DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 342 — DMEA NO. 2184

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- [ ] Withdrawn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

- [x] 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

- [x] Project summary (final) - 7/1/58
- [x] Work Completed analysis (final)

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

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

Additional Folders:

Left Side

Folders No. 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
- [ ] Field Team Interim Reports
- [x] Operator's Monthly Reports with transmittal, narrative and maps.

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

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

17963

Stewart

225

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-E342, Docket No. DMEA-2184 (Lead-Zinc), dated June 13, 1952, with

Mayer and Thiede Mining Company
Room 1625, 37 West Van Buren Street
Chicago 5, Illinois

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Rowe Leases located in La Fayette County, Wisconsin, during the period June 13, 1952, through August 4, 1960.

A certification of discovery or development was issued on April 6, 1954, and, in accordance with Article 9 of the contract, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 10 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final audit dated November 30, 1953, indicated accepted costs under the exploration contract amounting to $2,700.49 with the Government's contribution, on a 50 percent basis, being $1,350.24.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) Inspection reports by field representatives of the Government and other correspondence in the Washington office files indicate that there has not been any production of minerals from the property on which royalty would be due to the Government since the date of the exploration contract; and

(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

C. E. Fisher

August 4, 1960

C. E. Fisher, OME Auditor

File C
Surnam

Surnamed
Chamber
Hoffland
Hedges
Selfridge
F Johnson

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

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

To: Meyer and Thiede Mining Company
Room 1625
37 W. Van Buren Street
Chicago 5, Illinois

Pursuant to the provisions of Exploration Project Contract No. Idr-F342, dated June 13, 1952, Docket No. DMEA-2184, 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 in the area southwest of the Judd shaft of the Tom lead mine has shown the existence of lead ores in the lower Drab and Gray horizons on the lands described in the contract.

Dated: APR 6 1954

WRGriswold/bjl (3/25/54)

THE UNITED STATES OF AMERICA

By C D Mitteudorf
Administrator, Defense Minerals
Exploration Administration

Copy to: Docket
Irving Gumbel, DR., MD, EPS
Mr. Hedges, 4604
Mr. Thayer, 5216, GSA Bldg
Admr. R. File
Op. Committee
Cont. & Audit Div.
Finance Office
Region V (2)
Mr. F. E. Johnson
Base Metals (DMEA)
Mr. Griswold
Chron.

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

Transmitted
Betty

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Mayer & Thiede Mining Company
Room 1625, 37 West Van Buren Street
Chicago 5, Illinois

pertaining to Exploration Project Contract No. Idm-F342, Docket No. DMEA-2184, including Amendments Nos. 1, 2 and 3, for the months of June and July, 1953, covering a project for the exploration of lead and zinc in the Rowe Mine area of La Fayette county, Wisconsin.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performance by reference to Work Progress Reports signed by Field Team representatives, and a determination of the reasonableness and propriety of the costs.

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

(a) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder; and
(b) a major portion ($2,343.75) of the costs were incurred under a subcontract for diamond drilling at a unit rate of $1.50 per foot.

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

Total cost as billed by Contractor		$2,861.75
Exceptions:		
By DMEA Finance Officer (Supervision and Technical Services in excess of allowable rates)	$161.26	
Herewith	-0-	161.26
Total Accepted Cost		$2,700.49

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 One thousand three hundred fifty and 24/100 Dollars,

$1,350.24

is considered valid and proper.

November 20, 1953

E. D. Talbert, Auditor

DOCKET COPY

Defense Minerals Administration
RECEIVED
NOV 24 1953

signed Talbot
Return

TERMINATION OF EXPLORATION PROJECT CONTRACT BY AGREEMENT
AFTER COMMENCEMENT BUT BEFORE COMPLETION OF THE WORK

It is agreed this 20th day of October, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Mayer & Thiede Mining Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract I-dm-E 342, Docket No. DMEA-2184, dated June 13, 1952, that the said contract shall be and is hereby terminated as of the first date above written.

Any work prosecuted or costs incurred by the Operator after the date first above written shall be for the sole account of the Operator, except for (a) such necessary and reasonable costs and expenses as may be incurred in preserving and disposing of any facilities, buildings, fixtures, equipment, or other items, to the cost of which the Government has contributed and in which the Government has an equity, and (b) the costs of any reports, accounts, and winding-up and settlement actions provided for in the contract.

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

Witness the following signatures as of the day and year first above written.

UNITED STATES OF AMERICA

By C. D. Woodham

Mayer & Thiede
(Operator)

By J. Mayer

AMENDMENT NO. 3

Docket DMEA-2184, Contract Idm E-342, dated June 13, 1952, between the United States of America and Mayer & Thiede Mining Co., is hereby amended as follows:

1. Article 3, Exploration Project - Starting date is extended to June 1, 1953, thus making completion date on or before June 1, 1954.

This amendment shall not be construed to increase the estimated cost of the project, the aggregate total amount the Government may pay, or the percentage of the cost which the Government may pay, under the terms of Article 8 of the contract form.

Dated: May 20, 1953

UNITED STATES OF AMERICA

By: A B Needham
A. B. Needham, Executive Officer
Field Team, Region V, DMEA

MAYER & THIEDE MINING COMPANY

By: J C Mayer
Title

AGREEMENT

THIS AGREEMENT Entered into this 1st day of June, 1953, by and between J. E. Doyle of Shullsburg, LaFayette County, Wisconsin, party of the first part, and the Mayer and Thiede Mining Company, of Chicago, Cook County, Illinois, by H. K. Geyer, their attorney, parties of the second part:

WITNESSETH, That whereas the parties of the second part as desirous of doing exploratory churn drilling for lead and zinc ores on the Harold Rowe and Albert Rowe lease which they now hold and whereas the party of the first is engaged in the occupation of churn drilling for these ores,

NOW THEREFORE, It is mutually agreed between the parties as follows:

1. The party of the first part agrees to move his drilling equipment on the Harold Rowe and Albert Rowe lease as soon as possible and to begin churn drilling operations for lead and zinc.

2. The party of the first part agrees to drill all drill holes into the limestone or ore-bearing rock.

3. The parties of the second part, their agents or representatives agree to spot all drill holes for the party of the first part.

4. The party of the first part agrees to keep a record of ore formations drilled through for all drill holes and upon completion of each drill hole, to submit a written report on such form or forms as the parties of the second part may require, showing the formations drilled through and their depth, the depth of the water table is reached, the depth of the drill hole and the date of the beginning and completion of the drill hole and any other data as such form or forms may require.

5. The party of the first part agrees to drill all holes to completion through the ore-bearing rock and is to be paid only for drill holes actually completed, the parties of the second part not being obligated to pay for any drill holes not so completed.

6. The parties of the second part agree to pay the party of the first part $1.50 a linear foot for all properly completed drill holes upon submission of

written report or reports covering holes drilled.

IN WITNESS WHEREOF The parties have hereunto affixed their names and seal on the day and year first above written.

In the presence of as to

J. E. Doyle:

/s/ Marjorie Hartshorn

/s/ J. E. Doyle (seal)

/s/ Donna L. Kuhls

In the presence of as to

Mayer & Thiede Mining Company:

By H. K. Geyer, their Attorney

MAYER AND THIEDE MINING COMPANY

By /s/ H. K. Geyer (seal)
Their Attorney

/s/ Marjorie Hartshorn

/s/ Donna L. Kuhls

AMENDMENT NO. 2

Docket DMEA 2184, Contract Idm-E342, dated June 13, 1952, between the United States of America and Mayer & Thiede Mining Co., is hereby amended as follows:

1. Article 3, Exploration Project - Starting date of work is extended to March 1, 1953, thus making completion date on or before March 1, 1954.

This amendment shall not be construed to increase the estimated cost of the project, the aggregate total amount the Government may pay, or the percentage of the cost which the Government may pay, under the terms of Article 8 of the contract form.

Dated: February 16, 1953

UNITED STATES OF AMERICA

By: A. B. Needham

A. B. Needham, Executive Officer
Field Team, Region V, DMEA

MAYER & THIEDE MINING COMPANY

By: J. Mayer

Title Partner

AMENDMENT NO. 1

Contract Idm-E342, Docket DMEA-2184, dated June 13, 1952, between the United States of America and Mayer & Thiede Mining Co., is hereby amended as follows:

1. Article 3, Exploration Project - Starting date of the work is extended from 120 days to 180 days from date of contract and completion date is extended from June 13, 1953, to August 13, 1953.

This amendment shall not be construed to increase the estimated cost of the project, the aggregate total amount the Government may pay, or the percentage of the costs which the Government may pay, under the terms of Article 8 of the contract form.

Dated: October 13, 1952

UNITED STATES OF AMERICA

By _____
Executive Officer, DMEA Field Team, Region V

MAYER & THIEDE MINING CO.

By _____
Title:

MF-200
(June 1951)
(Revised Feb. 1952)

Department of the Interior
Defense Minerals Administration
RECEIVED
JUL 28 1952

DOCKET NO. DMEA 2134

COMMODITY Lead-Zinc
Idm-E342
Docket Copy

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 13th day of June, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Mayer and Thiede Mining Company, a partnership composed of J. S. Mayer and Walter E. Thiede Room 1625, 37 W. Van Buren Street Chicago 5, Illinois

hereinafter called the "Operator," as follows:

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 Wisconsin, County of La Fayette, described as follows: [3]

See Annex I attached

the Operator represents and undertakes: [4]

(*a*) ~~That the Operator is the 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 the Operator is a lessee, in possession and ~~entitled to possession, and the owner's consent to lease is attached~~ /and/or Landlord's Subordination Agreement/

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, within 120 days from the date of this contract shall commence work on a project of exploration for [5] Lead and zinc

in or upon the described land; and shall bring the project to completion within a period of 1½ from the date of this contract. 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.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, 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. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—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 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. 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 unit prices for 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.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[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*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred 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 costs incurred 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.

(*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 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. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay ---50--- percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $5,000.00, which is ---50--- percent of $---10,000.00---, 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 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.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *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 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 10. *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 11. *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.

ARTICLE 12. *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. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* ----------

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Mayer and Thiede Mining Company
(Operator)

By Walter E. Thiede J. L. Mayer, Partner

By
Walter E. Thiede, Partner

By C. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration

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

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

ANNEX I

All of the NE¼ of the NE¼ of Section Thirty (30) West of the highway. The S½ of the SE¼ of the SE¼ of Section Nineteen (19); all of the NW¼ of the NW¼ of Section Twenty-Nine (29), West of highway and a tract commencing 9.98 chains South of the NW corner of the SW¼ of the SW¼ of Section Twenty (20), thence South 42 degrees 20' East 4.52 chains, thence South 60 degrees 40' East 4.41 chains, thence South 45 degrees and 15' East 2.25 chains to center of highway, thence Southwesterly along center of highway to South line of said Section, thence West to the SW corner of said Section, thence North to place of beginning, all above in Township Two (2) North, Range Three (3), East of the 4th P. M., containing 56 acres, more or less.

Also, the NE¼ of the NW¼ and the NW¼ of the NE¼, and the W½ of the SW¼ of the NE¼; the N½ of the SW¼ and the SE¼ of the NW¼; the W½ of the NW¼ excepting one (1) acre for schoolhouse purposes, all the last described properties lying and situated in Section Thirty (30) of Township Two (2) North of Range Three (3) East of the 4th P. M.

EXPLORATION PROJECT CONTRACT
MAYER AND THIEDE MINING COMPANY
DOCKET NO. DMEA-2184

EXHIBIT "A"

Description of the Work

The proposed work shall consist of churn drilling and suitable assaying to explore for the continuation of mineralization in the vicinity of the "Howe" lead and zinc prospects and shall be divided into two stages.

Stage I

Stage I shall consist of 15 churn drill holes having an aggregate length of 3,000 feet and drilled at locations and steps as follows:

1. Drill five holes in the Howe lead mine "Area A" at approximately the locations indicated by holes Nos. 1-5, inclusive.

2. Drill six holes in the Howe zinc mine "Area B-C" at approximately the locations indicated by holes Nos. 6-11, inclusive.

3. Drill four holes in "Area D", south of the Howe zinc mine area at approximately the locations indicated by holes Nos. 12-15, inclusive. Prior to drilling in this area, the Operator shall provide the Government with an accurate map locating previous drill holes in relation to topographic and land survey features.

If in the estimation of the Government, the above initial drilling of Steps 1-3 proves unsuccessful in extending mineralization warranting additional drilling, the project shall be terminated.

If in the estimation of the Government, the results of the initial drilling of Steps 1-3 prove further drilling is warranted, to delineate ore trends in the area, additional drilling described in Stage II shall be performed.

Stage II

Stage II shall consist of churn drilling an aggregate of 2,000 feet of hole at locations and to depths to be determined to the satisfaction of the Government.

Estimate of Costs
(*Indicates allowable maximum)

Stage I

(1) Independent Contracts

3,000 feet of churn drilling @ $1.60* per foot of hole completed — $ 4,800.00

(2) Labor, Supervision, Consultants

Labor:

None

Supervision:

Schedule waived. The reasonable cost of supervision shall be allowable @ $0.15* per foot of drill hole completed — 450.00

Consultants:

Schedule waived. The reasonable cost of engineering and surveying services shall be allowable @ $0.07* per foot of drill hole completed — 210.00

(3) Operating Materials and Supplies

None

(4) Operating equipment

None

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

None

(7) Miscellaneous

Allowable costs under this heading are limited to the reasonable cost of bookkeeping, stenographic help, transportation of labor, compensation and payroll taxes, @ $0.12* per foot of drill hole completed — $360.00

And the assaying @ $0.06* per foot of drill hole completed	$180.00	$ 540.00

(8) Contingencies

None

Total estimated cost, Stage I	$ 6,000.00*

Stage II

(1) Independent Contracts

2,000 feet of churn drilling @ $1.60* per foot of hole completed	$ 3,200.00

(2) Labor, Supervision, Consultants

Labor:

None

Supervision:

Schedule waived. The reasonable cost of supervision shall be allowable @ $0.15* per foot of drill hole completed	300.00

Consultants

Schedule waived. The reasonable cost of engineering and surveying services shall be allowable @ $0.07* per foot of drill hole completed	140.00

(3) Operating Materials and Supplies

None

(4) Operating Equipment

None

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

None

(7) Miscellaneous

Allowable costs under this heading are limited to the reasonable cost of bookkeeping, stenographic help, transportation of labor, compensation and payroll taxes, @ $0.12* per foot of drill hole completed	$240.00	
And the assaying @ $0.06* per foot of drill hole completed	120.00	$ 360.00

(8) Contingencies

None

Total estimated cost, Stage II	$ 4,000.00*
Total for project	$10,000.00*
Government participation @ 50%	$ 5,000.00*

NOTE: Although the estimate is made in terms of units of work, the allowable costs in which the Government will participate are actual costs within the maximums indicated by asterisks, including as actual costs payments made under independent contract.

MF-202

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 Lafayette, State of Wisconsin, described in a certain Exploration Project Contract dated June 13, 1952, between Mayer & Shieles Mining Co., the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated 1949 to 1959, 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 2nd day of Jan., 1952

Harold Rowe

Alice Rowe

Albert Rowe

Winifred Rowe

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

AFFIDAVIT

STATE OF WISCONSIN)
) ss.
COUNTY OF LAFAYETTE)

N. W. Judd, being first duly sworn on oath, deposes and says that he is a partner of J. D. Judd and Son, of Shullsburg, Lafayette County, Wisconsin, a co-partnership consisting of J. D. Judd and N. W. Judd; that on the 11th day of May, 1951, J. D. Judd and Son entered into a certain contract with J. L. Mayer and Walter E. Thiede, partners doing business as Mayer & Thiede, of the City of Chicago, Cook County, Illinois, wherein and whereby it was agreed that J. D. Judd and Son would sell, assign and transfer to Mayer & Thiede all their right, title and interest in and to the following described personal property, to-wit:

Mining lease dated January 15th, 1949, of certain lands located in the Townships of Shullsburg and Seymour and recorded on the 17th day of January, 1949 in Volume 18 of Bonds and Contracts, page 377, Records of the Register of Deeds for Lafayette County, Wisconsin.

All mining machinery
All mining equipment, all buildings and
All supplies located on said premises described in said lease, except the LeRoi number 105 compressor, skid mounted tool-house and a six foot steel tool-box.

That the consideration for said contract of sale was $13,000.00, and that said consideration has been fully paid by Mayer & Thiede and received by J. D. Judd and Son, and that title to all the personal property as hereinbefore set forth is now vested in Mayer and Thiede.

N W Judd
N. W. Judd

Subscribed and sworn to before me this 30 day of June, 1952.

R. K. Newman
Notary Public
Lafayette County, Wisconsin.
My commission expires 3-15-53.

(SEAL)

KOPP & McKICHAN
ATTORNEYS AT LAW
W. ROY KOPP
M. A. McKICHAN
FIRST NATIONAL BANK BUILDING
PLATTEVILLE, WISCONSIN
TELEPHONE 2615

October 22, 1951

United States Dept. of Interior
Defense Minerals Administration
Washington 25, D. C.

Re: DMA ~~1375~~ 2184

Gentlemen:

We are submitting herewith the necessary information for the processing of the above application and request that you place this file on an active basis and give the same your prompt attention.

Very truly yours,

KOPP & McKICHAN

H. K. Geyer

H. K. Geyer

HKG:mh
Enclosures

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
OCT 25 1 35 PM '51

Form MF-103
(April 1951)

S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA ~~1395A~~ 2184

Date received 5-31-51

Participation

Mayer & Thiede Mining Company
Room 625
37 W. VanBuren Street
Chicago 5, Illinois

Name and address of applicant

Date May 29, 1951

FILL IN THIS BLOCK

Date of application May 29, 1951

Estimated cost $10,000.00

Mineral or metal zinc and lead

Percentage of Government participation 50%

Location of mine 3 1/2 miles Northeast of Shullsburg, Wisconsin

Date of filing MF-100 Not filed

DMA Docket Number, if available ~~1395A~~ ~~None~~ 2184

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

(See attached statement answering questions 1 to 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.

Mayer & Thiede Mining Company
(Name of company)

By L. Mayer
(Signature of authorized official)

May 29, 1951
(Date)

Partner
(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

THE APPLICANT

1. Partnership - Mayer & Thiede Mining Company

2. James L. Mayer, 9528 North Ridgeway Avenue, Skokie, Illinois.
   Walter E. Thiede, 8107 Ingleside Avenue, Chicago, Illinois.

3. Not applicable

4. James L. Mayer has been associated with Ding Magnetic Separator Company in sales and processing work in Chicago, Illinois, since 1927. He has owned during that time the St. Ann Foundry Company at St. Ann, Illinois, the Tri Mount Instrument Company located at Chicago, Illinois, and the Ancroft Test Instruments Company located at Chicago, Illinois. Mr. Mayer presently resides in Skokie, Illinois, and has had a varied and broad experience in operating and managing business institutions. Mr. Mayer does his banking at the Continental Illinois National Bank and Trust Company of Chicago, Illinois, and submits the name of Tilden Cummings, Vice President of the Continental Illinois National Bank and Trust Company of Chicago, Illinois, as a reference.

   Walter Thiede has been raised and has lived in the lead and zinc mining district of southwestern Wisconsin all his life. He has set up and operated iron reclamations metal mining units and has had more than ten years experience in this connection. In addition, he is a machinist and a machine operator and is thoroughly familiar with mining equipment and its operations.

5. Lessee

6. Not applicable

7. Mining lease in good standing. (See attached Exhibit "A") Applicant has purchased lease as shown by Exhibit "A" under a contract of sale dated May 11, 1951, a copy of which is attached hereto and marked Exhibit "B".

8. Mining operations just getting under way, hence not applicable.

9. $5,000.00. Yes

10.
   a. Applicants have a 110 foot shaft located on the property described in Exhibit "A" with two drifts, one approximately 70 feet long running in a Westerly direction from the shaft and the other approximately 60 feet long running in a Northwesterly direction from the shaft. The mine has a complete

tipple with complete underground equipment, including pumps, drills, and tracks; also has complete surface equipment, including hopper capacity, screens, compressor and jig, and all equipment that is necessary for immediate operation.

b. All of the NE¼ of the NE¼ of Section Thirty (30) West of the highway. The South ¼ of the SE¼ of the SE¼ of Section Nineteen (19); all of the NW¼ of the NW¼ of Section Twenty-Nine (29), West of highway and a tract commencing 9.98 chains South of the North West corner of the SW¼ of the SW¼ of Section Twenty (20), thence South 42 degrees 20' East 4.52 chains, thence South 60 degrees 40' East 4.41 chains, thence South 45 degrees and 15' East 2.25 chains to center of highway, thence Southwesterly along center of highway to South line of said Section, thence West to the South West corner of said Section, thence North to place of beginning, all above in Town Two (2) North, Range Three (3), East of the 4th P. M., containing 56 acres, more or less.

Also, the NE¼ of the NW¼ and the NW¼ of the NE¼, and the W½ of the SW¼ of the NE¼; the N½ of the SW¼ and the SE¼ of the NW¼; the W½ of the NW¼ excepting one (1) acre for schoolhouse purposes, all the last described properties lying and situated in Section Thirty (30) of Town Two (2) North of Range Three (3) East of the 4th P. M.

11. Rowe property

12. 3 1/2 miles Northeast of Shullsburg, Wisconsin. Served by Milwaukee Railroad. Good surfaced, all year round highway available.

13. Ample supply of ground water available at all seasons.

14. See answer to Item 10a

15. Applicants have a mill on the property which is to be used to mill all ore mined and/ore is to be hauled by truck to railroad siding in Shullsburg, Wisconsin, and shipped by rail directly to processing plant.

16.

a. Exploration to be conducted on 400 acres of land by churn drill on which there has been previous exploration by churn drilling. Approximately 90 test holes have been drilled since 1938. Records of both plan and cross sections on file in U.S. Bureau of Mines office, Platteville, Wisconsin. Present mine operated for a period two years ago by J. D. Judd and Son of Shullsburg, Wisconsin. Operations discontinued in 1949 bedause of low market. (Maps of drillings

and ore workings to be submitted at a later date.)

b. Near-by producing mine (Rodham Mine) has produced large quantities of both zinc and lead ores and the range for this mine extends onto the property described in Exhibit "A".

c. None

17. Not applicable.

18.

a. Production just beginning. Previous drillings indicate a substantial low-grade orebody consisting of lead and zinc which is to be explored and extended by drilling.

b. Not available at present but can be submitted at a later date by U. S. Bureau of Mines office, Platteville, Wisconsin.

c. 80% or better lead sulfide. For tonnage, see Bureau of Mines record of drilling.

19. See answers to questions 21 and 22.

20. For zinc and lead ore occurring in orebodies typical of the Southwestern Wisconsin district.

21 & 22. It is proposed to drill approximately 40 drill holes of approximately 150 foot depth to explore and prove the present lead and zinc orebodies. Drillings previously conducted by J. D. Judd & Son and the U.S. Bureau of Mines have indicated an orebody of substantial lead and zinc of low grade which should be extended and proven. The orebody can be mined profitably once it is proven on today's market at a small profit, and if it is not mined under present price conditions, it probably never will be and a substantial tonnage of lead will be lost to the defense effort. The Mayer & Thiede Mining Company does not feel warranted in expanding their present mining operations without first having an opportunity to explore and examine the present orebody further. This can best be done at the present time by drilling approximately 40 drill holes to further sample the orebody. As previously stated, the estimated cost of this drilling is approximately $10,000.00 and the Mayer & Thiede Mining Company would share 50% of this cost, or $5,000.00. It is estimated that it would take approximately six to eight months to properly explore the extent of this orebody, since it has definitely been established that the adjoining Rodham mine has a range which extends onto this property as indicated by the office of the U.S. Bureau of Mines at Platteville, Wisconsin.

EXHIBIT "A"

MINING LEASE

THIS INDENTURE, Made and entered into this 15th day of January, A.D., 1949, by and between Harold Rowe and Alice Rowe, his wife, and Albert Rowe and Winifred Rowe, his wife, hereinafter referred to as Lessors, and J. D. Judd and N. W. Judd, Co-partners, doing a business as J. D. JUDD AND SON, hereinafter referred to as Lessee.

WITNESSETH:

1. THAT, in consideration of the covenants and agreements hereinafter set out, to be kept and performed by Lessee, Lessors do hereby lease unto Lessee for prospecting and mining for lead, zinc and other valuable metals, for ten (10) years from the date hereof, the following described lands situated in LaFayette County, Wisconsin, to-wit:-

County I

All of the NE¼ of the NE¼ of Section Thirty (30) West of the highway. The South ½ of the SE¼ of the SE¼ of Section Nineteen (19); all of the NW¼ of the NW¼ of Section Twenty-Nine (29), West of highway and a tract commencing 9.98 chains South of the North West corner of the SW¼ of the SW¼ of Section Twenty (20), thence South 42 degrees 20' East 4.52 chains, thence South 60 degrees 40' East 4.41 chains, thence South 45 degrees and 15' East 2.25 chains to center of highway, thence Southwesterly along center of highway to South line of said Section, thence West to the South West corner of said Section, thence North to place of beginning, all above in Town Two (2) North, Range Three (3), East of the 4th P. M., containing 56 acres, more or less.

Also, the NE¼ of the NW¼ and the NW¼ of the NE¼, and the W½ of the SW¼ of the NE¼; the N½ of the SW¼ and the SE¼ of the NW¼; the W½ of the NW¼ excepting one (1) acre for schoolhouse purposes, all the last described properties lying and situated in Section Thirty (30) of Town Two (2) North of Range Three (3) East of the 4th P. M.

2. Lessors hereby give and grant unto Lessee, for said term, the exclusive right and license to prospect and mine said land for lead, zinc and other ores, together with the right and license to prepare for market on said premises and remove and sell all lead, zinc and other concentrates produced from said ores, with the right to construct buildings or other structures and to make excavations, openings, stockpiles, dumps, ditches, drains, roads, tracks and other improvements upon said premises, including the use of water in said operations, and to place such machinery thereon as Lessee may deem necessary for efficiently prospecting and mining said land and treating the ores mined therefrom, with the right in Lessee to remove all property so placed thereon at any time during the term hereof or within six (6) months after the termination of this lease.

3. IN CONSIDERATION AS FOLLOWS:

a. In the event that mine rock or wet mill concentrates are shipped the royalty F. O. B. mine shall be:

10% on zinc
10% on lead
5% on iron

b. In the event a flotation plant is built on the property the royalty F. O. B. mine shall be:

7½% on zinc concentrates
7½% on lead concentrates
5% on iron concentrates

No royalty shall be required to be paid on premiums or bonuses received from Metals Reserve Company or other governmental agency by Lessee.

4. Lessee will keep accurate books showing quantities and kinds of concentrates produced and sold from said lands, when and to whom sold and the money received from sales, and such books of account shall be open to the inspection of Lessors at all reasonable hours

5. All mining operations shall be carried on in a miner-like and workman-like manner as the same are usually conducted in said locality.

6. It is agreed that ores mined from the lands covered hereby shall be cleaned and prepared for market in the usual and customary manner and if mill or flotation plant shall be located on these lands, Lessee shall have the right to treat ores from other lands therein. Said ores may be milled in a plant in which other ores are being treated.

7. The Lessee agrees to provide a sewer to carry all water resulting from mining and milling operations on said leased lands beyond the boundaries of the cultivated portions thereof. The said sewer shall be of iron piping or be constructed of concrete or other material of equal durability, and the same shall be laid preferably upon the surface of said leased lands, but may be laid, where necessity requires, in a trench and covered with earth. The laying of said sewer shall be accomplished with as little damage to said leased lands as is possible, considering the nature of the sites where the same is to be laid. Upon the termination of mining and milling operations on said lands, all sewer pipes shall be removed and the land occupied by the same restored as nearly as possible, to the condition the same was in prior to the laying thereof.

8. If ores and rock mined from the lands covered hereby are milled on said lands, Lessee, during the term of this lease, shall have the right to sell the tailings and agricultural lime resulting therefrom, and shall pay to the owners of said lands five per cent (5%) of the gross proceeds derived from such sales. If such ores and rock are milled on other lands, the tailings resulting therefrom shall be the property of Lessee, but if it shall sell the same or any part thereof, during the term hereof, it shall pay to the owners of said lands five per cent (5%) of the gross proceeds of such sales. If ores and rock from other lands shall be milled on the lands covered

hereby, the tailings resulting therefrom shall be the property of Lessee, and it shall have the right to remove the same at any time during the term of this lease, but if not so removed, said tailings shall become the property of the owners of said lands. It is agreed that tailings resulting from the milling of ores from this and other lands may be deposited in a common mass on this or other lands. Payment of such royalty shall be made on or before the 15th day of the month following the month of receipt of settlement.

9. Lessee shall have the right to remove ores and minerals mined on the lands covered hereby through a shaft or shafts located on adjoining lands, and to hoist ores and minerals mined on adjoining lands through a shaft or shafts on this land. In case Lessee shall avail itself or any of the privileges granted under paragraphs 5, 6 and 8 hereof, it shall exercise special care to see that all ores and tailings are properly credited to the lands from which they may be mined or produced.

10. The Lessors shall at all reasonable times and hours have access to any mines on said land for the purpose of inspection and ascertaining the progress of the work being done, but shall not interfere with the prospecting and mining operations of Lessee.

11. Lessee agrees to commence mining operations on said land within thirty days after the ____ day of September A.D., 19__, and to continue such mining operations with not less than four (4) men for ten (10) months in each year during the continuance of this lease, unless prevented because of fire, strikes, delays of carriers, unavoidable accidents, or other causes beyond the control of Lessee. Prospect drilling shall be considered mining under the terms of this lease.

12. In the event mining operations shall not be conducted on said land as hereinafter provided, Lessee shall pay to Lessors the sum of Twenty-Five Dollars ($25.00), and such payment shall operate as rental for one (1) month and shall cover the right and privilege in

Lessee to suspend mining operations for and during said One (1) month period. In like manner and upon like payments, mining operations may be further deferred or suspended for like periods successively during the term of this lease. All such payments shall be considered as advance royalty and shall be deducted from royalties subsequently accruing hereunder to said landowners.

13. It is further agreed that in the event the East St. Louis smelter market shall at any time during the life of this lease drop below five cents (5¢) per pound, the Lessee shall have the privilege of discontinuing work under this lease until the said market price equals or exceeds five cents (5¢) per pound; said cessation from work in no event to exceed a period of two (2) years at any one time.

14. Lessee shall furnish Lessors a true copy of the log of each drill hole put down on said land by Lessee, showing any assays made of cuttings therefrom.

15. Lessee shall not have the right to erect any dwelling house or other habitations on said land without the consent of the Lessors. In case of sale of buildings placed on said premises by Lessee, the owners of said lands shall have the first privilege of buying same. Lessee also agrees to properly protect and timber all shafts sunk by it on said premises in order to prevent horse, cattle or other domestic animals belonging to the owner or tenant of said premises from falling herein. Lessee shall do no unnecessary damage to growing crops on said land, and in case any such damage is done to said crops, it shall pay the reasonable amount of such damage. In going to and from the mines on said lands, Lessee shall keep gates closed so that stock cannot escape therefrom, and shall as near as practicable use the same road.

16. The Lessee agrees to fill up all prospect holes as soon as same are abandoned and also where there are open holes or shafts on which it is not working to protect and enclose the same to prevent stock from falling therein.

17. No shaft shall be sunk within four hundred (400) feet of the dwelling house or other buildings and should the well be drained by pumping water at the mines, Lessee agrees to drill well deeper so as to furnish water for the owners of said lands.

18. In the event ores and minerals mined from other lands are milled on lands covered hereby, Lessee shall pay to the owners of said lands for such privilege the sum of Fifty ($50.00) Dollars per month during the time such milling shall be carried on, provided no such payment shall be required when ores mined on these lands are also being milled.

19. After the expiration of the term hereinbefore fixed, this lease shall continue in force and effect so long thereafter as ore shall be produced from said lands by the Lessee, or it shall continue prospecting or mining operations on said land or any part thereof in good faith.

20. It is expressly understood that this lease can be transferred or sublet to another company or operator.

21. Lessee shall at all times have the right to surrender and release this lease unto Lessors, first giving unto Lessors fifteen (15) days' written notice of intention so to do, and upon such surrender and release being made, Lessee shall thereupon be released and discharged from all further obligations hereunder. Such notice and release may be given or delivered to Lessors personally or by registered mail, postage prepaid, addressed to Lessors at their last known address, or to such other address as they may from time to time in writing designate.

22. The Lessors shall have the right to terminate this lease when and if the Lessee shall fail to operate or pay the rental agreed upon according to the terms of said lease for any continuous period of three (3) months, by mailing to the said Lessee at its last known address, by registered mail, a notice in writing, setting forth the conditions of the lease which have been violated or unperformed by the said Lessee. Said notice shall be termed and con-

ditioned so that the said Lessee may, within fifteen (15) days after the date of mailing, continue operating under the terms of the lease. However, if at the end of said fifteen (15) days the Lessee shall have failed to so operate or pay rent, the filing of the notice, a copy of which has been sent to the Lessee, together with an affidavit or proof of mailing, at the Register of Deeds Office in the County Court House of Lafayette County, Wisconsin, shall cause this lease to cease and become null and void.

23. The terms and conditions of this lease shall be binding upon and inure to the benefit of the heirs, successors, legal representatives and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have duly executed this indenture the day and year first above written.

IN THE PRESENCE OF:

/s/ C. O. Bergener

/s/ Lawrence S. Mill

/s/ Harold Rowe (SEAL)
Harold Rowe

/s/ Alice Rowe (SEAL)
Alice Rowe

/s/ Albert Rowe (SEAL)
Albert Rowe

/s/ Winifred Rowe (SEAL)
Winifred Rowe

(Lessors)

J. D. JUDD AND SON

By /s/ J. D. Judd (SEAL)
J. D. Judd - Partner

and

/s/ N. W. Judd (SEAL)
N. W. Judd - Partner

(Lessee)

STATE OF WISCONSIN)
) SS
COUNTY OF LAFAYETTE)

I, C. O. Bergener, a Notary Public in and for said County, do hereby certify that Harold Rowe and Alice Rowe, his wife, and Albert Rowe and Winifred Rowe, his wife, and J. D. Judd and N. W. Judd, Co-partners, personally known to me to be the same persons who executed the foregoing lease, appeared before me this day in person and acknowledged that they executed the said lease as their free and voluntary act for the uses and purposes therein set forth.

Witness my hand and notarial seal this 15th day of January, A. D. 1949.

/s/ C. O. Bergener
Notary Public

My Commission Expires April 3, 1949

(SEAL)

Register's Office)
) ss
Lafayette County, Wis.)

Received for Record this 17th day of January A.D., 1949 at 8:20 o'clock A.M.
/s/ Roy O'Neill Register

EXHIBIT "B"

This Contract, made this 11th day of May, 1951, the parties to which are J. D. Judd and N. W. Judd, co-partners, doing business as J. D. Judd & Son, of Shullsburg, Lafayette County, Wisconsin, hereinafter referred to as the Sellers, and J. L. Mayer and Walter Thiede, partners, doing business as Mayer and Thiede, of the City of Chicago, Illinois, hereinafter referred to as the Buyers.

WITNESSETH:

For and in consideration of the sum of thirteen thousand ($13,000.00) dollars to be paid as hereinafter provided, the Sellers have agreed and do hereby agree to sell, assign and transfer to the Buyers all of their right, title and interest in and to the following described personal property, to-wit:

> Mining lease dated January 15th, 1949 of certain lands located in the Townships of Shullsburg and Seymour and recorded on the 17th day of January, 1949 in Volume 18 of Bonds and Contracts, page 377, Records of the Register of Deeds for Lafayette County, Wisconsin.
>
> All mining machinery
> All mining equipment, all buildings and
> All supplies located on said premises described in said lease, except the LeRoi number 105 compressor, skid mounted toolhouse and a six foot steel tool-box.

Payments for the foregoing described property are to be made as follows:

> $1,000.00 on the 11th day of May, 1951
> 4,000.00 on the 17th day of May, 1951
> 5,000.00 on the 17th day of June, 1951
> 3,000.00 on the 17th day of July, 1951

The receipt of the first payment of the sum of one thousand ($1,000.00) dollars is hereby admitted and acknowledged by the Sellers.

The title to said above described personal property shall remain in the Sellers until said sum of thirteen thousand ($13,000.00) dollars above scheduled is fully paid, and in the event the said Buyers shall fail, neglect or refuse to make any

of said payments on the dates herein specified, all the right, title and interest of the Buyers in said personal property shall thereupon cease and the title to the same shall revert to the Sellers who shall then have the right to the immediate possession of the same. It is also agreed that until said personal property is fully paid for, the Buyers shall keep the same in as good condition as it is at the time possession thereof is delivered to the Buyers.

On the full payment of the said sum of thirteen thousand ($13,000.00) dollars, the title to all of the above described personal property shall pass absolutely and forever to said Buyers.

It is understood and agreed that the said Buyers may use without payment therefor the said LeRoi compressor and the portable tool-shed until August 17th, 1951, provided, however, the Buyers are to deliver these items to the Sellers on the agreed date in as good a condition as the same are in when the use thereof is commenced by the said Buyers.

The Sellers covenant and agree to and with the Buyers that the above described personal property is free and clear from all liens and encumbrances and their title to the same they will forever warrant and defend against claims of all persons.

This agreement shall be binding upon the parties hereto and upon their heirs, assigns and legal representatives.

In Witness Whereof, the parties hereto have hereunto affixed their hands and seals the day and the year first above written.

In Presence of as to
J. D. Judd & Son:

/s/ C. O. Bergener

/s/ Joan Harwick

J. D. JUDD & SON:

By: /s/ J. D. Judd (Seal)
Partner

/s/ M. W. Judd (Seal)
Partner

In presence of as to
Mayer and Thiede:

/s/ C. O. Bergener

/s/ Joan Harwick

MAYER AND THIEDE:

By: /s/ J. L. Mayer (Seal)
Partner

/s/ Walter E. Thiede (Seal)
Partner

By the consent of all the parties hereto, the following provision is hereby incorporated into the foregoing agreement and hereby made part hereof:

Anything in this agreement to the contrary notwithstanding, it is specifically understood and agreed that there shall be no personal or individual liability on the part of the Buyers hereunder for the payment of the purchase price in the amount of Thirteen Thousand Dollars ($13,000.00) as herein provided. In the event that the Buyers shall fail to make payments of the purchase price as herein provided, then Sellers shall be privileged to retain for their own use and benefit any and all payments on account of the purchase price theretofore made by Buyers.

In Witness Whereof, all of the parties to said agreement have hereunto affixed their hands and seals this 18th day of May, 1951.

In presence of as to all
parties:

/s/ C. O. Bergener

/s/ Joan Harwick

J. D. JUDD & SON:

By: /s/ J. D. Judd (Seal)
Partner

/s/ N. W. Judd (Seal)
Partner

MAYER AND THIEDE:

By: /s/ J. L. Mayer (Seal)
Partner

/s/ Walter E. Thiede (Seal)

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.

OCT 25 1 36 PM '51

THE APPLICANT

SUPPLEMENTAL INFORMATION FOR DMA ~~1375~~ 2184 ITEMS:

1 through 15 - No change.

16. Exhibit C attached hereto.

17. No change.

18.

a. No change

b. See Exhibits C and D attached hereto.

19 through 22 - No change.

23 & 24. Churn drilling @ 1300 feet per month with approximate costs per feet of drilling:

a.	Churn drilling	$ 1.60	per ft.
b.	Supervision	.15	" "
c.	Surveying	.07	" "
d.	Stenographic help	.07	" "
e.	Transportation	.03	" "
f.	Withholding tax	.01	" "
g.	Compensation insurance	.01	" "
	Total Cost per Foot	$ 1.94	" "
	Total Cost per Month		$ 2,522.00

DRILL HOLE RECORD

Lease: Rowe Lease

Location of Hole: N 1474 E 5855

Drilled by: Webster & Peart

Examined by: Sullivan

Depth to Water: 70 ft.

Hole Number: 1

Elevation: 1002.7

Oil Rock Elevation: 861.0

Started: June 15, 1946

Finished: June 26, 1946 Engine trouble

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil				
5	40			Yellow Lime				
40	95			" "				
95	100			" " & Gray				
100	105			Gray Lime - Flint				
105	110			" " "				
110	120			" " "				
120	125			Blue Lime		Trace	1.00	Trace
125	130			Blue Lime		1.30	1.30	"
130	132			" "		0.90	1.20	"
132	134			" "		0.50	1.10	"
134	136			" "		Trace	1.30	"
136	138			" "		0.20	1.10	"
138	140			" "		Trace	1.10	"
140	142			" " Some oil rock at 142				
142	144			Oil Rock				
144	146			Oil Rock at 146 strong 2' of Oil Rock				
146	148			Oil Rock 6' total				
	148			Glass Rock-Brown, somewhat more soft than ordinary glass rock	Barren or slight			
148	164			Glass Rock - 16 ft. total 8" opening at 162 - 164	traces of			
164	176			Trenton - top - brown lacking the usual white trenton color	Pb., Zn., & Fe.			

DRILL HOLE RECORD

Lease: Rowe Lease

Hole Number: 2

Location of Hole: N 1347 E 5945

Elevation: 1010.0

Drilled by: Faherty & Welch

Oil Rock Elevation:

Examined by: Sullivan

Started: June 25

Depth to Water: 75 ft.

Finished: June 27

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil			
7	93			Yellow Lime - No trace of mineral			
	100			Broke into old workings found a 19 ft. opening in stope			

DRILL HOLE RECORD

Lease.....Bowe Lease.....

Hole Number.....3.....

Location of Hole.....N 14415 E 5812

Elevation.....1002.8.....

Drilled by.....Webster - Peart.....

Oil Rock Elevation.....

Examined by.....Sullivan.....

Started.....June 26.....

Depth to Water.....70 ft.....

Finished.....June 28.....

Depth From	Depth To	Estimated ZN.	Estimated PE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay PE.	Assay PR.
0	7			Soil			
7	85			Yellow Lime			
	85			Some Gray Lime			
85	100			Gray Lime			
	100			Broke into west heading			
				Found 6' opening			

DRILL HOLE RECORD

Lease: Rowe Lease
Hole Number: 4
Location of Hole: N 1304 E 5981
Elevation: 1012.07
Drilled by: Faherty & Perat
Oil Rock Elevation: 858.
Examined by: Sullivan
Started: June 28, 1946
Depth to Water: 80 ft.
Finished: July 3, 1946

Depth From	Depth To	Estimated ZN.	Estimated PE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay PE.	Assay PB.
0	10			Soil			
10	95			Yellow lime			
95	100			" "	0.10	0.50	Trace
100	105			" "	Trace	0.40	"
105	110			" "	"	0.35	"
110	115			" "	0.20	0.55	"
115	120			" "	0.10	0.88	"
120	125			" "	0.40	0.80	"
125	130			" " & Gray	Trace	0.20	"
130	132			Gray Lime	0.45	1.15	"
132	134			Blue "	0.10	0.95	"
134	136			" "	0.10	1.35	"
136	138			" "	0.15	0.95	"
138	142			" "	Trace	0.95	"
142	146			" "	Trace	1.00	"
146	150			" "	"	1.10	"
150	154			" " Some oil rock	0.20	1.30	"
154	155			Oil Rock - Changed bits	0.45	1.45	"
155	157			" "	0.20	1.60	"
157	159			" "	0.20	1.25	"
159	161			Glass Rock	Trace	1.25	"
161	163			" "	"	1.00	"
163	165			" "	"	0.90	"
165	167			" "	0.10	1.25	"
167	169			" "	0.10	0.80	"
169	171			" "	Trace	0.90	"
171	175			" "			
175	171			Mostly Trenton			
171	181			Trenton			

DRILL HOLE RECORD

Lease. . . . Rowe Lease . . . . . .

Location of Hole . N1459 E 5763 . .

Drilled by . . . . . Webster - Perat

Examined by . Sullivan . . . . . .

Depth to Water . 80 ft. . . . . .

Hole Number. . 5 . . . . . .

Elevation . 993.4 . . . . . .

Oil Rock Elevation 861.0

Started . June 29 . . . . . .

Finished . July 4 . . . . . .

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil			
5	115			Yellow Lime			
115	138.5			Blue			
138.5				Oil Rock	Slight traces of		
138.5	143.5			Oil Rock			
143.5	159			Glass Rock	Pb. Zn. & Fe.		
159	163			Trenton			

DRILL HOLE RECORD

Lease. Rowe

Hole Number. 6

Location of Hole

Elevation. 999.4

Drilled by Webster

Oil Rock Elevation 850.9

Examined by Sullivan

Started July 5

Depth to Water 80'

Finished July 9

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	10			Soil			
10	110			Yellow Lime			
110	115			" " 2' opening	1.85	1.20	5.55
115	117			" " Not many cuttings	0.65	0.90	1.90
117	119			" "	2.80	1.45	2.30
119	121			Gray Lime	0.90	1.80	1.10
121	123			" "	0.65	2.20	0.15
123	125			" "	2.20	2.40	0.10
125	127			" "	2.15	2.10	0.10
127	129			" "	1.00	2.80	Trace
129	131			" "	0.80	2.00	"
131	133			Blue "	0.40	1.85	"
133	135			" "	0.60	2.35	"
135	137			" "	0.50	1.30	"
137	139			" " Oil Rock			
				Oil Rock at 138.5			
138.5	141			Oil Rock			
141	143			" " at 143.5			
				(5' Oil Rock)			
143.5	145			Glass Rock			
145	159			" "			
159	165			Trenton Lime (Somewhat decomposed)			

DRILL HOLE RECORD

Lease . . . Rowe . . . . . Hole Number . . 7 . . . . .

Location of Hole . . . . . Elevation. . . 1013.05 . .

Drilled by . . . Haherty . . . . . Oil Rock Elevation . 8590 .

Examined by . . . Sullivan . . . . . Started . . July 5 . . . .

Depth to Water . . 80' . . . . . Finished . . July 10 . . . .

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil			
5	123			Yellow Lime (Chert)			
123	125			" "			
125	135			Gray Lime			
135	137			" "	0.20	1.10	Trace
137	139			" "	0.20	1.15	.10
139	141			" "	0.25	1.00	Trace
141	147			" "			
147	151			Blue "			
151	153			" "	0.30	1.15	Trace
153	155	Error in		" " Oil R ock at 154.5	0.35	1.40	0.10
155	157	measuring string		Oil Rock(6' of oil R ock)	0.75	1.25	Trace
157	160			Oil Rock	0.80	1.40	"
162	164				0.20	1.45	"
164	166			Glass Rock			
166	179			" "			

(Unable to drill as drill would not sharn, possible crevise or Pitch)

DRILL HOLE RECORD

Lease . . . . . Rows Lease . . . . . Hole Number. . 8 . . . . . .

Location of Hole. . . . . Elevation . . . 998 . . . . . .

Drilled by. . . Webster . . . . . Oil Rock Elevation. . 860 . . .

Examined by . . Sullivan . . . . . Started . . . July 9, 1946 . .

Depth to Water . 80 ft. . . . . Finished . . . July 12, 1946 .

Depth From	Depth To	ZN.	FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	10			Soil			
10	100			Yellow Lime			
100	105			" " Darker	0.45	0.65	Trace
105	110			" " "	2.15	0.95	"
110	112			" " "	2.85	1.40	"
112	114			" " "	1.25	1.00	"
114	116			Drab & Gray	0.60	1.05	"
116	118			Gray	0.45	0.90	"
118	120			"	0.35	1.00	"
120	122			"	0.65	0.90	"
122	124			"	0.45	1.50	"
124	126			"	0.35	1.50	"
126	128			"	0.25	1.00	"
128	130			Blue Lime	0.20	1.05	"
130	132			" "	0.25	1.15	"
134	136			" "	0.45	1.15	"
136	138			Blue & Some Oil Rock	1.25	2.30	"
138				Oil Rock	4.05	2.80	"
138	140			" " } 3.5 ft.			
140	141			" " }			
140	142			Oil Rock & Glass	0.85	1.85	"
142	144			Glass Rock	0.70	1.65	"
144	146			" "	1.00	1.60	"
146	148			" "	0.60	1.50	"
148	150			" "	0.85	1.25	"
150	152			" "	0.75	1.05	"
152	154			Trenton	0.55	1.45	"
154	156			"	0.55	1.20	"
156	158			"	0.50	1.15	"
158	160			"	0.40	3.30	"

DRILL HOLE RECORD

Lease. . . . Rowe . . . . . .

Location of Hole . . . . . .

Drilled by . . . Faherty . . . . . .

Examined by . Sullivan . . . . . .

Depth to Water . 85 ft. . . . . .

Hole Number. . . 9 . . . . . .

Elevation . 1004 . . . . . .

Oil Rock Elevation 855.8 . .

Started . July 10, 1946 . .

Finished July 16, 1946 . .

0	8	Soil			
8	60	Yellow Lime			
60	95	" "			
95	120	" Chert			
120	125	Gray			
125	130	"			
130	140	Blue Lime			
140	142	" "	0.25	1.00	Trace
142	144	" "	0.15	1.00	"
144	146	" "	0.15	1.05	"
146	148	Blue Rock	0.20	1.15	"
148	150	Oil Rock	0.15	1.45	"
150	153	" "			
153	154	Glass Rock			
154	156	" "			
156	171	" "			
171	175	Trenton			

DRILL HOLE RECORD

Lease . . . . . Rowe Lease . . . . . Hole Number . . . . . 10 . . . . . .

Location of Hole . . . . . Elevation . . . . . 998 . . . . . .

Drilled by . . . . . Webster . . . . . Oil Rock Elevation . . . . . 858 . . . . .

Examined by . . . . . Sullivan . . . . . Started . . . . . July 15, 1946 . . . . .

Depth to Water . . . . . 80 ft. . . . . Finished . . . . . July 19, 1946 . . . . .

0	4	Soil				
4	100	Yellow Lime				
100	110	" "				
110	112	Drab opening		2.85	2.10	0.60
112	114	"		3.55	2.35	0.80
114	116	Gray Lime		1.75	2.30	0.15
116	118	" "		1.25	1.70	0.25
118	120	" "		1.10	2.00	0.10
120	122	" "		1.00	1.50	0.10
122	124	" "		0.90	1.75	Trace
124	126	" "		0.65	1.90	"
126	128	" "		0.55	1.45	"
128	130	" "		0.45	1.45	"
130	132	Blue Lime		0.25	1.40	"
132	134	" "		0.40	1.80	"
134	136	" "		0.35	1.95	"
136	138	" "		0.35	1.85	"
138	140	" "		0.40	1.70	"
140	142	Oil Rock	4.5 ft.	0.35	1.60	"
142	144	" "		0.55	2.25	"
144	144.5	" "				
144.5	146	Glass Rock				
146	148	" "				
148	150	" "				
150	160	Trenton				

DRILL HOLE RECORD

Lease..Rowe.Lease..... Hole Number .11.....

Location of Hole..,..... Elevation..1003.6.....

Drilled by ....Faherty..... Oil Rock Elevation....855.6.....

Examined by...Sullivan..... Started....July.18,.1946.....

Depth to Water...73'..... Finished...July.22,.1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil				
5	125			Yellow Lime				
125	138			Gray Lime				
138	140			Blue		0.20	1.30	Trace
140	142			"		0.15	1.00	"
142	144			"		0.15	0.90	"
144	146			"		0.25	1.10	"
146	148			" Some Oil Rock		0.15	1.15	"
148	150			Oil Rock) 5 ft.		0.15	1.10	"
150	152			" ")		0.25	1.05	"
152	154			" "		0.25	0.95	"
154	156			Oil Rock & Glass Rock				
156	168			Glass Rock				
168	174			Trenton Lime				

DRILL HOLE RECORD

Lease....Rowe Lease.....

Hole Number....12.....

Location of Hole.... .....

Elevation.....998.....

Drilled by....Webster.....

Oil Rock Elevation..858 .....

Examined by....Sullivan.....

Started.....July 19, 1946.....

Depth to Water...80 ft.....

Finished....July 26, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil			
5	110			Yellow Lime			
110	130			" "			
130	134			Gray Lime	0.25	1.00	Trace
134	136			" "	0.20	1.00	Trace
136	138			Blue-Trace Zn.	0.20	1.00	"
138	140			" & some oil rock	0.15	1.10	"
140	142			Oil Rock (3' oil rock)	0.20	1.20	"
142	144			Glass Rock	0.10	1.00	"
144	146			" "	0.10	1.00	"
146	148			" "	0.10	1.05	"
148	150			" "	0.10	0.80	"
150	160			" "			
160	162			Trenton-altered material			
162	168			Trenton			

DRILL HOLE RECORD

Lease.....ROWE.....

Hole Number.....13.....

Location of Hole..... .....

Elevation.....1004.61.....

Drilled by ..M. Faherty.....

Oil Rock Elevation...857.61.....

Examined by ..G. L. Sullivan.....

Started....July 23, 1946.....

Depth to Water...85 ft.....

Finished...July 26, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	4			Soil				
4	113			Yellow lime				
113	123			" "				
123	138			Gray lime				
138	147			Blue lime				
147	154			Oil Rock				
154	168			Glass Rock				
168	169			Trenton				

B L A N K

DRILL HOLE RECORD

Lease...Rowe..... Hole Number.....14.....

Location of Hole..... Elevation.....987.5.....

Drilled by..M. Faherty..... Oil Rock Elevation...857.5.....

Examined by...Sullivan..... Started...July 26, 1946.....

Depth to Water...80 ft..... Finished...July 31, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	100			Yellow Lime				
100	105			" " Some clay				
105	110			" " Some green clay present				
110	115			Gray Lime				
115	126			Blue "				
126	128			Oil Rock				
128	130			" " Trace Zn. & Pb.				
130	131			" "				
131	132			Glass Rock				
132	134			" "		0.10	0.90	Trace
134	136			" "		0.20	0.65	"
136	138			" "		0.10	1.00	"
138	140			" "		0.15	0.75	"
140	142			" "		0.10	0.70	"
142	144			" "		0.10	0.70	"
144	146			" " Green Clay		0.10	0.75	"
146	148			" "				
148	150			" "				
150	152			Trenton				

DRILL HOLE RECORD

Lease.....Rowe..... Hole Number.....15.....

Location of Hole..... Elevation.... .979.5.....

Drilled by.....Faherty..... Oil Rock Elevation...861.7.....

Examined by...Sullivan..... Started.....Aug. 1, 1946.....

Depth to Water....65 ft..... Finished.....Aug. 6, 1946.....

Depth		Estimated		Description of Ground, Etc. Rec.	Assay		
From	To	ZN.	FE.		ZN.	FE.	PB.
0	8			Soil			
8	65			Yellow Lime			
65	70			" "			
70	75			" "	0.15	0.40	Trace
75	80			" "	0.10	0.35	"
80	85			" "			"
85	105			" "			"
105	110			Gray Lime	0.25	0.95	"
110	112			" "	0.15	0.85	"
112	114			" & Blue, course Zn.	0.50	1.10	"
114	116			Blue	0.50	1.15	"
116	118			" & oil rock } 4½' oil rock	0.15	1.35	"
118	120			Oil Rock }	0.15	1.35	"
120	122			" "	0.25	2.60	"
122	124			Glass Rock	0.10	1.65	"
124	126			" "	0.15	1.20	"
126	128			" "	0.25	0.90	"
128	130			" "	0.15	0.90	"
130	131			" "	0.15	0.90	"
131	133			" "	0.15	0.75	"
133	135			" "	0.15	0.75	"
139	141			" "	0.30	1.70	"
141	148			Trenton			

DRILL HOLE RECORD

Lease..Rowe..... Hole Number.....16.....

Location of Hole..... Elevation.....998.....

Drilled by....John Welch..... Oil Rock Elevation...854.....

Examined by...Sullivan..... Started...Aug. 1, 1946.....

Depth to Water....45'..... Finished..Aug. 7, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil			
6	114			Yellow Lime			
114	118			" "			
118	122			Gray Lime	0.30	0.85	Trace
122	126			Blue "	0.20	1.00	"
126	130			" "			
130	134			" "			
134	136			" "			
136	138			" " Some clay			
138	140			" "	0.10	1.00	
140	142			" "	0.10	1.15	
142	144			" " Some oil rock	0.05	1.50	
144	146			Oil Rock	0.15	1.10	
146	148			" "	0.15	1.10	
148	150			Glass Rock	0.15	1.10	
150	152			" "	0.10	1.35	
152	154			" "	0.15	0.95	
154	156			" "	Trace	0.85	
156	167			" "			
167	172			Trenton Lime			

Small opening at 168-170 ft.

DRILL HOLE RECORD

Lease.....ROWE.....

Hole Number.....17.....

Location of Hole.....

Elevation.....995.67.....

Drilled by.....R. Webster.....

Oil Rock Elevation.....857.67.....

Examined by.....G. L. Sullivan.....

Started.....Aug. 1, 1946.....

Depth to Water.....80 ft.....

Finished.....Aug. 24, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil			
5	107			Yellow Lime			
107	115			Drab Lime			
115	128			Gray "			
128	138			Blue "			
138	143			Oil Rock			
143	148			Glass Rock			

B L A N K

DRILL HOLE RECORD

Lease....Rowe Lease..... Hole Number.....18.....

Location of Hole..... Elevation.....979.3.....

Drilled by...Faberty..... Oil Rock Elevation...858.....

Examined by.....Geo..Sullivan... Started...Aug..6..1946.....

Depth to Water...65'..... Finished...Aug..9..1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	8			Soil			
8	50			Yellow lime- chert			
50	75			" " "			
75	100			" & drab lime			
100	105			Gray Lime			
105	109			" Shines Zn. & Fe.			
109	111			" & Blue - Shines Zn.			
111	113			Blue Trace Pb.			
113	115			" " "			
115	117			" " "			
117	119			"			
119	121			" Lime Some Oil Rock			
121	126			Oil Rock (5.5')			
126	127			Glass Rock			
127	129			" " Shines Zn.			
129	131			" " "			
131	133			" " "			
133	135			" " "			
135	144			" " Trace Zn. & Pb.			
144	145			Trenton Lime			
145	147			" "	0.20	3.60	
147	149	7 ½ %		" Course Zn.	0.50	3.20	0.05
149	151			" Shines "	0.75	4.50	0.05
151	153			" "	0.30	3.30	Trace
153	155			" "	0.25	2.15	"
155	157			" "	0.10	1.65	"
157	159			" " Opening	0.25	0.95	"

DRILL HOLE RECORD

Lease: Rowe Lease

Hole Number: 19

Location of Hole:

Elevation: 1001

Drilled by: John Welch

Oil Rock Elevation: 846

Examined by: Geo. Sullivan

Started: Aug. 8, 1946

Depth to Water: 35 ?

Finished: Aug. 20, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil				
7	60			Yellow Lime - Chert				
60	65			" opening - no cuttings				
65	95			Yellow Lime				
95	100			" " Trace Pb.				
100	117			" "				
117	119			" " opening				
119	121			No cuttings				
121	127			Yellow Lime - Trace Pb.				
127	129			Gray Lime - Heavy Fe		0.50	2.60	Trace
129	131			" " " "				
131	143			" " " "				
143	153			Blue Lime - Fe				
153	157			Oil Rock, calcite				
157	159			" " "		0.40	3.20	Trace
159	161			Glass Rock--Tr. Zn. & Fe.		0.25	1.95	"
161	167			" " Strong H_2O No Cuttings				
167	169			Glass Rock - Few Cuttings		0.10	2.00	"
169	171			" " " "		0.15	2.75	"
171	173			" " " "				
173	175			" " " "				
175	177			" " " "		0.90	2.80	"
177	179			2 foot opening				
179	181			Trenton Lime Fine Zn.		1.55	2.60	0.10
181	183			" " " "		1.75	6.15	0.15
183	185			" " " "		1.05	5.75	0.10
185	187			" "		0.65	5.50	0.10
187	189			" "		0.75	7.45	Trace
189	191			" "		0.25	6.10	"
191	193			" " Few Cuttings				
193	203			" " Much Fe in the trenton				

Hole contains many fractures & openings

DRILL HOLE RECORD

Lease.....ROWE..... Hole Number.....20.....

Location of Hole..... Elevation.....977.74.....

Drilled by.....M. Faherty..... Oil Rock Elevation.....859.74.....

Examined by.....G. L. Sullivan..... Started.....Aug. 10, 1946.....

Depth to Water.....30 ft..... Finished.....Aug. 13, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc, Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil			
5	100			Yellow Lime			
100	110			Gray "			
110	118			Blue "			
118	124			Oil Rock			
124	138			Glass Rock			
138	146			Trenton			

B L A N K

Hole number 21

Elevation 1009.22

Oil rock elevation 849.71

Started 1946

Completed ..... Sept. 20, 1946

Depth Estimated From	To	Description of Ground, etc. Rec.	Assay Au.	Ag.	%
0	6	Soil			
6	65	Yellow Lime			
65	95	" "			
95	115	" "			
115	120	Grab "			
120	145	Grey "			
145	150	Blue "			
150	155	Oil rock			
155	159	" "			
159	161	Silver rock			
161	172	" "			
172	174	" "	0.20	2.50	1.30
174	175	" "	0.25	1.00	Trace
175	179	Trenton	1.10	2.70	0.90
179	180	" Rock cuttings	1.50	4.00	0.45
180	184	" Drilling	1.00	3.00	0.10
184	185	"			

DRILL HOLE RECORD

Lease.....Rowe.....

Hole Number.....22.....

Location of Hole.....

Elevation.....1020.56.....

Drilled by..R. Webster.....

Oil Rock Elevation.....836.56.....

Examined by.....G. L. Sullivan.....

Started.....Aug. 26, 1946.....

Depth to Water.....50 ft.....

Finished.....Sept. 2, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	4			Soil			
4	104			Yellow Lime			
104	154			Drab "			
154	164			Gray "			
164	166			Blue - Much Fe			
166	180			" Trace Zn. Much Fe.			
180	182			"	0.15	1.05	Trace
182	184			"	0.15	2.05	"
184	186			Oil Rock	0.10	3.30	1.25
186	188			" "	0.20	4.05	3.35
188	190			Glass Rock	0.15	1.10	Trace
190	192			" "	0.15	0.85	"
192	194			" "	0.15	1.05	"
194	196			" "	0.10	0.85	"
196	198			" "	0.15	0.80	"
198	200			" "	0.20	2.65	"
200	202			Trenton Lime	0.40	4.70	3.15
202	204			" "			
204	208			" "			

DRILL HOLE RECORD

Lease: Rowe

Hole Number: 23

Location of Hole:

Elevation: 1010.46

Drilled by: R. Lobster

Oil Rock Elevation: 841.46

Examined by: G. L. Sullivan

Started: Sept. 2, 1946

Depth to Water: 45 ft.

Finished: Sept. 10, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	12			Soil				
12	90			Yellow Lime				
90	125			Drab				
125	143			"				
143	159			Gray Lime				
159	169			Blue "				
169	173			Oil Rock				
173	175			" "		3.40	5.30	Trace
175	177			" "		1.80	4.70	0.10
177	179			Glass Rock		0.15	2.30	0.10
179	181			" "		0.10	1.40	0.90
181	183			" "		0.10	1.70	0.15
183	185			" "		0.10	1.70	Trace
185	187			" "		0.15	1.60	"
187	189			" "		0.10	1.60	"
189	191			" "		9.30	6.60	1.60
191	193			Trenton		5.10	6.00	0.30
193	195			"		8.20	7.50	0.95
195	197			"		8.60	8.10	1.50
197	199			"		3.90	15.00	1.40
199	201			"		2.20	18.00	1.35
201	203			"		2.10	19.10	0.85
203	205			"		1.00	7.40	0.15
205	207			"		1.00	5.70	0.50

DRILL HOLE RECORD

Lease: Rowe

Hole Number: 24

Location of Hole:

Elevation: 1005.07

Drilled by: R. Webster

Oil Rock Elevation: 841.07

Examined by: G. L. Sullivan

Started: Sept. 12, 1946

Depth to Water: H_2O 40 ft.

Finished: Sept. 24, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Et. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil			
7	115			Yellow Lime			
115	120			" "			
120	150			Drab "			
150	155			Gray "			
155	163			Blue Lime			
163	164			Oil Rock			
164	170			" "			
170	182			Glass Rock			
182	184			" "			
184	186			" "	1.50	3.90	0.25
186	194			Trenton Lime			

DRILL HOLE RECORD

Lease: Rowe

Hole Number: 25

Location of Hole:

Elevation: 1001.97

Drilled by: W. Meherty

Oil Rock Elevation: 851.97

Examined by: C. E. Sullivan

Started: Sept. 11, 1946

Depth to Water: 45 ft.

Finished: Sept. 17, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	115			Drab Lime				
115	118			Opening in Drab				
118	125			Drab - Considerable Fe				
125	140			Gray Lime				
140	148			Blue "				
148	150			Oil Rock - opening				
150	154			" " Rew cuttings				
154	156			" "				
156	158			" " " "				
158	160			Glass Rock opening				
				Oil & Glass rock contained no Fe or black water				

DRILL HOLE RECORD

Lease: Rowe
Hole Number: 26
Location of Hole:
Elevation: 1012.28
Drilled by: M. Faherty
Oil Rock Elevation: 839.28
Examined by: G. L. Sullivan
Started: Sept. 18, 1946
Depth to Water: 45'
Finished: Sept. 25, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil			
7	65			Yellow Lime			
65	90			" "			
90	135			Drab " Trace Pb.			
135	140			" " " "			
140	145			Gray--Considerable Fe. Tr. Pb. & Zn.			
145	150			" Shines Pb. & Zn.	0.25	1.50	Trace
150	155			" " " "	0.50	2.70	"
155	157			" " " "	0.50	2.00	"
157	159				0.50	1.50	
159	161			" " " "	0.50	1.40	"
161	163			" " " "	0.40	1.30	"
163	165			Gray & Blue	0.50	2.10	"
165	167			Blue Lime	2.00	4.00	"
167	169	2%	3.50	" "	1.80	3.70	"
169	171	4.00	5.50	" "	4.60	5.80	"
171	173	1.0	2.50	" "	1.20	2.60	"
(173	175	3.00	12.00	" " Oil Rock	4.00	15.00	0.10
5.5'(175	177			Oil Rock	2.10	9.00	Trace
Oil R(177	179			" "	1.60	5.70	"
179	181			Glass Rock	1.80	4.00	0.75
181	183			" "	2.00	4.40	0.10
183	185			" "	2.40	5.40	0.30
185	187			" "	2.40	5.40	0.40
187	189			" "	1.50	2.90	0.35
189	191			" "	8.10	5.60	1.55
191	193			Trenton Lime	2.50	5.70	0.85
193	195			" "	0.90	3.30	0.30
195	197			" "	0.80	3.00	0.30
197	199			" "	1.10	4.90	0.15
199	201			" "	0.90	15.70	Tr.
201	203			" "	0.90	6.30	0.85
203	205			" "	0.70	10.40	Tr.
205	207			" "	0.60	4.60	1.55
207	209			Pb. Disseminated in Lime	0.70	3.00	2.35
209	211			"	1.40	3.10	0.90
211	213			"	0.60	3.00	0.15
213	215				1.30	2.80	Tr.
215	217				0.60	2.40	"
217	219				0.70	2.20	"

DRILL HOLE RECORD

Lease.....Rowe..... Hole Number.....27.....

Location of Hole..... Elevation.....999.27.....

Drilled by.....J. Welch..... Oil Rock Elevation.....855.27.....

Examined by.....G. L. Sullivan..... Started.....Sept. 21, 1946.....

Depth to Water.....50 Ft..... Finished.....Sept. 30, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil			
7	60			Yellow Lime			
60	100			" "			
100	120			Drab "			
120	130			Gray "			
130	134			Blue "			
134	138			" "			
138	142			" "			
142	144			" "			
144	146			Oil Rock - Pale			
146	150			" " "			

TRACES

Lease: Howe

Hole Number: 22

Location of Hole:

Elevation: 1014.27

Drilled by: Liberty

Oil Rock Elevation: 839.27

Examined by: J. L. Sullivan

Started: Sept. 27, 1940

Depth to Water: 45 ft.

Finished: Oct. 1, 1940

Depth From	Depth To	Estimated Ft.	Estimated In.	Description of Ground, Etc. Rec.	Assay Ft.	Assay In.	Assay Gl.
0	7			Soil			
7	85			Yellow Lime			
85	140			Crab Lime			
140	145			Grey Lime			
145	150			" Much Fo. & Tr. Pb.			
150	154			"			
154	162			"			
162	168			Blue Lime			
168	170			" "	2.30	5.70	Trace
170	172			" "	0.80	2.70	"
172	174			"	0.70	3.70	"
174	176			" Trace Oil Rock	2.30	6.20	"
176	178			Oil Rock	4.60	10.10	0.10
178	180			" "	7.10	10.80	0.15
180	182			" " Shelley	4.30	7.70	Trace
182	184			Black Rock	1.50	3.00	0.50
184	186			" "	0.70	2.50	0.25
186	188			" " Considerable Fe.	0.60	3.00	0.10
188	190			" "	1.00	3.00	1.60
190	192			" "	1.20	2.70	1.30
192	194			" "	0.60	4.50	0.40
194	195			" ")			
195	196			Trenton)	1.80	7.70	0.20
196	198			"	0.90	4.70	0.65
198	200			" Strong Water	0.80	6.20	1.05
200	202			"	0.70	4.70	0.10
202	204			"	0.90	6.60	Trace
204	206						"

DRILL HOLE RECORD

Lease: Howe

Hole Number: 29

Location of Hole:

Elevation: 1011.05

Drilled by: R. Webster

Oil Rock Elevation: 842.05

Examined by: G. L. Sullivan

Started: Oct. 3, 1946

Depth to water: 45 ft.

Finished: Oct. 14, 1946

Depth From	Depth To	Estimated IN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay IN.	Assay FE.	Assay PB.
0	7			Soil				
7	90			Yellow Lime				
90	140			Drab lime				
140	160			Gray "				
160	164			Blue " Tr. Pb.				
164	168			"				
168	169			"				
169	172			Oil Rock				
172	176			" "	Tr.	4.00	1.00	
176	178			Glass Rock				
178	190			" "				
190	192			Trenton Lime	Tr.	4.00	0.50	
192	194			" "	"	4.90	1.15	
194	196			" "	"	4.90	1.30	

DRILL HOLE RECORD

Lease... Rowe ..... Hole Number..... 30 .....

Location of Hole..... Elevation..... 1016.84 ....

Drilled by..... John Welch ..... Oil Rock Elevation..... 845 .....

Examined by..... G. L. Sullivan ..... Started..... Sept. 30, 1946 .....

Depth to Water..... 50 ft. ..... Finished..... Oct. 9, 1946 .....

Depth From	Depth To	Estimated Ab.	Estimated Ab.	Description of Ground, Etc. Rec.	Assay Ib.	Assay PE.	Assay PB.
0				Soil			
7	95			Yellow Lime			
95	151			Drab "			
151	163			Gray " Dark			
163	171			Blue Lime			
171	172			" ")			
172	175			Oil Rock)	1.10	5.30	0.15
175	176			" ")			
176	177			Glass Rock)	0.55	2.90	0.40
177	179			" "	0.20	1.80	0.10
179	181			" "	0.20	1.40	Trace
181	183			" "	2.70	1.80	"
183	185			" "	0.50	1.10	"
185	187			" "	0.30	1.20	"
187	189			" "	0.80	6.40	"
189	191			Trenton	0.20	5.10	0.65
191	193			"	0.20	2.60	0.10
193	195			"	0.20	2.10	0.20
195	197			"			

DRILL HOLE RECORD

Lease.....[illegible]..... Hole Number....31.....

Location of Hole..... Elevation.....

Drilled by..... Oil Rock Elevation. .....

Examined by..... Started.....

Depth to Water..... Finished.....

Depth From	Depth To	Estimated Ft.	Estimated In.	Description of Ground, Etc.	Rec.	Assay Ft.	Assay In.	Assay Ft.

Hole not completed

Lost drill bet at 90 feet

DRILL HOLE RECORD

Lease: Rowe
Hole Number: 32
Location of Hole:
Elevation: 1018.03
Drilled by: John welch
Oil Rock Elevation: 840
Examined by: G. L. Sullivan
Started: Oct. 9, 1946
Depth to Water: 50 ft.
Finished: Oct. 17, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	95			Yellow Lime				
95	145			Drab "				
145	172			Gray "				
172	174			Blue "				
174	176			"				
176	178			Blue & Oil Rock		0.50	3.30	Trace
178	180			Oil Rock		0.90	5.40	2.60
180	186			Glass Lime				
186	188			" "		0.30	1.90	1.45
188	190			" "				
190	192			" "				
192	194			" "		1.40	9.50	0.85
194	196			Trenton				
196	198			"				
198	200			" Strong H_2O				
200	202			"				

WELL HOLE RECORD

Lease: [illegible]

Hole Number: 33

Location of hole:

Elevation: 1016.38

Drilled by: M. Fumerty

Oil Rock Elevation: 839

Examined by: C. L. Sullivan

Started: Oct. 10, 1946

Depth to water: 50 Ft.

Finished: Oct. 18, 1946

Depth From	Depth To	Estimated Am.	Estimated Ft.	Description of Ground, Etc. Rec.	Assay Am.	Assay Ft.	Assay Au.
0	6			Soil			
6	85			Yellow Lime			
85	154			Drab "			
154	170			Gray "			
170	177			Blue "			
177	178			Oil Rock			
178	180			" "	0.20	3.70	0.15
180	182			" "	0.10	3.30	1.70
182	183			" "			
183	184			Glass Lime			
184	186			" "			
186	188			" "			
188	190			" "	0.15	2.80	1.65
190	192			" "			
192	194			" "			
194	196			" "	1.20	5.10	0.10
196	198			Trenton			
198	200			"			

DRILL HOLE RECORD

Lease: ROTE

Hole Number: 34

Location of Hole:

Elevation: 1913.73

Drilled by: R. Webster

Oil Rock Elevation: 839

Examined by: G. L. Sullivan

Started: Oct. 15, 1946

Depth to Water: 50 '

Finished: Oct. 23, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil				
7	145			Drab Lime				
145	150			Gray "		0.70	2.50	1.25
150	155			" "		1.70	4.30	3.85
155	165			" "				
165	167			" "		1.30	2.00	2.25
167	169			Blue "		1.40	2.80	0.35
169	171			" "		1.00	3.30	0.10
171	173			" "		0.40	2.60	Trace
173	175			" "		1.30	2.00	"
175	177			Oil Rock		1.60	5.20	"
177	179			" "		7.40	11.10	"
179	181			" "		2.20	9.80	"
181	183			Glass Rock		1.10	2.30	0.10
183	185			" "		0.90	2.00	1.15
185	187			" "		0.90	1.60	0.45
187	189			" "		0.90	2.70	1.00
189	191			" "		0.60	2.30	1.05
191	193			" "		0.50	2.10	0.10
193	195			" "		0.40	3.40	0.10
195	197			Trenton		0.50	11.90	3.15
197	199			"		0.50	10.60	1.60
199	201			" "		0.30	6.60	0.80

DRILL HOLE RECORD

Lease.....HOWE..... Hole Number..35.....

Location of Hole..... Elevation.....1011.93.....

Drilled by....M. Faherty..... Oil Rock Elevation....841.....

Examined by..G. L. Sullivan.... Started..Oct. 18, 1946.....

Depth to Water....45'..... Finished.....Oct. 28, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil				
7	30			Yellow Lime - Oxidized Fe				
30	75			" "				
75	150			Drab "				
150	163			Gray "				
163	167			Blue "		0.80	1.60	Trace
167	169			" "		0.40	1.40	"
169	171			" "		0.60	2.20	"
171	173			Oil Rock		0.20	1.30	"
173	175			" "		3.80	8.60	0.40
175	177			" "		10.30	12.30	0.10
177	179			" "		2.80	10.90	0.10
179	181			Glass Rock		1.00	3.30	Trace
181	183			" "		0.50	2.50	0.35
183	185			" "		0.30	2.20	0.90
185	187			" "		0.50	2.50	2.00
187	189			" "		0.30	1.30	1.20
189	191			" "		0.30	1.80	0.80
191	193			" "		7.70	5.00	2.45
193	195			Trenton Lime		3.20	3.50	2.00
195	197			" "		1.70	4.40	1.10
197	199			" "				

DRILL HOLE RECORD

Lease: Rowe

Hole Number: 36

Location of Hole:

Elevation: 1015.23

Drilled by: J. Welch

Oil Rock Elevation: 844.20

Examined by: G. L. Sullivan

Started: Oct. 19, 1946

Depth to Water: 60'

Finished: Nov. 3, 1946

Depth From	Depth To	Estimated Zn.	Estimated Fe.	Description of Ground, Etc. Rec.	Assay Zn.	Assay Fe.	Assay S.
0	7			Soil			
7	25			Yellow - Ocher--Clay & crevice			
25	95			" Lime			
95	125			Drab			
125	130			" Considerable Flint			
				Some Diss. Sp.			
130	145			Drab			
145	155			Gray			
155	160			" Some Diss. Sp.			
160	171			Blue Lime			
171	176			Oil Rock			
176	184			Glass Rock			
184	186			" "	0.80	2.80	0.45
186	188			" "	0.90	3.20	0.15
188	190			" "	2.00	7.70	0.75
190	192			Trenton	1.30	6.40	0.15
192	194			"	1.74	5.00	0.10

DRILL HOLE RECORD

Lease: Rowe

Hole Number: 37

Location of Hole:

Elevation: 1010.03

Drilled by: M. Faherty

Oil Rock Elevation: 842

Examined by: G. L. Sullivan

Started: Oct. 24, 1946

Depth to Water: 45 ft.

Finished: Oct. 31, 1946

Depth From	Depth To	Estimated ZN.	Estimated FT.	Description of Ground, Etc.	Rec. ZN.	Rec. FT.	Rec. IN.	Assay
0	7			Soil				
7	90			Yellow Lime				
90	145			Drab "				
145	164			Gray "				
164	168			Blue "				
168	178			Oil Rock				
178	188			Glass Rock				
188	190			" "				Shines
190	196			Trenton				

Hole Drilled Hard

DRILL HOLE RECORD

Lease.....Rowe..... Hole Number.....38.....

Location of Hole..... Elevation.....1015.33.....

Drilled by.....R. Webster..... Oil Rock Elevation.....833.38.....

Examined by.....G. L. Sullivan..... Started.....Oct. 23, 1946.....

Depth to Water...45.ft..... Finished.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil			
7	100			Yellow Lime			
100	155			Drab			
155	172			Gray			
172	174			Blue	1.80	6.20	0.55
174	176			"	1.30	4.50	0.10
176	178			"	2.00	6.10	0.10
178	180			"	4.20	7.70	0.10
180	182			"	7.80	9.30	Trace
182	184			Oil Rock	8.30	13.80	"
184	186			" "	2.90	9.20	"
186	187			" ")	1.80	8.70	"
187	188			Glass Rock)			
188	190			" "	1.40	8.10	"
190	192			" "	1.30	7.40	"
192	194			" "	1.30	3.40	1.30
194	196			" "	0.90	3.30	0.90
196	198			" "	1.00	4.10	0.95
198	200			Trenton			
200	202			"			
202	204			"			

DRILL HOLE RECORD

Lease.....Rowe..... Hole Number.....39.....

Location of Hole..... Elevation.....1013.63.....

Drilled by...M. Faherty..... Oil Rock Elevation. ..837.63.....

Examined by.....G. L. Sullivan..... Started.....Nov. 2, 1946.....

Depth to Water...45'..... Finished.....Nov. 13, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil				
7	95			Yellow Lime				
95	154			Drab				
154	158			Gray Lime				
158	162			" "		0.60	1.50	Trace
162	166			" "		0.25	1.40	"
166	168			" "		0.20	1.50	"
168	170			Blue Lime		0.90	1.20	0.20
170	172			" "		0.40	2.80	0.10
172	174			" "		0.30	2.90	0.10
174	176			" "		1.50	2.00	Trace
176	178			Oil Rock		0.50	6.10	"
178	180			" "		2.60	16.70	"
180	182			" "		1.50	11.50	"
182	186			#Ft.Glass Rock-1 ft.Oil Rock		1.50	4.50	1.20
186	188			Glass Rock		1.20	3.50	0.10
188	190			" "		1.20	3.50	0.65
190	192			" "		Tr.	3.00	Tr.
192	194			" "		Tr.	"	Tr.
194	196			Trenton		Tr.	"	Tr.
196	198			"		Tr.	"	Tr.

DRILL HOLE RECORD

Lease: ROYL

Hole Number: 40

Location of Hole:

Elevetion: 1015.83

Drilled by: R. Webster

Oil Rock Elevation: 835.83

Examined by: G. L. Sullivan

Started: Nov. 5, 1946

Depth to Water: 45 ft.

Finished: Nov. 18, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil				
7	85			Yellow Lime				
85	145			Drab "				
145	155			" "				
155	172			Gray Lime				
172	174			Blue "		0.80	2.80	0.45
174	176			" "		0.90	4.30	0.55
176	178			" "		2.80	3.80	0.85
178	180			" "		5.50	5.80	0.80
180	182			Oil Rock		9.20	7.60	0.25
182	184			" "		2.50	4.60	Trace
184	185			Oil Rock)				
185	186			Glass Rock)		2.70	3.60	0.25
186	188			" "		1.00	2.90	Trace
188	190			" "		0.50	2.90	"
190	192			" "		0.80	2.80	0.40
192	194			" "		0.60	3.70	2.10
194	196			" "		0.50	4.10	0.45
196	198			" "		1.10	6.00	0.40
198	200			Trenton		1.40	3.20	0.45
200	202			"		1.10	3.40	0.55
202	204			"		0.70	3.60	0.15
204	206			"				

DRILL HOLE RECORD

Lease.ROLE..... Hole Number..41.....

Location of Hole..... Elevation....1014.73.....

Drilled by...J. Walch..... Oil Rock Elevation...846.73.....

Examined by...G. L. Sullivan... Started.....Nov. 6, 1946.....

Depth to Water..70 Ft..... Finished.....Nov. 18, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	85			Yellow Lime				
85	110			" "				
110	125			" "				
125	130			Drab "				
130	135			" Some disseminated ZN.				
135	140			" " "		0.60	1.40	Trace
140	145			Gray Lime		1.70	2.10	"
145	150			" "		0.50	1.00	"
150	155			" "				
155	160			" "				
160	165			Blue Lime		0.40	1.20	Trace
165	168			" ")		0.50	1.30	0.10
168	179			Oil Rock)				
170	174			" "		0.80	3.90	0.55
174	188			Glass Rock				
188	190			Trenton				

DRILL HOLE RECORD

Lease: ROWE
Hole Number: 42
Location of Hole:
Elevation: 1010.8
Drilled by: M. Faherty
Oil Rock Elevation: 838
Examined by: G. L. Sullivan
Started: Nov. 13, 1946
Depth to Water: 40 ft.
Finished: Nov. 20, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	130			Yellow Lime				
130	150			Drab "				
150	160			Gray "				
160	165			" "		0.15	1.90	Trace
165	170			Blue "		0.10	1.40	0.15
170	173			" ")		1.20	4.50	0.10
173	175			Oil Rock)				
175	177			" "		1.30	3.50	Trace
177	179			Glass Rock		0.20	1.70	"
179	181			" "		0.15	1.40	"
181	183			" "		0.10	2.00	"
183	185			" "		0.30	2.40	"
185	187			" "		0.20	2.70	"
187	189			" "		1.80	4.30	1.55
189	191			Trenton		1.10	6.00	1.35
191	193			"		0.50	4.40	0.35
193	195			" Strong Water		0.40	6.30	0.25
195	197			" " "		0.80	4.30	Trace
197	199			"		6.20	25.30	1.15
199	201			"		3.50	18.20	0.20
201	203			"		1.20	16.20	Trace

DRILL HOLE RECORD

Lease.....ROWE.....

Location of Hole.....

Drilled by.....REO WEBSTER.....

Examined by..G. L. SULLIVAN....

Depth to Water.....

Hole Number.....43.....

Elevation.....1015.7.....

Oil Rock Elevation.....834.....

Started.....Nov. 19, 1946.....

Finished.....Dec. 4, 1946.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	8			Soil				
8	105			Yellow Lime				
105	155			Drab "				
155	175			Gray "				
175	178			" "		1.90	2.40	Trace
178	180			Blue Lime		14.40	7.50	"
180	181			" ")		16.80	9.50	"
181	182			Oil Rock)				
182	184			" "		4.10	4.80	"
184	186			Glass Rock		1.00	1.60	0.15
186	188			" "		0.70	1.30	Trace
188	190			" "		0.70	2.50	1.10
190	196			" "				
196	198			" "				
198	204			Trenton				

DRILL HOLE RECORD

Lease..... ROLL ..... Hole Number..44.....

Location of Hole..... Elevation.....994.5.....

Drilled by...John welch..... Oil Rock Elevation...849.....

Examined by...G. L. Sullivan..... Started...Nov. 21, 1946.....

Depth to Water.....35 feet..... Finished.....Dec. 3, 1946.....

Depth From	Depth To	Estimated R.	Estimated Tk.	Description of Ground, Etc.	Rec.	Assay M.	Assay [illegible]	Assay [illegible]
0	6			Soil				
6	125			Drab				
125	140			Gray Lime		3		
140	145			Blue "		1		
145	149			" "				
149	156			Oil Rock			1	
156	173			Glass Rock			K	
173	175			Trenton				

DRILL HOLE RECORD

Lease: ROYE

Hole Number: 45

Location of Hole:

Elevation: 1004.2

Drilled by: Faherty

Oil Rock Elevation: 837

Examined by: G. L. Sullivan

Started: Nov. 22, 1946

Depth to Water: 40 ft.

Finished: Nov. 30, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	8			Soil			
8	85			Yellow Lime			
85	140			Drab "			
140	145			Gray Lime			
145	150			" "	1.00	1.10	Trace
150	155			" "	0.30	1.00	"
155	160			" "	0.30	1.10	"
160	165			Blue Lime	0.50	1.30	"
165	167			Oil Rock	0.70	4.00	"
167	169			" "	4.40	18.80	0.75
169	171			" "	1.10	6.60	0.25
171	185			Glass Rock	0.60	2.00	0.10
185	193			Trenton			

DRILL HOLE RECORD

Lease: NO. 2

Hole Number: 46

Location of Hole:

Elevation: 1006.0

Drilled by: M. Faherty

Oil Rock Elevation: 839

Examined by: G. L. Sullivan

Started: Dec. 2, 1946

Depth to Water: 35 ft.

Finished: Dec. 9, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	100			Yellow Lime				
100	140			Drab Lime				
140	144			Gray Lime		0.30	2.20	1.45
144	148			" "		0.30	1.60	0.45
148	152			" "		0.20	1.80	0.40
152	156			" "		0.70	1.40	0.10
156	160			" "		0.70	2.30	0.10
160	162			Blue Lime		0.50	2.00	0.10
162	164			" "		0.40	1.80	Trace
164	166			" "		0.50	3.70	"
166	167			" ")		3.00	7.50	"
167	168			Oil Rock)				
168	170			" "		3.00	7.10	"
170	172			" "		2.00	4.90	1.25
172	174			Glass Rock		0.50	2.80	0.15
174	176			" "		0.40	2.80	Trace
176	178			" "		0.50	3.20	"
178	180			" "		0.15	1.60	"
180	182			" "		0.15	3.50	"
182	184			" "		0.15	4.50	"
184	186			Trenton Lime				
186	188			" "				

DRILL HOLE RECORD

Lease: ROLE

Hole Number: 47

Location of Hole:

Elevation: 1013

Drilled by: R. Webster

Oil Rock Elevation: 836

Examined by: G. L. Sullivan

Started: Dec. 4, 1946

Depth to Water: 40 feet

Finished: Dec. 16, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	5			Soil				
5	110			Decomposed lime				
110	140			Drab Lime				
140	150			" "				
150	165			Gray Lime				
165	170			Blue Lime				
170	175			" "				
175	177			Oil Rock				
177	179			" "				
179	180			Glass Rock				

Stopped in Glass Rock

DRILL HOLE RECORD

Lease ROWE

Hole Number 48

Location of Hole

Elevation

Drilled by M. Faherty

Oil Rock Elevation

Examined by G. L. Sullivan

Started Dec. 9, 1946

Depth to Water 40 feet

Finished Dec. 16, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	90			Yellow Lime				
90	125			Drab "				
125	130			" "		1.40	3.10	1.75
130	140			"		0.55	5.40	3.15
140	145			Gray		0.10	2.00	0.35
145	150			"		0.30	2.00	0.10
150	155			"		0.30	2.80	Trace
155	160			Blue		0.10	1.70	"
160	165			"		0.20	1.60	"
165	167			")				
167	170			Oil Rock)		0.40	3.50	"
170	172			" "		0.80	5.40	1.65
172	175			Glass Rock		0.15	2.30	1.25
174	176			" "		0.10	1.20	0.40
176	182			" "				
182	184			" "		0.50	5.20	Trace
184	187			" "				
187	190			Trenton Lime				

DRILL HOLE RECORD

Lease: ROYL

Hole Number: 49

Location of Hole:

Elevation:

Drilled by: R. Webster

Oil Rock Elevation:

Examined by: G. L. Sullivan

Started: Dec.17, 1946

Depth to Water: 45 feet

Finished: Dec. 23, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	85			Yellow Lime	B			
85	155			Drab Lime	L			
155	170			Gray Lime	A			
170	179			Blue Lime	N			
179	182			Oil Rock	K			
182	196			Glass Rock				
196	202			Trenton Lime				

DRILL HOLE RECORD

Lease: ROLE

Hole Number: 50

Location of Hole:

Elevation:

Drilled by: M. Faherty

Oil Rock Elevation:

Examined by: G. L. Sullivan

Started: Dec. 17, 1946

Depth to Water: 40 ft.

Finished: Dec. 26, 1946

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	6			Soil				
6	120			Yellow Lime				
120	130			Drab Lime	B			
130	145			Gray Lime		L		
145	157			Blue Lime			A	
157	166			Oil Rock				H
166	182			Glass Rock				K
182	184			Trenton Lime				

DRILL HOLE RECORD

Lease.....Rock..... Hole Number.....51.....

Location of Hole..... Elevation....1017.5.....

Drilled by....H. Webster..... Oil Rock Elevation.....838.5.....

Examined by.G. L. Sullivan..... Started.....Dec. 23, 1946.....

Depth to water.....45 feet..... Finished.....Jan. 10, 1947.....

Depth From	Depth To	Estimated ZN.	Estimated PB.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay PB.	Assay PB.
0	6			Soil				
6	115			Yellow Lime				
115	140			Drab Lime				
140	175			Gray Lime				
175	179			Blue Lime		2.30	3.70	1.50
179	181			Oil Rock		Trace	4.10	0.10
181	183			Glass Rock				
183	195			" "				
195	203			Trenton Lime				

DRILL HOLE RECORD

Lease: Road

Hole Number: 52

Location of Hole:

Elevation: 1001.3

Drilled by: M. Faherty

Oil Rock Elevation: 842.3

Examined by: G. L. Sullivan

Started: Dec. 26, 1946

Depth to Water: 60 ft.

Finished: Jan. 6, 1947

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc. Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil			
7	115			Yellow Lime			
115	135			Drab Lime			
135	150			Gray "			
150	159			Blue "			
159	160			Oil Rock			
160	162			" "			
162	164			" "	3.20	3.60	1.65
164	166			Glass Rock	0.60	2.40	0.10
166	179			" "			
179	182			Trenton			

DRILL HOLE RECORD

Lease.....ROLE.....

Hole Number.....53.....

Location of Hole.....

Elevation.....1002.5.....

Drilled by.....M. Faherty.....

Oil Rock Elevation.....844.5.....

Examined by.....C. L. Sullivan.....

Started.....Jan. 7, 1947.....

Depth to Water.....60 ft.....

Finished.....Jan. 14, 1947.....

Depth From	Depth To	Estimated ZN.	Estimated FE.	Description of Ground, Etc.	Rec.	Assay ZN.	Assay FE.	Assay PB.
0	7			Soil				
7	115			Yellow Lime				
115	135			Drab "				
135	150			Gray "				
150	154			" "		0.20	3.50	1.35
154	158			Blue Lime		0.10	1.80	0.10
158	160			Oil Rock		Trace	15.50	2.30
160	162			" "				
162	164			" "				
164	166			" "		1.80	4.10	0.55
166	168			Glass Rock		0.80	4.80	0.15
168	170			" "				
170	172			" "		Trace	2.00	3.65
172	174			" "		"	1.60	1.30
174	176			" "		0.50	1.30	3.60
176	178			" "		Trace	1.40	0.55
178	180			" "		0.50	2.00	1.35
180	182			" "		0.40	1.30	0.10
182	184			Trenton Lime				

DMEA Form
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

PROJECT SUMMARY REPORT

By: J. W. Alt July 11, 1958

1. Docket No. DMEA-2184 (Lead-Zinc)
Contract No. Idm-E342
Property: Rowe Leases
LaFayette County, Wisconsin

Operator: Mayer and Thiede Mining Company
Room 1625, 37 W. VanBuren Street
Chicago 5, Illinois

Operator's Property Rights: Lessee
Mining Lease made January 15, 1949.
Landlord's Subordination Agreement
dated January 2, 1952.

2. Contract dated June 13, 1952. To complete - 1 year.

Work Authorized

STAGE I

Drill 15 churn drill holes having an aggregate length of 3,000 feet and drilled at specified locations.

STAGE II

This stage shall consist of churn drilling an aggregate of 2,000 feet of holes at locations and to depths to be determined to the satisfaction of the Government.

Estimate of Costs
(* allowable maximums)

STAGE I

(1)	Independent Contracts	
	3,000 feet of churn drilling @ $1.60/ft* of hole completed	$4,800.00
(2)	Labor, Supervision, Consultants	
	Supervision:	
	Allowable @ $.15/ft* of drill hole completed	450.00
	Consultants:	
	Allowable for engineering and surveying services @ $.07/ft* of drill hole completed	210.00
(7)	Miscellaneous	
	Booking, stenographic help, transportation of labor, compensation and payroll taxes @ $.12/ft* of drill hole completed	360.00
	Assaying @ $.06/ft* of drill hole completed	180.00
	Total Estimated Cost, Stage I	$6,000.00

STAGE II

(1)	Independent Contracts	
	2,000 feet of churn drilling @ $1.60/ft* of hole completed	$3,200.00
(2)	Labor, Supervision, Consultants	
	Supervision:	
	Allowable @ $.15/ft* of drill hole completed	300.00
	Consultants:	
	Allowable @ $.07/ft* for engineering and surveying services of drill hole completed	140.00
(7)	Miscellaneous	
	Booking, stenographic help, transportation of labor, compensation and payroll taxes @ $.12/ft* of drill hole completed	240.00
	Assaying @ $.06/ft* of drill hole completed	120.00
	Total Estimated Cost, Stage II	$4,000.00

Total for Project	$10,000.00
Government Participation @ 50%	$ 5,000.00

Amendments

No. 1 Dated October 13, 1952.

Starting date of the work is extended from 120 days to 180 days.
Completion date is extended from June 13, 1953 to August 13, 1953.

No. 2 Dated February 16, 1953.

Starting date of the work is extended to March 1, 1953.
Extends completion date to March 1, 1954.

No. 3 Dated May 20, 1953.

Starting date extended to June 1, 1953.
Completion date extended to June 1, 1954.

Work Completed

Ten holes with an average depth of 156 feet were completed for a total of 1562.5 feet.

Contract drilling	$2,343.75	cost per foot	$1.50
Supervision	234.37	cost per foot	.15
Technical services	109.37	cost per foot	.07
Sampling and analysis	13.00	cost per foot	.008
Total Cost	$2,700.49		$1.728

Drilling under the contract started June 1, 1953 and the last hole drilled was completed July 23, 1953.
The contract was terminated before completion of the work by an agreement dated October 20, 1953.

3. Report of Review dated November 20, 1953.

Total cost as billed by Contractor	$2,861.75
Exceptions	161.26
Total Accepted Cost	$2,700.49
Government Participation @ 50%	$1,350.24

Operator's final report - none submitted
Field Team final report dated March 9, 1954

4. Certification date: April 6, 1954.

The discovery consisted of lead ores occurring as replacements in limestone rocks. Due to the small amount of work, no proper estimate could be mades as to an ore reserve tonnage.

5. Comments

Supervision and technical services were performed by a local consulting engineer employed by the Operator. The work was conducted satisfactorily; however, Stage I was not pursued to completion. The only ore discovered was in hole R2 southwest of the Rowe Lead Mine(Judd Shaft). The 35 feet of 5.66% lead in the lower Drab and Gray horizons may be mined if the Rowe Lead Mine is ever reopened. This was the only hole of the ten drilled that disclosed minable grade lead ore.

The Mayer and Thiede Mining Company, in October, requested that the exploration project be terminated. The Government concurred and the project was terminated by mutual agreement. However, the most potential part of the area was not explored, namely, that part to be explored by step 3, "- - - four holes in 'Area D' south of the Rowe zinc mine area at approximately the locations indicated by holes Nos. 12-15 inclusive - - -."

J. W. Alt

JWAlt/ss 7/9/58
Copy to: Docket
Mr. Johnson
Chron.

☒ Audited

☒ Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12/13/54
Incl. Voucher for July 1953

☐ Actual Cost

☒ Agreed Maximum Unit Costs

Name Mayer and Schiede Mining Company

Docket No. DMEA-3184

State Wisconsin

Commodity Lead - Zinc

Idm-E No. 342

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Churn	5,000'	$8,000.00	675'	$2,343.75	$2,700.49
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Exploration, Assays, Etc.		2,000.00		356.74	356.74
Totals		$10,000.00		$2,700.49	$3,700.49

Prepared by W. R. Hugenschmidt

71626

File Copy
Surname

500

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

JUN - 1 1954

Mr. H. K. Geyer
Kopp & McKichan
Attorneys at Law
First National Bank Building
Platteville, Wisconsin

Re: Docket No. DMEA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Leases
La Fayette County, Wisconsin
Contract No. Idm-E342

Dear Mr. Geyer:

This will acknowledge your letter of May 22 regarding the cited exploration project. I wish to thank you for advising us of the change of status outlined by you in your letter.

Sincerely yours,

S. O. Mittendorf (fw)

Administrator

WRGriswold:bjl (6/1/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Gildersleeve (USGS)
Region V (2)
Chron.

R.C.G.

KOPP & McKICHAN
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
PLATTEVILLE, WISCONSIN

W. ROY KOPP
M. A. McKICHAN
H. K. GEYER

TELEPHONE 2615

Sif Copies

Greenwald
Betty

May 22, 1954

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

Re: Docket No. DMEA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Leases
LaFayette County, Wisconsin
Contract No. Idm-E342

Dear Mr. Mittendorf:

This is to advise that the Mayer & Thiede Mining Company has surrendered it's leases which are the subject of this contract. To the best of our knowledge the land owners, Harold and Albert Rowe of Shullsburg, Wisconsin, now hold this land.

This Notice is being given to you in accordance with the request made in your letter of April 6th, 1954, in regard to this matter, that the Mayer & Thiede Mining Company notify you of any changes in ownership which might affect the Government's right to it's percentage royalty under the discovery made under the Exploration Project Contract.

If you have any further questions about this matter will you kindly address them to the writer of this letter.

Very truly yours,

KOPP & McKICHAN

H. K. Geyer

H. K. Geyer

HKG:ne

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

FILE COPY
SURNAME

Mr. James L. Mayer
Mayer & Thiede Mining Company
Room 1625
37 W. Van Buren Street
Chicago 5, Illinois

APR 8 1954

Re: Docket No. DMEA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Leases
La Fayette County, Wisconsin
Contract No. Idm-E342

Dear Mr. Mayer:

Transmitted herewith is a Certification of Discovery or Development related to the Exploration Project Contract No. Idm-E342, dated June 13, 1952, on the lands described in the contract.

By the terms of the Exploration Project Contract and of the Certification, all production from the land described in the contract after June 13, 1952, the date of the contract is subject to the Government's percentage royalty as set forth in the said contract until the sum of $1,350.24, which the Government has advanced as its participating interest is repaid, or until June 13, 1962, whichever occurs first.

Payments should be made to Mr. A. B. Needham, Executive Officer, DMEA Field Team, Region V, 2908 Celfax Avenue, South, Minneapolis 8, Minnesota. Checks should be drawn in favor of the Treasurer of the United States. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the checks 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 the products sold, the name of the purchaser, and the price and charges, certified to be correct by the purchaser.

You are requested to notify Mr. Needham of any changes in ownership or production rights that might affect the Government's right to its percentage royalty. Also, if production ceases at any time for an extended period please notify Mr. Needham at six-month intervals that such is the case.

Sincerely yours,

C. O. Mittendorf
Administrator

Enclosure

R.C.B.

WRGriswold/bjl (3/30/54)

Copy to: Docket
Irving Gumbel, Dr., MD, EPS
Mr. Hedges, 4604
Mr. Thayer, 5216, GSA Bldg
Admr. R. File
Op. Committee
Cont. & Audit Div.
Finance Office
Region V (2)
Mr. F. E. Johnson
Base Metals Div.
W. R. Griswold
Chron.

File Copy
Surname

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

APR 14 1954

Mr. and Mrs. Albert Rowe
R.F.D. 3
Shullsburg, Wisconsin

Re: Docket No. DMEA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Leases
La Fayette County, Wisconsin
Contract No. Idm-E342

Dear Mr. and Mrs. Rowe:

Enclosed is a copy of a Certification of Discovery or Development related to Exploration Project Contract No. Idm-E342, dated June 13, 1952, between the Mayer & Thiede Mining Company and the Government of the United States.

A copy of our letter to the Mayer & Thiede Mining Company which explains in detail the various matters pertaining to royalty payments is also enclosed.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures 2

WRGriswold/bjl (4/13/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kinkel
Region V (2)
Chron.

File Copy
Surname

Griswold

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

APR 14 1954

Mr. and Mrs. Harold Rowe
R.F.D. 3
Shullsburg, Wisconsin

Re: Docket No. DMEA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Leases
La Fayette County, Wisconsin
Contract No. Idm-E342

Dear Mr. and Mrs. Rowe:

Enclosed is a copy of a Certification of Discovery or Development related to Exploration Project Contract No. Idm-E342, dated June 13, 1952, between the Mayer & Thiede Mining Company and the Government of the United States.

A copy of our letter to the Mayer & Thiede Mining Company which explains in detail the various matters pertaining to royalty payments is also enclosed.

Sincerely yours,

A. O. Mittendorf (fw)

Administrator

Enclosures 2

WRGriswold/bjl (4/14/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Kinkel
Mr. Bishop
Chron.
Region V (2)

FILE COPY
SURNAME

Griswold
Martin
Chandler
Hoffman
Hedges
Guild
Selfridge
F E Johnson

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

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

APR 8 1954

Re: Docket No. DMEA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Leases
La Fayette County, Wisconsin
Contract No. Idm-E342

My dear Mr. Gumbel:

Enclosed is a copy of a Certification of Discovery or Development related to Exploration Project Contract No. Idm-E342.

The contract was dated June 13, 1952, with the Government participating to the extent of 50 per cent in an exploration project estimated to cost $10,000.00. Actual expenditures were $2,700.49, with the Government's share half of such amount.

The total amount of work provided for under the contract consisted of 5,000 feet of churn drilling. Work actually completed consisted of 1,562 feet churn drilled.

The discovery consisted of lead ores occurring as replacements in limestone rocks. Due to the small amount of work done, no proper estimate could be made as to an ore reserve tonnage.

Sincerely yours,

C. O. Mittendorf (for)
Administrator

WRGriswold/bjl (3/30/54)

Copy to: Docket
Region V (2)
Cont. & Audit Div.
Base Metals
Admr. R. File
Op. Committee
Mr. Hedges (4604)
Mr. Thayer (5216,GSA
Mr. F. E. Johnson
Mr. W. R. Griswold
Chron.

Enclosure

DMEA-2184

Defense Minerals Administration
RECEIVED
APR 6 1954

487 WA MP /I-BOM/

MINNEAPOLIS MINN 4-6-54 843A

GEORGE C SELFRIDGE CHAIRMAN OPERATING COMMITTEE

DEFENSE MINERALS

EXPLORATION ADMINISTRATION INTERIOR BUILDING WA

REURTT APRIL 5 MAILING ADDRESS HAROLD AND ALBERT ROWE IS RFD 3

SHULLSBURG WISCONSIN

A B NEEDHAM EXECUTIVE OFFICER FIELD TEAM REGION 5

5

MW 845A

APR 6 2 25 PM '54
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.

FILE COPY
SURNAME
Swanel
Selfridge
Nutting

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

4-5-54

T E L E T Y P E

WRGriswold/bjl,Rm. 4058,Ext. 3669

Base Metals Div., DMEA, Interior

14X4401(01) Revolving Fund
Defense Production Act, Interior (allocated Working Fund to Office of the Secy.)

X XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Date:

To: A. B. Needham, Executive Officer, DMEA Field Team, Region V, Minneapolis, Minnesota

Please advise immediately by teletype proper mailing addresses for Harold Rowe and Albert Rowe who are lessors on Mayer and Thiede project, Docket DMEA-2184, Contract Idm-E342.

George C. Selfridge
Chairman, Operating Committee (2B)

WRGriswold/bjl (4/5/54)

Copy to: Docket
Admr. R. File
Base Metals
Op. Committee
Accounts
Mr. Bishop
Mr. Kinkel
Chron.

R.C.S.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

March 12, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket 2184, Contract E-342, Mayer and Thiede Mining Company

Here are the original and three copies of the Field Team's final geologic-engineering report on the subject project.

You will note that there is a recommendation that the project be certified because of some minable grade lead which was disclosed in one hole on the Rowe property, which is contrary to our first notice to you that the project probably might not be certified.

A. B. Needham
A. B. NEEDHAM

Attachments

Final F.T. Report

Reviewed by
DMEA OPERATING COMMITTEE
3-19-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINAL GEOLOGICAL-ENGINEERING REPORT BY FIELD TEAM REGION V

DOCKET NO. D.M.E.A. 2184
CONTRACT NO. Idm-342
COMMODITY: Zinc-Lead

Mayer and Thiede Mining Company
Lafayette County, Wisconsin

W. A. Grosh, Mining Engineer
U.S. Bureau of Mines
W. A. Broughton, Geologist
U.S. Geological Survey

March 9, 1954

Reviewed by
DMEA OPERATING COMMITTEE
3-19-54
(date)

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Illustrations

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Figure 2.	Stratigraphic section, showing ore zones, in the Rowe property, Lafayette County, Wisconsin	15
Plate 1.	Map of a part of the Rowe property showing drill holes, structure contours, and mine workings, Lafayette County, Wisconsin	15

Appendix A

	Pages
Drill Hole Logs and Assays	1a - 10a

Mayer and Thiede

Location:

The D.M.E.A. exploration program was conducted in Lafayette County, Wisconsin about four miles northeast of Shullsburg. The leased lands included in the contract area contained approximately 361 acres. Boundaries of the contract area are indicated on maps included with this report. Detailed descriptions of the leases are a part of the contract but a general description is as follows:

NW$\frac{1}{4}$, N$\frac{1}{2}$ of SW$\frac{1}{4}$; and N$\frac{1}{4}$ of NE$\frac{1}{4}$ sec. 30
S$\frac{1}{4}$ of SE$\frac{1}{4}$ of SE$\frac{1}{4}$ sec. 19
A parcel in the NW$\frac{1}{4}$ of sec. 29 containing 6 acres more or less
A parcel in the SW$\frac{1}{4}$ of sec. 20 containing 5.6 acres more or less

All land in Township 2 North, Range 3 East, Lafayette County, Wisconsin.

Contract Provisions and Amendments:

Contract Idm E-342, dated January 13, 1952, between the U. S. Government and Mayer and Thiede Mining Company, a partnership, was entered into for the purpose of exploring for lead and zinc ores. The total amount of the contract was $10,000.00 to accomplish 5,000 feet of churn drilling. Government participation was 50 percent.

The work was to be performed in two stages. The first stage called for 3,000 feet of drilling at a maximum allowable cost of $1.60 per foot or a total of $4,800.00. Other allowable costs in Stage I were $450.00 for supervision at a maximum allowable cost of $0.15 per foot of hole, engineering and surveying service $210.00

at a maximum cost of $0.07 per foot, $360.00 for miscellaneous at a maximum allowable cost of $0.12 per foot of hole, and $540.00 for assaying at a maximum allowable cost of $0.06 per foot of hole completed. Total estimated cost for Stage I was $6,000.00.

Stage II provided for 2,000 additional feet of churn drilling upon the completion of Stage I. The total estimated cost for Stage II was $4,000.00 with the same maximum allowances per foot of hole for the various items listed in Stage I.

Stage I of the contract called for drilling 15 holes in three specified areas as indicated on a map included with the contract.

Five holes were to be drilled in the vicinity of the Rowe Lead Mine. Four of these were on a north-south cross section west of the mine and one to the northeast of the mine. Six holes were to be drilled in the vicinity of the Rowe Zinc Mine, three in an east-west section south of the mine and three in a north-south section west of the mine. The remaining four holes were to be drilled to the southeast of the Rowe Zinc Mine to establish continuity of ore in that area as shown by previous drilling.

Stage II, consisting of 2,000 feet of churn drilling, was to be completed if, in the estimation of the government, such additional drilling was warranted from the results of Stage I.

Amendment No. 1 dated October 1952 extended the starting and completion dates two months or to December 13, 1952 and August 13, 1953, respectively.

Amendment No. 2 dated February 16, 1953 further extended the starting and completion dates to March 1, 1953 and March 1, 1954.

The contract was again extended by Amendment No. 3 dated May 20, 1953, making the starting date June 1, 1953 and the completion date June 1, 1954.

Landlord's Subordination Agreement was obtained for all the land covered by the contract.

The contract was terminated before completion of the work by an agreement dated October 20, 1953.

Summary:

The operator failed to complete Stage I of the contract and has not submitted a final geological and engineering report to date. The only ore discovered was in hole R2 southwest of the Rowe Lead Mine (Judd Shaft). The 35 feet of 5.66 percent lead in the lower Drab and Gray horizons may be mined if the Rowe Lead Mine is ever reopened.

Drilling near the Rowe Zinc Mine only showed minor amounts of lead and zinc. Had Stage I been completed, it is very likely that ore would have been encountered in the area southeast of the Rowe Zinc Mine.

Certification:

Drilling under the contract disclosed mineable grade lead ore in hole R2 southwest of the Rowe lead shaft. All the drilling

called for under Stage I was not completed and the most favorable area for finding zinc ores was not explored.

Therefore, it is recommended that either the contract be certified or the operator be requested to refund the government funds advanced on the contract.

Possible Exploitation:

Because of the spotty irregular nature of the lead deposits in the upper horizon of this district, single holes showing lead should be considered with considerable caution. If the Rowe lead shaft should be reopened for the mining of lead, it is quite possible the ore indicated by this hole will be mined. These types of deposits are not suitable for large-scale mining but a small operation might have limited success.

There was no ore discovered or developed in the vicinity of the Rowe Zinc Shaft by the DMEA work. Ore known to exist in this vicinity prior to the DMEA contract could be mined under favorable economic conditions if the reserves were more firmly established and increased by further exploration.

Description of the Work:

Drilling under the contract started June 1, 1953 and the last hole drilled was completed July 23, 1953. Ten holes with an average depth of 156 feet were completed for a total of 1562.5 feet.

The holes were drilled with a churn drill using a six-inch chisel type bit. Normally the upper unconsolidated weathered material required casing. The usual procedure was to drill five feet and then bail the sludge with a flap-type valve bailer. The sludge was then dumped into a tub, thoroughly mixed and representative sample taken and placed in a pile on the ground for logging and assaying purposes. When an ore zone was reached, the sample interval was usually reduced to two and one-half feet. Only one drill rig was employed for the contract.

The first four holes were drilled on a north-south cross section west of the Rowe lead shaft. Hole R2 showed mineable grade lead ore. Hole R5 was drilled to the northeast of the shaft.

Holes R6, R7 and R8 were drilled south of the Rowe zinc shaft and showed only minor amounts of lead and zinc. A north-south cross section consisting of holes R9 and R10 was drilled east of the old Rowe Zinc Mine. This section was moved 100 feet east of the location stipulated in the contract because it was found that the mine workings extended farther than indicated on the old maps.

Drilling was discontinued July 23, 1953 upon completion of hole R10. The project was terminated by agreement October 20, 1953 before completion of Stage I of the contract.

Maps accompanying this report show the location of holes drilled and significant lead-zinc mineralization. A complete set of drill logs showing formations penetrated, estimated and assay values is included as Appendix A.

The operator's final geologic and engineering report has not been received to date.

Expenditures:

The following tabulation shows the essential items of expenditures incurred under the contract.

Total amount of contract	$ 10,000.00
Government share	5,000.00
Total approved expenditures	2,700.49
Government share of approved expenditures	1,350.24
Government share not expended	3,649.76

A disallowance of $86.76 was made on the June voucher for excess supervision and technical services costs. This amount is not included in the tabulation.

The operator was reimbursed on the basis of actual incurred and approved costs. The charges were distributed as follows:

Item	Approved Expense	Cost Per Foot
Contract drilling	$ 2,343.75	$ 1.500
Supervision	234.37	.150
Technical services	109.37	.070
Sampling and Analysis	13.00	.008
Total	$ 2,700.49	$ 1.728

No audit has been made of this contract. In view of the small expenditures made and the periodic examinations made by the

local field team representatives, an "on site" audit should not be necessary.

Technical Control - Supervision:

The company was responsible for direct supervision of the project. The contract specified the location of all the holes in Stage I. These locations were followed except for the two holes to the east of the Rowe zinc shaft. When it was found that the mine workings extended farther than shown on the old maps, permission was given to move the holes 100 feet to the east.

Supervision and technical services were performed by a local consulting engineer employed by the operator. The work was conducted satisfactorily; however, Stage I was not pursued to completion.

Final geologic report and results of drilling by the Mayer and Thiede Mining Company in the Rowe property, Lafayette County, Wisconsin

W. A. Broughton

U. S. Geological Survey

Docket no. : DMEA 2184
Contract no. : Idm-E342
Commodity: zinc-lead

Location of property

The Rowe property is about 3½ miles northeast of Shullsburg and 5½ miles southwest of Darlington, Lafayette County, Wisconsin (fig. 1). It includes the N½SW¼, the NW¼ except one acre for school, the W½SW¼NE¼, the NW¼NE¼, and that part of the NE¼NE¼ lying west of County Trunk E, sec. 30, T. 2 N., R. 3 E.; the S¼SE¼SE¼ sec. 19, T. 2 N., R. 3 E.; that part of the NW¼NW¼ sec. 29, T. 2 N., R. 3 E., lying west of County Trunk E; and a tract described as follows: Beginning 9.98 chains south of the northwest corner of the SW¼SW¼ sec. 20, T. 2 N., R. 3 E., then 4.52 chains S. 42°20' E., then 4.41 chains S. 60°40' E., then 2.25 chains S. 45°15' E. to center of County Trunk E, then southwest along center of highway to south line of sec. 20, then west to the southwest corner of sec. 20, then north to place of beginning.

Occurrence of ore

Ore-bearing beds

Zinc and lead minerals in the Rowe property occur in the Galena, Decorah, and Platteville formations, all of Ordovician age (fig. 2).

Past production was mainly from the lower part of the Galena with a small amount of ore being mined from the upper part of the Decorah (pl. 1; Rowe zinc mine and Rowe lead mine). Drilling in 1946 and 1947 by the Puritan Mining Co. and in 1947 by the U. S. Bureau of Mines showed zinc ore (containing galena) in the Decorah and the upper part of the Platteville (fig. 2) as well as in the lower part of the Galena. This area of drilling is south of the Rowe zinc mine and west of the school lot (pl. 1). Later drilling by J. D. Judd & Son in the vicinity of the Rowe lead mine (pl. 1) showed lead ore (containing sphalerite) in the lower part of the Galena and the upper part of the Decorah (fig. 2).

Miners' terms subdividing the formations into members are used in this report (fig. 2). The oldest member of the Galena that occurs in the Rowe property is the "drab." The Decorah is divided from top to bottom into the "gray," "blue," "oil rock," and "clay bed." The Platteville is similarly divided into the "glass rock" and the "Trenton."

Geologic structure

Ordovician rocks in the vicinity of the Rowe property have been gently folded into anticlines and synclines that trend in general northwesterly and northeasterly directions (pl. 1).

The zinc ore bodies in the southwestern Wisconsin mining area frequently occur on the limbs of synclines in steeply inclined mineralized fractures called "pitches." The pitches are reverse faults roughly paralleling synclinal trends and may develop on both limbs of the synclines. They are inclined away from each other on opposite limbs and may extend from the lower part of the "drab" through the "Trenton." Generally there is a major outside pitch with minor parallel inside

pitches. The pitches may terminate in and be offset by "flats," which are nearly horizontal bedding-plane openings usually on the syncline side of the major pitch. Individual pitches and flats range in thickness from a fraction of an inch to several feet. Thin pitches and flats may be closely spaced, constituting a mineable ore body. Major flats may occur at several stratigraphic horizons such as the "Trenton"-"glass rock" contact, the "oil rock"-"blue" contact, and the "gray"-"drab" contact. Besides the pitches and flats, ore minerals in major disseminations may occur in several stratigraphic zones such as the upper "Trenton," lower "glass rock," "clay bed," "oil rock," "blue"-lower "gray," and cherty "drab."

Minor lead ore may occur in pitches and flats within the Decorah and the lower part of the Galena. However, major lead ore occurs as nearly vertical veins ("crevices") in the lower part of the Galena and in the upper part of the Decorah. The vertical veins generally occur in groups of seweral parallel crevices, constituting "ranges" that commonly parallel the anticlinal trends. Individual crevice veins are normally one-half inch to 3 inches wide; but wider ore shoots, in "openings," are commonly at several stratigraphic horizons, especially at crevice intersections.

The ore in the Rowe lead mine is controlled by east-west crevices, southwestward-trending crevices, and east-west pitches (pl. 1). The Rowe zinc mine is on a structural high and the ore is probably controlled by east-west crevices. The ore indicated by drilling south of the Rowe zinc mine and west of the school lot is on a northwestward-trending syncline and appears to be controlled by minor crossing folds.

Character of ore

Ore minerals in the crevices and pitches and associated flats down to the middle of the "gray" are chiefly medium- to coarse-grained galena with minor medium- to coarse-grained sphalerite. Above the water table the sphalerite has been largely converted to smithsonite. Below the middle of the "gray" the ore minerals in the pitches and flats are medium- to coarse-grained sphalerite and minor medium- to coarse-grained galena. Some of the sphalerite and galena probably occurs as fine- to medium-grained disseminations. The gangue, other than rock, is chiefly marcasite, pyrite, and calcite.

Exploration

Prior to DMEA contract

The Puritan Mining Company, in 1946 and 1947, drilled numerous holes (pl. 1: drill holes 1-12, 16, 17, 19, 21-26, 28-30, 32-54, and 56) in the vicinity of the Rowe zinc mine and west of the school lot. Eleven of these holes penetrated probable ore-bearing ground but failed to indicate a mineable ore body. The U. S. Bureau of Mines, in 1947, drilled four holes (US1-US4) in this same area; hole US1 cut material of ore grade. J. D. Judd & Son later drilled numerous holes (pl. 1: drill holes J1-J3, J5-J25, J27, J30, J35, J38) near the Rowe lead mine, and many of these holes indicated the presence of lead ore.

DMEA contract drilling terms

On June 13, 1952, DMEA Contract Idm E-342 was signed with the Mayer and Thiede Mining Co. Drilling was to begin within 120 days of this date and was to be completed by June 13, 1953. According to Exhibit "A" of the contract the exploration was to consist of two stages as follows:

"Stage I shall consist of 15 churn drill holes having an aggregate length of 3,000 feet and drilled at locations and steps as follows:

"1. Drill five holes in the Rowe lead mine 'area A' at approximately the locations indicated by holes Nos. 1-5 inclusive.

"2. Drill six holes in the Rowe zinc mine 'area B-C' at approximately the locations indicated by holes Nos. 6-11 inclusive.

"3. Drill four holes in 'area D' south of the Rowe zinc mine area at approximately the locations indicated by holes Nos. 12-15 inclusive ...

"If in the estimation of the Government, the results of the initial drilling of steps 1-3 prove further drilling is warranted, to delineate ore trends in the area, additional drilling described in Stage II shall be performed.

"Stage II shall consist of churn drilling an aggregate of 2,000 feet of hole at locations and to depths to be determined to the satisfaction of the Government."

Chronology of amendments to contract

September 25, 1952. The Mayer and Thiede Mining Co. requested 60-day extensions of the starting and finishing dates.

October 13, 1952. Amendment No. 1 was issued, extending the starting date to within 180 days of June 13, 1952, and the completion date to August 13, 1953.

February 12, 1953. The mining company requested further 60-day extensions of starting and completion dates.

February 16, 1953. Amendment No. 2 extended the starting date to March 1, 1953, and the completion date to March 1, 1954.

May 11, 1953. The DMEA field team notified the Mayer and Thiede Mining Co. that the contract was terminated because exploration had not started by March 1, 1953, the date set forth in Amendment No. 2.

May 15, 1953. The Mayer and Thiede Mining Co. requested reconsideration of notice of termination and asked for further extensions of starting and finishing dates.

May 20, 1953. Amendment No. 3 extended the starting date to June 1, 1953, and the completion date to June 1, 1954.

Drilling under DMEA contract

The mining company began exploration on June 1, 1953. Required holes R1-R5 were drilled near the Rowe lead mine and required hole R6 was drilled near the Rowe zinc mine during June (pl. 1). Required holes R7-R10 were drilled near the Rowe zinc mine in July. No exploration was done during August, September, and October.

The Mayer and Thiede Mining Co. in October 1953 requested that the exploration project be terminated. The government concurred and the project was terminated by mutual agreement. However, the most potential part

of the area was not explored, namely that part to be explored by step 3, " ... four holes in 'area D,' south of the Rowe zinc mine area at approximately the locations indicated by holes Nos. 12-15 inclusive ... " (Exhibit A of the exploration contract).

Results of exploration

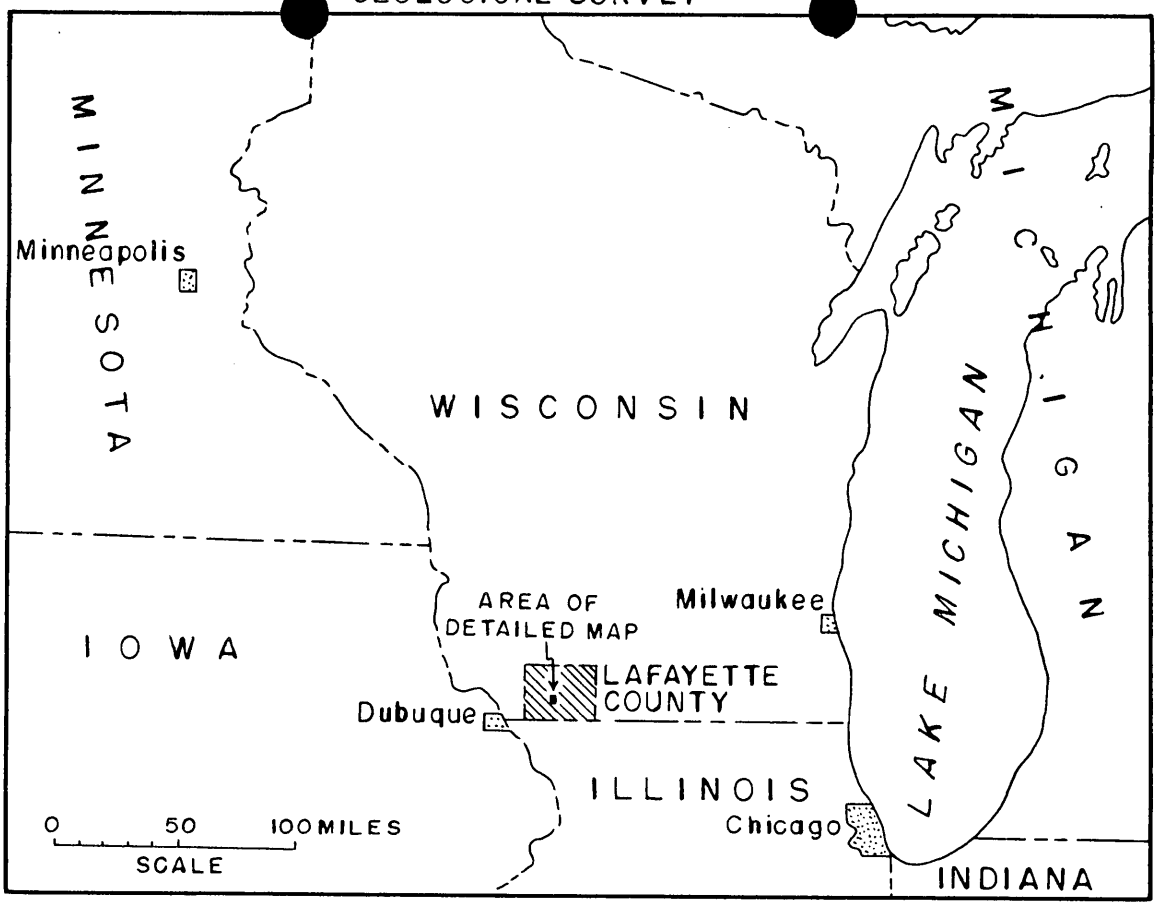
One hole (R2) of the ten drilled by the Mayer and Thiede Mining Co. penetrated rock of ore grade (pl. 1). This hole showed 35 feet of 5.66 percent lead from the lower beds of the "drab" through the "gray". It is impractical to estimate tonnage of lead ore from one drill hole. However, it is possible that further drilling in the vicinity of R2 might indicate considerable lead ore.

Recommendations

It is the opinion of the reporting geologist that drilling by the Mayer and Thiede Mining Co., with DMEA assistance, discovered lead ore in one of ten holes drilled in the Rowe property. Thus it is recommended that the exploration be certified as a discovery. Furthermore, considering the history of the exploration project, it is the opinion of the reporting geologist that the Mayer and Thiede Mining Co. failed to live up to the terms of the exploration contract by not drilling proposed drill holes 11-15 (Exhibit A of the exploration contract). Proposed drill holes 12-15 would have partly explored the most potential zinc ore area of the Rowe property. The exploration program was terminated because the mining

company was apparently no longer interested in developing a mineable ore body. However, the DMEA exploration contract had been granted on the assumption that the mining company was sincerely interested in discovering and developing ore. Thus it is recommended that the Mayer and Thiede Mining Co. be required to refund the Government's paid share of the exploration costs of the uncompleted exploration program.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



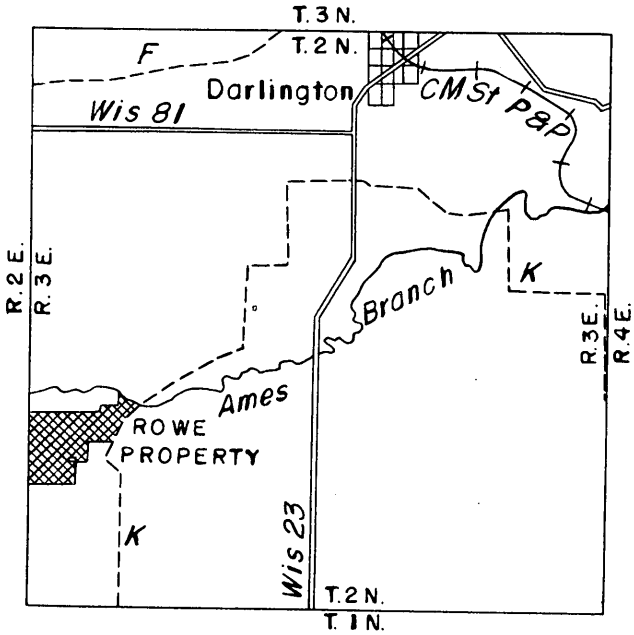


Figure 1. Index maps showing location of the Rowe property, leased by Mayer and Thiede Mining Company, Lafayette County, Wisconsin.

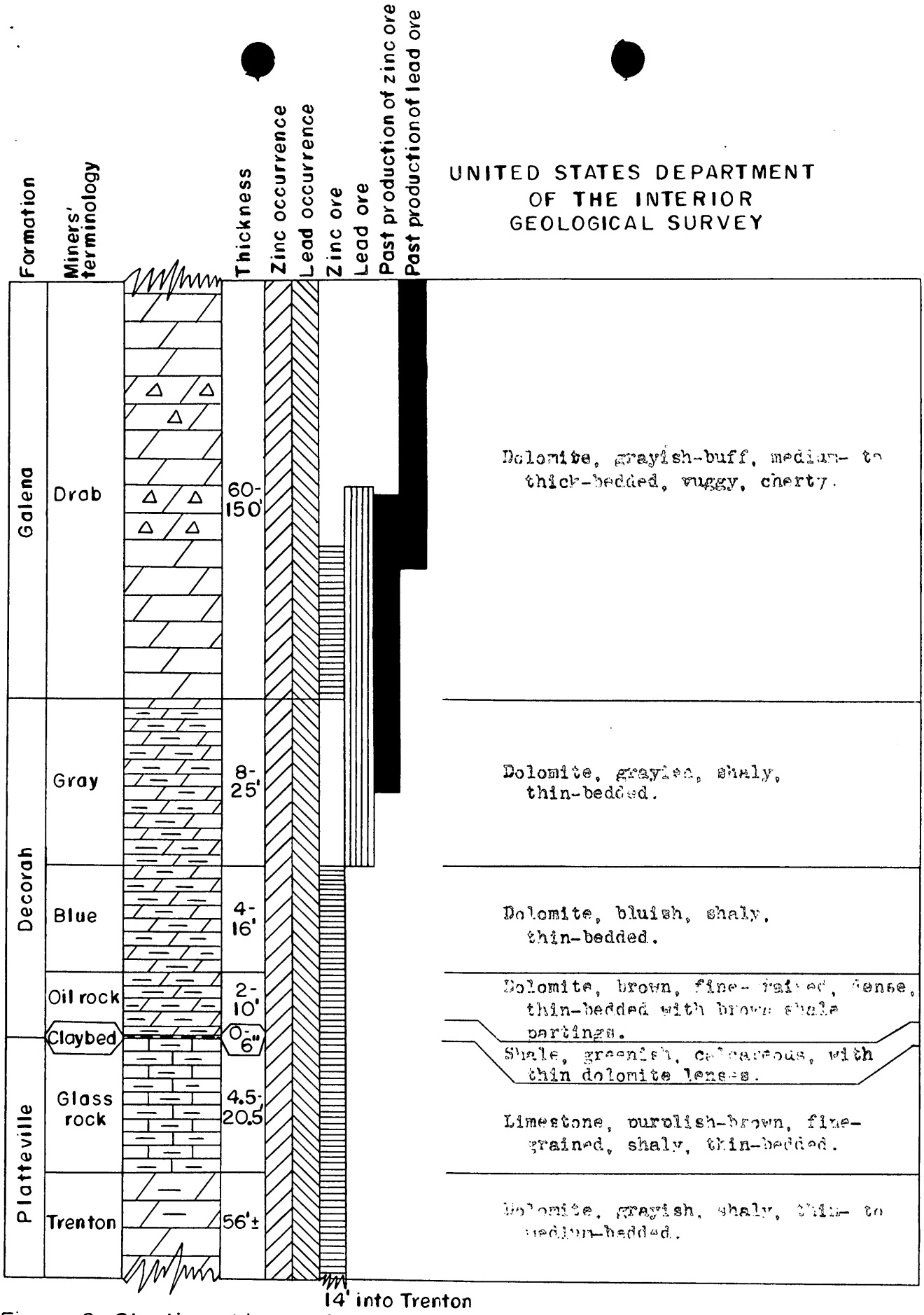


Figure 2. Stratigraphic section, showing ore zones, in the Rowe property, Lafayette County, Wisconsin.

Appendix A

Drill Hole Logs and Assays

~~Serial No. 89~~
Hole No. R1
Collar Elevation: 949.1'
Depth of Hole: 138'
Location: Rowe

Lafayette County
~~Geo. Ref. 223~~

Date completed: 6/6/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay
10	15	Clay & Drab
15	99	Drab
99	100	Gray
100	110	Gray
110	122	Blue
122	127	Oil
127	135	Glass
135	138	Trenton

Water table: 50'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
0	15		Shine	
15	20		2.0	
20	35		1.0	
35	100		Shine	
100	110		1.0	Shine
110	115		.5	Shine
115	122		1.0	Shine
122	124		8.0	Shine
124	126		2.0	Shine
126	128		1.0	Shine
128	132		.5	Shine
132	134		Shine	Shine
134	136	Shine	.5	Shine
136	138		Shine	Shine

Oxidized 0 - 100'
Slightly oxidized 100' - 138'

~~Serial No. 90~~
Hole No. R2
Collar Elevation: 944.0'
Depth of Hole: 140'
Location: Rowe

Lafayette County
~~Sec. Ref. 223~~

Date completed: 6/10/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay
10	15	Clay & Drab
15	90	Drab
90	105	Gray
105	113	Blue
113	122½	Oil
122½	137	Glass
137	140	Trenton

Water table: 45'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
0	65		Shine	
65	70		1.0	
70	75		4.0	1.5
75	77½		5.0	8.0
77½	80		5.0	7.0
80	90		2.0	3.0
90	95		2.0	2.0
95	100		2.0	1.5
100	105		1.5	2.0
105	110		1.5	1.0
110	112½		1.5	.5
112½	115		4.0	.25
115	117½		2.0	.25
117½	120		2.0	Shine
120	122½		Shine	Shine
122½	130		1.0	Shine
130	140		Shine	Shine

Oxidized 0 - 90'
Slightly oxidized 90' - 140'

Depth From	Depth To	Assays Zn	Fe	Pb
70	75			4.15
75	77½			13.70
77½	80			8.25
80	90			7.35
90	95			4.95
95	100			2.60
100	105			2.30

Lafayette County
~~Loc. Ref. 223~~

~~Serial No. 91~~
Hole No. R3
Collar Elevation: 938.0'
Depth of Hole: 135'
Location: Rowe

Date completed: 6/12/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	15	Clay
15	30	Clay & Drab
30	87½	Drab
87½	100	Gray
100	110	Blue
110	116	Oil
116	132	Glass
132	135	Trenton

Water table: 40'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
15	35		Shine	
35	60		Shine	Shine
60	65		1.0	
65	70		.5	
70	80		1.0	
80	90		2.0	
90	95		1.0	
95	102½		2.0	Shine
102½	105		2.0	
105	107½		1.0	
107½	110		2.0	Shine
110	112½		1.0	Shine
112½	115	Shine	1.0	Shine
115	117½		Shine	Shine
117½	122½	Shine	.5	Shine
122½	130		Shine	Shine
130	132½		Shine	Shine +
132½	135		Shine	Shine

Oxidized 0 - 90'
Slightly oxidized 90' - 100'

~~Serial No. 92~~
Hole No. R4
Collar Elevation: 949.3'
Depth of Hole: 142'
Location: Rowe

Lafayette County
~~Sec. Ref. 223~~

Date completed: 6/16/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	5	Clay
5	10	Clay & Drab
10	100	Drab
100	111	Gray
111	125	Blue
125	127½	Oil
127½	140	Glass
140	142	Trenton

Water table: 35'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
10	25		Shine	
30	40		Shine	
65	70		Shine	Shine
70	75		Shine	
75	80		.5	Shine
80	90		10.0	.5
90	92½		10.0	.75
92½	95		20.0	.5
95	100		15.0	.5
100	102½		5.0	1.5
102½	107½		4.0	.25
107½	110		5.0	Shine
110	112½		5.0	.25
112½	122½		5.0	Shine
122½	125		3.0	Shine
125	135		2.0	Shine
135	140		2.0	
140	142		2.0	Shine

Oxidized to 105'
Slightly oxidized 105 - 142

Depth From	Depth To	Assays Zn	Fe	Pb
95	97½			1.05
100	102½			1.20

~~Serial No. 93~~
Hole No. R5
Collar Elevation: 952.7'
Depth of Hole: 150'
Location: Rowe

Lafayette County
~~S. Ref. 223~~

Date completed: 6/18/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	5	Clay
5	10	Clay & Drab
10	105	Drab
105	113	Gray
113	123	Blue
123	130	Oil
130	146	Glass
146	150	Trenton

Water table: 55'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
10	15		1.0	
15	100		Shine	
100	110		Shine	Shine
110	132½		2.0	Shine
132½	135		1.0	Shine
135	150		Shine	Shine

Oxidized 0 - 110'
Slightly oxidized 110' - 150'

~~Serial No. 94~~
Hole No. R6
Collar Elevation: 996.1'
Depth of Hole: 182½'
Location: Rowe

Fayette County
~~Sec. Ref. 223~~

Date completed: 6/23/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	5	Clay
5	10	Clay & Drab
10	135	Drab
135	148	Gray
148	156	Blue
156	161	Oil
161	179	Glass
179	182½	Trenton

Water table: 95'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
5	45		Shine	
45	60		1.0	
60	65		Shine	
65	70		Shine	Shine
70	80		Shine	
80	85		.5	
85	115		Shine	
115	152½		Shine	Shine
152½	155		.5	
155	157½	Shine	1.0	
157½	160		1.0	
160	161		1.0	Shine
161	165		.5	Shine
165	167½		Shine	Shine
167½	182½		Shine	

Oxidized 0 - 140
Slightly oxidized 140 - 182½

Lafayette County
~~Sec. Ref. 223~~

~~Serial No. 95~~
Hole No. R7
Collar Elevation: 994.9'
Depth of Hole: 180'
Location: Rowe

Date completed: 7/11/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	5	Clay & Drab
5	134	Drab
134	148	Gray
148	154	Blue
154	161	Oil
161	177	Glass
177	180	Trenton

Water table: 95'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
0	50		Shine	
50	55		Shine	Shine
55	90		Shine	
90	95		.5	
95	125		Shine	
125	155		Shine	Shine
155	157½	Shine	Shine	Shine
157½	162½	Shine	.5	Shine
162½	165	Shine	Shine	Shine
165	180		Shine	Shine

Oxidized 0 - 125'
Slightly oxidized 125' - 180'

~~Serial No. 96~~
Hole No. R8
Collar Elevation: 993.2'
Depth of Hole: 175'
Location: Rowe

Lafayette County
~~Sec. Ref. 223~~

Date completed: 7/15/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	5	Clay & Drab
5	127½	Drab
127½	143	Gray
143	148	Blue
148	153	Oil
153	172½	Glass
172½	175	Trenton

Water table: 94'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
5	15		.25	
15	25		.5	
25	50		.25	
50	80		Shine	
80	85		.25	
85	115		Shine	
115	120		.25	Shine
120	122½		.25	.5
122½	130	Shine	.5	.25
130	140		Shine	Shine
140	145	Shine	.25	Shine
145	150	Shine	Shine	Shine
150	152½		.25	Shine
152½	157½	Shine	Shine	Shine
157½	170		Shine	Shine
170	175		.25	

Oxidized 0 - 127½
Slightly oxidized 127½' - 175

Depth From	Depth To	Assays Zn	Fe	Pb
115	120	0.40		0.05
120	122½	0.45		0.35

~~Serial No.~~ 97
Hole No. R9
Collar Elevation: 977.8'
Depth of Hole: 160'
Location: Rowe

Lafayette County
~~Sec. Ref. 223~~

Date completed: 7/18/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay
10	15	Clay & Drab
15	120	Drab
120	129	Gray
129	132½	Blue
132½	137½	Oil
137½	158	Glass
158	160	Trenton

Water table: 75'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
15	20		1.0	
20	25		2.0	
25	30		Shine	Shine
30	35		.5	Shine
35	40		Shine	
40	55		.25	
55	65		Shine	
65	70		.25	
70	90		Shine	
105	115		4.0	Shine
115	125		.5	Shine
125	127½		1.0	Shine
127½	130		4.0	Shine
130	132½		2.0	Shine
132½	135		1.0	Shine
135	155		Shine	Shine
155	160		Shine	

Oxidized 0 - 137½; 142½ - 160
Slightly oxidized 137½ - 142½

~~Serial~~ No. 98
Hole No. R10
Collar Elevation: 979.1'
Depth of Hole: 160'
Location: Rowe

Lafayette County
~~Sec. Ref. 223~~

Date completed: 7/23/53
Drilled by: Mayer & Thiede, DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	8	Clay
8	114	Drab
114	129	Gray
129	137	Blue
137	140	Oil
140	159	Glass
159	160	Trenton

Water table: 80-85'

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
8	30		Shine	
30	35		Shine	Shine
35	45		Shine	
45	55		.5	
55	90		Shine	
95	105			Shine
110	115		Shine	
115	130		Shine	Shine
130	132½		1.0	Shine
132½	135		Shine	Shine
135	137½		1.0	Shine
137½	140		2.0	Shine
140	142½		1.0	Shine
142½	145		.5	Shine
145	160		Shine	Shine

Oxidized 0 - 115'
Slightly oxidized 115 - 160'

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Defense Minerals Administration
RECEIVED
MAR 12 1954

March 10, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: DMEA Docket 2184, Mayer & Thiede Mining Company

Reference is made to your letter of March 4, 1954, regarding final reports on the subject project. The Government final report is now being written and will be forwarded to you as soon as completed.

We have requested the operator's report, but thus far have not yet received it.

A. B. Needham
A. B. NEEDHAM

500

Griswold
Selfridge
Kelman
Wilkerson

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

MAR 4 1954

Mr. L. B. Needham, Executive Officer
Field Team, Region V
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Re: Docket No. D. M.-2184 (lead-zinc)
Meyer & Shields Mining Company
Dove Leases
Lafayette County, Wisconsin
Contract No. Im-7643

Dear Mr. Needham:

The above project was terminated October 20, 1953, and it is our understanding that certification will not be recommended. However, when convenient, will you please forward the final report covering the project.

Sincerely yours,

George C. Selfridge (JHB)
Chairman, Operating Committee

Concurrence:

J. H. Hedges (JHB)
Member, Bureau of Mines

D. M. Larrabee (JHB)
Member, Geological Survey

WRGriswold/bjl (3/1/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Kinkel
Mr. Bishop
Chron.

R.C.S.
3-4-54

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

November 2, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: DMEA Docket 2184, contract Idm-E-342, Mayer & Thiede Mining Company

Here are the original and two copies of an executed mutual termination of the subject project. One copy of this termination is being transmitted direct to the Regional Fiscal Section, and one copy retained for our files.

A. B. NEEDHAM

Attachments

DOCKET COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

November 2, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket 2184, Contract Idm-E-342, Mayer and Thiede Mining Co.

Mutual termination documents were sent you on November 2.

Following are the financial data on the project:

Total amount of contract	$10,000.00
Government's share	5,000.00
Total amount spent on project.	2,700.48 2900.49
Government's share	1,350.24
Balance to general fund.	3,649.76

Final reports are yet to come.

A. B. NEEDHAM

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

October 20, 1953

DMEA-2184

Mr. James L. Mayer
Mayer & Thiede Mining Company
Room 625
37 W. Van Buren Street
Chicago 5, Illinois

Dear Mr. Mayer:

Reference is made to your DMEA Contract Idm E-342.

As you know, this contract was initiated June 13, 1952. No work was done during the period it should have begun, and the starting date was extended to March 1, 1953. No attempt was made to pursue the work, and our intentions then were to terminate the contract. However, on the advice of your attorney, Mr. H. K. Geyer, Platteville, Wis., further extension was granted and work actually got under way in June 1953.

A total of 10 holes, aggregating 1,562 1/2 feet, were drilled during June and July 1953, and the project has been idle since that time.

Although amendment 3 extended the completion date to June 1, 1954, we do feel the work has not progressed efficiently; and we would appreciate being advised as to your intention of completing the work proposed by the contract.

Attached are 6 copies of a mutual termination of the project, which we believe you should consider if your intentions are not to pursue the work any further. In that event, please sign all copies, retain a carbon, and return all others to this office.

Very truly yours,

A. B. Needham
Executive Officer
Field Team, Region V

cc: Dutton Grosh
Broughton
DMEA, Washington
H. K. Geyer

Enclosures - 6

Docket Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

June 3, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2184, Contract Idm E-342, Mayer & Thiede Mining Co.

Here are the original and two copies of Amendment No. 3 to the subject contract extending the completion date.

One copy has been retained by the Operator, one by this office, and one transmitted to the Regional Fiscal Section.

The reason for extending the date is because the Operator has had a very difficult time engaging a drilling company to drill for him. He now has a driller, and a copy of the subcontract is also enclosed.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments

RECEIVED
JUN 12 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

DMEA - 2184

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

May 20, 1953

Mr. H. K. Geyer
c/o Kopp and McKichan
First National Bank Building
Platteville, Wisconsin

Dear Mr. Geyer:

Reference is made to your letter of May 15, 1953, requesting reconsideration of Mayer & Thiede Mining Co.'s exploration contract Idm E-342 notification to terminate.

Attached are seven copies of Amendment No. 3 extending the starting date of the contract to June 1, 1953. Have the company sign all copies, retain a carbon, and return the rest to this office. They may disregard the termination forms transmitted on May 11, 1953.

It should be pointed out that the original contract was dated June 13, 1953, nearly a year ago and that an extention of starting was was granted February 16, 1953. During that time no attempt was made to pursue the proposed work. Government exploration contracts are not solely for the benefit of the individual or operator, but rather the Government, as well. The attached amendment will grant the operator 10 days in which to begin operation.

If the work is to be done by subcontract, we will want a copy of the proposed contract with the drilling company.

For your information, there is enclosed a press release indicating zinc and lead minerals are no longer classed as commodities exploration for which the Government will participate.

Very truly yours,

Defense Minerals Administration
RECEIVED
MAY 22 1953

A. B. Needham
Executive Officer, Field Team
Region V

Enclosures
Copies to:
Operating Comm (2)
Dutton
Grosh
Broughton

FILE COPY
SURNAME:

500

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

Mr. A. F. Needham, Executive Officer
DMA Field Team, Region V
2903 Colfax Ave., South
Minneapolis 8, Minnesota

MAY 1 1953

Re: Docket No. DMA-2184 (Lead-Zinc)
Mayer & Thiede Mining Company
Rowe Lead and Zinc Mines
LaFayette County, Wisconsin
Contract No. Idn-5342

Dear Mr. Needham:

Referring to your letter of April 23, 1953, regarding the subject docket, this will be your authorization to effect termination of the contract if, in your opinion, it would be to the best interests of the Government to do so.

Sincerely yours,

SIGNED (GHB)

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines (GHB)

Member, Geological Survey (GHB)

WRGriswold/bjl (written 4/28/53)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kinkel
Chron.

L.C. 5/1/53

Grosvold
Betty

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

April 23, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 27 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2184, Contract Idm-E342, Mayer & Thiede Mining Co.

Pursuant to the Operating Committee's Memorandum No. 18, dated March 9, 1953, that terminations of contracts should first have approval of the Washington office, please be advised that it is our intention to advise the operator that his contract is terminated.

The reason for this is that the contract dated June 13, 1952 has never been put in force. Amendment No. 1 extended the completion date to March 1. The operator was notified several times that work should be started but he has never done so to date. We feel that it should not be carried any further and that termination should be made.

A. B. Needham
Executive Officer, Field Team
Region V

Docket copy 2184

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 - 1953

February 20, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2184, Contract Idm-E342, Mayer and Thiede Mining Co.

Here are the original and two copies of Amendment No. 2 extending the starting and completion dates. The reason that this contract has been delayed in getting started is because (1) the company had considerable difficulty in obtaining a company to do the contract drilling for them; drillers in this particular area are few, and they simply had to wait their turn (2) during the beginning of this period of waiting for drillers their options ran out, and they had difficulty in realigning themselves. The company indicates now that they will begin to drill shortly.

One copy of the amendment has been transmitted to the Regional fiscal section, and a copy has been retained by the Operator, the Platteville office, and this office.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

cae 2-24-53

RECEIVED
MAR - 5 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Docket Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 1 6 1952

November 13, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2184, Contract Idm-E342, Mayer & Thiede Mining Company

Here are the original and two copies of Amendment No. 1 to the subject contract extending the starting date.

The company's reason for not starting until now was given that they have been unable to obtain drillers and now they state the project is ready to start.

One copy of the amendment has been retained by the operator, one by the Regional fiscal section, one by this office, and one is being sent our Platteville field office.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

ABNeedham:dg
cc Dutton
Grosh (At.)
Broughton
Hill (Att.)
Region V
files
df

11-17

RECEIVED
DEC 1 - 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

DMA 2184 - Kopp and McKichan, Attorneys
First National Bank Building
Platville, Wisconsin

I'm turning that report over to Mr. McKnight of the USGS.

OFFICE OF THE ADMINISTRATOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 28 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

July 25, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2184x, Contract Idm-E342, Mayer & Thiede Mining Co.

Returned are the original and two copies of the duly executed subject contract.

One copy has been retained by the operator, one by this office, and one transmitted to the Regional fiscal section.

In answer to your transmittal of June 16, 1952, there is attached to each copy of the contract an affidavit signed by N. W. Judd, one of the partners of J. F. Judd & Son, showing J. D. Judd & Son have no further interest in the property; and this should suffice in lieu of the requested owner's consent to lien form.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

ABNeedham:dg
cc Dutton
Grosh
Broughton
Hill
Region V
files
df

ddS
7-28-52

500
FILE COPY
SURNAME:

Moulds

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

JUN 16 1952

Mr. A. B. Needham
Executive Officer, Region V
DMEA Field Team
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Re: Docket No. DMEA 2184
Mayer and Thiede Mining Co.
Lead-Zinc

Dear Mr. Needham:

We are transmitting herewith the original and five copies of a contract covering the drilling to be done on the Rowe Lead and Zinc Area by the Mayer and Thiede Mining Company. This contract has been drawn up in accord with your recommendations of April 10, 1952 after consultation with the applicant.

The applicant does not hold the land under a lease but under a contract with the lessee, J. D. Judd and Son, to transfer the leasehold to the applicant upon the payment of the costs set forth in the contract. Under these circumstances, it is necessary to have the Owner's Consent to Lien signed by the original lessee, J. D. Judd and Son, and attached to the contract prior to signing by the operator.

If this contract is satisfactory to you and the Owner's Consent to Lien is obtained, kindly present to the operator for signature and distribute in the usual manner.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

J.H. 6-16-52

Enclosures-6

APPROVED:

J. H. Houston

Member, Bureau of Mines (JHB)

A. M. Lemmon

Member, Geological Survey (JHB)

D. E. Moulds/mef
6/10/52
cc to: Adm. R. File
Operating Committee
Docket File Copy
Mr. Lyons
Mr. Bishop
Mr. Moulds
Region V

P.S. It will be necessary to insert in the contract in the space provided under Article 3 the number of days from the date of the contract in which work shall commence.

140

FILE COPY
SURNAME:

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

June 9, 1952

Memorandum

To: Acting Administrator
Through: D. E. Moulds

From: Chief Counsel

Subject: Mayer and Thiede Mining Company - Docket No. DMA-2184

The above contract has been drafted from notes supplied by Mr. Moulds, and is approved as to legal form and sufficiency, subject to procuring and adding to the contract an Owner's Consent to Lien signed J. D. Judd & Son by J. D. Judd, Partner, N. W. Judd, Partner.

The applicant in this case does not hold the land under a lease, but under a contract with the lessee, J. D. Judd & Son, to transfer the leasehold to the applicant upon the payment of the consideration set forth in the contract. Under these circumstances it is necessary to have the Owner's Consent to Lien signed by the original lessee, J. D. Judd & Son, as indicated in Circular 20, Supplement 1.

The rough draft of the contract submitted to this office indicated that payments to the Operator would be made on the basis of agreed unit prices rather than actual costs. After discussion with Mr. Moulds I discovered that this is not the intention, but the intention is rather that all payments will be made on the basis of actual costs, with the unit allowances stated merely to fix allowable maximums. Therefore, the unit allowances have been indicated as allowable maximums to conform with Mr. Moulds' instructions.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments
JLHofflund/ema/bjl

Copy to: Mails & Files
J. L. Hofflund
H. C. Rubin
D. E. Moulds
~~Sec~~ Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 14 1952

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

May 12, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMA-2184x, Mayer and Thiede Mining Company

Reference is made to your letter of March 27, 1952, the first paragraph of the second page of which requested a revised map for the project.

Here are two copies of a map which we believe is as accurate as can be expected. Considerable work has been expended in attempting to locate old drill holes so that they could be plotted more accurately on a revised map, and we feel that we cannot go to more expense to locate any more than now appear on the map. From the holes actually found and the indication of other holes, as evidenced by old sludge piles, it has been possible to correct major errors in the old map.

It is believed that this map is now sufficiently accurate to be used as the basis for planning and conducting an exploration program.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments 2

ABNeedham:dt
cc Dutton
Grosh
files
df
Region V

IN REPLY REFER TO:

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

May 7, 1952

Memorandum

To: Mr. D. E. Moulds, DMEA

From: Erwin J. Lyons, USGS

Subject: Docket DMEA-2184, Mayer and Thiede Mining Company

The present reviewer concurs with the recommendations set forth in the attached memoranda of April 8 from W. A. Grosh to A. B. Needham and of April 10 from the Executive Officer, Field Team, Region V, to Frank E. Johnson with the following modification:

If the exploration in areas A, B, C, and D, is unsuccessful, then the project should be terminated without additional drilling to the southeast and northwest of the mineralized area south of the Rowe Zinc shaft as suggested by the field team.

Erwin J. Lyons

Erwin J. Lyons
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
MAILED
APR 14 1952

April 10, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2184
Mayer and Thiede Mining Co.

Reference is made to your letter of March 25, 1952, in reference to a revised proposal of drilling pertinent to the subject docket.

As you can see from the attached correspondence from our field representatives at Platteville, Wis., and from the operator, your recommendations as to the modified program have been approved with certain additions. The contract recommended by the field then would be:

1. Drill 5 holes in the Rowe lead mine area as indicated in green on the returned map.

2. Drill 6 holes in the Rowe zinc mine area (a section of 3 holes east of the workings and a section of 3 holes south of the workings) as indicated in red on the map and pursuant to your recommendations.

3. Drill 4 holes in the general area south of the Rowe zinc mine as shown in red on the map and pursuant to your recommendations. Operator to provide more accurate map of this area before these 4 holes are drilled.

4. Should the above work prove nothing encouraging, remaining footage as originally proposed to be used to explore SE and NW extensions of the area south of Rowe zinc mine (Item 3 above). These holes to be located by mutual agreement between field representatives and operator.

5. If initial drilling, that is, items 1, 2, and 3, prove encouraging, further drilling of unused footage to determine the mineralization will be mutually agreed on as to location and extent.

A. B. Needham

Enclosures: 3

Box 261
Platteville, Wisconsin
April 8, 1952

MEMORANDUM

TO: A. B. Needham, Chief, Mining Division, Region V

FROM: W. A. Grosh, Mining Engineer

SUBJECT: Exploration Application - Docket No. DMEA 2184
Mayer and Thiede Mining Company
Re: Letter by F. E. Johnson on March 27, 1952

A conference was held by this office and Broughton with Messrs. Mayer and Thiede in accordance with the subject letter. As a net result, they have summarized their desired modification of the exploration project in the attached letter.

We feel the applicant is justified in proposing some drill holes into the Trenton in the immediate vicinity of the operating mine as no information to that horizon exists there. Their suggested locations are shown on the docket map being returned. Spacing and locations appears satisfactory to us.

The six holes adjacent to the Howe Zinc Mine and the four in the area to the south as spotted on the docket map by the operating committee are acceptable to the applicant. In connection with the latter area, we feel there is enough non-drilled ground and favorable structure so as not to exclude the possibility of a continuation either to the northwest or the southeast of this area. We could not determine from reading recommendation No. 1 what further drilling would be authorized or suggested if mineralization is encountered.

In the applicants proposed order of drilling, areas A, B, and C, can be completed before needing a corrected map showing accurate location of holes around area D. Several of the holes have been found, but it may be most practical to await plowing of the field to show other locations and make a complete map. Accordingly, we recommend that the contract be awarded, but prior to drilling around holes A and J (Washington's recommendation No. 1) the applicant provide a map acceptable to the field representatives.

To summarize, we recommend a contract embodying the following:

(1) Initial holes in accord with locations shown on returned docket map and in order of drilling requested by applicant.

(2) Applicant to provide acceptable map prior to drilling holes as per your recommendation No. 1 (applicants proposal D.)

(3) Should the applicants proposals A, B, C and D fail to discover favorable mineralization their remaining footage be used to explore the possible southeast and northwest extensions of the mineralized area south of the Rowe Zinc shaft.

(4) Location of holes beyond initial holes to be mutually satisfactory to the field team and the applicant.

We are returning the docket material forwarded to us for purposes of this report. The docket map has had the hole locations proposed by the applicant added to it.

W. A. Grosh

CC File
Day File
A.B.Needham

MAYER and THIEDE MINING COMPANY

SHULLSBURG, WISCONSIN

April 7, 1952.

Bureau of Mines
Platteville
Wisconsin

Attention: Mr. A. B. Needham
Executive Officer

Dear Mr. Needham:

In order to clarify our discussion of date, we propose to drill:

A. 5 holes in the vicinity of the Rowe Lead Mine indicated in ~~red~~ green on map in the Platteville office.

B. 3 holes east of Rowe Zinc Mine

C. 3 holes south of Rowe Zinc Mine.

D. 4 holes as indicated by Washington office as shown on map.

It is proposed to drill the holes in order as stated. All holes in initial program will be completed before detailed drilling of any ore bodies found. It is proposed that we will do detailed drilling on any initial holes showing favorable mineralization. In the event none of the holes show favorable mineralization, we would like to attempt to extend the southeast and northwest end of the indicated ore body south of the Rowe Zinc Mine.

The advisability of any drilling beyond the initial stage will be decided mutually by the field team and the company.

Trusting this meets with your approval, we are,

Very truly yours,

MAYER and THIEDE MINING COMPANY

By J. L. Mayer
J. L. Mayer, Partner

JLM:mh

500

FILE COPY
SURNAME:

Mouldel (mch)

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

MAR 28 1952

Mr. H. K. Geyer
Kopp and McKichan
First National Bank Building
Platteville, Wisconsin

Re: Docket No. DMEA 2184
Exploration Project
Rowe Property

Dear Mr. Geyer:

We refer to your letter of February 14, 1952 requesting a definite word on the status of the subject application.

As a result of our review of the proposed project and correspondence with the applicant, we have informed the applicant, as per enclosed copy of letter, to contact the Platteville Office of the Defense Minerals Exploration Administration for further discussion of the proposed work.

Sincerely yours, 3/28

D. E. Moulds (mch)

D. E. Moulds, Chief
Base Metals Division
Defense Minerals Exploration
Administration

DEMoulds/hmj
3-28-52
CC to: Adm. Reading File
Docket File Copy
Region V
Mr. Moulds

500 FILE COPY
Surname:

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

Moulds
Lyons
Bishop
Mayer
McKnight
Hutchison

Mr. J. L. Mayer
Mayer and Thiede Mining Co.
Room 625
37 W. Van Buren Street
Chicago 5, Illinois

Re: Docket No. DMEA 2184

Dear Mr. Mayer:

With reference to your letter of March 17, 1952, we note that you suggest exploration in the lead area to a deeper level and that work be done on both the Rodham and Rowe Mines. As this is a modification of the exploration project as now understood, we agree that this matter should be taken up with the Platteville Office. At the same time, the matter of a map of the area can be discussed.

We are advising Mr. Needham, Executive Officer of the Minneapolis Branch, of your desire to discuss this matter and have transmitted to him all material pertinent to your proposal.

Sincerely yours,

D. E. Moulds (meh)

D. E. Moulds, Chief
Base Metals Division
Defense Minerals Exploration
Administration

DEMoulds/meh/hmj
3-24-52
cc to: Adm. R. File
Region V
Mr. Bishop
Mr. McKnight
Mr. Moulds
Docket File Copy

FILE COPY
Surname:

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

Mr. A. B. Needham
Executive Officer, Region V
DMEA Field Team
2908 Colfax Ave., South
Minneapolis, Minnesota

Re: Docket No. DMEA 2184 (Lead-Zinc)
Mayer and Thiede Mining Co.

Dear Mr. Needham:

With reference to the exploration project submitted by the Mayer and Thiede Mining Company covering the Rowe Lease in Lafayette County, Wisconsin; the recommendation of your office for a project involving alternative plans of drilling has been reviewed.

The previous drilling accomplished by the Puritan Mining Company and the Bureau of Mines appears from the map, "Plate I", to have thoroughly explored the area south of the Rowe Zinc Mine so far as the possible extensions northwest of holes 23, 26, 28 and southeast of hole 46 is concerned. However, exploratory drilling to connect the four indicated ore blocks appears warranted as does exploratory drilling to determine the extension of the Rowe Zinc Mine to the east and south.

Accordingly the following recommendations were made:

(1) That the recommended field program of holes A through K be modified to the drilling of four initial holes as indicated in red on Plate I.

(2) That two cross sections of 3 holes each be drilled, one at the approximate position of hole L, the other at the position of holes M and N. If commercial ore is encountered in any of these 6 holes, further drilling is to extend out from such holes; if no commercial ore is found in any of the holes, the project should be abandoned.

(3) That holes O through W be eliminated from the program.

(4) That the program be approved for the amount suggested by the field team, in order that Steps 1 and 2 above may be fully carried out, if warranted.

It was noted in the geological report submitted by your office that the original map submitted by the applicant was inaccurate, and that the map, "Plate I", accompanying the report should not be used as a basis for an exploration or development program because drill holes are not located with sufficient accuracy. "The applicant should not be permitted to begin to touch DMEA supported drilling until he has accurately mapped ground locations of old drill holes with reference to shafts, winzes, and roads."

In view of this, Mr. Mayer was advised by letter, a copy of which you have in your files, to survey the area and submit a map accurately locating all drill holes. Mr. Mayer has replied by letter under date of March 17, 1952, a copy of which is enclosed, advising that the map accompanying report R. I. 4446 indicates the drilling in the Rodham Mine area and that they also had the complete map of the drilling in the lead mine. He also advises that they now believe exploration should be carried on in the lead area to a deeper level.

As it appears that the project has been modified both in comparison to the initial application and to the recommended project, and now by the applicant, we are advising the applicant to discuss this project again with your Platteville field office. We are transmitting the information and map indicating the drill holes recommended by this office, so that it can be thoroughly considered along with the applicant's new proposal, and, also, the matter of a map on which to base the project should be determined.

Please transmit your comment and recommendation relative to an exploration project as soon as convenient after consideration of the above suggestions and discussion with the applicant of the indicated modifications.

Sincerely yours,

(SIGNED) FRANK E. JOHNSON (JHB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hodges (JHB)

Member, Bureau of Mines

P. P. Thayer (JHB)

Member, Geological Survey

DEMoulds/meh/hmj
3-24-52
cc to: Adm. R. File
Docket File Copy
Operating Committee
Mr. Bishop
Mr. McKnight
Mr. Moulds
Region V

MAYER & THIEDE - MINING CO.
SHULLSBURG, WISCONSIN

ADDRESS REPLIES TO
ROOM 625
37 W. VAN BUREN ST.
CHICAGO 5, ILLINOIS
HARRISON 7-0531

March 17, 1952

United States Dept. of Interior
Defense Minerals Administration
Washington 25, D.C.

Subject: Docket No. DMEA 2184
Attention: Mr. E.E. Moulds, Chief
Base Metals Division

Dear Mr. Moulds:

I have your letter of March 3rd requesting the reworking of the preliminary map that we sent to you.

Originally we had intended this map simply as a consolidation of the lead and the zinc mine.

Referring to Report R.I. 4446 of April, 1949 that shows the location of drilling in the Rodham Mine area and we also had a very complete map showing the drilling of the lead mine.

Would it not be possible that these two would suffice for the preliminary exploration which we had originally estimated in our request of May 29, 1951 as a total of $10,000.00 and after we had filed our original request we decided to expand this lead operation to include zinc and it now looks from the work we have done so far, that we should carry the exploration on in the lead area to a deeper level, and work both the Rodham mine and the Rowe mine for both zinc and lead.

I would like to discuss this matter with your chicago office or at Plattville because I feel that the zinc ore body stems under our lead mine and I would like to get this drilling done as quickly as I can.

Very truly yours,

MAYER - THIEDE - MINING CO.

J.L. Mayer

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 19 1952

JLM:bb

FILE COPY
SURNAME:

500

Moulds

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

MAR 3 1952

Mr. James L. Mayer
Mayer & Thiede Mining Company
Room 625
37 West Van Buren Street
Chicago 5, Illinois

Re: Docket No. DMEA 2184

Dear Mr. Mayer:

Your application for exploration project assistance for churn drilling on the Rowe Lease in Wisconsin has been reviewed and tentatively approved. We find, however, that the accuracy of the map locating previous drill holes has been questioned. As the location and logs of previous holes are necessary to determine the feasibility of further drilling, we cannot approve your project until an accurate map is presented for review.

We, therefore, request that a survey and map be made of the SW¼ of the NW¼ of Section 30, T2N, R3E containing the Rowe Zinc Shaft. The map shall locate all drill holes by identifying number and in relation to mine shafts and section subdivision, and is to be approved by the Government representative in the area before transmittal to this office.

Upon receipt of the map, final decision on your project will be made as soon as possible.

Sincerely yours,

D. E. Moulds meh

D. E. Moulds, Chief
Base Metals Division
Defense Minerals Exploration
Administration

DEMoulds/meh
3/3/52
cc to: Adm. R. File
Docket File Copy
Mr. Moulds
Mr. Bishop
Mr. McKnight
Region V (2)

IN REPLY REFER TO:

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

February 26, 1952

Memorandum

To: Mr. D. E. Moulds, DMEA

From: Erwin J. Lyons, USGS

Subject: Docket DMEA-2184, Mayer and Thiede Mining Company, Chicago, Illinois. (Property in Lafayette County, Wisc.)

The tract of land it is proposed to investigate has already been explored, at least in part, by the Puritan Mining Company in 1946 and by the U. S. Bureau of Mines in 1947. The work by the Bureau was to investigate more fully the mineralization revealed by the drilling of the Puritan Mining Company. This company drilled 56 holes in the area and the U. S. Bureau of Mines core-drilled 5 holes having a total footage of 1,192 feet.

On the basis of the results of these two programs, the U. S. Bureau of Mines engineer stated: "With broad interpretation of drilling results, approximately 40,000 tons of material containing a minimum of 1.5 per cent combined lead and zinc is inferred by the Puritan drilling. The Bureau of Mines drilling did not contribute to the establishment of this reserve." The engineer concluded that further exploration of the area was not justified until it was economically feasible to mine large, low-grade lead-zinc orebodies.

With an even broader interpretation of results than that of the U. S. Bureau of Mines engineer, the present reviewer estimates an indicated reserve of about 53,000 tons having a grade of 2.34% Zn and 1.5% Pb. This is based on a cut-off of 3% combined lead-zinc over a minimum thickness of 6 feet. However, this tonnage is distributed among four bodies separated by undrilled areas or areas containing blank holes and it is doubtful whether it could be economically mined.

It appears to the present reviewer that the area in which these orebodies occur and which is to be explored by drill holes A through K of the field team's suggested program (plans 1-3, inclusive), has been sufficiently investigated and that it must be concluded that all that can be hoped for in this area is an orebody having a grade comparable to that given in the above estimate. So far as is known to the present reviewer, orebodies of this grade cannot yet be mined at a profit in the Southwestern Wisconsin area.

Holes L through U of the field team's suggested program are to investigate possible extensions of the Rowe Zinc mine, in which ore was reported to have been left in the face, and also to attempt to

locate a possible crevice between the Rowe Zinc mine and the Rowe Lead mine. Ore in the Rowe Zinc mine is reported to occur in crevices and "openings" in the cherty Presser beds above the ore horizon from which today's production in the district is obtained. Although ore occurrences of this nature are extremely difficult to find by churn drilling, because the holes must be spotted more or less blindly in the hope of hitting a vertical crevice and if the crevice is not located there is no way to determine its location or direction from the hole, it is suggested that some drilling be done here (see recommendations, below).

The field team states that the two cross sections between the two mines (holes O through T) are located where the land owner reported ore indications, but what these ore indications are is not given in the field team's report. The U. S. Bureau of Mines' hole number 5, located approximately between the two sections, is a blank hole which was spotted where the land owner reported ore indications. In addition the west side of the Rowe Lead mine appears to be blanked off by holes J-21 through J-24.

Holes U, V, and W are to determine structure. However, it is dubious whether the information derived from these three holes will add materially to the structure picture. The most successful method for obtaining information of this type in that district has been to drill on a regular grid pattern having 660-foot or 330-foot centers.

Recommendations : The following recommendations are suggested:

(1) That holes A through K be eliminated from the program because present information indicates that any deposit found would be of too low a grade to mine under present economic conditions.

(2) That two cross sections of 3 holes each be drilled, one at the approximate position of hole L, the other at the position of holes M and N. If commercial ore is encountered in any of these 6 holes, further drilling is to extend out from such holes; if no commercial ore is found in any of the holes, the project should be abandoned.

(3) That holes N through W be eliminated from the program.

(4) That the program be approved for the amount suggested by the field team, in order that step 2 above may be fully carried out, if successful.

E. J. Lyons (ETM)

E. J. Lyons
Geologist

FILE COPY
Surname:

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

Bishop

February 25, 1952

Memorandum

To: Mr. D. E. Moulds, DMEA

From: O. M. Bishop, USBM

Subject: Docket DMEA-2184, Mayer and Thiede Mining Company property, Lafayette City, Wisconsin

I have read the field team report and also E. J. Lyons' (USGS) memorandum on the application. I concur with Lyons' opinion. I also wish to point out that the field team notes

(a) Existing mill is unsuited to milling zinc-lead ore of the kind now indicated by the Puritan Mining Company and USBM drilling.

(b) Required subordination agreements had not been submitted at time of their report, January 16,1952.

(c) As a condition of approval, the field team recommends employment of an individual capable of supervising the exploration program.

As a comment on the comments as to the grade of ore that can be treated I would note that an average of about 75,000 tons of ore were milled per month in 1951. It contained about 3.65% Zinc and 0.22% lead.

OMB
O. M. Bishop
USBM

O.M.Bishop:emp
Copies to: Files
O. M. Bishop 3423 Interior
E. T. McKnight 4204 GSA Bldg.

KOPP & McKICHAN
ATTORNEYS AT LAW
W. ROY KOPP
M. A. McKICHAN
FIRST NATIONAL BANK BUILDING
PLATTEVILLE, WISCONSIN
TELEPHONE 2615

February 14, 1952

Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals Administration
New Interior Building
Washington 25, D. C.

Subject: DMA-2184
Re: Exploration Loan
Rowe Property

Dear Mr. Mittendorf:

We have been advised that the application for the above captioned exploration loan has been reported to your office favorably by the field team which did the field work. Since we are extremely anxious to begin the exploration work in question, we would appreciate it if this application could have your immediate attention.

Would you be so kind as to advise us when we might have definite word on this matter.

Very truly yours,

KOPP & McKICHAN

H. K. Geyer mh

H. K. Geyer

HKG:mh

FEB 16 1952

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

Reviewed by
DMEA OPERATING COMMITTEE
2-6-52

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ON-SITE EXAM

DMA-DOCKET 2184 - Mayer and Thiede Mining Company

Lafayette County, Wisconsin

FEB 1 1 28 PM '52

Wesley A. Grosh, Mining Engineer
Harold J. Schroeder, Mining Engineer
U. S. Bureau of Mines

Geology by W. A. Broughton, Geologist
U. S. Geological Survey

January 16, 1952

Following are the findings of the field team investigation of the Mayer and Thiede Mining Company's exploratory loan application on the Rowe Lease. Subjects are numbered to correspond to the deficiences noted by the review of application.

4d. The logs of the Bureau of Mines holes were checked and the following table taken from Report of Investigation 4446 shows the significant mineralization that was encountered.

Samples from hole number	Sample interval, feet 1/ From -	to -	Length	Analysis, percent Zinc	Lead	Iron
1.....	168.3	169.6	1.3	0.70	Trace	1.10
	170.7	172.7	2.0	.70	Trace	1.50
	172.7	174.6	1.9	.20	Trace	2,90
	174.6	176.7	2.1	7.00	1.70	9.50
	176.7	178.3	1.6	1.60	.10	6.60
	178.3	179.0	.7	.10	.10	1.20
	179.0	180.0	1.0	1.70	1.45	.90
	180.0	185.0	5.0	Trace	Trace	1.40
	189.5	192.7	3.2	.40	.25	3.30
	199.6	200.9	1.3	1.30	.70	3.30
	200.9	204.2	3.3	Trace	Trace	3.20
	204.2	207.0	2.8	Trace	.65	2.30
	233.4	235.0	1.6	Trace	Trace	4.30
3.....	165.0	171.0	6.0	.15	Trace	1.00
4.....	155.0	161.0	6.0	Trace	.30	2.40
	170.0	172.0	2.0	.10	.80	1.00
	188.0	192.0	4.0	.15	.40	7.30
	195.0	196.5	1.5	.90	.10	4.00

1/ Drilling intervals are measured from the collar of the hole.

The logs of the J. D. Judd and Son drilling are on file here. However, the depth of drilling is not to the horizon that shows the zinc mineralization in the drilling south of the Rowe Zinc Mine.

Location of the proposed drill holes, together with a detailed description of the drilling plan and its feasability is to be found on the accompanying map and under the geologic portion of this report.

7b. To date the required subordination agreements have not been submitted. Mr. Thiede has very recently inquired as to some of the details regarding these agreements, and stated he would have them completed. We shall forward them as soon as they are received.

10a & b. Past drilling shows that holes will need to be drilled into the Trenton formation to penetrate to the ore horizon. Depths of holes is estimated at 195' so the application for $10,000 of participation drilling would allow only 26 holes rather than the forty as stated by the application. Locations of the proposed holes is covered under "4d" in this report.

10.d. The estimated unit costs appear reasonable. The total cost would be based upon approximately 26 holes to 195 foot depth or 4 - 5160 ft. of hole for a total cost of $10,000.

General:

Although not applying directly to the conduct of the feasibility of the proposed exploration program, there are certain statements in the application of Mayer and Thiede Mining Company that are misleading. It is felt these items should be pointed out as it would affect the exploitation of any ore deposit discovered.

The equipment described in the application is being used satisfactorily in mining and milling the coarsly sized, easily separated lead crevice material. Mining any zinc ore body discovered would sooner or later require underground transportation equipment to replace the hand tramming now practiced. Additional pumping and ventilation facilities would probably be needed.

Concentration for shipment to a near by custom mill could not be accomplished as there is no crusher or rolls and only three

cells in the jig. If direct shipment to a smelter is desired, grinding and flotation equipment would also be required. From the above it is obvious the answer to item 15 on their application is considerably in error.

Geologic report on the Rowe mine,

Lafayette County, Wisconsin

Location of property

The Rowe property includes the N½SW¼, the NW¼ except one acre for school, the W½SW¼NE¼, the NW¼NE¼, and that part of the NE¼NE¼ lying west of County Trunk E, sec. 30, T. 2 N., R. 3 E.; the S½SE¼SE¼ sec. 19, T. 2 N., R. 3 E.; that part of the NW¼NW¼ sec. 29, T. 2 N., R. 3 E., lying west of County Trunk E; and a tract described as follows: beginning 9.98 chains south of the northwest corner of the SW¼SW¼ sec. 20, T. 2 N., R. 3 E., then 4.52 chains S. 42°20' E., then 4.41 chains S. 60°40' E., then 2.25 chains S. 45°15' E. to center of County Trunk E, then southwest along center of highway to south line of sec. 20, then west to the southwest corner of sec. 20, then north to place of beginning. The property is about 3½ miles northeast of Shullsburg, Wisconsin (fig. 1).

Ore-bearing beds

Zinc and lead mineralization in the vicinity of the Rowe mine occurs in the Galena, Decorah, and Platteville formations, all of Ordovician age (fig. 2). Past production was mainly from the lower part of the Galena with a small amount possibly having been mined from the upper part of the Decorah. At present a small amount of lead ore (containing sphalerite) is being mined from the lower Galena (pl. 1, Rowe lead mine). Drilling in 1946 and 1947 by the Puritan Mining Co.

and in 1947 by the U. S. Bureau of Mines showed zinc and lead ore in the Decorah formation and the upper part of the Platteville formation as well as in the lower part of the Galena.

Miners' terms, subdividing the formations into members, are used in this report (fig. 2). The oldest member of the Galena formation is the "drab". The Decorah formation is divided, from top to bottom, into the "gray", "blue", "oil rock", and "clay bed". The Platteville formation consists of the "glass rock" and the underlying "Trenton".

Geologic structure

Geologic structure at the top of the oil rock as mapped from drill records shows a syncline trending southeasterly through drill holes 22, 38, 45, and 50. The old Rowe zinc mine possibly is on a parallel anticline although information here is meager (pl. 1).

In the southwestern Wisconsin mining district the limbs of synclines may contain steeply inclined mineralized fractures, called "pitches", and are favorable areas for prospecting. The pitches are steeply dipping reverse faults roughly paralleling the trend of the synclines, are inclined away from each other, may develop on both limbs of the synclines, and may extend from the lower "drab" into the top of the "Trenton". Usually there is a major outside pitch with minor parallel inside pitches. The pitches may terminate in and be offset by flats, which are nearly horizontal mineralized bedding-plane openings on the syncline side of the major pitch. Individual pitches and flats range in thickness from

a fraction of an inch to several feet. Thin pitches and flats may be closely spaced, constituting a mineable ore body. Nearly vertical mineralized fractures, called "crevices", may develop in the "drab" and the upper members of the Decorah formation. They are similar to the pitches except that they may overlie either synclines or anticlines. They commonly trend north-south, east-west, northeast, or northwest. Several relatively closely spaced and parallel crevices constitute a "range".

The old Rowe zinc mine is reported to have been on an east-west crevice in the bottom of the "drab" and the top of the "gray". Zinc mineralization was largely in horizontal flats and bedding disseminations out from the crevices. Ore is reported in the south and east headings (pl. 1). The shape of the south workings suggests a second crevice parallel to the main Rowe crevice. Lead mineralization was largely in the east-west crevice and associated small oblique crevices.

Production from the Rowe zinc mine has not been large; but the Rodham mine, about half a mile northwest of the Rowe, is one of the past important producers in the district. The Rodham ore body was similar to that of the Rowe, being confined to the lower "drab" and upper "gray" and consisting of numerous major east-west and minor associated oblique lead-bearing crevices with horizontal zinc-bearing flats and disseminations extending as much as 25 feet from crevices.

The Rowe lead mine, now being operated by the applicant, is open to about the base of the "drab". A flooded winze, with some drifting, extends into the "blue". The north stope exposes the intersection of

a strong east-west crevice dipping about 85° S. and a minor northeast vertical crevice. The south stope shows a rather strong pitch striking about N. 65° W. and dipping about 65° SW. The area between the north and south stopes contains several minor pitches and flats not more than one inch in thickness.

Character of the ore

Ore mineralization in the crevices and pitches down to the upper part of the "gray" is chiefly coarse-grained galena with minor medium- to coarse-grained sphalerite. Ore mineralization in the associated flats and disseminations is chiefly medium to coarse sphalerite with some galena. Above the water table the sphalerite has been largely converted to smithsonite. The gangue, other than rock, is marcasite, pyrite, and calcite below the water table and ocherous clay above the water table. Thus, beneficiation of the ore is a rather simple process.

Exploration

Exploration for ore in this district is customarily done by churn drilling. Considerable drilling has been done on the Rowe property. Plate 1 shows the approximate locations of known drill holes and whether or not they encountered ore.

The applicant primarily desires to explore for the extension of the ore indicated by the drilling south and southeast of the Rowe zinc mine (pl. 1). His drilling proposal is:

Plan 1. Hole A (pl. 1) will be drilled. If this hole indicates ore, the drill will be moved about 400 feet southeast, and holes B, C, and D will be drilled about 50 feet apart as a cross section. More holes may be required on this cross section, depending on information obtained from B, C, and D. If this cross section indicates ore, then holes E, F, and G will be drilled on the ore trend at about 100-foot intervals; another cross section will be drilled where it is necessary in the opinion of the operator and the DMEA field team. This system of drilling will be continued to the southeast so long as it is possible to follow the ore.

Plan 2. Holes H and I (pl. 1) will be drilled if plan 1 does not find ore. If either of these holes indicates ore, an attempt will be made to determine the extent of the ore body by following a plan of drilling similar to that outlined in plan 1.

Plan 3. Holes J and K (pl. 1) will be drilled if plan 2 does not find ore. If either of these holes indicates ore, the trend will be prospected to the northwest by following a plan of drilling similar to that outlined in plan 1.

Plan 4. Holes L, M, and N (pl. 1) will be drilled if plan 3 does not find ore. Ore is reported to have been left in the south and east faces of the Rowe zinc mine, and if these holes indicate such ore, an attempt will be made to find the extent of the ore to the south or east by following a plan of drilling similar to that outlined in plan 1.

Plan 5. Holes O, P, Q, and R, S, T (pl. 1) will be drilled as two cross sections if plan 4 does not find ore. These sections cross the east-west crevice trend between the Rowe zinc mine and the present Rowe lead mine. These cross sections are located approximately where ore indications have been reported by the land owner. Any ore indicated by these holes will be traced out by a plan of drilling similar to that outlined in plan 1.

Plan 6. Proposed holes U, V, and W (pl. 1) are chiefly for structural information. However, an attempt will be made to trace out any ore that they might indicate.

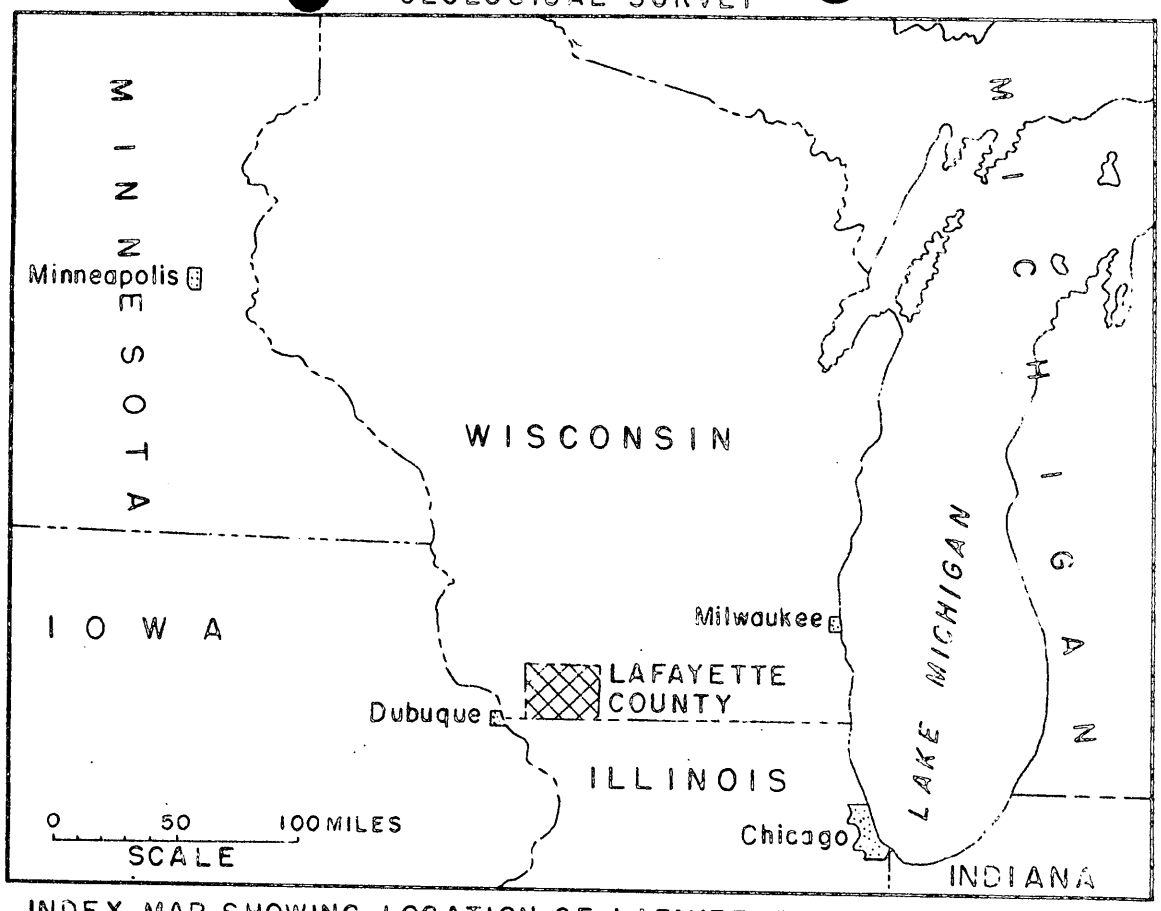
If the exploration program is carried through plan 6, any additional holes should be located with the approval of the DMEA field team after all accumulated information has been evaluated. All holes should be drilled into the top of the "Trenton" inasmuch as the earlier drilling in this area indicated favorable ore conditions at this horizon.

Recommendations

It is recommended that the above proposed drilling be executed. If the applicant receives DMEA financial assistance, he should be required to furnish adequate technical supervision for carrying out an intelligent exploration program. At present he is not known to have anyone in his employ capable of doing this.

The original map submitted by the applicant is inaccurate. Plate 1 of this report was made up by compiling data from the Puritan Mining Company, the U. S. Geological Survey, and the U. S. Bureau of Mines. It is probably the most accurate map of the area now available, but it should not be used as a base for an exploration or development program because drill holes are not located with sufficient accuracy. The applicant should not be permitted to begin DMEA supported drilling until he has accurately mapped ground locations of old drill holes with reference to shafts, fences, and roads.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



INDEX MAP SHOWING LOCATION OF LAFAYETTE COUNTY, WISCONSIN

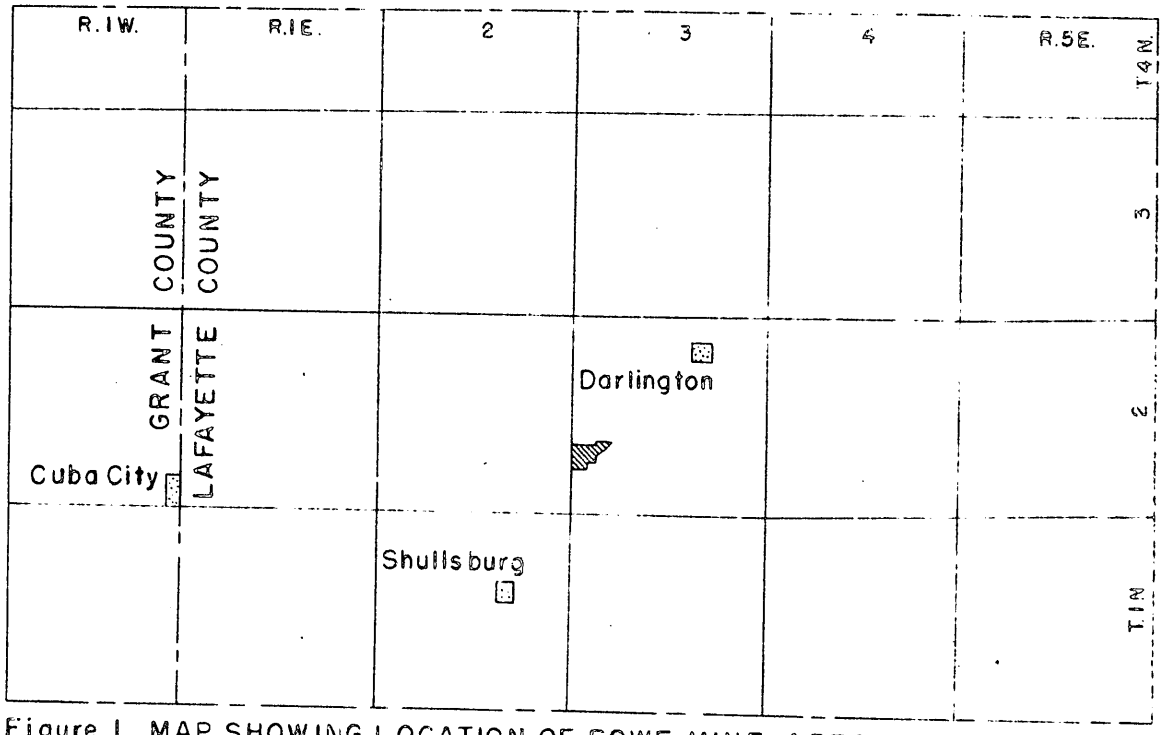


Figure 1. MAP SHOWING LOCATION OF ROWE MINE AREA

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

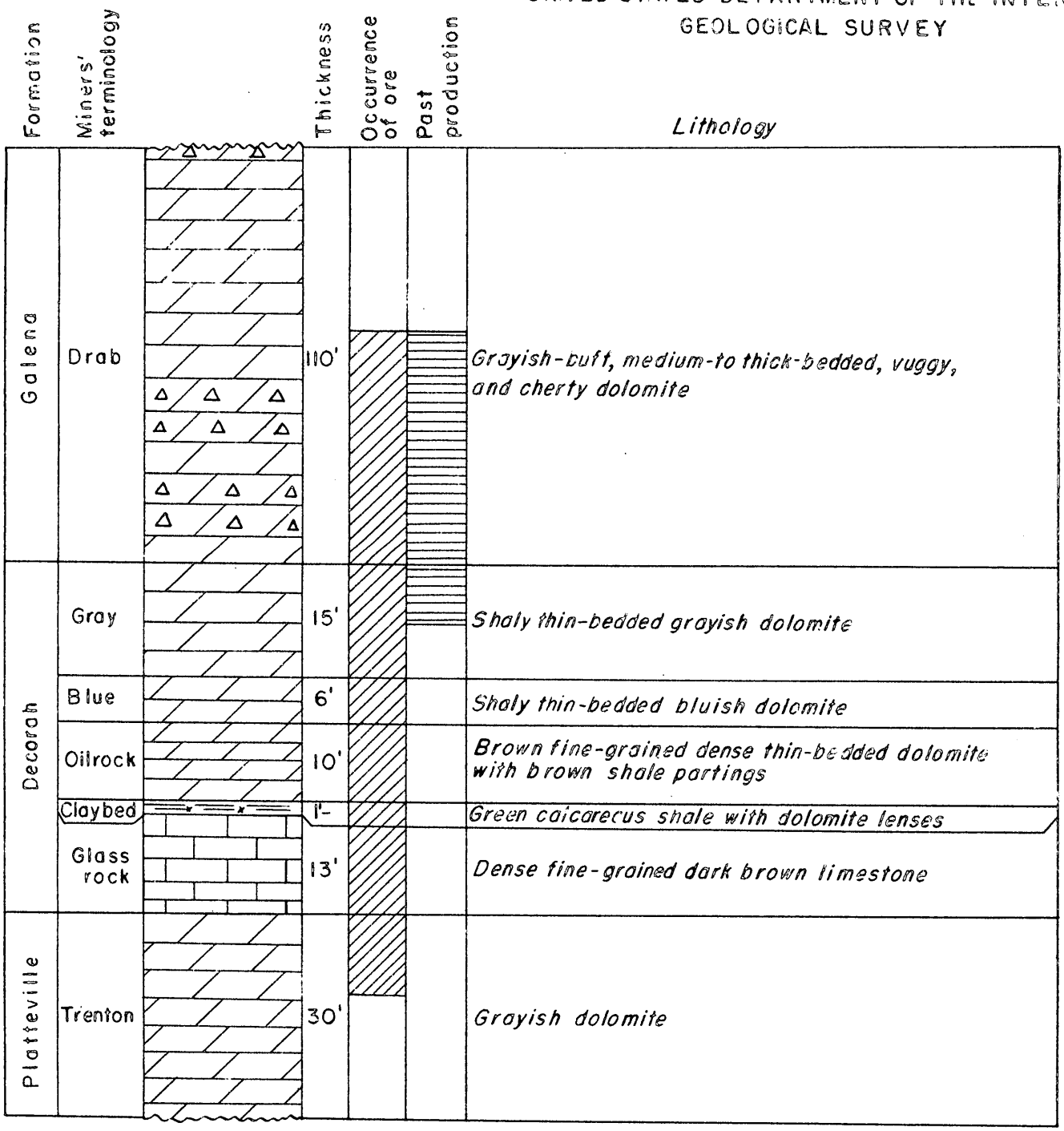


Figure 2. Stratigraphic section of the Rowe mine area, Lafayette County, Wisconsin, showing indicated ore zone and zone of past production.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

January 21, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region V

Subject: Docket DMA-2184, Mayer & Thiede Mining Co.

Returned are the referral papers together with the original and three copies of the field team's report recommending the project with the proviso that adequate technical supervision be included in their contract.

Applicant should also accurately map location of former drill holes so an intelligent planning of subsequent holes can be made.

Subordination agreements will come by the time the contract is drawn.

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
FEB 1 1 28 PM '52

A. B. Needham
Executive Officer
DMEA Field Team, Region V

Attachments

McKnight
Bishop

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

Bureau of Mines
DEPARTMENT OF THE INTERIOR

NOV 13 1951

Mr. A. B. Needham
Executive Officer, DMA Field Team
Region V
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 2184

Commodity Lead-zinc

Applicant James L. Mayer, Mayer & Thiede Mining Co., Rm. 625, 37 W. Van Buren Street, Chicago 5, Illinois

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2184

Commodity Lead, zinc

Total Amount $10,000

Govt. Participation 50% - $5,000

1. Name and Address of Applicant James L. Mayer

Mayer & Thiede Mining Co., Rm. 625, 37 W. Van Buren Street, Chicago 5, Ill.

2. Location of Property 3½ miles NE of Shullsburg, Lafayette County, Wisconsin

(T. 2 N., R. 3 E.)

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

If not, application will be rejected.

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

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

a) Good

b) Poor

c) None

d) Don't know—needs field examination X, see attached draft

e) Is there an alternative and favorable project?
(If so, attach an explanation)

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

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

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

productive period? Yes

*question numbers are those of MF-103

4. (d) The proposed work is not clearly indicated on the map. Initial holes have not been "spotted" on the Rowe property to the west. Though the logs for many of the old holes have been submitted, the Bureau of Mines' holes should be checked against the logs at their Platteville office. The reviewer questions whether all the proposed holes are justified as given on map, marked Exhibit "C".

In the phase of the program involving 25 holes on the property to the east, the applicant has not shown whether a "fence" of holes will be drilled to the NW or SE of the old holes. From the map, marked Exhibit "C", the old holes NW of the mine indicate that further drilling in this direction is not warranted. However, some drilling to the SE of the mine would seem to be a better proposition. Logs for the old holes in this area were not submitted, but are probably available from the owners, J. D. Judd & Son, Shullsburg, Wisconsin. Also, the old holes show a trend in ore NE-SW, with a possible change to the E on the NE end. For this reason, a few holes transverse to the trend may be needed to the SW of the mine.

E.L. Newcomb

7. Are subordination agreements necessary? Yes

a) MF-201? _____

b) MF-202 Yes

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

a) Available manpower Yes

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

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

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

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

_____

Is a field check needed on this point? No

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

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? Yes, without details If so, attach a draft. see draft.

b) Is there an adequate map or sketch of the proposed work? No. Holes are not located on map.

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

If not, what part of it is? _____

_____

_____

_____

10. (a) It is proposed to drill approximately 40 churn drill holes to about 150 foot depths to explore and prove the present lead and zinc ore bodies. However, the locations of the proposed holes are not given. Some clarification of this matter is needed.

10. (d) Estimated costs of drilling approximately 40 holes to 150 foot depth:

6,000 ft. at $1.94/ft.....$ 11,640

Items included in $1.94 per foot are:

Churn drilling.....	$ 1.60
Supervision.....	.15
Surveying.....	.07
Stenographic help.....	.07
Transportation.....	.03
Withholding tax.....	.01
Compensation insurance.....	.01
	$ 1.94

12. (a) Churn drilling to be done under contract at $1.60/ft.

Depth of hole probably 130'. [illegible]
[illegible] 1.94 = 2.7 holes (5130')

E.L. Newcomb

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? Yes

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

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? No

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? Not applicable

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

c) Is a field check needed? No

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

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft. See draft.

c) Are rents and charges reasonable? Yes

d) Is a field check needed? No

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

a) Are there sufficient data? Yes

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

c) Is the schedule excessive for the work proposed? No

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? Not applicable

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? No

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? _____

Reviewed by: E.L. Newcomb GS

Date 10-31-51

INT.-DUP. SEC., WASH., D.C. 99009

FILE COPY
SURNAME 350

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

Newcomb (ETM)
McKnight
Bishop
Johnson
Lyon
Moore

Re: DMA-2184

NOV 8 1951

Mr. James L. Mayer
Mayer & Thiede Mining Company
Room 625
37 W. Van Buren Street
Chicago 5, Illinois

Dear Mr. Mayer:

Your application for an exploration loan on property near Shullsburg, Lafayette County, Wisconsin, has been reviewed by the Defense Minerals Administration.

We are forwarding your application to Mr. A. B. Needham, Executive Officer, DMA Field Team, 2908 Colfax Avenue, South, Minneapolis 8, Minnesota, for additional information and advice.

A copy of this letter will be sent to Mr. H. K. Geyer of the law firm, Kopp & McKichan, First National Bank Building, Platteville, Wisconsin.

Very truly yours,

signed cc 11/8

Tom Lyon, Director
Supply Division

ELNewcomb:emp
G 10-31-51
Copies to: H. K. Geyer (above address)
A. B. Needham Region V (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
O. M. Bishop
Directors r. files 4214 GSA
Br. r. files 4214 GSA
Administrators r. files
DMA docket files

Kopp & McKichan, Attorneys
First National Bank Building
Platteville, Wisconsin

Subject: DMA-2184
Re: Exploration Loan
Rowe Property

Gentlemen:

This will acknowledge receipt of your application dated October 22, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA- 2184 and referred to the Lead-Zinc Branch.

Kindly refer to DMA- 2184 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

2463

OCT 29 1951

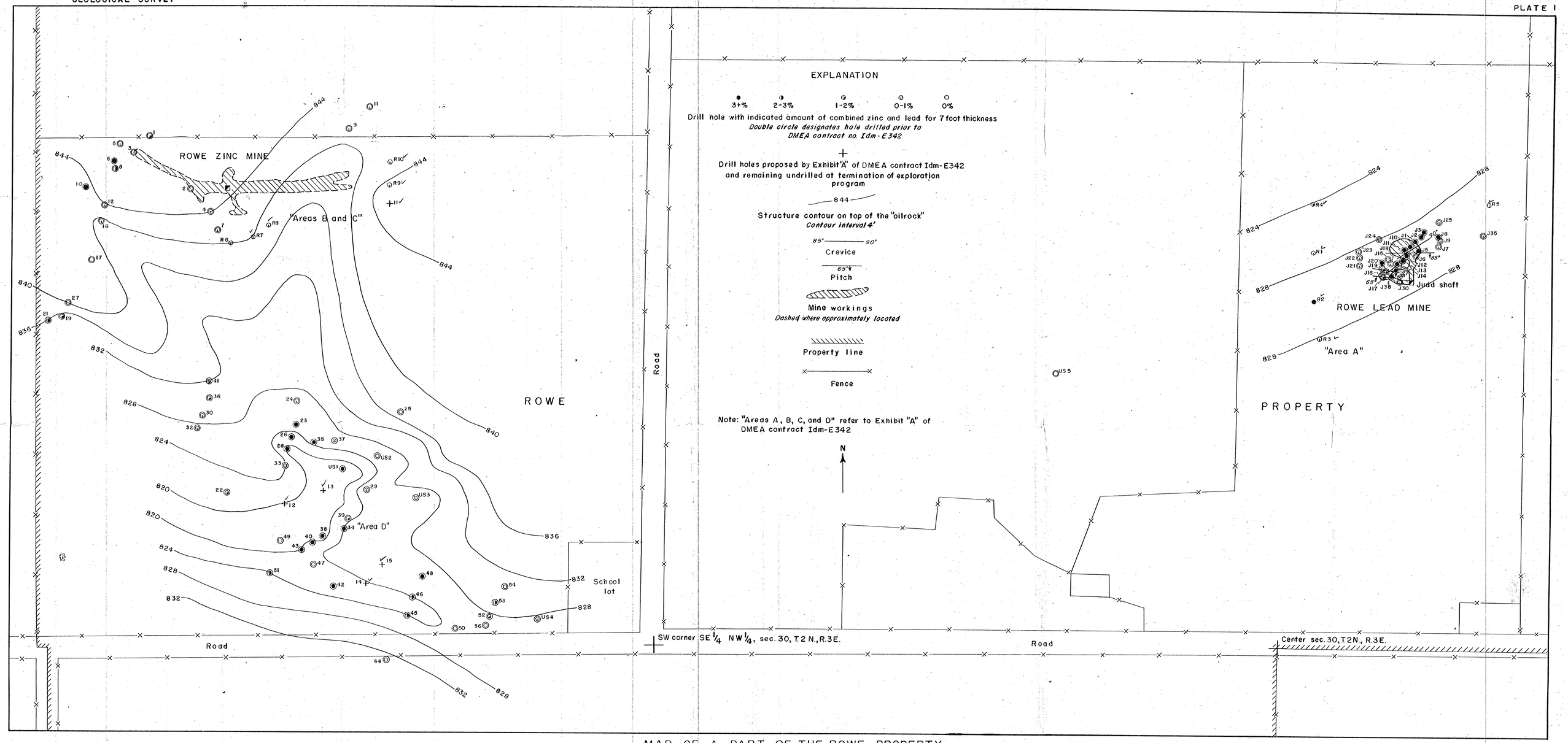
October 26, 1951

MATERIAL WAS RECEIVED FROM APPLICANT ON OCTOBER 25, 1951 BUT NO FORMS WERE ATTACHED. PER THE INSTRUCTIONS OF MR. ADAMS, REPORTS AND RECORDS BRANCH, THREE COPIES OF FORM MF-103 WITH ATTACHMENTS WERE REMOVED FROM FILE DMA-1375 AND PLACED IN THE DOCKET IN ORDER THAT THIS CASE MAY BE PROCESSED.

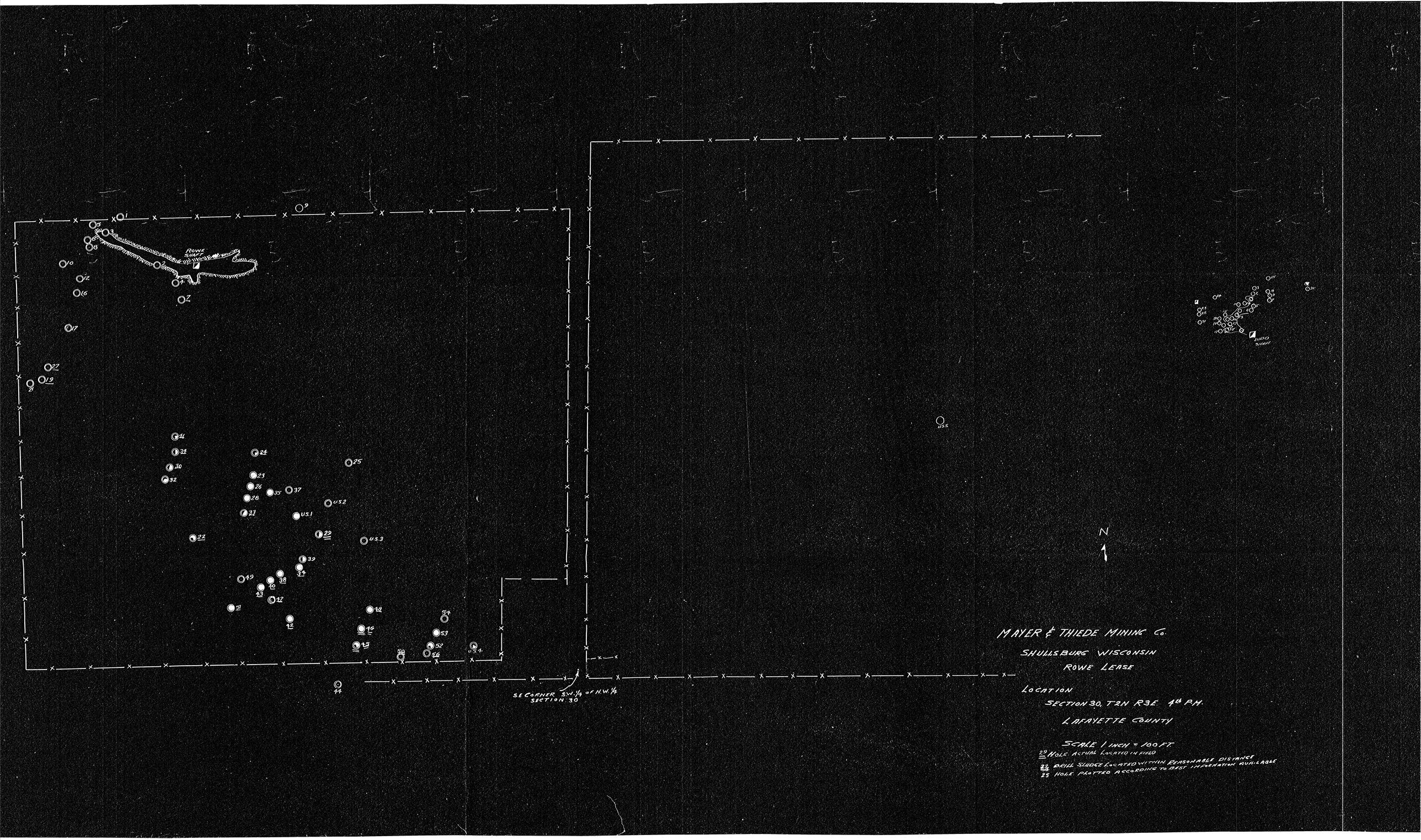
Reports and Records Branch
(Miss Lanahan)

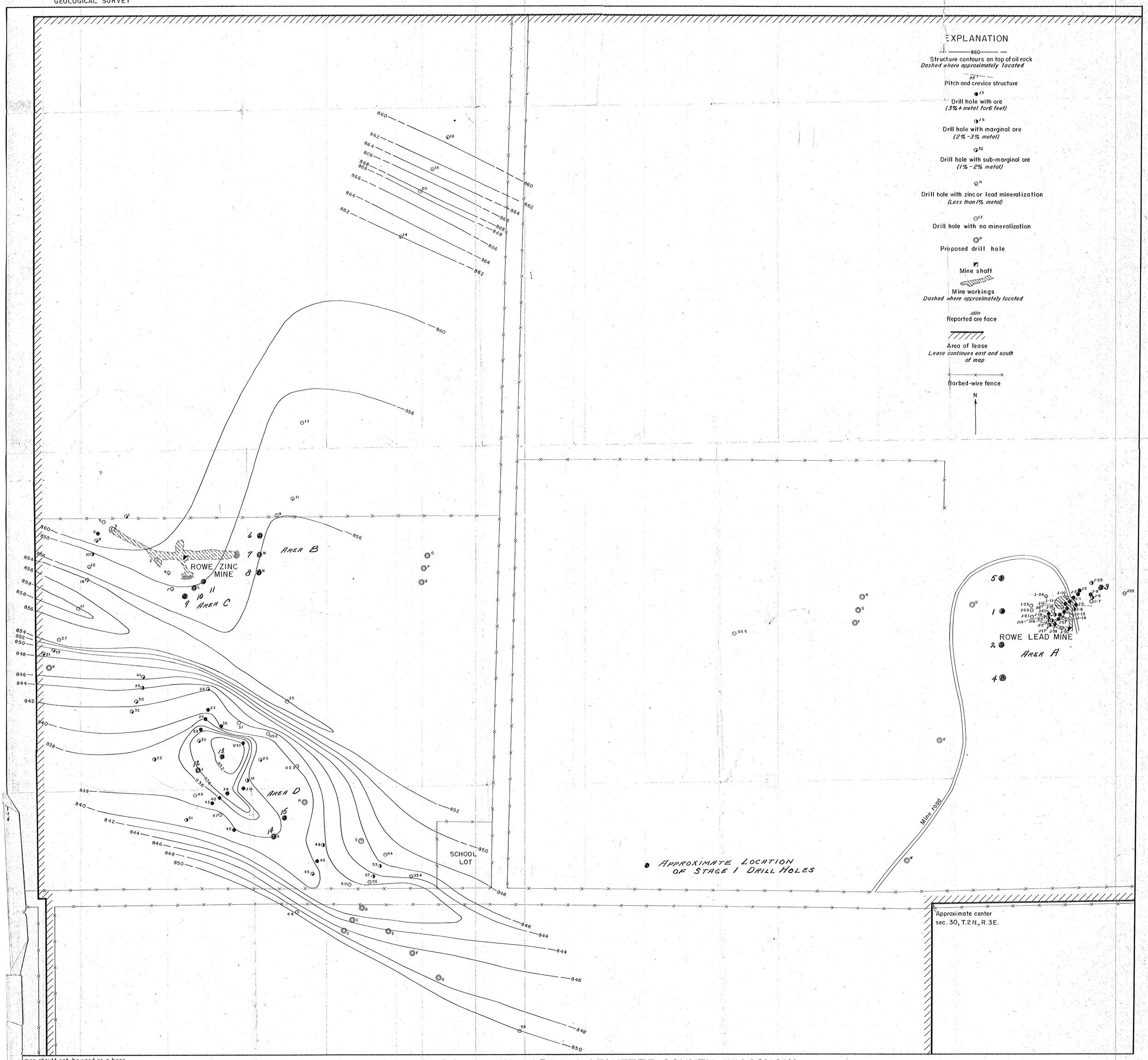
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PLATE I



MAP OF A PART OF THE ROWE PROPERTY
SHOWING DRILL HOLES, STRUCTURE CONTOURS, AND MINE WORKINGS
LAFAYETTE COUNTY, WISCONSIN


ROWE SHAFT
MUD SHAFT
SE CORNER SW. 1/4 OF N.W. 1/4 SECTION 30
N
MAYER & THIEDE MINING CO.
SHULLSBURG WISCONSIN
ROWE LEASE
LOCATION
SECTION 30, T2N R3E 4th P.M.
LAFAYETTE COUNTY
SCALE 1 INCH = 100 FT.
29 HOLE ACTUAL LOCATED IN FIELD
22 DRILL SLUDGE LOCATED WITHIN REASONABLE DISTANCE
24 25 HOLE PLOTTED ACCORDING TO BEST INFORMATION AVAILABLE

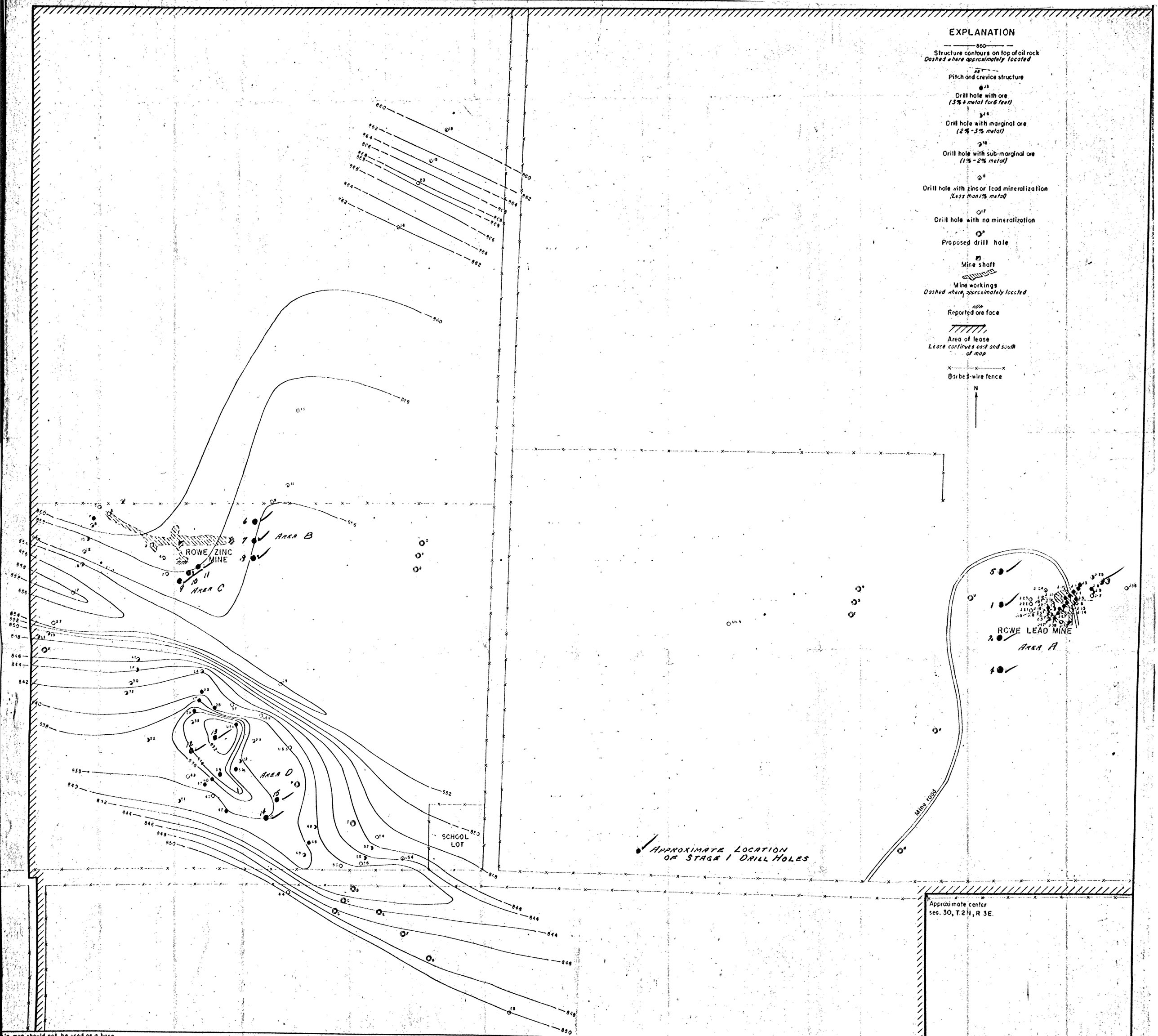


map should not be used as a base
xploration or development

MAP OF PART OF THE ROWE MINE AREA, LAFAYETTE COUNTY, WISCONSIN, SHOWING THE PROPOSED LOCATIONS OF INITIAL DRILL HOLES

100 0 100 200 300 400 Feet
SCALE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



This map should not be used as a base for exploration or development

MAP OF PART OF THE ROWE MINE AREA, LAFAYETTE COUNTY, WISCONSIN, SHOWING THE PROPOSED LOCATIONS OF INITIAL DRILL HOLES