DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO. 1048

DMEA NO. 4159

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

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

Right Side

- [ ] Project summary (final)
- [ ] Work Comoleted analysis (final)

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

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

Additional Folders:

Left Side

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

Right Side

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

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

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty material

17963

Pub
Sawyer
Anderson
Chambers
Selfridge
Johnson

Government's Copy

RESCISSION OF EXPLORATION PROJECT CONTRACT

It is agreed this 18th day of October, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Robert N. Frazer, Marion, Kentucky, parties to that certain Exploration Project Contract No. Idm-E1048 (Docket No. DMEA-4159), dated December 31, 1956, that said Contract is hereby rescinded, revoked, and cancelled as of December 31, 1956, before any work has been performed or any costs have been incurred thereunder, without any obligations whatever one party to the other, the same as if the Contract had never been entered into.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C Mittendorf
Administrator, Defense Minerals
Exploration Administration

By Robert Frazer
ROBERT N. FRAZER (Operator)

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957
DATE

Docket Copy

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE
	10	

MF-200
(Revised June 1954)

Docket No. DMEA 4159

Commodity Fluorspar

Contract No. Idm-E 1048

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this DEC 3 1 1956 day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Robert N. Frazer,

whose mailing address is P. O. Box 431
Marion, Kentucky,

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and 2 maps (Figures 1 and 2)

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

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Kentucky, County of Livingston, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee-Optionee of the mineral rights (except gas & oil) in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a lease and option contract [6] recorded in Book -, page -, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: interests of lessors and outstanding undivided one-half (life estate) interest of J. O. Pierce in Tract 3.

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.) are attached, as follows: Consents to Lien and Subordination Agreements of Owners

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Fluorspar The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before October 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A.", except as otherwise provided in Exhibit "A" with respect to stages of work.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $7,812.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $3,906.00 : *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work.

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums.

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 8.

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

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

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

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

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

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. **See Article 13.**

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

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

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

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

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

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

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

Robin
Dunyer
"Appd. Sol. Off."
Anderson
Hunt
Fisher
Selfridge
Alexander
Johnson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mitchell
Administrator, Defense Minerals
Exploration Administration

ROBERT N. FRAZER
(Operator)

By Robert Frazer

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

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—
In Article 6(b) the term "minerals" does not include oil and gas.
In Category (1) of Article 6(a), the phrase "the estimated cost of each unit of work" shall be construed to mean, for the purposes of this contract: "the average cost per foot of drilling in each stage."

EXPLORATION PROJECT CONTRACT
ROBERT N. FRASER
DOCKET NO. DMRA-4159

ANNEX I

The land referred to in Article 2 of the Contract is known as the Lingang Property; is located in Livingston County, Kentucky, 3 3/4 miles west of Salem via U. S. Highway 60 (See attached Index Map, Figure 1); and is the same land conveyed to J. W. Lingang and his wife, Sheila Lingang by a deed recorded in Deed Book 76, Page 603, records of Livingston County Clerk's Office. The land consists of three tracts and is more particularly described as follows:

Tract #1:

Parcel 1: Beginning at a stone on west side of the road running from U. S. Highway 60 to Farris Bridge; thence north 86½ W 88 poles to a hickory and ash near the top of the bluff; thence S 28 W 18 poles to a stone (did call for 2 black oaks); thence S 5 E 116 poles to whiteoak; thence N 61½ E 66 poles to stone (did call for a white oak); thence N 72½ E 68 poles to same road as started; thence with the road N 45 W 42 poles; thence N 8 W 41 poles and 13 feet to the beginning, containing 76 acres more or less.

Parcel 2: Beginning at a stone corner to Richardson and McDaniel; thence S 86 E 54 poles to a stone; thence S 28 E 66 poles to a poplar and stone S 58 E 14 poles to a stone on top of the bluff; thence with bluff S 52 W 22 poles, S 73 W 22 poles, S 54 W 13 poles, S 13 E 36 poles S 18 W 20 poles to Little's line on west side of bluff; thence with Little's line S 62 E 112 poles to ash and black oak on east side of bluff; thence with the meanders of the bluff N 18 E 40 poles N 40 E 32 poles N 10 E 30, N 40 W 20 poles, N 14 W 36 poles, N 3 E 10 poles, N 3 W 18 poles, N 20 W 34 poles to a hickory, white oak and elm sapling; thence N 42 E 13 poles to white oak corner N 5 W 116 poles to a stone near hickory and ash N 28 E 50 poles to a stone; thence N 70 W 74 poles to a stone; thence S 69 W 50 poles to a stone; thence S 19 E 49 poles to a white oak; thence S 16 W 19 poles to a white oak----; thence S 20 W 115 poles to a white oak;

thence N 70 W 25 poles to double white oak, S 20 W 48 poles to Richardson corner, the beginning, containing two hundred acres more or less,

And being the same tract or parcels of land conveyed to the Party of the First Part by J. O. Pierce by deed of record in Deed Book 76 at Page 603 of the records of the Livingston County Clerk's Office.

Tract 2:

Beginning at a stone at the old beginning corner; thence S 49 E 38 poles to a stone; thence N 20 E 16 poles to three ash trees; thence S 61 E 45 poles to a spanish oak; thence S 86 E 54 poles to a stone, was red oak; thence S 28 E 47 poles to a stone in or near the old Cochran line; thence N 77 W 72 poles to a stone on drean; thence N 74 W 92 poles to a stone; thence S 21 W 50 poles following the old road to a hickory; thence N 24 W 37 poles to a stone; thence N 47 E 56 poles to a white oak stump; thence N 21 E 20½ poles to stone, the beginning corner, containing 39½ acres, more or less.

Tract 3:

Beginning at stone on south side of Highway corner to W. L. Richardson; thence with Richardson line S 4° W 23¼ poles, S 6° W 34-2/3 poles to Lyman Ramage Line; thence S 79° E with Lyman Ramage line 67 poles to a stake, did call for a cotton wood; thence S 81° E 40 poles and 14 feet to hickory tree in lane; thence N 24° W 37 poles to a stone; thence N 47° E 56 poles to white oak stump; thence with McDaniel line N 65° W 160 poles to a stone in J. M. Alsobrook line; thence S 10° E 61 poles, crossing U. S. Highway 60 to south side; thence with said Highway S 45° W 9 poles to the beginning containing 80 acres more or less, as surveyed by W. C. Loyd, September 6, 1950.

This being the same land conveyed to Parties of the First Part by deed recorded in Deed Book 76 at Page 603 of the records of the Livingston County Clerk's Office. There is reserved to J. O. Pierce a ½ undivided interest in and to the minerals and mineral and mining rights on the last described tract, during his natural life, and upon his death the same to revert to J. W. Lingang and Mrs. Sheila Lingang, their heirs or assigns.

The land was leased to the Operator for a period of five years with a purchase option, by J. W. Lingang and wife, Sheila in an instrument dated October 7, 1953.

EXPLORATION PROJECT CONTRACT
ROBERT N. FRAZER
DOCKET NO. DMEA-4159

EXHIBIT "A"

Description of the Work

Explore for fluorspar by AX standard diamond core drilling. The holes shall be drilled into the fault zone, as indicated on map, Figure 2, entitled "Reconnaissance Geologic Map of Lingang Property and Nearby Areas, Livingston County, Kentucky," attached hereto and made a part hereof.

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

General Provisions

The Government shall not contribute to the cost of an incompleted hole, or one that bottoms less than AX size.

Records of each hole drilled, together with assay certificates of samples taken (CaF_2, Pb, and Zn), shall be submitted with the Operator's monthly progress report, which shall also include a map showing the location of all holes drilled during the reporting period. All samples shall be properly identified as to drill hole number and the depths represented.

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

Stage I

Stage I consists of drilling 2 diamond core holes, one hole to cut a fault near locality "b" and one hole near locality "c," shown on the attached Figure 2.

Each drill hole shall be approximately 350 feet in length, and the total drilling for this Stage I shall not exceed 700 feet. The holes shall be drilled on a 45° inclination, but the Operator may, on the basis of information gained during drilling, modify the inclination of the holes, subject to the approval of the Government.

Stage II

Stage II consists of drilling 4 diamond core holes, each approximately 350 feet in length, and totaling not in excess of

1,400 feet for the 4 holes. The number, locations, inclinations, and depths of the holes shall be determined by agreement between the Operator and the Government.

Estimated Costs of the Project

Actual Costs

Stage I

Category (1) Independent Contracts		
700 feet diamond core drilling (Includes all costs for reaming, casing, cementing, and moving in and out)	@ $3.00/ft.	$2,100.00
Drillers stand-by time, 12 hours	@ $7.50/hr.	90.00
Category (2) Personal Services		
Subcategory (a) Supervision - 1 Supervisor 25 hours (part time)	@ $4.00/hr.	100.00
Subcategories (b) and (c) Technical Services and Labor	None	
Category (3) Operating Materials and Supplies		
29 core boxes	@ $3.00/each	87.00
Category (4) Operating Equipment	None	
Category (5) Initial Rehabilitation and Repairs	None	
Category (6) New Buildings, Fixtures and Installations	None	
Category (7) Miscellaneous		
Accounting and office expenses, 2 months @ $50.00/mo.		100.00
Payroll taxes and Insurance @ 6%		6.00
10 samples assayed for CaF_2, Pb, and Zn	@ $12.00/sample	120.00
Estimated Total Cost - Stage I		$2,603.00

Stage II

Category (1) Independent Contracts		
1,400 feet diamond drilling (core) (Includes all costs for reaming, casing, cementing, and moving in and out)	@ $3.00/ft.	$4,200.00

Drillers stand-by time, 24 hours	@ $7.50/hr.	$ 180.00
Category (2) Personal Services		
Subcategory (a) Supervision - 1 Supervisor 50 hours (part time)	@ $4.00/hr.	200.00
Subcategories (b) and (c) Technical Services and Labor	None	
Category (3) Operating Materials and Supplies		
58 core boxes	@ $3.00/each	174.00
Category (4) Operating Equipment	None	
Category (5) Initial Rehabilitation and Repairs	None	
Category (6) New Buildings, Fixtures and Installations	None	
Category (7) Miscellaneous		
Accounting and office expenses, 4 months @ $50.00/mo.		200.00
Payroll taxes and Insurance @ 6%		12.00
20 samples assayed for CaF_2, Pb, and Zn @ $12.00/sample		240.00
Estimated Total Cost - Stage II		$5,206.00

SUMMARY

Estimated Total Cost - Stage I	$2,603.00
Estimated Total Cost - Stage II	5,206.00
Estimated Total Cost of Project (rounded)	$7,812.00
Government Participation @ 50%	$3,906.00

MF-205
(Combines and supercedes MF-202 and MF-203)
June 1956

Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Robert N. Fraser
Docket No. DMEA-[illegible]
Contract No. Idm-E
Contract Date

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

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Livingston State of Kentucky, described as follows: 2/

Lease and option contract dated October 7, 1953, between J. W. Lingang and wife, Sheila, and Robert N. Fraser, said description being incorporated herein by reference.

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

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

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

None

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

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

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this 12 day of Jan, 1957.

J. W. Lingang	[Seal]	Same	[Address]
Sheila Lingang	[Seal]	"	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

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

_____

[Corporate Seal]

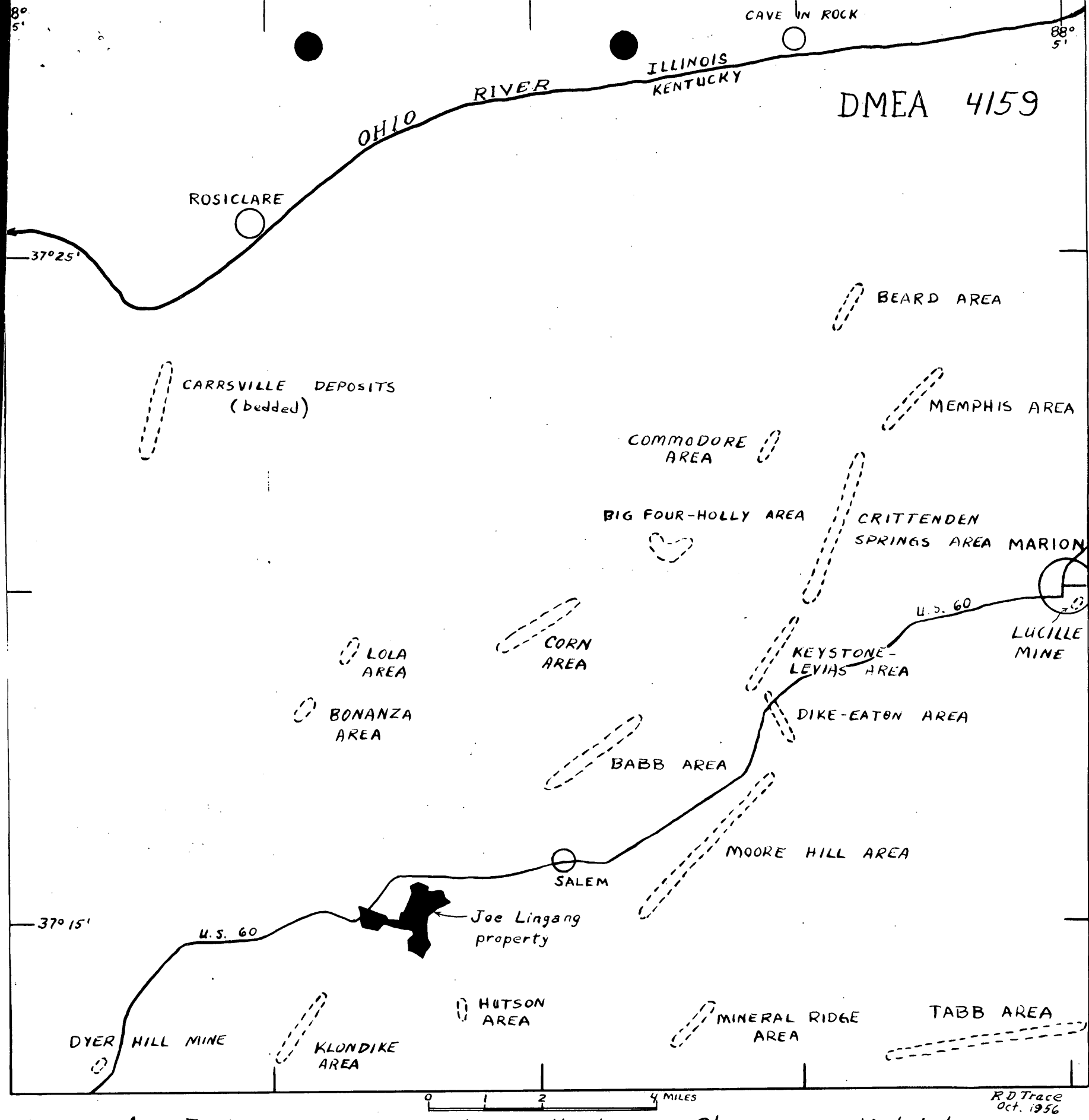

Figure 1.--Index map of western Kentucky fluorspar district, SHOWING APPROXIMATE LOCATION OF PRINCIPAL MINING AREAS AND KNOWN DEPOSITS, CRITTENDEN, LIVINGSTON, AND CALDWELL COUNTIES.

OFFICIAL FILE COPY
RECEIVED MAY 24 1957
D M E A

DATE	INITIALS	CODE

DMEA 4159

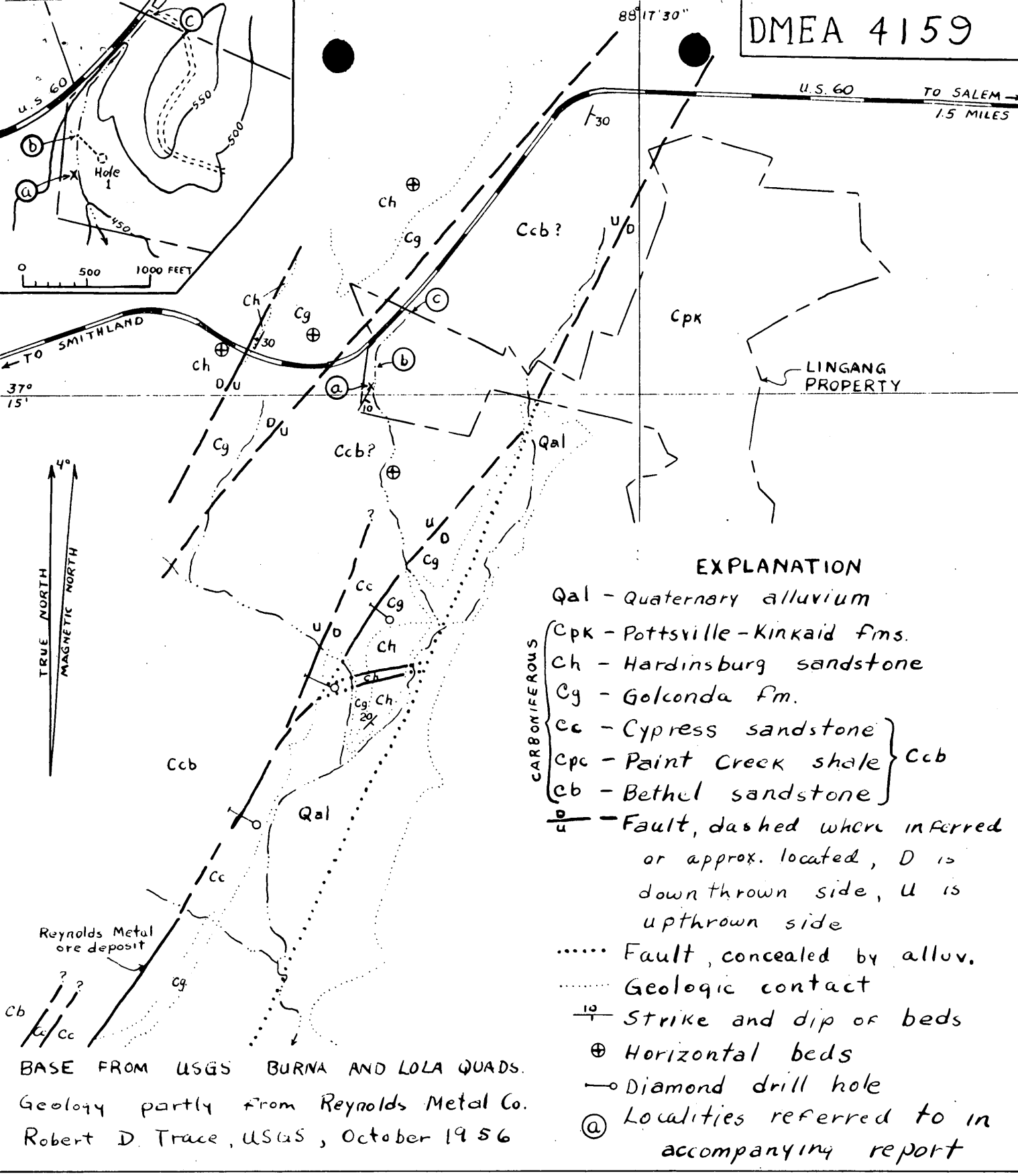

Figure 2. RECONNAISSANCE GEOLOGIC MAP OF LINGANG PROPERTY AND NEARBY AREAS, LIVINGSTON COUNTY, KENTUCKY

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

Extra Copy

MF-200
(Revised June 1954)

Docket No. DMEA 4159

Commodity Fluorspar

Contract No. Idm-E 1048

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this DEC 31 1958 day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Robert W. Fraser, whose mailing address is P. O. Box 431, Marion, Kentucky, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and 2 maps (Figures 1 and 2)

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

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Kentucky, County of Livingston, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee-Optionee of [5] the mineral rights (except gas & oil) in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] Lease and option contract [7], recorded in Book ....., page ....., official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: Interests of lessors and outstanding undivided one-half (life estate) interest of J. O. Pierce in Tract 3.

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.) are attached, as follows: Consents to Lien and Subordination Agreements of Owners

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Fluorspar The work to be performed is described in Exhibit "A." The Operator on or before shall commence the work, and on or before October 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A.", except as otherwise provided in Exhibit "A" with respect to stages of work.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $7,812.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $3,906.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work.

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums.

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 8.

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

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

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

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

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

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. See Article 13.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

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

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

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

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

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

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—

In Article 3(b) the term "minerals" does not include oil and gas.

In Category (1) of Article 6(a), the phrase "the estimated cost of each unit of work" shall be construed to mean, for the purposes of this contract: "the average cost per foot of drilling in each stage."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. O. Mittendorf
Administrator, Defense Minerals
Exploration Administration

ROBERT H. FRAZER
(Operator)

By

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

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

EXPLORATION PROJECT CONTRACT
ROBERT N. FRAZER
DOCKET NO. DNRA-4159

ANNEX I

The land referred to in Article 2 of the Contract is known as the Lingang Property; is located in Livingston County, Kentucky, 3 3/4 miles west of Salem via U. S. Highway 60 (See attached Index Map, Figure 1); and is the same land conveyed to J. W. Lingang and his wife, Sheila Lingang by a deed recorded in Deed Book 76, Page 603, records of Livingston County Clerk's Office. The land consists of three tracts and is more particularly described as follows:

Tract #1:

Parcel 1: Beginning at a stone on west side of the road running from U. S. Highway 60 to Farris Bridge; thence north 86½ W 88 poles to a hickory and ash near the top of the bluff; thence S 28 W 18 poles to a stone (did call for 2 black oaks); thence S 5 E 116 poles to whiteoak; thence N 61½ E 66 poles to stone (did call for a white oak); thence N 78½ E 68 poles to same road as started; thence with the road N 45 W 42 poles; thence N 8 W 41 poles and 13 feet to the beginning, containing 76 acres more or less.

Parcel 2: Beginning at a stone corner to Richardson and McDaniel; thence S 86 E 54 poles to a stone; thence S 28 E 66 poles to a poplar and stone S 58 E 14 poles to a stone on top of the bluff; thence with bluff S 52 W 22 poles, S 73 W 22 poles, S 54 W 13 poles, S 13 E 36 poles S 18 W 20 poles to Little's line on west side of bluff; thence with Little's line S 62 E 112 poles to ash and black oak on east side of bluff; thence with the meanders of the bluff N 18 E 40 poles N 40 E 32 poles N 10 E 30, N 40 W 20 poles, N 14 W 36 poles, N 3 E 10 poles, N 3 W 18 poles, N 20 W 34 poles to a hickory, white oak and elm sapling; thence N 42 E 13 poles to white oak corner N 5 W 116 poles to a stone near hickory and ash N 28 E 50 poles to a stone; thence N 70 W 74 poles to a stone; thence S 69 W 50 poles to a stone; thence S 19 E 49 poles to a white oak; thence S 16 W 19 poles to a white oak----; thence S 20 W 115 poles to a white oak;

thence N 70 W 25 poles to double white oak, S 20 W 48 poles to Richardson corner, the beginning, containing two hundred acres more or less,

And being the same tract or parcels of land conveyed to the Party of the First Part by J. O. Pierce by deed of record in Deed Book 76 at Page 603 of the records of the Livingston County Clerk's Office.

Tract 2:

Beginning at a stone at the old beginning corner; thence S 49 E 38 poles to a stone; thence N 20 E 16 poles to three ash trees; thence S 61 E 45 poles to a spanish oak; thence S 86 E 34 poles to a stone, was red oak; thence S 28 E 47 poles to a stone in or near the old Cochran line; thence N 77 W 72 poles to a stone on drain; thence N 74 W 92 poles to a stone; thence S 21 W 50 poles following the old road to a hickory; thence N 24 W 37 poles to a stone; thence N 47 E 56 poles to a white oak stump; thence N 21 E 20½ poles to stone, the beginning corner, containing 39½ acres, more or less.

Tract 3:

Beginning at stone on south side of Highway corner to W. L. Richardson; thence with Richardson line S 4° W 23¼ poles, S 6° W 34-2/3 poles to Lyman Ramage Line; thence S 79° E with Lyman Ramage line 67 poles to a stake, did call for a cotton wood; thence S 81° E 40 poles and 14 feet to hickory tree in lane; thence N 24° W 37 poles to a stone; thence N 47° E 56 poles to white oak stump; thence with McDaniel line N 65° W 160 poles to a stone in J. M. Aleshreck line; thence S 10° E 61 poles, crossing U. S. Highway 60 to south side; thence with said Highway S 49° W 9 poles to the beginning containing 80 acres more or less, as surveyed by W. C. Loyd, September 6, 1950.

This being the same land conveyed to Parties of the First Part by deed recorded in Deed Book 76 at Page 603 of the records of the Livingston County Clerk's Office. There is reserved to J. O. Pierce a ½ undivided interest in and to the minerals and mineral and mining rights on the last described tract, during his natural life, and upon his death the same to revert to J. W. Lingang and Mrs. Sheila Lingang, their heirs or assigns.

The land was leased to the Operator for a period of five years with a purchase option, by J. W. Lingang and wife, Sheila in an instrument dated October 7, 1953.

EXPLORATION PROJECT CONTRACT
ROBERT N. FRAZER
DOCKET NO. DMRA-4159

EXHIBIT "A"

Description of the Work

Explore for fluorspar by AX standard diamond core drilling. The holes shall be drilled into the fault zone, as indicated on map, Figure 2, entitled "Reconnaissance Geologic Map of Lingang Property and Nearby Areas, Livingston County, Kentucky," attached hereto and made a part hereof.

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

General Provisions

The Government shall not contribute to the cost of an incompleted hole, or one that bottoms less than AX size.

Records of each hole drilled, together with assay certificates of samples taken (CaF_2, Pb, and Zn), shall be submitted with the Operator's monthly progress report, which shall also include a map showing the location of all holes drilled during the reporting period. All samples shall be properly identified as to drill hole number and the depths represented.

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

Stage I

Stage I consists of drilling 2 diamond core holes, one hole to cut a fault near locality "b" and one hole near locality "c," shown on the attached Figure 2.

Each drill hole shall be approximately 350 feet in length, and the total drilling for this Stage I shall not exceed 700 feet. The holes shall be drilled on a 45° inclination, but the Operator may, on the basis of information gained during drilling, modify the inclination of the holes, subject to the approval of the Government.

Stage II

Stage II consists of drilling 4 diamond core holes, each approximately 350 feet in length, and totaling not in excess of

1,400 feet for the 4 holes. The number, locations, inclinations, and depths of the holes shall be determined by agreement between the Operator and the Government.

Estimated Costs of the Project

Actual Costs

Stage I

Category (1) Independent Contracts

700 feet diamond core drilling (Includes all costs for reaming, casing, cementing, and moving in and out)	@ $3.00/ft.	$2,100.00
Drillers stand-by time, 12 hours	@ $7.50/hr.	90.00

Category (2) Personal Services

Subcategory (a) Supervision - 1 Supervisor 25 hours (part time)	@ $4.00/hr.	100.00
Subcategories (b) and (c) Technical Services and Labor	None	

Category (3) Operating Materials and Supplies

19 core boxes	@ $3.00/each	57.00

Category (4) Operating Equipment — None

Category (5) Initial Rehabilitation and Repairs — None

Category (6) New Buildings, Fixtures and Installations — None

Category (7) Miscellaneous

Accounting and office expenses, 2 months @ $50.00/mo.	100.00
Payroll taxes and Insurance @ 6%	6.00
10 samples assayed for CaF_2, Pb, and Zn @ $12.00/sample	120.00

Estimated Total Cost - Stage I $2,603.00

Stage II

Category (1) Independent Contracts

1,400 feet diamond drilling (core) (Includes all costs for reaming, casing, cementing, and moving in and out)	@ $3.00/ft.	$4,200.00

Drillers stand-by time, 24 hours @ $7.50/hr.		$ 180.00
Category (2) Personal Services		
Subcategory (a) Supervision - 1 Supervisor		
50 hours (part time)	@ $4.00/hr.	200.00
Subcategories (b) and (c) Technical Services and Labor	None	
Category (3) Operating Materials and Supplies		
58 core boxes	@ $3.00/each	174.00
Category (4) Operating Equipment	None	
Category (5) Initial Rehabilitation and Repairs	None	
Category (6) New Buildings, Fixtures and Installations	None	
Category (7) Miscellaneous		
Accounting and office expenses, 4 months @ $50.00/mo.		200.00
Payroll taxes and Insurance @ 6%		12.00
20 samples assayed for CaF_2, Pb, and Zn @ $12.00/sample		240.00
Estimated Total Cost - Stage II		$5,806.00

SUMMARY

Estimated Total Cost - Stage I	$2,603.00
Estimated Total Cost - Stage II	5,806.00
Estimated Total Cost of Project (rounded)	$7,818.00
Government Participation @ 50%	$3,906.00

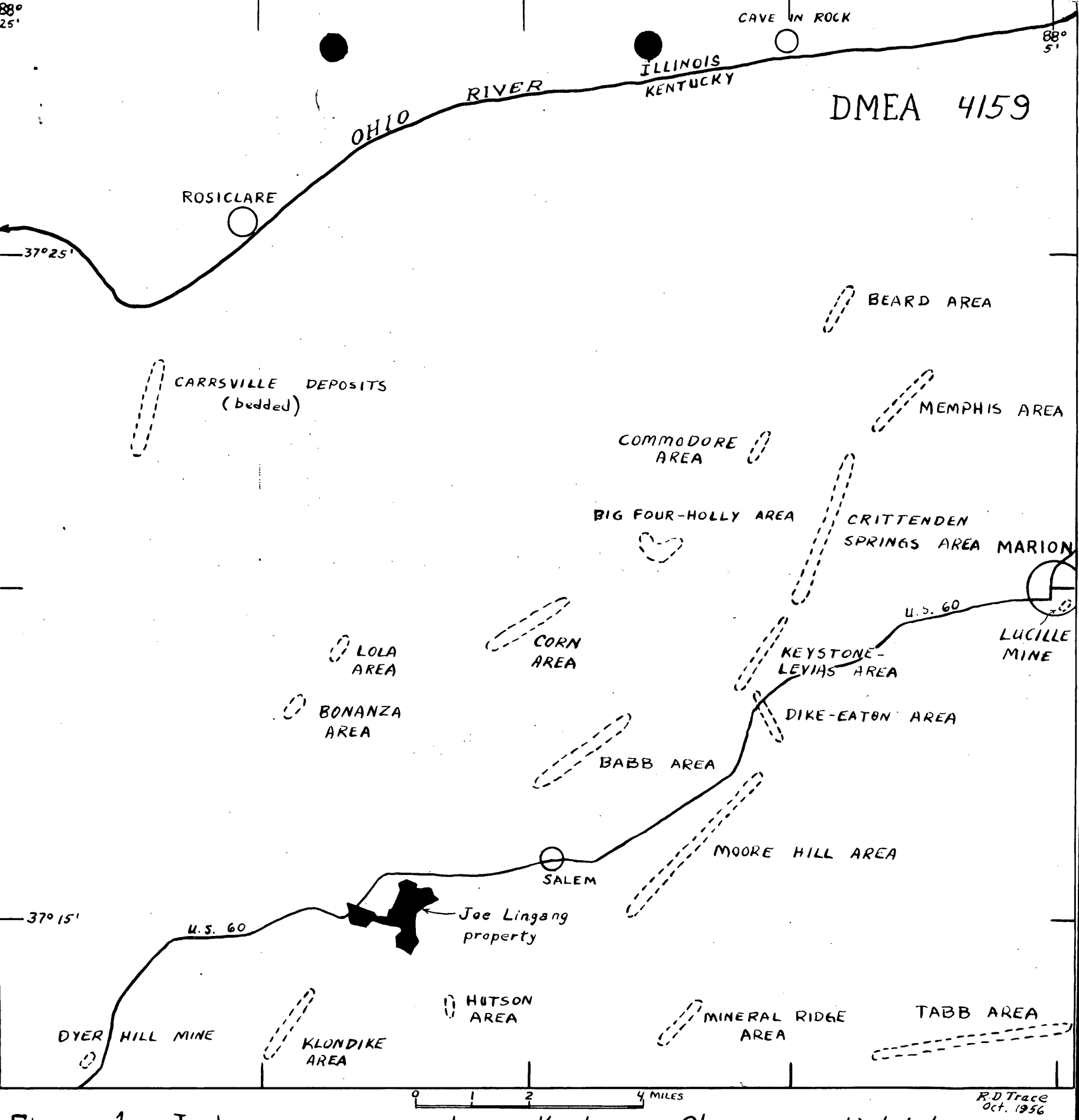

Figure 1.--Index map of western Kentucky fluorspar district, SHOWING APPROXIMATE LOCATION OF PRINCIPAL MINING AREAS AND KNOWN DEPOSITS, CRITTENDEN, LIVINGSTON, AND CALDWELL COUNTIES.

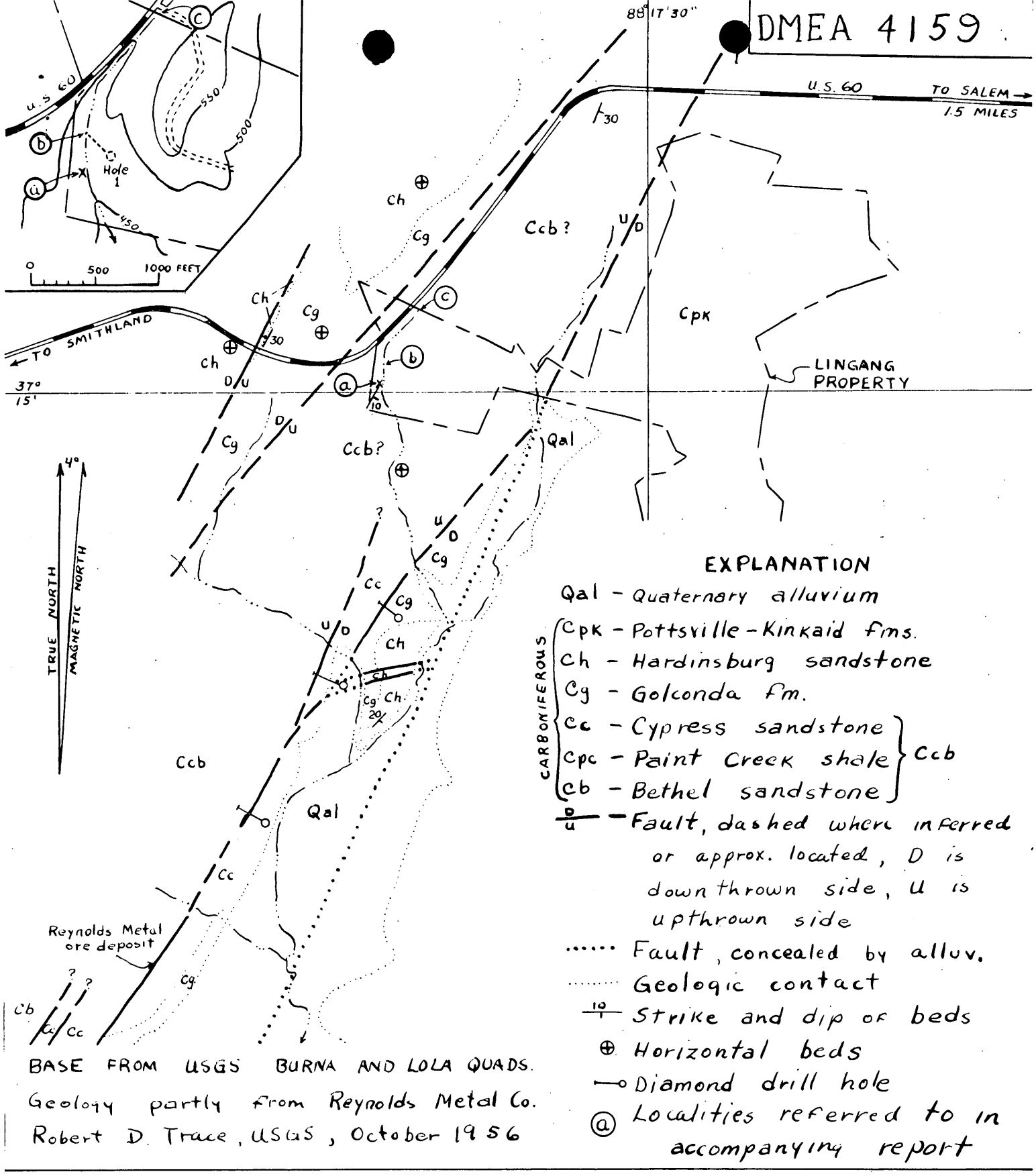

Figure 2. RECONNAISSANCE GEOLOGIC MAP OF LINGANG PROPERTY AND NEARBY AREAS, LIVINGSTON COUNTY, KENTUCKY

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Robert N. Fraser
Docket No. DMEA-[illegible]
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Livingston, State of Kentucky, described as follows: 2/

Lease and option contract dated October 7, 1953, between J. W. Bingang and wife, Sheila, and Robert N. Fraser, said description being incorporated herein by reference.

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

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

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

None

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

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

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this 12 day of Jan, 1957.

J. W. Lingang	[Seal]	Salem Ky	[Address]
Sheila Lingang	[Seal]	" "	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

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

_____

[Corporate Seal]

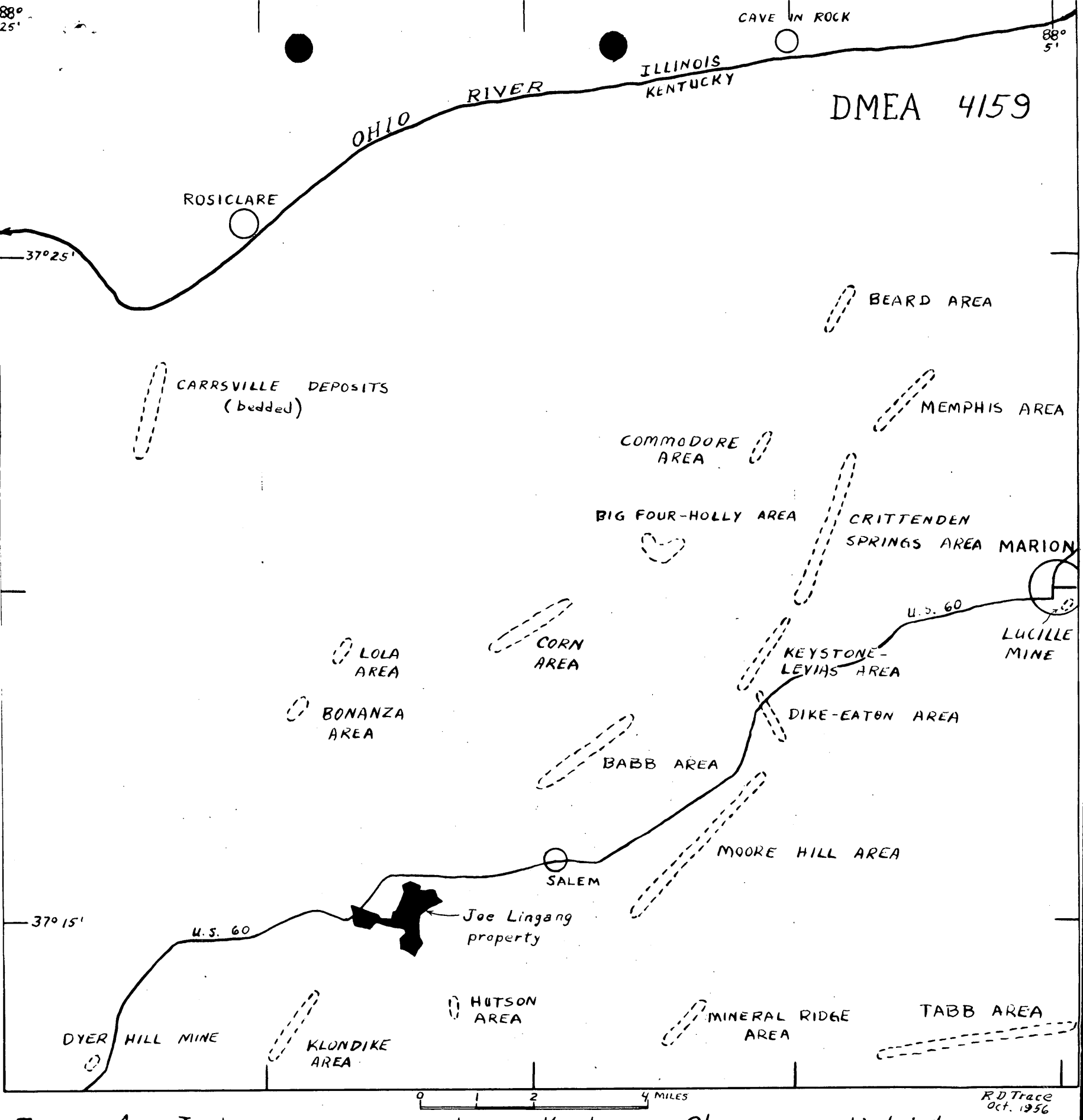

Figure 1.--Index map of western Kentucky fluorspar district, SHOWING APPROXIMATE LOCATION OF PRINCIPAL MINING AREAS AND KNOWN DEPOSITS, CRITTENDEN, LIVINGSTON, AND CALDWELL COUNTIES.

EXTRA COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

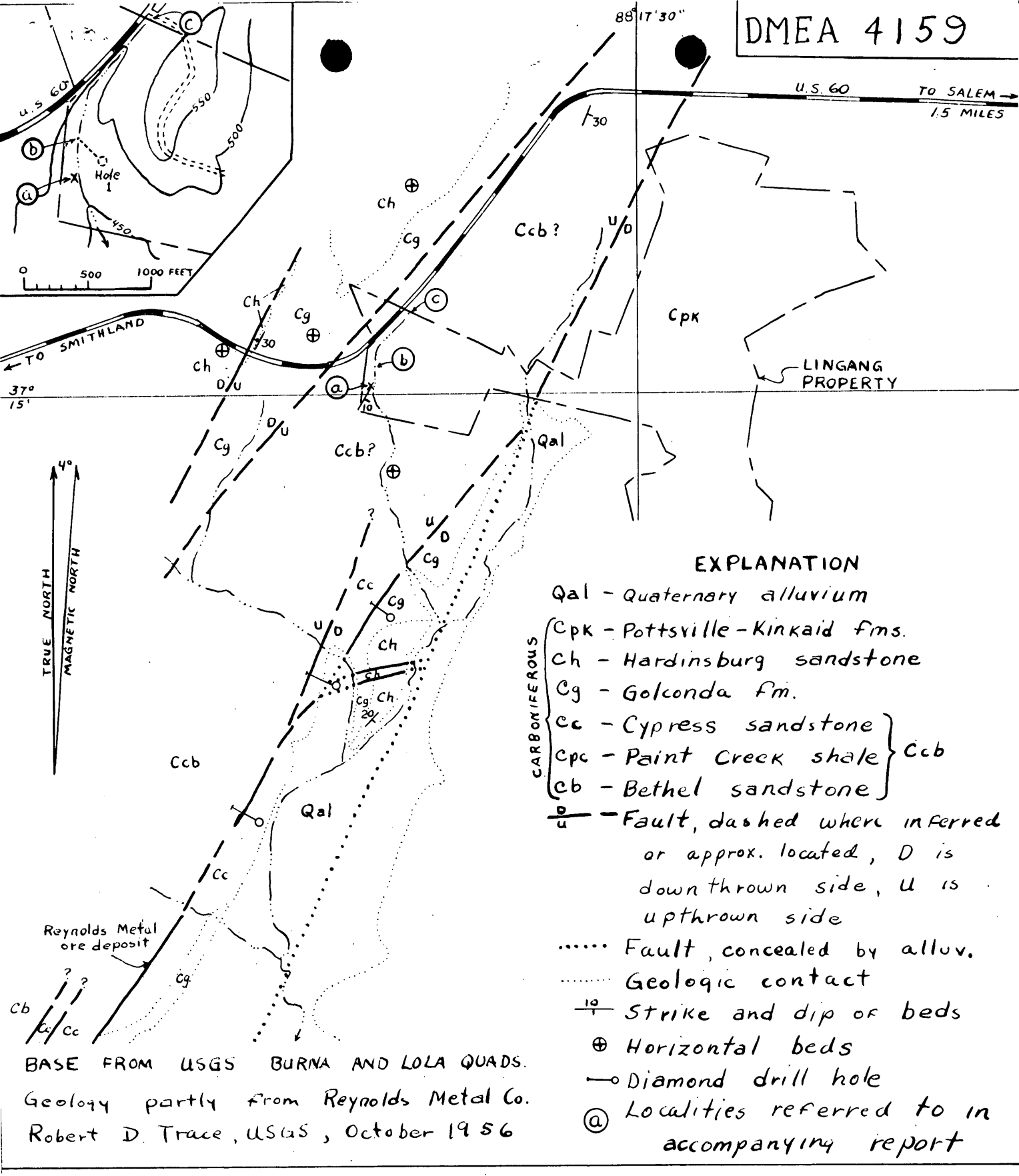

Figure 2. RECONNAISSANCE GEOLOGIC MAP OF LINGANG PROPERTY AND NEARBY AREAS, LIVINGSTON COUNTY, KENTUCKY

EXTRA COPY
D M E A
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

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

RECEIVED
FEB 8 1956

February 6, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Application, Kentucky Fluorspar, Co., Inc., Martion, Ky.
Joe Lingang Property, Livingston County, KY.

Enclosed are three copies of the subject application, received in this office today. The fourth copy is being kept for our use.

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

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

RECEIVED
FEB - 8 1956

February 6, 1956

Mr. Robert N. Fraser
P.O. Box 431
Marion, Kentucky

Dear Mr. Fraser:

Your application for aid in exploration for fluorspar on the Joe Lingang property, Livingston County, Kentucky, has been forwarded to our Washington office, in accordance with established procedure. You will be notified in advance if a field examination is to be made.

Very truly yours,

Robert A. Laurence
Executive Officer, DMEA - Region V

RAL/mm
cc:
Lynch
Shirley
Trace
Amos
Lynch
Files

KENTUCKY FLUORSPAR COMPANY
INCORPORATED
GROUND, LUMP AND GRAVEL
FLUORSPAR
MARION · KENTUCKY
PHONE 247

February 3, 1956

Mr. Robert A. Laurence, Executive Officer
Department of the Interior
Defense Minerals Exploration Administration
Room 13, Post Office Building
Knoxville 2, Tennessee

Dear Mr. Laurence:

I attach hereto application for assistance in drilling a fluorspar property I have leased from Joe Lingang in Livingston County, Kentucky. This property is located on each side of U.S. Highway 60 about three miles west of Salem, Kentucky. I am attaching a map which shows the approximate location.

The property has never had any development or prospecting on it. Some years ago I found a few little veinlets of fluorspar in a rocky branch and have always wanted to prospect this exposure. If we do not locate ore in one of the first two or three holes, I will abandon the lease, in which event the total drilling cost would probably not be over $3,000.00. If ore is found, I would think we all would want to determine the approximate extent of the ore body. The adjoining property is available for leasing.

I hope you find all papers in order.

Yours very truly,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer,
President

RNF:wc

cc: Mr. W. T. Millar, Mining Engineer
Eastern Experiment Station
Department of the Interior
Defense Minerals Exploration Administration
College Park, Maryland

RECEIVED
FEB 6 - 1956
U.S. Geological Survey
Geologic Division
Knoxville, Tenn.

P. S. The area covered by lease is about midway between Salem and Burna on U.S. Highway 60.

MF-108
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
FEB - 8 1956

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. DMEA - 4159
Metal or Mineral Fluorspar-Lead-Zinc
Date Received 2-8-56
Estimated Cost $3,000.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Robert N. Frazer
P. O. Box 431
Marion, Kentucky

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract See copy of lease attached containing description.

(*b*) State any mine name by which the property is known. No name to this date.

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

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

(*e*) If you own the land, describe any liens or encumbrances on it None

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

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FEB 6 - 1956
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. None

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

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. Fissure vein formation, map attached showing approx. location.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. Located on U.S. 60 about 15 mi. from shipping point at Marion, Ky.

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

16—66551-1

All are available and ample.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Fluorspar, lead and zinc.

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. Intend to explore by drilling, property has never been worked.

(*c*) The work will start within 90 days and be completed within 12 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. Been in fluorspar business 30 years.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated February 2, 1956

Robert N. Frazer
(Applicant)

By

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

6.

(a) Contract will be let for core drilling at estimated price $2.50 to $3.25 per foot, plus usual charges for reaming, cementing, etc. Footage to be drilled will depend on discovery of ore at least by the 2nd or 3rd hole.

(b) Geologist and Engineer Fee of $100.00 for each hole drilled.

(c) Drilling contractor to furnish all his materials and supplies.

(d) Drilling contractor to furnish all necessary equipment.

(e) None

(f) None

(g) Drilling contractor will furnish all repairs and maintenance, workmens compensation, liability insurance and payroll taxes. My office will do necessary accounting. Analysis of any cores will be made by Frazer Laboratories, Marion, Kentucky. Their charge for each analysis will be $6.00.

(h) None

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LEASE AND OPTION CONTRACT

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FEB - 8 1956

THIS LEASE AND OPTION CONTRACT made and entered into this the 7 day of October, 1953, by and between J. W. Lingang and his wife, Sheila Lingang, of Livingston County, Kentucky, Parties of the First Part and Robert N. Frazer, Marion, Crittenden County, Kentucky, Party of the Second Part.

W I T N E S S E T H :

That for and in consideration of the mutual promises of the First Parties and Second Party herein made, said Parties of the First Part hereby grant, let and lease unto the Party of the Second Part for a period of 5 years from this date with the privileges of renewing this contract so long as Party of Second Part carries on mining operations, the sole and exclusive right and permission to enter upon the lands of said First Parties, as hereafter described, for the purpose of prospecting, developing, mining, and milling any and all minerals, except oil and gas, that may be found on, in, or underlying said described lands. Party of the Second Part is hereby given and shall have the sole and exclusive right and privilege, while this contract is in full force and effect, to prospect, develop, mine and mill on said hereinafter described lands, with the full right, permission and privilege to remove therefrom any and all other minerals therein, except oil and gas, thereon, or underlying said lands and shall have the full right and privilege to install machinery, erect buildings, derricks, sink shafts, make openings, build reservoirs, and any and all other necessary things to carry on said prospecting, developing, mining, and milling any and all other minerals that might be found on, in or underlying said lands.

IT IS FURTHER AGREED by the First Parties that said Second Party shall have free egress and ingress.

IT IS FURTHER EXPRESSLY AGREED among all the Parties hereto that said Second Party is to pay to the First Parties a royalty of 10 percent of the net selling price for all and any and all other minerals, except oil and gas, that might be mined and removed from said lands and that said Second Party will pay to the First Parties Twenty ($20.00) Dollars per month minimum royalty after this lease and option contract has been in full force and effect Three (3) months from date hereof, if and only when the property is not worked in good faith, and such minimum royalties shall be applied on future royalties on any fluorspar, lead, zinc that might be mined, removed and sold from said premises. However, it is expressly understood by and among the parties hereto that no tonnage royalty or minimum royalty payment that might be made shall apply or be applied to the option price.

Said land, upon which this mineral Lease and Option Contract is given, is the following described property:

TRACT #1:

Parcel 1: Beginning at a stone on west side of the road running from U.S. Highway 60 to Farris Bridge; thence north 86½ W 88 poles to a hickory and ash near the top of the bluff; thence S 28 W 18 poles to a stone (did call for 2 black oaks); thence S 5 E 116 poles to whiteoak; thence N 61½ E 66 poles to stone (did call for a white oak); thence N 72¼ E 68 poles to same road as started; thence with the road N 45 W 42 poles; thence N 8 W 41 poles and 13 feet to the beginning, containing 76 acres more or less.

Parcel 2: Beginning at a stone corner to Richardson and McDaniel; thence S 86 E 54 poles to a stone; thence S 28 E 66 poles to a poplar and stone S 58 E 14 poles to a stone on top of the bluff; thence with bluff S 52 W 22 poles, S 73 W 22 poles, S 54 W 13 poles, S 13 E 36 poles S 18 W 20 poles to Little's line on west side of bluff; thence with Little's line S 62 E 112 poles to ash and black oak on east side of bluff; thence with the meanders of the bluff N 18 E 40 poles N 40 E 32 poles N 10 E 30, N 40 W 20 poles, N 14 W 36 poles, N 3 E 10 poles, N 3 W 18 poles, N 20 W 34 poles to a hickory, white oak and elm sapling; thence N 42 E 13 poles to white oak corner N 5 W 116 poles to a stone near hickory and ash N 28 E 50 poles to a stone; thence N 70 W 74 poles to a stone; thence S 69 W 50 poles to a stone; thence S 19 E 49 poles to a white oak; thence S 16 W 19 poles to a shite oak----; thence S 20 W 115 poles to a white oak; thence N 70 W 25 poles to double white oak, S 20 W. 48 poles to Richardson corner, the beginning, containing two hundred acres more or less.

And being the same tract or parcels of land conveyed to the Party of the First Part by J. O. Pierce by deed of record in Deed Book 76 at Page 603 of the records of the Livingston County Clerk's Office.

TRACT 2:

Beginning at a stone at the old beginning corner; thence S 49 E 38 poles to a stone; thence N 20 E 16 poles to three ash trees; thence S 61 E 45 poles to a spanish oak; thence S 86 E 54 poles to a stone,

was red oak; thence S 28 E 47 poles to a stone in or near the old Cochran line; thence N 77 W 72 poles to a stone on drean; thence N 74 W 92 poles to a stone; thence S 21 W 50 poles following the old road to a hickory; thence N 24 W 37 poles to a stone; thence N 47 E 56 poles to a white oak stump; thence N 21 E 20½ poles to stone, the beginning corner, containing 39½ acres, more or less,

TRACT 3:

Beginning at stone on south side of Highway corner to W. L. Richardson; thence with Richardson line S 4° W 23¼ poles, S 6° W 34-2/3 poles to Lyman Ramage Line; thence S 79° E with Lyman Ramage line 67 poles to a stake, did call for a cotton wood; thence S 81° E 40 poles and 14 feet to hickory tree in lane; thence N 24° W 37 poles to a stone; thence N 47° E 56 poles to white oak stump; thence with McDaniel line N 65° W 160 poles to a stone in J. M. Alsobrook line; thence S 10° E 61 poles, crossing U.S. Highway 60 to south side; thence with said Highway S 45° W 9 poles to the beginning, containing 80 acres more or less, as surveyed by W. C. Loyd, September 6, 1950.

This being the same land conveyed to Parties of the First Part by deed recorded in Deed Book 76 at Page 603 of the records of the Livingston County Clerk's Office. There is reserved to J. O. Pierce a ½ undivided interest in and to the minerals and mineral and mining rights on the last described tract, during his natual life, and upon his death the same to revert to J. W. Lingang and Mrs. Sheila Lingang, their heirs or assigns.

IT IS FURTHER EXPRESSLY AGREED AND UNDERSTOOD by and among all parties hereto, and as a part of the consideration for the execution of this Lease and Option Contract, and the First Parties expecially agree, bind and obligate themselves to sell at any time while this Lease is in effect, all the mineral and minerals, except oil and gas, of any and every kind and description and the mineral and mining rights and privileges on, in, and underlying the above described tract of land to said Second Party if and when said Second Party elects to purchase same at any time that this Lease and Option Contract is in full force and effect and at the agreed price of $25,000.00, to be paid to the First Parties in cash by the Second Party upon the tander to the Second Party of a good and sufficient deed of general warranty, conveying to said Second Party in fee simple all the minerals, except oil and gas, in, or, and underlying all of the aforedescribed land, together with the mining rights, therein, thereon, and thereunder.

In case the option to purchase herein provided for is exercised, royalties on all fluorspar and other minerals removed from natural place, or brought to surface, will be paid and no part thereof will become part of the option to purchase price.

IT IS FURTHER AGREED AND EXPRESSLY UNDERSTOOD that should said Second Party, at any time, fail to pay royalties when due under this Contract, or within 15 days after same are due, then and in that event said Second Party shall no longer have the right to hold said property or to enter upon said described lands for the purpose of prospecting, developing, mining, or carrying on mining and milling operations,

and the rights of the Second Party shall forthwith automatically cease and be at an end and this Lease and Option Contract shall immediately become null and void and of no further binding force and effect upon either the First Parties or the Second Party, and the Second Party shall forthwith immediately in such event surrender to First Parties the full and complete possession of said described property without either demand or notice except said Second Parties shall have the right to enter upon and over the said land and premises for a period of 90 days after the termination of this Lease and Option Contract for the purpose of removing from said land and premises any and all machinery building, equipment, and all other material or other things as said Second Party may have placed or erected on said land or premises.

Said Second Party agrees to carry workmen's compensation insurance in a solvent company authorized to do business in Kentucky.

IT IS FURTHER AGREED BY the Parties hereto that any fluorspar, lead, zinc, and any and all other minerals, except oil and gas, that might be mined or produced from the property described herein, and removed to a mill for cleaning or concentration, that such ore that is so milled, shall be kept separate and milled separately, and the royalty shall be paid on the weight of the fluorspar, lead, zinc, and any and all other minerals recovered through such milling operations.

No damage is to be done to any building or buildings, now located on the aforedescribed premises by Second party and any damage done to growing crops is to be paid for by Second Party.

First Parties shall have the right to inspect the weight books, scale books, selling price, or other records pertaining to the sale of any fluorspar or other minerals mined and removed from the aforedescribed property at any reasonable time. First Parties or their representative shall have the right to go into all prospect holes, shafts or levels for the purpose of inspecting, measuring or examining ores or minerals, and Second Party agrees that all mining operations shall be performed in a workmanlike manner.

IT IS FURTHER AGREED AND EXPRESSLY UNDERSTOOD by and between the First and Second Parties that all the terms, stipulations, and conditions herein mentioned shall extend and apply to the heirs, executors, administrators, successors, and assigns of the Parties to this Contract respectively.

IN WITNESS thereof said Parties have hereto subscribed their names on this the _____day of _____, _____.

_____

_____
PARTIES OF FIRST PART

_____
PARTY OF SECOND PART

STATE OF KENTUCKY

LIVINGSTON COUNTY

I, _____ Notary Public, in and for the County and State aforesaid, do hereby certify that the foregoing Lease and Option Contract was produced before me in my said county by J. W. Lingang and his wife Sheila K. Lingang, first parties thereto, duly signed, and acknowledged to be their act and deed.

Given under my hand this the _____ day of _____, _____.

_____
Notary Public

My commission expires:

STATE OF KENTUCKY

COUNTY OF _____

I, _____ Notary Public, in and for the State and County aforesaid, do hereby certify the foregoing Lease and Option Contract between J. W. Lingang and his wife Sheila K. Lingang, Parties of the First Part, and Robert N. Frazer as Party of the Second Part, was produced to me in my said county, duly signed, and acknowledged before me by Robert N. Frazer, Party of the Second Part, to be his act and deed.

Given under my hand this the _____ day of _____, _____.

_____
Notary Public

My commission expires:

MF-203
Revised March 24, 1955

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FEB - 8 1956

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of LIVINGSTON, State of KENTUCKY, described as follows:1/

SEE COPY OF LEASE ATTACHED

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

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

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/ NONE

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

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

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

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

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

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this _____ day of _____, 195__.

J M Lungang [Seal]

Sheila Lungang [Seal]

_____ [Seal]

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

_____

[Corporate Seal]

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MF-203
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EXPLORATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN

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

_____

_____

_____

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_____

_____

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---

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

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5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this "2nd day of FEBRUARY, 1956*.

_____ [Seal]

_____ [Seal]

_____ [Seal]

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

_____

[Corporate Seal]

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator _____
Docket No. DMEA- _____
Contract No. Idm-E _____
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SEE COPY OF LEASE ATTACHED

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2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/ NONE

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5. Added provision: _____

_____

_____

_____

_____

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_____

_____

Dated this _____ day of _____, 195__.

M Lingsang [Seal]

Sheila Lingsang [Seal]

_____ [Seal]

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

_____

[Corporate Seal]

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Operator_____
Docket No. DMEA-_____
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5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this _____ day of _____, 195__.

_____ [Seal]

_____ [Seal]

_____ [Seal]

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

_____

[Corporate Seal]

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EXPLORATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of LEVIRGOTH, State of KENTUCKY, described as follows:1/

SEE COPY OF LEASE ATTACHED

_____

_____

_____

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_____

_____

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

---

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

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

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

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

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this _____ day of _____, 195__.

_____ [Seal]

_____ [Seal]

_____ [Seal]

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

_____

[Corporate Seal]

RECEIVED
AUG - 8 1956

REPORT ON THE J. .. LINGANG PROPERTY

Near

SALEM, KENTUCKY

By

JOHN S. TIBBS

April 28, 1956

INTRODUCTION:

The Lingang property, located on the Southeast side of Highway #60, some three miles west of Salem, Kentucky, has two major fault structures crossing parts of it; and at the request of Mr. R. N. Frazer of Marion, Kentucky, I made a field study to determine the best places to drill two or more diamond drill holes for the discovery of fluorspar ore.

RECOMMENDATIONS:

I recommend that the two diamond drill holes, located on sketch to cut Fault "A", be drilled; and if these holes are successful, then other holes be drilled to delineate the ore deposit found.

CONCLUSIONS:

I believe that the fault designated by "A" on the accompanying sketch has the best chance of either of the faults on the Lingang property. This fault has all the necessary geologic features to contain economic ore deposits at reasonable depth below the surface.

GEOLOGY:

The area covered by the Lingang farm has formations ranging from the Pennsylvania Caseyville Conglomerate down to the Mississippian Cypress Sandstone on the surface, with both of the major faults unthrust to the west.

FAULT "A" (see sketch) has Cypress Sandstone on the west and Hardinsburg Sandstone on the east; and with a vertical drill hole depth of 250 feet or 360 feet on a 45° angle, one can expect to cut the fault at a favorable horizon for CaF_2 deposition.

Many shallow pits have been sunk in the neighborhood of Fault "A" because of a surface exposure of CaF_2 stringers in the creek bed. However, a careful study of the area shows that these stringers have strayed some 150 feet to the southeast from the main fault structure; and any drilling done with economic deposits in mind will have to be done in the main structure.

Two diamond drill hole locations have been shown on the sketch; and if either, or both of these holes, cuts CaF_2 then at least four more holes should be located to determine average width, grade and tonnage to be expected.

ORE RESERVES--About 1800 feet of Fault "A" lies on the Lingang property; and if we take 3 feet of width as the minimum mineable, and 300 feet as the probable vertical extent of any ore discovered (as one may with some degree of certainty in the area) then using a conservative density of 12 cubic feet per ton:

$$\frac{1800 \times 3 \times 300}{12} = 135{,}000 \text{ tons of } CaF_2 \text{ ore can be expected}$$

from this deposit.

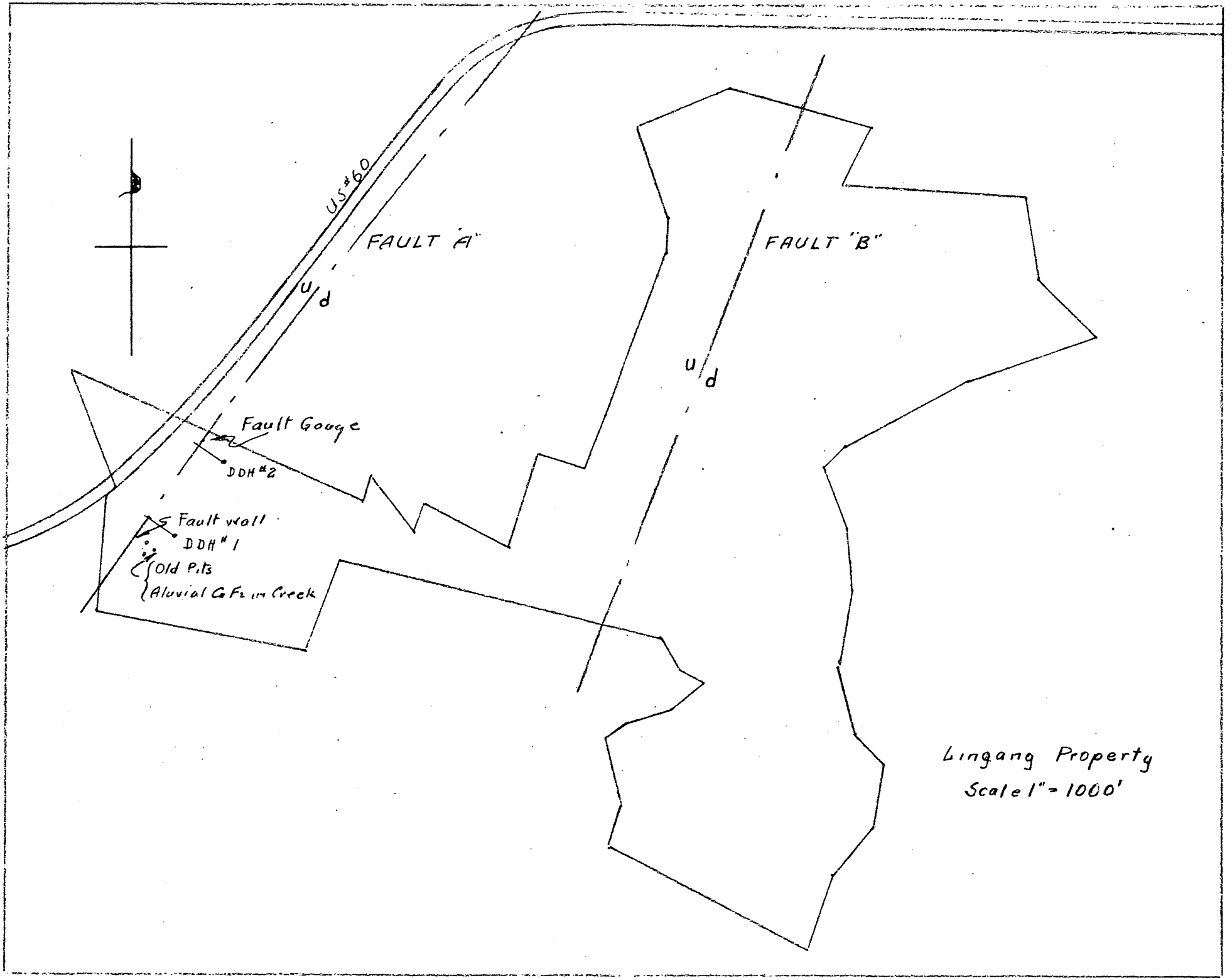
FAULT "B" (see sketch) has Golconda limestone on the west and probably Palestine Sandstone on the east, which would mean

a minimum vertical drilling depth of 350 feet in order to expect economic ore deposits of 500 feet on a -45° angle. This is probably too deep for the present leaseholder to consider diamond drilling, or mining at the present time. This fault has a total length on the Lingang property of about 4600 feet; and if an economic ore deposit were proved on it, then it might be expected to contain over 300,000 tons of CaF_2 ore.

Respectfully submitted,

John S. Tibbs
Registered Geologist

3 and last.


US #60
FAULT "A"
u
d
FAULT "B"
u
d
Fault Gouge
DDH #2
Fault wall
DDH # 1
Old Pits
Alluvial Gravel in Creek
Lingang Property
Scale 1" = 1000'

RECEIVED
AUG - 8 1956

REPORT ON THE J. .. LINGANG PROPERTY

Near

SALEM, KENTUCKY

By

JOHN S. TIBBS

April 28, 1956

RECEIVED
AUG - 8 1956

INTRODUCTION:

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CONCLUSIONS:

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FAULT "B" (see sketch) has Golconda limestone on the west and probably Palestine Sandstone on the east, which would mean

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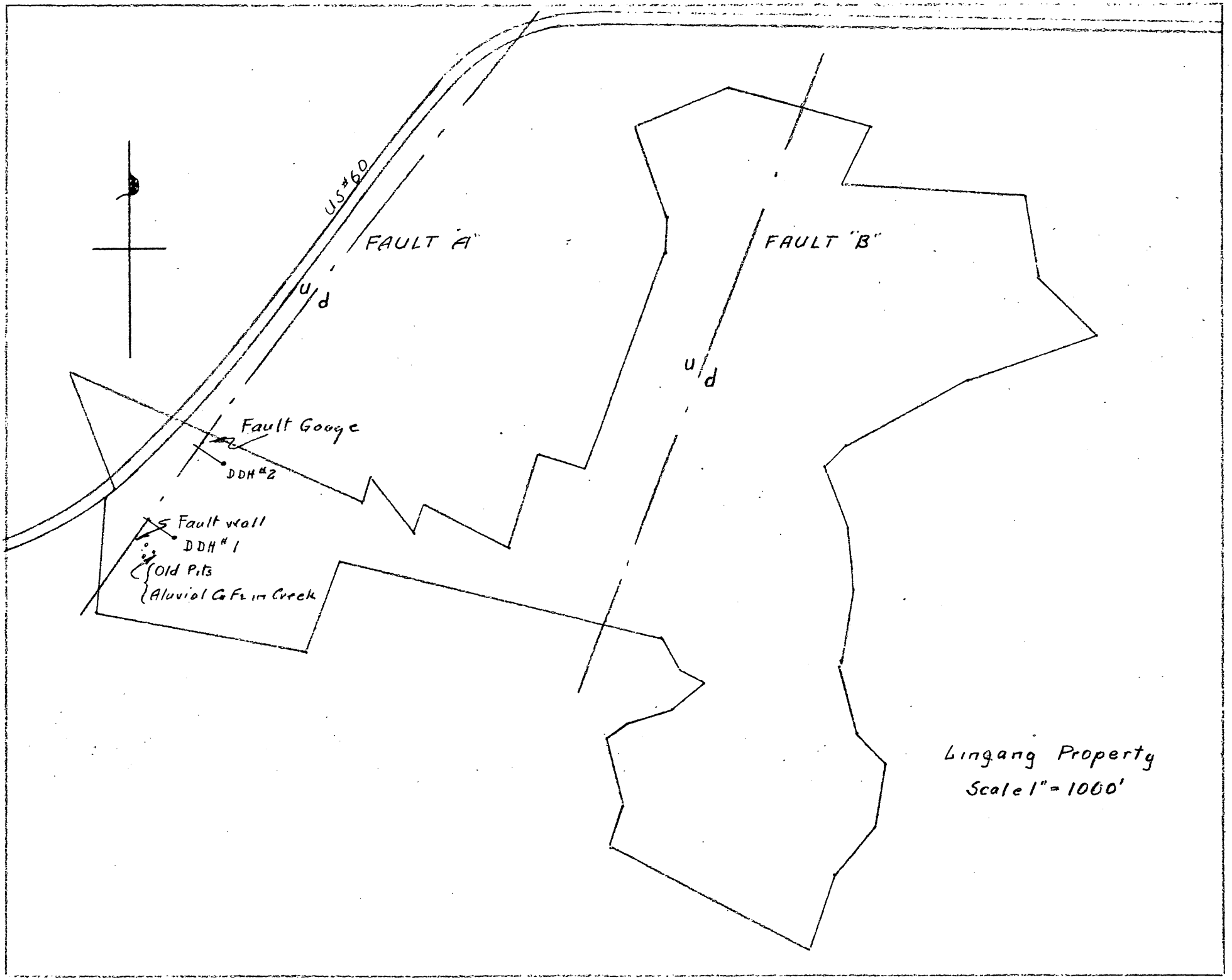
Respectfully submitted,

John S. Tibbs
Registered Geologist

3 and last.


US #60
FAULT "A"
u
d
FAULT "B"
u
d
Fault Gouge
DDH #2
Fault wall
DDH # 1
Old Pits
Alluvial Ca Fe in Creek
Lingang Property
Scale 1" = 1000'

Box 65 T

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 18, VIRGINIA

EXECUTIVE OFFICES

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 7 1957
CODE

September 30, 1957

Mr. V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V
Room 13 Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 - Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Sir:

We request that the DMEA contract No. Idm-E 1048, dated December 31, 1956, between the United States Department of Interior Defense Minerals Exploration Administration and Robert N. Frazer, be assigned to Reynolds Metals Company.

Yours very truly,

REYNOLDS METALS COMPANY

Walter L. Rice

Walter L. Rice
Vice President

RECEIVED
OCT 4 1957
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 19, VIRGINIA

REPLY TO
PARTS DIVISION
2000 SOUTH NINTH STREET
LOUISVILLE 1, KENTUCKY

OFFICIAL FILE COPY
D. M. E.
RECEIVED OCT 7 1957
DATE

October 2, 1957

Mr. V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V
Room 13 Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 - Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Sir:

I am enclosing a letter dated September 30 from Mr. Walter L. Rice, Vice President, Reynolds Metals Company, asking that the contract numbered Idm-E 1048, dated December 31, 1956, be assigned to this Company. I have a copy of a letter from Mr. Robert N. Frazer dated July 9 to you asking the consent and saying that he will send you shortly an assignment of the Lingang Lease and seven copies of the new Consent to Lien from Mr. Lingang. Will you please advise me when this assignment has become complete so that operations may commence.

Yours very truly,

REYNOLDS METALS COMPANY

Fred R. Edney
Attorney

FRE/md
Enclosure

RECEIVED
OCT 4 1957
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
ROOM 1[illegible] FEDERAL BLDG.
KNOXVILLE 2, TENN.

October 4, 1957

Mr. Fred R. Edney, Attorney
Reynolds Metals Company
Parts Division
2000 South Ninth Street
Louisville 1, Kentucky

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Edney:

Mr. Frazer did not send me the assignment of the lease from Mr. Lingang to Reynolds Metals Company, or the new Consent to Lien, as he indicated he would so in his July 9 letter.

The contract is now in default, as it was not completed by October 1, 1957 as provided in the contract, and final disposition is in the hands of our Washington office. They will advise you as to the status of the contract. If the contract has actually been cancelled, it will be necessary for you to file a new application.

Very truly yours,

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

RAL/mg
cc - Operating Committee (3)
Mr. V. J. Lynch
Mr. W. T. Millar
Mr. W. L. Rice
File

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

EXTRA COPY
D M E A
RECEIVED OCT 4 1957

DATE	INITIALS	CODE

October 4, 1957

Memorandum

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

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

Subject: DMEA-4159 (Fluorspar
Robert H. Frazer, Marion, Kentucky
Joe Lingang Property, Livingston County, Kentucky

Enclosed are three copies of two letters from Reynolds Metals Company, and three copies of our replies. This was discussed by phone with Mr. Houk today.

We have never received the assignment of lease or new Consent to Lien which Mr. Frazer promised to send "shortly", in his letter of July 9, 1957.

Robert A. Laurence
Executive Officer

V. J. Lynch
Member, Bureau of Mines

RAL/mg
Enclosures 4
cc - Operating Committee (2)
Mr. V. J. Lynch
Mr. W. T. Millar
File

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

October 4, 1957

Mr. Walter L. Rice, Vice-President
Reynolds Metals Company
Reynolds Metals Building
Richmond 13, Virginia

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Rice:

We have been unable to complete the assignment of the subject contract to Reynolds Metals Company, as requested in your letter of September 30, 1957, as the necessary documents were not supplied. Mr. Frazer wrote on July 9 that he would send them, but he has not done so.

In the meantime, the stated completion date (Oct. 1, 1957) has passed and the contract is in default. Our Washington office will advise you as to the status of the contract and whether it can be assigned. If it cannot now be assigned you may, of course, file a new application.

Very truly yours,

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

RAL/mg
cc - Operating Committee (3)
Lynch
Miller
Fred R. Edney
File

☐ Audited

☐ Certified

Name Robert H. Frazer

State Kentucky

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of _____

Incl. Voucher for _____

Commodity Fluorspar

☑ Actual Cost

☐ Agreed Unit Costs

Docket No. 4159

Idm-E No. 1048

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drillers stand-by time ~~Drifting & Crosscutting~~	36 hours	270.00			
Assaying ~~Raising~~	30 Samples	360.00			
Supervision ~~Shafts~~	75 hours	300.00			
Accounting + Office expense	6 mos.	300.00			
Payroll taxes + Ins ~~Winzes~~ Core boxes	87	18.00 241.00			
Drilling (Specify) AX diamond drilling	2100 Ft.	$6300.00			
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		7,812.00 (rounded)			

Prepared by Walter C. Anderson

71626

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

November 22, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957
DATE INITIALS CODE
11/25 JB 220
12/5 B 215
Hmb 600

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Signed Rescission of Exploration Project contract-Idm-E1048, DMEA-4159, Robert N Frazier, Joe Lingang Property, Livingston County, Ky.

Transmitted is the original and Audit copy of the subject signed rescission.

Distribution of the other copies has been made by this office.

Robert A. Laurence

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

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/1	Houk	600
	Jensen	~~110~~
		~~100~~
11/4	C	220
		600

600

NOV 4 1957

Mr. Fred R. Edney
Reynolds Metals Company
Reynolds Metals Building
Richmond 19, Virginia

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Edney:

Reference is made to your letter of October 28, 1957, stating that you have the necessary Consent to Lien and Subordination Agreements and the assignment of the lease from Mr. Robert N. Frazer on the Joe Lingang Property.

You will find enclosed a set of application forms for completion; four copies should be returned to this office; one copy may be retained in your files. You may send the Rescission Agreements with the application.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

Enclosures 5

LGHouk:gad 11/1/57
Copy to: Admr. R. File
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 19, VIRGINIA

REPLY TO
PARTS DIVISION
2000 SOUTH NINTH STREET
LOUISVILLE 1, KENTUCKY

October 28, 1957

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

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Mittendorf:

I have your letter of October 18. I have in my possession the necessary Consent to Lien and Subordination Agreement and an Assignment of the Lease which Robert N. Frazer held on the Lingang property. I am ready to send these, however, as I interpret your letter they should accompany the application. Is it necessary that the application be in any particular form? If so, will you please send me the form at your earliest convenience. If not, would you please so advise me.

We also have in our hands the Rescission Agreements which your Mr. Robert A. Laurence sent to Mr. Robert N. Frazer. We shall send these to Mr. Laurence at the time that we mail our application. If you would prefer them sent prior thereto, please advise.

Yours very truly,

REYNOLDS METALS COMPANY

Fred R. Edney
Attorney

FRE/md

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 31 1957

DATE		HOURS
10/31	C	220
11/3	Hour	600

Houk

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

October 17, 1957

000

Air Mail

Mr. Fred R. Edney, Attorney
Reynolds Metals Company
2000 South Ninth Street
Louisville, Kentucky

Re: DMEA-4159 (Fluorspar)
Robert H. Fraser
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Edney:

I have just received your letter of October 16 stating that you have the Consent to Lien and Assignment which were requested in connection with the proposed transfer of the Fraser contract.

Please send these documents directly to Mr. Lawrence G. Houk, Director, Division of Non-Metallic Minerals, Defense Minerals Exploration Administration, U. S. Department of the Interior, Washington 25, D. C.

Very truly yours,

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

RAL/mg
cc - Operating Committee (2)
Mr. Lawrence G. Houk
Mr. V. J. Lynch
Mr. W. T. Millar
File

orm 7
56)

OFFICIAL FILE COPY

Date	Surname	Code
10/17	Anderson	600
10-17	Chamberlin	800
10/18	[illegible]	130
"	Johnson	110
"	[illegible]	100
10/21	GB	220
		600

600

OCT 18 1957

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

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Laurence:

Reference is made to the Field Team's memorandum of September 18, 1957, suggesting cancellation of the subject contract.

As the contract is in default, it cannot be assigned as has been requested. The most expeditious way to proceed with this case is to have Mr. Robert N. Frazer sign the enclosed rescission which has been signed by the Administrator. The original and four copies and two extra copies for the use of the Field Team are enclosed. If the proposed rescission meets with your approval present it to Mr. Frazer for signature. After execution of the rescission, the copies are to be distributed in the usual manner.

We are writing to Reynolds Metals Company informing it of the cancellation of the contract.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

Frank D. Lamb

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

Enclosures 7

WCAnderson:gad 10/17/57
Copy to: Admr. R. File
Operating Committee
Mr. McDougal, 3522
Mr. Kiilsgaard, 5222
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/17	Anderson	600
10/18	Schroeder	130
10-18	Lamb	130
		~~130~~
10/18	Johnson	110
"	Rutherdale	100
10/21	GB	220
10/18	Chas H. Gilig	130
		600

600

OCT 18 1957

Mr. Fred R. Edney, Attorney
Reynolds Metals Company
Reynolds Metals Building
Richmond 19, Virginia

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Edney:

This will acknowledge your letter of October 8, 1957, to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, requesting status of the subject contract.

Please be informed that the contract is in default because no work has been done and the time for completion of the work was October 1, 1957. We are transmitting to Mr. Fraser a form for rescission of the contract and are requesting that he sign and return it.

Therefore, since the contract is in default, it cannot be assigned. However, if you are still interested in exploring the Lingang Property, you may submit an application for exploration assistance, referring to the subject docket and contract numbers. It will be necessary that you obtain a Lease and Consent to Lien and Subordination Agreement, signed by J. W. Lingang and his wife, Sheila K. Lingang. This office will require one copy of the Lease and five copies of the Consent to Lien and Subordination Agreement. In addition, please advise whether any change in the work is contemplated. If so, please give in detail the exploration work you have in mind. As is customary, we require three bids for diamond drilling.

We assure you that when the above-outlined information is received, we will give the matter immediate attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WCAnderson:rsi 10/17/57
Copy to: Admr. R. File
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 18 1957

DATE		CODE
10/18	B	220
10/18		800
		600

October 16, 1957

Mr. Fred R. Edney, Attorney
Reynolds Metals Company
Parts Division
2000 South Ninth Street
Louisville 1, Kentucky

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Edney:

In reply to your letter of October 8, it is suggested that you write to Mr. C. D. Mittendorf, Administrator, Defense Minerals Exploration Administration, Washington 25, D. C. for further information concerning the status of the referenced contract.

Very truly yours,

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

RAL/mg
cc - Operating Committee (2)
Mr. W. L. Rice, Reynolds Metals, Richmond
Mr. V. J. Lynch
Mr. W. T. Miàlar
File

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 19, VIRGINIA

REPLY TO
PARTS DIVISION
2000 SOUTH NINTH STREET
LOUISVILLE 1, KENTUCKY

October 8, 1957

United States Department of the Interior
Geological Survey
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

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

Dear Mr. Laurence:

I have your letter of October 4, 1957 wherein you say that your Washington office will advise us of the status of the contract. We should like to receive this advice as quickly as possible. Therefore, if you can expedite the advice, please let us know. If not, if you would please advise us of the person with whom we should correspond in Washington, we could attempt to expedite the matter. We hope that the cancellation can be waived for we are interested in taking over the contract.

Yours very truly,

REYNOLDS METALS COMPANY

Fred R. Edney
Attorney

FRE:jh

OFFICIAL FILE COPY
DMEA
RECEIVED Oct 14 1957

DATE		
10/14	B	220
10/14	wra	600

RECEIVED
OCT 10 1957
U. S. Geological Survey
Knoxville, Tenn.

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 19, VIRGINIA

REPLY TO
PARTS DIVISION
2000 SOUTH NINTH STREET
LOUISVILLE 1, KENTUCKY

October 8, 1957

United States Department of the Interior
Geological Survey
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

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

Dear Mr. Laurence:

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Yours very truly,

REYNOLDS METALS COMPANY

Fred R. Edney
Attorney

FRE:jh

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED 7 1957

DATE		CODE
10/7	C	220
10/7	Houk	600

October 4, 1957

Memorandum

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

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

Subject: DMEA-4159 (Fluorspar
Robert N. Frazer, Marion, Kentucky
Joe Lingang Property, Livingston County, Kentucky

Enclosed are three copies of two letters from Reynolds Metals Company, and three copies of our replies. This was discussed by phone with Mr. Houk today.

We have never received the assignment of lease or new Consent to Lien which Mr. Frazer promised to send "shortly", in his letter of July 9, 1957.

Robert A. Laurence
Robert A. Laurence
Executive Officer

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

Enclosures 9

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 19, VIRGINIA

REPLY TO
PARTS DIVISION
2000 SOUTH NINTH STREET
LOUISVILLE 1, KENTUCKY

October 2, 1957

Mr. V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V
Room 13 Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 - Fluorspar
Robert N. Fraser
Joe Lingang Property
Livingston County, Kentucky

Dear Sir:

I am enclosing a letter dated September 30 from Mr. Walter L. Rice, Vice President, Reynolds Metals Company, asking that the contract numbered Idm-E 1048, dated December 31, 1956, be assigned to this Company. I have a copy of a letter from Mr. Robert N. Fraser dated July 9 to you asking the consent and saying that he will send you shortly an assignment of the Lingang Lease and seven copies of the new Consent to Lien from Mr. Lingang. Will you please advise me when this assignment has become complete so that operations may commence.

Yours very truly,

REYNOLDS METALS COMPANY

Fred H. Edney
Attorney

FHE/md
Enclosure

RECEIVED
OCT 4 1957
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee

REYNOLDS METALS COMPANY
REYNOLDS METALS BUILDING
RICHMOND 18, VIRGINIA

EXECUTIVE OFFICES

EXTRA

September 30, 1957

Mr. V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V
Room 13 Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 - Fluorspar
Robert N. Fraser
Joe Lingang Property
Livingston County, Kentucky

Dear Sir:

We request that the DMEA contract No. Idm-E 1048, dated December 31, 1956, between the United States Department of Interior Defense Minerals Exploration Administration and Robert N. Fraser, be assigned to Reynolds Metals Company.

Yours very truly,

REYNOLDS METALS COMPANY

Walter L. Rice

Walter L. Rice
Vice President

RECEIVED
OCT 1 1957
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee

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

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 7 1957
DATE

October 4, 1957

Mr. Fred R. Edney, Attorney
Reynolds Metals Company
Parts Division
2000 South Ninth Street
Louisville 1, Kentucky

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Edney:

Mr. Frazer did not send me the assignment of the lease from Mr. Lingang to Reynolds Metals Company, or the new Consent to Lien, as he indicated he would so in his July 9 letter.

The contract is now in default, as it was not completed by October 1, 1957 as provided in the contract, and final disposition is in the hands of our Washington office. They will advise you as to the status of the contract. If the contract has actually been cancelled, it will be necessary for you to file a new application.

Very truly yours,

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

RAL/mg
cc - Operating Committee (3)
Mr. V. J. Lynch
Mr. W. T. Millar
Mr. W. L. Rice
File

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

October 4, 1957

Mr. Walter L. Rice, Vice-President
Reynolds Metals Company
Reynolds Metals Building
Richmond 18, Virginia

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Rice:

We have been unable to complete the assignment of the subject contract to Reynolds Metals Company, as requested in your letter of September 30, 1957, as the necessary documents were not supplied. Mr. Fraser wrote on July 9 that he would send them, but he has not done so.

In the meantime, the stated completion date (Oct. 1, 1957) has passed and the contract is in default. Our Washington office will advise you as to the status of the contract and whether it can be assigned. If it cannot now be assigned you may, of course, file a new application.

Very truly yours,

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

RAL/mg
cc - Operating Committee (9)
Lynch
Millar
Fred A. Edney
File

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/16	Anderson	600
9/16	Houk	600
9/16	Selfridge	130
9/16	Houk	130
9/16	Kiilsgaard	130
		~~130~~
		220

SEP 18 1957

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Frazer:

Reference is made to the subject contract which you signed and returned on May 20, 1957.

As work has not been started under the contract and, therefore, cannot be completed by October 1, 1957, (the time for completion) the contract is considered as being in default. This Administration feels that there has been ample time for starting the work under the contract and may take steps to cancel it if immediate action is not taken to remedy the default.

Sincerely yours,

Frank E. Johnson
(By [illegible])
ACTING Administrator

WCAnderson:gad 9/13/57
Rewritten
LGHouk:WCAnderson:gad 9/16/57
Copy to: Admr. R. File
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

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

September 18, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 20 1957

DATE	INITIALS	CODE
9/20	C	220
9/20	Hawk	600

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4159, Idm-E1048(fluorspar) Robert N. Frazer, Marion, Kentucky.
Joe Lingang Property, Livingston County, Ky.

Enclosed are the copies of Mr. Johnson's letter to the Operator. We have forwarded the original to Mr. Frazer.

We have repeatedly urged both Mr. Frazer and Reynolds Metals to do something about this. It appears that neither party is going to do anything and cancellation of the contract would be the most appropriate action.

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

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

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/13	Anderson	600
9/16	Houk	600
9/16	[illegible]	130
"	[illegible]	110
9-17	[illegible]	220
		600

600

SEP 16 1957

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

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky
Contract No. Idm-E1048

Dear Mr. Laurence:

Enclosed is a letter to the subject Operator prepared in this office.

If it meets with your approval kindly forward, retaining your copies and returning the remaining copies.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JB)

Approved:

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

Thor H. Kiilsgaard (JB)
Member, Geological Survey

Enclosure

WCAnderson:gad 9/13/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

REYNOLDS METALS COMPANY
BOYLE BUILDING
LITTLE ROCK, ARKANSAS

8/5 P.K 220
Salem, Kentucky 8/5 800
July 30, 1957 8/5 Hook 600

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

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Bob:

I reget the delay in starting the Lingang project, but we can do nothing until we have legal clearance. Part of the delay was due to the very inaccurate legal description of the property. We have just completed a new survey of the property and have located most of the corners. (The corners which are still in question are adjacent to a property which we will soon control).

Our lawyers are checking the title to the property and drafting the assignment. They estimate that everything will be completed within two weeks.

I will start the drilling as quickly as possible after the assignments have been made.

Yours very truly,

John W. Hook
Resident Geologist

cc: Mr. Fred Edney

RECEIVED
AUG 1 - 1957

OFFICIAL FILE COPY
DMEA

July 25, 1957

7/29 P.L. 220
600

Mr. John W. Hook, Geologist
Reynolds Metals Company
Salem, Kentucky

Re: Docket No. DMEA-4750 (Fluorspar)
Reynolds Metals Company
Kemper Property
Livingston County, Kentucky

Dear John:

Your letter of July 17, requesting revision of the Kemper application, has been received. I will send it along to the Washington office with the examination report of Trace and Myslinski when it is received.

Can you do anything to speed up the assignment of the Lingang property to Reynolds? We still need a copy of the assignment of the lease, and a letter from Reynolds requesting the assignment of the contract.

DMEA
4159

Sincerely yours,

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

RAL/mg
cc
Operating Committee 2
Lynch
Trace
Myslinski
File

7/10/57

DMEA-4159

Mr. Houk calling Mr. Laurence

Laurence will write 60 day letter to Frazer. No answer to his letter to applicant of May 22, 1957.

KENTUCKY FLUORSPAR COMPANY

INCORPORATED

GROUND, LUMP AND GRAVEL
FLUORSPAR

MARION · KENTUCKY

PHONE 247

OFFICIAL-COPY

July 9, 1957

DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE
7/15	P.K.	220
7/15	[illegible]	800
7/16	[illegible]	600

Mr. V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V
Room 13 Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4159 - Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Lynch:

Replying to your letter of May 22, I request that the DMEA assign the contract No. Idm-E1048 dated December 31, 1956 to the Reynolds Metals Company of Richmond, Virginia.

I feel quite sure that in the very near future you will receive a letter from Reynolds Metals stating that it is willing to accept this contract. I will also send you a copy of the assignment of my lease on the Lingang Property to the Reynolds Metals Company. I also expect to send you shortly seven copies of the new Consent to Lien from Mr. Lingang to the Reynolds Metals Company.

Thanking you, I am

Yours very truly,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer
President

RNF:jo

cc: Mr. Fred Edney
Mr. John Hook
Mr. John Moses

RECEIVED
JUL 11 1957
Knoxville, Tenn.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 40 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON 25, D.C.

May 22, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE
5/24	JWW	220
5/24	B	215
5/24	H	600

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Signed contract - Idm-E1048, DMEA-4159-fluorspar.
Robert N. Frazier, P.O. Box 431, Marion, Ky.

Transmitted is the original and two copies of subject contract, with copies of Mr. Frazier's transmittal letter and three copies of our reply to his letter pertaining to the assignment of the contract to Reynolds Metals Company.

The date to start work on this contract expired March 1, 1957.

V. J. Lynch

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

S. C. Bergman

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

Operating Team

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

May 22, 1957

Mr. Robert H. Fraser
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-6159 - Fluorspar
Robert H. Fraser
Jae Lingang Property
Livingston County, Kentucky

Dear Mr. Fraser:

Receipt of the signed copies of contract no. Idm-E1048 is hereby acknowledged.

If you wish to have the contract assigned to Reynolds Metals Company, it will be necessary for you to submit the following data.

1. A letter from you to DMEA requesting assignment of the contract to Reynolds Metals Company.

2. A letter from Reynolds Metals Company stating its willingness to accept the reassignment.

3. A copy of the assignment of your lease on the Lingang property to the Reynolds Metals Company.

4. Seven copies of a new Consent to Lien from the land owner to Reynolds Metals Company.

There are enclosed eight copies of Form MF-205, Consent to Lien and Subordination Agreement.

Sincerely yours,

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

VJL/mg
cc - Operating Committee (3)
Mrs. Helen Miller
Reynolds Metals Co.
Mr. Robt. H. Fraser
Mr. V. J. Lynch
Mr. Tracy Jones

KENTUCKY FLUORSPAR COMPANY

INCORPORATED

GROUND, LUMP AND GRAVEL
FLUORSPAR

MARION · KENTUCKY

PHONE 247

May 20, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1957

DATE	INITIALS	CODE

Mr. Robert A. Laurence,
Executive Officer, DMEA
Field Team, Region V
United States Department of the Interior
Defense Minerals Exploration Administration
Knoxville 2, Tennessee

Dear Mr. Laurence:

I am attaching hereto signed contract No. Idm-E 1048 covering diamond drilling on the Lingang property.

For your information I have made an agreement with Reynolds Metal whereby they will take over the Lingang property and will therefore want this contract assigned over to them. This is in line with recent telephone conversation between Mr. John Hook, you and the writer.

Thanks for your kind cooperation.

Yours sincerely,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer,
President

RNF:jo

RECEIVED
MAY 22 1957
Knoxville, Tenn.

May 22, 1957

Telephone conversation

Robert A. Laurence, Knoxville, Tennessee

Washington Office: Mr. L. G. Houk
Mr. W. C. Anderson

Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Kentucky Fluorspar Company
Livingston County, Kentucky

Executed contract just received. Applicant states he has an agreement with Reynolds Metals to take over. Advised Laurence that Reynolds Metals must supply us with a copy of the instrument of transfer and request an assignment and provide new Consents to Lien. When this is received the Washington Office will prepare the assignment. The beginning and completing dates of the new contract should be changed in the assignment.

FRAZER LABORATORIES

MARION, KY.

May 15,1957

Schedule of charges for Ore Analysis

CaF_2	SiO_2	$CaCO_3$		$4.50	each	sample
"	"	"	$BaSO_4$	6.00	"	"
Pb Zn Fe Al S $BaSO_4$ etc.				3.00	"	determination

Discounts on monthly accounts:

$100 to	$150	10%
150	200	15%
200 up		20%

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Ellmca
4159

Box 204
Marion, Ky
5/15/57

Dear Barry,

Enclosed is a price list of assays by the local assayer (Edwin Frazer). (a brother of Bob Frazer). according to this list:

CaF_2 - SiO_2 - $CaCO_3$ - Pb - Zn
would be $10.50

With barite - it would be 12.00

One other place you might check, is GSA. They have a Joplin assayer doing stockpile ore.

Let me know if I can help any more.

Bob Trace

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

May 2, 1957

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4159 (Fluorspar) Robert W. Frazer, Marion, Ky.
Joe Lingang Property, Livingston County, Ky.

In a telephone conversation today, Mr. John Hook, Geologist, Reynolds Metals Company told me that Reynolds still expects to acquire the Lingang property and wants to explore for fluorspar on it. Mr. Frazer is still holding the unexecuted contract, pending completion of the deal with Reynolds.

I advised Hook to tell Frazer he should sign and return the contract promptly, and request an assignment to Reynolds later, if the transfer materializes.

Robert A. Laurence

Robert A. Laurence

FILE COPY
DMEA
RECEIVED MAY 6 1957

DATE	INITIALS	CODE
5/6	C	220
5/6	WCA	600

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/25	Anderson	600
4/26	Houk	600
✓	Sawyer	140
4/26	Selfridge	120
"	Johnson	110
		~~100~~
4/29	C	220
		600

600

APR 26 1957

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

Reference is made to our letter of April 3, 1957, requesting that you execute the proposed contract signed by the Administrator for the Government and forwarded to you on February 8, 1957.

We feel that you have had ample time to reach a decision and would appreciate your returning the executed contract promptly. However, if the executed contract is not received by May 25, 1957, the Government's proposal to contract with you will be automatically withdrawn as of that date.

Sincerely yours,

Frank E. Johnson
ACTING Administrator

WCAnderson:gad 4/25/57
Copy to: Admr. R. File
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE
4/8	C	220
		600

April 5, 1957

Memorandum

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

From: Executive Officer, DMEA Field Team, Region V

Subject: DMEA-4159 (Fluorspar)
Robert N. Fraser, Marion, Kentucky
Joe Lingang property, Livingston County, Kentucky

Reference is made to Mr. Mittendorf's letter to the Applicant, dated April 3, 1957.

It is my understanding that the Applicant is negotiating with Reynolds Metals Company for the sale of this property, and that if Reynolds acquires it, they will ask that the contract be assigned to them.

Robert A. Laurence

Robert A. Laurence

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/3	Anderson	600
4/3	Houk	600
"	Johnson	110
"	Mittendorf	100
4/4	C	220
		600

600

APR 3 - 1957

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

On February 8, 1957, we transmitted to you the original and five copies of a contract, signed by the Administrator for the Government, for execution and return to this office.

We wish to cooperate with you fully in allowing ample time to reach a decision. We would appreciate very much your returning the executed contract promptly; however, if you have lost interest in the exploration project please return all copies to this office and we will consider the application as having been withdrawn.

Sincerely yours,

C. O. Mittendorf

Administrator

WCAnderson:gad 4/3/57
Copy to: Admr. R. File
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

Form 7
(2-56)

Harper 140
800

OFFICIAL FILE COPY

Date	Surname	Code
2/6	Houk	600
2/8	Selfridge	130
"	Johnson	110
"	Chubbuck	100
2/12	C	220
		600

FEB 8 1957

600
2-8 Chambers

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

Reference is made to your letter of January 31, 1957, requesting the contract be returned for execution.

We are enclosing the original and five copies of a contract, signed by the Government, for the cited exploration project. The complete contract includes the contract form, Annex I (2 pages), Exhibit "A" (3 pages), and two maps.

If the contract meets with your approval please sign all copies, retain the "Operator's Copy" for your files, and return the others to this office.

Also enclosed are six copies of form MF-104, "Operator's Monthly Report and Voucher," and six copies of form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville 2, Tennessee. The extra copy is for your records.

In the matter of your claim for reimbursement of drilling costs under the terms of the contract, reimbursement to you will be on the basis of a hole or holes completed to the objective, which has, or have, been drilled in compliance with the conditions under the "General Provisions" section of Exhibit "A" of the contract. Therefore, your monthly report should include only such holes which are completed to that extent, and the required records made a part of your claim for reimbursement.

The contract is prepared on form MF-200, and under its provisions, and as outlined in Exhibit "A", the estimated costs

R.C.S.

8623

of performing the work are broken down in categories, which conform to the "Categories" in "Article 6" of contract form MF-200 and to the numbered items for reporting on form MF-104. Under the provisions of the contract, the work outlined in Exhibit "A" under Category (1) is to be performed by an independent subcontractor, and the unit cost established for each item of the work for all stages is the maximum average unit cost, which cannot be exceeded. The actual cost of the work completed is to be recorded under item (1) of form MF-104 and must be supported and documented by a certified copy of the billing from the subcontractor. The charges under all other categories are to be documented in conformance with the instructions in the next to the last paragraph on the reverse side of form MF-104. The actual properly documented cost, up to the maximum average unit cost established and/or the maximum total cost established for each category, will be the basis for reimbursement to you under the terms of the contract.

The locations of the holes to be drilled under Stage I are indicated as approximate on the map, "Figure 2", attached to the contract. Should conditions encountered necessitate any appreciable change in the location of any of the holes, approval of the Government for the change must be obtained prior to performance of the drilling. Otherwise, the drilling may not be acceptable for reimbursement to you under the terms of the contract.

For your information your project will be examined periodically by Government engineers who will also check the forms MF-104 and MF-104A sent to Mr. Laurence. If the forms are in order a check will be issued by the Treasury Department for the Government's portion of the approved costs. If you have any difficulty in completing these forms and the reports you may call upon Mr. Laurence or the engineer who checks your monthly progress.

Sincerely yours,

Administrator

LGHouk:GCSelfridge:gad 2/8/57
Copy to: Admr. R. File
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

KENTUCKY FLUORSPAR COMPANY
INCORPORATED
GROUND, LUMP AND GRAVEL
FLUORSPAR
MARION · KENTUCKY
PHONE 247

January 31, 1957

OFFICIAL FILE COPY DMEA RECEIVED FEB 4 1957		
DATE	INITIALS	CODE
2-4	C	220
		600

Mr. C. O. Mittendorf, Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

In re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Mittendorf:

Replying to your letter of the 28th, it was not my desire to cancel the contract because of the two objectionable features which I brought up, and if it is not your intention to further negotiate on these two matters, may I ask that you return the contract as is for execution.

Yours very truly,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer,
President

RNF:jo

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/28	Houk	600
1/28	Selfridge	130
"	Johnson	110
"	Mittendorf	100
1-29	Cw	220
		600

600

28 JAN 1957

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Nelson
Lamb

Dear Mr. Frazer:

Reference is made to your letter of January 17, 1957, to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, returning the unsigned contract.

Mr. Robert A. Laurence in his letter of January 22, 1957, has pointed out in the second paragraph that the Government is never desirous of entering Stage II of a contract where the first stage results have been unfavorable. However, an operator may not terminate the contract at any time unless the Government agrees. Our experience in your area indicates that very few drill holes are lost or incompleted, and most lost holes are due to inefficiency or negligence of the driller. It has been customary for the Government not to participate in the cost of any lost or incompleted holes in this district.

We regret that you find these conditions of the contract objectionable. Under the circumstances if we do not hear from you further by March 1, 1957, we will consider your application for a contract as having been withdrawn.

Sincerely yours,

G. D. Mittendorf (fw)

Administrator

LGHouk:gad 1/25/57
Rewritten
LGHouk:gad 1/28/57
Copy to: Admr. R. File
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/25	Houk	600
		130
		110
		100
		220

600

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

Reference is made to your letter of January 17, 1957, to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, returning the unsigned contract.

Mr. Robert A. Laurence in his letter of January 22, 1957, has pointed out in the second paragraph that the Government is never desirous of entering Stage II of a contract where the first stage results have been unfavorable. (1) It has been customary for the Government not to participate in the cost of any lost or incompleted holes in this district. (2)

(3) We regret that you find these conditions of the contract ~~unacceptable~~ but wish to thank you for your interest in the DMEA Program.

Sincerely yours,

Administrator

LGHouk:gad 1/25/57
Copy to: Admr. R. File
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

5/57

Mr. Selfridge -

Make suggested changes

Suggested changes in letter

Inserts ----

(1) However, an operator may not terminate the contract at any time unless the Government agrees.

(2) Our experience in your area indicates that very few drill holes are lost or abandoned uncompleted, and most lost holes are due to inefficiency or negligence of the driller.

(3) Objectionable. Under the circumstances if we do not hear from you further by February 15, 1957, we will consider your application for a contract as having been withdrawn.

FJ

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

ROOM 4, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1957

DATE	INITIALS	CODE
1-24	C	220
1-24	WJA	600
January 22, 1957		

Memorandum

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

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

Subject: Unsigned Contract, DMEA-4159 (Fluorspar)
Robert N. Frazer, Marion, Kentucky
Joe Lingang Property, Livingston County, Kentucky

Enclosed are all copies of the subject contract which were returned unsigned by the Applicant, together with three copies of his letter of explanation.

In his first paragraph, he raises a point which many Applicants and Operators have questioned, though in only a few cases has the situation actually arisen. He is obviously afraid that we might insist on completion of Stage II even though by that time he might consider the remaining work unjustifiable.

He sends no supporting data for the second paragraph, and we see no reason why the Government and the Operator should share the cost of lost holes. No mention of payment for lost holes is made in the drilling bids. Unless the Applicant submits evidence that the contractors' bids were based upon payment for lost holes by the Operator, we can see no reason to change that provision of the contract.

Robert A. Laurence
Robert A. Laurence
Executive Officer

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

372 Bonnell

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 18 POST OFFICE BLDG
KNOXVILLE 2, TENN.

WASHINGTON 25, D.C.

OFFICIAL FILE COPY
D M E A
RECEIVED JAN 1957
DATE INITIALS CODE

January 22, 1957

Mr. Robert N. Fraser
President, Kentucky Fluorspar Co.
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159 (Fluorspar)
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Fraser:

Reference is made to your letter of January 17, returning the contract unsigned.

The designation of Stages I and II in the contract was to provide an opportunity to evaluate the results of work after the completion of the initial holes, and to decide whether to continue or terminate the project. We, too, would prefer to terminate the contract at that point if results of Stage I are unfavorable.

As to the matter of payment for lost holes, I find nothing in the drilling contractors' bids concerning this item. Usually, it is the contractor's responsibility to complete the hole, and you should protect yourself by including such a clause in your drilling contract. If, however, the contractor refuses to accept responsibility for lost holes, or insists on a higher footage rate if he does, then you should submit such data and it is possible that the contract could be altered accordingly.

This office does not have the authority to amend that portion of the contract in that manner, so I am returning the contract to our Washington office. You will be advised as soon as a decision is reached.

Very truly yours,

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

RAL/mg
cc - Operating Committee (3)
Millar
Amos
Lynch

KENTUCKY FLUORSPAR COMPANY

INCORPORATED

GROUND, LUMP AND GRAVEL
FLUORSPAR

MARION · KENTUCKY

KENTUCKY FLUORSPAR COMPANY INCORPORATED KSPAR TRADE MARK MARION, KY. ESTABLISHED 1902

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1957

DATE	INITIALS	CODE
	PHONE 247	

RECEIVED
JAN 21 1957
U. S. Geological Survey
Geologic Division
Reston, Va.

January 17, 1957

Mr. Robert A. Laurence,
Executive Officer, DMEA
Field Team, Region V
United States Department of the Interior
Defense Minerals Exploration Administration
Knoxville 2, Tennessee

Dear Mr. Laurence:

Thanks very much for your letter of the 14th, and one question I have is whether I will be committed for both Stage 1 and Stage 2, or whether or not I can complete Stage 1, and whether or not I will be committed to complete Stage 2. In other words, if Stage 1 is not successful, I would be inclined to forget about Stage 2.

I suggest you make this change in event you think it is necessary.

While I do not anticipate any incompleted hole, and for sure which will be no fault of mine, I do not want to be wholly responsible for the incompleted hole. I would prefer this provision be changed to make both us and the government equally responsible. As suggested, I am returning all copies of the contract unsigned.

Thanking you greatly, I am,

Yours sincerely,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer,
President

RNF:jo
Encs.

KENTUCKY FLUORSPAR COMPANY
INCORPORATED
GROUND, LUMP AND GRAVEL
FLUORSPAR
MARION · KENTUCKY
PHONE 247

January 12, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1957
DATE | INITIALS | CODE

Mr. V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V
United States Department of the Interior
Defense Minerals Exploration Administration
Knoxville 2, Tennessee

Dear Mr. Lynch:

I am returning herewith seven copies of Form MF-205 signed by J. W. and Sheila Lingang.

J. O. Pierce retained a one-half interest in these mineral rights so long as he lived, but upon his death all the mineral rights became J. W. and Sheila Lingang's, and in as much as Mr. Pierce is dead we are returning the Form MK-205 which you sent for his signature.

Yours very truly,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer
President

RNF:jo
Encs.

RECEIVED
JAN 14 1957
U. S. Geological Survey
Contracts Division
Knoxville, Tenn.

DOCKET COPY
Surname:
Anderson
Houk
Fisher
Selfridge
Mottinger

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

DEC 31 1956

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

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Fraser
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Laurence:

Enclosed are the original and five copies of a proposed long-form contract signed by the Administrator for the Government. It consists of the form, Annex I (2 pages), Exhibit "A" (3 pages), and two maps. Also enclosed are two extra copies of Annex I, Exhibit "A" and the maps for Field Team use.

Before execution of the contract, please have the retyped Consent to Lien and Subordination Agreements executed by J. W. and Sheila Lingang in one case, and by J. O. Pierce in the other.

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

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

Copies of memoranda dated December 5, and December 13, 1956, by Mr. R. B. McDougal, USBM, and Mr. T. H. Kiilsgaard, USGS, respectively, relating to the project are enclosed.

Approved:

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

Thor H. Kiilsgaard (Byes)
Member, Geological Survey

Enclosures: 26

Sincerely yours,

George C. Selfridge
(Byes)
Chairman, Operating Committee

WCAnderson:ms 12/28/56
Copy to: Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File

RECEIVED
AUG - 8 1956

REPORT ON THE J. .. LINGANG PROPERTY

Near

SALEM, KENTUCKY

By

JOHN S. TIBBS

April 28, 1956

RECEIVED
AUG - 8 1956

INTRODUCTION:

The Lingang property, located on the Southeast side of Highway #60, some three miles west of Salem, Kentucky, has two major fault structures crossing parts of it; and at the request of Mr. R. N. Frazer of Marion, Kentucky, I made a field study to determine the best places to drill two or more diamond drill holes for the discovery of fluorspar ore.

RECOMMENDATIONS:

I recommend that the two diamond drill holes, located on sketch to cut Fault "A", be drilled; and if these holes are successful, then other holes be drilled to delineate the ore deposit found.

CONCLUSIONS:

I believe that the fault designated by "A" on the accompanying sketch has the best chance of either of the faults on the Lingang property. This fault has all the necessary geologic features to contain economic ore deposits at reasonable depth below the surface.

GEOLOGY:

The area covered by the Lingang farm has formations ranging from the Pennsylvania Caseyville Conglomerate down to the Mississippian Cypress Sandstone on the surface, with both of the major faults upthrust to the west.

FAULT "A" (see sketch) has Cypress Sandstone on the west and Hardinsburg Sandstone on the east; and with a vertical drill hole depth of 250 feet or 360 feet on a 45° angle, one can expect to cut the fault at a favorable horizon for CaF_2 deposition.

Many shallow pits have been sunk in the neighborhood of Fault "A" because of a surface exposure of CaF_2 stringers in the creek bed. However, a careful study of the area shows that these stringers have strayed some 150 feet to the southeast from the main fault structure; and any drilling done with economic deposits in mind will have to be done on the main structure.

Two diamond drill hole locations have been shown on the sketch; and if either, or both of these holes, cuts CaF_2 then at least four more holes should be located to determine average width, grade and tonnage to be expected.

ORE RESERVES--About 1800 feet of Fault "A" lies on the Lingang property; and if we take 3 feet of width as the minimum mineable, and 300 feet as the probable vertical extent of any ore discovered (as one may with some degree of certainty in the area) then using a conservative density of 12 cubic feet per ton:

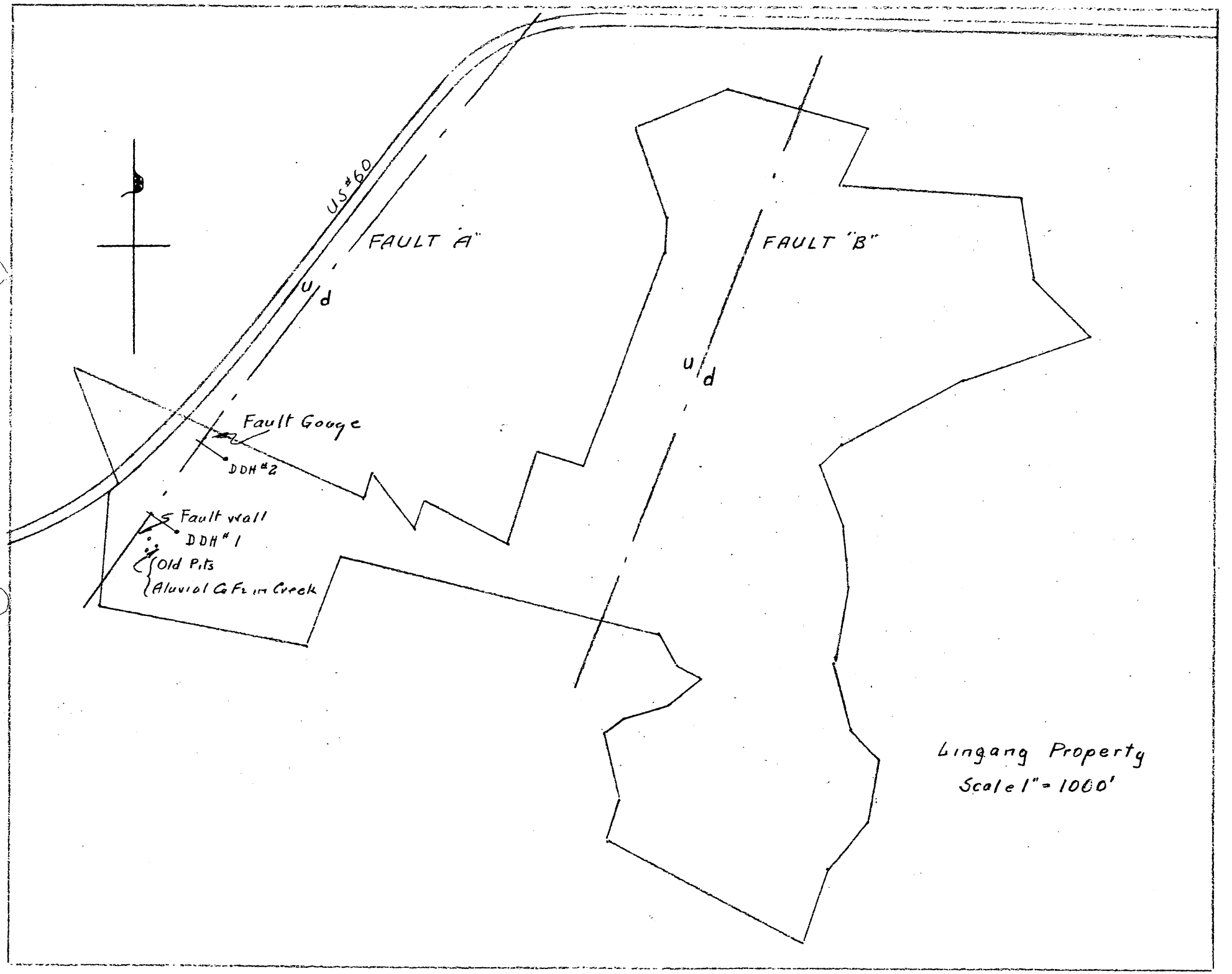
$\frac{1800 \times 3 \times 300}{12} = 135{,}000$ tons of CaF_2 ore can be expected from this deposit.

FAULT "B" (see sketch) has Golconda limestone on the west and probably Palestine Sandstone on the east, which would mean

a minimum vertical drilling depth of 350 feet in order to expect economic ore deposits of 500 feet on a -45° angle. This is probably too deep for the present leaseholder to consider diamond drilling, or mining at the present time. This fault has a total length on the Lingang property of about 4600 feet; and if an economic ore deposit were proved on it, then it might be expected to contain over 300,000 tons of CaF_2 ore.

Respectfully submitted,

John S. Tibbs
Registered Geologist


US #60
FAULT "A"
u
d
FAULT "B"
u
d
Fault Gouge
DDH #2
Fault wall
DDH # 1
Old Pits
Alluvial Gravel in Creek
Lingang Property
Scale 1" = 1000'

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

IN REPLY REFER TO:

December 13, 1956

Re: DMEA 4159
Lingang Property
(Fluorspar)
Livingston Co. Ky.

Memorandum

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

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of Field Team Report.

Field examiners recommend a modified exploration contract for the applicant. The Field Team concurs with this recommendation.

As proposed, the work is to be in two stages with Stage I consisting of two diamond drill holes aggregating 700 feet of drilling and Stage II to consist of 1,400 feet of drilling in four holes. No work is to be done in Stage II unless results from Stage I are favorable. Cost of the project is estimated at $8,024.00.

Recommendations for the project are justified on: 1) Outcropping of fluorite in old diggings on the property, 2) Favorable location of the property with respect to other fluorspar - producing properties in the surrounding Kentucky fluorspar district, 3) The structural trend of nearby fluorspar deposits passing through the applicant's property, and 4) Similiarity of host rocks on the applicant's property with those of nearby deposits.

As described, the chance of finding mineable fluorspar deposits by the proposed work is weak but there is a possibility and the work may accurately be described as justified exploration. I therefore concur with the field examiners and recommend approval of the proposed contract.

T. H. Kiilsgaard

T. H. Kiilsgaard

Dec. 15, 1956.

Re: Applicants Lease -

Called Mr. Rubin -

Lease status as contained

in the file is O.K.

W Vanderson

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

DEC 26 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Nonmetallic Minerals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4159 (Fluorspar)
Robert N. Frazer
Lingang Property
Livingston County, Kentucky

As requested in Mr. Houk's reference slip dated December 14, 1956, we have prepared the attached contract.

However, a new "Consent to Lien and Subordination Agreement" will be required from the lessors, because the Consent to Lien in the docket refers to "see copy of lease attached" and there is no attachment. We have attached a Consent to Lien and Subordination Agreement for your use. We have also attached a Consent to Lien and Subordination Agreement to be executed by Mr. J. O. Pierce, who owns a life estate in an undivided one-half interest in Tract 3.

Robert P. Dwyer

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

RECEIVED DEC 6 1956 D.M.E.A.

Date December 5, 1956

DMEA Docket No. 4159
DMEA Contract No.
Commodity Fluorspar, Lead and Zinc
Name of applicant Robert N. Frazer
Name of property Lingang
Location of property Livingston County, Ky.
Estimated cost of project $8,034

Memorandum ✓

To: Lawrence G. Houk, Chief, Non-Metallic Minerals Division, Defense Minerals Exploration Administration

From: Robert B. McDougal, Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 11/20/56. 2. Date received by reviewer: 11/27/56.

3. Prior reports on this property known to reviewer: Yes [ ], No [x].

4. Prior reports on nearby properties known to reviewer: Yes [ ], No [x].

5. Information available on past production: Yes [ ], No [x].

6. Other pertinent factors known to reviewer: Yes [ ], No [x].

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Denial [ ]
   d. Agree with Field Team [x]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary)

Robert B. McDougal

Robert B. McDougal

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 15 POST OFFICE BLDG
KNOXVILLE 2, TENN.

November 20, 1956

Memorandum

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

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

Subject: Field Examination Report, Docket No. DMEA-4159 (Fluorspar)
Robert N. Frazer, Marion, Kentucky
Lingang Property, Livingston County, Kentucky

Enclosed are four copies of the subject examination report. We are advised that Mr. Harry Burmeister, Mining Engineer, USBM, College Park, Maryland, who is familiar with the property but was not available to participate in the field examination, has conferred with Mr. Trace during the preparation of this report, and is in agreement with the conclusions and recommendations.

We recommend approval of a two-stage contract as outlined in the report.

Robert A. Laurence
Robert A. Laurence
Executive Officer

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

Enclosures 4

Reviewed by
DMEA OPERATING COMMITTEE
11-28-56

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Field Team, DMEA, Region V

DATE: November 15, 1956

FROM : Robert G. Trace, U.S.G.S.

SUBJECT: Field Examination report, DMEA 4159 (Fluorspar)
Robert N. Frazer, Marion, Kentucky
Lingang Property, Livingston County, Kentucky

Enclosed are five copies of the subject examination report.

RECEIVED
NOV 19 1956
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

Robert G. Trace

Reviewed by

Released by
DNEA OPERATING COMMITTEE
11-28-56
(Date)

Field Team Report on Examination of Property

by

Robert D. Trace [1]

DMEA Docket No. 4159 (Fluorspar)
Robert N. Frazer, Marion, Kentucky

CONCLUSIONS AND RECOMMENDATIONS

The geological conditions are considered to be reasonably favorable for the possible discovery of a fluorspar deposit at comparatively shallow depths. Justification for exploration of the western part of the Lingang property and the above conclusions is summarized as follows:

1. The Lingang property is favorably located in reference to nearby known ore deposits, particularly the Reynolds Metal Company deposit.

2. A fault probably is present with displacement not so great as to be unfavorable for ore deposits.

3. The most favorable geologic horizon is present probably at reasonable depths below the surface.

It is recommended that this application be approved and that diamond drilling be done in two stages as outlined in this report under "Description of Project" and "Allowable Costs of Project."

TIME SPENT ON PROPERTY

The writer discussed the proposed project with the applicant, Mr. Robert N. Frazer, for half a day, and examined the area for half a day in company with Mr. John S. Tibbs, consulting geologist for the applicant. Two additional days of field work were done by the writer.

[1] Robert D. Trace, geologist, U. S. Geological Survey.

Reviewed by DMEA OPERATING [illegible]
11-28-56
(date)

NAME AND LOCATION OF PROPERTY

The property is known as the J. W. Lingang property and is in Livingston County, Kentucky, 3-3/4 miles west of Salem via U. S. Highway 60 (fig. 1). The proposed drilling would be no more than 500 feet from U. S. Highway 60.

COMPETENCY OF APPLICANT

The applicant has been in the fluorspar mining business for at least 25 years and is well known in the fluorspar district for his capabilities and financial responsibility. The writer has known the applicant personally for 14 years.

APPLICANT'S PROPERTY RIGHTS

The applicant has a 5-year lease on the Lingang property, dated October 7, 1953, and signed by J. W. Lingang and Sheila Lingang. Copies of the lease and consent to lien are in the Washington DMEA files.

DESCRIPTION OF PROPERTY

The surface of the exploration area is hilly and wooded, but no difficulty is anticipated in setting up drill rigs as the slopes are gentle and woods are fairly sparse.

Three shallow pits or shafts were sunk 20 to 30 years ago on the property. No other workings or facilities of any kind are on the property.

GEOLOGY

The ore deposits of the Kentucky-Illinois fluorspar district consist of fluorite with subordinate quantities of sphalerite and galena. Calcite and barite are the principal gangue minerals. The ore deposits

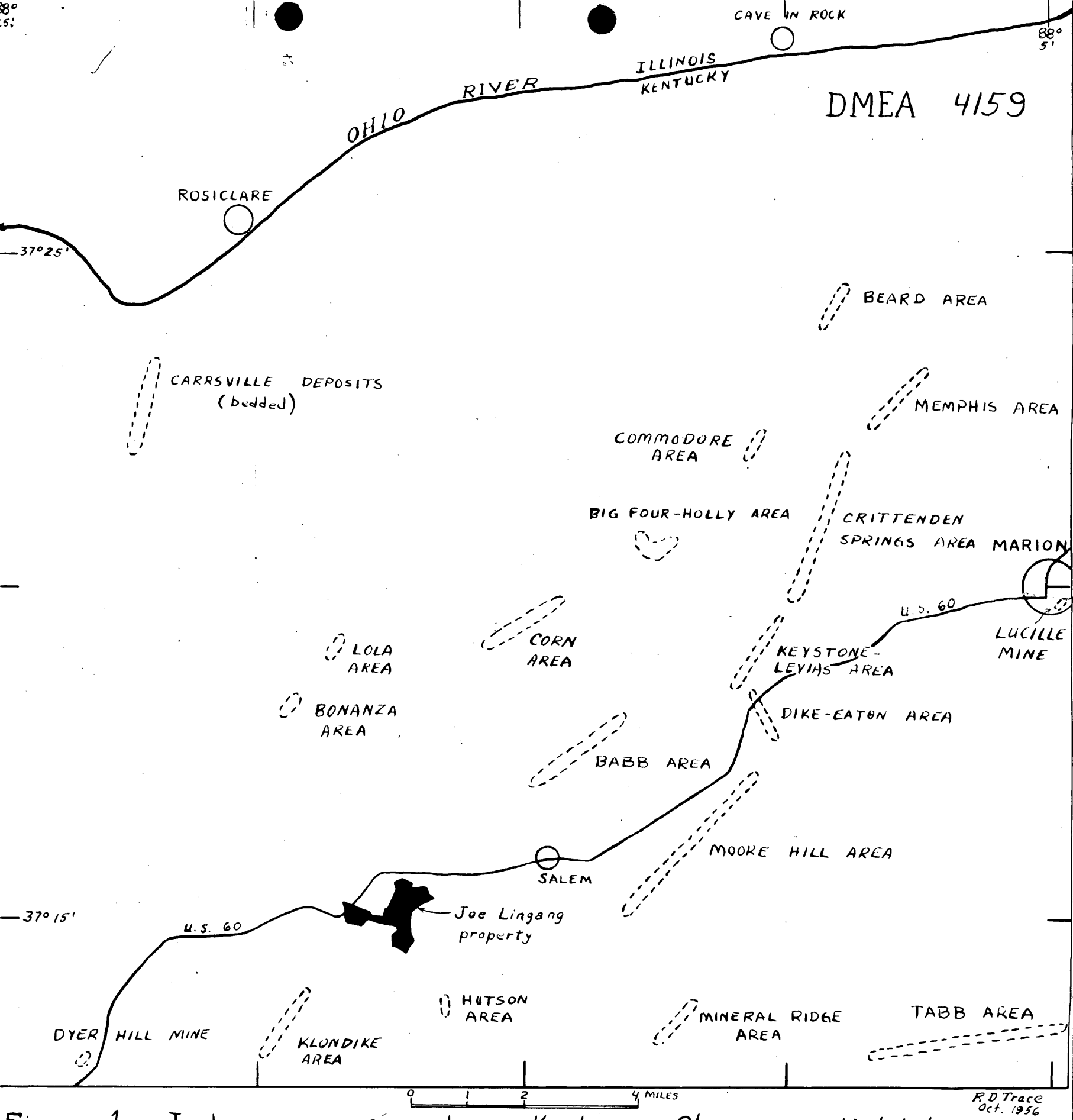


Figure 1.--Index map of western Kentucky fluorspar district, SHOWING APPROXIMATE LOCATION OF PRINCIPAL MINING AREAS AND KNOWN DEPOSITS, CRITTENDEN, LIVINGSTON, AND CALDWELL COUNTIES.

occur (1) as veins along steeply dipping normal faults that displace relatively flat or shallow-dipping shale, sandstone, and limestone beds of the Meramec and Chester groups of Mississippian age, and (2) as bedding replacement deposits in the lower part of the Chester group and the upper part of the Meramec group. With the exception of the Carrsville bedded deposits, the Kentucky part of the district is known to contain only vein deposits. Most of the major vein deposits in Kentucky are in a NE-trending belt that is about 10 miles wide and 20 miles long (fig. 1); the applicant's property is within this belt, about 1-3/4 miles northeast of the Klondike area.

The geology in the vicinity of the Lingang property, and also the northern part of the Klondike area, is shown on figure 2. The area of the proposed projct is in the western part of the Lingang property (locs. a and b, fig. 2).

The nearest known ore deposit is owned by the Reynolds Metal Company and is in the Klondike area, about 1-3/4 miles southwest of the Lingang property (figs. 1 and 2). According to local fluorspar operators, this deposit may contain about half a million tons of fluorspar reserves.

The nearest known exploration is about 2,000 feet south of the proposed project area, and consisted of diamond drilling by the Reynolds Metal Company. The three northernmost Reynolds drill holes are shown on figure 2; they did not find ore.

The rock formations that are either exposed or underlie the western part of the Lingang property probably include the following formations of Mississippian age:

Golconda formation (limestone and shale)	150 feet thick
Cypress sandstone (sandstone and shale)	110 feet thick
Paint Creek shale (shale and sandstone)	20-40 feet thick
Bethel sandstone (sandstone)	85 feet thick
Renault formation (limestone and shale)	115 feet thick
Ste. Genevieve limestone (mostly limestone, some sandstone, Rosiclare member)	200 feet thick

Although the major structural elements of the area shown on figure 2 seem relatively well outlined, many details of faulting are obscure, particularly in the northern part of the mapped area and within the block of ground shown as undifferentiated Cypress-Paint Creek-Bethel. Only sandstone with a little associated shale crops out in most of the western part of the Lingang property. The identification of these outcrops as Cypress-Paint Creek-Bethel is based mostly upon the known presence of these formations to the southwest of the Lingang property, with no visible evidence of cross faulting between the Lingang property and the area to the southwest. It is relatively impossible, however, to identify a sandstone formation where no overlying or underlying limestone formation is present. Therefore, sandstone other than the Cypress or Bethel may be present in this area.

Based upon the evidence of localities "a" and "b" (see below), a fault that trends northeast probably is present in the area of the proposed project. Because of the presence of only sandstone, however, no faults could be traced in sufficient length to show on a map. Displacement of the beds is probably less than 200 feet.

Most of the rock outcrops in the vicinity of the proposed project are in a small creek that flows south and southwest through the area (fig. 2). Three localities of interest were described by the applicant's consulting geologist. Locality "a" (fig. 2, inset) consists of three shallow prospect shafts or pits, all within a radius of about 50 feet. Two of the holes are completely caved and filled; one hole was timbered, however, and stands open for about 5 feet downward, exposing sandstone beds that strike N. 25° E. and dip 10 degrees southeast. The entire exposure is broken by a series of closely spaced joints or fractures that dip 70 degrees northwest. No minerals or displacement could be seen in the shaft. On the dump of the shaft, however, slickensided sandstone fragments and a few thin veinlets of calcite and fluorite were found.

Locality "b" is in the creek bed and is about 300 feet north of locality "a". At "b", another series of closely spaced joints or fractures are exposed that strike N. 50 E. and dip steeply northwest. No fault plane is exposed, as at locality "a", although in both places the closely spaced joints strongly suggest that a fault is close.

Locality "c" is about 1,000 feet northeast of locality "b" and is shown by the applicant's map as having an exposure of fault gouge. This exposure is probably a weathered shale, as about 150 feet northeast of locality "c" an outcrop of the same material was found in a bed that underlies a relatively flat-lying bed of sandstone.

DESCRIPTION OF PROJECT

The application provides for exploration by diamond drilling in

two stages. Stage I provides for 2 holes, one hole to cut a fault near locality "b" and one hole near "c". The two holes are about 700 feet apart. Stage II provides for 4 holes, contingent upon the results of Stage I.

The following alternative program is recommended for Stage I: the site for hole 1 should be located no more than 250 feet southeast of locality "b" (fig. 2, inset), as suggested by the applicant. The hole would be drilled at an angle of about 45°, in a northwesterly direction, and may be as deep as 350 feet. The location of hole 2 is modified slightly, as the no. 2 hole suggested by the applicant is too far to the north. Hole 2 should be drilled at a location from 300 to 600 feet northeast of the site of hole 1. The exact location would depend upon the results of hole 1 and may be left to the applicant. Hole 2 should be drilled in a northwesterly direction at an angle of 45° and may be as deep as 350 feet. The minimum core size for all drilling should be Ax.

A Stage II program of 4 holes totalling no more than 1,400 feet is recommended, as suggested by the applicant. Any or all of these holes should be drilled only with the approval of the Field Team.

ALLOWABLE COSTS OF PROJECT

Stage I

Independent Contracts

700' diamond drilling (Ax) at $3.25	$2275.00	
Drillers standby or cementing time, 8 hrs. at $7.50 per hr.	60.00	
Subtotal	$2335.00	

Personal Services

Supervision (part time) 25 hrs.	100.00	

Operating Materials & Supplies

29 core boxes at $3.00	87.00	

Miscellaneous

Payroll taxes and insurance at 6% on $100	6.00	

Lost time not due to contractor

4 hrs. at $7.50 per hr.	30.00	

Assaying

10 assays for CaF_2, Pb, and Zn at $12.00	120.00	
Subtotal	$ 343.00	
Stage I Total		$2678.00

Stage II

Independent Contracts

1,400' diamond drilling (Ax) at $3.25	$4550.00	
Drillers standby or cementing time, 16 hrs. at $7.50 per hr.	120.00	
Subtotal	$4670.00	

Personal Services

Supervision (part time) 50 hrs.	200.00	

Operating Materials & Supplies

58 core boxes at $3.00	174.00	

Miscellaneous

Payroll taxes and insurance at 6% on $200.00	12.00	

Lost time not due to contractor

8 hrs. at $7.50 per hr.	60.00	

Assaying

20 assays for CaF_2, Pb, and Zn at $12.00	240.00	
Subtotal	$ 686.00	
Stage II Total		$5356.00

4(700) 2.

4(1467) 4 mos

COMPETENCY OF DRILL BIDDER

In the field referral letter from the Operating Committee to the Field Team of Region V, we were asked to comment on the competency of one of the drill bidders. Carlton Tabor operates a large service station in Marion, Kentucky. He has one drill and has operated it spasmodically since 1946, including some work for the Minerva Oil Company. His competency as a driller is average for the district. His financial resources probably are limited.

Robert D. Tace

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

DOCKET COPY
Surname:
Anderson
Houk
Selfridge
Johnson

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

AUG 1 6 1956

Re: Docket No. DMEA-4139-fluorspar
Robert N. Fraser
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Lawrence:

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

Copies of memoranda dated February 10 and 16, 1956, by Mr. N. E. Nelson, USGS, and Mr. J. E. Holtzinger, USBM, respectively, relating to the project are enclosed.

Also enclosed are copies of the following:

1. Letter of August 6, 1956, from the subject applicant.
2. Report on the J. W. Lingang property near Salem, Kentucky by John S. Tibbs.
3. Bid for core drilling by O. B. Wardlaw and Sons, dated March 5, 1956.
4. Bid for core drilling by Joy Manufacturing Company, dated March 5, 1956.
5. Bid for core drilling by Garlton Tabor, dated March 13, 1956. (Please comment on the competency of this bidder.)

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (SLB)

Approved:

FRANK D. LAMB (SLB)
Member, Bureau of Mines

N. E. Nelson (SLB)
Member, Geological Survey

Enclosures: 14

Mr. Houk
Admr. R. File

WCAnderson:ms 8/13/56
Copy to: Docket
Operating Committee
Mr. Killgaard, 5222
Mr. R. B. McDougal, 3522

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

DOCKET COPY
Surname:
Anderson
Houk
Nelson
Lamb
Selfridge
Johnson

AUG 16 1956

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

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

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

Sincerely yours,

C. O. Mittendorf

Administrator

WCAnderson:ms 8/13/56
Copy to: Docket
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. R. B. McDougal, 3522
Mr. Houk
Admr. R. File

KENTUCKY FLUORSPAR COMPANY
INCORPORATED
GROUND, LUMP AND GRAVEL
FLUORSPAR
MARION · KENTUCKY
PHONE 247

RECEIVED AUG 8 1956

August 6, 1956

4159

Mr. Lawrence G. Houk, Chief
Nonmetallic Minerals Division
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Houk:

Thanks for your letter of August 3rd, together with copy of your letter of February 27th, and which letter I turned over to Mr. J. S. Tibbs, a geologist presently with Pennsalt Manufacturing Company, and whom we are sometimes are able to employ for consultation and field work. We attach the original and several copies of Mr. Tibbs' report covering the Lingang Property. We might further point out that this property is situated on the same fault system as is the famous Klondike Fluorspar Mines, and the big deposit which Reynolds Metal developed on the Coaker and Donaky properties. Mr. Tibbs was the geologist in charge, for Reynolds Metals, of the drilling on this property, and core lengths of 14'-16' pure fluorspar were not uncommon, with one hole returning a true width of 35' high grade fluorspar.

To answer your questions regarding the drill cost, I am attaching bids by Joy and others, as I already have them in.

I have the original lease here in my office, being dated October 7, 1953, with and signed "J. W. Lingang" and "Sheila Lingang". If this is not sufficient evidence let me know and I will have a photostat made and send in to you.

Let me know if there is further information you require.

Yours very truly,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer
President

RNF:jo
Encs.

RECEIVED
AUG - 8 1956

REPORT ON THE J. W. LINGANG PROPERTY

Near

SALEM, KENTUCKY

By

JOHN S. TIBBS

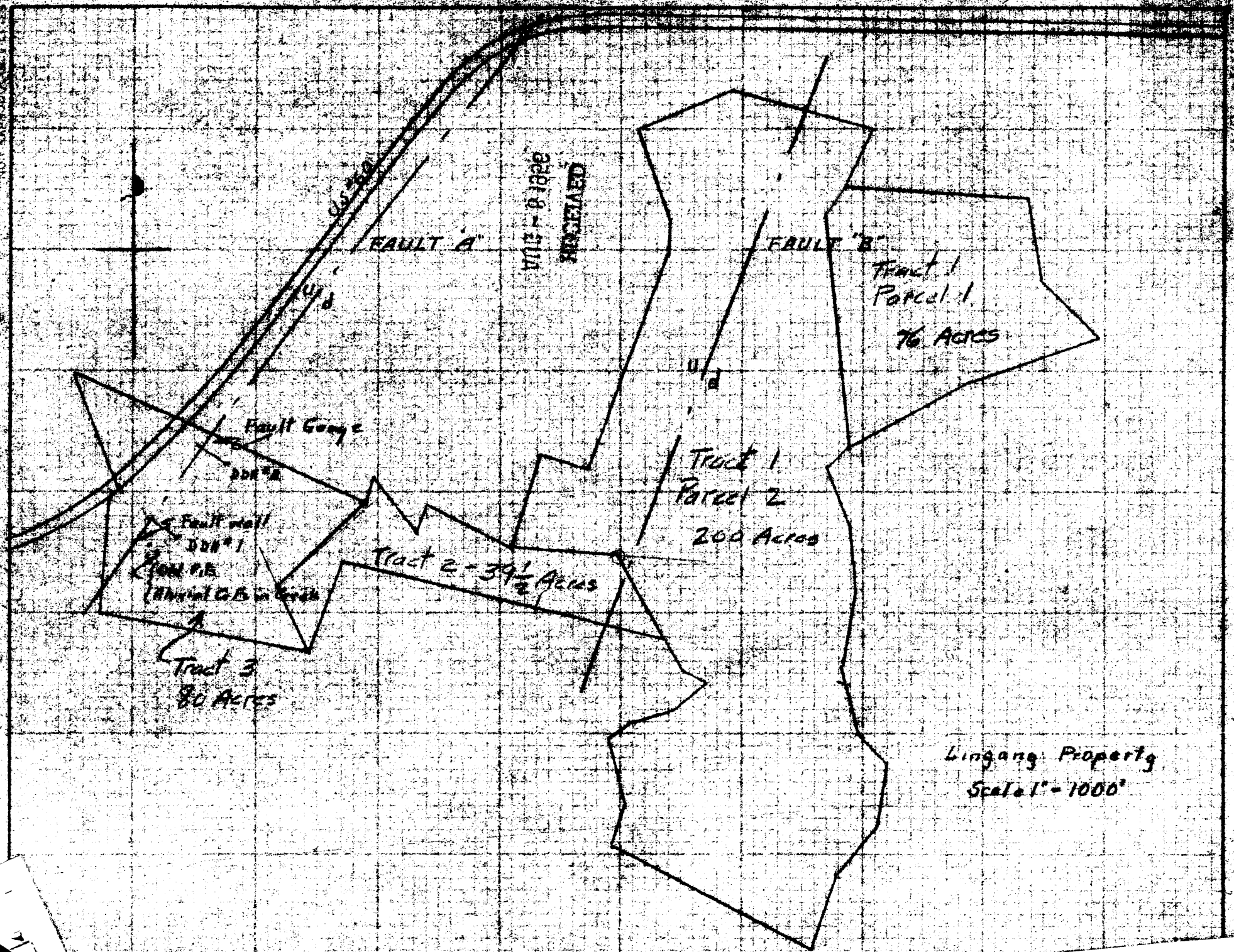
April 28, 1956

STATE OF KENTUCKY
JOHN S. TIBBS
REGISTERED
PROFESSIONAL ENGINEER

a minimum vertical drilling depth of 350 feet in order to expect economic ore deposits of 500 feet on a -45° angle. This is probably too deep for the present leaseholder to consider diamond drilling, or mining at the present time. This fault has a total length on the Lingang property of about 4600 feet; and if an economic ore deposit were proved on it, then it might be expected to contain over 300,000 tons of CaF_2 ore.

Respectfully submitted,

John S. Tibbs
Registered Geologist



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aug 8 - 1984

RECEIVED
AUG - 8 1956

RECEIVED
AUG - 8 1956

April 28, 1956

To: Robert N. Frazer
Marion, Kentucky

For report and professional services on the J. W. Lingang property $150.00

John S. Tibbs

O. B. WARDLAW & SONS
CORE DRILLING CONTRACTORS
Box 410
MARION, KENTUCKY

March 5, 1956

RECEIVED
AUG - 3 1956

TO

Kentucky Fluor Spar Company
Box 431
Marion, Kentucky

INVOICE NO. _____
CUSTOMER'S NO. _____
AUTHORIZATION _____
REQUISITION NO. _____
CONTRACT _____

TERMS: NET

Gentlemen:

We herewith submit a bid for a maximum of 8000 feet of vertical or angle diamond core drilling in the area of Livingston, Crittenden, and Caldwell counties, Kentucky, said holes to be limited to a maximum depth of 1000 feet, at the following prices:

NX Drilling	$ 3.25
BX Drilling	3.00
AX Drilling	2.75
Cementing	$ 5.00 per hour
Acid Surveys	5.00 per hour
Waiting on Orders	5.00 per hour
Cement	4.05 per 100 lbs.

In hard rock formations such as chert or quartzite, the price will be: $ 6.50 per foot

Yours very truly,

O. B. WARDLAW & SONS

By O. B. Wardlaw
O. B. Wardlaw

OBW:lcl

JOY MANUFACTURING COMPANY
900 WOODLAND AVENUE
MICHIGAN CITY, INDIANA
TELEPHONE 7-7231

RECEIVED
AUG - 8 1956

EXECUTIVE OFFICES
HENRY W. OLIVER BUILDING
PITTSBURGH 22, PA.

March 5, 1956

Mr. Robert Frazier
Marion, Kentucky

Dear Mr. Frazier:

In accordance with your request, we have prepared and attach herewith for your consideration, our core drilling agreement in duplicate which sets forth in detail the terms and conditions under which we are prepared to undertake a minimum of 450 ft. of drilling in the vicinity of Salem, Kentucky.

The agreement in brief, stipulates a price of $4.00 per ft. for a minimum of 450 ft. of "AX" drilling in holes not to exceed a depth of 300 ft. For all drilling in excess of 450 ft., the price will be at the rate of $3.00 per ft. If it is your desire to save cores of the drilling, then it will be necessary that you furnish the proper containers for same.

We will arrange to furnish and pump water for drilling purposes provided that an ample source of supply is located not more than 2500 ft. from any one drill hole.

In the event it becomes necessary to resort to reaming, casing or cementing, then such work will be performed at the rate of $40.00 per 8-hour shift plus cost of materials used up. Any casing lost or ordered left in place will be invoiced at cost.

We will furnish for this proposed drilling one of our Joy #12-B gasoline driven core drills complete with operating equipment, and will conduct the drilling operations on the basis of one or two 8-hour shifts per day and not less than six days per week.

If the agreement is in order and acceptable, please sign both copies of the agreement and return to us for execution by an officer of our company, after which one duly executed copy of the agreement will be returned for your reference.

Thanking you for giving us an opportunity of quoting on your requirements, and hoping that we may have the pleasure of being of service to you, we are,

Yours very truly,

JOY MANUFACTURING COMPANY

W. J. Pilarski, Mgr.
Contract Drill Division

WJP/ab

CORE DRILLING AGREEMENT

RECEIVED
AUG - 3 1956

NO.
PAGE

1. **THIS AGREEMENT,** made and entered into this fifth day of March, 1956. by and between Robert Frazier of Marion, Kentucky the party of the first part and the JOY MANUFACTURING COMPANY, of Pittsburgh, Pennsylvania, party of the second part,

Witnesseth:

2. In consideration of certain payments hereby agreed to be made by the said first party to the said second party, the said second party hereby agrees to drill, sink or prospect with a diamond core drill from surface in or near Salem, Kentucky at sites to be selected by the said first party, subject to the conditions hereinafter mentioned. It is further agreed by the said first party that the depth of none of the herein specified drill holes shall exceed a depth of 300 feet, and the total amount as guaranteed must be drilled in not more than three holes.

3. The said second party agrees to use for the above described work one Diamond Core drill.., and men skilled in operating same; to operate the drill.., both day and night whenever practicable, and to furnish only such person as the said first party may designate by written order, all core taken out of said prospect holes.. Size of core to be approximately 1 1/8" (AX). inches in diameter. The said first party shall provide suitable boxes if it desires to save the core, and if it also desires may have a man at the drill at all times to remove and take charge of said core. No information whatever regarding the records and results of this drilling is to be given any other party, without the written consent of the said first party.

4. The said first party hereby agrees to pay to said second party the following prices. for the herein described drilling.

For a minimum of 450 feet of drilling	@$4.00 per ft.
For all drilling in excess of 450 feet	@$3.00 per ft.

21 12' — 3 21

5. In accordance with this agreement, the said first party hereby guarantees the said second party a minimum total of 450 feet of drilling at the prices. as herein provided in Clause Four.

The said second party shall have the option of withdrawing from this contract after a total of 1,000 feet have been drilled under the terms of this agreement.

~~In the event the said first party should stop the drilling before the guaranteed footage has been drilled, it agrees to pay the said second party half the price per foot for the undrilled balance, in addition to payment at full price for the footage actually drilled.~~

JOY MANUFACTURING COMPANY

Form 6215 (1A)

CORE DRILLING AGREEMENT

RECEIVED
AUG - 3 1953

NO.
PAGE

~~6. The party of the first part hereby agrees to furnish the said second party at each of the herein described prospect holes, free of charge, an ample supply of water for the proper prosecution of the herein described work.~~

6. The second party agrees to pump water for drilling purposes provided that the holes are spotted not more than 2,500 feet from an ample source of water supply.

~~7. The said first party also agrees to transport the drilling outfit and supplies of the said second party from the nearest railway station or truck carrier to the location of the first prospect hole, and from one hole to another and back to the nearest railway station or truck carrier at the termination of the work under this contract.~~

7. ~~X.~~ Should the party of the first part fail to perform its part of the contract ~~of furnishing water, and transportation,~~ to locate sites, as herein agreed, regardless of cause, or should the party of the first part issue instructions that delay operations for any reason or in any other way interrupt the continuous operation of the said diamond drill, it shall pay the second party the labor expense of drilling crew while idle through such delay, at the rate of $ 40.00 per shift, consisting of 8 hours, for each shift or part thereof that the operation of the said drill is delayed.

~~8. It is hereby agreed that should a cavity, or loose and caving material be encountered at a depth which should prevent successful drilling, the party of the second part does not guarantee to drill or sink said prospect hole to any specified depth, but will drill or sink as deep as is practicable under the conditions, and the party of the first part shall pay for every foot actually sunk or drilled.~~

8. It is ~~further~~ agreed by both parties hereto that should cavities, soft, broken or caving material be encountered so that the drill hole will not remain open after being bored, and it becomes necessary or advisable to resort to cementing or reaming and casing in order to protect same until the depth desired by said first party is reached, then the said first party agrees to pay for such reaming, casing and cementing at the rate of $ 40.00 per shift plus cost of materials used up, lost or destroyed.

Casing lost or ordered left in place will be invoiced to the first party at cost.

9. ~~IX.~~ The party of the second part agrees to cover its employees with Workmen's Compensation Insurance under the State Laws of Kentucky and agrees to furnish the first party with insurance certificate as evidence of such coverage.

CORE DRILLING AGREEMENT

NO.
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10. ~~XX~~ The payments for the herein-described work are to be made on the first of each month for all invoices rendered for work done up to the 25th day of the previous month.

11. ~~XXX~~ The party of the second part hereby agrees to ship the outfit for the herein described work within 15 days from the date of notification of acceptance of this agreement, but the said second party shall not be responsible for delays caused by strikes, railroad accidents or blockades. **This proposition is for immediate acceptance,** but although accepted does not constitute a contract until approved by an officer of the Joy Manufacturing Company, at its office in Pittsburgh, Pennsylvania, U. S. A., and is subject to change or withdrawal until so approved.

It is expressly agreed that there are no promises, agreements or understandings outside of this contract, and that no agent or salesman has any authority to obligate the Joy Manufacturing Company, by any terms, stipulations or conditions not herein expressed. This contract may be altered only by written consent of both parties hereto.

JOY MANUFACTURING COMPANY

By S. Pilarski

IN WITNESS WHEREOF, the parties hereto have set their hands and seals.

Accepted by

.....

.....

Title .....

Approved by JOY MANUFACTURING CO.

By .....

Date .....

Title .....

JOY MANUFACTURING COMPANY

Form 6215 (3A)

RECEIVED
AUG - 8 1956

Marion, Kentucky

March 13, 1956

Mr. Robert Frazer

Marion, Kentucky

Dear Mr. Frazer:

I am submitting my bid on core drilling that you asked me for. My price for the drilling is $3.50 per foot.

Yours truly,

Carlton Tabor

Carlton Tabor

DOCKET COPY
Surname:
Anderson
Houk
Whitesides

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

AUG 3 1956

Mr. Robert N. Frazer
President, Kentucky Fluorspar Company
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159-fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

Reference is made to your letter of July 27, 1956, stating that you will submit the information we requested on February 27, 1956.

Pursuant to your request, we are enclosing a copy of this letter which we note you are unable to locate. Your prompt attention to this matter will enable us to give further consideration to your application. Please be informed that we will need all the data requested.

Sincerely yours,

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

Enclosure

WCAnderson:ms 8/2/56
Copy to: Docket
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File

R.C.J.

KENTUCKY FLUORSPAR COMPANY

INCORPORATED

GROUND, LUMP AND GRAVEL
FLUORSPAR

MARION · KENTUCKY

PHONE 247

4159

July 27, 1956

A

RECEIVED
AUG - 1 1956

Mr. Frank E. Johnson, Acting Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Johnson:

We are replying to your letter of the 23rd, we wish to advise that we are just getting ready to send you the additional information you wanted, but we have been unable to locate your letter of February 27. Therefore, in order for us to give you all the data you asked for will you please send us a copy of your letter of February 27.

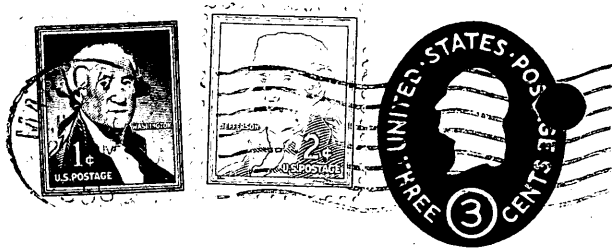
Yours very truly,

KENTUCKY FLUORSPAR COMPANY

Robert N. Frazer,
President

RNF:jo

KENTUCKY FLUOR SPAR COMPANY
Box 431
MARION, KENTUCKY



Air mail

Mr. Frank E. Johnson, Acting Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Docket Copy
Surname:
Anderson
Hark

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

JUL 23 1956

Mr. Robert N. Frazer
P. O. Box 431
Marion, Kentucky

Re: Docket No. DMEA-4159 - Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

Reference is made to our letter of February 27, 1956, requesting additional information needed to continue processing the subject application. To date we have not received any of the requested information.

We wish to cooperate with you in allowing ample time to submit the requested information. However, if the needed data have not been received by August 31, 1956, we will assume you are no longer interested and will consider your application as being withdrawn.

Sincerely yours,

Frank E. Johnson

Acting Administrator

WCAnderson:gad 7/23/56
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Mr. Anderson

R.C.S.

Field Team Visit to DMEA Applicant

Docket No. DMEA-4159 (Fluorspar)
Applicant: Kentucky Fluorspar Co.
Marion, Ky.
Property: Joe Lingang Property,
Livingston County, Ky.

RECEIVED
MAY 7 - 1956

While engaged in other DMEA work in the area, the offices of the Kentucky Fluorspar Co. were visited on April 23, 1956.

Mr. Robert N. Frazer, President of the company, was interviewed in connection with furnishing additional information on this application. The application was sent directly to the Knoxville office which transmitted it to Washington on February 6, 1956. Mr. Anderson of the Nonmetallic Minerals office sent a letter to Mr. Frazer on February 27 requesting additional information. To the date of this visit no action has been taken by Mr. Frazer.

In this interview and in response to questions, Mr. Frazer stated that he had not seen this occurrence for several years but that in his memory the deposit outcropped in only one place. This outcrop was in a draw or gully and consisted of three or four stringers of fluorspar, each about 1/4-inch wide and all contained in a rock width of three or four feet. Mr. Frazer did not seem to think that he would do any work to justify a DMEA loan and stated that it was his understanding that the DMEA embraced what is interpreted as prospecting. In justification of his view he cited recent Government diamond drilling on the Tabb fault. It was explained that this had been a Bureau of Mines project and not connected with the DMEA. In my opinion, no work will be done toward furnishing additional information on Docket No. 4159.

Mr. Frazer stated that his company was considering submittal of a DMEA application (fluorspar) on a property owned by Robert Frazer and located in Caldwell County, Ky. This property has no showing of fluorspar mineralization and is assumed to be on the northwestern extension of the Tabb fault. The Williamson and Schwenck fluorspar mines are operating on the Tabb fault about 1½ miles southeastward of this property. Mr. Frazer's property is on the approximate strike of the Tabb fault.

All forms necessary for an application were furnished Mr. Frazer and all information required by the Government was reviewed with him.

H. L. Burmeister

H. L. Burmeister

May 1, 1956

Field Team Visit to DMEA Applicant

Docket No. DMEA-4159 (Fluorspar)
Applicant: Kentucky Fluorspar Co.
Marion, Ky.
Property: Joe Lingang Property,
Livingston County, Ky.

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H. L. Burmeister

H. L. Burmeister

May 1, 1956

Field Team Visit to DMEA Applicant

Docket No. DMEA-4159 (Fluorspar,
Applicant: Kentucky Fluorspar Co.
Marion, Ky.
Property: Joe Lingang Property,
Livingston County, Ky.

RECEIVED
MAY 7 - 1956

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All forms necessary for an application were furnished Mr. Fraser and all information required by the Government was reviewed with him.

H. L. Burmeister

H. L. Burmeister

May 1, 1956

DOCKET COPY
Surname:
Anderson
Houk
Mittendorf

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

Mr. Robert N. Frazer
P. O. Box 431
Marion, Kentucky

FEB 27 1956

Re: Docket No. DMEA-4159-Fluorspar
Robert N. Frazer
Joe Lingang Property
Livingston County, Kentucky

Dear Mr. Frazer:

Reference is made to your application for Government assistance to explore the subject property.

In your application, you refer to the proposed work as prospecting. Prospecting, as this expression is commonly understood, is not contemplated in the Defense Minerals Exploration Administration exploration program. The information submitted with your application is too meager to properly evaluate it. It is doubtful if the examining engineers could properly evaluate the exposure of fluorspar veinlets by an on-site examination. Perhaps you have, or can obtain additional information on the exposure.

To continue with the processing of your application, additional information will be appreciated. We would like your comments on the features that you think will qualify your property for Government exploration assistance. A sketch map of the locality in which the veinlets occur would be helpful. This sketch may show the extent of the veinlets, an estimate of the fluorspar content and the formation in which the veinlets occur and the location and direction of the drill holes. We would like to know the size and depth of your planned drill holes. You indicate a cost of $2.50 to $3.25 per foot of drilling plus the usual charges for reaming, cementing, etc. What are these usual charges? In this connection, please be advised that if a contract is recommended, you will be required to furnish three bids from drilling contractors.

The lease attached to the application does not have a date or signature. Please forward the date of the lease and evidence that the Owners have signed it.

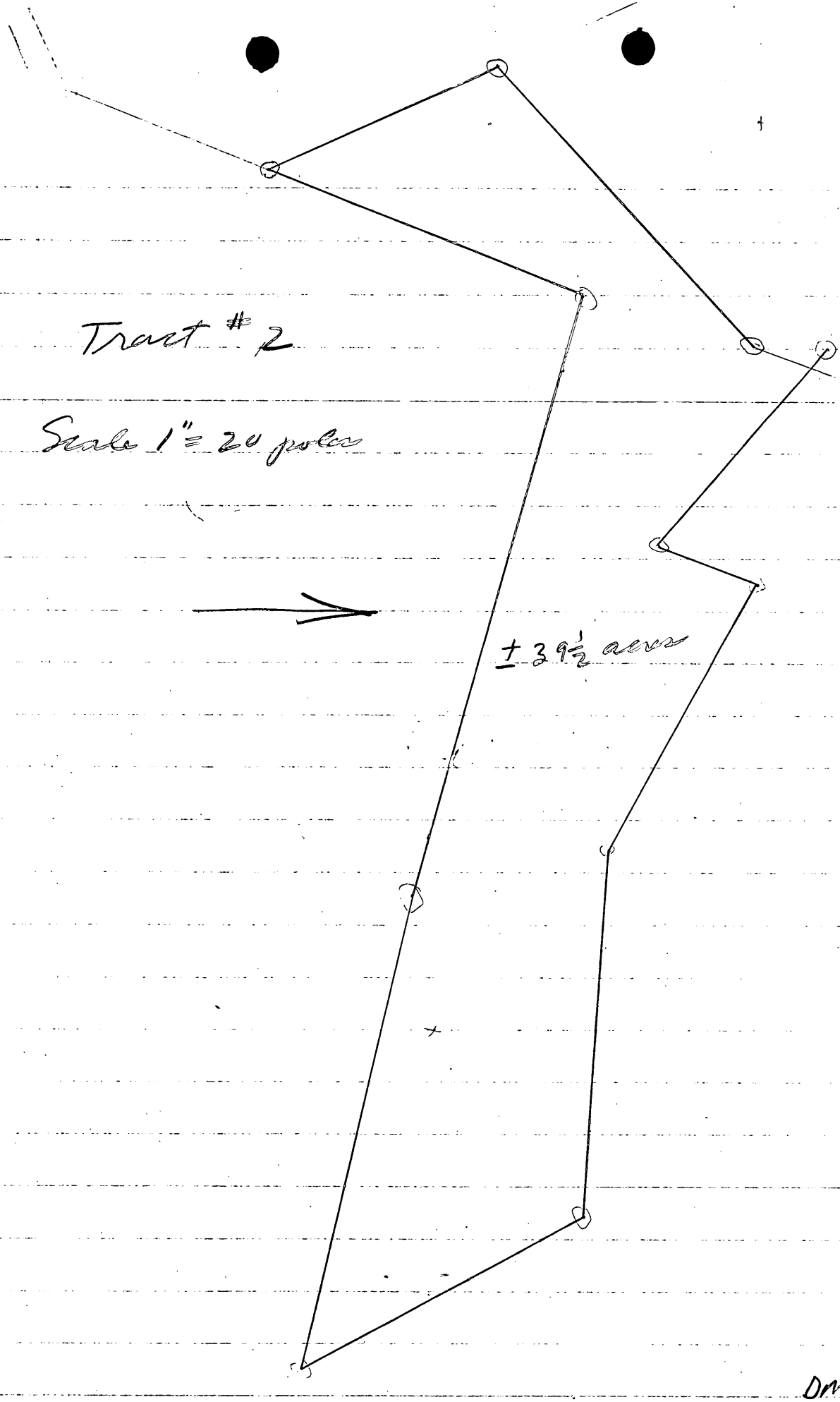
Sincerely yours,

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

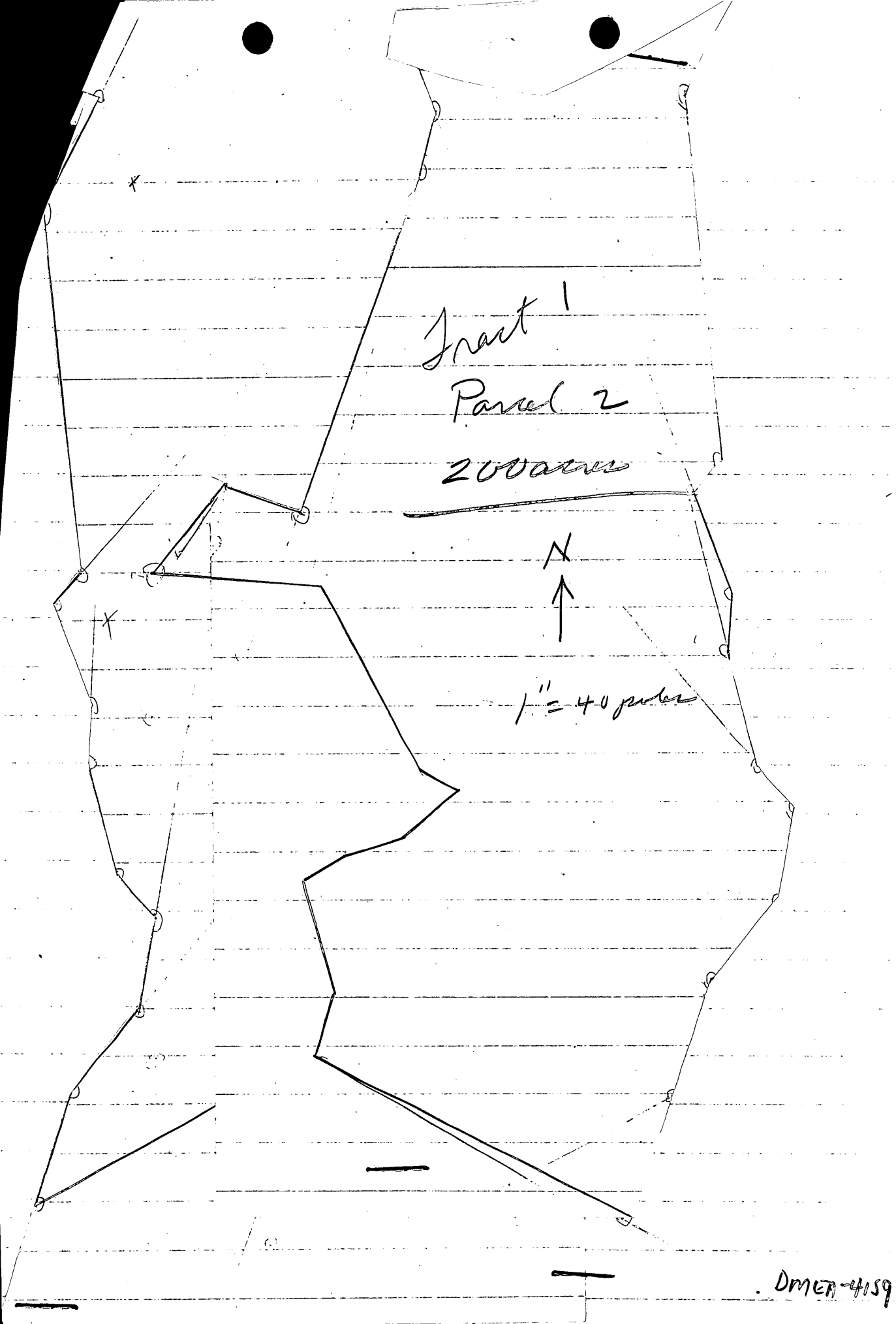
Mr. Holtzinger, 3522
Mr. Houk
Mr. Anderson

WCAnderson:ms 2/24/56
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222

R.G.K.



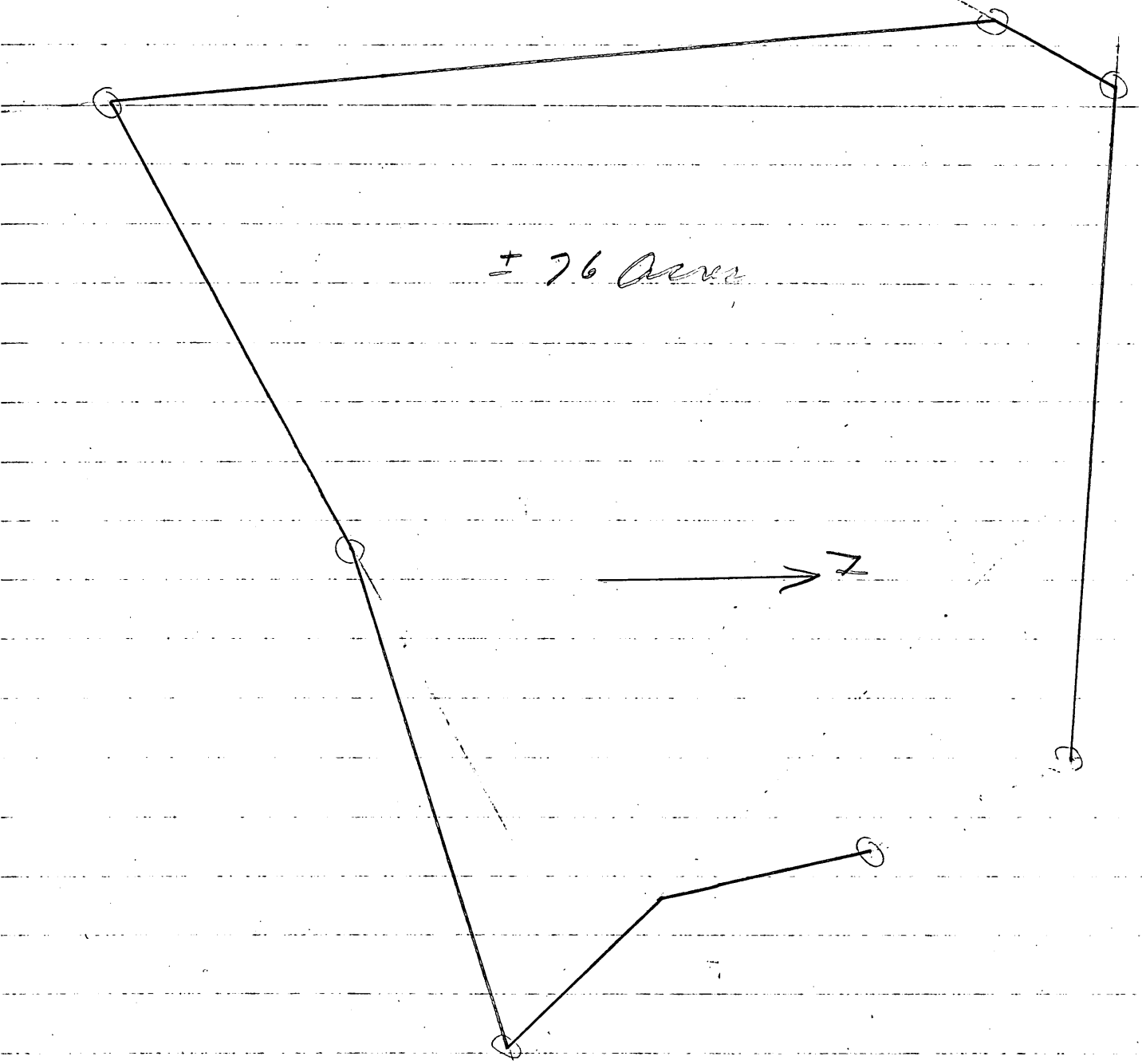
DMEA-4159



DMEA-4159

Tract No. 1. Parcel #1

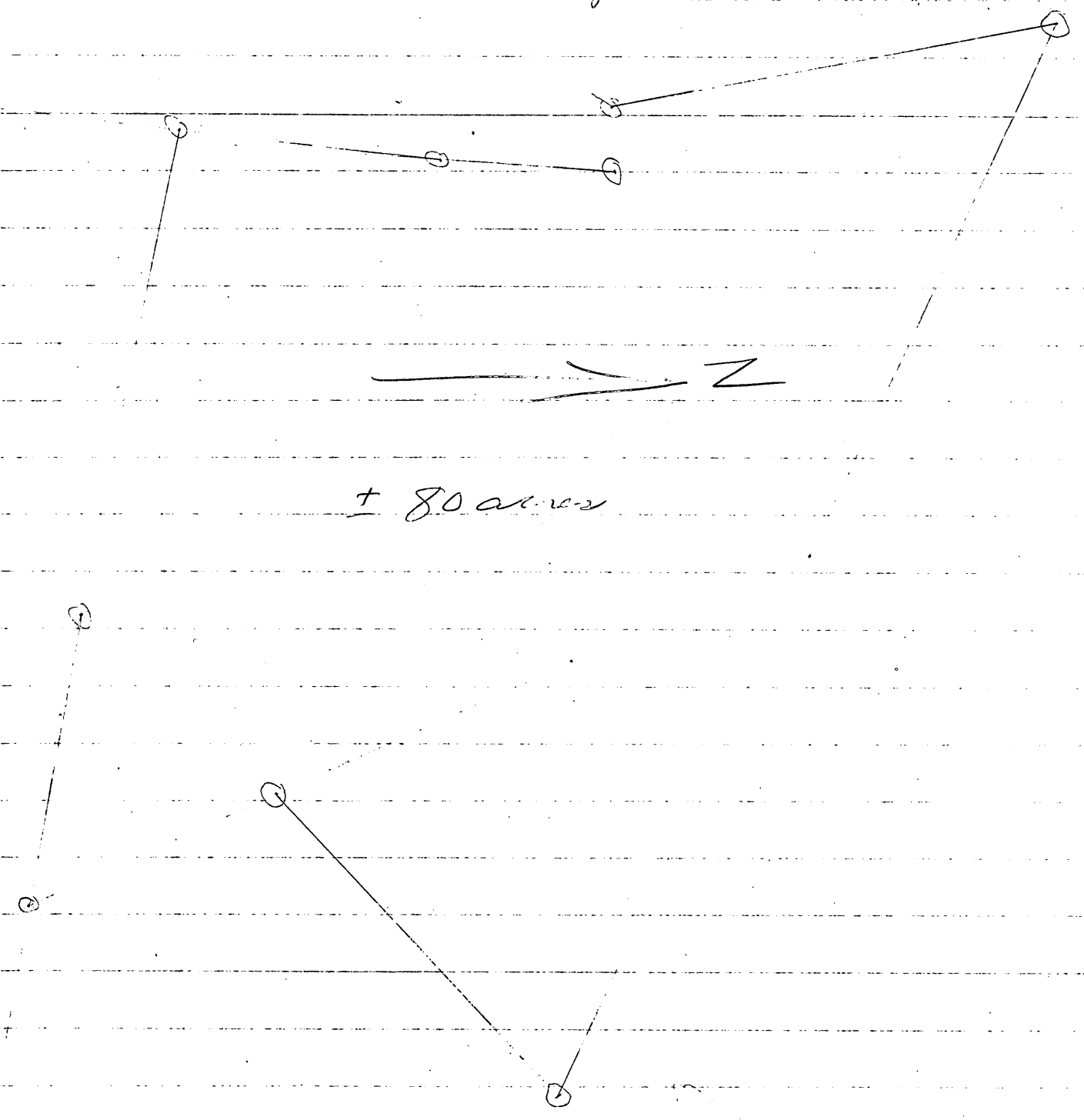
Scale: 1" = 20 poles



DMEA-4159

Trail run 3

1" = 20 yards



DMEA-4159

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

RECEIVED
FEB 1 6 1956

February 16, 1956

Memorandum

To: L. G. Houk, Chief, Non-Metallic Minerals Division, DMEA

From: Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of application, DMEA Docket No. 4159, Robert N. Frazer, Lingang Tract, Livingston County, Kentucky, Fluorspar-Lead-Zinc, Estimated Cost $3,000.

The application states only that assistance is requested to "prospect" a fluorspar showing, and as submitted does not contain sufficient information to warrant a field examination. However, it is my understanding that the applicant has been asked to furnish additional data, and in view of the applicant's long experience in fluorspar mining, it is recommended that the application and such further information as is furnished be referred to the field team for further evaluation and appropriate action. Possibly a visit might be made if the field team is in the district on other DMEA business.

John E. Holtzinger

John E. Holtzinger

Copy to: F I L E S
Div. of Minerals
Br. of Const. and Chem. Mats.
Mr. Holtzinger
Mr. Robert W. Geehan
Mr. Thor H. Kiilsgaard, USGS, Room 5222

IN REPLY REFER TO:

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

RECEIVED
FEB 10 1956

February 10, 1956

Re: DMEA 4159
Robert N. Frazer
J. W. Lingang Tract
Livingston Co., Kentucky
$3,000.00 - Fluorspar

Memorandum

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

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

Subject: Review of application.

The applicant requests Government participation in the diamond drilling of an outcrop of fluorspar-bearing rock. No work has been done on the showing and no information concerning it is given, other than the statement, "I found a few little veinlets of fluorspar in a rocky branch and have always wanted to prospect this exposure."

The applicant would seem to have characterized the proposed work correctly when he called it 'prospecting'.

Referral of the application to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

February 8, 1956
Subject: DMEA-4159
Re: Exploration Assistance

Mr. Robert N. Frazer
P. O. Box 431
Marion, Kentucky

My dear Mr. Frazer:

The receipt of your application dated February 2, 1956, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4159 and referred to the Nonmetallic Minerals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

Memorandum

To: Executive Officer, DMEA Field Team, Region V

From: Chief, Operation's Control and Statistics Division

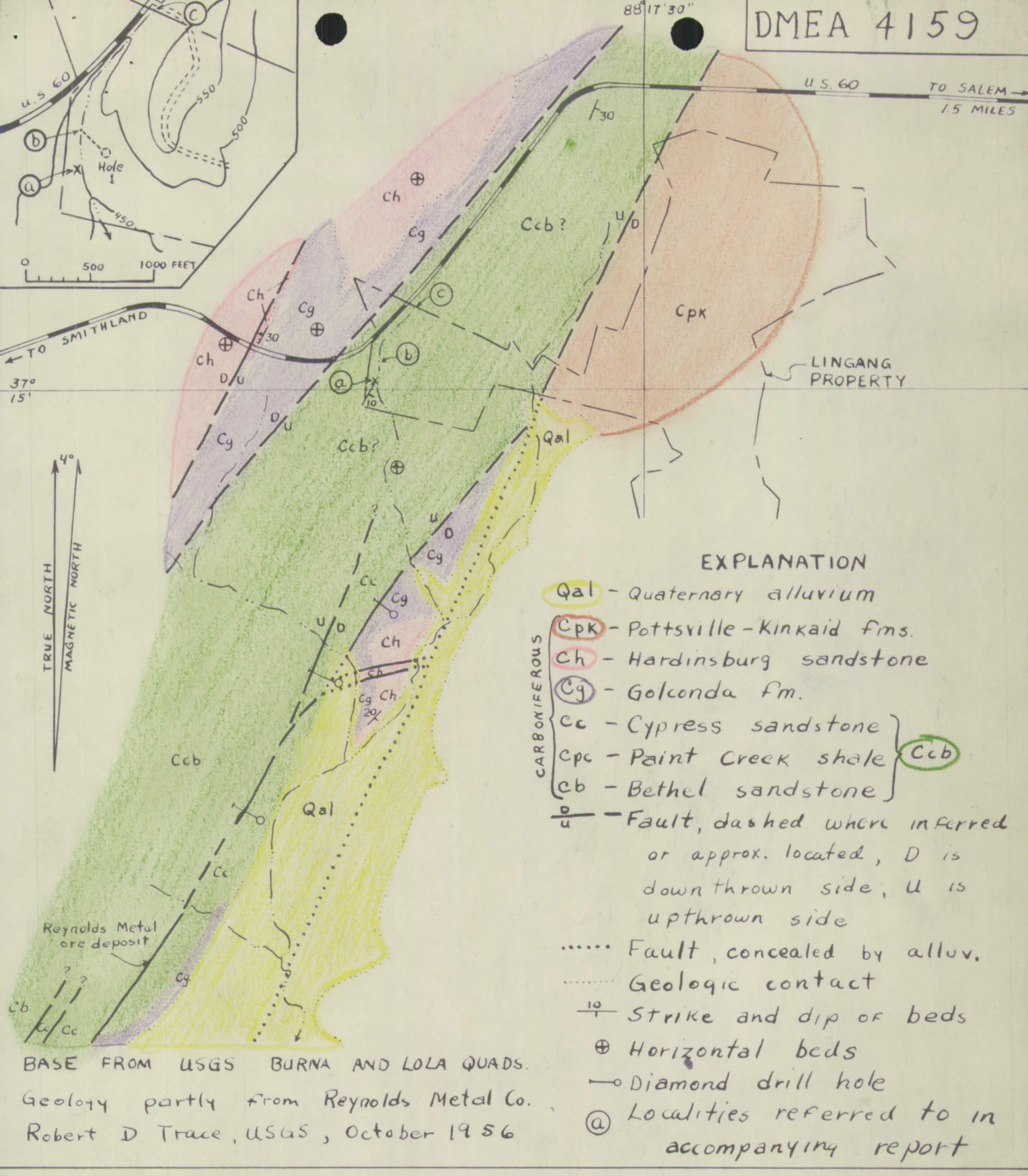
Subject: Assignment of Docket Number

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

DMEA - 4159 Robert N. Frazer

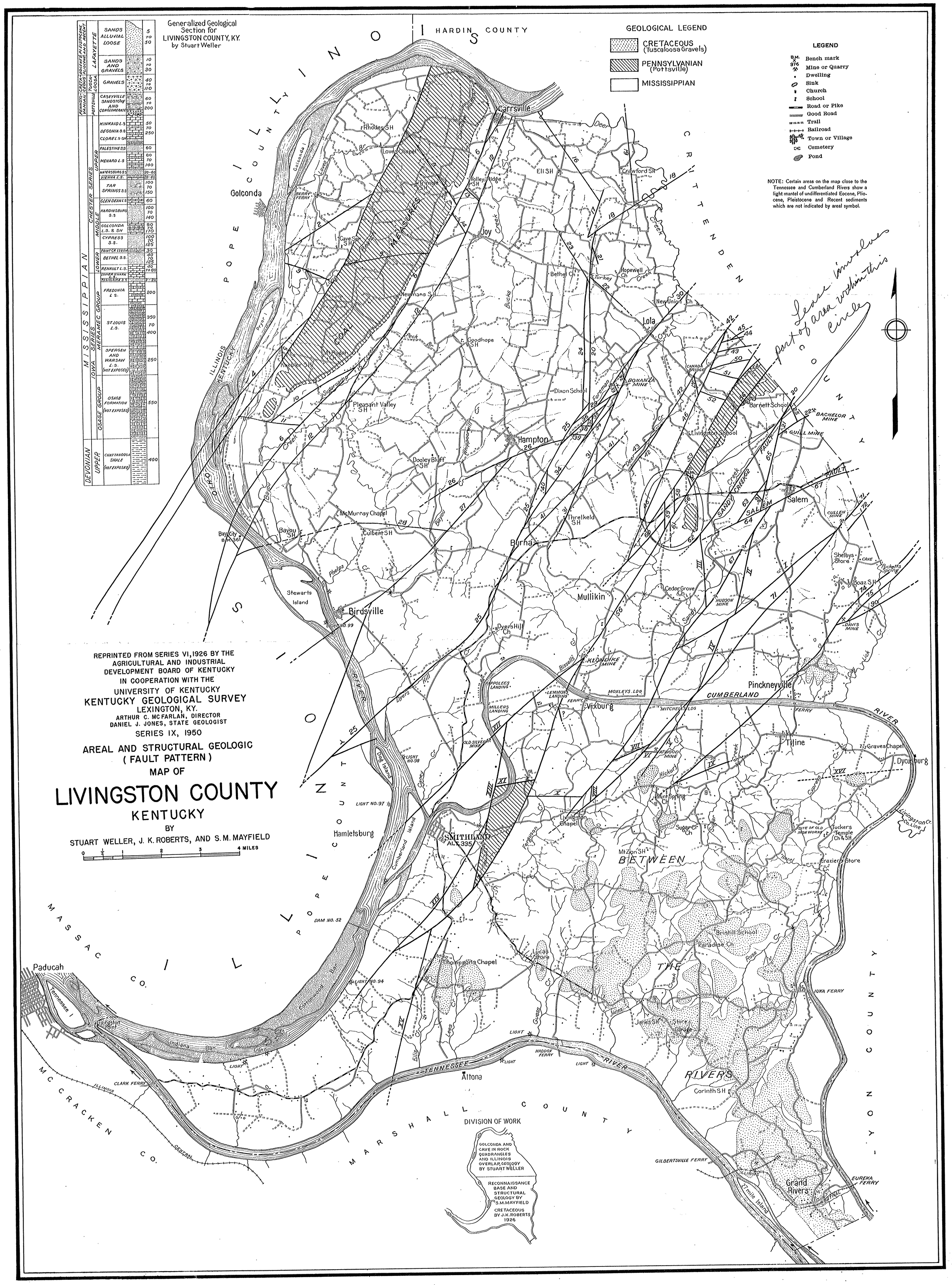
Robert E. Adams
Chief, Operation's Control
and Statistics Division

DMEA 4159



BASE FROM USGS BURNA AND LOLA QUADS.
Geology partly from Reynolds Metal Co.
Robert D. Trace, USGS, October 1956

Figure 2. RECONNAISSANCE GEOLOGIC MAP OF LINGANG PROPERTY AND NEARBY AREAS, LIVINGSTON COUNTY, KENTUCKY


Generalized Geological Section for LIVINGSTON COUNTY, KY. by Stuart Weller
PENNSYLVANIAN
CRETACEOUS
EOCENE
PLEISTOCENE AND RECENT
PLIOCENE
TUSCALOOSA
LAFAYETTE
POTTSVILLE
CHESTER SERIES
UPPER
MIDDLE
LOWER
MISSISSIPPIAN
IOWA SERIES
MERAMEC GROUP
OSAGE GROUP
DEVONIAN
UPPER
SANDS ALLUVIAL LOOSE 5 TO 50
SANDS AND GRAVELS 10 TO 30
GRAVELS 40 TO 110
CASEYVILLE SANDSTONE AND CONGLOMERATE 60 TO 200
KINKAID L.S. 50 TO 250
DEGONIA S.S.
CLOREL S. SH.
PALESTINE S.S. 60
MENARD L.S. 80 TO 140
WATERSBURG S.S. 20-60
VIENNA L.S. 20-40
TAR SPRINGS S.S. 100 TO 150
GLEN DEAN L.S. 60
HARDINSBURG S.S. 100 TO 140
GOLCONDA L.S. & SH 80 TO 170
CYPRESS S.S. 100 TO 125
PAINT CR. L.S. & SH. 30
BETHEL S.S. 40 TO 125
RENAULT L.S. 40 TO 80
LOWER O'HARA L.S. & ROSICLAIRE S.S. 2-20
FREDONIA L.S. 200
ST. LOUIS L.S. 350 TO 400
SPERGEN AND WARSAW L.S. (NOT EXPOSED) 250
OSAGE FORMATION (NOT EXPOSED) 550
CHATTANOOGA SHALE (NOT EXPOSED) 400
HARDIN COUNTY
POPE COUNTY
CRITTENDEN COUNTY
LYON COUNTY
MARSHALL COUNTY
MASSAC CO.
MC CRACKEN CO.
ILLINOIS
KENTUCKY
OHIO RIVER
CUMBERLAND RIVER
TENNESSEE RIVER
GEOLOGICAL LEGEND
CRETACEOUS (Tuscaloosa Gravels)
PENNSYLVANIAN (Pottsville)
MISSISSIPPIAN
LEGEND
Bench mark
Mine or Quarry
Dwelling
Sink
Church
School
Road or Pike
Good Road
Trail
Railroad
Town or Village
Cemetery
Pond
NOTE: Certain areas on the map close to the Tennessee and Cumberland Rivers show a light mantel of undifferentiated Eocene, Pliocene, Pleistocene and Recent sediments which are not indicated by areal symbol.
Leave involves part of area within this circle
REPRINTED FROM SERIES VI, 1926 BY THE AGRICULTURAL AND INDUSTRIAL DEVELOPMENT BOARD OF KENTUCKY IN COOPERATION WITH THE UNIVERSITY OF KENTUCKY
KENTUCKY GEOLOGICAL SURVEY
LEXINGTON, KY.
ARTHUR C. MC FARLAN, DIRECTOR
DANIEL J. JONES, STATE GEOLOGIST
SERIES IX, 1950
AREAL AND STRUCTURAL GEOLOGIC (FAULT PATTERN) MAP OF
LIVINGSTON COUNTY
KENTUCKY
BY
STUART WELLER, J. K. ROBERTS, AND S. M. MAYFIELD
0 1/2 1 2 3 4 MILES
DIVISION OF WORK
GOLCONDA AND CAVE IN ROCK QUADRANGLES AND ILLINOIS OVERLAP, GEOLOGY BY STUART WELLER
RECONNAISSANCE BASE AND STRUCTURAL GEOLOGY BY S.M. MAYFIELD
CRETACEOUS BY J.K. ROBERTS 1926
Golconda
Carrsville
Rhodes SH
Loves Chapel
Eli SH
Crawford SH
Joy Creek
Bethel Ch
Hopewell Ch
New Union Ch
Lola
Newmans SH
Goodhope SH
Dixon School
Pleasant Valley SH
Hampton
Barnett School
Livingston School
Salem
Dooley Bluff SH
McMurray Chapel
Culbert SH
Bayou SH
Bay City
Burna
Threlkeld SH
Shelbys Store
Boaz SH
Stewarts Island
Birdsville
Mullikin
Cedar Grove Ch
Dyers Hill Ch
Pinckneyville
Vixburg
Tyline
Graves Chapel
Dycusburg
Hamletsburg
SMITHLAND
ALT. 335
Mt. Zion SH
BETWEEN
Fraziers Store
Bristill School
Paradise Ch
Thompsons Chapel
Lucas Store
THE
RIVERS
Corinth SH
Paducah
Altona
Grand Rivers
Gilbertsville Ferry
Clark Ferry
Haddox Ferry
Eureka Ferry
Iuka Ferry
Canada Bridge
Bonanza Mine
Bachelor Mine
Guill Mine
Cullen Mine
Hudson Mine
Klondike Mine
Atwood Mine
Davis Mine
Old Silver Mine
Sandy Creek Fault
Salem Fault
Dam No. 52
Light No. 97
Light No. 98
Light No. 99
Light No. 94
Cottonwood Bar
Indiana Bar
Tennessee I.
Livingston Point
Cumberland Island
Dog Island
27 mile Island
Livingston Cr. Co. Line
Illinois Central