DMEA 3605

DOCKET INDEX

ACTION DOCUMENTS

1. APPLICATION — DATE RECEIVED 12-13-54

2. CONTRACT — DATE 9-21-55

3. TERMINATION AGREEMENT: — DATE 9-14-56

   a. Mutual (with/without repayment provision).
   b. Unilateral.
   c. Amendment with automatic termination clause and with/without repayment provision.

4. CERTIFICATION — DATE

5. AUDIT REPORT — DATE

6. AMENDMENTS - NUMBERS — DATE

   1 — 12-9-55
   2 — 1-12-56

Docket Copy

Rubin
Sawyer
Appd. Sol. Off.
Samuel
Talbott
Selfridge

TERMINATION AGREEMENT

It is agreed this 14th day of September, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Hurst Majors, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E878 (Docket No. DMEA-3605), dated September 21, 1955, hereinafter called the "Contract," that:

1. Effective November 15, 1955, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

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

3. All rights of the Government under the Contract with respect to records, audits, and recovery of any overpayment are preserved.

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

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

THE UNITED STATES OF AMERICA

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

HURST MAJORS

Hurst Majors

Gustin 2/13/56

EXPLORATION PROJECT CONTRACT
HURST MAJORS
DOCKET NO. DMEA 5605
CONTRACT NO. IDM-E878

AMENDMENT NO. 2

It is agreed this 12th day of January, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Hurst Majors, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E878, Docket No. DMEA 5605, dated September 21, 1955, hereinafter called the "Contract," that:

1. The date fixed under "Article 3" of the Contract for completion of the work is extended to September 1, 1956.

2.(a) Work under the Contract shall be suspended during the period beginning November 15, 1955, and ending not later than July 1, 1956.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any cost of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator, at his own cost and expense, without contribution by the Government during the period of suspension, shall preserve and protect the project work and any property in which the Government has an interest.

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

Executed in sextuplet the day and year first above written.

HURST MAJORS - Operator

By Hurst Majors
Hurst Majors

UNITED STATES OF AMERICA

By W. M. Trever
W. M. Trever
Executive Officer, DMEA
Field Team, Region III

Date Rec'd

JAN 11 1956

BUREAU OF MINES
Denver, Colorado

MAJORS PRODUCE COMPANY

MANHATTAN, KANSAS

DISTRIBUTORS OF
"CHEMI-CA'PELLETS"
(CHEMICAL-CAPON PELLETS)

January 10, 1956

U.S. Department of Interior,
224 New Customhouse
Denver 2, Colorado,
Gentlemen;

Re Docket DMEA---3605
Contract Idm- E 878
Mineral Farm Group
Ouray County Colorado

As stated in my narrative report for the month of November 1955, we were forced to shut down operations when a two foot snow buried the road to the property on Mineral Farm.

The last work we did on Mineral Farm was on November 14th, 1955 The men walked up that day, did a little work, but were unable to get fuel up the hill for further work.

Normally the road to the property is closed by snow until late May; early May is a possible date. I would think we better estimate that we might start drilling again by June 1st 1956.

It took us approximately 3 weeks to drill the first hole to 153 feet. I would estimate it will require 2 months to complete three holes.

I am also assuming that the Government will wish to continue the exploration up there, after studying the cores and after assays have been made on the cores brought up in the first hole.

Respectfully,

Hurst Majors

MAJORS PRODUCE COMPANY
MANHATTAN, KANSAS

JAN 11 1956

BUREAU OF MINES
Denver, Colorado

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I am also assuming that the Government will wish to continue the exploration up there, after studying the cores and after assays have been made on the cores brought up in the first hole.

Respectfully,

Hurst Majors

Rubin (per Geo) OK as to Singer 1/11

RECEIVED
DEC 13 1955

AMENDMENT OF CONTRACT No. Xbs-2078

CONTRACT Docket No. DSA 3605, dated September 21, 1955, between the United States of America and Hurst Mayer, is hereby amended as follows, effective as of the date of the Contract:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Docket DSA 3605 (Revised June 1954), replace "Description of the Work," second paragraph, delete the second sentence which reads, "The size of the holes shall be not less than AX."

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated December 9, 1955

UNITED STATES OF AMERICA

By W M Traver
T. M. Traver, Executive Officer
DSA Field Team, Region III

HURST MAYER

Hurst Mayer

Building 20
Denver Federal Center
Denver 2, Colorado
November 14, 1955

REGION III

Memorandum

RECEIVED
DEC 13 1955

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: C. M. Harrer

Subject: DMEA 3605, Contract Idm-2878 (Lead-zinc)
Hurst Majors (Mineral Farm mine), Ouray County, Colo. -
Progress report for October 1955

Messrs. Hurst Majors and John Crim were contacted at the property on November 1, 1955. Drilling started on October 21, 1955, on vertical hole no. 1. This hole was started AX and drilled for 13 feet through hard quartz and siliceous limestone. So much difficulty was experienced in drilling that the hole was continued from this depth in size BX. At the time of inspection, the hole had progressed satisfactorily for a depth of 104 feet with good core recovery. In the upper 10 feet, very small spots of sphalerite were noted in almost massive quartz. Beyond this depth no mineralization was noted other than occasional faint limonite staining. Rock penetrated was quartz and very siliceous limestone.

C. M. Harrer
C. M. Harrer
Mining Engineer

cc 6
Idm-2878
Chron

CMH:ph

REGION XXI

Memorandum

Building 20
Denver Federal Center
Denver 2, Colorado
November 14, 1955

To: Executive Officer, DMEA Field Team, Region XXI

RECEIVED
DEC 13 1955

Through: E. E. Burchman
Member, Field Team

John F. Shea
Supervising Mining Engineer

From: C. M. Harper

Subject: DMEA 3605, Contract Ida-2878 (Lead-zinc)
Hurst Majors (Mineral Farm mine), Ouray County, Colo. -
Core drilling change from size AX to size EX

In a letter dated October 28, 1955, Hurst Majors states that extreme difficulty was evidenced in core drilling quartz and very siliceous limestone formations necessitating a change from size AX to size EX after 13 feet of advance. Inspection of drilling size EX indicates good core recovery.

It is recommended that size EX hole be approved only if core recovery is good and holes are completed to their objective. No uncompleted holes would be paid for.

C. M. Harper
C. M. Harper
Mining Engineer

cc 9
EEBurchman
Ida-2878
Chron

CMH:ph

October 28, 1955
Ouray, Colorado

W.M. Traver,
Executive Officer, DMEA
Field Team Region III
Denver, Colorado.
Dear Mr. Traver ;

RECEIVED
DEC 13 1955

Re; DMEA 3805 Contract Idm X 878

This will confirm the gist of my phone conversation with Mr. Shaw on Thursday morning October 27th.

I arrived in Ouray, from my home in Manhattan, Kansas, last Monday October 24th. Mr. John Grim had started his drilling program the preceding Friday, in the middle location of the three staked out by Mr. Harrer and Mr. Grim.

In five days of drilling, the men had been able to penetrate the extremely hard quartz and limestone only 14 feet. There was nearly 10 feet of quartz, and the AXL bit would simply not core the formations.

On Wednesday, Mr. Grim brought a Mr. C.C. Chamberlain, Supervising Engineer of the Idarado Mining Co., to our property on Mineral Farm, for his advice as to our best procedure. He and Mr. Grim had brought from the Idarado, a smaller bit (XXL) with some smaller pipe, and they went into that quartz with the smaller bit a total of learly 12 feet in four hours.

Mr. Chamberlain told me he thought the XXL would tell us what we needed to know, and Mr. Grim and his driller advised me they saw no possibility of putting the large hole through that Mineral Farm line, so I had to make a decision on the spot as to my next move.

My contract with the Government is on the basis of $4.80 per foot for AXL. This is of course far below existing costs, and barely one half of what my cost is going to be even drilling XXL. I am not complaining about this; I accepted your contract and am fully bound by its terms, though frankly I was surprised when we got bids from commercial drillers who asked $14.00 and $16.00 per foot for the rather small footage, 450 feet, on Mineral Farm (after I agreed to your $4.80 figure)

But we set up the operation ourselves; hired a driller to operate the machine, with our help; rented compressor, drills, etc. at a cost of over $1500.00 per month, besides labor, and tried our best to put down AXL core.

I have definitely decided that we cannot put 3 holes into that property AXL. Then what should our next move be?

We are going to try to reach the shale through the limestone with the XXL bit. If the Government will approve the change to XXL, we will do our best to drill the contract holes to a total of 400 feet. If however it is your position that the holes must be AXL, we will do as much work as we can, in thirty days, on our own——since we have received pay for a month——and of course not expect any participating loan from the Government.

I can spend only a limited time in Ouray. I wanted to get as much done as possible while I am here. I made the change to XXL because it seemed to be the only way we could get the job done in that unusually hard lime formation up there.

Mr. Shaw said that Mr. Harper will be here next Monday. I will talk with him about our problems. The men are going to work long hours Saturday, Sunday and Monday day and night, to try to get deep in the lime before he arrives.

I would like to leave Ouray for Kansas on Tuesday afternoon or Wednesday morning, and hope to know just what Mr. Orim should plan to do after I go——hence I would greatly appreciate it if you can make a ruling on the XXL change while Mr. Harper is in Ouray. We are already in trouble with the weather at Ouray, and every day's delay will cause new problems of supply and access to the property.

If your decision is that only AXL is acceptable, we will go on our own. If you agree with Mr. Chamberlain and my own that XXL will tell the story, we'll try to finish the original 5 holes. More winter steps in.

Respectfully,

Hurst Majors

Hurst Majors

Docket copy

MF-200A
(Revised June 1954)

Docket No. DMEA -3605

Commodity lead-zinc

Contract No. Idm-E 878

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

It is agreed this SEP 21 1955 day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Hurst Majors

whose mailing address is Manhattan, Kansas

hereinafter called the "Operator," as follows:

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

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] owner of [5] the entire interest in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] ---, [7] ---recorded in Book ---, page ---, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: none.

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: .....

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

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of lead and zinc. The work to be performed is described in Exhibit "A." The Operator on or before October 31, 1955 shall commence the work, and on or before Jan. 1, 1956 (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the work.

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

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

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $2,200.00 The Government will contribute 50 percent of the fixed unit costs as work is performed, in a total sum not in excess of $1,100.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

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

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

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

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

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

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

ARTICLE 7. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

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

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

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

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

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

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

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

(c) The giving of any notice by the Government under the provisions of this Article 8 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 9. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

HURST MAJORS
(Operator)
Hurst Majors

By

THE UNITED STATES OF AMERICA

By C P Mitteudorf
Administrator, Defense Minerals
Exploration Administration

"Appd. Sol. Off."

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

.....

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
URANIUM MAJORS
DOCKET NO. NMRA-3603

ANNEX X

The land referred to in Article 2 of the contract consists of the following patented claims:

Claim	Survey No.
Mineral Farm No. 1	200
Mineral Farm No. 2	201
Mineral Farm No. 3	202
Mineral Farm No. 4	203
Miner's Desire	6550
Miner's Dream	989
Midnight	1149A
Forest	1149A

All of these claims are shown on the attached map entitled "Map Showing Location of Proposed Drill Holes in Relation to Boundaries of Property, Mineral Farm Mine, Ouray County, Colo."

EXPLORATION PROJECT CONTRACT
KERBY MAJORS
DOCKET NO. DMRA-3605

EXHIBIT "A"

Description of the Work

The purpose of the work is to explore for ores of lead and zinc by diamond drilling. The work program consists of drilling three holes downward from the floor of the old east steps, about 450 feet in combined total length.

The location, inclination, direction, and extent of each hole are subject to the approval of the Government. The size of the holes shall be not less than AX. The approximate positions of the holes are shown on the attached map.

The entire length of each drill hole shall be cored. All core shall be boxed and the boxes marked to indicate proper depths and stratigraphic sequence. All mineralized core shall be split, and one half shall be used for analysis and the other half retained for the Government's use. A driller's petrographic log shall be accurately kept. Copies of assay results and driller's log must accompany each monthly report of the Operator. In cases of core recovery of less than 75 per cent, sludge samples shall be taken for analysis.

Fixed Unit Costs

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

450 feet of diamond drilling @ $4.80/ft.	$2,160.00	
8 samples assayed for gold, silver, copper, lead and zinc @ $5.00 per sample	40.00	
Estimated Total Cost of Project		$2,200.00
Government Participation @ 50%		$1,100.00

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/17	C	[redacted]
		220
		225

PROJECT SUMMARY REPORT

By: W. R. Griswold May 9, 1957

1. Docket No. DMEA-3605 (Lead-Zinc)
Contract No. Idm-E878
Property: Mineral Farm Group
Ouray County, Colorado

Operator: Hurst Majors
Manhattan, Kansas

Operator's Property Rights: Owner

2. Contract date September 21, 1955.

Work Authorized

450 feet diamond drilling @ $.480/ft.	$2,160.00
8 samples for assay for gold, silver, copper, lead and zinc @ $5.00/sample	40.00
Total estimated cost of project	$2,200.00
Government's participation, 50%	$1,100.00

Amendments

No. 1 Dated December 9, 1955.

Permits EX diamond drilling.

No. 2 Dated January 12, 1956.

Extends completion time to September 1, 1956.

Recesses work from November 15, 1955 to July 1, 1956.

8623

Work Completed

153.8 feet diamond drilling @ $4.80/ft.	$738.40
Total cost of the project	$738.40
Government's participation, 50%	$369.29

Termination Agreement dated September 14, 1956.

Terminates work effective November 15, 1955.

Work terminated November 1955.

3. Audit Certificate.

Report of Review dated September 26, 1956.

No Operator's final report

Final Field Team report January 23, 1957.

4. Certification Date; No certification of discovery or development issued.

5. Comments

The project contemplated exploration for lead-zinc replacements in limestone.

The results of the small amount of work were done were negative and there is no apparent reason for any further Government participation.

W. R. Griswold

WRG/er
Copy to: Docket
Base Metals
Chron.

DMEA Form 17
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WORK COMPLETED ANALYSIS

After final audit or review report is received, prepare original only and file in official docket

Operator: Hurst Majors		Actual Cost	
State: Colorado		Agreed Unit Cost	X
Final Report of Audit		Commodity	Docket No. DMEA-3605
Final Report of Review	X	Lead-Zinc	Contract No. Idm-E878

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling Diamond (AX) (Specify)	450' @ $4.80	$2,160.00	153'10"	$738.40	$738.40
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) 8 Assays (Au., Ag. Cu., Pb, Zn) @ $5.00		40.00			
Totals		$2,200.00		$738.40	* $738.40

* Net cost total must agree with final report of audit or review.

Prepared by W. P. Klugescheid/er Date

31398

☒ Audited 9/26/56. WORK ANALYSIS SHEET - DMEA PROJECT ☐ Actual Cost

☐ Certified Analysis as of _____ ☒ Agreed Unit Costs

Incl. Voucher for Nov. 1955

Name HURST MAJORS Docket No. 3,605

State COLORADO Commodity LEAD-ZINC Idm-E No. 878

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond (AX)	450' @ 4.80	$2,160.00	153'10"	738.40	
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) 8 Assays (Au, Ag, Cu, Pb, Zn) @ 5.00		40.00			
Totals		$2,200.00		738.40	

Checked Audit.

Amendment No. 1. Deletes AX Diamond drill specification.

Amend. No. 2. Recess from Nov. 15, 1955 – July 1, 1956 – Completion date Sept. 1, 1956.

Termination Agreement. Dated Sept. 14, 1956 Effective Nov. 15, 1955.

Prepared by W. P. Klugescheid.

71626

Diamond Drilling (AX)	450' @ 4.00	$2,160.00
8 Assays @	5.00	40.00
		$2,200.00

Spent.

Nov. 1955.	153'10"	738.40

November 6, 1957

Memorandum

To: Jay L. Chambers, Director
Division of Contract Administration & Audit

From: Director, Division of Base Metals

Subject: Concluded Projects

The following dockets are closed and no further action remains. No closing letters are being sent due to excessive time lag but please consider them as having been finalized.

Contract No.	Docket No.	Name
Idm-E21	DMEA-1100	United Park City Mines Company
Idm-E279	DMEA-2044	Harry E. Briggs
Idm-E546	DMEA-2856	Neuberg Bros. & Sloan, Inc.
Idm-E709	DMEA-3198	Chesselah Copper Company, Inc.
Idm-E798	DMEA-3396	Yuba Dike Mines, Inc.
Idm-E821	DMEA-3684	Ogle Swingle
Idm-E878	DMEA-3605	Hurst Majors
Idm-E966	DMEA-4111	Parker Mining & Development Company

W. R. Griswold

W. R. Griswold

WRG/er
Copy to: Docket
Admr R File
Mr. Dakan, Code 200
Chron.

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

March 1, 1957

Re: DMEA 3605; Lead-Zinc;
Hurst Majors
(Mineral Farm Group)
Ouray County, Colorado
Contract No. Idm-E878

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of Final Field Report, dated February 13, 1957, received February 26, 1957.

The contract provided for 3 holes, totaling 450 feet of diamond drilling, which were designed to explore in and under the red shale of the Leadville limestone from the floor of old stopes.

The work was begun October 31, 1955 and Hole 1 was completed at 153.1 feet of depth but showed only negligable quantities of lead and zinc. Thereafter the operator drilled 2 shallow non-contract holes, which were barren. Disappointed with the drilling results and his share of the costs of contract drilling the operator refused to do further work and the contract was terminated as of November 15, 1955.

The field team states that since exploration did not explore the target area the possibility for successful exploration remains.

They recommend that no further Government assistance be given to the applicant, that no certificate of discovery be issued and conclude that the property still has potential worth.

I concur with these views.

O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Mr. Killsgaard
Mr. Lamb
Mr. Bishop
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
Denver 2, Colorado
224 New Customhouse

February 13, 1957

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DATE	INITIALS	CODE
2/20	C	220
"	Fd	130
2/26	C	220
"	CMM	100

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 3605 (Lead-Zinc), Contract No. Idm-E878, Hurst Majors (Mineral Farm Group), Ouray County, Colorado - FINAL REPORT

Enclosed are the original and three copies of a joint final engineering and geologic report, dated January 23, 1957, by E. W. Buel, Mining Engineer, Bureau of Mines, and Walden P. Pratt, Geologist, Geological Survey, and transmittal thereof, dated January 25, 1957, from J. F. Shaw and E. N. Harshman, pertaining to work completed under the subject Contract.

Under the circumstances, it is recommended that the Operator's Report attached to form MF-104, Operator's Monthly Report and Voucher, for the month of November, 1955, be accepted as the Operator's final report.

The Contract was terminated before completion of the work provided for, by an Agreement, dated September 14, 1956, which was made effective November 15, 1955.

The exploration work completed consisted of one core drill hole, 153 feet and 10 inches in depth, at a total accepted cost of $738.40, toward which the Government contributed 50%, or an amount of $369.20.

Reimbursement to the Operator in processing form MF-104, Operator's Monthly Report and Voucher, for the month of November, 1955, constituted final payment to the Operator, which was verified by the Report of Review of reported project costs by the Contract Administration and Audit Division, DMEA, dated September 26, 1956.

Reviewed by
DMEA OPERATING COMMITTEE
2-25-57
(date)

The exploration work completed did not result in the discovery or development of a significant quantity of lead-zinc ore. Therefore, certification of the project is not recommended.

DMEA Field Team, Region III

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
JAN 25 1957
REGION III
DENVER, COLORADO

January 25, 1957

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DATE	INITIALS	CODE
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Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. F. Shaw
E. N. Harshman

Subject: DMEA Docket 3605 (Lead-zinc), Contract Idm-E 878, Hurst Majors (Mineral Farm group), Ouray County, Colorado

Enclosed are the original and eight copies of a joint final report on exploration completed under Contract Idm-E 878.

The authorized program consisted of 450 feet of diamond drilling (three holes) at a total cost of $2,200. The operator drilled one hole (no. 1) at a total accepted cost of $738.40, Government participation 50 percent or $369.20.

It is concluded that work completed did not prove or disprove the presence of ore in the target area, but that additional exploration assistance should not be granted to the present operator.

No ore was discovered, and a Certificate of Discovery should not be issued.

E. N. Harshman
E. N. Harshman

J. F. Shaw
J. F. Shaw

Reviewed by
DMEA OPERATING COMMITTEE
2-25-57
(date)

Enclosures

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3605

Contract Idm-E878

Hurst Majors

Mineral Farm Group

Ouray County, Colorado

Lead-zinc

Joint Final Engineering and Geological Report

by

E. W. Buel, Mining Engineer
Bureau of Mines

Walden P. Pratt, Geologist
Geological Survey

January 23, 1957

Reviewed by
DMEA OPERATING COMMITTEE
2-25-57
(date)

FIELD TEAM
FINAL REPORT

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Location and geography..... 2

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Geology..... 5

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Mineral Farm deposit..... 6

Geologic basis for exploration..... 8

Applicant's project proposal..... 9

Project operations..... 9

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Cost of the project..... 13

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ILLUSTRATIONS

Figure		Follows Page
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3.	Map showing location of proposed DMEA core holes, Mineral Farm mine, Ouray County, Colorado	14

TABLE

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RECEIVED FEB 20 1957

DATE	INITIALS	CODE
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DMEA 3605

Contract Idm-E878

HURST MAJORS
MINERAL FARM GROUP
OURAY COUNTY, COLORADO

INTRODUCTION

Hurst Majors, of Manhattan, Kansas, applied for Defense Minerals Exploration Administration assistance to explore for lead-zinc ore on the Mineral Farm group of patented claims, Ouray County, Colorado. The operator proposed reopening a caved adit crosscut, unwatering two underground workings, and drilling a total of 2,500 feet in 14 surface diamond drill holes. The estimated cost of this proposed exploration program was $10,500.

The property was examined for DMEA on June 21, 1955, by J. E. O'Rourke, U.S. Geological Survey, and Glen Walker, U.S. Bureau of Mines. The examining team recommended a modified exploration program consisting of three diamond drill holes.

Contract Idm-E878 was executed on September 21, 1955. It provided for three diamond drill holes to explore for lead-zinc ore at depth. The starting date was October 31, 1955, and the completion date January 1, 1956. The total cost of the program was estimated at $2,200 and the Government's share 50 percent, or $1,100.

LOCATION AND GEOGRAPHY

The Mineral Farm property is in sec. 6, T. 43 N., R. 7 W.; sec. 31, T. 44 N., R. 7 W.; and sec. 1, T. 43 N., R. 8 W., New Mexico principal meridian, Ouray County, Colorado (fig. 1); it is in the Uncompahgre (Ouray) mining district. The claims are in Canyon Creek gulch, less than a mile southwest of the small town of Ouray. A gravel road, locally known as the Camp Bird mine road, is followed for about half a mile from Ouray to a turnoff which provides easy access to the Mineral Farm property.

The Ouray mining district lies at the western margin of the San Juan Mountains, in a region of extremely rugged terrain consisting of high jagged peaks, serrated ridges, steep talus-covered slopes, and cirques. Altitudes range from 7,800 feet at Ouray to well over 13,000 feet atop some of the nearby peaks.

Precipitation in the region is heavy. Snowfalls cause the suspension of most small mining operations from the beginning of November to late June or early July; but county-maintained roads are, for the most part, kept open throughout the year, permitting access to many larger mining properties. Thunderstorms occur almost daily during the summer months. The heavy combined precipitation supports a dense growth of fir, spruce, and aspen in areas on the lower valley slopes containing a suitable soil mantle, and adequate timber for mining purposes is

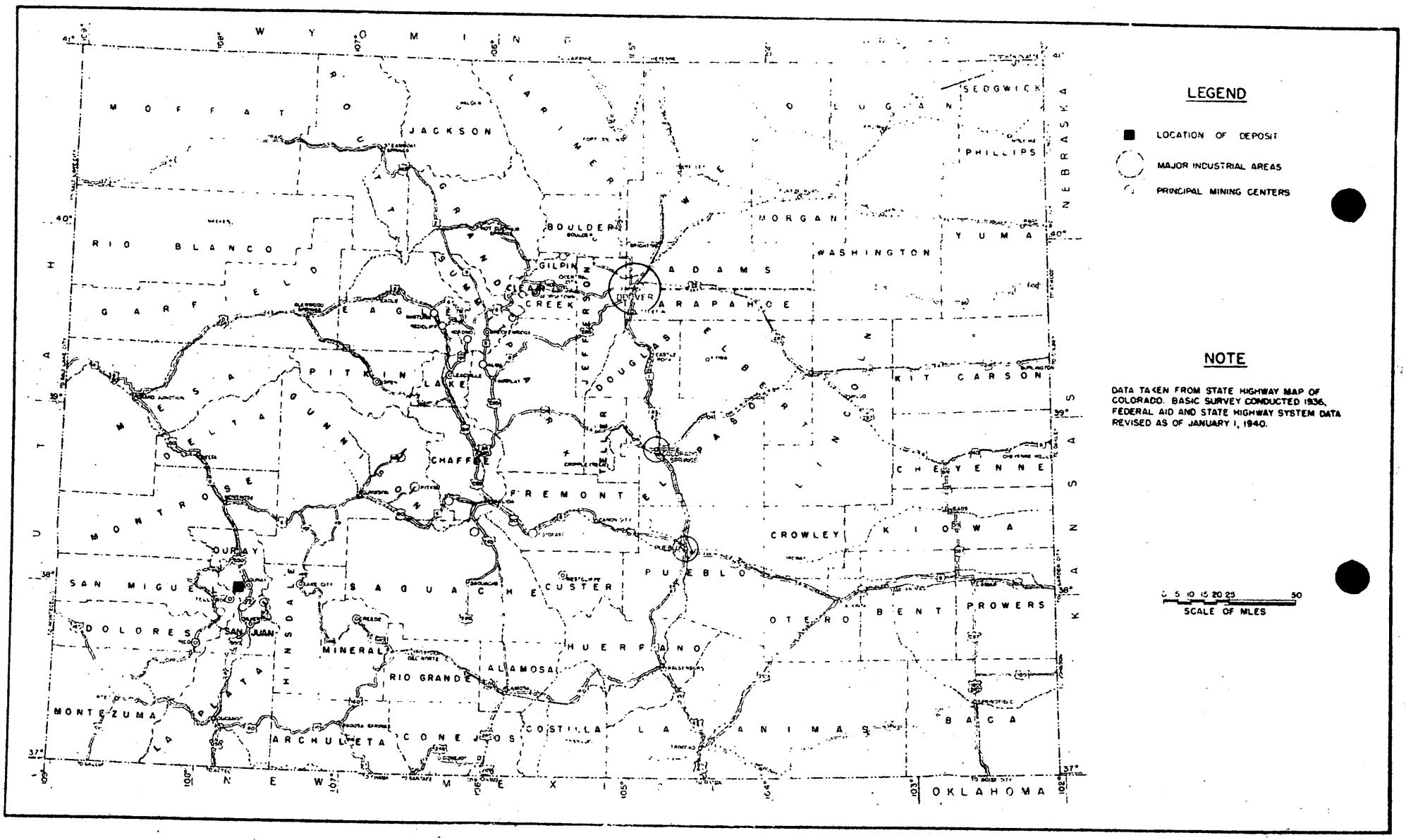


FIGURE 1 - MINERAL FARM GROUP, OURAY COUNTY, COLO. DMEA 3605

present on the Mineral Farm property. Water is plentiful in the area but because of the steep topography, which results in a rapid runoff, most of the streams are intermittent. There is little or no surface water on the Mineral Farm property, but water can be obtained from nearby Canyon Creek.

Electric power is transmitted to the Camp Bird mine by a power line from Ouray; but for a small operation on the Mineral Farm group, power needs would have to be met by portable equipment.

Abundant skilled mining labor can be obtained within the region. Mining equipment and supplies are available from Ouray and from Silverton, about 25 miles to the south.

HISTORY AND PRODUCTION

It is reported that ore was first discovered on the Mineral Farm property in 1876, and that two complete sets of workings were developed during the following quarter century; the first production was in 1879, and the ore produced from that time until 1900 was valued at $500,000. The property was neglected during the first part of this century, and most of the subsequent production has come from surface workings. Bureau of Mines statistics from 1900 through 1929 show the property as having a production of 2,071 tons of crude ore yielding 20.2 ounces gold, 25,000 ounces silver, 565,370 pounds lead, and 5,750 pounds copper. Since 1929 the property has been operated intermittently by lessees who produced a limited amount of ore.

OPERATOR'S PROPERTY RIGHTS

The Mineral Farm property consists of the following patented claims:

Claim	Survey No.
Mineral Farm No. 1	200
Mineral Farm No. 2	201
Mineral Farm No. 3	202
Mineral Farm No. 4	203
Miser's Dream	989
Midnight	1149A
Forest	1149A
Miser's Desire	6550

None of the claims are of standard size, all being less than 600 feet wide and slightly less than 1,500 feet long.

DESCRIPTION OF WORKINGS

The Mineral Farm property has been explored and developed by open cuts, surface and underground shafts, raises, winzes, and several crosscuts, drifts, and stopes (fig. 2). The principal stope is reported to measure 8 feet high, 20 feet wide, and 400 feet long.

The "main" or east workings are in very good condition except for a raise which is caved tight and a winze which is filled with waste rock resulting from the sorting of ore. The "lower" or west workings are inaccessible.

GEOLOGY

District setting

The geology of the Ouray district has been described by Burbank in two older publications _/. The geologic formations range from Precambrian to Tertiary in age, and comprise a thickness of about 8,000 feet of Precambrian quartzites and 5,000 feet of Paleozoic and Mesozoic limestones, sandstone, and shales, intruded by granodiorite or quartz monzonite porphyry of late Upper Cretaceous or early Eocene age, and overlain by some 5,000 feet of middle to late Tertiary volcanic rocks. The principal ore deposits are early Tertiary lodes, mantos, and pipes; they are related to the intrusives and were deposited chiefly in the Paleozoic and Mesozoic sedimentary rocks through a stratigraphic range of about 4,500 feet.

The broad controls of mineralization are the northwest-trending Uncompahgre axis of uplift and faulting, and a northeast-trending axis of doming along which quartz monzonite sheets and stocks have been intruded. The mineral deposits are zoned with respect to the intersection of these axes. The deposits in the central area are

---

_/ Burbank, W. S., 1930, Revision of geologic structure and stratigraphy in the Ouray district of Colorado, and its bearing on ore deposition: Colorado Sci. Soc. Proc., v. 12, no. 6, p. 151-232.

_____, 1940, Structural control of ore deposition in the Uncompahgre district, Ouray County, Colorado: U. S. Geol. Survey Bull. 906-E, p. 189-265.

contact-metamorphic types; those in the intermediate zone are pyritic, containing base metals, gold, and silver; farthest removed are the argentiferous lead-zinc deposits, and in this category belongs the deposit at Mineral Farm.

Mineral Farm deposit

The Mineral Farm ore deposit is a tubular pipe or channel in the upper part of the Leadville limestone and the lower part of the overlying Molas shale. The ore fills cavities in the country rock, and also replaces it near many of the larger ore shoots; it consists of galena, sphalerite, tetrahedrite, pyrite, and chalcopyrite, with a gangue of quartz, chalcedony, calcite, and barite.

Deposition of the ore was controlled by three types of structures and by one stratigraphic factor. The primary structural control of the pipe was apparently a zone of fractures striking N. 70° E. and dipping 60° SE, nearly parallel to the strike of the ore body. A further control was a well-developed set of steeply dipping fractures that strike N. 40° W.; ore shoots occur within the pipe where these fractures intersect the main fracture zone, and many small deposits outside the pipe, mined by open pits, were also localized by these fractures. A third structural control was shear zones caused by close spacing of the N. 40° W. fractures. Some of these zones are highly leached and are filled with chert

typical of many beds of the Leadville limestone, and may be the "clastic dikes" described by earlier workers. In many mines these "dikes" were favorable loci for ore deposition; in the Mineral Farm mine numerous short drifts, a 75-foot winze, and an 80-foot shaft were driven on such "clastic dikes" or shear zones. In addition to these structural controls, ore deposition was localized in the limestone and in local, slump-fractured portions of the shale, by the relatively impervious beds of shale and conglomerate lying directly above.

The Mineral Farm ore pipe measures about 8 feet high, 20 feet wide, and 1,000 feet long, and plunges 15° S. 60° W., coinciding with the dip of the bedding. The trend of the pipe is continuous, with two interruptions. One is a sharp kink, probably related to the N. 40° W. fractures, in which the pipe is offset laterally about 100 feet (fig. 2). The other is a right lateral fault that cuts the pipe about 130 feet from its west end and has a strike slip of about 260 feet and a dip slip of 10 feet; the fault is not exposed directly, but is suggested by the identical width and orientation of the two segments and by a zone of intense fracturing or sheeting at the west end of the east working (fig. 2). Displacement on the other fractures of the N. 40° W. set is probably less than a few feet.

Geologic basis for exploration

The exploration program recommended by the examining team was markedly different from that of the applicant, because it was based on different reasoning and was aimed at a different target. The applicant's proposal for exploration was based on the possibility of discovering additional silver-lead ore deposits at the same horizon as the main pipe, both laterally and down-dip from it, and on the suggestion by Burbank that the ore might change down-dip into a higher-grade copper zone, possibly containing some gold (1940, p. 240-241). The examining team did not concur with these ideas, since they interpreted the ore body in the west workings as the faulted extension of the main pipe, and therefore felt that the "down-dip extension" of the main pipe had already been mined out. They recommended instead a program based on the presence in the Leadville limestone of a bed of red shale estimated to be 100 to 150 feet below the top of the limestone, and the presumed continuation to depth of the controlling fractures; it was reasoned that the structures would be favorable for the deposition of ore as in the known ore body, and that the impervious red shale would have an effect similar to that of the Molas formation farther above. The conclusion thus seemed justified that there might be another ore pipe in the Leadville limestone within a few feet below the red shale.

APPLICANT'S PROJECT PROPOSAL

The applicant proposed to explore the property with DMEA assistance by reopening the west or "lower" workings, by dewatering both the west workings and the lower end of the east or "main" workings, and by surface drilling of 14 core holes with a total combined length of 2,500 feet: ten of these holes, each 60 to 150 feet deep, were to explore possible extensions of the east workings; the four remaining holes, each 300 to 500 feet deep, were to explore possible extensions of the west workings. The applicant's cost estimate for this exploration program was $10,500 with Government assistance of 50 percent or $5,250.

PROJECT OPERATIONS

The DMEA examining team recommended a greatly modified program, to explore for ore in and under the red shale of the Leadville limestone, at an estimated cost of $2,203.50.

Description of contract work

DMEA contract Idm-E878 was approved on September 21, 1955, to explore for ores of lead and zinc on the Mineral Farm group of claims. The contract provided for core drilling of three AX holes with a total combined length of 450 feet, downward from the floor of the old east (main) stope, and for collection and assay of eight samples.

The work was to start October 31, 1955, and was to be completed not later than January 1, 1956. Total cost of the project under the contract was $2,200 with Government assistance of 50 percent, or $1,100.

Description of contract amendments

An amendment was prepared to allow the operator to reduce the size of the drilling from AX to EX, effective December 9, 1955.

A record amendment prepared by the Government and executed on January 12, 1956, provided for the following changes:

(1) The completion date was extended from January 1, 1956, to September 1, 1956.

(2) (a) Work under the contract was to be suspended during the period beginning November 15, 1955, and ending not later than July 1, 1956.

(b) No costs incurred by the operator during the period of suspension were allowable by the Government, nor was the Government to contribute to any rehabilitation or repair costs which in the Government's opinion would not have occurred if there had been no suspension of work.

(c) The operator, at his own cost and expense, without any Government contribution during the period of suspension, was obligated to preserve and protect the project work and any property in which the Government maintained an interest.

Description and results of work performed

A total of 153.8 feet of diamond drilling, in one hole, was completed under the contract, at a total accepted cost of $738.40, with Government participation of $369.20.

The three proposed drill holes were tentatively laid out by the DMEA examining team as follows (fig. 3):

Hole No.	Inclination	Bearing	Depths
1	-90°	--	140± feet
2	-77°	S. 31° W.	160± feet
3	-59°	N. 45° E.	135± feet

Diamond drilling of an AX hole (No. 1) began October 21, 1955. This hole was drilled for 13 feet through quartz and a siliceous limestone, in which the operator experienced so much drilling difficulty that he requested permission to reduce his drilling from AX to EX. From 13 to 153.8 feet, the hole was drilled to EX size. The upper 15 feet of the hole penetrated small, sporadically distributed pods of sphalerite and galena, but the remainder of the

hole revealed no ore minerals. The hole bottomed in dark gray limestone. In addition to the DMEA hole, the operator drilled two non-contract holes to depths of 34 and 40 feet; these holes were also barren of ore minerals.

The following is a log of DMEA hole No. 1:

Depth (feet)	Lithology
0 - 13.0	(AX core) Light gray siliceous limestone
13.0- 53.0	(EX core) Gray crystalline limestone
53.0- 53.4	Salmon shale
53.4- 95.0	Gray finely crystalline limestone
95.0-108.0	Dark gray crystalline limestone
108.0-111.0	Light gray very fine grained limestone
111.0-122.5	Mostly light gray to buff very fine grained sandy limestone - some small dark bands From 116 to 116'10": reddish brown mud, no core
122.5-127.0	Dark gray crystalline to sandy limestone
127.0-129.0	Gray limestone with carbonaceous seams
129.0-133.0	Gray to light brown limestone
133.0-153.1	Dark gray very fine grained limestone, silty in places

Upon the completion of the one DMEA contract hole and the two independent holes, the operator suspended all drilling operations. In several letters to the DMEA Field Team, he complained that the unit cost of $4.80 per foot allowed for diamond drilling was entirely too low; he stated that commercial drillers submitted bids for the 450 feet of drilling for $14 to $16 per foot. In a letter of July 20, 1956, to the Field Team, the operator stated that he had no intention of resuming work under the contract because of the inequities of the unit cost established for the diamond drill work.

The DMEA examining team in a memorandum of August 8, 1956, recommended that the contract be terminated because of the operator's unwillingness to resume work and the unfavorable showing of the completed drilling. A termination agreement was issued on September 18, 1956, terminating the contract as of November 15, 1955.

COST OF THE PROJECT

Exploration Project Contract Idm-E878 was a short form unit cost contract, Form MF-200 A (revised June 1954). Allowable fixed unit costs were $4.80 per foot for diamond drilling and $5 per sample assayed for gold, silver, copper, lead, and zinc. The units of work and costs authorized and completed under the contract are summarized in Table 1.

Table 1.--Summary of authorized and accepted costs of the project

	Authorized			Completed	
Type of work	Units	Unit Cost	Total Cost	Units	Total Accepted Cost
Diamond drilling	450 ft.	$4.80	$2,160.00	153.8 ft.	$738.40
Sample assays	8	5.00	40.00	--	--
Total			$2,200.00		$738.40
Government participation			$1,100.00		$369.20

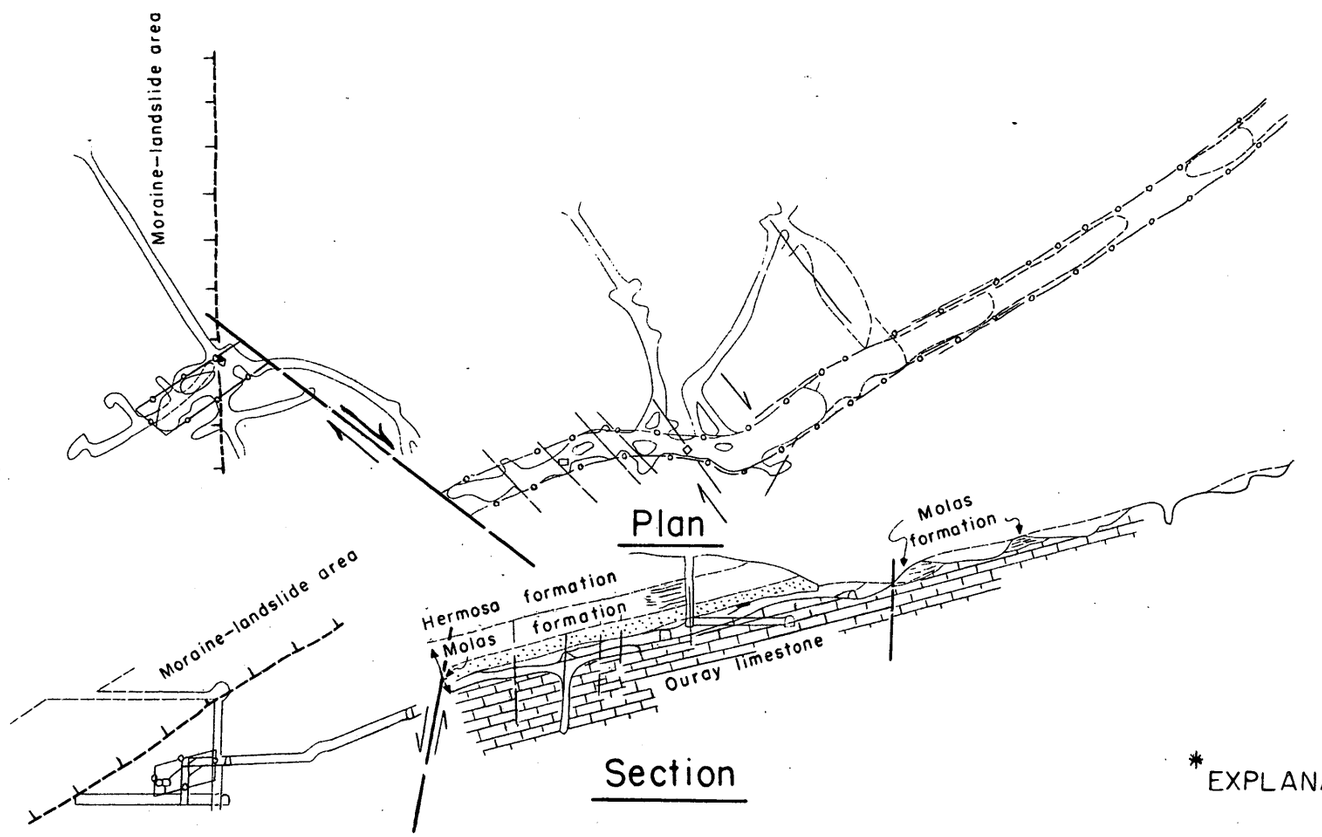
CONCLUSIONS AND RECOMMENDATIONS

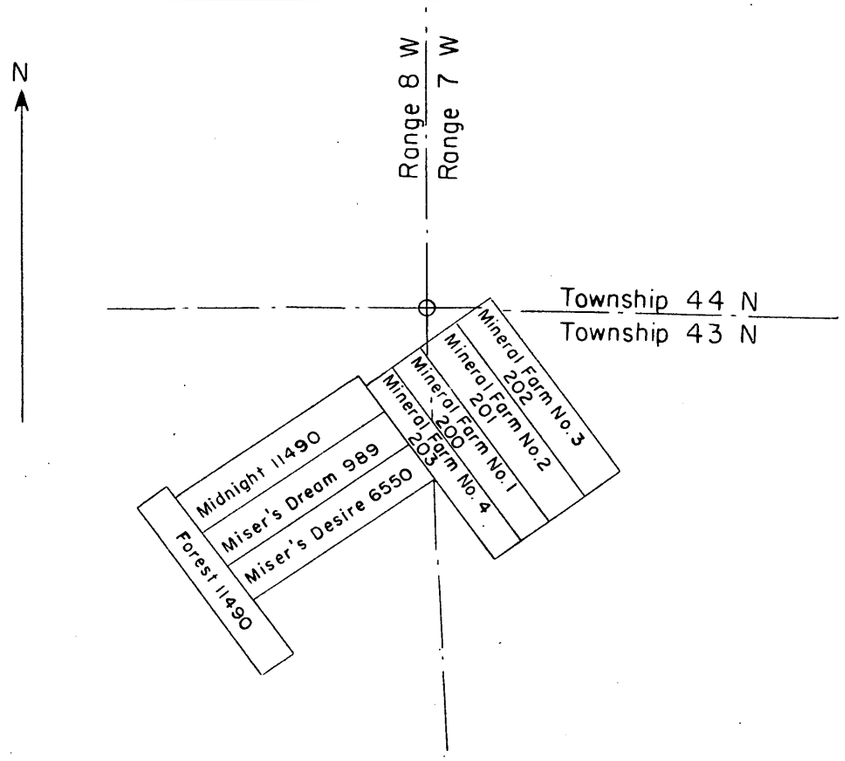
Exploratory drilling of one hole indicated the presence of only small pods of lead and zinc ores, distributed erratically near the top of the Leadville limestone; the limestone penetrated in two other holes was completely barren. Since the drilling did not reach its target - the base of the red shale bed within the Leadville limestone - the possibility of discovering lead and zinc ores at this horizon still remains. It is recommended, however, that while commercial possibilities of the property are not exhausted, the Government should not assist in any further exploration by the present owner. A certification of discovery should not be issued.

DEPARTMENT OF THE INTERIOR

DMEA DOCKET 3605

PREPARED FOR DEFENSE
MINERALS EXPLORATION ADMINISTRATION





*EXPLANATION

Outline of ore channel

Fault

NOTES

1) Data for underground workings taken from map in Colorado Scientific Society proceedings, Volume 12, No. 6, Stratigraphy in the Ouray District of Colorado by W. S. Burbank.

2) Data for claim map taken from Claim Map of San Juan Region by Hotchkiss Map Co.

*Data added in DMEA Doc. 3605

FIGURE 2-PLAN, SECTION AND CLAIM MAP, MINERAL FARM MINE, OURAY COUNTY, COLORADO

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

224 New Customhouse
Denver 2, Colorado

September 21, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3605 (Lead-Zinc), Contract Idm-E878, Hurst Majors (Mineral Farm mine), Ouray County, Colorado.

Enclosed are the Government's, Division, and Docket copies of the "TERMINATION AGREEMENT" to the subject contract, transmitted by your letter of September 14, 1956 for signature.

Copies of the "TERMINATION AGREEMENT" have been forwarded to the Operator, Region III Finance Officer, and other offices concerned.

W. M. Traver

W. M. Traver

Enclosures

RECEIVED
SEP 23 1956

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

September 18, 1956

Mr. Hurst Majors
Majors Produce Company
Manhattan, Kansas

Re: Docket DMEA 3605 (Lead-Zinc)
Contract Idm-E878
Hurst Majors
(Mineral Farm mine)
Ouray County, Colorado

Dear Mr. Majors:

Enclosed are the Government's, Division, Docket, Finance Office, and Field Team copies of a "TERMINATION AGREEMENT" which has been prepared by the Washington Office, DMEA, and signed by the Administrator, in conformance with the third paragraph, page 2, of your letter dated July 20, 1956.

If the "TERMINATION AGREEMENT" is satisfactory, all copies should be signed by you where indicated and promptly returned to this office.

On return of the "TERMINATION AGREEMENT" properly executed, the "Operator's Copy" will be forwarded to you for attachment to your copy of the Contract.

Very truly yours,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures

WMT:prl

cc: Corres. E878
Chairman, Oper. Comm. (2)
Harshman
Shaw (2)
Townsend
Chron.

File Copy
Surname

Griswold
Talbot
Selfridge
Johnson

500

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

SEP 5 1956

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
22 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-3605 (Lead-Zinc)
Hurst Majors
Mineral Farm Group
Ouray, Colorado
Contract No. Idm-2878

Dear Mr. Traver:

This is with reference to your memorandum of August 9, relating to the cited project.

We are enclosing the original and five copies of a Termination Agreement, signed by the Administrator. If it meets with your approval, please refer it to the Operator for signature and, when completed, distribute the copies in the usual manner. If it should not meet with your approval please return all copies with your recommendations.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

WRGriswold/er 9/5 & 12/56
Copy to: Docket
Admr & File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:

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

Thor H. Kiilsgaard (THK)
Member, Geological Survey

R.C.S.

File Copy
Surname
Mineral Farm
Talbot

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

500

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-3605 (Lead-Zinc)
Hurst Majors
Mineral Farm Group
Ouray, Colorado
Contract No. Idm-2878

Dear Mr. Traver:

This is with reference to your memorandum of August 9, relating to the cited project.

We are enclosing the original and five copies of a "Notice of Failure to Achieve Results", prepared for your signature. If it meets with your approval, please execute it, forward the original to the Operator and distribute the copies in the usual manner. If it should not meet with your approval please return all copies with your recommendations.

Sincerely yours,

Chairman, Operating Committee

Enclosures

WRGriswold/er 9/5/56
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Division copy

Phil
Hoffmeed
"Appr. Sec. Sit."
Forwarded
Talbut

NOTICE OF FAILURE TO ACHIEVE RESULTS

To: Ernest Majors

Manhattan, Kansas

Operator under Exploration
Project Contract Idm-2878,
Docket No. DMEA-3605,
dated September 21, 1955.

1. The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, pursuant to the provisions of Article 8 of the subject contract, hereby notifies you that in its opinion operations under the contract have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in its opinion further operations are not justified.

2. Pursuant to the provisions of said Article 8, the Government upon giving this notice is "free of all obligation to pay on account of units of work not then performed . . ."; and you are "free of all obligation to prosecute the work other than such as may be necessary and incidental to winding-up, reporting, and accounting."

3. By the provisions of Article 8(a) of the contract, the giving of this notice by the Government ". . . shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved."

Dated this _____ day of _____, 1956.

THE UNITED STATES OF AMERICA

By_____
Executive Officer,
DMEA Field Team, Region III

cket copy

Robin
Hoffman
Appd. Sol. Off.

Talbot Bishop

NOTICE OF FAILURE TO ACHIEVE RESULTS

To: Murat Majors

Manhattan, Kansas

Operator under Exploration
Project Contract Idm-8878,
Docket No. DMEA-3603,
dated September 21, 1955.

1. The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, pursuant to the provisions of Article 8 of the subject contract, hereby notifies you that in its opinion operations under the contract have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in its opinion further operations are not justified.

2. Pursuant to the provisions of said Article 8, the Government upon giving this notice is "free of all obligation to pay on account of units of work not then performed . . ."; and you are "free of all obligation to prosecute the work other than such as may be necessary and incidental to winding-up, reporting, and accounting."

3. By the provisions of Article 8(c) of the contract, the giving of this notice by the Government ". . . shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved."

Dated this _____ day of _____, 1956.

THE UNITED STATES OF AMERICA

By_____
Executive Officer,
DMEA Field Team, Region III

Docket copy

"Appd. Sol. DIM"

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Hurst Majors, hereinafter called the "Operator," parties to that certain Exploration Project Contract Ldm-2878 (Docket No. DMEA-3409), dated September 21, 1955, hereinafter called the "Contract," that:

1. Effective November 15, 1955, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

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

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account. All rights of the Government under the Contract with respect to records, audits, and recovery of any overpayment are preserved.

4. The Operator, as principal if the Operator is the producer or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the Contract, in the same manner and amount and for the same period as if a certification of discovery or development had been made, such certification being hereby waived.

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

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

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals Exploration Administration

HURST MAJORS

_____

Division copy

Burton Langer

"Appd. Sol. Off."

Jerauld

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Hurst Majors, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-2578 (Docket No. DMEA-3603), dated September 21, 1955, hereinafter called the "Contract," that:

1. Effective November 15, 1955, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

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

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account. All rights of the Government under the Contract with respect to records, audits, and recovery of any overpayment are preserved.

4. The Operator, as principal if the Operator is the producer or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the Contract, in the same manner and amount and for the same period as if a certification of discovery or development had been made, such certification being hereby waived.

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

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

FROM SOLICITOR
AUG 22 1956
FOR SIGNATURE

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

HURST MAJORS

_____

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION 500
WASHINGTON 25, D. C.

September 12, 1956

Memorandum for the Files

From: Chief, Base Metals Division

Subject: Docket No. DMEA-3605 (Lead-Zinc), Hurst Majors, Mineral Farm Group, Ouray, Colorado, Contract No. Idm-E878.

The project called for three short drill holes, one of which has been completed, with negative results. The Operator discontinued the work due to high cost; actually there is probably little expectancy in view of the first hole being negative. Since the Government has little reason to force completion of the project, a mutual termination seems to be in order.

W. R. Griswold

WRG/er

Copy to: Docket
Base Metals
Chron

File Copy
Surname

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

500

August 24, 1956

Memorandum

To: Associate Solictior, Division of Mineral Resources

From: Chief, Base Metals Division

Subject: Docket No. DMEA-3605, Hurst Majors, Mineral Farm Mine, Ouray County, Colorado, Contract No. Ldm-5878, Lead-Zinc.

At our request, you recently prepared a Mutual Termination Agreement (with a pseudo-certification) covering the referenced contract.

However, it has now been decided that the cost to the Field Team of administering and checking-up for a period of ten years would vastly exceed the small sum involved. Hence, while we regret putting you to double work, we request that you prepare a unilateral notice of termination, by the Government, due to the improbability of making any worthwhile discovery by any further work under the contract. The right to certify need not be perserved in such notice.

Please make such notice to be signed by the executive Field Officer of Region III, W. M. Traver.

W. R. Griswold

W. R. Griswold

WRG/er

Copy to: Docket
Base Metals
Chron.

File Copy
Surname

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

August 15, 1956

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Chief, Base Metals Division

Subject: Preparation of Mutual Termination Agreement for
Docket No. DMEA-3605 (Lead-Zinc)
Contract No. Idm-E878
Hurst Majors
Mineral Farm Mine
Ouray County, Colorado

Will you kindly prepare a Mutual Termination Agreement to the cited contract. A pseudo-certification clause should be included.

W. R. Griswold

W. R. Griswold

WRG/er

Copy to: Docket
Base Metals
Chron.

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

RECEIVED
AUG 13 1956

224 New Customhouse
Denver 2, Colorado

August 9, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3605 (Lead-Zinc), Contract Idm-E878, Hurst Majors (Mineral Farm mine), Ouray County, Colorado

Enclosed is the following material pertaining to operations under the subject contract:

1. The original and three copies of a letter from the Operator, dated July 20, 1956 in reply to two letters from this office dated July 18, 1956.

2. The original and three copies of a memorandum, dated August 8, 1956 from C. M. Harrer, Mining Engineer, Bureau of Mines.

3. The original and three copies of a joint memorandum, dated August 8, 1956 from C. M. Harrer, Mining Engineer, Bureau of Mines, and E. N. Harshman, Geologist, Geological Survey, and member of the DMEA Field Team, Region III.

The Operator, for reasons outlined, states that he has no intention of resuming work under the contract.

The field examiners state that the project still has some merit. However, under the circumstances, they recommend that the contract be terminated and that the Government retain royalty rights.

If the contract is terminated in its present status, reimbursement to the Operator in the amount of $369.20 in processing form MF-104, Operator's Monthly Report and Voucher, for the month of November, 1955 will constitute final payment under the contract.

We recommend that if possible the Operator be required to reimburse the Government for the amount of its contribution. However, if the amount contributed cannot be recovered by other means, we do not recommend that the project be certified as a discovery or development, because the cost of administering the contract on royalty matters for ten years would far exceed the amount of the Government's contribution to date.

The matter is forwarded for your consideration and appropriate action, or advice as to how this office should proceed.

W. M. Traver

W. M. Traver

Enclosures

MAJORS PRODUCE COMPANY

MANHATTAN, KANSAS

RECEIVED
AUG 13 1956

DISTRIBUTORS OF
"CHEMI-CA'PELLETS"
(CHEMICAL CAPON PELLETS)

July 20th 1956

DMEA
Date Rec'd.
JUL 23 1956

BUREAU OF MINES
Denver, Colorado

W.M Traver,
Executive Officer, DMEA,
Field Team Region 111,
Dear Sir;

I have your letters, two of them, dated July 18th, with reference to the work done on my Mineral Farm property.

Referring first to the question of my resumption of the work up there. When we shut down last winter, I began to pay the bills resulting from the drilling of the first test hole to a depth of 150 feet, and when I finished the job of paying the bills, I found that instead of being able to do the work for the $4.80 per foot, as your engineers estimated, it cost me closer to $15.00 per foot. I discovered that no contract drilling firm would do the job for less than $13.50 to $15.00 per foot, and apparently I was a Kansas greenhorn in accepting the generous offer of the Government to share the $4.80 cost with me.

But when I had your letter of December 22, 1956, from Mr. Harshman, reading in part, "If you wish to resume operations in the Spring, it is necessary that you request a recess of operations at this time", I had not paid all the bills and I did write you on January 10th that we ought to be able to resume by June 1, 1956.

The phraseology of your letter above quoted indicated to me that you did not particularly care whether I started work in the Spring, and I therefore voted not to pour another $3,000 or $4,000 down the rathole. I am therefore NOT going to resume work up there under the one-sided contract this has turned out to be.

Now as to the matter of the lease to Mr. Wright. He is being given permission to go in the "Church" and do some looking around. If he finds anything, I assure you that the Government may have anything and everything you are entitled to, and you may accept this letter as my agreement to give you your percentage royalty if you think you are entitled to it.

MAJORS PRODUCE COMPANY

MANHATTAN, KANSAS

DISTRIBUTORS OF
"CHEMI-CA'PELLETS"
(CHEMICAL CAPON PELLETS)

Summarizing therefore my answer to your two letters, I'll simply say that

first--I am not going to continue the work up there under the unreasonable terms of the contract. I'll go broke if I do try to drill at the price you say I should.

secondly---if you think the Government has a right to royalty on anything Mr. Wright finds by digging holes along the walls of the Church, I'll pay it to you.

I want further to say this to you. I was told when I entered into the original contract that you would make certain assays and appraisals of the ores and formations we encountered on the way down. I was told to save the cores for your assay. I have had Not one word of a ny kind from any source whatsoever, about what you thought of the formations we went thru, or whether it is your judgment that we might find anything in two more holes.

And I note in the instruction booklet explaining the DMEA workings, the statement that in case I come to the conclusion there is no benefit or advantage in completing the work, the Government may agree with me to terminate the work. I therefore request that we terminate the work.

I also read this statement----in answer to the question, "must I repay the Government the money which it contributes"----"Only in case there is production which is subject to a percentage royalty as provided in the contract" I am repeating myself here--if we get one dollars worth of ore from the drilling we did up there, you'll get every cent of the royalty due you.

And I'll make one final statement. If the Government really and honestly means it when they say they will pay half of the actual cost of doing that work up there, based on real figures and not just a $4.80 figure picked out of thin air, I'll finish drilling two more holes with you up there.

Respectfully

Hurst Majors

Hurst Majors

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DMEA
Date Rec'd.
AUG 9 1956
BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
August 8, 1956

Memorandum

RECEIVED
AUG 13 1956

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: C. M. Harrer
E. N. Harshman

Subject: Docket DMEA 3605 (Lead-zinc) Contract Idm-E878, Hurst Majors (Mineral Farm mine) Ouray County, Colorado - Recommendations on contract

In a letter dated July 20, 1956, Hurst Majors states that he will not continue exploration under the contract. As of December 12, 1955 one of the three proposed drill holes was completed to a depth of 153 feet 10 inches. This hole bottomed in about 10 feet of blue-black shale without encountering any ore. Two holes remain to be drilled; 110 feet east and 130 feet west of the completed hole. There is still a possibility of encountering ore in the remaining two drill holes. However, since the one hole proved barren and the operator does not wish to continue exploration, it is recommended that the contract be terminated and that the Government retain royalty rights.

C. M. Harrer
C. M. Harrer
Mining Engineer

E. N. Harshman
E. N. Harshman
Member Field Team

CMH/mw
Idm-E878
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DMEA
Date Rec'd.
AUG 9 1956
BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
August 8, 1956

RECEIVED
AUG 13 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: C. M. Harrer

Subject: DMEA 3605 (Lead-zinc) Contract Idm-E878, Hurst Majors Mineral Farm mine, Ouray County, Colorado -- Status of the contract

The Mineral Farm mine was examined on August 1, 1956. There has been no activity under the contract for the year 1956. Arthur Wright, lessee of the property has spent a few shifts sorting out ore from the mine dumps.

Amendment No. 2 of the contract stipulates that work under the contract should start not later than July 1, 1956. This has not been done.

C. M. Harrer
C. M. Harrer
Mining Engineer

CMH/mw
Idm-E878
Chron
cc: 9

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

RECEIVED
JUL 25 1956

[illegible]
Denver 2, Colorado

July 23, 1956

Gentlemen:

To: E. H. Burnham - w/enclosure
John P. Shaw - " "

From: Executive Officer, DMEA Field Team, Region III

Subject: Project DMEA 3063 (Lead-Zinc), Contract DMe-1878, Hunt Mojave (Shoshoni Mine mine), Sunny County, Colorado

Enclosed is a copy of the Operator's letter of July 20, 1956 in reply to the letters from this office, dated July 13, 1956, wherein we request advice as to the Operator's intention relative to resumption of work.

The Operator states that he has no intention of resuming work under the contract because of the inequities of the work cost established for performing the work.

Please submit a concurring report of your recommendations in the matter and contain your opinion as to the merits of the project.

W. M. TRAVER
W. M. Traver

Enclosure

JPS:jcl

cc: Chairman, Operating Committee (2)) w/copy of Operator's letter of July 20

General
Source, File
Circ.

W.B.

RECEIVED
JUL 25 1956

MAJORS PRODUCE COMPANY

MANHATTAN, KANSAS

DISTRIBUTORS OF
"CHEMI-CA'PELLETS"
(CHEMICAL CAPON PELLETS)

July 20th 1956

DMEA
Date Rec'd.
JUL 23 1956
BUREAU OF MINES
Denver, Colorado

W.M Traver,
Executive Officer, DMEA,
Field Team Region 111,
Dear Sir;

I have your letters, two of them, dated July 18th, with reference to the work done on my Mineral Farm property.

Referring first to the question of my resumption of the work up there. When we shut down last winter, I began to pay the bills resulting from the drilling of the first test hole to a depth of 150 feet, and when I finished the job of paying the bills, I found that instead of being able to do the work for the $4.80 per foot, as your engineers estimated, it cost me closer to $15.00 per foot. I discovered that no contract drilling firm would do the job for less than $13.50 to $15.00 per foot, and apparently I was a Kansas greenhorn in accepting the generous offer of the Government to share the $4.80 cost with me.

But when I had your letter of December 22, 1956, from Mr. Harshman, reading in part, "If you wish to resume operations in the Spring, it is necessary that you request a recess of operations at this time", I had not paid all the bills and I did write you on January 10th that we ought to be able to resume by June 1, 1956.

The phraseology of your letter above quoted indicated to me that you did not particularly care whether I started work in the Spring, and I therefore voted not to pour another $3,000 or $4,000 down the rathole. I am therefore NOT going to resume work up there under the one-sided contract this has turned out to be.

Now as to the matter of the lease to Mr. Wright. He is being given permission to go in the "Church" and do some looking around. If he finds anything, I assure you that the Government may have anything and everything you are entitled to, and you may accept this letter as my agreement to give you your percentage royalty if you think you are entitled to it.

MAJORS PRODUCE COMPANY

MANHATTAN, KANSAS

DISTRIBUTORS OF
"CHEMI-CA'PELLETS"
(CHEMICAL CAPON PELLETS)

Summarizing therefore my answer to your two letters, I'll simply say that

first--I am not going to continue the work up there under the unreasonable terms of the contract. I'll go broke if I do try to drill at the price you say I should.

secondly---if you think the Government has a right to royalty on anything Mr. Wright finds by digging holes along the walls of the Church, I'll pay it to you.

I want further to say this to you. I was told when I entered into the original contract that you would make certain assays and appraisals of the cores and formations we encountered on the way down. I was told to save the cores for your assay. I have had not one word of a ny kind from any source whatsoever, about what you thought of the formations we went thru, or whether it is your judgment that we might find anything in two more holes.

And I note in the instruction booklet explaining the DMEA workings, the statement that in case I come to the conclusion there is no benefit or advantage in completing the work, the Government may agree with me to terminate the work. I therefore request that we terminate the work.

I also read this statement----in answer to the question, "must I repay the Government the money which it contributes"----"Only in case there is production which is subject to a percentage royalty as provided in the contract" I am repeating myself here--if we get one dollars worth of ore from the drilling we did up there, you'll get every cent of the royalty due you.

And I'll make one final statement. If the Government really and honestly means it when they say they will pay half of the actual cost of doing that work up there, based on real figures and not just a $4.80 figure picked out of thin air, I'll finish drilling two more holes with you up there.

Respectfully

Hurst Majors

Hurst Majors

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

RECEIVED JUL 23 1956

224 New Customhouse
Denver 2, Colorado

July 18, 1956

Mr. Hurst Majors
Majors Produce Company
Manhattan, Kansas

Re: Docket DMEA-3685 (Lead-Zinc)
Contract Idm-E878
Hurst Majors
Mineral Farm Mine
Ouray County, Colorado

Dear Mr. Majors:

According to the provisions of contract Amendment No. 2, executed January 12, 1956, work was to have been resumed under DMEA Exploration Contract Idm-E878 not later than July 1, 1956. Advice from the field indicates that the work was not resumed by that date, which places you in default under the terms of the contract.

Please submit to this office, by return mail, your plans relative to resumption and completion of all authorized contract work.

Very truly yours,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JDC:jy
cc: Corresp. E878)
Chair. Op. Comm. (2)) w/copy of C. M. Harrer's
Harshman) relative memo of July 16, 1956
Shaw (2))
Townsend)
Chron.

DMEA
Date Rec'd.

JUL 18 1956

BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
July 16, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: C. M. Harrer

Subject: DMEA 3605 (Lead-zinc) Contract Idm-2378, Hurst Majors Mineral Farm mine, Ouray County, Colorado - Status of the contract

Mr. John D. Crim of Ouray, Colorado was contacted on July 10, 1956. There has been no activity at the property for the year. Arthur Wright of Ouray has a lease on that part of the Mineral Farm property including the incline and a 50-foot extension on each side of the incline walls. The lease is effective as of July 1, 1956 and for a period of one year.

Amendment No. 2 of the contract stipulates that work under the contract should start not later than July 1, 1956. This has not been done.

C. M. Harrer
C. M. Harrer
Mining Engineer

CMH/mw
Idm-2378
Ouray

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

RECEIVED
JUL 20 1956

224 New Customhouse
Denver 2, Colorado

July 18, 1956

Mr. Hurst Majors
Majors Produce Company
Manhattan, Kansas

Re: Docket DMEA 3605 (Lead-Zinc), Contract Idm-E878, Hurst Majors (Mineral Farm Mine) Ouray County, Colorado

Dear Mr. Majors:

This agency has been informed that you have leased a portion of the property described in the Contract Idm-E878 to a Mr. Arthur Wright of Ouray, Colorado

We refer you to Article 2(d) which states in part:

"...the Operator shall neither transfer, convey, nor surrender the land or any right, title, or interest therein nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof."

You are accordingly requested to submit a signed copy of the instrument of conveyance or photostat of same to this office which conforms to the requirements of the contract.

Yours very truly,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

MEM/vj

cc: Royalty File E878
Correspondence File E878
Sec. Opr. Comm. (2)
J. F. Shaw (2)
Townsend
Marshall
Chron.

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

February 15, 1956

Memorandum

To: Miss Curtin, Statistics and Control Division, DMEA

From: Hazel Berry, Operating Committee, DMEA

Subject: Amendment to Contract

Attached is the following docket copy of an amendment to a contract which has been reviewed and approved by the Commodity Division, Contract Administration and Audit Division, and the Legal Division. The official docket is also attached.

Hurst Majors, DMEA-3605, Idm-E878, Amendment No. 2.

Attachment-1

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

JAN 23 1956

224 New Customhouse
Denver 2, Colorado

January 20, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3605 (Lead-Zinc), Contract Idm-E878, Hurst Majors, Mineral Farm Group, Ouray County, Colorado

Enclosed are the original and two copies of Amendment No. 2 to Contract Idm-E878, which has been executed to extend the period for completion of the project work to September 1, 1956, and authorize a recess of operations from November 15, 1955, to July 1, 1956.

Also enclosed are four copies of the Operator's letter of January 12, 1956, requesting the recess of operations.

Copies of the Amendment have been given to the Operator, the Finance Office, Region III, and distributed to other offices concerned.

W. M. Traver

W. M. Traver

Enclosures

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

January 17, 1956

Memorandum

To: Miss Curtin, Statistics and Control Division, DMEA

From: Hazel Berry, Operating Committee, DMEA
by ESG

Subject: Amendment to Contract

Attached is the following docket copy of an amendment to a contract which has been reviewed and approved by the Commodity Division, Contract Administration and Audit Division, and the Legal Division. The official docket is also attached.

Hurst Majors, Mineral Farm Mine, DMEA-3605, Idm-E878, Amendment No. 1.

Attachment-1

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

224 New Customhouse
Denver 2, Colorado

December 22, 1955

Mr. Hurst Majors
Majors Produce Company
Manhattan, Kansas

Re: Docket DMEA-3605
Contract Idm-E878
Mineral Farm Group
Ouray County, Colorado

Dear Mr. Majors:

We note that some of the entries on your November 1955 Form MF-104A, Operator's Unit Cost and Progress Report, are not in the proper columns. Attached is a sample form showing correct distribution of entries for the same month which you may use as a guide in preparing subsequent monthly reports.

Very truly yours,

E. N. Harshman

E. N. Harshman
Acting Executive Officer, DMEA
Field Team, Region III

Enclosure
JDC:jy
cc: Corresp. E878
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Chron.

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

224 New Customhouse
Denver 2, Colorado

December 22, 1955

Mr. Hurst Majors
Majors Produce Company
Manhattan, Kansas

Re: Docket DMEA-3605
Contract Idm-E878
Mineral Farm Group
Ouray County, Colorado

Dear Mr. Majors:

In your Narrative Report for the month of November 1955 you indicate that operations have been shut down for the winter months. If you wish to resume operations in the spring it is necessary that you request a recess of operations at this time, and in conjunction with the request we must have the following information:

a) Date on which operations were suspended

b) Date on or before which operations will be resumed

c) Length of time required to complete the drilling after resumption of work

Very truly yours,

E. N. Harshman

E. N. Harshman
Acting Executive Officer, DMEA
Field Team, Region III

JDC:jy
cc: Corresp. E878
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Chron.

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

RECEIVED
DEC 13 1955

224 New Customhouse
Denver 2, Colorado

December 9, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3605 (Lead-Zinc) Contract Idm-E878, Hurst Majors Mineral Farm Mine, Ouray County, Colorado

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E878 which has been executed to modify the specifications of the work to be performed under the contract. Also enclosed are four sets of data relative to the Amendment.

Copies of the Amendment have been given to the Operator and distributed to other personnel concerned.

E. N. Harshman

E. N. Harshman

Enclosures

Building 20
Denver Federal Center
Denver 2, Colorado
November 14, 1955

REGION III

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: C. M. Harrer

Subject: DMEA 3605, Contract Idm-8878 (Lead-zinc)
Hurst Majors (Mineral Farm mine), Ouray County, Colo. -
Progress report for October 1955

Messrs. Hurst Majors and John Crim were contacted at the property on November 1, 1955. Drilling started on October 21, 1955, on vertical hole no. 1. This hole was started AX and drilled for 13 feet through hard quartz and siliceous limestone. So much difficulty was experienced in drilling that the hole was continued from this depth in size BX. At the time of inspection, the hole had progressed satisfactorily for a depth of 104 feet with good core recovery. In the upper 10 feet, very small spots of sphalerite were noted in almost massive quartz. Beyond this depth no mineralization was noted other than occasional faint limonite staining. Rock penetrated was quartz and very siliceous limestone.

C. M. Harrer
C. M. Harrer
Mining Engineer

cc 6
Idm-8878
Chron

CMH:ph

REGION III

Memorandum

Building 20
Denver Federal Center
Denver 2, Colorado
November 14, 1955

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Hardman
Member, Field Team

John F. Shaw
Supervising Mining Engineer

RECEIVED
DEC 13 1955

From: C. M. Harrer

Subject: DMEA 3605, Contract 14n-2878 (Lead-zinc)
Hurst Majors (Mineral Farm mine), Ouray County, Colo. -
Core drilling change from size AX to size BX

In a letter dated October 28, 1955, Hurst Majors states that extreme difficulty was evidenced in core drilling quartz and very siliceous limestone formations necessitating a change from size AX to size BX after 13 feet of advance. Inspection of drilling size BX indicates good core recovery.

It is recommended that size BX hole be approved only if core recovery is good and holes are completed to their objective. No uncompleted holes would be paid for.

C. M. Harrer
C. M. Harrer
Mining Engineer

cc 9
Hardman
14n-2878
Chron

CMH:ph

October 28, 1955
Ouray, Colorado

Mr. Trevor,
Executive Officer DMEA
Field Team Region [illegible]
Denver, Colorado
Dear Mr. Trevor

Bureau of Mines
Denver, Colo.
RECEIVED
DEC 13 1955

Re; DMEA 3605 Contract Idm E 878

This will confirm the gist of my phone conversation with Mr. Shaw on Thursday morning October 27th.

I arrived in Ouray, from my home in Manhattan, Kansas, last Monday October 24th. Mr. John Grim had started his drilling program the preceding Friday, in the middle location of the three staked out by Mr. Harrer and Mr. Grim.

In five days of drilling, the men had been able to penetrate the extremely hard quartz and limestone only 14 feet. There was nearly 10 feet of quartz, and the AXL bit would simply not core the formations.

On Wednesday, Mr. Grim brought a Mr. C.C. Chamberlain, Supervising Engineer of thr Idarado Mining Co., to our property on Mineral Farm, for his advice as to our best procedure. He and Mr. Grim had brought from the Idarado, a smaller bit (EXL) with some smaller pipe, and they went into that quartz with the smaller bit a total of learly 12 feet in four hours.

Mr. Chamberlain told me he thought the EXL would tell us what we needed to know, and Mr. Grim and his driller advised me they saw no possibility of putting the large hole through that Mineral Farm lime, so I had to make a decision on the spot as to my next move.

My contract with the Government is on the basis of $4.80 per foot for AXL. This is of course far below existing costs, and hardly one half of what my cost is going to be even drilling EXL. I am not complaining about this; I accepted your contract and am fully bound by its terms, though frankly I was surprised when we got bids from commercial drillers who asked $14.00 and $16.00 per foot for the rather small footage, 450 feet, on Mineral Farm (after I agreed to your $4.80 figure)

But we set up the operation ourselves; hired a driller to operate the machines, with our help; rented compressor, drills, etc. at a cost of over $1500.00 per month, besides labor, and tried our best to put down AXL core.

I have definitely decided that we cannot put 3 holes into that property AXL. Then what should our next move be?

[illegible] to try to reach the shale through the limestone [illegible] If the Government will approve the change to [illegible] to our best to drill the contract hole [illegible] a total [illegible] However it is your position that the hole must [illegible] we will do as much work as we can, in thirty days, on our [illegible] time to have rentals paid for a month [illegible] and of course not support any participating loan from the Government.

I can spend only a limited time in Ouray. I wanted to get as much done as possible while I am here. I made the change to XXL because it seemed to be the only way we could get the job done in that unusually hard lime formation up there.

Mr. Shaw said that Mr. Harrer will be here next Monday. I will talk with him about our problems. The men are going to work long hours Saturday, Sunday and Monday, day and night, to try to get deep in the lime before he arrives.

I would like to leave Ouray for Kansas on Tuesday afternoon or Wednesday morning, and hope to know just what Mr. Grim should [illegible] after I go—hence I would greatly appreciate it if you can give a ruling on the XXL change while Mr. Harrer is in Ouray. We are already in trouble with the weather at ouray, and every day's delay will cause new problems of supply and access to the property.

If your decision is that only XXL is acceptable, we will [illegible] on our own. If you agree with Mr. Chamberlain and my own men [illegible] will tell the story, we'll try to finish the original [illegible] before winter stops us.

Respectfully,

Harrison Hagen

Harrison Hagen

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

RECEIVED
DEC - 8 1955

224 New Customhouse
Denver 2, Colorado

December 6, 1955

Mr. Hurst Majors
Majors Produce Company
Manhattan, Kansas

Re: Docket DMEA-3605
Contract Idm-E878
Uncompahgre Mining District
Ouray County, Colorado

Dear Mr. Majors:

We are returning herewith all copies of your Forms MF-104 and MF-104A and the one copy of your Narrative Report including written and graphic logs of drill hole No. 1.

It is necessary, and a requirement of the contract (Article 6 (b)) that the Narrative Report, including all supporting data such as maps and logs be in quintuplicate.

We request that you mail the five complete copies of your monthly report to Mr. John F. Shaw, U. S. Bureau of Mines, Room 137, Building 20, Denver Federal Center, Denver 2, Colorado. Please refer to our letter to you dated September 29, 1955.

JDC:jy
cc: Corresp. File E878
Sec. Op. Comm. (2)
Harshman
Shaw (2)
Chron.

Very truly yours,

E. N. Harshman

E. N. Harshman
Acting Executive Officer, DMEA
Field Team, Region III

Enclosures

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

RECEIVED
OCT 4 1955

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

September 29, 1955

Memorandum

To: Chairman of the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA-3605 (Lead-Zinc) Contract Idm-E878, Hurst Majors (Mineral Farm Group) Ouray County, Colorado

Enclosed are the Government's, Division, and Docket copies of Contract Idm-E878, properly executed by the Contractor. The contract was transmitted to this office by your letter of September 21, 1955.

Copies of the contract have been furnished the Operator, the Region III Finance Officer, distributed to the field offices concerned, and a copy retained in our files.

W. M. Traver

W. M. Traver

Enclosures

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

RECEIVED
OCT 4 - 1955

224 New Customhouse
Denver 2, Colorado

September 29, 1955

Mr. Hurst Majors
Manhattan,
Kansas

Re: DMEA-3605 (Lead-Zinc) Contract Idm-E878, Hurst Majors (Mineral Farm Group) Ouray County, Colorado

Dear Mr. Majors:

Enclosed herewith is the Operator's copy of Short-Form Exploration Project Contract No. Idm-E878, Docket DMEA-3605.

Also enclosed are six copies of Form MF-104, "Operator's Monthly Report and Voucher" and six copies of Form MF-104A, "Operator's Unit Cost and Progress Report." At the completion of the first calendar month of operation and monthly thereafter you are required to submit five copies of the form to Mr. John F. Shaw, U. S. Bureau of Mines, Room 137, Building 20, Denver Federal Center, Denver 2, Colorado. The sixth form is for your records.

Please note that the monthly report requires a narrative report which should be accompanied by maps or sketches. The narrative report must be signed by the Operator. The monthly report will not be processed for payment unless accompanied by a narrative report. Additional copies of Forms MF-104 and MF-104A will be forwarded to you as required.

For your information and in reply to many questions that have been asked, after Forms MF-104 and MF-104A are received an engineer will check progress and approve your accounts, after which it will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 224 New Customhouse, Denver 2, Colorado, for auditing and vouchering. If the report is in order, a check will be issued by the Treasury Department for the Government's portion of the costs. If you have any difficulty in completing these forms and the reports, please call on Mr. Shaw or this office for assistance.

Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington office, DMEA or the DMEA Field Team, Region III, which is comprised of E. N. Harshman, U. S. Geological Survey member, and W. M. Traver, U. S. Bureau of Mines member.

No oral statement of any person shall modify or otherwise affect the terms or conditions of this contract.

It is a regulation that reimbursement for the cost of work accomplished prior to the date of the contract will not be allowed. We have entered October 31, 1955, as the date on or before which work shall commence in Article 3 of all copies of the contract.

It is also a requirement and imperative that you notify this office in writing the date work actually commences under the contract, with a copy of your letter to Mr. Shaw.

Very truly yours,

W. M. Traver

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures

WMT:jy

cc: Corresp. File E878
Amend. File E878
Chair. Opr. Comm. (2)
Shaw (2)
Harshman
Townsend
Chron.

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

RECEIVED
SEP 28 1955

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

September 26, 1955

Docket

Mr. Hurst Majors
Manhattan, Kansas

Re: DMEA-3605 (Lead-Zinc) Proposed Contract Idm-E878, Hurst Majors (Mineral Farm Group) Ouray County, Colorado

Dear Mr. Majors:

Enclosed are the Governments's, Division, Docket, Finance Office and Field Team copies of Proposed Short Form Exploration Contract Idm-E878 prepared in Washington and signed by the Administrator, DMEA pursuant to your application.

If you find the contract satisfactory in all respects, sign all five copies as an individual and return as soon as possible.

Upon receipt of the five copies properly signed the "Operator's Copy" will be forwarded to you together with instructions relative to work performance and reporting procedures under the contract. You are cautioned not to commence operations, irrespective of the date of the contract, until you receive your copy with the instructions.

When you return the copies of the contract, please advise the approximate date on or before which you will be able to start operations in order that we may insert in under Article 3 of all copies of the contract.

Also will you please advise the correct Survey Number of the Midnight and Forest claims. They are both shown in your application as Number 1149A and on the Hotchkiss Claim Map of the San Juan region as Number 1149D.

Very truly yours,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosure
WMT/vj
cc: Correspondence File E878
~~W.M. Traver~~ Secr. Op. Comm. (2)
Harshman
J. F. Shaw (2)
Townsend
Chron.

File Copy
Surname

Turned

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

SEP 23 1955

Mr. Hurst Majors
Major Produce Company
Manhattan, Kansas

Re: Docket No. DMEA-3605 (Lead-Zinc)
Hurst Majors
Mineral Farm Group
Ouray County, Colorado

Dear Mr. Majors:

I have your letter of September 19, inquiring as to the status of your Defense Minerals Exploration Administration application.

A contract was forwarded to the field office on September 21 for transmittal to you. I feel sure you will hear from them in the course of a very few days.

Sincerely yours,

Frank E. Johnson (fw)

ACTING Administrator

WRGriswold/er 9/22/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Hiilsgaard, USGS
Region III (2)
Chron.

R.C.S.

File Copy
Surname

Griswold
Talbot
Selfridge
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

SEP 21 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-3605 (Lead-Zinc)
Hurst Majors
Mineral Farm Group
Ouray, Colorado

Dear Mr. Traver:

With reference to your memorandum of August 4, we are enclosing the original and five copies of a contract for the cited project.

If it meets with your approval, will you please present it to the Applicant for signature and, when complete, distribute the copies in the usual manner. Otherwise all copies should be returned to us with your comments.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

P. F. Yopes

Member, Bureau of Mines

/s/ M. E. Nelson

Member, Geological Survey

WRGriswold/er 9/15/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

P. S. Please note that in Annex I we have numbered the Midnight and Forest Claims 1149A, as shown on the application. On the map attached to the contract, these claims are numbered 11490. Please check this and correct as necessary.

MAJORS PRODUCE COMPANY
MANHATTAN, KANSAS

RECEIVED
SEP 21 1955

DISTRIBUTORS OF
"CHEMI-CA'PELLETS"
(CHEMICAL-CAPON PELLETS)

September 19, 1955

U.S. Department of the Interior,
Administrator of DMEA,
Interior Building,
Washington, 25, D.C.,
Gentlemen;

Attention Mr. C.O. Mittendorf

I have a letter from the Denver office, Bureau of Mines, dated September 16th, written by John F Shaw, Supervising Mining Engineer.

"Reference is made to your letter dated September 10,1955, regarding the status of your application for exploration assistance, docket DMEA 3605"

"The examination report was forwarded to the Washington office of the DMEA on August 4, 1955. It is suggested that you write to Mr. C.O. Mittendorf, Administrator, DMEA , Department of Interior, Interior Building, Washington, 25, D.C., regarding the status of your application".

My letter to Denver was prompted because of the fact that the property at Ouray is at an elevation of approximately 8,500 feet; we couldn't get in there last Spring until almost June First, because of snow, and we don't have too much time left this fall if we are going to do some core drilling up there.

I would just like to know if possible, when this application will likely be processed and returned, thru Denver, to me, so I can tell my Ouray young miner friend just what we are going to do.

Respectfully, Hurst Majors

File Copy
Surname

510

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

September 2, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals Division

Subject: Docket No. DMEA-3605, Hurst Majors, Mineral Farm Group, Ouray County, Colorado

Please prepare a contract following the lines of the attached draft.

W. R. Griswold

W. R. Griswold

WRGriswold/bjl (9/2/55)

Copy to: Docket
Base Metals
Chron.

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

Griswold
Betty

August 30, 1955

Re: DMEA-3605
Lead-Zinc, $10,500
Hurst Majors
Mineral Farm Group
Ouray County, Colo.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop,
Branch of Base Metals

Subject: Application for assistance and review of Field Team Report

Hurst Majors requested exploration assistance to reopen the Mineral Farm Group of claims, the work to consist of reopening a caved adit crosscut, of unwatering underground workings, and of drilling 14 surface diamond drill holes totaling 2,500 feet.

The Field Team in examining the property concluded that the original ore body had been extracted, but that there was an unexplored ore potential 125 to 150 feet beneath existing stopes near the middle of the Leadville limestone below a red shale bed. The applicant and the examining team agreed to explore this ore potential with a program of 3 holes totaling about 450 feet and costing $4.50 per foot. Although this horizon is not known as an ore producer, its possibilities should be tested when it can be done at such a relatively low cost. I recommend that a contract be prepared covering the exploration requested.

O. M. Bishop

O. M. Bishop

Copy to - Division of Minerals
Mr. Kiilsgaard, Room 5222
O. M. Bishop
Files

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

August 30, 1955

Re: DMEA-3605
Lead-Zinc, $10,500
Hurst Majors
Mineral Farm Group
Ouray County, Colo.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop,
Branch of Base Metals

Subject: Application for assistance and review of Field Team Report.

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O. M. Bishop
O. M. Bishop

Copy to - Division of Minerals
Mr. Kiilsgaard, Room 5222
O. M. Bishop
Files

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

August 30, 1955

Re: DMEA-3605
Lead-Zinc, $10,500
Hurst Majors
Mineral Farm Group
Ouray County, Colo.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop,
Branch of Base Metals

Subject: Application for assistance and review of Field Team Report.

Hurst Majors requested exploration assistance to reopen the Mineral Farm Group of claims, the work to consist of reopening a caved adit crosscut, of unwatering underground workings, and of drilling 14 surface diamond drill holes totaling 2,500 feet.

The Field Team in examining the property concluded that the original ore body had been extracted, but that there was an unexplored ore potential 125 to 150 feet beneath existing stopes near the middle of the Leadville limestone below a red shale bed. The applicant and the examining team agreed to explore this ore potential with a program of 3 holes totaling about 450 feet and costing $4.50 per foot. Although this horizon is not known as an ore producer, its possibilities should be tested when it can be done at such a relatively low cost. I recommend that a contract be prepared covering the exploration requested.

O. M. Bishop

O. M. Bishop

Copy to - Division of Minerals
Mr. Kiilsgaard, Room 5222
O. M. Bishop
Files

IN REPLY REFER TO:

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

Griswold

August 19, 1955

Re: DMEA 3605
Hurst Majors
Mineral Farm Group
Ouray Co., Colo.
$2,203.50 - Lead-zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant has asked for assistance in exploring for a possible ore body underlying the Mineral Farm 1600-foot ore channel. The work was to consist of opening and unwatering old workings, and diamond drilling. The proposal as outlined was estimated to cost $10,500.00.

The idea of prospecting for an ore body beneath a red shale bed in the Leadville limestone appears to be new and perhaps novel. Burbank, in Bulletin 906E, Ore Deposition, Uncompahgre District Colo., seems not to have recognized the possibility. Plate 54-D suggests such a favorable condition could exist if a shale comparable to the Molas should be present. Interbeds of reddish shale characterize the Leadville, but there may be a question as to their effectiveness as dams such as is ascribed to the 40- to 60-foot Molas formation.

Much care should be exercised in laying out the diamond drill holes in the office and underground. The depth to the shale bed is conjectural and the intersections it is desired to explore even more so. Probably the three holes planned will not do a thorough job, but they may afford an estimate of the soundness of the idea.

I concur with the acceptance recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

RECEIVED
AUG 19 1955

IN REPLY REFER TO:

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

August 19, 1955

Re: DMEA 3605
Burrat Majors
Mineral Farm Group
Gurey Co., Colo.
$2,203.50 - Lead-zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant has asked for assistance in exploring for a possible ore body underlying the Mineral Farm 1600-foot ore channel. The work was to consist of opening and unwatering old workings, and diamond drilling. The proposal as outlined was estimated to cost $10,500.00.

The idea of prospecting for an ore body beneath a red shale bed in the Leadville limestone appears to be new and perhaps novel. Burbank, in Bulletin 906E, Ore Deposition, Uncompahgre District Colo., seems not to have recognized the possibility. Plate 54-B suggests such a favorable condition could exist if a shale comparable to the Molas should be present. Interbeds of reddish shale characterize the Leadville, but there may be a question as to their effectiveness as dams such as is ascribed to the 40- to 60-foot Molas formation.

Much care should be exercised in laying out the diamond drill holes in the office and underground. The depth to the shale bed is conjectural and the intersections it is desired to explore even more so. Probably the three holes planned will not do a thorough job, but they may afford an estimate of the soundness of the idea.

I concur with the acceptance recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-8/19/55
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617

RECEIVED
AUG 19 1955

IN REPLY REFER TO:

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

August 19, 1955

Re: DMEA 3605
Burst Majors
Mineral Farm Group
Ouray Co., Colo.
$2,203.50 - Lead-zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant has asked for assistance in exploring for a possible ore body underlying the Mineral Farm 1600-foot ore channel. The work was to consist of opening and unwatering old workings, and diamond drilling. The proposal as outlined was estimated to cost $10,500.00.

The idea of prospecting for an ore body beneath a red shale bed in the Leadville limestone appears to be new and perhaps novel. Burbank, in Bulletin 906E, Ore Deposition, Uncompahgre District Colo., seems not to have recognized the possibility. Plate 54-B suggests such a favorable condition could exist if a shale comparable to the Molas should be present. Interbeds of reddish shale characterize the Leadville, but there may be a question as to their effectiveness as dams such as is ascribed to the 40- to 60-foot Molas formation.

Much care should be exercised in laying out the diamond drill holes in the office and underground. The depth to the shale bed is conjectural and the intersections it is desired to explore even more so. Probably the three holes planned will not do a thorough job, but they may afford an estimate of the soundness of the idea.

I concur with the acceptance recommendation of the Field Team.

N. E. Nelson

NENelson:iml
G-8/19/55
cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617

RECEIVED
AUG 19 1955

N. E. Nelson

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

Gwendolyn Betty

August 19, 1955

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 3605 (Lead-Zinc), Hurst Majors, Mineral Farm Group, Ouray County, Colorado

Enclosed are nine copies of a map showing the locations of proposed drill holes in relation to property boundaries which you may wish to use in the preparation of the proposed contract.

The Joint Report of Examination on this docket was transmitted to your office August 4, 1955.

W. M. Traver

W. M. Traver

Enclosures

RECEIVED
AUG 1955

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

RECEIVED
AUG 10 1955

224 New Customhouse
Denver 2, Colorado

August 4, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Joint Report of Examination, DMEA Docket 3605 (Lead-Zinc), Hurst Majors, Mineral Farm group, Ouray County, Colorado

Enclosed are the original and three copies of the report pertaining to the above application.

We recommend DMEA participation in drilling three diamond core holes from the bottom of the main stope to explore a lower horizon in the limestone. The estimated total cost of the work is $2,203.50, Government participation at 50%: $1,101.75.

Nine copies of a revised Figure 3 have been requested from the engineer, to show the proposed location of the drill holes with relation to the property boundaries. These maps will be forwarded you for possible use in a contract.

DMEA Field Team, Region III

W. M. Traver

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-15-55
(date)

DMEA
Date Rec'd
AUG 1 1955
BUREAU OF MINES
Denver, Colorado

RECEIVED
AUG 10 1955

TRANSMITTED
AUG - 4 1955

Region III

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
July 29, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw

Subject: DMEA 3605 (Lead-zinc), Hurst Majors, Mineral Farm group, Ouray County, Colorado

Enclosed are the original and eight copies of a "Joint Summary, Conclusions, and Recommendations" and a joint geologic and engineering report by J. E. O'Rourke, geologist, and Glen Walker, mining engineer, covering docket DMEA 3605.

Hurst Majors requested exploration assistance in the amount of $10,500.00 to explore his Mineral Farm group of claims by reopening a caved adit, unwatering two underground workings, and drilling 14 surface diamond core holes. A field examination was made on June 21, 1955 by J. E. O'Rourke, geologist, and Glen Walker, mining engineer. The examining team concluded that the original deposit has been mined out but there is probability of another deposit at a lower horizon in the limestone.

It is recommended that the DMEA participate in the cost of drilling three diamond core holes from the bottom of the main stope to explore this lower horizon. The estimated cost of the work is $2,203.50. The amount of Government participation at 50 percent would be $1,101.75.

John F. Shaw
Supervising Mining Engineer

E. N. Harshman
Member Field Team

Enclosures

cc 8
DMEA 3605
Chron

JFS/em

Reviewed by
DMEA OPERATING COMMITTEE
8-15-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
AUG 10 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3605, Mineral Farm Group

Hurst Majors

Ouray County, Colorado

Lead-zinc

Joint Engineering and Geologic Report

By

J. E. O'Rourke, Geologist
Geological Survey

Glen Walker, Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
8-15-55
(date)

July 21, 1955

DMEA 3605

MINERAL FARM GROUP
HURST MAJORS
OURAY COUNTY, COLORADO

Joint Summary, Conclusions, and Recommendations

By

J. E. O'Rourke, Geologist
Geological Survey

Glen Walker, Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
8-15-55
(date)

TRANSMITTED
AUG - 4 1955

DMEA 3605

MINERAL FARM GROUP
HURST MAJORS
OURAY COUNTY, COLORADO

RECEIVED
AUG 10 1955

JOINT SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By

J. E. O'Rourke and Glen Walker

Hurst Majors of Manhattan, Kan., requested assistance in the exploration of lead-zinc ore on his Mineral Farm group of eight patented claims in sec. 6, T. 43 N., R. 7 W., and sec. 1, T. 43 N., R. 8 W., New Mexico principal meridian, in Ouray County, Colo. He proposed reopening a caved adit cross-cut, unwatering two underground workings and drilling 2,500 feet in 14 surface diamond core holes. This work was estimated to cost $10,500.00.

A DMEA field examination was made on June 21, 1955, by J. E. O'Rourke, geologist, U. S. Geological Survey and Alberto Manrique, Point-4 trainee, and Glen Walker, mining engineer, U. S. Bureau of Mines, in company with the applicant's representative, John Crim of Ouray, Colo.

It was concluded that the probability of discovering lead ore at a deeper horizon warranted a small expenditure. A much less extensive program of exploration than that of the applicant was briefly outlined to his representative. Both Crim and the applicant have agreed with the examining team's suggestion for exploratory drilling.

It is recommended that DMEA participate in the cost of drilling three AX diamond core holes from the bottom of the east stope through a shale layer in the Leadville limestone estimated to be at a depth of 100 to 150 feet below the original east stope.

DMEA 3605

MINERAL FARM GROUP
HURST MAJORS
OURAY COUNTY, COLORADO

Joint Geologic and Engineering Report

By

J. E. O'Rourke, Geologist
Geological Survey

Glen Walker, Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
8-15-55
(date)

DMEA 3605

MINERAL FARM GROUP
HURST MAJORS
OURAY COUNTY, COLORADO

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DMEA 3605

MINERAL FARM GROUP
HURST MAJORS
OURAY COUNTY, COLORADO

JOINT GEOLOGIC AND ENGINEERING REPORT

By

J. E. O'Rourke and Glen Walker

INTRODUCTION

Hurst Majors, owner of the Mineral Farm group of eight patented claims in the Uncompahgre mining district of Ouray County, Colo., requested assistance from the DMEA in the exploration of lead, zinc, copper ores. The property is in sec. 6, T. 43 N., R. 7 W. and sec. 1, T. 43 N., R. 8 W., New Mexico principal meridian. See fig. 1.

The work outlined in the application included reopening of an old caved adit cross-cut for visual inspection of a winze and underlying small stope, dewatering old stopes and the drilling of 14 surface diamond core holes totaling 2,500 feet. The proposed work was estimated to cost $10,500.00.

An examination of the property by a Region III examining team was made on June 21, 1955.

A modification of the applicant's proposal was agreed upon by the applicant and the members of the examining team. The acceptable program of exploration consists of drilling three 100- to 150-foot AX diamond core holes from the floor of the old east stope to 10 feet below a red shale horizon in the Leadville limestone. The red shale and certain

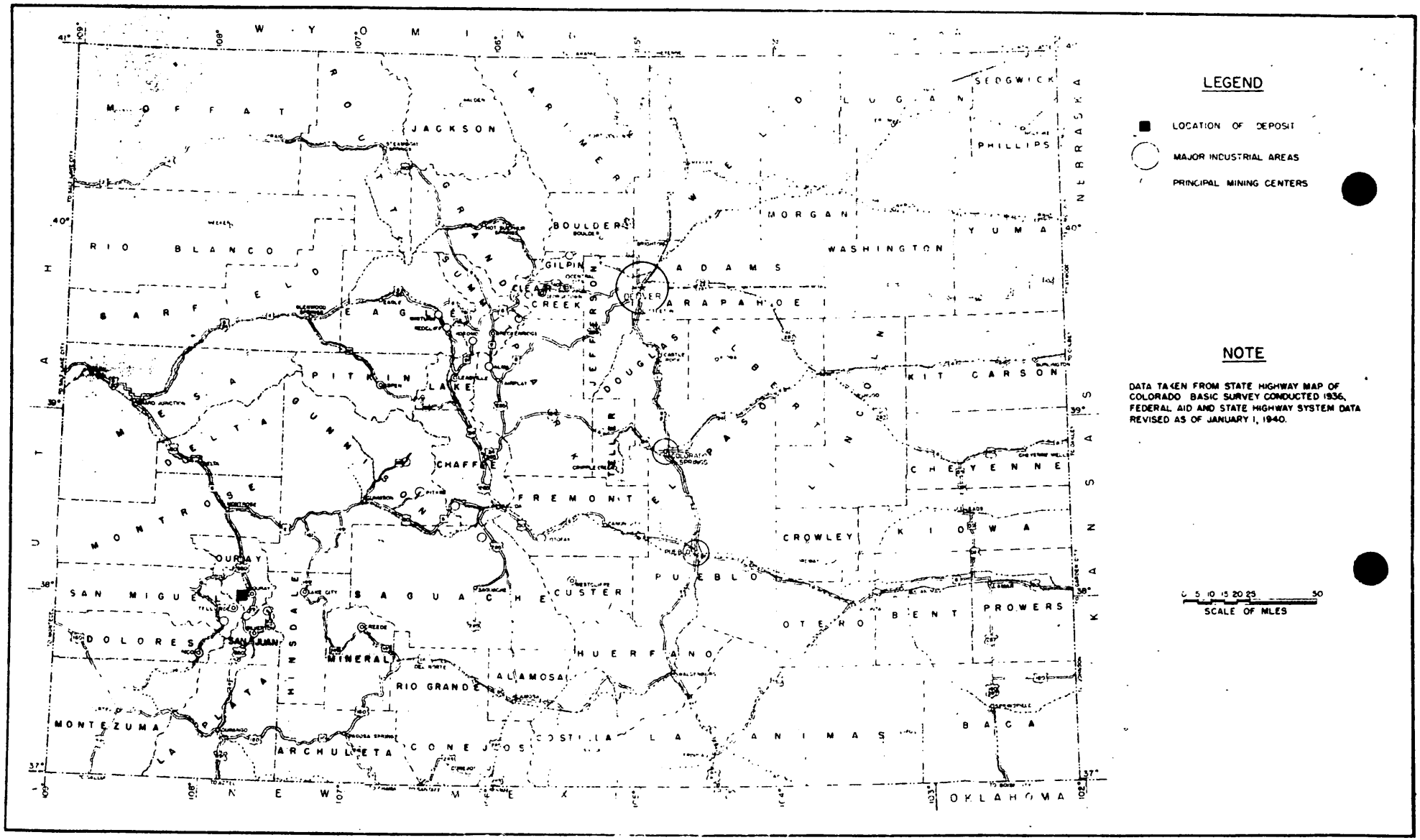


FIGURE 1 - MINERAL FARM GROUP, OURAY COUNTY, COLO. DMEA 3605

fractures are thought to have had a similar effect on the occurrence of ore as the Molas shale formation did at the top of the Leadville limestone.

ACKNOWLEDGEMENTS

John Crim, a former lessee of the property guided the examining team and offered considerable pertinent information on the surface ore occurrences.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The property composed of eight patented mining claims is in sec. 6, T. 43 N., R. 7 W., and sec. 1, T. 43 N., R. 8 W., New Mexico principal meridian, Uncompahgre mining district, Ouray County, Colo., and at an elevation of about 8,700 feet.

There is about 600 feet of relief between Canyon Creek and the old mine workings 1/2 mile southeast. The east part of the claims slopes west about on the dip of the sediments which is 15 degrees; but the west part is covered by a steep land slide that came from the south. The entire property is covered by soil which supports a dense growth of pine and spruce timber suitable for mine use.

There is little or no water on the property, therefore, it would have to be hauled or pumped from Canyon Creek.

Electric power for a sizeable operation could be had from the line from Ouray to the Camp Bird mine; but power for the proposed project would be furnished by internal combustion engines.

The property is easily accessible from Ouray over about a mile of good gravel road which is known as the Camp Bird mine road.

Labor for most any size mining operation should be readily obtained in Ouray, an old mining camp.

HISTORY, PRODUCTION AND OWNERSHIP

It is reported the Mineral Farm deposits came into production about 1879 and from then until 1900 the ore sold was worth $500,000.00. From 1900 through 1929 the Statistical Branch of the U. S. Bureau of Mines shows 2,071 tons of crude ore yielded 20.2 ounces Au, 25,000 ounces Ag, 565,370 pounds Pb and 5,750 pounds Cu. Since 1929 a number of lessees have worked the property very intermittently, the last was John Crim who states he sold ore found on or near the surface for about $8,000.00. From all available sources of information it may be estimated that the total value of the production is near $600,000.00, all of which came from the one pipelike deposit at or near the top of the Leadville limestone.

Ouray county records indicate taxes on the group are not in arrears.

DESCRIPTION OF DEPOSITS

The geology of the Ouray district has been described by Burbank in U. S. Geological Survey Bulletin 906-E and in Proceedings of the Colorado Scientific Society, Vol. 12, No. 6, 1930. The principal ore deposits of the area are early Tertiary lodes, mantos, and pipes in a section of Paleozoic and Mesozoic rocks 4,500 feet thick.

The broad controls of mineralization are the northwest-trending Uncompahgre axis of uplift and faulting, and a northeasterly axis of doming along which quartz monzonite sheets and stocks have been intruded.

The mineral deposits are zoned with respect to the intersection of these axes. The deposits in the central area are contact-metamorphic types; those in the intermediate zone are pyritic, containing base metals, gold, and silver; farthest removed are the argentiferous lead-zinc deposits. The Mineral Farm belongs in the last category.

The Mineral Farm ore deposit is a tubular channel or pipe 1,000 feet long, 8 feet high, and 20 feet wide in the upper part of the Leadville limestone (180-200 feet thick) near the contact of the overlying Molas shale. It plunges 15° S., 60° W., coinciding in attitude with the dip of the bedding.

The channel served as a conduit for several waves of hydrothermal mineralization. The earlier solutions dissolved out cavities which were later filled with galena, sphalerite, tetrahedrite, pyrite, chalcopyrite, quartz, chalcedony, calcite, and barite. Additional ore was formed by replacement of the wall rock, which is leached and silicified near many of the larger ore shoots. Burbank believes that the mineralizing solutions migrated laterally up the channel instead of having entered by means of major vertical fissures, as in some of the mantos of the district. This theory would explain the apparent lack of fissure veins or feeders below the pipe.

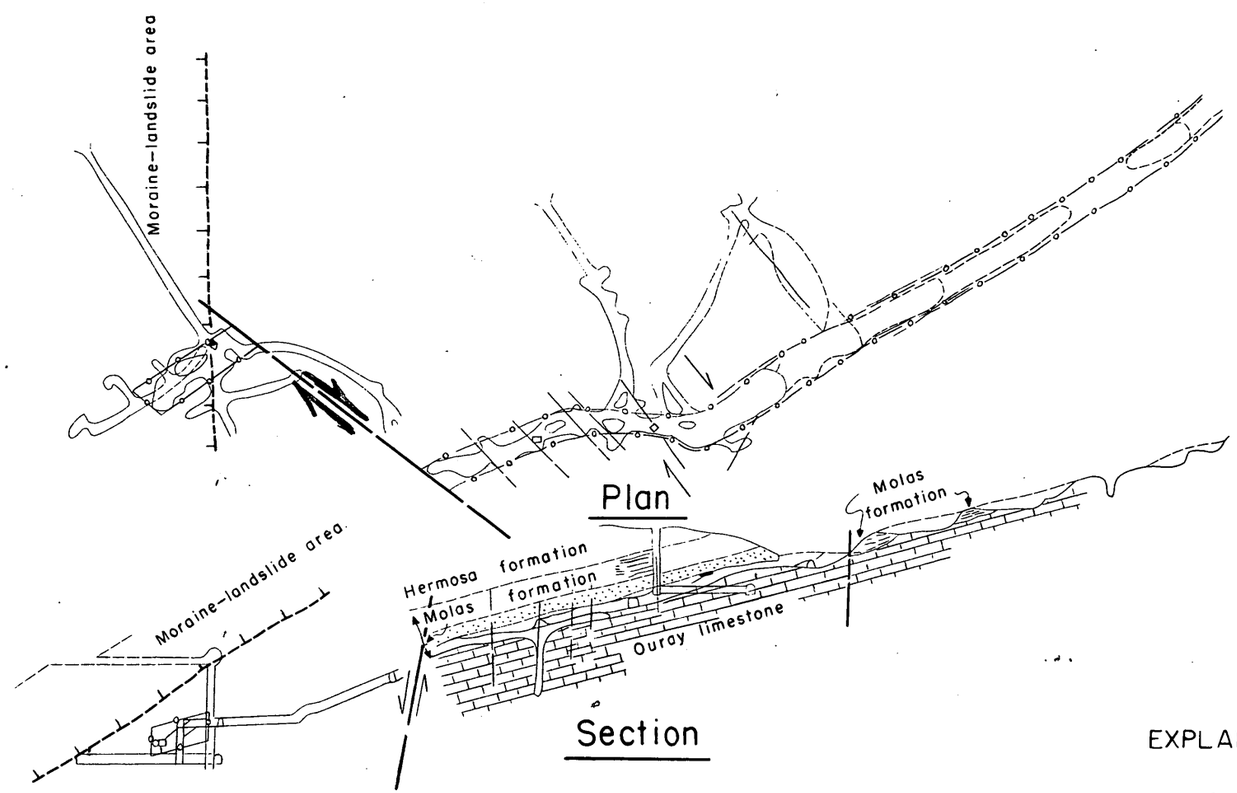
The primary structural control of the channel has never been determined. Fractures striking N. 70° E. and dipping 60° SE, nearly parallel to the strike of the ore body, are especially numerous in the channel and may have guided the hydrothermal solutions as they ascended the favorable stratigraphic horizon.

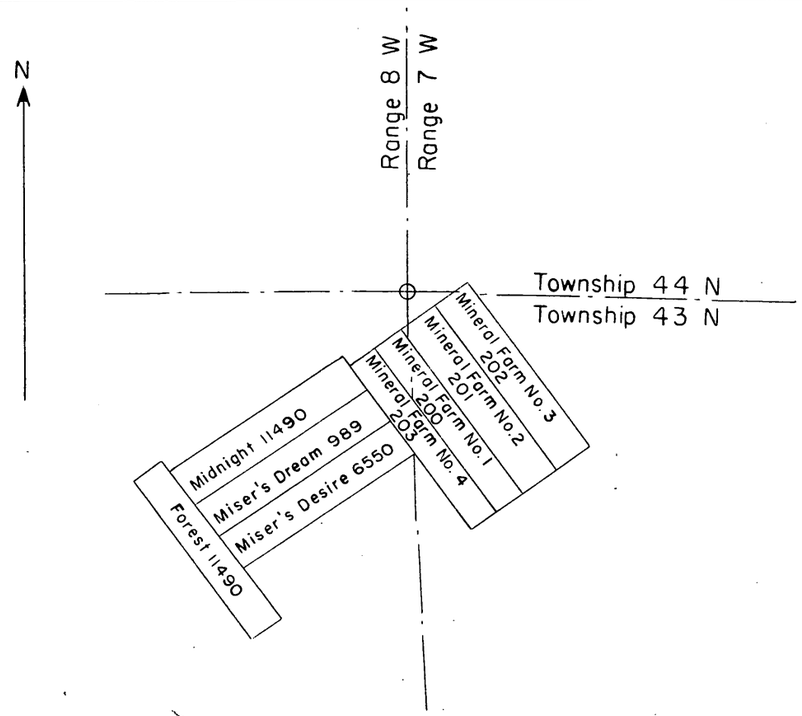
Ore shoots in the channel were controlled by a well-developed set of steeply dipping fractures that strike N. 40° W. Many small deposits outside the channel, which were mined by open pits, were also controlled by this structure.

Where the N. 40° W. fractures are closely spaced they form shear zones, some of which are highly leached and filled with angular fragments of chert of the type which is found in many beds of the Leadville formation. These structures may be the "clastic dikes" described by several earlier workers who believed they were avenues of escape for rapidly expanding gases. In many mines these "dikes" were loci for later ore mineralization. In the Mineral Farm mine numerous short drifts, a winze 75 feet deep and one shaft 80 feet deep were driven on "clastic dikes" or shear zones with the same attitude.

The displacement on most of the fractures of the N. 40° W. set is probably relatively small ranging from a few inches to a few feet, but in the last 20 accessible feet of the eastern incline, the fractures are numerous and closely spaced, producing an intensely sheeted zone that implies proximity to a major shear zone or fault (fig. 2).

If the limit of stoping of the eastern workings is outlined, it is seen that the channel varies only slightly in width and attitude throughout its length. Delineating the stopes of the western workings in the same way discloses another tubular body that is shorter but has an equivalent width and orientation.





EXPLANATION

Outline of ore channel

Fault

NOTES

1) Data for underground workings taken from map in Colorado Scientific Society proceedings, Volume 12, No. 6, Stratigraphy in the Ouray District of Colorado by W. S. Burbank.

2) Data for claim map taken from Claim Map of San Juan Region by Hotchkiss Map Co.

Data added in DMEA Doc. 3605

FIGURE 2 - PLAN, SECTION AND CLAIM MAP, MINERAL FARM MINE, OURAY COUNTY, COLORADO

This suggests that the western ore body is a segment of the larger eastern "channel" that has been displaced by the fault observed at the end of the incline. The southwest block moved westward and downward. The heave is about 280 feet and the throw about 10 feet. A sharp kink in the main pipe higher in the incline may have been produced by strike-slip shearing of the same orientation (fig. 2).

The early miners recovered the faulted segment by driving the westernmost adit, but the ore body proved to be small because much of it was removed by landslides. Before abandoning the mine, the operators drove a crosscut along the fault to make sure that the faulted segment belonged to the known pipe because a slight difference in the mineralogy of the two ore bodies suggested the possibility of two different faulted pipes. It thus seems very probable that all of the ore channel has been discovered and mined out.

MINABLE ORE RESERVES

The main portion of the deposit appears to be completely exhausted; however, on the surface from time to time lessees have discovered and mined small deposits on the general strike of the main ore body at junctures of fracture zones and the favorable horizon, no doubt others of this type exist but their size obviates planned exploration. There are no known minable ore reserves on the property.

PRESENT STATUS

It is assumed from the extent and distribution of surface excavations, that somewhat more than half the production came from this

area. As this part of the deposit was depleted the ore was apparently followed underground resulting in the present open stope which measures about 8 feet high, 20 feet wide and 400 feet long. Several intersections of greatly brecciated and leached fracture zones with the limestone ore horizon have probably had a beneficial effect on ore deposition; at any rate they have been prospected by short drifts, crosscuts, a raise and a winze. The winze was not observed as it probably has been filled with waste resulting from ore-sorting. Burbank, in U. S. Geological Survey Bulletin 906-E, indicates the location of this winze. The raise which penetrated the overlying Molas shale is caved tight. The underground workings are in very good condition except for 2 or 3 small caves where the Molas formation has been broken into.

The only mining equipment on the property is a small "homemade" air compressor with a reported capacity of about 70 cfm and a 2-inch pipeline laid full length of the big stope.

Apparently very little work has been done here during the past 5 years. Figure 3 shows the extent of the mine; the west or "lower" workings are inaccessible.

PROJECT PROPOSALS

The applicant outlined exploratory work consisting of reopening the "lower" or west workings, dewatering both the west and the lower end of the east or "main" workings, drilling 2,500 feet of core hole at 14 surface locations.

The modified program includes drilling three AX diamond core holes from the bottom of the main stope to 10 feet below the red shale near the

middle of the Leadville limestone. The first hole should be drilled vertically at a point about midway of the stope to ascertain the stratigraphic and petrographic relations. The other two holes would be about 100 feet either side of the first and at inclinations such that the intersection of a brecciated zone and the potential ore horizon under the red shale would be penetrated. See figure 3. The total footage is estimated at 450 feet. The holes should be cored for their entire depth, the core boxed and the boxes marked to indicate the proper depths and stratigraphic sequence. All ore cored should be split; one-half to be used for analysis of Au, Ag, Pb, Zn and Cu; the other retained for the Government. A driller's petrographic log should be accurately kept. Copies of the assay results and the driller's logs should accompany each MF 104 Form submitted. Should it prove impossible to recover less than 75 percent of the core in the ore zone sludge samples should be taken for the purpose of analysis.

It is understood John Crim, former lessee of property, will contract and supervise the proposed work. The project should be completed in 2 months.

Project Costs

Independent contracts	
3 AX diamond core holes totaling 450 feet at $4.50 per foot	$2,025.00
Labor, supervision and technical services	
Surveyor, 2 days at $25.00 per day	50.00
Operating materials and supplies	
50 paper core boxes at $1.00 each	50.00

Operating equipment

None

Initial rehabilitation and repairs

None

New buildings and improvements

None

Miscellaneous

Accounting at $25.00 per month for 2 months	$50.00	
Chemcial analysis of 6 samples at $5.00 each	30.00	
Total		$ 80.00

Total cost of project $2,205.00

Cost per foot of drilling less analysis - $2,175.00 ÷ 450 = $4.833

SUMMARY OF PROPOSED PROJECT COSTS

Phase	Footage	Duration	Estimated cost per foot	Total cost
I	450	2 months	$4.83	$2,173.50
		Samping 6 chemical assays at $5.00		30.00
		Total cost of project		$2,203.50
		Government participation at 50 percent		$1,101.75

CONCLUSIONS

It is concluded that the original deposit has been mined out and further exploration for it is impractical. However, it is believed there is the probability of another deposit at a lower horizon in the limestone where the observed geologic structures encounter a shale bed. Ore deposition appears to have been localized in the limestone along a fracture

zone resulting from numerous intersections of steeply dipping S. 70° W. fractures and N. 40° W. breaks. The broken zone or "channel" is directly overlain by the relatively impervious Molas shale. Similar conditions are expected at or near the middle of the Leadville formation.

RECOMMENDATIONS

It is recommended that the DMEA participate in the cost of the exploration project outlined in this report.

/cm

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

224 New Customhouse
Denver 2, Colorado

December 10, 1954

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMEA Form 3a and MF-103 and supporting data pertaining to the following applications for Government assistance in exploration work:

Hurst Majors — Lead-Copper-Zinc
Manhattan, Kansas

W.H.B.F. Mining & Engineering Co. — Uranium
3040 Broadway
Boulder, Colorado

W. H. King

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 3605
Metal or Mineral Copper-Lead-Zinc
Date Received
Estimated Cost $10,500
Participation (Government %)

INSTRUCTIONS

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

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract The Mineral Farm groups in the Uncompahgre Mining District, Ouray County, State of Colorado. Number One, Two, Three and Four Lodes which are respectively U.S. Mineral Survey Numbers 200, 201, 202, 203; Miners Desire Lode which is U.S. Min. Sur. #6550; Miners Dream Lode-U.S. Surv. 989; Midnight Lode, U.S. Min Surv # 1149 A; Forest Lode, U.S. Min Sur # 1149 A

(*b*) State the time by which the property is known

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

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

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

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

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. See attached supplemental statement

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

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Lead, Copper, Zinc, Silver

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See attached statement

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated December 4th 1954, 195...

Hurst Major (Applicant)

By .....

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

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

Supplementary data be attached to Application filed by Hurst Majors, Manhattan Ks.

Paragraph 4. PHYSICAL DESCRIPTION. The Mineral Farm group, as these claims are locally known, was first discovered and worked in 1876. Two complete sets of workings were developed during the quarter century immediately following the discovery, and much ore was shipped, even as far as Alamosa, Colorado by mule-back early in the 1880s.

Following the depressed metal markets in the first decade of this century, the property was neglected, shafts and tunnels were permitted to cave, and some reports of purposeful destruction of existing shafts to cover ore showings are found in records studied. For the past forty years, only surface scalping and digging had produced ore in comparatively small volume.

During the seven years I have owned the property, I have permitted a half dozen different miners to do surface work on a royalty basis. The most ore that was taken from this property during those seven years was in 1949, when two young men shipped more than $6,000 worth of ore to Leadville, all from three small holes at outcroppings along the exposed vein running up the hill. At no time have we explored the probable extension of the vein underground.

In the language of Mr. W.S. Burbank, who discusses the possibility of ore reserves in the Mineral Farm veins, the "pipe-like formation is unique among replacement deposits in the district", and " the ore may change below the zinc zone into a higher grade copper zone", etc.

Because of this appraisal, and because other mining men have asserted that there is a good chance for the discovery of additional valuable veins in the lower reaches of the property, it seems logical to find out what we can by core drilling and/or further exploration by re-opening caved portals and shafts.

The property is only one mile from Ouray, on the road leading to Camp Bird mine, which is kept open the year 'round. Adequate transportation, manpower, materials, water, power, etc., is available.

PARAGRAPH 5 THE EXPLORATION PROJECT.

A sketch of the present workings, in blueprint form, super-imposed on the property lines of the eight claims, is attached

The work should be started as soon as possible next Spring. It should not require more than six months to complete outlined exploratory work.

The man who would do the work for me is Mr. John Crim, a miner of nearly 20 years experience in all phases of mining. He is presently employed at the Idarado near Ouray, and is the man who, for the past six years, has studied the Mineral Farm property with a view to doing additional exploration up there.

It is his judgement, and mine, that we should attempt in three possible ways to determine the feasibility of larger scale operations on these eight claims.

a. We should open the caved west tunnel marked A in red on the attached map. This tunnel is possibly caved only at the portal. The tunnel leads nearly 300 feet into the mountain, where a winze 110 feet deep was sunk in the ore body, and ore was taken from three levels thru this winze. The last reported entry into this caved tunnel was made about fifteen or eighteen years ago by a man who dug a small hole thru the cave in, and reported that he found considerable evidence of ore good enough to sort into shipping and milling ore, but this is only hearsay, and only reopening the tunnel will give us the facts.

It will require a minimum of $1,500.00 to explore the tunnel and the winze and the three levels. There is a chance that the winze and lower levels are full of water, but this is unlikely because the upper workings have made but little water in a half century.

b. The upper reaches (marked UPPER in red) go underground where a red line separates the surface open veins from the underground shaft The vein on the surface lies exposed for nearly six hundred feet up the slope, and originally the ore was literally plowed up in chunks off the surface of the ground. The vein goes into the mountain side at a steep pitch for a distance of 500 feet. At bottom of the steep incline there is some water, perhaps 3 to 6 feet deep, and to my knowledge no-one has been able to inspect the face of the extreme bottom of the workings. A report presumed to have been made by a mining engineer forty years ago states that there was rich ore on this face at the time work was abandoned in this steep incline shaft, when the now-caved lower tunnel leading to the LOWER workings was dug, apparently with the intention of intercepting the first rich vein——too deep to haul economically back up the steep incline.

To properly inspect this face, now under some water, we should pump out this water. My best estimates indicate this would require approximately $1,500.00

c. The next logical step in exploring this property would be to core drill certain areas in the claims.

There is understandably some question as to where these test holes should be drilled, and how many such holes are desirable. It would seem wise to test the theory of many good mining men that somewhere below the original pipe-like vein, which was rich copper-silver ore, or in extension of that vein, or off-shooting from it, there is a chance to locate substantial bodies of rich ore.

I believe a maximum of 2,500 feet of core drilling would give us much needed information. I have suggested on the map a suggested 10 locations for core drilling holes, each hole to go 60 to 150 feet into the mountainside. We find the ore in this country on top of the Ouray limestone, and therefore when we hit the Ouray and penetrate it a few feet, there would likely be no point in further drilling—hence the estimate " 60 to 150 feet" in depth. In addition to these suggested 10 locations, I think several 300 foot to 500 foot holes should be driven at about spots indicated by numbers 11 to 14, back towards the existing workings. Burbank thought the lower workings might increase in value with depth. The location of the numbers 11 to 14 is several hundred feet below the upper workings, and would give us an idea of the possibility of finding the vein below any past activity.

I believe we should estimate the cost of such a core drilling program as $3.00 per foot, in view of the frequent moving from spot to spot.

I would prefer to let Mr. John Crim, whom I mentioned above, do all the above work. If he is considered a "contractor" underthe meaning of paragraph 6, item a, then I would say that the total cost of the above suggested exploration would be

Core drilling	$7,500.00	
Opening west caved tunnel		$1,500.00
De-watering upper workings		$1,500.00
Total		$10,500.00

Hurst Majors

Hurst Majors

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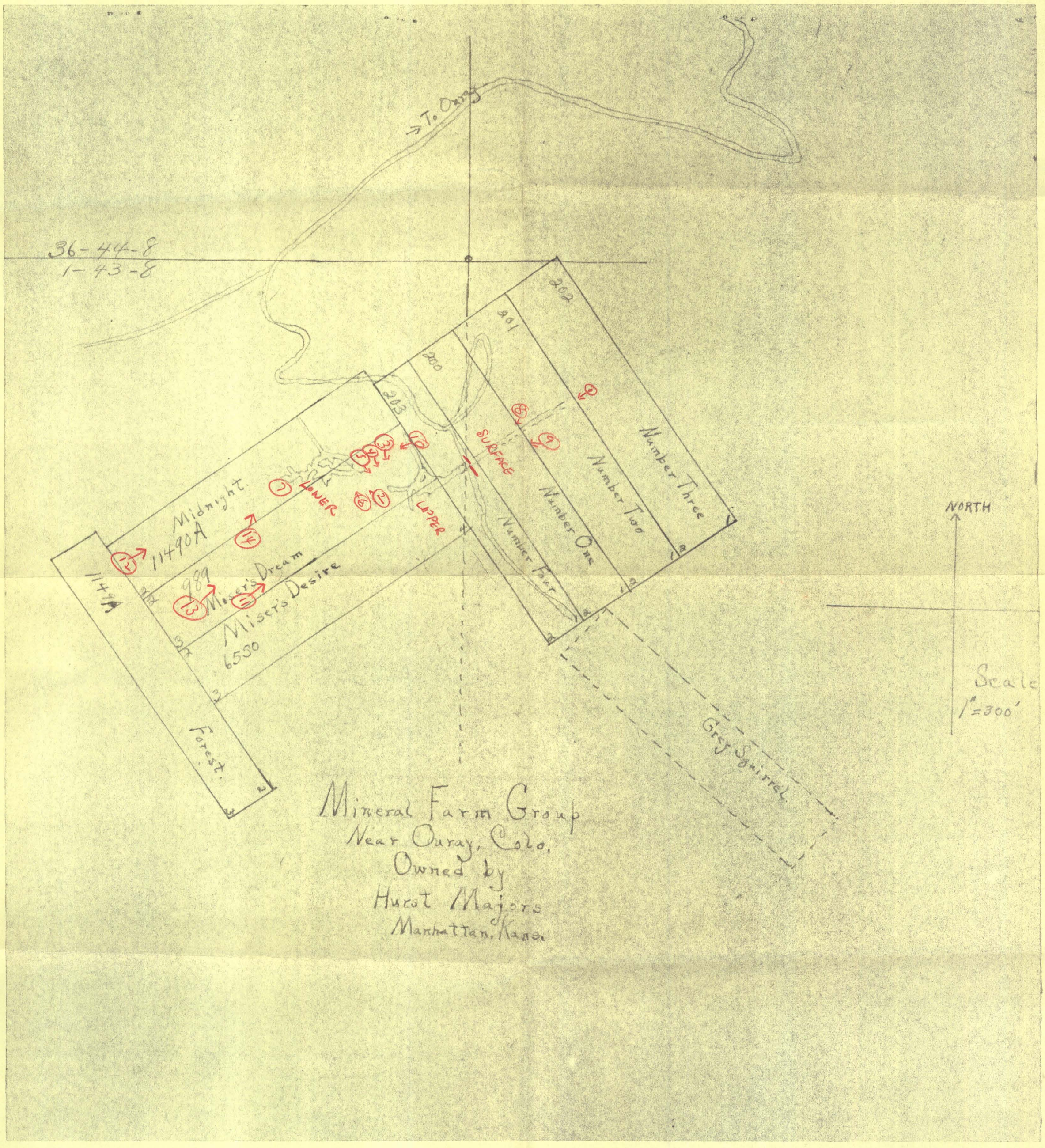
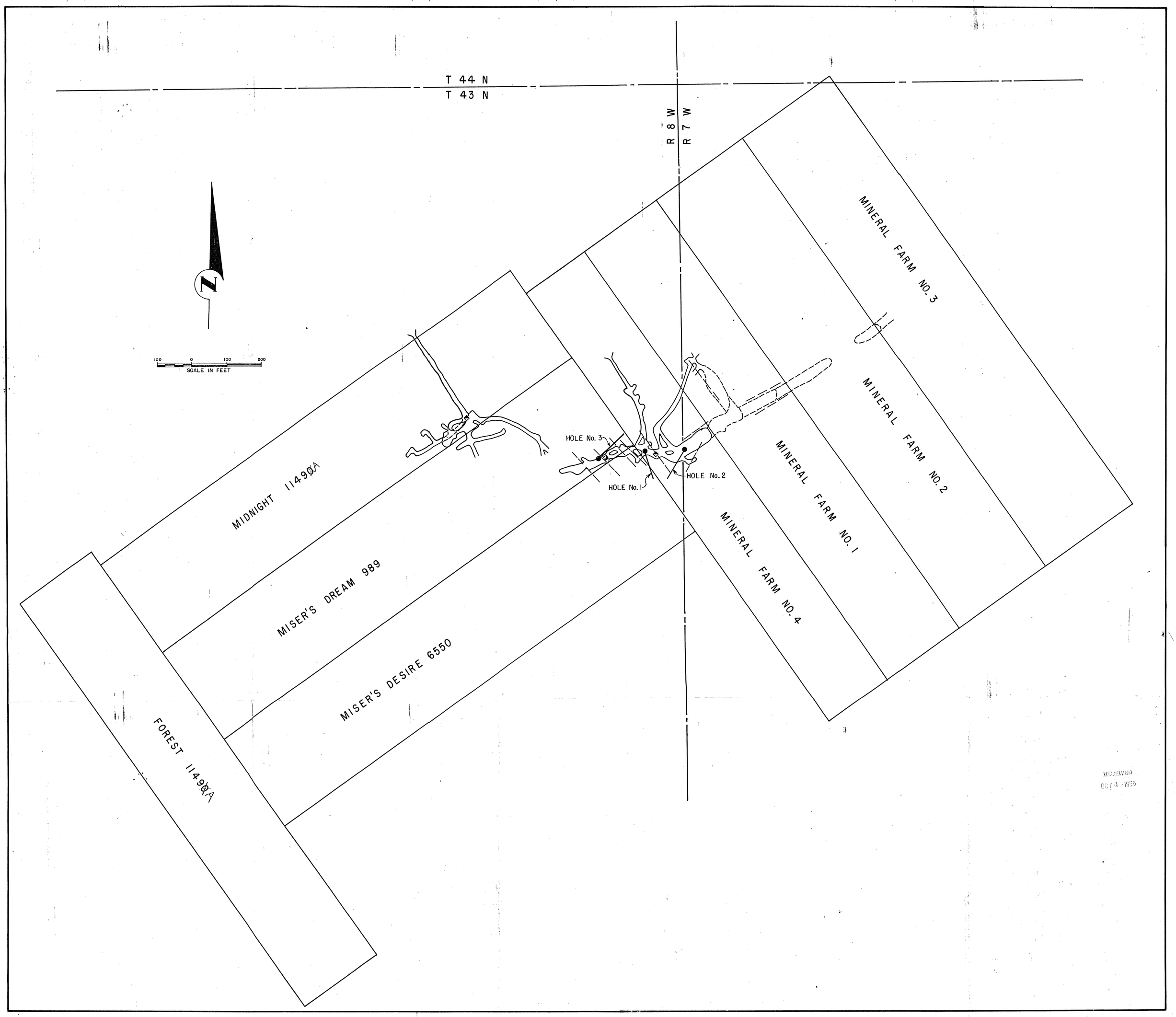
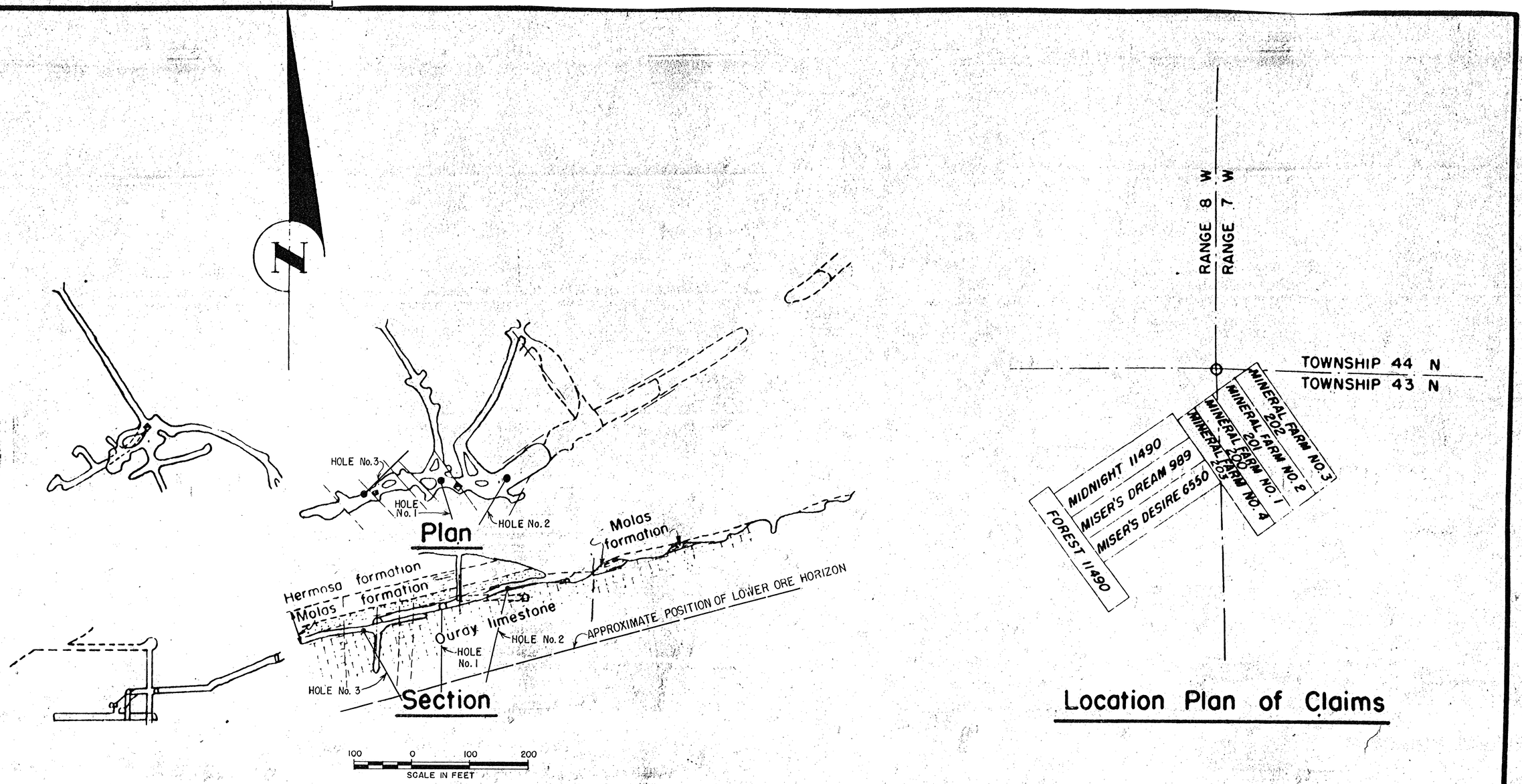
Mr. Jay L. Chambers, Chief
Contract Administration and Audit Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.


To Ouray
36-44-8
1-43-8
202
201
200
203
Number Three
Number Two
Number One
Number Four
SURFACE
LOWER
UPPER
Midnight
11490A
989
Miser's Dream
Miser's Desire
6530
1149A
Forest
Grey Squirrel
NORTH
Scale
1"=300'
Mineral Farm Group
Near Ouray, Colo.
Owned by
Hurst Majors
Manhattan, Kans.



MAP SHOWING LOCATION OF PROPOSED DRILL HOLES IN RELATION TO BOUNDARIES OF PROPERTY, MINERAL FARM MINE, OURAY COUNTY, COLO. DMEA 3605



1) Data for underground workings taken from map in Colorado Scientific Society proceedings, Volume 12, No.6, Stratigraphy in the Ouray District of Colorado by W.S. Burbank.

2) Data for claim map taken from Claim Map of San Juan Region by Hotchkiss Map Co.

FIGURE 3 - MAP SHOWING LOCATION OF PROPOSED DMEA CORE HOLES, MINERAL FARM MINE, OURAY COUNTY, COLO. DMEA 3605