DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 255 — DMEA NO. 2248

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

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

Right Side

- [ ] Project summary (final)
- [x] Work Completed analysis (final)

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

- [x] Field Team Semi-Annual Report for Certified Project
- [x] Final Field Team Report (Tab) - Rpt 1
- [x] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam ~~Report~~ MEMO. (Tab)
- [x] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. 2 : Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

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

Folder R# 3- Field Team Final Rpt #2

Folders No. 4 : Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

17963

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 6-4-54

REFERRED TO:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Gelfridge~~
4. Mr. Houk

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Pl. see letter of May 29 [illegible] copy of an [illegible] of [illegible] [illegible] for the [illegible] of $30,982.50 [illegible]

Check (X) before the items needing attention.

[illegible]

E. D. Talbert
Initials of sender.

GPO 16—63815-1

[illegible]

42,941.20

(over)

The original
The celebration of dress day, or
development of women's lady, the
year ending May 29 remarkable
effect

Docket File copy
Surname

Rubin
Talbot
Houk
Hedges
Hoffland
Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 140

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Ozark-Mahoning Company
Rosiclare, Illinois

Pursuant to the provisions of Amended Exploration Project Contract No. Idm-E255, (Docket No. DMEA-2248), dated June 2, 1953, between you and the United States of America, hereinafter called the "Government," to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Churn-drilling discovered and partly blocked out two separate fluorite-zinc-lead replacement deposits in limestone of Mississippian age. Sufficient drilling was completed to calculate inferred ore reserves.

THE UNITED STATES OF AMERICA

By C O Mitchell
Administrator, Defense Minerals Exploration Administration

Dated: JUL 7 - 1954

LGHouk:HCRubin:lm - 6-22-54

Copies to:
Irving Gumbel, EPS, GSA
Chas. N. Hill, Elizabethtown, Ill.
Walter Ledford & Blanche H. Ledford
Cave-in-Rock, Ill
Operating Committee
Mr. Hedges, 4604
Mr. Houk (2)
Hofflund
Chron.

Field Team, Reg VIII(2)
Mr. Thayer, 5216 GSA Bldg
Docket File
Admr. R. File
Finance Office
Mr. Chambers
Mr. Johnson
Rubin
Pending

E COPY
NAME:

Robertson
Houk
Selfridge
Hedges
Johnson
Chamber
Johnson

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

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Ozark-Mahoning Company
Rosiclare, Illinois

Pursuant to the provisions of Exploration Project Contract No. Idm-E255, dated February 18, 1952, (Docket No. DMEA-2248), hereinafter called the "contract", between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the mineral deposit which is the subject of the exploration project, the Government considers and therefore certifies that a discovery or development has resulted from the work from which commercial production of ore may be made, in or upon that certain property, described as follows:

A leased tract of land known as the Hill-Ledford Farm containing 597 acres more or less, as more fully described in Annex I attached to contract.

The Government's estimate of said discovery or development is particularly described and delimited as follows:

Churn-drilled holes aggregating 25,500 feet in length discovered and partly blocked out two separate bodies of fluorite-zinc-lead ore occurring as bedded replacement deposits in limestone beds of Mississippian age. Sufficient drilling was done to calculate inferred ore reserves.

THE UNITED STATES OF AMERICA

By C D Mitchenor
Administrator, Defense Minerals
Exploration Administration

Dated: MAY 29 1953

JTRobertson/GCSelfridge/esf 5-28-53
Copy to: Mr. Russell Forbes, DMPA
Operating Committee
Admn. R. File
Mr. Hedges, 4604
Mr. Johnson
Field Team, Region VIII
Mr. Thayer, 5216 GSA Bldg.
Mr. Chambers
Docket File ✓
Mr. Houk

D.N. 5-29-53

[illegible]

[illegible]

I have reviewed the Monthly Reports of:

Clark-Eshoniar Company
Dondiclero, Illinois

pertaining to Exploration Project Contract No. [illegible], Project No. [illegible]-[illegible], including Amendment No. 1, an Amended Contract, and Amendments Nos. 1 and 2, thereto, for the months of February, 1962, to March, 1964, inclusive, covering a project for the exploration of fluorspar on property from an Hill-Vedford Tract, located in [illegible] County, Illinois.

My review included an examination of the Monthly Reports (Form [illegible]-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports, and determination of the reasonableness and propriety of the costs.

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

> all of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed.

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

Total cost as billed by Contractor		$85,[illegible].54
Exceptions:		
By DMA Finance Officer	- 0 -	
Verification	- 0 -	- 0 -
Total Accepted Cost		$[illegible],[illegible]2.54

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 forty-two thousand seven hundred forty-one and 27/100 dollars,

$42,741.27

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

E. D. Talbert
E. D. Talbert, Auditor

June 4, 1964

Mr. Robertson

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-E255, Docket No. DMA-2248, including Amendment No. 1, for the period of February 18, 1952 to January 31, 1953, inclusive, covering a project for the exploration of fluorspar.

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, consultation with the Regional DMEA Executive Officer, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of an audit of the Operator's accounts for the reason that:

the contract as amended provides for payment by the Government on the basis of agreed estimated costs of units of work actually performed, i.e., 25,500 feet of drilling at the following costs:

Sub-contract churn drilling @ $2.25/ft.	$57,375.00
Supervision @ $0.15/ft.	3,825.00
Assaying and laboratory @ $0.01/ft.	255.00
Clerical @ $0.02 ft.	510.00

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

Total cost as billed by Contractor		$61,965.00
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$61,965.00

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 Thirty thousand nine hundred eighty-two and 50/100 Dollars

— $30,982.50 —

is considered valid and proper.

March 9, 1953

E R Talbert
Auditor

Docket copy

TERMINATION AGREEMENT

It is agreed this 7th day of July, 1954, 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 Amended Exploration Project Contract Idm-E255 (Docket No. DMEA-2248), dated June 2, 1953, as amended, hereinafter called the "Amended Contract," that:

1. All work and operations provided for in the Amended Contract shall be terminated as of May 24, 1954.

2. The Operator shall promptly render to the Government a full and final report and final accounting of the units of work performed under the Amended Contract up to and including May 24, 1954. Any units of work performed after May 24, 1954, shall be for the sole account of the Operator without contribution by the Government.

3. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Amended Contract, except as herein otherwise provided.

4. All rights of the Government with respect to Certification of Discovery or Development, percentage royalty, and lien for payment, as provided in the Amended Contract, are preserved.

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

THE UNITED STATES OF AMERICA

By C. Mitchenor
Administrator, Defense Minerals Exploration Administration

Robin Talbot Hale

OZARK-MAHONING COMPANY

By: J. G. Irwantha
Vice President

DOCKET COPY

Rutin 3/2/54

AMENDMENT NO. II TO ANNEX II OF
AMENDED CONTRACT NO. Idm-E255
OZARK-MAHONING COMPANY
DOCKET NO. DMEA - 2248

Contract Idm-E255 was amended, effective June 2, 1953, authorizing 25,000 feet of additional exploratory drilling as specified in Exhibit "A" Amended.

Due to unavoidable delay in starting the explorations under the Amended Contract and the advisability of reducing the operation from three drilling units to one drilling unit in order to take advantage of information obtained on the geologic structure in locating subsequent drill sites, progress was not maintained at the same rate as the previous exploratory work. As of February 1, 1954 there remains 16,500 feet of drilling to be completed and the expiration date of the Amended Contract is February 18, 1954.

It is considered to the advantage of the Government as well as the Operator to extend the expiration date of Contract Idm-E255 to permit completion of the exploratory drilling as specified in Annex II of the Amended Contract.

This amendment hereby extends the termination date of Contract Idm-E255 from February 18, 1954 to June 30, 1954.

This amendment shall not be construed as authorizing any change in allowable maximum costs or changes other than those specified, nor shall this amendment be construed as authorizing any increase in the total estimated allowable maximum cost of the project or the amount of the Government's participation.

OZARK-MAHONING COMPANY

BY J. G. Trewartha
Vice Pres

THE UNITED STATES OF AMERICA

BY W. T. Millar
W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Date: February 2, 1954

Docket Copy

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 19 1953

AMENDED EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-2248

AMENDMENT NO. 1

It is agreed this 6th day of November, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Ozark-Mahoning Company, each acting in consideration of the agreement of the other to the terms hereinafter set forth, that Amended Exploration Project Contract Idm-E255, Docket No. DMEA-2248, dated June 2, 1953, between the parties hereto, be modified and amended as of said date, as follows:

1. In "Exhibit 'A' Amended," Stage II is amended to read as follows:

(a) In the first paragraph, the word "partly" is inserted on the first line before the word "indicated."

(b) The second paragraph is changed to read as follows:

> "Three strips of land of a uniform width of 500 feet, located in the NW¼ of Sec. 24, T. 11 S., R. 9 E., are to be tested by a series of churn-drill holes not in excess of 25,000 feet, drilled to depths not in excess of 950 feet in the first and second strips and not in excess of 1100 feet in the third strip."

(c) To the third paragraph, the following is added:

> "The third strip is parallel to the southeastern sideline of the first strip and extends from the highway, Illinois Route No. 1, to the east side line of the quarter section."

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.

Executed in sextuplicate the day and year first above written.

OZARK-MAHONING COMPANY

By H. Trowartha Vice Pres.

THE UNITED STATES OF AMERICA

By O. Meitzenberg
Administrator, Defense Minerals Exploration Administration

DPKane
Van Alstine
Talbert

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 224

COMMODITY fluorspar

Docket Copy
IDM-E 255

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

AMENDED

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 2nd day of June, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ozark-Mahoning Company, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, Moscicare, Illinois

hereinafter called the "Operator," as follows: and as set forth in Annex II attached hereto

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Illinois, County of Hardin, described as follows:[3] A leased tract of land known as the Hill-Ledford farm containing 57 acres more or less, as more fully described in Annex I attached to Prior Contract, and made a part hereof

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner in possession and entitled to possession, and the property is subject to ~~xxxxxxx~~ to ~~xxxxxxx~~ liens, encumbrances, etc., a list of which is attached ~~xxxxxxx~~

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

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

ARTICLE 3. *Exploration project.*—The Operator, ~~xxxxxxx~~ shall continue ~~xxxxxxx~~ work on a project of exploration for[5] fluorspar

in or upon the described land; and shall bring the project to completion ~~xxxxxxxxxxxxxx~~ prior to Feb. 10, 1954 ~~xxxxxxxxxxxx~~ The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $ 61,357.50 which is 50 percent of $ 122,715.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

Ozark-Mahoning Company
(Operator)

By J. Trowbridge

THE UNITED STATES OF AMERICA

By O. Mittendorf
Administrator, Defense Minerals Exploration Administration

I, J. L. Cadden, certify that I am the Assistant Secretary of the corporation named as Operator herein; that J. G. Trowbridge, Vice President, who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

J. L. Cadden

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA - 2248

ANNEX II

WHEREAS, the parties to this amended agreement are also parties to Contract Idm-E255, dated February 18, 1952, as amended, executed on Form MF-200 (June 1951), hereinafter called the "Prior Contract;" and

WHEREAS, all the exploration work provided for thereunder has been completed but because of the favorable results there indicated, it is desired to explore further the northeasterly extension of the mineralized belt; and

WHEREAS, the parties desire to restate their agreement on the new contract form MF-200A(February 1952);

NOW THEREFORE, it is mutually agreed that:

(1) The Prior Contract is amended and superseded by this amended contract which shall control the Government's claim and lien for percentage royalty and in which all the rights and obligations of both parties are fully merged.

(2) The operator hereby releases and agrees to save harmless the Government from all claims and demands arising out of the Prior Contract.

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-2248

EXHIBIT "A" AMENDED

Description of the Work

The work shall be conducted in two stages.

Stage I

Stage I consists of the work already performed under the Prior Contract which is set forth in Exhibit "A" thereof and is incorporated herein by reference.

Stage II

The work in Stage II, indicated on the map attached hereto and made a part hereof, and entitled "Plat of NW¼ Sec. 24, T11S., R9E part of Ozark-Mahoning Company Lease of Hill-Ledford Tract," shall be as follows:

Two strips of land of a uniform width of 500 feet, both located in the NW¼ of Sec. 24, T.11S, R9E, are to be tested by series of churn-drill holes, not in excess of 25,000 feet, drilled to depths not in excess of 950 feet.

The first strip bears N.50° E and extends from Hole No. 32 M, to the east sideline of the quarter section. The second strip bears N 65° W and extends from the center of the centerline of the first strip to the west boundary of the quarter section.

Subject to the limitations set forth in items 3, 4, 5, and 6 on page 1 of Exhibit "A" of the Prior Contract, the spotting and spacing of the holes shall be determined by the operator.

Agreed Unit Costs

Stage I

25,500 feet of churn drilling at costs indicated in Amendment No. 1 of the Prior Contract	$61,965.00

Stage II

25,000 feet of churn drilling @ $2.43 per foot	$ 60,750.00	

S U M M A R Y

Cost of Stage I	$ 61,965.00	
Cost of Stage II	60,750.00	
Total Agreed Unit Cost		**$122,715.00**
Government Participation @ 50%		**$ 61,357.50**

DMEA-2248
DMEA-2935 - Idm-E255

MF-203

OWNER'S CONSENT TO LIEN

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

A leased tract of land known as the Hill-Ledford Farm containing 597 acres more or less, as more fully described in Annex I attached to prior Contract.

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

2/ Great-Lakes Mining Company, Bordelon, Illinois, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware.

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

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

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

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 84,357.53, or ten years have elapsed from the date of the contract.

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

Dated this 9th day of May, 1953

Paul H. Ledford [Seal]
Blanche H. Ledford [Seal]
Kathryn K. Ledford [Seal]
Walter Ledford [Seal]
Frances P. Wiley [Seal]
Charles N. Hill [Seal]
Victor L. Wiley [Seal]

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

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

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

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

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

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

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

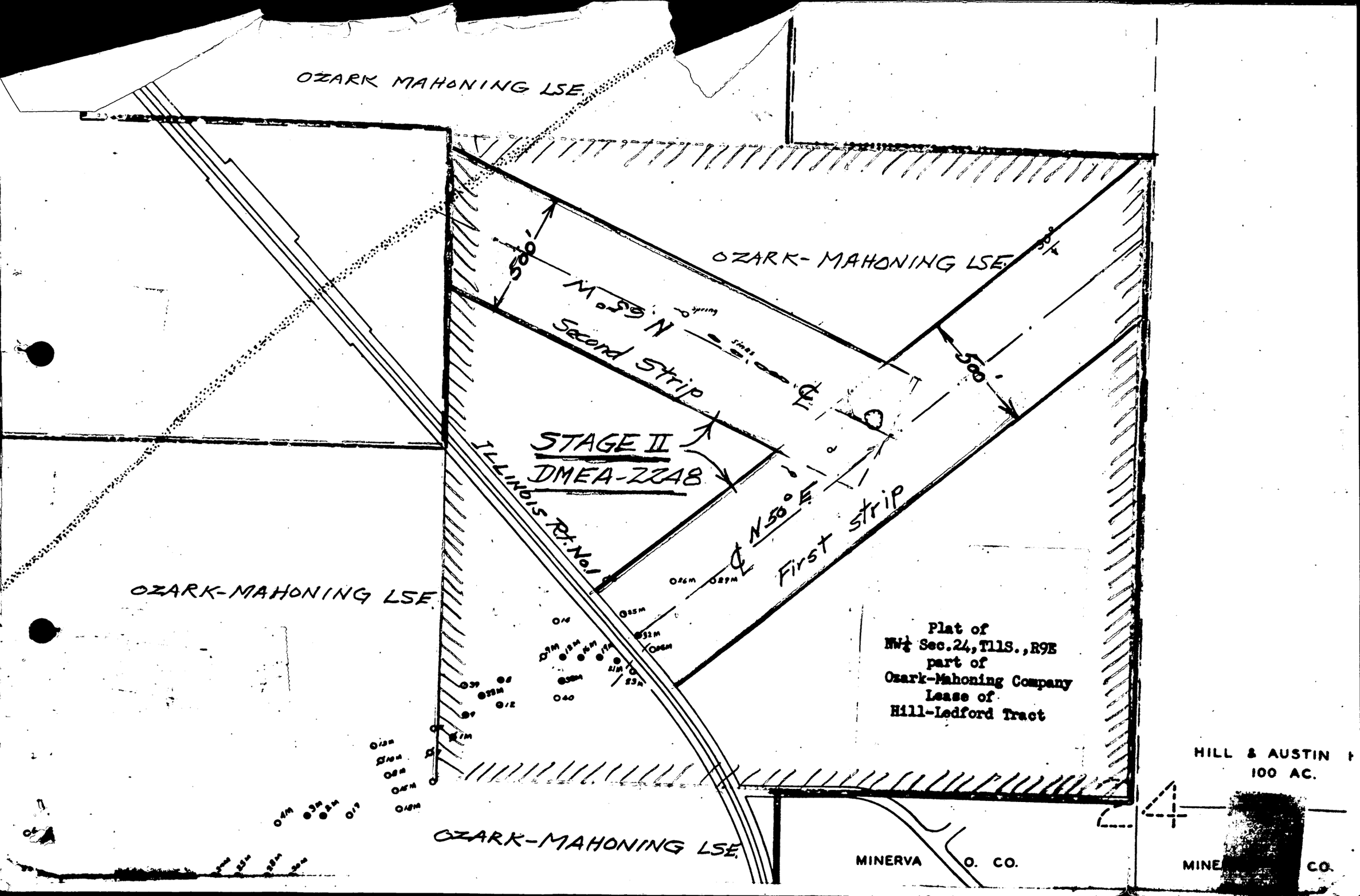
(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

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

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

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.


OZARK MAHONING LSE.
OZARK-MAHONING LSE.
OZARK-MAHONING LSE.
OZARK-MAHONING LSE.
500'
500'
N 59° N
Second Strip
STAGE II
DMEA-22A8
ILLINOIS Rt. No. 1
N 50° E
First strip
Plat of
NW¼ Sec.24, T11S., R9E
part of
Ozark-Mahoning Company
Lease of
Hill-Ledford Tract
HILL & AUSTIN
100 AC.
MINERVA
CO.
MINE
CO.

CKET COPY

CONTRACT AMENDMENT
NO. I

DMSA-2248, Idm-8255, Ozark-Mahoning Company

Hill-Ledford Tract

Hardin County, Illinois

Contract Docket No. DMSA-2248, Idm-8255, dated February 18, 1952, between THE UNITED STATES OF AMERICA and OZARK-MAHONING COMPANY, is amended as follows, effective February 18, 1952:

1. Articles 5, 6, 8 and 9 of the contract form are deleted.

2. Article 10 of the contract form is deleted and a new Article 10 is substituted therefore, reading as follows:

"Allowable costs of the project. The costs of the project in which the Government will participate are limited to the agreed, estimated unit costs, including independent contract costs scheduled in Exhibit "A", as amended herein, in lieu of actual costs. No work performed or costs incurred before the date of this contract shall be allowed as costs of the project in which the Government will participate."

3. In Exhibit "A", the " Estimated Costs of the Project" are amended to read as follows:

Independent Contract		
Churn-drilling, 25,500 ft. @ $2.25/ft.	$57,375.00	
Labor and supervision		
Supervision, 25,500 ft. @ $0.15/ft.	3,825.00	
Assaying and laboratory, 25,500 ft. @ $0.01/ft.	255.00	
Clerical, 25,500 ft. @ $0.02/ft.	510.00	
Total estimated cost of project	$61,965.00	$61,965
Government participation @ 50%		$30,98

The Government shall not be nor be considered to be a party to any independent contract entered into by the operator, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the cost of the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be obligated to pay, or the percentage of the costs which the Government may be obligated to pay, under the provisions of the contract.

Dated: Aug. 11, 195-

THE UNITED STATES OF AMERICA

By McHenry Mosier

McHenry Mosier, Executive Officer
Geologic-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

OZARK-MAHONING COMPANY

By J. G. Irwin Vice Pres.

MF-200
(June 1951)

3-7-52

Docket No. DMA 2248
Commodity Fluorspar
IdmE-255

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DOCKET COPY

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 18th day of February, 1952 between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Ozark-Mahoning Company, a corporation organizaed and existing under the laws of the State of Delaware ~~Rockford~~, Illinois.

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Illinois, County of Hardin described as follows: [3] A leased tract of land known as the Hill-Ledford Farm containing 597 acres, more or less; legal description is more fully described in Annex I, attached hereto

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached~~:

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

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] fluorspar; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] one (1) year from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

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

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

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

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

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

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

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

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

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $30,982.50, which is 50 percent of the agreed estimated total cost of this project, $61,965.00.

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

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

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

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

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

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

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

Ozark-Mahoning Company
(Operator)

By C. O. Anderson, Vice-President

ATTEST
Wm. Bloomfield SECRETARY

THE UNITED STATES OF AMERICA

By C. W. Mutterdorf
Acting Administrator, Defense Minerals Exploration Administration

Approved as to form
Hoffman

U. S. GOVERNMENT PRINTING OFFICE 16—40756

ANNEX I

West half of Southwest quarter of Section 13; East half of the Southeast quarter of Section 14, except one acre, more or less, south and west of State Route 1 sold to Kenneth Dutton June 11, 1940 as per Book 27, Page 363, Deed Records of Hardin County, Illinois; South half of Northeast quarter of Section 23; North half of Southeast quarter of Section 23; Southeast quarter of Southeast quarter of Section 23; Northwest quarter (except 2 acres in N. E. corner) of Section 24; West half of Southwest quarter of Section 24, all in Township 11 South, Range 9 East, containing 597 acres, more or less.

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-2248

EXHIBIT "A"

Statement of the Work

The project shall consist of testing for fluorspar by means of churn-drill holes, a strip of ground, 3,000 feet long by 400 feet wide, situated on a tract of land known as the Hill-Ledford Farm, Cave-In-Rock District, Illinois. It is estimated that 30 holes will be required drilled to depths of approximately 850 feet each or a total of 25,500 feet of holes.

The spotting and spacing of the holes shall be governed by the judgment of the supervising engineers and geologists in the employ of the operator subject to the following limitations:

1. The total footage shall not exceed 25,500 feet.

2. The strip of ground to be drilled shall not exceed a length of 3,000 feet nor a width in excess of 400 feet. The center line of strip is that straight line which would pass through Hill-Ledford Hole No. 8 and Hill-Ledford Hole No. 10.

3. No more than eight sections or rows of holes shall be drilled across the strip.

4. No more than 5 holes shall be drilled across any one section.

5. No holes shall be drilled closer than 60 feet from the nearest completed hole.

6. Deviation from the above five over-all limitations may be made only after approval from the Executive Officer of the Field Team of Region VIII. It is the intent that a reasonable liaison be maintained between the operator and the Field Team to the end that the program may be well planned.

Estimated Costs of the Project

Fixtures and improvements

None

Operating equipment

To be purchased

None

To be rented

None

Contracted work

Churn-drilling 25,500 ft. @ $2.25/ft.		$57,375.00

Labor and supervision

Supervision, 25,500 ft. @ $.15/ft.	$3,825.00	
Assaying and laboratory, 25,500 ft. @ $.01/ft.	255.00	
Clerical, 25,500 ft. @ $.02/ft.	510.00	4,590.00
Total estimated cost		$61,965.00
Government participation		$30,982.50

The Government shall not be nor be considered to be a party to any independent contract entered into by the operator, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the cost of the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Hardin, State of Illinois, described in a certain Exploration Project Contract dated ....., 195...., between Ozark-Mahoning Company - a Corporation of Rosiclare, Illinois, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 11, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 5th day of November, 195.1

Charles N. Hill

Blanche H. Ledford

Walter Ledford

U. S. GOVERNMENT PRINTING OFFICE 940768

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
NOV 26 8 58 AM '51

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

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

DO NOT FILL IN THIS BLOCK

Docket No. D.M.E.A. 2248

Date received 11-26-51

Participation

Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Name and address of applicant

Date November 7, 1951

FILL IN THIS BLOCK

Date of application November 7, 1951

Estimated cost $61,965.00

Mineral or metal Fluorspar-Zinc-Lead

Percentage of Government participation 50%

Location of mine Cave-In-Rock District

Rosiclare, Illinois

Date of filing MF-100 None filed

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

Sheet attached to cover answers 1-24, inclusive

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

*16. History:

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

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

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

*17. Production:

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

CERTIFICATION

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

Ozark-Mahoning Company
(Name of company)

By J. Truwartha
(Signature of authorized official)

November 7, 1951
(Date)

Vice President
(Title)

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

*Same as footnote on page 1.

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

OZARK-MAHONING COMPANY
Mahoning Mining Division
Rosiclare, Illinois

THE APPLICANT

1. Corporation
2. Not applicable
3. Data furnished General Services Administration in connection with Northgate, Colo. Acid Grade Fluorspar Project GSOOP (D) - 12085, Letter of Intent dated September 25, 1951.

4. The Ozark-Mahoning Company commenced prospecting for fluorspar, zinc and lead ores in the Illinois-Kentucky fluorspar district January 1, 1937 and have been actively engaged in that type of prospecting since that date. Most of the prospecting has been confined to the Cave-In-Rock district of Illinois, where the principal ore reserves of company are located. The concentrating plant of the company located at Rosiclare, Illinois was built in 1939 and has been in continuous operation since that date. Lead, zinc and fluorspar concentrates are produced - some of the zinc concentrates produced contain appreciable amounts of cadmium.

   Prospecting is in charge of A. G. Johnson, who has been in charge of prospecting operations for a period of thirty-five years, principally in the Tri-State district of Oklahoma, Kansas and Missouri and the Illinois-Kentucky fluorspar district. Mr. E. A. Brecke, geologist, is assistant to A. G. Johnson and has had ten years experience in the Illinois-Kentucky fluorspar district.

5. Lessee
6. Not applicable
7. Copy of lease attached, dated July 11, 1951. Ozark-Mahoning Company started prospecting the ground covered by the lease July 30, 1951 and have been drilling continuously since that date. The lease is in good standing. Landowners subordination contract, dated November 5, 1951, is attached to the lease.

8. Please refer to answer number three.
9. Fifty per cent of cost

THE PROPERTY

10. (a) The N-1/2 of SE-1/4 and the SE-1/4 of NE-1/4 of Section 23, Township 11 South, Range 9 East, Hardin County, Illinois.

    The SW-1/4 of NW-1/4 and NW-1/4 of SW-1/4 of Section 24, Township 11 South, Range 9 East, Hardin County, Illinois.

    See 400' scale map of property to show area included. Outlined by blue line.

    (b) Same as (a).

11. Hill-Ledford Farm
12. Property is located approximately six miles north of Cave-In-Rock and 20 miles northeast of Rosiclare, Illinois State Highway No. 1, which is paved, cuts through the property. The nearest railroad shipping point is Rosiclare - Roads are satisfactory for trucking.

13. Ample water available from underground mining operations. R.E.A. power available along Highway No. 1 - 200-500 HP necessary in case the property is mined.

14. None

15. Ore can be trucked and milled at Ozark-Mahoning mill located at Rosiclare, Ill.

16. (a) Property was prospected by Minerva Oil Company in 1941-1942. Twenty-one holes were drilled averaging in depth approximately 800 feet. A 100 foot scale map is attached showing the location of most of these holes. We believe holes #7, 8, 9, 10 and 13 show mineable ore along a NE-SW fault structure over an overall length of 3,000 ft. with the width of ore undetermined. The ore occurrence is a fluorspar-zinc-lead replacement of Fredonia limestone at the Rosiclare and Sub-Rosiclare contacts. We do not know the reason for abandonment by Minerva Oil Company. No production from property.

(b) The Minerva Oil Company operations are located approximately three-quarters of a mile to the southeast along more or less parallel faults or shear zones. The horizon is the base of the Bethel, which is approximately 100-150 feet shallower than that of the orebody indicated on the Hill-Ledford tract. Minerva has been in continuous operation for the past ten years and is presently milling 200 tons of fluorspar-zinc ore daily. The orebodies are more or less flat lying, averaging in height about eight feet and have a width of 75-300 feet. The grade of the ore is approximately 25% CaF_2 and 4% Zinc.

The Ozark-Mahoning operations are centered approximately two miles southwest of the Hill-Ledford tract. The orebodies are similar in type and occurrence to those of the Minerva Oil Company. On the Minerva properties the principal ore occurrence is a limestone replacement at the base of the Bethel sandstone. On the O-M properties the orebodies occur at one of three contacts, namely the base of the Bethel sandstone, the base of the Rosiclare sandstone as well as the base of the Sub-Rosiclare sandstone. Preliminary drilling on the Hill-Ledford tract suggests the probability of replacement type orebodies at the base of the Rosiclare as well as the Sub-Rosiclare. Ozark-Mahoning is presently operating five shafts on different orebodies and mining crude ore at the rate of 125,000 tons annually. The average grade approximates 38% CaF_2, 2.50 Zn., and 1.70 Pb. The crude ore is milled at the company plant located at Rosiclare.

(c) None available

17 - 19, inc. Not applicable

THE EXPLORATION

20. Fluorspar, zinc and lead. Bedded replacement type orebodies similar to those now being mined in the Cave-In-Rock district.

21. Kindly refer to the 100 foot scale map which is attached showing the location of the churn drill holes and pertinent data along the trend of the mineralized structure. At the present time, Ozark-Mahoning is drilling cross section A-A in an effort to determine the width of the mineralized zone. Two holes, 2-M and 3-M have already been completed, both of which show good mineable grade fluorspar ore at the Rosiclare contact. In addition, 2-M also shows good Zn,

with some Pb and fluorspar at the Sub-Rosiclare contact. We believe this ore is also of mineable grade. We are continuing the crosscut to the west and also expect to do further drilling to the east of #17. When this crosscut is completed we expect to drill other crosscuts, both to the southwest and the northeast in an effort to determine whether the ore occurrence is of sufficient size to justify a shaft and underground development. We estimate that thirty additional holes will be necessary. We believe the project can be completed within one year depending on the availability of churn drill operators.

22. Attached hereto is a map of the Cave-In-Rock district showing the location of the Hill-Ledford tract and the relation of same to other orebodies of the district. The major structural feature is the Peter's Creek fault trending N 45° E along which there has been a vertical displacement of 500 feet or more. The orebodies which have been mined to the southeast of the Peter's Creek fault are located along minor faults or shear zones which are adjustments produced at the time of the major disturbance.

THE REQUIREMENTS AND COST

23. Performance of Work

To determine whether sufficient ore exists along the mineralized trend as shown on the 100 ft. scale map and as outlined in answer 21, the company believes it will be necessary to drill approximately 30 holes averaging 850 ft. in depth. This depth will explore the probability of ore to the Sub-Rosiclare horizon. Distribution of the drill holes will be at the discretion of the company, provided however that the company will confine the work to the known mineralized trend and that the Government Field Engineers may consult with and advise the operator on such distribution.

The holes will be drilled with churn drilling equipment, utilizing independent drillers. The prevailing rate in the district is $2.00 - $2.25 per foot. A cost of $2.25 per foot will be used as a basis of this estimate, but the work will be done at a lower cost if possible.

The prospecting will be under the supervision of E. A. Brecke, company geologist, salary $523.69 per month. Engineering, surveying, mapping and blue printing will be carried on by company engineer, W. H. Melcher, salary $300.00 per month.

Total cost of the project is not to exceed $61,965.00.

Estimated Cost of Project

25,500 feet of churn drilling @$2.25 per foot	=	$ 57,375.00
(30 holes @ 850 ft.)	=	[illegible]
Supervision and Engineering cost @ 15¢ per foot	=	3,825.00
Assaying & Laboratory cost @ .01 per foot	=	255.00
Clerical & Office Work @ .02 per foot	=	510.00
Total		$61,965.00

24. We estimate the project can be completed within twelve months after project is approved.

C O P Y

LEASE AGREEMENT

This agreement made and entered into this 11th day of July, 1951, by and between Walter Ledford and Blanche H. Ledford, his wife, of Cave-In-Rock, Illinois and Charles N. Hill, of Elizabethtown, Illinois, hereinafter designated as the owners and Ozark-Mahoning Company, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and duly authorized to do business in the State of Illinois, hereinafter referred to as the lessee, WITNESSETH:

WHEREAS, owners hereby warrant that they are the fee owners of the hereinafter described real estate, all situated in the County of Hardin, State of Illinois, to-wit:

> West half of Southwest quarter of Section 13; East half of the Southeast Quarter of Section 14, except one acre, more or less, south and west of State Route 1 sold to Kenneth Dutton June 11, 1940 as per Book 27, Page 363, Deed Records of Hardin County, Illinois; South half of Northeast Quarter of Section 23; North half of Southeast Quarter of Section 23; Southeast Quarter of Southeast Quarter of Section 23; Northwest Quarter (except 2 acres in N.E. corner) of Section 24; West Half of Southwest Quarter of Section 24, all in Township 11 South, Range 9 East, containing 597 acres, more or less,

and

WHEREAS, lessee is interested in securing the entire and exclusive right to prospect for, mine, mill and otherwise prepare for market any or all minerals or mineral substances of every kind and character, including oil and gas, in, upon, beneath and underlying the above described real estate; and

WHEREAS, owners desire to have such minerals and mineral substances mined from said premises as above stated and lessees desire the right and privilege of entering upon said premises and working the same by the use of suitable machinery, equipment, fixtures and buildings, for mining and milling and related purposes which lessee may desire to place upon the premises and mining and recovering from said premises minerals and mineral substances for the purpose of sale and in the exploitation and determination of the possibilities obtaining, and the same is agreeable to owners:

NOW, THEREFORE, in consideration of the sum of one dollar ($1.00), and other valuable considerations paid or to be paid to the owners, the receipt and

sufficiency of which is hereby acknowledged, and the covenants and agreements to be kept and performed by the lessee as hereinafter expressed, the owners have and by these presents do give and grant to said lessee the exclusive right to enter upon said premises for the purpose of removing said minerals, and mineral substances, erecting buildings to be used in connection, either directly or indirectly, with the operations of lessee upon the above premises, installing machinery, tipples, sinking shafts, drifting, drilling or using any and all methods known to the science of mining, milling or refining or otherwise preparing ores, minerals, or mineral substances, for market, with the exclusive right to so conduct prospecting, mining, milling and related operations upon the above described premises, together with the right of ingress and egress and to build and construct over and across said lands, roads, trams and other means of conveyance and transportation for the purpose of transporting ores, minerals and other valuable substances found thereon or thereunder.

1. Lessee agrees to begin development work or prospecting or mining in an effort to determine the location of minerals under said premises within ninety (90) days from the date hereof. Said prospecting, mining or development work shall be carried on with reasonable expediency insofar as weather, road and marketing conditions will permit. Commencing July 1, 1953, the minimum annual royalty shall be four thousand eight hundred dollars ($4,800.00) per year payable quarterly. Minimum royalties shall be credited by owners to lessee upon earned royalties when and as same accrue.

2. The term of this lease shall be for a period of ten (10) years from the date hereof and as long thereafter as the terms and conditions set forth in this agreement are complied with.

3. The ore mined from said premises is to be milled at the plant of the lessee located at Rosiclare, Illinois, or any other milling plant, which the lessee may designate in Kentucky or Illinois. It shall not be mixed or commingled with ores from other lands until it has been crushed and sampled by the lessee for the purpose of determining the zinc, lead and fluorspar content. The resulting sample is to be assayed at the laboratory of lessee and owners may, upon request, receive an assay certificate showing the zinc, lead and fluorspar content of each day's run. In addition thereto, owners may receive, upon request, pulp of each day's composite sample; provided, however, there is no obligation on lessee to keep pulps for a period longer than thirty (30) days. In case of dispute as to analyses the pulp

prepared from the sample shall be referred to any umpire acceptable to both owners and lessee and the findings of the umpire shall be binding on both parties.

4. As full compensation to the owners for all ores mined and milled from the property above described, lessee shall pay to the owners a royalty of ten per cent (10%) of the selling price of the concentrates produced therefrom, based on the average prices actually received for lead, zinc and fluorspar concentrates by the lessee during the monthly periods as same are milled and sold. There is no obligation on the part of lessee to pay royalty on the zinc and lead content of the crude ore when the zinc or lead assay is below 0.5%. The net weight of the crude ore, dry weight basis, is to be determined at scales of lessee. Owners shall have the right to check weights as often as they deem necessary. On all other minerals, including oil and gas, produced and sold from the above-described property, the royalty shall be ten per cent (10%) of the selling price.

5. Owners shall have the right to examine such books, papers and records of the lessee as may be necessary to determine the amount of royalty due. Payment for all royalty shall be due and payable on the twenty-fifth (25th) day of the month for all tonnage removed from said property during the preceding month.

6. Owners shall have the right to examine all cores or cuttings removed in the drilling operations upon said premises but all information obtained by such examinations shall be held strictly confidential. Lessee shall keep such maps of the mine workings as may, in lessee's opinion, be required for the conduct of the mining operations and such maps shall be available to owners' representatives for examination at reasonable times.

7. Lessee agrees to surrender said premises to the owners at the termination of this contract and agreement in as good condition as now, excepting for such depletion in value as would result from operations in connection with mining and without any liability for any damage done by said operations, excepting only injury done to growing crops, to fences, buildings, cisterns, orchard or other personal property of owner by lessee, for which lessee shall pay when the actual extent of such damage shall have been determined by the parties hereto, but no liability shall attach to the lessee for any damage of any kind or character which is not asserted within ninety (90) days from the surrender, forfeiture or termination hereof.

8. Lessee expressly reserves the right to surrender this lease at any time and be relieved from all liability hereunder of every kind and character, except to account for royalties due at the time of such surrender for minerals, or other valuable substances, mined and sold from said premises prior to the date of such surrender.

9. Should lessee fail or neglect to make all payments or to perform any of the covenants and agreements herein set forth and should still fail to do so after receiving written notice from owners regarding the same and should fail to take proper steps to meet said conditions within a period of thirty (30) days after the receipt of said written notice, then in that event this lease shall be canceled and terminated. However, in any event, lessee shall be liable under this contract and agreement only for such royalty payments as may be due and payable at the time such actual cancellation and termination becomes effective as above set forth. Lessee reserves the right to remove from the premises any or all buildings, machinery and other personal property of lessee placed thereon by lessee, at the expense of lessee, after the termination, surrender or forfeiture of this agreement, and shall have one (1) year in which to make such removal.

10. Any notice herein mentioned to be given by lessee to owners shall be in writing and shall be sent by registered mail addressed to owners at Cave-In-Rock, Illinois and Elizabethtown, Illinois. Any notice herein mentioned to be given by the owners to the lessee shall be in writing and shall be sent by registered mail addressed to lessee at Rosiclare, Illinois.

11. Lessee shall carry Workmen's Compensation and Public Liability Insurance for and during the term of this lease or any renewal or extension thereof; provided, however, that with the permission of the proper authority the lessee may carry its own insurance as to Workmen's Compensation and Public Liability or any other insurance exacted or provided for under the laws of the State of Illinois, but in such event, lessee shall save and hold the owners harmless from any liability for damage occasioned to a stranger or to the employees of lessee resulting from said operations.

12. Lessee agrees that if any liens of any kind or character are filed against the minerals leased herein on account of the operations of the lessee that it will pay the same and free the minerals leased from such liens.

13. It is understood and agreed that lessee may use up to ten per cent (10%) of the land area herein leased which lies East of State Route No. 1, and ten per cent (10%) of the land area which lies West of State Route No. 1 for any purpose it sees fit in carrying out mining and milling operations. However, it is agreed and understood that the surface rights of any land above the stipulated ten per cent (10%) which the lessee requires shall be purchased by him at a rate of one hundred dollars ($100.00) per acre for bottom land and fifty dollars ($50.00) per acre for other land.

14. All parties hereto agree and understand that all the rights of either party hereto may be assigned, and the privilege of assigning or subletting in whole or in part is expressly allowed, and all the covenants and agreements hereunder shall inure to, continue and be binding upon the heirs, legal representatives, successors and assigns of the parties hereto, but no change in the ownership of the land or assignment of royalties shall be binding on the lessee until after the lessee has been furnished with a recorded, written transfer or assignment or a true copy thereof.

15. This lease is granted primarily for the purpose of prospecting, mining and selling fluorspar from said premises and while provision is made herein for royalty covering other valuable substances, minerals and metals, including oil and gas, the prospecting and mining of such other minerals, metals and valuable substances is at the option of the lessee and there is no requirement hereunder for it so to do.

16. It is agreed that no opening or buildings shall be made upon the surface of said premises within three hundred (300) feet of any building now situated thereon, but this provision shall not prevent prospect drilling on the area in question, nor the mining of said area by means of drifts and shafts located on an adjacent area. Provided however, that lessee shall pay to owner all damage to buildings occasioned by said mining operations.

17. Owners shall pay all taxes assessed against the property leased but the lessee shall pay all taxes assessed against any buildings, improvements, equipment or other personal property placed upon said premises by it.

18. IN WITNESS WHEREOF, the Parties have signed, sealed and delivered this instrument in triplicate each to be original, the day and year first above written.

/s/ Walter Ledford

/s/ Blanche H. Ledford

/s/ Charles N. Hill

Lessors

STATE OF ILLINOIS)
) ss.
COUNTY OF HARDIN)

I, Eva C. Bousman, a Notary Public, in and for and residing in said county, in the state aforesaid, do hereby certify that Walter Ledford and Blanche H. Ledford, his wife, and Charles N. Hill, personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 11th day of July, A.D. 1951.

/s/ Eva C. Bousman
Notary Public

SEAL

My commission expires:
March 20, 1954

OZARK-MAHONING COMPANY

By /s/ J. G. Trewartha
Vice President

SEAL

Attest:

/s/ J. L. Cadden
Assistant Secretary

STATE OF ILLINOIS)
) ss.
COUNTY OF HARDIN)

I, A. M. Sperberg, a Notary Public in and for the county and state aforesaid, do hereby certify that J. G. Trewartha, personally known to me to be the Vice President of Ozark-Mahoning Company, a corporation, and J. L. Cadden, personally known to me to be the Assistant Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such Vice President and Assistant Secretary they signed and delivered the said instrument as Vice President and Assistant Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

Given under my hand and notarial seal this 11th day of July, A.D. 1951.

/s/ A. M. Sperberg
Notary Public

SEAL

My commission expires: Oct. 4, 1953.

SEMI-ANNUAL REPORTS OF CERTIFIED PROJECTS

Reporting Period Jan. 1 to June 30, 1958 **Date of Examination** Feb. 1958

Operator Ozark-Mahoning Company

Mine Name Hill-Ledford Tract

County and State Hardin County, Illinois

Docket No. and Commodity — DMEA - 2248 (fluorspar)

Contract No. — Idm-E 255

ORIGINAL FILE COPY
DMEA
RECEIVED JUN 20 1958

DATE	[illegible]	[illegible]
6/20	C	220
23	Com	100
"	Fl	110
"	[illegible]	800
"	LG	600

Date of Contract June 2, 1953

Date of Certification July 7, 1954

Expiration Date of Royalty Payments June 2, 1963

Total Amount of Contract $122,715.00

Total Expenditures under Contract $85,482.54

Amount of Government Participation at 50 % $42,741.27

Royalty Payments since last report . . . $13,402.69

Previous Royalty Payments . . $15,147.93

Total Royalty Payments to June 16, 1958 . . . . . $28,550.62

Precent Government Participation Repaid 66.8

Royalty Due on Production to Date See remarks

Royalty Remarks

Royalty has not been paid for production made in April, May and June, 1958.

	Tons	Analysis	
Original Estimate of DMEA Reserves (Field Team Final Report) Mines ☐ Survey ☐ Joint ☒	463,600	CaF_2 35.5	Zn 2.48
Revised Estimate of DMEA Reserves (Field Team) Mines ☐ Survey ☐ Joint ☐	None		
Increase of Reserves by work performed subsequent to DMEA project work	484,418	CaF_2 33.20	Zn 1.30
Production DMEA ore Jan. 1, 1958 to Apr. 1, 1958 (~~This period~~)	7,077.8	51.47	0.335
(Previous) to Jan. 1, 1958	19,867.8	41.30	0.69
(To date)	26,945.6	44.41	0.596
* Operator's ore found subsequent to DMEA work (This period)			
(Previous)			
(To date)			

Percent Revised Reserves mined 2.84% of 948,240 tons revised reserves

(For Uranium Ores Only)

Initial Production Bonus:

Status of Operator: Ineligible ☐ Applied for ☐ Rec'ing pmt ☐ Pd up ☐

Pounds U_3O_8 produced this period eligible for Bonus

Amount of Bonus paid to Operator this period $

Total pounds U_3O_8 produced to date eligible for Bonus

Total amount of Bonus paid to Operator to date

Bonus Royalty Paid $

Bonus Royalty Due $

Investment Data

Shafts Size	Feet	Cost	Winzes Size	Feet	Cost	Drifts & Crosscuts Size	Feet	Cost

Raises Size	Feet	Cost	Drilling Type & Size	Feet	Cost	Rehabilitation Description	Cost

Facilities

Mine Plant Description	Cost	Mill Description	Cost	Roads Description	Cost

Pillars amounting to about 25% ore left in mining this flat orebody which varies from 10 to 20 feet thick. Since July 1, 1957, approximately 2,700 linear feet averaging 18 feet wide have been mined. Ore as mined contains about 10% more CaF_2 than calculated in the reserve estimate.

Signed H. L. Burmeister
Engineer

FILE COPY
SURNAME:

Roberts
Smith
Chamberlin

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

May 25, 1953

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A closing review of Docket No. DMEA-2248 - Fluorspar - Zinc - Lead
Contract No.: Idm-E255
Date: February 8, 1952
Property: Hill-Ledford Tract (6 miles north of Cave-in-Rock), Hardin County, Illinois, Approx. 576 Acres.
Operator: Ozark-Mahoning Company (Mahoning Mining Division) Rosiclare, Illinois.
Correspondents: J. G. Trewartha, Vice President, A. G. Johnson, Chief, Geologist for the Company.
Approved amount of Contract: $61,965.00.
Accepted cost of project: $61,965.00.
Governments share @ 50%: $30,982.00.
Project work started March 1, 1952.
Project work completed January 15, 1953.
Total churn-drill holes: 25,500 feet.
Unit cost per foot: $2.43.

Discovery: See Certification Of Discovery.

Docket Summary:

11/26/51	Received application form MF-103.
12/6/51	Project recommended by H. W. Davis, USBM. Amount $61,965.00.
12/13/51	Project recommended by Ralph W. Van Alstine, USGS.
2/12/52	Contract No. Idm-E255 transmitted to Region VIII for applicant's signature.
2/18/52	Ozark-Mahoning Co. arrange drilling contract with Moreland and Hohlers, contractors.
2/18/52	Amendment to contract, Amendment No. 1. All cost placed on unit cost basis of $2.43 per foot.
3/1/52	Project churn-drilling started.
1/15/53	33 holes totaling 25,500 feet completed.
2/16/53	Received, Operator's final report (see final report for ore developed and maps and logs of holes).
3/9/53	Audit review by E. D. Walbert, Auditor.

4/24/53 Received Final Report on Completed Contract by Field Team, Region VIII. Certificate of Discovery recommended.

Project Cost: (Per audit review 4/9/53 by E. D. Talbert, Auditor.)

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

Total cost as billed by contractor		$61,965.00
Exceptions:		
By DMEA Finace Officer	$-0-	
Herewith	-0-	
Total accepted cost		$61,965.00

The contract called for a 50 percent participation of exploration expense by the United States Government. Therefore, payment to the contractor by the Government in the amount of Thirty thousand nine hundred eighty-two and 50/100 Dollars

- $30,982.50 -

is considered valid and proper.

Resume:

The exploration project, as approved, provided for a maximum of 25,500 feet of churn-drilling; some 33 holes were drilled spaced systematically over an area 3,000 feet long and 400 feet wide. The unit cost was $2.43 per foot and the total cost $61,965.00.

The operation started March 1, 1952 and was completed January 15, 1953. The drilling indicated substantial tonnages of fluorite, with associated zinc and lead, in two separate blocks of ground, designated in the reports "Block "A" and Block "B". Block A is 1500 feet long, 200 feet wide and averages 13.4 feet in thickness. Block B is 800 feet long, 100 feet wide and averages 41.8 feet in thickness.

Tabulation of Ore Reserves in Blocks "A" and "B" -

	Block	Tons	$\%CaF_2$	%Zn	%Pb
	A	339,466	37.4	3.46	0.20
	B	278,666	33.4	1.54	--
Total -		618,132	35.5	2.58	0.12

25% for pillars and lean zones	154,532	-	-	-
Minable Reserves	463,600	35.5	2.58	0.12

The field team made a tentative monetary appraisal or evaluation of the above inferred reserves. The tentative evaluation set forth is as follows:

Revenue:

(Based on an ore concentration ratio of 3 to 1.)

108,173 tons acid grade fluorite @ $60.00 /ton	$ 6,490,380.00
46,360 tons Met. grade fluorite @ $40.00 /ton	1,854,400.00
19,137,400 lbs. zn. (80% extract. 12¢ mkt.)	2,296,488.00
890,120 lbs. Pb. (80% extract. 12¢ mkt.)	106,814.00
Total return	$10,748,082.00

Operating Cost:

Ore delivered to mine bin @ $3.50 per ton	$ 1,622,600.00
Ore delivered to mill bin @ 1.50 per ton	695,400.00
Milling and smelting @ 8.00 per ton	3,708,800.00
Concentrates marketed @ 1.00 per ton	463,600.00
Royalty to land owner @ 2.00 per ton	927,200.00
Operating expense	$7,417,600.00
Revenue less Operating cost	$3,330,482.00
Less Government repayment contract Idm-E255	30,982.50
Estimate potential profit	$3,299,499.50

The above appraisal is only an approximate estimate as there may be numerous other cost-revenue factor entering into the picture at the time the orebodies are actually mined.

The Ozark-Fahoning Company is a leading producer of fluorspar, conducting its own mines and concentrating plants. There is, therefore, reasonable expectation that the royalty payment due under the contract will ultimately accrue to the Government.

Comment:

For a more detailed description, reference is made to the final reports, drill logs and maps. The operation from every standpoint was well conducted andresultedin very substanial discoveries of fluorspar, together with associated zinc and lead.

The Nonmetallic Mineral Division concurs with the field team in recommending that a certificate of discovery or development be issued.

JTRobertson:fls 5/25/53

Copy to: Admr. R. File
Docket File; Mr. Houk

Jasper T. Robertson
Nonmetallic Minerals Division

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/6	Selfridge	120
2/9	Houk	600
2-9	Chamlin	800
	Rutin	140
	Dunger	140
	Asst. Sol. Off.	110
2/13	C	220
		600

FEB 13 1959

INTERIOR DEPT.
FEB 9 - 1959
SOLICITOR

Ozark-Mahoning Company
Rosiclare, Illinois

Re: Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-K255

Gentlemen:

With your recent royalty payment the Government was reimbursed in full for its contribution of $42,741.29 under the subject contract. Therefore, the liens established by Article 5(c) of the contract upon the land and any production therefrom no longer exist.

We wish to congratulate you on the success of the exploration project and express our appreciation for your interest and participation in the former DMEA program.

Sincerely yours,

(signed) FRANK E. JOHNSON (FL)

Acting Director

LGHouk/GCSelfridge/gad/esf
2/6/59
Copy to: Dir. R. File
Mr. Johnson
Mr. Chambers
Field Team, Region V
Mr. Kiilsgaard, Room 5224
Mr. Lamb, Room 3608
Operating Committee
Mr. Houk
Mr. Selfridge

RECEIVED
FEB 9 1959
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

DMEA Form 7
(12-56)

OFFICIAL

Date	Surnam	
2/2	Houk	600
2-2	Chambers	800
	Rustin	140
	Sawyer	140
	Asst. Sol. Title	190
		110
		220

600

Ozark-Mahoning Company

INTERIOR DEPT.
FEB 2 - 1959
SOLICITOR

Opsiclare, Illinois

Re: Docket No. DMEA-2248-Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-E255

RECEIVED
SOLICITOR
RESOURCES

Gentlemen:

As a result of the successful fluorspar exploration and the complete repayment of the Government's contribution, our lien against the property and from any future production has been satisfied.

The Government allocated a total of $122,715.00 for exploration for fluorspar, and agreed to share 50% of the approved costs. The accepted costs were determined to be $85,482.54, and the Government's share $42,741.27.

The exploration work resulted in a discovery and under the terms of the contract the Government was entitled to receive royalty on production for a period of ten years or until $42,741.27 was repaid. The royalty on production from the contract area resulted in repayment of the Government's contribution in less than seven years.

We wish to congratulate you on the success of the exploration work and to thank you for the payment in full of the Government's contribution.

Sincerely yours,

Acting Director

LGHouk:gad 2/2/59
Copy to: Dir. R. File
Mr. Johnson
Mr. Chambers
Field Team, Region V
Mr. Kiilsgaard
Mr. Lamb
Operating Committee
Mr. Houk

8623

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 12 1959

DATE	INITIALS	CODE
1-12	C	220
		600

January 9, 1959

Memorandum

To: Finance Officer, Region V (OME) Morris, Tennessee

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

Subject: Royalty Payment - [redacted]-2248, Idm-8255, sinc, Fluorspar.
Hill-Ledford Tract, Hardin County, Illinois.
Ozark-[redacted] Co., Rosiclare, Illinois.

Attached is the royalty statement for the month ending October 31, 1958, and a check for royalty in the amount of $2,703.55.

Also attached is a check in the amount of $659.10 for the balance due on the contract.

Robert A. Laurence

sm;
F. Johnson, OME
Lynch
Files.

Ch. No. 23790
dated 12/23/58

ch. no. 23791
dated 12/23/58
$659.10.

2703.55
659.10
3,362.65

Note varying dates

OZARK MARKETING COMPANY
Rockford, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

COVERNENT ROYALTY STATEMENT FOR MONTH ENDING October 31, 1958
DMEA 2248-Ick E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	13494.055
2. Total Tons Hoisted	
3. Deduct Waste Discarded	
4. Ore Hoisted	5127.743
5. Total Ore on Hand	
6. Deduct Ore Processed	2418.030
7. Ore on Hand End of Month	16203.768
8. Head Feed Assay	
(a) % CaF2	49.07
Tons CaF2	1186.53
(b) % Zn	.33
Tons Zn	7.98
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF2 Metallurgical	
CaF2 Acid	53.59
(b) Zn	108.54
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF2 Metallurgical	
Tons	
CaF2 Acid	83.72
Tons	993.36
(b) Zn %	96.56
Tons	7.71
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF2 Metallurgical	
CaF2 Acid	53234.16
(b) Zinc	836.84
(c) Lead	
Totals	54071.00

12. Royalty Rate 54071.00 ÷ 1001.07 = 54.01 = 5% Royalty

13. Royalty Payment - 5% x 54071.00 = 2703.55

2703.55

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 12 1959
DATE | INITIALS | CODE

Ozark-Mahoning Company

MINING DIVISION

310 West Sixth Street Tulsa 19, Oklahoma Phone DIamond 3-0128

Please Reply To: Rosiclare, Illinois
P. O. Box 57
Phone 70

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 12 1959

DATE	INITIALS	CODE

RECEIVED
JAN 2 9 1958

December 23, 1958

Mr. Robert A. Lawrence
Executive Officer-DMEA
Region V
Defense Minerals Exploration Administration
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Sir:

Re: DMEA 2248 - Hill-Ledford Tract
Hardin County, Illinois
Amended Contract - Idm E-255

Enclosed you will find three copies of the Government Royalty Statement for Month Ending October 31, 1958, with check attached in the amount of $2,703.55 covering the royalty due for this period.

We are also enclosing our check in the amount of $659.10 which is the balance due according to our records to complete this contract. We will appreciate your acknowledging the receipt of this money and the completion of the contract.

According to the terms of the contract, we have paid $42,741.29, with this final payment.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

Works Accountant

CWSohosky/blc

Enclosures

ccs: Mr. A. G. Johnson
Mr. H. I. Burmeister

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 200 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

November 24, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 26 1958

DATE	INITIALS	CODE
11-26	C	220
11-26	[illegible]	600

Memorandum

To: Finance Officer, Region V - (OME) Morris, Tenn.

From: Executive Officer, OME - Region V - Knoxville

Subject: Royalty Payment - DMRA-2248, Idm-E255-fluorspar
Ozark-Mahoning Co., Rosiclare, Illinois
Hill-Ledford Tract, Hardin County, Illinois

Transmitted are sale settlement sheets for September 1958, from the subject company and their check for royalty on the sales in the amount of $1,942.65.

Robert A. Laurence

zm.

cc
Frank Johnson-OME
Lynch
Files

ARK-MARDINIC COMPANY
osiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING September 30, 1958
DMEA 2248-Idn E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	10753.059
2. Total Tons Hoisted	
3. Deduct Waste Discarded	
4. Ore Hoisted	4635.790
5. Total Ore on Hand	
6. Deduct Ore Processed	1894.794
7. Ore on Hand End of Month	13494.055
8. Head Feed Assay	
(a) % CaF_2	46.34
Tons CaF_2	878.05
(b) % Zn	.14
Tons Zn	2.65
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	
CaF_2 Acid	53.16
(b) Zn	95.41
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	
Tons	
CaF_2 Acid	82.70
Tons	726.15
(b) Zn %	99.55
Tons	2.63
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	
CaF_2 Acid	38602.13
(b) Zinc	250.93
(c) Lead	
Totals	38853.06

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 26 1958

DATE	INITIALS	CODE

12. Royalty Rate 38853.06 ÷ 728.78 = 53.31 = 5% Royalty

13. Royalty Payment - 5% x 38853.06 = 1942.65

1942.65

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 20 1958
CODE
10/20 C 220
10/20 Hook 600

October 17, 1958

Memorandum

To: Finance Officer, Region V (OME) Norris, Tennessee

From: Executive Officer, OME - Region V-Knoxville

Subject: Royalty Payments - Ozark-Mahoning Company, Rosiclare, Illinois.
DMEA-2248, Idm-E255(fluorspar) Hill-Ledford Tract
Hardin County, Illinois

Transmitted are sales settlement sheets for July and August 1958 from the subject company and two checks for royalty as follows:

July sales, check no. 23509, dated October 15,1958 in the amount of $1,923.41.

August sales, check no. 23508,dated October 15, 1958 in the amount of $2,131.40.
4,054.81

Total....$4,054.81

Robert A. Laurence

x
cc.
Acting Director,OME
Lynch
Burmeister
Files

OZARK-MAHONING COMPANY
ROSICLARE, ILLINOIS

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING JULY 31, 1958
DMEA 2248-Idm E-255
Hill-Ledford Tract

		Totals
1. Ore on Hand - Start of Month	7921.063	
2. Total Tons Hoisted	2848.588	
3. Deduct Waste Discarded	486	
4. Ore Hoisted	2362.588	
5. Total Ore on Hand	10283.651	
6. Deduct Ore Processed	1808.602	
7. Ore on Hand End of Month	8475.049	
8. Head Feed Assay		
(a) % CaF_2	47.16	
Tons CaF_2	852.94	
(b) % Zn	.59	
Tons Zn	10.67	
(c) % Pb		
Tons Pb		
9. Average Price Per Ton		
(a) CaF_2 Metallurgical		
CaF_2 Acid	52.83	
(b) Zn	93.90	
(c) Pb		
10. % Recovery on Ore Milled		
(a) CaF_2 Metallurgical		
Tons		
CaF_2 Acid	83.15	
Tons	709.22	
(b) Zn %	99.80	
Tons	10.65	
(c) Pb %		
Tons		
11. Value of Minerals Recovered		
(a) CaF_2 Metallurgical		
CaF_2 Acid	37468.09	
(b) Zinc	1000.04	
(c) Lead		
Totals	38468.13	

12. Royalty Rate - 38,468.13 ÷ 719.87 = 53.44 = 5% Royalty

13. Royalty Payment - 5% x 38,468.13 = 1,923.41 $1,923.41

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING August 31, 1958

DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	8475.049
2. Total Tons Hoisted	
3. Deduct Waste Discarded	
4. Ore Hoisted	4269.528
5. Total Ore on Hand	12744.577
6. Deduct Ore Processed	1991.518
7. Ore on Hand End of Month	10753.059
8. Head Feed Assay	
(a) % CaF_2	47.14
Tons CaF_2	938.80
(b) % Zn	.24
Tons Zn	4.78
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	
CaF_2 Acid	53.07
(b) Zn	94.43
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	
Tons	
CaF_2 Acid	84.58
Tons	794.04
(b) Zn %	108.17
Tons	5.17
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	
CaF_2 Acid	42139.70
(b) Zinc	488.20
(c) Lead	
Totals	42627.90

12. Royalty Rate 42,627.90 ÷ 799.21 = 53.34 = 5% Royalty

13. Royalty Payment - 5% x 42,627.90 = 2,131.40

$2,131.40

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

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 25 1958

DATE		
8/25	C	220
8/26	Hinch	600

August 22, 1958

Memorandum

To: Finance Officer, Region V - (DMEA) Norris, Tenn.

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

Subject: Royalty Payment - DMEA-2248, Idm-E255-lead-zinc.
Ozark-Mahoning Co., Rosiclare, Illinois.
Hill-Ledford Tract, Hardin County, Illinois

Attached is a settlement sheet for sales from the subject certified contract for the month of June, 1958; and their check for $1,392.77, royalty on the sales.

Robert A. Laurence

zm.
cc
Eynch
Mittendorf
Files

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING JUNE 30, 1958

DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	7042.778
2. Total Tons Hoisted	2769.604
3. Deduct Waste Discarded	486.000
4. Ore Hoisted	2283.604
5. Total Ore on Hand	9326.382
6. Deduct Ore Processed	1405.319
7. Ore on Hand End of Month	7921.063
8. Head Feed Assay	
(a) % CaF_2	43.28
Tons CaF_2	608.22
(b) % Zn	.94
Tons Zn	13.21
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	
CaF_2 Acid	52.54
(b) Zn	93.58
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	
Tons	
CaF_2 Acid	83.47
Tons	507.68
(b) Zn %	95.59
Tons	12.63
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	
CaF_2 Acid	26673.51
(b) Zinc	1181.92
(c) Lead	
Totals	27855.43

OFFICIAL FILE COPY
DMEA
RECEIVED
DATE

12. Royalty Rate 27,855.43 -:- 520.31 = 53.54 = 5% Royalty

13. Royalty Payment - 5% x 27,855.43 = 1,392.77

$1,392.77

Ozark-Mahoning Company

MINING DIVISION

310 West Sixth Street Tulsa 19, Oklahoma Phone DIamond 3-0128

Please Reply To: Rosiclare, Illinois
P. O. Box 57
Phone 70

August 20, 1958

OFFICIAL FILE COPY

Mr. Robert A. Lawrence
Executive Officer DMEA
Region V
Defense Minerals Exploration Administration
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Sir:

Re: DMEA 2248 - Hill-Ledford Tract
Hardin County, Illinois
Amended Contract - Idm E-255

Enclosed you will find three copies of the Government Royalty Statement for Month Ending June 30, 1958. Also you will find enclosed our check in the amount of $1,392.77 covering the royalty due for this period.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

C. W. Sohosky

Works Accountant

CWSohosky/blc

Enclosures (4)

ccs: Mr. A. G. Johnson
Mr. H. L. Burmeister

RECEIVED
AUG 22 1958
U. S. Geological Survey
Geologic Division

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

July 24, 1958

RECEIVED JUL 28
DATE INITIALS
7/28 H. J. 225-600

Memorandum

To: Finance Officer, Region V (DMEA) Norris, Tennessee

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

Subject: Royalty Payment - DMEA-2248, Idm-E255-fluorspar Ozark-Mahoning Co. Hill-Ledford Tract, Hardin County, Illinois.

Transmitted is a settlement sheet from the subject project in the amount of $34,100.43 and their check no.23189 dated July 22, 1958 for 5% royalty in the amount of $1,705.02 to be credited to their contract.

Robert A. Laurence

zm.
cc
Mittendorf
Lynch
Files

OZARK-MAHONING COMPANY
ROSICLARE, ILLINOIS

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING MAY 31, 1958
DMEA 2248-Idm E-255
Hill-Ledford Tract

		Totals
1.	Ore on Hand - Start of Month	6320.641
2.	Total Tons Hoisted	4101.350
3.	Deduct Waste Discarded	1621
4.	Ore Hoisted	2480.350
5.	Total Ore on Hand	8800.991
6.	Deduct Ore Processed	1758.213
7.	Ore on Hand End of Month	7042.778
8.	Head Feed Assay	
	(a) % CaF_2	43.33
	Tons CaF_2	761.83
	(b) % Zn	1.20
	Tons Zn	21.10
	(c) % Pb	
	Tons Pb	
9.	Average Price Per Ton	
	(a) CaF_2 Metallurgical	
	CaF_2 Acid	51.38
	(b) Zn	94.02
	(c) Pb	
10.	% Recovery on Ore Milled	
	(a) CaF_2 Metallurgical	
	Tons	
	CaF_2 Acid	82.05
	Tons	625.08
	(b) Zn %	100.00
	Tons	21.10
	(c) Pb %	
	Tons	
11.	Value of Minerals Recovered	
	(a) CaF_2 Metallurgical	
	CaF_2 Acid	32116.61
	(b) Zinc	1983.82
	(c) Lead	
	Totals	34100.43

DMEA RECEIVED JUL		
DATE	INITIALS	CODE

12. Royalty Rate - 34,100.43 ÷ 646.18 = 52.77 = 5% Royalty

13. Royalty Payment - 5% x 34,100.43 = 1705.02

$1705.02

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 25 1958

6/25	C	220
6/26	Hirsh	600

June 23, 1958

Memorandum

To: Finance Officer, DMEA - (Region V) Norris, Tennessee

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Royalty Payment - Idm-E255, DMEA-2248-fluorspar
Ozark-Mahoning Co., Hill-Ledford Tract,
Hardin County, Illinois

Transmitted is a settlement sheet from the subject project in the amount of $34,665.31 and their check for 5% royalty on the sale for $1,732.77 to be credited to the contract.

Robert A. Laurence

sm.
cc
Lynch
Mittendorf
Files

Enc:
Settlement sheet
Ck. No.23030
dated 6/20/58

CLARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING April 30, 1958

DMEA 2248-Idn E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	4865.861
2. Total Tons Hoisted	3115.597
3. Deduct Waste Discarded	-
4. Ore Hoisted	3115.597
5. Total Ore on Hand	7981.458
6. Deduct Ore Processed	1660.817
7. Ore on Hand End of Month	6320.641
8. Head Feed Assay	
(a) % CaF_2	44.38
Tons CaF_2	737.07
(b) % Zn	.33
Tons Zn	5.48
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	
CaF_2 Acid	52.23
(b) Zn	94.01
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	
Tons	
CaF_2 Acid	88.56
Tons	652.75
(b) Zn %	109.16
Tons	5.98
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	
CaF_2 Acid	34093.13
(b) Zinc	562.18
(c) Lead	
Totals	34655.31

OFFICE FILE COPY
DMEA
RECEIVED JUN 26 1958
DATE | INITIAL | CODE

12. Royalty Rate 34,655.31 ÷ 658.73 = 52.61 = 5% Royalty

13. Royalty Payment - 5% x 34,655.31 = 1732.77

$1,732.77

RECEIVED
JUN 23 1958
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee

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

OFFICIAL FILE COPY
DMEA
RECEIVED 24

DATE	INITIAL	
5/23	H.G.	225
6/26	[illegible]	680

May 21, 1958

Memorandum

To: Finance Officer - Region V (DMEA) Norris

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Royalty Payment - DMEA-2248, Idm-E255
Ozark-Mahoning Co. Hill-Ledford Tract, Hardin County, Illinois

Transmitted is the settlement sheet for March 1958 on the subject contract for production of zinc-lead in the amount of $36,823.00 and their check for $1,841.15 royalty to be credited to their account.

Robert A. Laurence

zm
Lynch
Burmeister
Files
Mittendorf

OZARK-MARONITE COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING March 31, 1958

DMEA 2248-Idn E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	2448.346
2. Total Tons Hoisted	5413.517
3. Deduct Waste Discarded	1227
4. Ore Hoisted	4186.517
5. Total Ore on Hand	6634.863
6. Deduct Ore Processed	1769.002
7. Ore on Hand End of Month	4865.861
8. Head Feed Assay	
(a) % CaF_2	45.79
Tons CaF_2	810.03
(b) % Zn	.39
Tons Zn	6.90
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	
CaF_2 Acid	52.32
(b) Zn	93.14
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	
Tons	
CaF_2 Acid	85.26
Tons	690.63
(b) Zn %	107.26
Tons	7.40
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	
CaF_2 Acid	36133.76
(b) Zinc	689.24
(c) Lead	
Totals	36823.00

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 24 1958
DATE | INITIALS | CODE

12. Royalty Rate 36,823.00 ÷ 698.03 = 52.75 = 5% Royalty

13. Royalty Payment - 5% x 36,823.00 = 1841.15

$1,841.15

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

April 21, 1958

Memorandum

To: Finance Officer, Region V - (DMEA) Norris, Tenn.

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

Subject: Royalty Payment - DMEA-2248, Idm-E255, zinc-lead. Ozark-Mahoning Co., Hill-Ledford Tract, Harden County, Illinois.

Transmitted is a settlement sheet on the subject contract for the Month of February 1958 for production from the subject mine and their check No.22818, dated April 19, in the amount of $4,149.39 for royalty to be credited to their contract.

Robert A. Laurence

zm.

cc
Lynch
Mittendorf
Files.
enc.2

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Mine[illegible]ls Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING February 28, 1958

DMEA 2248-Idm E-255
Hill-Ledford Tract

		Totals
1. Ore on Hand - Start of Month	2091.204	
2. Total Tons Hoisted	4211.213	
3. Deduct Waste Discarded	395	
4. Ore Hoisted	3816.213	
5. Total Ore on Hand	5907.417	
6. Deduct Ore Processed	3459.071	
7. Ore on Hand End of Month	2448.346	
8. Head Feed Assay		
(a) % CaF_2	51.90	
Tons CaF_2	1795.26	
(b) % Zn	.30	
Tons Zn	10.38	Grade?
(c) % Pb		
Tons Pb		
9. Average Price Per Ton		
(a) CaF_2 Metallurgical		
CaF_2 Acid	52.64	
(b) Zn	95.07	
(c) Pb		
10. % Recovery on Ore Milled		
(a) CaF_2 Metallurgical		
Tons		
CaF_2 Acid	86.72	
Tons	1556.85	
(b) Zn %	104.91	
Tons	10.89	
(c) Pb %		
Tons		
11. Value of Minerals Recovered		
(a) CaF_2 Metallurgical		
CaF_2 Acid	81952.58	
(b) Zinc	1035.31	
(c) Lead		
Totals	82987.89	

12. Royalty Rate 82987.89 ÷ 1567.74 = 52.93 = 5% Royalty

13. Royalty Payment - 5% x 82987.89 = 4149.39

OFFICIAL FILE COPY
TO: DMEA
RECEIVED APR 23 1958
DATE | INITIALS

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

DMEA
RECEIVED APR 21 1958

4/21	C	226
4/22	Hirsch	686

April 17, 1958

Memorandum

To: Finance Officer, Region V - Norris (DMEA)

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

Subject: Royalty Payment - DMEA-2248, Idm-E255, zinc-lead. Ozark-Mahoning Co., Hill-Ledford Tract, Hardin County, Illinois.

Transmitted is a settlement sheet on the subject contract for the Month of January 1958, and their check in the amount of $2,434.41 royalty on production.

V. J. Lynch

zm.
cc
Mittendorf
Lynch
Files

Ozark-Mahoning Company

MINING DIVISION

310 West Sixth Street Tulsa 19, Oklahoma Phone DIamond 3-0128

Rosiclare, Illinois
P. O. Box 57
Phone 70

April 14, 1958

DMEA
RECEIVE 21 1958
DATE

Mr. Robert A. Lawrence
Executive Officer DMEA
Region V
Defense Minerals Exploration Administration
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Sir:

Re: DMEA 2248 - Hill-Ledford Tract
Hardin County, Illinois
Amended Contract - Idm E-255

Enclosed you will find three copies of the Statement of Royalty for Month of January, Ending January 31, 1958. Also you will find enclosed our check in the amount of $2,434.41 covering the royalty due for this period.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

C W Sohosky

Works Accountant

CWSohosky/phs

cc: Mr. A. G. Johnson

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

Enclosure - 4

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING January 31, 1958

DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	880.232
2. Total Tons Hoisted	3468.707
3. Deduct Waste Discarded	408
4. Ore Hoisted	3060.707
5. Total Ore on Hand	3940.939
6. Deduct Ore Processed	1849.735
7. Ore on Hand End of Month	2091.204
8. Head Feed Assay	
(a) % CaF_2	54.72
Tons CaF_2	1012.17
(b) % Zn	.34
Tons Zn	6.29
(c) % Pb	
Tons Pb	
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	
CaF_2 Acid	52.34
(b) Zn	93.91
(c) Pb	
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	
Tons	
CaF_2 Acid	90.74
Tons	918.44
(b) Zn %	104.47
Tons	6.57
(c) Pb %	
Tons	
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	
CaF_2 Acid	48071.15
(b) Zinc	616.99
(c) Lead	
Totals	48688.14

12. Royalty Rate 48,688.14 ÷ 925.01 = 52.64 = 5% Royalty

13. Royalty Payment = 5% x 48,688.14 = 2,434.41

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

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 28 1958

DATE	INITIALS	CODE
2/26	C	220
2/27	Hoube	600

February 28, 1958

Memorandum

To: Finance Officer, Region V (DMEA) Norris, Tennessee

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

Subject: Royalty Payment - Idm-E2248-zinc-lead. Ozark-Mahoning Co. Hill-Ledford Tract, Hardin County, Illinois

Attached are settlement sheets for the month of December 1957 and their check for royalty No.22549, dated February 21, 1958 in the amount of $1,547.47 for royalty on the sales.

Robert A. Laurence

zm.

cc
Lynch
Burmeister
Files
Mittendorf

CLARK-MARDNING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING December 31, 1957
DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	1648.810
2. Total Tons Hoisted	3264.176
3. Deduct Waste Discarded	2465.
4. Ore Hoisted	799.176
5. Total Ore on Hand	2447.986
6. Deduct Ore Processed	1567.754
7. Ore on Hand End of Month	880.232
8. Head Feed Assay	
(a) % CaF2	41.96
Tons CaF2	657.83
(b) % Zn	.77
Tons Zn	12.07
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF2 Metallurgical	41.74
CaF2 Acid	52.91
(b) Zn	95.44
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF2 Metallurgical	5.66
Tons	37.23
CaF2 Acid	81.19
Tons	534.09
(b) Zn %	98.71
Tons	11.91
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF2 Metallurgical	1553.98
CaF2 Acid	28258.70
(b) Zinc	1136.69
(c) Lead	-
Totals	30949.37

ORIGINAL FILE COPY
DMEA
RECEIVED FEB 26 1958
DATE INITIALS CODE

12. Royalty Rate 30949.37 ÷ 583.23 = 53.07 = 5% Royalty

13. Royalty Payment - 5% X 30949.37 = $1547.47

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

WASHINGTON 25, D.C.

DMEA
RECEIVED JAN 20 1958

DATE		CODE
1/20		
1/20		220
		600

January 16, 1958

Memorandum

To: Finance Officer, Region V - Norris (DMEA)

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

Subject: Royalty Payment - Idm-E255, DMEA-2248-fluorspar.
Ozark-Mahoning Co. Resiclare, Illinois.
Hill-Ledford Tract, Hardin County, Illinois

Transmitted are settlement sheets in the amount of $35,940.03, and a check no.22377, dated January 13, 1958 in the amount of $1,797.00, royalty to be credited to the contract.

Robert A. Laurence

zm.
cc
Burmeister
Mittendorf
Lynch
Files

CLARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING November 30, 1957
DMEA 2248-Idm E-255
Hill-Ledford Tract

		Totals
1. Ore on Hand - Start of Month		2346.701
2. Total Tons Hoisted		2640.343
3. Deduct Waste Discarded		1144
4. Ore Hoisted		1496.343
5. Total Ore on Hand		3843.044
6. Deduct Ore Processed		2194.234
7. Ore on Hand End of Month		1648.810
8. Head Feed Assay		
(a) % CaF_2		34.37
Tons CaF_2		754.16
(b) % Zn		.78
Tons Zn		17.12
(c) % Pb		-
Tons Pb		-
9. Average Price Per Ton		
(a) CaF_2 Metallurgical		42.81
CaF_2 Acid		52.56
(b) Zn		92.35
(c) Pb		-
10. % Recovery on Ore Milled		
(a) CaF_2 Metallurgical		8.15
Tons		61.46 ✓
CaF_2 Acid		79.68 ✓
Tons		600.91
(b) Zn %		109.10
Tons		18.68
(c) Pb %		-
Tons		-
11. Value of Minerals Recovered		
(a) CaF_2 Metallurgical		2631.10
CaF_2 Acid		31583.83
(b) Zinc		1725.10
(c) Lead		-
Totals		35940.03

RECEIVED JAN. 20 1958 D.M.E.A.

12. Royalty Rate 35940.03 ÷ 681.05 = 52.77 = 5% Royalty

13. Royalty Payment - 5% x 35940.03 = $1797.00

$ 1797.00

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 30 1957
DATE | CODE
12/26 | gG | 220
600

December 23, 1957

Memorandum

To: Finance Officer, Region V -(DMEA) Norris, Tennessee

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

Subject: Royalty Payment - DMEA-2248, Idm-E255, Hill-Ledford Tract, Hardin County, Illinois

Transmitted are settlement sheets in the amount of $32,665.30 and a check for royalty in the amount of $1,633.27 to be credited to the subject contract.

ck No. 22244
dated 12-18-57.

V. J. Lynch

zm
cc
Mittendorf
Lynch

Files

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

December 18, 1957

Mr. Robert A. Lawrence
Executive Officer DMEA
Region V
Defense Minerals Exploration Administration
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Sir:

Re: DMEA 2248 - Hill-Ledford Tract
Hardin County, Illinois
Amended Contract - Idm E-255

Enclosed you will find three copies of the Statement of Royalty for Month Ending October 31, 1957. Also you will find enclosed our check in the amount of $1,633.27 covering the royalty due for this period.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

C.W. Sohosky

Works Accountant

CWSohosky/blc

cc: Mr. A. G. Johnson

Enclosures - 4

RECEIVED

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

RECEIVED NOV 22 1957

DATE	INITIALS	CODE
11/22	C	220
		600

November 20, 1957

Memorandum

To: Finance Officer, Region V (DMEA)

From: Acting Executive Officer, Region V - Knoxville

Subject: Royalty Payment - DMEA-2248, Idm-E255-Fluorspar
Ozark-Mahoning Co. Rosáclare, Illinois
Hill-Ledford Tract, Hardin County, Illinois

Attached is a settlement sheet from the subject Operator for production during September 1957 amounting to $41,737.93. And a check dated Nov. 18, 1957, No.22119, for 5% royalty on the sale, in the amount of $2,086.90 to be credited to their contract.

V. J. Lynch

zm
cc
Burmeister
Lynch
Laurence
Mittendorf

X-MAHONING COMPANY
Viclare, Illinois

Due to: Defense Mine[illegible] Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING September 30, 1957
DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	614,904
2. Total Tons Hoisted	2222.420
3. Deduct Waste Discarded	-
4. Ore Hoisted	2222.420
5. Total Ore on Hand	2837.324
6. Deduct Ore Processed	1811.208
7. Ore on Hand End of Month	1026.116
8. Head Feed Assay	
(a) % CaF2	48.51
Tons CaF2	878.62
(b) % Zn	.52
Tons Zn	9.42
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF2 Metallurgical	43.17
CaF2 Acid	51.80
(b) Zn	94.20
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF2 Metallurgical	5.10
Tons	44.81
CaF2 Acid	85.48
Tons	751.04
(b) Zn %	101.35
Tons	9.55
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF2 Metallurgical	1934.45
CaF2 Acid	38903.87
(b) Zinc	899.61
(c) Lead	
Totals	41,737.93

12. Royalty Rate 41,737.93 ÷ 805.40 = 51.82 = 5% Royalty

13. Royalty Payment - 5% x 41,737.93 = 2086.90 $2,086.90

RECEIVED
NOV 22 1957
D.M.E.A.

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

October 11, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 14 1957

DATE	Ini.	CODE
10/14	C	220
10/14	MRC	600

Memorandum

To: Finance Officer, DMEA- Region V

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

Subject: Royalty Payment: DMEA-2248, Idm-E255-Fluorspar
Ozark-Mahoning Co., Rosiclare, Illinois
Hill-Ledford Tract - Hardin County, Illinois

Attached is a statement of production for the month of August 1957 of fluorspar from the subject certified contract and their check dated October 9, 1957, check No.21957, in the amount of $2,974.75 to be credited to their contract.

V. J. Lynch

sm.
cc
Mittendorf
Needham
Grosh
Files

ZARK-MARKETING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING August 31, 1957

DMEA 2248-Idm E-255
Hill-Ledford Tract

		Totals
1. Ore on Hand - Start of Month	500.593	
2. Total Tons Hoisted	2448.613	
3. Deduct Waste Discarded	-	
4. Ore Hoisted	2448.613	
5. Total Ore on Hand	2949.206	
6. Deduct Ore Processed	2334.302	
7. Ore on Hand End of Month	614.904	
8. Head Feed Assay		
(a) % CaF_2	52.97	
Tons CaF_2	1236.41	
(b) % Zn	.74	
Tons Zn	17.18	
(c) % Pb	-	
Tons Pb	-	
9. Average Price Per Ton		
(a) CaF_2 Metallurgical	41.35	
CaF_2 Acid	52.36	
(b) Zn	93.36	
(c) Pb		
10. % Recovery on Ore Milled		
(a) CaF_2 Metallurgical	4.96	
Tons	61.33	
CaF_2 Acid	85.64	
Tons	1058.85	
(b) Zn %	94.62	
Tons	16.25	
(c) Pb %	-	
Tons	-	
11. Value of Minerals Recovered		
(a) CaF_2 Metallurgical	2536.00	
CaF_2 Acid	55441.91	
(b) Zinc	1517.10	
(c) Lead	-	
Totals	59495.01	

12. Royalty Rate 59495.01 ÷ 1136.44 = 52.35 = 5% Royalty Rate

13. Royalty Payment - 5% x 59495.01 = 2974.75 $ 2974.75

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

September 20, 1957

official

EXTRA COPY
DMEA
RECEIVED SEP 23 1957

DATE	INITIALS	CODE
9/23	C	220
9/23	Hook	600

Memorandum

To: Finance Officer - Region V (DMEA)

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Royalty Payment - DMEA-2248, Idm-E255(fluorspar)
Ozark-Mahoning Co. Rosiclare, Illinois
Hill-Ledford Tract, Hardin County, Illinois

Attached is a Statement of Royalty for the month ending July 31, 1957, and a check No.21863, dated September 18, 1957 for royalty in the amount of $2,780.29.

Robert A. Laurence

sm
cc
Lynch
Mittendorf
Burmeister
Files

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

September 18, 1957

Mr. Robert A. Lawrence
Executive Officer DMEA
Region V
Defense Minerals Exploration Administration
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Sir:

Re: DMEA 2248 - Hill-Ledford Tract
Hardin County, Illinois - Amended Contract
Idm E-255

Enclosed you will find three copies of the Statement of Royalty for Month Ending July 31, 1957. Also you will find enclosed our check in the amount of $2,780.29 covering the royalty due for this period.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

C.W. Sohosky

Works Accountant

CWSohosky/phs

cc: Mr. A. G. Johnson

Enclosures - 4

RECEIVED
SEP 20 1957

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING July 31, 1957

DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	547.816
2. Total Tons Hoisted	2048.895
3. Deduct Waste Discarded	-
4. Ore Hoisted	2048.895
5. Total Ore on Hand	2596.711
6. Deduct Ore Processed	2096.118
7. Ore on Hand End of Month	500.593
8. Head Feed Assay	
(a) % CaF_2	55.28
Tons CaF_2	1158.73
(b) % Zn	.45
Tons Zn	9.43
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	43.98
CaF_2 Acid	52.44
(b) Zn	92.95
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	5.57
Tons	64.54
CaF_2 Acid	85.39
Tons	989.44
(b) Zn %	100.56
Tons	9.48
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	2838.47
CaF_2 Acid	51886.23
(b) Zinc	881.17
(c) Lead	
Totals	55605.87

12. Royalty Rate 55,605.87 -:- 1063.46 = 52.29 = 5% Royalty Rate

13. Royalty Payment - 5% x 55,605.87 = 2780.29 $2780.29

RECEIVED SL D.M.E.A.

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

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 23 1957

DATE	INITIALS	CODE
9/23	C	220
9/23	[illegible]	600

September 20, 1957

Memorandum

To: Finance Officer - Region V -(DMEA)

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Royalty Payment - DMEA-2248, Idm-E255(fluorspar)
Ozark-Mahoning, Rosiclare, Ill.
Hill-Ledford Tract, Hardin County, Illinois

Transmitted is a royalty statement for the month of June 1957, and a check No.21862m dated Sept. 18, 1957 in the amount of $2,777.22 to be credited to their contract.

Robert A. Laurence

zm.
cc
Burmeister
Mittendorf
Lynch
Files

MAHONING COMPANY
Hare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING June 30, 1957

DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	510.484
2. Total Tons Hoisted	2392.753
3. Deduct Waste Discarded	-
4. Ore Hoisted	2392.753
5. Total Ore on Hand	2903.237
6. Deduct Ore Processed	2355.421
7. Ore on Hand End of Month	547.816
8. Head Feed Assay	
(a) % CaF_2	45.53
Tons CaF_2	1072.42
(b) % Zn	.78
Tons Zn	18.37
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	43.50
CaF_2 Acid	51.48
(b) Zn	103.92
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	6.36
Tons	68.21
CaF_2 Acid	92.56
Tons	992.63
(b) Zn %	77.34
Tons	14.21
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	2967.14
CaF_2 Acid	51100.59
(b) Zinc	1476.70
(c) Lead	-
Totals	55544.43

12. Royalty Rate 55,544.43 -:- 1075.05 = 51.67 = 5% Royalty Rate

13. Royalty Payment - 5% x 55,544.43 = $2,777.22

RECEIVED D.M.E.E.

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

September 18, 1957

Mr. Robert A. Lawrence
Executive Officer DMEA
Region V
Defense Minerals Exploration Administration
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Sir:

Re: DMEA 2248 - Hill-Ledford Tract
Hardin County, Illinois - Amended Contract
Idm E-255

Enclosed you will find three copies of the Statement of Royalty for Month Ending June 30, 1957. Also you will find enclosed our check in the amount of $2,777.22 covering the royalty due for this period.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

C W Sohosky

Works Accountant

CWSohosky/phs

cc: Mr. A. G. Johnson

Enclosures - 4

RECEIVED
SEP 20 1957

Millendorf

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 26 1957

		CODE
8/26		
8/26	Q	220
	F	600

August 23, 1957

Memorandum

To: Finance Officer, Region V (DMEA)

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Royalty Payment - Idm-E255, DMEA-2248
(Zin-Fluorspar) Ozark-Mahoning Co. Rosiclare, Ill.

Transmitted is the statement of royalty for the month ending May 31, 1957. And a check No.21753 dated Aug. 19, 1957 in the amount of $1,737.47 for royalty to be credited to their contract.

Robert A. Laurence

(By: Z. Martin)

Mittendorf

OZARK-MAHONING COMPANY
Rockcleare, Illinois

Due to: Defense Mi[illegible]ls Exploi[illegible]ration
Knoxville, Tennessee

COVERNMENT ROYALTY STATEMENT FOR MONTH ENDING May 31, 1957
DMSA 2268-Ida E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	98.324
2. Total Tons Hoisted	2406.992
3. Deduct Waste Discarded	-
4. Ore Hoisted	2406.992
5. Total Ore on Hand	2505.316
6. Deduct Ore Processed	1994.832
7. Ore on Hand End of Month	510.484
8. Head Feed Assay	
(a) % CaF_2	35.51
Tons CaF_2	708.36
(b) % Zn	.80
Tons Zn	15.96
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	43.74
CaF_2 Acid	51.50
(b) Zn	117.32
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	8.95
Tons	63.40
CaF_2 Acid	82.98
Tons	587.80
(b) Zn %	91.05
Tons	14.53
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	2773.12
CaF_2 Acid	30271.70
(b) Zinc	1704.66
(c) Lead	
Totals	34749.48

12. Royalty Rate 34,749.48 -:- 665.73 = 52.20 = 5% Royalty Rate

13. Royalty Payment - 5% x 34,749.48 = $1737.47

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

July 30, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 2 1957

DATE	INITIALS	CODE
8/2	P.K.	220
8/2	Hunter	600

Mr. C. W. Sohosky, Work's Accountant
Ozark-Mahoning Co.
Rosiclare, Illinois

Re: DMEA-2248(fluorspar, zinc)
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois
Amended Contract-Idm-K255

Dear Mr. Sohosky:

This will acknowledge with thanks, receipt of your letter of July 19 and royalty payment of $1,642.72 for the month of April 1957. I note, in Mr. Johnson's letter of June 17 to Mr. Burmeister, that an additional $1,740.33 is due on May production and assume that we may expect payment of that amount soon.

I would like to point out an error in the method of royalty calculation, although it has not yet affected the results, and the amounts paid have been correct. Item 12 of the royalty statement calculates the royalty rate on the basis of value of crude ore. However, the contract (Article 6a) provides that royalty is calculated on the value of production "in whatever form disposed of." Therefore the value of concentrates, not the value of crude ore, determines the royalty rate. As the value of crude ore has been more than $8.00, your payments have been calculated correctly on a 5% rate, so this error has not resulted in an underpayment.

Sincerely yours,

Robert A. Laurence
Executive Officer, DMEA
Region-V

RAL/sm
cc
Opr. Com.-2
Millar-Burmeister
Files
Lynch

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/22	Foley	800
7-22	Chambers	800
7/23	Houk	600
		~~600~~
7/24	Martin	130
"	Johnson	110
"	Gutteridge	100
7/25	P.K.	220
		225

JUL 25 1957

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

Re: Docket No. DMEA-2248 (Fluorspar)
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E255

Dear Mr. Laurence:

The Semi-Annual Report of Certified Project for the period ended June 30, 1957, indicated royalty due and unpaid on production from the land subject to this exploration project to June 1, 1957, amounted to $3,383.05. Mr. Burmeister was contacted by telephone with regard to this amount due. He advised that the information was received in a letter dated June 17, 1957, from the Operator and has now furnished this office a copy of the letter. It is understood that you have also been furnished a copy.

Presumably the royalty due has been computed in the manner outlined in the Operator's letter dated February 14, 1957. Monthly payments of royalty should be made by the company to DMEA on such basis, subject to audit as and when determined to be necessary.

Will you please request the Operator to pay the royalty now due and to arrange to make prompt monthly settlements of the royalty account in the future.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

APPROVED:

Horace T. Reno

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

Copy to: Docket
Admr. Reading File
Operating Committee
Mr. Kiilsgaard, USGS
Mr. Dietrich, USBM
Mr. Chambers
Mr. Houk

CEFisher/wb
July 22, 1957

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 26 1957

DATE	INITIALS	CODE
7/26	S.K.	220
		600

July 24, 1957

Memorandum

To: Finance Officer, DMEA - Region V - Norris

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

Subject: Royalty Payment - Idm-E255, DMEA-2248
Ozark-Mahoning Co., Hill-Ledford Tract, Hardin County, Illinois.

Transmitted is a statement of royalty for the month ending April 30, 1957, and a check for 5% royalty in the amount of $1,642.72 to be credited to the contract.

Robert A. Laurence
Executive Officer, DMEA
Region V

zm.
cc
Lynch
Burmeister
Mittendorf
Files

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

July 19, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 26 1957

DATE	INITIALS	CODE
7/30	[illegible]	[illegible]

Mr. Robert A. Lawrence
Executive Officer DMEA
Region V
Defense Minerals Exploration Administration
Room 1
Post Office Bldg.
Knoxville 2, Tennessee

Re: DMEA 2248 - Hill-Ledford Tract, Hardin County, Illinois
Amended Contract Idm E-255

Gentlemen:

Enclosed you will find three copies of the Statement of Royalty for Month Ending April 30, 1957. Also you will find enclosed our check in the amount of $1642.7[illegible] covering the royalty due for this period.

Very truly yours,

OZARK-MAHONING COMPANY
Mining Division

C. W. Sohosky

Works Accountant

CWSohosky/phs
cc: Mr. A. G. Johnson
Enclosures - 4

OZARK-MAHONING COMPANY
Rosiclare, Illinois

To: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING April 30, 1957
DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	10.148
2. Total Tons Hoisted	2155.182
3. Deduct Waste Discarded	-
4. Ore Hoisted	2155.182
5. Total Ore on Hand	2165.330
6. Deduct Ore Processed	2067.006
7. Ore on Hand End of Month	98.324
8. Head Feed Assay	
(a) % CaF_2	32.80
Tons CaF_2	677.98
(b) % Zn	.68
Tons Zn	14.06
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	39.70
CaF_2 Acid	52.10
(b) Zn	144.56
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	9.56
Tons	64.82
CaF_2 Acid	80.39
Tons	545.03
(b) Zn %	92.78
Tons	13.04
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	2573.35
CaF_2 Acid	28396.06
(b) Zinc	1885.06
(c) Lead	-
Totals	32854.47

12. Royalty Rate $\frac{32854.47 \text{ Value}}{2067.006 \text{ Tons Crude Ore Treated}}$ = 15.89 = 5% Royalty

13. Royalty Payment - 5% x 32854.47 = $1,642.72

Royalty Remarks

Royalties should come in steadily as soon as the shaft facilities are completed, probably about March 1957.

Other Remarks

Soon after certification the company drilled 6 holes immediately south of contract hole No. 1 and discovered a deposit branching southeastward from the contract-discovered deposit. The 6 holes covered an area 300' along the strike and 260' wide. In 1956 the company drilled 7 additional holes near the southern end of the contract area and found additional ore.

During the past 1½ years a 6' x 15', 3-compartment, vertical shaft has been sunk at a point 100' west of contract hole 15 M. As of Nov. 30, 1956 the shaft bottom is at 775' and is being extended to 790' which will allow mining of ore in the Sub-Rosiclare formation at that level.

The present main workings will be just under the Rosiclare sandstone at the 724' level. The blanket deposit is about 10' thick and averages 40% CaF_2 with very little lead or zinc. At present the 724' station has been cut out in the ore about 65' in a northwesterly direction and 30' northeasterly on the low side of the shaft. Excavation has also been made below the 724' level for a coarse crusher and skip pockets.

The top 110' of shaft is concreted, followed by 340' of lagged sets, below which is 190' of unlagged sets, the balance being untimbered. No dividers have been placed to allow for lowering crushing equipment next month. Shaft timbers are 6" x 6" corner posts and 6" x 8" wall plates. Mucking was done with a 3/8-cu.yd. clamshell hung directly on the hoisting cable and actuated by a tugger hoist bolted to the clamshell. A 1½-ton bucket was used without crosshead in sinking.

The overall cost of the shaft exclusive of concrete was $120 per foot which is considered by the company to be $20 in excess of what it should be. All work was done on company time.

Hoisting facilities consist of a new 50' timber headframe and a 200 h.p. single-drum electric hoist, hoisting 2½ ton skips in balance.

Further detail on sinking methods, equipment and costs will be found in the "Interim Report on Certified Project" under date of May 1, 1956, and "Field Inspection Report of Certified Project", under date of Dec. 21, 1955.

RECEIVED MAR 30 1957 OMGA

CHEMICALS OZARK MAHONING

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

June 17, 1957

Official ~~EXTRA~~ COPY
DMEA
RECEIVED JUN 20 1957

DATE	INITIALS	
7/19	P. K.	220
7/19	Hovk	600
		225

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

Dear Mr. Burmeister:

Re: DMEA-2248, Idm-E255-Fluorspar
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois

I wish to acknowledge your telegram of June 14th requesting operating data on the Hill-Ledford Tract, as outlined in your letter of June 3rd, reference the Loyd-Gibson Tract. Below is tabulated the data in the order outlined by you:

(1)	Royalty payments - this period	$ 375.24
(2)	Previous royalty payments	773.34
(3)	Total royalty payments	1,148.58
(4)	Royalty due on production to June 1, 1957	3,383.05
(5)	Increase of reserves by work performed subsequent to D.M.E.A. work	484,418 Tons
(6)	Production D.M.E.A. ore, this period Assay 34.36% CaF_2 - 0.76% Zn	4,695 "
	Production - previous period Assay 41.37% CaF_2 - 0.65% Zn - 0.18% Pb	808 "
	Production to June 1, 1957 Assay 35.34% CaF_2 - 0.74% Zn	5,773 "
(7)	Production operator's ore	None

BLM-leasehold 011508 May 68 6.883 Mar 2002.2

(8) The final report sent you on February 4, 1953 at the time the original project was concluded showed the following tonnages of ore:

Block A	254,600 Tons	- Assay 37.40% CaF_2 - 3.46% Zn - 0.20% Pb
	209,222 "	- Assay 33.40% CaF_2 - 1.54% Zn
Total	463,822 Tons	

Our tonnage estimate as of December 31, 1956 shows the following tonnages of ore, including ore developed by D. M. E. A. project:

Block A	374,695 Tons	- Assay 35.26% CaF_2 - 3.35% Zn - 0.82% Pb
Block B, C, & D	497,420 Tons	- Assay 33.20% CaF_2 - 1.30% Zn
Bethel Ore	76,125 Tons	- Assay 29.00% CaF_2 - 1.00% Zn
Total	948,240 Tons	

The development program at the mine includes the sinking of a 14' x 6' shaft to a depth of 809 ft. The shaft is bottomed in the white lime formation which occurs immediately below the Sub-Rosiclare sand formation. A crosscut was driven from the shaft in a northwesterly direction about 50 ft. immediately below the Rosiclare contact. The floor of the crosscut is at an approximate elevation of -312 ft. Ore was cut about 20 ft. from the shaft. Consequently, there was no appreciable amoun of drifting necessary to start mining operations. Approximately $350,000.00 was spent in shaft sinking, cross-cutting, underground crushing plant and the surface plant. This is a nice layout. Our books will show a total expenditure of $128,629.5 for churn drilling as well as diamond drilling.

Attached hereto is an up-to-date 50 ft. scale map of the property showing all holes drilled to date as well as the underground workings.

I hope you can find time to visit the property on your next trip to Hardin County. The mine is opening up nicely.

With kind personal regards, I am

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/blc

Enclosure

cc: Mr. C. W. Sohosky

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

OFFICIAL FILE COPY DMEA RECEIVED JUN 5 1957		
DATE	INITIALS	CODE
6-5	C	220
6/5	Hmk	600

June 3, 1957

Memorandum

To: Finance Officer, Region V - (DMEA)

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Royalty Payment - Idm-E255, DMEA-2248, Fluorspar Ozark-Mahoning Co. Hill-Ledford Tract, Hardin County, Illinois.

Transmitted is a settlement sheet of concentrates produced during the month of March 1957 from the subject project, and their check for $375.24 royalty due on production.

Robert A. Laurence

ZM.
cc
Burmeister
Lynch
Mittendorf
Files

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 5 1957

DATE	INITIALS	CODE

June 3, 1957

C. W. Sohosky, Work Accountant
Ozark-Mahoning Company
Rosiclare, Illinois

Re: DMEA-2248, Idm-E255-Fluorspar
Ozark-Mahoning Company
Hill-Ledford Tract,
Hardin County, Illinois

Dear Mr. Sohosky:

This will acknowledge receipt of your letter of May 28, and the check for $375.24 covering earned royalty on the Hill-Ledford Tract for March 1957.

The Royalty Statement form which was used for the first time appears to contain all the information necessary for submitting royalty payments and it has our approval.

Very truly yours,

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

VJL/zm
cc
Burmeister
Lynch
Mittendorf
Files

Mattendorf

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

May 28, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 5 1957

DATE	INITIALS	CODE

Mr. Robert A. Lawrence
Executive Director
DMEA Field Team
Region V
Room B - Post Office Building
Knoxville, Tennessee

Dear Mr. Lawrence:

We are enclosing herewith three copies of Royalty Statement covering earned royalty on the Hill-Ledford Tract for the month of March 1957. This is the first month of operation since we furnished you with the last Royalty Statement. Please advise if this Royalty Statement is in order, as it is the form which we propose to use for future payments on the contract covering the drilling done on the Hill-Ledford Tract.

We are enclosing our check in the amount of $375.24 covering the royalty due as per statement.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

C.W. Sohosky

Works Accountant

CWSohosky/phs
cc: Mr. A. G. Johnson
Enc.

RECEIVED
JUN 3 - 1957

Ozark-Mahoning Company
Rosiclare, Illinois

Due to: Defense Minerals Exploration Administration
Knoxville, Tennessee

GOVERNMENT ROYALTY STATEMENT FOR MONTH ENDING MARCH 31, 1957

DMEA 2248-Idm E-255
Hill-Ledford Tract

	Totals
1. Ore on Hand - Start of Month	None
2. Total Tons Hoisted	402.933
3. Deduct Waste Discarded	-
4. Ore Hoisted	402.933
5. Total Ore on Hand	402.933
6. Deduct Ore Processed	392.785
7. Ore on Hand End of Month	10.148
8. Head Feed Assay	
(a) % CaF_2	36.75
Tons CaF_2	144.33
(b) % Zn	.94
Tons Zn	3.69
(c) % Pb	-
Tons Pb	-
9. Average Price Per Ton	
(a) CaF_2 Metallurgical	38.81
CaF_2 Acid	51.97
(b) Zn	148.24
(c) Pb	-
10. % Recovery on Ore Milled	
(a) CaF_2 Metallurgical	8.80
Tons	12.70
CaF_2 Acid	86.93
Tons	125.48
(b) Zn %	89.58
Tons	3.31
(c) Pb %	-
Tons	-
11. Value of Minerals Recovered	
(a) CaF_2 Metallurgical	492.89
CaF_2 Acid	6521.20
(b) Zinc	490.67
(c) Lead	-
Totals	$ 7504.76

12. Royalty Rate $\frac{7504.76 \text{ Value}}{392.785 \text{ Tons Crude Ore Treated}}$ = 19.11 = 5% Royalty

13. Royalty Payment - 5% $ 375.24

DMEA Form 7
(12-56)

2248

OFFICIAL FILE COPY

Date	Surname	Code
5/29	Mittendorf	100
6-4	C O	270
		225

MAY 29 1957

Mr. A. G. Johnson, Manager
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Dear Mr. Johnson:

I wish to thank you for your letter of May 23, in which you explain your reasons for not desiring the Hill-Ledford project to become the subject of a DMEA case history.

It was my realization that many factors must be considered before an operator consented to release information about his project that caused me to exercise the precaution of first discussing the matter privately with you. I very well appreciate your position and you may be assured that your name will not be mentioned in connection with the Mining World project.

With best wishes for your continued success, I am

Sincerely yours,

C. O. Mittendorf

Administrator

COMittendorf/esf
5/29/57
cc to: Mails & Files
Admr. R. File
Mr. Mittendorf

8623

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

May 23, 1957

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

Dear Mr. Mittendorf:

We have been giving considerable thought to your letter of May 3rd, reference the exchange of correspondence between yourself and George O. Argall, Jr., Editor of the Mining World. From this, it would seem that Mr. Argall wishes to publish an article in the Mining World on the achievements of the D. M. E. A. program, citing case histories of successful projects in various sections of the United States. In the Illinois-Kentucky area you mention the Hill-Ledford project as being of real interest to the mining industry.

We agree with you that D. M. E. A. has been of real help to our company in the development of the Hill-Ledford orebody. We, however, would hesitate to publicize the geology and structural features at this time because of the probability that the information would be useful to our competitors who are attempting to set up drilling projects in the general area. For your information, we have already purchased the fee on 160 acres immediately northeast of the Hill-Ledford Tract and have other tracts in mind.

Under the circumstances until such a time as the underground structural pattern has been developed more fully and we have completed our leasing or fee purchase program, we do not believe that any information on this ore occurrence should be available to the general public. The mine was opened up March 1, 1957. The structural pattern is developing nicely but is somewhat different than we had anticipated from the drilling.

With kind personal regards, I am

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson, Manager

AGJ/blc

DMEA Form 7
(12-56)

DMEA-2248

600

MAY 3 - 1957

OFFICIAL FILE COPY

Date	Surname	Code
5/3	Mitchell	100
5-7	C	220
		225

Mr. A. G. Johnson
General Manager, Ozark-Mahoning Company
Rosiclare, Illinois

Dear Mr. Johnson:

I have had an exchange of correspondence recently with Mr. George O. Argall, Jr., Editor of the Mining World, who desires to publish an article in the nature of a review of some significant achievements of the DMEA program. He expresses his thoughts as follows:

> "I am thinking that a series of five or six case histories might prove exceptionally interesting to the entire geological and mining world. The examples should be carefully selected, perhaps one from each of the major regions, to illustrate how good geologic mapping or careful company analysis of structures, or an interpretation of geology on a district basis and applied to one deposit, contributed to major ore discoveries.
>
> "The purpose of this article would be to indicate that the DMEA has been worthwhile, that properly directed exploration is warranted, and that opportunity for exploration continues."

Mr. Argall hoped that my staff, together with a key engineer and key geologist in each of the regions, would cooperate with him in writing the article.

I have explained to Mr. Argall that it would be contrary to our policy to disclose any information about individual participants in the DMEA program. We do, of course, disclose the identity of a contract recipient at the time the contract is executed. After a contract is executed we conceal the percentage of committed funds actually spent, the results of the work accomplished, and whether a certification of discovery or development was issued. Likewise, we do not reveal the identity of those who have been denied DMEA assistance or of the applicants generally. I know you will readily appreciate the wisdom of this policy.

8623

I also told Mr. Argall that we of DMEA would like to see more articles of the type he has in mind, but that they must be initiated by the publishing medium and the individual operator working in cooperation with each other. He has expressed his willingness to proceed on that basis and appears anxious to get started as soon as possible.

One approach to the project would be to have Mr. Argall send out a fairly lengthy questionnaire to all of the 1013 operators who have received DMEA contracts, requesting certain specific information. The names, as you know, have already been made public through our regular press releases issued over the years. Such an approach would entail a long and tedious screening expedition with doubtful end results.

The general idea could be more effectively implemented if I furnished the Mining World with the names of several operators who have participated with DMEA in projects which I thought might provide interesting subject matter for case histories. In this connection it occurs to me that your project, DMEA-2248, Hill-Ledford Tract, might be of special interest to the mining industry, but, of course, I would not even suggest your name without your prior approval. If granted, then I would expect the editorial staff of Mining World to assume responsibility for working up the details of the story, in cooperation with you or your representatives. I should appreciate your early reactions to this idea, and if favorable I will do no more than mention your name to Mr. Argall as one whom he might contact. If you do not approve, your reply will be kept confidential in my personal files.

Incidentally, Mr. Argall indicates to me that he will keep the name of the operator and the identity of the property confidential, by referring to case "A" or case "B", if the operator so desires.

With kindest personal regards,

Sincerely yours,

C. O. Hittendorf (for)

Administrator

COMittendorf/gad
5/3/57

CC: Mails & Files
Admr. Reading File
Administrator
Field Team, Region V

The monthly summary sheets supplied the BLM appear to contain the necessary information on production & values but the allowable deductions of the BLM - may not be allowable under the OMEA contract

File

166/TOW

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 1 1957

DATE	INITIALS	CODE
3/1	C	220
		225

February 27, 1957

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-2248, Idm-E255-Fluorspar. Ozark-Mahoning Co. Rosiclare, Ill. Hill-Ledford Tract, Hardin County, Illinois.

Reference is made to your letter of January 28.

Enclosed are three copies of a letter from the Operator, and three copies of our reply. It will be noted that all crude ores are sampled before co-mingling with ores from other properties.

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

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 1 1957

DATE	INITIALS	CODE

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

February 27, 1957

RAL/sm
cc:
Operating Committee-3
Millar
Lynch
Files

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: DMEA-224S (fluorspar)
Hill-Ledford Tract
Hardin County, Illinois
Amended Contract-Idm-E255

Dear Mr. Johnson:

Thank you for your letter of February 14 relative to the computation of royalties on ore produced from the subject property. My reply is late because I have been out of town.

Because ores are sampled before co-mingling, it probably will not be necessary to work out a royalty agreement as was suggested in my letter of February 8. However, it would be better to wait until final settlements have been received before computing royalties instead of estimating the selling price, as has been done until now.

The type of statement which you are furnishing to the Bureau of Land Management will provide the type of information we need. It will be appreciated if you can send such a statement, as well as copies of the settlement sheets for lead and zinc concentrates, when the royalty payments are made. Please send these statements for all sales since the date of the DMEA contract.

Your letter is being forwarded to the Washington office for the attention of our Contract Administration and Audit Division, and any comments or suggestions they may have will be passed along to you.

I appreciate your suggestion that I visit with your Mr. Sehosky, to work out an arrangement for reporting the data to us, but I do not think this will be necessary, and I have no plans to be in your area in the near future. Mr. Harry Burmeister, of the U. S. Bureau of Mines, has been handling the field end of this contract for us, and he will probably call on you when he is next in the district.

Very truly yours,

Robert A. Laurence, Executive Officer
DMEA-Region V

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

February 14, 1957

RECEIVED
FEB 18 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 1 1957

DATE	INITIALS	CODE

Mr. Robert A. Laurence
Executive Officer, DMEA
Region V
United States Department of the Interior
Defense Minerals Exploration Administration
Room 1, Post Office Bldg.
Knoxville 2, Tennessee

Re: DMEA-2248 (Fluorspar)
Contract-Idm-E255
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois

Dear Mr. Laurence:

I wish to acknowledge your letter of February 8 relative to the data to be furnished in connection with royalty to be paid on the above captioned property.

The Rosiclare flotation plant processes ores from a number of properties. Before the crude ore from any one property loses its identity it is segregated in a separate hopper, crushed and sampled prior to co-mingling with other ores. The sampled portion is then assayed to determine the lead, zinc, fluorspar content. Mill extractions and values are determined on a monthly basis. From this data we determine the number of tons of zinc, lead and fluorspar concentrates produced from the various ores over a monthly period, as well as the values thereof based on prices actually received over a monthly period.

We do not receive settlement sheets covering fluorspar shipments, as we invoice the customer at the end of the month and receive payment on that basis. We do, however, receive settlements covering lead and zinc concentrates which can be furnished.

Attached hereto is a copy of statements we furnish the Bureau of Land Management on land leased from the government located in Hardin Co., Illinois. If this type of information provides the kind of information you need for your records, we will be glad to furnish same on a monthly basis. If not, we will be glad to make any cahnges you feel are necessary. If you happen to be in the Rosiclare area in the near future, Mr. Carroll Sohosky, the local works accountant, will be happy to work out with you satisfactory arrangements.

The property should be in steady production on April 1, 1957. So far what little production there has been has come from development drifts.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/phs
cc: Mr. Carroll Sohosky
Attached

GOVERNMENT ROYALTY STATEMENT FOR PERIOD ENDING MARCH 31, 1956

BLM-A-011508-III.

	January	February	March	Totals
1. Ore on Hand - Start of Month	11640	17306	21620	
2. Total Tons Hoisted	10498	9144	10864	30506
3. Deduct Waste Discarded	-	-	-	-
4. Ore Hoisted	10498	9144	10864	30506
5. Total Ore on Hand	22138	26450	32484	
6. Deduct Ore Processed	4832	4830	5014	14676
7. Ore on Hand End of Month	17306	21620	27470	
8. Head Feed Assay				
(a) % CaF2	30.87	28.05	29.00	
Tons CaF2	1491.64	1354.82	1454.06	4300.52
(b) % Zn	5.89	5.98	5.98	
Tons Zn	284.60	288.84	299.84	873.28
9. Average Price Per Ton				
(a) CaF2 Metallurgical	34.87	35.01	35.30	
CaF2 Other	48.69	48.64	48.60	
(b) Zn	165.88	167.99	166.37	
10. % Recovery on Ore Milled				
(a) CaF2 Metallurgical	7.20	13.17	13.75	
Tons	107.40	178.42	199.94	485.76
CaF2 Others	77.42	80.66	85.34	
Tons	1154.82	1092.80	1240.90	3488.52
(b) Zn %	93.57	92.04	92.82	
Tons	266.30	265.84	278.32	810.46
11. Value of Minerals Recovered				
(a) CaF2 Metallurgical	3745.04	6246.48	7057.88	17049.40
CaF2 Others	56228.18	53153.80	60307.74	169689.72
(b) Zinc	44173.84	44658.46	46304.10	135136.40
Totals	104147.06	104058.74	113669.72	321875.52
12. Amount of Allowable Deductions	29571.84	29559.60	30685.68	89817.12
13. Amount to Which Royalty is Applied	74575.22	74499.14	82984.04	232058.40
14. Royalty Payment 2%	1491.50	1489.98	1659.68	4641.16

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 1 1957
DATE | INITIALS | CODE

February 4, 1957

Mr. L. G. Houk calling Mr. R. A. Laurence, Knoxville, Tennessee

Re: Docket No. DMEA-2248-Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E255

Mr. Houk: Have you seen our letter on the Ozark-Mahoning settlement sheets?

Mr. Laurence: I see it in the mail. I have not read it yet.

Mr. Houk: We ask them to give us the settlement sheets to substantiate their estimate of the royalty. We probably will have to give them one of those royalty agreements.

Mr. Laurence: Like Eagle Pitcher?

Mr. Houk: Yes. Like Hitchcock.

Mr. Laurence: Millar has a new man in Illinois now and presumably he will handle all that. They have taken Burmeister off that. We will probably have to make one of those royalty agreements.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Signed _____

Interior—Duplicating Section, Washington, D. C.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/24	Houk	600
1-25	Chamberlin	800
1/25	Selfridge	130
"	Johnson	100
"	Whitehead	200
1-28	C	220

600

JAN 28 1957

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

Re: Docket No. DMEA-2243-Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E255

Dear Mr. Laurence:

Reference is made to the three royalty payments totaling $773.34, and the company's practice of estimating the value of production for royalty purposes.

The Ozark-Mahoning Company should provide us with settlement sheets or other metallurgical data to substantiate its estimates of value of the concentrates. If the Hill-Ledford ores are being commingled with ores from other company properties or with custom ore it may be necessary to execute a royalty agreement with the Ozark-Mahoning Company.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

Frank D. Lamb
Member, Bureau of Mines

N. E. Nelson
Member, Geological Survey

LGHouk:gad 1/24/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

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

WASHINGTON 25, D.C.

December 14, 1956

RECEIVED DEC 17 1956 D.M.E.A.

Memorandum

To: Finance Officer, Region V (DMEA)

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

Subject: Royalty Payment - Idm-E2248, Idm-E255, Ozark-Mahoning Company
Hill-Ledford Tract - Hardin County, Illinois

Transmitted is a statement of concentrates produced from the subject certified contract, and their check No.20791, for royalty on the sales in the amount of $545.30.

V. J. Lynch

EI
cc:
Lynch
Burmeister
Files

Mr. Houk -

Larry:

I suggest holding letter in abeyance until the Field Team has had an opportunity to submit semi-annual report in accordance with current instructions now being issued.

FEJ

Mr. Forest

Sorry: I overlooked letter in advance on CP. It might have had an opportunity to review Semi-Annual report in accordance with

(over)

current and bacteriums now
being carried

Francis 1/30/56

This is a good letter — but — I wonder if our Sheriff would see what the F.T. can ferret out before writing the Company?

I believe — generally — that more info will be obtained orally — than any operator would feel on writing

Jm

rt A. Laurence
xecutive Officer
DMEA Field Team, Region
Room B, Post Office Building
Knoxville, Tennessee
Petty Cash
A. G. Johnson
1 - File

November 30, 1956

RECEIVED DEC 17 1956 D.M.E.A.

Ozark-Mahoning Company
Rosiclare, Illinois

Due to: Defense Minerals Exploration Admin.
Knoxville, Tennessee

Royalty Statement

Hill-Ledford Tract - DMEA 2248, IdmE255
November 1956

Crude ore on hand October 31, 1956	none
Crude ore mined November 1956	499.463
Crude ore treated November 1956	499.463
Crude ore on hand November 30, 1956	none

Tons Concentrates Produced		*Estimated Selling Price Per Ton	Estimated Value
Acid Grade Fluorspar	195.82	47.50	9301.45
Metallurgical grade Flspr.	34.33	30.10	1033.33
Zinc	3.34	90.87	303.51
Lead	1.44	185.94	267.75
			10906.04

10906.04 ÷ 499.463 = $21.84 per ton crude treated or 5% Royalty Rate

10906.04 (Value) x 5% (Royalty rate) = $545.30 amount due

* It is necessary to estimate the selling price as all settlements have not been received.

Charge: Accrued Royalty - Mining Operation - Hill-Ledford.

20 791

2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 201 POST OFFICE BLDG.
WASHINGTON
KNOXVILLE 2, TENN.

RECEIVED
FEB 17 1956

February 15, 1956

Memorandum

To: Helen Miller, Ass't Administrative Officer, Region V

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

Subject: Royalty payment- DMEA-2248, Idm-E255, Fluorspar, zinc-lead. Ozark-Mahoning Co., Hill-Ledford Tract. Illinois

Transmitted is a royalty statement on the subject contract in the amount of $862.46, and a royalty check No. 19645 in the amount of $43.12 due the Government on the sale.

Robert A. Laurence

RAL
cc:
Lynch
Mittendorf
Miller
Files

obert A. Laurence ✓
xecutive Officer
MEA Field Team, Region
oom 13, Post Office Bldg.
Knoxville 2, Tennessee
1 - Petty Cash
1 - A. G. Johnson
1 - File

Ozark-Mahoning Company
Rosiclare, Illinois

Due to:
Defense Minerals Exploration Admin.
Knoxville, Tennessee

ROYALTY STATEMENT

Hill-Ledford Tract - DMEA 2248, Idm E-255

JANUARY 1956

Crude ore on hand December 31, 1955	None
Crude Ore Mined January 1956	40.138
Crude Ore Treated January 1956	40.138
Crude Ore on hand January 31, 1956	None

Tons Concentrates Produced		Estimated Selling Price Per Ton	Estimated Value*
Acid Grade Fluorspar	15.51	47.50	$ 736.73
Met. Grade Fluorspar	1.69	28.00	47.32
Zinc	.54	89.06	48.09
Lead	.17	178.35	30.32
			$ 862.46

$862.46 ÷ 40.138 tons = $21.49 per ton crude ore treated or 5% Royalty Rate

$862.46 x 5% = $43.12 Amount Due

*It is necessary to estimate the selling price as all settlements have not been received

FEB 1956
19645

Charge: Accrued Royalty - Mining Operation - Hill-Ledford

RECEIVED
FEB 16 1956

January 23, 19[illegible]

Employment taxes local

Mr. C. O. Anderson
President, Ozark-Mahoning Company
Tulsa, Oklahoma

Hold

Dear Mr. Anderson:

Reference is made to our informal discussion of the results of the DMEA work on the Hill-Ledford and the Lloyd Gibson Tracts which have been certified by the Government as discoveries.

Notice of the first payment of royalty from the Hill-Ledford Tract has been received in this office. As you, no doubt, know the amount of royalty the DMEA receives from its projects is one of the measures of effectiveness of our program. I note that your company has had four contracts under the DMEA, two of which were certified as discoveries and one is still in process. This, I believe to be a remarkable record and speaks very highly for the careful planning made by your geologic staff.

In order that we may appraise the Legislative Branch of the Government of the overall results of our program (in participation with your company,) we desire some information on your plans to develop and mine the Hill-Ledford and the Lloyd Gibson Tracts. It is our understanding that your company has outlined additional reserves of ore at the Hill-Ledford Tract by a drilling program. We would appreciate it if you could give us the order of magnitude of the additional reserves found, and the amount of money that you spent in (company) delineating them. What we are trying to develop is an (cumulative) overall (expenditures) ~~figure that will be spent by the various companies of~~ certified projects. Thus we can say the DMEA spent X dollars for exploration in the fluorspar exploration and the companies will spend three or four X dollars for development and

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Signed _____

Interior—Duplicating Section, Washington, D. C.

preparation for mining. Thus we will be in a position to justify an exploration type of program which seems to have the acceptance of the fluorspar industry. If you do not care to give us the actual reserves of ore that you have found on the Hill-Ledford Tract, perhaps you can give us an estimated dollar value of the reserves. All figures you supply will be treated in a confidential manner and any figures made public will be for the entire DMEA fluorspar program. This information we are requesting must be given entirely voluntarily on your part, however, I am sure that your company is desirous of the continuation of the exploration program and will help us as far as you are able.

Any information you can give us on when you expect to get into production, total investment for plant and equipment, total development ~~will be appreciated. We realize, of course, that price, imports, consumers demand, contracts, etc., will govern the production~~ cost, number of employees when in full operation, dollar value of reserves, and any pertinent information on your plans for mining at the Hill-Ledford Tract will be appreciated. We realize, of course, that price, imports, consumers demand, contracts, etc., will govern the production rate.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Signed _____

Interior—Duplicating Section, Washington, D. C.

Talbert
Chrono

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

JAN 31 1955

Mrs. Helen Miller
Authorized Certifying Officer
Bureau of Mines
P. O. Box 1909
Knoxville 1, Tennessee

Subj.: Idm-E255, DMEA-224E
Ozark-Mahoning Company

Dear Mrs. Miller:

Reference is made to your memorandum of January 20, 1955, addressed to F. R. Kantner, Administrative Assistant, Western Experiment Station, College Park, Maryland, relative to a deficit of $0.02 on the ledger sheet for the subject contract.

This $0.02 was due to an accumulative "breakage" in the monthly payments of the Government's 50 percent contribution. Had this difference been noted at the time the Report of Review was prepared, the amount certified would have been stated as $41,741.31 instead of $42,741.29.

You may consider this letter your authority to disregard this deficit of $0.02.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
January 31, 1955

Copy to: Docket
Admr. Reading File
Mr. Kantner
Mr. Bailey, Bu Mines
Mr. Chambers

R.C.

Docket Copy
Surname:
Houk
Rubin
Chamberlain
Martin
Burton
Larrabee
Hedges

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

AUG 23 1954

Mr. Irving Gumbel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Ida-1255

INTERIOR DEPT.
AUG 11 1954
SOLICITOR

Dear Mr. Gumbel:

This letter supplements our letter of May 29, 1953, and sets forth the total liability of the operator for royalty on production from the subject property. The original contract was amended to explore a new target on the land described in the contract after the project was certified as a discovery.

The contract, signed February 18, 1952, was amended and rewritten on the new short form contract (MF-200 A), June 2, 1953, with the Government participating to the extent of 50 percent of $122,715.00 or $61,357.50.

The project work was started February 18, 1952, and terminated by agreement July 7, 1954. In accordance with the report of review, dated June 4, 1954, the accepted cost is $85,482.54.

Under Stage I, 25,500 feet of churn drilling was completed. The amended contract provided for an additional 25,000 feet of churn drilling under Stage II. Eleven holes were drilled totaling 9,678 feet, and the project work under Stage II was suspended by mutual agreement May 24, 1954, as the results indicated that no significant increase to the reserves discovered in Stage I would be found.

The exploration work under Stage II was unsuccessful; however, Stage I was successful and our letter of May 29, 1953, outlines the results achieved.

LGHouk:gad 8/6/54

Sincerely yours,

SIGNED

Administrator

Copy to: Admr. R. File
Operating Committee
Mr. Thayer, 4307 GSA
Mr. Johnson
Mr. Chambers
Docket
Field Team, Region VIII
Mr. Hedges, 4604
Mr. Houk

Docket Copy
Surname:
Houk
Porter

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

Mr. Irving Gumbel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

INTERIOR DEPT.
AUG 3 - 1954
SOLICITOR

Re: Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E155

Dear Mr. Gumbel:

FROM SOLICITOR
AUG 3 - 1954
FOR SIGNATURE

This letter supplements our letter of May 29, 1953, and sets forth the total liability of the operator for royalty on production from the subject property. The original contract was amended to explore a new target on the land described in the contract after the project was certified as a discovery.

The contract, signed February 18, 1952, was amended and rewritten on the new short form contract (MF-200 A), June 2, 1953, with the Government participating to the extent of 50 percent of $122,715.00 or $61,357.50.

The project work was started March 1, 1952, and terminated by agreement July 7, 1954. In accordance with the report of review, dated June 4, 1954, the accepted cost is $85,482.54.

Under Stage I, 25,500 feet of churn drilling was completed. The amended contract provided for an additional 25,000 feet of churn drilling under Stage II. Eleven holes were drilled totaling 9,678 feet, and the project work under Stage II was suspended by mutual agreement May 24, 1954, as the results indicated that no significant increase to the reserves discovered in Stage I would be found.

The exploration work under Stage II was unsuccessful, however, Stage I was successful and our letter of May 29, 1953, outlines the results achieved.

Sincerely yours,

LGHouk:gad 8/2/54

Administrator

Copy to: Admr. R. File
Operating Committee
Mr. Thayer, 4307 GSA Bldg.
Mr. Johnson
Mr. Chambers
Docket File
Field Team, Region VIII
Mr. Hedges, 4604
Mr. Houk

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

July 26, 1954

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

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E255

Dear Mr. Mittendorf:

Please find enclosed five copies of Termination Agreement. These have been executed by Mr. J. G. Trewartha, our Vice President.

Yours very truly,

OZARK-MAHONING COMPANY
Mahoning Mining Division

E. A. Brecke

E. A. Brecke

Encls.

EAB:fhb

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

DOCKET FILE
Surname:
Houk
Hayes
Hodges
Lathrop
Bjelmud

JUL 22 1954

Ozark-Mahoning Company

Rosiclare, Illinois

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E255

Gentlemen:

Reference is made to your letter of July 13, 1954, pointing out the omission of five copies of the Termination Agreement.

You will find enclosed the five copies of the Termination Agreement which were inadvertently omitted from our letter of July 8, 1954, for your execution and return to this office. We regret the delay and inconvenience this has caused.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures 5

LGHouk:ag 7/19/54
Copy to: Admr. R. File
Docket File
Operating Committee
Field Team, Region VIII
Mr. Arundale, 3516
Mr. Van Alstine, 5216
Mr. Houk

R.C.G.

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

July 13, 1954

Department of the Interior
Defense Minerals Administration
RECEIVED
JUL 15 1954

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

Re: Docket No. DMEA-2248 (Fluorspar)
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract Idm-E255

Dear Mr. Mittendorf:

We have received your communication of July 8 in regard to the Hill-Ledford project with which was enclosed a Certification of Discovery; also, one copy of the Termination Agreement of this contract. According to your letter you were enclosing six copies of the Termination Agreement to be signed by our Company. However, this enclosure was apparently omitted as we found only one copy designated as Operator's copy. We will be glad to sign this Termination Agreement when you provide the six requested copies.

Yours very truly,

OZARK-MAHONING COMPANY
Mahoning Mining Division

E. A. Brecke

E. A. Brecke

EAB:fhb

cc: Mr. J. G. Trewartha
Ozark-Mahoning Co.,
Rosiclare, Ill.

DMEA
File Copy
Surname

140

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

Rubin
Talbert
Houk
Hedges
Guild
Selfridge

JUL 8 - 1954

Rewritten: Hoffhund Rubin

Ozark-Mahoning Company

Rosiclare, Illinois

Re: Docket No. DMEA-2248 (Fluorspar)
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract Idm-E255

Gentlemen:

The subject Amended Exploration Contract, dated June 2, 1953, superseded the Prior Contract, dated February 18, 1952, covering the subject project, including the rights and obligations concerning the Government's percentage royalty. Therefore, the Certification of Discovery or Development dated May 29, 1953, and the letter of the same date transmitting it, are superseded by the attached Certification of Discovery or Development made under the Amended Contract and by this letter, respectively.

By the terms of the Amended Contract and of the Certification, all production from the land described in Article 2 of the Amended Contract from June 2, 1953, is subject to the Government's percentage royalty as set forth in the Amended Contract until the sum of $42,741.29 is paid or until June 2, 1963, whichever occurs first.

Payments should be made to Mr. W. T. Millar, Executive Officer, Defense Minerals Exploration Administration Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland. Checks should be drawn payable to the Treasurer of the United States. The purchaser should be advised to deduct the royalty from the amount due on each shipment and forward a check directly to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets showing quantity and grade of ore sold, the name

of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Millar of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Millar at six-month intervals that no production has been made.

Also attached are six copies of a Termination Agreement signed by the Administrator in behalf of the Government. If this agreement is satisfactory to your company, please execute and return all copies to us except the one marked "Operator's Copy," which is for your files.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Enclosures

HCRubin:lm 6-24-54

Copy to: Docket
Admin. Reading File
Operating Committee
Field Team Reg VIII (2)
Finance Office
Mr. Irving Gumbel, EPS, GSA
Mr. Chas. N. Hill,
Elizabethtown, Ill.
Walter Ledford and Blanche
H. Ledford, Cave-In-Rock, Ill.
Mr. Hedges, Rm. 4604
Mr. Thayer, 5216 GSA Bldg.
Mr. Chambers
Mr. Johnson
Mr. Houk (2)
Mr. Hofflund
Mr. Rubin
Chron.
Pending

File copy
Surname

Martin
Talbot
Hook
Hedges
Guy
Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
140
WASHINGTON 25, D. C.

Ozark-Mahoning Company
Rosiclare, Illinois

Re: Docket No. DMEA-2248-Fluorspar
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Idm-E255

Gentlemen:

The subject Amended Exploration Contract, dated June 2, 1953, superseded the Prior Contract, dated February 18, 1952, covering the subject project, including the rights and obligations concerning the Government's percentage royalty. Therefore, the Certification of Discovery or Development dated May 29, 1953, and the letter of the same date transmitting it, are superseded by the attached Certification of Discovery or Development made under the Amended Contract and by this letter, respectively.

By the terms of the Amended Contract and of the Certification, all production from the land described in Article 2 of the Amended Contract from February 18, 1952, is subject to the Government's percentage royalty as set forth in the Amended Contract until the sum of $42,741.29 is paid or until February 18, 1962, whichever occurs first.

Payments should be made to Mr. W. T. Millar, Executive Officer, Defense Minerals Exploration Administration Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland. Checks should be drawn payable to the Treasurer of the United States. The purchaser should be advised to deduct the royalty from the amount due on each shipment and forward a check directly to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets showing quantity and grade of ore sold, the name

DOCKET FILE COPY
Surname: Hook

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

600

CERTIFICATION OF THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Quarry-Mahoning Company
Rosiclare, Illinois

Pursuant to the provisions of Exploration Project Contract No. 1dm-8255, dated June 2, 1953 (Docket No. DMEA-2268), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government", to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Churn-drilling discovered and partly blocked out fluorite-zinc-lead replacement deposits in limestone of Mississippian age. Sufficient drilling was completed to calculate inferred reserves.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

Dated: _____

LGHook:gad 6/16/54

Copy to: Mr. Irving Gumbel, EPS, GSA
Charles E. Hill, Elizabethtown, Illinois
Walter Ledford and Blanche H. Ledford, Cave-In-Rock, Illinois
Docket File
Admr. R. File
Operating Committee
Mr. Hedges, 4604
Mr. Hook
Field Team, Region VIII
Mr. Thayer, 5216 GSA Bldg.
Finance Office
Mr. Chambers
Mr. Johnson

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

JUN 17 1954

June 16, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2248 - (Fluorspar)
Ozark-Mahoning Company, Hill-Ledford Tract
Hardin County, Illinois
Contract No. Idm-E255 - (Amended)

The attached two copies of a letter dated June 11, 1954 and maps, from Mr. A. G. Johnson, Ozark-Mahoning Company, are transmitted for your files. This is additional information in connection with the last progress report from this company forwarded to you under date of April 15.

W. T. Millar

W. T. Millar

Enclosures

June 11, 1954

Mr. W. T. Millar,
Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
United States Department of the Interior
College Park, Maryland

Dear Mr. Millar:

We have discontinued drilling operations on that portion of the Hill-Ledford tract located east of Illinois Highway No. 1. This development work was covered by an amended D. M. E. A. contract No. IDM-E 255, dated June 2, 1953. The expiration date was February 18, 1954. By amendment No. II, dated February 2, 1954, the expiration date was extended to June 30, 1954. Because of disappointing results we now wish to terminate the above agreement.

Under the terms of the Agreement eleven holes were drilled along the northeast extension of the Hill-Ledford trend. Below is tabulated the data on the various holes:

Hole No.	Started	Completed	Depth	Remarks
M-43	8-1-53	8-28-53	905	No open ground.
M-44	8-24-53	10-1-53	815	do
M-45	8-24-53	9-30-53	900	do
M-46	8-28-53	10-6-53	940	do
M-47	9-30-53	11-5-53	935	do
M-48	10-1-53	11-2-53	815	do
M-49	10-6-53	11-6-53	923	do
M-50	11-6-53	12-5-53	895	do
M-51	11-5-53	12-9-53	885	do
M-52	12-9-53	1-19-54	815	do
M-53	1-19-54	3-10-54	850	do
		Total Footage	9678	

Attached hereto is a 400 feet scale map of the property showing the location of all holes drilled east of Illinois Highway No. 1, under the terms of the original D. M. E. A. contract as well as Amended Contract IDM-E 255.

In the cross section as represented by Drill Holes Nos. 26-M, 29-M, 44-M, 48-M, 52-M and 53-M, a slight anomaly was indicated in 52-M. However, all holes as represented by this cross section were tight and practically full of water when completed. It was, therefore, felt that no important structural feature was indicated by the drilling.

The cross sections as represented by Drill Holes Nos. 51-M, 50-M, 49-M, 46-M, 45-M, No. 1, 43-M and 47-M were drilled not only to determine the possibility of a northeast trending structure but also to determine the possibility of a northwest-southeast trending structure. The northwest trending possibility was due to a series of sink holes trending in that direction.

The holes which we drilled in this area did not develop any structural features, were tight and full of water, and failed to cut any mineralization at either the Bethel or Rosiclare horizon. Hence the decision on the part of Ozark-Mahoning Company to discontinue drilling operations.

We trust that all of this meets with the approval of you and your staff.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

Encls.
AGJ:fhb

June 16, 1954

Memorandum

To: Legal Division

From: Nonmetallic Minerals Division

Subject: Termination and certification

Re: Docket No. DMEA-2248
Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-E255

Attached you will find the new certification of discovery prepared by this office. Please prepare termination by mutual agreement as requested by the field team in their memorandum of May 25, 1954, and please prepare a transmittal letter to accompany the certification of discovery.

LGHouk:gad 6/16/54

Copy to: Admr. R. File
Mr. Houk

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

800
Alley
Talbert

JUN - 4 1954

Mr. W. T. Millar
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Ozark-Mahoning Company
Idm-E255
Docket No. DMEA-2248

Dear Mr. Millar:

Enclosed are the original and two copies of the Report of Review covering the referenced Exploration Project Contract.

Distribution should be effected in accordance with Section 3 of DMEA Circular 19, Supplement 4, dated October 9, 1952.

Sincerely yours,

SIGNED

E. D. Talbert, Acting Chief
Contract Administration
and Audit Division

Enclosures

AMAlley/ama
June 4, 1954

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.S.J.

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

May 25, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Termination of Contract
Docket No. DMEA-2248 - (Fluorspar)
Ozark-Mahoning Company
Hill-Ledford Tract, Hardin County, Illinois
Contract No. Idm-E255 - Amended

Since the results of the churn drilling under Stage II in the northeastern section of the Hill-Ledford Tract, as given in the amendment to the original contract, have all been negative, it is the Operator's opinion that no further drilling is justified at this time. A request by the Operator to terminate this contract after commencement but before completion has been reviewed.

In consideration of the request by the Operator to terminate this contract, the Field Team has reviewed the results obtained from this exploration and has reached the following conclusion:

Eleven holes were churn drilled under Stage II for a total of 9,678 feet. The holes were all barren of mineral and no breaks in the formation were indicated. The pattern of the drilling practically precludes any sizeable extension of the ore body, which lies in the southwestern section of the Hill-Ledford Tract and which was indicated and certified as a discovery under Stage I of this contract.

Recommendation

The Field Team recommends that this contract be terminated by agreement after commencement but before completion, as of May 24, 1954.

Quentin D. Singewald, U.S. Geological Survey
Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

April 12, 1954

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

Dear Mr. Mittendorf:

Re: Docket No. DMEA-2248-Fluorspar
Hill-Ledford Tract
Hardin County, Illinois
Contract No. Idm-E255-Amended

I wish to acknowledge and thank you for your letter of April 8, 1954.

We are sorry to note that request contained in our letter of January 26, 1954 for inclusion of additional ground for prospecting southwest of Highway No. 1 under the terms of Amended Contract No. Idm-E-255 has been denied.

We have discontinued prospecting east of the highway due to the discouraging results and have moved the drilling southwest of the highway to explore the area discussed in my letter of January 26th. Inasmuch as we do not expect to further explore the ground east of the highway, the project can now be considered closed.

In conclusion I wish to again express my appreciation to Mr. Millar and his staff for their help and cooperation during the prospecting period.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

AGJ/blc

cc: Mr. W. T. Millar

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

RECEIVED
APR 9 1954

April 9, 1954

Memorandum

To: Mr. Lawrence Houk, Chief, Nonmetallic Minerals Division, D. M. E. A.

From: Assistant Chief, Construction and Chemical Materials Branch

Subject: Docket No. DMEA-2248 (Fluorspar-Lead-Zinc), Ozark-Mahoning Company, Hill-Ledford Tract, Hardin County, Illinois - Contract No. Idm-E255 (Amended)

Applicant proposes to drill 16,000 feet of hole in an effort to prove a possible structure trending about 20 degrees southwest from about the area of hole No. 42-M. I concur in the recommendation of the field team that this application be denied. Stage 1 of the project resulted in a certification of discovery and the company has indicated their intention of developing the deposit. Mining would be carried through the area of indicated possible intersection of the two structures. In my opinion exploration of the possible structure could best be carried out by cross cutting or drifting on any indicated structure from future workings.

Joseph C. Arundale

Joseph C. Arundale

Attachments 2

File Copy
Surname:
Houk
Hodges
Hooper
Selfridge
Johnson

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

APR 8 1954

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Hardin County, Illinois
Contract No. Idm-E255 - Amended

Dear Mr. Johnson:

Reference is made to your letter of March 30, 1954, submitting supplemental data to justify exploratory drilling to confirm the inferred intersection of a known ore-bearing structure with an undeveloped structure.

A careful study of all of the available data relating to the possible structural intersection and the probability of finding additional ore, indicates that Government participation in this proposed work is not warranted. Your request to transfer the unused funds programed for drilling East of the highway to explore for an intersection of two structures Southwest of the highway is, therefore, denied.

We wish to congratulate you on your work performance and on the successful exploration completed under the first stage of this contract.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

LGHouk:gad 4/7/54
Copy to: Admr. R. File
Docket File
Field Team, Region VIII
Operating Committee
Mr. Arundale, 3516
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

R.C.B.

IN REPLY REFER TO:

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

G-MD-CNM
Defense Minerals Administration
RECEIVED
APR - 7 1954

April 7, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2248 (fluorspar-lead-zinc)

To: L. G. Houk, Defense Minerals Exploration Administration
From: R. E. Van Alstine, U. S. Geological Survey
Applicant: Ozark-Mahoning Company.
Name of property: Hill-Ledford tract.
Location of property: Cave in Rock district, Hardin County, Illinois.
Date of field team report: February 10, 1954.
Authorship of field team report: W. T. Millar, U.S.B.M., and J. B. Hanley, U.S.G.S.
Field team's recommendation: Denial of the request to amend the contract to authorize remaining footage (16,000) under Stage II of the amended contract (Idm-E255) to be used in exploring a new area shown on the accompanying map, adjacent to the previously certified ore body discovered under Stage I.
Comments: Data submitted are insufficient to indicate the joining of two structures hypothesized by the applicant. Hence, exploratory drilling of the area shown on the map is not justified.
ACTION RECOMMENDED:
Follow field team's recommendation.

R. E. Van Alstine

R. E. Van Alstine

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

APR - 1 1954

April 1, 1954

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2248 - (Fluorspar)
Ozark-Mahoning Company
Hill-Ledford Tract, Hardin County, Illinois
Contract No. Idm-E255 - Stage II

Enclosed are two copies of the February progress report from the Ozark-Mahoning Company, contract No. Idm-E255, which has been certified for payment by the Finance Officer, Region VIII.

W. T. Millar

W. T. Millar

Enclosures - 2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR - 1 1954

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

March 30, 1954

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

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Co.,
Hardin County, Ill.
Contract No. Idm-E255 - Amended

Dear Mr. Houk:

Your letter of March 25 concerning further information which would justify an amendment to this contract to permit further drilling has been referred to me.

I am enclosing a 400 foot scale map to illustrate the information presented in the following paragraphs.

First, I wish to clarify one point in regard to spurs or offshoots. The widening of the ore trend in the vicinity of drill holes 22, 24, 27 and 31-M as indicating a divergence from the main structural trend is cited as an example that such a structural condition does exist in the area. We feel that it is entirely possible that a second off-shoot or spur of a S. 30° W. trend may exist in the area which we have proposed be included in this amendment. The following information may assist you in your evaluation of the project.

1. Drill Holes 38-M, 40-M and 42-M show structures of greater magnitude than any part of the main structural trend either northeast or southwest of the location of these holes. The best explanation of this condition is a fault intersection with accumulated displacement and solution action. Thus drill hole 42-M is designated as possible northeast end of a structural zone which terminates against the main structural zone.

2. Referring to the map, you will note three drill holes numbered 5, 18 and 20. These holes were drilled in 1941 by the Minerva Oil Company and the logs show traces of zinc in all the holes. In addition the surface sandstone near drill hole No. 20 shows northwest dip which is variance with the regional which is northeast. This variation of dip is considered to be a favorable criterion in this district.

? 54M ? Billed on Feb & Mar MF-104

3. We are at present drilling drill hole 53-M in the "proposed" area and have had a favorable water condition. Strong water entered the hole at 20 feet and stood near the surface. When the hole reached 80 feet the water left the hole and the hole has had little water below this depth. This loss of water may indicate that a structure which is connected to the main trend was cut at this point and the water drained to the main structure. The main structure has been dewatered to a depth of 700 feet by a pumping test in recent months. Drill Hole ~~53~~-M is now drilling at 300 feet.

I believe the above paragraphs cover all the information we have on hand and trust that it will help you to further evaluate this project.

Yours very truly,

OZARK-MAHONING COMPANY

E. A. Brecke

E. A. Brecke, Geologist

Encls.
EAB:FHB

C
O
P
Y

OZARK - MAHONING COMPANY

Mahoning Mining Division

Rosiclare, Illinois

March 30, 1954

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

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Co.,
Hardin County, Ill.
Contract No. Idm-E255 - Amended

Dear Mr. Houk:

Your letter of March 25 concerning further information which would justify an amendment to this contract to permit further drilling has been referred to me.

I am enclosing a 400 foot scale map to illustrate the information presented in the following paragraphs.

First, I wish to clarify one point in regard to spurs or offshoots. The widening of the ore trend in the vicinity of drill holes 22, 24, 27 and 31-M as indicating a divergence from the main structural trend is cited an example that such a structural condition does exist in the area. We feel that it is entirely possible that a second off-shoot or spur of a S.30° W. trend may exist in the area which we have proposed be included in this amendment. The following information may assist you in your evaluation of the project.

1. Drill Holes 38-M, 40-M, and 42-M show structures of a greater magnitude than any part of the main structural trend either northeast or southwest of the location of these holes. The best explanation of this condition is a fault intersection with accumlated desplacement and solution action. Thus drill hole 42-M is designated as possible northeast end of a structural zone which terminates against the main structural zone.

2. Referring to the map, you will note three drill holes numbered 5, 18 and 20. These holes were drilled in 1941 by the Minerva Oil Company and the logs show traces of zinc in all the holes. In addition the surface sandstone near drill hole No. 20 shows northwest dip which is variance with the regional which is northeast. This variation of dip is considered to be a favorable criterion in this district.

3. We are at present drilling drill hole 53-M in the proposed area and have had a favorable water condition. Strong water entered the hole at 20 feet and stood near the surface. When the hole reached 80 feet the water left the hole and the hole has had little water below this depth. This loss of water may indicate that a structure which is connected to the main trend was cut at this point and the water drained to the main structure. The main structure has been dewatered to a depth of 700 feet by a pumping test in recent months. Drill Hole 53-M is now drilling at 300 feet.

I believe the above paragraphs cover all the information we have on hand and trust that it will help you to further evaluate this project.

Yours very truly,

OZARK-MAHONING COMPANY

/s/
E. A. Brecke, Geologist

Encls.
EAB;FHB

File Copy
Surname:

Authority

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

MAR 25 1954

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosielare, Illinois

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-E255 - Amended

Dear Mr. Johnson:

Reference is made to your letter of January 26, 1954, addressed to Mr. W. T. Millar, Executive Officer, DMEA Field Team, Region VIII, requesting an amendment to the present contract to explore an area 500 feet wide extending S. 20 W. from Drill Hole 42-M.

The justification to drill the proposed area in question is inadequate. To properly evaluate your proposal, we would be pleased to receive such additional information as you may have to support your thesis that there is a N. 30 E. structure which intersects the main structure near 2-M. Do you have additional geologic information to indicate an intersection of structures, other than the widening of the ore section Southwest of M-2 and M-3?

Upon receipt of your reply action will be taken upon your request.

Sincerely yours,

SIGNED
Lawrence G. Houk, Chief
Nonmetallic Minerals Division

LGHouk:gad 3/25/54
Copy to: Admr. R. File
Docket File
Field Team, Region VIII
Mr. Arundale, 3516
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

File Copy
Surname:
Houk

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

February 26, 1954

N.S. in R.R.

Memorandum

To: Mr. C. O. Mittendorf

From: Lawrence G. Houk

Subject: Concurrence of Amendment No. 2 to the amended contract.
Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois
Amended Contract No. Idm-E255

The Nonmetallic Minerals Division concurs in Amendment No. 2 as written and executed in the field to extend the termination date of the contract from February 18, 1954 to June 30, 1954 and with the field team's recommendation of denial of Ozark-Mahoning's request to amend the contract to authorize the remaining footage outside of the area permitted in the contract.

Results of the drilling northeast of the road have not been encouraging and the Nonmetallic Minerals Division concurs with the field team that unless encouraging results are obtained in diamond drill hole 53-M no additional drilling is warranted.

LGHouk:gad 2/26/54

Copy to: Admr. R. File
Docket File
Mr. Houk

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

Defense Minerals Administration
RECEIVED
FEB 23 1954

February 19, 1954

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2248 - (Fluorspar)
Ozark-Mahoning Company
Hill-Ledford Tract, Hardin County, Illinois
Contract No. Idm-E255 (Stage II - Amended)

Transmitted herewith are the Government, Division and Docket copies of Amendment No. II to Annex II of subject contract, which have been signed by both the Government and the Company.

W. T. Millar
W. T. Millar

Enclosures - 3

RECEIVED
MAR 1 - 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

February 11, 1954

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2248 - (Fluorspar-Lead-Zinc)
Ozark-Mahoning Company
Hill-Ledford Tract, Hardin County, Illinois
Contract No. Idm-E255 (Amended)

Transmitted herewith are the original and three copies, together with maps, of the Report of Field Team Review of Request to amend Contract No. Idm-E255 (Amended), for your consideration.

W. T. Millar

W. T. Millar

Enclosures 4

GOVERNMENT'S COPY

REPORT OF FIELD TEAM REVIEW OF REQUEST TO AMEND CONTRACT IDM-E255 (AMENDED)

DMEA Docket No. 2248 - (Fluorspar-Lead-Zinc)
Operator: Ozark-Mahoning Co., Rosiclare, Illinois
Property: Hill-Ledford Tract, Hardin County, Illinois
Contract No. Idm-E255 (Amended)

Amendment requested - to abandon drilling on the northeastern extension of Hill-Ledford Fault and use the balance of the footage remaining under the contract to test a possible split off of the discovery deposit, drilled and certified under the original contract. Also, it is requested that the time limit of the contract be extended to permit completion of the drill hole now in progress.

Summary

Due to unfavorable results from exploratory drilling under Stage II of this contract, the drilling units were reduced from three to one unit in order to take advantage of the data obtained on the geologic structure of the area in locating subsequent drill sites. Therefore, progress in this exploration was impeded.

In accordance with the contract, the Executive Officer authorized the extension of the completion date from February 18, 1954 to June 30, 1954, in order to complete drill hole No. 53M now in progress, and to permit additional drilling specified in the Amended Contract if the results of hole No. 53M warrant additional drilling.

The amendment authorizing the extension of time has been submitted to the Operator for signature.

The request to amend the contract to authorize the remainder of the drilling, approximately 16,000 feet, under Stage II of the Amended Contract to

be used in the area south of the area drilled and certified under Stage I, is not considered justified.

Conclusions

It is concluded that the indications of two structures joining as shown on the map are insufficient to warrant a churn drilling program. Also, since the deposit discovered and certified under Stage I of this contract will be developed, it is concluded that further exploration of the area could be conducted more advantageously from the underground developments. Furthermore, it is the opinion of the Field Team that neither the Government nor the Operator would be benefited by further drilling in this area from the surface.

Recommendations

The Field Team recommends denial of the request to amend the contract to authorize the remaining footage under Stage II of the Amended Contract to be used in the new area shown on the accompanying map.

Discussion

In the opinion of the Field Team there are insufficient data to indicate the joining of two structures to justify exploratory drilling in the area shown on the map.

The following facts are considered:

1. There is a balance of approximately $35,000.00 for 16,000 feet of drilling under the Amended Contract.

2. Stage I of this contract indicated sufficient ore to warrant certification.

3. The area proposed for additional drilling joins the area certified under Stage I. (See map).

4. Plans are being made for development of the deposit discovered under Stage I.

5. The proposed exploration requested would require drilling to depths of 700 to 800 feet.

6. Drilling costs would be dead work.

7. Better interpretations can be made from geological studies of underground workings after the certified deposit has been developed.

8. Crosscutting and drifting from underground developments of the discovery deposit could be used in case additional ore is proven.

9. For the dollar spent, more information could be obtained by conducting exploratory work from underground developments than from surface drilling.

W. T. Millar

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

John B. Hanley

for Quentin D. Singewald, U. S. Geological Survey
Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

February 10, 1954

C

O

P

15 1954

Y

OZARK-MAHONING COMPANY
Mahoning Mining Division
Rosiclare, Illinois

January 26, 1954

Mr. W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
Defense Minerals Exploration Administration
College Park, Maryland

Dear Mr. Millar:

Subject: Docket DMEA-2248 - (Fluorspar)
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-E255 - Amended

I wish to acknowledge and thank you for your letter of January 7, 1954 advising us that the contract covering the exploration on the Hill-Ledford Tract expires February 18th unless same is extended by your office.

At the present time we are drilling 53-M. Because of weather conditions, we do not believe this hole will be completed prior to termination date. Unless we find indications of ore in this hole, it is our present intention to discontinue the prospecting on the east side of the highway.

We would, however, like to continue prospecting on the west side of the highway provided an amendment to the present contract can be secured.

Attached hereto is a 400 ft. scale map of the property showing the location of the drill holes on the east side of the highway as well as the west side of the highway. You will note the general trend of the structure west of the highway is N 55° E. We believe, however, that the ore as represented by drill holes No. 22, 24, 27 and 31-M is on a structure which trends about N 30° E and ties into the main structure near 2-M. This would account for the widened ore section southwest of 2-M and 3-M.

Because of the highly mineralized and fractured condition of the formations in the north end, as represented by drill holes No. 12, 16, 19, 21, 38, 40 and 42-M, we believe this may be due to the joining of two structures, the

off-shoot having about the same trend as the off-shoot to the southwest. Under the circumstances, we would like to drill a number of holes to test this possibility.

The map shows the location of the ground we propose to prospect provided an amendment to the present contract can be secured to cover the situation. The suggested acreage would be a strip of ground 500 feet wide with the center line commencing at 42-M and extending to the southwest S 20° W.

If such a modification can be secured, we believe the contract should be extended for a period of one year. If not, we trust the contract can be extended sufficiently to allow us to complete 53-M.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

/s/ A. G. Johnson
A. G. Johnson

AGJ/blc

Enclosures - 5 prints

Mr. Selfridge

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 3 1954

February 2, 1954

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Docket DMEA-2248 - (Fluorspar)
Hill-Ledford Tract (Amended)
Ozark-Mahoning Company
Contract No. Idm-P255

Dear Mr. Johnson:

Your letter of January 26 requesting that the subject contract be amended to extend the expiration date of the contract and to change the plan for exploratory drilling to authorize drilling in an area not included in the contract is hereby acknowledged.

Enclosed is Amendment No. II to the contract which authorizes an extension of the time limit for completion of the exploratory drilling specified in the contract. If the terms and condition of this amendment meet with your approval please sign all copies, retain the Operator's copy for your files and return the other five copies to this office.

Exploration work in areas other than the areas specified in the contract requires the approval of the Administrator, therefore, this request is being reviewed by the DMEA Field Team for referral to the Administrative Office. A reply will be received at a later date.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Enclosures - 6

WTM:rwa

copies for FRKantner, Fin. Off., Reg. 8
✓ GeoCSelfridge, Oper. Comm.
DMEA Files 2

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

Defense Minerals Administration
RECEIVED
JAN - 8 1954

January 7, 1954

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Docket DMEA-2248 - (Fluorspar)
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-E255 - Amended

Dear Mr. Johnson:

This acknowledges receipt of your December progress report.

Please refer to the contract and Amendment No. 1 which authorizes 25,000 feet of additional drilling. Approximately 8,500 feet of this drilling has been completed and the expiration date of the contract is February 18, 1954. You will note that the time limit was not extended in Amendment No. 1, and 16,500 feet remain to be drilled.

If you contemplate drilling after February 18, please submit a written request for an amendment to the contract to extend the time limit to a specified date which you estimate will be required to complete the authorized work.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:rwa

copies for Mr. Selfridge, Chrm., Oper. Comm.
USGS
DMEA Files 2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 23 1953

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

DOCKET COPY

December 22, 1953

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Docket DMEA-2248 - (Fluorspar)
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-E255 (Amended)

Dear Mr. Johnson:

In answer to your letter of December 15th, regarding the limitation of five drill holes to a cross-section, authority is hereby granted to continue the cross-section composed of holes 26M, 29M, 44M, 48M and 52M to the east. This continuation is to carry through so far as it is deemed necessary to locate the break in the formation.

Very truly yours,

G. L. Neumann for
W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

GLN:rwa

copy for GeoCSelfridge, Oper. Comm.
QuentinDSingewald, USGS
DMEA Files 2

FILE COPY
SURNAME:

Robertson
Houk
Van Alstine
Chandler
Talbert
Selfridge
H. Johnson

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

NOV 9 1953

Mr. W. T. Millar
Executive Officer, DMEA
Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Subject: Docket No. DMEA-2243 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois
Amended Contract No. Idm-1255

Dear Mr. Millar:

Enclosed are six copies of Amendment No. 1 to the amended contract signed by the Administrator.

If the amendment meets with your approval present it to the Operator for approval and signature. If any provisions are unsatisfactory to the Operator, return all copies to this office with suggested changes for consideration.

After signing of the amendment, the usual distribution of copies is to be made.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

Approved:

J. H. Hedges (JHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

Enclosures 6

JTRobertson:gad 11/5/53
Copy to: Admr. R. File
Docket File
Operating Committee
Mr. H. W. Davis, 3519
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

R.C.G. 11-9-53

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 2 1953

October 30, 1953

Memorandum

To: E. G. Houk through George C. Selfridge, Chairman, DMEA Operating Committee

From: N. A. Eilertsen for W. T. Millar, Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2248 - (Fluorspar)
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-E255 (Amended)

In reference to your telephone coversation with H. L. Burmeister this morning, enclosed is a letter of October 28, 1953 to Mr. Millar from A. G. Johnson, Ozark-Mahoning Co., regarding the subject contract.

It is noted that on September 30 there was completed 3420 feet of drilling. It is probable that this has been increased by October 30 to approximately 6600 feet. It is also noted that the continuance of the line consisting of holes 26M, 29M, 44M and 48M, by more than one hole would require specific permission to drill more than 5 holes in any one cross section.

N. A. Eilertsen

N. A. Eilertsen

Enclosures: Ltr. of 10/28/53 to WTMillar from AGJohnson together with map of Hill-Ledford Tract and surrounding acreage, T 11 S R9 & 10 E

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

October 28, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration
RECEIVED
NOV 2 1953

Mr. W. T. Millar
Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration,
Region VIII
U. S. Department of the Interior
College Park, Maryland

Subject: Docket No. DMEA-2248 (Fluorspar)
Hill-Ledford Tract
Ozark-Mahoning Co.,
Hardin County, Ill.
Contract No. Idm-E255 (Amended)

Dear Mr. Millar:

I wish to acknowledge and thank you for your letter of October 22nd, all in reference to the prospecting now going on at the Hill-Ledford property in Hardin County, Illinois.

The prospecting which we are doing east of the highway is limited by the terms of the amended Contract IDM-E255 to two strips of ground, each 500 feet in width. The location of these strips is shown on the 400 foot scale map which is attached. Holes Nos. 47-M, 48-M and 49-M are now drilling and should be completed on or before November 7, 1953. Up to this time we have not been able to locate any mineral or open ground. This is disappointing in view of the fact that Holes Nos. 26-M, 29-M, 44-M, 43-M, 45-M and 46-M should be along the northeast extension of the mineralized trend as determined by the ore, open ground and structural features southwest of the highway.

Under the circumstances we feel that the structure has terminated near the highway or is swinging more nearly eastward. To determine the picture we believe that the crosscut as represented by drill holes Nos. 26-M, 29-M and 48-M should be continued to the east as soon as 48-M is completed regardless of results in 48-M. To do this it will be necessary for us to secure a modification of the present contract. To give us ample room, I believe a strip of ground 400 ft. in width southeast of the present southeast boundary would suffice.

I trust that this modification can be secured promptly so that the work can proceed as soon as 48-M is completed.

The present contract also limits the depth of hole to 950 feet. It will be necessary to drill at least to that depth to reach the Sub-Rosiclare horizon in Drill Hole No. 47-M. If additional holes are drilled to the northeast or east of 47-M, the depth of hole will be in excess of 950 feet. This is due to the dip of the formations to the northeast as well as higher surface elevations than those prevailing to the southwest. I also trust that this feature of the present contract can be modified to permit holes at least 1,000 feet in depth.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ:fhb

C
O
P
Y

NOV 2 1953

College Park, Maryland

October 22, 1953

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Docket No. DMEA-2248 - (Fluorspar)
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-E255 (Amended)

Dear Mr. Johnson:

Receipt of your progress report for September is hereby acknowledged and reviewed with interest.

It is noted from your reports and the field inspection report that the trend of the deposit might be bearing more eastward and to follow the indications might require exploration work beyond the southeastern boundary specified in the contract. Also, indications suggest that the depth of the Sub-Rosiclare formation is greater than 950 feet which is specified in the contract as the maximum depth to be drilled.

In case you are contemplating drilling beyond the area specified in the contract and to a depth greater than the maximum depth allowed by the contract, it is suggested that a written request be made for an amendment to the contract to include the proposed changes. If the request is made, please submit a justification for the proposed changes and a map indicating the location of the work.

We hope the drilling now in progress will be more encouraging than the previous drilling.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:rwa

copy for DMEA Files 2

July 3, 1953

Memorandum

To: Mr. Robert E. Adams, Chief, Operations Control and Statistics Division

From: Nonmetallic Minerals Division

Subject: Docket No. DMEA-2935 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Lease
Hardin County, Illinois

Re: Calling attention to withdrawal of Docket No. DMEA-2935

DMEA-2935 was an application for work on the same Hill-Ledford Lease as DMEA-2248. Therefore, it was discarded and the project requested in it was made Stage II of DMEA-2248 - Amended. The latter has now been executed and the contents of File DMEA-2935 may be placed in File DMEA-2248, and DMEA-2935 closed.

J. T. Robertson
Nonmetallic Minerals Division

JTRobertson:gad
Copy to: Admr. R. File
Docket File
Mr. Houk

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

June 18, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: H. L. Burmeister, acting for Executive Officer, DMEA Field Team, Region VIII

Subject: Amended Contract No. Idm-E255
Docket No. DMEA-2248 - (Fluorspar)
Ozark-Mahoning Company, Hill-Ledford Lease
Hardin County, Illinois

Attached are the Government, Division and Docket copies of the amended contract Idm-E255, which have been signed by the Government and the applicant.

H. L. Burmeister

H. L. Burmeister, acting for
W. T. Millar

Attachments - 3

coe
6-19

College Park, Maryland

June 4, 1953

Mr. A. G. Johnson
Geological Engineer
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Docket No. DMEA-2935 - Fluorspar
Docket No. DMEA-2248 - Fluorspar
Contract No. Idm-E255
Ozark-Mahoning Company
Hill-Ledford Lease
Hardin County, Illinois

Dear Mr. Johnson:

Recent regulations restricting Government's participation in explorations for certain minerals which were removed from the list of critical or strategic minerals, have been revised to change the effective date from April 15, 1953 to May 15, 1953. Your application, Docket No. DMEA-2935, has been reactivated in accordance with the new regulations. An amendment to Contract Idm-E255 has been prepared authorizing the exploratory work described in Docket No. DMEA-2935, to be combined with the exploration described in Docket No. DMEA-2248.

Six copies of the amendment with the new "Owner's Consent to Lien" attached, are submitted herewith for your approval. If you concur in this amendment, please sign all six copies, retain the operator's copy for your files and return the other five copies to this office.

Docket No. DMEA-2935 will be canceled upon proper execution of this amendment.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Enclosures - 6

WTM:rwa

copies for GeoCSelfridge - Chrm. Oper. Comm. - 2
FRKantner, Fin. Off., Reg. VIII
JBHanley, USGS
DMEA Files - 2

Houk
Ext 2971

FILE COPY
SURNAME:

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

Department of Interior
Defense Minerals Exploration
Administration

1413923.970 Working Fund,
Interior, Defense Minerals Exploration
Administration

1
Houk

Day Letter

Omea 2248

June 3, 1953

Mr. J. C. Trewartha, Vice President
Ozark-Mahoning Company
Mahoning Mining Division
Rockdale, Illinois

Recurtel May 15 denying your amendment to contract number Idm-E 255, this is to advise you that restricted program directive dated April 15 modified on June 1 giving DMEA authority to execute your contract which was pending prior to date reftel. Accordingly amended contract has been signed by me and mailed to Regional Office at Bureau of Mines, Eastern Experiment Station, College Park, Maryland for submission to you.

C. O. Mittendorf

C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration

LGHouk:gad 6/3/53

Confirmation copy

Copy to: Admr. R. File
Docket File
Field Team, Region VIII
Mr. Arundale, 3519
Mr. Van Alstine, G-232 GSA Bldg.
Mr. Houk

6/3/53

Mr. Robertson

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

June 2, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 4 1953

Dulea-2248

Mr. C. O. Mittendorf
Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C. 600

Dear Mr. Mittendorf:

I wish to acknowledge your letter of May 29 to which was attached Certification of Discovery on Contract Idm-E255, Hill-Ledford Farm, Hardin County, Illinois.

We note the procedure which should be followed in the payment of royalties to the Government when actual production commences on the property. We will follow the procedure outlined by you.

We have no definite plans at this time for the development of the property by shaft sinking. We are continuing with the prospecting in an effort to tie together both blocks of ore so as to be in a position to locate the shaft at the most advantageous point. This Summer we expect to get an idea of the water situation by installing one or more Reda submersible pumps in drill holes already located on the property.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ:fhb

ccs: Mr. W. N. Smith
Tulsa Office
Mr. J. L. Cadden
Mr. J. G. Trewartha

Copy made for Denver. File.

FILE COPY
SURNAME:

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

Robertson
Hook
Arundale
Chandler
Selfridge
Williams

JUN 2 1953

Mr. W. T. Millar
Executive Officer, DMEA
Field Team, Region VIII
Bureau of Mines
Eastern Experimental Station
College Park, Maryland

Subject: Docket No. DMSA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Lease
Hardin County, Illinois
Contract No. Idm-R255
(See also DMSA-2935)

Dear Mr. Millar:

Enclosed herewith are six copies of an amended contract prepared by the Legal Division and providing for a Stage II to the project work on the Hill-Ledford Lease of the Ozark-Mahoning Company.

If this amended contract meets with your approval, and after you have attached the proper Owner's Consent to Lien, present it to the Operator for his approval and signature. If any provisions are unsatisfactory to you or the Operator, return all copies to this office with suggested changes for consideration.

After the signing of the amended contracts, copies are to be distributed in the usual manner.

Later, when the amended contract is fully executed, we will withdraw or cancel Docket No. DMSA-2935.

Sincerely yours,

Chairman, Operating Committee (JKB)

Approved:

Member, Bureau of Mines (JKB)

Member, Geological Survey (JKB)

Enclosures 6

JRobertson:fls 4/21/53
Copy to: Admr. R. File
Docket File
Operating Committee
Mr. H. W. Davis, 3519
Mr. Van Alstine, G-232 GSA Bldg.
Mr. Houk

S.N.
6-2-53

FILE COPY
SURNAME:

Robertson
Smith
Chambers
Wilson
Martin
Bidwell
Hedges
Mellinger
Johnson

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

630

MAY 29 1953

Ozark-Mahoning Company

Rosiclare, Illinois

Re: Docket No. [illegible]-224E - Fluorspar
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-5255

Gentlemen:

Transmitted herewith is a Certification of Discovery or Development on Contract No. Idm-5255 on the Hill-Ledford Farm in Hardin County, Illinois.

By the terms of the Exploration Project Contract and of the Certification, all production from the property from the date of the Exploration Project Contract, February 18, 1952, is subject to the Government's percentage royalty as set forth in the contract until the sum of $30,982.50 is paid or until February 18, 1962, whichever occurs first.

Payments should be made to Mr. W. T. Millar, Executive Officer, Defense Minerals Exploration Administration Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland. Checks should be drawn payable to the Treasurer of the United States. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward check direct to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets showing quality and grade of ore sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Millar of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Millar at six-month intervals that no production has been made.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

JTRobertson:gad 5/26/53

Copy to: Admr. R. File
Mr. Johnson
Mr. Hedges, 4604
Mr. Chambers
Operating Committee
Docket File
Field Team, Region VIII
Mr. Thayer, 5216 GAO Bldg.
Mr. Bell

5-29-53

FILE COPY
SURNAME:

Robertson
Hoch
Lefferdge
Hedges
Chandler
Johnson

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

MAY 29 1953

Mr. Russell Forbes,
Acting Administrator, Defense Materials
Procurement Agency
General Services Administration Bldg.
Washington 25, D. C.

Re: Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-E255

Dear Mr. Forbes:

I am enclosing one copy each of a "Certification of Discovery or Development" and a final report by the Field Team, both relating to the subject exploration contract.

The contract was signed February 18, 1952, with the Government participating to the extent of 50% of $61,965.00 or $30,982.50.

The project work was started March 1, 1952, and completed January 15, 1953. In accordance with audit review, the accepted cost is $61,965.00.

The exploration contract provided for a maximum of 25,500 feet of churn-drilling. Thirty-three holes averaging 772 feet in depth were spaced over an area 3,000 feet long and 400 feet wide. The results obtained from the drilling were very satisfactory - two areas, "A" and "B", of commercial fluorite ore with associated zinc and lead minerals were discovered and partly outlined.

Block "A" is 1,500 feet long, 200 feet wide, and averages 13.4 feet thick. It contains 339,466 tons, assaying 37% CaF_2, 3.46% Zn and 0.20% Pb. Block "B" is 800 feet long, 100 feet wide, and averages 41.8 feet thick. It contains 278,666 tons, assaying 33.4% CaF_2, 1.58% Zn, and .00 Pb.

The operator, after allowing for approximately 25% pillars and lean zones, estimated the total minable reserves at 463,600 tons. A separate estimate of inferred ore reserves made by the

Field Team, including low-grade ore, totaled 1,212,000 short tons averaging 27.2% fluorite, 2.22% zinc and 0.09% lead.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures 2

JTRobertson/GCSelfridge/esf 5/28/53

Copy to: Admr. R. File
Operating Committee
Mr. Hedges, 4604
Mr. Thayer, 5216 GSA Bldg.
Field Team, Region VIII
Mr. Chambers
Mr. Johnson
Docket File
Mr. Houk

5-29-53

FILE COPY
SURNAME:

Roberts
Hirsch
Chamberlin
DeFrance
Perkins

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

600

Mr. Russell Forbes
Acting Administrator, Defense Materials
Procurement Agency
General Services Administration Bldg.
Washington 25, D. C.

Re: Docket No. DMA-[illegible]48 - Fluorspar
Mark-Tabontag Company
Hill-Lefford Farm
Hardin County, Illinois
Contract No. Idm-8255

Dear Mr. Forbes:

I am enclosing one copy each of a "Certification of Discovery or Development" and a final report by the Field Team, both relating to the subject exploration contract.

The contract was signed February 18, 1952, with the Government participating to the extent of 50% of $61,965.00 or $30,982.50.

The project work was started March 1, 1952, and completed January 15, 1953. In accordance with audit review, the accepted cost is $61,965.00.

The exploration provided for a maximum of 2[illegible],500 feet of churn-drilling. The holes were spaced over an area 3,500 feet long and 400 feet wide. Some 33 holes were drilled to a depth averaging 772 feet. The results obtained from the drilling were very satisfactory. Two blocks of commercial fluorite, with associated zinc and lead, were discovered and outlined. They are indicated on the maps as Block "A" and "B".

Block "A" is 1,500 feet long, 400 feet wide, and averages 13.4 feet thick. It contains 339,466 tons, assaying 37% CaF_2, 3.46% Zn and 0.20% Pb.

Block "B" is 900 feet long, 1[illegible]0 feet wide, and averages 41.8 feet thick. It contains 278,[illegible] tons, assaying 33.4% CaF_2, 1.56% Zn, and .[illegible]0 Pb.

Allowing for about 25% pillars and lean zones, the total minable reserves developed are in the order of 460,000 tons. A tentative appraisal of its gross value is as follows:

108,173 tons acid grade fluorite conc.	$6,490,380
46,360 tons met. grade fluorite conc.	1,854,400
19,137,400 lbs. of zn (80% extrac.,12¢ mkt.)	2,296,488
189,120 lbs. of pb (80% extrac., 12¢ mkt.)	106,814
Total potential value	$10,748,082

The DMEA concurs in the evaluation made by the Field Team, and has certified that a discovery or development has resulted from the work under the contract.

Please refer to the final reports, drill logs, and maps, for a more comprehensive appraisal and description of the exploration and results.

Sincerely yours,

Administrator

Enclosures 2

JTRobertson:gad 5/26/53

Copy to: Admr. R. File
Operating Committee
Mr. Hedges, 4604
Mr. Thayer, 5216 GSA Bldg.
Field Team, Region VIII
Mr. Chambers
Mr. Johnson
Docket File
Mr. Houk

Houk
Ext 2972

FILE COPY
SURNAME:

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

Department of the Interior
Defense Minerals Exploration
Administration

Houk

14X9923.970 Working Fund,
Interior, Defense Minerals Exploration
Administration

May 15, 1953

Night Letter

Mr. J. G. Trewartha, Vice President
Cmark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

RE YOUR EXPLORATION APPLICATION DOCKET NUMBER DMRA 2935 BEING PROCESSED AS AN AMENDMENT TO DOCKET NUMBER DMRA 2248, IDMR 255, FLUORSPAR. THIS IS TO ADVISE YOU THAT EFFECTIVE APRIL 15, 1953 EXPLORATION FUNDS RESTRICTED TO ASSISTANCE ONLY FOR SPECIFIED MINERALS STILL IN SHORT SUPPLY. FLUORSPAR NO LONGER INCLUDED. CONSEQUENTLY WE DO NOT HAVE AUTHORITY OR FUNDS TO EXECUTE CONTRACT FOR EXPLORATION PROJECT ON YOUR PROPERTY AND YOUR APPLICATION THEREFORE IS DENIED. THIS IS WITHOUT PREJUDICE TO THE MERITS OF YOUR PROPOSED PROJECT. WE REGRET THE NECESSITY OF THIS ACTION AND EXPRESS APPRECIATION FOR YOUR INTEREST IN THE EXPLORATION PROGRAM AND COOPERATION DURING PERIOD YOUR APPLICATION UNDER CONSIDERATION.

G. O. MITTENDORF, ADMINISTRATOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

LGHouk:gad 5/15/53

5-15-53

Copy to: Admr. R. File
Docket File 659
Field Team, Region VIII
Mr. Arundale, 3519
Mr. Van Alstine, G-232 GSA Bldg.
Mr. Houk
Confirmation Copy

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 14 1953

May 13, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2248 - (Fluorspar)
Docket No. DMEA-2935 - (Fluorspar)
Ozark-Mahoning Company
Hill-Ledford Lease, Hardin County, Illinois
Contract No. Idm-E255

Attached are six copies of "Owner's Consent to Lien" requested in preparing Docket No. 2935 as an amendment to contract Idm-E255.

W. T. Millar

W. T. Millar

Enclosures - 6

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 24 1953

April 23, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket DMEA-2248 - (Fluorspar-Zinc-Lead)
Ozark-Mahoning Company, Rosiclare, Illinois
Hill-Ledford Tract, Hardin County, Illinois
Contract Idm-E255

Transmitted herewith in quadruplicate is the final report on completed contract Idm-E255, by the DMEA Field Team of Region VIII.

W. T. Millar

W. T. Millar

Enclosures - 4

FINAL F.T. Rpt #1

Reviewed by
DMEA OPERATING COMMITTEE
5-1-53
(date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 24 1953

5/28/53

FINAL REPORT ON COMPLETED CONTRACT

DMEA Docket No. 2248 - (Fluorspar-Zinc-Lead)

Contract No. Idm-E255

Hill-Ledford Tract, Ozark-Mahoning Company
Hardin County, Illinois

by

Defense Minerals Exploration Administration
Field Team, Region VIII

April 22, 1953

Reviewed by
DMEA OPERATING COMMITTEE

5-1-53
(date)

FINAL REPORT ON COMPLETED CONTRACT

DMEA Docket No. 2248 - (Fluorspar-Zinc-Lead)

Contract No. Idm-E255

Operator: Ozark-Mahoning Company, Rosiclare, Illinois

The property explored under this contract, known as the Hill-Ledford tract, is located in Sections 23 and 24, T. 11 S; R. 9 E, Hardin County, Illinois, approximately 6 miles north of Cave in Rock, Illinois. State Highway No. 1 crosses the property near its eastern end.

The final Field Team examination was made by G. L. Neumann, representing the Bureau of Mines, and H. J. Klepser, representing the Geological Survey, accompanied by E. C. Brecke, geologist for the Ozark-Mahoning Company. Records of the operation kept by the operator were reviewed in the company's office at Rosiclare, Illinois.

Summary, Conclusion and Recommendation

Summary: Work on this project consisted of churn drilling, sampling, assaying, surveying, geologic mapping, and estimating ore reserves.

This project was conducted under the supervision of the Ozark-Mahoning Company's engineering staff and inspected monthly by representatives of the Defense Minerals Exploration Administration's Field Team.

Drilling under this contract totaled 25,500 feet in 33 holes in an area 3,000 feet long by 400 feet wide. Good mineralization of fluorite, lead and zinc was discovered.

An estimate made by the operator of inferred, minable ore averaging 35.5 percent fluorite, 2.58 percent zinc and 0.12 percent lead, amounts to 463,600 short tons after deducting 25 percent for pillars and low grade areas.

A separate estimate of inferred ore reserves including lower grade ore, which was made by the Bureau of Mines representative, totaled 1,212,000 short tons, averaging 27.2 percent fluorite, 2.22 percent zinc and 0.09 percent lead.

Conclusion: The project was conducted satisfactorily and in accordance with good engineering practice.

The estimate of inferred ore reserves made by the operator was checked by Bureau and Survey representatives of the Field Team with the operator's engineers and found to be reasonably correct.

The area covered under this contract is considered sufficiently explored. However, by reason of the favorable results from this operation, the areas to the southwest and northeast warrant exploration for the extension of the newly discovered deposit.

The estimate of inferred ore and assay results are favorable enough to justify development of the deposit and the estimated cost of production from this deposit is considered economically feasible. Discovery of this deposit was made possible by Government participation through the Defense Minerals Exploration Administration and the Government is entitled to royalty payments on production from this deposit.

Recommendation: The Field Team recommends this project for certification subject to royalty payments on the production.

Introduction

Contract Idm-E255, between the Ozark-Mahoning Company and the Government, was entered into specifically to explore for fluorspar with the ultimate purpose of increasing domestic production of this critical mineral for national security. The area included in this contract is 3,000 feet long by 400 feet

wide on property known as the Hill-Ledford tract in Hardin County, Illinois, more completely described in Annex I of the contract.

The contract authorized a maximum of 25,500 feet to be drilled for a total cost of $61,965.00. The Government's participation is 50 percent or $30,982.50. The property is owned by Walter Ledford and Blanche H. Ledford of Cave in Rock, Illinois and Charles N. Hill of Elizabethtown, Illinois, who leased the property to the Ozark-Mahoning Company, the operator.

Description of the Work

Operations started under this contract on March 1, 1952 and were completed on January 15, 1953. The work consisted of churn drilling, sampling, assaying, surveying, geologic mapping, and ore estimating.

Drilling commenced in hole No. 6-M at a depth of 240 feet which was completed at 790 feet. Holes Nos. 7-M to 37-M, inclusive, and 448 feet in hole No. 38-M, totaling 25,500 feet drilled, were for the account of this contract. Holes Nos. 1-M to 5-M, inclusive, and 240 feet in hole No. 6-M and from 448 feet to 833 feet in hole No. 38-M, and holes 39-M and 40-M were for the operator's account. The cost of the project was on a unit basis of $2.43 per foot including drilling, assaying, technical and clerical work.

Maps and sections of this exploration were prepared by the operator and attached to the operator's final report.

Geology

The ore indicated by churn drilling on this project is a flat-bedded fluorspar replacement containing zinc and lead sulphides of the Mississipian limestone beds, and is along the trend of the major bedded fluorspar deposits of the area. The main ore-bearing horizons are the Rosiclare and Sub-Rosiclare formations.

Maps, sections, assay data, and ore estimates are included in the company's final report.

The deposit consists of two separate blocks: A and B. Block A is 1,500 feet long, 200 feet wide and averages 13.4 feet in thickness. Block B is 800 feet long, 100 feet wide and averages 41.8 feet in thickness. A factor of 12 cubic feet equals one ton was used. changed by

Tabulation of Ore Reserves -

	Block	Tons	%CaF_2	%Zn	%Pb
	A	339,466	37.4	3.46	0.20
	B	278,666	33.4	1.54	--
Total -		618,132	35.5	2.58	0.12
25% for pillars and lean zones		154,532	-	-	-
Minable Reserves		463,600	35.5	2.58	0.12

Discussion

This deposit shows a sufficient quantity of ore of a suitable grade to make an attractive mining venture. It is planned to mine this deposit by the conventional room and pillar method from drifts and crosscuts connected with a vertical hoisting shaft. An estimate of the mining costs, including development, is $3.50 a ton. The ore can be trucked to the concentrating plant in Rosiclare. No changes in the mill flow sheet will be necessary.

A tentative balance sheet for this ore is:

Costs -

Ore delivered to mine bins	@ $3.50/ton	$1,622,600
Ore delivered to mill	@ 1.50/ton	695,400
Milling and smelting	@ 8.00/ton	3,708,800
Concentrates marketed	@ 1.00/ton	463,600
Royalty on lease	@ 2.00/ton	927,200
Operating expenses		$7,417,600
Repayable to Government Contract Idm-E255		$ 30,982.50
Total expenditures		$7,448,582.50

Returns -

154,533 tons CaF_2 concentrates produced ratio 3 ore: 1 conc.

108,173 tons acid grade CaF_2 conc. @ $60.ton	$ 6,490,380
46,360 tons met. grade CaF_2 conc. @ $40/ton	1,854,400
19,137,400 lbs. Zn (80% extraction-refined) @ 12¢/lb.	2,296,488
890,120 lbs. Pb (80% extraction-refined) @ 12¢/lb.	106,814
Total returns	$10,748,082
Total expenditures	$ 7,448,582.50
Net profit -	$ 3,299,499.50

Expenditures of Contract

a.	Total approved	$ 61,965.00
b.	Total cost of project	$ 61,965.00
c.	Government's share of cost	$ 30,982.50
d.	Government's share unexpended	None
e.	Value of production during operation	None
f.	Government's Royalty	None

Probably two years of development necessary before production can start

Efficiency of Operation

This project was conducted in an efficient manner in accordance with good engineering practice.

The Ozark-Mahoning Company is the leading commercial producer of fluorspar, conducting its own mines and concentrating plants, and maintaining an efficient technical staff.

Equipment

There was no equipment purchased for the project.

W. T. Millar

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

John B. Hanley

John B. Hanley, U. S. Geological Survey
Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

April 22, 1953

FILE COPY
SURNAME:

Robertson
Houk
Arundale
Thompson

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

April 21, 1953

Memorandum

N. S. in R. v R.

To: Chairman, Operating Committee

From: Nonmetallic Minerals Division

Subject: Docket No. DMRA - 2248 - Fluorspar
Docket No. DMRA - 2935 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Lease
Hardin County, Illinois
Contract No. Idm-E-255

Re: An amendment to Contract Idm-E255. For the purpose of enlarging the area to be drilled under the contract and increasing the total amount of contract from $61,965.00 to $122,715.00.

The company presented a new application for additional churn drilling (Assigned Docket No. DMRA-2935).

The land involved, however, is in the same Hill-Ledford Farm, so the Legal Division prepared an amended contract to Idm-E255 rather than set up a new project contract.

The amended contract is recommended by the Nonmetallic Minerals Division; if it is approved, the new application DMRA-2935 should be withdrawn. The amended contract (Idm-E255) adds a Stage II amounting to 25,000 feet of additional churn - drilling and increases the total cost of the project contract from $61,965.00 to $122,715.00.

The amended contract, together with map, is in order except for the attachment of Owner's Consents to Lien which are to be attached later by the Executive Officer, Region VIII, prior to final signatures.

This division approves the amended contract as written.

JTRobertson:fls 4/21/53

Jasper T. Robertson
Nonmetallic Minerals Division

Copy to: Admr. R. File
Docket File
Mr. Houk

FILE COPY
SURNAME:

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

600

Robertson
Houk
Dubin
Hoffman
Fitzhugh
Fitzhugh

Mr. W. T. Millar
Executive Officer, DMEA
Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Subject: Docket No. DMEA-2248 - Fluorspar
Docket No. DMEA-2935 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Lease
Hardin County, Illinois
Contract No. Idm-8255

Dear Mr. Millar:

APR 16 1953

Reference is made to the subject dockets.

The Legal Division, rather than write a new contract under the recent application, Docket No. DMEA-2935, has prepared an amended contract to Idm-8255, Docket No. DMEA-2248. This amended contract will encompass both projects.

It is necessary, therefore, to obtain new Owner's Consent to Lien. Enclosed herewith please find seven copies of Form MF-203 properly filled out but requiring the land owner's signature. We are also returning to you the old forms for your disposition.

D.C. 4/16/53

The amended contract will be sent to you shortly for execution and approval, and to each a copy of the signed Owner's Consent to Lien (amount $61,357.50) is to be attached.

Sincerely yours,

George C. Stoddard

(GHB)

Chairman, Operating Committee

Approved:

(GHB)

Member, Bureau of Mines

(GHB)

Member, Geological Survey

Enclosures 12

JTRobertson:gad 4/13/53
Copy to: Admr. R. File
Docket File
Operating Committee
Mr. H. W. Davis, 3519
Mr. Van Alstine, G-232 GSA Bldg.
Mr. Houk

DMEA-2935 AND DOCKET MATERIAL TRANSFERRED TO DMEA-2248

FILE COPY
SURNAME:

Rubin

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

April 9, 195

BP

Memorandum

To: Administrator

Through: L. G. Houk

From: Chief Counsel

J.C. 4/9/53

Subject: Ozark-Mahoning Company, DMEA-2248

There is attached in satisfactory legal form for execution, a contract covering the above-described project, subject to the attachment of the maps and the Owner's Consent to Lien.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

AEKane/ema
cc: Mails & Files
L. G. Houk
A. E. Kane
H. C. Rubin
J. L. Hofflund
Chron.

IN REPLY REFER TO:
G-MD-CNM

Mr. Robertson

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
APR 2 1953

Memorandum April 1, 1953

REVIEW OF APPLICATION DMEA-2935 (fluorspar, zinc, lead)

To: L. G. Houk, Defense Minerals Exploration Administration
From: R. E. Van Alstine, U. S. Geological Survey
Applicant: Ozark-Mahoning Company, Mahoning Mining Division, Rosiclare, Illinois.
Name of property: Hill-Ledford tract.
Location of property: NW¼ sec. 24, T. 11 S., R, 9 E., Hardin County, Illinois.
Estimated cost of project: $60,750.
Summary of applicant's proposal:

25,000 feet of drilling at $2.43 per foot; drill three east-west cross sections on 150-foot centers across the northeasterly trend found to be mineralized to the southwest in this tract of land (see DMEA-2248). If results are encouraging, possibly fill in with holes along this trend or along a NW-SE trending area of fractures, erratic dip, and sink-holes. Holes probably will average 850-900 feet in depth.

Sources of information on applicant's property:

1. Currier, L. W., Geological and geophysical survey of fluorspar areas in Hardin County, Illinois: U. S. Geol. Survey Bull. 952, 1944.
2. Weller, J. M., Grogan, R. M., and Tippie, F. E., Geology of the fluorspar deposits of Illinois: Illinois Geol. Survey, Bull. 76, 1952.
3. Files on DMEA-2248 and DMEA-2757.

Comments:

Successful exploration of this northeast-trending structure, immediately southwest of the area recommended for exploration, shows that the proposed project is on a sound basis. Although the most northeasterly holes drilled were blank, the probability is good that other ore bodies may be found farther northeast along the same break. Exploration of the northwest trend (described above), which is not known to be mineralized, might be made contingent upon favorable results of drilling near the intersection of this projected trend with the mineralized northeast-trending structure.

RECOMMENDATION:

Approval of proposal, with any modifications considered necessary in light of the above comments.

R. E. Van Alstine
R. E. Van Alstine

March 31, 1953

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: Evaluation of Illinois Fluorspar and Florida Rutile Discoveries.

Illinois Fluorspar	
Total DMEA Contract	$61,965.00
Government share expended 50%	$30,982.50
Net value subject to DMEA royalty	$9,546,431.00
Florida Rutile	
Total DMEA contract (drilling)	$42,449.90
Government share expended	-0-
Second DMEA contract (Bulk testing)	$20,900.00
Government share expended 75%	$15,208.85
Net value subject to royalty	$10,961,360.00

Subject: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Hardin County, Illinois
Contract No. Idm-X255
Total Cost $61,965.00 - Government share $30,982.50

This project tested for fluorspar mineralization at depths of 550 to 850 feet. 25,000 feet of churn-drilling was contracted for and completed @ $2.43 per ft. A strip of ground 3,000 feet long by 400 feet wide was drilled discovering two blocks of good fluorspar with some zinc - totaling 618,130 tons. Allowing 25% for underground pillar the minable tonnage indicated is 463,600 tons.

Tonnage and value:

Estimated Net tonnage of ore	463,600 tons
Estimated analysis of ore	
Fluoride (CaF_2)	35.5%
Zinc	2.58%
Lead	0.12%

After milling (the recovery estimated at 80%) the saleable product from the above-mentioned tonnage of ore will be approximately as follows:

Acid grade fluorspar	108,173 tons	@ $60	$6,490,380
Metallurgical fluorspar	46,360 "	@ $40	1,854,400
Zinc concentrate about	19,140 "	@ 6¢/lb.	1,148,244
Lead concentrate about	74 "	@ 6¢/lb.	53,407
Total net value of discovery subject to DMEA royalty.			$9,546,431

Subject: Docket No. DMEA-2286 - Rutile
A.C. and R.C. Skinner Tracts
Duval County, Florida
National Lead Company
Contract Idm-2264 $20,900

The contract originally was for $42,449.90 but as company had completed a large part of the work the contract finally was made for $20,900 to complete the work already started.

The project was successfully completed at total expenditure of $20,278.46 of which the Government participated to the extent of 75% or $15, 208.85. Drilling and four large test-pit excavations tested the large tract (about 2 miles long by 1/3 mile wide). This project was concerned with the excavation of four large pits and the bulk sampling and testing of some 138 tons of heavy sand material recovered from the pits. The rutile occurs in a 6 - 10 foot section under 20 to 30 feet of sand overburden.

Estimated tonnage of ore 11,739,000 tons

By standard metallurgical practices the recovery based on the metallurgical work performed under the contract will be:

60,560 Tons rutile @ $100 ton	$6,056,000
272,520 Tons ilmenite @ $18 ton	4,905,360
	$10,961,360

Jasper T. Robertson
Nonmetallic Minerals Division

JTRobertson:gad
Copy to: Admr. R. File
Docket File
Mr. Houk

C
O
P
Y

OZARK-MAHONING COMPANY
Mahoning Mining Division
Rosiclare, Illinois

March 30, 1953

Mr. W. T. Millar
Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration,
Region VIII
U. S. Department of the Interior
College Park, Maryland

Dear Mr. Millar:

I wish to acknowledge receipt of your letter of March 20, 1953 in which you advised me that it would be necessary to have a new Owner's Consent to Lien in connection with the exploration application which was filed with you, dated March 18, 1953.

I therefore enclose six copies of a fully executed Owner's Consent to Lien. You will note that in addition to the owners which are shown on the Lease Agreement dated July 11, 1951, the names of Paul H. Ledford, Katherine K. Ledford, Frances L. Wiley and Victor L. Wiley are included. We felt that these signatures were necessary inasmuch as Mr. Walter Ledford and his wife, Blanch H. Ledford had assigned a part of the minerals to their children after the original lease was executed.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

/s/ A. G. Johnson
A. G. Johnson

Encls.
AGJ:fhb

March 23, 1953

Mr. J. G. Trewartha, Vice President
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: DMEA-2935
Re: Exploration Assistance
Hill-Ledford Farm

My dear Mr. Trewartha:

The receipt of your application dated March 18, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2935 and referred to the Nonmetallic Minerals Division

Kindly refer to DMEA-2935 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams, Chief
Operations Control and
Statistics Division

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

March 23, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region VIII

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region VIII.

DMEA - 2935 Ozark-Mahoning Company

ROBERT E. ADAMS

Robert E. Adams,
Chief, Operation's Control
and Statistics Division

33980

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

March 20, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: New Application from Ozark-Mahoning Company
Hardin County, Illinois - (Fluorspar-Zinc-Lead)
(3rd Application)

Transmitted herewith are the original and two copies of the third application filed by the Ozark-Mahoning Company.

Attached is a copy of a letter from this office to the applicant requesting a new "Owner's Consent to Lien" covering the area described in the new application.

W. T. Millar

W. T. Millar

Enclosures - 3

appln was no. 2935 but changed over to amend to DMEA 2248

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

College Park, Maryland

March 20, 1953

Mr. A. C. Johnson
Geological Engineer
Ozark-Mahoning Company
Rosiclare, Illinois

Dear Mr. Johnson:

Your application dated March 18, 1953, requesting DMEA assistance in exploration for fluorspar, zinc and lead in Hardin County, Illinois, has been reviewed by this office and is being transmitted through the proper channels for processing.

Regarding the Owner's Consent to Lien, a new form MF-203 will be required to cover the area described in the new application. It is noted that the owners of the property, described in the new application, also own the property explored under Contract Idm-E255 and that the Owner's Consent to Lien was signed by them. Actually, the Owner's Consent to Lien is for that area specified in the contract and when additional area is acquired, another "lien" will be necessary to protect production from the new acquisition.

Enclosed are seven copies of Form MF-203, Owner's Consent to Lien, for the new application. Upon receipt of six copies of this form, properly executed by the owners, they will be forwarded to the Washington Office to be attached to your application.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Enclosures - 7

WTM:rwa

copies for GeoCSelfridge - 3
JBHanley, USGS
DMEA Files - 2

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Form Approved
Budget Bureau No. 44-R1035.2.
RECEIVED
MAR 23 1953

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

Not to be filled in by applicant

Docket No. DMEA-2935
Metal or Mineral
Date Received 3-23-53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Ozark-Mahoning Company, a corporation organized and existing under the laws of the State of Delaware, Rosiclare, Illinois.

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

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

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

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

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

(*b*) State any mine name by which the property is known.

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

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

(*e*) If you own the land, describe any liens or encumbrances on it

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

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

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

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

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

5. *The exploration project.*—(*a*) [redacted] the mineral or minerals for which you wi[redacted] explore .....

.....

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated ..... March 18 ....., 1953

OZARK-MAHONING COMPANY
(Applicant)

By J. G. Trewartha

J. G. Trewartha

Vice President

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

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

Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

March 18, 1953

THE APPLICANT

1. (a) Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

(b) Delaware Corporation

(c) Data furnished in connection with DMEA Contract E-255, dated February 18, 1952.

(d) Not applicable

3. (a) The NW¼ of Sec. 24, Twp. 11 S, R 9 E, Hardin County, Illinois.

(b) Hill-Ledford Farm

(c) Lessee

(d) Copy of Lease Agreement, dated July 11, 1951 is attached.

(e) Not applicable

(f) Not applicable

4. (a) No mining operations have been conducted on the leased premises. The company has, however, lately completed a drilling project on other portions of the Hill-Ledford acreage under the terms of DMEA Contract E-255. This resulted in the discovery of certain tonnages of lead-zinc-fluorspar ores along an approximate N 50° E trend. The purpose of this application is to further explore this trend to the northeast to the east line of the Hill-Ledford tract. It is to be noted that a small portion of the acreage covered by the application overlaps the prospecting covered by Contract E-255. The reason for this is the possibility that the company may wish to further outline the ore possibilities along the southeast edge of the trend.

(b) None

(c) The geologic features of the entire tract were described in connection with DMEA Contract E-255 dated February 18, 1952.

(d) Acreage is easily accessible for prospecting and mining purposes. A paved highway, Illinois No. 1, traverses the acreage.

(e) All available

5. (a) Fluorspar - Zinc - Lead ores

(b) We are attaching hereto a 400 foot scale map of the Hill-Ledford tract. The acreage we propose to prospect under the terms of a new DMEA Contract is outlined in blue. The entire acreage covered by the Hill-Ledford lease is outlined in red. The map shows the location of all holes drilled under the

terms of Contract E-255, as well as holes previously drilled by Ozark-Mahoning and other operators. As previously stated, we believe the structural trend continues across the property generally along a N 50° E strike with local variation. You will also note the location of a series of sink-holes trending approximately N 65° W. This may represent the outcrop of another structure trending NW-SE. At the junction of the two structures fracturing could well be extensive and result in the localization of important orebodies. In addition to the sink-holes we find fractures and erratic dips in the sandstone formations of the creek bottoms which also have a NW-SE trend. This condition is noted in the area to the northeast of the sink-holes.

In a general way we propose to drill three east-west cross-sections on 150 ft. centers across the northeasterly trend so as to define the structure. If results are encouraging we may wish to fill in with additional holes along trend. We may also wish to drill a number of holes along the apparent NW-SE trend provided the work as it progresses makes this desirable.

(c) Thirty days after execution of proposed contract. Completion date two years.

(d) Data furnished in connection with DMEA Contract E-255, dated February 18, 1952.

6. (a) Independent drill contractors will be hired. Same drillers as were used under Contract E-255. We are setting up the project on the basis of 25,000 feet, with the understanding that the program can be abandoned prior to completion provided results are unsatisfactory. Holes may average from 850-900 feet in depth. The greater depth is due to the regional dip of the formations to the northeast, approximately 5°. The unit cost is as follows:

Independent drill contractor	$2.25 per foot
Geologist	0.15 per foot
Clerical	0.02 per foot
Assaying	0.01 per foot
Total cost per foot	$2.43

The above is the unit cost basis set up under DMEA Contract E-255, dated February 18, 1952. There are no other costs than those above stated.

7. (a) Yes

(b) Money

COPY

LEASE AGREEMENT

This agreement made and entered into this 11th day of July, 1951, by and between Walter Ledford and Blanche H. Ledford, his wife, of Cave-In-Rock, Illinois and Charles N. Hill, of Elizabethtown, Illinois, hereinafter designated as the owners and Ozark-Mahoning Company, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and duly authorized to do business in the State of Illinois, hereinafter referred to as the lessee, WITNESSETH:

WHEREAS, owners hereby warrant that they are the fee owners of the hereinafter described real estate, all situated in the County of Hardin, State of Illinois, to-wit:

> West half of Southwest quarter of Section 13; East half of the Southeast Quarter of Section 14, except one acre, more or less, south and west of State Route 1 sold to Kenneth Dutton June 11, 1940 as per Book 27, Page 363, Deed Records of Hardin County, Illinois; South half of Northeast Quarter of Section 23; North half of Southeast Quarter of Section 23; Southeast Quarter of Southeast Quarter of Section 23; Northwest Quarter (except 2 acres in N.E. corner) of Section 24; West Half of Southwest Quarter of Section 24, all in Township 11 South, Range 9 East, containing 597 acres, more or less,

and

WHEREAS, lessee is interested in securing the entire and exclusive right to prospect for, mine, mill and otherwise prepare for market any or all minerals or mineral substances of every kind and character, including oil and gas, in, upon, beneath and underlying the above described real estate; and

WHEREAS, owners desire to have such minerals and mineral substances mined from said premises as above stated and lessees desire the right and privilege of entering upon said premises and working the same by the use of suitable machinery, equipment, fixtures and buildings, for mining and milling and related purposes which lessee may desire to place upon the premises and mining and recovering from said premises minerals and mineral substances for the purpose of sale and in the exploitation and determination of the possibilities obtaining, and the same is agreeable to owners:

NOW, THEREFORE, in consideration of the sum of one dollar ($1.00), and other valuable considerations paid or to be paid to the owners, the receipt and

sufficiency of which is hereby acknowledged, and the covenants and agreements to be kept and performed by the lessee as hereinafter expressed, the owners have and by these presents do give and grant to said lessee the exclusive right to enter upon said premises for the purpose of removing said minerals, and mineral substances, erecting buildings to be used in connection, either directly or indirectly, with the operations of lessee upon the above premises, installing machinery, tipples, sinking shafts, drifting, drilling or using any and all methods known to the science of mining, milling or refining or otherwise preparing ores, minerals, or mineral substances, for market, with the exclusive right to so conduct prospecting, mining, milling and related operations upon the above described premises, together with the right of ingress and egress and to build and construct over and across said lands, roads, trams and other means of conveyance and transportation for the purpose of transporting ores, minerals and other valuable substances found thereon or thereunder.

1. Lessee agrees to begin development work or prospecting or mining in an effort to determine the location of minerals under said premises within ninety (90) days from the date hereof. Said prospecting, mining or development work shall be carried on with reasonable expediency insofar as weather, road and marketing conditions will permit. Commencing July 1, 1953, the minimum annual royalty shall be four thousand eight hundred dollars ($4,800.00) per year payable quarterly. Minimum royalties shall be credited by owners to lessee upon earned royalties when and as same accrue.

2. The term of this lease shall be for a period of ten (10) years from the date hereof and as long thereafter as the terms and conditions set forth in this agreement are complied with.

3. The ore mined from said premises is to be milled at the plant of the lessee located at Rosiclare, Illinois, or any other milling plant, which the lessee may designate in Kentucky or Illinois. It shall not be mixed or commingled with ores from other lands until it has been crushed and sampled by the lessee for the purpose of determining the zinc, lead and fluorspar content. The resulting sample is to be assayed at the laboratory of lessee and owners may, upon request, receive an assay certificate showing the zinc, lead and fluorspar content of each day's run. In addition thereto, owners may receive, upon request, pulp of each day's composite sample; provided, however, there is no obligation on lessee to keep pulps for a period longer than thirty (30) days. In case of dispute as to analyses the pulp

prepared from the sample shall be referred to any umpire acceptable to both owners and lessee and the findings of the umpire shall be binding on both parties.

4. As full compensation to the owners for all ores mined and milled from the property above described, lessee shall pay to the owners a royalty of ten per cent (10%) of the selling price of the concentrates produced therefrom, based on the average prices actually received for lead, zinc and fluorspar concentrates by the lessee during the monthly periods as same are milled and sold. There is no obligation on the part of lessee to pay royalty on the zinc and lead content of the crude ore when the zinc or lead assay is below 0.5%. The net weight of the crude ore, dry weight basis, is to be determined at scales of lessee. Owners shall have the right to check weights as often as they deem necessary. On all other minerals, including oil and gas, produced and sold from the above-described property, the royalty shall be ten per cent (10%) of the selling price.

5. Owners shall have the right to examine such books, papers and records of the lessee as may be necessary to determine the amount of royalty due. Payment for all royalty shall be due and payable on the twenty-fifth (25th) day of the month for all tonnage removed from said property during the preceding month.

6. Owners shall have the right to examine all cores or cuttings removed in the drilling operations upon said premises but all information obtained by such examinations shall be held strictly confidential. Lessee shall keep such maps of the mine workings as may, in lessee's opinion, be required for the conduct of the mining operations and such maps shall be available to owners' representatives for examination at reasonable times.

7. Lessee agrees to surrender said premises to the owners at the termination of this contract and agreement in as good condition as now, excepting for such depletion in value as would result from operations in connection with mining and without any liability for any damage done by said operations, excepting only injury done to growing crops, to fences, buildings, cisterns, orchard or other personal property of owner by lessee, for which lessee shall pay when the actual extent of such damage shall have been determined by the parties hereto, but no liability shall attach to the lessee for any damage of any kind or character which is not asserted within ninety (90) days from the surrender, forfeiture or termination hereof.

8. Lessee expressly reserves the right to surrender this lease at any time and be relieved from all liability hereunder of every kind and character, except to account for royalties due at the time of such surrender for minerals, or other valuable substances, mined and sold from said premises prior to the date of such surrender.

9. Should lessee fail or neglect to make all payments or to perform any of the covenants and agreements herein set forth and should still fail to do so after receiving written notice from owners regarding the same and should fail to take proper steps to meet said conditions within a period of thirty (30) days after the receipt of said written notice, then in that event this lease shall be canceled and terminated. However, in any event, lessee shall be liable under this contract and agreement only for such royalty payments as may be due and payable at the time such actual cancellation and termination becomes effective as above set forth. Lessee reserves the right to remove from the premises any or all buildings, machinery and other personal property of lessee placed thereon by lessee, at the expense of lessee, after the termination, surrender or forfeiture of this agreement, and shall have one (1) year in which to make such removal.

10. Any notice herein mentioned to be given by lessee to owners shall be in writing and shall be sent by registered mail addressed to owners at Cave-In-Rock, Illinois and Elizabethtown, Illinois. Any notice herein mentioned to be given by the owners to the lessee shall be in writing and shall be sent by registered mail addressed to lessee at Rosiclare, Illinois.

11. Lessee shall carry Workmen's Compensation and Public Liability Insurance for and during the term of this lease or any renewal or extension thereof; provided, however, that with the permission of the proper authority the lessee may carry its own insurance as to Workmen's Compensation and Public Liability or any other insurance exacted or provided for under the laws of the State of Illinois, but in such event, lessee shall save and hold the owners harmless from any liability for damage occasioned to a stranger or to the employees of lessee resulting from said operations.

12. Lessee agrees that if any liens of any kind or character are filed against the minerals leased herein on account of the operations of the lessee that it will pay the same and free the minerals leased from such liens.

13. It is understood and agreed that lessee may use up to ten per cent (10%) of the land area herein leased which lies East of State Route No. 1, and ten per cent (10%) of the land area which lies West of State Route No. 1 for any purpose it sees fit in carrying out mining and milling operations. However, it is agreed and understood that the surface rights of any land above the stipulated ten per cent (10%) which the lessee requires shall be purchased by him at a rate of one hundred dollars ($100.00) per acre for bottom land and fifty dollars ($50.00) per acre for other land.

14. All parties hereto agree and understand that all the rights of either party hereto may be assigned, and the privilege of assigning or subletting in whole or in part is expressly allowed, and all the covenants and agreements hereunder shall inure to, continue and be binding upon the heirs, legal representatives, successors and assigns of the parties hereto, but no change in the ownership of the land or assignment of royalties shall be binding on the lessee until after the lessee has been furnished with a recorded, written transfer or assignment or a true copy thereof.

15. This lease is granted primarily for the purpose of prospecting, mining and selling fluorspar from said premises and while provision is made herein for royalty covering other valuable substances, minerals and metals, including oil and gas, the prospecting and mining of such other minerals, metals and valuable substances is at the option of the lessee and there is no requirement hereunder for it so to do.

16. It is agreed that no opening or buildings shall be made upon the surface of said premises within three hundred (300) feet of any building now situated thereon, but this provision shall not prevent prospect drilling on the area in question, nor the mining of said area by means of drifts and shafts located on an adjacent area. Provided however, that lessee shall pay to owner all damage to buildings occasioned by said mining operations.

17. Owners shall pay all taxes assessed against the property leased but the lessee shall pay all taxes assessed against any buildings, improvements, equipment or other personal property placed upon said premises by it.

18. IN WITNESS WHEREOF, the Parties have signed, sealed and delivered this instrument in triplicate each to be original, the day and year first above written.

/s/ Walter Ledford

/s/ Blanche N. Ledford

/s/ Charles N. Hill

Lessors

STATE OF ILLINOIS)
) ss.
COUNTY OF HARDIN)

I, Eva C. Bousman, a Notary Public, in and for and residing in said county, in the state aforesaid, do hereby certify that Walter Ledford and Blanche H. Ledford, his wife, and Charles N. Hill, personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 11th day of July, A.D. 1951.

/s/ Eva C. Bousman
Notary Public

SEAL

My commission expires:
March 20, 1954

OZARK-MAHONING COMPANY

By /s/ J. G. Trewartha
Vice President

SEAL

Attest:

/s/ J. L. Cadden
Assistant Secretary

STATE OF ILLINOIS)
) ss.
COUNTY OF HARDIN)

I, A. M. Sperberg, a Notary Public in and for the county and state aforesaid, do hereby certify that J. G. Trewartha, personally known to me to be the Vice President of Ozark-Mahoning Company, a corporation, and J. L. Cadden, personally known to me to be the Assistant Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such Vice President and Assistant Secretary they signed and delivered the said instrument as Vice President and Assistant Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

Given under my hand and notarial seal this 11th day of July, A.D. 1951.

/s/ A. M. Sperberg
Notary Public

SEAL

My commission expires: Oct. 4, 1953.

FILE COPY
SURNAME:

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

March 19, 1953

Memorandum

M.S. in R.&R.

To: Chairman, Operating Committee

From: Chief, Nonmetallic Minerals Division

Subject: The need for more cooperation by the Geological Survey in the fluorspar area of Region VIII.

I have been informed by the Executive Officer of Region VIII that the final report on the Ozark-Mahoning Company and the field examination report on the Minerva Oil Company are being delayed because the Survey have not supplied their reports. The fact that the Survey specialist for this Region is a WAE employee, and has a full time teaching job and is employed as a WAE for other Government agencies, should not be an excuse for delaying DMEA progress. It is, therefore, recommended that you take whatever action necessary within the Committee to remedy this situation.

Ozark-Mahoning Co. DMEA-2248

Project work finished Jan. 15, 1953
Final field team examination 2/13,14,15/53
Final field team report ?

Minerva Oil Co. DMEA-2838

Application received 1/8/53
To field 2/12/53
Field examination 2/15/53
Field examination report ?

LGHouk:gad 3/19/53

Copy to: Admr. R. File
Records File
Mr. Houk

FILE COPY
SURNAME:

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

Mr. W. T. Miller
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

MAR 1 2 1953

J. C. 3/12/53

Dear Mr. Miller:

As a result of Mr. Talbert's recent visit, he has completed and prepared the following Reports of Review:

Contract No.	Docket No.	Operator
X255	DMA-2248	Ozark-Mahoning Company
X257	DMA-2077	Fred Busche

These Reports are transmitted to you for distribution in accordance with Section 3 of DMEA Circular 19, Supplement 4, dated October 9, 1952.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

WBorovies/wb
March 12, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

Please File

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 26 1953

February 25, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region VIII

Subject: Final Operator's Monthly Progress Report - January 1953
Ozark-Mahoning Co., Hill-Ledford Tract, Hardin County, Ill.
Contract Idm-E255 - Docket DMEA-2248 - (Fluorspar)

Transmitted herewith are two copies of the January (final) progress report for Contract Idm-E255, which has been certified for payment.

W. T. Millar

W. T. Millar

Attachments:
Forms MF-104 & 104A
Supplemental Sheet
Drill Logs of 37-M and 38-M

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

February 13, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 16 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region VIII

Subject: Ozark-Mahoning Company, Hill-~~Bedford Tract~~,
Hardin County, Illinois
Contract Idm-E255, Docket DMEA-2248 - (Fluorspar)

Enclosed are two copies of the final report with a progress map attached prepared by the operator. Also, two sets of drill sections to accompany the final report are transmitted under separate cover.

This report is being submitted for your consideration prior to the completion of a final report by the Field Team.

W. T. Millar

W. T. Millar

Enclosures - 2

Operational Rpt.

Cac 2-16-53

February 6, 1953

Mr. W. T. Miller, Acting Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration,
Region VIIX
U. S. Department of the Interior
Defense Minerals Administration
College Park, Md.

Dear Mr. Miller:

The drilling program on the Hill Ledford Tract under the terms of Contract IDM-8255 has been completed. It has been a pleasure to work with Mr. Newman and Mr. Bumeister, your field representative, on this project.

The project covered the drilling of 25,500 feet of churn drill hole in the Cave-In-Rock fluorspar district of Hardin County, Illinois. Thirty-eight holes have been drilled on the property by Ozark-Mahoning to date. Of these, Holes Nos. 1, 2, 3, 4, 5 and 6-M to a depth of 240 feet was for the account of Ozark-Mahoning. From that point on to a depth of 448 feet in Hole No. 38-M, the holes were for the joint account. The balance of 38-M, 385 feet was for the account of Ozark-Mahoning. Attached hereto is a summary of the drill hole data showing the elevation of the various contacts and the ore occurrences.

As stated in the original application to D. M. E. A. covering this project, the ore bodies of the Cave-In-Rock District are bedded deposits which occur as replacement of limestone beds of Mississippian Age at the Bethel, Rosiclare or Sub Rosiclare horizons. These are sandstone formations. Mineralization is limited to areas where the formations have been fractured or sheared due to faults of minor throw. The prospecting on the Hill-Ledford was confined to such an area along a strike length of 3,000 feet trending in a general way N. 50° E., with local variation.

Attached hereto is a 100 feet scale map showing the location of all holes drilled under the terms of Cont. No. IDM-8255. There is also attached a set of cross sections set up on a 30 ft. vertical and horizontal scale. From these it will be noted that the ore occurrence is largely confined to the Rosiclare - Sub Rosiclare horizons.

The 100 ft. scale map also shows the outline of two areas of probable ore, Blocks A and B, which we believe will eventually justify further development by shaft sinking and underground drifting. Because of the depth and the probability of strong water, the development of this ore will represent a sizable investment. The drill hole data on Block A follows:

Mr. W. T. Miller
February 4, 1953
Page Two

Hill Ledford Tract
Tonnage Estimate - probable ore

Shoelace - Sub Rosiclare Horizon

Block A

DRILL HOLE DATA

Hole No.	Elev. Ore Page	Height	Assay CaF2	Assay Zn	Assay Pb	Prod. CaF2	Prod. Zn	Product Pb
2-M	-296 to -306	10	51.03	0.20		510.30	2.00	
	-356 to -376	20	17.90	6.35	0.15	358.00	127.00	3.00
3-M	-290 to -297.5	7.5	45.67			342.53		
25-M	-293 to -303	10	60.00	0.32		600.00	3.20	
28-M	-289.5 to -302	12.5	42.40			530.50		
30-M	-298 to -305	7	25.50	2.10	1.40	178.50	14.70	9.80
34-M	-282 to -287	5	31.10	0.40		155.50	2.00	
5-M D.D.	-272 to -280	8	54.21			433.68		
	-325 to -334	9	37.00	13.20	0.24	333.00	118.80	2.16
6-M	-330 to -347.5	17.5	9.33	11.00		163.53	192.50	
7-M	-274 to -279	5	50.81	0.63	0.17	254.05	3.15	0.85
22-M	-263 to -271	8	69.70			557.60		
24-M	-257 to -264.5	7.5	43.13	2.94		323.48	22.05	
27-M	-258.5 to -265	12.5	28.30			353.75		
	-292.5 to -300	7.5	51.90	0.90		389.25	6.75	
31-M	-225.5 to -232	7.5	35.90			269.25		
	-278 to -298	20	39.00	5.60	1.00	780.00	112.00	20.00
13	Totals	174.5				6538.98	604.15	35.81
	Averages	13.4 ft. av. height of ore				37.40 CaF2	3.46 Zn	0.20 Pb

Area = 304000 sq. ft.

$$\frac{304000 \text{ sq. ft.} \times 13.4' \text{ av. height}}{12 \text{ cu. ft. per ton}} = 339466 \text{ tons}$$

Deduct 25% pillars and barren areas = 84866 tons
Tons of probable ore 254600 tons

From the foregoing data you will note that we feel there is 254,600 tons of probable ore developed in Block A which will assay 37.40 CaF_2, 3.46 Zn and 0.20 Pb.

The drill hole data covering Block B follows:

Hill Ledford Tract

Rosiclare - Sub Rosiclare Horizon

Tonnage Est. - Probable Ore

Block B

Hole No.	Elev. Ore Face	Height	Assay CaF_2	Assay Zn	Assay Pb	Prod. CaF_2	Prod. Pb	Prod. Zn
9-M	-345 to -352.5	7.5	27.65			207.38		
12-M	-334 to -404	70	25.00	0.28		1750.00		19.60
16-M	-319 to -409	90	29.80	1.25		2682.00		112.50
19-M	-333 to -408	75	50.50	0.80		3787.50		60.00
21-M	-354 to -399	45	30.80	3.95		1386.00		177.75
32-M	-384 to -396.5	12.5	23.68	2.75		296.00		34.38
33-M	-399.5 to -422	22.5	17.80	2.70		400.50		60.75
8	-395 to -428.5	33.5	No assays - Minerva Hole					
9	-324 to -334	10	20.65	5.09		206.50		50.90
	-371.5 to -381.5	10	72.80	1.20		728.00		12.00
9	Totals	376						
	Averages	41.8 ft. Height				33.40 CaF_2		1.54 Zn

Area

800' Long x 100' wide x 41.8' H. / 12 cu. ft. per ton	=	278,666 Tons
Deduct 25% pillars and lean areas	=	69,444 Tons
Tons of Probable Ore	=	209,222 Tons

You will note that the grade of the ore is 33.40 CaF_2 and 1.54 Zn. This is somewhat lower than the average of the drill hole data from Block A. We have not figured Hole No. 38-M in the estimate covering Block B, for the reason we do not know how the results should be evaluated. There is a strong probability this hole either followed downward or is very close to a fault of major throw compared to the minor faults of the Cave-In-Rock District. The Bethel sandstone formation was fractured and mineralized over a vertical distance of 135 feet. This is the first occurrence of mineralization in the sandstone formation on the property.

We expect to continue drilling in the general area of Block B for the time being. If the data contained in this letter is insufficient for your purposes, we will be glad to elaborate on such points as you deem necessary.

Very truly yours,

OZARK-MANGANESE COMPANY
Marketing Mining Division

A. G. Johnson

A. G. Johnson

Encl.

AGJ:fmb

SUMMARY OF CRANE-MANCHTED DRILL HOLE DATA

NEAR LEMPOR TRACE

Hole No.	Elev. Collar	Elev. Base of Bethel	Elev. Base of Bendelare	Date Completed	Elevation of Mineralization
1-M	388.0	-219	-327	9-3-51	- 333 to - 343 15.31 CaF_2, 1.02 Zn
2-M	403.70	-202	-299	10-8-51	- 296 to - 306, 51.03 CaF_2, 0.20 Zn -326 to - 356 Spar-Zn shines -356 to - 376 17.90 CaF_2, 6.35 Zn, 0.15 Pb.
3-M	400.0	-195	-290	11-3-51	-290 to -297.5, 45.67 CaF_2
4-M	399.8			12-17-51	Lost in Bethel sand formation at 590'
5-M	425.0	-188	-272	2-5-52	Cable Tools - Hole lost in ore at 788 ft. Completed with diamond drill equipment 6-12-52.
5-M	(Diamond drill)				-292 to -300' 54.21 CaF_2 -125 to -334' 37.08 CaF_2, 13.80 Zn, 0.24 Pb.
6-M	420.3	-176	-284	3-14-52	-275 to -285', Spar shs. -330 to -347.5, 9.23 CaF_2, 11.00 Zn. -347.5 to -365, 8.37 CaF_2, 4.35 Zn
7-M	416.4	-172	-274	4-26-52	-274 to -279, 50.84 CaF_2, 0.63 Zn, 0.27 Pb -279 to -289, No cuttings - openings
8-M	405.0	-202	-313	4-19-52	Blank
9-M	380.2	-250	-348	5-7-52	-345 to -352.5, 27.65 CaF_2 -352.5 to -410, Scattered spar-Zn shs. -410 to -420, 14.50 CaF_2, 1.60 Zn.
10-M	402.6	-200	-305	5-14-52	-297 to -304.5 18.60 CaF_2 -354.5 to -362 5.69 CaF_2, 0.97 Zn
11-M	412.1	-174	-274	5-29-52	Blank
12-M	380.7	-251	-354	6-9-52	-334 to -344, 45.92 CaF_2 -344 to -354 18.94 CaF_2 -354 to -374 11.90 CaF_2 -374 to -381.5, 38.06 CaF_2, 1.70 Zn -381.5 to -394, 19.30 CaF_2 -394 to -404 34.50 CaF_2, 0.90 Zn -404 to -434 11.10 CaF_2, 0.80 Zn -434 to -444 20.28 CaF_2, 1.59 Zn -444 to -459 21.85 CaF_2, 4.70 Zn -334 to -404 25.00 CaF_2, 0.28 Zn

Hole No.	Elev. Collar	Elev. Base of Bethel	Elev. Base of Rosiclare	Date Completed	Elevation of Mineralization
13-M	400.0	-203	-306	6-7-52	Blank.
14-M	397.2	-169	-275	6-26-52	-318 to -378 Scattered openings and crevices, V. F outgs. - strong water
15-M	407.1	-210	-312	7-2-52	-338 to -373, Few spar & Zn shines.
16-M	381.0	-253	-346	7-3-52	-319 to -346.5, 40.90 CaF_2, 2.20 Zn. -346.5 to -379, 16.80 CaF_2, 0.90 Zn. -379 to -389, 41.85 CaF_2, 1.22 Zn. -389 to -399, 25.30 CaF_2, 0.30 Zn. -399 to -409, 33.80 CaF_2, 0.80 Zn. -409 to 431.5, 21.50 CaF_2, 1.70 Zn. -431.5 to -439, 22.46 CaF_2, 10.00 Zn. -439 to -459, 30.00 CaF_2, 3.90 Zn. -319 to -409, 29.80 CaF_2, 1.85 Zn.
17-M	417.6	-167	-272	7-24-52	Blank.
18-M	408.7	-209	-298	8-1-52	Blank.
19-M	381.6	-256	-352?	7-26-52	-331 to -408, 50.50 CaF_2, 0.80 Zn. -408 to -433, 13.74 CaF_2, 2.96 Zn. -433 to -438, 25.82 CaF_2, 3.91 Zn.
20-M	416.4	-168	-269	8-19-52	-234 to -274, Spar and Zn shs. -334 to -344, Zn shings.
21-M	381.0	-243	-347	8-16-52	-354 to -399, 30.80 CaF_2, 3.95 Zn
22-M	399.2	-167	-263	8-23-52	-263 to -271, 69.70 CaF_2 -271 to -321, Spar and Zn shines
23-M	380.3	-227	-323	9-9-52	Blank.
24-M	398.5	-162	-261	9-18-52	-257 to -284.5, 43.13 CaF_2, 2.94 Zn -286 to -306, 11.23 CaF_2, 2.05 Zn, 0.18 Pb.
25-M	417.1	-191	-300	9-20-52	-293 to -303, 60.00 CaF_2, 0.32 Zn. -303 to -333, 49.44 CaF_2
26-M	383.2	-251	-353	9-30-52	Blank
27-M	400.3	-148	-265	10-18-52	-252.5 to -265, 28.30 CaF_2 -265 to -272.5, 18.90 CaF_2 -272.5 to -300, 51.90 CaF_2, 0.90 Zn. -300 to -330, 14.00 CaF_2, 2.28 Zn.
28-M	413.1	-189	-290	10-16-52	-289.5 to -302, 42.60 CaF_2 -302 to -307, 22.06 CaF_2 -307 to -362, Spar, Zn, Pb shines.
29-M	383.9	-252	-353	10-22-52	Blank.

Hole No.	Elev. Collar	Elev. Base of Bethel	Elev. Base of Rosiclare	Date Completed	Elevation of Mineralization
30-M	412.3	-190	-298	11-8-52	-298 to -305, 25.50 CaF_2, 2.10 Zn, 1.40 Pb. Lost at 732 ft. Deepened to 778'. Diamond Drill cores - blank.
31-M	401.9	-189	-228	11-12-52	-225.5 to -233, 35.90 CaF_2. -243 to -253, 20.35 CaF_2, 2.06 Zn, 1.90 Pb. -278 to -298, 39.00 CaF_2, 5.60 Zn, 1.00 Pb. -298 to -308, 11.10 CaF_2, 4.90 Zn, 0.75 Pb.
32-M	381.3	-240	-351	11-13-52	-344 to -351.5, 16.15 CaF_2, 0.49 Zn. -384 to -396.5, 23.68 CaF_2, 2.75 Zn.
33-M	378.3	-239	-338	12-8-52	-302 to -312, 31.42 CaF_2, 0.53 Zn. -337 to -344.5, 9.70 CaF_2, 2.10 Zn. -399.5 to -422, 17.83 CaF_2, 2.70 Zn. V. F. outgs. from -399.5 to -427.
34-M	423.1	-184	-283	12-20-52	-282 to -287, 32.10 CaF_2, 0.40 Zn.
35-M	381.1	-246	-349	12-8-52	Blank.
36-M	381.8	-230	-330	12-29-52	Blank.
37-M	430.5	-161	-261	1-7-53	Blank.
38-M	381.7	-3037	?	1-31-53	-158 to -193, 29.00 CaF_2 -313 to -343, 22.40 CaF_2, 2.17 Zn -398 to -413, 26.48 CaF_2 -413 to -428, 52.42 CaF_2

SUMMARY OF SHARK-MANCHENO DRILL HOLE DATA

HILL LEOPARD TRACT

Hole No.	Elev. Collar	Elev. Base of Bethel	Elev. Base of Rapatalary	Date Completed	Elevation of Mineralization
1-M	382.0	-219	-327	9-3-51	- 333 to - 343 15.31 CaF_2, 1.82 Zn
2-M	403.70	-302	-299	10-8-51	- 296 to - 306, 51.03 CaF_2, 0.20 Zn -326 to - 356 Spar-Zn shines -356 to - 376 17.90 CaF_2, 6.35 Zn, 0.15 Pb.
3-M	400.0	-195	-290	11-3-51	-290 to -297.5, 45.67 CaF_2
4-M	399.8			12-17-51	Lost in Bethel sand formation at 570'
5-M	425.0	-182	-272	2-5-52	Cable Tools - Hole lost in ore at 720 ft. Completed with diamond drill equipment 8-12-52.
5-M	(Diamond drill)				-272 to -280' 54.21 CaF_2 -325 to -334' 37.00 CaF_2, 13.20 Zn, 0.24 Pb.
6-M	420.3	-176	-284	3-14-52	-275 to -285', Spar shs. -330 to -347.5, 9.23 CaF_2, 11.00 Zn. -347.5 to -365, 2.37 CaF_2, 4.35 Zn
7-M	416.4	-172	-274	4-26-52	-274 to -279, 50.81 CaF_2, 0.63 Zn, 0.17 Pb -279 to -289, No cuttings - openings
8-M	405.0	-202	-313	4-19-52	Blank
9-M	380.2	-250	-348	5-7-52	-345 to -352.5, 27.65 CaF_2 -352.5 to -410, Scattered spar-Zn shs. -410 to -420, 14.50 CaF_2, 1.60 Zn.
10-M	402.6	-200	-305	5-14-52	-297 to -304.5 18.60 CaF_2 -354.5 to -362 5.69 CaF_2, 0.97 Zn
11-M	412.1	-174	-274	5-29-52	Blank
12-M	380.7	-251	-354	6-9-52	-334 to -344, 45.92 CaF_2 -344 to -354 18.94 CaF_2 -354 to -374 11.90 CaF_2 -374 to -381.5, 38.06 CaF_2, 1.70 Zn -381.5 to -394, 19.30 CaF_2 -394 to -404 34.50 CaF_2, 0.70 Zn -404 to -434 11.10 CaF_2, 0.80 Zn -434 to -444 20.28 CaF_2, 1.59 Zn -444 to -457 21.05 CaF_2, 1.70 Zn -334 to -404 25.00 CaF_2, 0.84 Zn

Hole No.	Elev. Collar	Elev. Base of Bethel	Elev. Base of Rockglare	Date Completed	Elevation of Mineralization
13-N	400.0	-203	-306	6-7-52	Blank.
14-N	397.2	-169	-275	6-26-52	-318 to -378 Scattered openings and crevices, V. F quartz. - strong water
15-N	407.1	-210	-312	7-2-52	-328 to -373, Few spar & Zn shines.
16-N	381.0	-253	-346	7-3-52	-329 to -346.5, 40.90 CaF_2, 2.80 Zn. -346.5 to -379, 16.80 CaF_2, 0.90 Zn. -379 to -389, 41.85 CaF_2, 1.22 Zn. -389 to -399, 25.30 CaF_2, 0.30 Zn. -399 to -409, 33.80 CaF_2, 0.80 Zn. -409 to 431.5, 21.40 CaF_2, 1.70 Zn. -431.5 to -439, 22.46 CaF_2, 10.00 Zn. -439 to -469, 30.00 CaF_2, 3.90 Zn. -319 to -469, 29.80 CaF_2, 1.85 Zn.
17-N	417.6	-167	-272	7-24-52	Blank.
18-N	408.7	-200	-298	8-1-52	Blank.
19-N	381.6	-256	-352?	7-26-52	-333 to -408, 50.50 CaF_2, 0.80 Zn. -408 to -433, 13.74 CaF_2, 2.96 Zn. -433 to -438, 25.82 CaF_2, 3.92 Zn.
20-N	416.4	-168	-269	8-29-52	-234 to -274, Spar and Zn shs. -334 to -344, Zn shines.
21-N	381.0	-243	-347	8-16-52	-354 to -399, 30.80 CaF_2, 3.95 Zn
22-N	399.2	-167	-263	8-23-52	-263 to -271, 69.70 CaF_2 -271 to -321, Spar and Zn shines
23-N	380.3	-227	-323	9-9-52	Blank.
24-N	398.5	-162	-261	9-18-52	-257 to -264.5, 43.43 CaF_2, 2.94 Zn -286 to -306, 11.23 CaF_2, 2.05 Zn, 0.18 Pb.
25-N	417.1	-191	-300	9-20-52	-293 to -303, 60.00 CaF_2, 0.32 Zn. -303 to -333, 49.44 CaF_2
26-N	383.2	-251	-353	9-30-52	Blank
27-N	400.3	-148	-265	10-18-52	-258.5 to -265, 28.30 CaF_2 -265 to -292.5, 18.90 CaF_2 -292.5 to -300, 51.30 CaF_2, 0.90 Zn. -300 to -330, 14.00 CaF_2, 2.28 Zn.
28-N	413.1	-189	-290	10-16-52	-289.5 to -302, 42.60 CaF_2 -302 to -307, 22.06 CaF_2 -307 to -362, Spar, Zn, Pb shines.
29-N	383.9	-252	-353	10-22-52	Blank.

Hole No.	Elev. Collar	Elev. Base of Retgal	Elev. Base of Rogialare	Date Completed	Elevation of Mineralization
30-M	418.3	-190	-298	11-8-52	-298 to -305, 25.50 CaF_2, 2.10 Zn, 1.40 Pb. Lost at 732 ft. Deepened to 778'. Diamond Drill cores - blank.
31-M	401.9	-189	-288	11-12-52	-225.5 to -233, 35.90 CaF_2, -243 to -253, 20.35 CaF_2, 2.06 Zn, 1.90 Pb. -278 to -298, 39.00 CaF_2, 5.80 Zn, 1.80 Pb. -298 to -306, 11.10 CaF_2, 4.90 Zn, 0.75 Pb.
32-M	381.3	-240	-391	11-13-52	-344 to -352.5, 16.15 CaF_2, 0.40 Zn. -384 to -394.5, 23.68 CaF_2, 2.75 Zn.
33-M	378.3	-239	-338	12-8-52	-302 to -312, 31.42 CaF_2, 0.53 Zn. -337 to -344.5, 9.70 CaF_2, 2.10 Zn. -399.5 to -424, 17.80 CaF_2, 2.70 Zn. V. P. enlgs. from -399.5 to -427.
34-M	423.4	-184	-283	12-10-52	-282 to -287, 31.30 CaF_2, 0.40 Zn.
35-M	381.2	-246	-349	12-8-52	Blank.
36-M	381.8	-230	-330	12-29-52	Blank.
37-M	430.5	-161	-261	1-7-53	Blank.
38-M	381.7	-303?	?	1-21-53	-156 to -273, 29.00 CaF_2 -313 to -343, 22.40 CaF_2, 2.17 Zn -398 to -413, 26.44 CaF_2 -413 to -426, 52.42 CaF_2

Copy for Mr. FEJohnson

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 6 1952

xxxxxxxxxxxxxxxxxx
College Park, Maryland

November 5, 1952

Mr. A. G. Johnson, Geologist
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Docket DMEA-2248
Contract Idm-E255

Dear Mr. Johnson:

In reviewing the October 1952 Progress Report for subject contract it is noticed that locations of the collars of incompleted holes are not described in the Narrative (Supplemental Sheet), nor are these holes marked on the monthly drilling progress map accompanying the report. In order to properly certify your reports at this office before transmittal to Washington, this information should be available and the holes marked on the map. Will you kindly conform to this request in preparing the November report?

Mr. G. L. Neumann expects to visit your project in the near future.

This office has been saddened by the sudden passing away of our Executive Officer, McHenry Mosier, on October 19th.

Very truly yours,

W. T. Millar, Acting Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:NAEilertsen:rwa

copy for DMEA Files 2
FEJohnson ✓

Mr Robertson

[redacted]
Silver Spring, Maryland

October 17, 1952

Mr. A. I. Johnson, Geologist
Ozark-Mahoning Company
Rosiclare, Illinois

Dear Mr. Johnson:

Your recommendation of modification of original contract Idr-1255 as set forth in Monthly Progress Report for September 1952, is hereby approved as follows:

(1) Along N-S x-section drill southward from 27-[illegible] [illegible] intervals as long as in the ore.

(2) Along northernmost E-W x-section on [illegible] side of No. 1 Highway drill 150 feet [illegible] of 26-H.

We are elated over showings of the September drilling. Mr. Neumann will be in Rosiclare early next week and you can take up anything further with him then.

The sections give a very complete picture of the results accomplished and justification for future program.

Very truly yours,

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

McHM:G.Neumann:rwa

copies for DMEA Files 2
[redacted] Files
[redacted] Comittendorf
D'Anderson

FILE COPY
SURNAME:

Roberton
Mitt

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

SEP 8 1952

Mr. McHenry Mosier
Executive Officer, DMEA
Field Team, Region VIII
Bureau of Mines
Eastern Experimental Station
College Park, Maryland

Subject: Docket No. DMEA-2246 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Rosiclare, Illinois
Contract Idm-8255

Dear Mr. Mosier:

Please refer to your letter of August 20, 1952 to the Operating Committee with which were enclosed original and two copies of Amendment No. 3 for subject Contract. The Amendment pertains to the relocation of drill holes outside of the pattern originally laid out in the Contract. Deviation in hole locations were provided for in Exhibit "A", Item 6, which permits deviation from the stated five over-all limitation upon approval of the Executive Officer of the Field Team.

We would, therefore, interpret your approval of changes of hole locations in Amendment No. 3 - and also Amendment No. 2 dated July 7, 1952 - as being changes, given with your approval, within the Contract and they would not be considered as Amendments to Contract in the usual sense.

Amendment No. 1 was a real amendment but the other two are operational approvals by Executive Officer. It was the intent, when the contract was written, to give the Executive Officer jurisdiction over the spotting of any holes deviating from the limitation placed upon the Company. Of course, all relocation of holes would be within the property boundaries of the Hill-Ledford Tract and within the total footage allowed under the contract.

It is conceivable that you may want the Operating Committee's approval in some special cases. In such cases, we shall be glad to pass on them if requested. However, in the main, your judgment should suffice with respect to the selection of new drill hole sites and with the cooperation of the Operator.

Please scratch out "Amendment No. 2" and "Amendment No. 3" from your file copies of hole relocations and we will do the same to our file copies.

Sincerely yours,

H. F. Keller

ACTING Chairman, Operating Committee (JHB)

Approved:

J. H. Hedges

Member, Bureau of Mines (JHB)

J.H.
9-8-52

T. P. Thayer

Member, Geological Survey (JHB)

JTRobertson:gad 9/8/52

Copy to: Admin. Reading File
Docket File
Operating Committee (2)
Mr. H. W. Davis, 3519
Mr. Van Alstine, G-232 GSA Bldg.
Mr. Houk

FILE COPY
SURNAME:

Robertson
Miller

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

September 8, 1952

Memorandum

To: Chairman, Operating Committee

From: Nonmetallic Minerals Division

Subject: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Rosiclare, Illinois
Contract No. Idm-E255

Re: A letter to Executive Officer, Region VIII, to request that Amendment No. 2 and Amendment No. 3 be considered as Executive Officer's operational approvals or authorization instead of being designated amendments to Contract.

There has been some confusion as to the distinction between an amendment to Contract and authorization from the Executive Officer.

In this Contract certain stated limitations were placed in the matter of "spotting" churn drill holes. The Company was confined to certain boundaries or a some, but under Item 6 of Exhibit "A" of Exploration Project Contract it was the intent to permit the Executive Officer of the Field Team to modify or approve deviations from the first proposed pattern.

Item 6, Exhibit "A", states as follows:

"Deviation from the above five over-all limitations may be made only after approval from the Executive Officer of the Field Team of Region VIII. It is the intent that a reasonable liaison be maintained between the operator and the Field Team to the end that the program may be well planned."

The wording of the above would appear to give to the Executive Officer the power to approve relocation of holes without going to the extent of making a formal amendment to Contract.

It is suggested that the attached letter on the subject be sent to the Executive Officer, Field Team, Region VIII.

JTRobertson:gad

Attachment

Jasper T. Robertson
Nonmetallic Minerals Division

Copy to: Admin. Reading File
Docket File
Mr. Houk

140

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

August 26, 1952

Memorandum

To: Chairman, Operating Committee

From: Chief Counsel

Subject: Amendment No. 3, Contract Docket No. DMEA-2248, Ozark-Mahoning Co.

We have reviewed the subject amendment.

There does not appear to be a copy of Amendment No. 2 in the file, and, therefore, we cannot determine whether Amendment No. 3 is consistent therewith. Moreover, it cannot be determined from the maps in the file whether the holes authorized by Amendment No. 3 will extend beyond the property line of the Operator.

Accordingly, if Amendment No. 3 is not inconsistent with Amendment No. 2, and if the holes to be drilled under Amendment No. 3 are within the property lines described in Article 2 of the contract, Amendment No. 3 is proper.

J. L. Hofflund
Chief Counsel

[illegible]

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

August 20, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Amendment No. 3, Docket DMEA-2248, Contract Idm-E255
Ozark-Mahoning Co., Rosiclare, Illinois - (Fluorspar)

Attached are the original and two copies of Amendment No. 3 on subject contract.

McHenry Mosier

McHenry Mosier

Attachments

RECEIVED
AUG 25 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

SDS
8/25/52

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
College Park, Maryland

August 15, 1952

Mr. A. G. Johnson,
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Amendment No.3, Docket DMEA-2248, Contract IdmE-255
Ozark-Mahoning Co. Rosiclare, Ill.
(Fluorspar)

Dear Mr. Johnson:

In reference to your letter of August 11, and ~~Amendment 2~~:

It is noted that 5 holes have been completed inline M9-M12-M-16-M-19 and M21, and that additional holes are desired to the S.E. of M21. The Field Team is agreeable to following the ore as you have requested. The simplest authorization appears to be as follows:

> "There is hereby authorized outside the area specified in the contract, a line of holes parallel to the highway, beginning with hole M21 and extending southeasterly herefrom, spaced at not less than the 60-foot intervals as specified in the contract and not exceeding the 5 holes likewise specified in the contract including M21. This line of holes will then constitute one of the eight lines mentioned in the contract, four of which have been established including line M20-M17."

Please indicate below the acceptance of Amendment 3 by the signature of the proper authorizing officer of your Company, keeping one carbon copy for your files and returning the other six copies to me.

Yours very truly,

McHenry Mosier

McHenry Mosier, Executive Officer
Bureau-Survey Field Team, Defense
Minerals Exploration Administration

ACCEPTED:

A. G. Johnson

Ozark-Mahoning Company

[illegible] AUG 21 1952

[illegible] operations during absence of the Executive Officer of Field Team and not [illegible] Amendment [illegible] Sept. 1 1952 [illegible]

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

August 15, 1952

Mr. A. G. Johnson,
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Subject: Amendment No.3, Docket DMEA-2248, Contract IDM-255 Ozark-Mahoning Co. Rosiclare, Ill. (Fluorspar)

Dear Mr. Johnson:

In reference to your letter of August 11, and Amendment 2:

It is noted that 5 holes have been completed in line M9-M12-M-16-M-19 and M21, and that additional holes are desired to the S.E. of M21. The Field Team is agreeable to following the ore as you have requested. The simplest authorization appears to be as follows:

> "There is hereby authorized outside the area specified in the contract, a line of holes parallel to the highway, beginning with hole M21 and extending southeasterly herefrom, spaced at not less than the 60-foot intervals as specified in the contract and not exceeding the 5 holes likewise specified in the contract including M21. This line of holes will then constitute one of the eight lines mentioned in the contract, four of which have been established including line M20-M17."

Please indicate below the acceptance of Amendment 3 by the signature of the proper authorizing officer of your Company, keeping one carbon copy for your files and returning the other six copies to me.

Yours very truly,

McHenry Mosier

McHenry Mosier, Executive Officer
Bureau-Survey Field Team, Defense
Minerals Exploration Administration

ACCEPTED:

A. G. Johnson

Ozark-Mahoning Company

SD

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
College Park, Maryland

August 20, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Amendment No. 1, Docket DMEA-2248, Contract Idm-E255
Ozark-Mahoning Company, Rosiclare, Illinois - (Fluorspar)
Hill-Ledford Tract, Hardin County, Illinois

Attached are the original and two copies of Contract Amendment No. 1 on subject contract and docket.

McHenry Mosier

McHenry Mosier

Attachments 3

A.S.
8/21/52

FILE COPY
SURNAME:

Robertson
Hedges
Rutan
Defrin
Talbert

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

JUL 29 1952

Mr. McHenry Mosier
Executive Officer, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Subject: Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hardin County, Illinois
Amendment No. 1 to Contract
Idm-8255 $61,965.00

Dear Mr. Mosier:

This is in reply to your letter of July 17, 1952, in the matter of actual costs versus unit-costs as applied to Labor and Supervision in the subject operations.

We have drafted an amendment to the contract - Amendment No. 1 - which in effect, puts all costs on a unit-cost basis. Attached please find six copies of the amendment, which, if it meets with your approval, should be signed in the usual way by the Operator and by yourself for the Government.

We trust this will overcome the administrative questions raised by Mr. Jay L. Chambers on the project and simplify the making of Monthly Progress Reports.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

7-29-52

Approved:

J. H. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

JTRobertson:mp 7/25/52
cc: Docket File
Adm. Reading File
Operating Committee
Mr. Houk

Enclosures - 6

FILE COPY
SURNAME:

Robertson
Houck

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

July 25, 1952

Memorandum

To: Chairman, Operating Committee, DMEA

From: Non-Metallic Minerals Division, DMEA

Subject: Docket No. DMEA-2248 - Fluorspar
Exploration Project Contract Idm-2255 - $61,965
Ozark-Mahoning Company
Re: Amendment No. 1 - To change cost items now on actual cost basis to a unit-cost basis. For request for change see attached memorandum to Operating Committee from Mr. Mosier, Region VIII.

In Exhibit "A" of the contract are listed three items, supervision, assaying and clerical, which together are but a small part of the project, but a necessary supplement to the main drilling contract which is let to an independent contractor on a basis of $2.25 per foot.

The Ozark-Mahoning Company, of necessity, had to look after supervision, assaying and clerical. The staff of the company does this service along with their own work, thus there is overlapping of time and intermittent service. The company is willing to handle the three items on a unit-cost basis:

Supervision	$ 0.15 per foot drilled
Assaying	0.01 per foot drilled
Clerical	0.02 per foot drilled
Total supplementary cost	$ 0.18 per foot drilled

(These figures are below cost).

Under the old form of contract, MF-200 (June 1951), the estimated costs cited in Exhibit "A" are difficult to apply and audit on actual cost basis. The unit-cost for all items is considered best suited to the project.

Therefore, to bring the three small items within the contract on a unit-cost basis, the attached Amendment has been prepared and is recommended. Letter of transmittal of Amendment No. 1 to Mr. Mosier is also prepared and attached hereto.

JTRobertson:mp
cc: Docket File
Adm. Reading File

Jasper T. Robertson
Non-Metallic Minerals Division

Attachments
Operating Committee
Mr. Houck

This is a preliminary draft of amend. #1 prepared by Rubin

3/5

(Docket No. etc.)

Amendment No. 1

Contract Idm-E255, Docket ~~No.~~ No. 2248, dated February 18, 1952, between the United States and Ozark-Mahoning Company, is amended as follows, effective February 18, 1952:

1. Articles 5, 6, 8 and 9 of the contract form ~~is~~ are deleted.

2. Article 10 of the contract form is deleted and a new Article 10 is substituted therefor, reading as follows:

"Allowable costs of the project. The costs of the project in which the Government will participate are limited to the agreed, estimated unit costs ~~and~~ including independent contract costs scheduled in Exhibit "A", as amended herein, in lieu of actual costs. ~~[illegible]~~ No work performed or costs incurred before the date of this contract shall be allowed as costs of the project in which the Government will participate."

~~3. Exhibit [illegible] Exhibit "A" [illegible] "Estimated Costs of the Project" are amended to read as follows: [illegible]~~

3. In Exhibit "A", the "Estimated Costs of the Project" are amended to read as follows:

"

Independent contract	
Churn-drilling 25,500 ft. @ $2.25/ft.	$57,375.00
Labor and supervision	
Supervision, 25,500 ft. @ $0.15/ft.	3,825.00
Assaying and laboratory, 25,500 ft. @ $0.01/ft.	255.00
Clerical, 25,500ft. @ $0.02/ft	510.00
Total estimated cost of project	$61,965.00
Government participation @ 50%	$30,982.50 "

(Copy last paragraph of Exhibit "A")
(Copy last paragraph of your draft)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 18 1952

July 17, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Exploration Contract Idm-E255
Docket DMEA-2248 - Fluorspar
Ozark-Mahoning Company

In reference to this contract, Mr. Jay L. Chambers, in his letter dated July 16, calls attention to my error in administration in the Operator's Monthly Cost and Progress Reports for each month since inception of the contract, February 18 (first report dated March 31, 1952), which have been submitted on the basis of the estimated $2.43 total cost per foot instead of the actual cost.

To rectify this error, I propose as an advantage to the Government that the contract be amended retroactive to February 18, 1952, to legalize payments to the operator on the estimated costs shown in Exhibit "A" of the original contract. This is agreeable to the company, which expressed approval at the first visit of the Government Engineer to the project, prior to the submission of any reports. In fact, the estimated total cost of $2.43 per foot for churn drilling is probably slightly below the actual cost. Exhibit "A" breaks down the estimated cost as follows:

Item	Cost per Foot
Sub-contract churn drilling	$2.25
Supervision	.15
Assaying	.01
Clerical	.02
Total	$2.43

The bulk of the cost is the sub-contract for churn drilling, which is the actual cost or $2.25 per foot, this leaves only $.18 additional to be accounted for. The $.15 for supervision which included geological and engineering work is probably below actual cost. The $.01 per foot for assaying, in view of the footage requiring samples and analyses, is apparently below cost. Similarly the $.02 for clerical work

is not excessive and is probably below actual cost. A further advantage to the Government, would be the elimination of the expense of on-site audits. These audits would be complicated by the fact that Ozark-Mahoning Company is operating a large mine adjacent to the project and the accounts for all items except contract-drilling would be overlapping. Difficulties in audit would be increased by the delay in starting. Consequently extra work would be entailed in obtaining documentary evidence.

To legalize the short-form of contract, retroactive to February 18, 1952, the date of original contract would simplify operations, reduce engineering work, eliminate expense of auditing accounts and should result in a saving to the Government in its payments on this contract, because the total cost on the basis of $2.43 a foot is probably less than the actual cost.

McHenry Mosier

McHenry Mosier

FILE COPY
SURNAME:

Talbert

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

JUL 16 1952

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Exploration Contract Idm-E255
Docket DMA-2248
Ozark-Mahoning Company

Dear Mr. Mosier:

The June MF-104 on the referenced contract has recently been received. It is noted that the entire costs of this project are shown under Item (1), Independent Contracts, of the MF-104 (Revised) April, 1952. Previous reports rendered under the old Form MF-104 indicated only part of this cost as being contract work with other items of supervision, assaying, and clerical being listed separately. It appears, therefore, that in the use of the new form the operator should only show that portion of his costs which are under independent contracts in the proper space after Item (1). Supervision should be shown under Item (2) and the other costs should be shown under Item (7). Please arrange to have future MF-104's under this project submitted correctly.

Your attention is called also to the use of the columns headed "For Government Use Only". The gross amount of the costs as approved, rather than the Government's share of such costs, should be inserted therein. The actual amount paid, together with the voucher number and date of payment should be inserted in the block in the lower right-hand portion of the MF-104. It will be necessary, of course, for you to withhold submission of the two copies required by the Administration until you receive this information from the DMEA Finance Officer for your region.

A review of the MF-104's submitted under this project also discloses that the operator is claiming costs at the estimated rates contained in Exhibit A of the contract. It should be noted that this contract is on an actual costs basis and that the items included in Exhibit A are estimates only. Therefore, the operator's monthly reports should be based on actual costs and the original should be supported by proper documentation.

Sincerely yours,

Signed

J.N. 7-16-52

Jay L. Chambers
Chief, Contract Administration
and Audit Division

EDTalbert/ama
July 16, 1952

Copy to: Admr. Reading File
Mr. Houk
Mails and Files
Mr. Chambers

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

July 15, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: June, 1952 Monthly Report of Operator
Docket DMEA-2248, Contract No. IdmE-255

Attached are three copies of the Monthly Report of Operator from the Ozark-Mahoning Company, Rosiclare, Illinois, for June 1952. These have been approved and are being sent to the Finance Officer, Region VIII, for payment of the Government's share.

McHenry Mosier

McHenry Mosier

Enclosures
Monthly Report of Operator
G.L. Neumann's Field Inspection Report

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1952

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

DOCKET COPY

July 7, 1952

Mr. A. G. Johnson
Chief Geologist
Ozark-Mahoning Company
Rosiclare, Illinois

Subject: ~~Amendment No. 2~~*
Docket No. DMEA-8248
Contract IdnE-855

Dear Mr. Johnson:

In reference to your narrative report on the supplemental sheet included in the Operator's Progress Report for June 1952, and to your request for approval of the location of proposed drill holes:

You are authorized to extend the drill-hole cross-section through holes 9, 12 and 16 to the south-eastward for two additional holes, including one hole outside the area specified for prospecting in the original Contract, E-855.

You are also authorized to drill a cross-section on a line through or near hole 2 as shown on the 100-scale map attached to the June 1952 Operator's Progress Report and if desirable, to extend this line south-eastward beyond the limits of the area specified for prospecting in the original Contract, E-855. The total holes in this proposed line are limited to 5, as stated in Contract E-855.

No other changes in Contract E-855, as amended March 27, 1952, are authorized nor inferred.

Your proposal regarding a line of drill holes, southerly from hole M-17 will be discussed with you by our Mr. Neumann on his arrival at the project later this week.

Yours very truly,

DEPARTMENT OF THE INTERIOR
JUL 11 1952

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

SDS
7-18-52

McM:rwa

copy for FEJohnson 4
GLNeumann, Rosiclare, Ill.
DMEA Files 2

NOTE: *This is an interpretation of parts of Contract and not considered an amendment. Mr. Houk talked with Mr. Mosier and asked him to remove "Amendment No. 2" from the Field Copy. FEJOHNSON

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

June 12, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator, DMEA

From: Executive Officer, Field Team, Region VIII

Subject: May 1952 Progress Report, Contract Idm-E255, Docket No. DMEA-2248 - Fluorspar

Attached is the original and one copy of the Operator's Progress Report from the Ozark-Mahoning Company, Rosiclare, Ill., for the month of May 1952. This has been approved and is being sent to the Finance Officer, Region VIII, for payment of the Government's share.

W. R. Miller for

McHenry Mosier

Enclosures 2
Operator's Report
HLBurmeister's Field Inspection Report

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 13 1952

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

May 13, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator, DMEA

From: Executive Officer, Field Team, Region VIII

Subject: Field Inspection Report, Docket DMEA-2248
Contract No. Idm-E-255 - Fluorspar

Attached is Field Inspection Report by Mr. G. L. Neumann, Mining Engineer, Region VIII, covering his visit to the exploration project of the Ozark-Mahoning Company, Rosiclare, Illinois, Docket DMEA-2248, Contract No. Idm-E-255 - (fluorspar).

The Operator's Monthly Report for April 1952 was sent to you last week.

McHenry Mosier

McHenry Mosier

Enclosures 2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 14 1952

OFFICE OF THE ADMINISTRATOR.

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

College Park, Maryland

May 6, 1952

Memorandum

To: C. O. Mittendorf
Acting Administrator, DMEA

From: Executive Officer
DMEA Field Team, Region VIII

Subject: April Progress Report, Docket DMEA-2248
Contract No. Idm-E-255, Fluorspar.

Attached are two copies (original and carbon) of the Progress Report for the month of April 1952, from the Ozark-Mahoning Company. This has been approved and is being sent to the Finance Officer for payment of the Government's share.

McHenry Mosier

Attachments

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 6 1952

DMEA 2248
IDm-E-255

May 3, 1952

Mr. McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Mosier:

Enclosed herewith you will find four copies of the Operator's Monthly Progress Report under the terms of Contract No. IDm-E 255, Docket No. DMA 2248. This is for the period April, 1952. Attached to this Progress Report are copies of Drill Holes Nos. 6-M and 7-M, as well as the Supplemental sheet.

I also enclose herewith four copies of a drilling agreement by and between the Ozark-Mahoning Company and B. W. Bales, drilling contractor, dated April 7, 1952. This agreement covers all of the contractors now operating on the property.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ;fhb

Enclosures

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

College Park, Maryland

April 10, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 11 1952

Memorandum

To: C. O. Mittendorf
Acting Administrator, DMEA

From: Executive Officer
DMEA Field Team, Region VIII

Subject: Progress Report - February 18, 1952 to March 31, 1952, Incl.
Docket No. DMEA-2248, Contract No. Idm-E-255 - Fluorspar

Attached are two copies (original and carbon) of the Progress Report for the period February 18, 1952 to March 31, 1952, Incl., from the Ozark-Mahoning Company. This has been approved and is being sent to the Finance Officer for payment of the Government's share.

McHenry Mosier

McHenry Mosier

Attachments 2

(Copy Rec...)

April 8, 1952

DMA 2248
Idm-E-255

Mr. McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Mosier:

Enclosed herewith you will find four copies of the Operator's Monthly Progress Report under the terms of Contract No. Idm-E 255, Docket No. DMA 2248. Attached to same are copies of Hill-Ledford Drill Hole No. 6, the Supplemental Sheet, as well as one hundred foot scale map of the property showing the location of the holes now drilling and completed. It is not our intention to furnish such a map monthly unless you feel same is desirable.

I wish also to acknowledge your letter of March 27th all in reference to certain modifications of the contract as recommended by Mr. Burmeister.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/ble

Enclosures

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

College Park, Maryland

March 31, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, Bureau-Survey Field Team, Region VIII

Subject: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Rosiclare, Illinois

Attached in duplicate are executed copies of ~~a diamond~~ (churn drill) ~~drilling~~ agreement between the Ozark-Mahoning Company and Moreland and Hohler, drilling contractors, in connection with exploration work on the Hill-Ledford property, Contract IdmE-255.

A copy is being sent to Mr. D. N. Anderson, Finance Officer, Region VIII, Pittsburgh, Pa.

McHenry Mosier

McHenry Mosier

Attachments

AGREEMENT

THIS AGREEMENT, Made and entered into this 18th day of February 1952 by and between the Ozark Mahoning Company, a Delaware Corporation having its office in the City of Rockdale, Martin County, Illinois, party of the first part, and Moreland & Hohler a drilling contractor, of Cave-In-Rock, Illinois, party of the second part,

WITNESSETH: THAT

WHEREAS, the parties hereto have agreed that second party will undertake to carry on drilling operations on the Hill-Ledford Tract for a period of 9 months, from the date of this contract, and the party of the first part will pay for said drilling at the rate of $2.25 per foot, all upon the terms and conditions hereinafter stated:

NOW, THEREFORE, It is hereby agreed by and between the parties hereto, as follows:

1. The party of the second part shall drill in an efficient and workmanlike manner and in accordance with recognized sound drilling procedure and practice. Second party shall exercise special care to do no more damage to properties upon which drilling operations are being carried on than is absolutely necessary. Second party shall strive to keep the area of drilling clean, neat and safe, and shall dispose of waste and refuse at the drill hole site upon completion of the hole.

2. Second party shall plug or case each drill hole with a cement plug and/or well casing, as may be specified by first party, at the completion of said hole. First party shall furnish such cement plug and/or well casing.

3. First party shall have the privilege of measuring any hole at any time during drilling operations, or after completion thereof. All holes are to be drilled to the depth specified by first party as representing a completed hole. First party shall have the right to order cessation of drilling at any depth less than that originally specified, but under such circumstances shall pay for the drilling of the hole to the depth to which same has been drilled at that time, and providing such drilling has been carried on in accordance with the provisions of this contract.

4. It is understood that said second party is an independent contractor, having full control of the work to be performed; that he will indemnify and save harmless first party from and against all liability for injury to or death of any person or persons and for loss of or damage to property, arising from, growing out of, or connected with the negligence of said second party. That he will indemnify and save harmless the said first party from and against any and all materialmen's or laborers' liens for material or work furnished and connected with, arising from or growing out of this contract. That he will defend all such claims and liens and will have same cancelled and satisfied; and that he will furnish the said first party satisfactory evidence of such indemnification, defense and cancellation, as provided by the statutes of the State of Illinois.

5. The party of the first part shall have the right to cancel this contract, upon giving fifteen (15) days written notice to second party.

IN WITNESS WHEREOF, the party of the first part has caused this instrument to be executed by J. G. Trewartha its Vice President and the party of the second part has hereunto set his hand and seal, all this 27th day of March, 1952.

CORPORATION COMPANY

BY J. G. Trewartha Vice Pres. (SEAL)
Party of the First Part

BY _____ (SEAL)

A. O. Moreland
A. O. Moreland

C. B. Hohler
Party of the Second Part
C. B. Hohler

A G R E E M E N T

THIS AGREEMENT, Made and entered into this 18th day of February 1952 by and between the Ozark Mahoning Company, a Delaware Corporation having its office in the City of Rosiclare, Hardin County, Illinois, party of the first part, and Moreland & Hohler a drilling contractor, of Cave-In-Rock, Illinois, party of the second part,

WITNESSETH: THAT

WHEREAS, the parties hereto have agreed that second party will undertake to carry on drilling operations on the Hill-Ledford Tract for a period of 9 months, from the date of this contract, and the party of the first part will pay for said drilling at the rate of $2.25 per foot, all upon the terms and conditions hereinafter stated:

NOW, THEREFORE, It is hereby agreed by and between the parties hereto, as follows:

1. The party of the second part shall drill in an efficient and workmanlike manner and in accordance with recognized sound drilling procedure and practice. Second party shall exercise special care to do no more damage to properties upon which drilling operations are being carried on than is absolutely necessary. Second party shall strive to keep the area of drilling clean, neat and safe, and shall dispose of waste and refuse at the drill hole site upon completion of the hole.

2. Second party shall plug or case each drill hole with a cement plug and/or well casing, as may be specified by first party, at the completion of said hole. First party shall furnish such cement plug and/or well casing.

3. First party shall have the privilege of measuring any hole at any time during drilling operations, or after completion thereof. All holes are to be drilled to the depth specified by first party as representing a completed hole. First party shall have the right to order cessation of drilling at any depth less than that originally specified, but under such circumstances shall pay for the drilling of the hole to the depth to which same has been drilled at that time, and providing such drilling has been carried on in accordance with the provisions of this contract.

4. It is understood that said second party is an independent contractor, having full control of the work to be performed; that he will indemnify and save harmless first party from and against all liability for injury to or death of any person or persons and for loss of or damage to property, arising from, growing out of, or connected with the negligence of said second party. That he will indemnify and save harmless the said first party from and against any and all materialmen's or laborers' liens for material or work furnished and connected with, arising from or growing out of this contract. That he will defend all such claims and liens and will have same cancelled and satisfied; and that he will furnish the said first party satisfactory evidence of such indemnification, defense and cancellation, as provided by the statutes of the State of Illinois.

5. The party of the first part shall have the right to cancel this contract, upon giving fifteen (15) days written notice to second party.

IN WITNESS WHEREOF, the party of the first part has caused this instrument to be executed by J. G. Trewartha its Vice President and the party of the second part has hereunto set his hand and seal, all this 27th day of March, 1952.

CONSIGNMENTS COMPANY

BY J. G. Trewartha Vice Pres. (SEAL)
Party of the First Part

BY _____ (SEAL)

A. O. Moreland
A. O. Moreland

C. B. Hohler
Party of the Second Part
C. B. Hohler

AGREEMENT

This Agreement, made and entered into this 7th day of April 1972 by and between the Marathon Oil Company, a Delaware Corporation having its office in the City of Robinson, Crawford County, Illinois, party of the first part, and B. W. Bales a drilling contractor, of Cave-In-Rock, Illinois, party of the second part,

WITNESSETH THAT

WHEREAS, the parties hereto have agreed that second party will undertake to carry on drilling operations on the Hill Ledford Tract for a period of 6 months, from the date of this contract, and the party of the first part will pay for said drilling at the rate of $2.25 per foot, all upon the terms and conditions hereinafter stated:

NOW, THEREFORE, It is hereby agreed by and between the parties hereto, as follows:

1. The party of the second part shall drill in an efficient and workmanlike manner and in accordance with accepted sound drilling practice and practice. Second party shall exercise special care to do no damage to properties upon which drilling operations are being carried on that is absolutely necessary. Second party shall strive to keep the area of drilling clean, neat and safe, and shall dispose of waste and refuse at the drill hole site upon completion of the hole.

2. Second party shall plug or case each drill hole with a cement plug and/or well casing, as may be specified by first party, at the completion of said hole. First party shall furnish such cement plug and/or well casing.

3. First party shall have the privilege of measuring any hole at any time during drilling operations, or after completion thereof. All holes are to be drilled to the depth specified by first party as representing a completed hole. First party shall have the right to order abandonment of drilling at any depth less than that originally specified, but under such circumstances shall pay for the drilling of the hole to the depth to which same has been drilled at that time, and providing such drilling has been carried on in accordance with the provisions of this contract.

4. It is understood that said second party is an independent contractor, having full control of the work to be performed; that he will indemnify and save harmless first party from and against all liability for injury to or death of any person or persons and for loss of or damage to property, arising from, resulting out of, or connected with the negligence of said second party. That he will indemnify and save harmless the said first party from and against any and all claims or liens for material or work furnished and connected with, arising from or growing out of this contract. That he will defend all such claims and liens and will have same cancelled and satisfied; and that he will furnish the said first party any necessary evidence of such indemnification, defense and cancellation, as provided by the statutes of the State of Illinois.

5. The party of the first part shall have the right to cancel this contract, upon giving fifteen (15) days written notice to second party.

In witness whereof, the party of the first part has caused this instrument to be executed by J. G. Trewartha (SEAL) Vice President and the party of the second part has hereunto set his hand and seal, all this 7th day of April, 1952.

CONTINENTAL OIL COMPANY

By J. G. Trewartha (SEAL)
Party of the first part

By B. W. Bales (SEAL)

B. W. Bales

Party of the second part

Report v. Rec. Docket.

College Park, Maryland

March 27, 1952

Mr. A. C. Johnson
Chief Geologist
Ozark-Mahoning Company
Rosiclare, Illinois

Docket DMEA 248

Dear Mr. Johnson:

This will confirm Mr. Burmeister's telephone conversation with you on March 26, 1952, regarding allowable deviations from the terms of Exploration Contract IdrE-255.

The first cross sectional line of holes which is now being drilled, beginning with holes 5N, 6N and 7N, may be extended by three holes outside the original northwest sideline if these extra holes are required to establish the location of the ore body. All other specifications and considerations in Contract IdrE-255 shall remain the same without change.

In further corroboration of Mr. Burmeister's statement, holes drilled prior to the effective date of Contract IdrE-255 will not be considered in the limitation of five holes per cross section. If drilled footage is reported for a hole and later the hole is lost and the sub-contractor is not paid for it, a correction may be made on the next Monthly Progress Report by crediting the amount previously charged for that hole.

Yours very truly,

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

McHM:HLBurmeister:rwa

B

copy for FEJohnson 2
DMAnderson, Pgh.
NENelson, USGS
DMEA Files 2

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~

College Park, Maryland

March 5, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, Bureau-Survey Field Team, Region VIII

Subject: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Rosiclare, Illinois

In reference to your letter of February 19 enclosing original and five copies of Contract IdmE-255, Docket No. DMEA-2248, Hill-Ledford Tract, Ozark-Mahoning Company, Rosiclare, Illinois:

The original and three copies of this contract, which have been signed by the Ozark-Mahoning Company, are attached.

McHenry Mosier

McHenry Mosier

Enclosures 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 6 1952

FILE COPY
SURNAME:

Robertson
Mitt

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

600

5=

Mr. McHenry Mosier
Executive Officer, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Subject: Docket No. DMEA-2248
Fluorspar
Hill-Ledford Farm
Ozark-Mahoning Company

Dear Mr. Mosier:

Enclosed please find a copy of a large map of a portion of the Cave-in-Rock District, Illinois.

We received a number of them in connection with Ozark-Mahoning application, DMEA-2248, but a small map was used in the contract. It might be well to put this map in your file on Ozark-Mahoning, DMEA-2248.

Sincerely yours,

SIGNED

Lawrence G. Houk, Chief
Non-Metallics Minerals Division
Defense Minerals Exploration
Administration

Enclosure - 1

JTRobertson:mp
3/4/52
cc: Act. Administrator
Docket File
Mr. Houk
Mr. Robertson

FILE COPY
SURNAME:

Robertson
Houk

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

FEB 19 1952

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Subject: Docket No. DMEA-2243 - Fluorspar
Hill-Ledford Tract
Ozark-Mahoning Company
Rosiclare, Illinois

Dear Mr. Mosier:

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

If the contract meets with your approval, present it to the Operator for his approval and signature. If any provisions are unsatisfactory to the Operator, return all copies to this office along with suggested changes for consideration.

After signing of the contract, one copy is to be given to the Operator, one copy retained for your files, and the remaining copies, including the original, are to be returned to this office as soon as possible.

A copy of the contract required by the Regional Finance Office will be forwarded directly by the Washington Finance Section.

Sincerely yours,

(signed) FRANK E. JOHNSON

2/19

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures 6

Approved:

J. H. Hedges
Member, Bureau of Mines

L. P. Shaver
Member, Geological Survey

JTRobertson:gad 2/12/52
Copy to: Admin. Reading File
Docket File
Mr. Houk
Mr. H. W. Davis, 3519
Mr. Van Alstine, G-232, GSA Bldg.

R.

FILE COPY
SURNAME:

Guthrie

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

February 7, 1952

Memorandum

To: Acting Administrator

not stripped in R. & R.

From: Chief Counsel

Subject: Ozark-Mahoning Company exploration project — Docket No. DMTA-2248

The attached seven copies of a draft of an Exploration Project Contract in this case are in satisfactory legal form and are approved by this office subject to the attachment of the necessary subordination agreement and maps.

Your file in this case is returned.

J. L. Hofflund
Chief Counsel

Attachments
RRGuthrie/bjl

Copy to: Repts. & Records
J. L. Hofflund
R. R.Guthrie
Chron.

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~

College Park, Maryland

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 6 1952

February 5, 1952

Memorandum

To: Frank E. Johnson, Chairman
Operating Committee, DMEA

From: Executive Officer
Bureau-Survey Field Team, Region VIII

Subject: DMEA Docket 2248, Ozark-Mahoning Company

Attached are comments on the original application from the Ozark-Mahoning Company by Mr. Ned E. Nelson of the Field Team for Region VIII. Mr. Nelson's communication was overlooked in my memorandum to you dated January 11, 1952.

McHenry Mosier

Enclosure (4 copies)

Reviewed by
DMEA OPERATING COMMITTEE
2-6-52
(date)

IN REPLY REFER TO:

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

December 20, 1951

Memorandum

To: Mr. McHenry Mosier
College Park, Md.

From: Mr. N. E. Nelson

Subject: DMEA Docket 2248, Ozark-Mahoning Company

As no up-to-date geologic map is available and surface examination would be of little or no use, judgment of the application must rest largely on faith in the applicant company.

As a leading fluorspar producer, it may be taken for granted they know what they are doing and probably know a good way to do it.

Although particular data are lacking, the drill hole map of the Cave in Rock Fluorspar District furnished by the applicant suggests the company is looking well ahead of immediate requirements since within the bounds of their properties in sections 26 and 35 are scores of drill holes ~~of~~ showing ore at much more shallow horizons than the beds being tested in the Hill-Ledford Tract. That the company will proceed to open the deep runs, if enough ore is found, is not certain, but may be assumed as possible since the minimum royalty is $4,800.00 per year.

Since on its own initiative, the applicant undertook to do drilling and has extended the discovery made, presumedly by Minerva Oil Company and has perhaps made a discovery of its own at 2M and 3M holes it may be difficult to make another technical discovery in the proceeds of which the Government might participate.

Conclusion

From the geologic point of view this project may now be regarded as a good prospect. If the project needs support, it should be given it; if it will go ahead anyway why become involved at this time?

N. E. Nelson

Ned E. Nelson
Geologist

BUREAU OF MINES
COLLEGE PARK, MD.

1951 DEC 26 AM 9:31

IN REPLY REFER TO:
G-MD-REVA

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

February 1, 1952

Memorandum

To: Lawrence G. Houk, DMEA

From: Ralph E. Van Alstine, USGS

Subject: Proposed drilling program of Ozark-Mahoning Company, searching for fluorspar in Cave-in-Rock district, Illinois, DMEA-2248.

The letter and accompanying map submitted by the applicant on January 25 in response to your phoned request for additional data have been reviewed. The applicant indicates that the proposed drill-hole locations mentioned in this letter and shown on the map are based on the "theory that an orebody may be found which has a strike length of at least 3,000 feet but may not have a width in excess of 50-100 feet." Many of the thirty holes proposed, however, are located at a considerable distance from the postulated orebody and might be regarded as wildcat drilling for which justification has not been shown.

As the objective is to explore and develop an orebody along this mineralized trend, the holes should be directed more closely at the target. For example, one 600-foot section along the trend and another 400-foot section, within which no proposed drilling is shown, seem to be desirable places for several series of holes to be drilled along cross-sections.

Ralph E. Van Alstine

Ralph E. Van Alstine

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

January 25, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 29 1952

Mr. Lawrence G. Houk
Room 3647
New Interior Building
Washington 25, D. C.

Dear Mr. Houk:

As requested by you in a telephone conversation Thursday P. M. January 24th, I enclose herewith 100 ft. scale map of a portion of the Hill-Ledford Tract showing proposed drill hole locations on the property under the setup as outlined in the application filed with Defense Minerals Administration November 7, 1951, which application was assigned No. DMEA-2248.

It is difficult or impossible to project drill locations so far ahead. Each completed hole creates a new problem and subjects the program to change. About all we know at the present is that it will take approximately thirty holes along the mineralized trend to determine the probability of an orebody. This is not an orebody. It is merely a mineralized trend along which a few holes indicate that an orebody might be drilled out which would justify further development work by shaft sinking and crosscutting. We are proceeding on the theory that an orebody may be found which has a strike length of at least 3000 feet but may not have a width in excess of 50-100 feet. Hence the necessity of drilling several crosscuts of closely spaced holes.

We have completed two holes along cross section A-A, both of which show ore of mineable grade. Hole No. 4-M is temporarily lost with drilling tools hung up in the hole at a depth of 575 feet.

We are now drilling 5-M along crosscut B-B. As soon as this hole is completed, we propose to continue with the drilling both to the west and the east to determine the width of the mineralized trough. As soon as this work is complete we may wish to move back to crosscut A-A and further drill same both to the west and the east.

If results are favorable at A and B, we will crosscut again at C-C. We should have sufficient information at that time so that locations can be spaced at 200 ft. intervals.

You will note the location of the proposed crosscut at D-D. We would expect to drill some holes on 200 foot centers; however, we would also probably wish to drill some close locations, particularly northeast of #8.

If results at D-D are encouraging we may wish to crosscut again to the northeast at E-E or else we propose to fill in the gaps between the various crosscuts to the southwest as shown on the map.

Frankly I do not understand the lawyer's interpretation that we are not eligible under this governmental setup unless holes are spaced at 200 foot intervals. Please be good enough to write me fully as to the point involved so that the matter can be taken up with our company's attorney, Mr. Fenelon Boesche. Thank you.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/blc

Enclosure

cc: C. O. Anderson

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 28 1952

January 21, 1952

Mr. Lawrence G. Houk
Room 3647
New Interior Building
Washington 25, D. C.

Dear Sir:

I have been advised by Mr. C. O. Anderson, Vice President of Ozark-Mahoning Company, that he, Messrs. Davis and Boesche met with Mr. Robertson and yourself in your Washington office January 17, 1952.

The purpose of the meeting was to discuss the status of the Ozark-Mahoning Company's application for an exploratory loan under the Defense Production Act of 1950. The application was assigned Docket Number DMEA-2248. Mr. Anderson now advises me that your office wishes a statement from the owners of the drill rig now operating on the property the items covered by the per foot cost of drilling.

Attached hereto is such a statement from the drillers signed in quadruplicate. I assume this is the information you desire. We again trust there will be no unnecessary delay in processing the application.

Thank you.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

AGJ/blc

Enclosures

cc: Mr. C. O. Anderson

Cave-In-Rock, Illinois
January 21, 1952

Ozark-Mahoning Company
Rosiclare
Illinois

Gentlemen:

At this time we are employed by Ozark-Mahoning Company as independent drillers on the Hill-Ledford tract in Hardin County, Illinois utilizing churn drilling equipment.

In addition to the churn drilling machine, we furnish labor, all tools, pipe, water, and any other equipment including a truck which is necessary to carry on drilling operations.

When a hole is completed we plug the top of same by the use of boulders or leave a joint of 6-1/4" casing approximately 20 feet long to protect the surface from caving. If casing is left in the hole, it is furnished by Ozark-Mahoning Company.

In conducting our operations, we carry Workmen's Compensation Insurance, Public Liability coverage as well as automobile and truck insurance and furnish Ozark-Mahoning Company with Certificates of Insurance.

At the present time, we receive for this work $2.00 per foot of hole drilled.

Very truly yours,

Arthur Moreland
A. O. Moreland

Clarence Hohler
Clarence Hohler

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

College Park, Maryland

January 11, 1952

Memorandum

To: Frank E. Johnson, Chairman
Operating Committee, DMEA

From: Executive Officer, DMEA
Field Team, Region VIII

Subject: DMEA Docket No. 2248

The attached comments of the Field Team were submitted December 18 and apparently were returned to this office, although there was no accompanying memorandum.

McHenry Mosier

McHenry Mosier

Attachments

File LD Team
ME MO

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
JAN 11 1 47 PM '52

OFFICE OF THE ADMINISTRATOR

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

December 18, 1951

Memorandum

To: Mr. Frank E. Johnson, Chairman
Operating Committee, D.M.E.A.

From: Executive Officer, D.M.E.A.
Field Team, Region VIII

Subject: Application of Ozark-Mahoning Co. for exploration loan of $61,985. D.M.E.A. Docket 2248.

G. L. Neumann, examining engineer of the field team, concurs completely with the memo from H. W. Davis to C. O. Mittendorf.

Paragraph 4 is a perfect answer to the slight objection raised in the Van Alstine memo to D. E. Moulds. Neumann has spent considerable time in this district and knows the applicant's personnel. He has not examined this particular section, nor has he gone over this drilling program with the applicant; but he considers the project worthwhile and recommends the application for approval.

M. P. Miller for
McHenry Mosier

FILE COPY
SURNAME:

Moulds

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

DEC 17 1951

BL

Mr. McHenry Mosier
Executive Officer, Region VIII
DMEA Field Team
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2248

Dear Mr. Mosier:

We enclose two copies of memorandum and one set of material listed in applicant's letter of transmittal.

Applicant: Ozark-Mahoning Company

Docket No.: DMEA 2248

Commodity: Zinc-Fluorspar

Amount: $61,965.00

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review", and return your recommendation with the enclosed material.

Sincerely yours,

SIGNED

JCD 12/17

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

DEMoulds/meh
12/14/51
cc to: Adm. Reading File
Mails and Files
Mr. Mittendorf
Mr. Moulds
Mr. Bishop
Mr. McKnight
Region VIII
Docket

IN REPLY REFER TO:

G-MD-REVA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 13 1951

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

DEC 13 1951

Memorandum

To: D. E. Moulds, Defense Minerals Exploration Administration

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

Subject: DMEA-2248, application of Ozark-Mahoning Company for government assistance with exploration for fluorspar on Hill-Ledford tract, Hardin County, Illinois, total cost estimated at $61,965.

The probability is very good that a significant body of fluorspar exists in this tract, which already has been partly explored. A more specific drilling program might be laid out, with some indication of the spacing of the proposed holes. More precise locations of the proposed holes seem desirable with respect to the holes in which fluorspar was discovered in this tract by the Minerva Oil Company in 1941-42 and by the applicant since July 1951.

It is suggested that the application be referred to the field team at this time for general information and comments, rather than for a field investigation of the proposal.

It is recommended that the application be accepted, subject to any modifications as a result of the above comments and those of the field team.

Ralph E. Van Alstine

Ralph E. Van Alstine

P.S. As mentioned in our phone conversation, I would like for our fluorspar files, if available, a copy of each of the three maps accompanying this application, especially the 1" = 400' large map of the Cave-in-Rock fluorspar district.

Van Alstine

FILE COPY
Surname:

Davis
Josephson

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

December 6, 1951

Memorandum

To: Mr. C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration

From: H. W. Davis, Commodity Specialist, Bureau of Mines

Subject: Application of Ozark-Mahoning Co. for exploration loan of $61,965. Docket No. D.M.E.A. 2248

The company proposes to churn drill 30 holes averaging 850 feet in depth, or a total of 25,500 feet, at estimated cost of $61,965.

The subject property is located about 3/4 mile from the mine of Minerva Oil Co., which has been in continuous operation for 10 years producing fluorspar and zinc; and about 2 miles from the mines of Ozark-Mahoning Co., which has been in continuous operation since 1939 producing fluorspar, lead, and zinc.

The subject property was prospected by Minerva Oil Co. in 1941-1942; 21 holes averaging 800 feet in depth were drilled. The Ozark-Mahoning Co. believes that 5 holes showed mineable ore. At the present time, Ozark-Mahoning Co. is drilling cross section A-A (see 100-foot scale map) in an effort to determine the width of the mineralized zone. In this connection two holes, both reported showing good mineable grade fluorspar ore have already been completed. In addition, one hole also showed good Zn, with some Pb and fluorspar at the sub-Rosiclare contact, believed by the company to be of mineable grade.

Inasmuch as the subject property is near a mineralized area, as drilling already done by the Ozark-Mahoning Co. has shown mineable grade ore, and as the company, one of the largest producers of fluorspar in the United States, is experienced in prospecting, mining, and milling fluorspar, it is recommended that the loan, on a matching basis, be approved.

HWDavis:cb

Copy to: G. W. Josephson
R. E. Van Alstine
H. W. Davis
Files

It might be mentioned that because of greatly expanding consumption of fluorspar in the United States and the rapid depletion of reserves of domestic fluorspar, it is believed that every encouragement and assistance should be given to reputable companies to prospect for fluorspar, especially in the Illinois-Kentucky district.

H. W. Davis

Subject: DMEA-2248
Re: Exploration Loan
Hill-Ledford Farm

Ozark-Mahoning Co.
Mahoning Mining Division
Rosiclare, Illinois

My dear Sirs:

This will acknowledge receipt of your application dated November 7, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2248 and referred to the Non-Metallics Branch.

Kindly refer to DMEA-2248 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams, Chief
Reports & Records Unit

7862

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D.C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
College Park, Md.

NOV 26 8 58 AM '51

November 9, 1951

Memorandum

To: Tom Lyon, Chairman
Coordinating Committee

From: Executive Officer
Bureau-Survey Field Team
Region VIII

Attached herewith on Form MF-103 in quadruplicate is an application for aid for an exploration project from the Ozark-Mahoning Company, Mahoning Mining Division, Rosiclare, Illinois.

W. D. Fuller
for McHenry Mosier

Attachments

CHEMICALS
OZARK
MAHONING
MINERAL PRODUCTS

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.
NOV 26 8 58 AM '51

November 7, 1951

Defense Minerals Administration
U. S. Bureau of Mines
College Park, Maryland

Attention: Mr. Gustave L. Neuman

Gentlemen:

Attached hereto are four executed copies of Form MF-103, to each of which is attached the following:

(1) Copy of the Hill-Ledford Lease, dated July 11, 1951.
(2) Landlords Subordination Agreement, dated November 5, 1951.
(3) Four hundred foot scale map of property showing location of partially developed orebody.
(4) One hundred foot scale map of drilled area and summary of drill hole data.
(5) Four hundred foot scale map of Cave-In-Rock District showing the location of the various deposits now being worked in the district and the relation of same to the Hill-Ledford tract, the subject matter of the proposed development program.

At the time you visited our office in Rosiclare a few weeks ago, you suggested that data of this nature be sent on to you for processing rather than Defense Minerals Administration, Washington, D.C. as you felt that procedure would speed the project to conclusion, one way or the other. We trust there will be no unnecessary delay.

I have been checking form MF-200, Exploration Project Contract, which is to be executed provided project is approved. Paragraph sixteen (c) provides as follows:

> "If in the opinion of the government, operations up to the time of the notice have not indicated the probability of making any worth-while discovery and in the opinion of the government further operations are not justified, the government may, at any time, by written notice terminate this contract".

We believe this is a sound provision; however, we do not find any provision in the Agreement which provides that the operator has the right to discontinue operations on the property prior to completion of the project, if in the opinion of the operator, further expenditures are not justified. We would like to have this covered as a "rider" to MF-200, unless we are advised same is not necessary.

Very truly yours,

OZARK-MAHONING COMPANY

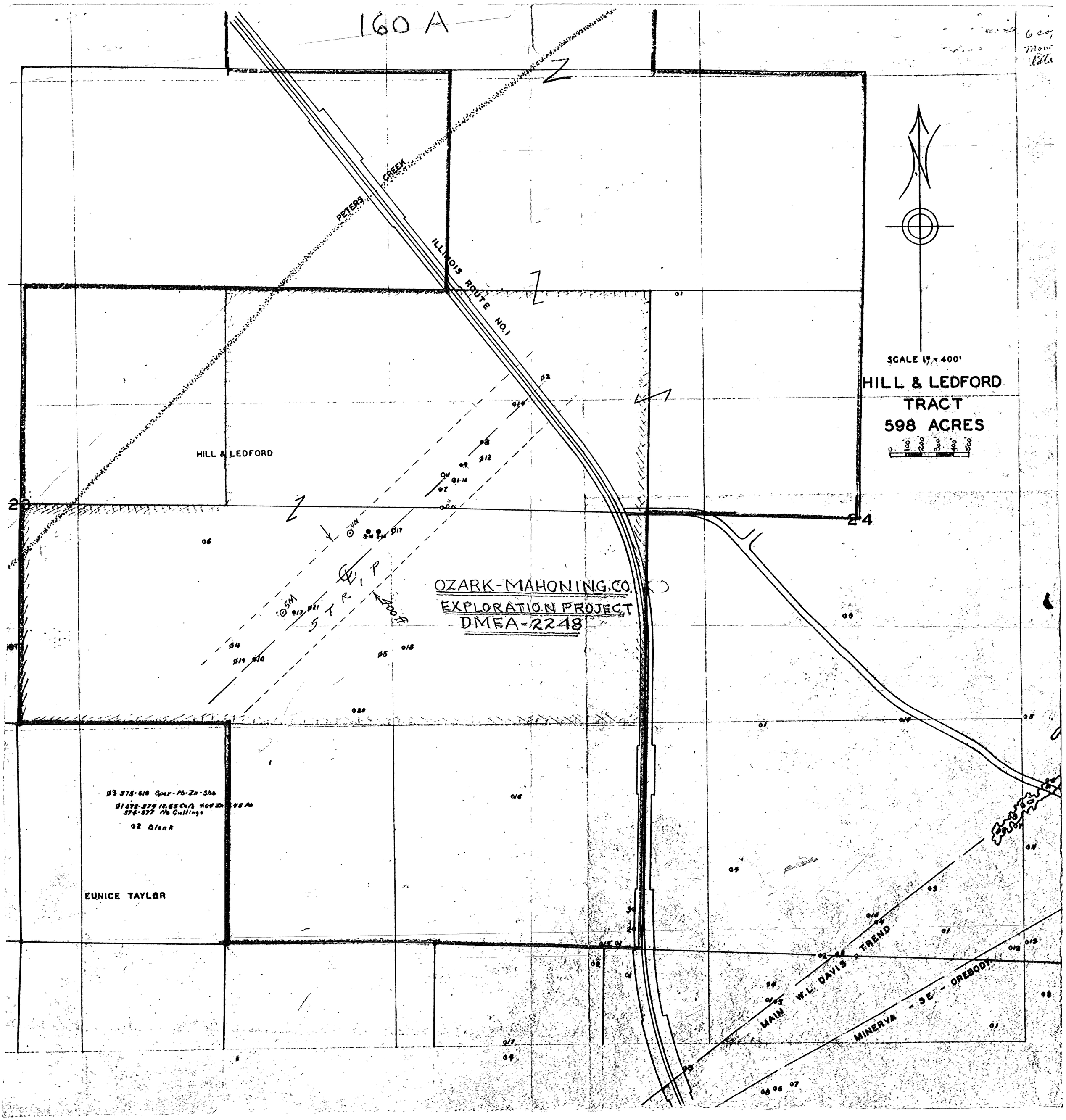
A. G. Johnson

A. G. Johnson
Geological Engineer

AGJ/blc

Enclosures

160 A


PETERS CREEK
ILLINOIS ROUTE NO. 1
HILL & LEDFORD
SCALE 1" = 400'
HILL & LEDFORD
TRACT
598 ACRES
0 100 200 300 400 500
23
24
OZARK-MAHONING CO.
EXPLORATION PROJECT
DMEA-2248
STRIP
400 ft.
EUNICE TAYLOR
MAIN W.L. DAVIS TREND
MINERVA - SE - OREBODY