr. 18, 1955	Charles J. and Bertha M. Clayton, et al.	104	"	"	"	3
T-89	Apr. 18, 1955	Grant and Bernice Seay	32	"	"	"	"

NORTH CAROLINA—WATAUGA COUNTY —MABEL TOWNSHIP (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-216	Dec. 31, 1954	R. A. and Eliza Thomas	75	North Carolina	Watauga	Mabel	5
X-217	Dec. 31, 1954	G. H. Thomas	100	" "	"	"	"
X-225	Jan. 8, 1955	F. R. and Lillie Critcher	60	" "	"	"	"
X-227	Jan. 8, 1955	F. R. and Lillie Critcher, et al.	120	" "	"	"	"

NORTH CAROLINA—AVERY COUNTY—BEACH MT. TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-125	Nov. 11, 1954	Nora Greenwell	45	North Carolina	Avery	Beach Mt.	5
X-140	Oct. 3, 1954	Willie and Merttie Trivett, et al.	37	" "	"	" "	"
X-143	Oct. 5, 1954	Nola Mae Presnell, et al.	40	" "	"	" "	"
X-144	Oct. 7, 1954	Craft S. and Delphia Presnell	42	" "	"	" "	"
X-156	Oct. 29, 1954	Ted R. and Norma Ruth Reece	90	" "	"	" "	"
X-159	Nov. 11, 1954	Cecil D. Isaacs	55	" "	"	" "	"

TENNESSEE—JOHNSON AND CARTER COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-160	Oct. 29, 1954	Ted R. and Norma Ruth Reece	54	Tennessee	Johnson and Carter	4 and 10	5

Mineral (Zinc) Leases on Private Lands

TENNESSEE—JEFFERSON COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-41	July 25, 1952	I. E. and Margaret Cody	100	Tennessee	Jefferson	8	5
T-42	July 26, 1952	Cecil and Reba O. Seaton	65	"	"	"	"
T-43	July 24, 1952	W. T. and Mary Seay	98	"	"	"	"
T-44	July 24, 1952	Darius Hensley, et al.	136	"	"	"	"
T-76	Mar. 23, 1953	Roy F. and Lulu S. Hammer	55	"	"	1	3
T-77	Mar. 23, 1953	J. M. Williford, widow	11	"	"	"	"
T-78	Mar. 23, 1953	Luther W. and Nola L. Woods	11	"	"	"	"
T-82	Apr. 13, 1955	James and Frankie Townsend	164	"	"	"	"
T-83	Apr. 19, 1955	Mabel Hill and A. D. Burchfiel	288	"	"	"	"
T-84	Apr. 14, 1955	W. F. and Minnie Dawn	184	"	"	"	"

TENNESSEE—CLAIBORNE COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-45	Aug. 11, 1952	James and Oneal Coffey	75	Tennessee	Claiborne	1	5
T-46	Aug. 11, 1952	Wade and Merlee Evans	30	"	"	"	"
T-47	Aug. 11, 1952	Fielden and Donna Cook	35	"	"	"	"
T-48	Aug. 19, 1952	G. B. and Ocie Lee Percival	60	"	"	"	"
T-49	Aug. 20, 1952	Roberta and Howard C. Crowe	19	"	"	"	"
T-50	Aug. 19, 1952	C. M. and Cecil Percival	30	"	"	"	"
T-51A	Aug. 21, 1952	Viola McBee Harmon, et al.	110	"	"	3	"
T-51	Aug. 21, 1952	Viola McBee Harmon, et al.	110	"	"	"	"
T-59	Aug. 30, 1952	David A. Kivett and Nora Kivett	100	"	"	10	"
T-60	Sept. 6, 1952	Robert Esco and Nelle Rogers	50	"	"	"	"
T-61	Sept. 6, 1952	Dewey and Lena Mayer	45	"	"	"	"
T-62	Aug. 30, 1952	D. F. and Ann Kivett	13	"	"	"	"
T-63	Sept. 18, 1952	E. W. and Laura May Mountain	60	"	"	3	"
T-64	Sept. 6, 1952	Jack and Imogene Hopper	8	"	"	10	"
T-73	Oct. 11, 1952	James H. and Edna Loope	70	"	"	3	"
T-74	Oct. 10, 1952	James Bradford and Betty Davis	15	"	"	"	"
T-75	Oct. 10, 1952	B. M. Davis, single	125	"	"	"	"
T-79	Mar. 25, 1953	Robert G. and Ruth Percival	11	"	"	1	3

TENNESSEE—ANDERSON COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
T-67	Sept. 9, 1952	Charles Wier Hillon, widower	47	Tennessee	Anderson	2	5
T-68	Sept. 6, 1952	Ed. Virla M. Braden	50	"	"	"	"
T-69	Sept. 3, 1952	Mrs. W. R. Herman, widow	40	"	"	"	"
T-70	Oct. 11, 1952	Lee and May Irwin	30	"	"	"	"
T-71	Oct. 11, 1952	J. O. Worthington, single	68	"	"	"	"
T-72	Sept. 24, 1952	Everette and Louise Worthington	62	"	"	"	"

TENNESSEE—CARTER COUNTY (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-55	Oct. 26, 1954	Thomas R. and Dalie Arnett	5	Tennessee	Carter	3	5
X-56	Oct. 25, 1954	John C. and Etta Byrd	25	"	"	"	"
X-57	Oct. 25, 1954	Blake G. and Beatrice R. Byrd	49	"	"	"	"
X-58	Oct. 25, 1954	Willie and Lottie Deloach	50	"	"	"	"
X-59	Oct. 25, 1954	Willard J. and Evelyn Byrd	30	"	"	"	"
X-60	Oct. 28, 1954	David A. and Maxine Campbell	20	"	"	4	"
X-61	Oct. 27, 1954	D. B. Montgomery	236	"	"	"	"
X-62	Oct. 27, 1954	D. B. Montgomery	295	"	"	"	"
X-63	Oct. 30, 1954	Frank and Belle Gouge	75	"	"	3	"
X-64	Oct. 28, 1954	J. T. and Viola Montgomery	150	"	"	4	"
X-65	Oct. 28, 1954	John and Margie Ashley	40	"	"	"	"
X-66	Dec. 13, 1954	Nat J. and Martha Potter	30	"	"	3	"
X-67	Dec. 14, 1954	Brady and Birtie Wise	21	"	"	"	"
X-68	Dec. 14, 1954	D. S. Morton	23	"	"	"	"
X-69	Dec. 11, 1954	Jerome and Luster Stevens	25	"	"	"	"
X-70	Dec. 11, 1954	James and Lora McKinney	45	"	"	"	"
X-71	Dec. 11, 1954	Daunt and Inez Stevens	5	"	"	"	"
X-72	Dec. 11, 1954	Walter and Verna Stevens	10	"	"	"	"
X-73	Dec. 13, 1954	Merit and Cinda McKinney	75	"	"	"	"
X-74	Dec. 13, 1954	Will and Ruth Tolley	25	"	"	"	"
X-75	Dec. 14, 1954	Lizzie McKinney	39	"	"	"	"
X-76	Dec. 13, 1954	Nelson and Martha Lee Stevens	50	"	"	"	"
X-77	Dec. 13, 1954	S. W. and Sadie Bentley	30	"	"	"	"
X-78	Dec. 13, 1954	Clay and Genieve Stevens	30	"	"	"	"
X-79	Oct. 27, 1954	Paul R. and Willie H. Cates	34	"	"	"	"
X-80	Dec. 11, 1954	C. F. and Cela Tolley	40	"	"	"	"
X-81	Nov. 22, 1954	Clay and Leona Street	50	"	"	"	"
X-82	Nov. 6, 1954	Ernest L. and Roxie Johnson	8	"	"	"	"
X-83	Nov. 13, 1954	Clyde and Gladys Johnson	50	"	"	"	"
X-84	Nov. 11, 1954	Lorena and G. A. Franklin	10	"	"	"	"
X-85	Nov. 11, 1954	M. G. and Millie Ashley	44	"	"	"	"
X-86	Nov. 8, 1954	Hensley John & Mary Ann Whithead	6	"	"	"	"
X-87	Nov. 20, 1954	Malone and Georgie Ingram	15	"	"	"	"
X-88	Nov. 29, 1954	James S. and Hester Roberson	31	"	"	"	"
X-89	Nov. 17, 1954	Hobert H. and Hattie Jane Miller	105	"	"	4	"
X-90	Dec. 2, 1954	Alfred Heaton	65	"	"	"	"
X-91	Dec. 4, 1954	Dallas and Anna Irick	38	"	"	"	"
X-92	Nov. 30, 1954	B. and Emma J. Irick	63	"	"	"	"
X-93	Dec. 1, 1954	Thomas M. and Etta Irick	50	"	"	"	"
X-94	Nov. 30, 1954	Emma J. and B. Irick	30	"	"	"	"
X-95	Nov. 16, 1954	John and Emiley Hampton	71	"	"	"	"
X-96	Nov. 1, 1954	Claude and Viola Banner	52	"	"	"	"
X-97	Nov. 1, 1954	Claude T. and Onis L. Irick	37	"	"	"	"
X-98	Dec. 9, 1954	Ernest and Mary S. Guinn	92	"	"	3	"
X-99	Nov. 20, 1954	Clarence and Maud Roberson	66	"	"	"	"
X-100	Nov. 19, 1954	Clifford and Viola Morgan	13	"	"	"	"
X-101	Nov. 13, 1954	Grant and Pearl Carnett	26	"	"	"	"
X-102	Nov. 23, 1954	M. D. and Tessie Lyons	29	"	"	"	"
X-103	Nov. 24, 1954	Grant and Pearl Ingram Townsend	55	"	"	"	"
X-104	Dec. 8, 1954	Lester and Laura Brewer	12	"	"	"	"
X-105	Nov. 24, 1954	Janie Turner	12	"	"	"	"
X-106	Nov. 29, 1954	Floyd and Kathleen Miller	30	"	"	"	"
X-182	Nov. 24, 1954	Carrie and Granville Townsend	9	"	"	"	"
X-186	Dec. 18, 1954	Henry and Gladys McClain	10	"	"	"	"

TENNESSEE—UNICOI COUNTY

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-183	Dec. 15, 1954	Dewey and Lila Corn	100	Tennessee	Unicoi	1	5
X-184	Dec. 17, 1954	Hubert F. and Verta M. Haynes	50	"	"	9	"

TENNESSEE—UNICOI COUNTY (Continued)

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-185	Dec. 17, 1954	Eliza E. Ramsey	20	Tennessee	Unicoi	9	5
X-187	Dec. 23, 1954	Arthur Lloyd & Linnie Mae Floyd	84	"	"	1	"
X-188	Dec. 28, 1954	Ervin and Theore Shelton	34	"	"	"	"
X-189	Dec. 28, 1954	Jess Shelton	4	"	"	"	"
X-190	Dec. 30, 1954	Everett O. and Ella Higgins	70	"	"	"	"
X-191	Jan. 4, 1955	Horace R. and Ruby M. Chandler	35	"	"	"	"
X-192	Jan. 4, 1955	F. A. and Elizabeth Chandler	76	"	"	"	"
X-193	Jan. 5, 1955	Vernie Metcalf	15	"	"	"	"

NORTH CAROLINA—WATAUGA COUNTY—BEAVER DAM TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-107	Oct. 1, 1954	George and Elfa Smitherman	28	North Carolina	Watauga	Beaver Dam	5
X-108	Nov. 30, 1954	D. F. and Hattie Greene	117	" "	"	" "	"
X-109	Oct. 1, 1954	George and Elfa Smitherman	264	" "	"	" "	"
X-110	Sept. 28, 1954	N. E. Tester	80	" "	"	" "	"
X-111	Oct. 21, 1954	Richard and Chloe Presnell	60	" "	"	" "	"
X-112	Oct. 29, 1954	Lewis and Ora Glenn	67	" "	"	" "	"
X-113	Dec. 1, 1954	A. C. and Etta C. Greene	70	" "	"	" "	"
X-114	Dec. 1, 1954	A. C. and Etta C. Greene	130	" "	"	" "	"
X-115	Dec. 8, 1954	Loyd and Verna Mae Hagaman	95	" "	"	" "	"
X-116	Sept. 27, 1954	Joe A. and Lillie Keller	140	" "	"	" "	"
X-117	Sept. 28, 1954	C. R. and Victoria Dishman	25	" "	"	" "	"
X-118	Sept. 28, 1954	Fred A. and Rose McGuire	164	" "	"	" "	"
X-119	Sept. 28, 1954	C. R. and Victoria Dishman	103	" "	"	" "	"
X-120	Sept. 28, 1954	W. C. and Bertha McGuire	40	" "	"	" "	"
X-121	Sept. 30, 1954	Robert and Polly Miller	16	" "	"	" "	"
X-122	Sept. 30, 1954	Clyde and Maggie Perry	30	" "	"	" "	"
X-123	Nov. 4, 1954	I. H. Main and Loy Main	73	" "	"	" "	"
X-124	Nov. 4, 1954	P. S. and Nancy Presnell	75	" "	"	" "	"
X-126	Nov. 12, 1954	Riley and Vinie Harmon	15	" "	"	" "	"
X-127	Nov. 15, 1954	Mabel Guy	6	" "	"	" "	"
X-128	Nov. 16, 1954	E. F. Vines	100	" "	"	" "	"
X-129	Nov. 18, 1954	Harvey and Burlie Smitherman	10	" "	"	" "	"
X-130	Nov. 19, 1954	Clyde and Eureka Harmon, et al.	15	" "	"	" "	"
X-131	Nov. 19, 1954	Linville and Edith Norris	11	" "	"	" "	"
X-132	Nov. 19, 1954	Howard and Sophia Harmon	40	" "	"	" "	"
X-133	Nov. 19, 1954	Jack and Pearl Forthing	25	" "	"	" "	"
X-134	Nov. 20, 1954	Harlie Cornett	25	" "	"	" "	"
X-135	Nov. 22, 1954	Max and Celia Trivett	50	" "	"	" "	"
X-136	Nov. 22, 1954	W. W. and Lora Wilson	106	" "	"	" "	"
X-137	Nov. 23, 1954	John Glenn and Vivian Ward	15	" "	"	" "	"
X-138	Oct. 1, 1954	Tracy L. and Beulah Bentley	59	" "	"	" "	"
X-139	Oct. 2, 1954	Nina Parks	27	" "	"	" "	"
X-141	Oct. 3, 1954	John F. and Mary A. Wood	65	" "	"	" "	"
X-145	Oct. 8, 1954	Joseph and Ida Farthing	72	" "	"	" "	"
X-146	Oct. 14, 1954	Don and Mary Trivett	90	" "	"	" "	"
X-147	Oct. 14, 1954	Don and Mary Trivett	84	" "	"	" "	"
X-148	Oct. 14, 1954	Don and Mary Trivett	55	" "	"	" "	"
X-149	Oct. 15, 1954	Lonie and Lona Guy	119	" "	"	" "	"
X-150	Oct. 15, 1954	Fonzo and Leona Tester	61	" "	"	" "	"
X-151	Oct. 15, 1954	Edgar and Genieve Farthing	35	" "	"	" "	"
X-152	Oct. 16, 1954	Edna Ward	32	" "	"	" "	"
X-153	Oct. 16, 1954	Clyde and Margaret Perry	300	" "	"	" "	"
X-154	Dec. 1, 1954	Spencer and Lucy May	30	" "	"	" "	"
X-155	Sept. 27, 1954	Graden and Pearl Harmon	20	" "	"	" "	"
X-157	Dec. 14, 1954	Howard and Addie Mae Love	35	" "	"	" "	"
X-158	Dec. 14, 1954	Collis and Gladys Greene	35	" "	"	" "	"
X-161	Nov. 17, 1954	Evander and Margaret S. Isaacs	46	" "	"	" "	"
X-162	Dec. 13, 1954	Clyde and Mae E. Robinson	24	" "	"	" "	"

NORTH CAROLINA—WATAUGA COUNTY—BEAVER DAM TOWNSHIP (Continued)

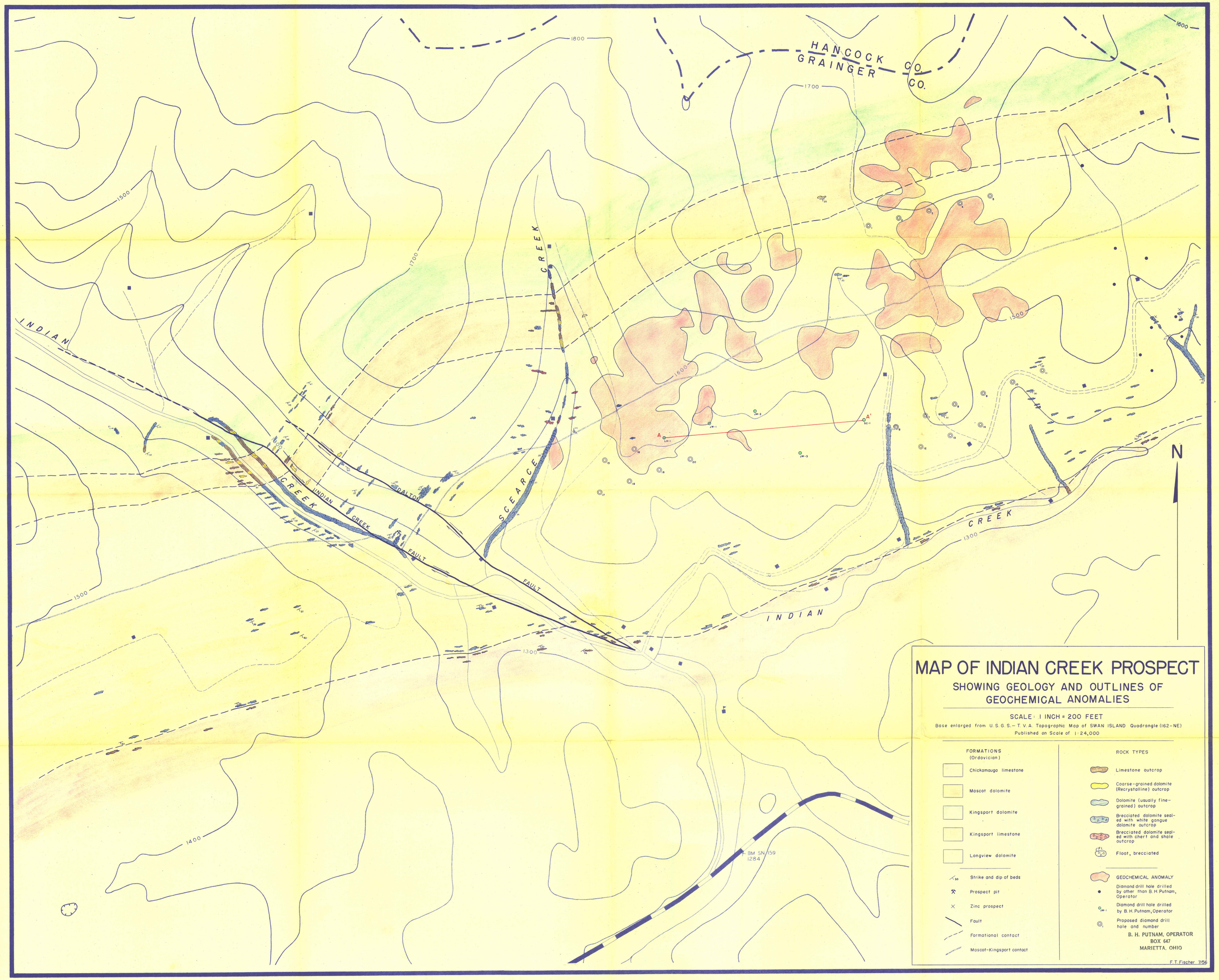
Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-163	Dec. 13, 1954	Clyde and Mae E. Robinson	50	North Carolina	Watauga	Beaver Dam	5
X-164	Dec. 13, 1954	Millie S. Wilson	124	" "	"	" "	"
X-165	Dec. 13, 1954	Stacy and Sarah M. Moody	118	" "	"	" "	"
X-166	Dec. 13, 1954	Frank P. and Ada Wilson	120	" "	"	" "	"
X-167	Dec. 13, 1954	Ray and Fay Stout	148	" "	"	" "	"
X-168	Dec. 13, 1954	John W. Covington	31	" "	"	" "	"
X-169	Dec. 11, 1954	R. R. and Nellie L. Stout	30	" "	"	" "	"
X-170	Dec. 10, 1954	Ray and Leota Swift	50	" "	"	" "	"
X-171	Dec. 10, 1954	A. R. and Daisy Davis	20	" "	"	" "	"
X-172	Dec. 10, 1954	Troy B. and Ida Fletcher	56	" "	"	" "	"
X-173	Dec. 9, 1954	C. B. and Margaret Reese, Sr.	200	" "	"	" "	"
X-174	Dec. 9, 1954	George W. and Drilla Robinson	27	" "	"	" "	"
X-175	Dec. 9, 1954	George W. and Drilla Robinson	28	" "	"	" "	"
X-176	Dec. 9, 1954	Asa L. and Kate S. Reese	45	" "	"	" "	"
X-177	Dec. 9, 1954	Asa L. and Kate S. Reese	60	" "	"	" "	"
X-178	Dec. 7, 1954	Clay and Mae Robinson	75	" "	"	" "	"
X-179	Dec. 14, 1954	Will and Mollie Wilson	20	" "	"	" "	"
X-180	Dec. 14, 1954	Mrs. Nellie Pope	45	" "	"	" "	"
X-181	Dec. 15, 1954	Baker and Louiva Ward	35	" "	"	" "	"
X-194	Jan. 1, 1955	Sanford S. and Stella Creed	54	" "	"	" "	"
X-195	Dec. 31, 1954	J. S. and Delia Snyder	182	" "	"	" "	"
X-196	Dec. 22, 1954	Burl Glenn	40	" "	"	" "	"
X-197	Dec. 22, 1954	Hugh and Elizabeth Davis	120	" "	"	" "	"
X-198	Dec. 22, 1954	Hugh and Elizabeth Davis	10	" "	"	" "	"
X-199	Dec. 22, 1954	Hugh and Elizabeth Davis	46	" "	"	" "	"
X-200	Dec. 14, 1954	Mrs. Ina Wilson, Adm.	90	" "	"	" "	"
X-201	Dec. 24, 1954	Don Shell	83	" "	"	" "	"
X-202	Dec. 17, 1954	Raleigh and Ruby Hodges	20	" "	"	" "	"
X-203	Dec. 17, 1954	Raleigh and Ruby Hodges	100	" "	"	" "	"
X-204	Dec. 17, 1954	Hugh and Bess Wilson	48	" "	"	" "	"
X-205	Dec. 16, 1954	Orville and Anna Lee Hageman	53	" "	"	" "	"
X-206	Dec. 16, 1954	Paul H. and Josephine Isaacs	20	" "	"	" "	"
X-207	Dec. 16, 1954	Milliard and Nellie Rominger	92	" "	"	" "	"
X-208	Dec. 16, 1954	Roy and Brodie Younce	112	" "	"	" "	"
X-209	Dec. 17, 1954	G. D. and Ruth Matheson	36	" "	"	" "	"
X-210	Dec. 24, 1954	Clay and Nell Phillips	34	" "	"	" "	"
X-211	Nov. 19, 1954	Dolph and Bessie Combs	20	" "	"	" "	"
X-218	Dec. 31, 1954	Howard and Marian Lawrence	32	" "	"	" "	"
X-219	Dec. 22, 1954	Roy and Dorothy Braswell	50	" "	"	" "	"
X-220	Dec. 27, 1954	Henry and Mamie Waters	16	" "	"	" "	"
X-221	Dec. 2, 1954	Frank and Bessie Proffitt	45	" "	"	" "	"
X-222	Dec. 27, 1954	Arlie B. and Hazel V. Eggers	73	" "	"	" "	"
X-223	Dec. 31, 1954	J. S. and Delia Snyder	118	" "	"	" "	"
X-224	Jan. 10, 1955	Laney and Edna Henson	55	" "	"	" "	"
X-226	Jan. 1, 1955	Woodrow and Carrie Lee Wilson	43	" "	"	" "	"
X-228	Jan. 4, 1955	S. G. and Lunda Lawrence	20	" "	"	" "	"
X-229	Jan. 6, 1955	Cecil and Fannie Swift	30	" "	"	" "	"
X-230	Jan. 6, 1955	Cecil and Fannie Swift	76	" "	"	" "	"
X-231	Apr. 25, 1955	Lillie and Edith Morris	8	" "	"	" "	"
X-232	Apr. 30, 1955	Letha Moody, Widow	24	" "	"	" "	"
X-233	Apr. 30, 1955	Fred and Louise Moody	26	" "	"	" "	"

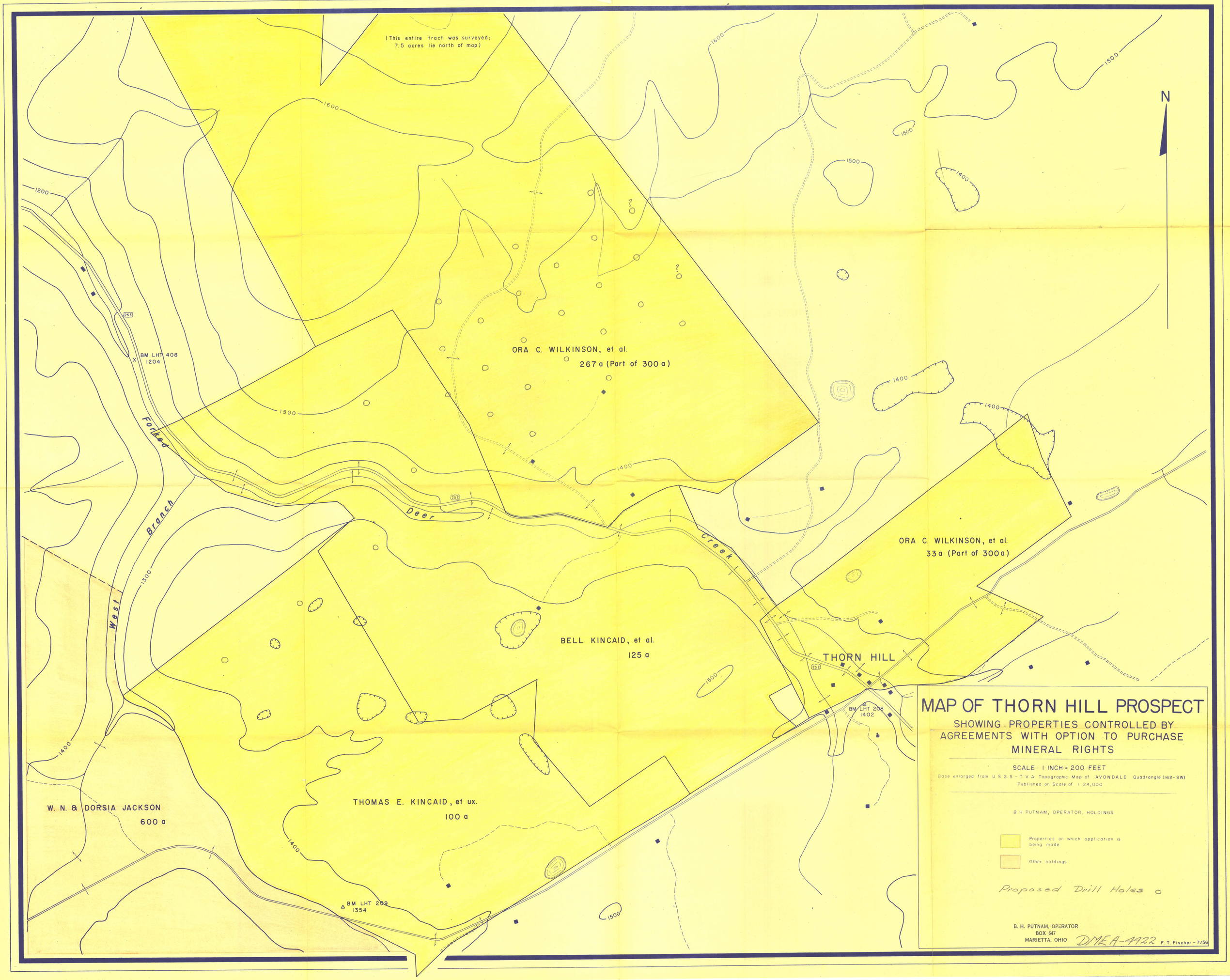
NORTH CAROLINA—WATAUGA COUNTY—LAUREL CREEK TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-142	Oct. 5, 1954	Nola Mae Presnell, et al	80	North Carolina	Watauga	Laurel Creek	5

NORTH CAROLINA—WATAUGA COUNTY—MABEL TOWNSHIP

Lease No.	Date	LESSOR	Acres	State	County	Township	Term of Lease
X-212	Dec. 31, 1954	Bert and Hazel F. Most	30	North Carolina	Watauga	Mabel	5
X-213	Dec. 31, 1954	Clay and Wilmetta Thomas	2	" "	"	"	"
X-214	Dec. 31, 1954	Clay and Wilmetta Thomas	26	" "	"	"	"
X-215	Dec. 31, 1954	R. A. and Eliza Thomas	82	" "	"	"	"


HANCOCK CO.
GRAINGER CO.
INDIAN CREEK
SCEARCE CREEK
INDIAN CREEK FAULT
DALTON FAULT
1800
1700
1600
1500
1300
1400
A
A'
BM SN 159
1284
N
MAP OF INDIAN CREEK PROSPECT
SHOWING GEOLOGY AND OUTLINES OF GEOCHEMICAL ANOMALIES
SCALE: 1 INCH = 200 FEET
Base enlarged from U. S. G. S. – T. V. A. Topographic Map of SWAN ISLAND Quadrangle (162-NE)
Published on Scale of 1:24,000
FORMATIONS (Ordovician)
Chickamauga limestone
Mascot dolomite
Kingsport dolomite
Kingsport limestone
Longview dolomite
Strike and dip of beds
Prospect pit
Zinc prospect
Fault
Formational contact
Mascot-Kingsport contact
ROCK TYPES
Limestone outcrop
Coarse-grained dolomite (Recrystalline) outcrop
Dolomite (usually fine-grained) outcrop
Brecciated dolomite sealed with white gangue dolomite outcrop
Brecciated dolomite sealed with chert and shale outcrop
Float, brecciated
GEOCHEMICAL ANOMALY
Diamond drill hole drilled by other than B. H. Putnam, Operator
Diamond drill hole drilled by B. H. Putnam, Operator
Proposed diamond drill hole and number
B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO
F. T. Fischer 7/56

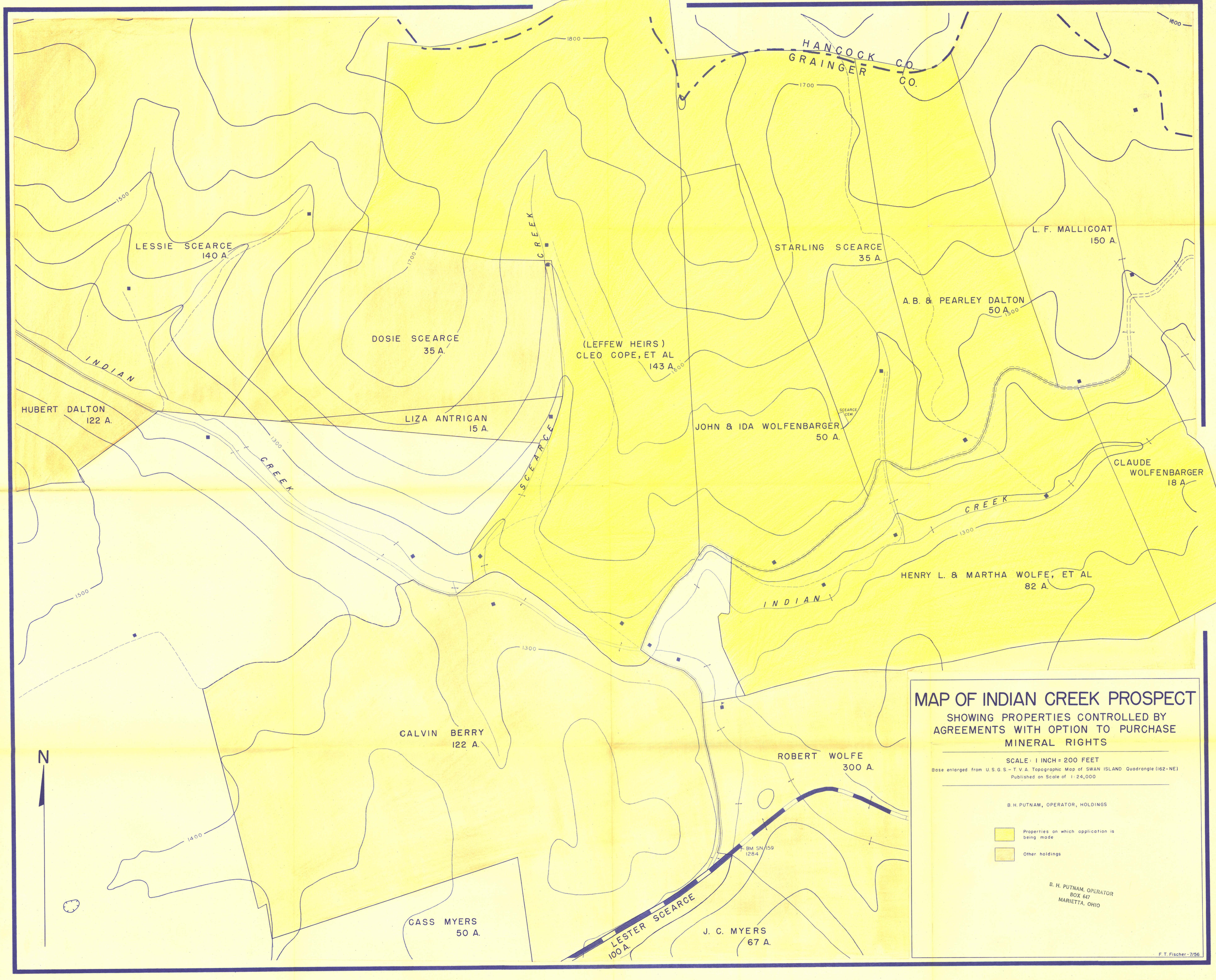

(This entire tract was surveyed;
7.5 acres lie north of map)
N
ORA C. WILKINSON, et al.
267 a (Part of 300 a)
ORA C. WILKINSON, et al.
33 a (Part of 300 a)
BELL KINCAID, et al.
125 a
THOMAS E. KINCAID, et ux.
100 a
W. N. & DORSIA JACKSON
600 a
THORN HILL
BM LHT 408
1204
BM LHT 209
1354
BM LHT 208
1402
Forked
Deer
Creek
West
Branch
1200
1300
1400
1500
1600
MAP OF THORN HILL PROSPECT
SHOWING PROPERTIES CONTROLLED BY
AGREEMENTS WITH OPTION TO PURCHASE
MINERAL RIGHTS
SCALE: 1 INCH = 200 FEET
Base enlarged from U.S.G.S.-T.V.A. Topographic Map of AVONDALE Quadrangle (162-SW)
Published on Scale of 1:24,000
B. H. PUTNAM, OPERATOR, HOLDINGS
Properties on which application is being made
Other holdings
Proposed Drill Holes
B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO
DMEA-4422
F. T. Fischer - 7/56

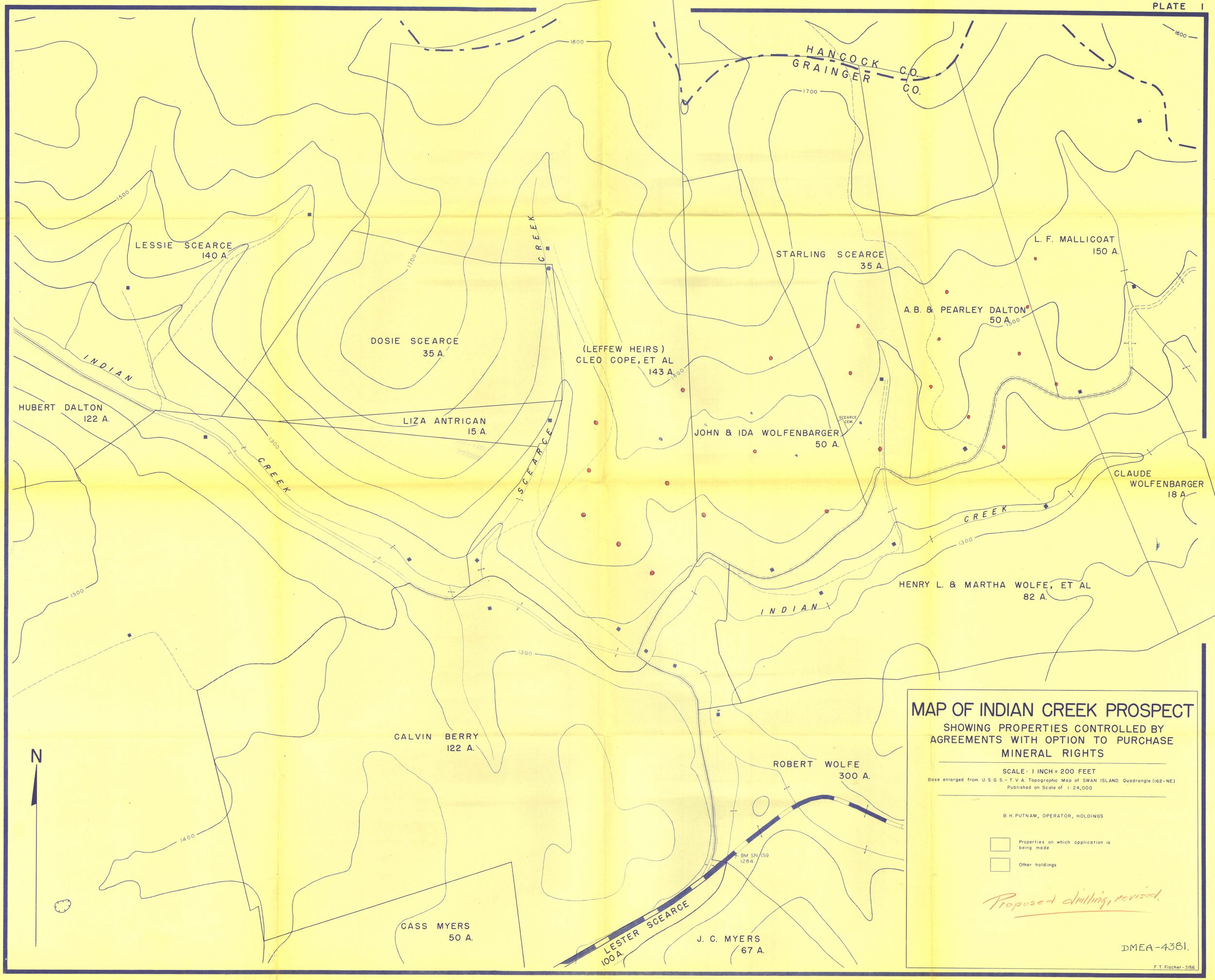
CROSS SECTION OF DIAMOND DRILL HOLES

DRILLED BY B. H. PUTNAM, OPERATOR

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

F. T. Fischer - 7/56


HANCOCK CO.
GRAINGER CO.
1800
1700
1600
1500
1300
1400
LESSIE SCEARCE
140 A.
DOSIE SCEARCE
35 A.
INDIAN
CREEK
HUBERT DALTON
122 A.
LIZA ANTRICAN
15 A.
SCEARCE
CREEK
(LEFFEW HEIRS)
CLEO COPE, ET AL
143 A.
STARLING SCEARCE
35 A.
L. F. MALLICOAT
150 A.
A. B. & PEARLEY DALTON
50 A.
JOHN & IDA WOLFENBARGER
50 A.
SCEARCE CEM.
CLAUDE
WOLFENBARGER
18 A.
CREEK
HENRY L. & MARTHA WOLFE, ET AL
82 A.
INDIAN
CALVIN BERRY
122 A.
ROBERT WOLFE
300 A.
BM SN 159
1284
LESTER SCEARCE
100 A.
CASS MYERS
50 A.
J. C. MYERS
67 A.
N
MAP OF INDIAN CREEK PROSPECT
SHOWING PROPERTIES CONTROLLED BY
AGREEMENTS WITH OPTION TO PURCHASE
MINERAL RIGHTS
SCALE: 1 INCH = 200 FEET
Base enlarged from U. S. G. S. - T. V. A. Topographic Map of SWAN ISLAND Quadrangle (162-NE)
Published on Scale of 1:24,000
B. H. PUTNAM, OPERATOR, HOLDINGS
Properties on which application is being made
Other holdings
B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO
F. T. Fischer - 7/56



MAP OF INDIAN CREEK PROSPECT

SHOWING PROPERTIES CONTROLLED BY AGREEMENTS WITH OPTION TO PURCHASE MINERAL RIGHTS

SCALE: 1 INCH = 200 FEET

Base enlarged from U. S. G. S. – T. V. A. Topographic Map of SWAN ISLAND Quadrangle (162-NE)
Published on Scale of 1:24,000

B. H. PUTNAM, OPERATOR, HOLDINGS

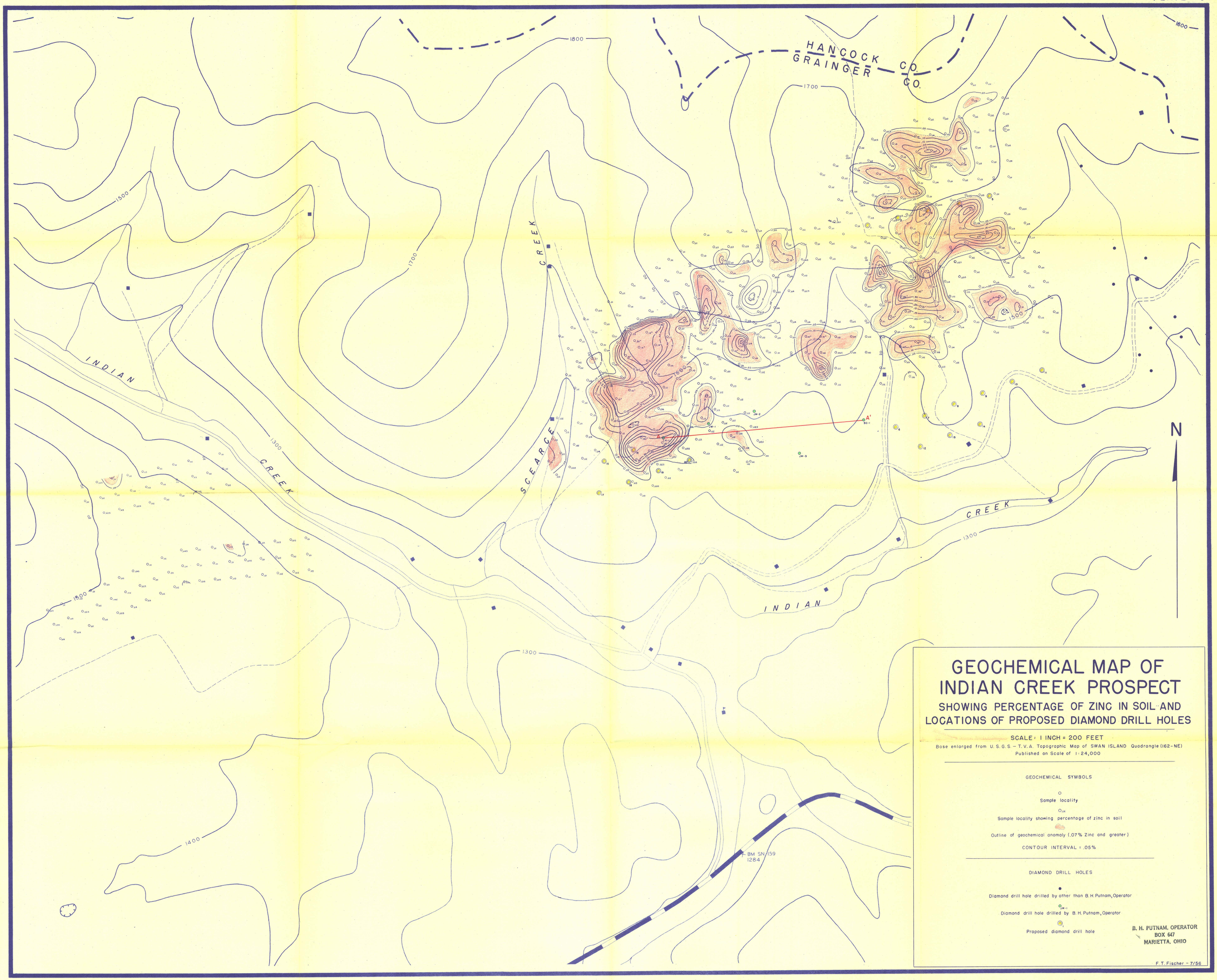
Properties on which application is being made

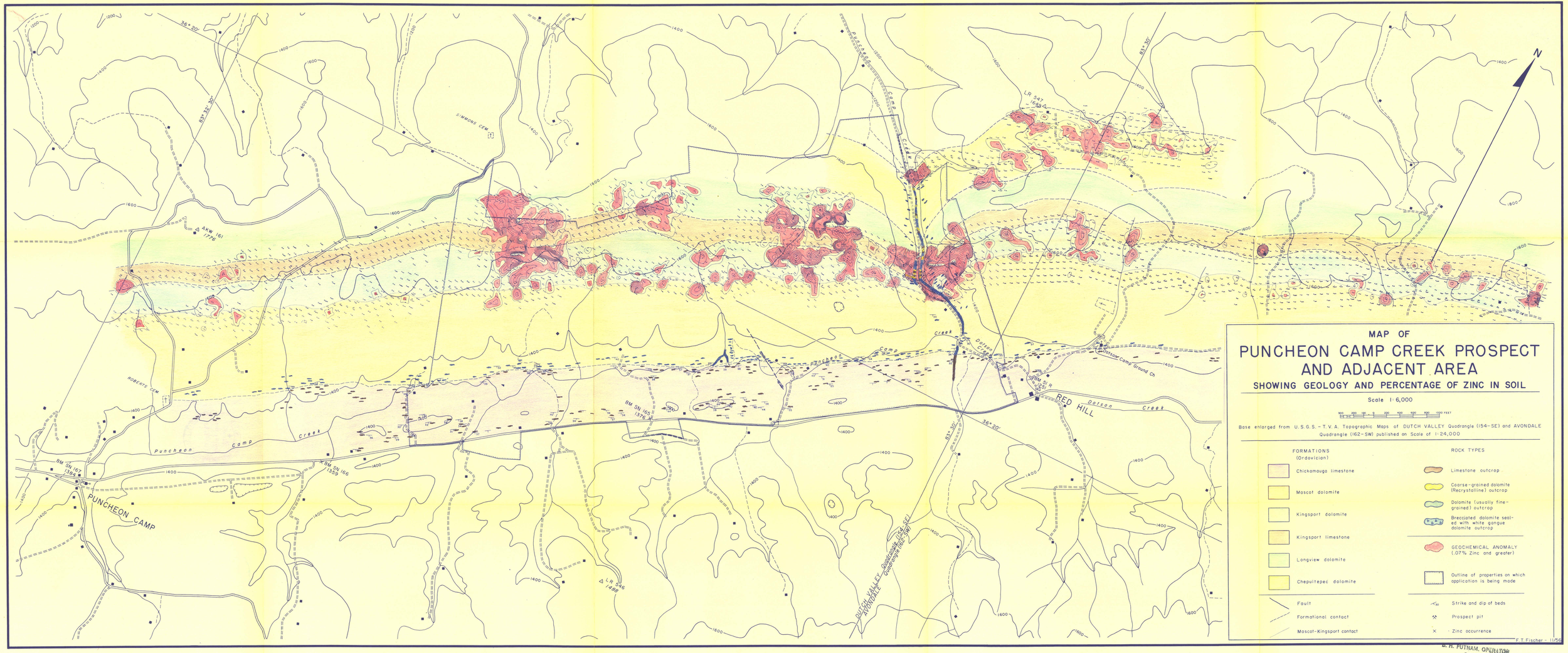
Other holdings

Proposed drilling, revised.

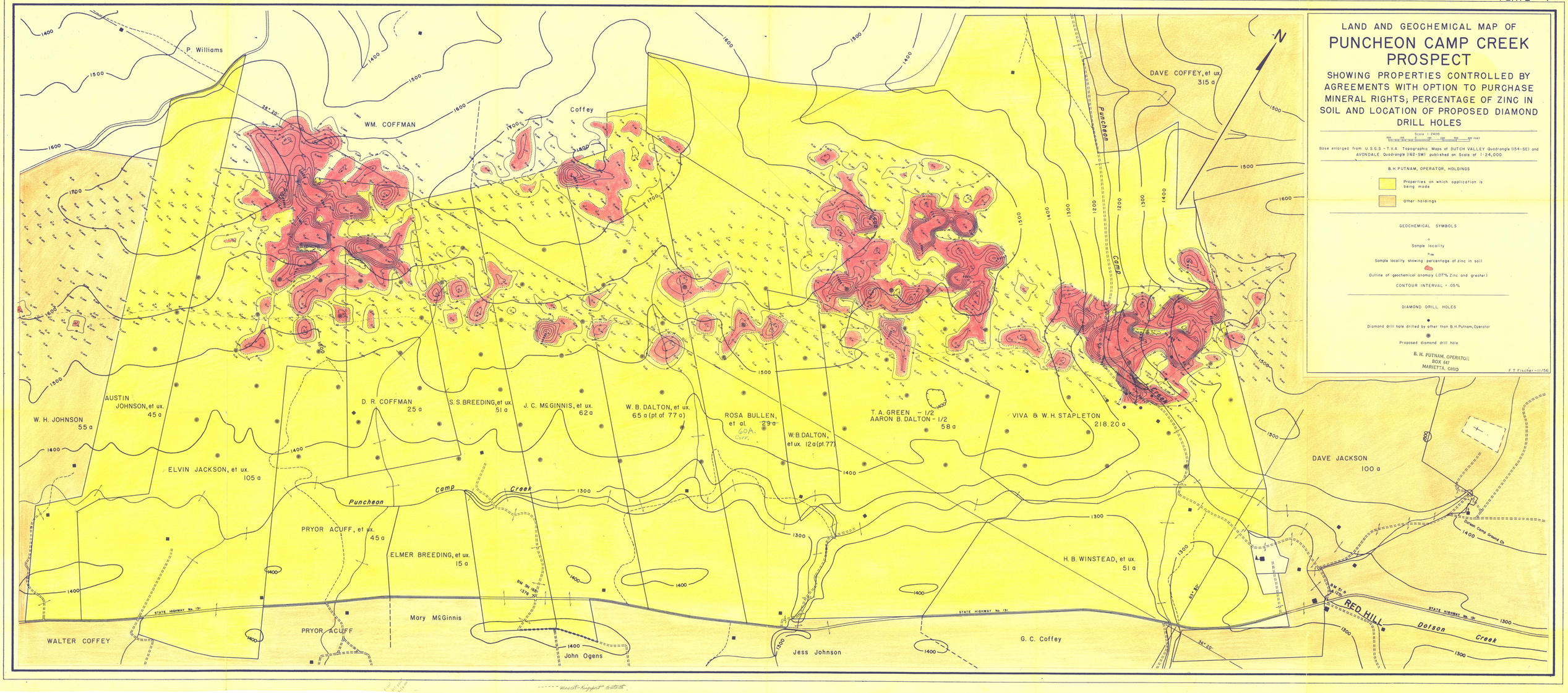
DMEA-4381.

F. T. Fischer - 7/56


HANCOCK CO.
GRAINGER CO.
1800
1700
1600
1500
1300
1400
INDIAN
CREEK
SCEARCE
CREEK
INDIAN
CREEK
A
A'
SC-1
JW-1
JW-2
JW-3
BM SN 159
1284
N
GEOCHEMICAL MAP OF
INDIAN CREEK PROSPECT
SHOWING PERCENTAGE OF ZINC IN SOIL AND
LOCATIONS OF PROPOSED DIAMOND DRILL HOLES
SCALE: 1 INCH = 200 FEET
Base enlarged from U. S. G. S. – T. V. A. Topographic Map of SWAN ISLAND Quadrangle (162-NE)
Published on Scale of 1:24,000
GEOCHEMICAL SYMBOLS
Sample locality
Sample locality showing percentage of zinc in soil
Outline of geochemical anomaly (.07% Zinc and greater)
CONTOUR INTERVAL = .05%
DIAMOND DRILL HOLES
Diamond drill hole drilled by other than B. H. Putnam, Operator
Diamond drill hole drilled by B. H. Putnam, Operator
Proposed diamond drill hole
B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO
F. T. Fischer – 7/56



E. H. PUTNAM, OPERATOR
BOX 547
MARIETTA, OHIO


LAND AND GEOCHEMICAL MAP OF
PUNCHEON CAMP CREEK PROSPECT
SHOWING PROPERTIES CONTROLLED BY AGREEMENTS WITH OPTION TO PURCHASE MINERAL RIGHTS; PERCENTAGE OF ZINC IN SOIL AND LOCATION OF PROPOSED DIAMOND DRILL HOLES
Scale 1:2400
Base enlarged from U.S.G.S. - T.V.A. Topographic Maps of DUTCH VALLEY Quadrangle (154-SE) and AVONDALE Quadrangle (162-SW) published on Scale of 1:24,000
B.H. PUTNAM, OPERATOR, HOLDINGS
Properties on which application is being made
Other holdings
GEOCHEMICAL SYMBOLS
Sample locality
.06
Sample locality showing percentage of zinc in soil
Outline of geochemical anomaly (.07% Zinc and greater)
CONTOUR INTERVAL = .05%
DIAMOND DRILL HOLES
Diamond drill hole drilled by other than B.H. Putnam, Operator
Proposed diamond drill hole
B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO
F.T. Fischer - 11/56
N
P. Williams
WM. COFFMAN
Coffey
DAVE COFFEY, et ux
315 a
Puncheon Camp Creek
W. H. JOHNSON
55 a
AUSTIN JOHNSON, et ux.
45 a
ELVIN JACKSON, et ux.
105 a
D. R. COFFMAN
25 a
S. S. BREEDING, et ux.
51 a
J. C. McGINNIS, et ux.
62 a
W. B. DALTON, et ux.
65 a (pt of 77 a)
ROSA BULLEN, et al.
29 a
60A.
W. B. DALTON, et ux.
12 a (pt. 77)
T. A. GREEN - 1/2
AARON B. DALTON - 1/2
58 a
VIVA & W. H. STAPLETON
218.20 a
DAVE JACKSON
100 a
PRYOR ACUFF, et ux.
45 a
ELMER BREEDING, et ux.
15 a
H. B. WINSTEAD, et ux.
51 a
Dotson Camp Ground Ch.
RED HILL
Dotson Creek
STATE HIGHWAY No. 131
WALTER COFFEY
PRYOR ACUFF
Mary McGinnis
John Ogens
Jess Johnson
G. C. Coffey