DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4709

1136 26 SEP 1957

Application (Denied
(Withdrawn
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
Owner's Consent to Lien
Subordination Agreement
Leases and assignments of leases
Application and attachments
(3) Envelope for maps

Right Side

Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) ~~Interim Summary Reports by W. O. Engineers~~
SEMIANNUAL REPORTS ON MF-104'S CERTIFIED PROJECTS

Right Side

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

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-81136, Docket No. DMEA-4709 (Uranium), dated September 26, 1957, with

Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Mint, et al. claims located in Fremont County, Wyoming, during the period September 26, 1957, through September 26, 1960.

A certification of discovery or development was issued on June 11, 1958, and, in accordance with Article 8 and Amendment No. 3 of the contract, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 11 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final audit dated June 11, 1958, indicated accepted costs under the exploration contract amounting to $16,013.22 with the Government's contribution, on a 75 percent basis, being $12,009.91.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established the total sales of uranium ore for the period to be $3,222.39. Royalty due the Government at rates specified in the contract is $158.66. The royalty paid and the balance due are as follows:

Total Royalty Due	$158.66
Total Royalty Paid	158.66
Balance of Royalty Due	$ -0-

C. E. Fisher

C. E. Fisher, OME Auditor

October 5, 1960

Idm-E1136 Little Mo Mining, Inc. DMEA-4709

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This property has been inactive since the latter part of 1959 due to litigation.

My review included the recomputation and tabulation of copies of liquidation statements received in support of royalty due to the Government withheld from settlement by the purchaser of the ore and paid directly to the GME, Region III office. The property is not eligible for the AEC initial production bonus. The tabulation is filed with my audit work-papers and is summarized as follows:

Production	
Ore - Short wet tons	175.215
" - Short dry tons	164.907
U_3O_8 - Pounds	691.08
" - Pounds in excess of 4#/SDT	49.41
Proceeds	
U_3O_8 - Base payments	$2,372.10
" - Excess 4#/SDT	37.06
Development allowance	345.55
Haulage allowance	467.68
Total Receiving Station	$3,222.39
AEC Production Bonus	None
Proceeds subject to royalty	$3,222.39
Royalty due	$ 158.66
Royalty paid	158.66

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

(1) Inspection reports by field representatives of the Government and other information in the Washington office files indicate that all production from the subordinated land has been reported and proper royalty has been received; and

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

MME Form 22
April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 23 1960

DATE	INITIALS

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name Little Mo Mining, Inc.

Address P. O. Box 321

Shoshoni, Wyoming

Exploration Contract No. Idm E1136

Docket No. ~~DMEA 4709~~

			Check One Yes	Check One No
1.	(a)	Does the Operator stockpile ore subject to royalty repayment?		X
	(b)	If so, is segregation and identification procedure adequate?		
2.	(a)	Does Operator commingle production subject to DMEA or OME royalties with exempt production?		X
	(b)	If so, do you consider the allocation of the commingled production equitable?		
3.	(a)	Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?		X
	(b)	If so, are adequate records maintained on such material to protect the Government's interest?		
4.		Do you consider the assay controls in effect are adequate?	X	
5.		Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	X	
6.		Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA or OME royalties?	X	
7.		Does the Operator buy from or sell to other Operators?		X
8.		Comment on any item 2 (b) to 6 if answer is No.		

9-26-60
Date

Hugh M. Connors
Mining Engineer
Hugh M. Connors

EXTRA COPY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

RECEIVED
DATE

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

pertaining to Exploration Project Contract No. DMm-E1136, Docket No. DMEA 4709, including Amendments 1 through 3, and Termination Agreement, dated May 16, 1958, for the months of November, 1957, through March, 1958, inclusive, covering a project for the exploration of uranium on property known as Mint et al. claims, located in Fremont County, Wyoming.

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

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

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

Total cost as billed by Contractor		$ 16,013.22
Exceptions:		
Prior to this review	$ 0.00	
Herewith	0.00	0.00
Total Accepted Cost		$ 16,013.22

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Twelve Thousand Nine and 91/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$ 12,009.91
Amount reimbursed	11,509.16
Balance due Operator	$ 500.75.

final payment
Ok to pay. 6/23/58

T. H. Brading

T. H. Brading, Auditor

June 11, 1958

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

Contract No. Idm-K1136 Docket No. BMRA 4709

LITTLE MO. MINING, INC.

(a) The Monthly Reports were supported by documentary proof of that portion ($14,815.00) of the cost which covered work performed at unit rates under independent contract. In addition, miscellaneous charges in the amount of $250.00 were supported by documentary proof (per summary attached);

(b) The balance ($968.22) of the cost incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and

(c) The administrative costs to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder.

SUMMARY OF DOCUMENTED COSTS

Contract No. Idm-E1136 | Docket No. DMEA 4709

LITTLE MO MINING, INC.

Independent Contracts

3586 feet of drilling at $4.00/ft.	$ 14,344.00
10 Hours standby time at $12.50/hr.	125.00
43-1/4 Hours bulldozing at $8.00/hr.	346.00
Total Independent Contract	$ 14,815.00

Miscellaneous

46 Analyses at $5.00/sample	$ 230.00
Total Documented Costs	$ 15,045.00

Docket copy

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

To: Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Pursuant to the provisions of Exploration Project Contract No. Idm-X1136, (Docket No. DMEA-4709), hereinafter called the "contract," between Little Mo Mining, Inc., a Wyoming corporation, and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

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

Exploratory drilling on the land described in Article 2 of the contract penetrated deposits of uranium ore in conglomeratic sedimentary rocks of the Tertiary Tepee Trail formation.

THE UNITED STATES OF AMERICA

By C. Mittendorf
Administrator, Defense Minerals
Exploration Administration

Dated: JUN 11 1958

Known
Phillips
Thorn
Stanger
Chapelier
Lamb
Selfridge
Johnson

MChing/gla
6-4-58
cc to:
Operator
Clifford A. Reed, Box 56, Kirby, Wyoming
Jesse C. Johnson, Director
Division of Raw Materials, AEC
Elton A. Youngberg, Assistant Mgr. of Operations
AEC Grand Junction Operations Office
Contract Adm. & Audit Division
DMEA Field Team, Region III (2)
Finance Office
Docket
F. E. Johnson
Admr.'s Reading File

Operating Committee
Frank D. Lamb, Rm. 3608
T. H. Killsgaard, Rm. 5224
Mr. Ching

Government's copy

DMEA
RECEIVED JUN 5 1958
App'd. Sol. Off.

Rutin
Lenger
Ching
Ellis
Talbert
Selfridge
Johnson

TERMINATION AGREEMENT

It is agreed this 16th day of May, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government", and Little Mo Mining, Inc., hereinafter called the "Operator", parties to that certain Exploration Project Contract No. Idm-E1136, Docket No. DMEA-4709, dated September 26, 1957, as amended, hereinafter called the "Contract" that:

1. Effective March 21, 1958, 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 allowable costs of the work performed prior to March 21, 1958.

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

4. All rights of the Government respecting certification of discovery and development, percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.

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 C. Mittenzwey
Administrator, Defense Minerals Exploration Administration

LITTLE MO MINING, INC.

By Milford M. Duffey

Title Secretary

DOCKET NO. DMEA-4709 (URANIUM)
CONTRACT NO. IDM-E 1136
LITTLE MO MINING, INC.
MINT, ET AL., CLAIMS
FREMONT COUNTRY, WYOMING

Ellis

JUSTIFICATION FOR TERMINATION AGREEMENT

The Operator completed 20 holes aggregating 2,686 feet in Stage I. Three of these holes contained significant mineralization.

Under Stage II, 8 offset holes were drilled of which 4 showed ore-grade material.

By Letter, dated April 21, 1958, the Operator requested that the contract be terminated.

The Field Team agrees that further drilling under Stage II would serve no useful purpose and recommends that the contract be terminated by mutual agreement. However, since the Operator is preparing to mine the ore bodies found under the subject contract and by drilling for its own account, the Field Team recommends that the project be certified as a discovery.

Michael Ching

Michael Ching, Mining Engineer
Div. of Rare and Misc. Metals

Government's Copy

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA 4709
CONTRACT NO. Idm-E1136

AMENDMENT NO. 3

It is agreed this 31st day of March, 1958 between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Little Mo Mining, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E1136, Docket No. DMEA 4709, dated September 26, 1957, hereinafter called the "Contract," that:

1. The date fixed in Article 3, on or before which the Operator shall have completed the work, as amended by Amendment No. 1, is extended from April 1, 1958 to June 1, 1958.

2. The maximum period for payment of royalty and lien for payment thereof, provided for in the Contract, is increased from ten (10) years to eleven (11) years from the date of the Contract.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Executed in quintuplicate the day and year first above written.

LITTLE MO MINING, INC.

By John Kummerfield
John Kummerfield
President

UNITED STATES OF AMERICA

By L. M. Hawkins
Acting Executive Officer, DMEA
Field Team, Region III

(Seal)

OFFICIAL FILE COPY
DMEA
RECEIVED APR 18 1958
DATE CODE

Government's copy

DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA-4709

AMENDMENT NO. 2

It is agreed this 7th day of February, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Little Mo Mining, Inc., that Exploration Project Contract Idm-E1136, Docket No. DMEA-4709, dated September 26, 1957, as amended, is further amended as follows:

1. In Exhibit "A":

(a) In line 2, paragraph 2, page 1, a "Model HD-6 Allis Chalmers" is substituted for "Model D-7 Caterpillar";

(b) In line 5, paragraph 3, page 1, the words "maximum depth of 150 feet" are revised to read "depth of approximately 150 feet";

(c) Stage I, page 2, is revised to read:

"The locations of Stage I drill holes are shown on the map Figure 2A, attached to Amendment No. 2. Prepare drill sites and access roads thereto, and drill 20 holes aggregating approximately 2,300 feet."

2. Under Stages I and II, Category (1) Independent Contracts, paragraph 3 is revised to read:

"31¼ hrs. actual tractor w/dozer operating time (including operator and all necessary costs whatsoever) @ $8.00/hr. $ 250.00"

3. In Annex I, the last paragraph is revised to read:

"The locations of the claims listed above are shown on the map entitled 'Figure 2A - Map Showing Claims, Stage I

Drill Holes Locations With Deleted and Relocated Holes Under Stage I, Little Mo Mining, Inc., Mint et al. Claims, Fremont County, Wyo. DMEA-4709, Contract Idm-E1136', attached to Amendment No. 2 and made a part of the Contract."

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C Mittendorf
Administrator, Defense Minerals
Exploration Administration

LITTLE MO MINING, INC.

By Millard M. Dirkey

Title Secretary

Kaguse
Ellis
Chamber
Selfridge
Johnson

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 6 1958

DATE	INITIALS	CODE

Government's copy

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA 4709
CONTRACT NO. Idm-E1136

AMENDMENT NO. 1

It is agreed this 27th day of December, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Little Mo Mining, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E1136, Docket No. DMEA 4709, dated September 26, 1957, hereinafter called the "Contract," that:

> The date fixed in Article 3 of the Contract form, on or before which the work shall be completed, is extended from January 1, 1958, to April 1, 1958.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Executed in sextuplicate the day and year first above written.

LITTLE MO MINING, INC.

By John Kummerfeld
John Kummerfeld
President

UNITED STATES OF AMERICA

By W S King
Executive Officer, DMEA
Field Team, Region III

Seal

New address: See Operator's letter 11/13/57

to Region III re change of address;

Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Government's copy

RECEIVED NOV 18 1957 D.M.E.A.

MF-200
(Revised June 1954)

Docket No. DMEA 4709

Commodity Uranium

Contract No. Idm-E 1136

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 26 SEP 1957 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] Little Mo Mining, Inc., a Wyoming Corporation, whose mailing address is P.O. Box 545, Upton, Wyoming, hereinafter called the "Operator," as follows:

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

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] See Annex I of [5] See Annex I in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] ..... recorded in Book ....., ~~page~~ See Annex I, 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: Interest of Clifford A. Reed

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consent to Lien and Subordination Agreement from Clifford A. Reed.

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before December 1, 1957 shall commence the work, and on or before January 1, 1958 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable costs set forth in Exhibit "A"~~ except as otherwise provided in Exhibit "A" with respect to stages of work (See Annex II)

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $ 21,120.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $ 15,840.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

SEE ANNEX II

Boston
Hoffman
"Appd. Sol. Off."
Kruse
Ellis
Talbert
Selfridge
Johnson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mittendorf
Administrator, Defense Minerals
Exploration Administration

LITTLE MO MINING, INC.
(Operator)

By John Kummerfeld

Title John Kummerfeld, President

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

Earl J. Cox

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA-4709

ANNEX I

The land referred to in Article 2 of the contract form consists of 27 unpatented lode mining claims in sections 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th Principal Meridian and Base; Fremont County, Wyoming, for which notices of location are recorded in the official records of Fremont County as follows:

Claim	Book	Page
Interruption No. 1	84	3
Interruption No. 2	109	457
Interruption No. 3	109	458
Arrowhead No. 2 ✓	84	2
Mint No. 1	58	369
Mint No. 2	58	370
Mint No. 3	58	371
Mint No. 4	58	372
Mint No. 5	63	333
Mint No. 6	63	334
Mint No. 7	63	335
Mint No. 9	63	337
Mint No. 10	63	338
Mint No. 11	63	339
Mint No. 12	63	340
Mint No. 13	63	341
Mint No. 14	63	342
Mint No. 15	63	343
Mint No. 16	133	228
Mint No. 17	133	229
Mint No. 18	133	230
Mint No. 19	133	231
Mint No. 20	133	232
Mint No. 21	133	233
Mint No. 23	136	482
Mint No. 24	141	109
Mint No. 25	141	108

The Operator owns the Mint Claims 5 through 25 listed above (Mint Nos. 8 and 22 not being included), and has an undivided interest in and lease from Clifford A. Reed for the Interruption Claims and the Arrowhead Claim listed above.

The locations of the claims listed above are shown on the attached map entitled "Figure 2 Map Showing Claims and Drill Hole Locations, Little Mo Mining, Inc."

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

Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Little Mo Mining, Inc.
Docket No. DMEA- 4709
Contract No. Idm-E
Contract Date

DMEA
DEPARTMENT OF THE INTERIOR
AUG 14 1957
REGION III
DENVER, COLORADO

RECEIVED 1957 DMEA

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

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

Interruption Claims Nos. 1, 2, and 3; Arrowhead No. 2; Mint Nos. 1-7, 9-21,
23 through 25, inclusive; described in instruments executed by Clifford A. Reed and Chester Fike with all the members of Little Missouri Mining Company, a partnership, dated June 4, 1954, July 27, 1954, and February 29, 1956, copies of which are located in the DMEA docket numbered above, and the description therein being hereby incorporated herein by reference,

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

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

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

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

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

interests of lessor

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

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

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

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

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

Dated this 9th day of September, 1957.

Clifford A. Reed [Seal] Box 56 Kirby, Wyo. [Address]

Clifford A. Reed [Seal] [Address]

[Seal] [Address]

~~Chester Fike~~ [Seal] [Address]

[Seal] [Address]

[Seal] [Address]

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

_____

[Corporate Seal]

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA-4709

ANNEX II

Article 13. Changes and added provisions.--

(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work, except as otherwise provided in Exhibit 'A' with respect to stagesof work."

(b) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.

(c) Categories (2) through (6) of Article 6(a) are deleted.

(d) In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the contract.

(e) In the last sentence of Article 6(c), the words "Article 8" are substituted for the words "Article 9."

(f) Notwithstanding any other provision of the Contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the Contract.

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA-4709

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by rotary drilling from the surface to test the uranium bearing sedimentary rocks of Tertiary Tepee Trail formation or conglomerate material, and the underlying contact zone of Precambrian granite.

Drill hole sites and access roads thereto shall be prepared with a Model D-7 Caterpillar tractor or an equivalent size unit of another make.

Each hole shall be drilled non-core, dry if possible, but wet if necessary, with a rotary drill through the sediments or rubble and not less than five feet nor more than 10 feet into the underlying granite, or to a maximum depth of 150 feet. Drilling depths are expected to range from 75 feet to 150 feet and average 100 feet. The minimum diameter of all drill holes shall be 3 inches. All holes shall be reamed and cased or cemented and re-drilled as necessary. No payment shall be made for an incompleted drill hole. No hole shall be drilled closer than 100 feet to the outside boundary of the land described in Article 2.

All cuttings and sludge shall be saved at each two-foot drilling interval and checked for radioactivity, in such manner and by such methods as are approved by the Government. When radiometric readings exceed by four times the background count of the area, drill cuttings or sludge from each two-foot section of drill hole shall be split into halves, and one half of the material shall be analyzed chemically for uranium. The other half of the radioactive drill cuttings or sludge shall be properly boxed, labeled, and stored, and furnished to the Government upon request. All the remaining drill cuttings and sludge from each drill hole shall be properly boxed, labeled, and stored for the Government's inspection. At the completion of the project, upon Governmental approval, all stored samples may be disposed of by the Operator.

All drill holes shall be logged geologically and probed for radioactivity, and copies of each log shall be furnished to the Government with each copy of the Operator's monthly report.

The method of all sampling is subject to the approval of the Government. Not more than 25 samples shall be analyzed chemically in either Stage I or Stage II.

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

The project shall be supervised at all times by a qualified geologist or mining engineer, who shall direct or perform the required surveying, mapping, sampling, drill hole logging, and prepare the reports required pursuant to the contract.

The work is divided into two stages as set forth below. The Operator shall complete Stage I, and shall perform as much of the Stage II work as the Government approves in writing, in advance, either after completion of Stage I or concurrently. In the event the estimated footages are insufficient to reach a specified horizon in any Stage I hole, additional footage and cost may be transferred from Stage II, if approved in writing by the Government.

Stage I

The approximate locations of Stage I holes are indicated by an "●" on the attached map described in Annex I.

Prepare drill sites and access roads thereto, and drill 23 holes aggregating approximately 2,300 feet.

Stage II

Prepare drill sites and access roads thereto, and drill not more than 24 holes aggregating not more than 2,400 feet of offset holes to any previously drilled holes that penetrated significant mineralization. Not more than four holes shall be drilled surrounding any previously drilled hole that penetrated significant mineralization, and these holes shall be spaced not less than 100 feet apart.

ESTIMATED COST OF THE PROJECT

(In addition to the maximums set forth in Article 6--an asterisk indicates maximum)

STAGE I

Actual Cost

Category (1) Independent Contracts

Rotary drilling, 2,300 feet @ $4.00/ft.	$9,200.00	
12 hrs. standby time: for hole logging, or reaming and casing, or cementing and redrilling @ $12.50/hr.	150.00	
20 hrs. actual tractor w/ dozer operating time (including operator and all necessary costs whatsoever) @ $12.50/hr.	250.00	$9,600.00
Categories (2) through (6) None	- - - -	

Category (7) Miscellaneous

(The only item of cost allowable under this category is chemical analyses)		
25 chemical analyses @ $5.00*/ each sample	125.00	125.00

Fixed Unit Cost (See Annex II)

Incidental allowance[1] for each foot of rotary hole completed, 2,300 feet @ $0.27/ft.	621.00	621.00

Estimated Total Cost of Stage I $10,346.00

STAGE II

Actual Cost

Category (1) Independent Contracts

Rotary drilling, 2,400 ft. @ $4.00/ft.	$9,600.00	
12 hrs. standby time: for hole logging, or reaming and casing, or cementing and redrilling @ $12.50/hr.	150.00	
20 hrs. actual tractor w/ dozer operating time (including operator and all necessary costs whatsoever) @ $12.50/hr.	250.00	$10,000.00

Categories (2) through (6) None	- - - -	
Category (7) Miscellaneous		
(The only item of cost allowable under this category is chemical analyses)		
25 chemical analyses @ $5.00*/ each sample	$125.00	125.00
Fixed Unit Cost (See Annex II)		
Incidental allowance[1] for each foot of rotary hole completed, 2,400 feet @ $0.27/ft.	648.00	648.00
Estimated Total Cost of Stage II		$10,773.00

S U M M A R Y

Estimated Total Cost of Stage I	$10,346.00	
Estimated Total Cost of Stage II	$10,773.00	
Estimated Total Cost of Project (rounded)		$21,120.00
Government participation @ 75%		$15,840.00

1/ Includes all costs that might be allowable costs of the project under Categories (1) through (7) of Article 6(a), except as scheduled in Exhibit "A".

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

March 29, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED APR 1 1957

DATE	INITIALS	CODE

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Application for DMEA aid (Uranium) Little Mo. Mining, Inc. (Interruption, Arrowhead and Mint claims) Fremont County, Wyoming

Enclosed are the original and two copies of the subject application. One copy is retained in our files.

The Applicant proposes a drilling program of 7500 feet of drilling in 100 holes at a total estimated cost of $37,265.00.

Three drilling bids are included with each copy of the application. The applicant has based the estimated drilling costs on what appears to be the higher of the three bids.

E. N. Harshman

E. N. Harshman

Enclosures

DIRECTORS
ALLAN DOUGLAS
JOHN KUMMERFELD
L. A. HENDERSON
J. E. ACKERMAN

EARL COX
GEOLOGICAL ENGINEER

LITTLE MO. MINING INC.

UPTON, WYOMING

March 29, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED APR 1 1957

DATE	INITIALS	CODE

DMEA
DEPARTMENT OF THE INTERIOR
MAR 28 1957
REGION III
DENVER, COLORADO

Mr. W. M. Travers
Executive Officer
DMEA Field Team, Reg. 111
224 New Customhouse
Denver 2, Colorado

Dear Mr. Travers:

Enclosed in quadruplicate is our application for a DMEA assistance loan. The application covers uranium claims in Fremont County, Wyoming.

It would be greatly appreciated if this application would be processed at your earliest convenience.

Should additional information be necessary to process the application, please feel free to call us collect at phone number INgersol 8-2631, Upton, Wyoming.

Very truly yours,

Earl J. Cox

Earl J. Cox
Geological Engineer
Little Mo Mining, Inc.

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

DMEA
DEPARTMENT OF THE INTERIOR
MAR 28 1957
REGION II
DENVER, COLORADO

RECEIVED
APR 1 1957
D.M.E.A.

Not to be filled in by applicant

Docket No. 4709
Metal or Mineral URANIUM
Date Received 4-1-57
Estimated Cost $37,265
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: Little Mo Mining, Inc., P.O. Box 545, Upton, Wyoming
Incorporated in the State of Wyoming.
President - Allan D. Douglas, Upton, Wyoming. Treasurer - J. E. Ackerman, Upton, Wyo.
Vice-president - John Kummerfeld, Moorcroft, Wyo. Secretary - Earl J. Cox, Upton, Wyo.

(*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 exploration is to be on mining claims covering: part of SW¼SE¼, Sec. 20; parts W½SW¼, Sec. 28; parts of N½N½, SE¼NE¼, N½SE¼, S½SW¼, SW¼SE¼, Sec. 29; all of SE¼NW¼, SW¼NE¼, N½SW¼, Sec. 29; part of SE¼SE¼, Sec. 30; part of NW¼NW¼, Sec. 32; part of NW¼NW¼, Sec. 33., all in T40N., R92W. 6th P.M.

(*b*) State any mine name by which the property is known. Little Mo Mine.

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

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

(*e*) If you own the land, describe any liens or encumbrances on it Not applicable

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

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

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

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore uranium

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

(*c*) The work will start within 30 days and be completed within 2 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated March 5, 1957

Little Mo Mining, Inc.
(Applicant)

By Earl J. Cox

Earl J. Cox

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

3 (d)

Little Mo. Mining, Inc.
Upton, Wyoming

AGREEMENT

This Agreement made and entered into this 4th day of June, 1954, by and between Chester Fike, party of the first part and Clifford A. Reed, party of the second part, WITNESSETH:

WHEREAS, the parties have this date as Lessors entered into a Mining Lease Agreement with L. A. Henderson, Allen Douglas and John Kunnerfield doing business as Little Missouri Mining Company, and

WHEREAS, said Lessee is to pay Lessors a royalty of twelve and one-half (12½%) percent all as more particularly appears by said Mining Lease dated June 4th, 1954 which is incorporated herein by reference thereto, and

WHEREAS, the parties hereto desire to agree on the division of said twelve and one-half (12½%) percent royalty,

NOW, THEREFORE, in consideration of the premises the parties mutually agree that the twelve and one-half (12½%) percent royalty shall be divided sixty (60%) percent thereof to Clifford A. Reed and forty (40%) percent thereof to Chester Fike and the Lessee is hereby authorized and directed to make payment of said royalties pursuant hereto.

Dated this 4th day of June, 1954.

Chester Fike
First Party

In the presence of:

Daniel Spahn

Clifford A. Reed
Second Party

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

STATE OF WYOMING
FREMONT COUNTY
CLERK'S OFFICE
No. 377925
Filed in this office
for record at 3 o'clock P M

Recorded
In Book 66 AUG 25 1954
of Misc. Page 283
F. B. Fossen
County Clerk and Ex-officio Register of Deeds
By ..... Deputy

INDEXED
ABSTRACTED
PHOTOSTATIC RECORDED

Little Mo Mining, Inc.
Upton, Wyoming 3 (d)
212

ASSIGNMENT OF LEASE

KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the sum of $1.00, the receipt and sufficiency of which is hereby acknowledged, we, Allan D. Douglas, L. A. Henderson, and John Kummerfeld, doing business as Little Missouri Mining Company, a co-partnership, the Lessee in that certain lease dated July 27, 1954, from Clifford A. Reed as Lessor, covering the following described lands and premises, to-wit:

> Interruption No. 1, Located in Section 28; and Interruption Nos. 2 and 3, Located in the NW¼NW¼ of Section 33, all in Township 40 North, Range 92 West, 6th P. M., Fremont County, Wyoming.
>
> Red Rock, Located in the NE¼SW¼ of Section 28, Township 40 North, Range 92 West, 6th P. M., Fremont County, Wyoming.
>
> All of said claims being more particularly described by Notice of Location thereon and Notice of Location recorded in the office of the County Clerk of Fremont County, Wyoming.

do hereby sell, assign, transfer, set over, and convey unto Little Mo. Mining, Inc., a Wyoming corporation, all our right, title, and interest in and to the said lease as individuals and as members of the said co-partnership;

To Have and To Hold the same unto the said Little Mo. Mining, Inc., its successors and assigns, subject to all the terms and provisions thereof.

Witness our hands this 12th day of February, 1955.

L. A. Henderson

John Kummerfeld

Allan D. Douglas

STATE OF WYOMING)
: ss
COUNTY OF WESTON)

On this 12th day of February, 1955, before me personally appeared Allan D. Douglas and John Kummerfeld, to me known to be the persons described in and who executed the foregoing Assignment of Lease and acknolwedged to me that they executed the same as their free and voluntary act and deed and as the free and voluntary act and deed of Little Missouri Mining Company ~~and Little Mo Mining, Inc.~~, a co-partnership.
Witness my hand and notarial seal the day and year in this certificate first above set forth.

J. E. Ackerman
Notary Public

~~My commission expires 8/12/58~~
My Commission expires March 25, 1955

STATE OF WYOMING)
: ss
COUNTY OF Fremont)

On this Twelfth day of February, 1955, before me personally appeared L. A. Henderson, to me known to be the person described in and who executed the foregoing Assignment of Lease and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of Little Missouri Mining Company ~~and Little Mo Mining, Inc.~~, a co-partnership.
Witness my hand and notarial seal the day and year in this certificate first above set forth.

Donald K. Lawrence
Notary Public

My Commission expires January 10, 1957

409933

STATE OF WYOMING
FREMONT COUNTY
CLERK'S OFFICE
No.
Filed in this office
for record at 11 o'clock A M
APR 4 1955
Recorded in Book 28 of Misc. Page 212
F. B. Fischer
County Clerk and Ex-officio Register of Deeds
By ..... Deputy

INDEXED
ABSTRACTED
PHOTOSTATIC RECORDED

Recorded in Book APR 4 1955
of L Page
County Clerk and Ex-officio Register of Deeds
By ..... Deputy

ORIGINAL FILE COPY
OCEA
RECEIVED APR 1 1987
DATE | INITIALS | DATE

3(d)

Little Mo Mining, Inc.
Upton, Wyoming

MINING LEASE

This Agreement, made and entered into this 4th day of June, 1954, by and between Chester Fike and Clifford A. Reed, hereinafter called the Lessor, and L. A. Henderson, Allen Douglas and John Kummerfield doing business as Little Missouri Mining Company, of Newcastle, Wyoming, hereinafter called the Lessee, WITNESSETH:

That for and in consideration of the sum of $500.00 in hand paid, the receipt and sufficiency of which is hereby acknowledged by the Lessor, and in further consideration of the agreements and provisions hereinafter contained, the Lessor does hereby demise and lease for the purposes hereinafter set forth, to the Lessee, the following described lands and premises, to-wit:

Mint Claims Nos. 1, 2, 3, 4, Located in Section 29, Township 40 North, Range 92 West, 6th P.M., Fremont County, Wyoming.

Arrowhead Claims Nos. 1, 2, 3, Located in Sections 28 and 29, Township 40 North, Range 92 West, 6th P.M., Fremont County, Wyoming.

Lucky Cliff Claims Nos. 1, 2, 3, located in Section 22, Township 40 North, Range 92 West, 6th P.M., Fremont County, Wyoming.

All of said claims being more particularly described by Notice Of Location thereon and Notice Of Location recorded in the office of the County Clerk of Fremont County, Wyoming.

to have and to hold the same exclusively with all rights and privileges thereunto appertaining, for the purpose of exploring for, developing, mining, removing, and selling any and all minerals and ores which the Lessee may desire, together with the right of ingress and egress, and drilling, digging, and otherwise penetrating into the said lands, and building roads and erecting other improvements thereon as may be reasonable and necessary in such operations; and all without liability on the Lessee's part for any surface damage caused thereby; provided, that the Lessee shall seasonably commence operations hereunder and shall prosecute the same diligently and continuously, weather permitting;

The Lessee shall pay the Lessor a royalty of twelve and one-half (12½%) percent of the gross value of all ores and minerals produced and sold from the said premises, payable within 20 days after receipt thereof by the Lessee; provided, that gross value shall be determined as the actual market price therefor received at the nearest market; provided further, that the Lessee shall at all times exert his best efforts to obtain the best possible price therefor; provided further, that the said royalty percentage shall also apply to and include any and all initial production bonuses paid by the U. S. Government or any of its agencies for any ores or minerals produced, but shall not apply to development or haulage allowances paid; provided further, that the Lessee shall deduct from such royalty payments the proportionate share of validly levied production taxes on such ores or minerals; and provided further, that the initial dollar payment hereinbefore mentioned shall be construed as an advance, minimum royalty , and that all royalty payments shall be first subject to credit in the amount of the said initial dollar payment first hereinabove mentioned; and provided further, that the Lessee will pay to the Lessor fifty (50%) percent of any mineral discovery bonus paid by the U. S. Government or any of its agencies relative to minerals qualifying therefor from the said lands, the same to be paid within 20 days after receipt thereof by the Lessee;

The Lessee shall conduct all his operations hereunder in a skillful and proper manner and according to good mining practices, and, subject thereto, he may use such methods of mining as to the whole or any part of the said premises as he may find most profitable and economical, or may, when he deems it necessary or desirable, discontinue operations entirely hereunder; provided, that in such event, and upon termination hereof, the Lessee agrees to deliver a good and sufficient and recordable release and termination hereof, releasing and returning unto the Lessor all rights hereunder; provided further, that upon termination hereof the Lessee shall have a reasonable time in which to remove his equipment,

[illegible] FILE COPY
[illegible]
[illegible] 1 [illegible]

DATE	[illegible]	CODE

materials, and improvements from said premises;

Lessee agrees to pay Lessors the same royalty on the mineral production of any further claims lessee may stake with a boundary in common to the above named claims. Such claims will be staked and recorded in the name of the Lessee.

Mining development and production of the mineral resources of the said premises are of the essence hereof, subject to the terms and provisions herein set forth; and all terms and conditions hereof shall be bind upon the parties hereto, their respective successors, heirs, and assigns;

The Lessor agrees that he will, upon request of the Lessee, furnish for examination an abstract of title to the said premises showing good and merchantable title in him, and to correct any defects therein which are required by the Lessee, at his own expense; such abstract to be returned to the Lessor upon completion of such examination; and the Lessor hereby warrants that his title thereto is good and merchantable and that he hereby releases and waives all rights in and to said lands under the homestead exemption laws of the State of Wyoming.

Witness the hands of the parties, and to a duplicate hereof, the day and year first above set forth.

Clifford A. Reed

Chester Fike

STATE OF WYOMING } No. 377924
FREMONT COUNTY } Filed in this office
CLERK'S OFFICE
for record at 3 o'clock P M

Recorded In Book 66 AUG 25 1954
of Mining Records Page 381
F. B. Fischer
County Clerk and Ex-officio Register of Deeds
By ..... Deputy

INDEXED
ABSTRACTED
PHOTOSTATIC RECORDED

Lessor

LITTLE MISSOURI MINING COMPANY
BY: L A Henderson
L. A. Henderson

STATE OF WYOMING)
Fremont) SS.
COUNTY OF/~~[illegible]~~)

On this 4th day of June, 1954, before me personally appeared L. A. Henderson, to me known to be the person described in and who executed the foregoing Mining Lease, and acknowledged to me that he executed the same as his free and voluntary act and deed.

Witness my hand and notarial seal the day and year in this certificate first above written.

Dwarf Zuber
Notary Public

My commission expires: August 8th, 1954.

STATE OF WYOMING)
) SS.
COUNTY OF FREMONT)

On this 4th day of June, 1954, before me personally appeared Chester Fike and Clifford A. Reed to me known to be the persons described in and who executed the foregoing Mining Lease, and acknowledged to me that they executed the same as their free and voluntary act and deed, including the release and waiver of homestead.

Witness my hand and notarial seal the day and year in this certificate first above written.

Dwarf Zuber
Notary Public

My commission expires: August 8th, 1954.

3 (d)

INDEXED ✓
ABSTRACTED ✓
PHOTOSTATIC RECORDED

STATE OF WYOMING
FREMONT COUNTY
CLERK'S OFFICE
No. 409932
Filed in this office
for record at 11 o'clock A M
Recorded
in Book 98 APR 4 1955
of MINING Page 211
J. B. Frazier
County Clerk and Ex-officio Register of Deeds
By ..... Deputy

211

Little Mo. Mining, Inc.
Upton, Wyoming

ASSIGNMENT OF LEASE

KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the sum of $1.00 and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, Allan D. Douglas, L. A. Henderson, and John Kummerfeld, doing business as Little Missouri Mining Company, a co-partnership, the Lessee in that certain lease dated June 4, 1954, from Clifford A. Reed and Chester Fike as Lessors, and which is of record in Book 66 of Mining Records at page 281 in the office of the County Clerk of Fremont County, Wyoming, and which covers the following designated unpatented lode mining claims, to-wit:

Mint Nos. 1, 2, 3, and 4 lode mining claims;
Arrowhead Nos. 1, 2, and 3 lode mining claims;
Lucky Cliff Nos. 1, 2, and 3 lode mining claims;

do hereby sell, assign, transfer, set over, and convey unto Little Mo. Mining, Inc., a Wyoming corporation, all our right, title, and interest in and to the said lease as individuals and as members of the said co-partnership;

To Have and to Hold the same unto the said Little Mo. Mining, Inc., its successors and assigns, subject to all the terms and provisions thereof.

Witness our hands this 2nd. day of ~~February~~ March, 1955.

STATE OF WYOMING
FREMONT COUNTY
CLERK'S OFFICE
No.
Filed in this office
for record at ..... o'clock ..... M
Recorded
in Book APR 4 1955
of ..... Page .....
County Clerk and Ex-officio Register of Deeds
By ..... Deputy

LITTLE MISSOURI MINING COMPANY:

John Kummerfeld
Allan D. Douglas
L. A. Henderson

STATE OF WYOMING)
COUNTY OF Weston) ss.

On this 2nd day of ~~February~~ March, 1955, before me personally appeared Allan D. Douglas and John Kummerfeld, to me known to be the persons described in and who executed the foregoing Assignment of Lease and acknowledged to me that they executed the same as their free and voluntary act and deed and as the free and voluntary act and deed of Little Missouri Mining Company, a co-partnership.

Witness my hand and notarial seal the day and year in this certificate first above set forth.

J. E. Cockerman
Notary Public
My Commission Expires:
My Commission expires March 25, 1956

STATE OF WYOMING)
COUNTY OF Weston) ss.

On this 2nd day of ~~February~~ March, 1955, before me personally appeared L. A. Henderson, to me known to be the person described in and who executed the foregoing Assignment of Lease and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of Little Missouri Mining Company, a co-partnership.

Witness my hand and notarial seal the day and year in this certificate first above set forth.

J. E. Cockerman
Notary Public
My Commission Expires:
My Commission expires March 25, 1956

STATE OF WYOMING
FREMONT COUNTY
CLERK'S OFFICE
No.
Filed in this office
for record at 11 o'clock A M

ORIGINAL FILE COPY
ED-MEA
RECEIVED APR 1 1957

DATE	INITIALS	CODE

3(d)

MINING LEASE

Little Mo Mining, Inc.
Upton, Wyoming

THIS AGREEMENT, made and entered into this 27th day of July, 1954, by and between Clifford A. Reed, hereinafter called the Lessor, and L. A. Henderson, Allen Douglas and John Kummerfield doing business as Little Missouri Mining Company, of Newcastle, Wyoming, hereinafter called the Lessee,

WITNESSETH:

That for and in consideration of the sum of Seventy Five Dollars ($75.00) in hand paid, the receipt and sufficiency of which is hereby acknowledged by the Lessor, and in further consideration of the agreements and provisions hereinafter contained, the Lessor does hereby demise and lease for the purposes hereinafter set forth, to the Lessee, the following described lands and premises, to-wit:

Interruption No. 1, Located in Section 28; and Interruption Nos. 2 and 3, Located in the NW¼NW¼ of Section 33, all in Township 40 North, Range 92 West, 6th P.M., Fremont County, Wyoming.

Red Rock, Located in the NE¼SW¼ of Section 28, Township 40 North, Range 92 West, 6th P.M., Fremont County, Wyoming.

All of said claims being more particularly described by Notice Of Location thereon and Notice Of Location recorded in the office of the County Clerk of Fremont County, Wyoming.

to have and to hold the same exclusively with all rights and privileges thereunto appertaining, for the purpose of exploring for, developing, mining, removing, and selling any and all minerals and ores which the Lessee may desire, together with the right of ingress and egress, and drilling, digging, and otherwise penetrating into the said lands, and building roads and erecting other improvements thereon as may be reasonable and necessary in such operations; and all without liability on the Lessee's part for any surface damage caused thereby; provided, that the Lessee shall seasonably commence operations hereunder and shall prosecute the same diligently and continuously, weather permitting;

The Lessee shall pay the Lessor a royalty of twelve and one-half (12½%) percent of the gross value of all ores and minerals produced and sold from the said premises, payable within 20 days after receipt thereof by the Lessee; provided, that gross value shall be determined as the actual market price therefor received at the nearest market; provided further, that the Lessee shall at all times exert his best efforts to obtain the best possible price therefor; provided further, that the said royalty percentage shall also apply to and include any and all initial production bonuses paid by the U. S. Government or any of its agencies for any ores or minerals produced, but shall not apply to development or haulage allowances paid; provided further, that the Lessee shall deduct from such royalty payments the proportionate share of validly levied production taxes on such ores or minerals; and provided further, that the initial dollar payment hereinbefore mentioned shall be construed as an advance, minimum royalty, and that all royalty payments shall be first subject to credit in the amount of the said initial dollar payment first hereinabove mentioned; and provided further, that the Lessee will pay to the Lessor fifty (50%) percent of any mineral discovery bonus paid by the U. S. Government or any of its agencies relative to minerals qualifying therefor from the said lands, the same to be paid within 20 days after receipt thereof by the Lessee;

The Lessee shall conduct all his operations hereunder in a skillful and proper manner and according to good mining practices, and, subject thereto, he may use such methods of mining as to the whole or any part of the said premises as he may find most profitable and economical, or may, when he deems it necessary or desirable, discontinue operations entirely hereunder; provided, that in such event, and upon termination hereof, the Lessee agrees to deliver a good and sufficient and recordable release and termination hereof, releasing and returning unto the Lessor all rights hereunder; provided further, that upon termination hereof the Lessee shall have a reasonable time in which to remove his equipment, materials, and improvements from said premises;

OFFICIAL FILE COPY
OMEGA
RECEIVED APR 1 1957

DATE	INITIALS	CODE

Lessee agrees to pay Lessors the same royalty on the mineral production of any further claims lessee may stake with a boundary in common to the above named claims. Such claims will be staked and recorded in the name of the Lessee.

Mining development and production of the mineral resources of the said premises are of the essence hereof, subject to the terms and provisions herein set forth; and all terms and conditions hereof shall be binding upon the parties hereto, their respective successors, heirs, and assigns;

The Lessor agrees that he will, upon request of the Lessee, furnish for examination an abstract of title to the said premises showing good and merchantable title in him, and to correct any defects therein which are required by the Lessee, at his own expense; such abstract to be returned to the Lessor upon completion of such examination; and the Lessor hereby warrants that his title thereto is good and merchantable and that he hereby releases and waives all rights in and to said lands under the homestead exemption laws of the State of Wyoming.

Witness the hands of the parties, and to a duplicate hereof, the day and year first above set forth.

Clifford A. Reed
Lessor

LITTLE MISSOURI MINING COMPANY

BY: L. A. Henderson
L. A. Henderson

STATE OF WYOMING
FREMONT COUNTY
CLERK'S OFFICE
Filed in this office ... NO
for record at 9 o'clock A.M
Book 133 Jul 25 '55
of Mining claim Page 253
F B Fischer
County Clerk and Ex-officio Register of Deeds
By James A Torring Deputy

STATE OF WYOMING)
) ss.
COUNTY OF FREMONT)

On this 27th day of July, 1954, before me personally appeared L. A. Henderson, to me known to be the person described in and who executed the foregoing Mining Lease, and acknowledged to me that he executed the same as his free and voluntary act and deed.

Witness my hand and notarial seal the day and year in this certificate first above written.

Donald Spike
Notary Public

My commission expires: Aug 8, 1957

STATE OF WYOMING)
) ss.
COUNTY OF FREMONT)

On this 27th day of July, 1954, before me personally appeared Clifford A. Reed to me known to be the person described in and who executed the foregoing Mining Lease, and acknowledged to me that he executed the same as his free and voluntary act and deed, including the release and waiver of homestead.

Witness my hand and notarial seal the day and year in this certificate first above written.

Donald Spike
Notary Public

My commission expires: Aug 8, 1957

CENTRAL FILE COPY
OMEA
RECEIVED APR 1 1957

DATE	INITIALS	CODE

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS, That Chester Fike of the County of Fremont, State of Wyoming, in consideration of One Dollar and other valuable consideration to him in hand paid by Little Mo Mining, Inc., a Wyoming corporation, the receipt and sufficiency whereof is hereby confessed and acknowledged, has remised, released, conveyed and forever quitclaimed and by these presents does for himself, his heirs, executors and administrators, remise, release, convey and forever quitclaim unto the said Little Mo Mining, Inc., its successors and assigns, forever, all such right, title, interest, property, possession, claim and demand, as he has or ought to have, in or to all the following designated unpatented lode mining claims situated in Fremont County, Wyoming, and being more particularly described in the respective location certificates therefor which are of record in the office of the County Clerk of Fremont County, Wyoming, to-wit:

Mint lode mining claims numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25;

Arrowhead lode mining claims numbers 1, 2, and 4;

Lucky Cliff lode mining claims numbers 1, 2, and 3; and 10;

All of said claims lying and being in Township 40 North, Range 92 West of the 6th P.M., Fremont County, Wyoming;

Together with all right, title, and interest of the Grantor in and to any and all of said claims under and by virtue of that certain Mining Lease dated June 4, 1954, and which is of record in the office of the County Clerk of Fremont County, Wyoming, in Book 66 of Mining at pages 281, 282, and 283; hereby specifically releasing all claim in and to any royalty on the production of minerals from adjoining claims located by the Lessee in said lease, as provided for in the fifth paragraph of said lease which reads as follows: "Lessee agrees to pay Lessors the same royalty on the mineral production of any further claims Lessee may stake with a boundary in common to the above named claims. Such claims will be staked and recorded in the name of the Lessee."

Together with all right, title, interest, claim, or demand in and to any royalty from the production of minerals, under or by virtue of that certain Assignment of Royalty dated March 31, 1955, and which is of record in the office of the County Clerk of Fremont County, Wyoming, in Book 97 of Mining at page 419, covering some of the mining claims above named;

Hereby releasing and waiving all rights under and by virtue of the homestead exemption laws of the State of Wyoming;

To Have and To Hold the said premises and royalty interests unto the said Little Mo Mining, Inc., its successors and assigns, to its and their own proper use and behoof forever; provided, that this conveyance shall be effective as of February 23, 1956, so that any royalty on production, to be paid after that date, shall go to the Grantee herein, and that the last production royalty payable to the Grantor was for the production designated as Lot 798 from said premises. So that neither the Grantor nor any other person in his name or behalf, shall or will hereafter claim or demand any right or title, interest or royalty, in, to, or applicable to, the above designated lode mining claims or any part thereof, but they and every one of them shall by these presents be excluded and forever barred. And the Grantor certifies that no part of the said claims or the lands covered thereby, is now or ever has been used or claimed by him or any member of his family for homestead or residence purposes.

All initial production bonus due the Grantor, wheather applicable to past or future production, from any of the above mentioned claims, shall go to the Grantee herein.

In Witness Whereof, Grantor has hereunto set his hand and seal this 29th day of February, 1956.

Chester Fike.

STATE OF WYOMING)
(ss.
COUNTY OF WESTON)

On this 29th day of February, 1956, before me personally appeared Chester Fike, to me known to be the person described in and who executed the foregoing Quitclaim Deed, and acknowledged that he executed the same as his free and voluntary act and deed.

Given under my hand and notarial seal, this 29th day of February, 1956.

Earl Cook
Notary Public

My Commission Expires 7/13/59.

451216

STATE OF WYOMING } No .....
FREMONT COUNTY } Filed in this office
CLERK'S OFFICE
for record at 4 o'clock P M
Recorded
In Book 150 MAR 5 1956
of Mining Page 362
F.B. Fisher
County Clerk and Ex-officio Register of Deeds
By Jannie A. Tomlinson Deputy

INDEXED
ABSTRACTED
PHOTOSTATIC RECORDED

Little Mo Mining, Inc.
Upton, Wyoming

3 (f) of INSTRUCTIONS

The following are the Books and pages of the recorded location notices of unpatented claims, in the office of the County Clerk of Fremont County, Wyoming.

CLAIM NAME	BOOK OF MINING	PAGE
Interruption No. 1	83	3
Interruption No. 2	109	457
Interruption No. 3	109	458
Arrowhead No. 2	83	2
Mint No. 1	58	369
Mint No. 2	58	370
Mint No. 3	58	371
Mint No. 4	58	372
Mint No. 5	63	333
Mint No. 6	63	334
Mint No. 7	63	335
Mint No. 9 8	63	337
Mint No. 10	63	338
Mint No. 11	63	339
Mint No. 12	63	340
Mint No. 13	63	341
Mint No. 14	63	342
Mint No. 15	63	343
Mint No. 16	133	228
Mint No. 17	133	229
Mint No. 18	133	230
Mint No. 19	133	231
Mint No. 20	133	232
Mint No. 21 22	133	233
Mint No. 23	136	482
Mint No. 24	141	109
Mint No. 25	141	108

RECEIVED FEB 1 1977
DATE
BOOK
PAGE
CERTIFIED TRUE COPY

Little Mo Mining, Inc., Upton, Wyoming

4 (c) of INSTRUCTIONS (Not necessary to return this report)

Aug. 25, 1956.

COMMENTS ON LITTLE MO URANIUM MINE, COPPER MOUNTAIN DISTRICT, FREMONT COUNTY, WYOMING.

LOCATION.

Property is 23 miles northeast of Shoshoni by a good dirt road, Shoshoni is 23 miles from the AEC buying station at Riverton, by highway.

TOPOGRAPHY.

The claims are located at the foot of Copper Mountain, the surface consisting of low rolling hills covered with sparse cedar trees and sage brush, with large granite boulders. The south slope of Copper Mountain, composed of nearly bare granite rises, abruptly immediately north of the mine. A small creek, with sufficient flow for camp use most of the year, flows off the mountain near this location.

HISTORY.

Uranium indications were discovered by a local prospector using a saddle horse and geiger counter. The claims were taken over by Little Mo Mining Co., a closed corporation composed of successful bentonite producers of northeastern Wyoming, an open pit mine was started and shipments were started on March 1, 1955, the date on which the Receiving Station was opened.

In sixteen months the shipments had totalled 2,400 tons, averaging 0.23% U_3O_8, according to information supplied by the company. The value of ore of this grade is approximately $19.00 in addition to the discovery bonus. Shipments have recently been increasing, 400 tons being delivered during the first three weeks of August, 1956.

PROPERTY.

There are 33 lode mining claims held under the U. S. and Wyoming Mining Laws with a total of approximately 640 acres. 3 claims carry 12½% over-ride, 7 claims carry no over-ride, 23 claims including the producing mine, carry 7½% over-ride. Title is good.

GEOLOGY.

Copper Mountain which rises along the north side of the property, is an uplift of pre-Cambrian granite having a present elevation above the basin, of two thousand to Three thousand feet, this uplift having occurred during the Laramide Revolution at the end of Cretaceous Time. The rising of other mountain ranges at this time resulted in the formation of inland lakes into which sediments were deposited from the surrounding mountains, these sediments being of Tertiary Age.

The Wind River Basin received the sediments eroded from Copper Mountain, the Owl Creek Mountain, Wind River Range, and granite mountains along the south, those of the most interest being the Eocene shales and sandstones of the Wind River formation. This has a total thickness of 3800 feet, containing near its middle a 450 foot zone in which commercial uranium deposits occur in at least ten different horizons.

The Tertiary sedimentary rocks on the Little Mo property are classified by the U. S. Geological Survey at Tertiary tuff and equivalent tuffaceous rocks of Upper Eocene age. These include shales, sandstones, and conglomerates deposited on the flanks of the Copper Mountain uplift, and, in general, lie nearly flat, though there has been some minor faulting and folding.

Following Eocene deposition the area was covered by Oligocene and Miocene deposition to a thickness of one thousand to three thousand feet, and containing great thicknesses of volcanic ash and tuff containing uranium in sufficient quantities so that the remnants of these beds still show traces of it. These formations have been largely eroded away in this area, leaving the Upper Eocene and Eocene beds exposed.

URANIUM DEPOSITION.

The theory accepted by the authorities for the occurence of uranium in commercial concentrations and quantities in the Tertiary beds is that it came from the overlying Oligocene and Miocene volcanic sediments by going into solution while these sediments were being eroded, and by percolating downward in solution in the surface water, and then migrating in ground water through channels in the porous sandstones and conglomerates, uranium salts being highly soluble in water.

Uranium has an affinity for carbonaceous material, is trapped by mud, and would have a tendency to deposit where the water became too highly charged to carry additional minerals. As a result uranium would accumulate in the sandstones and conglomerate where shale lenses were present, where there would be bends in the channels or where there would be trash pockets or beds of carbonaceous material.

Above ground water level the uranium minerals would be secondary, at ground water both secondary and primary, and below that they would be primary minerals as a reducing condition would exist at ground water level which would convert them back to primary minerals.

MINE MINERALOGY.

The tertiary rocks at the Little Mo mine consist of arkose containing material derived from the granite on which they lie, this contact running east and west across the property for about two miles. This arkose resembles disintegrated granite so closely that it is difficult to determine where the base of the arkose ends and the top of the granite begins, except that the arkose contains granite boulders, and some shale.

The uranium minerals in the arkose are uranophane with some meta-autunite, secondary minerals. At the bottom of the arkose and in the disintegrated granite there are primary minerals coffinite and uraninite, and it appears that this horizon is higher in grade than that above.

This set of geological conditions occurs over most of the property. Since it has not been drilled there is no way to set a limit on the extent of the ore occurence. It could be tremendous in an area of 640 acres.

MINING.

The mine is an open cut about 600 feet long and with a maximum depth of about 25 feet. The surface has numerous big boulders, but they are not so plentiful in the mine face. The owners state that the thickness of the ore is from one foot to 20 feet, averaging four to eight feet, with about three tons of overburden to each ton of ore.

MINING COSTS.

Under these conditions the mining cost should be in the order of about $5.00 per ton, with $1.00 more for a drilling program, or a total of $6.00, which leaves a good margin of profit on $19.00 ore. In mining the 2,400 tons of shipping ore that has been produced, the company has stockpiled about 5,000 tons of low grade ore which they report carries .07% to .09% U308, and which would have a value with a mill or upgrading plant.

ORE TREATMENT.

This ore, with either the primary or secondary ore, should be amenable to the sulphuric leach process, the acid consumption should be low owing to the siliceous nature of the gangue.

Uranium milling combined with mining is more profitable than either one alone. There is another property two miles distant with a reported 127,000 tons of ore drilled out, which would help to justify a mill here. Also there should be more ore deposits found along the granite-sedimentary contact, when prospected, on this property and on other properties.

ORE RESERVES.

It is impossible to compute ore reserves from the present development, as the company has not drilled ahead of its face except for blasting, and except for one hole they report as about 25 feet ahead of the face that did not reach the bottom of the ore but still got a considerable thickness.

They report a shipment of ore from a shallow cut about 400 feet south of the operating pit, which would make the exposure 1000 feet long if continous to that poing, and they report an exposure about 1000 feet to the west, but we can not assume an area 1000 by 1000 feet without more confirmation.

If the 600 feet face has four feet of ore, the tonnage would be approximately 10,000 tons for each 50 feet, or 50,000 tons for 250 feet, or less than four acres. With the surface rocks the same over most of their 640 acres, the ore reserves could well be enormous, but they are impossible of prediction.

DRILLING.

To go into large scale mining it would be necessary to carry on a drilling program on which to plan a mining program. A grid of widely spaced holes over the property should be combined with a grid of holes on 50 foot centers to define the immediate ore body. Considering the nature of the material such drilling would probably cost about $3.00 a foot, or $1.00 per ton of ore mined. Generally cores can not be recovered, so dry rotary drilling should be used, the holes probed, with enough coring to calibrate the probe. The ore is understood to be in balance except it the base, where the chemical is about double the radio-metric assay.

EQUIPMENT.

The mine has equipment in fine condition adequate to carry out its present program. A list will be attached. Production 400 tons already this month.

CONCLUSIONS.

This is a mine operating at a profit on good ore, with tremendous possibilities for expansion.

A. B. Bartlett

Independent Geologist

ABB / m

4 (c) of INSTRUCTIONS (Not necessary to return this report)

Little Mo Mining, Inc., Upton, Wyo.

URANIUM OCCURRENCES IN THE COPPER MOUNTAIN AREA FREMONT COUNTY, WYOMING

By: Tom H. W. Loomis, Geologist, DEB

INTRODUCTION

During the fall of 1955 the Atomic Energy Commission conducted detailed geologic reconnaissance along the southern flank of Copper Mountain, Fremont County, Wyoming. Copper Mountain is part of the Owl Creek Mountain Range, which in part forms the northern edge of the Wind River Basin. Cedar Ridge, a prominent fault escarpment, is included in the described area. The topography consists of low, rounded knolls lying between the steep, rugged escarpments of Cedar Ridge and Copper Mountain. (Fig. 1, Copper Mountain Area)

Prospecting of this area has been active since the discovery of uranium in the Gas Hills during 1953. Numerous occurrences of uranium have been reported and considerable exploration work has been done. One mine has operated since March, 1955. Several ore shipments have been made from another claim, but mining attempts have been unsuccessful on at least three other properties.

ROCK FORMATIONS

The formations exposed in this locality are: Precambrian schist and gneiss intruded by pink granite; Tertiary sedimentary rocks; and recent alluvium and gravels. Several inliers of Paleozoic and Mesozoic rocks occur in the western part of this area.

The Tertiary sedimentary rocks in this area consist of the Wind River formation of early Eocene age and a sequence of andesitic

tuffaceous and equivalent non-tuffaceous rocks of middle and late Eocene and possibly early Oligocene age. The Wind River formation is divided into the Lysite and Lost Cabin members. This formation contains continental beds with a very coarse, conglomeratic facies in the basin. The conglomerate of the Lysite member has been derived mostly from erosion of upper Paleozoic and Mesozoic rocks and is intertongued with fine-grained units. Some of these intertongued fine-grained rocks in the Lost Cabin member are tuffaceous. The conglomerate of the Lost Cabin member is more widespread and contains Precambrian and lower Paleozoic debris.

Separated from the Wind River formation by the Cedar Ridge fault are the andesitic tuffaceous rocks, consisting of about 1000 feet of tuffs, ash, tuffaceous limestone, siltstones, and conglomerates.

The Quaternary sediments locally consist of gravels capping pediments and sands deposited as stream alluvium.

STRUCTURE

At the end of Precambrian time, rocks of the Rocky Mountain Region were eroded to an approximate peneplain. Invasion of the area by epi-continental seas during Paleozoic and Mesozoic eras was followed by a broad uplift and mountain building from late Cretaceous time to the close of the Eocene epoch. Erosion of the uprising mountain masses and the explosive volcanism which accompanied the mountain building supplied the sediments which filled the basins.

The Cedar Ridge fault, which is intimately associated with the long narrow McComb anticline, forms an easterly trending ridge several

miles long. This steeply dipping fault is donthrown probably several thousand feet on the north side.

Between the Cedar Ridge fault and the Precambrian rocks are numerous associated easterly trending and secondary northerly trending faults forming several grabens and horsts in the Tertiary strata. The steeply dipping Paleozoic and Mesozoic formations are complexly faulted.

URANIUM DEPOSITS

Uranium minerals have been found in Precambrian granite, Precambrian granite debris, Wind River sandstone, Tertiary tuffaceous rocks, and in recent conglomerate. All known uranium occurrences in this area are between the crest of Copper Mountain and the Cedar Ridge fault. The deposits range in size from numerous traces of uranium minerals to a few significant ore bodies.

Uranium minerals identified in the area are uranophane, uranospinite, uraninite, meta-autunite, schroeckingerite, coffinite, and becquerelite.

Uranophane is the main uranium mineral in the Precambrian granite. Small, spotty stains of this yellow, non-fluorescent uranium mineral are found in tight, fractured zones within several feet of the surface. These are usually limited in width and depth to a few feet.

In the Precambrian granite debris, uranophane occurs with small amounts of coffinite, uraninite, and meta-autunite as streaks, coatings, and intergranular fillings. Weathering and ground water action have altered much of the feldspar and biotite in the granite to kaolin and chlorite. The alteration has made this rock more permeable

and apparently more susceptible to mineral deposition. The Little Missouri Mine is an example of this type of deposit.

The tuffaceous Tertiary series is host to several types of uranium minerals. Meta-autunite, an apple-green, brightly fluorescent uranium mineral, occurs as fracture fillings, blebs and streaks in the richly bentonity mudstone layers. There are also specks and streaks of this mineral in the arkosic sandstone layers of this series. Green, highly fluorescent schroekingerite occurs as pellets of flaky crystals. These occurrences found at or near the surface are small in size.

Mineral concentration in the tuffaceous Tertiary series has been found at depths of from 80 to 100 feet by drilling. The deposits in the unoxidized zone are in a gray, sandy to muddy siltstone. The Siltstone is interbedded with gray, very coarse-grained, arkosic sandstone and occurs 15 to 30 feet above the basement granite. The uranium mineral has not been identified. Deposits of this type hold considerable promise for production of a substantial tonnage of uranium ore.

Mineral concentration in the Wind River formation is confined to very spotty occurrences of becquerelite and meta-autunite along the Cedar Ridge fault scarp. Numerous lenses of radioactive carbonaceous shale are found in the Tertiary formations. These are small and are very low in grade.

ORIGIN AND CONTROL OF THE DEPOSITS

Mineralization in the Tertiary rocks has been influenced in the Copper Mountain area by structure, rock permeability, and rock type. Most of the mineralized localities lie within two belts that coincide with ancient valleys in the pre-Tertiary surface of the Precambrian granite. Significant subsurface uranium deposits are found at the junction of these two belts. Below the jundtion a horst of Wind River strata blocks the old valley and may have acted as a barrier to the uranium bearing solutions carried by the ground or subsurface waters. (Fig. 2, Inferred trends of uranium mineralization)

This suggests to the writer that the channels in the ancient valleys controlled the uranium deposition. It appears that fracturing in the Tertiary rocks blocked or otherwise influenced the flow of uranium-bearing waters.

In some areas the Precambrian granite bedrock is well mineralized. The degree of weathering has a direct bearing on the grade of the mineralization as the well decomposed granite is often completely impregnated with uranium mineral. Jointing may have provided permeability in the granite.

It is inferred that the uranium present in very small quantities in the granite was released into ground water during the erosion of granites and deposited in the Tertiary rocks. Tuffaceous rocks formerly covered this region, but an uranium origin from granites

rather than tuffs is favored in this locality because a limited area is affected instead of the widespread area that the tuffs once covered. The ore grade mineral concentrations are all adjacent to the granite Precambrian rocks, not the dark schists and gneisses.

In the Copper Mountain area the favorable localities are those where old valley trends in the Precambrian granites underlie fractured areas in the Tertiary rocks. Surface indications of uranium mineralization may be sparse, even in very favorable areas. There appears to be little direct relationship between the spotty mineralization on the surface and ore found at depth by drilling.

Other areas in the region showing similar relationships between granites and sandstone rocks containing faults and folded structures should be favorable for uranium deposits. Selected areas can be rapidly evaluated by aerial radiometric reconnaissance and ground checks. Linear trends in the area appear to be of particular significance.

4 (a) Some drilling has been conducted on the land and shows areas of mineralization. Exploration drilling has been by wagon drill which does not prove satisfactory in drilling holes over 20 feet deep as the formation to be drilled is a granite debris with boulders of all sizes surrounded by fines. The work that has been done is accessible for examination. Drilling was by Little Mo Mining, Inc., with their own equipment.

Little Mo Mining, Inc., has been mining uranium ore from the Arrowhead No. 1 Claim (see enclosed Map) since March, 1955. The Arrowhead Nos. 1 and 4 are not included in the claims to be drilled with the DMEA Loan. The mine on the Arrowhead No. 1 Claim is an open pit and ore is in the granite debris. Ore mined is secondary uranophane and primary coffinite. The coffinite is encountered between 20 to 30 feet below the surface. It appears that the areas to be drilled with the DMEA Loan will encounter the same horizons that are being mined from the Arrowhead No. 1 Claim. Total ore production from the Arrowhead No. 1, from March, 1955 through February of 1957 has been approximately 3,460 dry tons. With an average of .20% U308 content. Two men are working the mine with an average of 200 tons of ore being mined per month. Only several months reserve is kept drilled out ahead of the miners.

4 (b) No production has been had from the property to be explored with a DMEA Loan.

4 (c) The main geological feature of the property consists of Precambrian granite (Copper Mountain) on the north with exposures of Precambrian granite in the center of the property. The flanks of the granite are covered with Precambrian granite debris. Mineralization in this area occurs in this debris, with uranophane being the main uranium mineral. At a depth of about 20 to 30 feet below the surface the debris is unoxidized and the primary ore coffinite is found. The mineralization of both primary and secondary is a bedded deposit, occuring as streaks, coatings, and intergranular fillings. With drilling which will go through the Precambrian debris and which will penetrate the base granite it is felt that deposits of primary and/or secondary uranium mineralization will be encountered which can be mined commercially.

4 (d) Access Roads: One dozer trail crosses the property and in areas of mineralization numerous drill trails have been made by dozer. At present a road runs from the property to the Lysite-Bonneville County road and can be used as a haul road except for short periods of heavy snows.
Distance to shipping: The property lies about 46 miles from the Riverton Ore Buying Station at Riverton, Wyoming, and of this distance about 26 miles is black topped highway.
Distance to residence point: Property is about 23 miles northeast of Shoshoni, Wyoming, the closest residence point.
Distance to supply point: Riverton, Wyoming would be the supply point, a distance of 46 miles from the property.

4 (e) The exploration on the property would consist of contracted drilling and the contractor would supply manpower and equipment. Water is available for drilling on or close to the property.

5 (b) The proposed work will consist of 100 holes to be drilled with air and/or water and will go to and penetrate the base granite. These holes would be probed and recorded. It is estimated that 150 feet should encounter base granite in all cases, with an average depth per hole of 75 feet. It is deemed necessary to reach base granite as the most favorable area of mineralization appears to lie in the granite debris and just above the contact of the debris and base granite. The location of the proposed drilling is indicated on the enclosed map by red dots. Samples will be taken each two feet. All drill holes will be at least 100 feet from the outside periphery of claims to be drilled.

5 (d) Little Mo Mining, Inc., has developed and operated a producing uranium mine in the area for the last two years. Prior to that they developed and operated a producing uranium mine in Crook County, Wyoming for one year.

The operations will be supervised by Earl J. Cox, Geological Engineer, who has been in charge of the operations of the Little Mo Mine in the area for two years. Prior to that he was field engineer, for four years, for a bentonite company and supervised their exploration works.

6. Estimate of costs for 100 drill holes - average depth 75 feet.

(a) Independent Contracts	
7,500 feet of drilling at $4.00 per foot	$30,000.
1/2 hour standby rig time per hole	625.
Dozer drill trails - 80 hours at $12.50 (estimated) per hour.	1,000.
(b) Labor, supervision, consultants	
Sampler $1.50 per hour for 50 working days	650.
Supervisor - 4 days per week for 8 weeks @ $30. per day (Would supervise making of dozer drill trails, sampler, probing of holes, surveying of holes, and handle all reports.)	960.
(c) Operating Material and Supplies	
Sample sacks - 8,000 @ 1¢ per sack	80.
(d) Operating equipment	
Babbel Counter with 500 ft. probe and Esterline-Angus Recorder. (Owned by Little Mo. - suggested use-allowance $200. per month rental for two months).	400.
(e) Rehabilitation and Repairs	
Not applicable	
(f) New Buildings, Improvements, Installations	
Not applicable	
(g) Miscellaneous	
Assays - 100 assays @ $5.00 per assay	500.
Repair of counter and recording equipment	50.
(h) Contingencies	
40¢ per foot of drilling on estimated 7,500 ft. of drilling	3,000.
Total	$37,265.00

OFFICIAL FILE COPY
D M E A
RECEIVED APR 1 1957
DATE | INITIALS | CODE

6 (a) of Instructions
Little Mo. Mining, Inc.
Upton, Wyoming

2

PHONES:
RIVERTON UL6-2317
CASPER 2-6166

Beavers & Harris Drilling Co.

P. O. BOX 175 RIVERTON, WYOMING

March 16, 1957

Little Mo. Mining Co. Inc.
Upton, Wyoming

Dear Sirs;

This is to correct our bid of January 21. We are pleased to quote the following prices.

Type Drilling	Depth Range	Drill/Foot	Standby Time
air& water plug drilling	150 ft. Max.	$4.00	$12.50

It is our understanding the Operator will prepare necessary roads and level drill sites to the extent necessary for drilling. Standby time will be charged in the event of a long water haul, it will be the responsibility of Operator (Little Mo. Mining) to locate water and pay for same if there is a charge. The Operator will furnish the right of egress and ingress.

We anticipate the use of rotary type air& water drill, it is in the classification of a Mahew 1000 heavy duty, mounted on 196 International. This equipment is less than one year old.

Beavers and Harris Drilling Co. will carry all insurance necessary to comply with the laws of Wyoming.

Sincerely,

Hugh M. Harris

Hugh M. Harris

OFFICIAL FILE COPY
D M E A
RECEIVED APR 1 1957
DATE INITIALS CODE

6 (a), of Instructions

Little Mo Mining, Inc.
Upton, Wyoming

Upton, Wyoming
March 11, 1957

Little Mo. Mining Inc.
Box 545
Upton, Wyoming

Dear Sirs:

As per your request for a bid on approximately 100 holes in the Copper Mountain area near Shoshoni, Wyoming, I respectively submit the following prices.

Type Drilling	Depth	Drill/ft	Standby Time
air & water plug	150' max.	$3.75	$12.50

Drilling bits used will be tungsten carbide and Grade #1 diamonds. Holes will be drilled as far as possible with tungsten insett bits using air to remove the cuttings. Dust will be collected in a Du-Cone dust collector and sampler will be given opportunity to remove cuttings every two feet. When formation nessistates diamonds then water will be used to remove the cuttings. Water cuttings will be collected if your company so desires. Machine used for drilling will be Longyear UG diamond core drill with Bethlehem 4X6 mud pump for water and Ingersoll Rand 315 rotary for air. The operator will locate water for drilling purposed and right of egress and ingress. Contractor will furnish own water truck and necessary pumps for handling water. It is further understood that operator will level all locations and furnish roads necessary for drilling operations.

Contractor will carry insurance necessary to comply with Wyoming laws.

Very truly yours
Lawrence Materi

6 (a) of Instructions

Little Mo Mining, Inc., Upton, Wyoming

TETON EXPLORATION DRILLING CO., INC.

Box 1102
RIVERTON, WYOMING

U. L. GRANTHAM, PRESIDENT
UL6-3587 — RIVERTON, WYOMING

D. L. HANKINS, VICE PRESIDENT
UL6-3102 — RIVERTON, WYOMING

R. K. LISCO, SECRETARY-TREASURER
3-4493 — CASPER, WYOMING

March 25, 1957

APR 1 1957
DATE | INITIALS | CODE

Little Moe Mining Inc.
Box 545
Upton, Wyoming

Dear Sir:

Thank you for the opportunity to bid on your DMEA loan drilling program, on your property in the Copper Mt. Area.

We would like to submit the following bid:

0------150------$3.85 per foot. With two foot air samples, delivered at drill sight where ever possible to drill with air.

Our above bid is understood that the majority of holes will be a 75 foot maxium, making 100 holes a total footage of 7500 feet to be drilled.

Where air drilling is not satifactory we will be permited to change over to water drilling, Client will compensate expense accorded to contractor on water hauls over a two mile distance, from drill sight.

There will be a charge of $18.00 per hour standby time. Standby time including probeing holes, waiting on locations and etc.

Client will have drill locations prepared in advance. And will be responsible for any damages arising while crossing other land thru- and from claims.

Contractor would furnish one drilling unit with in 15 to 20 days notice if the bid was submitted to them.

Thank you, TETON EXPLORATION DRILLING CO INC.

BY: Vernon L. Grantham

DOCKET COPY

Project Summary Report

By: F. L. Knouse September 15, 1958

1. Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136

Operator - Little Mo Mining, Inc., a Wyoming corporation
P. O. Box 321
Shoshoni, Wyoming

Property - Consists of 27 contiguous unpatented lode mining claims in secs. 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th P.M.& B., Fremont County, Wyoming. The claims are Interruption Nos. 1, 2, and 3; Arrowhead No. 2; Mint Nos. 1 through 7, 9 through 21, and 23, 24, and 25.

Property Rights - The Operator owns the Mint claims Nos. 1 through 25 listed above (Nos. 8 and 22 not being included) and has an undivided interest in and lease from Clifford A. Reed for the Interruption claims and Arrowhead claim listed above. A Consent to Lien and Subordination Agreement, dated September 9, 1957, signed by Clifford A. Reed, is attached to the contract.

2. Contract date - September 26, 1957.

The project work was started November 19, 1957, and completed March 20, 1958.

Work Authorized -

Consisted of 4,700 feet of rotary drilling from the surface, with related bulldozing to prepare access roads and drill sites, to explore for uranium in the Tertiary Tepee Trail formation and underlying contact zone of Precambrian granite.

Stage I - Consisted of preparing access roads and drill sites and drilling 23 holes to depths of 75-150 feet, aggregating about 2,300 feet.

Stage II - Consisted of preparing access roads and drill sites, and drilling 24 holes to depths of 75-160 feet, aggregating not more than 2,400 feet. Stage II holes were to be drilled as offset holes to Stage I holes that penetrated significant mineralization. Hole spacing was limited to not less than 100 feet from any previously drilled hole.

Estimated and Completed Cost of the Project Work

Stage I

Actual Cost	Est.Cost	Work Completed Units	Work Completed Cost
2,300 ft. rotary drilling @ $4/ft.	$9,200.00	2,686	$10,744.00
12 hrs. drilling standby time @ $12.50/hr.	150.00	8	100.00
20 hrs. bulldozing @ $12.50/hr.	250.00	31¼*	250.00
25 chemical analyses @ $5/sample	125.00	21	105.00
Fixed Unit Cost (Incidental Allowance)			
2,300 ft. drilling @ $0.27/ft.	621.00	2,686	725.22
Total - Stage I	$10,346.00		$11,924.22

Stage II

Actual Cost			
2,400 ft. rotary drilling @ $4/ft.	$9,600.00	900	$3,600.00
12 hrs. drilling standby time @ $12.50/hr.	150.00	2	25.00
20 hrs. bulldozing @ $12.50/hr.	250.00	12*	96.00
25 chemical analyses @ $5/sample	125.00	25	125.00
Fixed Unit Cost (incidental allowance)			
2,400 ft. drilling @ $0.27/ft.	648.00	900	243.00
Total - Stage II	$10,773.00		$4,089.00
Estimated Cost of Project (rounded)	$21,120.00		$16,013.22
Government participation @ 75%	$15,840.00		$12,009.91

* Amendment No. 2 allowed the use of a Model 4D-6 Allis-Chalmers tractor @ $8/hr. in lieu of a Model D-7 Caterpillar tractor @ $12.50/hr. 3,586 feet of rotary drilling were completed for a cost of $4.27/ft., excluding standby time. Stage I holes were drilled to an average depth of 134 feet, and Stage II holes averaged 112.5 feet deep.

Amendments -

No. 1 - dated December 27, 1957, extended the completion date from January 1, 1958, to April 1, 1958.

No. 2 - dated February 7, 1958 (a) permitted the use of a Model HD-6 Allis-Chalmers tractor @ $8/hr. in lieu of a Model D-7 Caterpillar tractor @ $12.50/hr.; (b) removed the maximum depth (150-foot depth) that any hole could be drilled to provide deeper drilling through the target zone; and (c) deleted drill holes Nos. 12, 13, and 15, and relocated drill holes Nos. 14, 16, and 17.

No. 3 - dated March 31, 1958, extended the completion date of the project work from April 1, 1958, to June 1, 1958. Also extended the Government royalty provision from 10 to 11 years.

Termination Agreement, dated May 16, 1958, effective March 21, 1958.

Final Reports -

Operator's, dated April, 1958, received in Washington April 28, 1958.

Field Team's, dated August 26, 1958, received in Washington September 10, 1958.

3. Audit Report of Review, dated June 11, 1958.

Total cost as billed by Contractor	$16,013.22
Exceptions:	-0-
Total Accepted Cost.	$16,013.22
Government Participation @ 75%	$12,009.91

4. Certification, dated June 11, 1958.

Production

No ore was produced from the property included in the contract before or during the period of contract work. However, 3,460 tons, averaging 0.20% U_3O_8, were reported produced from the adjoining Arrowhead No. 1 claim from March, 1955, to February, 1957.

Ore Reserves

	Tons	Grade % U_3O_8
	3,972 (indicated)	0.182
	8,635 (inferred)	0.184
Total	12,607	0.183 av. grade

5. Comments -

The Field Team did not comment on the quality and efficiency of the work performed by the Operator. However, the Operator furnished a satisfactory final report and, also, monthly reports, except that no ore reserve calculations were furnished in the reports. Under Stage I, 20 rotary non-core holes were drilled, aggregating 2,686 feet, to an average depth of 134 feet, and under Stage II, 8 rotary non-core holes were drilled, aggregating 900 feet, to an average depth of 112.5 feet. Hard, loose granite boulders and associated material made drilling slow and costly. An average of six three-cone, roller-type rock bits were required to finish each hole. Drilling was dry where it was possible to use compressed air to collect drill cuttings, but it was necessary to use water in parts of some holes to collect drill cuttings. Drill cuttings were collected at 2-foot intervals. The holes were logged geologically and probed for radioactivity.

The project was established to explore for uranium-bearing ore in the sedimentary rocks of the Tertiary Tepee Trail formation or conglomerate material and the underlying contact zone of Precambrian granite. ~~underlying the property~~. Uranium ore was being mined from an open pit on the adjoining Arrowhead No. 1 claim before the DMEA program. Uranium, in the mineral coffinite, occurs principally as interstitial mineralization between grains, pebbles of arkosic sandstone, and boulders of conglomerate, and locally forms rinds around some of the rock fragments. Uranium is not in balance with its radioactive daughter products in the deposit so far mined; uranium values of the ore exceed the equivalent uranium values by as much as 50 percent.

Seven holes drilled on the Arrowhead No. 2 claim, Nos. 4, 5, and 6 (Stage I), and 5E, 6E, 7E, and 8E (Stage II) indicated that a significant ore deposit or several ore deposits with a grade of 0.10 percent U_3O_8 or better was discovered by the drilling done under the contract.

No additional exploration with Government assistance is recommended. However, additional development drilling will be required to delineate the discovered ore bodies.

F. L. Knouse

F. L. Knouse

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: Little Mo Mining, Inc.		Actual Cost	X
State: Wyoming		Agreed Unit Cost	X
Final Report of Audit		Commodity: Uranium	Docket No. DMEA-4709
Final Report of Review	x		Contract No. Idm-E1136

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) 3 inch diam Non-core rotary	4700	$20,369.00	3586	$15,437.22	$15,437.22
Surface Excavation					
Underground Excavation					
Roads and Trails + Drillsites		500.00		346.00	346.00
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) 50 chem. Analyses		250.00		230.00	230.00
Totals (Rounded)		$21,120.00		$16,013.22	* $16,013.22

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

Prepared by F. L. Kramer Date 9-12-58

31390

Building 20 - Federal Center
Denver 25, Colorado

9/17 800
9-19 720
~~September 9, 1963~~ ~~100~~
9/23 110
500
~~520~~

Mr. T. J. Vogenthaler
Administrative Manager
Susquehanna-Western, Inc.
777 Grant Street
Denver, Colorado

Re: DMEA-4709 (Uranium)
Contract Ldm-E1136
Little Mo Mining, Inc.
(Mint, et al., Claims)
Fremont County, Wyoming

Dear Mr. Vogenthaler:

Thank you for the copy of your letter to the Riverton Ranger in Riverton, Wyoming.

I want you to know that we appreciate both the way you handled this contract and also the good publicity that the Office of Minerals Exploration will receive.

Sincerely yours,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

cc Chief, Division of Field Operations, OME
Royalty Corres E1136
Chron
HMC/lm

September 6, 1963

OME
DEPARTMENT OF THE INTERIOR
SEP 9 1963
REGION III
DENVER, COLORADO

Mr. Roy Peck
The Riverton Ranger
Riverton, Wyoming

Dear Roy:

Recently we completed the repayment of a DMEA loan on the Arrowhead property. We have checked with the Office of Minerals Exploration, and they are most willing to have us release the story on it if you think it is worthwhile. Here is a draft with which you may use editor's license in order to make it suitable for publication:

SUSQUEHANNA-WESTERN, INC.,
COMPLETES DMEA LOAN REPAYMENT

The Little Mo property in Fremont County, Wyoming, borrowed $12,009.91 from the Office of Minerals Exploration when that property was new. This was a standard government-participation Defense Minerals Exploration loan. Word has just been received from the Office of Minerals Exploration Director, George Fumich, Jr., that complete repayment has been made by Susquehanna-Western, Inc.

When Susquehanna-Western, Inc., took over the property, the loan repayment had only been started. Past-due royalties were paid by Susquehanna-Western, Inc., and then further production generated the balance of payments amounting to $9,982.09. Almost all of this money has been repaid since March, 1962.

We hope you can use this material.

Very truly yours,

SUSQUEHANNA-WESTERN, INC.

T. J. Vogenthaler
Administrative Manager

TJV:cw
cc: Mr. G. H. Bryant
Mr. H. Conners — E W. Davis

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

[redacted]

AREA V

OFFICE OF
AREA DIRECTOR

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 9 1963
224 NEW CUSTOM HOUSE
DENVER, COLORADO 80202

DATE	INITIALS	CODE
9-9		100
		~~200~~
		~~500~~
		200

September 5, 1963

Memorandum

To: George Fumich, Jr., Director, OME

From: Acting Area Director, Area V Mineral Resource Office

Subject: DMEA 4709, Contract E-1136

Mr. Tom Vogenthaler of Susquehanna Western, Inc., phoned today regarding possible publicity. He stated that you had written them regarding a complete payment on DMEA 4709, Contract E-1136, on the Little Mo in Wyoming. I suggested that he either phone or write to you before he issued any story to the newspapers because you might be sending out a press release.

Robert W. Geehan
Robert W. Geehan

Copy to:
Director's reading file

News release To Information Division 9/5

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/21	Murphy	500
	Grant	500
8/21	Talbert	800
"	On leave	120
8/21	Johnson	110
"	Frost	100
		220

AUG 21 1963

Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming
Contract Ida-Z1136

Gentlemen:

This is to advise that the final payment made by the Susquehanna-Western, Inc. completes payment of the Government's participation of $12,009.91 in the above-referenced exploration contract for uranium. As a result of the payment, the Government retains no lien or claim against the property or any future production therefrom.

Sincerely yours,

George Fumich, Jr. (gfa)

Director

FMMurphy/mm
8/21/63
cc: Clifford A. Reed, Box 56, Kirby, Wyoming
Director's Reading File
CA&A Division
Region III
Docket
Code 500

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/21	Murphy	500
	Franklin	500
8/21	Talbut	800
"	On leave	120
8/21	Johnson	110
"	Fumich	100
		210

AUG 21 1963

Susquehanna-Western, Inc.
777 Grant Street
Denver 3, Colorado

Re: DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming
Contract Idm-E1136

Gentlemen:

This is to advise that the Susquehanna-Western, Inc. check No. 1665 in the sum of $264.72, submitted August 14, 1963, completes payment of the Government's participation of $12,009.91 in the above-referenced exploration contract for uranium. As a result of the payment, the Government retains no lien or claim against the property or any future production therefrom.

Sincerely yours,

George Fumich, Jr. (gfa)

Director

FMMurphy/nm
8/21/63
cc: Director's Reading File
Region III
CA&A Division
Docket
Code 500

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/21	Murphy	500
	Fowler	500
8/21	Talbot	800
"	On leave	120
8/21	Johnson	110
"	Fumich	100
		220

AUG 21 1963

Mr. Clifford A. Reed
Box 56
Kirby, Wyoming

Re: DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming
Contract Idm-E1136

Dear Mr. Reed:

Enclosed is a self-explanatory letter of today to Little Mo Mining, Inc.

This correspondence relates to the Consent to Lien and Subordination Agreement dated September 7, 1957, signed by you under the Defense Minerals Exploration Administration program which has been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

George Fumich, Jr. (gfa)

Director

Enclosure

FMMurphy/mm
8/21/63
cc: Director's Reading File
Region III
Docket
Code 500

8623

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/21	Murphy	500
		500
2/21	Talbot	800
2/21	Selbergen	120
"	Johnson	110
2-21	Fumich	100
		220

Mr. Olin M. Hart
Staff Geologist
Susquehanna-Western, Inc.
777 Grant Street
Denver 3, Colorado

FEB 21 1962

Re: IMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming
Contract Idm-E1136

Dear Mr. Hart:

Mr. H. M. Connors, Acting Field Officer, OME, Region III, forwarded your letter of February 5, 1962, and attachment to this office for reply.

In answer to your request, we are enclosing one copy each of the subject contract, three amendments, termination agreement, and certification.

Government participation under the contract amounted to $12,009.91, of which the Operator repaid $158.66, leaving a balance of $11,851.25 due the Government.

Royalty payments should be made to the Field Officer, OME, Region III, Building 20, Denver Federal Center, Denver 25, Colorado, (by the purchaser) with checks drawn payable to the Office of Minerals Exploration. Each check should be accompanied by suitable sales evidence - such as copies of settlement sheets - showing the name of the purchaser, the quantity and grade of the products sold, and the price and charges, certified to be correct by the purchaser.

You are requested to notify the Field Officer of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Also if production ceases at any time for an extended period, please notify the Field Officer accordingly at six-month intervals.

FMMurphy/gla 2-21-62
cc to: Director's R. File
Contract Division
Region III (2)
Docket
Code 500

Sincerely yours,

George Fumich, Jr.

Director

Enclosures

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

DMEA-4709

February 19, 1963

Memorandum

To: Chief, Fiscal Section
Division of Administrative Services
Office of the Secretary

From: E. D. Talbert, Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-4849 (Uranium)
Kanter-Levy Company
Cave Line et al., Claims
Big Horn County, Wyoming
Contract Idm-E1173
and
DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint et al., Claims
Fremont County, Wyoming
Contract Idm-E1136

The following OME Region III royalty receipts under symbol 14X4401 were erroneously reported for and credited to the DMEA account for contract Idm-E1173, Kanter-Levy Company:

Abstract of Remittances No.	Date	Amount
'62-11-6	11-27-62	$5,964.96
"	"	94.99
'62-12-1	12-4-62	78.41
'62-12-4	12-14-62	80.14
'62-12-6	12-27-62	118.35
'63-1-1	1-4-63	188.62
'63-1-5	1-15-63	106.06
'63-1-7	1-31-63	232.51
'63-2-1	2-6-63	231.05
'63-2-2	2-11-63	177.74
	Total	$7,272.83

43683

These royalty receipts properly should have been reported for contract Idm-41136, Little Mo Mining, Inc. Accordingly, you are requested to make an appropriate adjustment in your accounts for the two contracts.

EDTalbert/ama 2-19-63

cc:
Docket - DMEA-4709
Director's Reading File
CA & A Division
Region III (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 19 1962

DATE	INITIALS	CODE
2/19	[illegible]	800
		120
2/19	Murphy	500
		140
		500
		220

AIRMAIL

February 16, 1962

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: DMEA-4709 (Uranium)
Contract Idm-E1136
Little Mo Mining Inc.
(Mint, et al., Claims)
Fremont County, Wyoming

This has further reference to your memorandum of February 12, 1962 on the subject docket.

I met Mr. Olin Hart several years ago when he was head of the AEC of Edgemont, South Dakota. He was most cooperative with us. When the AEC cut their force, Mr. Hart went with the Susquehanna-Western, Inc. and became head of their land department.

On February 1, 1962 Mr. Hart telephoned me and asked if I could bring the subject contract to his office which I was happy to do. He informed me that the Little Mo Mining Inc. had transferred the property to Helmer & Cummings, who operated the property and later became involved in a lawsuit with the Little Mo Mining Company. Susquehanna-Western purchased the property but are withholding the funds due the Government on royalty on past production.

A few minutes ago Mr. Olin Hart telephoned me and asked me how soon he could expect a copy of the subject contract which I requested from you in my memorandum of February 6, 1962.

Will you please advise the date on or before which Mr. Olin Hart may expect to receive a copy of the subject contract.

RECEIVED
FEB 19 1962
ASSOC. SOLICITOR
MINERAL RESOURCES

Yours very truly,

Hugh M. Connors

Hugh M. Connors
Acting Field Officer, OME
Region III

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

February 14, 1963

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: DMEA-4709 (Uranium)
Contract Idm-E1136
Little Mo Mining Inc.
(Mint, et al., Claims)
Fremont County, Wyoming

DMEA-4849 (Uranium)
Contract Idm-E1173
Kanter-Levy Company
(Cave Line, etal., Claims)
Big Horn County, Wyoming

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 18 1963

DATE	INITIALS	CODE
2/19		800
		500

I made a huge error in crediting royalty payments to the subject contracts royalty accounts.

Attached is a photo copy of the royalty payments which were credited to E1173 which should have been properly credited to E1136. Our records have been corrected as shown. Will you please correct your records and advise the Fiscal Section to make the necessary corrections.

The royalty account on E1136 now shows that $9,300.65 has been paid leaving only $2,709.26 to repay the Government participation in full.

I talked to Mr. Kahler, Auditor at Susquehanna-Western, Inc., who informs me that his records check with mine.

Hugh M. Connors

Hugh M. Connors

Attachment

5,964.96
94.99
78.41
80.14
118.35
79.61
109.01
106.06
232.51
231.05
177.74
7,272.83
1,869.16
158.66
9,300.65

12,009.91
9,300.65
2,709.26

Mo

E 1136

	Lot	Dry Tons	Gross Value	Net Value	Value Per Ton	$ Rate	Royalty Due	Royalty Paid	Remarks
[illegible]	1215	19,516.953	119,301.06			5	5,964.96	5,964.96	
11-13-62	1217	281.041	1,899.85			✓	94.99	94.99	
11-17-62	1221	200.030	1568.22			✓	78.41	78.41	
11-30-62	1225	278.247	1602.70			✓	80.14	80.14	
12-5-62	1230	262.998	2366.98			✓	118.35	118.35	
12-10-62	1235	276.427	1592.21			✓	79.61	79.61	
12-20-62	1236	278.080	2180.14			✓	109.01	109.01	
12-31-62	1245	270.559	2121.20			✓	106.06	106.06	
1-22-63	1249	274.349	4650.25			✓	232.51	232.51	
1-28-63	1251	288.806	4620.93			✓	231.05	231.05	
2-4-63	1257	198.591	3554.78			✓	177.74	177.74	

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 8 1962

DATE		
2/8	MW	800
	Murphy	500
		140
	Murphy	500
		220

February 6, 1962

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint, et al., claims)
Fremont County, Wyoming

Attached are a copy of a letter from Mr. Olin M. Hart dated February 5, 1962 and a copy of the Assignment of Conveyance of Interest in Mining Claims.

Will you please forward Mr. Hart a copy of the subject contract, on receipt of which he states he will pay the past due royalty.

Hugh M. Connors

Hugh M. Connors

Sept. 26 1957
Royalty extended to 11 yrs. by amend No. 3

Attachments

Royalty due thru Sept 26 1968 -
7 yr.

SUSQUEHANNA - WESTERN, INC.

777 GRANT STREET • DENVER 3, COLORADO • AComa 2-4761

February 5, 1962

OME
DEPARTMENT OF THE INTERIOR
FEB 6 1962
REGION III
DENVER, COLORADO

Mr. H. M. Connors, Field Officer
Office of Minerals Exploration
Region III
Bldg. 20, Denver Federal Center
Denver, Colorado

Dear Mr. Connors:

Attached is a copy of "Assignment and Conveyance of Interest in Mining Claims" conveying the Arrowhead and other claims to Susquehanna-Western, Inc.

I trust that your receipt of the above mention assignment is sufficient for your records to show Susquehanna as owner and controller of the Arrowhead property, and as per our discussion as of February 1, 1962, you will request at your earliest convenience a copy of the DMEA contract Idm E 1136, subjugating the property to a 5% royalty, for our use and files.

Your immediate attention to this matter would be greatly appreciated so the royalty distribution on the property can be finalized.

Yours very truly,

SUSQUEHANNA-WESTERN, INC.

Olin M. Hart

Olin M. Hart
Staff Geologist

OMH/ms
Encl.

FEB 3 1962

RMD

ASSIGNMENT AND CONVEYANCE OF

INTEREST IN MINING CLAIMS

WHEREAS, by that certain Mining Agreement dated September 11, 1960, Little Mo Mining, Inc. did grant unto Hilmer-Cummings Mining the sole and exclusive right and license to enter upon the following described unpatented lode mining claims and to mine all uranium and other minerals thereon; and

WHEREAS, by that certain Mining Agreement dated September 8, 1960, and recorded in Book 188 at Page 49 of the Fremont County, Wyoming, records, Clifford A. Reed did grant unto Hilmer-Cummings Mining the sole and exclusive right and license to enter upon the following described unpatented lode mining claims and to mine all uranium and other minerals thereon; and

WHEREAS, by that certain Agreement dated July 13, 1960, Myrtle B. Reed did sell and convey all of her right, title and interest in and to the following described unpatented lode mining claims to Martin C. Hilmer and John D. Cummings, subject to the terms of such Agreement; and

WHEREAS, Hilmer-Cummings Mining, a co-partnership composed of Martin C. Hilmer and John D. Cummings, and Martin C. Hilmer and John D. Cummings individually, do desire to sell, transfer, assign and convey unto Susquehanna-Western, Inc. all of their right, title and interest in and to the following described unpatented lode mining claims and in and to the aforementioned agreements;

NOW, THEREFORE, Hilmer-Cummings Mining, a co-partnership composed of Martin C. Hilmer and John D. Cummings, and Martin C. Hilmer and John D. Cummings individually, parties of the first part, for and in consideration of the sum of Seventeen

Thousand Five Hundred Dollars ($17,500.00) paid by Susquehanna-Western, Inc. and other good and valuable considerations, the receipt and sufficiency of which are hereby confessed and acknowledged, do hereby sell, assign, transfer, set over and convey unto Susquehanna-Western, Inc., a Wisconsin corporation, with offices at 777 Grant Street, Denver, Colorado, hereinafter called "Susquehanna", all of their right, title and interest in and to the following described unpatented lode mining claims situate in the County of Fremont, State of Wyoming, being more particularly described in the respective location certificates on file in the office of the Recorder of Fremont County, Wyoming, to-wit:

Arrowhead claims Nos. 2 and 5, located in Sections 28 and 29, Township 40 North, Range 92 West, 6th P. M.; # 2 only

Mint claims Nos. 1, 2, 3 and 4, located in Section 29, Township 40 North, Range 92 West, 6th P. M.; yes

Arrowhead claims Nos. 1 and 3 located in Sections 28 and 29, Township 40 North, Range 92 West, 6th P. M.; no

Lucky Cliff claims Nos. 1, 2 and 3, located in Section 22, Township 40 North, Range 92 West, 6th P. M.; no

Interruption claim No. 1, located in Section 28, and yes

Interruption claims Nos. 2 and 3, located in Section 33, Township 40 North, Range 92 West, 6th P. M.; yes

Red Rock claim located in Section 28, Township 40 North, Range 92 West, 6th P. M.; no

Arrowhead claim No. 4, located in Sections 28 and 29, Township 40 North, Range 92 West, 6th P. M.; no

Mint claims 5, 6, 7, 9, 10, 11 through 14, both inclusive, and 16 through 25, both inclusive, Section 29, Township 40 North, Range 92 West, 6th P. M. yes except 20

(The above described unpatented lode mining claims shall hereinafter be referred to as "the Claims".)

and further, parties of the first part do hereby assign, transfer and convey to Susquehanna all of their right, title and interest in and to the aforementioned agreements by and between Little No Mining, Inc., Clifford A. Reed, and Myrtle B. Reed and the parties of the first part, subject, however, to the reservation hereinafter set forth and the provisions hereinafter contained.

There is expressly excepted to and reserved by parties of the first part Twenty-Five Percent (25%) of the net profits (as hereinafter defined) realized from the mining, producing and marketing of any and all uranium and other minerals mined, produced and sold pursuant to the interests herein conveyed and assigned. "Net profits" are defined for the purposes hereof as any and all proceeds received from the sale of any of such minerals, less the following:

A. Each and every cost and expense, capital or otherwise, incurred by Susquehanna in exploring for, developing, mining, producing and in delivering to the ore-buying station or the processing mill or plant the minerals, including but without being limited thereto, the following:

1. All sums expended by Susquehanna for labor, equipment, fuel, materials, equipment rental and for field labor and field supervision for the purpose of exploring and determining the mineral content of and developing of and mining of and producing the Claims and the lands covered thereby. If equipment owned by Susquehanna and not acquired for the property is used thereon, the fair rental value thereof shall be charged.

2. All sums expended by Susquehanna in transporting the minerals from the point of production and removal to the ore-buying station or mill or to the point where the sums are sold.

3. All taxes levied against the lands above described and against the gross production of the minerals therefrom, including ad valorem taxes for property placed upon the above described lands by the parties hereto.

4. All sums paid by Susquehanna as rentals, royalties or yearly payments reserved in the Agreements referred to in the first three paragraphs of this Assignment.

5. All premiums paid for workmen's compensation, public liability, property damage or other types of casualty or other insurance obtained in connection with or related to the exploration and development of the Claims conveyed.

6. All expenses incurred in connection with the examination and perfecting and defense of title to the Claims, including reasonable attorneys' fees, provided that such expenses shall not exceed $1,000.00 without the prior written approval of the parties of the first part.

Anything in this Paragraph A to the contrary notwithstanding, no travel expenses of any of Susquehanna's supervisory personnel not permanently located at Riverton, Wyoming, shall be charged as an expense.

B. An amount equal to seven and one-half per cent (7½%) of those costs and expenses deductible by Susquehanna pursuant to Subparagraph A above, which amount shall constitute and shall operate in liquidation of Susquehanna's overhead charges allocable to the Claims.

C. All losses, damages or liabilities sustained or incurred by Susquehanna in operating, maintaining and developing the Claims.

D. At such time as net profits as hereinabove defined and calculated shall have totalled One Hundred Sixty Thousand Dollars ($160,000.00) and there shall have been paid in the manner hereinafter specified to parties of the first part Twenty-Five Percent (25%) of said sum or Forty Thousand Dollars ($40,000.00) then and at such time, Susquehanna shall be entitled to deduct in the determination of net profits accruing thereafter the sum of Two Thousand Dollars ($2,000.00).

In the event that the minerals are not sold but instead are processed by Susquehanna, it shall be presumed for the purposes of determining net profits under this Agreement that a sale of such minerals has transpired, with Susquehanna being the purchaser at such sale and paying a purchase price for such minerals equal to the fair market value of any of such minerals as may be recovered by Susquehanna in initial processing and prior to the time that the residue thereof shall be first deposited in the tailings pile by Susquehanna. Until March 31, 1962, fair market value for uranium-bearing ore shall be the price established by the Atomic Energy Commission, Domestic Uranium Circular 5, as now or hereafter amended, for ore of similar uranium content after deduction has been made for mill penalties and

haulage not reimbursed and exclusive of mining development allowances, other allowances and bonuses. Thereafter, the fair market value for uranium-bearing ore shall be the going field price, that is, the amount which a third party would pay for similar ores of similar quality and quantity and similarly located, less mill penalties and haulage costs. If other mineral-bearing ores are recovered in the initial processing, the fair market value for such ores shall be computed as to such recovered minerals on the basis of the price which a third party would pay for similar ores of similar quality and quantity and similarly located prevailing at the time of removal of such minerals in their crude state at the mine. In the event that Susquehanna sells or salvages any equipment, supplies and materials purchased by it under this Agreement or purchased by it and used by it upon the Claims and if the cost of the same has been charged against income pursuant to the provisions of Subparagraph A above, then the proceeds received for the sale of such equipment or if not sold the salvage value of the same shall be treated as income for the purposes of determining net profits hereunder. Parties of the first part shall be entitled to receive their percentage of net profits as hereinabove provided when it shall appear at the end of any given month that net profits have been realized. Payment of any portion of net profits shall be made within twenty (20) days after the end of any given month in which the same are realized. In computing net profits, deficits shall be carried over from month to month and the accumulated totals thereto applied against subsequent receipts or credits; however, if net profits are at any time realized and payment made therefor, parties of the first part shall never be obligated to repay any portion of the same should ultimate losses or deficits occur pursuant to Susquehanna's subsequent operations. Susquehanna shall keep an accurate record of all accounts relating

to mining, producing and selling the minerals, showing all receipts and credits received and all sums expended and costs incurred, which records and accounts shall be available at all reasonable times for the examination and inspection of the parties of the first part or their duly authorized representatives; and within twenty (20) days after the closing of each calendar month following the date of this Assignment Susquehanna shall furnish to parties of the first part monthly statements of investment and expenses incurred and credits and moneys received during the preceding calendar month. If requested by parties of the first part, such statements shall be accompanied by true copies of invoices and billings, by copies of all assays of production made during the month and by all weighing receipts of production during such month. In the event that parties of the first part do not protest or reject any such monthly statements within eighteen (18) months from the mailing of the same, it shall be conclusively presumed that parties of the first part have accepted and concurred in the terms of the same.

Any and all payments made pursuant to this Assignment, including any payments relating to the net profits interest herein reserved, shall be made by Susquehanna to the Clerk of the District Court in and for the County of Fremont, State of Wyoming, by an appropriate pleading in Civil Action No. 10155 presently pending in said Court or by such other appropriate action in said District Court as will protect the rights of the parties hereto and the rights of any other party who may be adjudged entitled to said payments. All of such payments shall be delivered by the Court to the appropriate party or parties upon the determination of their rights thereto in said action.

Parties of the first part represent and warrant that they are the owners of the exclusive right and option to mine and remove the uranium and other minerals from the Claims and are a

possession of the same under and pursuant to the terms and provisions of the agreements mentioned in the first three paragraphs hereof, subject, however, to the terms and provisions of such agreements; that any prior agreements covering the operation of said claims have been properly terminated or released and that the Claims are free and clear of liens, encumbrances or unrecorded agreements; that the Claims have been validly located and maintained in accordance with the mining laws of the United States of America and of the State in which they are located; that all assessment work required under such laws has been performed; and that parties of the first part will forever defend the title to said claims against any and all persons claiming by, through or under them except any claim which Robert C. Foster, Jr. may assert thereto and except an existing DMEA loan outstanding against the property.

All notices, reports and other correspondence required or made necessary by the terms of this Assignment shall be determined to have been properly served except for actual notice or delivery as required or other procedures provided for, if and when sent by United States mail or Western Union telegram, postage or charges prepaid, within the time required to the parties hereto at the addresses set forth below, as follows:

Parties of the First Part:
Box 206
Riverton, Wyoming

Susquehanna-Western, Inc.:
777 Grant Street
Denver, Colorado

Either party may effect a change of address by advising the other party by registered mail of such desired change.

IN WITNESS WHEREOF, the undersigned have executed this instrument as of the 22nd day of November, 1961.

HILMER-CUMMINGS MINING

By Martin C. Hilmer

By John D. Cummings

Martin C. Hilmer
Martin C. Hilmer

John D. Cummings
John D. Cummings

STATE OF ILLINOIS)
) ss
COUNTY OF COOK)

On this 27 day of November, 1961, before me personally appeared MARTIN C. HILMER, to me known to be the person who executed the foregoing instrument, and known to me to be a general partner of HILMER-CUMMINGS MINING, who executed the foregoing instrument individually and in behalf of Hilmer-Cummings Mining, and acknowledged that he executed the same as his free act and deed and as the free act and deed of Hilmer-Cummings Mining.

Given under my hand and seal the day and year in this certificate first above written.

Notary Public

My commission expires:

30 day 1962

STATE OF WYOMING)
) ss
COUNTY OF FREMONT)

On this 28 day of November, 1961, before me personally appeared JOHN D. CUMMINGS, to me known to be the person who executed the foregoing instrument, and known to me to be a general partner of HILMER-CUMMINGS MINING, who executed the foregoing instrument individually and in behalf of Hilmer-Cummings Mining, and acknowledged that he executed the same as his free act and deed and as the free act and deed of Hilmer-Cummings Mining.

Given under my hand and seal the day and year in this certificate first above written.

Lois M Chambers
Notary Public

My commission expires:

August 2, 1965

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/12	[illegible]	120
2/12	[illegible]	500
		~~500~~
2/12	Talbot	800
"	Johnson	110
2/12	[illegible]	100
		220
		500

FEB 12 1962

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: DMEA-4709 (Uranium)
Little Mo Mining Inc.
Mint, et al., Claims
Fremont County, Wyoming
Contract Idm-R1136

Reference is made to your memorandum of February 2, 1962. In view of the conflicting information we have received since August 26, 1958, can you shed a little more light on just what happened with regard to production matters under this contract. What brought the matter up with Mr. Owen Hart?

Enclosed for your information and future reference are two copies of a letter giving details of the cost of long-hole drilling in the limestones of the Mutaline Mining district. The speech mentioned in the letter adds little to the basic facts.

/s/ George C. Selfridge (GCS)

Enclosure

GCSelfridge/hb (2/9/62)
Rewritten 2/12/62)
cc to: Docket DMEA-4709
Director's Reading File
CA & A Division
G. C. Selfridge
Code 500

43683

Referring to your memorandum of February 2, 1962, there appears to be some discrepancies in the reports we have received on the production from the Little Mo Mining Company. In view of the previous production reports and your report of September 26, 1960, can you shed .....

Re: DMBA-4709

Mr. Selfridge —

Much as I hate to take exception, I can't agree to your first two lines. Is it only the Audit Div. that is an s.o.b.? Isn't DME as a whole interested?

May I suggest:

"In view of ~~to~~ your answer to question number 6 on DME Form 22 dated September 26, 1960, and the production information given in semi-annual and annual reports and the final Field Team report, can you shed [etc]"

Talbut
2/8/62

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/8	GCS	120
2/8	Murphy	500
		800
		110
		100
		220

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming
Contract Idm-E1136

For the information of the Audit Division and a revision of the Report of Royalty Review dated October 5, 1960, which was based on the Final Field Team report, ~~and~~ subsequent semiannual and annual reports, and MME Form 22 of September 26, 1960, can you shed a little more light on just what happened with regard to production matters under this contract. What brought the matter up with Mr. Owen Hart?

Enclosed for your information and future reference are two copies of a letter giving details of the cost of long-hole drilling in the limestones of the Metaline mining district. The speech mentioned in the letter adds little to the basic facts.

/s/ George C. Selfridge

(242)

Enclosure

GCSelfridge/hb (2/8/62)
cc to: Docket DMEA-4709
Director's Reading File
CA&A Division
G.C.Selfridge
Code 500

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/8	GCS	120
2/8	Murphy	500
		800
		110
		100
		270

500

Memorandum

To: Acting Field Offic Region III

From: Chief, Division ofield Operations

Subject: DMEA-4709 (Uranium
Little Mo Mining, .
Mint, et al., Clai
Fremont County, Wyng
Contract Idm-E1136

For the information of the Auc Division and a revision of the Report of Royalty Review datectober 5, 1960, which was based on the Final Field Team reportsubsequent semiannual and annual reports, and MME Form 22 of Sember 26, 1960, can you shed a little more light on just whatappened with regard to production matters under this contract. at brought the matter up with Mr. Owen Hart?

Enclosed for your information d future reference are two copies of a letter giving details of e cost of long-hole drilling in the limestones of the Metalline ining district. The speech mentioned in the letter adds litt to the basic facts.

George C. Selfridge (GCS)

Enclosure

GCSelfridge/hb (2/9/62)
cc to: Docket DMEA-4709
Director's Reading Fle
CA & A Division
G.C.Selfridge
Code 500

Reference is made to your memorandum of February 2, 1962, for review of the conflicting information ~~regarding production~~ ~~that~~ we have received since August 26, 1958,

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/6	cae	220
2/8	Selfridge	130
2/9	Murphy	500

FEB 6 - 1962

Memorandum

To: Chief, Division of Field Operations

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

Subject: DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et. al., Claims
Fremont County, Wyoming
Contract Idm-E1136

As I am sure you are well aware, this Division necessarily must depend upon engineering opinions as to propriety of reported or recorded production in preparation of a royalty review or the performance of a royalty audit. This was the case in the release on October 5, 1960, of a Report of Royalty Review covering sales of production applicable to the subject contract during the period September 26, 1957, through September 26, 1960.

This Report of Royalty Review states that only 164.907 short dry tons of ore were sold for $3,222.39 in proceeds subject to royalty during the period under review. In connection with this review, Hugh M. Connors on September 26, 1960, executed a MME Form 22, in which he indicates that periodic examinations of operations indicate that production is properly reported. A 1959 Annual Report of Certified Projects, also executed by Mr. Connors, states that the property was examined on March 29, 1960, and that only 164.907 tons of saleable ore had been produced to date.

In a Semi-Annual Report of Certified Projects for the last six months of 1958, an engineer by the name of Marshall states that the property was examined on February 25, 1959, the only production during the period and to date was 14.8 tons of non-saleable ore, and that operations were shut down. A similar report for the first half of 1958, prepared by an engineer named Binyon, states that the property was examined on September 25, 1958, no production had occurred, and the only activity was the stripping of an open cut. The Field Team's Final Report, prepared by D. F. Davidson and W. W. Winkel on August 26, 1958, states on page 6 that "No ore has been produced from the claims subject to DMEA royalty".

43683

Now comes the "atomic bomb", which completely devastates all of the statements set forth in the foregoing paragraphs. Mr. Connor's memorandum of February 2, 1962, advises that Mr. Owen Hart of Susquehanna-Western, Inc., "admits" that royalty is due the Government on sales proceeds of $44,765.72 in addition to the $3,222.39 previously reported. It is to be noted that the list supporting this admission indicates the production as originating from "Arrowhead # 1 & 2", "Arrowhead", and "Arrowhead No. 2" claims, whereas only the Arrowhead No. 2 claim is included under the contract along with 26 other unpatented claims.

This list completely discredits this Division's Report of Royalty Review. Proceeds of $11,366.94 are "admitted" for the period covered by the review, as compared to the $3,222.39 reported therein.

I suggest that Mr. Connors be requested to furnish an explanation of this matter.

EDTalbert/ama 2-6-62

cc:
Docket
Director's Reading File
CA & A Division

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

CHIEF'S FILE COPY
O. M. E.
RECEIVED FEB 6 1962

DATE		
2/6	[illegible]	800
2/8	Murphy	120
		500

February 2, 1962

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint, et al., claims)
Fremont County, Wyoming

Yesterday I had a conference with Mr. Owen Hart of Susquehanna-Western, Inc. who stated that Susquehanna-Western now have the subject property.

Mr. Hart promised to forward me a copy of their agreement. He gave me the attached list of shipments of ore from the Arrowhead claims. He admits that royalty is due the Government on all ore shown on this list with the exception of the three lots on which $158.66 has been paid. Mr. Hart stated that all royalty money has been impounded by the court together with other money and that we will receive all the royalty past due and that which will become due.

When Mr. Hart forwards me the copy of their agreement he will also ask me to obtain for him a copy of the subject contract and I will so advise you when he requests it.

Hugh M. Connors

Hugh M. Connors

Attachments

¤

996.21
1,267.05
3,117.22
668.90
293.02
222.34
724.34
458.55
544.95
123.29
3,070.16
1,028.94
851.99
3,094.14
5,963.23
5,275.59
3,844.71
1,178.88
1,394.00
3,019.54
3,898.57
3,109.98
3,179.49
1,836.97
921.25
1,046.76
3,858.06
47,988.11
47,988.11 ¤

Date of receipt by Jackson

2-1-62

RMC.

PRODUCTION FROM ARROWHEAD CLAIMS, 1958

Date	Claim Name & No.	Producer	Dry tons Ore	lbs. U_3O_8	Amount Paid for Ore	Premium Bonus	Mine Devel.	Haulage	Total	DMEA
2/27/1958	Arrowhead #1&2	Little Mo Mining Co.	45.856	210.94	$ 738.29	$ 20.64	$ 105.47	$ 131.81	$ 996.21	$
3/20/1958	Arrowhead #1&2	Little Mo Mining Co.	96.436	308.60	833.22		154.30	279.53	1267.05	
5/23/1958	Arrowhead #1&2	Little Mo. Mining Co.	177.650	532.95	1332.38		266.48	518.36	2117.22	
6/18/1958	Arrowhead #1&2	Little Mo Mining Co.	56.306	168.92	422.30		84.46	162.14	668.90	
7/17/1958	Arrowhead #1&2	Little Mo Mining Co.	42.568	85.14	127.71		42.57	122.74	293.02	
10/13/1958	Arrowhead #1&2	Little Mo Mining Co.	28.940	63.67	108.24		31.84	82.26	222.34	
10/30/1958	Arrowhead #1&2	Little Mo Mining Co.	55.060	176.19	474.71		88.10	160.53	724.34	

PRODUCTION FROM ARROWHEAD CLAIMS, 1959

3/16/1959	Arrowhead #1&2	Little Mo Mining Co.	38.296	114.89	287.23		57.45	113.85	458.53	
4/4/1959	Arrowhead #1&2	Little Mo Mining Co.	56.012	145.63	305.82		72.82	166.31	544.95	
6/13/1959	Arrowhead #1&2	Little Mo Mining Co.	12.827	33.35	70.04		16.68	36.57	123.29	3.70
6/27/1959	Arrowhead #1&2	Little Mo Mining Co.	104.600	439.32	1537.62	15.69	219.66	297.19	2070.16	103.51
8/17/1959	Arrowhead #1&2	Little Mo Mining Co.	47.480	218.41	764.44	21.37	109.21	133.92	1028.94	51.45
										158.66

PRODUCTION FROM ARROWHEAD CLAIMS, 1960

7/8/1960	Arrowhead	Hilmer-Cummings Mining	104.046	249.71	474.45		124.86	252.68	851.99	11,366.94
9/30/1960	Arrowhead	Hilmer-Cummings Mining	80.530	450.97	1578.40	96.64	225.49	193.61	2094.14	
10/6/1960	Arrowhead	Hilmer-Cummings Mining	289.780	1275.03	4462.61	86.93	637.52	745.43	5963.23	
10/31/1960	Arrowhead	Hilmer-Cummings Mining	283.536	1134.15	3969.53		567.08	738.98	5275.59	
11/17/1960	Arrowhead	Hilmer-Cummings Mining	270.803	750.25	1743.98		379.13	721.60	2844.71	
12/15/1960	Arrowhead	Hilmer-Cummings Mining	177.307	354.61	531.92		177.31	469.65	1178.88	

PRODUCTION FROM ARROWHEAD CLAIMS, 1961

1/1961	Arrowhead #2	Hilmer-Cummings Mining	119.818	359.45	898.63		179.73	315.64	1394.00	
1/1961	Arrowhead #2	Hilmer-Cummings Mining	185.010	777.04	2719.64	27.75	388.52	493.63	3019.54	
2/9/1961	Arrowhead #2	Hilmer-Cummings Mining	181.568	835.21	2923.24	91.71	417.61	476.01	3898.57	
2/27/1961	Arrowhead #2	Hilmer-Cummings Mining	164.014	524.85	1417.10		262.43	430.45	2109.98	
3/31/1961	Arrowhead #2	Hilmer-Cummings Mining	187.632	562.90	1407.25		281.45	490.79	2179.49	
4/6/1961	Arrowhead #2	Hilmer-Cummings Mining	195.921	509.39	1069.72		254.70	512.55	1836.97	
4/6/1961	Arrowhead #2	Hilmer-Cummings Mining	109.898	263.76	501.14		131.88	288.23	921.25	
5/8/1961	Arrowhead #2	Hilmer-Cummings Mining	89.680	269.04	672.60		134.52	239.64	1046.76	
7/31/1961	Arrowhead #2	Hilmer-Cummings Mining	122.272	611.36	2139.76	91.70	305.68	320.92	2858.06	
									$47,988.11	

Arrowhead and Arrowhead No. 1 are not subordinated, however Arrowhead No. 2 is subordinated under Idm-E1136.

[illegible] 2/12/62

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 21 1960

DATE		CODE
10-21	gad	220
11/1	400	800
	Murphy	400
		220

Building 20 - Federal Center
Denver 25, Colorado

October 19, 1960

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of the Secretary, Department of the Interior
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint, et al., Claims)
Fremont County, Wyoming

Attached is the original Report of Royalty Review on the subject project dated October 5, 1960 covering the period September 26, 1957, through September 26, 1960.

Original signed by TMR

For

Hugh M. Connors

Attachment

HMC/lm
cc Chief, Division of Field Operations (2)
Royalty Corres E1136
Chron

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 21 1960

DATE	INITIALS	CODE
10-21	gad	VVO
10/21	[illegible]	800
10/24	[illegible]	500
		220

October 19, 1960

Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMRA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint, et al., Claims)
Fremont County, Wyoming

Gentlemen:

Enclosed is your copy of the Report of Royalty Review dated October 5, 1960 covering the period September 26, 1957, through September 26, 1960.

Yours very truly,

Original signed by TMR

For

Hugh M. Connors
Acting Field Officer
OME, Region III

Enclosures

HMC/lm
cc E. D. Talbert, Acting Chief
Contract Administration and Audit Division
Chief, Division of Field Operations (2)
Royalty Corres. E1136
Chron

OFFICIAL FILE COPY O. M. E. RECEIVED MAY 4 1960		
DATE	INITIALS	CODE
5-4	gad	220
5/4		800
		500
		2225

April 22, 1960

Department of the Interior
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4709 (Uranium)
Contract No. Ldm-71136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Attention: J. W. Townsend

Dear Sir

The bonus for this property was all paid before we put in an application for DMEA. However, if we are entitled to additional bonus we would be glad to know it. There was no bonus collected on the ore shipped from this property.

Very truly yours
LITTLE MO MINING, INC.

John Kummerfeld

John Kummerfeld, President

Copies to
Chief Division of Field Operations (2)

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 11 1960

DATE	INITIALS	CODE
4-11	gad	VVO
4/11	[illegible]	800
~~4/12~~	~~[illegible]~~	~~500~~
		225

XXXXXXXXXXXXXXXXXXXX
Building 20 - Federal Center
Denver 25, Colorado

April 7, 1960

Mr. Millard M. Dickey, Secretary
Little Mo Mining, Inc.
Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Dickey:

Three shipments of ore were made from the captioned property during 1959 on which the Government is entitled to bonus royalty as follows:

Liquidation Number	Bonus Payment	Bonus Royalty Due Government
390	$ 70.04	$ 2.10
401	$1537.62	$76.88
491	$ 764.44	$38.22
	$2372.10	$117.20

We presume that you have received the bonus payments from the AEC and, if so, will you please forward this office your check for $117.20 to bring this account into balance.

Very truly yours,

J. W. Townsend
Executive Officer, OME
Field Team, Region III

JWT/bjo

cc: Chmn. Op. Comm.(2)
Royalty corres. E1136
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/19/58	Crowe	700
9/19	Taffy	800
9/22	Selfridge	120
"	Johnson	110
"	Matthews	100
9/23	C. B.	220
		700

SEP 22 1958

Mr. Jesse C. Johnson
Director, Raw Materials Division
Atomic Energy Commission
1717 H Street, N. W.
Washington 25, D. C.

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Johnson:

The information promised in my letter of June 12, 1958, regarding the subject exploration contract, follows:

The contract was dated September 26, 1957, and covered an exploration program estimated to cost $21,120.00, with Government participation at 75 percent, or $15,840.00. Project contract work was started November 19, 1957, and was completed on March 20, 1958. Twenty-eight widespread non-core rotary holes were drilled from the surface of the property, aggregating 3,586 feet of drilling. The net cost of the drilling and related work thereto was $16,013.22, and the Government's participation was 75 percent, or $12,009.91. The exploration work was confined to 27 contiguous unpatented lode mining claims in secs. 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th P.M.& B., Fremont County, Wyoming.

As a result of the exploration work, there were discovered the following estimated ore reserves:

Ore Reserves
(Arrowhead Claim No. 2)

	Tons	Percent U_3O_8
Indicated ore	3,972	0.182
Inferred ore	8,635	0.184
Total	12,607	0.183 Av.

8623

A certification of discovery or development was issued June 11, 1958, a copy of which was forwarded to you on June 12, 1958.

Sincerely yours,

C. O. Mittendorf (for)

ACTING Director

cc to: Elton A. Youngberg
AEC Grand Junction Operations Office

FLKnouse/gla
9-19-58
cc to: Director's Reading File
Frank E. Johnson
Mr. Knouse
Field Team, Region III (2)

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 4 1958

DATE	INITIALS	CODE
9/4	C	220
		700

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

Date September 3, 1958

DMEA Docket No. 4709
DMEA Contract No. Idm-E1136
Commodity Uranium
Name of Applicant Little Mo Mining, Inc.
Name of Property Mint et al claims
Location of property Fremont County, Wyoming
Estimated cost of project $16,013.22

Memorandum

To: Frederick L. Knouse, Acting Director
Rare and Misc. Minerals Div., DMEA

From: James Paone, Bureau of Mines
Uranium Commodity Committee

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

1. Date of subject document: _____. 2. Date received by reviewer: _____

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked 'yes' above:

8. Factors meriting special consideration:

a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs
h. _____ ☐

9. Action advised:

a. Obtain information from applicant ☐
b. Refer to Field Team ☐
c. Denial ☐
d. Agree with Field Team ☒
e. Disagree with Field Team ☐
f. Suggest alternate plan ☐
g. Request another consultation ☐
h. Approval ☐
i. Consult with Mr. _____ at _____ AEC Office

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

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. ~~100~~	CDM	9/9
2. 110	JEJ	"
3. 800	EJM	9/9
4. 700 Mr. Krause		9/10
5.		
FROM:		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

INT.-DUP. SEC., WASH., D.C. M25803

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
August 28, 1958

SEP 2 1958

9/2	C	220
9/2	2/12	130
"	24	110
9/5	2/12	130
9/5	C	220
9/10	Knowles	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming - FINAL SUMMARY REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report, dated August 26, 1958, from D. F. Davidson, Geologist, Geological Survey, and E. O. Binyon, Mining Engineer, Bureau of Mines, pertaining to work completed under the subject contract. The original and one copy of the Operator's final report were forwarded by memorandum of April 4, 1958.

The contract was terminated before completion of all work originally provided for, by a TERMINATION AGREEMENT, dated May 16, 1958, which was made effective March 21, 1958.

Final payment to the Operator was processed by this office June 20, 1958, in conformance with the Report of Review of reported project costs by the Contract Administration and Audit Division, DMEA, dated June 11, 1958, which was released to this office June 19, 1958.

Exploration work completed under the contract consisted of the drilling of 28 holes, aggregating 3586 feet of non-core drilling. Work and services incident to the drilling consisted of 43-1/4 hours bulldozing time preparing access roads and drill sites, 10 hours drill crew standby time, incidental allowance for 3586 feet of drilling, and analysis of 46 samples for U_3O_8 content; all at a total accepted cost of $16,013.22, toward which the Government contributed 75 percent, or $12,009.91.

The exploration work resulted in the discovery or development of a significant quantity of uranium ore, on which a Certification was issued June 11, 1958.

J. W. Townsend

J. W. Townsend

Robert U. King

Robert U. King
for E. N. Harshman

Reviewed by
DMEA OPERATING COMMITTEE

9-5-58
(date)

FINAL F.T. REPORT

9/5 JB 130
220

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT FINAL REPORT BY EXAMINING TEAM
REGION III

DMEA
DEPARTMENT OF THE INTERIOR
AUG 28 1958
REGION III
DENVER, COLORADO

DMEA 4709

Contract Idm-E 1136

Little Mo Mining, Inc.

Mint et al. claims

Fremont County, Wyoming

Uranium

Joint Final Engineering and Geologic Report

by

D. F. Davidson, Geologist
Geological Survey

W. W. Winkel, Mining Engineer
Bureau of Mines

August 26, 1958

Reviewed by
DMEA OPERATING COMMITTEE
9-5-58
(date)

CONTENTS

	Page
Summary and introduction	1
Location and physical features	2
Property	3
History and production	6
Geology and ore deposits	6
Ore reserves	9
The project	9
The program and modifications	9
Description of work completed	11
Conclusions	14

ILLUSTRATIONS

Figure	Follows page
1. Little Mo Mining, Incorporated, Fremont County, Wyoming, DMEA 4709, Contract No. Idm-E 1136	2
2. Map showing claims, Stage I drill holes locations with deleted and relocated holes under Stage I, Little Mo Mining, Inc., Mint et al. claims, Fremont County, Wyo., DMEA 4709, Contract Idm-E 1136	14
3. Ore reserves, Little Mo Mining Incorporated, Fremont County, Wyo., DMEA 4709, Contract No. Idm-E 1136	14
4. Sketch map showing geology in the vicinity of claims of Little Mo Mining, Inc	14

DMEA 4709

CONTRACT Idm-E 1136

LITTLE MO MINING, INC.
MINT et al. CLAIMS
FREMONT COUNTY, WYOMING

SUMMARY AND INTRODUCTION

Little Mo Mining, Inc., Box 545, Upton, Wyoming, on March 5, 1957, applied to the Defense Minerals Exploration Administration for aid in exploring for uranium on 27 unpatented claims in secs. 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th P.M., Fremont County, Wyoming. The applicant proposed to test drill granite debris and the surface of the underlying Precambrian granite. The proposed work required 7,500 feet of drilling at an estimated cost of $37,265.00.

An examination was made on May 8, 1957. A program modified from the one outlined by the applicant was agreed upon which included 4,700 feet of non-core drilling at an estimated cost of $21,119.00 with Government participation at 75 percent or $15,839.25.

A contract, dated September 26, 1957, authorized 4,700 feet of rotary drilling and incidentals in two stages at an estimated total cost of $21,120.00 with Government participation at 75 percent or $15,840.00

Work under the contract was started on November 19, 1957, and completed March 20, 1958.

The contract was terminated effective May 16, 1958, without completion of all authorized work.

A "Certification of Discovery or Development", dated June 11, 1958, was issued to the operator, and made all minerals mined or produced from September 26, 1957, to September 26, 1968, subject to DMEA royalty.

The total accepted cost of the project is $16,013.22, Government participation 75 percent or $12,009.91.

The completed project comprised 3,586 feet of rotary drilling, 43-1/4 hours of bulldozer time, 3,586 feet of incidental allowance, 10 hours of standby time, and 46 chemical assays.

The drilling resulted in the discovery of 12,607 tons of indicated and inferred ore with an average grade of 0.183 percent U_3O_8.

LOCATION AND PHYSICAL FEATURES

The property is in secs. 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th P.M., Fremont County, Wyoming (fig. 1). It is reached by driving 23 miles from Shoshoni, Wyoming, over the unimproved Bonneville-Lysite road. Shoshoni is on the Chicago, Burlington & Quincy Railroad and on U. S. Highway 26. The area consists of low, rolling hills rising to the north, and cut by small ravines. The altitude ranges from 5,800 to 6,400 feet.

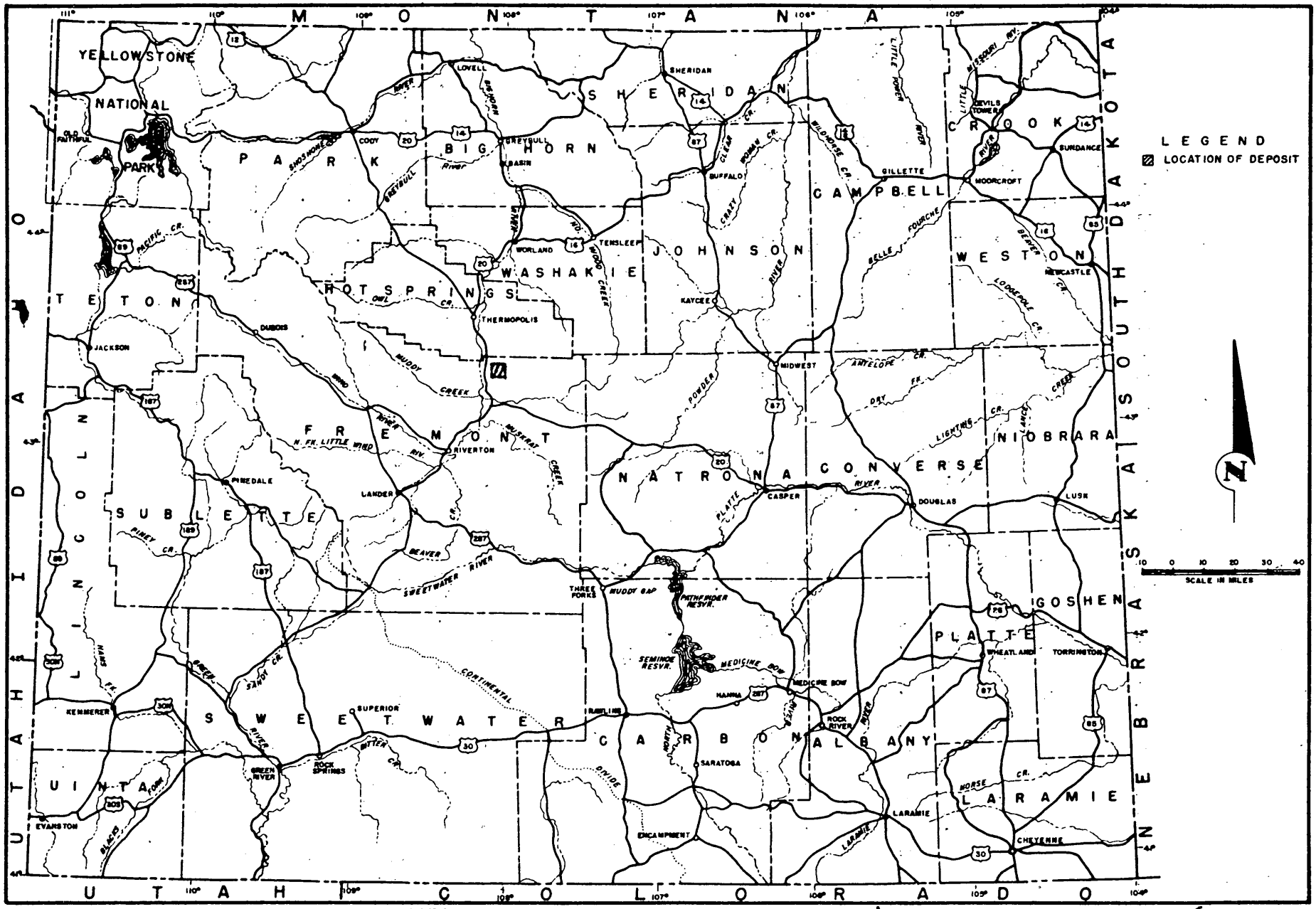


FIGURE 1. - LITTLE MO MINING, INCORPORATED, FREMONT COUNTY, WYOMING, DMEA 4709, CONTRACT NO. IDM-E1136

Water for drilling is available on the property. Men and supplies can be obtained at Shoshoni and Riverton, Wyoming. An ore-buying depot is maintained at Riverton, 46 miles to the southwest of the property.

The climate is semi-arid with hot, dry, and windy summers and severe winters. Vegetation consists largely of sage brush and range grass.

PROPERTY

The subordinated property consists of 27 contiguous unpatented lode mining claims comprising an area of about 480 acres (fig. 2). The claims as recorded at the County Recorder's office at Lander, Wyoming, are listed below.

CLAIMS SUBJECT TO SUBORDINATION UNDER CONTRACT

Claim	Book	Page	Date Recorded	Recorder
Interruption No. 1	84	3	1-5-55	Clifford A. Reed & Little Missouri Mining Co.
Interruption Nos. 2 & 3	109	457-458	5-14-55	do.
Arrowhead No. 2	84	2	1-5-55	Chester Fike, Clifford A. Reed & Little Missouri Mining Company
Mint Nos. 1-4 (incl.)	58	369-372	1-22-54	Chester Fike and Clifford A. Reed
Mint Nos. 5-7 (incl.)	63	333-335	7-16-54	Little Missouri Mining Co. by L. A. Henderson
Mint Nos. 9-15 (incl.)	63	337-343	7-16-54	do.
Mint Nos. 16-21 (incl.)	133	228-233	7-23-55	Little Mo Mining Co.
Mint No. 23	136	482	8-13-55	do.
Mint Nos. 24-25	141	108-109	9-9-55	do.

Although the lease and assignments, and quitclaim deed mentioned below include the Mint No. 1 through 25 and the Arrowhead 1, 2, 3, and 4 claims, the Mint claims Nos. 8 and 22 and the Arrowhead claims No. 1, 3, and 4 were not subordinated and were excluded from the contract. The Arrowhead Nos. 1 and 4 claims are, however, shown on the map that is a part of the contract.

A mining lease dated June 4, 1954, from Chester Fike and Clifford A. Reed, lessors, to L. A. Henderson, Allen Douglas, and John Kummerfield, doing business as Little Missouri Mining Company, includes the Mint Nos. 1 through 4 claims, the Arrowhead Nos. 1, 2, 3, and other claims and is recorded as of August 25, 1954, in Book 66 Mining Records, Page 281. By an assignment dated February 12, 1955, and recorded April 4, 1955, in Book 98 of Mining on Page 211, the lease was transferred to the Little Mo Mining, Inc. Another mining lease, dated July 27, 1954, from Clifford A. Reed, lessor, to L. A. Henderson, Allen Douglas, and John Kummerfield doing business as the Little Missouri Mining Company, included the Interruption Nos. 1, 2, and 3 claims and another claim and is recorded as of July 25, 1955, in Book 133 of mining on Page 253. This lease was also assigned by the lessee, the Little Missouri Mining Company, to the Little Mo Mining, Inc. The assignment is a matter of record in Book 98 of mining on Page 212 and was recorded April 4, 1955, at the County Recorder's office in Lander. Later, ownership of the Mint claims No. 1, through 25, the Arrowhead 1, 2, and 4 and other claims was transferred

to the Little Mo Mining, Incorporated, by a quitclaim deed from Chester Fike dated February 29, 1956. The deed was recorded March 5, 1956, in Book 150 of mining on page 362 at the Recorder's office.

An agreement between Chester Fike and Clifford A. Reed dated June 4, 1954, and having to do with a division of royalties accompanied the application. This agreement was recorded August 25, 1954, in Book 66 of mining on page 283.

HISTORY AND PRODUCTION

Uranium ore was found in 1954, in the creek bed that crosses the Arrowhead No. 1 claim, and the claims subject to this contract and others were located.

No ore has been produced from the claims subject to DMEA royalty. The operator has an adjoining claim, Arrowhead No. 1, from which, during the period March 1955 through February 1957, a total of 3,460 tons of uranium ore, averaging 0.20 percent U_3O_8 is said to have been produced from an open pit.

GEOLOGY AND ORE DEPOSITS

The surficial geology of the claims of Little Mo Mining, Inc., is not complex, as may be seen from the geological sketch map (fig. 4). Sedimentary rocks called Tertiary Tepee Trail formation by Tourtelot 1/

1/ Tourtelot, H. A., 1953, Geology of the Badwater area, Central Wyoming: U. S. Geol. Survey Oil and Gas Investigations Map OM-124, 2 sheets.

dip gently (3-6°) south from their contact with the Precambrian granite mass of Copper Mountain to the north. Sedimentary rocks commonly overlie granite on the claims, although both rock types are exposed, and the uranium deposit presently being mined appears to have been localized at a contact between these two rock types, or in the lower part of the sedimentary rocks.

The sedimentary rocks shown on the sketch map can be separated handily into two "formations". Rocks designated T_1 are essentially arkosic sandstone, conglomerates, and granite rubble. The material making up these rocks appears to be directly derived from the Precambrian mass to the north.

Rocks designated T_2 are similar to those of formation T_1 except that they contain considerable amounts of volcanic ash, locally bedded, and elsewhere disseminated, through the unit.

Uranium, in the mineral coffinite, occurs principally as interstitial mineralization between grains, pebbles of arkosic sandstone, and boulders of the conglomerate of T_1, and locally forms rinds around some of the rock fragments. To date little uranium has been discovered in the tuffaceous material (T_2).

It is thought that the uranium of the deposits has been derived by weathering, and transported in ground water, from the granite of Copper Mountain. Small low-grade uranium concentrations are known in the granite, and radioactivity anomalies are present.

Uranium in solution was transported by ground water into, and probably to a certain extent through, the highly permeable and porous arkosic sandstone, and rubble zones, and deposited at contacts with less permeable units, and locally at least, at the contact of the Tertiary sedimentary rocks and the underlying granite.

As noted above, most uranium found to date is in non-tuffaceous rocks, perhaps because tuffaceous material is less permeable, thus permitting poorer ground water circulation. However, the possibility exists that some uranium concentrations may be found in this material.

Uranium is not in balance with its radioactive daughter products in the deposit so far mined; uranium values of the ore exceed the equivalent uranium values by as much as 50 percent. The concentrations of uranium making up the known ore deposits thus may be relatively young.

The topography of the claims is rather closely related to the geology, for relief on the claims is largely provided by dissection and removal of Tertiary beds. Ridges thus are capped by Tertiary rocks, and draw bottoms are underlain by granite.

ORE RESERVES

The reserves discovered by the project drilling are estimated to be 3,972 tons of indicated ore averaging 0.182 percent U_3O_8, and 8,635 tons of inferred ore containing 0.184 percent U_3O_8 or a total of 12,607 tons with a grade of 0.183 percent U_3O_8.

The reserves as shown on figure 3 were calculated by using the A.E.C. method.

THE PROJECT

The program and modifications

The program submitted by the applicant included 7,500 feet of drilling at an estimated cost, including incidentals, of $37,265.00. An examination was made on May 8, 1957, and a two-stage rotary drilling program of 4,700 feet of non-core drilling was recommended at an estimated cost of $21,119.00 Government participation 75 percent or $15,839.25.

A contract, dated September 26, 1957, authorized 4,700 feet of rotary drilling, and other incidentals, at an estimated total cost of $21,120.00, Government participation 75 percent or $15,840.00.

Stage I of the project authorized 2,300 feet of rotary drilling, 12 hours standby time, 20 hours bulldozer time, 25 chemical assays, and 2,300 feet of incidental allowance. The estimated total cost of Stage I was $10,346.00.

Stage II of the project authorized, with prior Government approval, 2,400 feet of rotary drilling, 12 hours standby time, 20 hours bulldozer time, 25 chemical assays, and 2,400 feet of incidental allowance. The estimated total cost of Stage II was $10,773.00.

Amendment No. 1, dated December 27, 1957, extended the date on or before which the work shall be completed, from January 1, 1958, to April 1, 1958.

Amendment No. 2, dated February 7, 1958, further amends the contract, as amended, as follows:

1. (a) A "Model HD-6 Allis Chalmers" is substituted for a "Model D-7 Caterpillar".

   (b) The "maximum depth of 150 feet" is revised to read "depth of approximately 150 feet".

   (c) "The location of Stage I drill holes are shown on the map Figure 2A. Prepare drill sites and access roads thereto, and drill 20 holes aggregating approximately 2,300 feet."

2. Under Stages I and II, paragraph 3 is revised to read:

   "31-1/4 hrs. actual tractor w/dozer operating time (including operator and all necessary costs whatsoever) at $8.00/hr. $250.00

3. In Annex I, the last paragraph is revised to read:

   "The locations of the claims listed above are shown on the map entitled Figure 2A--Map Showing Claims, Stage I Drill

Locations with Deleted and Relocated Holes Under Stage I, Little Mo Mining, Inc., Mint et al. claims, Fremont County, Wyo., DMEA 4709, Contract Idm-E 1136, attached to Amendment No. 2 and made a part of the contract.

In summary, the Amendment, in effect, deletes holes 12, 13, and 15, and relocates holes 14, 16, and 17.

Amendment No. 3, dated March 31, 1958, extended the Amendment No. 1 date on or before which the work shall be completed, from April 1, 1958, to June 1, 1958. The maximum period for payment of royalty and lien for payment thereof is increased from 10 years to 11 years from the date of the contract.

Description of work completed

Exploration under Stage I of the contract was started on November 19, 1957, and completed on or about February 15, 1958. It consisted of 20 rotary drill holes comprising 2,686 feet, or an average of 134 feet per hole. Incidental work included 31-1/4 hours of bulldozer time on access roads and drill site locations, 2,686 feet of incidental allowance, 8 hours of standby time, and 21 chemical assays. The approved total cost of Stage I was $11,924.22.

Rotary drilling and incidental work under Stage II was started in February 1958 and completed March 20, 1958. It included 8 completed holes with a total footage of 900 feet, or an average of 112.5 feet per

hole. The incidental work included 12 hours of bulldozer time, 900 feet of incidental allowance, 2 hours of standby time, and 25 chemical assays. The approved total cost of Stage II was $4,089.00.

The total project cost was $16,013.22. Factual data are summarized in the following table.

The location of Stage I and II drill holes is shown on Figure 2.

SUMMARY OF FACTUAL DATA

	CLAIMED			ACCEPTED COSTS			CONTRACT MAXIMUMS		
STAGE I									
CONTRACT ITEM	UNITS	UNIT COST	TOTALS	UNITS	UNIT COST	TOTALS	UNITS	UNIT COST	TOTALS
Rotary Drilling	2,686. ft.	$4.00	$10,744.00	2,686. ft.	$4.00	$10,744.00	2,686. ft.	$4.00	$10,744.00
Incidental Expense	2,686. ft.	0.27	724.22	2,686. ft.	0.27	725.22	2,686. ft.	0.27	725.22
Bulldozer Time	31 1/4 hr.	8.00	250.00	31 1/4 hr.	8.00	250.00	31 1/4 hr.	8.00	250.00
Standby Time	8 1/2 hr.	12.50	106.25	8 hr.	12.50	100.00	12 hr.	12.50	150.00
Chemical Assays	21 ea.	5.00	105.00	21 ea.	5.00	105.00	25 ea.	5.00	125.00
		Total	$11,929.47		Total	$11,924.22		Total	$11,994.22
STAGE II									
Rotary Drilling	900 ft.	$4.00	$3,600.00	900 ft.	$4.00	$3,600.00	2,014. ft.	$4.00	$8,056.00
Incidental Expense	900 ft.	0.27	243.00	900 ft.	0.27	243.00	2,014. ft.	0.27	543.78
Bulldozer Time	12 hr.	8.00	96.00	12 hr.	8.00	96.00	31 1/4 hr.	8.00	250.00
Standby Time	2 hr.	12.50	25.00	2 hr.	12.50	25.00	12 hr.	12.50	150.00
Chemical Assays	25 ea.	5.00	125.00	25 ea.	5.00	125.00	25 ea.	5.00	125.00
		Total	$4,089.00		Total	$4,089.00		Total	$9,124.78
				Project Totals		$16,013.22	(rounded)		$21,119.00
				Government Participation at 75 percent		$12,009.91			$15,839.25

CONCLUSIONS

Of the 20 Stage I holes and the 8 Stage II offset holes, probe and assay results in 7 holes on the Arrowhead No. 2 claim (holes nos. 4, 5, and 6 (Stage I) and offset holes, 5E, 6E, 7E, and 8E) indicated that a significant ore deposit or several ore deposits with a grade of 0.10 percent U_3O_8 or better have been discovered by drilling under the contract.

Stage I and II drilling indicates a continuation of the mineralized area currently being mined on the Arrowhead No. 1 claim. The trend runs southeast from the existing mine on Arrowhead No. 1 along the slope of a hill of Precambrian granite debris.

The results of drilling on the Arrowhead No. 1 claim indicates that mineralization occurs at more than one horizon and not as a continuous blanket deposit. The ore is unoxidized, and is similar to that being mined on the Arrowhead No. 1 claim.

The project resulted in the discovery of significant amounts of ore-grade material which will undoubtedly be mined. A Certification of Discovery is recommended.

No additional exploration, with Government assistance, is recommended. Additional development drilling by the operator will probably be necessary to define the ore bodies roughly delineated by DMEA drilling.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
August 4, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 7 1958

DATE	INITIALS	CODE
8/7	N. G.	225
8/7	FLK	700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4709 (Uranium) Contract Idm-E1136
Little Mo Mining, Inc., (Mint, et al. claims)
Fremont County, Wyoming

In reference to your letter of July 29, 1958, it is expected that the Field Team's final report for the subject contract will be available for forwarding to your office about August 15, 1958.

J. W. Townsend

EA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/28	[illegible]	700
	[illegible]	130
7/29	[illegible]	110
"	[illegible]	100
		67
7/29	[illegible]	220
		700

JUL 29 1958

Mr. J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Townsend:

Please advise when we may expect to receive the Field Team's final report for the subject project.

Sincerely yours,

W. S. Martin (esf)

ACTING Chairman, Operating Committee

APPROVED:

P. F. Yopes (esf)

Member, Bureau of Mines

Thor H. Kiilsgaard (esf)

Member, Geological Survey

FLKnouse/izm 7-28-58 (7-25-58)

cc: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/18/58	Knouse	700
6-19	Chambers	800
"	Johnson	110
"	Mittendorf	100
6/19	C	220
		700
6/19	Selfridge	120

JUN 19 1958

Mr. John Kummerfeld, President
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Kummerfeld:

Please refer to our letter, dated June 12, 1958, that relates to a certificate of discovery or development for the subject property.

The amount of the Government's contribution to the subject exploration project was $12,009.91.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Copy to:
Mr. Clifford A. Reed
Box 56
Kirby, Wyoming

FLKnouse/gla
6-18-58
cc to: Admr.'s Reading File
Frank E. Johnson
Frank D. Lamb, Rm. 3608
T. H. Kiilsgaard, Rm. 5224
Field Team, Region III (2)
Contract Adm. & Audit Division
Mr. Knouse

8623

OFFICIAL FILE COPY

Date	Surname	Code
6/16	Alley	800
6/16	Talbot	800
6/16	C	220
6/17	Kuscese	700

JUN 16 1958

Mr. Thomas H. Brading
DMEA Auditor
224 New Customhouse
Denver 2, Colorado

Re: Idm-E1136, DMA-4709 (Uranium)
Little Mo Mining, Inc.

Dear Mr. Brading:

Your Report of Review on the referenced project is acceptable and normal distribution is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

AMAlley/ama
June 16, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/4/58	[illegible]	700
6/11	[illegible]	700
	[illegible]	140
	[illegible]	140
6-10	[illegible]	800
6/11	[illegible]	130
6/11	[illegible]	130
6/11	[illegible]	130
6/11	[illegible]	110
6/12	[illegible]	100
		220
		700

JUN 12 1958

Mr. John Kummerfeld, President
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Kummerfeld:

Enclosed is a "Certification by the United States of America of a Discovery or Development Under an Exploration Project Contract." This certification covers all the land described in Article 2 of the subject contract.

By the terms of the Exploration Project Contract, as amended, and of the certification, all minerals mined or produced from September 26, 1957, to September 26, 1968, are subject to the Government's percentage royalty as set forth in the contract until the amount contributed by the Government is repaid.

Payments should be made to the Executive Officer, DMEA Field Team, Region III, 224 New Customhouse Building, Denver 2, Colorado. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check directly to the Executive Officer. Any bonus payments or allowances received by you from production are considered to be a part of the purchase price to which the Government's royalty applies. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the products sold, the name of the purchaser, and the price and charges, certified to be correct by the purchaser.

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

Sincerely yours,

Administrator

Enclosure

MChing/EWEllis/gla
6-4-58
cc to: Clifford A. Reed, Box 56, Kirby, Wyoming
Admr.'s Reading File
Mr. Ching
Frank E. Johnson
Contract Adm. & Audit Division
T. H. Killsgaard, Rm. 5224
Frank D. Lamb, Rm. 3608
Operating Committee

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/4/58	Kuguer	700
6/10	Ellis	700
	Portin	140
	Sluyter	140
6-16	Chamberlain	800
6/11	Selfridge	130
6/11	Lamb	130
6/11	Kiilsgaard	130
6/4	Fleman	110
"	Mittendorf	100
		220
		700

JUN 12 1958

Mr. Clifford A. Reed
Box 56
Kirby, Wyoming

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Reed:

Enclosed is a copy of a certification of discovery or development, with copy of covering letter to the Operator, which has been issued pursuant to the terms of the above-cited contract.

This correspondence relates to the Consent to Lien and Subordination Agreement signed by you on September 9, 1957. The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by you, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

C. O. Mittendorf (Leo)

Administrator

Enclosures

MChing/gla
6-4-58
cc to: Admr.'s Reading File
Frank E. Johnson
Operating Committee
Frank D. Lamb, Rm. 3608
T. H. Kiilsgaard, Rm. 5224
Field Team, Region III (2)
Contract Adm. & Audit Division
Mr. Ching

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/4/58	Kuguse	70
6/10	Ellis	700
		~~140~~
		~~140~~
6-10	Chamber	800
6/11	Selbridge	130
6/11	Smith	130
6/11	Kilsgaard	130
6/11	Ching	110
	Mittendorf	100
		220
		700

JUN 12 1958

Mr. Jesse C. Johnson
Director, Division of Raw Materials
Atomic Energy Commission
1717 H Street, N. W.
Washington 25, D. C.

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Johnson:

I am enclosing one copy of a certification of discovery or development relating to the subject exploration contract.

The final report of the Field Team and the final accounting of funds expended on this project have not been completed. Accordingly, we will supply additional information for your records upon receipt of these reports.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

Copy to:
Mr. Elton A. Youngberg
Assistant Manager of Operations
AEC Grand Junction Operations Office
Grand Junction, Colorado

MChing/EWEllis/gla
6-4-58
cc to: Admr.'s Reading File
Frank E. Johnson
Operating Committee
DMEA Field Team, Region III (2)
Frank D. Lamb, Rm. 3608
T. H. Kiilsgaard, Rm. 5224
Contract Adm. & Audit Division
Mr. Ching

8623

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 5 1958
DATE | INITIAL | CODE
6/5 | C | 220
| | 700

224 New Customhouse
Denver 2, Colorado
June 3, 1958

Memorandum

To: T. E. Bruding, DMEA Auditor

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

Subject: Docket No. DMEA 4709 (Uranium), Contract No. AEC-E1136, Little Ro Mining, Inc. (Hint et al. claims), Fremont County, Wyoming

The subject contract was terminated before completion of all work originally provided for, by a TERMINATION AGREEMENT, dated May 15, 1958, which was made effective March 31, 1958. A copy of the Termination Agreement is enclosed for your records.

The Operator has rendered a final accounting and its final report, as required by the contract. Therefore, final payment of the Operator's account is in order, contingent on release to this office of a Certificate and Report of Audit, or Report of Review of reported project costs, whichever the case indicates.

Acceptable units of work or service completed on a Fixed Unit Cost basis consist only of incidental allowance on 3,386 feet of drilling.

The sum of $500.00 was withheld from reimbursement to the Operator in processing its final accounting report, which was for the month of March, 1958.

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosure

JWTrytl

cc: Chem. Op. Comp. (2)
Raytheon
Corpus. File
Townsend
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
June 3, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 5 1958
DATE | INITIALS | CODE
6/5 | C | 220
| | 700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed are the Government's and Audit copies of the TERMINATION AGREEMENT which was forwarded by your letter of May 19, 1958 for signature by the Operator.

Copies of the Termination Agreement have been distributed to the Operator, the Finance Office, and others concerned in Region III.

J. W. Townsend

20A Mar Centennial
Denver 2, Colorado
May 22, 1958

Office...
DMEA
RECEIVED 26 1958

5/26	C	220
		800
		700

Mr. L. A. Henderson, Consultant
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Wyoming)
Contract No. IAm-8113
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

Enclosed are the Department's, Audit, Finance Office, and Field Team copies of a proposed TERMINATION AGREEMENT, which has been prepared in reference to your letter of April 21, 1958 to terminate the contract effective March 31, 1958.

If the proposed Termination Agreement is satisfactory, all copies are to be signed by an official of Little Mo Mining, Inc. authorized to sign such an instrument, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office; upon receipt of which the "Operator's Copy" will be forwarded to you.

Very truly yours,

Original signed by
J. W. TOWNSEND

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

JWT:prl

cc: Chem. Op. Comm. (2)
Barahman
DMEA/BPC (Sinyon)
Corres. File
Townsend
Chrom.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/15	Ching	700
5/15	Ellis	700
5/15	Talbut	800
5/16	[illegible]	130
"	Jenson	110
	[illegible]	100
		[illegible]
5/19	C	220
		700

MAY 19 1958

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-81136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Harshman:

In accordance with your memorandum of April 29, 1958, we are enclosing the original and four copies of a proposed Termination Agreement between the Government and Little Mo Mining, Inc., signed by the Administrator. Also enclosed are two extra copies of the agreement for the use of the Field Team.

If you and the Operator find the agreement in order, please have the Operator execute it as indicated and make the usual distribution thereafter.

We are in process of preparing a Certification of Discovery or Development for this project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

APPROVED:

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

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

MChing/izm 5-15-58
cc: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DRAFT
EChing/iam
5-13-58

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Little Mo Mining, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E1136, Docket No. DMEA-4709, dated September 26, 1957, as amended, hereinafter called the "Contract" that:

1. Effective March 21, 1958, 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 agreed actual and fixed unit costs of the work performed prior to March 21, 1958.
3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.
4. All rights of the Government respecting percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.
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

LITTLE MO MINING, INC.

By_____

Title_____

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
April 29, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1958

DATE		CODE
5/2	C	220
		130
"	Ching	700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4709 (Uranium) Contract Idm-E1136, Little Mo Mining, Inc., (Mint et al. claims) Fremont County, Wyoming

Enclosed are the original and two copies of a joint memorandum dated April 25, 1958, from E. N. Harshman, Geologist, USGS, and E. O. Binyon, Mining Engineer, USBM, pertaining to the termination of the subject contract. Two copies of the Operator's request for termination dated April 21, 1958, were forwarded to your office on April 23, 1958.

The Field Examiners recommend that the contract be terminated in its present status without completion of the balance of work originally provided for. Records in this office indicate that the last work was performed on March 20, 1958.'

The Field Examiners recommend that a Certification of Discovery or Development be issued as a result of the exploration work performed.

This office concurs in the recommendations of the Field Examiners regarding termination of the contract and issuing of the Certification of Discovery or Development, and it is further recommended that a suitable termination agreement be prepared in your office.

E. N. Harshman

E. N. Harshman

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DMEA
DEPARTMENT OF THE INTERIOR

REGION III

APR 28 1958
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
April 25, 1958

FILE COPY
DMEA
RECEIVED MAY 2 1958
CODE

Memorandum

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

From: E. N. Harshman
E. O. Binyon

Subject: Docket DMEA 4709 (Uranium) Contract Idm-E1136, Little Mo Mining, Inc. (Mint et al claims) Fremont County, Wyoming -- Termination of the contract and Certification of a Discovery or Development

In a letter to the Executive Officer, Region III, the operator requested termination of the contract. All approved Stage II drilling was completed on or about March 20, 1958 and as further drilling under the contract would not be to the Government's advantage, it is recommended that the request for termination be granted.

Of the 19 Stage I holes and the 8 Stage II offset holes, probe and assay results in 6 holes, Holes No. 4, 5, and 6 (Stage I) and offset holes, 5E, 6E, 7E, and 8E, indicated that a significant ore deposit or ore deposits with a grade of .10 percent U_3O_8 or better had been discovered by drilling under the contract on the Arrowhead No. 2 Claim. A list of the holes with probe and assay results is attached.

Based on the results of the contract drilling as well as company drilling, the operator is, at present, preparing to mine by open cut the ore bodies thus far discovered. It is therefore recommended that a Certification of Discovery or Development be issued for this contract. (Idm-E1136).

E. N. Harshman

E. N. Harshman
Member Field Team

E. O. Binyon

E. O. Binyon
Mining Engineer

EOB/mw cc: 9 Idm-E1136 chron

HOLE LIST

Hole No.	Depth Ft.	Depth of Mineralization	Probe Results eU_3O_8	Chemical Assays	
4	150	76-78	0.09	0.10	
5	118	63.5-66.5	0.20	0.288	60'-62'
				0.06	62'-64'
				0.16	64'-66'
6	150	56-59	0.28	0.08	52'-54'
				0.17	54'-56'
				0.08	56'-58'
5E	100	38.5-41.5	0.33	0.31	
6E	100	32-33.25	0.12	-	
		37.5-38.25	0.13	0.17	38'-40'
		52-53	0.09	0.12	52'-54'
7E	100	76-78	0.20	0.26	
8E	100	56-59	0.05-0.07	-	
		67.5-71.25	0.08	0.16	68'-70'
				0.09	68'-72'

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 2 1958

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

April 24, 1958

4/28 C 220
4/28 407 800
4/29 ~~Chg~~ 700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136
Little Mo Mining Inc. (Mint et al claims)
Fremont County, Wyoming

Enclosed are the original and one copy of a final report submitted by the Operator pertaining to work completed under the subject contract.

The Operator's final accounting report has not been received, and the Operator's request for termination of the contract has been forwarded to the field examiners for their recommendations concerning termination of the contract in its present status and the issuing of a certification of discovery or development.

E. N. Harshman

E. N. Harshman

Encl.

W.O

APRIL 1958

FINAL REPORT Stage I & Stage II

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm-E 1136

LITTLE MO MINING INC,
P.O.Box 321 Shoshoni, Wyoming

(Mint et al Claims)
Fremont County, Wyoming

OFFICIAL FILE COPY
DMEA
RECEIVED APR 28 1958
DATE

Consultant

L.A.Henderson
Phone UL 6 3314
Riverton, Wyoming

FINAL REPORT

ARTICLE 7 (c) (summary of work performed)

DMEA
DEPARTMENT OF THE INTERIOR
APR 21 1958
REGION III
DENVER, COLORADO

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm-E 1136

LITTLE MO MINING INC.
P.O.Box 321 Shoshoni, Wyoming

(Mint et al Claims)
Fremont County, Wyoming

Work under Stage I was started November 19, 1957 and was finished in February 1958. Work under Stage II was started about March 10,1958 and finished in about ten days.

Holes were drilled non-core using a rotary drill and compressed air so that we would get dry samples of the drill cuttings as much as possible however it was necessary to use water on part of some of the holes. (See Equipment List, Annex II.)

The area covered by this contract consists of 27 unpatented lode claims which are located on the southern flank of Copper mountain about 24 miles north of Shoshoni,Wyoming in Fremont County . Copper mountain forms part of the northern edge of the Wind River basin and such part of it as as joins this property is formed of precambrian granite, gneiss, and schists. the claims are located at the base of the mountain proper. Topography on the claims consists of low hills of precambrian granite durbis penetrated by precambrian granite out crops and cut with several narrow gulches with part time streams flowing generally south east. these beds of precambrian granite DURBIS and associated materials are the "Tepee Trail" formation. It is this formation which carries uranium mineralization in commercial quantity and quality, and this formation which the drilling under this contract was to explore. Little Mo Mining Inc. hasoperated a successful uranium mine on this property since March of 1955.(On "Arrowhead No.,1", See Map Figure 2A).

Commercial mineralization (debris?) on this property occurs in the precambrian granitic durbis surrounding rocks and boulders of the same material and in some cases the more porous rocks and boulders too are mineralized sufficiently to be ore. The ore mined from the property at the begining of the operation in 1955 was of secondary mineralization but for the last year the unoxidized zones of primary mineralization have came into increased importance. Zones of mineralization penetrated by drilling under this contract, namely on "Arrowhead No. 2", lies just south east of this mine area and ajoining "Arrowhead No. 1". Mineralization encountered by drilling on "Arrowhead No. 2 has all been of the unoxidized type. (See Maps, Figures 2A and 7A also Cross Section Chart, Figure 7.)

Drilling under this contract has narrowed the trend of important mineralization to what appears to be a continuation of the mineralized area of "Arrowhead No. 1" on which the mine is located. (See Map Figure 2A). The trend runs south east from the mine along the north east slope of a hill of precambrian granite durbis.

Drill holes No. 4, 5, 6, 5E, 6E, 7E, and 8E on "Arrowhead No. 2 (See Maps Figure 2A and 7A also Cross Section Chart Figure 7) are all mineralized and are not seperated by any dead holes, however spacing is quite wide and additional drilling may prove dead areas in this mineralized block making an estimate of ore reserves difficult. Also mineralization seems to be on more than one plane rather than one continuous blanket. Ore grade mineralization was found in the drill cuttings from all of the holes listed above.

Some minerals identified by the A.E.C. are uranophane, uranospinite, uraninite, meta-autunite, schroeckingerite, coffinite and becquerelite.

Drilling conditions
Hard loose boulders of granite and associated materials make drilling in this area slow and costly. An average of six three cone roller type rock bits were required to finish each hole. In some cases the drill was moved over a few feet and a new hole was started where rocks and boulders were causing trouble somewhere near the surface however a move was not practicle where trouble was encountered deeper in the ground.

Bulldozing in this kind of material is also slow and costly as some of the boulders are in excess of ten feet in diameter. These larger boulders were either bypassed or blasted to make the access roads and drill sites.

Samples of the drill cuttings were collected for every two feet of hole and sacked and marked with the hole number and depth represented and are stored at the office of Little Mo Mining Inc. in Shoshoni, Wyoming. Unsacked portions of the cuttings are piled in rows, near the hole, two feet to the pile, inthe order of a printed page, viewed from the hole.

A radiometric log recording has been made of all holes using an "Esterline-Angus" graphic ammeter and "Babbel" geiger counter. (See radiometric log sheets and radiometric equipment list, Annex II. All recordings are five scale on the "Babbel" geiger counter. this is the most sensitive scale. Original radiometric logs are on file at the office of Little Mo Mining Inc. in Shoshoni, Wyoming where they may be examined by the Government.

L. A. Henderson April 15, 1958

L.A.Henderson -- Consultant
Phone UL 6 3314 Little Mo Mining Inc.
Riverton, Wyoming

RELATED COSTS

STAGE I

20 Holes Drilled --- 134 feet Average Depth

Drilling	2686 Ft. @ $4.00 per ft.		$10,744.00
Bulldozing	31¼ hrs.@ 8.00 per Hr.		250.00
Incidental	2686 ft. @ 0.27 per ft.		725.22
Standby	8 hrs.@ 12.50 per hr.		100.00
Assays	21 @ 5.00 each		105.00
	Total cost Stage I		$11,924.22

$11,924.22

STAGE II

8 Holes Drilled --- 4 Holes 100 Feet Each 4 Holes 125 Feet Each

Drilling	900 ft. @ $4.00 per ft.		$ 3600.00
Bulldozing	12 hrs.@ 8.00 per hr.		96.00
Incidental	900 ft. @ 0.27 per ft.		243.00
Standby	2 hrs.@ 12.50 per hr.		25.00
Assays	25 @ 5.00 each		125.00
			$4,089.00

Total cost Stage II $ 4,089.00

TOTAL COSTS OF STAGE I AND STAGE II $16,013.22

ANNEX II

EQUIPMENT LIST

1 - "Winter-Weiss" 1500 Rotary Drill
1 - 500 cu. ft. Air Compressor
1 - 4½ X 6 inch Mud Pump
1 - Sample Catcher
Above equipment mounted on a "Ford" F-8 Truck.

1 - 500 gal. exaust heated water tank mounted on a "Ford" F-7 Truck.

* * * * * * * * *

1 - "Mayhew" 1000 Rotary Drill
1 - "Gardner-Denver" 585 cu. ft. Air Compressor
1 - "Gardner-Denver" 5 X 6 inch Mud Pump
Above equipment mounted on a R-190 "International" Truck
1 - 1000 gal. exaust heated water tank mounted on a R-180 "International" Truck

* * * * * * * * *

RADIOMETRIC EQUIPMENT

1 - Geiger Counter "Babbel" Model 610
1 - Probe mounted on 500 ft. cord on reel and stand
1 - Graphic Ammeter (Recorder) "Esterline-Angus Model AW

2 - Geiger counters "Detectron"
1 - Scintillator"Precision" Model 111

Hole No. 4 T.D. 150 Elev. 6125 Date 12/57 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE	COLOR	GRAINS	ACCESSORIES	REMARKS
2				granitic tan coarse silt				
4								
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								
40								
42								
44								
46								
48								
50								
52								
54								
56								
58								
60				granitic gray coarse				
62								
64				granitic dk.gray coarse biotite				
66								
68								
70				granitic tan coarse				
72				schist dk.gray coarse biotite				
74			0.01					
76			0.05					
78			0.10					
80			0.01					
82			0.01					
84			0.02					
86								
88				granitic gray coarse pink feldspar				
90								
92								
94								
96				granitic & biotite gray fine				
98				granitic tan coarse silt				
100								
102				schist dk.gray fine & granitic				
104								
106				NOTE -Radiometric log is only background to 150 feet.				
108								
110								

Hole No. 5 T.D. 118 Elev. 6116 Date 12/57 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Lawrence Materi

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE COLOR GRAINS ACCESSORIES	REMARKS
2				granitic tan very coarse	
4					
6					
8					
10					
12					
14					
16					
18				granitic tan coarse	
20					
22					
24					
26				granitic tan coarse biotite	
28					
30					
32					
34					
36					
38					
40					
42					
44				granitic gray coarse clay	
46					
48					
50				schist dk.gray coarse & granitic	
52					
54					
56				arkosic gray coarse silt	
58					
60			0.02		
62			0.288	granitic gray coarse sharp	
64			0.06		
66			0.16		
68			0.14		
70			0.01	granitic gray coarse blue clay	
72					
74					
76					
78					
80				granitic rusty gray coarse biotite	
82				granitic blue gray coarse	
84					
86					
88				schist dk.gray med.fine biotite	
90					
92					
94					
96					
98					
100					
102				NOTE * Balance of radiometric log is only background.	
104					
106					
108					
110					

Hole No. 6 T.D. 234 Elev. 6134 Date 12/57 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE COLOR GRAINS ACCESSORIES	REMARKS
2				granitic tan coarse silt	
4					
6				granitic tan very coarse	
8					
10					
12					
14					
16					
18					
20					
22				granitic tan sharp coarse	
24					
26					
28				clay tan gritty fine	
30					
32					
34					
36					
38					
40					
42				arkosic gray fine silt	
44					
46				arkosic tan to gray fine silt	
48					
50				arkosic dk.gray fine carbon	
52			0.08		
54			0.17		
56			0.08		
58			0.05	arkosic blue gray fine	
60					
62					
64					
66					
68					
70					
72			0.01	granitic gray sharp chunks	
74			0.04	granitic blue gray coarse with fines	
76			0.06		
78					
80					
82					
84					
86					
88					
90					
92			0.05		
94			0.05		
96					
98					
100				arkosic lt.gray coarse mixed with fines	
102					
104				NOTE - Balance of radiometric log is only background.	
106					
108				Base granite was encountered at about 228 feet.	
110					

Hole No. 2W T.D. 125 Elev. 6145 Date 3/58 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

Depth	Hole Probe (Babbel) MR/HR.	Sample Pile Babbel Hand Probe MR/HR.	Assay % U_3O_8	Lithology: Rock Type	Color	Grains	Accessories	Remarks
2				granitic tan coarse silt				
4								
6								
8								
10								
12								
14								
16								
18								
20								
22				biotite and granitic gray coarse				
24				granitic light med.fine				
26								
28				biotite gray coarse				
30								
32				biotite dk.gray coarse				
34								
36								
38								
40								
42				biotite and granitic lt.gray coarse				
44								
46								
48								
50								
52				arkosic light med.fine				
54								
56				arkosic dk.gray med.fine				
58								
60								
62								
64								
66								
68								
70								
72			0.04					
74			0.04					
76								
78				arkosic lt.gray med.fine				
80								
82				arkosic and red clay med.fine				
84								
86								
88								
90								
92								
94				arkosic pink med.fine				
96								
98				arkosic gray med.fine				
100								
102								
104								
106								
108								
110								
125'								

Hole No. 5E T.D. 100 Elev. 6092 Date 3/58 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE COLOR GRAINS ACCESSORIES	REMARKS
2				granitic tan coarse silt	
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28				arkosic med.fine light muscovite	
30				schist gray fine	
32				granitic gray coarse	
34					
36					
38			0.03		
40			0.36	schist dk.gray med.fine red clay	
42			0.26		
44					
46				arkosic light med. coarse	
48					
50			0.10		
52					
54					
56				arkosic gray med.coarse red clay	
58					
60					
62					
64				arkosic dk.gray coarse muscovite	
66				schist dk.gray coarse red clay	
68					
70				dark red clay and dk.gray schist	
72					
74					
76				arkosic dk. gray coarse	
78				arkosic gray coarse red clay	
80				arkosic tan med.fine	
82					
84				schist gray fine & clay	
86					
88					
90				arkosic gray med.coarse	
92					
94					
96					
98					
100					
102					
104					
106					
108					
110					

Hole No. 6E T.D. 100 Elev. 6082 Date 3/58 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

Depth	Hole Probe (Babbel) MR/HR.	Sample Pile Babbel Hand Probe MR/HR.	Assay % U_3O_8	Lithology: Rock Type	Color	Grains	Accessories	Remarks
2				granitic tan coarse silt				
4				granitic rusty coarse				
6								
8								
10				granitic rusty coarse gray schist				
12				arkosic tan coarse				
14								
16								
18				granitic rusty coarse black schist				
20				granitic gray coarse				
22								
24								
26								
28								
30								
32								
34			0.06	arkosic lt. gray med. coarse				
36			0.02					
38			0.01					
40			0.17					
42			0.02	arkosic gray med.coarse				
44								
46								
48			0.01	arkosic gray brown med.fine				
50			0.02					
52			0.02					
54			0.12					
56			0.01	granitic tan coarse				
58				schist dk. gray med.fine red clay				
60				arkosic dk.gray coarse red clay				
62								
64			0.04					
66			0.08	arkosic dk.gray coarse				
68								
70				arkosic dk.gray coarse red clay				
72								
74								
76				arkosic gray coarse				
78								
80								
82								
84				schist dk.gray med.fine				
86								
88								
90								
92				arkosic gray coarse				
94								
96								
98								
100								
102								
104								
106								
108								
110								

Hole No. 7E T.D. 100 Elev. 6087 Date 3/58 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE COLOR GRAINS ACCESSORIES	REMARKS
2				granitic tan very coarse	
4					
6					
8					
10					
12					
14					
16				quartz gray very coarse sharp	
18				granitic tan coarse	
20					
22					
24					
26					
28				granitic gray coarse schist	
30					
32					
34				arkosic gray coarse	
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58				granitic light coarse	
60					
62				granitic gray coarse	
64			0.03		
66					
68				granitic light very coarse large flakes muscovite	
70					
72					
74				granitic light to gray coarse red clay	
76			0.21 0.31		
78				arkosic gray coarse red clay	
80					
82					
84					
86					
88					
90					
92					
94					
96					
98					
100					
102					
104					
106					
108					
110					

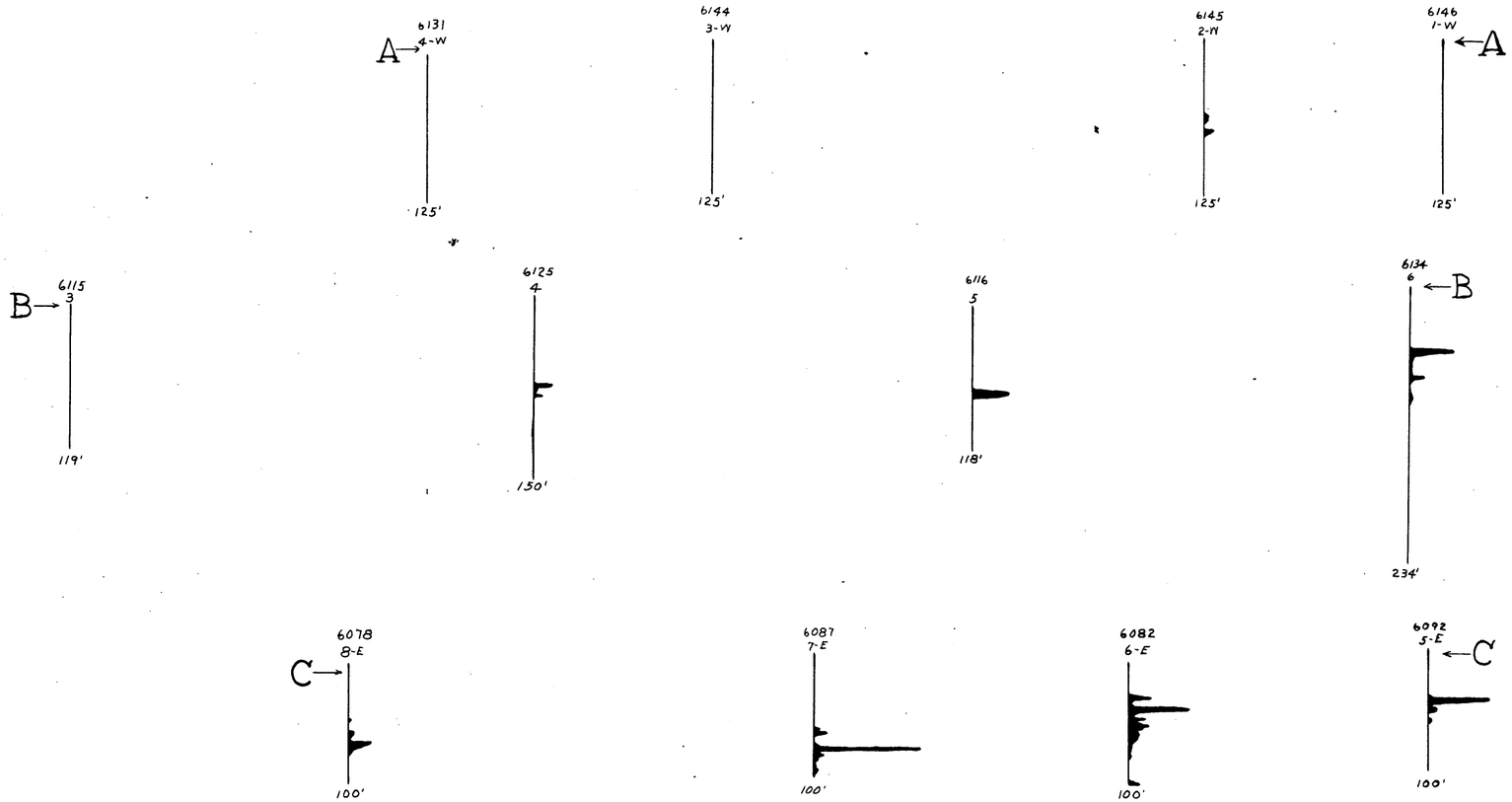
Hole No. 8E T.D. 100 Elev. 6078 Date 3/58 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

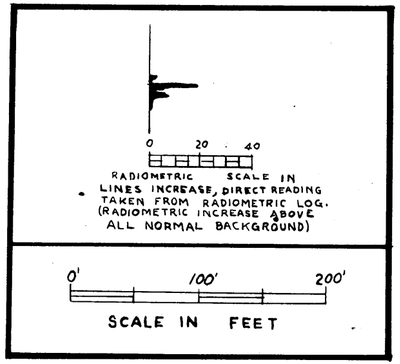
Drlg. Cont. Beavers & Harris

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE	COLOR	GRAINS	ACCESSORIES	REMARKS
2				granitic	tan	coarse	silt	
4								
6								
8								
10								
12								
14								
16								
18								
20								
22								
24				granitic	gray	coarse	biotite	
26								
28				granitic	tan	coarse		
30								
32								
34								
36				granitic	gray	coarse	biotite	
38								
40				arkosic	dk.gray	coarse	biotite	
42				granitic	tan	med.coarse	silt	
44				arkosic	gray	med.	coarse	
46								
48								
50								
52								
54				arkosic	dk.gray	med.coarse		
56			0.09					
58								
60								
62				arkosic	gray	coarse		
64								
66				arkosic	dk.gray	med.fine		
68			0.16					
70			0.02					
72								
74								
76								
78				arkosic	lt.gray	browmcast	coarse	
80								
82								
84								
86								
88								
90								
92								
94								
96				schist	dk.gray	med.fine	biotite	
98								
100								
102								
104								
106								
108								
110								

FIGURE 7

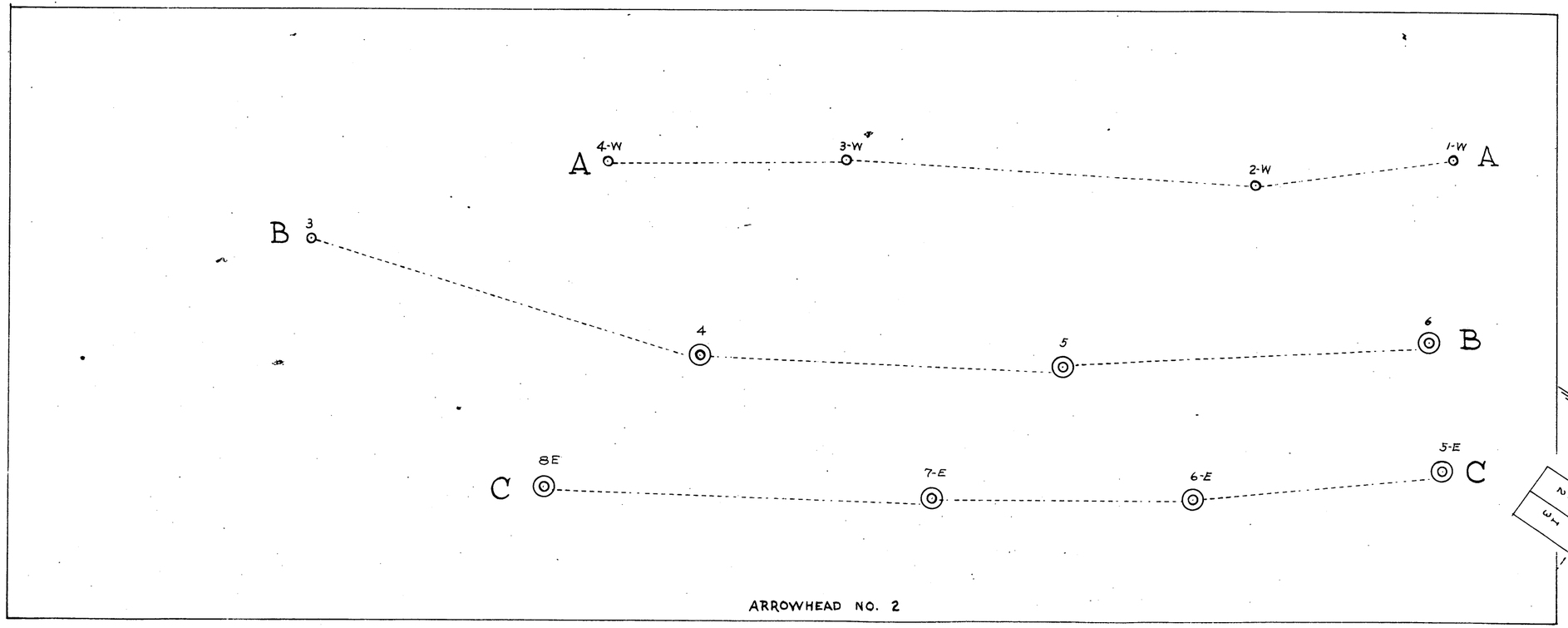


LITTLE MO MINING INC.
DMEA 4709



L. A. HENDERSON 3-58

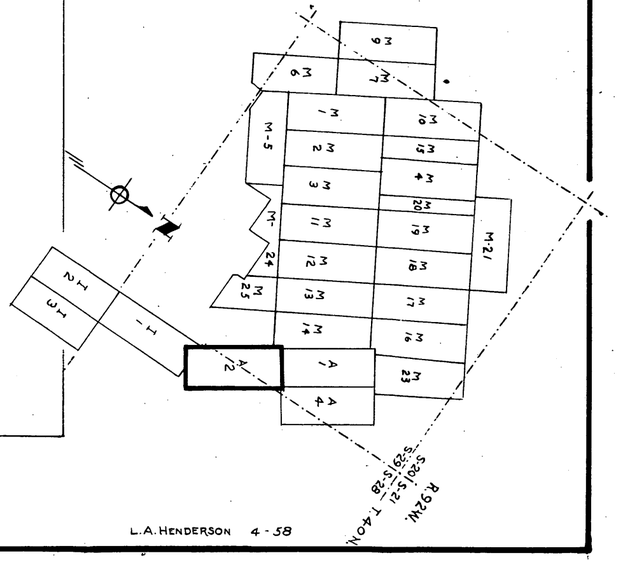
FIGURE 7-A



LEGEND

- ○ DRILL HOLES
- ◎ MINERALIZED DRILL HOLES

0' 50' 100'
SCALE



L.A. HENDERSON 4-58

LITTLE MO MINING INC.

DMEA 4709

OFFICIAL FILE COPY
DMEA
RECEIVED APR 28 1958
DATE | | AMOUNT
4/28 | C | 220
4/28 | | 200
4/29 | | 700

224 New Customhouse
Denver 2, Colorado
April 24, 1958

Mr. John Kummerfield, President
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA-4709 (Uranium)
Contract Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Kummerfield:

Form MF-104, Operator's Monthly Report and Voucher, for March 1958, has been received in this office and is being processed for payment.

All currently approved work under the contract has been completed, and the Operator's final report has been received; therefore an amount of $500.00 is withheld from reimbursement to Little Mo Mining, Inc., pending resolution of matters prerequisite to closing the account, which include:

1. Execution by the parties to the contract of a suitable agreement to terminate the contract in its present status without requiring completion of the balance of work provided for. Termination was requested by letter of April 21, 1958.

2. Release to this office of a Certificate of Audit and Audit Report or Report of Review of the reported project costs, by the Contract Administration and Audit Division, DMEA.

You will be further advised of the above deduction by means of an Administrative Audit Difference Statement, which will be forwarded to you by the Finance Office, Region III.

JDC:hmh

Yours very truly,

Original signed by
E. N. HARSHMAN

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

cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC
Townsend
Corres.file,Reg.III
Chron

cc: L. A. Henderson
P. O. Box 321
Shoshoni, Wyoming

4/28		
4/28		
4/29	Ching	

224 New Customhouse
Denver 2, Colorado
April 23, 1958

Memorandum

To: E. N. Harshman - w/enclosure
DMEA/BPC (Simpson) - " "

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

Subject: Docket No. DMEA 4709 (Uranium), Contract No. DMe-R1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed is a copy of the Operator's letter of April 21, 1958 requesting termination of the contract upon completion of the work presently approved for performance under Stage II.

Please submit a joint memorandum report containing your recommendations relative to terminating the contract and the issuing of a Certification of Discovery or Development as a result of the exploration work performed.

Original signed by
E. N. HARSHMAN
E. N. Harshman

JWT:prl

cc: Chmn. Op. Comm.-2) w/copy of
Corres. file) enclosure.
Townsend
Chron.

DMEA
DEPARTMENT OF THE INTERIOR

APR 23 1958
REGION III
DENVER, COLORADO

April 21, 1958

Mr. W.H.King:

Executive Officer, DMEA
Field Team, Region III
224 New Customhouse

Denver 2, Colorado

Re: Docket No. DMEA 4709 (uranium)
Contract No. Idm-E 1136
LITTLE MO MINING INC.
P.O.Box 321, Shoshoni, Wyoming
(Mint et al Claims)
Fremont County, Wyoming

Dear Mr. King:

Little Mo Mining Inc. hereby requests the approval of the Government to terminate the above named contract. such termination to be effective with the work completed under Stage II which included the drilling of holes Nos. 1W, 2W, 3W, 4W, 5E, 6E, 7E and 8E. This work was covered by our monthly report for March 1958.

Work under Stage II was started about March 10, 1958 and was completed about March 20, 1958.

Very truly yours,

Little Mo Mining Inc.

By L. A. Henderson
L.A.Henderson - Consultant for,
Little Mo Mining Inc.

April 21, 1958

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault,
Division of Rare and Miscellaneous Metals

Subject: Amendment to contract

Mr. Ching has reviewed and approved Amendment No. 3 to Contract No. Idm-X1136, dated March 31, 1958, Docket No. DMEA-4709, Little Mo Mining, Inc., and has indicated no further review by the Legal Division is required.

Grace L. Ault

OFFICIAL FILE COPY
DMEA
RECEIVED APR 18 1958

DATE	INIT.	CODE
4/18	C	220
		130
"	Chung	700

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
April 15, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed are the Government's and Audit copies of Amendment No. 3 to the subject contract, which has been executed to extend the date on or before which the Operator shall have completed the work to June 1, 1958 and to increase the maximum period for payment of royalties and lien for payment thereof to eleven years from the date of the contract.

Copies of the Amendment have been distributed to the Operator, the Finance Office, and others concerned in Region III.

E. N. Harshman

E. N. Harshman

Enclosures

[illegible] New Customhouse
Denver 2, Colorado
March 31, 1958

4/3
4/4

Mr. L. A. Henderson, Consultant
Little Mo Mining, Inc.
P. O. Box 381
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract No. Idm-Ki136
Little Mo Mining, Inc.
(Hirt et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

Enclosed are the Government's, Audit, Operator's, Finance Office, and Field Team copies of proposed Amendment No. 3 to Contract No. Idm-Ki136, which has been prepared in reference to your letter of March 25, 1958 to extend the date presently fixed on or before which the work shall be completed from April 1, 1958 to June 1, 1958.

In addition, the Amendment increases the maximum period for payment of royalty and lien for payment thereof, provided for in the Contract, from ten years to eleven years from the date of the Contract.

If the Amendment is satisfactory, all copies are to be signed by the President of Little Mo Mining, Inc., as indicated, the corporate seal affixed, and all copies promptly returned to this office; upon receipt of which and after signature by the Executive Officer, DMEA Field Team, Region III, for the Government, the "Operator's Copy" will be returned to you.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

JWT:prl

cc: Chm.Op.Comm.-2) w/copy of
Harshman) Operator's
DMEA/Afo(Binyon)) letter of
Corres. file) March 25.
Townsend
Chron.

DMEA
DEPARTMENT OF THE INTERIOR

MAR 28 1958
REGION III
DENVER, COLORADO

LITTLE MO MINING INC.
P.O.Box 321 Shoshoni, Wyo.

March 25, 1958

Mr. W.H.King
Executive Officer, DMEA
Field Team, Region III
224 New Customhouse
Denver 2, Colorado

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm - E 1136

LITTLE MO MINING INC.
P.O.Box 321 Shoshoni,Wyo.
(Mint et al Claims)
Fremont Co. Wyo.

Dear Mr. King:

We wish to have the date set for completion of our contract extended from April 1,1958 to June 1,1958 to insure sufficient time to complete the operation.

Very truly yours,
L.A.Henderson
L.A.Henderson, - Consultant
Little Mo Mining Inc.

3/21	C	220
3/21	[illegible]	800
3/21	[illegible]	700

824 New Customhouse
Denver 2, Colorado
March 18, 1958

Mr. L. A. Henderson, Consultant
Little No Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract I4n-E1136
Little No Mining, Inc.
(Hint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

The date fixed for completion of the work provided for under Contract I4n-E1136 is April 1, 1958. If, for reasons beyond your control, it will not be possible to complete the work by April 1, 1958, you should submit to this office for consideration by the Government, the original and five copies of a request for extension of the completion date for such specific additional time as you anticipate will be required.

Yours very truly,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

cc: John Kunzerfeld
Little No Mining, Inc.
Shoshoni, Wyoming

JDC:hmh

cc: Chan. Op. Comm. (2)
DMEA/DFC
Harshman
Townsend
Corres.file, Reg. III
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

FILE COPY
DMEA
RECEIVED MAR 10 1958

DATE	INITIALS	CODE
3/10	C	220
3/10	[illegible]	700

March 7, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed are three copies of approval from the DMEA Field Team, Region III, to transfer needed footage and funds from Stage II to Stage I, as provided for in the contract.

Also enclosed are three copies of a joint memorandum, dated March 5, 1958, from E. N. Harshman, Geologist, Geological Survey, and Member of the DMEA Field Team, Region III, and E. O. Binyon, Mining Engineer, Bureau of Mines, pertaining to the transfer of needed additional footage and funds for use under Stage I.

Copies of the approval for transfer of footage and funds have been distributed to the Finance Office, Region III, and to others concerned.

W H King
W. H. King

Enclosures

DMEA
RECEIVED MAR 10 1958
DATE

224 New Customhouse
Denver 2, Colorado
March 7, 1958

Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Gentlemen:

In reference to your accounting report submitted covering work performed during the month of February, 1958, and consistent with provisions in the Contract regarding transfer of needed footage and funds from Stage II to Stage I to enable completion of Stage I holes to the stated objectives, this constitutes the Government's approval for transfer of drilling footage and applicable funds between stages as follows:

1. Increase rotary drilling footage under Stage I, Category (1), by 386 feet at $4.00/ft. ..... $ 1,544.00

2. Increase incidental allowance under Stage I, caption "Fixed Unit Cost," by 386 feet at $0.27/ft. ..... $ 104.22

3. Comparable footage and funds under Stage II will be decreased by amounts equivalent to those included under items 1 and 2 above.

Nothing in this approval for transfer of footages and funds shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

JWT:prl

Very truly yours,

DMEA Field Team, Region III

By W H King
W. H. King
Executive Officer

cc: Chmn. Op. Comm. (3)
Finance Office, Region III
Amendment file, Region III
Harshman
DMEA/DFC (Binyon)
Corres. file
Townsend
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
MAR 6 - 1958
REGION III
DENVER, COLORADO

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
March 5, 1958

RECEIVED MAR 10 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Marshman
E. O. Binyon

Subject: Docket No. DMEA 4709 (Uranium) Contract I[illegible]-E1136,
Little Mo Mining, Inc., (Mint et al claims)
Fremont County, Wyoming

This is in reply to your memorandum of February 26, 1958, requesting verification of acceptable Stage I drilling footage, and our recommendations relative to a transfer of footage from Stage II to Stage I with the necessary allowances for incidental costs of this footage.

The 386 feet drilled under Stage I in excess of the footage allowed for this stage was required in order to penetrate the base granite as set forth in Amendment No. 2 and the total footage, 2686 feet, is acceptable for Stage I drilling.

It is recommended that 386 feet be transferred from the footage allowed under Stage II to that allowed for Stage I. Also that the Incidental allowance under Fixed Unit Cost, Stage I, be increased by 386 feet and Stage II be decreased by this amount. The amounts for Stage I and Stage II Category I, Independent Contracts, and Fixed Unit Cost, would then be

Stage I Independent Contracts Rotary Drilling 2686 at $4.00/ft.	$10,744.00
Fixed Unit Cost Incidental allowance for each foot of rotary hole completed 2686 ft. at $0.27/ft.	725.22

Stage II Independent Contracts
Rotary Drilling 2014 feet at $4.00/ft. $8,056.00

Fixed Unit Cost
Incidental allowance for each foot
of rotary hole completed 2014 feet at $0.27/ft. 543.78

No changes in the other items - stand by time, dozer work, and allowance for chemical analyses under either Stage I or Stage II or in the total amount of the contract are recommended.

E. M. Harshman
E. M. Harshman
Member Field Team

E. O. Bizyon
E. O. Bizyon
Mining Engineer

EOB/mw
cc: 9
Idm-E1136

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

DMEA RECEIVED MAR 10 1958		
DATE	INITIALS	CODE
3/10	C	220
3/10	[illegible]	700

March 6, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed are three copies of approval by the DMEA Field Team, Region III, for the drilling of eight holes under Stage II of the contract.

Two copies of the Operator's request for approval of the drilling were forwarded to you by copies of the memorandum from this office, dated March 3, 1958, to the field examiners requesting their recommendations in the matter.

Also enclosed are three copies of a joint memorandum, dated March 4, 1958, from E. O. Binyon, Mining Engineer, Bureau of Mines, and E. N. Harshman, Geologist, Geological Survey, and Member of the DMEA Field Team, Region III, pertaining to the drilling approved.

Copies of the work approval have been distributed to the Operator, the Finance Office, Region III, and to others concerned.

W H King
W. H. King

Enclosures

DMEA
RECEIVED MAR 10 1958
DATE | INITIALS | COST

224 New Customhouse
Denver 2, Colorado

March 6, 1958

Mr. L. A. Henderson, Consultant
Little Mo Mining, Inc.
P. O. Box 321
Shoshone, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract No. Idm-R1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

In reference to your application for work approval under Stage II, dated February 26, 1958, and consistent with provisions in the Contract pertaining to prior Government approval for Stage II drilling, this constitutes Government approval for the drilling of eight (8) holes on the Arrowhead No. 2 claim under the provisions of Stage II of the Contract, offsetting Stage I holes Nos. 4, 5, and 6.

The approved holes are to be drilled in accordance with all provisions in the Contract pertaining thereto.

The locations of the eight approved holes, numbered 1W, 2W, 3W, 4W, 5E, 6E, 7E, and 8E, are indicated on the map entitled, "Figure 2A - Map Showing Claims, Stage I Drill Holes Locations With Deleted and Relocated Holes Under Stage I, Little Mo Mining, Inc., Mint et al claims, Fremont County, Wyo. DMEA 4709, Contract Idm-R1136," which is attached hereto and made a part of this work approval.

Proposed hole numbered 9E is considered too far from a significantly mineralized hole. Therefore, it is not approved for drilling under the provisions of the Contract.

Nothing in this work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the

fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

By W. H. King
W. H. King

By E. M. Harshman
E. M. Harshman

Enclosure (map)

JWT:prl

cc: Chmn. Op. Comm. (3)
Finance Office, Region III
Amendment file, Region III
Harshman
DMEA/DFC (Binyon)
Corres. file
Townsend
Chron.

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
MAR 5 - 1958
REGION III
DENVER, COLORADO

RECEIVED MAR 10 1958

DATE	INITIALS	CODE

March 4, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. O. Binyon
E. N. Harshman

Subject: DMEA Docket 4709 (Uranium), Contract Idm-E 1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Your memorandum of March 3, 1958, request recommendations in regard to the operator's request of February 26, 1958, for second stage drilling on the Arrowhead No. 2 claim.

Probing and assays on cuttings from Stage I holes completed under the contract indicate that three holes penetrated significant mineralization and can be offset under the terms of the contract. Data on the three mineralized holes follows:

Hole No.	Depth interval (feet)	c U_3O_8 *
4	72-74	0.01
	74-76	0.05
	76-78	0.10
	78-80	0.01
5	at 60	0.02
	60-62	0.29
	62-64	0.06
	64-66	0.16
	66-68	0.04
	at 70	0.01

Hole No.	Depth interval (feet)	c U_3O_8 *
6	52-54	0.08
	54-56	0.17
	56-58	0.08
	58-60	0.05
	72-74	0.01
	74-76	0.04
	76-78	0.06
	92-94	0.05
	94-96	0.05

* Chemical analyses on cuttings

The operator requests 8 Stage II holes (Nos. 1 W to 4 W and 5 E to 8 E) as offsets to the 3 mineralized holes and one Stage II hole (No. 9 E) located about 275 feet southeast of unmineralized hole No. 3. The 8 holes appear warranted; hole 9 E cannot be justified on the basis of Stage I drilling and is not recommended.

Stage I drilling indicates that ore-grade material underlies the northwestern part of the Arrowhead No. 2 claim but that the southeastern part is underlain by low-grade or barren material. The applicant's proposed locations have therefore been shifted slightly (less than 100 feet) to the northwest in order to explore better the area with the highest ore potential. All holes are on centers greater than the minimum distance specified in the contract.

Stage II offset holes shall be drilled to depths not over 10 feet below the ore horizon in the hole being offset. These depths are estimated to range from 75 to 110 feet.

E. O. Binyon, Mining Engineer

E. N. Harshman, Geologist

ENHarshman:mp

RECEIVED 6

2/6	C	220
3/7		800
3/10	KLK	700

DMEA
Denver Federal Center
Denver 2, Colorado

March 3, 1958

Memorandum

To: E. H. Kerstman - w/enclosure
DMEA/DPS (Simpson) - " "

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Wyoming), Contract No. Ym-Ml36, Little Mo Mining, Inc. (Mist et al. claims), Fremont County, Wyoming

Enclosed is a copy of the Operator's request of February 26, 1958 for the Government's approval for drilling under Stage II of the contract.

Please submit a joint memorandum report containing your recommendations in the matter.

Original signed by
W. H. KING

W. H. King

JWFigel

cc: Chem. Op. Comm. -2
Contr. file
Regional
Chron.

w/copy of Operator's request.

APPLICATION FOR WORK APPROVAL UNDER STAGE II

DMEA
DEPARTMENT OF THE INTERIOR
MAR 3 - 1958
REGION III
DENVER, COLORADO

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm- E 1136

LITTLE MO MINING INC.
P.O.Box 321 Shoshoni, Wyoming

(Mint et al Claims)
Fremont County, Wyoming

This application is for work approval under Stage II of the above named contract and consists of nine drill holes as located on Map, Figure 2A and preparing necessary drill sites and access roads thereto.

Drill hole Nos. 1w,2w,3w and 4w to be drilled to an approximate depth of 125 feet or base granite whichever is encountered first. Drill holes No. 5E,6E,7E,8E & 9E to be drilled to an approximate depth of 100 feet or base granite whichever is encountered first.

Map,Figure 2A shows approximate location of Stage I drill holes and approximate location of Stage II drill holes as herein requested.

Radiometric Log Sheets show the the radiometric logs, assays and notes on the lithology of the drill cuttings of Holes No. 4,5 & 6 Stage I.

Assay Sheets show chemical analysis of drill cuttings from the mineralized zones in Stage I holes No. 4,5 & 6.

Cross Section Chart, Figure 5, shows location of mineralization in Stage I drill holes No. 4,5 & 6. Also the elevation at these holes along with hole No.3. Mineralization is scaled in lines of increase of radiation above normal background as it was recorded on the radiometric log. A "Babbel" geiger counter attached to an "Esterline-Angus" graphic ammeter was the recording equipment used . All recordings were made on the five scale of sensitivity of the geiger counter.

We have spaced the Stage II holes well over 100 feet from the parent holes of Stage I which penetrated a mineralized zone. We believe this spacing will give us the best general over all picture of the mineralization in the region of Stage I holes which have proven mineralized zones. Were these three mineralized holes seperated by dead holes we would expect to place the offset holes much closer to the parent holes for best results. Since three consecutive holes show mineralization and we have a producing uranium mine some 600 feet north west of hole No.6 and on the same hill it is possible that an ore body of considerable size may be located here. These are our reasons for placing Stage II holes as shown on Map,Figure 2 A.

Approved by,
Millard M. Dirks Secretary
Little Mo Mining Inc.

L. A. Henderson
L.A.Henderson -- Consultant
Little Mo Mining Inc.

Hole No. 4 T.D. 150 Elev. 6125 Date 12/57 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

Depth	Hole Probe (Babbel) MR/HR.	Sample Pile Babbel Hand Probe MR/HR.	Assay % U_3O_8	Lithology: Rock Type	Color	Grains	Accessories	Remarks
2				granitic	tan	coarse	silt	
4								
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								
36								
38								
40								
42								
44								
46								
48								
50								
52								
54								
56								
58								
60				granitic	gray	coarse		
62								
64				granitic	dk.gray	coarse	biotite	
66								
68								
70				granitic	tan	coarse		
72			0.01	shist	dk.gray	coarse	biotite	
74			0.05					
76			0.10					
78			0.01					
80			0.01					
82			0.02					
84								
86								
88				granitic	gray	coarse	pink feldspar	
90								
92								
94								
96				granitic & biotite	gray	fine		
98				granitic	tan	coarse	silt	
100								
102				shist	dk.gray	fine	with	granitic material
104								
106				NOTE - This shows the upper 100 ft. of this hole. Balance of hole isdead, (see Cross Section Chart, Figure 5).				
108								
110								

Hole No. 5 T.D. 118 Elev. 6116 Date 12/57 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Lawrence Materi

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE	COLOR	GRAINS	ACCESSORIES	REMARKS
2				Granitic tan very coarse				
4								
6								
8								
10								
12								
14								
16								
18				granitic tan coarse				
20								
22								
24								
26				granitic tan coarse biotite				
28								
30								
32								
34								
36								
38								
40								
42								
44				granitic gray coarse clay				
46								
48								
50				shist dk.gray coarse with granitic material				
52								
54								
56				arkosic gray coarse silt				
58			0.02					
60			0.288					
62			0.06	granitic gray coarse sharp biotite shist pieces				
64			0.16					
66								
68			0.14					
70			0.01	granitic gray coarse blue clay				
72								
74								
76								
78								
80				granitic rusty gray coarse biotite				
82				granitic blue gray coarse				
84								
86								
88				shist dk.gray med.fine biotite				
90								
92				NOTE - This shows the upper 100				
94				ft. of this hole. Balance				
96				of hole is dead. (See Cross				
98				Section Chart, Figure 5).				
100								
102								
104								
106								
108								
110								

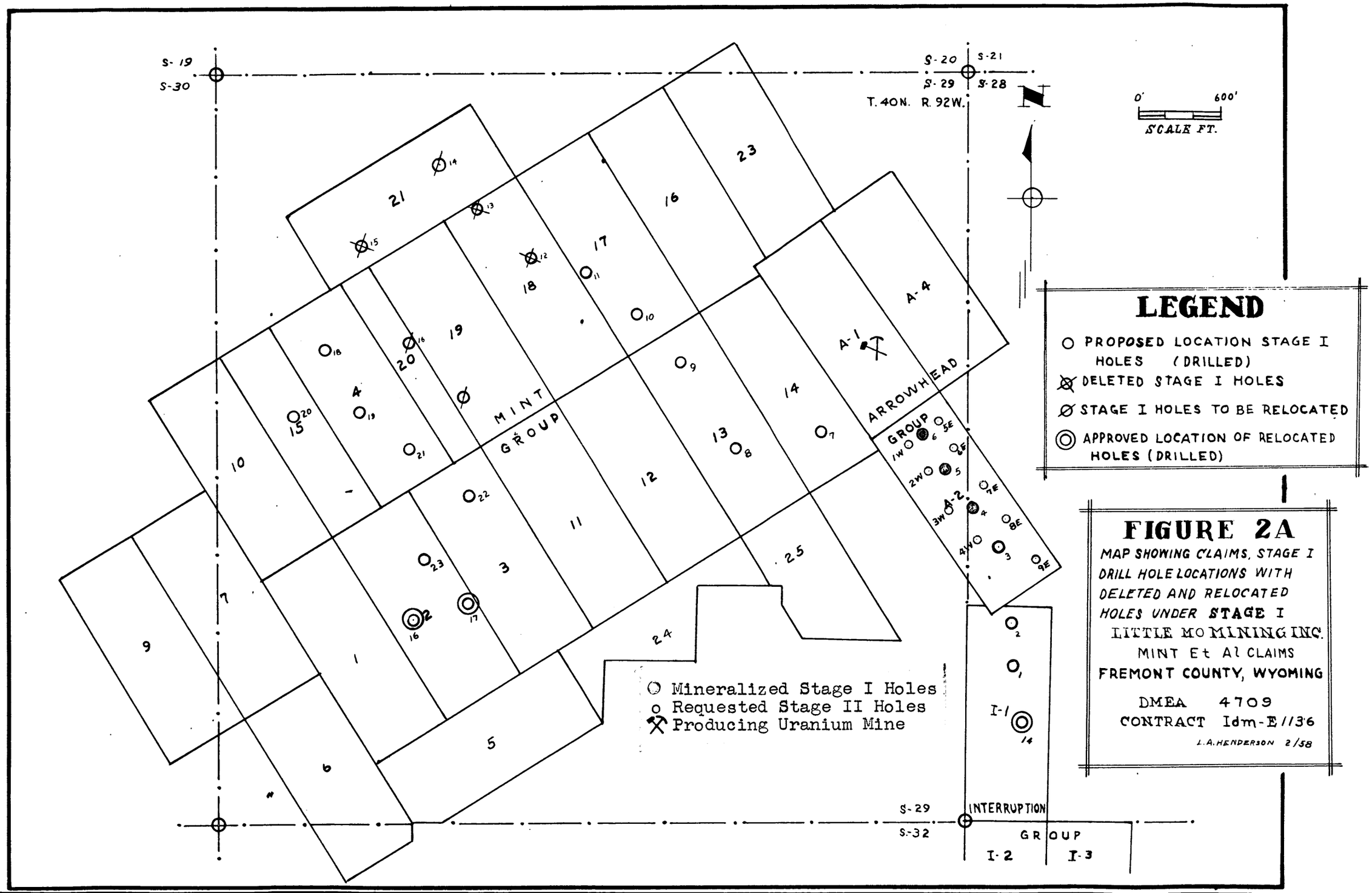
Hole No. 6 T.D. 234 Elev. 6134 Date 12/57 Geologist _____ Claim _____

LITTLE MO MINING, INC.
P. O. Box 321
SHOSHONI, WYOMING

Drlg. Cont. Beavers & Harris

DEPTH	HOLE PROBE (BABBEL) MR/HR.	SAMPLE PILE BABBEL HAND PROBE MR/HR.	ASSAY % U_3O_8	LITHOLOGY ROCK TYPE	COLOR	GRAINS	ACCESSORIES	REMARKS
2				granitic	tan	Coarse	silt	
4								
6				granitic	tan	Very coarse		
8								
10								
12								
14								
16								
18								
20								
22				granitic	tan	sharp	coarse	
24								
26								
28				clay	tan	fine	gritty	
30								
32								
34								
36								
38								
40								
42				arkosic	gray	fine	silt	
44								
46				arkosic	tan to gray	fine	silt	
48								
50				arkosic	dk.gray	fine	carbon	
52			0.08					
54			0.17					
56			0.08					
58			0.05	arkosic	gray	fine		
60								
62								
64								
66								
68								
70								
72			0.01	granitic	gray	sharp	pieces	
74			0.04	granitic	gray	coarse with fines		
76			0.06					
78								
80								
82								
84								
86								
88								
90								
92			0.05					
94			0.05					
96								
98								
100				arkosic	lt.gray	coarse mixed with fines		
102								
104								
106								
108								
110								

NOTE- This is the upper 100 ft. of this hole, balance of hole is dead. (See Cross Section Chart Figure 5).


S-19
S-30
S-20
S-21
S-29
S-28
T. 40N. R. 92W.
N
0'
600'
SCALE FT.
MINT GROUP
ARROWHEAD GROUP
A-1
A-2
A-4
I-1
I-2
I-3
INTERRUPTION GROUP
S-29
S-32
Mineralized Stage I Holes
Requested Stage II Holes
Producing Uranium Mine
LEGEND
PROPOSED LOCATION STAGE I HOLES (DRILLED)
DELETED STAGE I HOLES
STAGE I HOLES TO BE RELOCATED
APPROVED LOCATION OF RELOCATED HOLES (DRILLED)
FIGURE 2A
MAP SHOWING CLAIMS, STAGE I DRILL HOLE LOCATIONS WITH DELETED AND RELOCATED HOLES UNDER STAGE I
LITTLE MO MINING INC.
MINT Et Al CLAIMS
FREMONT COUNTY, WYOMING
DMEA 4709
CONTRACT Idm-E/136
L.A. HENDERSON 2/58

WESTERN CHEMICAL LABORATORY
915 ELK DRIVE
DENVER, COLO.
Phone TL 6-2679

Chemical Analysis Report for:

Little Mo

1/26/58

Lab. No.	Customer's Sample No.			% MoS2
37-1	Stage I,	Hole #4	72-74	0.01
" -2	"	" "	74-76	0.05
" -3	"	" "	76-78	rerun
" -4	"	" "	78-80	0.01
" -5	"	" "	80-82	0.01
" -6	"	" "	82-84	0.02
" -7	"	Hole #5	60'	0.02
" -8	"	" "	70'	0.01
" -9	"	Hole #6	52-54	0.08
" -10	"	" "	54-56	0.17
" -11	"	" "	56-58	0.08
" -12	"	" "	58-60	0.05
" -13	"	" "	72-74	0.01
" -14	"	" "	74-76	0.04
" -15	"	" "	76-78	0.06
" -16	"	" "	92-94	0.05
" -17	"	" "	94-96	0.05

Assayer--John W. Schneider
B.M.S. Marine Analyst

No. Assays 21 at 5.00 each = 105.00

Credit Balance _____ Balance due _____

Total due 105.00

FRANTUM CENTER LABORATORY
915 ELK DRIVE
DIVERTON, IDAHO.
Phone TL 6-2679

Chemical Analysis Report for:

Little Nid

2/17/58

Lab. No.	Customer's Sample No.	% Mgo
rerun	Stage I, Hole #4 76 – 78	0.10

Assayer—John V. Schneider
A.B.S. Mentre Analyst

No. Assays _____ at _____ each = _____

Credit Balance _____ Balance due _____

Total due _____

TRAUTMAN CHEMICAL LABORATORY
815 ELK DRIVE
DUBUQUE, IOWA
Phone WL 4-2679

Chemical Analysis Report for:

Litte MO

12/26/57

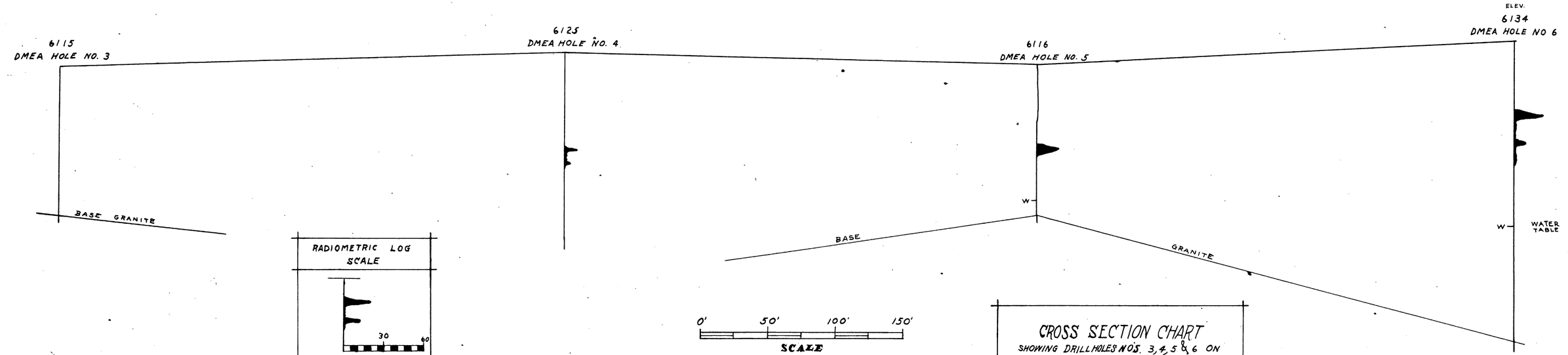
Lab. No.	Customer's Sample No.			% MgO
3393-1	Stage I	Hole #5	60-62	0.288
" -2	"	" "	62-64	0.06
" -3	"	" "	64-66	0.16
" -4	"	" "	66-68	0.04

Assayer---John W. Schneider
A.B., Inspire Analyst

No. Assays _____ at _____ each = _____

Credit Balance _____ Balance due _____

Total due _____



CROSS SECTION CHART
SHOWING DRILLHOLES NO'S. 3, 4, 5 & 6 ON
ARROWHEAD NO. 2 (LODE CLAIM) STAGE I
DMEA 4709
LITTLE MO MINING INC.
SHOSHONI, WYOMING

L.A. HENDERSON 2-58

FIGURE 5

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 28 1958

2/28		220
2/28		800
2/28		700

224 New Customhouse
Denver 2, Colorado
February 26, 1958

Mr. L. A. Henderson, Consultant
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

Form MF-104, Operator's Monthly Report and Voucher, for the month of January, 1958, has been received in this office and is being processed for payment.

We note that an arithmetical error has been made in the amount reported for Incidental Allowance on the January, 1958 Voucher. Correction should be made on subsequent copies in the "Monthly Total" column and "Totals to Date" column of Form MF-104, and also in the "Costs this Month" column and "Costs to Date" column of Form MF-104A. Notation of the correction should also be made under "Remarks" on Form MF-104A.

Yours very truly,

Original signed by
W. H. KING
W. H. King
Executive Officer, DMEA
Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm. (2)
DMEA/BFC
Harshman
Townsend
Corres. file, Reg. III
Chron

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 17 1958

DATE		
2/18	C	220
2/20	[illegible]	800
3/24	[illegible]	700

224 New Customhouse
Denver 2, Colorado
February 12, 1958

Mr. Earl J. Cox, Secretary
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Cox:

Form MF-104, Operator's Monthly Report and Voucher, for December 1957, has been received in this office and is being processed for payment.

The cost of three hours Standby time was reported on Form MF-104, however, documentation is included for only 2½ hours of Standby time. The reported cost for one-half hour Standby time is disallowed.

You will be further advised of the disallowance by means of an Administrative Audit Difference Statement which will be forwarded to you by the Finance Office, Region III. Please make the necessary adjustment of units and costs on the next reports submitted on voucher and accounting Forms MF-104 and MF-104A.

Yours very truly,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm. (2)
DMEA/DFC
Harshman
Townsend
Corres. file, Reg. III
Chron

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 14 1958

DATE	INITIALS	CODE
2-14	C	220
2/14	[illegible]	800
2/20	FEK	700

224 New Customhouse
Denver 2, Colorado

February 11, 1958

Mr. L. A. Henderson, Consultant
Little Mo Mining, Inc.
P. O. Box 321
Shoshone, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

Enclosed are the Government's, Audit, Finance Office, and Field Team copies of proposed Amendment No. 2 to Contract No. Idm-E1136, which has been prepared in reference to requests contained in your three letters of December 26, 1957, to:

(a) Provide for the use of an HD-6 Allis Chalmers tractor in lieu of a Model D-7 Caterpillar or unit of other make of equivalent size.

(b) Provide for the drilling of the holes to a depth of approximately 150 feet instead of a maximum depth of 150 feet.

(c) Provide for the deletion of Stage I holes Nos. 12, 13, and 15 and the relocation of Stage I holes Nos. 14, 16, and 17.

The relocation of holes Nos. 12, 13, and 15, as requested, is not considered necessary by the Government to fulfill the purpose of Stage I drilling described in the Contract.

If the Amendment is satisfactory, all copies are to be signed by an official of Little Mo Mining, Inc. authorized to sign such an instrument, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office; upon receipt of which, the "Operator's Copy" of the Amendment will be forwarded to you.

Very truly yours,
Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

JWT:prl
cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC (Binyon)
Corres. file
Townsend
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	CODE
2/19	C	220
2/24	~~FLK~~	700

February 14, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming.

Enclosed are the Government's and Audit copies of Amendment No. 2 to Contract Idm-E1136, which was forwarded by your letter of February 7, 1958 for signature by the Operator.

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

W H King
W. H. King

Enclosures

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2-5	Knouse	700
2-5	Ellis	700
"	Chambers	800
2/7	Selfridge	130
2/7	Johnson	110
"	Kirkendall	100
2/10	C	220
		700

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
224 NewCustomhouse Building
Denver 2, Colorado

FEB 7 1958

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. King:

As recommended in your memorandum, dated January 27, 1958, we are enclosing the original and four copies (also two extra copies) of Amendment No. 2 to the subject contract, signed by the Administrator. The amendment consists of two pages and one map (Figure 2A).

If you and the Operator find the amendment satisfactory, it is ready for the Operator's signature. After the amendment has been signed, please make the usual distribution of the document.

If any part of the amendment does not meet with your or the Operator's approval, the original and all copies should be returned with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FLKnouse/izm 2-5-58
cc: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1-30	Kuane	700
		140

January 30, 1958

Memorandum

To: Associate Solicitor
Division of Mineral Resources

From: Ernest Wm. Ellis, Director
Division of Rare and Miscellaneous Metals

Subject: Preparation of Amendment No. 2

INTERIOR DEPT.
JAN 31 1958
SOLICITOR

Docket No. DMEA-4709 (Uranium)
Contract No. Idm-E1136
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

You are referred to the memorandum, dated January 27, from the Executive Officer, Region III, and attachments thereto.

Please prepare Amendment No. 2 to the above contract for the signature of the Administrator, which provides for the following:

1. In line 5, paragraph 3, page 1, of Exhibit "A," delete the word "maximum 150 feet" and add "approximately 150 feet";

2. In line 2, paragraph 2, page 1, of Exhibit "A," delete "Model D-7 Caterpillar" and add "Model HD-6 Allis Chalmers";

3. Under Stages I and II, Category (1) Independent Contracts, paragraph 3, delete the two paragraphs and add the following for each paragraph, "31¼ hrs. actual tractor w/dozer operating time (including operator and all necessary costs whatsoever) @ $8.00/hr.";

4. On page 2, Annex I, in lines 2 and 3, delete "Figure 2 - Map Showing Claims and Drill Hole Locations Little Mo Mining, Inc.," and add "Figure 2A - Map Showing Claims, Stage I Drill Holes Locations With Deleted and Relocated Holes Under Stage I, Little Mo Mining, Inc., Mint et al Claims, Fremont County, Wyo. DMEA 4709, Contract Idm E 1136"; and

5. Under Stage I, page 2, Exhibit "A," delete the first paragraph and add "The revised locations of Stage I drill holes are shown on the map Figure 2A referred to above". Also in line 2, paragraph 2, delete "23 holes" and add "20 holes".

8623

Eight prints of the map Figure 2A are attached for use as attachments to the amendment.

Ernest Wm. Ellis
Ernest Wm. Ellis

Attachments

FLKnouse/izm 1-30-58
cc: Mr. Knouse

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 29 1958

DATE	INITIALS	CODE
1/29	gb	220
		130
"	FLK	700

January 27, 1958

VIA AIR MAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed are the original and two copies of a joint memorandum report, dated January 21, 1958, from D. F. Davidson, Geologist, Geological Survey, and E. O. Binyon, Mining Engineer, Bureau of Mines, pertaining to the Operator's request of December 26, 1957 for approval of certain changes in the contract.

Two copies of the Operator's request were forwarded to you by copies of the memorandum from this office to the field examiners, dated January 2, 1958, requesting their recommendations in the matter.

The Operator requests as follows:

1. Approval for the drilling of the holes through the Tepee Trail formation to an approximate average depth of 150 feet instead of approximately an average of 100 feet in depth as presently provided for in the contract.

2. Relocation of Stage I holes Nos. 12, 13, 14, 15, 16, and 17.

3. Provide for the use of an HD 6 Allis Chalmers tractor at $8.00 an hour in lieu of the D-7 Caterpillar tractor as presently provided for in the contract.

It is presently stipulated in the third paragraph of Exhibit "A" that the holes shall not exceed a maximum of 150 feet in depth. The drilling to date has indicated a greater depth will be necessary in order to reach the objective of penetrating not more than 10 feet into the underlying granite. Therefore, it will be necessary to remove the maximum depth stipulation of 150 feet.

The field examiners recommend that Holes Nos. 14, 16, and 17 be relocated, and further recommend the deletion of Holes Nos. 12, 13, and 15.

The field examiners further recommend that provision be made in the contract for the use of an HD 6 Allis Chalmers tractor at $8.00 an hour.

Preparation of an amendment of the nature involved is not considered within the authority delegated to this office. Therefore, the matter is forwarded for your consideration and appropriate action, with the recommendation that a suitable amendment be prepared as detailed in the field examiners' report dated January 21, 1958.

Also enclosed are eight copies of a map, "Figure 2A," which shows the revised location of Holes Nos. 14, 16, and 17, for possible use in conjunction with the proposed amendment.

W. H. King

Enclosures

IN REPLY REFER TO:

DMEA

DEPARTMENT OF THE INTERIOR

JAN 23 1958

REGION III

DENVER, COLORADO

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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 29 1958
DATE | INITIALS | CODE
EMH

January 21, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III
Through: E. N. Harshman

From: D. F. Davidson
E. O. Binyon

Subject: Docket DMEA 4709 (Uranium), Contract Idm-E 1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

In letters dated December 26, 1957, the operator requested approval of (1) drilling of holes to an approximate depth of 150 feet instead of a maximum of 150 feet as stipulated in the contract, (2) relocation of holes nos. 12, 13, 14, 15, 16, and 17, and (3) the use of an HD 6 Allis-Chalmers tractor at $8.00 per hour in lieu of the D-7 caterpillar or equivalent at $12.50 per hour as stipulated under the terms of the contract.

As requested in your memorandum of January 2, we submit the following recommendations:

(1) The ore deposit at the mine on the property occurs at or only a few feet above the contact of the Tepee Trail formation and the underlying Precambrian granite. The operator has recently drilled 6 holes 2 of which (holes nos. 19 and 23) were drilled to 150 feet, the maximum depth allowed by the contract, without reaching the basal granite. Since it is possible that future drilling may have to go to depths of

slightly more than 150 feet to reach the favorable zone for mineralization or the granite, it is recommended that the drill hole depth be changed to an approximate average depth of 150 feet or not more than 10 feet into the underlying granite.

(2) Relocation of holes 14, 16, and 17 as requested by the operator, and deletion of holes 12, 13, and 15, is suggested by the examining team. At the time of the original examination, Loomis and Marks of the Atomic Energy Commission office at Riverton, Wyoming, had mapped a reasonable thickness of tuffaceous, granite debris in the area in which these holes were located. Subsequent work apparently has caused them to change their interpretation, and they now feel that only a thin skin of decomposed granite and tuffaceous material covers hard granite in the area. Relocation of holes 12, 13, and 15 as requested by the operator is not considered necessary to fulfill the purpose of the first stage drilling described in the contract. The relocated positions of holes 14, 16, and 17 are shown on the attached figure 2A.

(3) The use of an HD 6 Allis Chalmers tractor or equivalent at $8.00 per hour in lieu of a D-7 caterpillar as stipulated in the contract shall be permitted.

D. F. Davidson, Geologist

E. O. Binyon, Mining Engineer

January 6, 1958

Memorandum

To: Hazel Berry, Operating Committee

From: Irene Z. Mainster, Div. of Rare & Misc. Metals

Subject: Amendment to Contract Idm-E1136

Mr. Knouse has reviewed and approved Amendment No. 1, dated December 27, 1957, to Contract Idm-E1136, Docket No. DMEA-4709, Little Mo Mining, Inc., and has indicated no further review of the amendment is required by the Legal Division.

Irene Z. Mainster

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 6 1958

DATE	INITIALS	CODE
1/6	gb	220
1/7	[illegible]	800
1/7	[illegible]	700

224 New Customhouse
Denver 2, Colorado
January 3, 1958

Mr. [illegible] A. Henderson, Consultant
Little Mo Mining, Inc
P O Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract Idm E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

Receipt is acknowledged of your three letters of December 26, 1957, pertaining to penetration through the "Tepee Trail" formation involving drilling to an approximate depth of 150 feet; the relocation of Stage I holes 12, 13, 14, 15, 16 and 17; and amendment of the contract to provide for the use of an Allis-Chalmers HD6 tractor, at $8.00 per hour, in lieu of a caterpiller tractor at $7.50 per hour.

Amending the contract to provide for the changes requested is in part not within the authority delegated to this office; therefore, the matter will be forwarded to the Washington Office, DMEA, for their consideration and appropriate action on which you should hear at an early date.

Yours very truly,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JWT:hmh

cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC (Binyon)
Townsend
Corres file, Reg. III
Chron

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 6 1958

DATE	INITIALS	CODE
1/6	gb	220
1/7	[illegible]	800
		200

224 New Customhouse
Denver 2, Colorado
January 2, 1958

Memorandum

To: E. N. Harshman - w/enclosures
E. O. Binyon, DMEA - w/enclosures

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4709 (Uranium) Contract Idm-E1136, Little Mo Mining, Inc., (Mint et al. claims), Fremont County, Wyoming

Enclosed are one copy each of the three letters dated December 26, 1957, from L. A. Henderson, the Operator's Consultant, requesting the Government's approval as follows:

1. Approval for the drilling of the holes through "Tepee Trail" formation to an approximate average of 150 feet, instead of approximately 100 feet as presently provided for in the contract.

2. Relocate holes Nos. 12, 13, 14, 15, 16 and 17.

3. To provide for the use of an HD6 "Allis-Chalmers" tractor at $[illegible].00 per hour, in lieu of the D-7 caterpiller tractor as presently provided for in the contract.

In reference to item 1, the contract provides for the transfer of necessary footage and funds from Stage II to Stage I, in the event the footage presently provided for Stage I is insufficient to enable reaching the stated objectives of the Stage I holes; however, since the requested increase in footage may seriously effect the extent of drilling originally planned for Stage II, that fact should be considered in making your recommendations.

It appears that approval for the foregoing listed items will involve an amendment to the contract which is not in part, at least, within the authority delegated to this office.

Please submit as promptly as possible a joint memorandum report containing your recommendations pertaining to the three items as listed above.

Original signed by
W. H. KING
W. H. King

JWT:hmh

cc: Chm. Cp. Comm. (2)) w/copy
Corres.file, Reg. III) of enclosures
Townsend
Chron

LITTLE MO MINING INC.
P.O.Box 321
Shoshoni, Wyoming
Dec. 26, 1957

MR.W.H.KING
Executive Officer DMEA, Region III
224 New Custom House
Denver 2, Colo.

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm-E 1136
(Mint et al Claims)
Little Mo Mining Inc.
Fremont County, Wyoming

Dear Mr. King:

It has been suggested by your field inspector "Mr.E.O.Binyon that our contract be ammended to read that"all holes be drilled through the "Tepee Trail"formation or aproximately a maximum of 150 feet. This would mean some holes would be deeper than 150 feet since the two holes so far drilled to that depth under this contract did not reach base granite.

The uranium mineralization in this area is found in the rubble of the "tepee Trail" formation which rests on the rugged surface of precambrian granite. This base granite seems to act as a control feature forming a floor for unoxidized mineralized zones in this area. This is the case of two zones of unoxidized uranium ore (encountered in the mine on the property) which rests just above the base granite. Oxidized zones have all been found considerably above any base granite in this mine.

The average depth of holes drilled under this contract so far is about 125 feet.

DMEA
DEPARTMENT OF THE INTERIOR
JAN 2 - 1957
REGION III
DENVER, COLORADO

Very truly yours,
L.A. Henderson
L.A.Henderson-----Consultant
Little Mo Mining Inc.

ORIGINAL FILE COPY
DMEA
RECEIVED JAN 6 1958
MAIL CONTROL CODE

DMEA
DEPARTMENT OF THE INTERIOR

JAN 2 - 1957
REGION III
DENVER, COLORADO

LITTLE MO MINING INC.
P.O.Box 321
Shoshoni, Wyoming
Dec. 26,1957

Mr.W.H.King
Executive Officer DMEA, Region III
New Custom House
Denver 2, Colo.

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm-E 1136
(Mint et al Claims)
Little Mo Mining Inc.
Fremont County,Wyoming

Dear Mr. King:

In laying out the recommended drill holes on the ground as per the contractwe find six of them located either on base granite or so nearly so as to be of little use to the contract. In view of this fact we are asking for relocation of the following holes, hole numbers 12,13,14,15,16 & 17. This was also brought to the attention of your field inspector, "Mr.E.O.Binyon" who expressed the belief that these holes should be relocated to better serve the purpose of the contract. The relocation of the above drill holes have been chosen on the ground and are believed to be favorable to the extension of known mineralized limits on the property.

See map ,Figure 2, for approximate relocated drill holes. Map also shows original hole locations and known areas of mineralization.

Very truly yours,
L.A.Henderson----- Consultant,Little Mo Mining Inc.
L. A. Henderson

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 6 1958

DMEA
DEPARTMENT OF THE INTERIOR
JAN 2 - 1957
REGION III
DENVER, COLORADO

Little Mo Mining Inc.
P.O.Box 321
Shoshoni, Wyoming
Dec. 26, 1957

Mr. W.H.King
Executive Officer DMEA, Region III
New Custom House
Denver 2, Colo.

RE: Docket No. DMEA 4709 (uranium
Contract No. Idm-E 1136
(Mint et al Claims)
Little Mo Mining Inc.
Fremont County, Wyoming

Dear Mr. King:

A Model D-7 caterpillar or equivalent was not available at the time we neededit so we have had to contract an "Allas-Chalmers" HD6 for building access roads and drill sites and wish to amend our contract to cover this tractor.

Actual cost of this machine to us has been $8.00 pr hour.

Very truly yours,
L.A. Henderson
L.A.Henderson-----Consultant,
Little Mo Mining Inc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
January 2, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 6 1958

DATE	INITIALS	CODE
1/6	gb	220
		130
	ELK	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA No. 4709 (Uranium) Contract Idm-E1136
Little Mo Mining, Inc. (Mint et al. claims)
Fremont County, Wyoming

Enclosed are the Government's and Audit copy of Amendment No. 1, to the subject Contract Idm-E1136, which has been executed to extend the date fixed on or before which work shall be completed from January 1, 1958, to April 1, 1958. Also enclosed are two copies of the Operator's letter of December 26, 1957, requesting the time extension.

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

W H King
W. H. King

Enclosure

DMEA
DEPARTMENT OF THE INTERIOR

DEC 27 1957
REGION III
DENVER, COLORADO

LITTLE MO MINING INC.
P.O.Box 321
Shoshoni, Wyoming
Dec. 26,1957

Mr. W.H.King
Executive Officer DMEA, Region III
224 New Custom House
Denver 2, Colo.

Dear Mr. King:

We find the time limit for completion of Stage I of our contract, (ARTICLE) (3) to be insufficient and hereby wish to request said time limit to be moved up to April 1, 1958.

At this time of the year weather conditions may force a shutdown of operations at any time. Also just before Christmas one of the drill crew had the misfortune to lose a finger on the job, so the drilling contractor suspended operations untill after the holidays. We expect to resume operations right after January 1,1958.

Very Truly Yours,
L.A. Henderson
L.A.Henderson (Consultant)
Little Mo Mining Inc.

RE: Docket No. DMEA 4709 (uranium)
Contract No. Idm-E1136
(Mint et al claims)
Little Mo Mining Inc.
Fremont County, Wyoming

CONFIDENTIAL COPY
DMEA
RECEIVED JAN 6 1958
DATE | INITIALS | CODE

DMEA RECEIVED DEC 30 1957		
DATE		CODE
12/30	C	220
12/30	EEF	800
12/31	~~FLR~~	700

224 New Custhouse
Denver 2, Colorado
December 27, 1957

Mr. L. A. Henderson, Consultant
Little Mo Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract Idm-E1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Dear Mr. Henderson:

Enclosed are the Government's, Audit, Operator's, Finance Office, and Field Team copies of proposed Amendment No. 1, to Contract Idm-E1136, which we have prepared in reference to your request of December 26, 1957, to extend the date fixed on or before which work shall be completed from January 1, 1958, to April 1, 1958.

If the Amendment is satisfactory all copies are to be signed by the President, Little Mo Mining, Inc., as indicated, the corporate seal affixed, and all copies promptly returned to this office. Upon receipt of same and after signature by the Executive Officer, DMEA Field Team, Region III, for the Government, the Operator's copy will be returned to you.

Yours very truly,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

Enclosures

JWT:hmh

cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC (Binyon)
Townsend
Corres.file,Reg.III
Chron

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 18 1957

DATE	INITIALS	CODE
11/18	C	220
11/18	B	215
11/18	FLK	700

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

November 14, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4709 (Uranium), Contract No. Idm-E1136, Little Mo Mining, Inc. (Mint et al. claims), Fremont County, Wyoming

Enclosed are the following, pertaining to the subject matter:

1. The Government's and Audit copies of Contract No. Idm-E1136, which was forwarded by your letter of September 26, 1957 for signature by the Operator and insertion of a suitable starting date under Article 3 of the contract form.

2. Three copies of a letter from this office, dated November 14, 1957, whereby we forwarded the Operator's Copy of the Contract, blank report forms, and instructions relative to reporting on work and corresponding with this office on matters in conjunction with the Contract.

3. Three copies of the Operator's letter of November 13, 1957, by which the executed copies of the Contract were returned to this office, advice was given as to the date on or before which work would be commenced, a request for a one-month's extension of the date fixed for completion of the work, and advice as to the change in the mail address of the company.

4. Three copies of a letter from this office to the Operator, dated November 14, 1957, advising that we prefer to defer preparation of an amendment to extend the completion date until after a portion of the work has been completed and a more accurate determination could be made of the time extension necessary.

The contract, dated September 26, 1957, provides for work estimated to cost $21,120.00, toward which the Government will contribute 75%, or an amount not in excess of $15,840.00

Copies of the contract have been distributed to the Finance Office, Region III, and to others concerned.

E. N. Harshman

E. N. Harshman

Enclosures

OFFICE MANAGER
DMEA
RECEIVED NOV 18 1957
DATE | INITIALS

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

NOV 14 1957

Little Mo Mining, Inc.
P. O. Box 545
Upton, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Contract No. 14m-K1136
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming

Gentlemen:

Enclosed herewith is the "Operator's Copy" of Exploration Project Contract No. 14m-K1136, Docket No. DMEA 4709.

Also enclosed are six copies of form MF-104, "Operator's Monthly Report and Voucher," and six copies of form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to the

Executive Officer
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado.

The extra copy is for your records.

Forms MF-104 and MF-104A are to be combined into five sets of one of each form. Each set of the combined forms is to be accompanied by a map or sketch showing the location and extent of work performed and a signed narrative report which describes the work performed, conditions encountered, and results of the work. The monthly accounting report will not be processed for reimbursement unless it is accompanied by a signed narrative report and other required or pertinent data. Additional copies of forms MF-104 and MF-104A will be forwarded to you each month on receipt of your report for the prior month.

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 on the project and review your accounts,

after which the report forms will be forwarded to this office for administrative examination and vouchering. If the report is in order, a check will be issued by the Treasury Department for the Government's portion of the approved costs. If you have any difficulty in completing these forms and the reports, please call on this office for assistance.

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

The contract is prepared on form NF-200, and under its provisions and as outlined in Exhibit "A" of the contract, the allowable costs are a combination of actual costs with a maximum average unit cost established for work under Categories (1) and (7), and fixed unit costs for performing the remaining items of work or service. Under the provisions of the contract, the work outlined in Exhibit "A" under Category (1) is to be performed by an independent contractor. The unit cost established for each item of work, for both stages, is a maximum average unit cost toward which the Government will contribute its appropriate share as provided for in the contract. The actual costs of the work completed under Category (1) are to be recorded under item (1) of form NF-104 and must be supported and documented by a signed or certified true copy of the billing from the subcontractor. The costs of sample analysis under Category (7) must be supported by a copy of the assay return and a signed or certified true copy of the billing from the assayer. Amounts reported on the basis of the fixed unit costs require no documentation, as they are otherwise verified. However, costs on a fixed unit cost basis are to be recorded on form NF-104 under item (1).

In reference to ANNEX II (f) of the contract pertaining to the average unit cost of the drilling, if excess costs are suspended by reason of exceeding the maximum unit cost of the drilling described under Category (1), the excess costs will be held in suspense and be reinstated by this office, to the extent suspended funds are available, in the event the unit costs for any month should cause the average unit cost to fall below the maximum average unit cost established in the contract for the drilling.

In the event you desire to perform the work under Category (1) on company account instead of subcontracting it, as provided in the contract, it will be necessary that you request and obtain an appropriate amendment to the contract before reimbursement can be made to you for the Government's portion of the allowable incurred costs.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data. Each request for action by this office must pertain to one matter only. Such requests are not to be incorporated in your narrative report accompanying monthly progress report forms MF-104 and MF-104A.

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

Your attention is directed to the provision in the contract that the Operator shall complete Stage I and shall perform as much of the Stage II work as the Government approves in writing in advance, either after completion of Stage I work or concurrently. The foregoing means that if the results of the drilling under Stage I justify offset drilling under Stage II, you are at liberty to request the Government's approval for the Stage II work as soon as you have completed a sufficient portion of the drilling under Stage I to enable an accurate evaluation of the results thereof. Your request for the work approval must be in septuplicate, each copy complete with a map showing the locations of the holes previously drilled and the locations of the holes you propose to drill under Stage II. Your request for the work approval should be complete with drill logs, results of radiometric probing, chemical analyses, and any other pertinent data which will be of value to the Government in appraising the work performed. Such requests for work approval are not to be made a part of a monthly accounting report, as the distribution and method of handling are entirely different.

If the work under Stage I is completed in its entirety before requesting approval for work under Stage II, you should anticipate a suspension of operations between stages of work, to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

To eliminate as much delay to operations as possible, if that is of serious consideration, you should expedite forwarding of the results of the work completed and your request for the Government's approval of the additional work you propose.

No oral statement of any person shall be construed to modify or change the terms of the contract. 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, DSSA, or by the DSSA Field Team, Region III.

It is a regulation that reimbursement for the cost of work accomplished prior to the date of the contract will not be allowed. It is a requirement and imperative that you notify this office in writing the date work actually commences under the contract.

Very truly yours,

Original signed by
E. N. HARSHMAN

Acting

Executive Officer
DSSA Field Team, Region III

Enclosures

JWT:prl

cc: Chem. Op. Comm. (3)
Finance Office, Region III
Amendment file, Region III
Harshman
DSSA/BFC (Simyon)
Townsend
Corres. file
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 18 1957
DATE | INITIALS | CODE

224 New Customhouse
Denver 2, Colorado

November 14, 1957

Mr. Earl J. Cox, Secretary
Little Mo. Mining, Inc.
P. O. Box 321
Shoshoni, Wyoming

Re: Docket No. DMEA-4709 (Uranium)
Contract No. Idm-K1136
Little Mo. Mining, Inc.
(Mint, et al. claims)
Fremont County, Wyoming

Dear Mr. Cox:

Reference is made to your letter of November 13, 1957, by which you returned the executed copies of Contract No. Idm-K1136, fixed the date on or before which work would be commenced, and requested an extension of the date fixed for completion of the work from January 1, 1958 to February 1, 1958.

We will prepare an amendment to extend the date fixed for completion of the work to such additional time as circumstances indicate. However, we prefer to defer the matter until a portion of the work has been completed. It is suggested that about December 20 you revive the matter and request an extension of the date fixed for completion of the work for such additional time as you deem will be necessary to enable you to complete the work under Stage I and such work as you may propose to complete under Stage II.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

JWT:bh
cc-Chairman, Op. Comm.(3)
Harshman
DMEA/DFC (Binyon)
Corres. File
Townsend
Chron.

DIRECTORS
ALLAN DOUGLAS
JOHN KUMMERFELD
L. A. HENDERSON
J. E. ACKERMAN

EARL COX
GEOLOGICAL ENGINEER

LITTLE MO. MINING INC.

UPTON, WYOMING
PHONE 127

DMEA
DEPARTMENT OF THE INTERIOR
NOV 14 1957
REGION III
DENVER, COLORADO

November 13, 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region 111
U.S. Department of the Intior
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4709 (Uranium)
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming -
Proposed Exploration Project
Contract No. Idm-E1136

Dear Mr. Harshman:

Enclosed are the four copies of the proposed Exploration Project Contract No. Idm-E1136, signed in accordance with instructions in your letter of September 30, 1957.

The proposed work will commence on or before December 1, 1957.

The date presently fixed on or before which the work shall be completed is January 1, 1958. It is requested that due to the season of the year that this completion date be extended to February 1, 1958.

Our head office is being moved to Shoshoni, Wyoming. In the future please address all our correspondence to:

Little Mo Mining, Inc.
P.O. Box 321
Shoshoni, Wyoming

Very truly yours,

Earl J. Cox

Earl J. Cox
Secretary

224 New Customhouse
Denver 2, Colorado

November 7, 1957

11/12 C 220 700

Mr. Earl J. Cox, Secretary
Little Mo Mining, Inc.
P. O. Box 545
Upton, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming -
Proposed Exploration Project
Contract No. Idm-E1136

Dear Mr. Cox:

By letter of September 30, 1957, we forwarded to you the Government's, Audit, Finance Office, and Field Team copies of proposed Contract No. Idm-E1136 for signature by an official of Little Mo Mining, Inc. and requested prompt return of all copies of the Contract, either executed, if satisfactory, or unexecuted if not satisfactory.

Since considerable time has elapsed and we have heard nothing further from you, we will appreciate advice by return mail as to your plans regarding the Contract and performance of the work provided for therein.

The date presently fixed on or before which the work shall be completed is January 1, 1958, which does not leave a great deal of time within which to complete the work. However, under justifiable circumstances, that date can be extended, subject to a request in writing from you for a specific time extension.

In our letter to you of September 30, we requested that you advise us the date on or before which work would be commenced for our insertion under Article 3 of the Contract form.

JWT:prl

Very truly yours,

Original signed by
E. N. HARSHMAN

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

cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC-Binyon
Townsend
Docket
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 2 1957
DATE | CODE
10/2 | 220
" | 700

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

September 30, 1957

Little Mo Mining, Inc.
P. O. Box 545
Upton, Wyoming

Re: Docket No. DMEA 4709 (Uranium)
Little Mo Mining, Inc.
(Mint et al. claims)
Fremont County, Wyoming
Proposed Exploration Project
Contract No. Idm-E1136

Gentlemen:

Enclosed are the Government's, Audit, Finance Office, and Field Team copies of proposed Exploration Project Contract No. Idm-E1136, which has been prepared pursuant to your application for Government assistance in exploration work under the Defense Minerals Exploration Administration program.

If the contract is satisfactory, all copies are to be signed by an official of Little Mo Mining, Inc. authorized to sign such an instrument, the signer's title inserted, the signature attested to by the Secretary, the corporate seal affixed, and all copies promptly returned to this office.

In the event the contract is not satisfactory, all copies are to be returned promptly to this office, together with your comments on or objections to the contract.

Your attention is especially directed to three provisions in the contract:

1. The Government will not contribute to the costs of any of the work that is provided for in the contract which is performed prior to the date of the contract.

2. The contract requires completion of the exploration work by the date fixed therefor. Approval must be obtained from this office for any suspension of work which may result in failure to complete the work by the date specified.

3. Royalty is due the Government on all production from the land described in the contract, beginning on the date of the contract.

If the contract is satisfactory, and upon return of all copies properly signed, the "Operator's Copy" of the contract will be forwarded to you, together with blank report forms and instructions relative to reporting on work performed under the contract. Also, instructions will be given as to the procedure to be followed in corresponding with this office in matters concerning operations under the contract.

When the signed copies of the contract are returned, please advise us the date on or before which work will be commenced, for our insertion in Article 3 of the contract form.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

Enclosures

JWT:prl

cc: Chmn. Op. Comm. (2)
Harshman
DMEA/DFC - Binyon
Townsend
Docket file
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/24/57	Knouse	700
"	Ellis	700
9/24	Talbert	800
9/26	GCS	130
"	Johnson	110
"	Rutherford	100
9/27	B	220
		700

SEP 26 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. Harshman:

Enclosed are the original and four copies of a proposed long-form contract between the Government and the subject Applicant, signed by the Administrator. The contract consists of Form MF-200; Annex I, two pages; Annex II, one page; a Consent to Lien and Subordination Agreement; Exhibit "A," four pages; and one map (Figure 2). Also enclosed are two extra copies of Annexes I and II, Exhibit "A" and map (Figure 2), for the use of the Field Team.

If you and the Applicant find the proposed contract satisfactory, it is ready for the signature of the Applicant, provided a suitable starting date is inserted under Article 3. After the contract is signed, please make the usual distribution of the document.

In the event that any part of this proposed contract does not meet with your approval or the Applicant's and cannot be amended within your delegated authority, the original and all copies are to be returned with the proposed changes for consideration.

Sincerely yours,

FLKnouse/gla
9-24-57

George C. Selfridge
(By ...)
Chairman, Operating Committee

cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, Rm. 5224
Mr. Knouse

Enclosures

APPROVED:

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

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

8623

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. Code 800		9/24
2. " 130		
3. " 110		
4. " 100		
5.		
FROM:		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions X Your information

REMARKS:

Note first line, page 2, of Exhibit "A." This wording was not in accordance with the Staff Meeting minutes of 9-12-57 due to the fact the proposed contract was in Legal prior to that date. The wording simply followed the previous contracts.

EWE

INT.-DUP. SEC., WASH., D.C. M8278

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA-4709

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by rotary drilling from the surface to test the uranium bearing sedimentary rocks of Tertiary Tepee Trail formation or conglomerate material, and the underlying contact zone of Precambrian granite.

Drill hole sites and access roads thereto shall be prepared with a Model D-7 Caterpillar tractor or an equivalent size unit of another make.

Each hole shall be drilled non-core, dry if possible, but wet if necessary, with a rotary drill through the sediments or rubble and not less than five feet nor more than 10 feet into the underlying granite, or to a maximum depth of 150 feet. Drilling depths are expected to range from 75 feet to 150 feet and average 100 feet. The minimum diameter of all drill holes shall be 3 inches. All holes shall be reamed and cased or cemented and re-drilled as necessary. No payment shall be made for an incompleted drill hole. No hole shall be drilled closer than 100 feet to the outside boundary of the land described in Article 2.

All cuttings and sludge shall be saved at each two-foot drilling interval and checked for radioactivity, in such manner and by such methods as ~~is~~ approved by the Government. Drill cuttings or sludge from each two-foot section of drill hole, when radiometric readings exceed by four times ~~those of~~ the background ~~rocks~~ count of the area, shall be split into halves, and one half of the material shall be analyzed chemically for uranium. The other half of the radioactive drill cuttings or sludge shall be properly boxed, labeled, and stored, and furnished to the Government upon request. All the remaining drill cuttings and sludge from each drill hole shall be properly boxed, labeled, and stored for the Government's inspection. At the completion of the project, upon Governmental approval, all stored samples may be disposed of by the Operator.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

September 16, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 18 1957

DATE	INITIALS	CODE
9/18	C	220
1/		700

INTERIOR DEPT.
SEP 19 1957
SOLICITOR

INTERIOR DEPT.
SEP 20 1957
SOLICITOR

Memorandum

To: Secretary to the Operating Committee, DMEA

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

Subject: Docket DMEA-4709 (Uranium) Little Mo Mining, Inc. (Mint et al., claims) Fremont County, Wyoming

Enclosed are the original and five copies of Form MF-205 signed by Clifford A. Reed and letter dated September 12, 1957, from the Applicant transmitting the foregoing to this office.

You will note that the Applicant purportedly clarifies the question of the "fixed term" for the two leases by which the subject land is controlled.

If the Applicant's clarification is considered inadequate, we will appreciate word to the effect that the required amendments can be requested.

E. N. Harshman

E. N. Harshman

RECEIVED
SEP 19 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

DIRECTORS
ALLAN DOUGLAS
JOHN KUMMERFELD
L. A. HENDERSON
J. E. ACKERMAN

LITTLE MO. MINING INC.

UPTON, WYOMING
PHONE 127

EARL COX
GEOLOGICAL ENGINEER

Have
M
MA

DMEA
DEPARTMENT OF THE INTERIOR
SEP 13 1957
REGION III
DENVER, COLORADO

September 12, 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA-4709 (Uranium)
Little Mo Mining, ~~Inc.~~
Fremont County, Wyoming

Dear Mr. Harshman:

Enclosed are the original and five copies of Form MF - 205, signed in accordance with the instructions in your letter of August 26th.

Your letter also asks us to clarify the length of time our leases with Messrs. Fike and Reed are to remain in force.

In the last paragraph of the first page of both leases, it states that the Lessee may, "when he deems it necessary or desirable, discontinue operations entirely hereunder; provided, that in such event, an upon termination hereof, the Lessee agrees to deliver a good and sufficient and recordable release and termination hereof."

We have mined continuously from Arrowhead No. 1 Claim since February, 1955. We are mining at the present time and will continue to do so. The Interruption Nos. 1, 2, and 3, have been and are being drilled and explored.

Our attorney informs us that as long as the drilling and mining mentioned above continues, our leases will continue in force. As we have no intention of diacontinuing this work we feel amendments are not necessary. However, should your office feel differently, please inform us so the necessary steps can be taken.

Sincerely

Earl J. Cox

Earl J. Cox, Secretary
Little Mo Mining, Inc.

Enclosures

PHOTO CY TO:
WO
DOCKET
DMEA/DFC-2
HARSHMAN

WO
~~Docket~~

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-3	Knouse	100
		140

INTERIOR DEPT.
SEP 5 - 1957
SOLICITOR

September 4, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis, Director
Division of Rare and Miscellaneous Metals

Subject: Docket No. DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Attached is a draft of a long-form contract covering the subject application. Eight prints of a map, Figure 2 are forwarded for attachment to the contract. Please refer to the letter, dated August 12, 1957 to Region III, and their reply, dated August 26, 1957, relating to the Consent to Lien and Subordination Agreement that was sent for execution by the lessor. Upon receipt of this agreement, it will be forwarded to you.

Ernest Wm. Ellis

FLKnouse/izm 9-4-57

cc to: Mr. Knouse

RECEIVED
SEP- 5 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

DRAFT
FLKnouse/izm
9-4-57

MF-200
(Revised June 1954)

Docket No. DMEA 4709

Commodity Uranium

Contract No. Idm–E

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this ..... 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] Little Mo Mining, Inc, aWyoming corporation, whose mailing address is P. O. Box 545 Upton, Wyoming, hereinafter called the "Operator," as follows:

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

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Owner - Lessee 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] Lease, Assignment, & Quitclaim deed [7] recorded in Book 66, 98 & 150, page 281, 212 & 362, 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: (Legal insertion)

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Attention Legal: (to be inserted upon receipt of Consent to Lien and Subordination Agreement now in field for signature).

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before January 1, 1958 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either have~~ completed the work ~~or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A"~~ except as otherwise provided in Exhibit "A" with respect to stage of work. (See Article 13).

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $ 21,120.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $ 15,840.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; ~~but except for any such necessary excesses in categories, subcategories, or items the excess over the Operator's total allowable cost of the work exceeds 10 percent of the estimated total allowable cost of the work.~~ See Article 13.

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9. **See Article 13.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work, except as otherwise provided in Exhibit 'A' with respect to stage of work."

(b) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.

(c) Categories (2) through (7) of Article 6(a) are deleted.

(d) In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the Contract.

(e) In the last sentence of Article 6(c), the words "Article 8" are substituted for the words "Article 9."

(f) Notwithstanding any other provision of the Contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the contract.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By .....

.....
(Operator)

By .....

.....

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

.....

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
Little Mo Mining, Inc.
Docket No. DMEA-4709

Annex I

The land referred to in Article 2 of the contract form consists of 27 unpatented lode mining claims in sections 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th Princiap Meridian and Base, Fremont County, Wyoming. Notices of location are recorded in the Fremont County records in the book and page numbers opposite the name of each claim listed below:

Claim	Book	Page
Interruption No. 1	84	3
" " 2	109	457
" " 3	109	458
Arrowhead No. 2	84	2
Mint No. 1	58	369
" " 2	58	370
" " 3	58	371
" " 4	58	372
" " 5	63	333
" " 6	63	334
" " 7	63	335
" " 9	63	337
" " 10	63	338
" " 11	63	339
" " 12	63	340
" " 13	63	341
" " 14	63	342
" " 15	63	343
" " 16	133	228
" " 17	133	229
" " 18	133	230
" " 19	133	231
" " 20	133	232
" " 21	133	233
" " 23	136	482
" " 24	141	109
" " 25	141	108

The locations of the claims listed above are shown on the attached map, entitled "Figure 2 Map Showing Claims and Drill Hole Locations, Little Mo Mining, Inc."

EXPLORATION PROJECT CONTRACT
LITTLE MO MINING, INC.
DOCKET NO. DMEA-4709

EXHIBIT "A"

General Provisions

The work consists of exploration by rotary drilling from the surface to test the uranium bearing sedimentary rocks, Tertiary Tepee Trail formation or conglomerate material and the underlying contact zone of Precambrian granite.

Drill hole sites and access roads thereto shall be done with a Model D-7 Caterpillar tractor or an equivalent size unit of another made.

Each hole shall be drilled non-core, dry if possible, but wet if necessary, with a rotary drill through the sediments or rubble and into the underlying granite not less than five feet nor more than 10 feet or to a maximum depth of 150 feet. Drilling depths are expected to range from 75 to 150 feet and average 100 feet. The minimum diameter of all drill holes shall be 3 inches. All holes shall be reamed and cased or cemented and redrilled as necessary. No payment shall be made for an uncompleted drill hole. No hole shall be drilled closer than 100 feet to the outside boundary of the land described in Article 2.

All cuttings and sludge shall be saved by such methods at each two-foot drilling interval, and shall be checked for radioactivity, in such manner as may be specified by the Government. Drill cuttings or sludge from each two-foot section of drill hole when radiometric readings exceed four times background ~~shall be~~ split into halves, and one half of the material shall be analyzed chemically for uranium. The other half of the

radioactive drill cuttings or sludge shall be properly boxed, labeled, and stored and furnised to the Government upon request. All the remaining drill cuttings and sludge from each drill hole shall be properly boxed, labeled, and stored pending Government's final inspection. At the completion of the project, upon Government approval, all stored samples may be disposed of by the Operator.

All drill holes shall be logged geologically and probed for radioactivity and copies of each log shall be furnished to the Government with each copy of the Operator's monthly report.

The method of all sampling is subject to the approval of the Government. Not more than 25 samples shall be analyzed chemically for either Stage I or Stage II.

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

The project shall be supervised at all times by a qualified geologist or mining engineer, who shall direct or perform the required surveying, mapping, sampling, drill hole logging, and prepare the reports required pursuant to the contract.

The work is divided into two stages as set forth below. The Operator shall complete Stage I, and shall perform as much of the work under Stage II as the Government approves in writing, in advance, either after completion of Stage I or concurrently. In the event the estimated footages are insufficient to reach a specified horizon in any Stage I hole, additional footage and cost may be transferred from Stage II, if approved in writing by the Government.

Description of the Work

Stage I

The approximate locations of Stage I holes are indicated by a "e" on the attached map, entitled "Figure 2 Map Showing Claims and Drill Hole Locations, Little Mo Mining, Inc."

Prepare drill sites and access roads thereto with a tractor w/dozer and drill 23 holes aggregating approximately 2,300 feet.

Stage II

Prepare drill sites and access roads thereto with a tractor w/dozer and drill not more than 24 holes aggregating not more than 2,400 feet of offset holes to any previously drilled holes that penetrated significant mineralization. Not more than four holes shall be drilled surrounding any previously drilled hole, that penetrated significant mineralization, and spaced not less than 100 feet apart.

Estimated Cost of the Project

(In addition to the maximum set forth in Article 6 - an asterisk indicates maximum)

Stage I

Actual Cost

Category (1) Independent Contracts

2,300 ft. rotary drilling @ $4/ft.	$9,200.00	
12 hrs. standby time for hole logging and/or reaming & casing, or cementing and redrilling @ $12.50/hr.	150.00	
20 hrs. actual tractor w/dozer operating time (including operator and all necessary costs) @ $12.50/hr.	250.00	$9,600.00

Categories (2) through (~~7~~ 6) None

Category (7) Miscellaneous

(The only item of cost allowable under this category is sample analyses)

25 chemical analyses @ $5.00*/each sample		125.00

Fixed Unit Cost (See Article 13)

Incidental allowance1/-for each foot of rotary hole completed, 2,300 ft. @ $0.27/ft.		621.00
Total Estimated Cost Stage I		$10,346.00

Stage II

Actual Cost

Category (1) Independent Contracts

2,400 ft. rotary drilling @ $4/ft.	$9,600.00	
12 hrs. standby time for hole logging and/or reaming and casing or cementing and redrilling @ $12.50/hr.	150.00	
20 hrs. actual tractor w/dozer operating time (including operator & all necessary costs) @ $12/50/hr.	250.00	$10,000.00

Categories (2) through(6) None

Category (7) Miscellaneous

(The only item of cost allowable under this category is sample analyses)

q25 chemical analyses @ $5.00*/each sample		125.00

Fixed Unit Cost (See Article 13)

Incidental allowance1/ for each foot of rotary hole completed, 2,400 ft. @ $0.27/ft.		648.00
Total Estimated Cost Stage II		$10,773.00
Total Estimated Cost of Project (rounded)		$21,120.00
Government Participation @ 75%		$15,840.00

1/ Includes all costs that might otherwise be allowable costs of the project under Categories (2) through (6) of Article 6(a).

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

August 26, 1957

OFFICIAL FILE COPY DMEA RECEIVED AUG 28 1957		
DATE	INITIALS	CODE
8/28	P	220
"	FK	700

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA-4709 (Uranium) Little Mo Mining, Inc. (Mint, et al., claims) Fremont County, Wyoming

Enclosed are the following which relate to the letter, dated August 12, 1957, from the Chairman, Operating Committee, DMEA, to this office:

1. Original and two copies of memorandum, dated August 22, 1957, from Carl Belser, USBM, and R. U. King, USGS.

2. Copy of our letter of August 26, 1957, from this office, to the Applicant.

You will note from Item 1 that the examiners conclude that the proposal made by Mr. Nelson in a memorandum, dated July 22, 1957, to E. W. Ellis of your office, is not necessary to adequately explore the property for uranium in view of the over-all objectives of the recommended exploration. The Field Team concurs in the conclusions of the examiners.

You will note from Item 2 that we have taken the conclusions into consideration and forwarded the Consent to Lien forms, prepared by the legal staff of your office, to the Applicant without the addition of any further land. The form was altered to exclude the name of Chester Fike according to the comments made by Robert P. Dwyer, Associate Solicitor, Division of Mineral Resources, in a memorandum, dated August 9, 1957, to the Administrator, DMEA.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Enclosures

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

IN REPLY REFER TO:
DMEA
DEPARTMENT OF THE INTERIOR
AUG 23 1957
REGION III
DENVER, COLORADO

August 22, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III
Through: E. N. Harshman

From: Carl Belser
R. U. King

Subject: Docket DMEA 4709 (Uranium), Little Mo Mining, Inc., Mint et al claims, Fremont County, Wyoming

In reply to Mr. Nelson's memorandum of July 22, 1957, regarding the Field Team Report on the subject docket wherein he suggests that "a more closely spaced fence of holes might be warranted across a possible 'channel'...," the examiners conclude that such a change in the recommended exploration is not necessary to adequately explore the property for uranium, nor is such a concentration of drill holes in Stage I justified in view of the over-all objectives of the recommended exploration.

There is sufficient room between the recommended hole sites on Mint claim No. 14 and Arrowhead claim No. 2 to permit the drilling of five 100-foot spaced Stage II holes in the suspect area without encroaching upon unsubordinated claims.

The drilling, as recommended in the Field Team report, is laid out in relation to the broader geologic features, and it is believed that little would be gained by concentrating so much of the exploration around a single feature such as the possible "channel."

The applicant, in reply to item 3-f of the DMEA application, has indicated that Arrowhead claims Nos. 1, 4, and 5 were not to be included in the project. Two of these claims contain known uranium ore deposits, and it is concluded that little benefit would derive from exploration of these particular claims.

Carl Belser/DHR
Carl Belser, Mining Engineer

R. U. King
R. U. King, Geologist

224 New Customhouse
Denver 2, Colorado

August 26, 1957

Mr. Earl J. Cox, Secretary
Little Mo Mining, Inc.
P. O. Box 545
Upton, Wyoming

Re: Docket DMEA-4709 (Uranium)
Little Mo Mining, Inc.
(Mint, et al., claims)
Fremont County, Wyoming

Dear Mr. Cox:

Enclosed are the original and six copies of Form MF-205, CONSENT TO LIEN and SUBORDINATION AGREEMENT, prepared by the Washington Office, DMEA, which will require the signature of Clifford A. Reed. You will note that the form includes land omitted from the Consent to Liens signed by Mr. Reed on July 25, 1957.

The original and five signed copies should be returned to this office. Mr. Reed may retain one of the copies for his file.

A question has arisen as to the period of time that the lease, dated June 4, 1954, between Messrs. Fike and Reed and your company, and the lease, dated July 27, 1954, are to remain in force. From the reading of the two leases, which are in the same language, it is not clear that they extend for any fixed term. Therefore, when returning the enclosed executed forms to this office, please clarify this question. If it is determined that the leases will require amendments to sufficiently clarify this question, you are requested to provide this office with four true copies.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

Enclosures
MHM:jy
cc: Chm. Op. Comm. (2)
Harshman
DMEA/DFC
Docket 4709
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG
DATE
8/19 ⊖ 220
~~FLK~~ 700

224 New Customhouse
Denver 2, Colorado

August 15, 1957

Memorandum

To: DMEA/DFC - Carl Belser
K. N. Marshman
} w/enclosures, Items 1-4

From: DMEA Field Team, Region III

Subject: Docket DMEA-4709 (Uranium) Little Mo Mining, Inc. (Mint, et al., claims) Fremont County, Wyoming

Enclosed is one copy each of correspondence concerning the Joint Report of Examination by D. F. Davidson, USGS, and Carl Belser, USBM, and the recommendations based thereon by the Field Team.

1. Memorandum, dated July 22, 1957, from K. E. Nelson, USGS.

2. Memorandum, dated August 9, 1957, from the Associate Solicitor.

3. Form MF-205, Consent to Lien and Subordination Agreement.

4. Memorandum, dated August 12, 1957, from Chairman, Operating Committee, DMEA, forwarding Items 1-3 to this office.

You are requested to review the proposal by Mr. Nelson of a more closely spaced fence of holes across the trend of the possible Arrowhead No. 1 and Arrowhead No. 5 "channel" and furnish your comments and recommendations to this office by joint memorandum.

If your recommendations signify agreement to this proposal, you are to 1.) prepare eleven copies of a map which shows the new hole locations, 2.) submit costs for the modified program which have been approved by the Applicant; and 3.) comment as to whether or not you feel that the southwest side (200-300 feet wide) of the Arrowhead No. 1 claim should be included in the application.

If you believe that a part of the Arrowhead No. 1 claim should be included, give us a description of the area for addition to the set of Consent to Lien forms held by this office.

We will supply the Applicant with a new set of Consent to Lien forms for signature by Clifford A. Reed. Mr. Fike's signature will be required only if he holds an interest in the land proposed for subordination. At the same time we will request clarification of the periods of time that the lease dated June 4, 1954, and the lease dated July 27, 1954, are to remain in force.

Original signed by
E. N. HARSHMAN

E. N. Harshman
Acting Executive Officer

Enclosures

MEM:jy

cc: Sec. Op. Comm. (2)
Harshman
Docket 4709
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/12	Knouse	700
8/12	GCS	130
"	Johnson	110
"	Mellendy	100
8/13	O.K.	220
		700

Mr. William H. King
Executive Officer
DMEA Field Team, Region III
22h New Customhouse Building
Denver 2, Colorado

AUG 12 1957

Re: Docket No. DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Dear Mr. King:

A review of the file by the Associate Solicitor's Office shows we will require another Consent to Lien and Subordination Agreement, also clarification by the Applicant of the period of time that the leases are valid. Copies of the memorandum, dated August 9, 1957, by the Associate Solicitor are enclosed and the original and five copies of Form IF-205, that should be executed and returned.

Please review the enclosed copies of the memorandum, dated July 22, 1957, from N. E. Nelson, U.G.S., which relates to a more closely spaced fence of holes across the trend of the possible Arrowhead No. 1 and Arrowhead No. 5 "channel," and furnish your comments and recommendations on this proposal. If you concur with this proposal, we will require the necessary copies of a map showing the new hole locations and cost for the modified program. In this connection, we note from the Applicant's map (submitted with the application) that the location of the ore body on the Arrowhead No. 1 claim is on the northeast part of the claim. Do you feel that a part of this claim should be included in the application, e.g., a 200-300-foot width paralleling the southwest side line of the claim? If you conclude that a part of the claim should be included, a description of the area should be added to the enclosed Consent to Lien and Subordination Agreement. Also, any changes in the program recommended by the Field Team should be approved by the Applicant.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

Enclosures
APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FLKnouse/gla/izm 8-12-57
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

FILE COPY
Surname:

Butin

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

AUG - 9 1957

Memorandum

To: Administrator, DMEA
Attention: Chief, Division of Rare and Miscellaneous Metals

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4709 - Uranium
Little Mo Mining, Inc.

Mr. Ellis' memorandum dated July 24, 1957, requested that we review the subject docket to determine whether any instruments are required in addition to the one specified in a letter dated April 10, 1957, from the Operating Committee to the Executive Officer.

Page 4 of the Field Team's Joint Report of Examination dated July 11, 1957, lists certain claims as being the subject of the proposed contract. It appears that in an instrument dated June 4, 1954, Chester Fike and Clifford A. Reed leased 4 Mint claims, 3 Arrowhead claims (No. 1 of which is to be excluded from the contract), and 3 Lucky Cliff claims; and in an instrument dated July 27, 1954, Clifford A. Reed leased 3 Interruption claims and one Red Rock claim, all to the members of the Little Mo Mining Company partnership. The above-mentioned leases have been assigned to the Applicant corporation.

In an instrument dated February 29,1956, Chester Fike quitclaimed to the Applicant corporation all of his interest in all the claims that were the subject of the June 4, 1954, lease (except Arrowhead No. 3, which is not listed in the Field Team's report as being included in the proposed contract), also in 21 additional Mint claims (in other words, Mint Nos. 1-7, 9-21, 23 through 25), and also in The Lucky Cliff No. 10.

Therefore, Consent to Lien and Subordination Agreement is required only of Clifford A.Reed, and we have prepared the attached form for your use. However, if any claims other than those listed in the attached form are added to the project, they should be added to the form before execution by Mr. Reed, and also by Mr. Fike if it is a claim in which he holds an interest.

From our reading of the two leases, which are in the same language, it is not clear that they extend for any fixed term. The applicant should be required to clarify this question, and the leases amended if necessary.

Robert P. Dwyer

HCRubin:ar
Aug. 7, 1957
Copy to: Solicitor's Docket (2)
DMEA Docket
Mr. Ellis (2)
R. P. Dwyer
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

August 6, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 8 1957

DATE	INITIALS	CODE
8/8	P.K.	220
"	FL/C	700

Memorandum

To: Secretary to the Operating Committee, DMEA

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

Subject: Docket DMEA 4709 (Uranium) Little Mo Mining, Inc. (Mint et al. Claims), Fremont County, Wyoming

Enclosed are the original and five copies of MF-205 Forms, signed as instructed in our letter to the Applicant, dated July 15, 1957.

E. N. Harshman

E. N. Harshman

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/24	Knouse	700
"	Ellis	700
		140

INTERIOR DEPT.
JUL 25 1957
SOLICITOR

July 24, 1957

Memorandum

To: Associate Solicitor,
Division of Mineral Resources

From: Ernest Wm. Ellis, Director
Division of Rare and Miscellaneous Metals

Subject: Docket No. DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Mint, et al., Claims
Fremont County, Wyoming

Please review the file of the subject proposed project and determine if any additional documents will be required to draft a contract. You will note in our letter, dated April 10, that a Consent to Lien and Subordination Agreement was requested for the Interruption 1, 2, and 3 claims; also, the Executive Officer's memorandum, dated July 16, 1957, advised forms had been sent to the Applicant for execution covering Interruption Nos. 2 and 3 claims.

Should you determine that additional Consents to Lien and Subordination Agreements will be required, please prepare the necessary copies.

Ernest Wm. Ellis

Ernest Wm. Ellis

RECEIVED
JUL 25 1957
SOC. SOLICITOR
MINERAL RESOURCES

FLKnouse/gla
cc to: Mr. Knouse

8623

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 24 1957

DATE	INITIALS	CODE
7/24	C	220
7-24	FLR	700
Comments		
Complete		

[illegible]
[illegible] OR
[illegible]
[illegible] Washington 25, D. C.

Date: July 23, 1957

DMEA Docket No. 4709
DMEA Contract No.
Commodity Uranium
Name of applicant Little Mo Mining, Inc.
Name of property Mint et al claims
Location of property Fremont County, Wyoming
Estimated cost of project $37,275.00

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: James Paone, Bureau of Mines Member
Uranium Commodity Committee

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

1. Date of project doc. [illegible]: 7/16/57 2. Date received by reviewer: 7/22/57

3. Have reports on this property been to reviewer: Yes ☐ No ☐

4. Have reports on nearby properties been to reviewer: Yes ☐ No ☐

5. Is information available on past production: Yes ☐ No ☐

6. Are pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked yes above:

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

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

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

IN REPLY REFER TO:

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 23 1957

DATE	INITIALS	CODE
7/23	P.K.	220
"	FLK	700
Memorandum		
To:	E. W. Ellis, Defense Minerals Exploration Administration	

July 22, 1957
Re: DMEA 4709
Little Mo Mining, Inc.
Mint, etc. Claims
Fremont County, Wyoming
Appl. Est. $37,265.00
Rec'd Est. 21,119.00 - Uranium

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

Subject: Review of Field Team Report

The applicant requested assistance in searching, by drilling, for the extension of an orebody and similar orebodies. The applicant in 23 months, ending February, 1957, produced 3,460 tons of 0.20% U_3O_8 material from an open cut on the adjoining claim, Arrowhead No. 1, which is not included in the project area. A total of 3,700 tons is credited to the Arrowhead No. 1 orebody and 12 feet of ore shows in an open cut on the Arrowhead No. 5 claim.

The No. 5 claim is not shown on the map and is not in the project area. If the claim lies between Arrowhead No. 2 and Mint No. 25, it means the chances of the claims, Arrowhead No. 2 and Mint No. 14, are enhanced, especially if there is a possibility the two ore showings may be connected. The "about 500 feet farther to the south" does not fit the map, and the location of the 12 feet of ore is not clear.

The 2-stage work program recommended by the examiners appears to be well adapted to the conditions shown on the geologic map, except that a more closely spaced fence of holes might be warranted across the trend of the possible Arrowhead No. 1 and Arrowhead No. 5 'channel', if that trend falls within the project area.

Otherwise, I concur with the recommendation of the examiners and the Field Team.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

July 16, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 18 1957

DATE	INITIALS	CODE
7/18	C	220
		130
7/23	C	220
"	FLK	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 4709 (Uranium) Little Mo Mining, Inc. (Mint et al. Claims) Fremont County, Wyoming - Joint Report of Examination

Enclosed are the original and two copies of the Joint Report of Examination on the subject property by D. F. Davidson, USGS, and Carl Belser, USBM.

The field examiners conclude that the probability for making a significant discovery is sufficiently promising to justify Government participation. Accordingly, they recommend that the Applicant's work proposal be approved in which the Field Team concurs.

In accordance with your letter dated April 10, 1957, Consent to Lien and Subordination Agreement Forms have been forwarded the Applicant to be signed by Clifford A. Reed covering Interruption Nos. 2 and 3 claims.

Also enclosed are eight extra copies of Figure 2 of a claim map for use in the preparation of the contract.

W H King
W. H. King
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
7-22-57
(date)

ON-SITE EXAM. REPORT

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA
DEPARTMENT OF THE INTERIOR
JUL 12 1957
REGION III
DENVER, COLORADO

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

July 12, 1957

TRANSMITTED
JUL 16 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket No. 4709 (Uranium), Little No Mining, Incorporated (Mint et al. claims), Fremont County, Wyoming

Enclosed are the original and eight copies of a joint report by D. F. Davidson, U. S. Geological Survey, and Carl Belser, U. S. Bureau of Mines, covering their examination of the subject property.

Uranium occurs in the area in Tertiary sedimentary rocks overlying granite. Uranium ore is being produced from an open pit on the Arrowhead claim immediately northeast of the subject property.

The examiners recommend a program of drilling very similar to that proposed by the applicant but somewhat reduced in scale.

I concur with the conclusions and recommendations.

Original signed by
E. N. HARSHMAN

E. N. Harshman
Member, Field Team

ENH:pri

Encl. (9)

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 18 1957

DATE	INITIALS	CODE
		130
		220

Reviewed by
DMEA OPERATING COMMITTEE
7-22-57
(date)

FOR UNITED STATES GOVERNMENT USE ONLY

DMEA
DEPARTMENT OF THE INTERIOR
JUL 12 1957
REGION III
DENVER, COLORADO

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED
JUL 16 1957

OFFICIAL FILE COPY
DMEA
130 JHB
220

DMEA 4709

Little Mo Mining, Incorporated

Mint et al. claims

Fremont County, Wyoming

Uranium

Joint Engineering and Geologic Report

by

D. F. Davidson, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

July 11, 1957

Reviewed by
DMEA OPERATIONS ENGINEER
7-22-57
(Date)

CONTENTS

	Page
Introduction and summary	1
Acknowledgments	2
Location, topography, and climate	2
History, ownership, and production	3
Present status	5
Exploration and development	5
Mining and milling equipment and other facilities	5
Geology	6
Sampling and ore reserves	8
Applicant's estimated cost of project	8
Recommended exploration program and estimated costs	9
Conclusions and recommendations	14

ILLUSTRATIONS

Figure	Follows page
1. Location map, Mint et al. claims, Little Mo Mining, Inc., Fremont County, Wyoming	2
2. Map showing claims and drill hole locations, Little Mo Mining, Inc.	14
3. Sketch map showing geology in the vicinity of the claims of the Little Mo Mining, Inc.	14

DMEA 4709

LITTLE MO MINING, INCORPORATED
MINT ET AL. CLAIMS
FREMONT COUNTY, WYOMING

INTRODUCTION AND SUMMARY

Little Mo Mining, Inc., Box 545, Upton, Wyoming, on March 5, 1957, applied to the Defense Minerals Exploration Administration for aid in exploring for uranium on 27 unpatented claims in secs. 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th P. M., Fremont County, Wyoming. The applicant's proposed program is to test granite debris and the surface of the underlying Precambrian granite. The work would require 7,500 feet of drilling at an estimated cost of $37,265.00. A field examination was made on May 8, 1957.

The property includes a number of ridges of Precambrian granite debris which may contain ore deposits similar to those found on the nearby Arrowhead Nos. 1 and 5 claims.

A modified two-stage drilling program is recommended. It consists of 4,700 feet of non-core drilling at an estimated cost of $21,119.00 with Government participation at 75 percent or $15,839.25.

ACKNOWLEDGMENTS

Earl J. Cox, manager of Little Mo Mining, Inc., accompanied the examining team.

The Atomic Energy Commission was consulted about the area before the examination was made.

Memorandums by James Paone and N. E. Nelson were noted.

LOCATION, TOPOGRAPHY, AND CLIMATE

The 27 contiguous claims contain approximately 480 acres in secs. 20, 28, 29, 30, 32, and 33, T. 40 N., R. 92 W., 6th P. M., Fremont County, Wyoming (fig. 1). The area consists of low, rolling hills rising to the north and cut by small ravines, and its altitude ranges from 5,800 to 6,400 feet. The property is reached by driving 23 miles from Shoshoni, Wyoming, over the unimproved Bonneville-Lysite road. Shoshoni is on the Chicago, Burlington & Quincy railroad and on U. S. Highway 26. Water for drilling is available on the property. Men and supplies can be obtained at Shoshoni and Riverton, Wyoming. An ore-buying depot is maintained at Riverton, 46 miles to the southwest.

The climate is semi-arid with hot, dry and windy summers and severe winters. Vegetation consists largely of sage brush and range grass.

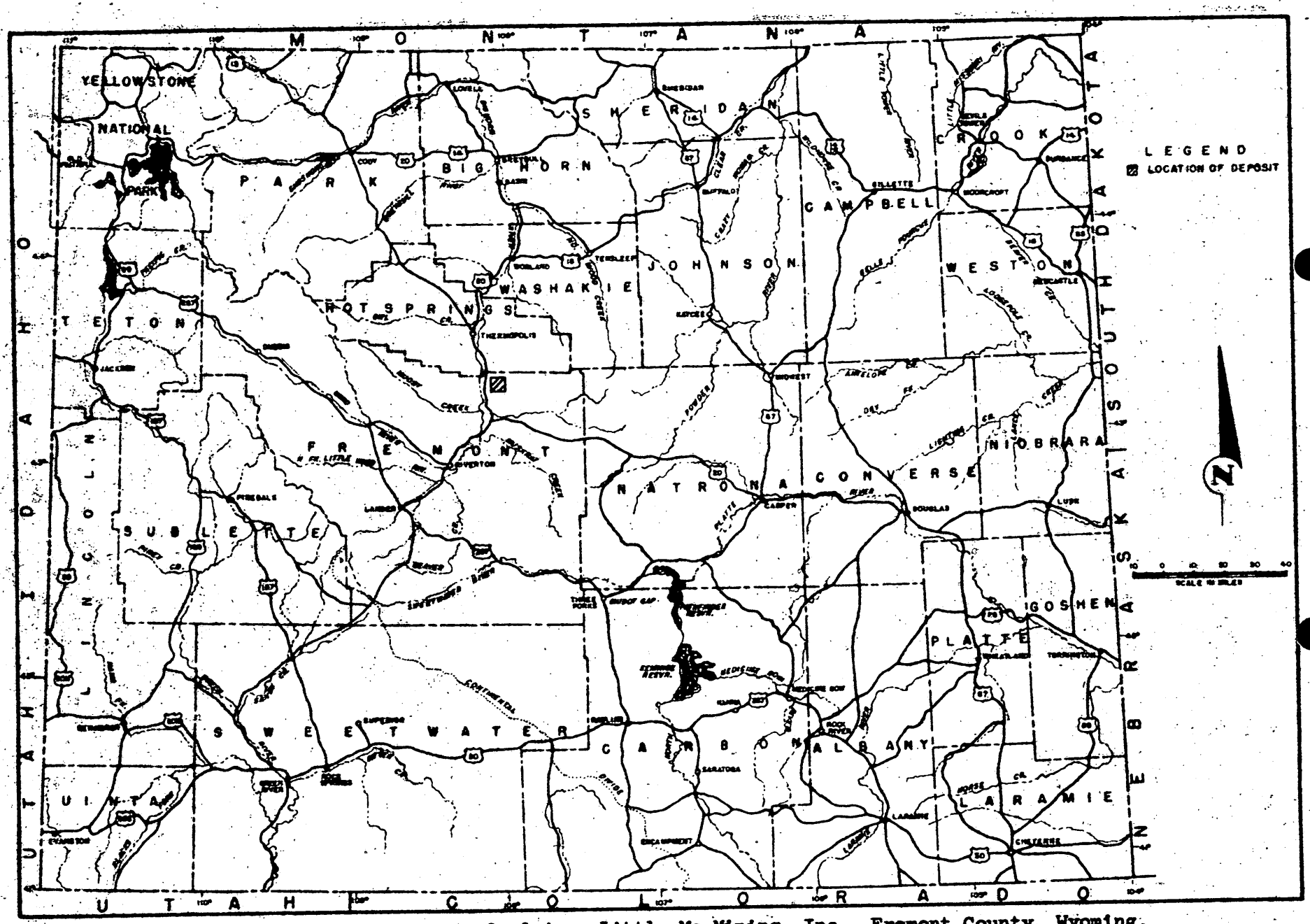


Figure 1. - Location map, Mint et al claims, Little Mo Mining, Inc., Fremont County, Wyoming, DMEA 4709.

HISTORY, OWNERSHIP, AND PRODUCTION

Uranium ore was found in 1954, in the creek bed that crosses the Arrowhead No. 1 claim, and the claims subject to this application and others, were located.

Interruption Nos. 1, 2, and 3 and the Red Rock claims were located by Clifford A. Reed and leased on July 27, 1954, to Allen D. Douglas, L. A. Henderson, and John Kummerfield, doing business as Little Missouri Mining Company. On February 12, 1955, this lease was assigned to Little Mo Mining, Inc., a Wyoming corporation. The lease is recorded in Book 133, page 253, and the assignment is recorded in Book 98, page 212, records of Fremont County, Wyoming.

Mint Nos. 1-25 (incl.) claims, Arrowhead Nos. 1, 2, and 3 claims and Lucky Cliff Nos. 1, 2, and 3 claims were located by Chester Fike and transferred by quitclaim deed, effective February 23, 1956, to Little Mo Mining, Inc. The deed is recorded in Book 150, page 326, records of Fremont County, Wyoming.

Mint Nos. 1-4 (incl.) claims, Arrowhead Nos. 1, 2, and 3 claims and Lucky Cliff Nos. 1, 2, and 3 claims were located by Chester Fike and Clifford A. Reed and leased, on July 4, 1954, to Allen Douglas, L. A. Henderson, and John Kummerfield, doing business as Little Missouri Mining Company. This lease was assigned on March 2, 1955, to Little Mo Mining, Inc.

It is noted that certain claims controlled by the applicant, Little Mo Mining, Inc., are not included in its proposed exploration project.

The claims subject to the application are recorded in the office of the County Clerk and Recorder of Fremont County, Wyoming, as follows:

Claim	Book	Page	Date Recorded	Recorder
Interruption No. 1	84	3	1/5/55	Clifford A. Reed and Little Missouri Mining Co.
Interruption Nos. 2 and 3	109	457-8	5/14/55	do.
Arrowhead No. 2	84	2	1/5/55	Chester Fike, Clifford A. Reed and Little Missouri Mining Company
Mint Nos. 1-4 (incl.)	58	369-72	1/22/54	Chester Fike and Clifford A. Reed.
Mint Nos. 5-15 (incl.)	63	333-43	7/16/54	Little Missouri Mining Company by L. A. Henderson.
Mint Nos. 16-21 (incl.)	133	228-33	7/23/55	Little Mo Mining Co.
Mint No. 23	136	482	8/13/55	do.
Mint Nos. 24 and 25	141	109-8	9/9/55	do.

All claims appear to have been staked properly.

No ore has been produced from the claims. The applicant has an adjoining claim, Arrowhead No. 1, from which, during the period March 1955 through February 1957, a total of 3,460 tons of uranium ore, averaging 0.20 percent U_3O_8, is said to have been produced from an open pit. The Arrowhead No. 1 is not included in the application.

PRESENT STATUS

Exploration and development

Some drilling has been done on the claims with a wagon drill, but this drilling was not considered satisfactory. No other exploration has been done on the claims. An open pit has been dug on the Arrowhead No. 1 claim, adjacent to the northeast end of the Mint group, from which some 3,700 tons of ore have been mined.

Mining and milling equipment and other facilities

There is no mining or milling equipment on the claims. Other facilities consist of the Lysite-Bonneville road, a dozer road, and several drill-rig trails. However, on the adjoining Arrowhead No. 1 claim worked by the applicant is the following equipment:

I-R Gyro-Flow 315 c.f.m. compressor mounted on an I.H. 1954 truck equipped with an I-R FM3 drill.

H.D. 6 A.C. tractor with one 1/2-yard bucket.

A.C. TL10 rubber-tired loader with 3/4-yard bucket.

1942 2-ton Chevrolet dump truck.

C.P. 125-c.f.m. gasoline-engine-driven compressor

Lincoln welder

Gorman-Rupp, gasoline-engine-driven pump with 1-1/2 inch intake

45 pound I-R jackhammer.

Small frame tool shed

Small trailer-house

Hand tools

Counter

GEOLOGY

The surficial geology of the claims of Little Mo Mining, Inc., is not complex, as may be seen from the accompanying geological sketch map (fig. 3). Sedimentary rocks called Tertiary Tepee Trail formation by Tourtelot [1] dip gently (3 to 6°) south from their contact with the Precambrian granite mass of Copper Mountain to the north. On the claims, both granite and sedimentary rocks are present, and uranium deposits have been localized at contacts between these two formations.

The sedimentary rocks shown on the sketch map can be separated handily into two "formations." Rocks designated T_1 are essentially arkosic sandstone, conglomerates, and granite rubble zones. The material making up these rocks appears to be directly derived from the Precambrian mass to the north.

Rocks designated T_2 are also arkosic, but contain considerable amounts of volcanic ash, locally bedded, and elsewhere disseminated, through the unit.

Uranium, in the mineral coffinite, occurs principally as interstitial mineralization between grains, pebbles of arkosic sandstone, and boulders of the conglomerate of unit T_1, and locally forms rinds around some of the rock fragments. To date little uranium has been discovered in the tuffaceous material.

1/ Tourtelot, H. A., 1953, Geology of the Badwater area, Central Wyoming: U. S. Geol. Survey Oil and Gas Investigations Map OM-124, 2 sheets.

It is thought that the uranium of the deposits is derived by weathering, and transported in ground water, from the granite of Copper Mountain. Small low-grade uranium concentrations are known in the granite, and radioactivity anomalies are present.

Uranium in solution was transported by ground water into, and probably to a certain extent through, the highly permeable and porous arkosic sandstones, and rubble zones, and deposited at contacts with the relatively impermeable granite underlying the Tertiary rocks.

Uranium is not in balance with its radioactive daughter products in the deposit so far mined; uranium values of the ore exceed the equivalent uranium values by as much as 50 percent. The concentrations of uranium making up the known ore deposit thus may be relatively young.

As noted above, most uranium found to date is in non-tuffaceous rocks, perhaps because tuffaceous material is less permeable, thus permitting poorer ground water circulation. However, the possibility exists that some uranium concentrations may be found in this material.

The topography of the claims is rather closely related to the geology, for relief on the claims is largely provided by dissection and removal of Tertiary beds. Ridges thus are capped by Tertiary rocks, and draw bottoms are underlain by granite.

SAMPLING AND ORE RESERVES

The only sampling done on the property was done with a wagon drill and was not considered satisfactory.

There are no known ore reserves on the claims, but 3,700 tons of ore averaging 0.20 percent U_3O_8 had been mined from a cut ±200 feet long, 60 feet wide, and 50 feet high on the Arrowhead No. 1 claim. About 500 feet farther to the south, on the Arrowhead No. 5 claim a 40- by 20- by 30-foot pit shows 12 feet of ore and the same ore body may extend through both pits. Some of the upper ridges of debris look somewhat similar to those being mined. There are no known ore reserves on the subordinated claims.

Loc. No 5 not on map.

APPLICANT'S ESTIMATED COST OF PROJECT

The applicant has requested the drilling of 100 holes totaling 7,500 feet of core drilling at the following costs:

Independent Contracts:		
7,500 feet of core drilling at $4.00/ft	$ 30,000.00	
50 hours standby at $12.50/hr.	625.00	
80 hours bulldozing at $12.50/hr.	1,000.00	
Total Independent Contracts		$31,625.00
Labor and Supervision:		
Sampler 50 days at $13.00/day	650.00	
Supervisor 32 days at $30.00/day	960.00	
Total labor and Supervision		1,610.00

Operating Materials and Supplies:		
8,000 sacks at 1¢ each	$ 80.00	
Total Operating Materials and Supplies		$ 80.00
Operating Equipment (use allowance):		
Babbel counter 2 months at $200.00/mo.	400.00	
Total Operating Equipment		400.00
Rehabilitation and Repairs:	None	
New buildings, improvements, installations:	None	
Miscellaneous:		
100 chemical assays at $5.00 each	500.00	
Repair of counter	50.00	
Total Miscellaneous		550.00
Contingencies:		
7,500 feet of drilling at $.40/ft.	3,000.00	
Total Contingencies		3,000.00
Total estimated cost for 7,500 feet of drilling		$37,265.00
Estimated cost per foot		$ 4.97

RECOMMENDED EXPLORATION PROGRAM AND ESTIMATED COSTS

The drilling program outlined by E. T. Cox for Little Mo Mining, Inc., is geologically sound and should be carried out in two stages. Cox has proposed to drill holes to granite bed rock from the tops of topographic highs, thus penetrating maximum thicknesses of Tertiary sedimentary rocks. The examiners agree with Cox's program except that

they suggest that it can be carried out by drilling 23 holes totaling 2,300 feet and averaging 100 feet in depth in first-stage drilling, and 24 holes averaging 100 feet in depth and totaling 2,400 feet in second-stage drilling. Total drilling footage suggested for the two-stage program is therefore 4,700 feet, as opposed to Cox's request for 100 holes totaling 7,500 feet. The approximate location of recommended holes for first-stage drilling is shown on figure 2. Second-stage drilling is intended to offset mineralized holes, and extend mineralized areas, and hole locations should be determined upon completion of first-stage drilling and evaluation of the results.

All holes shall be drilled to bedrock granite (but not more than 10 feet into bedrock granite) or to a depth of 150 feet, whichever is the more shallow.

Holes of at least 3-inch diameter should be drilled by rotary drill, dry if possible, but wet if necessary. Sludge or cutting samples should be collected every 2 feet and preserved. All drill holes should be logged geologically and by a radiometric logging device, and it is recommended that samples representing depths of holes at which radiometric readings exceed 4 times background in the area be analyzed for uranium. Although this is a low radiometric value, the unbalance known to exist between uranium and equivalent uranium in the only explored deposit of the area makes analysis of samples of rather low radioactivity mandatory.

It is assumed by the examiners that comparison between equivalent uranium and uranium analyses of samples from drilling the first few holes will be made, and that the radioactivity cut-off for analyses of samples will be raised or lowered as seems needful.

Cost estimates follow:

Stage I

Independent contracts		
2,300 feet of rotary drilling at $4/ft.	$ 9,200.00	
12 hours standby at $12.50/hr.	150.00	
20 hours bulldozing at $12.50/hr.	250.00	
Total independent contracts		$ 9,600.00
Labor and supervision		
Sampler 15 days at $13.00/day	195.00	
Supervisor 15 days at $500.00/mo.	250.00	
Total labor and supervision		445.00
Operating materials and supplies		
2,000 sacks at $.01 each	20.00	
Oil and gas for jeep	15.00	
Total operating materials and supplies		35.00
Operating equipment (use allowance)		
Babbel counter and probe 15 days	25.00	
Jeep 15 days	20.00	
Total operating equipment		45.00

Rehabilitation and repairs	None	
New buildings, improvements, installations	None	
Miscellaneous		
Bookkeeping	$ 50.00	
Payroll taxes, compensation and FIDC insurance, 7% of $495.00	34.65	
Total miscellaneous		$ 84.65
Estimated cost of Stage I drilling		$10,209.65
Estimated cost per foot		4.44
25 chemical assays at $5.00 each		125.00
Total estimated cost of Stage I		$10,334.65

Stage II

Stage II is identical to Stage I with the exception that there is one more drill site and 100 feet more drilling. Stage II is dependent upon the results of Stage I drilling.

Recapitulation

Stage I

Independent contracts		
2,300 feet of rotary drilling at $4/ft.	$ 9,200.00	
12 hours standby at $12.50/hr.	150.00	
20 hours bulldozing at $12.50/hr.	250.00	
Total independent contracts		$ 9,600.00

Incidental expense $.27 a foot (2,300 feet)		$ 621.00
25 chemical analyses for U_3O_8 at $5.00 each		125.00
Total estimated cost of Stage I		$10,346.00

Stage II

Independent contracts

2,400 feet of rotary drilling at $4/ft.	$ 9,600.00	
12 hours standby at $12.50/hr.	150.00	
20 hours bulldozing at $12.50/hr.	250.00	
Total independent contracts		$10,000.00
Incidental expense $.27 a foot (2,400 feet)		648.00
25 chemical analyses for U_3O_8 at $5.00 each		125.00
Total estimated cost of Stage II		$10,773.00
Total estimated cost of project		$21,119.00
Government participation, 75% or		$15,839.25

Time for completion - 2 months.

It is recommended that a short form contract be prepared. Incidental expense includes all items of labor, supervision, materials, equipment, and miscellaneous.

Costs are higher than normal for rotary drilling due to anticipated difficulty in drilling the conglomeratic material containing larger granite boulders.

CONCLUSIONS AND RECOMMENDATIONS

The examining team concludes that exploration on the Little Mo Mining, Inc., property will result in the discovery of significant amounts of uranium ore similar to that now being mined on the Arrowhead No. 1 claim northeast of the property. They recommend the preparation of a contract to provide for the exploration outlined in this report.

224 New Customhouse
Denver 2, Colorado

July 15, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 18 1957

DATE	INITIALS	CODE
7/18	C	220
"	PLK	700

Mr. Earl J. Cox, Secretary
Little Mo Mining, Inc.
P. O. Box 545
Upton, Wyoming

Re: Docket DMEA 4709 (Uranium)
Fremont County, Wyoming

Dear Mr. Cox:

Enclosed are the original and six copies of Form MF-205, Consent to Lien and Subordination Agreement. Please obtain the signature of Clifford A. Reed on the original and all copies.

The original and five signed copies should be returned to this office. Mr. Reed may retain one of the copies for his file.

When we receive the executed copies of the Subordination Agreement as noted above we will continue to process your application.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

Enclosures

HMC:eh

cc: Ch. Op. Comm. (2)
Harshman
Docket
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
APR 17 1957
REGION III
DENVER, COLORADO

April 16, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4709 (Uranium), Little Mo Mining, Inc., (Mint et al, claims) Fremont County, Wyoming

The application for Little Mo Mining, Inc., Docket DMEA 4709, in the amount of $37,265.00 was received in this office on April 16, 1957.

A field examination will be made and suitable report prepared by an engineer from the Denver office.

W. E. KING

W. E. King

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957

DATE	INITIALS	CODE
4/22	C	220
"	~~[illegible]~~	700

cc: Executive Officer (2)
E. N. Harshman
J. F. Shaw

WO

OFFICIAL FILE COPY
DMEA
RECEIVED APR 17 1957

DATE	INITIALS	CODE
4-17	C	220
"	[illegible]	700

224 New Customhouse
Denver 2, Colorado

April 15, 1957

Memorandum

To: W. H. King, E. N. Harshman) W/enclosures, Items 1-5 Below

From: DMEA Field Team, Region III

Subject: Docket No. DMEA-4709 (Uranium) Little Mo Mining, Inc., (Mint et al., Claims) Fremont County, Wyoming

Enclosed is the following material relating to the subject docket.

1. Copy of application for Government assistance in exploration work under the DMEA program.
2. Memorandum of Review by James Paone, USBM.
3. Memorandum of Review by N. E. Nelson, USGS.
4. Letter of transmittal of the foregoing to this office, dated April 10, 1957, from the Chairman, Operating Committee, DMEA.
5. Routing control sheet.

A joint report of recommendations based on available information or a joint report of findings and recommendations based on a field examination is requested.

If the field examiners view the work proposal favorably, the Applicant should be informed that we will require in addition to the usual information a Consent To Lien and Subordination Agreement signed by Clifford A. Reed covering the Interruption 1, 2, and 3 claims.

Twelve extra copies of each map used in the joint report which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries, should be submitted if Government participation is recommended.

The Bureau of Mines' copy of the application should be returned to this office with the joint report of examination. Mr. Harshman will forward the Survey's copy of the application to the Washington office.

E. M. Harshman

By E. M. Harshman
Acting Executive Officer

Enclosures
MEM:eh
cc: Sec. Op. Comm. (2)
King
Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4-10	Knouse	700
4-10	[illegible]	700
4/10	[illegible]	130
"	[illegible]	110
"	Mittendorf	100
		220

APR 10 1957

Mr. Earl J. Cox, Secretary
Little Mo Mining, Inc.
P. O. Box 545
Upton, Wyoming

Re: Docket No. DMEA-4709 (Uranium)
Mint, et al., Claims
Fremont County, Wyoming

Nelson Lamb

Dear Mr. Cox:

The application for assistance in exploring your claims, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to:

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

The Regional Office will contact you in regard to your project if additional information is required.

Sincerely yours,

C. O. Mittendorf

Administrator

FIKnouse/dlm/izm 4-10-57
cc to: Mr. Knouse
Admr.'s Reading File
DMEA FT Reg. 3 (2)

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4-9	Knouse (Rlot)	700
4-9	[illegible]	700
4/10	Selfridge	130
"	[illegible]	110
	Mutterdog	100
4/17	C 220	[illegible]
		700

APR 10 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4709 (Uranium)
Little Mo Mining, Inc.
Hint, et al., claims
Fremont County, Wyoming

Dear Mr. Harshman:

The captioned application is referred to your office for either a field examination and report on the proposed project or the Field Team's recommendations based on available information.

Enclosed are copies of memoranda, dated April 5 and 8, 1957, from James Paone, USGS, and N. E. Nelson, USGS, respectively, relating to the proposed project. Also enclosed are two extra copies of the application for the use of the Field Team.

If the Field Team recommends an exploration project, we will require, in addition to the usual information, a Consent to Lien and Subordination Agreement signed by Clifford A. Reed covering the Interruption 1, 2, and 3 claims.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

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

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

FLKnouse/dlm 4-9-57
cc to: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED APR 9 1957

DATE	INITIALS	CODE
4/10	JWG	220
"	Ellis	700
"	Kuzan	700

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

April 8, 1957
Re: DMEA 4709
Little Mo Mining, Inc.
Arrowhead, etc. claims
Fremont County, Wyoming
$37,265.00 - Uranium

complete

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of application

The applicant requests assistance in exploring for the extension of an orebody on claims adjoining that on which small scale mining is being done, and searching for like deposits on a number of other claims.

The mine on the Arrowhead No. 1 claim has produced about 3,460 tons of 0.20% ore from open cuts. No map of the mine is given and no estimate of reserves is furnished by which it would be possible to estimate the probable worth of the orebody and calculate the chances of finding another. Some drilling has been done and "areas of mineralization" have been shown. The work was not satisfactorily done, according to the applicant, and the locations are not marked.

Comparatively close drilling is the pattern for 4 claims and I assume a reason for the pattern will be furnished. No pattern appears to have been followed in spotting a number of holes.

Referral of the application to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE
4/8	C	220
"	Ellis	700
4/8	Knowlse	700

April 5, 1957

4709

Uranium
Little Mo. Mining, Inc.
Interruptinn, Arrowhead, Mint claims
Fremont, Cty., Wyo.
$37,265.00

Ernest William Ellis, DMEA Member
Uranium Commodity Committee
James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee

Application

3/29/57

4-4-57

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

April 2, 1957

Mr. Allan D. Douglas, President,
Little Mo Mining, Inc.,
P.O. Box 545,
Upton, Wyoming.

Subject: DMEA 4709

Dear Mr. Douglas:

Your application for exploration assistance, dated March 5, 1957, submitted to our office at Denver, Colorado, has been assigned Docket Number DMEA 4709 and referred to the Rare & Misc. Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to: Region III

6416

DMEA 4709

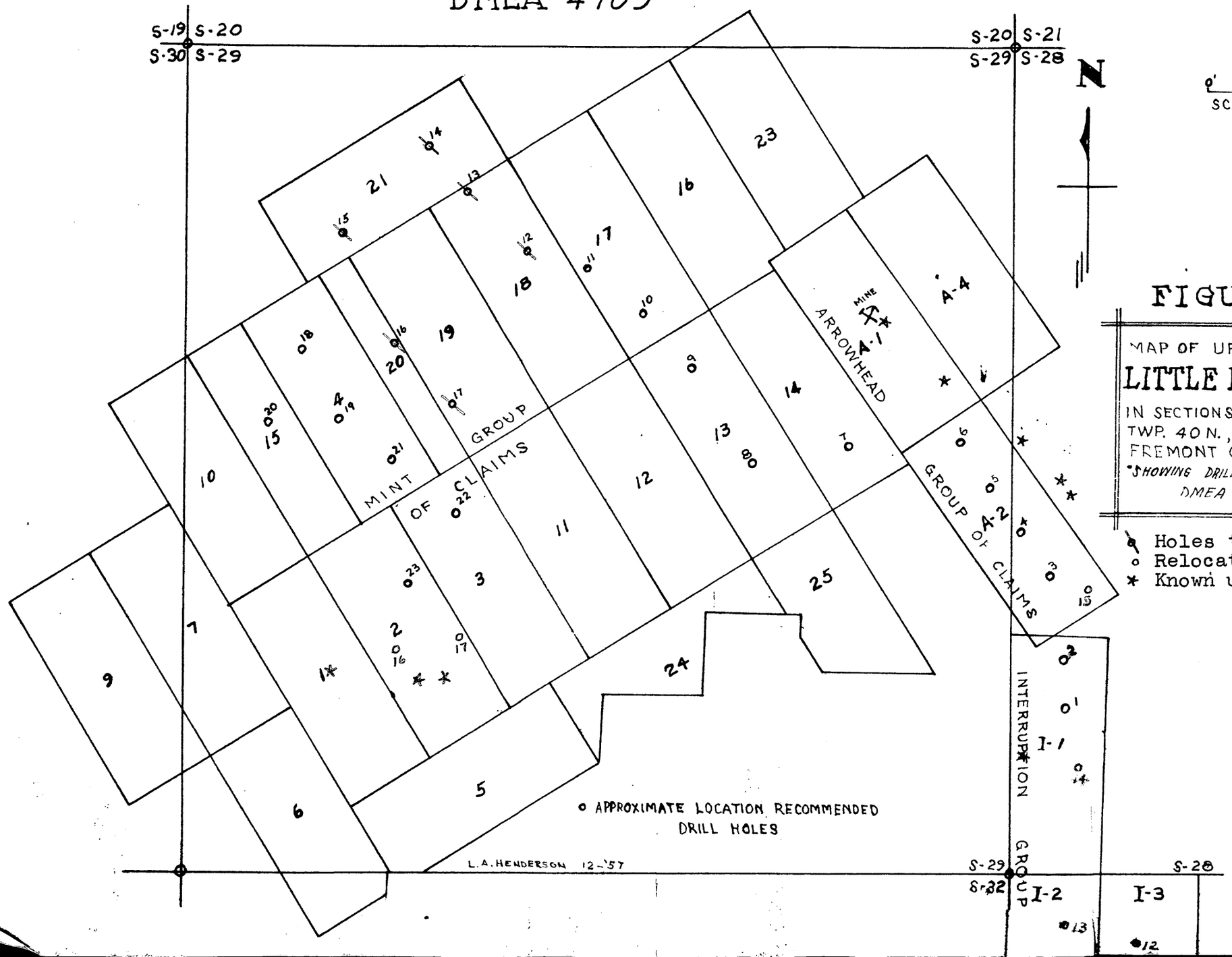


FIGURE 2

MAP OF URANIUM CLAIMS OF

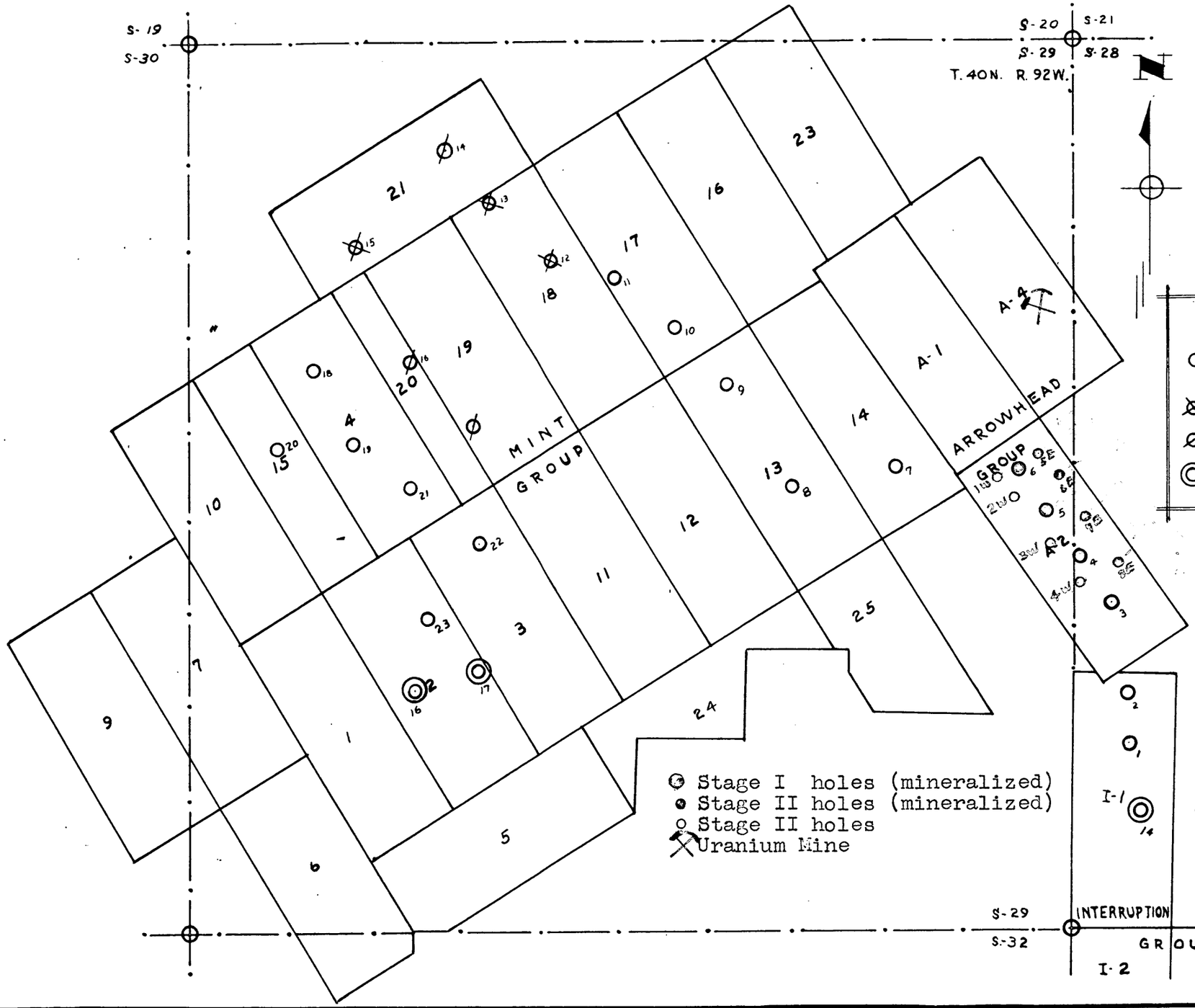
LITTLE MO MINING INC.

IN SECTIONS 28, 29, 30, 32 & 33
TWP. 40 N., R. 92 W., 6 P.M.
FREMONT COUNTY, WYOMING
SHOWING DRILL HOLE LOCATIONS, STAGE I, DMEA 4709

- Holes to be relocated
- o Relocated holes
- * Known uranium deposits

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 6 1958

DATE	INITIALS	CODE



LEGEND

- ○ PROPOSED LOCATION STAGE I HOLES (DRILLED)
- ⊗ DELETED STAGE I HOLES
- ⊘ STAGE I HOLES TO BE RELOCATED
- ◎ APPROVED LOCATION OF RELOCATED HOLES (DRILLED)

FIGURE 2A

MAP SHOWING CLAIMS, STAGE I DRILL HOLE LOCATIONS WITH DELETED AND RELOCATED HOLES UNDER STAGE I

LITTLE MO MINING INC.

MINT Et Al CLAIMS

FREMONT COUNTY, WYOMING

DMEA 4709

CONTRACT Idm-E/136

J.A. HENDERSON 2/58

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

EXAMINATION REPORT
DMEA 4709

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

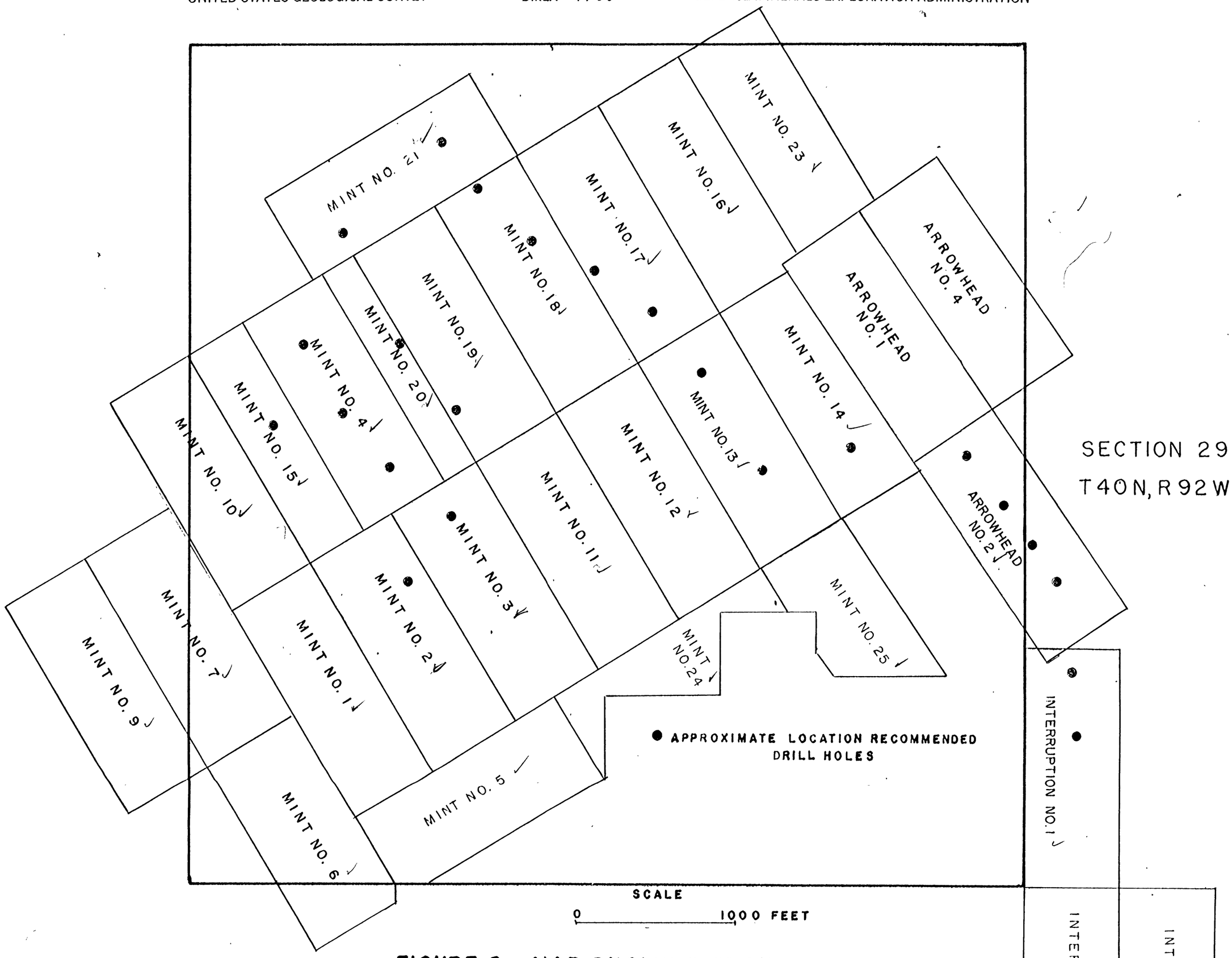


FIGURE 2 MAP SHOWING CLAIMS AND DRILL HOLE LOCATIONS, LITTLE MO MINING, INC.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

EXAMINATION REPORT
DMEA 4709

PREPARED FOR
DEFENSE MINERALS
EXPLORATION ADMINISTRATION

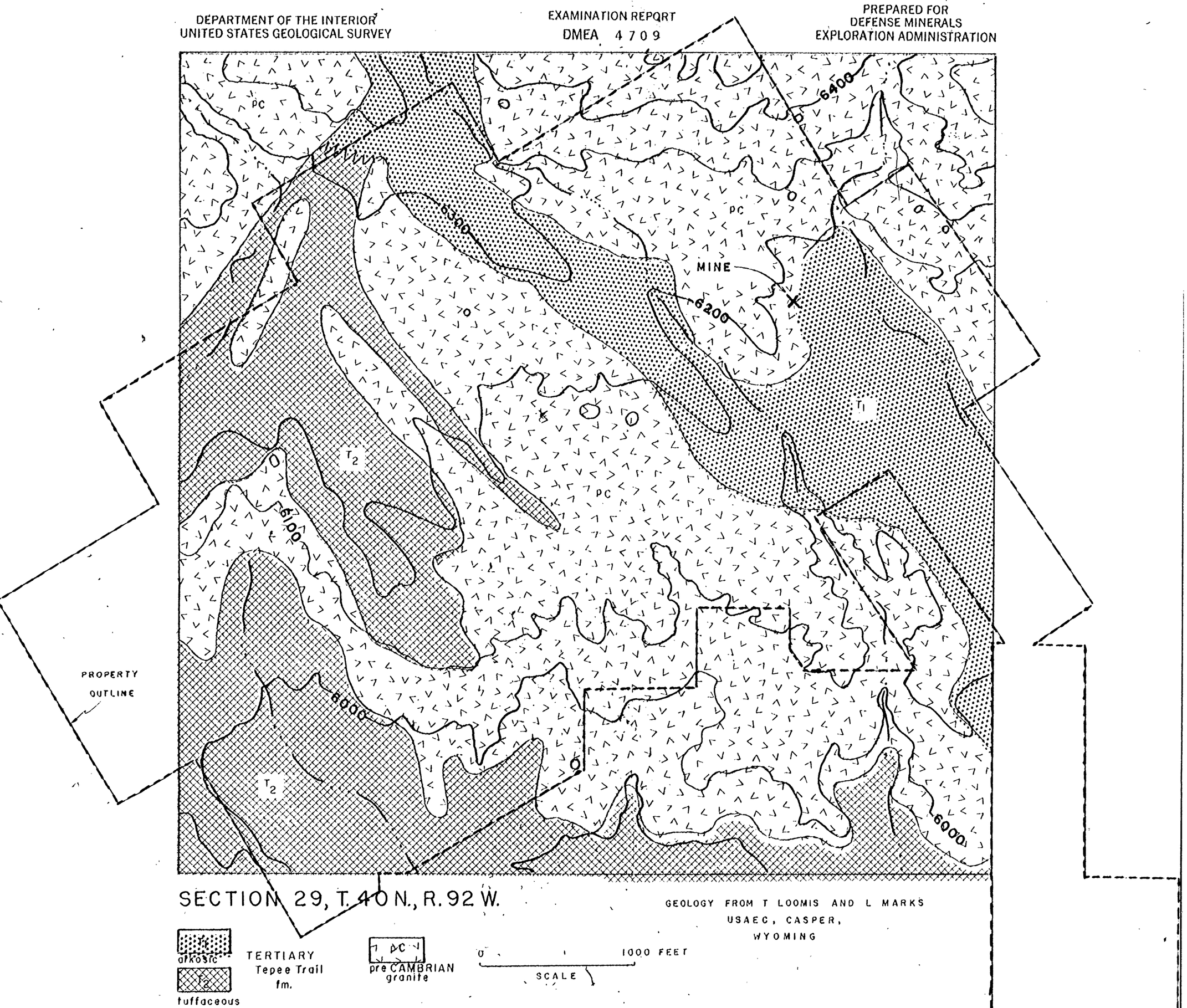


FIGURE 3. SKETCH MAP SHOWING GEOLOGY IN THE VICINITY OF CLAIMS OF LITTLE MO MINING, INC.

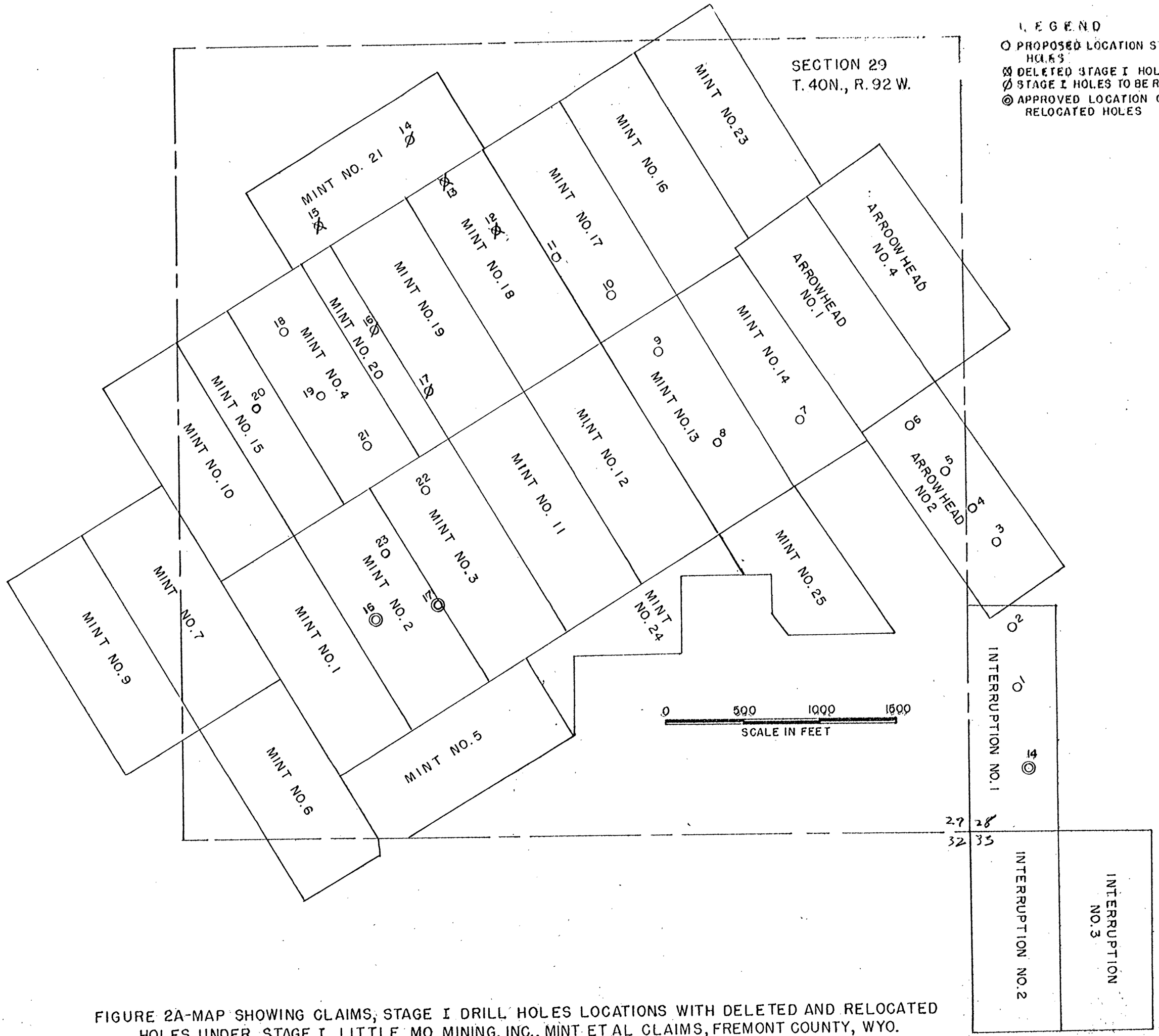


FIGURE 2A-MAP SHOWING CLAIMS, STAGE I DRILL HOLES LOCATIONS WITH DELETED AND RELOCATED HOLES UNDER STAGE I, LITTLE MO MINING, INC., MINT ET AL CLAIMS, FREMONT COUNTY, WYO.
DMEA 4709, CONTRACT Idm E-1136

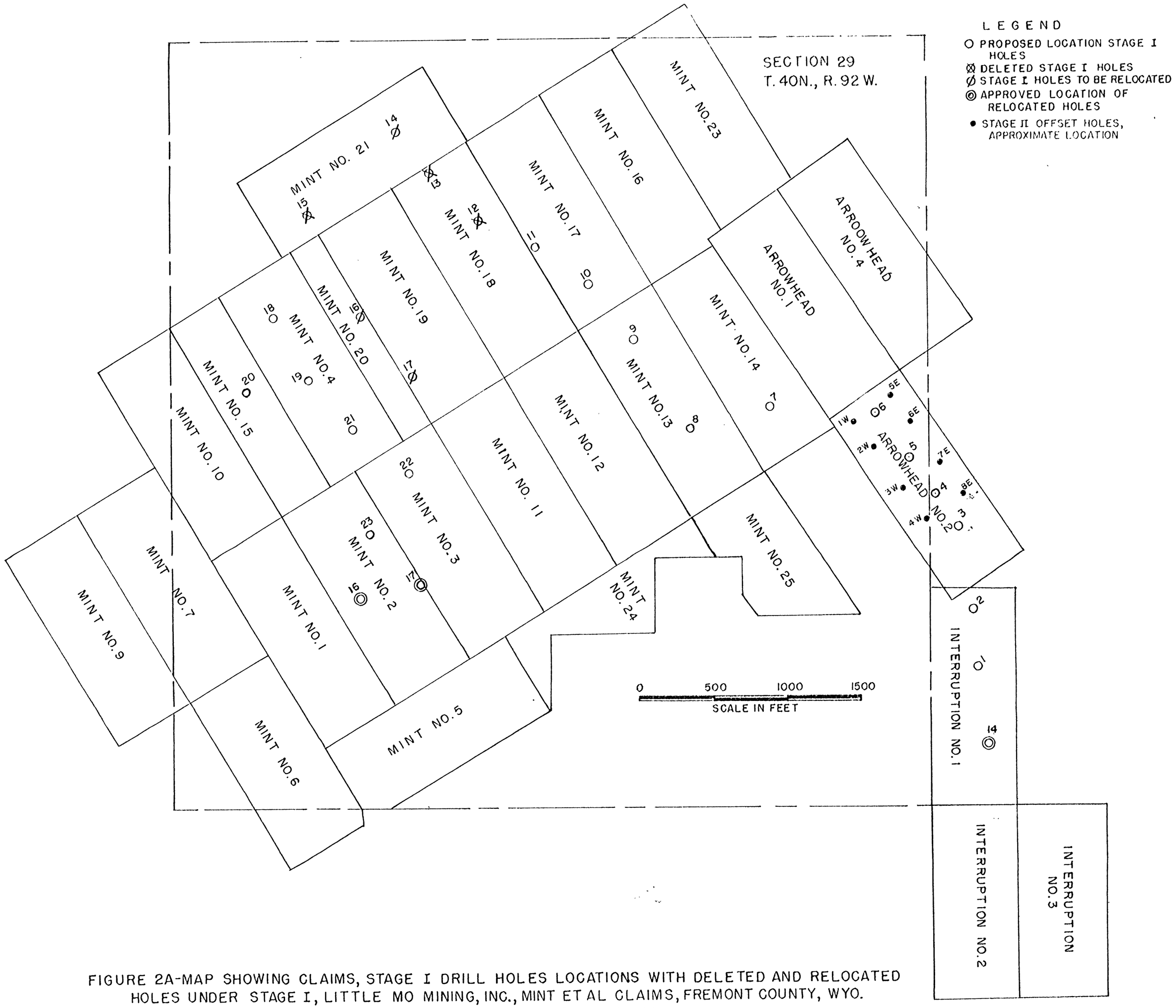


FIGURE 2A-MAP SHOWING CLAIMS, STAGE I DRILL HOLES LOCATIONS WITH DELETED AND RELOCATED HOLES UNDER STAGE I, LITTLE MO MINING, INC., MINT ET AL CLAIMS, FREMONT COUNTY, WYO.
DMEA 4709, CONTRACT Idm E-1136

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

Idm-E 1136
DMEA 4709

PREPARED FOR
DEFENSE MINERALS
EXPLORATION ADMINISTRATION

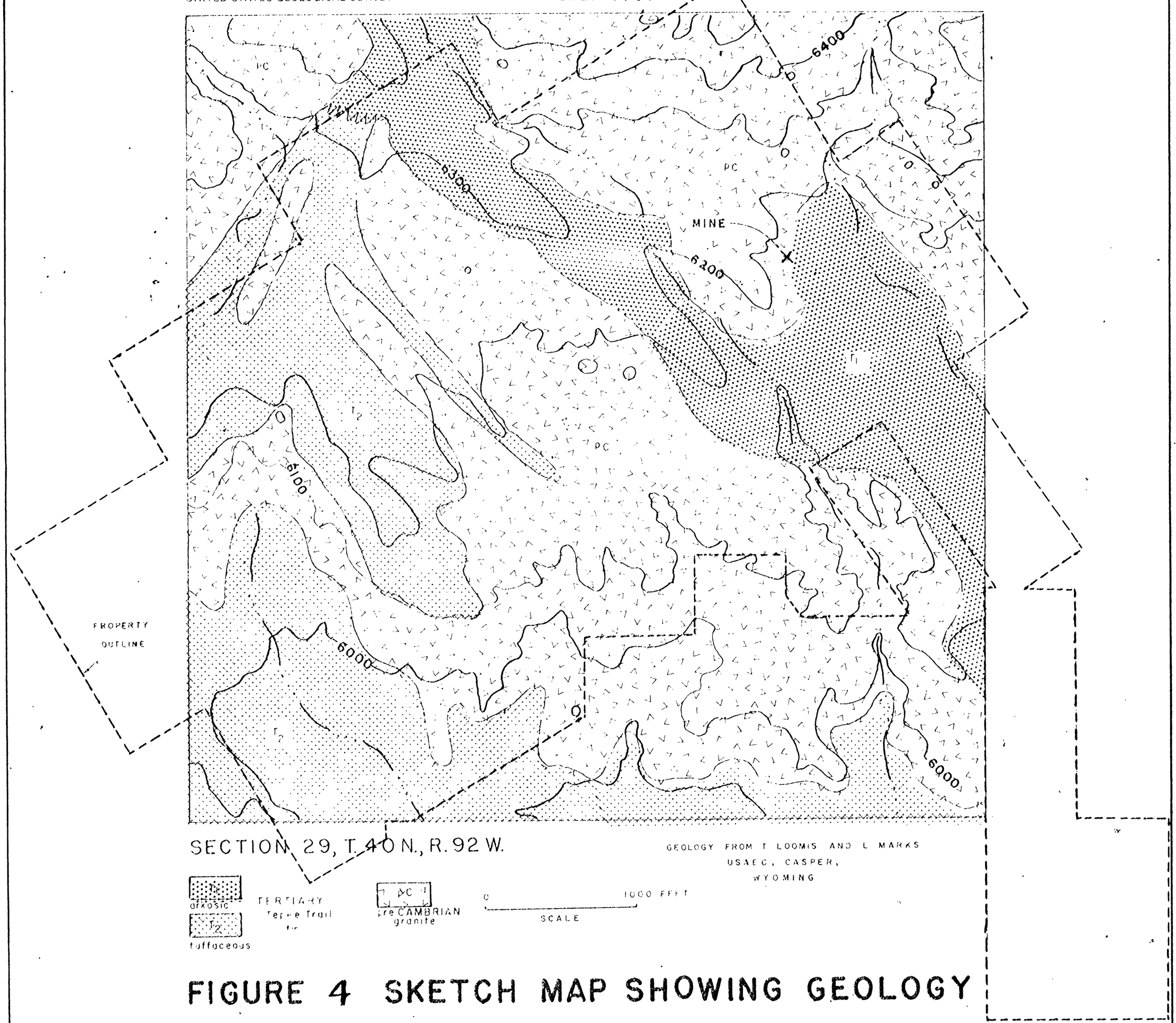
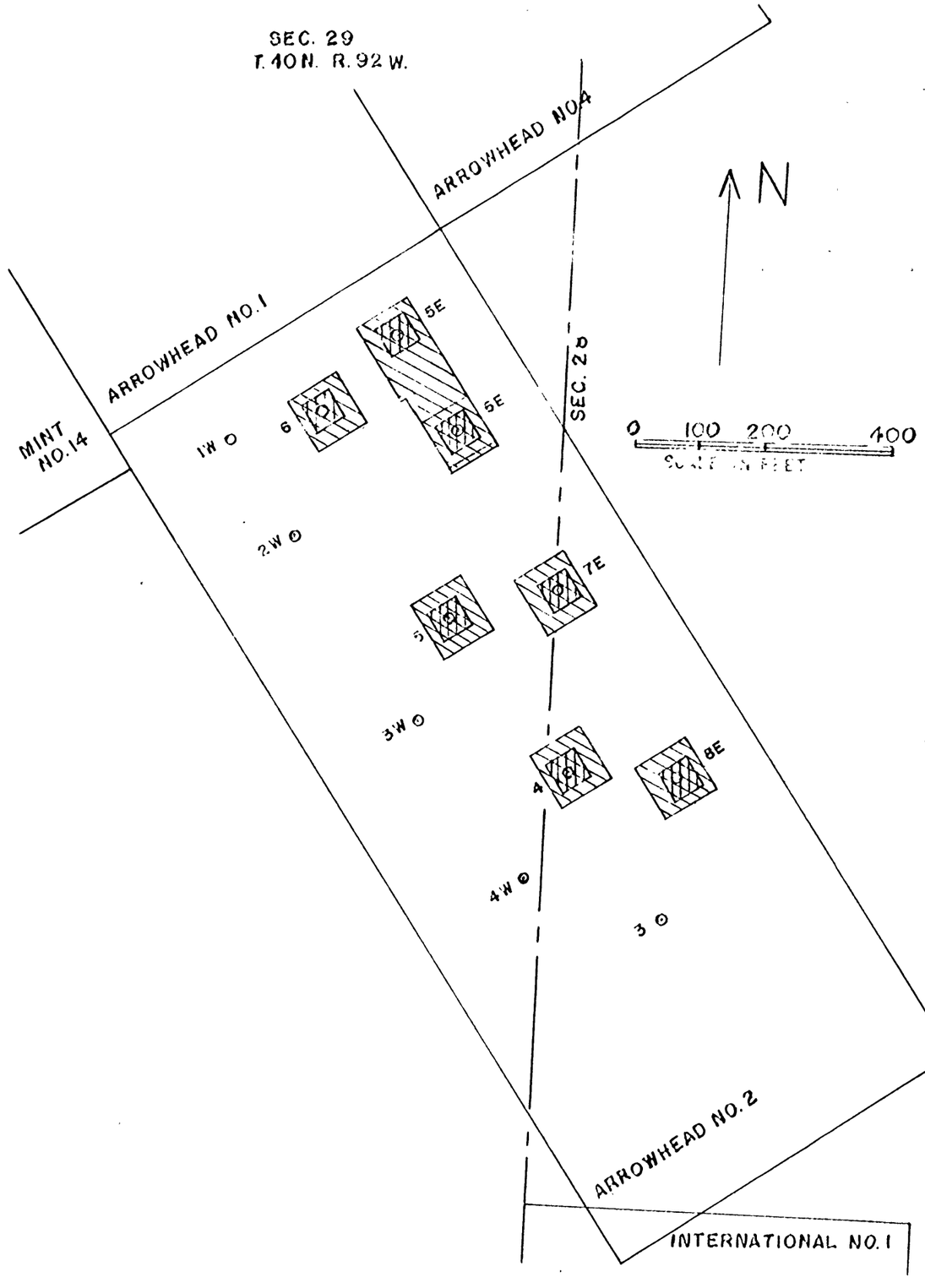


FIGURE 4 SKETCH MAP SHOWING GEOLOGY IN THE VICINITY OF CLAIMS OF LITTLE MO MINING, INC.



INDICATED ORE

Hole No.	Collar Elev.	Top of Ore Elev.	Thickness of Ore Feet	Tons	Grade Percent U_3O_8
4	6125	6049	2.0	357	0.10
5	6116	6056	6.0	1071	0.169
6	6134	6080	2.0	357	0.17
5E	6092	6053.5	3.0	536	0.31
6E	6082	6050	1.25	223	0.12 (eU_3O_8)
6E		6044	2.0	357	0.17
6E		6030	2.0	357	0.12
7E	6087	6011	2.0	357	0.26
8E	6078	6010	2.0	357	0.16
		Total Indicated Ore		3972	0.182

INFERRED ORE

Hole No.	Collar Elev.	Top of Ore Elev.	Thickness of Ore Feet	Tons	Grade Percent U_3O_8
4	6125	6049	2.0	800	0.10
5	6116	6056	6.0	2614	0.169
6	6134	6080	2.0	800	0.17
5E 6E	6092 6082	6053.5 6050	2.0	1636	0.254
6E	6082	6044	2.0	557	0.17
6E	6082	6030	2.0	557	0.12
7E	6087	6011	2.0	871	0.26
8E	6078	6010	2.0	800	0.16
		Total Inferred Ore		8635	0.184
		Total Indicated and Inferred Ore		12,607	0.183

ORE RESERVES

LITTLE MO MINING INCORPORATED
FREMONT COUNTY, WYO.
DMEA 4709 CONTRACT NO. IDM-E 1136

FIGURE 3

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

EXA... ...ATION REPORT
DMEA 4709

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

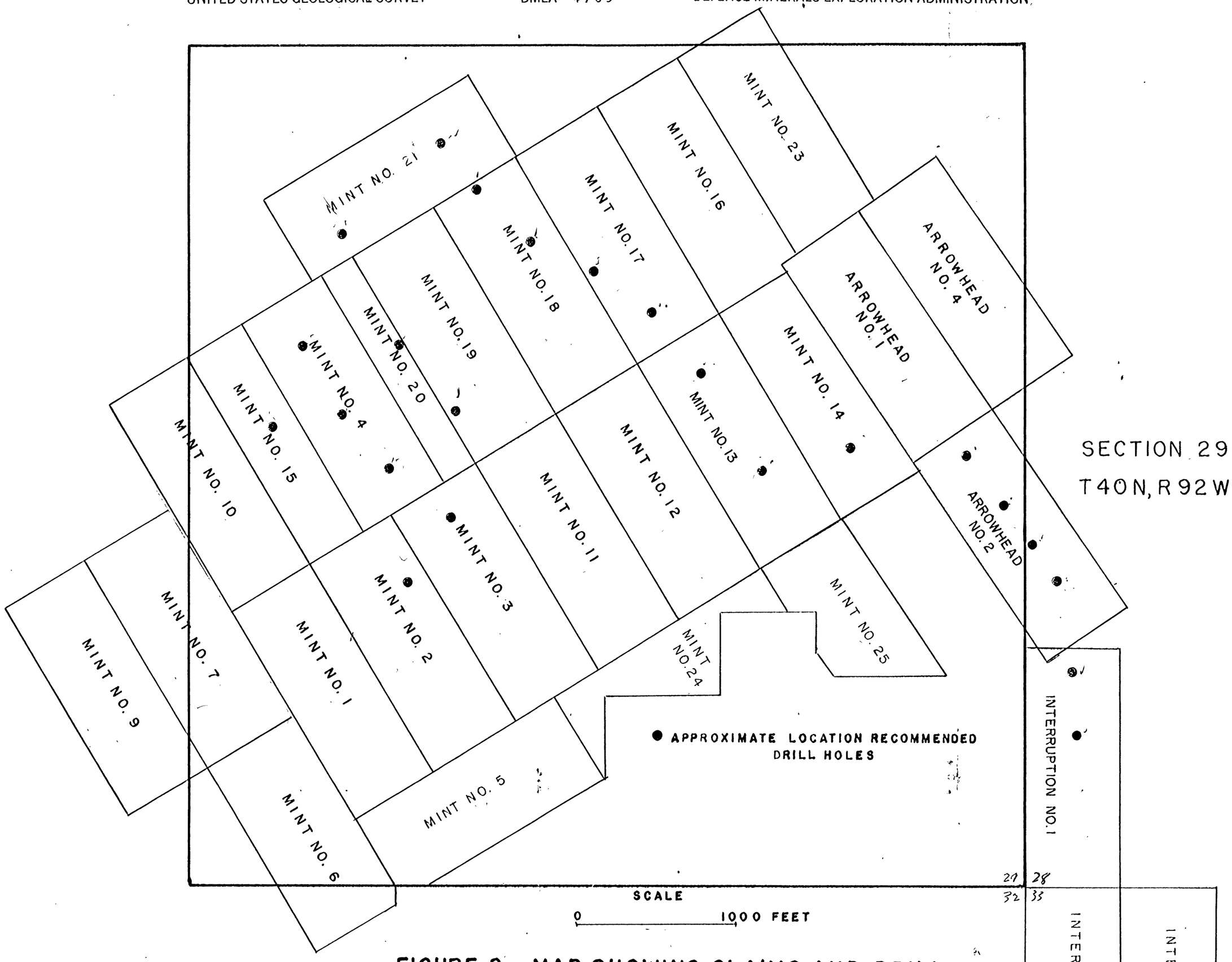


FIGURE 2 MAP SHOWING CLAIMS AND DRILL HOLE LOCATIONS, LITTLE MO MINING, INC.

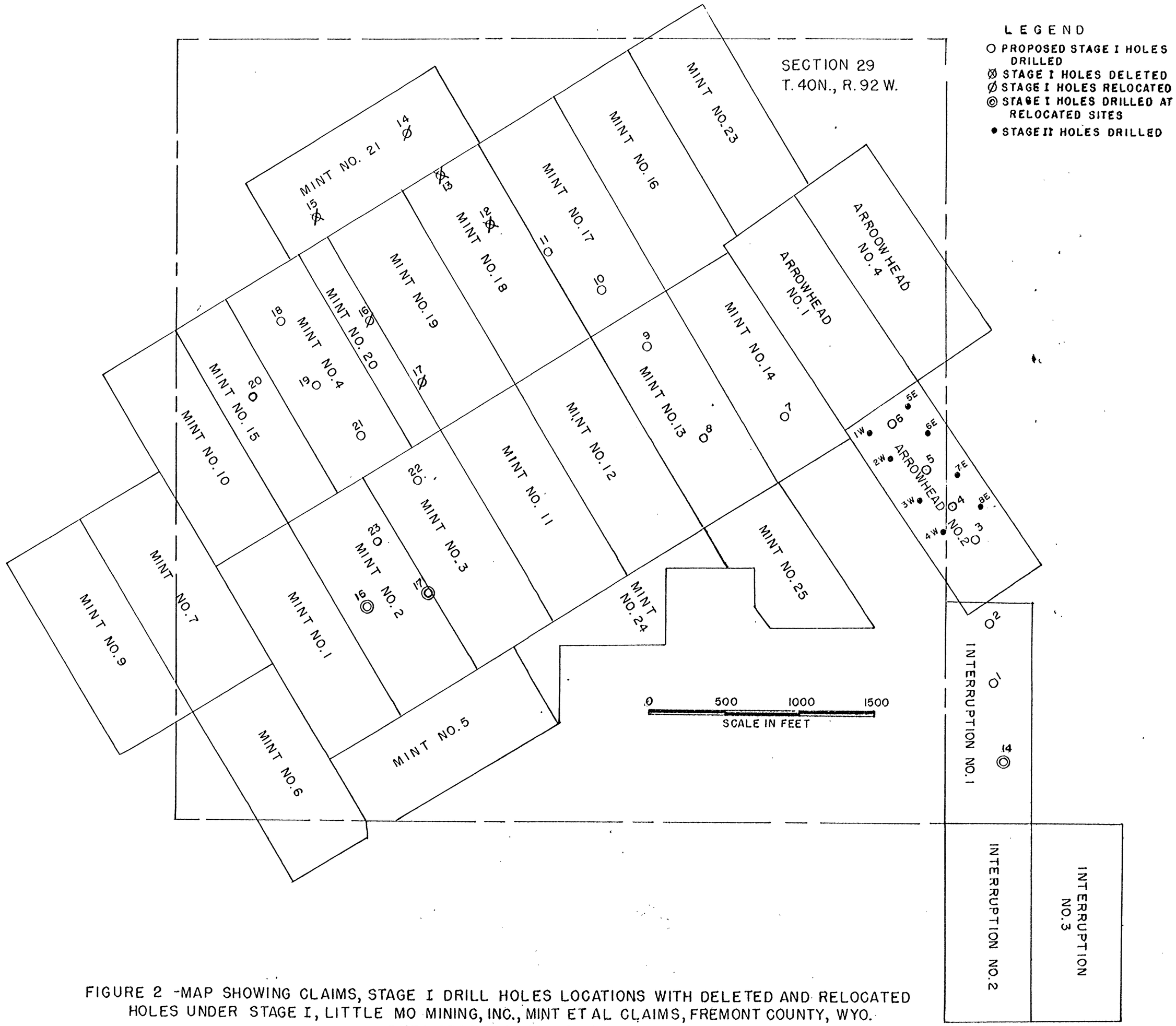
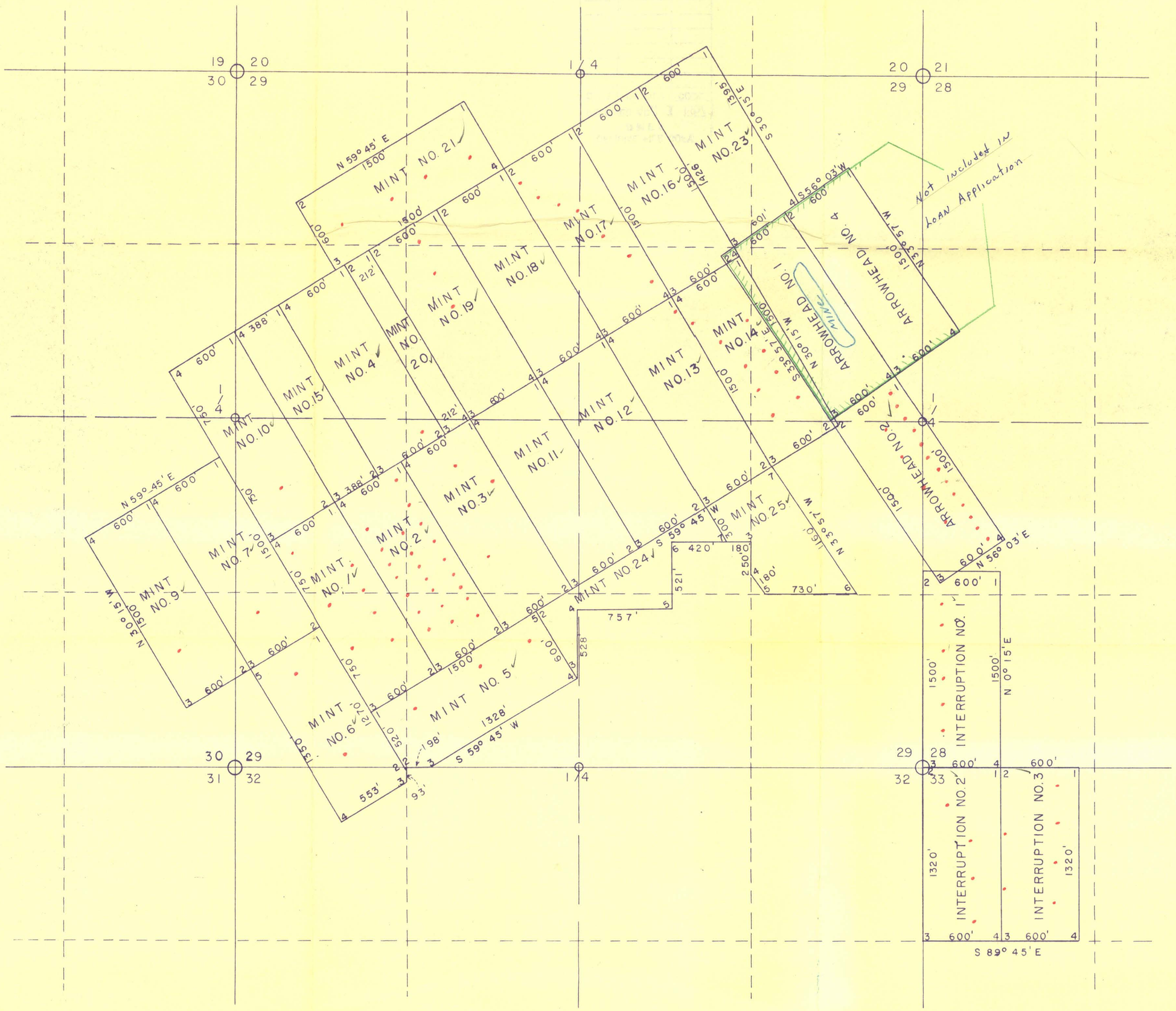


FIGURE 2 -MAP SHOWING CLAIMS, STAGE I DRILL HOLES LOCATIONS WITH DELETED AND RELOCATED HOLES UNDER STAGE I, LITTLE MO MINING, INC., MINT ET AL CLAIMS, FREMONT COUNTY, WYO. DMEA 4709, CONTRACT Idm E-1136



LODE CLAIMS & LEASES

LITTLE MO. MINING, INC.

Secs. 28, 29, 30, 32, & 33.

T 40 N, R 92 W, 6th P.M.

FREMONT CO. WYO.

SCALE: 1" — 500'

7/13/55

E. J. COX