DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Ozark-Mahoning Company

Rosiclare, Illinois

pertaining to Exploration Project Contract No. Idm-2818, Docket No. DMEA-3644 including Amendment No. 1, for the months of August 1955, to January 1956, inclusive, covering a project for the exploration of lead and zinc on property, known as the Jackson-Fee Tract located in Pope County, Illinois.

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

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

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

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

Total cost as billed by Contractor		$14,052.90
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$14,052.90

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Seven thousand twenty-six and 45/100 Dollars

$7,026.45

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

E. D. Talbert, Auditor

March 9, 1956

Division Copy

Sandrutz 3/13/56
Approved: A. Ullin

TERMINATION AGREEMENT

It is agreed this 19th day of March, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Ozark-Mahoning Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E818 (Docket No. DMEA-3644) dated June 16, 1955, hereinafter called the "Contract," that:

1. Effective February 5, 1956, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the fixed unit costs of work performed prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

4. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By Robert A. Lawrence
Executive Officer
DMEA Field Team, Region V

OZARK-MAHONING COMPANY

By H. Trewartha

Title Vice Pres.

Division Copy

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET No. DMEA-3644

AMENDMENT NO.1

It is agreed this 13th day of July, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Ozark-Mahoning Company, a Delaware Corporation, that Exploration Project Contract Edm-2310 (Docket No. DMEA-3644), dated June 16, 1955, is amended as follows:

Article 3...."The work to be performed is described in Exhibit "A". The Operator on or before July 25, 1955 shall commence the work, and on or before July 25, 1956 (unless the Operator's obligation to complete the work is terminated-see Article 6) shall complete the work."

This amendment is needed because drilling equipment was in use on another property and was not available for use on the contract until July 21, 1955.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the agreed unit cost of any item of work.

OZARK-MAHONING COMPANY

By J. Trwartha
Vice President

THE UNITED STATES OF AMERICA

By Robert A. Lawrence
EXECUTIVE OFFICER
DMEA REGION V

RECEIVED
AUG 2 4 1955

Division copy

RECEIVED

JUL 13 1955

MF-200A
(Revised June 1954)

Docket No. DMEA-364

Commodity Fluorspar, Lead and Zinc

Contract No. Idm-E 818

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

It is agreed this 16th day of June, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Ozark Mining Company, a Delaware corporation, whose mailing address is Rosiclare, Illinois, 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-200A), the attached Exhibit "A," Annex I, and [redacted].

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 Illinois, County of Pope, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] See Annex I of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [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: none

(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 of the land (lessor, seller, optionor, etc.), are attached, as follows: Consent to Lien of the Lessors of the leased land.

[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."

(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 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Fluorspar, lead and zinc. The work to be performed is described in Exhibit "A." The Operator on or before July 14, 1955 shall commence the work, and on or before July 14, 1956 (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the 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) *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.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $33,360.00. The Government will contribute 50 percent of the fixed unit costs as work is performed, in a total sum not in excess of $16,680.00: *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. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(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. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine 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.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

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

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

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

ARTICLE 7. *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 6) 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.

(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 thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

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

One and one-half (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 8. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The 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 8 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 9. *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 10. *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 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

CZARK-MAHONING COMPANY
(Operator)

By J. G. Irwantha
Vice President

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Administrator, Defense Minerals Exploration Administration
Porter

"Apod. Sol. Off."
Hoult
Talbert
Selfridge

I, A. M. Sperberg, certify that I am the assistant secretary of the corporation named as Operator herein; that J. G. Irewantha, who signed this contract on behalf of the Operator, was then Vice President 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.

A. M. Sperberg

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70618-1

RECEIVED
JUL 1 8 1955

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-3644

ANNEX I

The land referred to in Article 2 of the contract form is in Section 27, Township 12 South, Range 7 East and is as follows:

Land leased by Operator (mineral rights)

NE quarter of the NW quarter and the NW quarter of the NE quarter.

Land owned by Operator (mineral rights)

The NE quarter of the NE quarter.

RECEIVED
JUL 18 1957

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMRA-3644

EXHIBIT "A"

Description of the Work

Explore for fluorspar, lead and zinc by AX minimum size diamond drilling. The purpose of the drilling is to determine the location and characteristics of the Structures B, C, D, E, and F, shown on the attached Map #1, and possibly other unknown ore-bearing structures.

The work is divided into two successive stages. The Operator shall perform Stage I and so much of the work under Stage II as is approved in advance in writing by the Government.

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

Stage I

Stage I consists of drilling approximately 10 holes along the approximate line marked "Cross sectional line" on Map #1, at plus or minus 45 degrees to the favorable ore horizon. The holes shall average approximately 450 feet in depth.

The initial hole shall probe for the extensions of Structure B. Subsequent holes shall be drilled to the northwest of the initial hole at no closer than 200-foot intervals. No portion of a drill hole may be within 150 feet of the external boundary of the land described in the contract.

Stage II

Stage II consists of not to exceed 7,500 feet of drilling on favorable structures indicated in Stage I. The minimum interval between holes shall be 200 feet.

Fixed Unit Costs

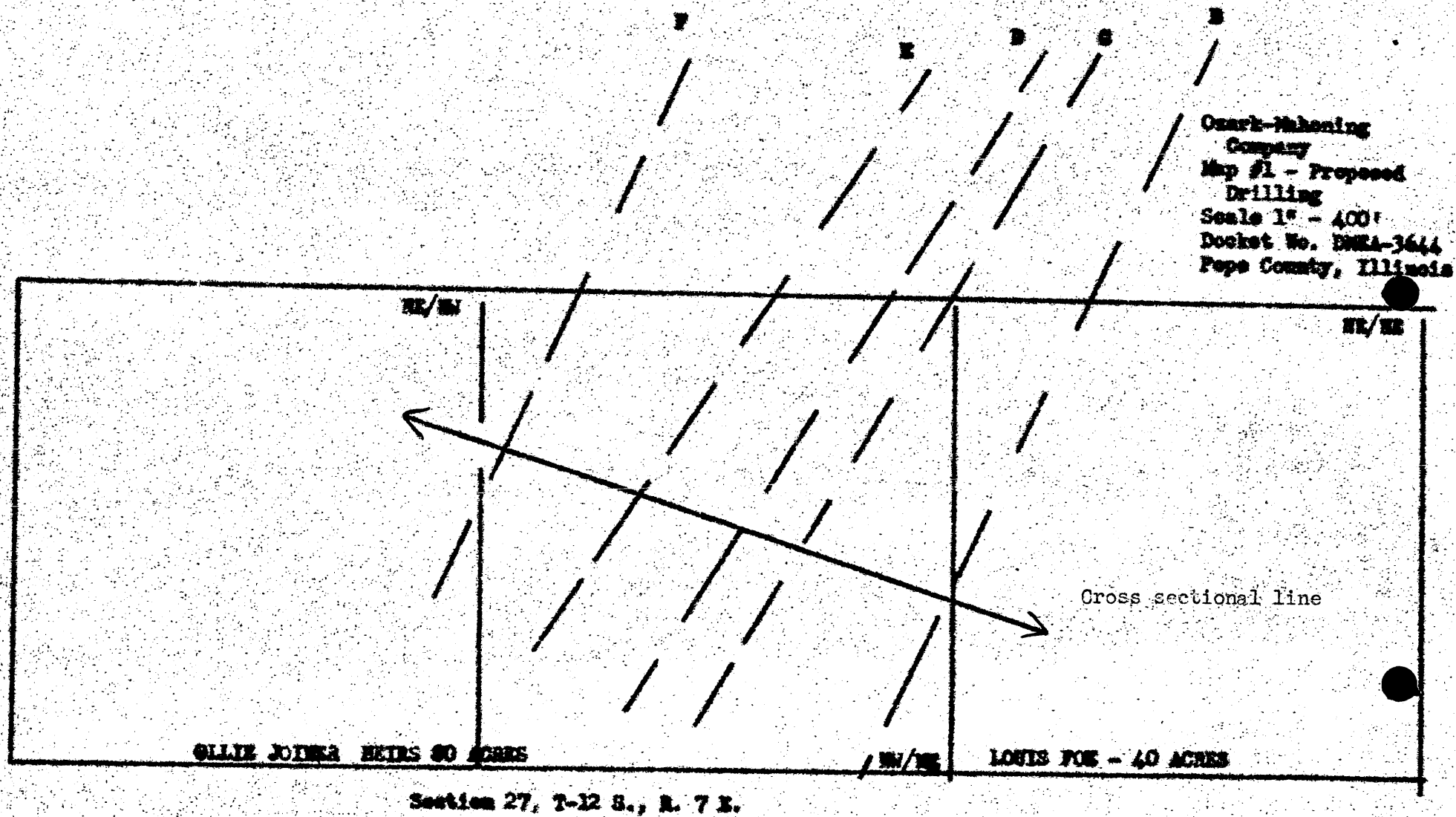
(The fixed unit costs include all costs whatsoever necessary to complete the project.)

Stage I

4,500 feet of diamond drilling @ $2.78/ft.	$12,510.00

Stage II

7,500 feet of diamond drilling @ $2.78/ft.	20,850.00
Estimated Total Fixed Unit Costs	$33,360.00
Government Participation @ 50%	$16,680.00



Section 27, T-12 S., R. 7 E.

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Ozark-Mahoning Company
Docket No. DMEA- 3644
Contract No. Idm-E 818
Contract Date JUN 16 1955

CONSENT TO LIEN

RECEIVED
JUL 13 1955

To the United States of America:

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

The NE Quarter of the NW Quarter and the NW Quarter of the NE Quarter

Section 27, Township 12 South, Range 7 East.

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/

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 30th day of June, 1955.

Maggie Joiner	1 Maggie Joiner		
B. E. Joiner	2 B. E. Joiner	[Seal]	Rosiclare, Hardin County, Ill.
Eugene Rose	3 Eugene Rose		" " " " "
Gladys Rose	4 Gladys Rose	[Seal]	Marion, Crittenden Co., Ky.
Mildred Lowry	5 Mildred Lowry		" " " " "
I. A. Lowry	6 I. A. Lowry	[Seal]	Albert Lea, Freeborn Co., Minn.
			" " " " "

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]

600

SEP 2 3 1956

Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Docket No. [illegible] lead and zinc
Ozark-Mahoning Company
Joiner-Fox Tract
Pope County, Illinois
Contract No. [illegible]

Gentlemen:

Reference is made to your terminated exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the contract. In the absence of such certification, the Government retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this project. Your attention, however, is called to the provisions of the contract which require the operator to keep and preserve certain records for the period indicated.

Your interest in the [illegible] exploration program and participation therein are fully appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

JHopkins:ms 9/21/56
Copy to: Docket
Mr. Chambers
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File

Maggie Joiner)
B. E. Joiner) landowners
Eugene and Gladys Rose)
I. A. and Mildred Lowry)

600

SEP 2 1956

Mrs. Maggie Joiner

Rosiclare, Illinois

Re: Docket No. DMEA-3614-fluorspar,
lead and zinc
Ozark-Mahoning Company
Joiner-Fox Tract
Pope County, Illinois
Contract No. Idm-2818

Dear Mrs. Joiner:

Reference is made to the Owner's Consent to Lien which you executed on June 30, 1955, in connection with the DMEA contract for an exploration project on your property located in Pope County, Illinois.

For your information, there is enclosed a copy of our letter of this date to the Ozark-Mahoning Company advising that the Government retains no claim or lien against the property described in the contract or on any future production therefrom.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

JHopkins:ms 9/24/56
Copy to: Docket
Field Team, Region V
Mr. Ellingsard, 5222
Mr. McDougal, 3522
Mr. Hook
Admr. R. File

Mr. B. E. Joiner

Rosiclare, Illinois

Re: Docket No. DMEA-3444-fluorspar, lead and zinc
Ozark-Mahoning Company
Joiner-Fox Tract
Pope County, Illinois
Contract No. Idm-8818

Dear Mr. Joiner:

Reference is made to the Owner's Consent to Lien which you executed on June 30, 1955, in connection with the DMEA contract for an exploration project on your property located in Pope County, Illinois.

For your information, there is enclosed a copy of our letter of this date to the Ozark-Mahoning Company advising that the Government retains no claim or lien against the property described in the contract or on any future production therefrom.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

JHopkins:ms 9/24/56
Copy to: Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R.File

SEP 26 1956

Mr. and Mrs. Eugene Rose

Marion, Kentucky

Re: Docket No. DMEA-3611-fluorspar,
lead and zinc
Ozark-Mahoning Company
Joiner-Foe Tract
Pope County, Illinois
Contract No. Idm-5818

Dear Mr. and Mrs. Rose:

Reference is made to the Owner's Consent to Lien which you executed on June 30, 1955, in connection with the DMEA contract for an exploration project on your property located in Pope County, Illinois.

For your information, there is enclosed a copy of our letter of this date to the Ozark-Mahoning Company advising that the Government retains no claim or lien against the property described in the contract or on any future production therefrom.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure:

JHopkins:ms 9/24/56
Copy to: Docket
Field Team, Region V
Mr. Killagnard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File

Mr. and Mrs. I. A. Leary

Albert Lea, Minnesota

Re: Docket No. DMEA-364-fluorspar, lead and zinc
Ozark-Mahoning Company
Joiner-Foe Tract
Pope County, Illinois
Contract No. Idm-8318

Dear Mr. and Mrs. Leary:

Reference is made to the Owner's Consent to Lien which you executed on June 30, 1955, in connection with the DMEA contract for an exploration project on your property located in Pope County, Illinois.

For your information, there is enclosed a copy of our letter of this date to the Ozark-Mahoning Company advising that the Government retains no claim or lien against the property described in the contract or on any future production therefrom.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

JHopkins:mc 9/24/56
Copy to: Docket
Field Team, Region V
Mr. Killagnard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File

HP
anderson

Project Summary Report

September 21, 1956

By: James Hopkins

1. Docket No. DMEA-3644-fluorspar, lead and zinc
Ozark-Mahoning Company
Joiner-Fee Tract
Pope County, Illinois
Contract No. Idm-E818

Operator: Ozark-Mahoning Company
Rosiclaire, Illinois
Operator's Property Rights:
Lessee of Mineral Rights in NE¼, NW¼ and NW¼ of the NE quarter, Sec 27, T. 125., R. 7 E., and owner of Rights in NE¼,NE¼, all in Pope County.

2. Contract: dated June 16, 1955
(a) Work authorized:

Stage I
Diamond drilling 4,500 ft. @ $2.78/ft. $12,510.00

Stage II
Diamond drilling 7,500 ft. @ $2.78/ft. $20,850.00

Estimated Total Cost $33,360.00

(b) Amendments:
No. 1 dated July 13, 1955, changes dates of starting and completion.
(c) Work completed
Diamond drilling 5055 ft. @ $2.78/ft. $14,052.90

Work began July 21, 1955
Work terminated by mutual agreement February 5, 1956, because of the lack of significant mineralization and structure.
Final Operator's Report dated February 6, 1956.
Final Field Team Report dated March 6, 1956.

3. Audit:
Report of Review dated March 9, 1956

Total Cost as billed by the operator	$14,052.90
Exceptions	none
Total Accepted Cost	$14,052.90
Government participation	$ 7,026.45

4. Certification of Discovery - none issued

5. Comments:

Geologic Premise:

Considerable exploration by drilling of the areas surrounding the Joiner and Foe tracts has established a geologic pattern of structures that may extend into this area. Since the area is covered by a heavy thickness of alluvion, exploration of these structures can only be satisfactorily performed by diamond drilling to intersect these structures in favorable stratigraphic horizons.

Geologic Criteria upon which project was based:

A thick series of Pennsylvanian rocks underlie the area.

Normal faults in adjacent areas can be projected across this area.

Mineralization along these faults in favorable horizons have resulted in the sizable economic deposits of fluorspar, lead and zinc.

Geologic Criteria developed during the project:

Some fluorspar, galena and sphalerite mineralization was encountered in three contiguous drill holes on Fault Structure "A" in widths from 1' to 1½'. Similar mineralization was encountered in two contiguous drill holes on Fault Structure "C" in addition to the two mineralized faults, one unmineralized fault was revealed by drilling.

Only one highly favorable structure, "A" is present and no significant mineralization was discovered on it.

Future Possibilities:

It is concluded (by the Field Team), that no ore bodies were discovered under this exploration program which could be profitably mined at present or in the forseeable future, and that additional exploration is not warranted.

Recommendations:

In accordance with the above conclusions, the Field Team recommends that no certification of discovery or development be issued.

The Nonmetallic Minerals Division and the Commodity Divisions of the Geological Survey and Bureau of Mines concur in the recommendation.

JHopkins:ms 9/21/56
Copy to: Mr. Houk
Admr. R. File

James Hopkins

IN RE

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

RECEIVED
JUNE 7 1956

June 6, 1956

Re: DMEA 3644 Idm-5818
Ozark-Mahoning Co.,
Joiner-Foe Tract
Pope County, Illinois
$33,360.00 - Fluorspar

Memorandum

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

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

Subject: Review of Field Team Final report

The applicant requested assistance in diamond drilling the connecting link of a fault structure and searching for other faults by crossectional angle hole drilling.

The known fault "A", which had been drilled and in places shown to be ore bearing, northeast and southwest of the tract was found to be somewhat mineralized but lacking in bodies large enough to mine. Another fault, "C", was encountered but it also lacks ore bodies though mineralized like the "A" fault.

A total of 5,055 feet of Ax-size holes was drilled at a cost of $14,052.90 out of the $33,360.00 approved for the project. Work was stopped by the operator because of lack of significant mineralization.

As no ore was found and none can be inferred as a result of the drilling, the examiners and the Field Team recommend that no certification be imposed upon the property.

I concur with that recommendation.

N. E. Nelson

N. E. Nelson

NENelson:btr
G 6/6/56

cc: John E. Holtzinger, Rm. 3522
Director's reading file 4212
Branch Reading File
DMEA(3)
Chron. File
Docket File

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

RECEIVED
APR 5 - 1956

April 5, 1956

Memorandum

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

From: Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of final Field Team report dated March 19, 1956 on DMEA 3644, Idm E-818, Fluorspar-Lead-Zinc, Ozark Mahoning Company, Rosiclare, Illinois, Joiner-Foe tract, Pope County, Illinois. Cost of project, $14,052.90.

The subject report of the Field Team is complete and its conclusion is concurred in that the work completed did not result in discovery or development of a minable ore body. However, in drilling on the Reid tract, immediately southeast of the contract area, the Field Team reports that the operator has been able to extend mineralization discovered along structure "A". Although the northernmost hole drilled on the Reid tract did not show mineralization, the Field Team states that there is a possibility that this mineralization may extend northeastward along structure "A" into the contract area. The operator evidently plans to test this possibility by drilling at its own expense a hole near the southern boundary of the Joiner tract although it discontinued the DMEA project on the Joiner tract voluntarily.

Since there is some possibility that an ore body may be located by the operator at least partly in the contract area and partly as a result of work connected with this project, there may be some question as to whether or not it should now be determined that no certification be made. However, it is believed that this possibility is so slight that the Field Team's recommendation of no certification should be approved.

John E. Holtzinger

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

RECEIVED
MAR 26 1956

March 26, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-3644, Idm-E818, Termination Agreement on-
Ozark-Mahoning Co., Rosiclare, Illinois (Fluorspar)

Transmitted are three signed copies of the subject termination agreement. The usual distribution of the other copies has been made.

Robert A. Laurence

ZM.
cc:
Lynch
Millar
Opr. Com.
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON FIELD OFFICE
ROOM 1050 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

RECEIVED
MAR 21 1956

March 19, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Field Team Final Report, DMEA-364A, Idm-8818, Fluorspar-Lead-Zinc. Ozark-Mahoning Co., Rosiclare, Illinois Heiner-Poe Tract, Pope County, Ill.

Enclosed are four copies of the subject report. Work has been suspended, and we have requested permission to terminate the contract by mutual consent.

Certification is not recommended.

Robert A. Laurence
Executive Officer, DMEA
Region V

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

RAL/km.

cc:
Burmeister
Lynch
Files

Reviewed by
DMEA OPERATING COMMITTEE
3-23-56
(date)

Field Team's Final Report on Terminated Contract

by

H. L. Burmeister and Dewey H. Amos 1/

Docket DMEA No.3644 (Fluorspar, Lead, Zinc)
Contract No. Idm-2018
Ozark-Mahoning Co., Rosiclare, Illinois
Joiner-Foe Tract, Pope County, Illinois

RECEIVED
MAR 21 1956

- Summary -

The final field examination was made by the geologist since only geological data was required.

This exploration was conducted on two adjoining parcels of land situate in Pope County, Illinois, Section 27, Twsp. 12 South, Range 7 East, and consists of the following: (1) The Joiner Tract of 80 acres on which the Operator holds a mineral rights lease, and (2) The Foe Tract of 40 acres on which the Operator owns the mineral rights.

The contract was divided into two stages and provided for diamond drilling an unspecified total number of holes at minimum intervals of 200 feet and for a maximum total of 12,000 feet at a cost not to exceed $33,360.00. Exploration was conducted on a unit cost basis of $2.78 per foot. There were diamond drilled a total of 5055 feet of AA-size core drill holes; 3836 feet under Stage I and 1219 feet under Stage II. All drilling was done with Operator-owned equipment.

Mineralization in the immediate area is confined to fault zones and in practically all cases occurs where the wall rocks of the faults are of the Ste. Genevieve formation. Mineralization is usually confined to a stratigraphic interval of about 120 feet, from approximately 50 feet above the top to about 40 feet below the base of the Rosiclare sandstone.

Five fault structures bearing northeast-southwest were known to exist to the northeast of the exploration area. The purpose of Stage I

1/ Dewey H. Amos, Geological Survey
H. L. Burmeister, Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
3-23-56
(date)

was to determine the location and characteristics of these structures by drilling approximately 10 holes along a line crosscutting the strike of the faults. Drilling under Stage II was to be undertaken only if the results obtained in Stage I were encouraging.

Some fluorspar, galena and sphalerite mineralization was encountered in three contiguous holes on fault structure "A" in widths from 1 to 1½ feet. Similar mineralization was encountered in two contiguous drill holes on fault structure "C". In addition to the two mineralized faults, one unmineralized fault was revealed by the drilling.

Due to discouraging results the operator stopped work on February 4, and submitted his final report on February 7, 1956. The Government had not been previously informed of intention to stop work.

No production resulted from exploratory work.

- Conclusions -

Current drilling by the Ozark-Mahoning Co. on the Reid Tract immediately south of the contract area has extended the mineralization discovered on fault structure "A" both downdip and southwestward along the strike. The possibility exists that this mineralization may extend northeastward along fault structure "A" into the Joiner tract although the northernmost hole (No.1) drilled on the Reid tract was blank. The Company plans to drill a hole in the near future at their expense near the southern boundary of the Joiner tract to intersect structure "A". The southernmost hole (47) drilled on the Stotlar tract just north of the Roe tract was blank, indicating that the Stotlar body does not extend into the contract area.

Only one highly favorable structure, "A", is present and no significant mineralization was discovered on it. Unexplored portions of structure "A" in the Joiner-Roe tract are too short along the strike of the fault to contain minable ore bodies.

The operator estimates that an ore body of average grade for the area and located in favorable stratigraphy (about 250 feet), must contain a minimum of 20,000 tons to be profitably mined under present economic conditions. It is also estimated that under optimum economic conditions an ore body of the same grade and stratigraphic location would have to contain a minimum of 10,000 tons to insure profitable mining.

It is concluded that no ore bodies were discovered under this exploration program which could be profitably mined at present or in the foreseeable future, and that additional exploration of the Joiner-Foe tract is not warranted at this time either by private capital or with Government assistance.

- Recommendations -

In accordance with the above conclusions the Field Team representatives recommend that no certificate of discovery or development be issued.

- Description of Work Completed -

Work under this contract was started on July 21, 1955 and stopped on Feb. 4, 1956. Exploration was stopped by the Operator because of the lack of significant mineralization and structures.

Twelve AX-size holes were diamond core drilled with company-owned equipment for a total of 5055 feet at a total cost of $14,052.90. Nine holes totaling 3836 feet were completed under Stage I. These holes were collared at approximate 250-foot intervals along a "cross-sectional line" trending WNW-ESE across the Joiner-Foe tracts. All holes were drilled in a southeasterly direction on a -50° inclination. Three holes totaling 1219 feet were completed under Stage II of the contract. Two of these were drilled northeast of hole No. 1 to intercept fault zone "A" found in hole No. 1, and also on tracts to the north and south of the Joiner-Foe tract. These holes were inclined -50° to the southeast. One hole was drilled to the northeast

of hole No. 3 to encounter a fault zone found in No. 3. (see attached map)

Cross sections of drill holes accompany the Operator's final report.

- Geology -

The ore deposits in the vicinity of the Joiner and Roe tracts occur as veins in steeply dipping normal faults that cut gently dipping limestone, sandstone and shale beds of Mississippian age. The deposits consist of fluorspar with lesser amounts of sphalerite and galena in a gangue of calcite and barite.

Most of this area is covered with alluvium. A few scattered outcrops of sandstone occur which the drilling indicated as being the Cypress sandstone of Chester age. It is a white to light brown, fine-grained sandstone usually about 110 feet thick in this district. Only the lower few feet of the Cypress is present in the Joiner-Roe tract. The Paint Creek formation underlies the Cypress sandstone. Drilling revealed that this formation is 20-60 feet thick in the area and consists of gray, thinly bedded sandstone with numerous shale partings. Considerable variation in thickness of the formation is caused by an unconformity between it and the overlying Cypress sandstone. Underlying the Paint Creek formation is the Bethel sandstone of lower Chester age. It is fine-grained, white to light gray in color and about 90 feet thick. The Renault formation, the basal formation of the Chester series, underlies the Bethel sandstone. The formation is 80-85 feet thick and consists of alternating beds of gray limestone and gray shale. Limestones in the upper half of the formation are often oolitic. Underlying the Renault formation is the Ste Genevieve formation of Meramec age. This formation is divided into three members:

the Levias limestone member - the upper member, the Rosiclare sandstone member, and the Fredonia limestone member. The Levias is a light to dark gray oolitic limestone 30-40 feet thick, the Rosiclare a gray to green calcareous sandstone 28-30 feet thick, and the upper part of the Fredonia is a gray to brown limestone. All drill holes were bottomed in the upper portion of the Fredonia limestone.

The beds in the area strike about north-south and dip about 3° westward. Two fault zones with gravity-type displacement were encountered during the drilling. Both strike about N.27°E. The easternmost fault zone-designated as A - dips about 80° to the northwest and has a displacement along the dip of approximately 55 feet. This is the same structure on which two ore bodies have recently been discovered by Ozark-Mahoning Company: on the Stotlar tract to the northeast of the contract area and on the Reid tract to the southwest. The other fault zone (C) is about 400 feet west of A. It dips about 80° to the southeast and has a displacement along the dip of about 10 feet. This structure may be one of the faults encountered to the northeast on the Fairbairn tract (DMEA-2838). No indication of the other faults evidenced by the drilling on the Fairbairn tract were found in the contract area except for a possible minor fault encountered in Hole No. 2.

- Ore Reserves -

No minable reserves were indicated by the drilling nor can any be inferred.

- Expenditures -

Total Approved	33,300.00
Total Cost of Project	14,052.90
Government's share of cost	7,026.45
Government's share unexpended	5,053.55
Value of exploration production	none
Government royalty	none

- Efficiency and Competency of Operator -

The operator conducted the exploration work in the same efficient and competent manner evidenced in previous contracts. Monthly reports were very well coordinated, complete and accurate in technical detail and cost data.

- Equipment Purchased -

No equipment was purchased for this project.

Summary Logs of Drill Holes

No. 1 - Located 363'N. and 356' W of SE cor. of NW¼,NE¼,Sec.27,T12S,R7E.
Inclined -50° in a S.65°E. direction

0 - 34	Alluvium and Cypress sandstone
34 -122	Paint Creek formation
122 -236	Bethel sandstone
236 -268	Renault formation
268 -269½	Fault. Calcite stringers, pyrite and gouge
269½-275	Renault formation
275 -316	Levias limestone member
316 -354	Mosiclare sandstone member
354 -399	Fredonia limestone member

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No. 2 - Located 474' N. and 502'W. of SE cor. of NW¼, NE¼, Sec.27,T12S,R7E.
Inclined -50° in a S.65°E. direction.

0 - 38	Alluvium and Cypress sandstone
38 -126	Paint Creek formation
126 -188	Bethel sandstone
188	Possible fault. Sandstone and barite breccia
188 - 231	Bethel sandstone
231 - 332	Renault formation
332 - 374	Levias limestone member
374 - 410	Mosiclare sandstone member
410 - 431	Fredonia limestone member

No. 3 - Located 500'N. and 602'W. of SE cor. of NW¼,NE¼,Sec.27,T12S,R7E.
Inclined -50° in a S.65°E. direction.

0 - 35	Alluvium and Cypress sandstone
35 - 97	Paint Creek formation
97 -208	Bethel sandstone
208 -346½	Renault formation
346½-349	Fault. Barite with some calcite and acid-grade fluorspar
349 -355	Levias limestone member
355 -355½	Calcite and fluorspar stringers
355½-378	Levias limestone member
378 -422	Mosiclare sandstone member
422 -437	Fredonia limestone member

No. 4 - Located 691'N. and 1020'W. of SE cor.of NW¼,NE¼,Sec.27,T12S,R7E.
Inclined -50° in a S.64°E. direction.

0 - 20	Alluvium and Cypress sandstone
20 - 47	Paint Creek formation
47 -172	Bethel sandstone
172 -269	Renault formation
269 -326	Levias limestone member
326 -368	Mosiclare sandstone member
368 -414	Fredonia limestone member

No. 5 - Located 798'N. and 1255'W. of SE cor. of NW¼, NE¼, Sec.27, T12S, R7E.
Inclined -50° in a S.65°E. direction.

0 - 24	Alluvium and Cypress sandstone (?)
24 - 54	Paint Creek formation
54 -174	Bethel sandstone
174 -270	Renault formation
270 -318	Levias limestone member
318 -359½	Rosiclare sandstone member
359½-400	Fredonia limestone member

No. 6 - Located 916'N. and 1528'W. of SE cor. of NW¼, NE¼, Sec.27, T12S, R7E.
Inclined -50° in a S.65°E. direction

0 - 65	Alluvium and Cypress sandstone
65 -125	Paint Creek formation
125 -237	Bethel sandstone
237 -335	Renault formation
335 -384	Levias limestone member
384 -422	Rosiclare sandstone member
422 -459	Fredonia limestone member

No. 7 - Located 1024'N. and 1763'W. of SE cor. of NW¼, NE¼, Sec.27, T12S, R7E.
Inclined -50° in a S.63°E. direction

0 - 66	Alluvium and Cypress sandstone
66 -127	Paint Creek formation
127 -240	Bethel sandstone
240 -344	Renault formation
344 -400	Levias limestone member
400 -425½	Rosiclare sandstone member
425½-467	Fredonia limestone member

No. 8 - Located 1136'N. and 1993'W. of SE cor. of NW¼, NE¼, Sec.27, T12S, R7E.
Inclined -50° in a S.64°E. direction.

0 - 45	Alluvium and Cypress sandstone
45 - 86	Paint Creek formation
86 -204½	Bethel sandstone
204½-311	Renault formation
311 -357	Levias limestone member
357 -388	Rosiclare sandstone member
388 -407	Fredonia limestone member

No. 9 - Located 1254'N. and 2216'W of SE cor. of NW¼, NE¼, Sec.27, T12S, R7E.
Inclined -50° in a S.62°E. direction

0 - 47	Alluvium and Cypress sandstone
47 - 99	Paint Creek formation
99 -216	Bethel sandstone
216 -313	Renault formation
313 -370	Levias limestone member
370 -398	Rosiclare limestone member
398-422	Fredonia limestone member

No. 10 - Located 576'N. and 300'W. of SE cor. of NW¼, NW¼, Sec. 27, T12S, R7E.
Inclined -50° in a S.61°30'E. direction.

0 - 27	Alluvium and Cypress sandstone
27 - 72	Paint Creek formation
72 -174	Bethel sandstone
174 -278	Renault formation
278 -282½	Levias limestone member
282½-284	Fault. Calcite, acid-grade fluorspar, and shines of sphalerite and galena.
284 -303	Levias limestone member
303 -322	Rosiclare sandstone member
322 -324	Fault. Calcite with traces of fluorspar, galena, sphalerite and barite.
324 -378	Fredonia limestone member

No.11 - Located 728'N. and 199'W. of SE cor. of NW¼, NW¼, Sec. 27, T12S, R7E.
Inclined -50° in a N.62°45'W. direction.

0 - 21	Alluvium and Cypress sandstone
21 - 63	Paint Creek formation
63 -187	Bethel sandstone
187 -313	Renault formation
313 -323	Levias limestone member
323 -325	Zone of fault. Calcite stringers with traces of fluorspar and barite.
325 -345	Levias limestone member
345 -395	Rosiclare sandstone member
395 -457	Fredonia limestone member

No.12 - Located 857'N. and 139'W. of SE cor. of NW¼, NW¼, Sec. 27, T12S, R7E.
Inclined -50° in a S.53°30'E. direction.

0 - 21	Alluvium and Cypress sandstone
21 - 74	Paint Creek formation
74 -179	Bethel sandstone
179 -268	Renault formation
268 -269	Fault, fluorspar, galena and sphalerite.
269 -293	Rosiclare sandstone member
293 -384	Fredonia limestone member

H. L. Burmeister, Bureau of Mines

March 6, 1956.

Dewey M. Amos, Geological Survey

JOINER-FOE TRACTS

POPE CO., ILLINOIS

DME A-3644 2-24-56

CONTRACT Idm-E 818

DRILL HOLES 1 to 12

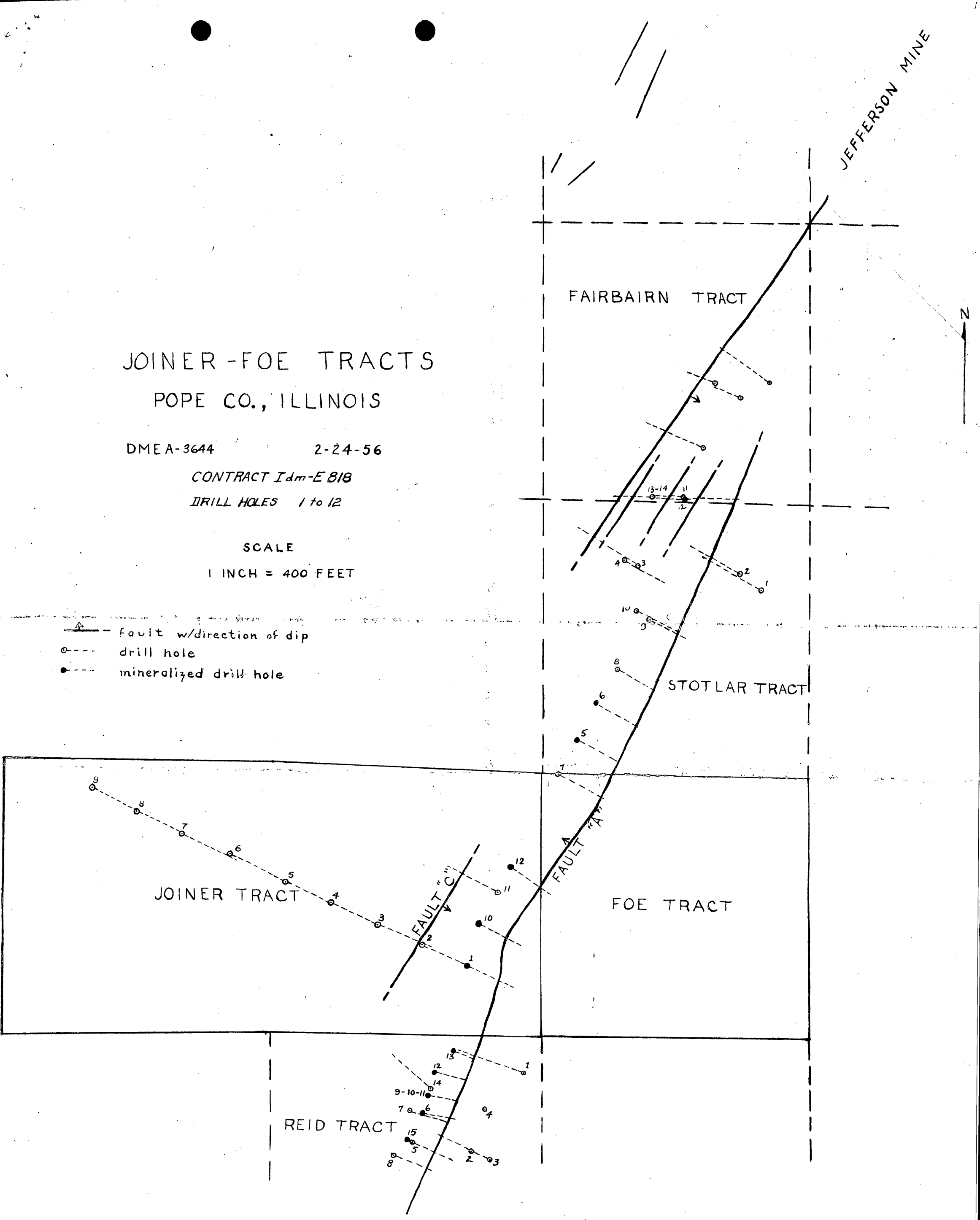
SCALE

1 INCH = 400 FEET

fault w/direction of dip

drill hole

mineralized drill hole



MAR 1 0 1956 600

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

Re: Docket No. DMM-364-Fluorspar,
Lead and Zinc
Ozark-Mahoning Company
Joiner-Foe Tract
Pope County, Illinois
Contract No. Idm-8213

Dear Mr. Laurence:

Reference is made to your memorandum dated February 29, 1956, requesting permission to terminate the subject contract by mutual agreement, effective February 5, 1956.

Please find herewith the original and five copies of a Termination Agreement of the subject contract for your signature with effective date as shown. If it meets with your approval, please sign it in behalf of the Government and present it to the Operator for approval and signature.

After execution of the Termination Agreement, the copies are to be distributed in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

JHopkins:ms 3/15/56
Copy to: Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Holtzinger, 3522
Mr. Houk
Mr. Hopkins
Admr. R. File

Approved:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

Enclosures: 6

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

MAR 13 1956

Memorandum

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

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-3644 (Fluorspar, lead, zinc)
Cerro-Mahoning Company - Contract No. Ydm-2818
Joiner-Jon Tract
Pope County, Illinois

Pursuant to your request, we have prepared the attached draft of Termination Agreement for the signature of the Executive Officer, DMEA Field Team, Region V.

Your attention is called to the Executive Officer's memorandum of February 29, requesting authorization to affect this Termination Agreement.

Robert P. Dwyer

P.Indritz/wmg
March 13, 1956
Copy to: Solicitor's Docket (2)
DMEA Docket
S.C.Selfridge
L.S.Houk (2)
R.P.Dwyer
P.Indritz
Chron.

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

MAR 13 1956

Memorandum

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

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-964 (Fluorspar, lead, zinc)
Ozark-Mahoning Company - Contract No. Idm-2018
Joiner-Fox Tract
Pope County, Illinois

Pursuant to your request, we have prepared the attached draft of Termination Agreement for the signature of the Executive Officer, DMEA Field Team, Region V.

Your attention is called to the Executive Officer's memorandum of February 29, requesting authorization to effect this Termination Agreement.

Robert P. Dwyer

P.Indritz/wog
March 13, 1956
Copy to: Solicitor's Docket (2)
DMEA Docket
G.P.Selfridge
L.S.Houk (2)
R.P.Dwyer
P.Indritz
Chron.

March 7, 1956

Memorandum

To: Mr. Robert Duyer, Associate Solicitor

From: Lawrence G. Houk, Chief
Nonmetallic Minerals Division

Subject: Termination Agreement - Docket No. DMRA-3644-Fluorspar, lead, zinc
Ozark-Mahoning Company
Joiner-Foe Tract
Pope County, Illinois
Contract No. Idm-E818

Pursuant to Field Team Memorandum, dated February 29, 1956, please prepare, for the signature of Robert A. Laurence, a termination agreement for the subject contract, effective February 5, 1956.

James Hopkins
Nonmetallic Minerals Division

JHopkins:ms 3/7/56
Copy to: Docket
✓Mr. Houk
Mr. Hopkins
Admr. R. File

P. O. Box 217
March 2, 1956

Memorandum

To: Jay L. Chambers, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Administrative Assistant, Electrotechnical Experiment Station, Region V, Morris, Tennessee

Subject: Monthly report and voucher

We are enclosing two copies of the following monthly report and vouchers:

Idm-E-818 Ozark-Mahoning
Docket No. DMEA-364
6th and final payment - months Feb., & Jan.
Termination Date: 2-5-56
Amount $1,168.99

Helen R. Miller

Attachment
/hm
Copies to R. A. Laurence
V. J. Lynch
Morris files
Day files

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-9

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1956 Docket No. DMEA 3644 RECEIVED Contract No. Icm-E818
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Bosiclare, Illinois MAR - 9 1956
Contract Amount, $ 33,360.00 Government Participation: 50 % Amount, $ 16,680.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Diamond	2337.98	11714.92	14,052.90			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2337.98	11714.92	14,052.90	2337.98	11,714.92	14,052.90

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

Date Feb. 6, 1956 *Payee OZARK-MAHONING COMPANY

Per A. M. Spurlberg Title Assistant Secretary

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

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

(Instructions on reverse)

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

$ 1168.99

Signature Helen R. Mellin
(Authorized Certifying Officer)

Date MAR 2 1956 Vou. No.

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 818 in accordance with the terms of the contract.

Signature W. H. Burmeister Title Mining Engr. Date 2/14/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lemmon Title EXECUTIVE OFFICER DMEA REGION V Date FEB 29 1956

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
MAR - 9 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1956 Docket No. DMEA 3644 Contract No. Idm-E818
Operator's Name OZARK-MAHONING COMPANY Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.78	2337.98	841	14052.90	5055		12000	2.78
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2337.98	841	14052.90				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Feb. 6, 1956 Operator OZARK-MAHONING COMPANY

Per A. M. Spaeberg Title Assistant Secretary

REMARKS:

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

(Instructions on reverse)

(For Government use only)

H. L. Burmaster
Mining Engr. 2/14/56

INSTRUCTIONS

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

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

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

GPO 872894

SUPPLEMENTAL SHEET

JANUARY 1956

B. E. JOINER ET AL

POPE COUNTY, ILLINOIS

Status of Holes

Hole No. 11	Comp. 1-19-56	Depth 457'	Prev. Rep. - None	Bal.	457 Ft.
Hole No. 12	Comp. 2-4-56	Depth 384'	Prev. Rep. - None	Bal.	384 "
			Total Footage		841 Ft.

Attached hereto are logs of diamond drill holes No. 11 and 12. Hole No. 11 was drilled to cut Structure C. From 323 - 325 feet the zone was cut, showing lime and calcite with traces of spar and barite. Hole No. 12 was drilled to cut Structure A. A fault was cut from 268 - 269 feet, showing good zinc and lead, with some spar and shale.

Drilling has been discontinued and a final report is included. To this report is attached 50 ft. scale map, 400 ft. scale map as well as cross-sections of all holes drilled.

CLARK-PRENTING COMPANY

R. L. Joiner et al
Diamond Drill Hole No. 11
Elevation: 459.6
Location: 728' north and 199' west
of the SE Cor. of the NW¼
of the NE¼ of Sec. 27
T-12-S, R-7-E, Pope County, Illinois

Started: 1-4-56
Finished: 1-19-56

Little water at 80 feet

Angle: 50° Bearing: N 62° 45' W
Drilled by: J. S. Baldwin Est. 130 feet - Lawrence Barkan 327 feet
Examined by: William H. Melcher

0-18	Surface
18-21	Oxidized sand BK Cons
21-63	Gray sand and shaly partings
63-173	White sand 6-8 spar and barite seams 77-112
173-185	Gray sand, few shale seams
185-187	Gray shale, few sand lenses SB 187
187-198	Gray shale, lime lenses
198-211	Gray fossiliferous shale, lime streaks
211-239	Gray fossiliferous lime
239-244	Green and maroon shale
244-255	Dense brown lime
255-276	Gray shale & lime lenses
276-313	Black fossiliferous shale
313-323	Dense brown lime, few shale seams, calcite stringers
323-325	Gray crystalline lime, calcite stringers, trace spar & barite
325-335	Dense brown lime, few shale seams
335-345	White oolitic lime
345-388	Residual sand and calcareous streaks
388-395	Residual sand & calcareous streaks, calcite seam 394, small fault
395-457	Dense light gray lime, few calcite seams and shale partings

[illegible]-[illegible]-[illegible] COUNTY

B. E. JONES ET AL
Diamond Drill Hole No. 12
Elevation: 475.9
Location: 857' north and 139' west of the [illegible]cor. of the NW¼ of the NE¼ of Sec. 27, T-12-S, R-7-E, Pope County, Illinois

Started: 1-21-56
Finished: 2-4-56

Water at 105
Lost Water at 219

Angle: 50° Bearing: S 53° 30' E
Drilled by: Lawrence Barkau
Examined by: W. W. Melcher

0-13	Surface
13-21	Oxidized sand BX Core
21-74	Gray sand and shale seams
74-179	White sand BB 179
179-193	Gray shale, lime lenses
193-196	Fossiliferous gray shale and lime lenses
196-221	Gray fossiliferous lime, few shale seams 1' shale seam at 219'
221-231	Green and maroon shale
231-240	Brown to gray lime
240-252	Gray shale
252-256	Gray lime
256-268	Black fossiliferous shale
268-269	Good spar, lead and zinc, some shale. Fault
269-293	Fossiferous sand. Calc. veinlets 270 and 278
293-303	Gray lime, slightly oolitic
303-311	Dense gray lime, few fossils. Calc. stringers
311-312	Calcite vein, trace spar
312-352	Gray lime
352-354	Gray shale
354-360	Gray fossiliferous lime, calc. stringers
360-367	Brown oolitic lime, trace zinc 367
367-384	White oily oolitic lime

RECEIVED
MAR - 9 1956

xxxxxxxxxxxxxxxxxx
College Park, Maryland

February 15, 1956

Memorandum

To: V. J. Lynch, Bureau Member, DMEA Field Team, Region V

From: H. L. Burmeister, Bureau of Mines, College Park, Maryland

Subject: Docket DMEA 3044, Contract Idm-E818 (fluorspar, lead, zinc)
Ozark-Mahoning Company, Joiner - Foe Tract, Pope County, Ill.
Monthly Progress Report for the period Jan. 1 through
Feb. 4, 1956

Transmitted herewith are the original and three copies of the subject report which I have checked. Attached to each report is a copy of the Operator's covering letter stating that exploration was stopped Feb. 4, 1956 and indicating that this will be the last Monthly Progress Report.

A total of 12 holes have been diamond drilled for an aggregate of 5055 feet at a cost of $16,052.90.

H. L. Burmeister

Enclosures

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

February 7, 1956

RECEIVED
FEB - 9 1956

Mr. H. L. Burmeister
Mine Examination & Exploration Engineer
U. S. Department of the Interior
Defense Minerals Exploration Administration
College Park, Maryland

Dear Mr. Burmeister:

Re: DMEA-364b Fluorspar-Lead-Zinc
Contract No. Idm-E818
Joiner - Foe Tract
Pope County, Illinois

I enclose herewith five copies of Form MF-104a as well as five copies of Form MF-10b to which is attached a supplemental sheet and drill logs, No. 11 and 12. This summary covers the work from January 1, 1956 through February 4, 1956.

Inasmuch as we have discontinued drilling operations on the property due to unfavorable results along the main structure, we are also enclosing five copies of a final report dated February 6, 1956 to which are attached various maps. As stated in the last paragraph of this report, we will be happy to review the results with your office should you see fit to do so.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

AGJ/blc

Enclosures

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

RECEIVED
MAR - 2 1956

February 29, 1956

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville

Subject: DMEA-364, Idm-2518 (Fluorspar-Lead-Zinc) Ozark-Mahoning Co. Rosiclare, Ill. Joiner-Fox Tract, Pope County, Illinois

Enclosed are four copies of an interim report on the subject contract by Dewey M. Ames, Geologist. Mr. Ames visited the project on February 23, after we had been advised by the Operator that they had quit work, and after we received the Operator's final report.

On the basis of Mr. Ames' report and recommendations, we recommend termination by mutual consent effective February 5, 1956. If you agree, please send us the termination forms or authorization to prepare them here. Certification will not be recommended.

As this was a unit-cost contract and the Operator's final engineering and geologic report has been received, we have approved payment of the final voucher. No royalty payments are due.

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

RAL/ss
cc:
Opr. Com.-2
Miller
Ames
Trace
Lynch
Files
Enc.-4

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

RECEIVED
MAR - 2 1956

INTERIM REPORT

DMEA-3644, Idm-E818 (fluorspar, lead, zinc)

Operator: Ozark-Mahoning Company, Rosiclare, Illinois

Location: Joiner-Foe Tract, Pope County, Illinois

The property was visited at this time to check results of three drill holes completed under Stage II of the contract. All three holes intersected structures containing slight but not commercial mineralization.

The mineralized sections of the core of three holes (Nos. 10, 11, 12) were examined. Two (Nos. 10, 12) cut structure "A" and the third intersected structure "C". Hole No. 10 located about 220 feet northeast of Hole No. 1 encountered two closely-spaced mineralized faults on structure "A". This consisted of 3½ feet of mineralization (calcite, fluorspar, sphalerite, galena and barite) in a horizontal distance of 33 feet. (see attached summary logs). The other drill hole (No. 12) on "A" located about 540 feet northeast of Hole No. 1 encountered one foot of mineralization. Hole No. 11 which intersected structure "C" 400 feet northeast of Hole No. 3 had about 2 feet of calcite with traces of fluorspar and barite.

The only possibility of an ore body in the contract area appears to be on structure "A" as "C" has a displacement of only about 10 feet. Ore bodies in the vicinity of the Joiner-Foe tract usually occur where displacement is 50 feet or more. Structure "A" has a total displacement across the zone of faulting of about 55 feet but none of the drill holes on the contract area revealed ore of mineable grade and thickness. Holes drilled just northeast and just southwest (Stotlar tract and Reid Tract respectively) of the Joiner-Foe tract were blank. Remaining unexplored ground along structure "A" in the contract area is not sufficient in strike length to contain an ore body that would justify development.

The field examiner is of the opinion that additional exploratory work on the Joiner-Foe tract is not warranted. It is recommended that the contract be terminated by mutual agreement effective February 5, 1956.

Date of examination: Ferruary 23, 1956

Dewey H. Amos
Geologist
U.S. Geological Survey

RECEIVED
MAR - 2 1956

SUMMARY LOGS OF HOLES COMPLETED UNDER STAGE II

No. 10 Located 576' N and 300' W of SE cor. of NW¼, NE¼, Sec. 27, T12S, R7E. Inclined -50° in a S. 61°30' E. direction.

0-27	Alluvium and Cypress sandstone
27-72	Paint Creek formation
72-174	Bethel sandstone
174-278	Renault formation
278-282½	Levias limestone member
282½-284	Fault. Calcite, acid-grade fluorspar and shines of sphalerite and galena.
284-303	Levias limestone member
303-322	Rosiclare sandstone member
322-324	Fault. Calcite with traces of fluorspar, galena, sphalerite and barite.
324-378	Fredonia limestone member.

No. 11 Located 728' N and 199' W of SE cor. of NW¼, NE¼, Sec. 27, T12S, R7E. Inclined -50° in a N. 62°45' W. direction.

0-21	Alluvium and Cypress sandstone
21-63	Paint Creek formation
63-187	Bethel sandstone
187-313	Renault formation
313-323	Levias limestone member
323-325	Zone of fault. Calcite stringers with traces of fluorspar and barite.
325-345	Levias limestone member
345-395	Rosiclare sandstone member
395-457	Fredonia limestone member

No. 12 Located 857' N and 139' W of SE cor. of NW¼, NE¼, Sec. 27, T12S, R7E. Inclined -50° in a S. 53°30' E. Direction.

0-21	Alluvium and Cypress sandstone
21-74	Paint Creek formation
74-179	Bethel sandstone
179-268	Renault formation
268-269	Fault. Fluorspar, galena and sphalerite.
269-293	Rosiclare sandstone member
293-384	Fredonia limestone member

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

RECEIVED
FEB 20 1956

February 17, 1956

Mr. A. G. Johnson
Ozark-Mahoning Co.
Mahoning Mining Division
Ronielare, Illinois

Re: DMEA-36bb, Idm-2818
Fluorspar, Ired-sine
Joiner-Fee Tract, Pope County, Ill.

Dear Mr. Johnson:

Mr. Burmeister has forwarded to me your letter of February 7, and your final report on the drilling on the Joiner and Fee tracts.

From the results, it appears that termination of the contract is the appropriate action. This will require execution of a termination agreement signed by both the Government and the Company, and before we can recommend that, it may be necessary to have a final visit and review by a Government representative. This should have been done upon completion of hole No. 12. I am, therefore, asking Mr. Dewey Amos, Geologist, U. S. Geological Survey, who is located at Carbondale, Illinois, to prepare a final geologic report on the project. If Mr. Amos feels that he needs further information, he will contact you and arrange for a visit.

Very truly yours,

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

RAL/sm
cc:
Lynch
Amos
Miller
Files
Opr. Com.-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1050 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

RECEIVED
FEB 20 1956

February 17, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-3644, Idm-2818 (Fluorspar, lead, zinc) Ozark-Mahoning Co., Rosiclare, Illinois. Joiner-Fee Tract, Pope County, Illinois

Enclosed are three copies of the Operator's final report on the subject project. The Operator submitted the required 5 copies, but as the engineer and geologist assigned to this project are in College Park, Md., and Carbondale, Illinois respectively, it was necessary to provide each with a copy for use in preparing the Field Team final report. We will forward the fourth copy as soon as it is no longer needed in the field.

The Operator discontinued drilling without notice, and we first learned about it from the final report, received today. However, review of that report indicates that termination was probably justified. We will probably recommend termination, without certification, but will await the field examiners' reports before submitting a recommendation.

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

RAL/am
cc: Lynch
Amos
Miller
Files

V. J. Lynch, Member
Bureau of Mines

xxxxxxxxxxxxxxxx
College Park, Maryland

February [illegible], 1950

RECEIVED FEB 20 1965

Memorandum

To: W. J. Lynch, Bureau Member, [illegible], Region V

From: H. I. [illegible], Bureau of Mines, College Park, Md.

Subject: Pocket [illegible], Contract [illegible] - [illegible]
[illegible] Company, Joiner-Ledo Tract, Pope County, Ill.
Operator's final report on project.

Transmitted herewith are the original and three copies of the subject report. The remaining copy will accompany the field team's final report.

Attached to the report is a copy of the operator's letter covering the transmittal of his final report.

[illegible] L. Armeister

Enclosures

cc: DMEA 2
Sta.files

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

February 7, 1956

RECEIVED
FEB 20 1956

Mr. H. L. Burmeister
Mine Examination & Exploration Engineer
U. S. Department of the Interior
Defense Minerals Exploration Administration
College Park, Maryland

Dear Mr. Burmeister:

Re: DMEA-3644 Fluorspar-Lead-Zinc
Contract No. Idm-E818
Joiner - Foe Tract
Pope County, Illinois

I enclose herewith five copies of Form MF-104A as well as five copies of Form MF-104 to which is attached a supplemental sheet and drill logs, No. 11 and 12. This summary covers the work from January 1, 1956 through February 4, 1956.

Inasmuch as we have discontinued drilling operations on the property due to unfavorable results along the main structure, we are also enclosing five copies of a final report dated February 6, 1956 to which are attached various maps. As stated in the last paragraph of this report, we will be happy to review the results with your office should you see fit to do so.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

14,052

AGJ/blc

Enclosures

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

February 6, 1956

RECEIVED
FEB 20 1956

Mr. H. L. Burmeister
Mine Examination & Exploration Engineer
U. S. Department of the Interior
Defense Minerals Exploration Administration
College Park, Maryland

Dear Mr. Burmeister:

Re: DMEA-3644 Fluorspar-Lead-Zinc
Contract No. Idm-E818
Joiner - Foe Tract
Pope County, Illinois

We have discontinued drilling operations on the B. E. Joiner et al Tract located in Pope County, Illinois because of negative results. This drilling program was covered by an Exploration Project Contract dated June 16, 1955, Docket No. DMEA 3644, Contract No. Idm-E818.

Twelve diamond drill holes were completed. Most of these holes were drilled as a northwest-southeast crosscut in an effort to locate structures more or less parallel to A structure which was definite based on drilling previously completed on the Stotlar Tract to the northeast of the Joiner and the Reed Tract to the southwest. We felt there was a possibility of four structures, A, B, C and D, as projected on the original application. Holes No. 2 and 3 did indicate the possibility of a minor structure B with a more pronounced structure C. Northwest of Hole No. 3, Holes No. 4 - 9 were drilled, in which there was no mineralization or evidence of faulting. There was a normal sequence of formation from the base of the Bethel to the base of the Rosiclare.

Along structure A, three holes were drilled, Nos. 1, 10 and 12. Hole No. 1 cut the fault plane from 268 - 269.5 feet, possibly at too shallow a depth for maximum mineralization possibilities. Hole No. 10 also cut the fault plane showing two closely spaced faults with traces of mineralization. We feel this hole cut the proper horizon for maximum possibility of mineralization. Hole No. 12 cut the fault plane from 268 - 269 feet with good spar, zinc and lead mineralization. The nearest hole to the northeast is No. 7 Stotlar which was blank. We do not believe there is sufficient distance between these holes to justify additional drilling to the northeast. A pod of ore in this area would be too short to justify development.

Along structure C, two holes were drilled, Nos. 3 and 11. Hole No. 3 showed barite, with traces of spar and zinc from 346.5 - 349 feet. The fault zone was cut at the proper horizon. Hole No. 11 also cut traces of mineralization from 323 - 325 feet at the proper horizon. Based on results in Holes No. 3 and 11, we do not believe structure C to be of sufficient importance to justify additional drilling either to the northeast of No. 11 or the southwest of No. 3.

Below is tabulated the data on the various holes:

Hole No.	Started	Completed	Angle	Depth	Remarks
1	7-21-55	8-3-55	50°	397	Cut Fault A 268 - 269.5
2	8- 6-55	8-19-55	50°	431	Calcite and Barite Traces
3	8-29-55	9- 9-55	50°	437	Cut Fault C 346.5 - 349 Barite, some calcite & spar
4	9-15-55	9-26-55	50°	414	Blank
5	9-28-55	10- 8-55	50°	400	Blank
6	10-11-55	10-21-55	50°	459	Blank
7	10-24-55	11- 5-55	50°	467	Blank
8	11- 8-55	11-18-55	50°	407	Blank
9	11-22-55	12-12-55	50°	422	Blank
10	12-16-55	12-31-55	50°	378	282½ - 284 Fault - Ls. & Calcite Traces of spar - lead - zinc 322 - 324 Rosiclare Sand, Calcite Traces Spar - zinc - lead - barite
11	1- 4-56	1-19-56	50°	457	323 - 325 - Ls., Calc., Tr. Spar & Barite
12	1-24-56	2- 4-56	50°	384	Fault - 268 - 269' - Spar-Pb-Zn-Some Shale 341 - 342 Calc. Veinlet - Tr. Spar

Stage I

T O T A L F O O T A G E 5055 Ft.

To complete this report, there is attached hereto the following maps:

50' Scale Map showing location of all holes drilled
400' Scale Map showing the location of the B. E. Joiner 80 Acre Tract and the Foe 40 Acre Tract in relation to other mineral tracts in the general area.
Set of cross-sections covering holes drilled.

If your office is not in agreement with our conclusions on the above project, we would be happy to review the results with personnel from your office.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/blc

Enclosures

P. O. Box 217
January 11, 1956

Memorandum

To: Jay L.Chambers, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Administrative Assistant, Electrotechnical Experiment Station, Morris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

Idm-E-818 — Ozark-Mahoning Company
Docket No. DMEA-3644
5th payment - month of December
Amount $834.00

Idm-E-849 — Thomas-Willis-Fortner
Docket No. DMEA-3822
4th payment - month of December
Amount $341.25

Idm-E-865 — Ed Boone
Docket No. DMEA-3860
4th payment - month of December
Amount $1050.00

Idm-E-876 — Shaffer Mining Co., Inc.
Docket No. DMEA-3905
3rd payment - month of December
Amount $851.25

Idm-E-880 — Paul Huskins and Claude Huskins
Docket No. DMEA-3899
3rd payment - month of December
Amount $1710.00

Idm-E-888 W. A. Greene
Docket No. DMEA-3743
2nd payment - month of December
Amount $762.00

Helen R. Miller

Attachments
/hbm
Copies to R. A. Lawrence
V. J. Lynch
Morris files
Day files

IF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 5 195 Docket No. DMEA 3614 RECEIVED Contract No. Idr-3018
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Tonicilare, Illinois JAN 13 1956
Contract Amount, $ 33,360.00 Government Participation: 50 % Amount, $ 16,680.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts: Diamond	1668.00	10046.92	11714.92			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1668.00	10046.92	11714.92	1668.00	10046.92	11714.92

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

Date Jan. 4, 1956 *Payee OZARK-MAHONING COMPANY

Per A. M. Spesberg Title Assistant Secretary

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

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

(Instructions on reverse)

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

$ 834.00

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JAN 11 1956 Vou. No. 97

(See other side)

834.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdmE 818 in accordance with the terms of the contract.

Signature R. L. Burmeister Title Mining Eng'r Date 1/6/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch ACTING Title EXECUTIVE OFFICER DMEA REGION VI Date JAN 9 1956

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
JAN 18 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1955 Docket No. DMEA 3644 Contract No. Idm-E818
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.78	1668.00	600	11714.92	1214		12000	2.78
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1668.00	600	11714.92				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Jan. 4, 1956 Operator OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

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

(Instructions on reverse)

REMARKS:

(For Government use only)

H. W. Burmeister,
Mining Eng'r.

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
JAN 18 1956

College Park, Maryland

January 6, 1956

Mr. E. A. Brecke
Eazra-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Rocket Mine Fluid Injection,
Contract [illegible]

Dear Mr. Brecke:

We have received your report of exploration for the month of December.

In your report for September it is stated on the supplemental sheet that drill hole No. 1 is on result "A", which is a major structure. We have carried on this sequence and mentioned it at the time Mr. Amos and I called at your office.

The supplemental sheet of the December report states, however, that drill hole No. 1 was drilled on Structure "B". In the interest of uniformity it might be well to carry on as started in the September report: namely, holes No. 2 and No. 10 are on structure "A" and holes 3 and 11 on structure "B".

The location of hole 11 appears to be well chosen to minimize moving costs and footage to be drilled.

Very truly yours,

[illegible]
Mine Examination and
Exploration Engineer

cc: VJLynch
✓ December report (4)
Sta. files

RECEIVED
JAN 9 1956
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee

RECEIVED
JAN 18 1956

SUPPLEMENTAL SHEET

DECEMBER 1955

B. E. JOINER ET AL

POPE COUNTY, ILLINOIS

Status of Holes

Hole No. 9	Comp.	12-12-55	Depth 422	Prev. Report	200	Balance	222
Hole No. 10	"	12-31-55	Depth 378	No Prev. Report			378
Total Footage							600

Attached hereto are logs of diamond drill holes No. 9 and 10. We also attach a 50' scale map and vertical sections showing holes 1 through 10. No. 9 hole showed nothing of interest so No. 10 was drilled on Structure B of the contract.

No. 11 hole will be drilled from location indicated on the enclosed plat. This location is different from the approved location because we find that we will save moving time and since we are drilling from the hanging wall side will save footage and intersect the structure at a more favorable angle.

CZAR-MAHONING COMPANY

S. F. Joiner et al
Diamond Drill Hole No. 9
Elevation: 384.4
Location: 1254 north and 2216 west
of the SE Cor. of the NW¼
of the NE¼ of Sec. 27,
T 12 S, R 7 E, Pope County,
Illinois

Started: 11-22-55
Finished: 12-12-55

Little water at 88'

Angle: 90° Bearing: S 62° E
Drilled by: J. S. Baldwin Est.
Examined by: Wm. H. Belcher

0-29	Surface
29-47	White sand, highly oxidized BX core
47-61	Gray sand & shaly conglomerate
61-99	Gray sand & shaly partings
99-182	White sand
182-190	Gray sand & shaly partings
190-213	White sand
213-216	Calcareous sand 38 216
216-229	Gray shale
229-233	Green and maroon shale
233-279	Gray to brown fossiliferous lime, shaly partings - 1" barite 255'
279-298	Green and maroon shale, few lime lenses
298-313	Black fossiliferous shale
313-325	Brown fossiliferous lime
325-356	Dense brown lime
356-370	Oolitic lime
370-398	Reniform sand
398-402	Dense light brown lime

CZARNAN MINING COMPANY

B. E. Joiner et al
Diamond Drill Hole No. 10
Elevation: 467.6
Location: 576 feet north and 300 feet west of the SE Cor. of the NW¼ of the NE¼ of Sec. 27, T 12 S, R 7 E, Pope County, Illinois
Angle: 50° Bearing: S 62° 30' E
Drilled by: J. S. Baldwin Est.
Examined by: William E. Melcher

Started: 12-16-55
Finished: 12-31-55

Little Water at 90'
Lost Water at 210'
Cemented 212 - 230

0-15	Surface
15-27	Oxidized sand. BX Core to 18'
27-72	Gray sand & shaly partings
72-174	White sand. BB 174
174-187	Gray shale & lime lenses
187-197	Gray fossiliferous shale and lime
197-215	Dense brown lime. Calc. stringers 205, 207 and 214
215-223	Gray shale
223-227	Gray crystalline lime
227-233	Green shale
233-243	Dense brown oolitic lime
243-278	Black fossiliferous shale, few lime lenses
278-282½	Brown lime, few shale seams
282½-284	Calcite, acid spar, Pb and Zn shines - Fault
284-288	Brown lime, trace spar
288-291	Dense brown sandy lime
291-303	Lower O'Hara
303-322	Residlare sand
322-324	Residlare sand, calcite, trace spar, Pb, Zn & barite - Fault.
324-327	Dense light brown lime. 1 ft. calc 326½
327-360	Light brown to gray lime
360-362	Gray shale
362-369	Dense light brown lime
369-373	Brown oolitic lime
373-378	White oily oolitic lime, calc. stringers, trace spar 373

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

January 6, 1956

RECEIVED
JAN 11 1956

Mr. E. A. Brecke
Ozark-Mahoning Co.
Mahoning Mining Division
Rosiclare, Illinois

Re: DMEA-3644, Idm-2818 (fluorspar)
Joiner-Foe Tract
Pope County, Illinois

Dear Mr. Brecke:

As requested in your letter of January 3, we agree with your suggestion for moving the collar location of hole No. 11 and drilling it toward the northwest. As shown by your cross-sections, structure "C" is dipping steeply to the southeast, and it is advisable to approach the structure from the hanging-wall side.

We also agree with your proposal to drill No. 12 at a point 200 to 400 feet northeast of No. 10, which cut two mineralized faults, and to drill it toward the southeast. In effect, this will be the same hole as formerly proposed for No. 13.

Do you then plan to explore structure "C" to the southwest of hole No. 3 with No. 13? Presumably the location of No. 13 will be affected by the results of hole No. 11; therefore, we would appreciate being advised at your earliest convenience after completion of hole No. 11, so that the plan for further exploration of structure "C" can be considered.

Very truly yours,

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

RAL/zm
cc:
Opr. Com. - 2
Burmeister
Amos
Trace
Lynch
Files

EAB/blc

E. A. Brecke

CHEMICALS OZARK MAHONING

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

January 3, 1956

JAN 11 1956

Mr. Robert A. Laurence
D. M. E. A. Field Team, Region V
Post Office Building
Knoxville 2, Tennessee

Dear Mr. Laurence:

Re: D.M.E.A. - 3644 Idm E-818 Fluorspar
Joiner - Foe Tract
Pope County, Illinois

We have found it advantageous to change the location of the collar of Diamond Drill Hole No. 11 as shown by the enclosed 50' scale map. This location tends to reduce our moving time and since the fault is dipping to the southeast, it tends to reduce the drilling depth and also gives a more favorable angle of intersection with the fault.

We also wish to request a change for drill hole No. 12. This hole was approved to be drilled southwest of Hole No. 3. As you will note from the logs in the December report, No. 10 hole cut two faults, both of which showed traces of ore minerals. This condition would indicate that the main fault northeast of the point where it was cut by No. 10 hole may be more favorable for a test. The present plans would call for the location of No. 12 hole 200 to 400 feet northeast of No. 10 and drilled to the southeast.

This proposed location would reduce moving time. The hole would probably cut the fault at or near the Joiner-Foe property line but since both properties are included under this contract, the 150 ft. limitation would not apply.

We trust that we will hear from you in regard to this change in the near future.

Yours very truly,

OZARK-MAHONING COMPANY
Mahoning Mining Division

E. A. Brecke

E. A. Brecke

RECEIVED
JAN 6 - 1956

EAB/blc

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

Subject: Docket No. DMEA-3644
Fluorspar, lead and zinc
Ozark-Mahoning Company
B.K.Joiner, et al. Tract
Pope County, Illinois
Contract No. Idm-[illegible]

Dear Mr. Lawrence:

Reference is made to your memorandum dated December 21, 1955, in which you request permission to prepare an amendment to the subject contract authorizing the drilling of one hole on structure "A" to the southwest of hole No. 1, less than 200 feet from hole No. 1.

You are hereby granted permission to prepare such an amendment, only if it is recommended by the field examiners after data from hole No. 10 have been considered.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

/s/ Robert W. Goeben

Member, Bureau of Mines

Thor N. Kiilsgaard

Member, Geological Survey

JHopkins:gad 1/5/56
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
~~[illegible]~~
Mr. Arundale, 3516
Mr. Houk
Mr. Hopkins

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

RECEIVED
DEC 23 1955

December 21, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region V - Knoxville

Subject: Interim report, DMEA-3644, Idm-E818 (Fluorspar, lead, zinc)
Ozark-Mahoning Company , Rosiclare, Ill.

Enclosed are 4 copies of the latest interim report on the subject contract.

The field examiners, in the first paragraph on page 2, recommend amending the contract to permit one hole on structure "A" to the southwest of hole No. 1, less than 200 feet from hole No. 1 . This would be hole No. 13, to be drilled after completion of hole No. 10 on structure "A" and holes 11 and 12 on structure "C".

However, both the company geologist and the field examiners were assuming the east line of the Joiner tract to be the project boundary, whereas actually the 40-acre Fee tract to the east is included. Under these circumstances, it seems preferable to drill hole No. 13 to the northeast of hole No. 10, in which case no amendment is needed.

In order to avoid loss of time if a later field inspection indicates need for a hole to the southwest, permission is requested to prepare such an amendment, only if it is recommended by the field examiners after data from hole No. 10 have been considered.

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

RAL/sm
Lynch
Files
Miller

L. E. Shirley for V. J. Lynch
Bureau of Mines.

INTERIM REPORT

RECEIVED
DEC 23 1955

DMRA-3644, Idm-E818 (fluorspar, lead, zinc)

Operator: Ozark-Mahoning Company, Rosiclare, Illinois

Location: Joiner-Fox Tract, Pope County, Illinois

The property was visited at this time to check diamond drill cores obtained in the 9 holes completed under Stage I of the contract. Completion of 9 holes on the cross sectional line designated in Stage I was considered adequate exploration along this line by the Operator. The field examiners are in agreement.

The significant sections of the core of the two holes (Nos. 1 and 3) showing mineralization were examined.

In the company reports the designation of the structures has been changed by starting with "A" as the most southeastern structure instead of "B" as it appears in the sketch map attached to the contract and each succeeding one is advanced one letter.

Hole No. 1 which encounters structure "A" cuts a mineralized zone 1 1/2 feet thick. Ore bodies have been discovered on this structure by the Operator, both northeast and southwest of the limits of the contract area. Hole No. 3 intersected a fault zone (Structure "C") about 9 feet thick of which 3 1/2 feet was mineralized. Company drilling outside the contract area and about 2600 feet northeastward from Hole No. 3 encountered ore on what appears to be this structure ("C").

The Operator is of the opinion that further exploratory work should be conducted on structures "A" and "C" by entering Stage II of the contract. Work on structure "A" would consist of drilling one hole (No. 10) about 450 feet long and collared 220 feet N. 17° E. of the collar of drill hole No. 1. The bottom of this hole would be about 200 feet northeast of the bottom of hole No. 1 and angled to intersect structure "A" about 80-feet lower than hole No. 1 in a more favorable stratigraphic zone.

Independent of the results obtained from hole No. 10, the company desires to explore structure "C" by drilling one hole 200 feet northeast of hole No. 3 and one hole 200 feet southwest of hole No. 3. If results of drilling these holes (Nos. 11 and 12) are favorable then additional holes should be drilled on structure "C".

The Field Team representatives are in agreement, that Stage II of the contract should be entered and the above outlined drilling procedure followed.

Under the present contract no hole can be drilled on Structure "A" southwest of hole No. 1, because of the property line limit and the required 200 foot spacing between drill holes. If exploration on Structure "A" to the southwest of hole No.1 is done, the hole will have to be located 100 to 150 feet southwest of hole No. 1. This would necessitate an amendment to the contract for this hole decreasing the minimum spacing between drill holes from 200 feet to 100 feet. It is the opinion of the examiners and of the Operator that the area southwest of drill hole No 1 on Structure "A" should be examined; therefore, the examiners recommend that the contract be amended to read, "the minimum interval between hole No.1 and the single hole southwest of No. 1 on the same structure shall be 100 feet instead of 200 feet." This proposed amendment is in conformity with the expressed desire of the Operator.

Stage II was entered on December 16, 1955 by starting drill Hole No. 10 with the verbal permission of the Field Team representatives.

Progress on the contract to date has been satisfactory. The Operator is to be commended on the accurate and detailed work performed under the contract.

Project visited December 16, 1955.

H. L. Burmeister, Mining Engineer
U. S. Bureau of Mines
and
D. H. Amos, Geologist
U. S. Geological Survey

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

RECEIVED
DEC 23 1955

December 20, 1955

Ozark-Mahoning Co.
Mahoning Mining Division
Rosiclare, Illinois

Re: DMEA-364h, Idm-2618 (Fluorspar)
Joiner-Fox Tract
Pope County, Illinois

Gentlemen:

This will constitute written approval to begin Stage II and drill holes Nos. 10, 11, and 12 as discussed with Mr. Burmeister and Mr. Amos on December 16, and confirms the verbal approval given you by them at that time. Approval is also given for drilling hole No. 13, but its location should be discussed with the Government before beginning it. It cannot be drilled to the southwest of hole No. 1 without an amendment to the contract, but it can be drilled to the northeast of hole No. 10 without amendment.

Very truly yours,

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

RAL/sm
cc:
Opr. Com.-3
Lynch, Amos-Evans
Miller
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1025 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON 25, D.C.

RECEIVED
DEC 23 1955

December 20, 1955

Mr. E.A. Brecky, Chief Geologist
Ozark-Mahoning Co.
Rosiclare, Illinois

Re: DMEA-3444, Idm-2318 (Fluorspar)
Jeimer-Fee Tract
Pope County, Illinois

Dear Mr. Brecky:

Mr. Burmeister has returned and we have discussed the proposed holes of Stage II of the subject contract. Enclosed herewith is written approval of the work proposed in Stage II.

As the adjoining Fee tract (NE 1/4 NE 1/4 Sec. 27) is included in the contract, it will not require an amendment to locate hole No. 13 to the northeast of hole No. 10, to further explore structure "A". This appears preferable to a location southwest of hole No. 1, which would be close to the south property line. Please let me know your opinion on this.

In the meanwhile, it appears preferable to drill holes 10, 11, and 12 at the localities agreed on between you, Mr. Burmeister and Mr. Ames, and a decision on hole 13 can be made after they are completed.

Very truly yours,

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

RAL/mm
cc:
Opr. Com. 2
Miller
Ames
Trace
Lynch
Files

P. O. Box 217
December 15, 1955

Memorandum

To: Jay L. Chambers, Defense Minerals Exploration Administration, Interior Building, Washington, D. C.

From: Administrative Assistant, Electrotechnical Experiment Station, Region V, Norris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

Idm-F-818	Ozark-Mahoning Company Docket No. DMEA-3644 4th payment - month of November Amount $1214.86
Idm-E-830	Mines and Mining, Inc. Docket No. DMEA-3265 4th payment - month of November Amount $175.31

Helen R. Miller

Attachments
/hbm
Copies to R. A. Laurence
V. J. Lynch
Norris files
Day files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 42

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1955 Docket No. DMEA 364 Contract No. Idm-1810
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 33,360.00 Government Participation: 50 % Amount, $ 16,680.00

RECEIVED DEC 19 1955

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Diamond	2429.72	7617.20	10046.92			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2429.72	7617.20	10046.92	2429.72	7617.20	10,046.92

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 12-6-55 *Payee OZARK-MAHONING COMPANY
Per A. M. Sperberg Title Assistant Secretary

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

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

(Instructions on reverse)

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

$1,214.86

Signature Helen R. Miller
(Authorized Certifying Officer)
Date DEC 15 1955 Vou. No. 36
(See other side)

4

1214.86

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E818 in accordance with the terms of the contract.

Signature R. L. Burnester Title Mining Engr. Date 12/9/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lauman Title EXECUTIVE OFFICER DMEA REGION V Date DEC 14 1955

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

-104A
(952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
DEC 19 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1955 Docket No. DMEA 364h Contract No. 1[illegible]-5618
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.78	2429.72	874	10046.92	364h		12000	2.78
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2429.72	874	10046.92				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 12-6-55 Operator OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

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

REMARKS:

(Instructions on reverse)

H. L. Barnesiter

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
DEC 10 1955

SUPPLEMENTAL SHEET

NOVEMBER 1955

B. E. JOINER ET AL

POPE COUNTY, ILLINOIS

Status of Holes

Hole #7	Comp. 11-5-55	Depth 467'	Prev. Rep. 200'	Bal.	267'
Hole #8	Comp. 11-18-55	Depth 407'	Prev. Rep. None	Bal.	407'
Hole #9	Drilling 11-30-55			Dep.	200'
Total Footage					874'

Attached hereto are logs of diamond drill holes No. 7 and 8. There is also attached hereto a 50 ft. scale map of the property showing the location of all completed holes as well as hole now drilling. In addition thereto, a vertical section is attached covering holes No. 5, 6, 7, 8 and 9. Results continue discouraging. Unless a change occurs in No. 9, we expect to move the rig to the main structure, moving approximately 200 ft. northeast of No. 1 hole.

Mr. Lawrence, in a letter dated November 18th, called our attention to a discrepancy in the October report. The Supplemental Sheet shows No. 7 at a depth of 240 ft. The correct footage was 200 ft. Therefore, the 959 foot total as shown on both the Supplemental Sheet as well as Forms 104 and 104-A is correct.

CLARK-MARCHING COMPANY

DEC 19 1955

B. E. Joiner et al
Diamond Drill Hole #8
Elevation: 400.9
Location: 1136' north & 1993' west of the SE Cor. of the NW¼ of the NE¼ of Sec. 27, T 12 S, R 7 E, Pope County, Illinois
Angle: 50° Bearing: S 64° E
Drilled by: J. B. Baldwin
Examined by: W. H. Melcher

Started: 11-8-55
Finished: 11-18-55

Little Water at 86'

0-28	Surface
28-45	Oxidized sand, BX Core
45-86	Broken sand & shale partings, calc. stringer at 81 ft.
86-160	White sand, barite slip at 127 ft.
160-175	Gray sand and shale partings
175-201	White sand
201-204.5	Calcareous sand, DB 204.5
204.5-220	Gray shale
220-227	Gray shale, lime lenses
227-264	Brown crystalline & oolitic lime, shale streaks
264-288	Maroon and green shale, little gray lime
288-311	Black fossiliferous shale
311-327	Dark brown lime, few shaly streaks
327-338	Brown silty lime
338-357	Brown to gray oolitic lime.
357-388	Boniclare sand 384-385 Calcareous sand
388-389	Brown oolitic lime
389-407	Dense gray lime, few calc. stringers

OZARK MINING COMPANY

E. E. Joiner et al
Diamond Drill Hole No. 7
Elevation: 450.1
Location: 1324' north and 1763' west of the SE Cor. of the NW¼ of the NE¼ of Sec. 27, T-12-S, R-7-E, Pope County, Illinois

Started: 10-24-55
Finished: 11-5-55

Water at 120'
Lost water at 146'

Angle: 59° Bearing: S 63° E
Drilled by: J. S. Baldwin
Examined by: W. H. Melcher

0-11	Surface
11-21	White sand, slightly oxidized Bx Core
21-66	Cypress sand, slightly oxidized
66-127	Grey sand and shale partings, Paint Creek
127-190	White sand, barite slip 188'
190-209	Green sand and shale partings
209-240	White sand, BP 240
240-241	Fossiliferous lime
241-258	Grey shale & maroon shale
258-263	Brown fossiliferous lime, shale partings
263-281	Grey lime, slightly oolitic
281-288	Brown fossiliferous shaly lime
288-304	Brown to grey crystalline lime, slightly oolitic
304-311	Dense dark brown lime, few shale seams
311-322	Grey and maroon shale
322-341	Black fossiliferous shale, few lime lenses
341-365	Brown crystalline and fossiliferous lime, few shale seams
365-375	Brown to grey oily oolitic lime
375-400	White oily oolitic lime, lower O'Hara
400-425.5	Basislare sand
425.5-439	White oolitic lime
439-467	Dense light brown lime

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

November 18, 1955

Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Idm-2818, DMEA-364h (Fluorspar)
Joiner-Fox Tract, Pope County, Ill.

Gentlemen:

Apparently there is an error in the addition of footage drilled on subject contract during the month of October. On the supplemental sheet attached to forms 104 and 104A for October the sum of the total footage should be 999 feet rather than 959 feet as shown and only a total of 959 feet is claimed on the October voucher.

The voucher will be passed for payment without change and if the total footage for the month should have been 999 feet, you may make the correction on the November voucher.

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

VJL/mm

cc:
Finance Office
Lynch
Miller
Files

RECEIVED
NOV 23 1955

November 7, 1955

SUPPLEMENTAL SHEET

OCTOBER 1955

B. B. JOINER ET AL

POPE COUNTY, ILLINOIS

Status of Holes:

Hole No. 5	Completed 10-8-55. Dep. 400'	Prev. Rep. 100'	Bal.	300'
Hole No. 6	Completed 10-21-55. Dep. 459'	Prev. Rep. None	Bal.	459'
Hole No. 7	Drilling 10-31-55		Dep.	240'
Total Footage				959'

Attached hereto are logs of diamond drill holes No. 5 and 6. A 50' scale map is also included showing the location of Holes No. 1-7, inclusive. There is also attached hereto a vertical section showing Holes No. 5, 6 and 7. Hole No. 7 was finished after the first of the month and is shown on the cross-section as a completed hole. Because of the greater than normal difference in elevation of the Bethel and Rosiclare contacts in No. 6 and 7, we have projected a probable fault as shown on the cross-section. There was no mineralization or broken ground in either 6 or 7 to indicate a structure had been cut.

We are continuing with the crosscut to the northwest. We believe that one or two holes at the most will complete this phase of the project. So far, results have been disappointing.

OZARK-MINERALS COMPANY

B. E. Jaimer et al
Diamond Drill Hole No. 5
Elevation: 436.1
Location: 796' north and 1255' west
of the SE cor. of the NW¼
of the NE¼ of Sec. 27
T 12 S, R 7 E, Pope County,
Illinois
Angle: 50° Bearing: S 65° E
Drilled by: J. T. Baldwin
Examined by: W. H. Melcher

Started: 9-28-55
Finished: 10-8-55

Strong Water at 135'

0-17	Surface
17-24	Oxidized sand. BR core
24-54	Gray sand, shaly partings
54-134	White sand
134-142	Gray sand, shaly partings
142-163	White sand
163-174	Gray sand, shaly partings. BR 174
174-178	Gray to green shale, lime lenses
178-187	Gray and maroon shale
187-189	Gray shale
189-197	Gray fossiliferous shale and lime lenses
197-211	Brown crystalline lime
211-218	Gray fossiliferous shale
218-222	Black shale
222-232	Brown oolitic lime
232-245	Gray shale, lime lenses
245-250	Gray and maroon shale
250-270	Black fossiliferous shale
270-291	Brown crystalline lime, shale partings
291-318	Oolitic lime, Lower O'Hara
318-359½	Residuals sand 256-257 oolitic lime BR 359½
359½-400	Dense little brown lime

OZARK-WATERING COMPANY

E. E. Joiner et al
Diamond Drill Hole No. 6
Elevation: 467.8
Location: 916' north and 1520' west of the
SE Cor. of the NW¼ of the NW¼ of
Sec. 27, T 12 S, R 7 E, Pope County,
Illinois
Angle: 90° Bearing S 85° E
Drilled by: J. S. Baldwin
Examined by: W. H. Melcher

Started: 10-11-55
Finished: 10-21-55

Little water at 170

0-10	Surface
10-20	Oxidized sand BX Core
20-65	White sand, slightly oxidized
65-125	Gray sand, shaly partings
125-231	White sand
231-236	Gray sand
236-237	Gray sand, shaly partings. BB 237
237-251	Gray and maroon shale, few lime lenses
251-267	Gray fossiliferous lime, few shale seams
267-309	Dense gray lime, few shale seams
309-335	Dark fossiliferous shale, few lime lenses
335-359	Brown crystalline lime
359-371	Gray oolitic lime, few shale seams
371-391	White oolitic lime, Lower O'Hara
391-411	Rodalaire sand
411-415	Sandy oolitic lime
415-422	Rodalaire sand BB 422
422-450	Dense gray lime
450-454	Gray oolitic lime
454-469	Gray crystalline lime

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1955 Docket No. DMEA 3644 Contract No. Icm-2818
Operator's Name OZARK-MAHONING COMPANY Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 33,360.00 Government Participation: 50 % Amount, $ 16,680.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Diamond	2666.02		7617.20			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2666.02		7617.20	2666.02	4951.18	7617.20

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

Date Nov. 7, 1955 *Payee OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

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

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(Instructions on reverse)

RECEIVED NOV 23 1955

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

$ 1333.01

Signature Helen R. Miller
(Authorized Certifying Officer)

Date NOV 21 1955 Vou. No.

(See other side)

1333.01

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 818 in accordance with the terms of the contract.

Signature R. L. Burmeister Title Mining Engr. Date Nov. 10, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date NOV 18 1955

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1955 Docket No. DMEA 3644 Contract No. Idm-2610
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Pesicloro, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.78	2666.02	959	7617.20	2740		12000	2.78
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2666.02	959	7617.20				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Nov. 7, 1955 Operator OZARK-MAHONING COMPANY

Per A. M. Spurberg Title Assistant Secretary

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

REMARKS:

(Instructions on reverse)

(For Government use only)

RECEIVED
NOV 23 1955

INSTRUCTIONS

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

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

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

GPO 872894

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

Hopkins

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 26

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1955 Docket No. DMEA 364 RECEIVED Contract No. Ion-R610

Operator's Name Ozark-Mahoning Company Minerals Fluorspar

Address Rosiclare, Illinois OCT 17 1955

Contract Amount, $33,360.00 Government Participation: 50 % Amount, $16,680.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Diamond	2212.88		4951.18			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2212.88		4951.18	2212.88	2738.30	4951.18

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

Date Oct. 6, 1955 *Payee OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

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

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

(Instructions on reverse)

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

$ 1106.44

Signature Helen R. Miller
(Authorized Certifying Officer)

Date OCT 13 1955 Vou. No. 82
(See other side)

1106.44

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 818 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 10/10/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Acting Executive Officer Date 10/13/55

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
OCT 17 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Sept. 195 5 Docket No. DMEA 3644 Contract No. Idn-2818
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.78	2212.88	796	4951.18	1781		12000	2.78
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2212.88	796	4951.18				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Oct. 6, 1955 Operator OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

October 6, 1955

SUPPLEMENTAL SHEET
SEPTEMBER 1955

B. E. JOINER ET AL
POPE COUNTY, ILLINOIS

Status of Holes:

Hole No. 3	Completed 9-9-55	Depth 437	Prev. Rep. 155'	Bal.	282'
Hole No. 4	Completed 9-26-55	Depth 414	Prev. Rep. None	Bal.	414'
Hole No. 5	Drilling				100'
Total Footage					796'

Attached hereto are logs of Diamond Drill Holes No. 3 and 4. There is also included a 50' scale map showing the location of all holes drilled to date and drilling as well as a vertical cross-section of same. Three faults have been cut, A, B and C. Fault A is the major structure. In order to properly check the mineral possibilities of this structure, it will be necessary later on to drill a hole which will cut the vein at a depth of about 80' below the point at which it was cut in drill hole No. 1. Fault C appears to be a minor structure. The mineralization in this hole from 346.5 - 349 was largely barite with minor amounts of spar and calcite. Fault B is also a minor structure and was not mineralized.

OZARK-MAHONING COMPANY

B. E. Joiner et al 60 Acres — Started: 8-29-55
Diamond Drill Hole No. 3 — Finished: 9-9-55
Elevation: 477.4
Location: 580' north and 802' west of the SW Cor. of the NW¼ of the NW¼ of Sec. 27, T 12 S, R 7 E, Pope County, Illinois — Water at 155
Angle: 50° Bearing: S 65° E
Drilled by: J. L. Baldwin
Examined by: W. H. Melcher

0-10	Surface
10-35	Oxidized sand, BX core
35-97	Gray sand, shale partings
97-198	White sand
198-199	Coal
199-208	Gray sand, slightly broken BB 208
208-227	Green to grey calcareous shale
227-255	Brown lime, few shale streaks
255-260	Gray shale, little maroon
260-270	Finely crystalline to oolitic brown lime
270-285	Dense brown lime, green and red shale streaks
285-318	Black fossiliferous shale, lime streaks, few calc. stringers
318-346.5	Dark crystalline lime
346.5-349	Vein - heavy barite, some calc. and acid spar
349-355	Dark brown oolitic lime, slightly leached & broken
355-355.5	Calc. and spar stringers
355.5-363	Dark oolitic lime
363-378	Lower O'Hara
378-422	Residuare sand
422-437	Dense grey lime

OZARK-MAHONING COMPANY

B. L. Julian et al 80 Acres
Diamond Drill Hole No. 4
Elevation: 443.7
Location: 692' North and 1020' West
of the SE Cor. of the NW¼
of the NW¼ of Sec. 27,
T 12 S, R 7 E, Pope County,
Illinois
Angle: 90° Bearing: S 84° E
Drilled by: J. S. Baldwin
Examined by: W. H. Melcher

Started: 9-15-55
Finished: 9-26-55

Strong Water at 130 ft.

0-12	Surface
12-20	Quicksand sand
20-22	Gray sand, few shale seams BX Core
22-47	Gray sand, few shale seams
47-131	White sand
131-137	Gray sand, shale seams
137-159	White sand
159-172	Gray sand, few shale seams BX 172
172-186	Black-green calcareous shale
186-191	Black fossiliferous shale, lime lenses
191-216	Light brown to gray crystalline lime, few shale streaks
216-221	Gray shale
221-246	Dense brown lime
246-256	Gray shale, few lime streaks
256-269	Black fossiliferous shale, lime streaks
269-298	Dark brown lime
298-309	Dark brown oolitic lime
309-326	Lt. brown oolitic lime, layer O'Hara
326-346	Residuary sand
346-352	Brown lime
352-368	Residuary sand, few lime streaks BX 368
368-414	Light brown to gray lime

October 12, 1955

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: Amendment No. 1 - Docket No. DMEA-3644
Fluorspar, lead and zinc
Ozark-Mahoning Company
B.E.Joiner, et al. Tract
Pope County, Illinois
Contract No. Idm-E818

The Nonmetallic Minerals Division concurs in Amendment No. 1 to the subject contract as written and executed in the field. This amendment changes the starting date from July 14, 1955 to July 25, 1955, and the completion date from July 14, 1956 to July 25, 1956.

Amendment No. 1 is necessary because drilling equipment was in use on another property and was not available for use on the contract until July 21, 1955.

/s/
James Hopkins
Nonmetallic Minerals Division

JHopkins:gad 10/12/55
Copy to: Admr. R. File
Docket
Mr. Houk
Mr. Hopkins

P. O. Box 217
September 15, 1955

Memorandum

To: Jay L. Chambers, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Administrative Assistant, Electrotechnical Experiment Station, Bureau of Mines, Region V, Norris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

✓ Idm-E-318 — Ozark-Mahoning Company
Docket No. DMEA-3614
1st payment - month of July-August
Starting Date: 7/21/55
Amount $1369.15

Idm-E-845 — Buchanan and Snyder
Docket No. DMEA-3821
1st payment - month of August
Starting Date: 8/1/55
Amount $1062.00

Helen R. Miller

Attachments
/hbm
Copies to Lynch
Laurence
Norris files
Day files

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

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED SEP 19 1955

Month of August, 1955 Docket No. DMEA 364 Contract No. Idm-E818
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 33,360.00 Government Participation: 50 % Amount, $ 16,680.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Diamond	2738.30		2738.30			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2738.30		2738.30	2738.30		2738.30

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

Date Sept. 2, 1955 *Payee OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

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

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

(Instructions on reverse)

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

$ 1369.15

Signature Helen R. Mullin
(Authorized Certifying Officer)

Date SEP 15 1955 Vou. No. 60
(See other side)

1369.15

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdmE 818 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 9/12/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. [illegible] Title EXECUTIVE OFFICER DMEA REGION V Date SEP 14 1955

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
SEP 19 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1955 Docket No. DMEA 3644 Contract No. Idm-P818
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.78	2738.30	985	2738.30	985		12000	2.78
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2738.30	985	2738.30				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Sept. 2, 1955 Operator OZARK-MAHONING COMPANY

Per A. M. Sperberg Title Assistant Secretary

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

September 2, 1955

SUPPLEMENTAL SHEET

AUGUST 1955

JOINER-FOE TRACT

POPE COUNTY, ILLINOIS

Status of Holes

Hole No. 1 Completed 8-3-55	399
Hole No. 2 Completed 8-19-55	431
Hole No. 3 Drilling at 155 feet 8-31-55	155
	985

Attached hereto are logs of Diamond Drill Holes No. 1 and 2, also a 50' scale map and cross-section of these holes. The map and cross-section also show the location of hole #3 which is drilling at 155'.

Diamond Drill Hole No. 1 cut the fault zone from 268 - 269.5' as indicated by gouge and calcite. No mineralization was cut.

Diamond Drill Hole No. 2 failed to cut any faults and was barren.

Diamond Drill Hole No. 3 is drilling at 155' and is not deep enough to give any pertinent information.

CHARLESTON MINING COMPANY

B. E. Joiner et al 80 Acres
Diamond Drill Hole No. 1
Elevation: 504.9
Location: 363' north and 358' west
of the SE cor. of the NW¼
of the SE¼ of Sec. 27
T 12 S, R 7 E, Pope County, Illinois
Angle: 50° Bearing: 65° E
Drilled by: J. S. Baldwin
Examined by: Wm. H. Nelsher

Started: 7-21-55
Finished: 8-3-55

Little Water @ 80'

0-11	Surface
11-80	White oxidized sand. BR core
80-91	White oxidized sand
91-68	Gray sand and shale seams
68-72	Gray oxidized sand, many shale seams
72-74.5	Opening sand filled spar and barite shines
74.5-122	Gray sand, shale seams
122-225	White sand
225-231	Gray sand
231-236	Gray shale, sand lenses, BR 236
236-241	Gray shale, brown limestone lenses
241-247	Gray limestone
247-251	Green fossiliferous shale, limestone lenses
251-261	Gray fossiliferous limestone, few shale seams
261-268	Dense tan limestone
268-269.5	Black shale gale, pyrite and shale gouge, possible fault
269.5-275	Dark brown shale, few gale stringers
275-286	Brown limestone, few oily gale stringers
286-304	Brown limestone, few gale stringers
304-313	White oolitic limestone
313-316	Dense gray lime
316-327	Residuals sand, gale and barite stringers
327-350	Gray shale, sand lenses
350-354	Mixed fossilers sand and oolitic lime, shale seams, BR 354
354-379	Gray limestone, few shale seams, gale stringers
379-395	Dark gray limestone, few fossils, shale seams
395-399	Gray crystalline limestone

Note: Hole was reamed to 80 feet and then cemented to 107 feet.

STARK-MARKWELL COMPANY

B. E. Joiner et al 80 Acre Tract
Diamond Drill Hole No. 2
Elevation: 491.3
Location: 474' North and 582' West of the SE Cor. of the W½ of the NE¼ of Sec. 27, T 12 S, R 7 E, Pope County, Illinois
Angle: 90° Bearing: S 65° E
Drilled by: J. S. Baldwin
Examined by: W. H. Muldner

Started: 8-6-55
Finished: 8-19-55

0-18	Surface
18-21	White oxidized sand 8¼ Core
21-27	White oxidized sand
27-38	White oxidized sand, pyrite lenses
38-47	Gray sand, shale seams, pyrite nodules
47-95	Gray sand and shale seams, 56% core
95-117	Gray sand and shale seams
117-126	Gray sand, few shale seams
126-174	White sand, 2 inch shale bed at 145'
174-188	White sand, 1 inch sand & barite breccia 188'
188-217½	White sand, coal slip, slikken sides 217.5'
217½-227½	Gray sand, few shale seams
227½-231	Gray shale, sand lenses DB 231
231-239	Gray shale and fossiliferous lime lenses
239-244	Gray to black fossiliferous shale, lime lenses
244-250	Gray fossiliferous lime and shale
250-263½	Light brown lime, few shale seams
263½-265	Gray shale
265-271	Gray lime, few shale seams
271-276	Maroon shale
276-287	Dense brown lime
287-295	Gray and maroon shale
295-306	Dense gray lime
306-332	Gray to black fossiliferous shale, crystalline lime lenses
332-353	Dense brown lime, oily calc. & barite stringers 336, 343 and 344
353-361	Oolitic lime
361-374	Dense tan lime, few shale seams
374-410	Fossilare sand
410-431	Gray lime, few shale seams, calc. stringers

September 1, 1955

Mr. G. L. Neuman
Mine Examination & Exploration Engineer
U. S. Department of the Interior
Defense Minerals Exploration Administration
College Park, Maryland

Dear Mr. Neuman:

Re: DMEA-364, Fluorspar-Lead-Zinc
Contract No. Idm-2B18
Joiner-Fox Tract
Pope County, Illinois

I enclose herewith five copies of Form MF-104 A and five copies of Form MF-104. Also there is attached to each a Supplemental Sheet, copies of logs, map and cross-section. This data covers work completed during August 1955.

Yours very truly,

OZARK-MAHONING COMPANY
Mahoning Mining Division

E. A. Brecke

E. A. Brecke

EAB/blc

Enclosures

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

August 18, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: Acting Executive Officer, DMEA - Region V

Subject: Signed Amendment No. 1. DMEA-3644, Idm-E818, Ozark-Mahoning Corporation. Pope County, Ill. (Fluorspar)

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

V. J. Lynch

Z.M.
C.
Lynch
Finance Office
Neumann
Files

RECEIVED
AUG 22 1955

Report of Investigation

Project visited July 28, 1955
by G. L. Neumann and V. J. Lynch

RECEIVED
AUG 22 1955

DMEA Docket No. 3644 (Fluorspar-Lead-Zinc)
Operator: Ozark-Mahoning Company
Rosiclare, Illinois
Property: Joiner-Foe Tract
Pope County, Illinois
Contract No. Idm-E818

Summary:

This project was designed to increase the Nation's reserve of the three strategic materials: fluorspar, lead and zinc. The work program consists of: diamond core drilling of a NW-SE cross section to check the extension of several parallel faults indicated by previous drilling on adjoining properties; following any favorable showings along the trend to the northeast or southwest. The drilling had just gotten well underway on hole JF-1. The hole was down to a depth of 170 feet. A fault intercept was expected at about 200 feet.

Conclusions:

The work as usual with this Operator has progressed efficiently and on schedule.

Recommendations:

No changes in operation are necessary. An amendment regarding the starting date of the contract was requested.

/s/ G. L. Neumann

College Park, Md.
August 16, 1955

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

RECEIVED
AUG - 8 1955

August [illegible], 1955

Mr. A. D. Cannon
Grant-Kharsim Mining Co.
Kharsim Mining Division
Danielson, Illinois

Re: [illegible]-24h, [illegible] (Amendment)
Dolomite Block, Pope County, Ill.

Dear Mr. Johnson:

Mr. [illegible] Fyneh, of the Bureau of Mines, has recently inspected the dolomite block, which we have on the application which is in our file 22. Therefore, I am enclosing, for your edification, also copies of Amendment No. 1, changing the working date as provided in Article 3 to July 25 [illegible], in order to provide a full year for work under the contract, the completion date to automatically be set to July 25, 1956.

Please sign the enclosed copies, and return all but the Government's copy to me.

Very truly yours,

Robert A. [illegible]
EXECUTIVE OFFICER
DMEA REGION V

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

RECEIVED
JUN 21 1955

June 21, 1955

Memorandum

To: L. G. Houk, Chief, Non-Metallic Minerals Division, DMEA

From: Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of Field team examination report on DMEA Docket No. 3644 (Fluorspar-Lead-Zinc), Ozark-Mahoning Co., B. E. Joiner et. al. tract, Pope County, Ill.

The recommendation of the field team to approve a program of diamond drilling to explore the eastern forty acres of the subject application, with continuation of drilling into the western forty acres to be contingent on discovery of new evidence of structure or mineralization, is concurred in.

John E. Holtzinger, Jr.

Copy to: Files
Div. of Minerals
Br. of Const. & Chem. Mats.
Mr. Holtzinger

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

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

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JUN 21 1955

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John E. Holtzinger, Jr.

Copy to: Files
Div. of Minerals
Br. of Const. & Chem. Mats.
Mr. Holtzinger

JUN 16 1955 600

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

Subject: Docket No. DMEA-3644
Fluorspar, lead and zinc
Ozark-Mahoning Company
B. E. Joiner, et al. Tract
Pope County, Illinois

Dear Mr. Laurence:

Please find herewith the original and five copies of a contract covering the subject exploration project which have been signed by the Government with register number and effective date as shown.

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

Please obtain properly executed copies of Consent to Lien forms and attach to copies of the contract before presenting them to the Operator for its signature.

After execution of the contract, the copies are to be distributed in the usual manner. Two copies of a memorandum from H. E. Nelson of the Geological Survey, dated May 20, 1955, are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

Enclosures 5

JHopkins:gad 6/14/55
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Arundale, 3516
Mr. Kiilsgaard, 5222
Mr. Houk

P. S. The Consent to Lien forms are enclosed for execution by the Lessors.

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

JUN 13 1955

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

Subject: Ozark-Mahoning Company, Docket No. DMEA-3644
Fluorspar, lead and zinc

There is attached hereto in satisfactory legal form for execution a contract covering the above project, subject to Consent to Lien signed by the 6 lessors of the lease-option agreement effective December 1, 1954.

S/ Henry C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

HCRubin/emd
Copy to: DMEA Docket
Solicitor's Docket
L. G. Houk
J. L. Hofflund
H. C. Rubin
chron.

College Park, Maryland

RECEIVED
JUN 2 1955

May 31, 1955

Memorandum

To: Lawrence C. Houk, Chief, Nonmetallic Minerals Division

From: C. L. Neumann

Subject: Docket No. [illegible] - (Fluorspar-Lead-Zinc)
Ozark-Mahoning Company
E. E. Joiner, et al. tract
Pope County, Illinois

Attached hereto as per your request is a plan map showing a tentative drilling program on the Ollie Joiner Tract and the Louis Foe Tract. The exact location of any of the drill holes is contingent on the results of two previously drilled holes. I have laid out 42 holes to be drilled at 45° inclination to an average depth of 400 feet. This would aggregate 16,800 feet of drilling. The operator requested an allowable maximum of 12,000 feet for the Ollie Joiner 80 acres, but since the Louis Foe 40 acre tract is to be included in the contract this allowable maximum should be increased. The applicant, Ozark-Mahoning Company, has been found through several DMA contracts and their production and reserves record to be thorough and conscientious. Their policy is to use enough footage to reasonably authenticate any ore estimates and no more. I do not deem it wise to place too many meaningless restrictions on an exploration contract. If the exploration of these two tracts does not warrant the full 16,800 feet of drilling allowed, the 16,800 feet would not be drilled. These contracts can be stopped at any time by the Field Team or the Applicant. Outside of the cross-section drilling and until at least two breaks and/or mineralized zones have been further indicated, this drilling will be accomplished with one machine. The drilling program is on a contingent basis and is purely tentative, depending on previous results.

C. L. Neumann

Enclosures

CLNgrm
cc LCHouk - 4
WDignah - 2
MTrace
MML Files

RECEIVED
JUN - 2 1955

College Park, Maryland

May 31, 1955

Memorandum

To: Lawrence G. Houk, Chief, Nonmetallic Minerals Division

From: G. L. Neumann

Subject: Docket No. DMEA-3644 - (Fluorspar-Lead-Zinc)
Ozark-Mahoning Company
B. E. Joiner, et al. tract
Pope County, Illinois

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G. L. Neumann

Enclosures

GLN:rwa
cc LGHouk - 4
VJLynch - 2
RDTrace
DMEA Files

RECEIVED
JUN - 2 1955

College Park, Maryland

May 31, 1955

Memorandum

To: Lawrence G. Houk, Chief, Nonmetallic Minerals Division

From: G. L. Neumann

Subject: Docket No. DMEA-3644 - (Fluorspar-Lead-Zinc)
Ozark-Mahoning Company
B. E. Joiner, et al. tract
Pope County, Illinois

Attached hereto as per your request is a plan map showing a tentative drilling program on the Ollie Joiner Tract and the Louis Foe Tract. The exact location of any of the drill holes is contingent on the results of the previously drilled holes. I have laid out 42 holes to be drilled at -45° inclination to an average depth of 400 feet. This would aggregate 16,800 feet of drilling. The operator requested an allowable maximum of 12,000 feet for the Ollie Joiner 80 acres, but since the Louis Foe 40 acre tract is to be included in the contract this allowable maximum should be increased. The applicant, Ozark-Mahoning Company, has been found through several DMEA contracts and their production and reserves record to be thorough and conscientious. Their policy is to use enough footage to reasonably authenticate any ore estimates and no more. I do not deem it wise to place too many meaningless restrictions on an exploration contract. If the exploration of these two tracts does not warrant the full 16,000 feet of drilling allowed, the 16,000 feet would not be drilled. These contracts can be stopped at any time by the Field Team or the Applicant. Outside of the cross-section drilling and until at least two breaks and/or mineralized zones have been further indicated, this drilling will be accomplished with one machine. The drilling program is on a contingent basis and is purely tentative, depending on previous results.

G. L. Neumann

Enclosures

GLN:rwa
cc LGHouk - 4
VJLynch - 2
RDTrace
DMEA Files

RECEIVED
JUN - 2 1955

College Park, Maryland

May 31, 1955

Memorandum

To: Lawrence G. Houk, Chief, Nonmetallic Minerals Division

From: G. L. Neumann

Subject: Docket No. DMEA-3644 - (Fluorspar-Lead-Zinc)
Ozark-Mahoning Company
E. E. Joiner, et al. tract
Pope County, Illinois

Attached hereto as per your request is a plan map showing a tentative drilling program on the Ollie Joiner Tract and the Louis Foe Tract. The exact location of any of the drill holes is contingent on the results of the previously drilled holes. I have laid out 42 holes to be drilled at -45° inclination to an average depth of 400 feet. This would aggregate 16,800 feet of drilling. The operator requested an allowable maximum of 12,000 feet for the Ollie Joiner 80 acres, but since the Louis Foe 40 acre tract is to be included in the contract this allowable maximum should be increased. The applicant, Ozark-Mahoning Company, has been found through several DMEA contracts and their production and reserves record to be thorough and conscientious. Their policy is to use enough footage to reasonably authenticate any ore estimates and no more. I do not deem it wise to place too many meaningless restrictions on an exploration contract. If the exploration of these two tracts does not warrant the full 16,000 feet of drilling allowed, the 16,000 feet would not be drilled. These contracts can be stopped at any time by the Field Team or the Applicant. Outside of the cross-section drilling and until at least two breaks and/or mineralized zones have been further indicated, this drilling will be accomplished with one machine. The drilling program is on a contingent basis and is purely tentative, depending on previous results.

G. L. Neumann

Enclosures

GLN:rwa
cc LGHouk - 4
VJLynch - 2
RDTrace
DMEA Files

MAY 2 5 1955

Cerro-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Docket No. DMA-3644 - Fluorspar, Lead and Zinc
Cerro-Mahoning Company
E. E. Joiner, et al. Tract
Pope County, Illinois

Gentlemen:

Reference is made to your application for exploration assistance dated January 12, 1955, on the E. E. Joiner, et al. Tract, Pope County, Illinois.

On your areal map you have shown the probable projections of five untested fault structures across the Joiner Tract. The structure designated "F" which appears to have the greatest possibilities also crosses the adjoining Louis Fee 40 acre tract. Because of the apparent benefit to the Louis Fee Tract from exploration work on structure "F" on the Joiner Tract, we suggest that the Fee Tract be included in the area for exploration.

If you agree with this suggestion please indicate your approval to this office in writing.

Sincerely yours,

C. O. Mittendorf

Administrator

JHopkins:ed 5/24/55
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region V
Mr. Hillegaard, 5222
Mr. Arundale, 3516
Mr. Houk

IN REPLY REFER TO:

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

May 20, 1955

Re: DMEA-3044
Ozark Mahoning Co.
Ollie Joiner Tract
Rosiclare, Illinois
Fluorspar, Lead & Zinc

Memorandum

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

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

Subject: Review of the Field Team report

This recommendation of approval of the application is based almost entirely on inference, but the inferring of the examiners and the applicants, due to intimate acquaintance with the area, is nearly devoid of the element of chance.

I concur with the recommendation of the Field Team.

N. E. Nelson

NENelson:hlm
G-5/20/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. C. Arundale, 3516 Interior

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1025, CEC BLDG.
KNOXVILLE 2, TENN.

WASHINGTON OFFICE

May 12, 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: D. M. E. A. Field Team, Region V - Knoxville, Tennessee

Subject: Field Team Examination Report on - DMEA-3644, Ozark-Mahoning Company, Mining Division - Rosiclare, Ill. Fluorspar-Lead-Zinc)

Transmitted are four copies of the field examination on the subject project.

The Field Team agrees with the examiners' findings and recommend approval of the application as outlined in the report. We have noted, and are in agreement, with the examiners' recommendation that exploration of the western 40 acre tract should be held in abeyance until further evidence of mineralization is discovered.

EXECUTIVE OFFICER
DMEA REGION V

V. J. Lynch,
Member DMEA Field Team
Bureau of Mines

VJL/sm
cc:
Lynch
Millar
Files

Field Team Report on Examination of Property

by

R. D. Trace 1/ and G. L. Neumann 2/

Docket No. DMEA-[illegible] - (Fluorspar-Lead-Zinc)

Applicant: Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

SUMMARY

The object of this application is to enhance the Nation's reserves of the three critical materials: fluorspar, lead and zinc.

The Operating Committee made a Field Team referral of this application on March 26, 1955.

Considerable diamond core drilling has been done in the immediate vicinity and practically surrounding the 80 acre Ollie Joiner Heirs tract, designated in the application. (See map with application). This drilling was accomplished on several exploration programs: the 40 acre R. F. Reid tract adjoining the Ollie Joiner tract on the southeast was drilled by the Applicant and a small body of good grade ore (estimated at 20,000 tons) was indicated; the 40 acre E. M. Stetler tract adjoining to the northeast was similarly drilled by the Applicant and indicated a strong structure with some minable ore, especially in the southern part of the tract; in the 40 acre Fairbairn tract, to the north of the Stetler, the Applicant drilled 4 holes along the southern border conjunctively with the Minerva Oil Company, Fluorspar Mining Division. This drilling indicated 4 parallel breaks and some fluorspar mineralization. The eastern break indicated by the drilling was further drilled along the northeast trend on Contract I ds-[illegible], Operator, Minerva Oil Company,

1/ R. D. Trace, Geologist, Geological Survey.
2/ G. L. Neumann, Engineer, Bureau of Mines.

Fluorspar Mining Division. A discovery was certified from this exploration ore body estimated at 32,500 tons. The Minerva Company is now doing more detailed drilling on this tract; on the 40 acre, R. F. Reid tract, to the north of the Fairbairn, the Applicant has drilled two holes and is continuing to drill an east-west cross section across the center of this tract. Good structure was found in these two holes and a 3-foot section of ore was cut in one of them; on the 40 acre, Jefferson tract, to the east of the Reid tract, is the producing Jefferson Mine, now owned by Minerva Oil Company. Reserves for the Jefferson Mine as stated in the Fairbairn application (DMEA-2838) were estimated at 100,000 tons of fluorspar with high values in lead and zinc from two parallel structures; on the 40 acre Mackey-Hunn tract to the north of the Jefferson tract is the producing Mackey Mine, estimated reserves probably 50,000 tons of high grade fluorspar with good lead and zinc values from two parallel structures, one of these structures, the Stewart fault, has been a producer along 1½ miles of trend to the northwest; on the 120 acre, Neat Parkinson tract to the northwest of the Ollie Jutner 80 acres, no core holes have been drilled in the eastern 80 acres but on the Lee Parkinson 40 acre tract to the west and on the northwest 40 acres of the Neat Parkinson, the Applicant drilled 20 core holes. These holes indicated a sizable ore body (probably 60,000 tons) of good grade fluorspar with associated lead and zinc in two or three parallel breaks. The Ozark Company is now engaged in rehabilitating the old Parkinson shaft and intend to mine this ore in the near future; on the 80 acre Loyd-Gibson tract to the north of the Neat Parkinson tract are the 19 core holes recently drilled under contract Idm-2685 and certified as a discovery (ore body estimated at 55,000 tons). Four or five parallel breaks were indicated in this drilling but only one showed enough concentration of mineral values to be termed ore.

Work proposed on the area covered by this examination is (1) core drill a series of holes at 500-foot spacing on a cross-section following a diagonal line between the southeast and the northwest corners of the tract, (2) if the fault breaks, previously indicated, are further confirmed or other faults are indicated, it is proposed to drill further core holes along such potential trends so long as encouraging results are obtained.

Conclusions

Since considerable exploration has been done in the area surrounding this Ollie Joiner tract and it has established that the general geological pattern appears to be one or more series of parallel breaks, many of which are mineralized with fluorspar, lead and zinc and since the area under consideration is covered with a blanket of alluvium and there are no outcrops apparent, the Applicant's proposal to drill a cross cut across the general trend appears to be the most logical method to explore this highly potential area for economic deposits of critical materials.

Recommendations

It is the recommendation of the Field Team to approve this application, as presented, so far as the eastern 40 acres is concerned, but with the proviso that the continuation of the cross cut onto the western 40 acres be held in abeyance, subject to later approval of the Field Team, if sufficient new evidence of formational breaks or mineralization is discovered, either in the drilling of the eastern 40 acres or from other adjacent tracts.

Time Spent on Property

This property was examined on April 12 - 13, 1955 by the Field Team composed of Robert D. Trace, U. S. Geological Survey and C. L. Neumann, Bureau of Mines. Mr. A. G. Johnson, Geological Engineer, Ozark-Mahoning Company, aided the Field Team in the examination.

Name and Location of Property

The Ollie Joiner tract comprises the NW¼ of the NW¼ and the NE¼ of the NW¼ of Section 27, Township 12S, Range 7E. It is located in Pope County, Illinois about 7 miles northwest of Rosiclare, via Illinois highways 34 and 146, and 8 miles northeast of Golconda, via Illinois highway 146. These State highways are good all-weather roads. The property is on a dirt road ½ mile south of Illinois 146.

Competency of Applicant

The Applicant is one of the largest producers of domestic fluorspar and is well staffed with technical and operational personnel. Ozark-Mahoning has completed three DMEA contracts, two of which have been certified. Their planning, efficiency, cooperation and reports are exemplary. The Applicant's financial responsibility is excellent.

Applicant's Property Rights

The Applicant has a lease and option on the 80 acre, Ollie Joiner Heirs tract. A copy of the lease is included with the application. Owner's Consent to Lien forms will be executed when contract is signed.

Description of Property

The Ollie Joiner Heirs tract is low rolling farm land. There are at present no mining or milling facilities on this tract. This particular 80 acre is well surrounded by exploration but no work has ever been done on the tract itself.

Geology

The ore deposits of the Kentucky-Illinois fluorspar district consist of fluorspar with subordinate quantities of sphalerite and galena. Calcite and barite are the principal gangue minerals. The ore deposits, excluding the Cave in Rock bedded deposits, occur as veins along steeply dipping faults that

displace relatively flat or shallow-dipping shale, sandstone, and limestone beds of Mississippian and Pennsylvanian age.

The geology and vein deposits of the Ollie Joiner tract are typical of the district and similar to the Fairbairn tract (DMA-2838) and the Loyd-Gibson tract (DMA-3338), which are about 1,500 feet northeast and 2,800 feet north, respectively. (See applicant's map).

Although outcrops in this area are poor, the Bethel sandstone probably is the surface formation over most of the Joiner tract. The Bethel sandstone of lower Chester age is a light-brown fine-grained massive sandstone, generally a little over 100 feet thick. Underlying the Bethel sandstone is the Renault formation, also of lower Chester age. This formation consists of alternating beds of dark-gray shaly limestone, gray shale, and gray oolitic limestone. The formation is approximately 2/3 limestone and 1/3 shale, and is about 100 feet thick. Underlying the Renault formation is the Ste. Genevieve formation of Meramec age. The Ste. Genevieve is divided into three members: the Levias limestone member--a light gray oolitic limestone about 30 feet thick, the Rockaire sandstone member--a greenish gray calcareous sandstone about 25 feet thick, and the Fredonia limestone member--mostly light gray and oolitic or dark gray and fine-grained limestone, about 150-175 feet thick. Practically all the ore deposits of the area occur where the wall rocks of the faults are the Ste. Genevieve.

Because of the poor outcrops, no surface evidence of faulting has been found on the Joiner tract. This lack of surface indication of faulting, however, is typical of the surrounding area, where considerably faulting has been found as a result of diamond drilling. A number of northeast-trending steeply dipping faults almost certainly cross at least the eastern half of the Joiner tract. (See applicant's map). This supposition is based upon the projection

of faults known to the northeast and south of the Joiner tract. Although the zone of faulting can be projected with considerable certainty through the eastern half of the Joiner tract, the details of the faulting (and accompanying mineralization) are unknown and can be found only by physical exploration or possibly geophysical techniques. The displacement along the faults in this area ranges from 20 to 100 feet and usually is less than 50 feet. This small displacement is also a factor that makes it difficult to locate and map the faults from surface evidence.

In addition to the localization of ore deposits along faults where the country rock is the Sta. Genevieve, there is suggestive evidence on both the Fairbairn and Loyd-Gibson tracts that ore may be localized at fault intersections. A projection of the faults known to the north of the Joiner tract, suggests that a fault intersection may be present in the south central part of the tract. (See applicant's map. Fault F, as drawn on applicant's map, may cross the north property line about 200 feet east of where it is now shown. This shift is based upon drilling now in progress on the Reid tract about 3,000 feet northeast of the Joiner tract.)

If ore deposits occur on the Joiner tract, and there is a reasonable chance that they will, they would probably be vein deposits of fluorspar with subordinate sphalerite and galena localized along faults, as found in the DMEA exploration on the nearby Fairbairn and Loyd-Gibson tracts.

An ore body of 32,500 tons was certified on the Fairbairn tract, and about 55,000 tons of ore was found through DMEA assistance on the Loyd-Gibson tract. In addition, Ozark-Mahoning found significant deposits on the Hart Parkinson tract, just south of the Loyd-Gibson tract. Also, about 20,000 tons of ore was found by Ozark-Mahoning on the Reid tract just south of the Joiner tract.

In summary, the favorable recommendation to drill the eastern half of the Joiner tract is based upon the following geologic factors:

(1) The probable occurrence of several faults.

(2) The presence of the favorable Ste. Genevieve formation at a depth of about 300 feet.

(3) The presence of several minable ore bodies in the immediate vicinity.

(4) The possible presence of a fault intersection.

Availability of labor, utilities, materials, etc.

This area has always been the leading producer of domestic fluorspar and still holds that position. Manpower is available for any size or type of fluorspar operation: unskilled labor $1.00 an hour, skilled labor $1.50 an hour. Supplies and materials are obtainable at Rosiclare or Elizabethtown, Ill., both seven miles from this property. Several large machinery houses have agents and truck delivery service in Marion, Kentucky, 25 miles distant or Paducah, Kentucky, 30 miles distant. Power is available through R.E.A. lines near the property. Water is available in Big Grand Pierre Creek, which runs just west of the property.

Applicant's Proposal

The work program has been well planned logically and financially to get the best answer as readily and cheaply as possible. The area has a good potential and the program: 12,000 feet of diamond core drilling, appears adequate to explore the 80 acre tract. The drilling would be on a continuation of former contracts and the price is very reasonable especially for the caliber of work produced. The program would start within 30 days after the contract is signed and continue for 18 months, which appears adequate but realistic considering that all of drilling except the original cross-cut will be contingent

upon indications from previous holes.

Allowable Costs of Project

The drilling will all be done on independent contract with a slight additional cost for technical assistance, guidance, sampling and analysis of samples.

Core drilling per foot	-	$2.60
Geologist	-	0.15
Chemist	-	0.02
Assaying	-	0.01
Total unit cost	-	$2.78

College Park, Md.
May 2, 1955

MAR 2 4 1955

Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Docket No. DMEA-9644 - Fluorspar-Lead-Zinc
Ozark-Mahoning Company
B. K. Jolmar, et al. Tract
Pope County, Illinois

Gentlemen:

Your application for assistance in exploring the subject property has been reviewed by the Nonmetallic Minerals Division of the Defense Minerals Exploration Administration and has been referred to Mr. Robert A. Lawrence, Executive Officer, DMEA Field Team, Region 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 that you may give the members of the field team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

JHopkins:ad 3/23/55
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region V
Mr. Killagnard, 5222
Mr. Ahumada, 3516
Mr. Hook

MAR 2 4 1955

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

Subject: Docket No. DMRA-3644 - Fluorspar-Lead-Zinc
Cerro-Mahoning Company
B. K. Jolner, et al., Trust
Pope County, Illinois

Dear Mr. Lawrence:

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

Copies of memoranda from the Geological Survey, dated March 8, 1955, and from the Bureau of Mines, dated March 18, 1955, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Redges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

Enclosures 4

JHopkins:ad 3/23/55
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Arundale, 3516
Mr. Nunk

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

March 18, 1955

Memorandum

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

From: Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of application; D.M.E.A. Docket No. 3644, Fluorspar-Lead-Zinc, Ozark-Mahoning Co. - B. J. Joiner et al tract, Pope County, Ill.

It is my understanding that the applicant has submitted additional information concerning holes drilled on the Milbourne, Stotlar and Reid tracts. It is therefore recommended that the application and such additional information as has been supplied be referred to the Field Team for evaluation and recommendations.

John E. Holtzinger

Copy to: Files
Div. of Minerals
Br. of Const. & Chem. Mats.
Mr. Holtzinger

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 9 - 1955

March 8, 1955

Memorandum

REVIEW OF APPLICATION DMEA-3644 (Fluorspar-lead-zinc)

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

From: R. E. Van Alstine, U. S. Geological Survey

Applicant's name and address: Ozark-Mahoning Co., Rosiclare, Ill.

Name of property: E. E. Joiner tract

Location of property: NW 1/4 NE 1/4 and NE 1/4 NW 1/4 sec. 27, T. 12 S., R. 7 E.

Summary of applicant's proposal:
12,000 feet of drilling; holes along line across these 2 quarter-sections at right angles to projected faults, and additional holes depending upon results.

Sources of information on applicant's property:
DMEA-2838, Fairbairn tract
DMEA-3338, Loyd-Gibson tract

Comments: The scope of the proposed exploration seems too large and might be cut to about 8,000 feet. The basis for any exploration in NE 1/4 NW 1/4 of sec. 27 has not been demonstrated. Evidence for the most northwesterly questioned fault or mineralization along it has not been presented. Therefore Stage I of the exploration might be limited to about 4,000 feet, or 6 to 8 holes along the southeast end of the proposed section in NW 1/4 NE 1/4 sec. 27. Additional drilling (total 4,000 feet) might be justified after Stage I has been completed, along the strike of any ore body found.

RECOMMENDATION: Field Team appraisal.

REVanAlstine:hlm
G-3/8/55
CC: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. C. Arundale, 3516 Interior

R. E. Van Alstine

600

FEB 1 4 1955

Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Docket No. DMEA-3644 - Fluorspar-Lead-Zinc
B. E. Joiner et al. Trust
Pope County, Illinois

Gentlemen:

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

According to your map of the area, we note that 10 holes have been drilled on the E. M. Stotler Trust, 12 holes on the R. F. Redd Trust and 4 holes on the C. R. Milbourne et al. Trust.

In order that we may properly evaluate your application, may we suggest that you furnish us with copies of the logs of these holes, together with any additional geological information you may have on the shafts sunk on the Stotler, Crusoe, Redd and Milbourne Trusts.

Sincerely yours,

Lawrence G. Hawk, Chief
Nonmetallic Minerals Division

JHopkins:ad 2/14/55
Copy to: Admr. R. File
Docket
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Arundale, 3516
Mr. Hawk

IN REPLY REFER TO:

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

February 3, 1955

Re: DMEA-3644
Ozark-Mahoning Co.
Joiner Tract
Pope County, Illinois
$33,360
Fluorspar-Lead-Zinc

Memorandum

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

From: R. D. Trace, U. S. Geological Survey

Subject: Review of application

Additional information is needed in order to evaluate the subject application. According to the applicant's map of the area, 10 holes have been drilled on the Stotler tract, 12 holes on the Reid tract, and 4 holes on the Milbourne tract. The logs of these holes would be quite useful.

Also, according to applicant's map, there is a shaft on each of the following tracts: Stotler, Crumm, Reid, and Milbourne.

I suggest that the Ozark-Mahoning Co. be asked to furnish any information that they may have about the above mentioned drill holes and shafts.

R. D. Trace

RDTrace:hlm
G-2/3/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. C. Arundale, 3516 Interior

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1955

February 3, 1955

Re: DMEA-3644
Ozark-Mahoning Co.
Joiner Tract
Pope County, Illinois
$33,360
Fluorspar-Lead-Zinc

Memorandum

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From: R. D. Trace, U. S. Geological Survey

Subject: Review of application

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R. D. Trace

RDTrace:hlm
G-2/3/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. C. Arundale, 3516 Interior

IN REPLY REFER TO:

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

February 3, 1955

Re: DMEA-3644
Ozark-Mahoning Co.
Joiner Trust
Pope County, Illinois
$33,360
Fluorspar-Lead-Zinc

Memorandum

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

From: R. D. Trace, U. S. Geological Survey

Subject: Review of application

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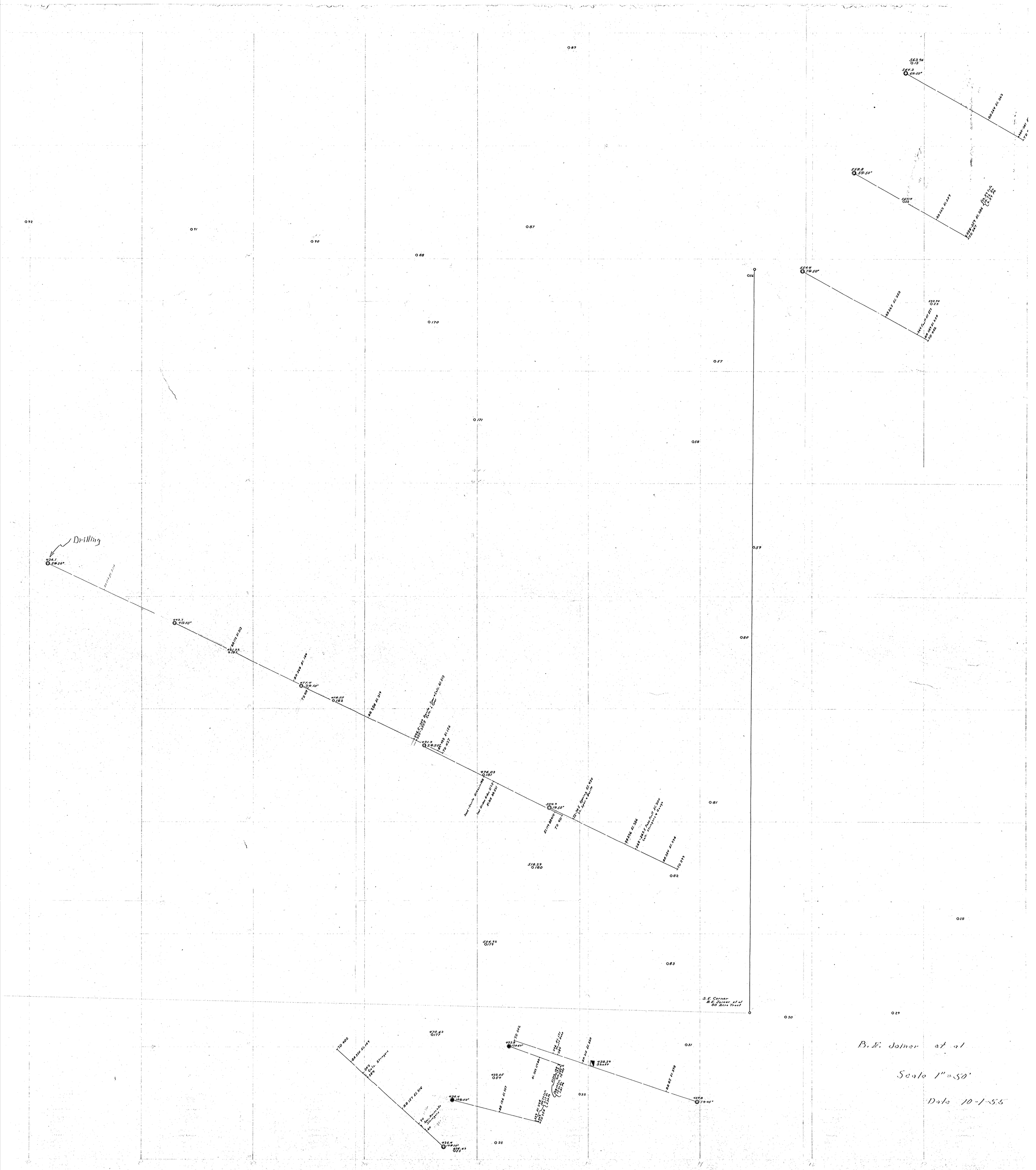
RDTrace:hlm
G-2/3/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. C. Arundale, 3516 Interior

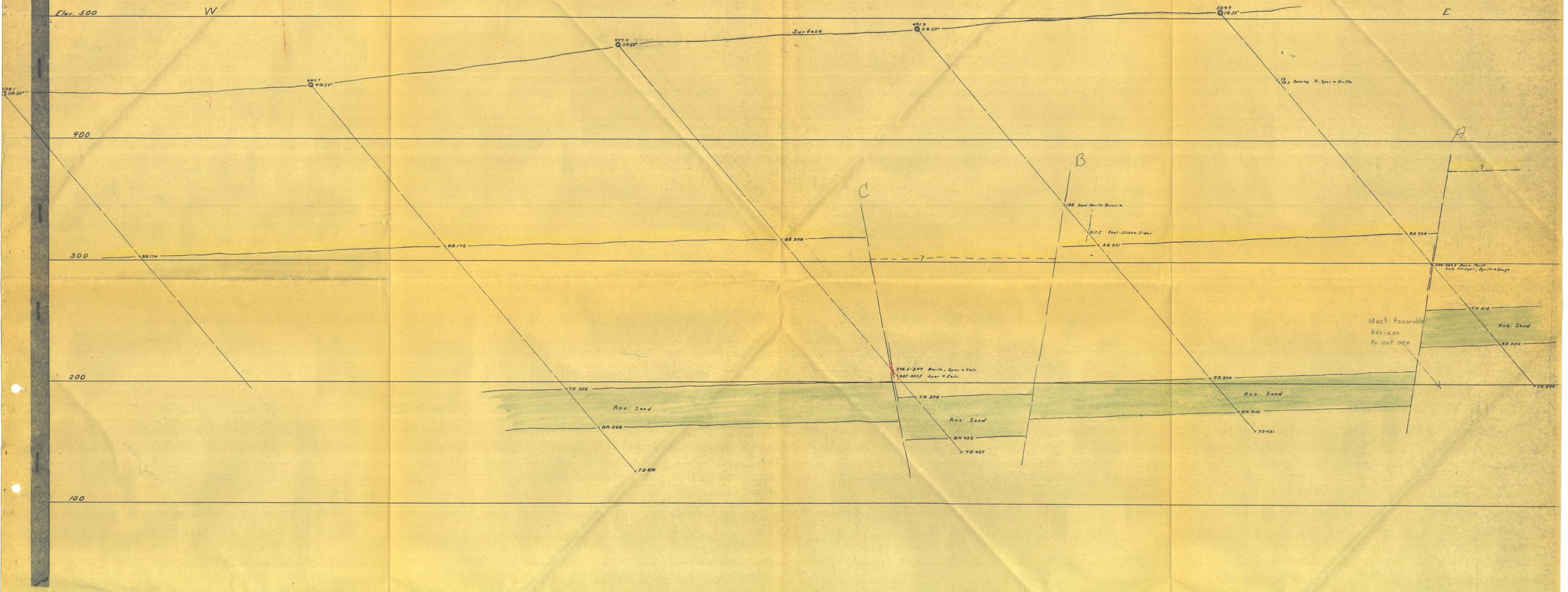


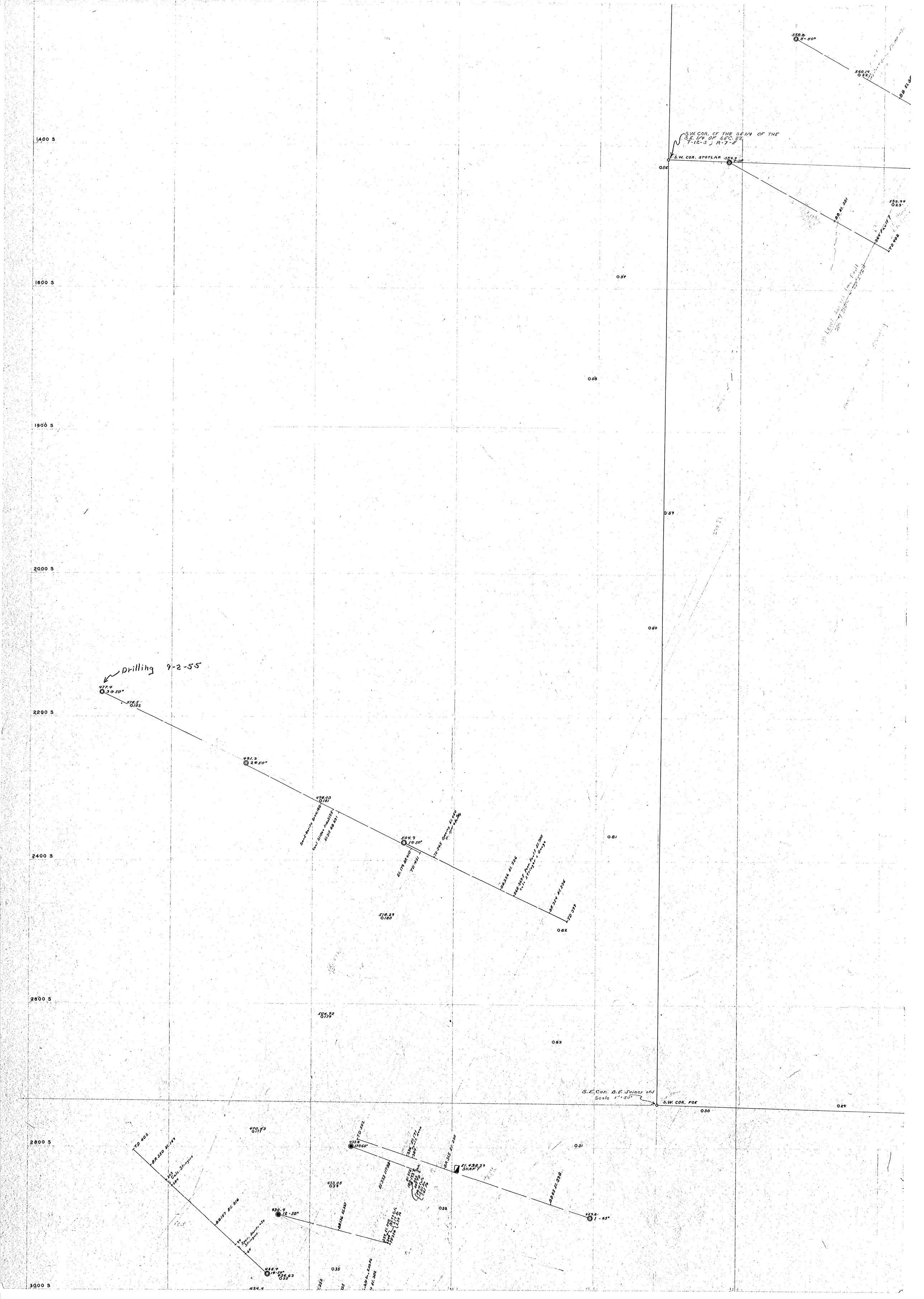
B.E. Joiner et al

Scale 1" = 50'

Date 10-1-55

B.E. JOINER 80 ACRE TRACT
SECTION - AA'
SCALE: 1" = 30'

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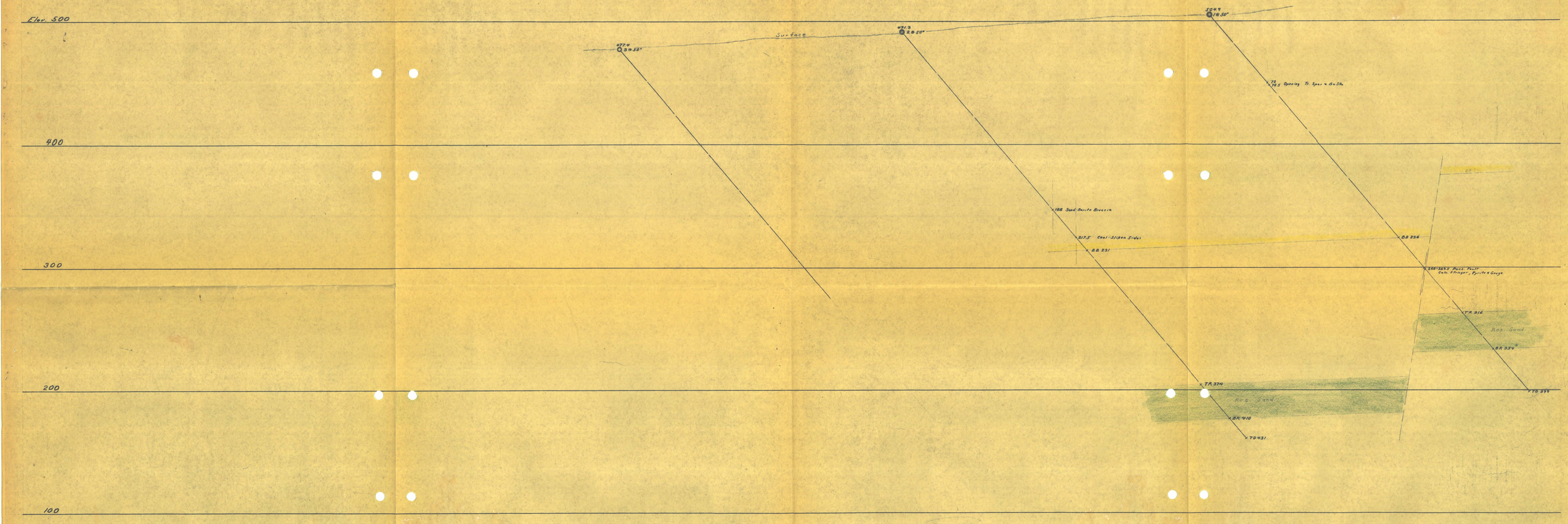
B.E. JOINER 80 ACRE TRACT
SECTION - AA'
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