DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4389

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(Withdrawn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

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

DMEA FORM 6. REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. ~~Mr. C. O. Mittendorf~~	[illegible]	9/2
2. ~~Mr. Frank E. Johnson~~	FJ	
3. Mr. George C. Selfridge		
4. ~~Mr. Fred L. Knouse~~ Mr. Okun (Murphy)		
5.		
FROM: Jay L. Chambers		8/29

FOR: Check items for action desired

____ Action	____ Reply for signature of ____	
____ Approval	____ Investigate	____ Surname
____ Comment	____ Recommendations	____ Signature
____ Conference	____ Rewrite	____ File
____ Instructions	xx Your information	

REMARKS;

Mr. Selfridge reviewed the docket 9/3/58 to see why project was not certified. gla

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

FIRST REPORT OF ROYALTY REVIEW

I have reviewed the files of the Executive Officer, DMEA Field Team, Region III, Denver, Colorado, pertaining to Contract Idm-E1033, Docket No. DMEA 4389 (Uranium), dated November 5, 1956, including Amendments Nos. 1 and 2, with

Uranium Enterprises
310 South 40th Street
Boulder, Colorado

for the purpose of determining the amount of royalties due the United States Government on the sale of Uranium bearing ores produced from mining operations at the Mann No. 1 Mine located in Jefferson County, Colorado, during the period November 5, 1956 through March 27, 1958.

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

My review established the total sales of Uranium bearing ores for this period to be $33,101.41. (See Schedule I attached.) Royalty due the United States Government at the contract rate of 5% is $1,655.07. The royalty paid and the balance due are as follows:

Total Royalty Due	$1,655.07
Total Royalty Paid	1,562.73
Balance of Royalty Due	$ 92.34
(See Schedule II attached)	

Donald T. Finch

Donald T. Finch, Auditor

August 26, 1958

STATUS OF THE PROJECT, DESCRIPTION OF REVIEW AND REASONS THEREFOR

Contract Idm-R1033 Docket DMEA-4389

No significant discovery resulted from operations under the exploration contract and no Certificate of Discovery or Development was issued by DMEA. The Operator's Final Engineering and Geological Report was received in the DMEA office at Denver, Colorado on September 27, 1957. In accordance with the contract, royalty is payable on all minerals mined or produced from the land described in Annex I, Article 2, during a maximum period from the date of the contract until six months after the receipt of a sufficient final report and final account. In this case, royalty is due on production during the period November 5, 1956 through March 27, 1958. A Report of Review in lieu of final audit, dated October 8, 1957, by T. H. Breding, indicated accepted costs under the Exploration Contract amounting to $7,270.32, with the Government's contribution on a 75 percent basis being $5,452.74.

My review included a tabulation and recomputation of all ore settlement sheets and load sheets in the files of the Executive Officer, DMEA Field Team, Region III, for the period November 5, 1956 through March 27, 1958, correspondence and telephone conference with the Chief of Accounting Branch, Finance Division, Field Operations Office, Atomic Energy Commission, Grand Junction, Colorado.

The producer's sales reported to DMEA were reconciled with the production records maintained by AEC. Royalties paid were reconciled with the DMEA Finance Office, Denver, Colorado.

The review was made in lieu of an on-site audit of the producer's accounts for the following reasons:

(a) All reported production was reconciled with records of the Atomic Energy Commission.

(b) The Examining Engineer is of the opinion all sales of production are accounted for.

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

SCHEDULE I

URANIUM ENTERPRISES

Contract No. Idm-E1033 Docket No. DMEA 4389

SUMMARY OF PRODUCTION, SALES AND DMEA ROYALTIES

MANN NO. 1 MINE

Purchaser	Vitro Uranium Company	Union Carbide Nuclear Co.	Totals
Period	11/5/56 to 11/30/57	12/1/57 to 3/27/58	11/5/56 to 3/27/58
Gross Weight, Pounds	790,480	704,160	1,494,640
Dry Weight, Pounds	753,038	674,852	1,427,890
Dry Weight, Tons	376.519	337.43	713.949
Average Assay	.364	.2655	.31736
Pounds U_3O_8	2,739.71	1,791.78	4,531.49
Base Payment U_3O_8	$ 9,589.00	$ 6,004.22	$15,593.22
Development Allowance	$ 1,369.84	$ 895.90	$ 2,265.74
Premium			
Excess of 4 lbs. U_3O_8 per Ton			
Pounds of Excess U_3O_8	1,233.64	528.89	1,762.53
Payment at 75¢ per lb.	$ 925.23	$ 396.67	$ 1,321.90
Haulage Allowance			
No. of Wet Tons	395.24	352.08	747.32
Allowance per Ton (Average)	6.00	6.427	6.201
Amount of Haulage Allowance	$ 2,371.44	$ 2,262.85	$ 4,634.29
Freight paid by Purchaser	$ 4,310.38		$ 4,310.38
Excess Sampling Charge	$ 2.14		$ 2.14
Total Paid by Purchaser	$ 9,942.99	$ 9,559.64	$19,502.63
A.E.C. Production Bonus	9,589.00	4,009.78	13,598.78
Total Value Subject to DMEA Royalty	$19,531.99	$13,569.42	$33,101.41
Average Value Per Dry Ton	$ 51.88	$ 40.21	$ 46.36
DMEA Royalty Percentage	5%	5%	5%
DMEA Royalty Due	$ 976.59	$ 678.48	$ 1,655.07
DMEA Royalty Paid	976.59	586.14	1,562.73
Balance of DMEA Royalty Due	$ 0.00	$ 92.34	$ 92.34

The last Liquidation Settlement in above is Union Carbide Nuclear Company No. 7948 3/24/58.

The last Certificate of Deposit in above is 59-31, dated August 20, 1958.

SCHEDULE II

URANIUM ENTERPRISES

Contract Idm-E1033

Docket DMEA 4389

SCHEDULE OF BALANCE OF ROYALTIES DUE

Date	Liquidation No.	Company	Amount	
March 10, 1958	7872	Union Carbide Nuclear Co.	$86.20	
March 25, 1958	7899	Union Carbide Nuclear Co.	6.14	
				$92.34

Balance of royalties due are royalty on A.E.C. production bonus applicable to the indicated Liquidations as reported to Auditor by A.E.C. representative on 8/14/58.

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name Uranium Enterprises

Address 310 South 40th Street

Boulder, Colorado

Exploration Contract No. Idm-E 1033 Docket No. DMEA 4389

Mann No. 1 Mine - Jefferson County, Colo.

	Check One	
	Yes	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 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 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.

Project was not certified and examination for semi-annual reports are not required

Date 8-18-58

W. B. Halsbury
Mining Engineer

EXTRA COPY
DMEA
RECEIVED OCT 11 1957

DATE	INITIALS	CODE
10-11	JK	800
14	Gone	100
"	HJ	110
	✓	120
"	~~[illegible]~~	~~[illegible]~~

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Uranium Enterprises,
2679 Arapahoe Street
Boulder, Colorado.

pertaining to Exploration Project Contract No. Idm-E1033, Docket No. DMEA-4389, including Amendments Nos. 1 and 2, for the months of March, 1957 to June, 1957, covering a project for the exploration of Uranium on property known as Mann No. 1 Mine located in Jefferson County, Colorado.

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

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

(a) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder;

(b) the monthly reports were supported by documentary proof of the costs claimed under the contract provisions for contribution by the Government on the basis of actual costs incurred;

(c) a major portion ($6,441.52) of the costs incurred covered work performed at unit rates under independent contract; and

(d) the balance ($828.80) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs for work actually performed.

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

Total cost as billed by Contractor		$7,270.32
Exceptions:		
By DMEA Finance Officer	$0.00	
Herewith	0.00	0.00
Total Accepted Cost		$7,270.32

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 Five thousand, four hundred fifty-two and 74/100ths Dollars

** $5,452.74 **

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

October 8, 1957

T. H. Brading, Auditor

Governm's copy

Original
Sawyer
"Appd. Sol. Unit"
Murphy
Ellis
Chambers
Selfridge

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DMEA
RECEIVED MAY 8 1957

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES
DOCKET NO. DMEA-4389

AMENDMENT NO. 2

It is agreed this 26th day of April, 1957, between the United States of ~~America,~~ acting ~~through the Department~~ of the Interior, Defense Minerals Exploration Administration, and Uranium Enterprises and Morrison Uranium Company, a Joint Venture, that Exploration Project Contract No. Idm-E1033 (Docket No. DMEA-4389), dated November 5, 1956, as amended, is further amended, effective November 5, 1956, as follows:

In Exhibit "A" under Description of the Work, the second paragraph is revised to read as follows:

"The holes shall be drilled approximately at the locations numbered 1, 2, 3, 8, 9, 10, 11, 12, 13, and 14 on the map entitled 'Geologic Map and Section of Mann Mine,' attached to Amendment No. 2 and made a part of the contract. The spacing between the lines of holes shall be approximately 100 feet and the interval between holes on the same line shall be approximately 30 feet."

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, or any item of allowable cost which is expressly designated "maximum."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

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

URANIUM ENTERPRISES

MORRISON URANIUM COMPANY

By Elliot Goldstein
Elliot Goldstein

Title Agent

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DATE | INITIALS | CODE

EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES, A PARTNERSHIP
DOCKET NO. DMEA 4389
CONTRACT NO. Idm-E1033

AMENDMENT NO. 1

It is agreed this 5th day of February, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Uranium Enterprises, a partnership, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E1033, Docket No. DMEA 4389, dated November 5, 1956, hereinafter called the "Contract," that:

1. The date fixed in "Article 3", on or before which the work is to be completed, is extended from March 1, 1957 to June 30, 1957.

2. The maximum period for payment of royalty and lien for payment thereof, provided for in the Contract, is increased 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 sextuplicate the day and year first above written.

URANIUM ENTERPRISES, a Partnership

By Elliot Goldstein
Elliot Goldstein,
Attorney in Fact

UNITED STATES OF AMERICA

By [illegible]
Executive Officer, DMEA
Field Team, Region III

Docket Copy

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DATE	INITIALS	CODE
2-13	C	220
2-13	B	215
2-14	Murphy	900

MF-200
(Revised June 1954)

Docket No. DMEA 4389

Commodity Uranium

Contract No. Idm-E 1033

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this NOV 5 1956 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] Uranium Enterprises, a partnership composed of L. E. Wolfson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Klaeger, W. W. Longley, and Elliott Goldstein, and Morrison Uranium Company, a Colorado corporation, a Joint Venture whose mailing address is Uranium Enterprises 2679 Arapahoe Street, Boulder, Colorado, 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 3

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee 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 ....., 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: 12½% Royalty as set forth in the lease; and deed of trust to use of National Farmers Union Property and Casualty Company

(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 of the owners and Performance Bond by the Operator in lieu of Consent to Lien and Subordination Agreement by the National Farmers Union Property and Casualty Company.

(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 March 15, 1957, shall commence the work, and on or before March 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~and shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit A~~ 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 $11,700.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $8,775.00: *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; [redacted] **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. **See Article 13.**

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) In Article 3, the words following the reference to Article 10 are deleted, and the following words are substituted: "shall have completed the work."

(b) In Article 6(a), that part of the last sentence in the first paragraph beginning after the semicolon is deleted.

(c) In Category (1) of Article 6(a), the phrase "the estimated cost of each unit of work" shall be construed to mean, for the purposes of this contract: "the average cost per foot of drilling."

(d) Categories (2) through (7) of Article 6(a) are deleted.

16—70617-1

(e) In Article 6(c), the words "Article 9" are changed to "Article 8."

(f) 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.

Executed in sextuplicate the day and year first above written.

URANIUM ENTERPRISES

By L. C. Nolson (Partner)

By [illegible] (Partner)

By [illegible] (Partner)

By [illegible] (Partner)

By [illegible] (Partner)

By W. W. Fowler (Partner)

By Elliot Goldstein (Partner)

By Edw. J. Klaeger (Partner)

MORRISON URANIUM COMPANY

By Edw. J. Klaeger

Title President

THE UNITED STATES OF AMERICA

By C. D. Mitchell

Administrator, Defense Minerals Exploration Administration

Indutz 10/29/56
Assigned
"Appd Sol. Off."
Murphy
Ellis
Chambers
Selbrodges
Fitzsimmons

I, Dorothy Merrifield, certify that I am the secretary of the corporation named as Operator herein; that Edw. J. Klaeger 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.

Dorothy Merrifield

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES and
MORRISON URANIUM COMPANY
DOCKET NO. DMMA-4389

ANNEX I

The land referred to in Article 2 of the Contract consists of the Northeast Quarter (NE¼) of the Southeast Quarter (SE¼) and the Southeast Quarter (SE¼) of the Northeast Quarter (NE¼) of Section twelve (12), Township Five (5) South, Range Seventy (70) West, 6th P.M., Colorado, comprising 80 acres more or less, as recorded in book 643, page 450, of the records of Jefferson County, Colorado.

The Operator has possession of the land under a Mining Lease, dated November 10, 1955, from the owners of the land, Joseph L. Mann and Fanny L. Mann, to the Operator.

Attached hereto and made a part hereof are copies of:

1. Consent to Lien and Subordination Agreement relating to the above described land, signed by Joseph L. Mann and Fanny L. Mann.

2. Performance Bond by the "Operator" in lieu of Consent to Lien and Subordination Agreement by the National Farmers Union Property and Casualty Company.

The location of the land is shown, in part, on the map entitled, "Figure 3. Geologic map and section of the J. L. Mann Lease, Uranium Enterprises,---," attached hereto and made part hereof.

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Uranium Enterprises Morrison Uranium Company
Docket No. DMEA- 4389
Contract No. Idm-E 1033
Contract Date NOV 5 1956

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

RECEIVED
OCT 11 1956

To the United States of America:

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

the Northeast Quarter (NE¼) of the Southeast Quarter (SE¼) and the Southeast Quarter (SE¼) of the Northeast Quarter (NE¼), section twelve (12), Township five (5) South, Range seventy (70) West, 6th Principal Meridian.

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.)

Deed of Trust dated and acknowledged April 1, 1953, and recorded April 22, 1953, at Book 804, Page 366, of the records of the Clerk and Recorder of Jefferson County, Colo., to the use of National Farmers Union Property and Casualty Co., to secure $11,925.00 with interest at 5% per an.

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 8th day of October, 1956.

Joseph L. Mann	[Seal]	Sedalia Colo.	[Address]
Joseph L. Mann *			
Fanny L. Mann	[Seal]	Sedalia Colo	[Address]
Fanny L. Mann			
	[Seal]		[Address]
	[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]

* Also known as J. L. Mann, also known as J. Leonard Mann.

STANDARD FORM 25
REVISED NOVEMBER 1950
PRESCRIBED BY GENERAL
SERVICES ADMINISTRATION
GENERAL REGULATION NO. 5

PERFORMANCE BOND

(*See Instructions on Reverse*)

DATE BOND EXECUTED

November 5, 1956

PRINCIPAL Uranium Enterprises, a partnership composed of L. E. Wollson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Klaeger, W. W. Longley, and Elliott Goldstein, and Morrison Uranium Company, a Colorado corporation, a Joint Venture

SURETY

Fidelity and Deposit Company of Maryland,
a Maryland Corporation of Baltimore, Maryland

PENAL SUM OF BOND (*express in words and figures*) ($8,775.00)	CONTRACT NO.	DATE OF CONTRACT
Eight Thousand Seven Hundred Seventy-Five and 00/100 Dollars	Idm-E 1033	November 5, 1956

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the United States of America, hereinafter called the Government, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Government, numbered and dated as shown above and hereto attached;

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Government, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of: Uranium Enterprises, a co-partnership as Principal

WITNESS

1. Margaret H. Bartleson — By L. E. Wollson (Partner)
2. Anne Nieman — By Lewis M. Schott (Partner)
3. Winifred Smith — By Carl McFarlin Sr. (Partner)
4. Frederick Kimpson — By Charles Block (Partner)
5. — By Lewis M. Schott (Partner)

WITNESS

1. Dale K. Gittersbouse — By Edward J. Klaeger (Partner)
2. H. R. Platts — By W. W. Longley (Partner)
By Elliot Goldstein (Partner)

Attest:

Dorothy Merrifield
SECRETARY

CORPORATE PRINCIPAL
Morrison Uranium Company
BUSINESS ADDRESS
2679 Arapahoe Street, Boulder, Colorado
BY Edward J. Klaeger
TITLE PRES.
AFFIX CORPORATE SEAL

~~Attest:~~ Witness:

Marguerite A. Welsh

CORPORATE SURETY
Fidelity & Deposit Company of Maryland
BUSINESS ADDRESS
100 Park Avenue, New York 17, N. Y.
BY J. N. Gelson
TITLE J. N. Gelson
Attorney-in-Fact
AFFIX CORPORATE SEAL

STANDARD FORM 25
NOVEMBER 1950 EDITION

16—30441-2

The rate of premium on this bond is $10.00 per thousand. per annum.

Total amount of premium charged, $87.75

(The above must be filled in by corporate surety)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, Dorothy Merrifield, certify that I am the secretary of the corporation named as principal in the within bond; that Edward J. Klaeger, who signed the said bond on behalf of the principal, was then President of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

Dorothy Merrifield [CORPORATE SEAL]

INSTRUCTIONS

1. This form shall be used for construction work or the furnishing of supplies or services, whenever a performance bond is required. There shall be no deviation from this form except as authorized by the General Services Administration.

2. The surety on the bond may be any corporation authorized by the Secretary of the Treasury to act as surety, or two responsible individual sureties. Where individual sureties are used, this bond must be accompanied by a completed Affidavit of Individual Surety for each individual surety (Standard Form 28).

3. The name, including full Christian name, and business or residence address of each individual party to the bond shall be inserted in the space provided therefor, and each such party shall sign the bond with his usual signature on the line opposite the scroll seal, and if signed in Maine or New Hampshire, an adhesive seal shall be affixed opposite the signature.

4. If the principals are partners, their individual names shall appear in the space provided therefor, with the recital that they are partners composing a firm, naming it, and all the members of the firm shall execute the bond as individuals.

5. If the principal or surety is a corporation, the name of the State in which incorporated shall be inserted in the space provided therefor, and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal the fact shall be stated, in which case a scroll or adhesive seal shall appear following the corporate name.

6. The official character and authority of the person or persons executing the bond for the principal, if a corporation, shall be certified by the secretary or assistant secretary, according to the form herein provided. In lieu of such certificate there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.

7. The date of this bond must not be prior to the date of the instrument in connection with which it is given.

16—30441-2 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1952—O-205420

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EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES and
MORRISON URANIUM COMPANY
DOCKET NO. DMEA-4389

EXHIBIT "A"

Description of the Work

General Provisions

The object of this project is to explore the Cretaceous Dakota formation by means of drill holes that shall penetrate the formation on each side of the Demming fault. The fault strikes northwest-southeast across the project area and dips approximately 50° to the southwest.

The holes shall be drilled at the locations approximately shown on the map entitled "Figure 3" referred to in Annex I. The distance between the two lines of holes shall be approximately 100 feet or more and the interval between holes on the same line shall be approximately 30 feet or more.

Each hole shall be drilled vertically to a depth of approximately 450 feet or until it penetrates about 10 feet into the Jurassic Morrison formation, whichever is the lesser depth. Holes No. 3 and No. 8 (Figure 3) shall be drilled first. These two holes shall be drilled non-core through the upper part of the Dakota shale, and core drilled the remaining depth. The zone or zones that will be core-drilled in the remaining holes will be determined by the supervising geologist, whose decision shall be based on the location and attitude of the Demming fault and the favorability of the host rock as indicated by the drill records of holes No. 3 and No. 8.

The work shall consist of not more than 8 hours of bulldozer work to prepare access roads and drill sites, and the drilling of not more than ten (10) holes totaling 3,300 feet of non-core and 1,200 feet of core drilling. Not more than 40 samples shall be analyzed chemically for their U_3O_8 content.

Mineralized portions of the drill core shall be split, the Operator using one-half for assay purposes. The remainder shall be stored with the rest of the core for Government inspection, in boxes properly identified as to hole number and with markers placed in the core sections to indicate the depth represented. The core shall be disposed of by the Operator when so authorized by the Government.

All holes shall be logged geologically and probed radiometrically by the Operator. Records of such logging and probing, together with the assay certificates of the core samples, shall be submitted with the Operator's monthly progress report, which shall also include a map or sketch showing the location of all holes drilled during the reporting period.

The Government will not participate in the cost of an incompleted hole; a hole that bottoms less than BX core size; nor of a hole that cannot be probed with standard radiometric testing equipment.

The bulldozing shall be done by a D-7 caterpillar dozer or equivalent unit.

The project shall be supervised by a qualified geologist or engineer.

The location of drill holes and access roads, the method of drilling, and the method of taking and storing samples shall be subject to Government approval.

Estimated Costs of the Project

Actual Costs

Category (1) Independent Contracts

Bulldozing access roads and drill sites, 8 hours @ $12.50/hr.	$ 100.00	
Non-core drilling, BX size or larger, 3,300 feet @ $2.00/ft. (average cost per foot)	6,600.00	
Core drilling, BX size or larger, 1,200 feet @ $3.00/ft. (average cost per foot)	3,600.00	
Categories (2) through (7)	None	
Total		$10,300.00

Fixed Unit Costs

Incidental allowance 1/ for each foot of drilling completed, 4,500 feet @ $0.28/ft.	$1,260.00

Chemical analyses for U_3O_8 content of 40 samples @ $3.50/sample	$ 140.00	
Total		$ 1,400.00
Estimated Total Cost of Project		$11,700.00
Government Participation @ 75%		$ 8,775.00

1/ Includes all costs whatsoever that are not included in the estimates for Category (1) Independent Contracts and for chemical analyses under Fixed Unit Costs, and is in lieu of all other costs, such as costs for supervision, office and field expenses, radiometric probing of holes, core boxes, sample containers, etc., which would otherwise be allowable under Categories (2) through (7) of the contract.

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DMEA
RECEIVED FEB 13 1957

DATE	INITIALS	CODE

POWER OF ATTORNEY

We, the undersigned members of the joint venture, do hereby appoint ELLIOT GOLDSTEIN to act as the agent of said joint venture in all matters connected with the United States Department of the Interior, Defense Minerals Exploration Administration, Contract No. Idm-[illegible]1033, Docket No. [illegible] 4389, and in behalf of said joint venture to submit to the Government all necessary reports and information required under said contract; and said agent is authorized to receive individually and to receipt for any monies that are now or may hereafter become due to said joint venture by reason of said Contract No. Idm-[illegible]1033.

Executed in sextuplicate this 12th day of January, 1957.

L. C. Wolfson
L. C. Wolfson

Joseph M. Glickstein
Joseph M. Glickstein

Carl McFarlin, Jr.
Carl McFarlin, Jr.

Charles Block
Charles Block

Lewis M. Schott
Lewis M. Schott

Edw. J. Klaeger
Edward J. Klaeger

W. W. Longley
W. W. Longley

Elliott Goldstein
Elliott Goldstein

MORRISON URANIUM COMPANY

By Edw. J. Klaeger

Title PRES.

Attest:

Dorothy Merrifield
Secretary, Morrison Uranium Company

RECEIVED
SEP 4 1956
Div. of Mineral Technology
BUREAU OF MINES
Denver Experiment Station
Denver, Colorado

RECEIVED
SEP 12 1956

DMEA
DEPARTMENT OF THE INTERIOR
SEP 6 1956
REGION III
DENVER, COLORADO

OPERATING AGREEMENT

WHEREAS, on the 6th day of April, 1955, a certain mining lease was made and entered into by and between Joseph L. Mann, also known as J. L. Mann, also known as J. Leonard Mann, and Fanny L. Mann, Lessors, and Eldon R. Bray, Lessee, and

WHEREAS, Eldon R. Bray has quitclaimed his interest to Morrison Uranium Company and Uranium Enterprises, and,

WHEREAS, the parties hereto have acquired as a result of the efforts of Morrison Uranium Company a new mining lease from the above-named Lessors, said leases and quit-claim deed covering the following described property situate in Jefferson County, State of Colorado, to-wit:

> The mineral rights to basic metals, precious metals and fissionable materials, including uranium, on the Northeast Quarter (NE 1/4) of the Southeast Quarter (SE 1/4) and Southeast Quarter (SE 1/4) of the Northeast Quarter (NE 1/4), Section Twelve (12), Township Five (5) South, Range Seventy (70) West, comprising 80 acres more or less, as recorded in book 643, page 450 of the records of Jefferson County, including the right to use water from, and water rights belonging to said property, excluding from said mining rights, all rights to oil, gas, and the mining of clay.

AND WHEREAS, Morrison Uranium Company has a Forty (40%) percent interest and Uranium Enterprises has a Sixty (60%) percent interest in and to said lease, and

WHEREAS, an action has been instituted by one Harry Kraemer in the District Court of Jefferson County, involving the premises above described, and which has resulted in a Lis Pendens recorded at book 918, page 510, of the records of Jefferson County, affecting said real property.

NOW, THEREFORE, for and in consideration of the moneys, conditions, covenants and agreements hereinafter contained and set forth and to be performed and kept by the parties hereto, MORRISON URANIUM COMPANY, hereinafter referred to as first Party and URANIUM ENTERPRISES, hereinafter referred to as second party, agree as follows:

Second Party, for and in consideration of the efforts of the First Party in acquiring the new mining lease, as aforesaid, and the other considerations set forth, agrees to assume full, exclusive, and complete control for the exploration, development and mining of said properties, including performing or causing to be performed all of the necessary drilling contracting, all of the hiring or contracting of workers and the performance of any other work and activities normally consistent with the successful development of a mining operation, including all legal, office and field work of any kind whatsoever, and First Party agrees that second party shall have said full, exclusive and complete control, and First Party shall have no control over the exploration, development and mining of said properties.

Second Party shall pay all the outstanding debts of first Party heretofore incurred in the exploration, development and mining of said properties, said payment of debts not to exceed a total of Seven Thousand ($7,000.00) Dollars, and to be made as follows within ten days from the execution of this agreement:

1. One Thousand ($1.000.00) Dollars of said amount shall be paid by second party directly to first party, to then be divided equally between Eldon R. Bray and Harry H. Herman.

2. The remaining amount, not to exceed Six Thousand ($6,000.00) Dollars, shall be paid directly to the creditors of First Party by Second Party, and after such creditors are fully paid, the balance of said Six Thousand ($6,000.00) Dollars remaining, if any, shall be credited to First Party.

Second Party shall pay all drilling costs on said properties, said payment of drilling costs not to exceed a total of Ten Thousand ($10,000.00) Dollars, and all drilling costs in excess of said total amount shall be charged to total costs of operation and deducted, as hereinafter stated, from gross profits of operation in deriving distributable net profit.

Second Party shall assume payment of all exploratory costs, and if sufficient ore in paying quantities is found, Second Party will assume the payment of all costs of mining and development of said properties, said payment of exploratory, mining and development costs to be deducted from gross profits of operation in arriving at distributable net profits of operation.

Second Party shall retain sixty (60%) percent of the distributable net profits of operation, and shall pay to First Party forty (40%) percent of said net profits. Distributable net profits of operation shall be derived as follows: from gross profits of operation shall be deducted:

(a) Rentals and royalties,

(b) All tangible and intangible costs incurred in the exploration, mining and development of said property and caring for the ore produced from said properties, said costs to include (but not to be limited to) salaries, wages, commissions, fees, licenses, supplies, equipment rentals, depreciation, legal costs, building and construction costs, insurance premiums, and all other costs necessary for the successful operation of said properties,

(c) Three Hundred ($300.00) Dollars per month for administrative and office expenses,

(d) The cost incurred by second party in obtaining a reduction of the rental or royalty payments to the Lessors, to-wit: One Thousand Eight Hundred and Eighty-five and 31/100 ($1,885.31) Dollars,

(e) All drilling costs in excess of the aforementioned total amount of Ten Thousand ($10,000.00) Dollars expended on said properties by Second Party.

First Party agrees that should the plaintiff Harry Kraemer in the aforestated action prevail and be awarded by the court any interest in the above described real estate, then such interest awarded shall be taken from First Party's Forty (40%) percent interest in the aforementioned lease, and

such interest awarded shall share only in the First Party's share of the Forty (40%) percent of distributable net profit. First Party shall execute an assignment to said Harry Kraemer, his assigns or successors in interest, of a percentage of its Forty (40%) percent interest in the said lease necessary to satisfy the award of said court, and hereby indemnifies second party's interest in the aforesaid lease and this Operating Agreement from any diminution as a result of any such claim by Harry Kraemer, and First Party agrees to pay all court costs and reasonable attorney's fees incurred by Second Party, in defending its interest in the aforesaid lease and the within Operating Agreement from any diminution as a result of such claim.

Second Party agrees to fulfill all the conditions and covenants of the aforesaid mining lease, and in the event of a breach by Second Party of said conditions and covenants, this Operating Agreement shall terminate and become null and void, and Second Party shall be required to convey all of its right, title, or interest in or to said mining lease to First Party, and upon such conveyance shall be released of all further liabilities to First Party.

This instrument shall not be construed as a partnership agreement, and the parties hereto hereby expressly represent that they are not partners for any purpose whatsoever.

IN WITNESS WHEREOF, the undersigned parties have signed and sealed this instrument this 10th day of November, 1955.

FIRST PARTY:

MORRISON URANIUM COMPANY,
a Colorado Corporation

ATTEST:

Harry H. Herman (Seal)
Harry H. Herman, Secretary

By _____ (Seal)
Eldon R. Bray, President

SECOND PARTY:

URANIUM ENTERPRISES,
a Joint Venture

By Elliot Goldstein (Seal)
Elliot Goldstein

By _____ (Seal)
Joseph M. Glickstein

By _____ (Seal)
Lewis M. Schott

STATE OF COLORADO)
) SS.
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 1st day of November, 1955, by Eldon R. Bray, President, and Harry H. Herman, Secretary, of Morrison Uranium Company, a Colorado Corporation.

WITNESS my hand and official seal.

My commission expires November 16, 1958

Dorothy Merrifield
Notary Public

STATE OF COLORADO)
) SS.
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this ~~1st~~ day of November, 1955, by Elliot Goldstein, for Uranium Enterprises, a Joint Venture.

WITNESS my hand and official seal.

My Commission expires November 16, 1958

Dorothy Merrifield
Notary Public

STATE OF NEW YORK)
) SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of November, 1955, by Joseph M. Glickstein, for Uranium Enterprises, a Joint Venture.

WITNESS my hand and official seal.

My Commission expires _____

_____
Notary Public

STATE OF NEW YORK)
) SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this 6 day of November, 1955, by Lewis M. Schott, for Uranium Enterprises, a Joint Venture.

WITNESS my hand and official seal.

My Commission expires _____

_____
Notary Public

RECEIVED
SEP 4 1956
Div. of Mineral Technology
BUREAU OF MINES
Denver Experiment Station
Denver, Colorado

RECEIVED
SEP 12 1956

DMEA
DEPARTMENT OF THE INTERIOR
SEP 6 1956
REGION III
DENVER, COLORADO

STOCKHOLDERS OF RECORD OF MORRISON URANIUM COMPANY

August 31, 1956

	Ctf. No.	Shares	Total
ABBOT, Cecil	75	100	100
ABBOTT, Eugene W.	74	140	140
BARTON, Ed 31 Park Hill Ave. Norwalk, Conn.	203	3,499	3,499
*BLOCK, Charles 41 East 42nd Street New York, N. Y.	175 180 196	7,098-3/4 52-1/2 3,000	10,151-1/4
BRAY, Eldon R. 100 Canyon Vista Drive Box 111 Morrison, Colorado	148	500	500
BRAY, Rollie H. 1735 E. 22nd Cheyenne, Wyoming	65	900	900
CALHOUN, Gerald 4061 E. 11th Denver, Colorado	202	2,000	2,000
CARNEY, H. B. & Jean 6730 East End Ave. Chicago 49, Illinois	206	3,000	3,000
COOPER, Duane Idledale, Colorado	119	500	500
CRIST, Robert B. and/or Gladys Laverne Selma, Iowa	80 81 82 83 84 85	500 500 1,000 1,000 1,000 1,000	5,000
DEIKMAN, Eugene 611 E. & C. Building Denver, Colorado	163 172 186 192 198	1 248 2 105 714-1/2	1,070-1/2
EMMOT, L. D. Box 282 Morrison, Colorado	122 124 126	200 200 200	600
*GLICKSTEIN, Joseph M. P.O. Box 1086 Jacksonville, Florida	174 179 195	7,098-3/4 52-1/2 3,000	10,151-1/4
GOLDBERG, Charles 38th and Wynkoop Denver, Colorado	16	600	600
*GOLDSTEIN, Elliot 2679 Arapahoe Street Boulder, Colorado	162 169 183 200	1 7,473 55 2,922	10,451

	Ctf. No.	Shares	Total
HERMAN, Harry H. 1051 - 11th St. Denver, Colorado	21 28 204	1,000 5,000 8,000	14,000
*KLAEGER, Edward J. 2679 Arapahoe Street Boulder, Colorado	161 170 184 199	1 7,473 55 2,922	10,451
KRAMER, Norbert & Charlotte 1018 Adams Denver, Colorado	187	1,000	1,000
LIVINGSTON, Werner & Rose 210 Glencoe Denver, Colorado	205	3,000	3,000
*LONGLEY, W. W. 2679 Arapahoe Street Boulder, Colorado	168 182 201	7,721 57 3,019-1/2	10,797-1/2
*McFARLIN, Carl, Sr. Executive Vice President Merritt-Chapman & Scott 1st American Nat'l Bank Bldg. Nashville, Tennessee	173 178 193	7,098-3/4 52-1/2 3,000	10,151-1/4
MERRIFIELD, Dorothy 270 S. 39th Street Boulder, Colorado	171 185 188	747-1/2 6 316	1,069-1/2
MOSER, Earl C. 211 S. Osceola Denver, Colorado	69 156 157	900 1,000 2,000	3,900
PICKETT, Arthur E. 211 S. Osceola Denver, Colorado	63	10,000	10,000
POLHAMUS, John Idledale, Colorado	93	100	100
POLMAMUS, Roy F. (Kremmling, Colo)	70	900	900
*SCHOTT, Lewis M. 41 E. 42nd Street New York, N. Y.	167 177 194	122-1/2 16,563-3/4 7,000	23,686-1/4
VanCLEAVE, Gwenith	76	10	10
*WOLFSON, L. E. 602 Florida Theatre Bldg. Jacksonville, Florida	176 181 197	33,127-1/2 245 14,002	47,374-1/2
			185,103

*Partners of URANIUM ENTERPRISES, a Joint Venture, owning a total of 133,214 shares of the outstanding stock, or 71.97%.

250,000 - authorized shares
185,103 - outstanding shares
64,897 - unissued shares

(Note: Ctf. No. 165 was not issued
Ctf. No. 100 was not printed

MORRISON URANIUM COMPANY

By Elliot Goldstein
Vice President

ATTEST: Dorothy Merrefield
Secretary

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

RECEIVED
JUL 20 1956

July 18, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
JUL 20 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Uranium Enterprises, Mann #1 Mine, Jefferson County, Colorado

Enclosed are three copies of the subject application in the amount of $19,130.00. One copy of the application is being retained in our file.

It is noted that the Applicant is Uranium Enterprises but the Mining Lease shows the lessees to be Morrison Uranium Company, a Colorado Corporation, and Uranium Enterprises, a Joint Venture. No documentary evidence has been submitted by the Applicant to show that Uranium Enterprises controls the Morrison Uranium Company.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JUL 20 1956
DMEA
Date Rec'd
JUL 18 1956
BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. 4389
Metal or Mineral Uranium
Date Received 7-20-56
Estimated Cost $19,130.00
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: URANIUM ENTERPRISES, 2679 Arapahoe St., Boulder, Colorado, a partnership--L. E. Wolfson, c/o Jos. M. Glickstein, P.O. Box 1086, Jacksonville, Fla.; Jos. M. Glickstein, P.O. Box 1086, Jacksonville, Fla.; Carl McFarlin, 1st American Nat'l Bank Bldg., Nashville, Tenn.; (continued on attached sheet)

(*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. (not applicable)

(*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 SE/4, NE/4 and NE/4, SE/4, Sec. 12, T. 5 S., R. 70 W., Jefferson County, Colorado

(*b*) State any mine name by which the property is known. Mann #1 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. (copy of Mann lease attached)

(*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. (not applicable)

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. (See enclosed report)

(*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 Uraninite or associated uranium minerals.

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

(*c*) The work will start within 15 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. (See attached sheet)

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 [X] 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 July 9, 1956

URANIUM ENTERPRISES
(Applicant)

By Ernest Goldstein
Partner

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

URANIUM ENTERPRISES
2679 Arapahoe Street
Boulder, Colorado

RECEIVED
JUL 20 1956

Instruction 1.(a)

Charles Block, c/o Merritt, Chapman & Scott, 261 Madison Ave., New York, N.Y.; Lewis M. Schott, 41 E. 42nd St., New York 17, N.Y.; Edward J. Klaeger, 2679 Arapahoe Street, Boulder, Colo.; W. W. Longley, 2679 Arapahoe St., Boulder, Colo.; and Elliot Goldstein, 2679 Arapahoe St., Boulder, Colo.

Instruction 5.(b)

The ore presently being mined on this property is in the lower part of the upper Dakota sandstone and is strongly controlled by a strike-slip fault striking N. 40° W. and dipping 50° to the SW. This fault has been explored underground by raising and uranium mineralization is present in permeable sandstone beds adjacent to or in close proximity to this shear.

The previous operators of this property shipped 6 tons of 0.21% U308 from the lower Dakota sandstone where mineralization appeared on the outcrop. This zone is 100 feet lower stratigraphically than the zone presently being mined.

We believe the intersection of the strike fault and the lower Dakota sandstone is an excellent place to explore for another ore body on this property.

We propose that three fences of holes be drilled, the fences being 100' apart and each fence consisting of 10 holes drilled to 300' on 10' centers.

The previous drilling program has demonstrated the necessity for drilling on 10' centers. Any wider spacing might run the risk of straddling the ore body.

If after the first fence is completed and ore is discovered along the fence, it would be desirable to lessen the number of holes in succeeding fences--that is to say, if 3 holes are all that are necessary to straddle the ore, it would be wasteful to drill 10 hole fences. We would then desire to use the footage saved thereby for two more fences.

We suggest the holes be plug-bit drilled and logged with our Mt. Sopris equipment. If ore is discovered in the hole, then the succeeding hole should be cored at that interval. Good correlation could then be obtained between the assayed core and gamma ray log. This system has been successful on the previous drilling.

RECEIVED
JUL 20 1956

GEOLOGIC REPORT

J. L. MANN LEASE

MORRISON, COLORADO

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APPENDIX - Ore Shipments

ILLUSTRATIONS

Plate I - Geologic Map and Cross Section of J. L. Mann Lease

Plate II - Block Diagram of J. L. Mann Lease Mine

GEOLOGIC REPORT
J. L. MANN LEASE
MORRISON, COLORADO

Introduction

The J. L. Mann lease consists of 80 acres located in SE/4, NE/4 and the NE/4, SE/4, Section 12, Township 5 South, Range 70 West, Jefferson County, Colorado, approximately 2 miles southeast of Morrison. Denver is 15 miles to the northeast, and Golden, the county seat of Jefferson County, 9 miles to the northwest. A graded county highway traverses the northwest corner of the property and connects with U.S. 285 3 miles to the west. Surface elevations range between 5700' and 6300' above sea level. An adequate water supply is available from Turkey Creek, a permanent stream which flows past the mine portal. R.E.A. electric power to the property is supplied by a 220 volt transmission line.

Legal Data

The property is owned by J. L. and Fanny Mann. A standard mining lease is held, 60% by Uranium Enterprises, a joint venture partnership, and 40% by Morrison Uranium Company. In January, 1956, the partners in Uranium Enterprises purchased 73% of the issued and outstanding stock of Morrison Uranium Company, thereby giving them effective control of

that corporation. Under the terms of the mining lease with J. L. and Fanny Mann, the landowners retain a 12½% gross royalty, which through subsequent arrangements has been reduced to 10% until March, 1957.

The property was certified by the Atomic Energy Commission for bonus payments on May 21, 1956, and the certification number is D.U.P. C6-C-727.

The writers of this report are partners in the joint venture and own approximately 25% of the mining lease.

Geology

Stratigraphy

The Dakota and Benton formations are both Cretaceous and are exposed on the property. The Benton conformably overlies the Dakota formation and is a dark, bentonitic shale.

The Dakota formation in which all the presently known mineralization on the property has been found is approximately 300' thick and for lithologic reasons is best divided into 3 members of equal thickness. They are referred to on Plate I as follows:

1. Lower Dakota Sandstone

This member overlies the Morrison formation (Jurassic) and consists of 100' of massive, light brown and tan-to-cream colored, medium-grained sandstone. The upper 30' of this member is thin-bedded, with thin shale

and carbonaceous trash beds separating the sandstone layers. This upper 30 feet also contains asphaltic material in seams and fractures and along bedding planes. Uranium mineralization is found in close association with this asphaltic material. The previous operators of this property mined and shipped 6 tons of 0.21% U3O8 from this zone. The small adit and dump on Plate I show the location of these workings.

2. Dakota Shale

This middle member, also about 100' thick, consists of dark, carbonaceous shale with a few thin beds of sandy shale. This member weathers more easily than the sandstones above and below.

3. Upper Dakota Sandstone

This upper member of the Dakota formation, also about 100' thick, is of most importance because in this member commercial uranium ore has been discovered, mined and shipped. The contact between this member and the underlying Dakota shale is quite distinct, both on the outcrop and underground. No transitional zone is present, and the contact is marked only in that the massive, medium-grained, tan sandstone overlies the dark, thick-bedded mudstone or shale. Asphaltic material is found along bedding planes. Carbonized wood and other vegetative trash has also been observed in this member. The sandstone is cross-bedded in such a fashion that it sometimes can be mistaken for true bedding.

Structure

The sediments strike N. 40 W. and dip 25° to the NE. The Dakota hogback is the most prominent topographic feature in the area; the upper Dakota sandstone forms the caprock of the escarpment. Turkey Creek has cut a water-gap through the hogback, and the surface installations of the mine are

located in this water-gap. The area is underlain by large thrust faults. The oil well 1/2 mile east of the property penetrated certain formations two and three times. Locally on the Mann lease and on the property to the north a prominent strike slip fault has been observed underground. This fault appears to have had little or no vertical throw, and the amount of horizontal movement is unknown. The fault dips 50° to the SW and in some places has a 6" gouge zone. Other places along this shear have only a smooth-hanging wall exposed with horizontal slickensides. The trace of this fault and the base of the upper Dakota sandstone is projected vertically and is shown as the solid black line forming the west margin of the ore body on Plate I. For description purposes we call this the "Damming Fault", and the reasons for this will be discussed later.

A close examination of the gamma ray logs of holes 1, 3, 7, and 10 indicates a 30 foot vertical displacement of the ore zones. If the ore is confined to certain permeable sandstones it seems reasonable to interpret an east-dipping fault paralleling the damming fault. We named this interpreted fault the "Conduit Fault".

The relationship of these two faults to each other and to the ore body is displayed in the cross-section on Plate I and block diagram (Plate II).

Mineralization

Uraninite in commercial quantity is found in the lower portion of the upper Dakota sandstone. This mineral has also been found in small quantity in the upper portion of the lower Dakota sandstone. The ore is found in close association with iron pyrite, asphalt, and a molybdenum oxide mineral identified by the A.E.C. as ilsmenite.

The uranium mineral, uraninite, fills interstitial spaces in the sandstone, but along the margins of the ore body the mineralization is observed along fractures which are closely related to the faulting. The molybdenum oxide is found adjacent to the uraninite and is visually indistinguishable from the uraninite. This necessitates underground testing prior to blasting with a shielded radiation detection instrument to delineate the edge of the uranium ore. After the molybdenum oxide has been exposed to the atmosphere several days, it becomes prussian blue in color.

The uraninite is relatively high grade. Some five pound samples have assayed as high as 4.3% U308. All radioactive rock is mined and shipped. The overall average of the first 6 cars (approximately 300 tons) which was completed under an A.E.C. fringe area purchasing contract was 0.29% U308. The ore contains only a trace of vanadium and lime.

Exploration

The former operators of this lease concentrated their efforts in the lower Dakota sandstone and drove the short tunnel shown on Plate I near the adit of the crosscut tunnel. They encountered uranium mineralization, but it was located in thin lenses and along fracture planes. When the present operators obtained the property they were aware of this mineralization and also of the mineralization in the upper Dakota sandstone located on the property to the north. The latter was situated in a narrow band, and the operators of this property sank a 75' vertical shaft through which to explore and mine.

It was decided to project this known ore zone by surveying to the Mann lease and explore that projection by drilling. It was also decided to conduct underground exploration of the old workings of the previous operator.

The exploration of these workings was conducted by raising and sinking on the mineralization. The results here were discouraging, and work was terminated when the first drill hole encountered ore on the projected ore body to the north.

A core was taken in hole #1, and 2' of the core section assayed 0.35% U308. Through loss of certain sections of the core, it was not definitely known from what interval this 2' core was taken. Holes #2, #3, and #5 showed commercial and #4 and #6 were barren. A good core recovery was

made in hole #5 which enabled the operator to correlate the gamma ray recorded log readings to chemical assay. A permanent gamma ray recorded log was run in every hole drilled. A chemical assay of hole #5 showed:

	Chemical Assay
92' - 94'	1.16% U308
102' - 109'	0.744% U308

The first 6 holes established the width of the ore body as 20', and the next objective was to establish its southern limits. The southernmost commercial hole was #21. Hole #25 was drilled further south and showed mineralization. This hole could have been drilled on either side of the ore body owing to the 20' ore width.

Hole #24 was drilled to a depth of 300' in order to test the lower Dakota sandstone. The reason for the location of this hole will be discussed later.

Development and Mining

A 5' x 7' crosscut tunnel was started in the water-gap on January 5, 1956, and was driven N. 80 E. a distance of 317' at a 4% grade. The tunnel was engineered to intersect the lowest portion of the mineralized zone on the down-dip margin of the ore body. (See block diagram) The tunnel then turned to parallel the strike of the ore body along its lowest point. Stopes were driven up-dip as far as the damming fault along the shale-sandstone contact. In order not to

open too much area underground, only 30% of the developed ore was removed, the intention being to remove this ore when retreating from the mine.

Two shifts are presently employed in the mine. A two-man night shift drills and blasts, and a five-man day crew removes the broken rock. The rock is loaded into 20 cu. ft. ore cars with a Gardner-Denver #9 ore car loader (mucking machine), and the cars roll by gravity to the lowest point in the mine; the point where the crosscut tunnel intersects the ore body, 317' from the portal. At that point an electric powered hoist pulls the car from the mine. A switch at the adit directs the cars either to the dump or 40-ton capacity steel ore bin.

The ore is trucked 15 miles along county highway to a loading dock on the Colorado and Southern Railway at Mt. Olivet Cemetery near Golden. The ore is loaded in 60-ton gondola cars and shipped to Vitro Uranium Company, Salt Lake City.

Ore Genesis

The ore body presently being mined is strongly controlled by the damming fault. The writers theorize that uranium bearing hydrothermal solutions rose along the conduit fault, and when these solutions reached the permeable strata of the upper Dakota sandstone, migrated up-dip through these sands as far as the damming fault. When the solutions backed

up against this fault and could move west no further, they moved vertically across bedding planes through a well developed fracture system. This hypothesis explains the thickest ore being closest to the damming fault.

If the asphaltic material were present prior to faulting and hydrothermal action, it could serve as the precipitant and cause the uranium to be deposited in the sandstone.

The two following facts might indicate the asphaltic material was present prior to the uranium deposition. Firstly, hydrocarbons are found in Cretaceous sediments in this area; and secondly, the Front Range Mineral Belt is closely related to tertiary intrusives. If this uranium mineralization is related to other Front Range deposits, it would have to have been subsequent to the hydrocarbon deposition, if it is assumed to be Cretaceous. In addition, the faulting is probably related to Laramied or post-Laramied revolution, which would be subsequent to Dakota deposition.

It is possible that the hydrocarbons migrated into their present location in post Cretaceous time, and it is also possible that the hydrocarbons and the uranium bearing solutions rose simultaneously. If the hydrocarbons and uranium bearing solutions migrated upward along fault channels, every permeable stratum the conduit fault traverses should have uranium mineralization and at least in the lower Dakota sand be of commercial grade and quantity.

Possibilities of Additional Ore

In view of the above data, the possibility is great that additional mineralized zones are present. We already mentioned one other known mineralized zone in the upper part of lower Dakota sandstone from which 6 tons of 0.21% U308 had been shipped. No structural control was found for this mineralization, but little work has been done on this zone.

The writers have decided that since this zone is mineralized and the upper ore zone is strongly fault controlled, an excellent area to explore for additional ore reserves would be the intersection of the damming fault and the upper part of the lower Dakota sandstone.

This hypothesis was originated when the conduit fault was interpreted from the logs and prior to the knowledge of the damming fault. After viewing the damming fault underground, it was observed that this fault and not the conduit fault controlled the localization of ore. Hole #24 was drilled with the anticipation of intersecting the conduit fault and the upper zone of the lower Dakota sandstone. Mineralization was not found, and after the discovery of the damming fault, this is not surprising. The location for deeper drilling should be 60' west of hole #5.

Submitted July 16, 1956

Edw. J. Klaeger

Elliot Goldstein

APPENDIX

ORE SHIPMENTS
A.E.C. Fringe Area Contract AT(05-1)-836

Lot #	Date Shipped	Wet Tons	% H20	Dry Tons	% U308
Pilot Load	3/14	10.27	6.1	9.64	0.31
1	4/ 9	46.050	4.15	44.139	0.33
2	4/ 9	44.59	3.45	43.051	0.30
3	4/13	53.97	4.0	51.811	0.25
4	4/20	51.59	4.3	49.371	0.23
5	5/ 3	54.25	4.1	52.02	0.26
6	5/14	60.20	4.55	57.47	0.38

P.S. Under Instruction 5(d) the application states that Mr. Elliot Goldstein—Geologist previously conducted a DMEA program for U. S. Tungsten Corporation. Actually, the DMEA project for which Mr. Goldstein worked was U. S. Tungsten, Inc., Box 910, Salida, Colorado, Docket No. DMEA-2617, Contract Idm-E567.

URANIUM ENTERPRISES
2679 Arapahoe Street
Boulder, Colorado

Instruction 5.(d)

Uranium Enterprises is a partnership. The operating partners are Geological Consultants, Inc., a consulting firm, consisting of

1. W. W. Longley, Ph.D. - Professor of Geology, University of Colorado

2. Edward J. Klaeger - Petroleum Engineer, President of Petroleum Operators Corporation

3. Elliot Goldstein - Geologist

Elliot Goldstein conducted the previous exploratory program on this property which resulted in the discovery of the upper Dakota ore body. He has been actively engaged in the exploration for uranium for three years and has previously conducted a DMEA program in 1954 for U. S. Tungsten Corporation.

Instruction 6.(a)	Unit Cost	Total Cost
9000' plug bit rotary drilling	$1.75/ft.	$15,750.00
300' core drilling	2.50/ft.	750.00
(previous drilling on this property cost the operator $3.00 and $2.00 per foot, respectively. With this amount drilling cost will be as shown)		
6.(b)		
Geologist and expenses for 2 months		1,600.00
6.(c) None		
6.(d)		
Mt. Sopris recording geiger counter, 500' reel and Esterline-Angus recorder (the operator paid $0.21/ft. for this service previously.)	$0.10/ft.	930.00
6.(e) None		
6.(f) None		
6.(g)		
Assays, accounting, etc.		100.00
6.(h) None		
		$19,130.00

Instruction 7.(b)

The 1/4 portion of this loan will be spent by Uranium Enterprises in their providing a geologist for two months, their gamma-ray logging equipment, and the balance in money.

RECEIVED
JUL 20 1956

MINING LEASE

THIS AGREEMENT OF LEASE MADE AND ENTERED INTO THIS 10TH DAY OF NOVEMBER, A.D. 1955, BY AND BETWEEN

JOSEPH L. MANN, ALSO KNOWN AS
J. L. MANN, ALSO KNOWN AS
J. LEONARD MANN, AND

FANNY L. MANN,

HEREINAFTER KNOWN AS LESSORS, AND

MORRISON URANIUM COMPANY, A
COLORADO CORPORATION, AND

URANIUM ENTERPRISES, A JOINT VENTURE,

HEREINAFTER KNOWN AS LESSEES,

WITNESSETH, THAT THE SAID LESSORS FOR AND IN CONSIDERATION OF ONE THOUSAND EIGHT HUNDRED AND EIGHTY-FIVE ($1,885.31) AND 31/100 DOLLARS, THE ROYALTY, COVENANTS AND AGREEMENTS HEREINAFTER EXPRESSED TO BE PAID, KEPT AND PERFORMED BY THE SAID LESSEES, HAVE LEASED, AND BY THESE PRESENTS DO LEASE, UNTO SAID MORRISON URANIUM COMPANY FORTY (40%) PER CENT, AND UNTO SAID URANIUM ENTERPRISES SIXTY (60%) PER CENT, OF THE FOLLOWING DESCRIBED PROPERTY SITUATE IN THE COUNTY OF JEFFERSON AND STATE OF COLORADO, TO-WIT:

> THE MINERAL RIGHTS TO BASIC METALS, PRECIOUS METALS AND FISSIONABLE MATERIALS, INCLUDING URANIUM, ON THE NORTHEAST QUARTER (NE¼) OF THE SOUTHEAST QUARTER (SE¼) AND SOUTHEAST QUARTER (SE¼) OF THE NORTHEAST QUARTER (NE¼), SECTION TWELVE (12), TOWNSHIP FIVE (5) SOUTH, RANGE SEVENTY (70) WEST, COMPRISING 80 ACRES, MORE OR LESS, AS RECORDED IN BOOK 643, PAGE 450 OF THE RECORDS OF JEFFERSON COUNTY, INCLUDING THE RIGHTS TO USE WATER FROM, AND WATER RIGHTS BELONGING TO SAID PROPERTY, EXCLUDING FROM SAID MINING RIGHTS, ALL RIGHTS TO OIL, GAS, AND THE MINING OF CLAY.

TO HAVE AND TO HOLD, WITH FULL POWER TO ASSIGN OR SUB-LEASE ALL OR ANY PART OF SAID PREMISES, FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE HEREOF, WITH THE PRIVILEGE

OF RENEWAL FOR AN ADDITIONAL FIVE (5) YEARS, SUBJECT TO THE LIMITATIONS SET FORTH IN THIS LEASE.

LESSEES SHALL HAVE RIGHTS OF WAY ACROSS THE LEASED PREMISES AND THE RIGHT TO USE THE SURFACE OF THE LEASED PREMISES TO THE EXTENT REASONABLY NECESSARY FOR PROSPECTING, DEVELOPMENT, MINING AND OTHER OPERATIONS REASONABLY INCIDENT THERETO.

AND SAID LESSEES COVENANT, CONTRACT, AND AGREE, AND BY THESE PRESENTS DO CONTRACT AND AGREE WITH THE SAID LESSORS, THEIR HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS OR ASSIGNS TO COMMENCE WORK ON SAID PREMISES WITHIN NINETY (90) DAYS OF THE DATE HEREOF, AND TO WORK SAME IN A THOROUGH AND WORKMANLIKE MANNER, PERFORMING AT LEAST FORTY (40) MAN-SHIFTS PER MONTH THEREON.

LESSEES WILL KEEP THE MINE TUNNELS AND SHAFTS SECURELY TIMBERED DURING THE TIME OF THIS LEASE, AND KEEP ACCURATE ACCOUNTS, AND RENDER STATEMENTS, ACCOMPANIED BY VOUCHERS, TO THE SAID LESSORS, THEIR AGENT OR ATTORNEY, SHOWING THE AMOUNT OF ALL ORE TAKEN FROM SAID PREMISES, AND THE YIELD OF SAME, AND THE COST OF HAULING AND MILLING THE SAME, AND TO PAY THE SAID LESSORS, THEIR AGENT OR ATTORNEY, AS ROYALTY FOR SAID PREMISES, AS FOLLOWS, TO-WIT:

> TWELVE AND ONE-HALF (12½) PER CENT OF THE NET MILL AND SMELTER RETURN, LESS THE COST OF FREIGHT AND TRUCKING ONLY, ON ALL URANIUM, FISSIONABLE ORES, OR OTHER METALS, AND IF THIS LEASE SHOULD BE SOLD, LESSORS SHALL RECEIVE TWELVE AND ONE-HALF (12½) PER CENT OF THE CASH AMOUNT OF SAID SALE. ROYALTIES ON BASIC METALS SHALL BE PAID ON ORES OF PROFITABLE QUALITY ONLY.

LESSEES FURTHERMORE AGREE THAT THE SAID LESSORS, THEIR AGENT OR ATTORNEY, SHALL HAVE THE RIGHT AT ANY TIME TO ENTER UPON AND DESCEND INTO ANY AND ALL PARTS OF SAID PREMISES, FOR THE PURPOSE OF INSPECTION, AND THAT THE SAID

LESSEES WILL RENDER TO THEM ALL THE ASSISTANCE IN THEIR POWER, IN SO DOING.

THAT THE SAID LESSEES AGREE TO CARRY PROPER WORKMAN'S COMPENSATION INSURANCE, PROPER INSURANCE TO PROTECT THE SAID LESSORS FROM ANY AND ALL CLAIMS THAT MAY ARISE BY OTHER THAN EMPLOYEES HAVING BEEN ON THE PREMISES INCIDENT TO THIS OPERATION, I.E., GENERAL LIABIDITY INSURANCE, AND TO COMPLY WITH THE STATE AND FEDERAL LAWS COVERING THIS TYPE OF OPERATION.

SAID LESSEES AGREE TO KEEP ALL SHAFTS PROPERLY COVERED OVER, AND TO FILL ANY ADANDONED SHAFTS, IN ORDER THAT THE PREMISES HEREIN MAY BE PROPERLY PROTECTED. LESSEES AGREE TO PAY ALL TAXES INCIDENT TO THE MINING OPERATION OR PRODUCTION TAXES THAT MAY BE ASSESSED AGAINST SAID PROPERTY; THE SAME TAXES INCIDENT TO THE FARM AND FARMING OPERATION WILL BE PAID BY THE LESSORS.

LESSEES FURTHERMORE AGREE THAT IN CASE THEY FAIL TO WORK THE SAME WITH REASONABLE DILIGENCE AND IN A WORKMANLIKE MANNER, OR TO KEEP THE SAME SECURELY TIMBERED, OR RENDER SAID STATEMENTS, OR TO PAY SAID ROYALTIES AS HEREBEFORE SET FORTH AND TO FULFILL THE AGREEMENTS HEREIOFORE EXPRESSED OR IMPLIED, THEN IN THAT CASE IT SHALL BE LAWFUL FOR SAID LESSORS, THEIR AGENT OR ATTORNEY, TO GIVE THIRTY (30) DAYS NOTICE IN WRITING TO THE LESSEES, OR THEIR ASSIGNS, STATING IN DETAIL THE NATURE OF THE VIOLATION CLAIMED AND THE PARTICULAR CLAUSE OR COVENANT OF SAID LEASE WHICH HAS BEEN VIOLATED, AND THE SAID LESSEES OR THEIR ASSIGNS SHALL HAVE THIRTY (30) DAYS IN WHICH TO CLEAR SAID VIOLATIONS AND RETAIN THE LEASE IN FULL FORCE AND EFFECT OR DEMAND ARBITRATION IF A DISPUTE ARISES AS TO WHETHER A VIOLATION EXISTS, AND IN THE EVENT THEY SHALL FAIL TO SO CLEAR SAID VIOLATION OR DEMAND ARBITRATION, THEN LESSORS, OR THEIR ASSIGNS, MAY

DECLARE SAID LEASE VOID AND ENTER SAID PREMISES WITHOUT PROCESS OF LAW, AND TAKE POSSESSION OF SAID PREMISES, AND IN SUCH CASE AT THE EXPENSE OF THE LESSEES.

ALL DISPUTES BETWEEN THE PARTIES REGARDING INTERPRETATION OF THIS LEASE OR THE PERFORMANCE OF THE PROVISIONS OF THIS LEASE SHALL BE SETTLED BY ARBITRATION. THE ARBITRATOR SHALL BE AN EXPERT IN MINING OR A LAWYER FAMILIAR WITH MINING, AND SHALL BE SELECTED AS FOLLOWS: LESSORS AND LESSEES SHALL EACH DESIGNATE ONE PERSON, AND THE TWO PERSONS SO DESIGNATED SHALL AGREE UPON AN ARBITRATOR. THE ARBITRATION SHALL BE HELD IN DENVER, COLORADO. THE LAWS OF COLORADO SHALL APPLY TO THIS CLAUSE AND TO THE HEARING. AN ARBITRATION HEARING SHALL BE HELD WITHIN TEN (10) DAYS AFTER DEMAND BY EITHER PARTY, UNLESS THE TIME THEREFOR IS EXTENDED BY WRITTEN STIPULATION OF THE PARTIES. IN THE EVENT THAT THE SAID ARBITRATOR FINDS A VIOLATION OF THE TERMS OF THE LEASE ON THE PART OF THE LESSEES, OR THEIR ASSIGNS, THE LESSEES OR THEIR ASSIGNS, SHALL HAVE TEN (10) DAYS WITH WHICH TO CLEAR SAID VIOLATIONS, AND IN THE EVENT OF FAILURE TO DO SO, THE LESSORS MAY ENTER WITHOUT PROCESS OF LAW, AS AFORESAID. IN THE EVENT OF FAILURE TO AGREE UPON AN ARBITRATOR SO THAT A HEARING MAY BE HAD WITHIN THE TIME ABOVE STATED, THEN EITHER PARTY SHALL HAVE THE RIGHT TO APPLY TO THE DISTRICT COURT OF JEFFERSON COUNTY FOR APPOINTMENT OF AN ARBITRATOR.

FURTHER, IN THE EVENT OF FORFEITURE OR CANCELLATION OF THIS LEASE, THE SAID LESSEES, OR THEIR ASSIGNS, SHALL HAVE A PERIOD OF THIRTY (30) DAYS FROM THE EFFECTIVE DATE OF CANCELLATION OR FORFEITURE IN WHICH TO REMOVE ANY AND ALL MACHINERY BELONGING TO THEM UPON SAID PREMISES, AND ANY MACHINERY LEFT AFTER THE SAID THIRTY (30) DAY PERIOD ALLOWED FOR SUCH REMOVAL, SHALL BECOME THE PROPERTY OF THE SAID LESSORS.

IT IS FURTHER UNDERSTOOD AND AGREED THAT IN THE EVENT OF INCLEMENT WEATHER CONDITIONS, LABOR STRIKES, FIRE, FLOODS, EXPLOSION, RIOTS, UNUSUAL MINING CASUALTY, ACTS OF GOD, OR SUSPENSION OF BUYING BY THE GOVERNMENT WHERE NO COMMERCIAL MARKET IS AVAILABLE, WORK MAY BE SUSPENDED UPON SAID PROPERTY DURING THE PERIOD THAT SUCH CONDITIONS EXIST, AND THE WORK REQUIREMENT SHALL NOT BE ENFORCED DURING THAT TIME.

AT THE EXPIRATION OF THIS LEASE, BY LIMITATION, SAID LESSEES AGREE TO YIELD AND DELIVER TO THE LESSORS, THEIR HEIRS, ADMINISTRATORS, EXECUTORS, SUCCESSORS AND ASSIGNS, QUIET AND PEACEABLE POSSESSION OF SAID PREMISES, IN GOOD CONDITION.

IN THE EVENT LESSEES FAIL TO MAKE PAYMENTS OF PRINCIPAL OR INTEREST UPON THE TRUST DEED OUTSTANDING AGAINST THE ABOVE DESCRIBED PROPERTIES, OR TO PAY TAXES ON THE REAL ESTATE, LESSEES SHALL HAVE THE RIGHT TO MAKE SUCH PAYMENTS ON THE LESSORS' BEHALF, AND SET OFF SUCH AMOUNT WITH INTEREST AT THE RATE OF SIX (6%) PER CENT PER ANNUM AGAINST ROYALTIES OWING OR TO BE OWED TO LESSORS. IF, AT THE EXPIRATION OR OTHER TERMINATION OF THIS LEASE, SUCH PAYMENTS HAVE NOT BEEN FULLY SATISFIED OUT OF ROYALTIES, THEN LESSEES SHALL HAVE A LIEN AGAINST THE ABOVE DESCRIBED PREMISES IN THE AMOUNT OF SAID PAYMENTS PLUS THE INTEREST AFORESAID, UNTIL FULLY PAID AND SATISFIED. THIS CLAUSE SHALL NOT BE CONSTRUED, HOWEVER, AS GUARANTEEING SAID PAYMENTS ON SAID TRUST DEED OR TAXES.

LESSEES MAY SURRENDER THIS LEASE AT ANY TIME BY GIVING LESSORS THIRTY (30) DAYS NOTICE IN WRITING. SURRENDER SHALL TERMINATE ALL OBLIGATIONS OF THE LESSEES EXCEPT THOSE THAT HAVE ALREADY ACCRUED.

THIS INSTRUMENT SHALL NOT BE CONSTRUED AS A PARTNERSHIP AGREEMENT, AND THE PARTIES HERETO EXPRESSLY REPRESENT THAT THEY ARE NOT PARTNERS FOR ANY PURPOSE WHATSOEVER.

THE ABOVE SHALL BE BINDING UPON THE HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS, OR ASSIGNS OF THE PARTIES HERETO.

THE WITHIN LEASE, FOR THE CONSIDERATIONS PAID TO THE LESSORS, IS GIVEN AS A SUBSTITUTE LEASE FOR THAT EXECUTED APRIL 6, 1955, BETWEEN THE LESSORS HEREIN AND ELDON R. BRAY, AND RECORDED AT BOOK 914, PAGE 72 OF THE RECORDS OF JEFFERSON COUNTY.

EXECUTED THE DAY AND YEAR ABOVE WRITTEN.

LESSORS:

(SEAL)
JOSEPH L. MANN, ALSO KNOWN AS J. L. MANN, ALSO KNOWN AS J. LEONARD MANN

(SEAL)
FANNY L. MANN

LESSEES:

MORRISON URANIUM COMPANY, A COLORADO CORPORATION

BY (SEAL)
ELDON R. BRAY, PRESIDENT

ATTEST:

(SEAL)
HARRY H. HERMAN, SECRETARY

URANIUM ENTERPRISES, A JOINT VENTURE

BY: (SEAL)
ELLIOT GOLDSTEIN

BY: (SEAL)
JOSEPH H. GLICKSTEIN

BY: (SEAL)
LEWIS H. SCHOTT

STATE OF COLORADO }
} ss
CITY & COUNTY OF DENVER }

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 10TH DAY OF NOVEMBER, 1960, BY JOSEPH L. BERK, ALSO KNOWN AS J. L. BERK, ALSO KNOWN AS J. GEOFFREY BERK, AND PATSY L. BERK.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES NOVEMBER 15, 1963.

Dorothy Merrifield (SEAL)
NOTARY PUBLIC

STATE OF COLORADO }
} ss
CITY & COUNTY OF DENVER }

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 10TH DAY OF NOVEMBER, 1960, BY [illegible], PRESIDENT, AND [illegible], SECRETARY, OF [illegible] MANAGEMENT CORP., A COLORADO CORPORATION.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES NOVEMBER 16, 1964.

Dorothy Merrifield (SEAL)
NOTARY PUBLIC

STATE OF COLORADO }
} ss
CITY & COUNTY OF DENVER }

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 10TH DAY OF NOVEMBER, 1960, BY ELLIOT GOLDSMITH, FOR [illegible], A JOINT VENTURE.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES NOVEMBER 16, 1960.

Dorothy Merrifield (SEAL)
NOTARY PUBLIC

STATE OF [illegible] }
} ss
COUNTY OF [illegible] }

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS [illegible] DAY OF NOVEMBER, 1960, BY [illegible], FOR [illegible], A JOINT VENTURE.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES 4/2/[illegible]

[illegible] (SEAL)
NOTARY PUBLIC

STATE OF ~~NEW YORK~~ Florida
COUNTY OF Duval } SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 24 DAY OF NOVEMBER, 1950, BY LEWIS M. SCOTT, [illegible], A NOTARY PUBLIC.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: 3/8/53

Margaret M. Kurtzman (SEAL)
NOTARY PUBLIC

LM.

RIDER

IT IS HEREBY EXPRESSLY AGREED AND UNDERSTOOD BY THE LESSEES THAT IN EXERCISING THE RIGHTS OF WAY GRANTED BY THE ABOVE AND FOREGOING LEASE THEY SHALL KEEP ALL GATES LEADING TO THE PROPERTY CLOSED WHEN NOT IN USE AND SHALL PROTECT ALL CATTLE GUARDS ON SAID PREMISES FROM DAMAGE. SAID LESSEES SHALL NOT USE SAID GATES OR SAID CATTLE GUARDS MORE THAN IS REASONABLY NECESSARY UNDER THE ABOVE AND FOREGOING LEASE. IN EVENT OF DAMAGE TO GATES OR CATTLE GUARDS AS THE RESULT OF EXERCISING RIGHTS OF WAY, LESSEES SHALL BE OBLIGATED TO REPAIR SAME.

LESSEES:

MULLISON URANIUM COMPANY, A
COLORADO CORPORATION

BY: Eldon R. Gray (SEAL)
ELDON R. GRAY,
PRESIDENT

ATTEST:

Harry H. Herman (SEAL)
HARRY H. HERMAN, SECRETARY

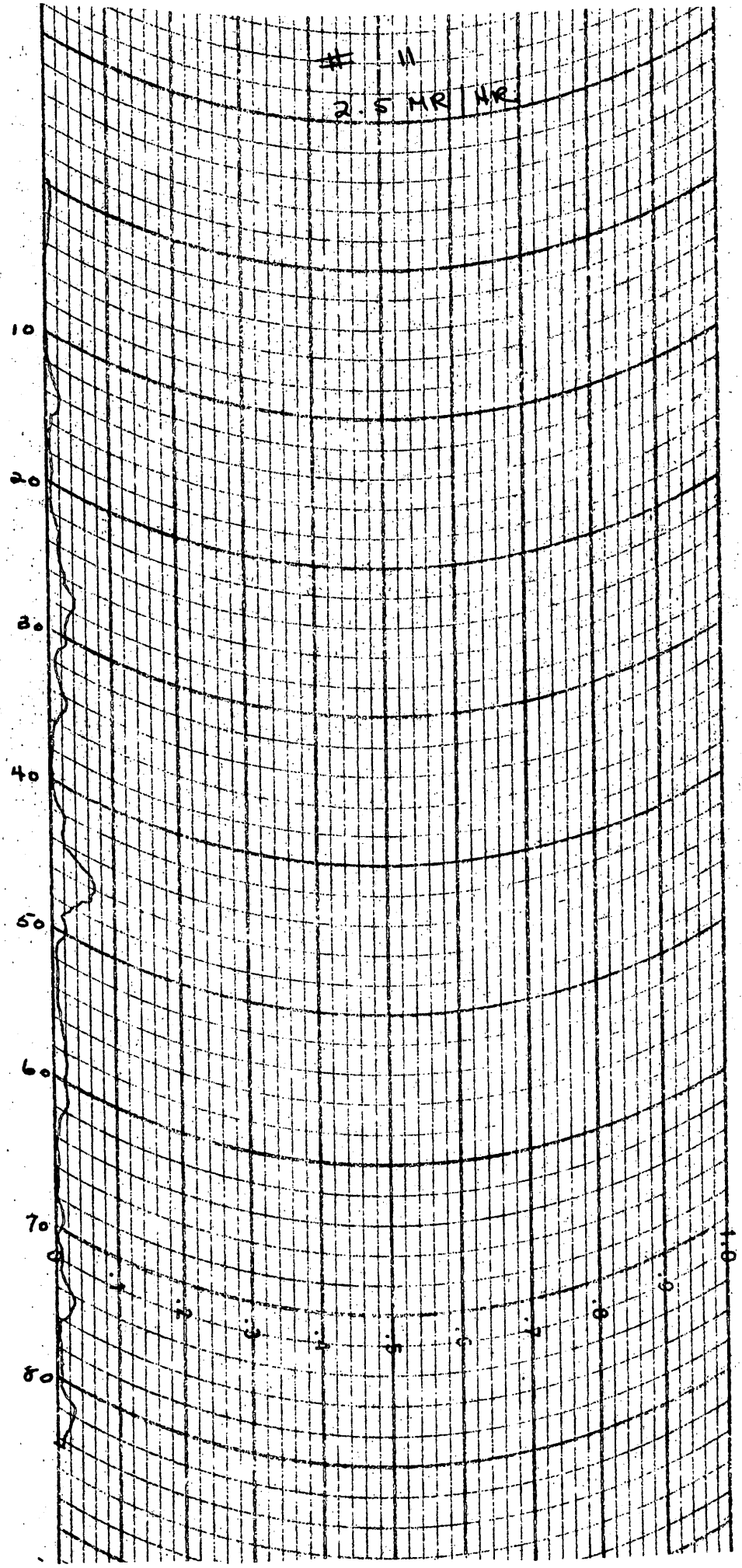
J. Z. M.

URANIUM ENTERPRISES, A JOINT VENTURE

BY: Elliot Goldstein (SEAL)
ELLIOT GOLDSTEIN

BY: [illegible] (SEAL)
JOSEPH H. GOLDSTEIN

BY: [illegible] (SEAL)
LEWIS E. YOBOTS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DATE	INITIALS	CODE

Project Summary Report

F. M. Murphy January 6, 1958

1. Docket No. DMEA-4389 (Uranium)
   Contract No. Idm-E1033

   Operator: Uranium Enterprises
   2679 Arapahoe Street
   Boulder, Colorado

   Property: Lessee of NE¼ of the SE¼ and the SE¼ of the NE¼, sec. 12, T. 5 S., R. 70 W., 6th P.M., Jefferson County, Colorado

2. Contract, dated November 5, 1956

   Amendment No. 1 extended completion date to June 30, 1957, and maximum royalty payment period to 11 years.

   Amendment No. 2 changed the locations of some of the drill holes.

3. Work under the contract started February 26, and was completed June 29, 1957.

4. No certification of the project was issued.

5. Project work:

   The project consisted of drilling 10 holes to explore the lower sandstone beds of the Cretaceous Dakota group along a fault line (Damming fault).

   Work Authorized (10 holes):

Bulldozing roads and drill sites 8 hrs. @ $12.50/hr.	$ 100.00
Non-core drilling 3,300 feet @ $2.00/ft.	6,600.00
Core drilling 1,200 feet @ $3.00/ft.	3,600.00
Drilling, incidental allowance 4,500 ft. @ $0.28/ft.	1,260.00
Analyses for U_3O_8, 40 samples @ $3.50/sample	140.00
Total	$11,700.00

   Work completed (10 holes):

Bulldozing roads and drill sites 7.88* hrs. @ $12.50/ft.	$ 98.52

(continued)

Non-core drilling, 1,942 feet @ $1.80*/ft.	$3,498.50
Core drilling, 1,018 feet @ $2.79*/ft.	2,844.50
Drilling, incidental allowance, 2,960/ft. @ $0.28/ft.	828.80
Total Cost of Project	$7,270.32

*approximate

6. Audit Report of Review: dated October 8, 1957:

Total cost as billed by Contractor	$7,270.32
Exceptions	None
Total Accepted Cost	$7,270.32
Government Participation @ 75%	$5,452.74

7. Final Reports on Project:

Operator's, received Denver office on September 27, 1957. It is considered acceptable by DMEA.

Field Team report by D. H. Richter, USGS, and W. W. Winkel, USBM, received December 16, 1957.

Excerpts from the final reports:

The property overlies rocks of the lower Cretaceous Dakota group along the prominent hogback south of Turkey Creek canyon, 2 miles southeast of the town of Morrison. On the lower dip slopes of the hogback along the projected trace of the Damming fault upwards of 15 to 40 feet of Benton shales may cover the upper Dakota sandstone.

Uranium ore was first found in long, narrow discontinuous pods and lenses, localized along the strong northwest-trending Damming fault, in the upper Dakota sandstone beds directly above the upper sandstone shale contact. About 900 tons of ore containing approximately 0.30% U_3O_8 have been mined on this horizon. The geologic environment of the ore bodies is identical to those at the Four Corners Uranium Co. (DMEA-4793) a few hundred feet north of the Uranium Enterprises property.

Rock penetrated by the drill holes:

Cretaceous	Thickness (feet)
Benton shale	15-40
Dakota group	
Upper sandstone	85
Upper shale	85-110
Lower sandstone	140
Jurassic	
Morrison formation	5-28 (penetrated)

The exploration under the subject contract was designed to explore the lower Dakota sandstone in the vicinity of the Damming fault.

The 10 holes failed to disclose any significant ore-grade mineralization. In holes 2 and 9, mineralized zones about 1-foot thick, assaying possibly more than 0.10% U_3O_8, were encountered at the Damming fault intersection. The other holes which penetrated the fault were essentially barren, indicating a very limited size to the possible ore horizon with little or no continuity. Hole 14 disclosed a thin streak of possible ore grade material in the upper sandstone, and holes 1, 2, 3, 8, 9, and 12 penetrated thin and discontinuous zones of anomalous radioactivity in the upper sandstone.

No reserves have been estimated for the insignificant thin zones of mineralized material discovered under the subject contract. The Operator's known reserves of ore in the Upper Dakota sandstone were not excluded from the provisions of the contract; therefore, it has paid royalty on production during the contract period. Last royalty on shipments: September and October, 1957.

The ten holes bottomed in the Jurassic Morrison formation. No mineralization was noted at the Cretaceous-Jurassic contact.

The drilling failed to disclose significant mineralization in the principal target area in the lower Dakota sandstone and only a number of thin, scattered beds of weakly mineralized rock in the upper Dakota sandstone, a secondary target. Therefore, the field examiners and Field Team recommend that the project should not be certified as a discovery or development.

Commodity members, in memoranda dated December 19, 1957, and January 8, 1958, by James Paone, USBM, and N. E. Nelson, USGS, respectively, agree that the project should not be certified.

The work under the contract was well executed and supervised. The Operator's monthly narrative reports and final report were satisfactory.

F M Murphy

F. M. Murphy

Ellis

☒ Audited

☐ Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of Jan. 7/58
Incl. Voucher for June. 1957

☒ Actual Cost and ☒ Agreed Unit Costs

Name Uranium Enterprises

State Colorado

Commodity Uranium

Docket No. 4389

Idm-E No. 1033

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Core	1200	3936.00	1018	3129.54	3129.54
Non-Core	3300	7524.00	1942	4042.26	4042.26
Surface Excavation					
Underground Excavation					
Roads and Trails		100.00		98.52	98.52
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Analyses U3O8		140.00		—	—
Totals		$14,700.00		$7270.32	$7270.32

Prepared by [signature]

71626

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	120
		120 m
2/11	Johnson	110
"	"	100
		220

FEB 12 1965

Mr. Chris L. Christensen, Jr.
735 Colorado Building
Denver, Colorado 80202

Re: DMEA-4389 (Uranium)
Uranium Enterprises
Mann No. 1 Mine
Jefferson County, Colorado
Contract Idm-21033

and

DMEA-4793 (Uranium)
Four Corners Uranium Company
Ballaore Lease
Jefferson County, Colorado
Contract Idm-21146

Dear Mr. Christensen:

The stratigraphic information which you request in your letter of February 8, 1965, exists in our dockets in the form of logs submitted by the Operators under the subject contracts. As we wrote you on February 5, we are not at liberty to release this information unless authorized in writing to do so. Under the circumstances, we can be of no further service to you until such letters are received.

Previously we sent you the address of Four Corners Oil and Minerals Company. Our last contact with Uranium Enterprises was through a Mr. Elliot Goldstein, 310 South 40th Street, Boulder, Colorado. A previous address of Uranium Enterprises was 2679 Arapahoe Street, Boulder, Colorado.

Sincerely yours,

George Fumich, Jr.

Acting Director

GCSelfridge/mm (2/11/65)
cc: Director's Reading File
Region III ~~XXXXXXXXXXXX~~
Docket DMEA-4389
Docket DMEA-4793
Mr. Selfridge

23263

U. S. DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration
224 New Customhouse
Denver 2, Colorado

November 7, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 10 1958

DATE	INITIALS	
11/10	C	220
11/13	Murphy	700

Memorandum

To: Chairman, Operating Committee, OME
From: Executive Officer, OME Field Team, Region III
Subject: Royalty Payments, Docket DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colorado

Period: October 1958

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Liq. No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.

NONE

Totals:

Past Due Royalties Collected: $92.34 - Per First Report of Royalty Review, dtd. 8/26/58.

Total Dry Tons (Ore or Cons.) Shipped to Date: 713.946

J. W. Townsend

jy
cc: Royalty File E 1033 w/settlement sheets
Chron.

224 New Customhouse
Denver 2, Colorado
Sept. 25, 1958

9/29 C 220
~~Murphy 700~~

CERTIFIED MAIL

Mr. Elliot M. Goldstein
Consulting Geologist
310 S. 40th Street
Boulder, Colorado

Re: Docket No. RMEA 4389 (Uranium)
Contract IAm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

By letter dated August 14, 1958, and again by "First Report of Royalty Review," dated August 26, 1958, you were informed that an amount of $92.34 in royalties is due the Government for production made under the terms of the captioned contract.

Please forward by return mail a check for $92.34 to:

Executive Officer
OME Field Team, Region III
224 New Customhouse
Denver 2, Colorado.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

MEM;hmh

cc: Chmn. Op. Comm. (2)
Corres.file, Reg. III
Royalty file, E1033
OME/DPC
Chron

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

September 5, 1958

9-8 C 220
" Chicago 700
(Murphy) closed

Memorandum

To: Chairman, Operating Committee, DMEA
From: Executive Officer, DMEA Field Team, Region III
Subject: Royalty Payments, Docket DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colorado

Period: August 1958

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Liq. No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.
3-10-58	7872	64.810	$131.73	$131.73	$86.20	--
3-24-58	7899	51.091	93.98	93.98	6.14	--
3-24-58	7948	105.147	86.68	86.68	None Due	
Totals:		221.048	$312.39	$312.39	$92.34	--

Past Due Royalties Collected: None

Total Dry Tons (Ore or Cons.) Shipped to Date: 713.946

Alternate Acting Executive Officer

MHM:jy
cc: Royalty File E 1033 w/settlement sheets
Monthly Royalty Payment File
Chron.

UNION CARBIDE NUCLEAR COMPANY
DIVISION OF UNION CARBIDE CORPORATION
P. O. BOX 1049, GRAND JUNCTION, COLORADO

ORE SETTLEMENT

LIQUIDATION NUMBER: 7948

A.E.C. LICENSE NUMBER: P 3072 | T/S: 1 | PERIOD ENDING: 3 24 58

BOUGHT OF
XANIUM ENTERPRISES
TT ELLIOT GOLDSTEIN
510 SOUTH 40TH STREET
BOULDER COLORADO

MINING CLAIM
MANN 1

A.E.C. DISTRICT NO. 42

RECEIVING PLANT CODES
2 URAVAN, COLO
3 & 4 RIFLE, COLO
6 GREEN RIVER, UTAH
7 SLICKROCK, COLO

RECV PLANT	SOURCE VENDOR	SOURCE CLAIM	NET WEIGHT POUNDS	% H_2O	DRY WEIGHT POUNDS	SETTLEMENT ASSAYS * U_3O_8	V_2O_5	$CaCO_3$	* APPROXIMATE AVERAGES PRICED PER A.E.C. CIRCULAR NO. 5 (REVISED)
4	091	9010	221820	52	210294.00	16	0.00		

DETAIL OF PAYMENT	LBS OR MILES	RATE	DRY/WET TONS	VALUE
U308 PAYMENT	33377	2.70000	10515	901.3
DEVELOPMENT ALLOWANCE	33377	50	10515	166.89
EXCESS 4 LB TON PREM		75	10515	
EXCESS 10 LB TON PREM		25	10515	
V205 PAYMENT		31		
LIME PENALTY OVER 6PC			10515	CR
HAULAGE ALLOWANCE	100.00	06	11091	665.46
TOTAL U_3O_8, V_2O_5 and HAULAGE PAYMENT				$ 173353

Lots 58-5
58-6

DMEA
~~DEPARTMENT OF THE INTERIOR~~
AUG 13 1958
REGION III
DENVER, COLORADO

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Union Carbide Nuclear Company, Division of Union Carbide Corporation.

I certify that I hold the A.E.C. Source Material License numbered above.

I hereby transfer to the Union Carbide Nuclear Company, Division of Union Carbide Corporation, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

The amount set opposite "Total U308, V205 and Haulage Payment" shown above constitutes the entire amount payable to me in respect of ore deliveries described herein and is accepted by me in full payment thereof.

I request that payment be made on the basis of the average of moisture contents, of U308 contents and of V205 contents of the several loads delivered and covered by this settlement.

VOUCHER NUMBER	
CHECK NUMBER 102934	4-7-58
APPROVED FOR PAYMENT	C. Mrnak

SELLER OR AGENT

IMPORTANT - SIGN SHEETS 3 AND 4 AND RETURN TO ABOVE ADDRESS

280-23-6

UNION CARBIDE NUCLEAR COMPANY
A Division of Union Carbide [redacted] Corporation

ORE SETTLEMENT

Corrected

Grand Junction, [redacted] Colorado, March 10 1958

Receiving Station Rifle Colorado
Liquidation No. 7872 Lot No. Shippers Lot No.
Bought of Thomas Stapleman
Address 310 South 40th St. Boulder, Colo. A.E.C. License No. P 3072
Type of Ore Carnotite
Mining Claim Mann #1 Mining District Colorado Date Received February 18 1958
File No.

Lot No.	Net Weight Pounds	% H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
58-3	135020	4.0	129619	0.38	0.00		492.56	0.00	

PRICED PER A.E.C. CIRCULAR NO. 5 (Revised)

	POUNDS	PER LB.	DRY SHORT TONS	PER TON	VALUE	TOTAL VALUE
U3O8 Payment	492.56	3.50	64.81		1723.96	
Development Allowance	492.56	.50	64.81		246.28	
Excess 4 lbs. per ton Premium	233.32	.75	64.81		174.99	
Excess 10 lbs. per ton Premium						
Total U3O8 Payment						
V2O5 Payment						2145.23
Total V2O5 Payment						
Less High Lime Penalty over 6% CaCO3						
Base Penalty						
___% — ___% = ___% Penalty @ $ .0- per 1/10th						
54.13 TOTAL						
Haulage Allowance 100 Miles 67.51 Wet Tons @ .0725 per wet ton mile						
						489.45
Total U3O8, V2O5 and Haulage Payment						2634.68

DMEA
DEPARTMENT OF THE INTERIOR
AUG 13 1958
REGION III
DENVER COLORADO

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Union Carbide Nuclear Company, A Division of Union Carbide [redacted] Corporation.

I certify that I hold the A. E. C. Source Material License numbered above.

I hereby transfer to the Union Carbide Nuclear Company, A Division of Union Carbide [redacted] Corporation, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

The amount set opposite "Total U3O8, V2O5 and Haulage Payment" shown above constitutes the entire amount payable to me in respect of ore deliveries described herein and is accepted by me in full payment thereof.

I request that payment be made on the basis of the average of moisture contents, of U3O8 contents and of V2O5 contents of the several loads delivered and covered by this settlement.

Voucher Number	Date
Check Number 6618	Date 8-11-58
Approved for Payment	

Seller or Agent

[redacted] PRINTING CO. PTD. DEPT.

NATIONAL PRINTING CO.

UNION CARBIDE NUCLEAR COMPANY

Division of Union Carbide Corporation

Rifle, COLORADO

Purchased Ore LOAD DETAIL

INSERT GRADE

PERIOD 2-16 thru 2-28 1958

NAME Uranium Enterprises ADDRESS Boulder, Colo.

CLAIM

DATE SHIPPED	TICKET NUMBER	POUNDS ORE	LAB. ASSAY NO.	PER CENT MOISTURE	POUNDS DRY ORE	GRADE U_3O_8	POUNDS U_3O_8	GRADE V_2O_5	POUNDS V_2O_5
2-18	63953	32220		4.0	30931	0.38	117.54	-0-	-0-
2-18	63954	30600		4.0	29376	0.38	111.63		
2-18	63955	32420		4.0	32083	0.38	121.92		
2-18	63956	25420		4.0	24403	0.38	92.73		
2-18	63957	13360		4.0	12826	0.38	48.74		
		135020		4.0	129619	0.38	492.56		

8.1543

TOTAL

UNION CARBIDE NUCLEAR COMPANY

DIVISION OF UNION CARBIDE CORPORATION

P. O. BOX 1049, GRAND JUNCTION, COLORADO

ORE SETTLEMENT SHEET

LIQUIDATION NUMBER 7899

RECEIVED APR 2 1958 Jacksonville

BOUGHT OF

URANIUM ENTERPRISES
ATT ELLIOT GOLDSTEIN
310 SOUTH 40TH STREET
BOULDER COLORADO

MINING CLAIM
MANN 1

DISTRICT NO 2

A.E.C. LICENSE NUMBER 3072 | T/S 1 | PERIOD ENDING

RECEIVING PLANT CODES
2 URAVAN, COLO
3 & 4 RIFLE, COLO
6 GREEN RIVER UTAH
7 SLICKROCK COLO

RECV. PLANT	SOURCE VENDOR	SOURCE CLAIM	NET WEIGHT POUNDS	% H_2O	DRY WEIGHT POUNDS	SETTLEMENT ASSAYS * U_3O_8	V_2O_5	$CaCO_3$	* APPROXIMATE AVERAGES PRICED PER A.E.C. CIRCULAR NO. 5 (REVISED)
4	091	901 0	105560	32	102182 00	34	000		

DETAIL OF PAYMENT	LBS OR MILES	RATE	DRY/WET TONS	VALUE
U308 PAYMENT	34742	350000	5109	121597
DEVELOPMENT ALLOWANCE	34742	50	5109	17371
EXCESS 4 LB TON PREM	14306	75	5109	10730
EXCESS 10 LB TON PREM		25	5109	
V205 PAYMENT		31		
LIME PENALTY OVER 6PC			5109	CR
HAULAGE ALLOWANCE	10000	0725	5278	38266
TOTAL U_3O_8, V_2O_5 and HAULAGE PAYMENT				$ 107964

58-4

DMEA
DEPARTMENT OF THE INTERIOR
APR 1 1958
REGION III
DENVER COLORADO

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Union Carbide Nuclear Company, Division of Union Carbide Corporation

I certify that I hold the A.E.C. Source Material License numbered above.

I hereby transfer to the Union Carbide Nuclear Company, Division of Union Carbide Corporation, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore

The amount set opposite "Total U308, V205 and Haulage Payment" shown above constitutes the entire amount payable to me in respect of ore deliveries described herein and is accepted by me in full payment thereof.

I request that payment be made on the basis of the average of moisture contents, of U308 contents and of V205 contents of the several loads delivered and covered by this settlement.

VOUCHER NUMBER
CHECK NUMBER 6626
APPROVED FOR PAYMENT

SELLER OR AGENT

IMPORTANT - SIGN SHEETS 3 AND 4 AND RETURN TO ABOVE ADDRESS

FORM 200-33-4

1

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/29	Fisher	800
9/2	C	220
"	Chain	700
	Murphy	

AUG 29 1958

Mr. Donald T. Finch
DMEA Auditor
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Uranium Enterprises
Contract No. Idm-E1033

Dear Mr. Finch:

The Report of Royalty Review transmitted with your letter dated August 26, 1958, is approved and the usual distribution is authorized.

The previous report which was returned to you with my letter of August 22, 1958, indicated a balance of royalty due in amount of $550.36 after allowing for a payment of $1,104.71. As Mr. Townsend's letter dated August 14, 1958, had advised the Operator that the delinquent royalty amounted to $404.73 ($312.39 plus $92.34) it was deemed to be improper to send him a copy of a report of royalty review indicating a balance due of $550.36 when we were aware of the fact that the payments actually totaled $1,250.34 and the balance due at that time was $404.73.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

CEFisher/GMcC
August 29, 1958

cc: Docket
Admr. Reading File
Mr. Chambers

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/22	Fisher	800
		800
8/25	Sh g.	220
		700

AUG 22 1958

Mr. Donald T. Finch
DMEA Auditor
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Uranium Enterprises
Contract No. Idm-E1033

Dear Mr. Finch:

The subject Report of Royalty Review is returned herewith for necessary corrections.

According to the records of this office "Total Royalty Paid" amounts to $1,250.34, not $1,104.71. Apparently you have overlooked Mr. Harshmann's letter to the Operator dated April 9, 1958, and Certificate of Deposit No. 125 dated April 28, 1958, which included $145.63 applicable to this contract.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

Enclosure

CEFisher/GMcC
August 22, 1958

cc: Docket
Admr. Reading File
Mr. Chambers

8623

RECEIVED AUG 18 1958		
DATE	INITIALS	CODE
8/18	J. G.	226
8/18	[illegible]	800
8/19	FMM	700

224 New Customhouse
Denver 2, Colorado
August 14, 1958

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

By letter dated August 13, 1958, we advised you that $312.39 as royalties was due on production covered by settlement sheet liquidation Nos. 7872, 7899, and 7948, Union Carbide Nuclear Company, purchaser.

In addition to the royalty amount of $312.39, there is an additional amount of royalty due for AEC bonus payments completed in May 1958 as follows:

Liquidation Number	Royalty Due of AEC Bonus
7872	$86.20
7899	6.14
	$92.34

For your information the Contract Administration and Audit Division, DMEA is now making an audit of your royalty account and it appears there will be further royalty payments due.

When the audit report is completed, a copy will be furnished to your office.

MHM:dz

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

cc: Chmn. Op. Comm. 2
Corres. File E1033
Royalty File E1033
DMEA/DFCX
Finch
Chron.
cc: Uranium Enterprises
Jacksonville, Florida

224 New Customhouse
Denver 2, Colorado
August 13, 1958

DATE		CODE
8/15	J.g.	225
8/15		800
		700
	filing	225
	Contract closed	

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Based on copies of settlement sheets enclosed with your letter of August 8, 1958, an amount of $312.39 in royalties is due the Government on production covered by settlement sheet liquidation Nos. 7872, 7899, and 7948, Union Carbide Nuclear Company, purchaser.

Your check in the amount of $312.39 should be submitted by return mail. The check should be made payable to Defense Minerals Exploration Administration and sent to the Executive Officer, DMEA Field Team, Region III, 224 New Customhouse, Denver 2, Colorado.

As requested, we are returning your copy of settlement sheet for lot No. 58-3.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

MHM:dz

cc: Comm. Op. Comm. 2)w/cy
Corres. File E1033) of
Royalty File E1033)Operator's
DMEA/DFC)letters
Finch)of 8-13-58
Chron.

ELLIOT H. GOLDSTEIN
Consulting Geologist
310 S. 40TH STREET
BOULDER, COLORADO
HILLCREST 2-6212

DMEA
DEPARTMENT OF THE INTERIOR
AUG 13 1958
REGION III
DENVER, COLORADO

August 8, 1958

Defense Minerals Exploration Administration
224 New Customs House
Denver 2, Colorado

Re: DMEA 4389
Contract Idm E1033

Gentlemen:

Transmitted herewith are the three settlement sheets which you have requested in your recent correspondence.

You may retain the sheets which reflect our lot numbers 58-4, 58-5, and 58-6. After you make copies of the settlement sheet 58-3, please return it to me for my files.

My calculations for the amount claimed by the DMEA are as follows, and please notify me if these are correct.

Liquidation No.	Lbs. U308	Royalty Due
7872	492.56	$131.73
7899	347.42	93.98
7948	333.77	86.68

Total royalties due would be $312.39. If this figure is correct and meets with your approval, a check in this amount will follow.

Sincerely yours,

Elliot Goldstein

Elliot Goldstein

EG:eg
cc: J. M. Glickstein
J. Mullaney

ELLIOT H. GOLDSTEIN
Consulting Geologist
310 S. 40TH STREET
BOULDER, COLORADO
HILLCREST 2-6212

DMEA
DEPARTMENT OF THE INTERIOR
AUG 13 1958
REGION III
DENVER, COLORADO

August 8, 1958

Mr. James Mullaney
602 Florida Theater Bldg.
Jacksonville, Florida

Dear Jim:

Enclosed please find my letter dated August 8, 1958 to the DMEA.

Please make a check in the amount $312.39 payable to DMEA and foward it to me.

Sincerely yours,

Elliot Goldstein

Elliot Goldstein

EG:eg
cc: DMEA ✓
J. . Glickstein

8/4 U.S. 225
8/4 800
8/5 ~~702~~

224 New Customhouse
Denver 2, Colorado
July 31, 1958

CERTIFIED MAIL

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

We have received notice that our letter dated July 15, 1958, was delivered to you. To date, however, the royalties and settlement sheets promised by your letter of June 27, 1958, have not been received.

You have repeatedly been requested to submit the royalties and sales data to no avail. Our letters dated May 19, 1958, June 9, 1958, June 24, 1958, and July 15, 1958, will testify to this.

Your are hereby notified and by copy of this letter directed to 602 Florida Theater Building, Jacksonville, Florida, Uranium Enterprises is notified that unless the requested royalties and sales data is received in this office by August 8, 1958, we will immediately refer the matter to the Washington Office, DMEA for such action as is indicated to protect the Governments' interests.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

MHM;dz
cc: Chem. Op. Comm. 2
Corres. File E1033
Royalty File E1033
DMEA/DFC
Finch Chron.
cc: Air Mail copy to

Uranium Enterprises
Jacksonville, Florida

CERTIFIED MAIL

224 New Customhouse
Denver 2, Colorado

July 15, 1958

7/21 C 220
7/21 800
~~700~~

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket DMEA 4389 (Uranium)
Contract Idm-81033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

By certified letter, dated June 24, 1958, you were informed that unless certain unreported production and royalties have been received in this office by July 7, 1958, it would be necessary to refer the matter to the Washington Office, DMEA, for such action as indicated to protect the Government's interest. Your reply of June 27, advised us that the requested settlement sheets and check would be received by us "in the very near future."

To date, we have not received the requested data and royalties; therefore, please give this matter your immediate attention.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

MHM:jy

cc: Chm. Gp. Comm. - 2 } w/copy of Oper's. ltr.
Corres. H1033 } dtd. 6/27/58
Royalty File
DMEA, DFC
Finch
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
JUL 1 - 1958
REGION III
DENVER, COLORADO

ELLIOT H. GOLDSTEIN
Consulting Geologist
310 S. 40TH STREET
BOULDER, COLORADO
HILLCREST 2-6212

June 27, 1958

Defense Minerals Exploration Administration
224 New Customs House
Denver, Colorado

Re: DMEA Docket 4389
Contr. Idm 1033

Gentlemen:

Reference is made to your recent correspondence requesting payment of royalties on uranium ore shipped form the Mann property in Jefferson Co., Colorado.

The reason that the royalties were not paid prior to this date is that I was under the impression that once a notice of non-certification was received, no further payments were necessary. The letter from C.O Mittendorf makes a statement to this effect.

Mr. Mittendorfs letter along with our DMEA file was fowarded to our Florida office.

The difficulty arose by our not realizing that although a letter of non-certification was received, all ore shipped prior to the receipt of that letter still fell under the royalty provisions of the contract.

I have long since sent to our Florida office for the necessary settlement sheets, and a check in the amount of the royalty due.

I am very sorry this difficulty arose, and shall have the settlement sheets and check for you in the very near future.

Sincerely yours,

URANIUM ENTERPRISES

Elliot Goldstein

Ellict Goldstein

CY TO OMAR COR COMM 2 7/15/58

FORWARDED TO HARSHMAN DMEA/DFC-2 7/1/58

FINCH 7/7/58

DMEA
RECEIVED JUN 26 1958

224 New Customhouse
Denver 2, Colorado

June 24, 1958

6/26 Hg. 225
6/26 800
6/27 FMM 700

CERTIFIED MAIL

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

By letters dated May 19, 1958 and June 9, 1958, you were requested to submit settlement sheets and royalties on the following production made from land included under the captioned contract:

Date	Liquidation No.	Lbs. U_3O_8
March 10, 1958	7872	492.56
March 25, 1958	7899	347.42
March, 1958	7948	333.77
	Total	1,173.75

We regret to advise you that your failure to reply to either of these letters leaves us with no alternative but to inform you that unless the requested production data and royalties have been received in this office by July 7, 1958, it will be necessary for us to refer the matter to the Washington Office, DMEA, for such action as is indicated to protect the Government's interest in the matter.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III.

MHM:bh
cc: Sec. Op. Comm. (2)
Royalty File E-1033
Corres. File
DMEA/DFC
Finch
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 12 1958

DATE	INITIALS	CODE
6/12	C	220
6/12		800
	~~Murphy for~~	
	Closed file	

224 New Customhouse
Denver 2, Colorado
June 9, 1958

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Enclosed is a photo copy of our certified letter dated May 19, 1958, for which we have received no reply.

We would appreciate your immediate attention to this matter so that we may finish the royalty review of the subject account now in progress.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III

MHM:dp

cc: ~~Sec.~~ Op. Comm. 2
Royalty File E1033
Corres. File
DMEA/DFC
Finch
Chron.

CERTIFIED MAIL

224 New Customhouse
Denver 2, Colorado

May 19, 1958

5/21 C 220
5/21 8007 8.00
5/27 7444 700

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket DMEA 4389 (Uranium)
Contract Idm-E1033
Uranium Enterprises
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Royalties and copies of settlement sheets for the below-listed production have not been received by this office:

Date	Liquidation No.	Lbs. U3O8
March 10, 1958	7872	492.56
March 25, 1958	7899	347.42
March 1958	7948	333.77
	Total	1,173.75

Please submit a copy of the settlement sheets and royalties for this production.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

MHM:jy

cc: Sec. Op. Comm. - 2)
Royalty File E1033) w/copy of 5/8/58 ltr.
Corres. file) from Westbrook, AEC
DMEA, DFC)
Finch
Chron.

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION OPERATIONS OFFICE
GRAND JUNCTION, COLORADO

IN REPLY REFER TO:

May 8, 1958

FD:CTN

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: Donald T. Finch, DMEA Auditor

Subject: Production - Uranium Enterprises
DMEA Contract Idm-E1033, Docket
DMEA-4389 Mann No. 1 Mine,
Jefferson County, Colo.

Dear Mr. Finch:

Production summarized in your letter of April 23, 1958 was checked against the records available in this office. Liquidation No. 7145, identified in your letter with a sale to Union Carbide Nuclear Company on January 3, 1958, should be No. 7745.

Additional production, sold to Union Carbide Nuclear Company, was found in March 1958 and is detailed below:

Date	Liquidation No.	Lbs. U_3O_8
March 10, 1958	7872	492.56
March 25, 1958	7899	347.42
March 1958	7948	333.77
	Total	[illegible]

Very truly yours,

3-27-58

OFFICIAL FILE COPY
DMEA
RECEIVED 13 1958
5/13 C 220
1 ~~MM~~ 700

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

May 7, 1958

Memorandum

To: Chairman, Operating Committee, DMEA
From: Executive Officer, DMEA Field Team, Region III
Subject: Royalty Payments, Docket DMEA-4389 (Uranium) Contract Idm-E1033, Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colo.

Period: April 1958

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Liq. No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.
1/3/58	7745	28.120	$44.62	-----*	$29.53	
Totals:		28.120	$44.62		$29.53	

*Paid in March 1958.

Past Due Royalties Collected: $145.63 per our letter dated 4/9/58.

Total Dry Tons (Ore or Cons.) Shipped to Date: 492.898

E. M. Hendrson
Acting Executive Officer

MHM:jy
cc: Royalty File E1033 w/settlement sheets
Monthly Royalty Payment File
Chron.

UNION CARBIDE NUCLEAR COMPANY

[redacted] Division of Union Carbi[redacted] Corporation

PURCHASED ORE SETTLEMENT STATEMENT

NAME Uranium Enterprises

Date Jan 3 1958

~~TOTAL~~ ORE VALUE, ~~LIQUIDATION NO.~~ 4201-00-071-7010-050 $ 717.06

~~TOTAL~~ ORE VALUE, ~~LIQUIDATION NO.~~ 4201-00-071-7010-051 $ NONE

~~TOTAL~~ ORE VALUE, ~~LIQUIDATION NO.~~ 4201-00-071-7010-056 $ 175.38

TOTAL
(701-2) $ 892.44

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 13 1958

DATE	[illegible]	[illegible]

LESS:

Royalty Payment
(880-__) $

Assignment of Mill Return to U.O.P.A.
(880-88-76) ___ dry tons at $

Invoice No.
(651) $

Invoice No.
(651-R) $

TOTAL DEDUCTIONS $

NET AMOUNT TO BE PAID $ 892.44

DMEA
DEPARTMENT OF THE INTERIOR
APR 7 - 1958
REGION III
DENVER, COLORADO

Form SD 17--Union 6160
2500 1-56--The Sentinel Printers

2

UNION CARBIDE NUCLEAR COMPANY

[redacted] Division of Union Carbide [redacted] Corporation

ORE SETTLEMENT

Grand Junction, [redacted] Colorado, Jan 3, 1958

Receiving Station: Rifle, Colorado

Liquidation No.: 2145 Lot No.: see load detail Shippers Lot No.:

Bought of: Uranium Enterprises Att. Elliot Goldstein A.E.C. License No.: R-3072

Address: 310 So 40th St. Boulder, Colorado

Type of Ore: carnotite Date Received: 12-21-57

Mining Claim: Mann #1 Mining District: Jefferson Co. Pile No.:

Lot No.	Net Weight Pounds	% H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
	58460	3.8	56239	0.30	0.01		168.72		

PRICED PER A.E.C. CIRCULAR NO. 5 (amended)

	POUNDS	PER LB.	DRY SHORT TONS	PER TON	VALUE	TOTAL VALUE
U308 Payment	168.72	3.50	28.12		590.52	
Development Allowance	168.72	.50	28.12		84.36	
Excess 4 lbs. per ton Premium	56.24	.75	28.12		42.18	
Excess 10 lbs. per ton Premium						
Total U308 Payment						717.06
V205 Payment	NONE					
Total V205 Payment						NONE
Less High Line Penalty over 6% CaCo3						
Base Penalty						
——%———%=——% Penalty @ $ .04 per 1/10th						
TOTAL						
Haulage Allowance 100 Miles 29.23 Wet Tons @ .06 per wet ton mile						175.38
Total U3O8, V2O5 and Haulage Payment						892.44

OFFICIAL FILE COPY DMEA RECEIVED [illegible] DATE [illegible]

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Union Carbide Nuclear Company, [redacted] Division of Union Carbide [redacted] Corporation.

I certify that I hold the A. E. C. Source Material License numbered above.

I hereby transfer to the Union Carbide Nuclear Company, [redacted] Division of Union Carbide [redacted] Corporation, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

The amount set opposite "Total U308, V2O5 and Haulage Payment" shown above constitutes the entire amount payable to me in respect of ore deliveries described herein and is accepted by me in full payment thereof.

I request that payment be made on the basis of the average of moisture contents, of U308 contents and of V205 contents of the several loads delivered and covered by this settlement.

Voucher Number	Date
Check Number 6160	Date 1-4-58
Approved for Payment	

Seller or Agent

DAILY SENTINEL COM'L PTG. DEPT.

E. PRINTING CO

UNION CARBIDE NUCLEAR COMPANY
Division of Union Carbide Corporation

Rifle, COLORADO

Purchased Mining LOAD DETAIL

INSERT GRADE

PERIOD 12 12 51 57

NAME Uranium Enterprises ADDRESS Denver, Colorado

CLAIM

DATE SHIPPED	TICKET NUMBER	POUNDS ORE	LAB. ASSAY NO.	PER CENT MOISTURE	POUNDS DRY ORE	GRADE U_3O_8	POUNDS U_3O_8	GRADE V_2O_5	POUNDS V_2O_5
2-21	62415	33340	283-51	3.8					
2-21	62422	25120	–	3.8	56237	0.30	168.72	0.01	5.62
		58460		3.8	56237	0.30	168.72	0.01	5.62

4/15 D 220
4/15 4707 100
" Monthly Rec.
(Closed file)

224 New Customhouse
Denver 2, Colorado

April 9, 1958

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract Idm-E1033, Uranium
Enterprises (Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Thank you for the loan of the enclosed copy of Union Carbide Nuclear Company settlement sheet bearing Liquation No. 7745 which was submitted with your letter dated April 4, 1958. We have duplicated a sufficient number of copies to meet our requirements.

The status of your royalty account for production reported to this office is as follows:

Liq. No.	Royalty Due	Royalty Paid	AEC Bonus Royalty Due	AEC Bonus Royalty Pd.
57/9-32	$265.97	$265.97	$245.75	$245.75
57/10-28	63.47	63.47	69.19	69.19
57/11-21	167.70	167.70	164.51	109.50
7745	44.62	30.53	29.53	------
7834	120.97	92.60	78.63	------
	$662.73	$620.27	$587.61	$484.44

Total Royalties Due	$1,250.34
Total Royalties Paid	1,104.71
Balance Royalties Due	$ 145.63

The letter from the Administrator, DMEA, dated March 27, 1958, informed you that henceforth, the Government retains no claims or lien against the subject property. The Government is due royalites, however, on the production listed and on all other production which may have been made from the subordinated property from the date of the contract, November 5, 1956 to March 27, 1958, or until the entire amount of Government participation ($5,452.74) has been fully repaid, whichever occurs first.

You will observe that we have calculated royalties due on production covered by settlement sheets bearing Liquation Nos. 7745 and 7834, respectively, exclusive of the railroad freight costs which according to your letters of March 10, 1958 and April 4, 1958, were as follows:

Liq. No.	Dry Tons	R. R. Freight Costs
7745	28.120	$182.00
7834	88.259	$567.42

The Government permits freight charges as a deductible item in computing royalties due DMEA when the charge is shown as a deduction on the settlement sheet issued by the ore purchaser and arises in its regular course of business. The copies of the settlement sheets we have do not indicate this to be the case. Therefore, unless you submit suitable evidence which shows freight charges to be a purchaser expense, you are requested to send us your check for the entire amount of royalties shown to be due on reported production and rightly due on unreported production.

You will recall that in past visits to this office, it was pointed out to you that any freight charge you incur prior to disposition of the ore is to be considered as part of production expense and not allowed as a deduction in calculating royalties due the Government.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

MHM:dp

cc: Sec. Op. Comm. (2))
Royalty File E1033) W/corres.
Corres. File E1033) related
DMEA/DFC)
Chron.

ELLIOT H. GOLDSTEIN
Consulting Geologist
310 S. 40TH STREET
BOULDER, COLORADO
HILLCREST 2-6212

DMEA
DEPARTMENT OF THE INTERIOR
MAR 11 1958
REGION III
DENVER COLORADO

March 10, 1958

Defense Minerals Exploration Administration
224 New Customs House
Denver 2, Colorado

Re: DMEA 4389
Contract Idm E1033

Gentlemen:

Enclosed please find our check #494 in the amount $30.53 for shipments made by us during the month of December 1957 to Union Carbide Nuclear Company, and check # 510 in the amount $92.60 for shipments made during January 1958 to the same company.

I have delayed sending the December check waiting for a copy of that settlement sheet. I have not yet received a copy of that settlement sheet, so have decided to mail the check anyway and will foward the settlement sheet when I receive it.

The railroad freight costs on the January shipments totaled $567.42 and have subtracted that amount before calculating the royalty owed to you.

Sincerely yours,

URANIUM ENTERPRISES

Elliot Goldstein

EG:eg
Encl:

ELLIOT H. GOLDSTEIN
Consulting Geologist
310 S. 40TH STREET
BOULDER, COLORADO
HILLCREST 2-6212

DMEA
DEPARTMENT OF THE INTERIOR
APR 7 - 1958
REGION III
DENVER, COLORADO

April 4, 1958

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
New Customs House
Denver 2, Colorado

Re: Docket No. DMEA 4389
Contract No. Idm E1033

Dear Mr. Harshman:

Reference is made to your letter dated April 3, 1958 in which your office requested a copy of our December 1957 Settlement Sheet. Enclosed you will find a copy of that Settlement Sheet.

The total value of th e settlement was $892.44 and the freight bill was $182.00, which leaves a net mill return of $710.44. Five (5%) percent of this amount is $30.53 which was the amount previously sent to you.

The" is no need to return this settlement sheet by certified mail; ordinary mail will be good enough.

Sincerely yours,

Elliot Goldstein

Elliot Goldstein

EG:eg
Enclosure

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

April 8, 1958

Memorandum

To: Chairman, Operating Committee, DMEA
From: Executive Officer, DMEA Field Team, Region III
Subject: Royalty Payments, Docket No. DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises, (Mann No. 1 mine) Jefferson County, Colorado

Period: March 1958

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Liq. No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.
2/26/58	7834	88.259	$120.97	$92.60*	$78.63	---
Totals:		88.259	$120.97	$92.60*	$78.63	---

Past Due Royalties Collected: $30.53 - settlement sheets not received.

Total Dry Tons (Ore or Cons.) Shipped to Date: 464.778

E. M. Henderson
Acting Executive Officer

Chron
cc: Royalty File E 1033 w/settlement sheets
Monthly Royalty Payment File
hmh

ELLIOT H. GOLDSTEIN
Consulting Geologist
310 S. 40TH STREET
BOULDER, COLORADO
HILLCREST 2-6212

DMEA
DEPARTMENT OF THE INTERIOR
MAR 11 1958
REGION III
DENVER COLORADO

March 10, 1958

Defense Minerals Exploration Administration
224 New Customs House
Denver 2, Colorado

Re: DMEA 4389
Contract Idm E1033

Gentlemen:

Enclosed please find our check #494 in the amount $30.53 for shipments made by us during the month of December 1957 to Union Carbide Nuclear Company, and check # 510 in the amount $92.60 for shipments made during January 1958 to the same company.

I have delayed sending the December check waiting for a copy of that settlement sheet. I have not yet received a copy of that settlement sheet, so have decided to mail the check anyway and will foward the settlement sheet when I receive it.

The railroad freight costs on the January shipments totaled $567.42 and have subtracted that amount before calculating the royalty owed to you.

Sincerely yours,

URANIUM ENTERPRISES

Elliot Goldstein

EG:eg
Encl:

DMEA
DEPARTMENT OF THE INTERIOR
MAR 11 1958
REGION III
DENVER, COLORADO

UNION CARBIDE NUCLEAR COMPANY
DIVISION OF UNION CARBIDE CORPORATION
P. O. BOX 1029
GRAND JUNCTION, COLORADO

PURCHASED ORE SETTLEMENT STATEMENT

NAME Uranium Enterprises

Date Feb 26 19 58

LIQUIDATION NO. 7834

TOTAL VALUE U_3O_8	4701	00	091	9010	$ 2419.35
TOTAL VALUE V_2O_5		00		051	$
TOTAL VALUE Haulage		00		056	$
TOTAL VALUE Lime Penalty		00		058	$
TOTAL VALUE					$ 2419.35

LESS

Royalty Payment (880-88-.....)	$
Invoice No. (651-88-50)	$
Invoice No (651-88-51)	$
TOTAL DEDUCTIONS	$
NET AMOUNT TO BE PAID	$ 2419.35

Form 250 2-13
1-58 Richardson

UNION CARBIDE NUCLEAR COMPANY

DIVISION OF UNION CARBIDE CORPORATION
P. O. BOX 1049, GRAND JUNCTION, COLORADO

ORE SETTLEMENT

LIQUIDATION NUMBER: 7834

BOUGHT OF

URANIUM ENTERPRISES
ATT ELLIOT GOLDSTEIN
310 SOUTH 40TH STREET
BOULDER COLORADO

A.E.C. LICENSE NUMBER	T/S	PERIOD ENDING
P 3072	1	

RECEIVING PLANT CODES
2 URAVAN, COLO.
3 & 4 RIFLE, COLO
6 GREEN RIVER, UTAH
7 SLICKROCK, COLO.

MINING CLAIM: MANN 1

A.E.C. DISTRICT NO: 42

RECV. PLANT	SOURCE VENDOR	SOURCE CLAIM	NET WEIGHT POUNDS	% H_2O	DRY WEIGHT POUNDS	SETTLEMENT ASSAYS * U_3O_8	V_2O_5	$CaCO_3$	* APPROXIMATE AVERAGES PRICED PER A.E.C. CIRCULAR NO. 5 (REVISED)
4	091	9010	183300	3.7	176518.00	25	000		

DETAIL OF PAYMENT	LBS OR MILES	RATE	DRY/WET TONS	VALUE
U308 PAYMENT	44931	350000	8826	157259
DEVELOPMENT ALLOWANCE	44931	50	8826	22466
EXCESS 4 LB TON PREM	9627	75	8826	7220
EXCESS 10 LB TON PREM		25	8826	
V205 PAYMENT		31		
LIME PENALTY OVER 6PC			8826	CR
HAULAGE ALLOWANCE	10000	06	9165	54990
TOTAL U_3O_8, V_2O_5 and HAULAGE PAYMENT				$ 241935

less Freight 567.42
Net 1851.93

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Union Carbide Nuclear Company, Division of Union Carbide Corporation.

I certify that I hold the A.E.C. Source Material License numbered above.

I hereby transfer to the Union Carbide Nuclear Company, Division of Union Carbide Corporation, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

The amount set opposite "Total U308, V205 and Haulage Payment" shown above constitutes the entire amount payable to me in respect of ore deliveries described herein and is accepted by me in full payment thereof.

I request that payment be made on the basis of the average of moisture contents, of U308 contents and of V205 contents of the several loads delivered and covered by this settlement

VOUCHER NUMBER	
CHECK NUMBER 6443	
APPROVED FOR PAYMENT	

SELLER OR AGENT

IMPORTANT - SIGN SHEETS 3 AND 4 AND RETURN TO ABOVE ADDRESS

FORM 250-23-5

FORM 250-23-4

UNION CARBIDE NUCLEAR COMPANY
DIVISION OF UNION CARBIDE CORPORATION

LOAD DETAIL SHEET

SOURCE	T/S	PERIOD ENDING
919010	1	

NAME AND ADDRESS

URANIUM ENTERPRISES
ATT ELLIOT GOLDSTEIN
310 SOUTH 40TH STREET
BOULDER COLORADO

MINING CLAIM

MANN 1

RECEIVING PLANT CODES
2 - URAVAN, COLO
3 & 4 RIFLE, COLO.
6 - GREEN RIVER, UTAH
7 SLICKROCK, COLO.

RECV PLANT	DATE OF RECEIPT MO.	DAY	SCALE TICKET NUMBER	POUNDS ORE	% H_2O	POUNDS DRY ORE	GRADE U_3O_8	GRADE V_2O_5	GRADE $CaCO_3$	POUNDS U_3O_8	POUNDS V_2O_5	POUNDS $CaCO_3$	# TOT	CB
4	02	03	63650	34540	37	33262	24			7983				
4	02	03	63652	28060	37	27022	24			6485				
4	02	03	63653	31840	37	30662	24			7359				
4	02	04	63678	34560	37	33281	27			8986				
4	02	04	63679	31500	37	30335	27			8190				
4	02	04	63681	22800	37	21956	27			5928				
				183300	37	176518	25			44931			*	

RECEIVED APR 7 1958

224 New Customhouse
Denver 2, Colorado
April 3, 1958

Mr. Elliot H. Goldstein
310 South 40th Street
Boulder, Colorado

Re: Docket No. DMEA 4389
(Uranium) Contract No.
Idm-E1033, Uranium Enterprises (Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Your letter of March 10, 1958, indicated that this office could expect to receive a copy of the settlement sheet for December shipments sent to Union Carbide Nuclear Company, which will support the royalty payment of $30.53 already received. To date we have not received a copy of the settlement sheet.

If you have a personal copy of this settlement sheet which you can loan us to bring your royalty account up to date, we will duplicate a sufficient number of copies to meet our requirement and return your copy promptly by certified mail.

Very truly yours,

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

MHM:dp

cc: Sec. Op. Comm. (2)
DMEA/DFC (2)
Royalty File E1033
Chron.

DMEA Form 7
(12-56)

Held until 3/27

OFFICIAL FILE COPY

Date	Surname	Code
1/8/58	Murphy	700
1/9	[illegible]	700
3-27	Chamberlin	800
	[illegible]	120
3/27	Johnson	110
"	[illegible]	100
3/27	[illegible]	220
		700

Rec 3-27-1958

MAR 27 1958

Mr. Elliot Goldstein, Agent
2679 Arapahoe Street
Boulder, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises, a partnership composed of L. E. Wolfson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Klaeger, W. W. Longley, and Elliot Goldstein, and Morrison Uranium Company, a Joint Venture
Mann No. 1 Mine
Jefferson County, Colorado

Dear Mr. Goldstein:

Reference is made to your exploration contract with the Government.

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

Your interest in the DMEA exploration program and participation therein are fully appreciated.

Sincerely yours,

G. O. Wittendorf (for)
Administrator

FMMurphy/gla
1-8-58

cc to: J. N. Gelson, Attorney-in-Fact
Fidelity and Deposit Company of Maryland
100 Park Ave., New York 17, N.Y.
Joseph L. Mann and Fanny L. Mann
Sedalia, Colorado
Admr.'s Reading File
Contract Adm. & Audit Division
DMEA Field Team, Region III (2)
F. M. Murphy

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/8/58	Murphy	700
1/9	Ellis	700
3-27	Chamber	800
	Ahrendt	120
3/27	Johnson	110
"	Wittenbrook	100
		220
		700

Rec. 3-27-58

MAR 27 1958

Mr. J. N. Gelson
Attorney-in-Fact
Fidelity and Deposit Company of Maryland
100 Park Avenue
New York 17, New York

Re: Docket No. DMEA-4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises, a partnership composed of L. E. Wolfson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Klaeger, W. W. Longley, and Elliot Goldstein, and Morrison Uranium Company, a Joint Venture
Mann No. 1 Mine
Jefferson County, Colorado

Dear Mr. Gelson:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the above-cited contract.

The property as set forth in the contract is covered by your Performance Bond, dated November 5, 1956, under the captioned name and contract number.

In the absence of certification, the Government retains no claim against the bonding company that assumed the responsibility for performance under the contract.

Sincerely yours,

G. O. Wittenbrook (for)

Administrator

Enclosure

FMMurphy/gla
1-8-58
cc to: Admr.'s Reading File
Contract Adm. & Audit Division
DMEA Field Team, Region III (2)
FMMurphy

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/8/58	Murphy	700
1/4	Ellis	700
3-27	Chambers	800
	Gheent	120
3/27	Johnson	110
"	Rutledge	100
		220
		700

Rec 3-27-58

Mr. Joseph L. Mann
and Mrs. Fanny L. Mann
Sedalia, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises, a partnership composed of L. E. Wolfson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Klaeger, W. W. Longley, and Elliot Goldstein, and Morrison Uranium Company, a Joint Venture
Mann No. 1 Mine
Jefferson County, Colorado

Dear Mr. and Mrs. Mann:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the above-cited contract.

This correspondence relates to the Consent to Lien and Subordination Agreement signed by you on October 8, 1956.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

FMMurphy/gla
1-8-58
cc to: Admr.'s Reading File
Contract Adm. & Audit Division
DMEA Field Team, Region III (2)
FMMurphy

8623

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

February 10, 1958

Memorandum

To: Chairman, Operating Committee, DMEA
From: Executive Officer, DMEA Field Team, Region III
Subject: Royalty Payments, Docket No. DMEA 4389 (Uranium) Contract Idm-E1032, Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colorado
Period: January, 1958

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Lot No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.

NONE

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Totals:

Past Due Royalties Collected (Royalty on bonus payments) $169.50

Total Dry Tons (Ore or Cons.) Shipped to Date 376.519

W. A. King
Executive Officer

Chron
cc: Royalty File E 1032w/settlement sheets
Monthly Royalty Payment File
hmh

IN REPLY REFER TO:

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

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DATE	INITIALS	CODE
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January 8, 1957

Re: DMEA 4389, Idm-E1033
Uranium Enterprises
Mann No. 1 mine
Jefferson County, Colorado
Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of Field Team Final Report

The contract awarded November 5, 1956 approved the exploration by 10 drill holes of lower Dakota beds adjacent to the postulated downward extension of the Damming fault. Near the fault in upper Dakota beds is a long and narrow deposit from which 900 tons of 0.30% U_3O_8 material has been produced. A very small amount (6 tons of 0.21% U_3O_8) of ore had been produced from an outcrop near the top of the lower Dakota sandstone about 270 feet from and updip (25°) of the assumed trace of the fault and the top of lower Dakota beds.

Although there appears to be uncertainty as to the location (perhaps the existence) of the Damming fault at its assumed projection, the non-existence of minable bodies of uranium ore in the lower Dakota sandstone in that immediate locality seems certain.

Therefore the conclusion of the examiners that "further work, with Government participation cannot be justified" and the recommendation that no certification of discovery be issued are sustained.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

January 7, 1958

Memorandum

To: Chairman, Operating Committee, DMEA
From: Executive Officer, DMEA Field Team, Region III
Subject: Royalty Payments, Docket DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises, (Mann No. 1 Mine) Jefferson County, Colorado
Period: December, 1957

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Lot No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.
* 57/9-32		--	$265.97	$265.97	--	--
* 57/10-28		--	63.47	63.47	$69.19	$69.19
57/11-21		158.451	167.70	167.70	164.51	---
Totals:		158.451	$497.14	$497.14	$233.70	$69.19

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" ~~Murphy~~ 200

* Past Due Royalties Collected See above

Total Dry Tons (Ore or Cons.) Shipped to Date 376.519

W X King
Executive Officer

cc: Chron
Royalty File E 1033w/settlement sheets
Monthly Royalty Payment File
hmh

DMEA
DEPARTMENT OF THE INTERIOR
DEC 30 1957
REGION III
DENVER, COLORADO

Vitro Uranium Company

A DIVISION OF VITRO CORPORATION OF AMERICA
400 WEST 2100 SOUTH, SALT LAKE CITY, UTAH
POST OFFICE BOX 67, SOUTH SALT LAKE BRANCH

RECEIVING STATION _____ SALT LAKE CITY, UTAH _____ Nov _____ 1957

SOURDOUGH NO. 57/11-21 VITRO ORE P. O. NO. 76 VITRO LOT NO. VRC 6721 SHIPPERS LOT NO. 57-5-6-2

PURCHASED FROM Uranium Enterprises Inc. AEC LICENSE NO. _____

ADDRESS 310 So 40th St. Boulder, Colo

TYPE OF ORE Uraninite DATE RECEIVED Nov 1957

MINING CLAIM Mahr Lease

MINING DISTRICT Morrison COUNTY AND STATE Jefferson, Colo

ASSAY DATE _____ ASSAY CERTIFICATE NO. _____ CHIEF CHEMIST _____

NET WEIGHT POUNDS	% H_2O	DRY WEIGHT POUNDS	ASSAY U_3O_8	ASSAY V_2O_5	ASSAY $CaCO_3$	CONTENT POUNDS U_3O_8	CONTENT POUNDS V_2O_5	CONTENT POUNDS $CaCO_3$
333900	5.10	816902	.296			940.05		
NET WEIGHT TONS		DRY WEIGHT TONS						
166.95		158.451						

U_3O_8	.296 %	940.65 LBS. AT 3.50 PER LB.	$ 3290	18
DEVELOPMENT ALLOWANCE		940.65 LBS. AT .50 PER LB.	470	02
CONTENT AT 4 LBS. PER TON		633.80 LBS.		
PREMIUM FOR LBS. IN EXCESS 4 LBS PER TON		306.85 LBS. AT .75 PER LB.	229	69
CONTENT AT 10 LBS. PER TON		_____ LBS.		
PREMIUM FOR LBS. IN EXCESS 10 LBS. PER TON		_____ LBS. AT _____ PER LB.		
TOTAL U_3O_8 VALUE			3989	89
HAULAGE ALLOWANCE	166.95	WET TONS AT 6.00 PER WET TONS	1001	70
LESS MI LIME PENALTY			(	)
SO_3 _____ %		_____ LBS. AT _____ PER LB.		
TOTAL GROSS			$ 4991	59
Low Freight Paid			1637	53
			3354	06

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Vitro Uranium Co.
I certify that I hold the A. E. C. Source Material License numbered above.
I hereby transfer to the Vitro Uranium Co., effective as of the date of delivery of the ore, all my right, title and interest in and to said ore. I agree to save Vitro Uranium Co. harmless in the event my right to convey title is contested for any reason.
I will accept the amount as shown above as "Total Gross Price" in full settlement.

_____
Seller or Agent

Buyer always govern if Seller fails to submit his assays prior to acceptance of payment, or where no umpire assay is called for. All ratios sold are based on U. S. Atomic Energy Commission ...

E 1033

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MINERAL MAPS
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Washington 25, D. C.

X

Date December 19, 1957

Mat Docket No. 4389
Client Reference No. Idm-E1033
Commodity Uranium
Name of applicant Uranium Enterprises
Name of property Mann No. 1 mine
Location of property Jefferson County, Colo.
Estimated cost of project $7,270.32

Memorandum to:

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
(Application, Field Team Report, etc.)

1. Date of subject document: 12/10/57. 2. Date received by reviewer: 12/17/57.

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 needing 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 [X]
   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) Certification of project as discovery or development not recommended.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

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12/16	[illegible]	110
12/16	[illegible]	130
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"	PMM	200

December 10, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4389 (Uranium), Contract No. Idm-E1033
Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colo. -
FINAL REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report dated November 29, 1957, by D. H. Richter, Geologist, Geological Survey, and W. W. Winkel, 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 September 30, 1957.

Final payment to the Operator was processed by this office October 15, 1957, in conformance with Report of Review of reported project costs by the Contract Administration and Audit Division, DMEA, dated October 8, 1957.

The exploration work completed consisted of the drilling of 10 holes aggregating 1,942 feet of non-core drilling and 1,018 feet of core drilling, the use of 7.88 hours of bull dozing time for preparation of access roads and drill sites, and incidental allowance on 2,960 feet of drilling, all at a total accepted cost of $7,270.32, toward which the Government contributed 75%, or an amount of $5,452.74.

The quantity of uranium ore disclosed by the exploration work is considered insignificant; therefore, certification of the project as a discovery or development is not recommended.

FINAL F.T. Report

W. H. King
W. H. King

Registered by
DMEA CH[illegible] [illegible]
12-18-57

E. N. Harshman
E. N. Harshman

IN REPLY REFER TO:
DMEA
DEPARTMENT OF THE INTERIOR
DEC 4 - 1957
REGION III
DENVER, COLORADO

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

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December 2, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 4389 (Uranium), Contract Idm-E 1033, Uranium Enterprises (Mann No. 1 mine), Jefferson County, Colorado

Enclosed are the original and eight copies of a joint final engineering and geologic report by D. H. Richter, U. S. Geological Survey, and W. W. Winkel, U. S. Bureau of Mines, describing the results of exploration under the subject contract.

The exploration, started February 26, 1957, and completed June 29, 1957, consisted of 10 drill holes comprising 1,942 feet of non-core drilling and 1,018 feet of core drilling. Total cost of the exploration was $7,270.32, Government participation 75 percent or $5,452.74.

The exploration resulted in the discovery of an insignificant amount of low grade mineralized material in the upper and the lower Dakota sandstone. Certification of discovery is not recommended.

I concur with the conclusions and recommendations.

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

Enclosures (9)

Reviewed by
DMEA OPERATIONS
12-18-57

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINAL REPORT BY FIELD TEAM
REGION III

DMEA
DEPARTMENT OF THE INTERIOR
DEC 4 - 1957
REGION III
DENVER, COLORADO

ORIGINAL FILE COPY
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DMEA 4389

Contract Idm-E 1033

Uranium Enterprises

Mann No. 1 mine

Jefferson County, Colorado

Uranium

Joint Final Engineering and Geologic Report

by

D. H. Richter, Geologist
Geological Survey

W. W. Winkel, Mining Engineer
Bureau of Mines

November 29, 1957

Reviewed by
DMEA OPERATIONS [illegible]
12-18-57
(Date)

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History and production..... 3

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Conclusions and recommendations..... 15

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DMEA 4389

CONTRACT Idm-E 1033

URANIUM ENTERPRISES
MANN NO. 1 MINE
JEFFERSON COUNTY, COLORADO

INTRODUCTION AND SUMMARY

Uranium Enterprises, 2679 Arapahoe Street, Boulder, Colorado, applied on August 14, 1956, for DMEA aid in exploring its leased Mann No. 1 mine property in Jefferson County, Colorado. The proposed exploration program was designed to explore, by drilling, the intersection of the Damming fault and the lower Dakota sandstone for uranium. A field examination was made on August 29, 1956, by a DMEA field team in company with E. H. Goldstein, geologist for the operator. A joint engineering and geological report recommending a modified drilling program was submitted by the examiners.

On November 5, 1956, a contract was signed authorizing 3,300 feet of non-core and 1,200 feet of core drilling in not more than 10 holes at an estimated cost of $10,300.00. Government participation at 75 percent was estimated at $8,775.00.

Exploration work under the contract was started on February 26, 1957, and completed June 29, 1957. During the active period of the contract a total of 1,942 feet of non-core and 1,018 feet of core drilling were completed at an over-all cost of $7,270.32. Government participation at 75 percent or $5,452.74.

The DMEA drilling disclosed only two thin zones of possible ore-grade material in the lower Dakota sandstone and a few thin streaks of mineralized rock in the upper sandstone. The mineralization which is weak, erratic, and very discontinuous, does not constitute a significant discovery nor warrant Government certification.

LOCATION, ACCESSIBILITY, AND PHYSICAL FEATURES

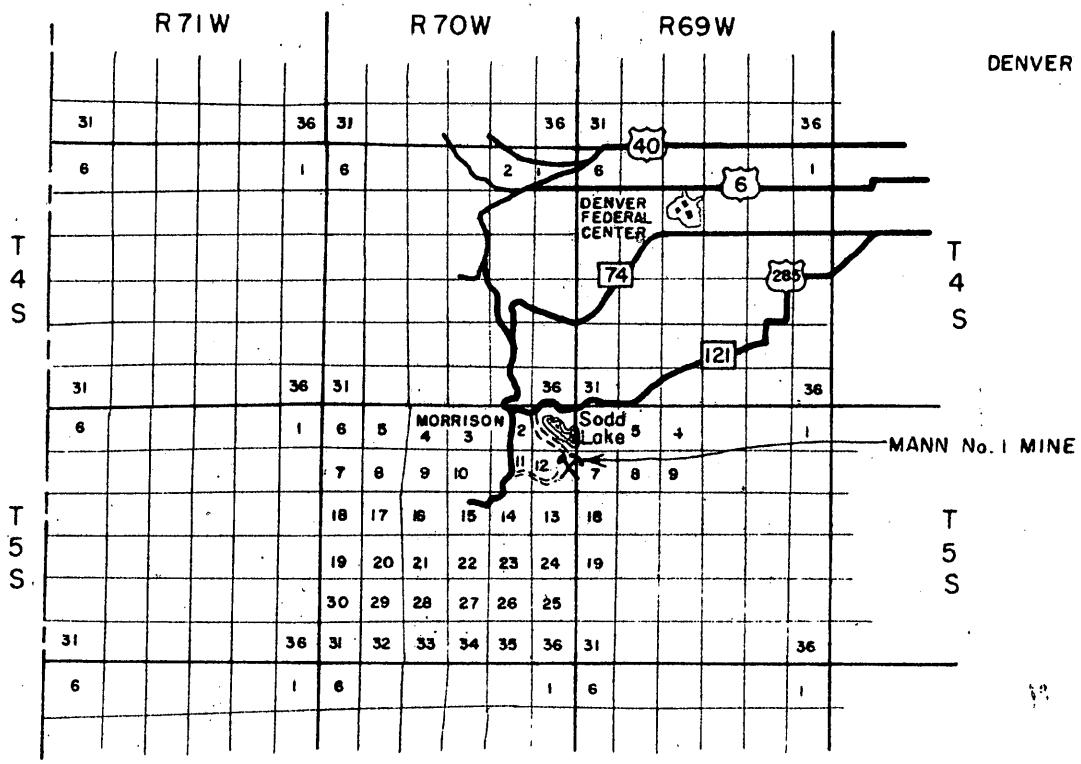
The Mann No. 1 mine property, (Mann lease) has an area of 80 acres. It comprises the SE 1/4, NE 1/4 and the NE 1/4, SE 1/4 of sec. 12, T. 5 S., R. 70 W., 6th P.M., Jefferson County, Colorado (fig. 1).

The property is reached by traveling east from Morrison, Colorado, one-half mile over paved U. S. Highway 285, then southeast 2 miles over an all-weather gravel-surface road to Turkey Creek water gap where the mine workings are located.

The topography of the property is rough. The altitude ranges from 5,700 to 6,300 feet above sea level. The climate is semi-arid. Turkey Creek, a permanent stream, flows across the northwest corner of the property and provides water for mining and domestic use.

PROPERTY

The property is owned by Joseph L. and Fanny Mann. They granted a mining lease to Morrison Uranium Company, a Colorado corporation, and Uranium Enterprises, a joint venture, in November 1955. The



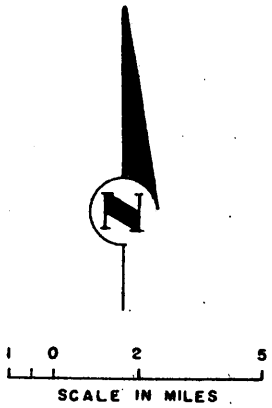


FIGURE 1 - URANIUM ENTERPRISES, MANN No. 1 MINE, JEFFERSON COUNTY, COLO. DMEA4389

former concern received a 40 percent interest and the latter 60 percent. In January 1956 the partner-owners of Uranium Enterprises purchased 73 percent of the outstanding stock of Morrison Uranium Company, thereby having full control of the lease.

HISTORY AND PRODUCTION

The property was formerly operated by the Morrison Uranium Company. This concern drove a short tunnel into an outcrop where a radiometric anomaly was found. Six tons of ore, containing 0.21 percent U_3O_8 was shipped from this opening.

Subsequently, Uranium Enterprises, recognizing the possibilities of finding additional ore, drilled a number of exploratory holes in the upper Dakota rocks. Ore-grade uranium mineralization was found along a fault zone near the upper Dakota sandstone-shale contact.

A tunnel and drift were then driven to further develop the ore-bearing zone. Nine hundred tons of ore containing approximately 0.30 percent U_3O_8 have been shipped.

GEOLOGY

General statement

Uranium Enterprises property, the Mann lease, overlies rocks of the lower Cretaceous Dakota group along the prominent hogback south of Turkey Creek canyon, 2 miles southeast of Morrison, Colorado. The

geologic environment of the uranium ore bodies in the Uranium Enterprises mine is identical to that of the ore bodies in the Four Corners Uranium Co. mine (DMEA 4793) a few hundred feet north on the hogback north of Turkey Creek (fig. 2). In both mines the ore bodies are long, narrow discontinuous pods and lenses, localized along the same strong northwest-trending fault (Damming fault), in the upper Dakota sandstone directly above the upper sandstone-shale contact.

DMEA exploration under the subject contract was designed to explore the lower Dakota sandstone, a potentially favorable horizon, in the vicinity of the Damming fault.

Stratigraphy

The stratigraphy and thickness of the Dakota group in the northern Front Range foothills vary considerably within relatively short distances and consequently problems concerning correlation, terminology, subdivision and relation to the underlying Morrison formation have yet to be solved or clarified to the satisfaction of the many different investigators who have studied these rocks. In the latest paper devoted to Dakota stratigraphy, Waage[1/] separates the Dakota group into two formations, the Lytle and South Platte, and further recognizes and names three distinct members in the upper South Platte formation. Although cognizant of Waage's subdivisions the writers, for the purpose

---

1/ Waage, Karl M., 1955, Dakota group in Northern Front Range Foothills, Colorado: U. S. Geol. Survey Prof. Paper 274-B, p. 18-19.

of this report, are employing the old subdivision of Lee[1/], i.e., upper sandstone, upper shale, and lower sandstone, which appear to be more applicable to the Dakota section exposed in the vicinity of Turkey Creek Canyon and encountered in the DMEA drilling. The thickness of the Dakota group in the Turkey Creek Canyon area is also controversial. The stratigraphic section presented in the original Examination Report and on which the exploration was based, was Lee's section modified with information supplied by Uranium Enterprises, Inc., from their drilling in the upper Dakota sandstone. The section presented below is further modified to incorporate recent field and drilling data and is believed to represent the normal Dakota group section, where not disturbed by faulting, in Turkey Creek Canyon.

1/ Lee, Willis T., 1927, Correlation of geologic formations between East-Central Colorado, central Wyoming and southern Montana: U. S. Geol. Survey Prof. Paper 149, p. 28.

	Feet
Cretaceous	
Benton formation	
Dakota group	
Upper sandstone - tan-buff fine- to medium-grained quartzose sandstone in part cross-bedded. Asphaltic material and carbonized wood occurs along some of the bedding planes. Forms caprock of the hogback.....	85
Upper shale - Dark-gray carbonaceous shale with numerous thin sandy beds.....	85-110
Lower sandstone - Tan-gray and medium- to coarse-grained sandstone. Upper half is crossbedded and friable; lower half conglomeratic.....	140
Total	310-335
Jurassic	
Morrison formation	

LeRoy[1/] who also measured the Dakota section in Turkey Creek Canyon gives a total thickness of 270 feet to the Dakota group, including 236 feet of sandstone and only 24 feet of shale! LeRoy incorrectly placed the Dakota-Morrison contact, and his lithological descriptions are also not compatible with Lee's section nor with recent field observations and information gained from drilling.

1/ LeRoy, L. W., 1946, Stratigraphy of the Golden-Morrison area, Jefferson County, Colorado: Quarterly of the Colo. School Mines, p. 74.

DMEA drilling on Uranium Enterprises property, under the subject contract, indicates that here the Dakota is only 230-250 feet thick. As the majority of the missing section (ca. 100 feet) is apparently from the lower Dakota sandstone, and both upper sandstone and shale appear to be normal, it is believed that either the Dakota is in fault contact with the underlying Morrison or that the lower sandstone thins rapidly, to the south and east, away from the hogback exposures. Although evidence of lensing in the lower Dakota sandstone is readily observable by tracing the sandstone north to the town of Morrison, where in less than 1 mile the 140-foot lower sandstone splits into a number of relatively thin sandstone beds, and may in part explain the missing section, the former belief is preferred (fig. 2). In DMEA holes 2, 3, 10, and 13 brecciation, clay gouge, and abundant pyrite at the Dakota-Morrison contact indicates strong movement and anomalous mineralization. Moreover, in holes 9 and 12 considerable core was lost in the vicinity of the contact. The upper Dakota sandstone appears to be more uniform in character and more persistent in continuity than the lower horizon.

The Benton formation of Cretaceous age conformably overlies the Dakota rocks. On the lower dip slopes of the hogback along the projected trace of the Damming fault upwards of 15 to 40 feet of Benton shales may cover the Dakota sandstones.

Structure

The rocks on the hogback have an average strike of N. 40° W. and dip between 25° and 36° to the northeast. The Damming fault, which strikes N. 37° to 45° W. (parallel the bedding) and dips 50° to 60° SW, is apparently the only major structural break exposed on the property. Observed maximum vertical offset along the fault is only 4 feet; however, slickensides on the fault surfaces plunge from 0° to 3° SE, indicating that, at least the last, and probably all the movement was primarily strike-slip.

Thickness of the fault zone ranges from a thin clay gouge, less than 1 inch thick, to a fairly inconspicuous fracture zone up to 3 feet wide. No mineralization, other than the clay gouge, has been noted in the fault on Uranium Enterprises property; however, in the Four Corners mine the fault is, in places, filled with 2 to 6 inches of massive, gray to grayish-brown quartz, which generally exhibits a banded texture with the individual bands composed of quartz, quartz-pyrite, or quartz-uraninite.

The fault is well exposed underground over a length of 260 feet at the Uranium Enterprises mine and 310 feet in the Four Corners mine. The fault is also exposed in Turkey Creek canyon between the two mines, a distance of approximately 400 feet, giving it a total known length of about 1,000 feet. Slight radioactivity anomalies around the Pallaoro spring, on trend with the Damming fault 3,600 feet northeast

of the Four Corners mine, strongly suggest that the fault extends at least this far north and acts as a conduit for subsurface waters.

The Damming fault was probably intersected by DMEA holes 2, 9, and 10 in the lower Dakota sandstone. Although holes 1, 3, 11, 12, 13, and 14 are shown penetrating the fault on figure 2, no evidence to indicate such was observed in the core or cuttings. However, if the fault, in the area of intersection, was primarily a few thin fractures it could easily be overlooked.

Ore deposits

Long, thin and discontinuous deposits of uranium ore occur in the upper sandstone of the Dakota group, immediately above the shale member, along the Damming fault. The ore bodies range in thickness from a maximum of about 20 feet to a minimum of 1 or 2 feet. The width of the ore bodies is also variable; minable ore, however, seldom occurs more than 20 feet downdip into the footwall or 3 to 5 feet into the hanging wall.

Uraninite and uraniferous asphalt are the principal ore minerals in the deposit. Gangue minerals are pyrite and ilsemannite (?), a poorly defined hydrous molybdenum oxide. The ore and gangue minerals coat quartz grains, fill interstitial spaces in the sandstone, and in part are localized along the Damming fault and smaller subsidiary

fractures. A common occurrence of ore is in "bubble-like" structures, where high grade uraninite is concentrated along the borders of single or concentric spheroids; the latter imparting a banded or zoned appearance to the ore. In many cases the centers of these "bubbles" contain pyrite.

The uranium mineralization is in part very probably controlled by the favorable nature, either physical or chemical, or both, of certain sandstone beds in the Dakota sandstone. It is also apparent that the Damming fault, because of the close spatial relations between fault and ore, is in some manner genetically related to the uranium ore bodies.

The 10 DMEA drill holes, designed to test the lower Dakota sandstone near the Damming fault failed to disclose any significant ore mineralization. In holes 2 and 9 two 1-foot zones, which would probably assay more than 0.10 percent U_3O_8 were encountered at the Damming fault intersection. The other holes, however, which penetrated the fault, were essentially barren indicating a very limited size to the possible ore horizon with little or no continuity. Hole 14 disclosed a thin streak of possible ore-grade material in the upper sandstone, and holes 1, 2, 3, 8, 9, and 12 penetrated thin and discontinuous zones of anomalous radioactivity in the upper sandstone (fig. 2). The following table shows the main stratigraphic units and zones of anomalous radioactivity (uranium mineralization) encountered in the 10 DMEA holes:

Table 1.--Holes drilled under Contract Idm-E 1033

Stratigraphic units (feet)

Hole no.	Benton frm.	Upper Dakota sandstone	Upper Dakota shale	Lower Dakota sandstone	Morrison frm.	Cored interval (feet)	Radioactivity (Mr/hr)
1	0-12	12-101	101-198	198-278	278-290	190-290	0.75 Mr/hr at 53'-55' (mineralized)*
2	0-12	12-101	101-198	198-269	269-297	190-297	1.75 Mr/hr at 265'-266' (ore) 0.5 Mr/hr at 95' (mineralized)
3		0-92	92-192	192-273	273-348	220-348	0.75 Mr/hr at 33'-34' (mineralized)
8		0-92	92-192	192-293	293-298	25-65 176-298	1.85 Mr/hr at 88' (mineralized)
9		0-95	95-196	196-271	271-291	185-291	1.50 Mr/hr at 269'-270' (ore) 0.5 Mr/hr at 46'-47' (mineralized)
10	0-15	15-105	105-207	207-279	279-298	190-298	Barren
11 (4a)	0-15	15-105	105-207	207-289	289-299	190-299	Barren
12 (7)		0-87	87-196	196-285	285-290	200-290	0.70 Mr/hr at 54'-55' (mineralized)
13 (6)		0-90	90-200	200-284	284-290	200-290	Barren
14 (5)	0-14	14-107	107-210	210-289	289-298	200-298	1.60 Mr/hr at 88'-89' (ore)

*For rough qualitative correlation, in lieu of chemical assays, the following terms have been used to designate certain ranges of radioactivity detected by the hole probe:

< 0.5 Mr/hr - Barren

0.5-1.5 Mr/hr - mineralized

> 1.5 Mr/hr - ore

Radioactivity background in the holes ranges between 0.01 and 0.05 Mr/hr.

In summarizing, it is apparent that the lower sandstone member of the Dakota group, is much less favorable for uranium deposition than the upper sandstone. Although mineralized zones were encountered along the Damming fault in the lower sandstone, their small size and limited continuity precludes consideration of their discovery as significant. Likewise, the mineralized zones encountered in the upper sandstone, although indicative of fairly widespread uranium mineralization through the upper sands, does not constitute a significant discovery.

ORE RESERVES

No ore has been shipped from the property since November 1956 and at that time total production was approximately 900 tons of ore containing about 0.30 percent U_3O_8. Also as of the same date, the operators' estimate of ore reserves in the upper Dakota sandstone was 12,000 tons of 0.30 percent U_3O_8. The examiners' reserve figure for the same deposit was conservatively estimated to be 2,200 tons of 0.30 percent U_3O_8.

No reserves have been estimated for the insignificant thin zones of mineralized material discovered under the subject contract.

THE PROJECT

The purpose of the DMEA exploration program was to explore by drilling the intersection of the Damming fault with the lower sandstone

beds of the Dakota group. From the data available at the time of the original examination, it appeared that the lower Dakota sandstone, might be as favorable for uranium deposition as the upper sandstones, where significant ore bodies have been discovered.

Original program and modifications

The original program submitted to DMEA, proposed to explore for uranium by drilling 30 holes on 10-foot centers along three fences 100 feet apart. The target was the intersection of the Damming fault with sandstone beds in the lower part of the Dakota formation. The examiners concluded that the structural and stratigraphic conditions in the target area were similar to those in the upper Dakota sandstone where significant deposits of uranium ore had been found and were being mined.

A single-stage program of drilling consisting of 10 holes on 30-foot centers along two fences 100 feet apart, at an estimated cost of $11,680 was recommended. The contract was amended two times during its active period. The amendments are summarized as follows:

Amendment No. 1

The purpose of this amendment, dated February 5, 1957, was to extend the date fixed under "Article 3", on or before which work was to be completed, from March 1, 1957 to June 30, 1957.

Amendment No. 2

The purpose of this amendment, dated April 26, 1957, was to revise some hole locations as shown on Figure 3 in the Examination Report. DMEA holes 4, 5, 6, and 7 were deleted from the two original fences and holes 12, 13, and 14 were substituted to constitute an additional fence and hole 11 was added to east end of the middle fence (fig. 2).

Description of work completed

Exploration under contract Idm-E 1033 started February 26, 1957, and was completed June 29, 1957. During the active period of the contract a total of 1,942 feet of non-core and 1,018 feet of core drilling were completed at an over-all cost of $7,270.32.

The contract work was efficiently performed and supervised by the operator and no unusual difficulties were encountered in completion of the approved exploration drilling.

Summary of accepted project costs

(1) Independent Contracts

(a) Drilling	Units	Amount
Non-core drilling	1,942 ft.	$ 3,498.50
Core drilling	1,018 ft.	2,844.50
Total accepted cost	2,960 ft.	$ 6,343.00

Average cost per foot:

Non-core drilling	$ 1.80		
Core drilling	$ 2.79		
(b) Bulldozing			
Roads and drill sites		7.88 hrs.	$ 98.52
(2) Fixed unit cost		2,960 ft.	$ 828.80
Total accepted cost of project			$ 7,270.32
Government participation at 75 percent			$ 5,452.74

SUMMARY OF FACTUAL DATA

Work under the contract was accomplished between February 26 and June 29, 1957. Total exploration accomplished was 10 rotary drilled holes aggregating 2,960 feet, of which 1,942 feet were non-core drilled and 1,018 feet were core drilled. The total cost of drilling only, was $6,343.00. The over-all cost of the project was $7,270.32. The Government's share of the cost of the project was 75 percent of the over-all amount, or $5,452.74.

The equipment used in the exploration drilling was the property of independent contractors, thereby leaving no salvage nor disposal problem.

CONCLUSIONS AND RECOMMENDATIONS

The DMEA exploration program failed to disclose significant uranium mineralization in the principal target area in the lower

Dakota sandstone. Two holes encountered a thin 1-foot zone of mineralized material near the Damming fault that may possibly contain as much as 0.10 percent U_3O_8. In the upper Dakota sandstone, a secondary target, drilling disclosed a number of thin but very erratic streaks of weakly mineralized rock.

The uranium potential of the lower Dakota sandstone therefore, in the area of exploration on the subject property, appears to be negligible.

Further work, with Government participation cannot be justified, and it is recommended that no certification of discovery be issued.

ORIGINAL FILE COPY
DMEA
RECEIVED DEC 9 1957
DATE | INITIALS | CODE
12 9 C 220
~~Murphy 700~~

U. S. DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

December 6, 1957

Memorandum

To: Chairman, Operating Committee, DMEA
From: Executive Officer, DMEA Field Team, Region III
Subject: Royalty Payments, **Docket DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises, (Mann No. 1 Mine) Jefferson County, Colorado**

Period: **November 1957**

Enclosed are settlement sheets for which royalty payments were received for ore or concentrates shipped from the subject property during the above month:

Date	Lot No.	Dry Tons	Royalty Due	Royalty Paid	Bonus Roy. Due	Bonus Roy. Pd.
57/9	32	159.925	$265.97	----	$245.75	$245.75
57/10-28		58.143	63.47	----	69.19	----
Totals:		218.068	$329.44	----	$314.94	$245.75

Past Due Royalties Collected **None**

Total Dry Tons (Ore or Cons.) Shipped to Date 218.068

W H King
Executive Officer

Chron
cc: Royalty File E 1033w/settlement sheets
Monthly Royalty Payment File
hmh

Vitro Uranium Company

A DIVISION OF VITRO CORPORATION OF AMERICA
420 WEST 3300 SOUTH, SALT LAKE CITY, UTAH
POST OFFICE BOX 07, SOUTH SALT LAKE, UTAH

RECEIVING STATION _____ SALT LAKE CITY, UTAH Sept NO. 9

LIQUIDATION NO. 57-9-22 VITRO ORE P. O. NO. 76 VITRO LOT NO. Var 1439 SHIPPING LOT NO. Var 57-1

PURCHASED FROM Uranium Enterprises ACC LICENSE NO. _____

ADDRESS 310 South 40th Street Boulder, Colo

VITRO OFFICE Uravinton DATE RECEIVED Sept 1957

MINE Mary-Lease

MINING DISTRICT Morrison COUNTY AND STATE Jefferson Colo

ASSAY DATE _____ ASSAY CERTIFICATE NO. _____ CHIEF CHEMIST _____

WET WEIGHT POUNDS	% H_2O	DRY WEIGHT POUNDS	ASSAY U_3O_8	ASSAY V_2O_5	ASSAY $CaCO_3$	CONTENT POUNDS U_3O_8	CONTENT POUNDS V_2O_5	CONTENT POUNDS $CaCO_3$
333720	4.6	319850	.439	-	-	1404.29	-	-
WET WEIGHT TONS		DRY WEIGHT TONS						
166.86		159.925						

U_3O_8	.439 % 1404.29 LBS. AT 3.50 PER LB.			$ 4915 02
DEVELOPMENT ALLOWANCE	1404.29 LBS. AT .50 PER LB.			702 14
CONTENT AT 4 LBS. PER TON	639.70 LBS.			
PREMIUM FOR LBS. IN EXCESS 4 LBS. PER TON	764.59 LBS. AT .75 PER LB.			573 44
CONTENT AT 10 LBS. PER TON	_____ LBS.			
PREMIUM FOR LBS. IN EXCESS 10 LBS. PER TON	_____ LBS. AT _____ PER LB.			
TOTAL U_3O_8 VALUE				6190 60
HANDLING ALLOWANCE	166.86 WET TONS AT 6.00 PER WET TONS			1001 16
LESS KI LIME PENALTY	_____			( )
V_2O_5	_____ % _____ LBS. AT _____ PER LB.			
TOTAL GROSS				$ 7191 76
Less Freight Paid				1870 17
Less Extra Sampling Lot 57-1				2 14
Less Advance				2500 00
Net Due				2819 45

DMEA
DEPARTMENT OF THE INTERIOR
NOV 8 - 1957
REGION III
DENVER, COLORADO

I certify that I am the lawful owner or authorized representative of the lawful Owner, of the Ore described in this Summary Sheet and that I have delivered the same to the Vitro Uranium Co.

I hereby [illegible] Vitro Uranium mentioned above.

I [illegible] to the date of delivery of said ore, all my rights, title and interest in and to said ore, I agree to use [illegible] to convey title to said ore for any action.

I will [illegible] "Gross Price" in full settlement.

E 1033

(3)

Vitro Uranium Company

A DIVISION OF VITRO CORPORATION OF AMERICA
600 WEST 3300 SOUTH, SALT LAKE CITY, UTAH
POST OFFICE BOX 67, SOUTH SALT LAKE BRANCH

RECEIVING STATION _____ SALT LAKE CITY UTAH _____ Oct. 1957

LIQUIDATION NO. 57/10-28 VITRO ORE P. O. NO. _____ VITRO LOT NO. 6478 SHIPPERS LOT NO. 57-4

PURCHASED FROM Uranium Enterprises, Inc AEC LICENSE NO. _____

ADDRESS 310 South 40th Street, Boulder, Colorado

TYPE OF ORE Uraninite DATE RECEIVED October 1957

MINING CLAIM Mann Lease

MINING DISTRICT Morrison COUNTY AND STATE Jefferson, Colorado

ASSAY DATE 10-17-57 ASSAY CERTIFICATE NO. 2324 Authorized by Allan L. Crockett CHIEF CHEMIST

NET WEIGHT POUNDS	% H_2O	DRY WEIGHT POUNDS	ASSAY U_3O_8	ASSAY V_2O_5	ASSAY $CaCO_3$	CONTENT POUNDS U_3O_8	CONTENT POUNDS V_2O_5	CONTENT POUNDS $CaCO_3$
122,860		116,286	0.34			395.37		
NET WEIGHT TONS		DRY WEIGHT TONS						
61.43		58.143						

U_3O_8	0.34 %	395.37 LBS. AT 3.50 PER LB.	$ 1,383	80
DEVELOPMENT ALLOWANCE		395.37 LBS. AT .50 PER LB.	197	68
CONTENT AT 4 LBS. PER TON		232.57 LBS.		
PREMIUM FOR LBS. IN EXCESS 4 LBS. PER TON		162.80 LBS. AT .75 PER LB.	122	10
CONTENT AT 10 LBS. PER TON		LBS.		
PREMIUM FOR LBS. IN EXCESS 10 LBS. PER TON		LBS. AT PER LB.		
TOTAL U_3O_8 VALUE			1,703	58
HAULAGE ALLOWANCE		61.43 WET TONS AT 6.00 PER WET TONS	368	58
LESS HI LIME PENALTY			(	)
V_2O_5		LBS. AT PER LB.		
TOTAL GROSS			$ 2,072	16
Less Rail Freight			802	68
			$ 1,269	48

RECEIVED DEC 9 1957 D.M.E.A.

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

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Vitro Uranium Co.
I certify that I hold the A. E. C. Source Material License numbered above.
I hereby transfer to the Vitro Uranium Co., effective as of the date of delivery of the ore, all my right, title and interest in and to said ore. I agree to save Vitro Uranium Co. harmless in the event my right to convey title is contested for any reason.
I will accept the amount as shown above as "Total Gross Price" in full settlement.

_____
Seller or Agent

Buyer assays govern if Seller fails to submit his assays prior to acceptance of payment, or where no umpire assay is called for. All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

11-12-57 E 1033 2

224 New Customhouse
Denver 2, Colorado

October 13, 1957

EXTRA COPY
DMEA
RECEIVED
DATE | CODE
10/21 | 110
700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket DMEA-4[illegible] (Uranium) Contract Idm-[illegible] Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colorado - FINAL PAYMENT

Enclosed are two copies of a memorandum to T. A. Christensen, dated October 15, 1957, relative to final payment under the terms of the subject contract.

Original signed by
E. N. HARSHMAN
E. N. Harshman

Enclosures

JDC:hmh

cc: DMEA, DFC
Corres.file,Reg. III
MF-104 file,Reg. III
Chron

224 New Customhouse
Denver 2, Colorado

October 15, 1957

Memorandum

To: T. A. Christensen

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

Subject: Docket DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colorado

Reference is made to our memorandum of September 3, 1957, whereby we transmitted the final Form MF-104, Operator's Monthly Report and Voucher for the month of June, 1957, and requested that you withhold the amount of $500.00 from reimbursement to the Operator pending resolution of matters prerequisite to closing the account.

The Operator's final report has been received, therefore, we recommend that final payment to the Operator be made on the following basis, which is in conformance with the Report of Review of reported project costs by the Contract Administration and Audit Division, dated October 8, 1957.

Basis for Final Payment

Total accepted cost ----------	$7,270.32
Government participation at 75 percent ----	5,452.74
Total prior payments ----------	4,952.74
Balance due the Operator ----------	$ 500.00

E. N. HARSHMAN

E. N. Harshman

JDC:eh
cc: Ch. Op. Comm. (2)
Harshman
DMEA/DFC
Townsend
Corres. file, Reg. III
MF-104 file, Reg. III
Chron.

PAID $500.00
RRC
Randel R. Cooper
Authorized Certifying Officer
OCT 18 1957 DMA-58-47

Form 7
(-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-11	Chambers	800
10/14	C	220
"	EMM	900

OCT 11 1957

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

Re: Report of Review
Uranium Enterprises
Contract No. Idm-E1033
Docket No. DMEA-4389

Dear Mr. Brading:

The recently submitted copies of your Report of Review covering the above-cited project are accepted and normal distribution is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/wb
October 11, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 2 1957

DATE	INITIALS	CODE
10/2	C	220
10/2	[illegible]	800
"	FMM	700

September 30, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4389 (Uranium), Contract No. Idm-E1033, Uranium Enterprises, a Partnership and a Joint Venture (Mann No. 1 mine), Jefferson County, Colorado

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 made changes in ink to the hole numbers on the second page of the narrative report. However, from comparison with drill logs, it appears that the originally typed numbers were correct.

J. W. Townsend

J. W. Townsend

Enclosures

Maps & logs submitted w/ Operator's final report are in envelope

DMEA
DEPARTMENT OF THE INTERIOR
SEP 27 1957
REGION III
DENVER, COLORADO

FINAL EVALUATION REPORT
DMEA 4389
Contract Idm. E1033

Introduction: The purpose of this project was to explore the lower Dakota sandstone along the intersection of the damming fault as shown in the accompanying map and cross sections.

Uranium ore had previously been discovered in the upper Dakota sandstone adjacent to and in the footwall side of the damming fault. Uranium occurrences were found in the lower Dakota sandstone on the outcrop. It was then decided that the previously described objective was a worthwhile exploratory venture.

Work Performed: The project was started in March 1957 and was completed in June 1957 with the culmination of Hole #7. A total of 10 holes were drilled. One fence consisted of 4 holes, and two fences (one drilled on either side of the 4-hole fence) consisted of 3 holes each. (See map)

Description of Results: Only one hole (Hole #2) had measurable quantities of radioactive material in the lower Dakota sandstone. (See log cross section) That hole had a reading of 1.75 MR/hr. at 265 feet. This is convertible to 0.5 feet of 0.35% eU_3O_8. Adjacent holes in four directions, namely, Holes 1, 3, 9 and 6, showed no mineralization at this depth.

The middle fence of holes showed the greatest amount of radioactivity in the upper Dakota sandstone. Again, the fences north and south did not reflect such mineralization. A recapitulation of these holes is as follows:

Hole #3

Depth	% eU_3O_8
32-33	.05
33-34	.15
34-35	.07
35-36	.04
36-38	.05
38-39	.03
39-40	.01
40-42	.07
42-43	.05

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DMEA
RECEIVED OCT 2 1957
DATE | INITIALS | CODE

OP. 15 FINAL Rep.

Hole #~~6~~ 2
(continued)

Depth	% eU308
43-44	.05
44-45	.05
45-46	.05
46-50	nil
50-52	.02
52-56	nil
56-58	.05

Hole #~~6~~ 1

40-42	.03
42-46	.04
46-50	.05
50-52	.02
52-54	.01
93-94	.09

Hole #~~4~~ 4

50-52	.05
52-54	.08
54-55	.14
55-56	.06

From the above data and a careful study of the gamma ray logs there appeared to be an increase of mineralization to the west. In view of this, the operator decided to explore west of these holes and drilled #11 as shown on the map updip from and between Holes 3 and 7. The results of this hole were discouraging inasmuch as almost no radioactivity was found. Enclosed in this report is a gamma ray log of that hole which shows a maximum reading 0.04% eU308 at a depth of 46 feet.

Conclusion: No ore was found, although traces were found in both the upper and lower sandstones. The average grade of mineralization was .04% eU308. From these results I must conclude the traces herein described must be a result of the ore body shown on the map, and that no additional ore is in evidence.

Respectfully submitted,

URANIUM ENTERPRISES

Elliot Goldstein

Elliot Goldstein

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10/2 | C | 220
Murphy | 100

224 New Customhouse
Denver 2, Colorado

September 30, 1957

Memorandum

To: T. K. Brading, DMEA Auditor

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

Subject: Docket No. DMEA 4389 (Uranium), Contract No. Idm-E1033, Uranium Enterprises, a Partnership and a Joint Venture (Mann No. 1 mine), Jefferson County, Colorado

Work under the subject contract has been completed and the Operator has rendered a final engineering and geologic report and a final accounting, 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 a Report of Review, of reported project costs, whichever the case indicates.

Exploration work or service completed on a Fixed Unit Cost basis consists of only incidental allowance on 2,960 feet of drilling.

The sum of $500.00 was withheld from reimbursement to the Operator in processing the final accounting report, which was for the month of June, 1957.

Original signed by
J. W. TOWNSEND

J. W. Townsend

JWT:prl

cc: Chmn. Op. Comm. (2)
Harshman
Townsend
Corres. file
Chron.

OFFICIAL FILE COPY
DMEA

224 New Customhouse
Denver 2, Colorado
September 3, 1957

9/5 G
9/6
220
800
700

Mr. Elliot Goldstein
Attorney in Fact
Uranium Enterprises,
2679 Arapahoe Street
Boulder, Colorado

Re: Docket DMEA-4389 (Uranium)
Contract Idm-E1033
Uranium Enterprises, a Partnership and a Joint Venture
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Form MF-104, Operator's Monthly Report and Voucher, for June, 1957, has been received in this office and is being processed for payment.

The project has been completed, therefore an amount of $500.00, is withheld from reimbursement, pending resolution of matters prerequisite to closing the account, which includes:

1. Rendering to the Government a final report as required under Article 7(c) of the contract form.

2. Release to this office of an Audit Report or Report of Review of the reported project expenditures by the Contract Administration and Audit Division, DMEA.

If you have any questions regarding the above, please feel free to contact this office.

Yours very truly,

Original signed by
E. N. HARSHMAN
E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

JDC:hmh
cc: Chmn. Op. Comm. (2)
Harshman
DMEA, DFC
Townsend
Corres.file, Reg. III
Chron

224 New Customhouse
Denver 2, Colorado

July 12, 1957

CHRONOLOGICAL FILE COPY
DMEA
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DATE	INITIALS	CO.
7/17	P.K.	220
7/19	[illegible]	800
~~K. FMM~~		~~700~~

Mr. Elliot Goldstein, Attorney in Fact
Uranium Enterprises
2679 Arapahoe Street
Boulder, Colorado

Re: Docket DMEA-4389 (Uranium)
Contract Idm-E1033
Uranium Enterprises, A partnership
and a joint venture
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

According to records available in this office, a part of the work outlined in the subject contract has not as yet been reported to the Government. The last Form MF-104, Operator's Monthly Report and Voucher, processed for payment was for the month of April, 1957, at which time holes 11 and 12, which were authorized by Amendment No. 2, remained to be completed. Please inform this office by return mail of the present status of the contract work.

If the balance of the authorized work has been completed, you should submit Form MF-104, Operator's Monthly Report and Voucher, to this office for payment, and as soon as possible thereafter you should submit to this office the original and four copies of a final report in conformance with the provisions of Article 7(c) of the contract form.

The period fixed in the contract on or before which the work was to be completed expired on June 30, 1957. Therefore, if the contract work has not been completed, and if it is your intention to complete the work, you should immediately submit to this office for consideration by the Government, the original and five copies of a request for extension of the completion period for such specific additional time as will be required.

If you do not desire to complete the balance of the authorized work, you should submit the original and five copies of a request that the contract be terminated in its present status without requiring completion of the balance of the work.

Your prompt attention in the matter is requested.

Very truly yours,

Original signed by
W. H. KING
W. H. King
Executive Officer, DMEA
Field Team, Region III

JDC:jy
cc: Chm. Op. Comm. (2)
Marshman
DMEA/DFC
Townsend
MF-104 File
Corresp. File E1033
Chron.

w/copy of relative memo 7/9/57 from W. W. Winkel

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
July 9, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: W. W. Winkel

Subject: Docket DMEA 4989 (Uranium) Contract Idm-K1033,
Uranium Enterprises (Mann No. 1 mine)
Jefferson County, Colorado -- Field Inspection

The subject property was visited on July 3, 1957, to determine if the drilling work was in progress.

The surface facilities, adjacent to Turkey Creek, were idle and had the appearance of being idle for several months. I then drove up an old access road to the top of the hogback directly above the old adit and looked for signs of drilling activities, but found them lacking, and no personnel around the property. I later asked Mr. Freedman, a partner in Grapevine Mines, Inc., about the property and was informed that there had been no activity around it for the past 90 days, or more.

W. W. Winkel
W. W. Winkel
Mining Engineer

WWW/mr
Idm-K1033
chron
cc: 9

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RECEIVED MAY 1[illegible] 1957

DATE		CODE
5/10		220
5/13		800
5/14	Murphy	700

224 New Customhouse
Denver 2, Colorado

May 6, 1957

Mr. Elliot Goldstein, Agent
Uranium Enterprises
2679 Arapahoe Street
Boulder, Colorado

Re: Docket DMEA-4389 (Uranium)
Contract Idm-81033
Uranium Enterprises, a Partnership and a Joint Venture
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Goldstein:

Form MF-104, Operator's Monthly Report and Voucher for March, 1957, has been received in this office and is being processed for payment.

We have received your letter of April 19, 1957, which explains why it was necessary to penetrate more than 10 feet into the Morrison formation in hole No. 3, the first hole drilled. We consider that the excess drilling in this hole was performed in good faith, and was necessary in order to definitely identify the Morrison formation, therefore no disallowance has been recommended for the excess drilling in hole No. 3. The reported cost including incidental allowance for excess drilling into the Morrison formation in holes 1, 2, 9 and 10 is disallowed as follows:

Hole No.	Penetration into Morrison formation	Allowable drilling into Morrison formation	Excess core footage
1	12 feet	10 feet	2 feet
2	28 "	10 "	18 "
9	20 "	10 "	10 "
10	19 "	10 "	9 "
		Total excess core drilling into Morrison form.	39 feet

In addition to the above, 40 feet of coring was performed in the upper part of hole No. 8 where non-core drilling is specified in the contract. This footage is acceptable to the Government as non-core drilling, therefore the difference between the core and non-core drilling rate for this footage is disallowed.

Accepted drilling footages for March, 1957 are as follows:

Core drilling	740	feet
Non-core drilling	1342	"
Total	2082	feet

You will be informed of the amounts disallowed by means of an Administration Audit Difference Statement which will be mailed to you by the Finance Office, Region III. Please make the necessary adjustment of units and costs in conjunction with the next reports submitted on voucher and accounting forms MF-104 and MF-104A.

Yours very truly,

Original signed by
E. N. HARSHMAN

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

JDC:HH
cc: Chmn. Op. Comm. (2)
Harshman
Konselman (2)
Townsend
Corres. File, Reg.III
Chron.

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

May 6, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 8 1957

DATE	INITIALS	CODE
5-8		220

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA-4389 (Uranium), Contract No. Idm-E1033
Uranium Enterprises, a Partnership and a Joint Venture
(Mann No. 1 mine), Jefferson County, Colorado

Enclosed are the Government's, Division and Audit copies of Amendment No. 2 to Contract Idm-E1033, which were forwarded by your letter of April 26, 1957, for signature by the agent of the Operator.

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

E. N. Harshman

E. N. Harshman

Encls.

FINAL DISTRIBUTION

MADE SEP 4 1957

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III
[redacted]
Administrative Audit Difference Statement

[redacted]

Date: [redacted]
Payee's
Reference: [redacted]

[redacted]

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ [redacted]

Difference $ _____

Amount Approved $ [redacted]

The reason for the difference was due to:

[redacted]

EXTRA COPY
DMEA
RECEIVED
DATE | CODE

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-III-B & F Form No. 4
4-15-52 D

224 New Customhouse
Denver 2, Colorado
September 3, 1957

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket-4389 (Uranium) Contract Idm-E1033, Uranium Enterprises, a Partnership and a Joint Venture, (Mann No. 1 mine) Jefferson County, Colorado - Operator's Monthly Progress Report for the month of June, 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended on the following basis, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Withhold an amount of $500.00 from reimbursement to the Operator pending resolution of matters which are prerequisite to closing the account. The project has been completed.

Reconciliation with Amount Reported by the Operator on Form MF-104 for June, 1957

Amount reported on Form MF-104 for June, 1957	$1,578.02
Government participation at 75 percent	1,183.52
Amount to be withheld	500.00
Balance due the Operator	$ 683.52

Remarks

Date of Report----------August 16, 1957
Date Received in Field Office----------
Date Received in Region Office----------August 28, 1957

Enclosures
JDC:kmh
cc: Chmn. Op.Comm. (2)
DMEA, DFC
Harshman) w/copy of Engr's
Townsend) report
MF-104 file, Reg.III
Chron

Original signed by
E. N. HARSHMAN
E. N. Harshman

DMEA
DEPARTMENT OF THE INTERIOR

REGION III

AUG 28 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
August 28, 1957

Memorandum

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

From: W. W. Winkel

Subject: Docket DMEA 4389 (Uranium) Contract Idm-E1033, Uranium Enterprises, a partnership and a joint venture, (Mann No. 1 mine) Jefferson County, Colorado -- Progress report for June 1957

The subject property was inspected on August 26, 1957. The inspecting engineer was accompanied by E. Goldstein, the company representative.

The last two holes, of the total of 10 scheduled holes, were drilled during the June reporting period and completed all scheduled drilling under the subject contract.

The operator claims payment for 400 feet of non-core drilling, 180 feet of core-drilling, 6.05 hours of bulldozer time, and 580 feet for incidental allowance.

The operator submitted in quintuplicate, for June 1957, a narrative report with map, lithologic logs, radiometric logs, forms MF-104 and MF-104A, and one copy each of the drilling contractor's invoice, and the bulldozer contractor's invoice. Other documentation to support the claim is not required by the contract.

All work has been performed and claimed in accordance with provisions of the contract and no contract maximums were exceeded. The first paragraph of the operator's narrative report states that holes Nos. 5 and 6 were drilled, whereas, the holes completed during the reporting period are Nos. 6 and 7.

During March 1957, holes Nos. 1, 2, 3, 4A, 8, 9, and 10 were reported as completed. During April 1957, hole No. 5 was reported as completed. During June 1957, holes Nos. 6 and 7 were completed. This completed the scheduled drilling under the subject contract.

The claim for June 1957 is the final claim under the contract. Payment of $808.51 or 75 percent of the amount claimed, $1,578.02 less $500.00 (amount withheld pending operator's final report, and the Report of Audit by the Contract Administration and Audit Division, DMEA.) is recommended for payment.

W. W. Winkel

WWW/mw cc: 6 Idm-E1033 chron

W. W. Winkel, Mining Engineer

Final Narrative Report
Docket # DMEA 4389 (Uranium)
Contract No. Idm-E 1033

This contract was completed on June 29, 1957. During the month of June holes #5 and 6 were drilled which now makes a total of 10 holes drilled under the contract which penetrated at least 10 feet of Morrison formation. One hole was drilled not under the contract to evaluate the mineralization found in the upper Dakota sandstone.

The only mineralization found in the lower Dakota sandstone was six inches of 0.21 U_3O_8 in hole #2. The offsetting holes to this mineralization failed to show any mineralization in the lower Dakota sandstone.

The mineralization encountered in the upper Dakota sandstone appeared to be increasing to the West. i.e. Hole #3, the furthest hole west, had the most mineralization. We therefore drilled a hole west of hole #3 to see if the trend would continue. Unfortunately this mineralization disappeared completely. This extra hole was not included in the DMEA program.

In conclusion, after studying the cuttings, cores, gamma ray logs and cross sections, it appears that no uranium ore is present in the lower Dakota sandstone. The upper Dakota mineralization is eratic and not continuous.

Respectfully submitted

Elliot Goldstein

Elliot Goldstein, Geologist
Uranium Enterprises
Attorney-in-fact

Month of June 1957
Docket DMEA 4389
Contract #Idm-E1033

Gamma Radiation - Hole #7

Depth	MR/hr.
0 - 3	.04
3 - 21	.02
21 - 22	.04
22 - 42	.02
42 - 44	.04
44 - 50	.02
50 - 54	.03
54 - 57	.05
57 - 65	.06
65 - 74	.02
74 - 76	.06
76 - 80	.12
80 -120	.01
120-127	.02
127-154	.01
154-156	.02
156-164	.01
164-166	.04
166-180	.02
180-186	.04
186-206	.02
206-208	.05
208-210	.02
210-212	.04
212-214	.02
214-217	.09
217-240	.02
240-242	.06
242-246	.02
246-250	.04
250-252	.02
252-255	.03
255-260	.02
260-266	.03
266-268	.04
268-275	.03
275-283	.02

Month of June 1957
Docket DMEA 4389
Contract #Idm-E1033

Gamma Radiation - Hole #6

Depth	MR/hr.
0 - 22	.01
22 - 28	.02
28 - 30	.04
30 - 32	.08
32 - 34	.05
34 - 40	.01
40 - 50	.02
50 - 52	.10
52 - 54	.20
54 - 55	.19
55 - 56	.10
56 - 70	.02
70 - 90	.01
90 - 93	.02
93 -168	.01
168-174	.02
174-178	.01
178-182	.02
182-226	.01
226-255	.02
255-271	.01
271-285	.02

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1957 Docket No. DMEA 4389 Contract No. Idn-B1033
Operator's Name URANIUM ENTERPRISES Minerals uranium
Address 2679 Arapahoe Street, Boulder, Colo.
Contract Amount, $ 11,700. Government Participation: 75 % Amount, $ 8,775.

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts: 580'	1340.00	5003.00	6343.00			
Drilling 75.62 hrs	75.62	22.90	98.52			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Fixed unit costs 280/ft.	162.40	666.40	828.80			
(8) Contingencies (specify):						
TOTALS	1578.02	5692.30	7270.32	1578.02	5692.30	7270.32

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/16/57 *Payee URANIUM ENTERPRISES
Per Elliot Goldstein Title Attorney in Fact

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

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

(Instructions on reverse)

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

$ 683.52

Signature (Authorized Certifying Officer)

Date 9/4/57 Vou. No. DMA 58-27

(See other side)

Note: Withhold 500.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1033 in accordance with the terms of the contract.

Signature W. W. Winkel ($ 808.51) Title Mining Engineer Date Aug. 28, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title acting Executive Officer Date SEP 3 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1957 Docket No. DMEA 4389 Contract No. IGM-81033
Operator's Name URANIUM ENTERPRISES Minerals uranium
Address 2579 Arapahoe Street, Boulder, Colo.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	540.00	159	2844.50	1018	2.79	1200	3.00
Non-Core: Churn	Ft.	800.00	400	3493.50	1942	1.80	3900	2.00
Auger								
Stripping								
Trenching								
Test Pits				98.50				
Roads and Trails	Hr.	73.62	6.05	98.52	7.05	12.50	8	12.50
Fixed unit cost	Ft.	152.40	580	828.80	2900	.28	4500	.28
Total Distributed Costs		1578.02		7270.32				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1578.02		7270.32				11,700.

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

Date August 16, 57 Operator URANIUM ENTERPRISES

Per Elliot Goldstein Title Attorney in Fact

Remarks:

W. W. Winkel

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

Hole #6

Drilled: 0'-200'
Cored: 200' - 290'

Description

Upper Dakota Sandstone

0-10	fine grained tan sandstone
10-15	fine grained tan and grey s.s. pyritic w/oil stain
15-20	lt. tan medium grained s.s.
20-45	tan medium grained s.s.
45-50	lt. tan medium gr. s.s. w/oil stain
50-60	dark grey medium grained s.s. w/oil stain
60-85	lt. tan to white medium grained s.s.
85-90	fine grained grey s.s.

Dakota Shale

90-200	black fissle shale and mudstone

Lower Dakota Sandstone

200-207	fine grained grey s.s.
207-208	interbedded black shale and fine grained s.s.
208-212	fine grained white s.s.
212-216	medium grained white porous s.s.
216-220	medium grained white s.s. w/pyrite
220-226	fine grained white s.s.
226-228	grey mudstone
228-229	red mudstone
229-231	fine grained grey s.s. w/oil in fractures
231-246	lost core
246-256	multi-colored fine grained s.s. w/iron stain
256-260	red s.s.
260-263	med. grained porous s.s.
263-264	fine grained grey s.s. w/pyrite
264-266	grey porous medium grained sandstone
266-270	lost core
270-276	medium grained s.s. w/much pyrite
276-280	lost core
280-284	coarse grained, soft, asphaltic s.s.

Morrison Formation

284-290	green and red sandstone and shale

Hole #7
Drilled: 0'-200'
Cored: 200'-290'

Description

Upper Dakota Sandstone

0-10	fine grained tan s.s.
10-15	fine grained tan & grey pyritic s.s. w/oil stain
15-20	lt. tan med. gr. s.s.
20-45	tan med. gr. s.s.
45-50	lt. tan med. gr. s.s. w/oil stain
50-60	dark grey med. gr. s.s. w/oil stain
60-87	lt. tan to white med. to fine gr. s.s.

Dakota Shale

87-196	black fissle shale

Lower Dakota Sandstone

196-202	med. grained grey s.s. w/oil stain
202-204	interbedded black shale & fine gr. s.s.
204-214	fine grained grey s.s. w/limonite filled pore spaces
214-220	fine gr. grey s.s. w/some pyrite and porosity and oil stain
220-223	fine grained grey s.s.
223-225	multi-colored fine grained s.s.
225-230	med. grained grey s.s. w/pyrite
230-231	red s.s.
231-238	med. grained grey porous s.s. w/some lumonite stain
238-239	fine gr. grey s.s. w/oil
239-240	red stained s.s.
240-243	med. gr. porous s.s. w/some iron stain
243-247	fine gr. grey s.s. w/pyrite
247-249	coarse gr. s.s. w/oil stain
249-261	lost core
261-264	fine gr.s.s.
264-270	medium to coarse gr. s.s. w/oil stain
270-275	fine gr. grey s.s.
275-285	lost core

Morrison Formation

285-290	red shales and mudstones

FINAL DISTRIBUTION
MADE MAY 23 1957

224 New Customhouse
Denver 2, Colorado

May 17, 1957

EXTRA COPY
RECEIVED
DATE
1957
CODE
5/27 FILE

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket 4389 (Uranium) Contract Idm-E1033 Uranium Enterprises, a Partnership and a Joint Venture, (Mann No. 1 mine) Jefferson County, Colorado - Operator's Monthly Progress Report for the month of April, 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for April, 1957, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Remarks

Date of Report----------May 2, 1957
Date Received in Field Office----------May 6, 1957
Date Received in Region Office--------May 16, 1957

Original signed by
E. N. HARSHMAN
E. N. Harshman

Enclosures
JDG:bh
cc: Chem. Op. Comm. (2)
Konselman
Harshman w/copy of Engr's report
MF-104 file, Reg. III
Chron.

EXTRA COPY
DMEA
RECEIVED 1957
DATE | CODE

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
May 15, 1957

Memorandum

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

Through: Albert S. Konselman ASK
Mining Engineer

From: D. E. Redmon

Subject: Docket DMEA 4389 (Uranium) Contract Ida-E1033, Uranium Enterprises, a partnership and a Joint Venture (Mann No. 1 mine) Jefferson County, Colorado -- Progress report for April 1957

The property was visited May 9, 1957, by D. E. Redmon, Bureau of Mines, accompanied by E. Goldstein, company representative.

Because of inclement weather in April, only one hole (No. 14) was completed.

The location of the hole collar was checked and is essentially as shown on the enclosed map. The core was checked against the lithologic log as submitted. It should be noted that the contact between the Dakota formation and the Morrison formation is not always easily discernable.

The operator reports the progress and costs as follows:

Non-core drilling 200 feet at $1.75/ft.		$350.00
Core drilling, 98 feet at $2.75/ft.		269.50
Fixed unit cost - 298 feet at $0.28/ft.		83.44
	Total	$702.94

The radiometric log indicates slight radioactivity in the interval 54-64 feet and possible significant radioactivity in the interval 87-89 feet.

The radiometric and lithologic logs, narrative reports, and maps are considered adequate.

It is recommended that the amount of $702.94, as reported, be allowed. Government participation at 75 percent would be $527.20.

D. E. Redmon
D. E. Redmon
Mining Engineer

DER/mr

104 (Rev.)
(1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1957 Docket No. DMEA 4339 Contract No. IC-51033
Operator's Name URANIUM ENTERPRISES Minerals Uranium
Address 2070 Arapahoe Street, Boulder, Colo.
Contract Amount, $ 11,700.00 Government Participation: 75 % Amount, $ 8,775.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling 299'	619.50	4530.75	5150.25			
Bulldozing	-0-	22.99	22.99			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Fixed unit costs 206/59	83.44	582.60	677.04			
(8) Contingencies (specify):						
TOTALS	702.94	5147.25	5850.19	702.94	5,147.25	5,850.19
				4-	157.89	157.89
				4,989.36		5,692.30
				$527.20		

RECEIVED MAY 27 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5/2/57 *Payee URANIUM ENTERPRISES
Per Elliot Goedstein Title Attorney in Fact

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
Signature (Authorized Certifying Officer)
Date 5/31/57 Voucher DMEA 57-126
(See other side)

1 Previous Disallowance

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1093 in accordance with the terms of the contract.

Signature N. E. Redmon 527 20 ANC Title Min. Engr. Date May 15-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE

Signature E. N. Hanlemann Title acting Executive Officer Date MAY 17 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

F-104A
(1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1957 Docket No. DMEA 4389 Contract No. Ion-R1039
Operator's Name URANIUM ENTERPRISES Minerals Uranium
Address 2679 Arapahoe Street, Boulder, Colo.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	269.50	95	2521.75	917	2.75	1200	3.00
Non-core Churn	Ft.	350.00	200	2528.50	1502	1.75	3300	2.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Mi.	-0-	-0-	22.90	1-5/8	12.50	8	12.50
Fixed Unit Cost	Ft.	83.44	298	677.04	2419	.28	4500	.28
TOTAL DISTRIBUTED COSTS		702.94		5850.19				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		702.94		5850.19				11,700.00

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

Date May 2, 1957 Operator URANIUM ENTERPRISES

Per Elliot Goldstein Title Attorney in Fact

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

REMARKS:

(Instructions on reverse)

(For Government use only)

RECEIVED MAY 27 1957 D.M.E.A.

INSTRUCTIONS

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

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

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

GPO 872894

Geological Consultants, Inc.

HIllcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

May 2, 1957

Mr. John F. Shaw
Room 137, Building 20
Denver Federal Center
Denver 2, Colorado

Re: Docket No. DMEA 4389
(Uranium)
Contract No. Idm-E1033

Dear Mr. Shaw:

Transmitted herewith are five sets of progress report for the month of April 1957 on the above DMEA contract.

Yours very truly,

URANIUM ENTERPRISES

By Elliot Goldstein
Elliot Goldstein

dm
Enclosures:
5 copies of Narrative Report
5 copies of Form MF-104
5 copies of Form MF-104A
5 maps
5 lithologic logs
1 strip radiometric log and 4 descriptive logs
1 driller's log
1 copy driller's invoice

Narrative Report
Month of April 1957
Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033

Due to extremely unfavorable weather conditions, only one hole was drilled and completed this month. That hole was No. 14, as shown on the accompanying map.

No uranium mineralization was encountered in the target area in this hole; however, some showings of uranium were found in the upper Dakota sandstone (see lithologic description and gamma ray log).

URANIUM ENTERPRISES

By Elliot Goldstein
Elliot Goldstein
Attorney in Fact

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D M E A
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DATE
CODE

Month of April 1957
Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises

Gamma Radiation. Hole #14

Depth (feet)	MR/hr.
0 - 26	.05
27 - 53	.025
54 - 55	.05
56 - 58	.10
59 -	.15
60	.20
61	.125
62	.10
63 - 64	.075
65 - 68	.05
69	.075
70 - 85	.05
86	.125
87	.25
88	.45
89	1.60
90	.05
91 - 105	.025
105 - 117	.05
118	.075
119	.10
120	.05
121 - 160	.025
161 - 176	.05
177 - 183	.025
184 - 198	.05
199 - 219	.025
220 - 223	.05
224 - 233	.025
234	.05
235 - 275	.025
276 - 280	.05
281 - 288	.025
289 - 294	.05

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DATE
1957
CODE

HOLE #14

Drilled: 0' - 200'
Cored: 200' - 298'

Description

Benton Formation

(feet)
0 - 14 Shaly sandstone

Upper Dakota Sandstone

14 - 66 Medium to coarse grained tan and gray permeable sandstone (uranium mineralization from 54' - 64')
66 - 69 Black shale
69 - 71 Sandy shale
71 - 73 Shaly sandstone
73 - 76 Fine grained gray sandstone
76 - 107 Medium to coarse grained gray sandstone (Uranium mineralization from 87' - 89')

Dakota Shale

107 - 210 Black fissle shale and mudstone

Lower Dakota Sandstone

210 - 215 Medium grained gray pyritic sandstone
215 - 217 Medium grained fractured pyritic sandstone
217 - 220 Medium grained sandstone
220 - 222 Interbedded sandstone and shale
222 - 229 Fine to medium grained gray sandstone
229 - 233 Fine grained porous sandstone
233 - 240 Medium grained gray permeable sandstone
240 - 247 Medium grained red and green sandstone
247 - 251 Fine grained gray sandstone
251 - 256 Red sandstone
256 - 267 Fine grained gray sandstone
267 - 272 Fine grained pyritic sandstone
272 - 276 Fine grained pyritic sandstone
276 - 281 Coarse grained ~~asphaltic~~ sandstone Pyritic
281 - 289 Coarse grained sandstone with some asphalt

Morrison Formation

289 - 298 T.D.

RECEIVED 1957 CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4-23	Murphy	700
4-23	Ellis	700
4-23	Chambers	800
4/26	Selfridge	130
"	Johnson	110
		~~100~~
4/29	C	230
		700

APR 26 1957

Mr. L. M. Marshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4389 (Uranium) 4/26 Williams
Contract No. Idm-21033
Uranium Enterprises and [illegible]
Mann No. 1 Mine
Jefferson County, Colorado

Dear Mr. Marshman:

In accordance with our teletype of April 8, 1957, enclosed are the original and five copies of the proposed Amendment No. 2, signed by the Administrator for the Government. Also enclosed for Field Team use are two extra copies of the amendment.

If you and the Operator find the amendment in order, have an authorized representative of Uranium Enterprises sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

W. P. Williams

Member, Geological Survey

FMMurphy/dlm 4-23-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

Government's Copy

Rubin
Dwyer
Sol. Off.
Murphy
Ellis
Chambers

of 7 or
6-1946

EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES
DOCKET NO. DMEA-4389

Amendment No. 2

It is agreed this _____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Uranium Enterprises, that Exploration Project Contract No. Idm-E1033, (Docket No. DMEA-4389), dated November 5, 1956, is further amended, effective November 5, 1956, as follows:

In "Exhibit "A" under Description of the Work, the second paragraph is revised to read as follows:

"The holes shall be drilled approximately at the locations numbered 1, 2, 3, 8, 9, 10, 11, 12, 13, and 14 on the map entitled 'Geologic Map and Section of Mann Mine,' attached to Amendment No. 2 and made a part of the contract. The spacing between the lines of holes shall be approximately 100 feet and the interval between holes on the same line shall be approximately 30 feet."

and Morrison Uranium Company, a joint venture,

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.

THE UNITED STATES OF AMERICA

By_____
Administrator, Defense Minerals
Exploration Administration

URANIUM ENTERPRISES
Morrison Uranium Company

By Elliott Goldstein

Title agent

~~Morrison Uranium Company~~

~~By~~

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

April 16, 1957

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises
Mann No. 1 Mine
Jefferson County, Colorado

JUSTIFICATION FOR AMENDMENT NO. 2

Drilling of 6 of the 10 holes allowed under the contract has shown the presence of a flat fault which has brought unfavorable Morrison siltstone in contact with the Damming fault in the area to be explored by Holes Nos. 4, 5, 6, and 7.

Holes Nos. 2 and 9 penetrated ore grade mineralization. Therefore, instead of drilling Holes Nos. 4, 5, 6, and 7, the Field Team and field examiners have recommended drilling one hole (No. 11) on the same line as No. 2 hole and drilling new holes Nos. 12, 13, and 14 on a new line about 100 feet SE of No. 2 hole.

The Rare and Miscellaneous Metals Division agree with conclusions of the Field Team and concur in its recommendations regarding the new locations of the four holes remaining to be drilled under the contract.

F M Murphy

F. M. Murphy

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 15 1957

DATE	INITIALS	CODE
4/15	C	220
~~4/15~~	~~Murphy~~	~~700~~

April 12, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4389 (Uranium), Contract No. Idm-E1033, Uranium Enterprises, a Partnership and a Joint Venture (Mann No. 1 mine), Jefferson County, Colorado

In reference to our memorandum of April 3, 1957 and your teletype of April 8, enclosed are ~~nine~~ 10 copies of a map entitled, "Geologic Map and Section of Mann Mine," showing the locations of holes 11, 12, 13, and 14, in conjunction with the proposed amendment.

E. N. Harshman

E. N. Harshman

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED APR 11 1957

DATE	INITIALS	CODE
4/11	C	220
	a Murphy	700

IN REPLY REFER TO:

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

April 10, 1957

Memorandum

To: E. W. Ellis, Defense Minerals Exporation Administration

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of proposed amendment to Uranium Enterprises exploration contract, DMEA Docket 4389.

The Field Team recommends amendment of the contract to change the location of some of the holes to be diamond drilled. The change is necessitated by an unforeseen fault that has affected the target area.

I concur with the Field Team and recommend that an amendment be drawn as they have proposed.

T. H. Kiilsgaard

T. H. Kiilsgaard

OFFICIAL FILE COPY
DMEA
RECEIVED APR 9 1957

DATE	INITIALS	CODE
4/10	C	220
		225

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

Date April 9, 1957

DMEA Docket No. 4389
DMEA Contract No. Idm-E1033
Commodity Uranium
Name of applicant Uranium Enterprises
Name of property Mann No. 1 mine
Location of property Jefferson County, Colo.
Estimated cost of project

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee
Subject: Review of Amendment to contract
(Application, Field Team Report, etc.)

1. Date of subject document: 4/3/57. 2. Date received by reviewer: 4/8/57

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

4. Other 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 needing 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)

dl MEA

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE
4/8	C	220
"	Murphy	700
Special		

DN 235 BUR MINES 4-8-57 1-13

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET NO DMEA 4389, CONTRACT IDM-E1033, URANIUM ENTERPRISES, OUR MEMORANDUM APRIL 3,1957. OPERATOR AWAITING GOVERNMENT S DECISION. PLEASE TELETYPE ADVICE.

E N HARSHMAN, ACTING EXECUTIVE OFFICER

Denver, Colorado

APR 8 3 42 PM '57

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/8	Murphy	700
"	[illegible]	700
4/8	Selfridge	130
"	[illegible]	110
"	[illegible]	100
4/9	[illegible]	220
		700

APR 8 - 1957

Department of the Interior

DMEA

11X4401(01) Revolving Fund,
Defense Production Act, Interior
(Transfer to Office of Secretary)

Lamb
Kiilsgaard

T E L E T Y P E

(Uranium)

E. N. HARSHMAN, ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REUTMEMO APRIL 3, DMEA-4389, CONTRACT IDEM-E1033, URANIUM ENTERPRISES. WILL PREPARE AMENDMENT RECOMMENDED UPON RECEIPT OF MAPS SHOWING NEW LOCATIONS OF DRILL HOLES.

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE (JHB)

FMMurphy/gla
4-8-57
cc to: Admr.'s Reading File
Operating Committee
T. H. Kiilsgaard, 5224
Code 700, Mr. Murphy
Confirmation to Region III

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE
4/5	C	220
		130
4-8	Murphy	700

April 3, 1957

AIR MAIL-SPECIAL DELIVERY

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4389 (Uranium), Contract No. Idm-E1033, Uranium Enterprises, a Partnership and a Joint Venture (Mann No. 1 mine), Jefferson County, Colorado

Enclosed are the original and two copies of the Operator's letter of March 29, 1957, with attached map, which constitutes a request for an amendment to the contract to change the locations of a part of the holes to be drilled.

Because of the presence of a flat fault which has brought unfavorable Morrison siltstone in contact with the Damming fault in the area to be explored by drill holes numbered 4, 5, 6, and 7, the Operator requests that these proposed holes be eliminated from drilling at the indicated locations and instead holes to be drilled elsewhere.

As an expedient to project operations, the Field Team approved verbally and the Operator is drilling new hole No. 11 at the location shown on the map attached to his letter instead of one of the holes that he requests to be omitted.

The Operator proposes to drill the three other holes that are to be omitted from the originally proposed locations at the locations indicated by holes numbered 12, 13, and 14 on his map.

The field examiners and this office are in complete accord with the Operator's proposal and since the field examiners can add little or no additional information in the matter considered to have an important bearing, a field report is not submitted.

In order not to delay the Operator and cause the incurring of added costs through stand-by time of the driller, please teletype advice

as to whether or not you are in accord with the recommended change in hole locations, if reply is affirmative we will forward additional copies of the map for use in conjunction with an amendment to provide for the change in hole locations.

E. N. Harshman

E. N. Harshman

Enclosures

Geological Consultants, Inc.
HIllcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE

MINERAL DEPOSITS
DMEA
RECEIVED
APR 3 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
DEPARTMENT OF THE INTERIOR
APR 3 - 1957
REGION
DENVER, COLORADO

March 29, 1957

Mr. E. Harshman
Defense Minerals Exploration Administration
Federal Center
Denver, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033

Dear Mr. Harshman:

We have as of this date completed holes numbered 1, 2, 3, 8, 9, and 10. Every hole has encountered mineralization in the upper Dakota sandstone. This mineralization is, in my opinion, of a sub-commercial nature. Holes numbered 2 and 9 encountered mineralization in the lower Dakota sandstone at a depth of approximately 270 feet. This interval places the mineralization 5 feet above the Morrison formation contact.

The DMEA program as set forth under the contract stipulates two fences of holes consisting of five holes in a fence. It also stipulates the holes to be drilled to 10 feet into the Morrison formation, which was originally calculated to be at approximately 400 feet. The Morrison formation in all of these holes has been reached at a depth of less than 300 feet. It appears that 100 feet of Dakota formation is missing in these holes. It is believed that the contact between the Dakota and Morrison formations is a fault contact. Due to the unexpected thinning of the Dakota formation, it now appears that holes numbered 4, 5, 6, and 7 are not necessary to test the zone which was previously considered our target area (see attached cross section). I feel that the lower portion of the lower Dakota sandstone has been tested, and one additional hole is necessary to test the upper portion of the lower Dakota sandstone along the fault plane. I, therefore, request that we be permitted to drill one hole 30 feet east of hole No. 1 in order to test this interval.

In view of the fact that holes numbered 2 and 9 encountered 1 foot of ore in the lower Dakota sandstone, I also request that we be permitted to drill three holes to test this mineralized zone. I propose that the three holes be located in a fence 100 feet south

and parallel to the fence on which holes 1, 2, and 3 are located. The first of these three holes would be located on the fence 15 feet east of the intersection of a line projected through holes 3 and 8. The second hole would be located on the same fence 15 feet east of the intersection of a line projected through holes 2 and 9. The third hole would be located on the same fence 15 feet east of the intersection of a line projected through holes 1 and 10.

The reason for this additional fence is based on knowledge obtained from our previous drilling program which resulted in the discovery of the upper Dakota ore body. The upper Dakota ore body is only 20 feet wide. Holes which were drilled close to this ore body and showed a foot of ore were offset 6 feet. Invariably the offset hole encountered uranium ore in commercial thickness. It can easily be demonstrated, therefore, that the encountering of 1 foot of ore in holes 2 and 9 is highly significant, especially since adjacent holes to these two mineralized holes are 30 feet away. We could conceivably have a 20 foot wide ore body in the lower Dakota sandstone and with the present spacing pattern straddle the deposit and not know of its existence. These additional three holes would split that 30 feet difference in an additional fence and either confirm or deny the possibility of such an ore body.

development drilling

economics

Very truly yours,

Elliot Goldstein

Elliot Goldstein

EG:dm
Enclosure

224 New Custom House
Denver 2, Colorado

EXTRA COPY
DMEA
RECEIVED MAY 13 1957

DATE	INITIALS	CODE
5-14		

March voucher

FINAL DISTRIBUTION MADE MAY 9 1957

Mr. Elliott Goldstein
Attorney in Fact
Uranium Enterprises a Partnership
2679 Arapahoe Street
Boulder, Colorado

Administrative Audit Difference Statement

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed	$ 5,147.25
Difference	$ 157.89
Amount Approved	$ 4,989.36

Forty feet of Dakota shale was cored in the upper part of hole No. 8, where non-core drilling is specified in the contract. This footage is acceptable at the non-core drilling rate. The difference between the reported cost and the non-core drilling rate is to be disallowed.

Disallowance, drilling

1. Cost of excess core drilling in holes 1, 2, 9 and 10; 39 feet @ $2.75/ft - $107.25
2. Difference between cost of core and non-core drilling in hole No. 8 for 40 feet of core drilling which is acceptable as non-core drilling.

   Reported cost of 40 feet core drilling @ $2.75 per foot- $110.00

   Acceptable cost at non-core rate, 40 feet @$1.75 per foot - 70.00

   Disallow - $ 40.00

Disallowance, Incidental Allowance

Amount reported, 2121 feet at total cost of - $593.60

Acceptable cost, 2082 feet at $0.28 per foot - $582.96

10.64

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

Naomi E. Stokes
Audit Section

224 New Customhouse
Denver 2, Colorado

May 6, 1957

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket-4389, (Uranium) Contract Idm-E1033
Uranium Enterprises, a Partnership and a Joint Venture
(Mann No. 1 mine)
Jefferson County, Colorado - Operator's Monthly
Progress Report for the month of March, 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

Except as otherwise indicated below, we consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended on the following basis, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

The contract stipulates that each hole shall be drilled approximately 450 feet or until it penetrates about 10 feet into the Jurassic Morrison formation, whichever is the lesser depth. Hole No. 3, the first hole drilled, penetrated 75 feet into the Morrison formation in the interval from 273 to 348 feet. The geologic section was much thinner than was anticipated, and the upper part of the Morrison formation was not definitely identified until the hole was completed, therefore we consider that the excess coring was necessary to assure that the overlying Dakota formation was completely penetrated. No disallowance is made for excess coring in this hole. A relative letter, dated April 19, 1957, from the Operator is attached to this memorandum.

Holes 1, 2, 9 and 10 each penetrated more than 10 feet into the Morrison formation. As these holes were drilled subsequent to hole No. 3, which established the approximate thickness of the Dakota formation, the excess coring in the Morrison formation is to be disallowed.

Hole No.	Penetration into Morrison formation	Allowable drilling into Morrison formation	Excess core footage
1	12 feet	10 feet	2 feet
2	28 feet	10 feet	18 feet
9	20 feet	10 feet	10 feet
10	19 feet	10 feet	9 feet

Total excess core drilling into Morrison form.39 feet.

Forty feet of Dakota shale was cored in the upper part of hole No. 8, where non-core drilling is specified in the contract. This footage is acceptable at the non-core drilling rate. The difference between the reported cost and the non-core drilling rate is to be disallowed.

Disallowance, drilling

1. Cost of excess core drilling in holes 1, 2, 9 and 10; 39 feet at $2.75/ft ——— $107.25

2. Difference between cost of core and non-core drilling in hole No. 8 for 40 feet of core drilling which is acceptable as non-core drilling.

Reported cost of 40 feet core drilling at $2.75 per foot	$110.00	
Acceptable cost at non-core rate, 40 feet at $1.75 per foot	70.00	
Disallow		$ 40.00

Disallowance, Incidental Allowance

Amount reported, 2121 feet at total cost of	$593.60	
Acceptable cost, 2082 feet at $0.28 per foot	582.96	
		10.64
Total Amount to be disallowed		$157.89

Reconciliation with Amount Reported by the Operator on Form MF-104 for March, 1957

Amount reported on Form MF-104 for March, 1957	$5147.25
Amount to be disallowed	157.89
Total accepted cost for March, 1957	4989.36
Government participation at 75 percent	$3742.02

Remarks

Date of Report——————————April 3, 1957
Date Received in Field Office——————April 5, 1957
Date Received in Region Office——————April 17, 1957
Reason for delay: Held in Region office pending execution of Amendment No. 2 which authorizes location of hole No. 4a.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures

JDC:hh
cc: Chmn. Oper. Comm. (2) } w/copy of Operator's letter, 4/19/57
MF-104 file, Reg. III
Kemmelman } w/copy Engr's report and Oper. letter, 4/19/57
Harshman
Townsend } w/copy Operator's letter, 4/19/57
Chron.

Geological Consultants, Inc.

HIllcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
APR 22 1957
REGION III
DENVER, COLORADO

April 19, 1957

Mr. E. Harshman
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

Re: Docket DMEA 4389 (Uranium)
Contract Idm-E 1033
Uranium Enterprises, a
Partnership and a Joint Venture,
(Mann No. 1 Mine)
Jefferson County, Colorado

Dear Mr. Harshman:

The purpose of this letter is to request payment specifically for Hole No. 3 (first hole drilled) under our DMEA program. It has been called to my attention by your office that the DMEA contract stipulates the holes shall core no interval greater than 10 feet into the top of the Morrison formation. Our first hole cored substantially more than the contract stipulated because of the unexpected thin characteristic of the Dakota formation. To be absolutely sure that we had penetrated the Morrison formation, we felt it was necessary to core to a depth of 348 feet. Had we cored only the interval suggested under the DMEA contract, we would not have known whether the red, green shales encountered at 270 feet were merely a shaly zone within the Dakota formation or actually the Morrison formation.

Your attention is called to the fact that it was anticipated that the Morrison formation in Hole No. 3 would not have been reached until a depth of 400 feet. Your office can, therefore, easily see why it was imperative to core to 348 feet.

Yours very truly,

URANIUM ENTERPRISES

By Elliot Goldstein
Elliot Goldstein
Attorney in Fact

EG:dm

DMEA
DEPARTMENT OF THE INTERIOR
APR 17 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
April 16, 1957

Memorandum

To: Acting Executive Officer, DMEA Field Team, Region III
Through: John F. Shaw
Supervising Mining Engineer

From: D. E. Redmon

Subject: Docket DMEA 4389, (Uranium), Contract Idm-X1033, Uranium Enterprises, a partnership and a Joint Venture, (Mann No. 1 mine), Jefferson County, Colorado. Progress report for March 1957.

The property was examined March 25, 1957, by D. E. Redmon, Bureau of Mines, and D. H. Richter, Geological Survey.

Seven holes were completed in March and the operator claimed 1,302 feet of non-core drilling and 819 feet of core drilling. The total amount claimed was $5,147.25.

According to Contract Idm-X1033, holes should be bottomed "about" 10 feet into the Jurassic Morrison formation.

A portion (about 130 feet) of the lower Dakota sandstone is apparently missing, probably due to faulting, thereby considerably reducing the section to be drilled.

Inasmuch as there was no previously known evidence to indicate that the lower Dakota sandstone was missing, it is believed that the operator was acting in good faith when drilling the first hole (No. 3). It is therefore recommended that 65 feet of excess core drilling into the Morrison formation in hole No. 3 be allowed.

Penetration of the Morrison formation in excess of 10 feet in subsequent holes will be disallowed.

A breakdown of drilling footages is as follows:

Hole No.	T.D.	Non-core drilling	Core drilling	Core footage disallowed
3	348	220	128	---
* 8	298	137	161	40
2	297	190	107	18
9	291	185	106	10
1	290	190	100	2
10	298	190	108	9
4 (a)	299	190	109	—
Total	2121	1302	819	79

*Hole No. 8 was specified to be rotary drilled through the Dakota shale before coring. Therefore, the interval 24 feet to 64 feet is disallowed for cored footage but should be allowed at non-core rate, making a total of 1342 feet of non-core drilling.

39 feet of core drilling is disallowed for excess penetration of the Morrison formation. Costs to be allowed are as follows:

Independent Contracts:

Bulldozing access roads and drill sites 1 5/6 hrs. at $12.30/hr.	$ 22.90
Non-core drilling, 1342 feet at $1.75/ft.	$2,348.50
Core drilling, (819-79) 740 ft. at $2.75/ft.	2,035.00
Fixed unit cost, 2082 feet at $0.28/ft.	582.96
Total	$4,989.36

Information obtained by drilling indicates some uranium mineralization in the lower Dakota sandstone. The mineralization is about 1 foot thick and the eU_3O_8 content is .25 percent in holes No. 2 and No. 9.

Narrative report, radiometric and lithologic logs, and maps are considered adequate.

It is recommended that the amount of $4,989.36 be allowed. Government participation at 75 percent would be $3,742.02.

D. E. Redmon
D. E. Redmon
Mining Engineer

DER:jg
Enc.
cc: 6 - Idm-R1039 - Chron.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 1957 Docket No. DMEA 4389 Contract No. Ida-21039
Operator's Name URANIUM ENTERPRISES Minerals uranium
Address 2570 Arapahoe, Boulder, Colo.
Contract Amount, $11,700.00 Government Participation: 75% Amount, $8,775.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling 2121'	4530.75	-0-	4530.75	4383.50		4383.50
Bulldozing 1 hr. 50min	22.90	-0-	22.90	22.90		
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
fixed unit costs 28¢/ft	593.60	-0-	593.60	582.96		582.96
(8) Contingencies (specify):						
Totals	5147.25		5147.25	4988.36		4988.36

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 4/5/57 *Payee URANIUM ENTERPRISES
Per Elliot Goldstein Title Attorney in Fact

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$3742.02

Signature
(Authorized Certifying Officer)
Date 5/8/57 Vou. No. DMA 57-124
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1033 in accordance with the terms of the contract.

Signature D. E. Redmond 3742.02 Title Min. Engr. Date Apr. 17-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. N. Hansman Title acting Executive Officer Date MAY 6 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1957 Docket No. DMEA 4389 Contract No. 1Qm-R1053
Operator's Name URANIUM ENTERPRISES Minerals Uranium
Address 2679 Arapahoe Ave., Boulder, Colo.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	2252.25	819	2252.25	819	2.75	1200	3.00
non-core Churn	Ft.	2278.50	1302	2278.50	1302	1.75	3300	2.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Hr.	22.00	1-5/6	22.00	1-5/6	12.50	3	12.50
Fixed Unit Cost	Ft.	593.50	2121	593.50	2121	.28	4500	.28
TOTAL DISTRIBUTED COSTS		5147.25		5147.25				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5147.25		5147.25				11,700.00

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

Date April 10, 1957 Operator URANIUM ENTERPRISES

Per Elliot Goldstein Title Attorney in Fact

REMARKS:

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

(Instructions on reverse)

(For Government use only) W. E. Redman

EXTRA COPY
D M E A
RECEIVED MAY 13 1957
DATE | INITIALS | CODE

INSTRUCTIONS

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

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

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

GPO 872894

Geological Consultants, Inc.

HIllcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

April 3, 1957

Executive Officer, DMEA
Field Team, Region III
224 New Customs House
Denver 2, Colorado

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Monthly Progress Report

Gentlemen:

As of March 31, 1957, 7 holes have been drilled and completed according to the above captioned contract. These holes are numbers 1, 2, 3, 8, 9, 10, and 4a (see enclosed map and cross section). Hole No. 4a was not originally calculated in the contract, but permission was granted to drill 4a in lieu of Hole No. 4. Enclosed you will find a lithologic description of each hole, plus a gamma ray log of each hole. The total depths of the holes have been considerably less than originally anticipated due to either one of two causes. Either a section of lower Dakota sandstone is missing due to a fault contact at the point between the lower Dakota sandstone and the Morrison formation, or the section originally measured by W. T. Lee of the U.S.G.S. and described in Professional Paper 128 was erroneous. At this point I am inclined to believe the latter.

There have been some irregularities discovered along the lower Dakota-Morrison contact which could conceivably be a fault contact; however, I believe the irregularities are due to an unconformity between these two formations.

Holes Nos. 3 and 8 were the first holes drilled. Neither hole encountered uranium mineralization in the lower Dakota sandstone. Hole No. 3 encountered slight mineralization at a depth of 320 feet in the Morrison formation. I believe that this slight anomaly on the gamma ray log is due to the fact that the damming fault plane should have been traversed by this hole at that depth.

Holes Nos. 2 and 9 were the next holes drilled. Both of these holes encountered uranium mineralization in the lower Dakota sandstone. The mineralization is only a foot thick, and assay is being run now to determine actual grade. The eU308 as indicated by the gamma ray log is .25. The uranium mineralization

encountered in the lower Dakota occurs at approximately the depth at which the damming fault was projected to intersect these holes. Uranium mineralization was also found in the upper Dakota sandstone in both of these holes. The eU308 as indicated by the gamma ray ranges between .05 and .15 of 1%.

The next holes drilled were Nos. 1 and 10. Hole No. 1 showed very slight radiation in the lower Dakota sandstone and mineralization in the upper Dakota sandstone. Hole No. 10 showed slight mineralization in both of these same zones. Request was made at this point to drill Hole No. 4a which was granted, and in this hole mineralization was encountered at 280 feet in the lower Dakota sandstone. The drilling program so far has indicated that the lower Dakota sandstone does have uranium present in the area traversed by these exploratory holes. At this point it does not appear that the mineralization is of a commercial nature.

I wish to bring to the attention of the reader that these holes were drilled on 30 foot spacing. It is possible that an ore body exists in the lower Dakota along this particular fault plane. The slight mineralization discovered cannot be ignored; however, a 30 foot spacing pattern is too great to either definitely confirm or deny the existence of such an ore body. The previous drilling done on the property while exploring the upper Dakota ore body indicated at that time that 30 foot spacing was hazardous. The ore body discovered in the upper Dakota sandstone is only 20 feet wide, and had we drilled that ore body on 30 foot centers, it is conceivable that the deposit could have been straddled by these holes. A careful examination of the enclosed map will more clearly demonstrate this point.

Yours very truly,

URANIUM ENTERPRISES

By Elliot Goldstein
Elliot Goldstein
Attorney in Fact

EG:dm
Enclosures:
Form MF-104A
Form MF-104
7 gamma ray logs
7 lithologic descriptions
1 drilling bill
1 bulldozer bill
1 map

STATEMENT

Denver, Colo. February 27, 1957

M Uranium Enterprises

2679 Arapahoe -- Boulder, Colorado

IN ACCOUNT WITH

ART'S EXCAVATING CO.

ARTHUR J. SMITH
Rt. 2, Box 266
Golden, Colo.

PHONES
[redacted]
Coal Creek Canyon, Call [redacted] 1

Travel Time . . . . . $ .....

D-7

1 hr. 50 min Hours Worked at $12.50 per hour . . . . . $ 22.90

Total $ 22.90

HOLE #3 (1st hole drilled)

Drilled: 0' - 220'

Cored: 220' - 348' T.D.

Description

Upper Dakota Sandstone

(feet)

0 - 56	Coarse to medium grained tan and gray permeable sandstone. (Some uranium mineralization between 32' and 46')
56 - 59	Black shale
59 - 61	Sandy shale
61 - 63	Shaly sandstone
63 - 66	Fine grained gray sandstone
66 - 92	Medium to coarse grained gray permeable sandstone. (U3O8 mineralization at 85')

Dakota Shale

92 - 192	Black fissle shale and mudstone

Lower Dakota Sandstone

192 - 200	Medium grained gray sandstone spotty oil stained and pyrite
200 - 202	Interbedded black shale and sandstone
202 - 218	Medium grained gray sandstone
218 - 222	Fine grained white to gray sandstone, pyrite in fractures
222 - 227	Fine to medium grained gray sandstone with much pyrite in fractures
227 - 229	Fine grained maroon sandstone
229 - 230	Maroon mudstone with limonite specks
230 - 232	White to gray fine grained sandstone with pyrite
232 - 235	Medium grained gray soft sandstone with dead oil
235 - 236	Highly fractured sandstone, much pyrite
236 - 239	Fine grained gray sandstone
239 - 242	Maroon sandstone
242 - 245	Fine grained gray sandstone
245 - 249	Fine grained gray sandstone with pyrite in fractures
249 - 272	Coarse grained permeable cross-bedded sandstone and some conglomerate, some oil stain
272 - 273	Heavily brecciated, fractured and pyritic
273 - 292	(Driller stuck in hole and lost core)

Morrison Formation @ 273 - Map interpretation (A.E.R.)

292 - 303	Interbedded red shales and sandstone
303 - 320	Red, green, gray shales and sandstones
320 - 321	Red shale
321 - 323	Gray fine grained sandstone
323 - 330	Red, black and green shales
330 - 331	Gray sandstone
331 - 332	Red shale
332 - 348	Interbedded green, red and gray shale

HOLE #8 (2nd hole drilled)

Drilled: 0' - 25'
Cored: 25' - 65'
Drilled: 65' - 176'
Cored: 176' - 298' T.D.

Description

Upper Dakota Sandstone

(feet)

0 - 56	Coarse to medium grained tan and gray permeable sandstone. (Some uranium mineralization between 36' and 48')
56 - 59	Black shale
59 - 61	Sandy shale
61 - 63	Shaly sandstone
63 - 66	Fine Grained gray sandstone
66 - 92	Medium to coarse grained gray permeable sandstone (U308 mineralization at 88')

Dakota Shale

92 - 192	Black fissle shale and mudstone

Lower Dakota Sandstone

192 - 202	Medium grained gray sandstone
202 - 203	Interbedded black shale and sandstone
203 - 218	Medium grained gray sandstone
218 - 223	Fine grained shaly sandstone with red stain and pyrite
223 - 230	Fine to medium grained tan sandstone
230 - 233	Gray sandstone with red clay
233 - 239	Fine to medium grained gray sandstone
239 - 249	Sandstone with green and red clay
249 - 253	Coarse grained sandstone
253 - 256	Conglomerate
256 - 259	Coarse grained sandstone
259 - 261	Clay
261 - 272	Coarse grained sandstone
272 - 274	Conglomerate
274 - 280	Coarse grained sandstone
280 - 284	Fine grained shaly sandstone
284 - 293	Medium grained sandstone

Morrison Formation

293 - 298	T.D. Red shale

HOLE #2 (third hole drilled)

Drilled: 0' - 190'

Cored: 190' - 297' T.D.

Description

Benton formation

(feet)
0 - 12 Fine grained silty shale

Upper Dakota Sandstone

12 - 62 Medium to coarse grained tan and gray permeable sandstone (uranium mineralization from 45'-55')
62 - 65 Black shale
65 - 67 Sandy shale
67 - 69 Shaly sandstone
69 - 72 Fine grained gray sandstone
72 - 101 Medium to coarse grained gray sandstone. (uranium mineralization from 94'-96')

Dakota Shale

101 - 198 Black fissle shale and mudstone

Lower Dakota Sandstone

198 - 199 Fine grained gray sandstone with much pyrite
199 - 208 Medium grained gray sandstone and some pyrite
208 - 210 Interbedded sandstone and black shale
210 - 218 Medium grained black sandstone
218 - 223 Medium grained, gray porous sandstone with much pyrite
223 - 230 Medium grained, soft, gray sandstone
230 - 238 Multi-colored fine grained sandstone with red and green clay
238 - 241 Red medium grained sandstone
241 - 257 Fine grained fractured pyritic sandstone
257 - 264 Fine grained gray sandstone
264 - 265 Medium grained sandstone - uranium mineralization
265 - 268 Coarse grained sandstone
268 - 269 Fine grained sandstone with much pyrite

Morrison Formation

269 - 297 T.D. Multicolored fine grained sandstones interbedded with shales

HOLE #9 (4th hole drilled)

Drilled: 0' - 185'
Cored: 185' - 291'

Description

Upper Dakota Formation

(feet)

0 - 57	Medium to coarse grained tan and gray permeable sandstone (uranium mineralization from 45' to 55')
57 - 60	Black shale
60 - 62	Sandy shale
62 - 64	Shaly sandstone
64 - 67	Fine grained gray sandstone
67 - 95	Medium to coarse grained gray sandstone

Dakota Shale

95 - 196	Black fissle shale and mudstone

Lower Dakota Sandstone

196 - 199	Fine grained sandstone with pyrite in vugs
199 - 201	Fine grained fractured pyritic sandstone
201 - 206	Medium grained gray pyritic sandstone
206 - 208	Interbedded sandstone and shale
208 - 221	Fine to medium grained gray porous and pyritic sandstone
221 - 224	Medium grained gray sandstone
224 - 233	Medium grained multi-colored sandstone with red, green, yellow clay
233 - 237	Fine grained gray sandstone
237 - 240	Fine grained green sandstone with red mudstone
240 - 244	Fine grained light green sandstone
244 - 247	Fine grained green and red sandstone
247 - 249	Gray porous sandstone
249 - 251	Fine grained red and green sandstone
251 - 254	Medium grained gray sandstone with much pyrite
254 - 257	Coarse grained gray sandstone
257 - 271	(lost core)

Morrison Formation

271 - 273	Green sandstone and shale and red shale
273 - 275	Speckled red sandstone
275 - 278	Red, green sandstone and shale
278 - 280	Green shale
280 - 285	Red sandy shale
285 - 288	Red and white sandstone
288 - 291	T.D. White fractured sandstone

[redacted]

[redacted]

March 30, 1957

5100 S. Floyd Avenue,
Englewood, Colorado

[redacted]
NW 1-8184

Uranium Enterprises
2879 Arapahoe Street
Boulder, Colorado

Re: D.N.A.A. Drilling Program
Hamm Lease, Morrison, Colo

I N V O I C E

Date	Hole	Work Performed	Footage Drilled	Footage Cored
2/1/57 to 2/7/57	# 3	Drilled 0' to 220'	220'	
		Cored 220' to 248' T.D.		128'
2/8/57 to 2/9/57	# 5	Drilled 0' to 24'	24'	
		Cored 24' to 64'		40'
2/10/57 to 2/11/57		Drilled 64' to 177'	113'	
2/14/57 to 2/16/57		Cored 177' to 302' T.D.		121'
2/16/57	# 2	Drilled 0' to 185'	185'	
2/17/57 to 2/19/57		Drilled 185' to 190'	5'	
		Cored 190' to 297' T. D.		107'
2/19/57 to 2/20/57	# 9 X	Drilled 0' to 185'	185'	
		Cored 185' to 288' T. D.		103'
2/21/57 to 2/24/57	# 1	Drilled 0' to 190'	190'	
		Cored 190' to 290' T. D.		100'
2/26/57 to 2/27/57	# ~~X~~ 10	Drilled 0' to 190'	190'	
		Cored 190' to 288' T. D.		108'
2/27/57 to 2/28/57	# ~~X~~ 4a	Drilled 0' to 190'	190'	
		Cored 190' to 294' T. D.		104'
		TOTALS	1,302'	819'

Footage Drilled w/ rotary bit 1,302' @ $ 1.75/ft ———— $ 2,278.50
Footage Cored w/ diamond bit 819' @ 2.75/ft ———— 2,252.25
TOTAL AMOUNT DUE CLAYTON PETROL. CO (March) $ 4,530.75

ACCEPTED and APPROVED this 1st day of April, 1957.

URANIUM ENTERPRISES

By Elliot Goldstein
Elliot Goldstein
Attorney in Fact

HOLE #1 (5th hole drilled)

Drilled: 0' - 190'
Cored: 190' - 290'

Description

Benton formation

(feet)

0 - 12	Shaly sandstone

Upper Dakota Sandstone

12 - 62	Medium to coarse grained tan and gray permeable sandstone (uranium mineralization from 50' - 55')
62 - 65	Black shale
65 - 67	Sandy shale
67 - 69	Shaly sandstone
69 - 72	Fine grained gray sandstone
72 - 101	Medium to coarse grained gray sandstone. (uranium mineralization from 72-78 feet)

Dakota Shale

101 - 198	Black fissle shale and mudstone

Lower Dakota Sandstone

198 - 205	Medium grained gray pyritic sandstone
205 - 207	Medium grained fractured pyritic sandstone
207 - 210	Medium grained sandstone
210 - 212	Interbedded sandstone and shale
212 - 219	Fine to medium grained gray sandstone
219 - 220	Brecciated sandstone
220 - 223	Fine grained porous sandstone
223 - 230	Medium grained gray permeable sandstone
230 - 237	Medium grained red and green sandstone
237 - 241	Fine grained gray sandstone
241 - 244	Red sandstone
244 - 246	Fine grained gray sandstone
246 - 257	Lost core
257 - 262	Fine grained pyritic sandstone
262 - 263	Coarse grained sandstone
263 - 266	Fine grained pyritic sandstone
266 - 271	Coarse grained heavily asphaltic sandstone
271 - 278	Coarse grained sandstone with some asphalt

Morrison formation

278 - 290	Multi-colored shales and fine grained sandstones.

HOLE #10 (6th hole drilled)

Drilled: 0' - 190'
Cored: 190' - 299'

Description

Benton formation

(feet)
0 - 15 Shaly sandstone

Upper Dakota Sandstone

15 - 71 Medium grained gray permeable sandstone
71 - 74 Black shale
74 - 76 Sandy shale
76 - 78 Shaly sandstone
78 - 105 Medium grained tan and gray permeable sandstone

Dakota Shale

105 - 207 Black fissle shale and mudstone

Lower Dakota Sandstone

207 - 216 Fine grained pyritic gray sandstone
216 - 218 Black shale interbedded with sandstone
218 - 222 Medium grained gray pyritic sandstone
227 - 228 Brecciated sandstone
228 - 231 Fine grained gray sandstone
231 - 236 Fine grained green, red and yellow sandstone
236 - 242 Fine grained gray sandstone
242 - 243 Medium grained sandstone
243 - 246 Fine grained pyritic sandstone
246 - 249 Fine grained red sandstone
249 - 254 Fine grained pyritic sandstone
254 - 259 Lost core
259 - 265 Fine grained sandstone
265 - 268 Fine grained sandstone
268 - 275 Coarse grained heavily asphaltic sandstone
275 - 278 Coarse grained asphaltic sandstone with pyrite
278 - 279 Coarse grained asphaltic sandstone with much pyrite

Morrison formation

279 - 282 Fine grained red, yellow and gray sandstone
282 - 285 Tan and red sandstone
285 - 292 Red shale
292 - 298 T.D. Sandstone and shale.

HOLE #4a (7th hole drilled)

Drilled: 0' - 190'
Cored: 190' - 299'

Description

Benton Formation

(feet)
0 - 15 Shaly sandstone

Upper Dakota Sandstone

15 - 71 Medium grained gray and tan permeable sandstone
71 - 73 Black shale
73 - 76 Sandy shale
76 - 78 Shaly sandstone
78 - 105 Medium grained gray permeable sandstone

Dakota Shale

105 - 207 Black fissle shale and mudstone

Lower Dakota Sandstone

207 - 216 Fine grained gray sandstone with pyrite
216 - 218 Black shale interbedded with sandstone
218 - 234 Fine to medium grained gray sandstone
234 - 239 Fine grained shaly sandstone with red, green staining - some pyrite
239 - 245 Fine grained gray sandstone
245 - 248 Fine grained gray sandstone and red sandstone
248 - 254 Medium grained gray sandstone
254 - 265 Medium grained sandstone with red, green and yellow stain
265 - 275 Coarse grained sandstone
275 - 289 Coarse grained gray sandstone with some asphalt Uranium mineralization at 280'

Morrison Formation

289 - 299 T.D. Multi-colored sandstones and shales

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

224 New Customhouse
Denver 2, Colorado

February 11, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 13 1957

DATE	INITIALS	CODE
2/13	C	220
	ed	130
	CJ	220
		700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4389 (Uranium), Contract No. Idm-E1033, Uranium Enterprises, a Partnership and a Joint Venture, (Mann No. 1 mine), Jefferson County, Colorado

Enclosed are the Government's, Division, and Docket copies of the subject Contract, which was forwarded by your letter of November 5, 1956, for signature by members of the partnership.

Also enclosed are the following:

1. Two copies of a letter from this office, dated February 7, 1957, whereby we forwarded the Operator's Copy of the Contract, report forms, and instructions relative to reporting on work performed under the Contract.

2. The original and ~~three~~ 2 copies of a Power of Attorney executed by the members of the partnership, designating Elliot Goldstein to act as Agent of the joint venture.

3. The original and two copies of Amendment No. 1, which has been executed to extend the date fixed for completion of the work from March 1, 1957 to June 30, 1957, and increases the maximum period for payment of royalty.

4. Four copies of the Operator's letter of February 5, 1957, relative to the start of work and extension of the date fixed for completion of the work.

A copy of a performance bond by the Operator has been attached to each copy of the Contract in lieu of Consent to Lien and Subordination Agreement by the National Farmers Union Property and Casualty Company. Page 1 of the Contract and Annex I were retyped to incorporate appropriate changes as we were instructed in your teletype of December 7, 1956.

The Contract, dated November 5, 1956, provides for an estimated total cost of the work amounting to $11,700.00, toward which the Government will contribute 75% of an allowable cost, or an amount not in excess of $8,775.00.

Copies of the Contract have been distributed to the Finance Office, Region III, and to others concerned.

W. M. Traver

Enclosures

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

FEB 7 - 1957

Mr. Elliott Goldstein
Attorney in Fact
Uranium Enterprises, a
Partnership
2679 Arapahoe Street
Boulder, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 13 1957

DATE	INITIALS	CODE

Re: Docket No. DMEA 4389 (Uranium)
Contract No. Idm-E1033
Uranium Enterprises, a Partnership Composed of L. E. Wolfson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Kiaeger, W. W. Longley, and Elliott Goldstein, and Morrison Uranium Company, a Joint Venture (Mann No. 1 mine), Jefferson County, Colorado

Dear Mr. Goldstein:

Enclosed herewith is the "Operator's Copy" of Exploration Project Contract No. Idm-E1033, Docket No. DMEA 4389.

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 Mr. John F. Shaw, Room 137, Building 20, Denver Federal Center, 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 to you 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 and approve your accounts, after which they will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 224 New Customhouse, Denver 2, Colorado, 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 Mr. Shaw or 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 MF-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 "Category (1)" and fixed unit costs for performing the remaining items of work or services. Under the provisions of Exhibit "A", the work under "Category (1)" is to be performed by subcontract. The costs recorded under item "(1)" on form MF-104 for such work must be supported each month by a signed copy of the billing from the subcontractor; or, submit for our records a certified copy of the subcontract agreement. Amounts reported on the basis of the "Fixed Unit Costs" require no documentation, as they are otherwise verified.

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 and 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 are indicated as approximate on the map, "Figure 3," 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.

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, DMEA, or by the DMEA 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, with a copy of your letter to Mr. Shaw.

Very truly yours,

Original signed by
W. M. TRAVER

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

Enclosures

JWT:prl

cc: Chairman, Op. Comm. (2)
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
Shaw
Townsend
Corres. file
Chron.

Geological Consultants, Inc.

Hillcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
FEB 6 1957
REGION III
DENVER, COLORADO

February 5, 1957

DMEA
FEB 1957
INITIALS

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

Re: Docket No. DMEA 4389
(Uranium)

Dear Mr. Traver:

Due to the long delay in securing the execution of Contract No. Idm E 1033, I hereby request an extension of the completion date for the work to be performed under said Contract to June 30, 1957.

Also due to previous commitments on the part of the drilling contractor, I would like an extension of the beginning date for the work performed to March 15, 1957.

Sincerely yours,

Elliot Goldstein

Elliot Goldstein

EG:dm

Department of the Interior

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

DMEA
14X1401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

FILE COPY
Surname:
Murphy
Fagal
Wilson
Selfridge
Johnson
Mitchelson

TELETYPE

DEC - 7 1956

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURTT DECEMBER 6, DOCKET 4389, URANIUM ENTERPRISES, PROPOSED CONTRACT IDM-E 1033. THE PERFORMANCE BOND IN LIEU OF CONSENT TO LIEN AND SUBORDINATION AGREEMENT WILL BE ACCEPTABLE. SUBSTITUTE CHANGE YOU PROPOSE IN ARTICLE 2(C) AND ALSO IN ANNEX I OF PROPOSED CONTRACT AND HAVE APPLICANT INITIAL, OR REWRITE NEW PAGES.

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE (2-B)

FMMurphy/izm 12-7-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Confirmation to Reg. III
Messrs. JECrawford, Rm. 3643
THKiilsggard, Rm. 5224
JOHosted, Rm. 3210, GSA
per. Conn.

12/6/56 Mr. George Selfridge

RECEIVED DEC 6 1956 D.M.E.A.

DN 235 BUR MINES 12-61-56 10-54

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 4389, URANIUM ENTERPRISES, PROPOSED CONTRACT IDM-E1033.

APPLICANT UNABLE TO OBTAIN EXECUTION OF OWNERS CONSENT TO LIEN AND SUBORDINATION AGREEMENT AND PROPOSES TO PROVIDE PERFORMANCE BOND IN THE AMOUNT OF $8,775.00.

IN THAT RESPECT, WE PROPOSE TO SUBSTITUTE IN ARTICLE 2/C/ OF CONTRACT--QUOTE, PERFORMANCE BOND IN THE SUM OF $8,775.00 IN LIEU OF OWNERS CONSENT TO LEIN, END QUOTE, FOR PRESENT RECITATION CONCERNING CONSENT TO LIEN AND SUBORDINATION AGREEMENT, SUBJECT TO YOUR CONCURRENCE. PLEASE TELETYPE ADVICE.

W M TRAVER

Denver, Colo.

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

December 4, 1956

Mr. Joseph M. Glickstein, Partner
Uranium Enterprises
Barnett National Bank Building
Jacksonville, Florida

Re: Docket DMEA 4389 (Uranium)
Proposed Contract Idm-E1033
Uranium Enterprises and
Morrison Uranium Company
(Mann No. 1 mine)
Jefferson County, Colorado

Dear Mr. Glickstein:

At the request of Mr. Elliott Goldstein, representing the captioned loan applicants, we transmit herewith, by certified mail, a courtesy copy of a proposed contract for your evaluation and acceptance.

Please return the courtesy copy of the contract promptly when it has served your purpose.

Very truly yours,

Original signed by
W. M. TRAVER

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

Enclosure
Copy to:
Elliott Goldstein
2679 Arapahoe Street
Boulder, Colorado
WMT:jy
cc: Sec.Op.Comm. (2)
Townsend
Harshman
Docket 4389
Chron.

11/30/56

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

CERTIFIED MAIL

224 New Customhouse
Denver 2, Colorado

November 28, 1956

RECEIVED 30 1956

Mr. J. N. Gelson
Foundation Associates
100 Park Avenue
New York 17, N. Y.

Re: Docket DMEA-4389 (Uranium) Proposed Contract Idm-K1033, Uranium Enterprises and Morrison Uranium Company, (Mana No.1 mine), Jefferson County, Colorado

Dear Mr. Gelson:

At the request of Elliott Goldstein, representing the captioned loan applicants, we transmit herewith by certified mail a courtesy copy of a proposed contract for your use in preparation of a Performance Bond.

Two copies of the Bond on Standard Form 25 are required and should be for the amount of $8,775.00 to cover the Government's participation. When received, Article 2(c) of all copies of the contract will be revised to recognize the bond in lieu of the Consent to Lien and Subordination Agreement stipulated therein.

Please return the courtesy copy of the contract promptly when it has served your purpose.

Very truly yours,

Original signed by
W. M. TRAVER

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

Enclosure
WMT/pw
Copy to: Elliott Goldstein
2679 Arapahoe St.
Boulder, Colo.
Sec.Op.Comm. (2)
Townsend
Chron

Harshman
DMEA-4389

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

RECEIVED
NOV 30 1956
D.M.E.A.

224 New Customhouse
Denver 2, Colorado

November 28, 1956

Mr. Elliott Goldstein
2679 Arapahoe Street
Boulder, Colorado

Re: Docket No. DMEA 4389 (Uranium),
Uranium Enterprises, a partnership composed of L. E. Wolfson, Joseph M. Glickstein, Carl McFarlin, Sr., Charles Block, Lewis M. Schott, Edward J. Klaeger, W. W. Longley, and Elliott Goldstein, and Morrison Uranium Company, a Joint Venture (Mann No. 1 mine), Jefferson County, Colorado - Proposed Exploration Project Contract No. Idm-K1033

Dear Mr. Goldstein:

Anticipating satisfactory resolution of all matters that are prerequisites to execution of the referenced proposed contract, it appears that a power of attorney should be executed by members of the joint venture designating an agent to act for the joint venture in all matters concerned with the contract.

For that purpose, there follows a sample power of attorney which, if properly executed by the parties concerned, should be acceptable to this office:

(Sample Power of Attorney)

"Power of Attorney

"We, the undersigned members of the joint venture, do hereby appoint _____ to act as the agent of said joint venture in all matters connected with the United States Department of the Interior, Defense Minerals Exploration Administration, Contract No. Idm-K1033, Docket No. DMEA 4389, and in behalf of said joint venture to submit to the Government all necessary

reports and information required under said contract; and said agent is authorized to receive individually and to receipt for any monies that are now or may hereafter become due to said joint venture by reason of said Contract No. Ism-21033.

RECEIVED
MAY 30 1956

"Executed in sextuplicate this _____ day of _____, 195_.

L. N. Walfson	Joseph M. Silverstein
Carl McFarlin, Sr.	Charles Block
Lewis M. Sebett	Edward J. Kissger
W. W. Longley	Elliott Goldstein

MORRISON URANIUM COMPANY

Attest:

By _____

Secretary, Morrison Uranium Company

Title _____ "

If the power of attorney is executed, please provide this office with the original signed instrument and five copies, or six photostats of the original signed instrument.

Very truly yours,

Original signed by
W. M. TRAVER

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

JWT:prl

cc: Chairman, Op. Comm. (2)
Marshman
Shaw
Townsend
Docket
Chron.

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

224 New Customhouse
Denver 2, Colorado

November 7, 1956

Uranium Enterprises
2679 Arapahoe Street
Boulder, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Uranium Enterprises & Morrison Uranium Co.
(Mann No. 1 Mine), Jefferson County, Colo.

Gentlemen:

Enclosed are the original and six copies of Consent To Lien and Subordination Agreement, to be signed by an authorized official of the National Farmers Union Property and Casualty Company which holds a Deed of Trust in the sum of $11,925.00 on the captioned property.

We are holding the contract in this office and it will be forwarded you for your signature upon receipt of the properly executed original and five copies of the attached Consent To Lien and Subordination Agreement.

Very truly yours,

Original signed by
W. M. TRAVER

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

Encls.

HMC:bh

cc-Sec. Op. Comm. (2)
Harshman
Townsend
DMEA-4389
Chron.

Surname copy 700

Murphy
Ellis
Champion
Selfridge
Johnson
Whitaker

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

NOV - 6 1956

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

Re: Docket No. DMEA-4389 (Uranium)
Uranium Enterprises and
Morrison Uranium Company
Mann No. 1 Mine
Jefferson County, Colorado

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed long-form contract signed by the Administrator for the Government, subject to the attachment of a Consent to Lien and Subordination Agreement by the National Farmers Union Property and Casualty Company, which holds a Deed of Trust in the sum of $11,925.00 on the subject property. Attached to each contract form MF-200 are Annex I (one page), a Consent to Lien and Subordination Agreement by the property owners, Exhibit "A" (three pages), and map, Figure 3. Also enclosed for Field Team use are two extra copies of Annex I, Exhibit "A," and the map.

If you and the Applicant find the proposed contract in order, please insert in Article 3 of the contract form the date work shall commence; then have the Uranium Enterprises partners and an authorized representative of the Morrison Uranium Company sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

If any part of the proposed contract does not meet with your approval and the Applicant's, then the original and all copies, including the extra copies, are to be returned to this office with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge
/ea/
Chairman, Operating Committee

APPROVED:

Frank D. [illegible] /ea/
Member, Bureau of Mines

N. E. Nelson /ea/
Member, Geological Survey

FMMurphy/gla 10-31-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, 3643
THKiilsgaard, 5224
JOHosted, 3210, GSA
Code 700
Mr. Murphy

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

OCT 29 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Rare & Miscellaneous Metals

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4389 (Uranium)
Uranium Enterprises and
Morrison Uranium Company
Mann No. 1 Mine
Jefferson County, Colorado

Pursuant to your request we have prepared the attached draft of contract.

Before an executed copy of the contract is delivered to the Operator, there should be obtained a Consent to Lien and Subordination Agreement from the National Farmers Union Property and Casualty Company which now has a prior lien for almost $12,000.00 on the property.

Robert P. Dwyer

PIndritz/wog
Copy to: Solicitor's Docket (2)
DMEA Docket
~~J.L.Simmons~~
E.W.Ellis (2)
R.P.Dwyer
P.Indritz
Chron.

DRAFT
10/18/56
FMMurphy/gla

DOCKET COPY

MF-200
(Revised June 1954)

Docket No. DMEA -4389

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] Uranium Enterprises, a partnership (see listing of partnersin Annex I) with Morrison Uranium Company, a Colorado corporation, a Joint Venture, whose mailing address is Uranium Enterprises 2679 Arapahoe Street, Boulder, Colorado, 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 3

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee 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 ....., 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: 12½% Royalty

(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: Owners Consent to Lien and Subordination Agreement

(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 March 1, 1957 (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."

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 $11,700.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $8,775.00: *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.

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.

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.*—

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

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10/18/56
FMMurphy/gla

EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES and
MORRISON URANIUM COMPANY
DOCKET NO. RMEA-4389

ANNEX I

The land referred to in Article 2 of the contract consists of the Northeast Quarter (NE¼) of the Southeast Quarter (SE¼) and the Southeast Quarter (SE¼) of the Northeast Quarter (NE¼) of section twelve (12), Township Five (5) South, Range Seventy (70) West, comprising 80 acres more or less, as recorded in book 643, page 450 of the records of Jefferson County, Colorado.

The Operator has possession of the land under a Mining Lease, dated November 10, 1955.

A copy of a Consent to Lien and Subordination Agreement, relating to the above-described land, signed by the owners' Joseph L. Mann and Fanny L. Mann is attached hereto and made a part hereof.

The location of the land is shown, in part, on the map entitled "Figure 3. Geologic map and section of the J. L. Mann Lease, Uranium Enterprises,---," attached hereto andmade part hereof.

EXPLORATION PROJECT CONTRACT
URANIUM ENTERPRISES and
MORRISON URANIUM COMPANY
DOCKET NO. DMEA-4389

EXHIBIT "A"

Description of the Work

General Provisions

The object of this project is to explore the Cretaceous Dakota formation by means of drill holes that shall penetrate the formation on each side of the Damming fault. The fault strikes northwest-southeast across the project area and dips approximately 50° to the southwest.

The holes shall be drilled at the locations approximately shown on map entitled "Figure 3" referred to in Annex I. The distance between the two lines of holes shall not be less than approximately 100 feet and the interval between holes on the same line not less than approximately 30 feet.

Each hole shall be drilled vertically to a depth of approximately 450 feet or until it penetrates about 10 feet into the Jurassic Morrison formation, whichever is the lesser depth. Holes No. 3 and No. 8 (Figure 3) shall be drilled non-core through the upper part of the Dakota shale, and cored the remaining depth. The zone or zones that will be core-drilled in the remaining holes will be determined by the supervising geologist, whose decision shall be based on the location and attitude of the Damming fault and the favorability of the host rock as indicated by the drill records of holes Nos. 3 and 8 which shall be drilled first.

The work shall consist of not more than 8 hours of bulldozer work to prepare access roads and drill sites and drilling not more than

ten (10) holes totaling 3,300 feet of non-core and 1,200 feet of core drilling. Not more than 40 samples shall be analyzed chemically for their U_3O_8 content.

Mineralized portions of the drill core shall be split, the Operator using one-half for assay purposes. The remainder shall be stored with the rest of the core for government inspection, in boxes properly identified as to hole number and with markers placed in the core sections to indicate the depth represented. The core shall be disposed of by the Operator when so authorized by the Government.

All holes shall be logged geologically and probed radiometrically by the Operator. Records of such logging and probing, together with the assay certificates of the core samples, shall be submitted with the Operator's monthly progress report, which shall also include a map or sketch showing the location of all holes drilled during the reporting period.

The Government will not participate in the cost of an incompleted hole; a hole that bottoms less than BX core size; nor of a hole that cannot be probed with standard radiometric testing equipment.

The bulldozing shall be done by a D-7 caterpillar dozer or equivalent unit.

The project shall be supervised by a qualified geologist or engineer.

The location of drill holes and access roads, the method of drilling, and the method of taking and storing samples shall be subject to Government approval.

Estimated Costs of the Project

Actual Costs

Category (1) Independent Contracts

Bulldozing access roads and drill sites, 8 hrs. @ $12.50/hr.	$100.00	
Non-core drilling, Bx size or larger, 3,300 ft. @ $2.00/ft (average cost per foot)	6,600.00	
Core drilling, Bx size or larger, 1,200 ft. @ $3.00/ft. (average cost per foot)	3,600.00	
TOTAL		$10,300.00

Categories (2) through (7) - None

Fixed Unit Costs

Incidental allowance[1] for each foot of drilling completed, 4,500 ft. @ $0.28/ft.	$1,260.00	
Chemical analyses for U_3O_8 content of 40 samples @ $3.50/sample	140.00	
TOTAL		$1,400.00

Total Estimated Cost of Project	$11,700.00
Government Participation @ 75%	$ 8,775.00

1/ Includes all costs whatsoever that are not included in the estimates for Category (1) Independent Contracts and for chemical analyses under Fixed Unit Costs, and is in lieu of all other costs, such as costs for supervision, office and field expenses, radiometric probing of holes, core boxes, sample containers, etc., which would otherwise be allowable under Categories (2) through (7) of the contract.

10-19-56

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

RECEIVED
OCT 19 1956

224 New Customhouse
Denver 2, Colorado

October 17, 1956

Memorandum

To: Chairman of the Operating Committee

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

Subject: Docket DMEA 4389 (Uranium) Uranium Enterprises (Mann No. 1 Mine) Jefferson County, Colorado

This responds to your letter dated October 10, 1956 on the subject docket.

Enclosed are the original and two copies of a letter from the Applicant, in which he agrees to pay royalty on production from the present ore body during the period a certification could be made, even though no ore is found as a result of DMEA work.

J. W. Townsend

J. W. Townsend

URANIUM ENTERPRISES
2679 Arapahoe
Boulder, Colorado

RECEIVED
OCT 19 1956

October 17, 1956

DMEA
DEPARTMENT OF THE INTERIOR
OCT 17 1956
REGION III
DENVER, COLORADO

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

Re: Docket No. DMEA 4389 (Uranium)
Uranium Enterprises

Dear Mr. Traver:

This is to confirm our understanding as set forth today by Mr. Townsend of your office, in that we, the Operators of the Mann Lease, or a subsequent operator of this property, will be required to pay to the Government a royalty on all ores mined and sold, as of the date of the proposed exploratory contract, and such time that the project is not certified as being a discovery.

If the project is certified as a discovery, the royalty will remain until the Government recovers its investment.

Sincerely yours,

Elliott Goldstein

Elliott Goldstein
Partner

EG prl

700

Mr. George Selfridge
10-18-56

RECEIVED
OCT 18 1956

BUR MINES DN 235 10-17-56 1-14 PM

CHAIRMAN, OPERATING COMMITTEE, DMEA

REURLET OCTOBER 10,1956 DMEA 4389 URANIUM ENTERPRISES APPLICANT AGREED TO PAY ROYALTY ON PRODUCTION FROM PRESENT ORE BODY DURING PERIOD OF CERTIFICATION. COPIES OF HIS LETTER BEING FORWARDED.

J W TOWNSEND, ACTING EXECUTIVE OFFICER

Denver, Colo.

OCT 11 1956

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

RECEIVED
OCT 11 1956

Date 10/10/56

DMEA Docket No. 4389
DMEA Contract No.
Commodity Uranium
Name of applicant Uranium Enterprises
Name of property Mann No. 1 Mine
Location of property Jefferson Co., Colorado
Estimated cost of project $11,680

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee
Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 9/20/56. 2. Date received by reviewer: 10/1/56.

3. Prior reports on this property known to reviewer: Yes [ ], No [x].

4. Prior reports on nearby properties known to reviewer: Yes [ ], No [x].

5. Information available on past production: Yes [ ], No [x].

6. Other pertinent factors known to reviewer: Yes [ ], No [x].

7. Explain items marked yes above:

8. Factors needing 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 [x]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [x]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary)
One-stage program of drilling recommended. Mr. J. O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

700

FILE COPY
Surname:
Murphy
Selfridge
Withdrawn

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

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

OCT 10 1956

Re: Docket No. DMEA-4389 (Uranium)
Uranium Enterprises
Mann No. 1 Mine
Jefferson County, Colorado

Dear Mr. Traver:

Reference is made to the final paragraph of the memorandum, dated September 20, 1956, by J. F. Shaw and E. M. Marshman, addressed to you, relating to the ground to be subordinated under the terms of the recommended contract.

We note that the field examiners estimate that the ore body presently being mined contains approximately 2,200 tons of 0.30 percent U_3O_8 ore. Has the Applicant agreed to pay royalty on production from this ore body during the period a certification could be made even though no ore was found as a result of DMEA work?

We have had complaints from operators about such payments. Therefore, if, in the present case, this question has not been clarified, it is suggested the Field Team consult with the Applicant in regard to the subject project area, and then advise this office.

We will hold the application in abeyance pending advice from you.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

FMMurphy/gla/izm 10-9-56 (10-5-56)
cc to: Docket
Code 700
Admr.'s Reading File
Operating Committee
Mr. Murphy
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Geological Consultants, Inc.

HIllcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

RECEIVED
OCT 11 1956

October 9, 1956

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

Attention, Mr. Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Re: Docket No. DMEA-4389 (Uranium)
Mann #1 Mine
Jefferson County, Colorado

Dear Mr. Ellis:

Enclosed you will find six "Consent to Lien and Subordination Agreement" forms signed by Mr. and Mrs. Mann.

If any additional information is needed, please let me know.

Sincerely yours,

URANIUM ENTERPRISES

By Elliot Goldstein
Elliot Goldstein

EG:dm
Enclosures 6
Via Air Mail

FILE COPY
SURNAME:

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

OCT - 3 1956

Uranium Enterprises
2679 Arapahoe Street
Boulder, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Mann #1 Mine
Jefferson County, Colorado

Gentlemen:

With reference to your above-docketed application which is presently being processed here in Washington, will you kindly obtain the signatures required and return the six enclosed "Consent to Lien and Subordination Agreement" forms as soon as possible.

Please request signers to indicate their address on the form.

Sincerely yours,

SIGNED

Ernest Wm. Ellis
Chief,
Rare and Miscellaneous Metals Division

Enclosures (6)

EWEllis/bih
10/2/56
cc to: Docket
Adm. Reading File
Code 700
DMEA Field Team, Region III (2)
Mr. Ellis

RGS.

10/3/56 gh

IN REPLY REFER TO:

RECEIVED
OCT - 2 1956

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

October 1, 1956

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of field examination report, DMEA 4389, Uranium Enterprises, Mann No. 1 mine, Jefferson County, Colorado.

The field examiners report that uranium ore is being produced from the subject property; and several drill holes that penetrate ore have previously been drilled on the property.

The Field Team recommends approval of an exploration drilling project that would search for ore in deeper strata that are cut by a fault. The fault zone is mineralized in the upper strata. Apparently no attempts have been made to drill for ore in the deeper zones. Evidence of deeper mineralization is given by the fact that a few tons of ore were mined at a point where the lower beds outcrop.

Because structural conditions would seem to be identical between the upper ore bearing zone and the deeper target area it appears that the proposed project would have a good chance of discovering new ore deposits. I, therefore, concur with the examining team's recommendations for approval.

There may be some criticism that the proposed holes, on 30 foot centers, are too closely spaced. The long, narrow ore bodies in the upper part of the fault zone could be missed by holes on 50 foot centers. In addition, vertical holes on 30 foot spacing would cut the fault plane on about 50 foot intercepts, measured along the plane of the fault.

W. P. Williams

W. P. Williams

9/28/56 gla

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

224 Customhouse
Denver 2, Colorado

September 24, 1956

Memorandum

To: Secretary to The Operating Committee

From: DMEA Field Team, Region III

Subject: Joint Report of Examination DMEA Docket 4389 (Uranium) Uranium Enterprises (Mann No. 1 mine) Jefferson County, Colorado

Enclosed are the original and three copies of a joint engineering and geologic report of examination on the subject property.

The examiners conclude that the structural and the stratographic conditions in the target area are similar to those in the upper Dakota sandstone where significant deposits of uranium ore are now being mined. They recommend a one-stage program of drilling at an estimated total cost of $11,680.00, Government participation $8,760.00. We concur in this recommendation.

Enclosed are 9 extra copies of figure 3, which accompanied the report of examination, for possible use in the contract.

Additional information furnished by the Applicant in an attempt to clarify the question of their joint ownership with Morrison Uranium Company, was forwarded your office September 7, 1956.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

RECEIVED
SEP 26 1956

Reviewed by
DMEA OPERATING COMMITTEE
9-28-56
(date)

ON-SITE EXAM. REPORT

TRANSMITTED

SEP 24 1956

IN REPLY REFER TO:
DMEA

DEPARTMENT OF THE INTERIOR
SEP 21 1956
REGION III
DENVER, COLORADO

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

September 20, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA Docket 4389 (Uranium), Uranium Enterprises, (Mann No. 1 mine), Jefferson County, Colorado

Enclosed are the original and 9 copies of a joint examination report by D. H. Richter, U. S. Geological Survey, and D. E. Redmon, U. S. Bureau of Mines, covering their examination of the subject property.

The applicant proposes to explore for uranium on the property by drilling 30 closely-spaced holes in three fences. The target is the intersection of a fault with sandstone beds in the lower part of the Dakota formation.

The examiners conclude that the structural and stratigraphic conditions in the target area are similar to those in the upper Dakota sandstone where significant deposits of uranium ore have been found and are being mined.

A single-stage program of drilling consisting of 10 holes in two fences, at an estimated cost of $11,680 is recommended.

We concur with the conclusions and recommendations.

The ground to be subordinated under the terms of the recommended contract includes the deposits of uranium ore now being mined in the upper Dakota sandstone. It appears that repayment of the Government's share in the proposed exploration program should include royalties from ore mined in the upper Dakota sandstone.

Reviewed by
DMEA OPERATING COMMITTEE
9-28-56
(date)

John F. Shaw, Supervising Mining Engineer

E. N. Harshman, Member, Field Team

Enclosures: (10)

ENHarshman:arh

FOR UNITED STATES GOVERNMENT USE ONLY

FOR UNITED STATES GOVERNMENT USE ONLY

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

TRANSMITTED

SEP 24 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 4389

Uranium Enterprises

Mann No. 1 mine

Jefferson County, Colorado

Uranium

Joint Engineering and Geologic Report

Reviewed by
DMEA OPERATING COMMITTEE
9-28-56
(date)

by

Donald H. Richter, Geologist
Geological Survey

Donald E. Redmon, Mining Engineer
Bureau of Mines

September 20, 1956

RECEIVED
SEP 26 1956

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ILLUSTRATIONS

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DMEA 4389

URANIUM ENTERPRISES
MANN NO. 1 MINE
JEFFERSON COUNTY, COLORADO

INTRODUCTION

On August 14, 1956, Uranium Enterprises applied for DMEA aid in exploring its leased Mann No. 1 mine property in Jefferson County, Colorado. On August 29, 1956, a Region III DMEA field team, composed of D. Richter, geologist, U. S. Geological Survey, and D. E. Redmon, mining engineer, U. S. Bureau of Mines, examined the property. As a result of this examination, the field team concluded that the property warranted further exploration, and approval of a modified program is recommended. The information on which this conclusion was based is presented in the following report.

SUMMARY OF REPORT

The property comprises about 80 acres. It is operated under a lease agreement in which the applicant, Uranium Enterprises, has a 60 percent interest, and Morrison Uranium Company the remaining 40 percent. The partner-owners of the applicant control Morrison Uranium Company by owning 73 percent of its outstanding stock.

The property is underlain by Dakota sandstones and shales of Cretaceous age and Morrison clastic sedimentary rocks of Jurassic age. The Dakota, in upward sequence consists of a lower sandstone 130 feet

thick, a shale 150 feet thick, and an upper sandstone 85 feet thick. A thin sandstone bed 10 feet thick parts the shale about 20 feet above its contact with the lower sandstone. A number of faults cut the sediments, the most prominent being the Damming fault. This fault appears to be an important factor in controlling ore deposition in this and a nearby property.

Uranium mineralization was found in the thin sandstone of the shale member, and 6 tons of ore, containing 0.21 percent U_3O_8 was mined from the outcrop. Significant amounts of higher grade material are present on the footwall side of the Damming fault along its intersection with the upper sandstone. This ore zone, as seen in underground workings and indicated by drill-hole data, is 800 feet long. It is partly developed through a crosscut tunnel and has yielded about 900 tons of ore containing 0.30 percent U_3O_8.

The applicant proposed to explore for possible extensions of the ore zone in depth by drilling 30 holes at a cost of $19,130. The objective is the intersection of the Damming fault with the thin sandstone of the shale member and the lower sandstone.

The examining team recommends further exploration but suggested a modified drilling program consisting of 10 holes, more widely spaced. The applicant indicated that he would agree to this change in program.

The estimated cost of the revised program is $11,680; the Government's participation, at 75 percent, would be $8,760.

ACKNOWLEDGMENTS

Mr. E. Grossman of the AEC furnished some data on preliminary ore reserve estimates. Mr. E. H. Goldstein furnished information on the relationship between Morrison Uranium Company and Uranium Enterprises, and geologic data from the private drilling program.

PROPERTY, LOCATION, PHYSICAL FEATURES

The Mann No. 1 mine property has an area of 80 acres. It comprises the SE 1/4, NE 1/4 and the NE 1/4, SE 1/4 of sec. 12, T. 5 S., R. 70 W., 6th P. M., Jefferson County, Colorado.

The property is reached by traveling east from Morrison, Colorado, one-half mile over paved U. S. Highway 285, then southeast 2 miles over an all-weather gravel-surface road to Turkey Creek water gap where the mine workings are (fig. 2).

The topography of the property is rough, the altitudes ranging from 5,700 to 6,300 feet.

The climate is semi-arid. Turkey Creek, a permanent stream, flows across the northwest corner of the property and can provide water for mining and domestic uses. There is no timber suitable for mining uses. Electric power is transmitted to the property over a 220-volt R.E.A. line. Labor, supplies, and living accommodations are available in nearby towns.

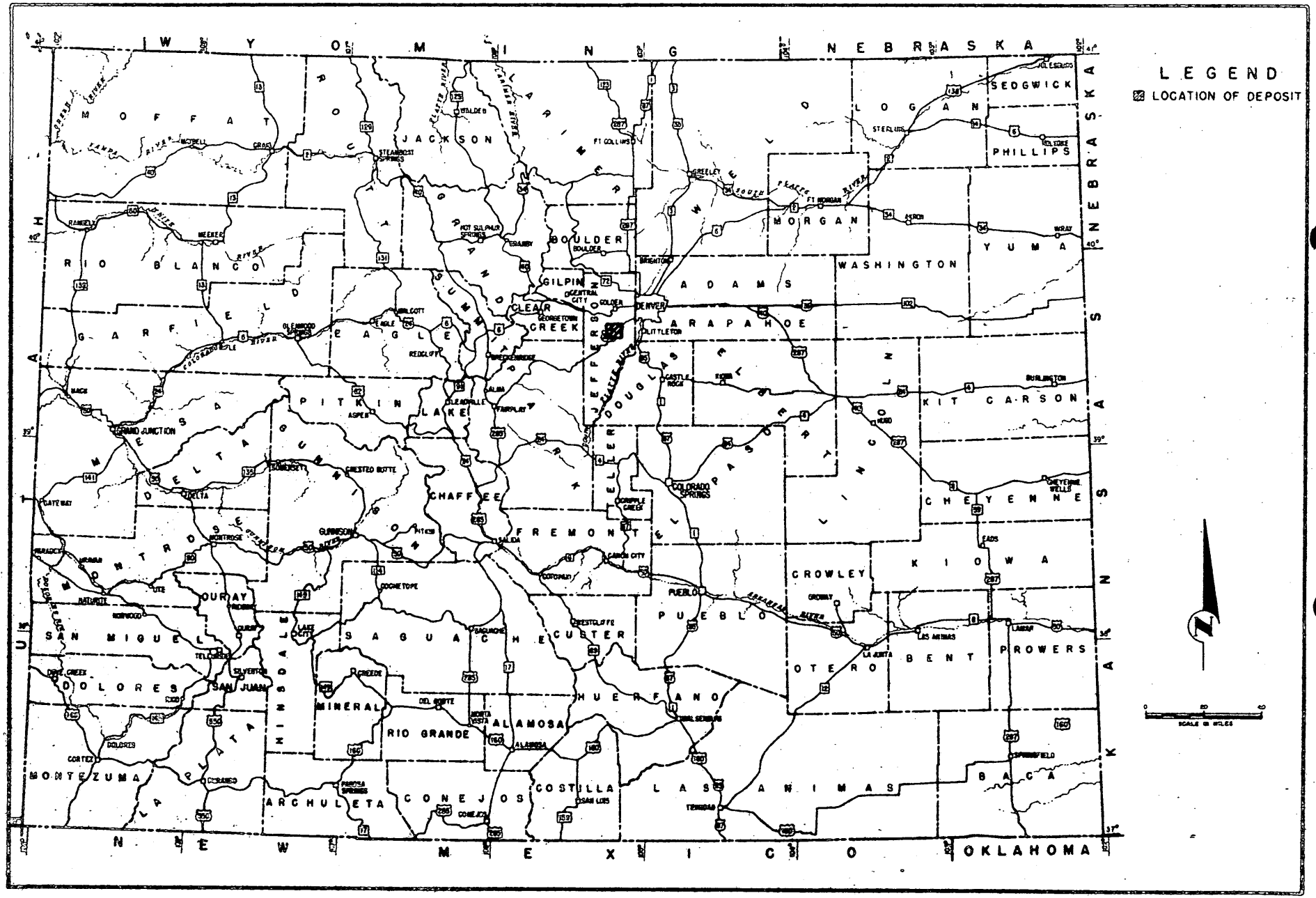


FIGURE 1 - LOCATION MAP, MANN No. 1 MINE, URANIUM ENTERPRISES, JEFFERSON COUNTY, COLORADO. DMEA 4389

OWNERSHIP, HISTORY, PRODUCTION

The property is owned by Joseph L. and Fanny Mann. They granted a mining lease to Morrison Uranium Company, a Colorado corporation, and Uranium Enterprises, a joint venture, in November 1955. The former concern received a 40-percent interest and the latter received 60 percent. In January 1956 the partner-owners of Uranium Enterprises purchased 73 percent of the outstanding stock of Morrison Uranium Company, thereby having full control of the lease.

According to Mr. E. R. Goldstein, the property was formerly operated by Morrison Uranium Company. This concern drove a tunnel into an outcrop where a radioactivity anomaly was found. Six tons of ore, containing 0.21 percent U_3O_8, was shipped from this work.

Subsequently, Uranium Enterprises, recognizing the possibilities of finding additional ore, drilled a number of exploratory holes in the Dakota formation. Ore-grade uranium mineralization was found along a fault zone near the upper Dakota sandstone-shale contact.

A tunnel and drift were then driven to further develop the ore-bearing zone. Nine hundred tons of ore containing approximately 0.30 percent U_3O_8 have been shipped.

PRESENT STATUS

The applicant is presently operating, and activities are mainly confined to extracting ore from the ore zone exposed along the Damming fault in the main tunnel.

No attempt has been made to determine the possible existence of uranium ore in the lower Dakota sandstone or Dakota shale.

EQUIPMENT AND FACILITIES

Equipment. The property has the following equipment:

1 - 365 cu. ft. capacity Sullivan compressor, 1939.

1 - Gardner-Denver No. 9 mucking machine.

1 - Atlas Copeo Pacific rock hammer with accessories.

1 - Atlas Copeo Pacific stoper, with drill steel.

1 - American General Purpose double-driver hoist, Model 25, 2,500 pounds pull at 180 ft. p.m.

1 - Steel ore bin, 40 tons capacity.

Miscellaneous hand tools.

Facilities. Electric power is transmitted to the property through a 220-volt REA line.

GEOLOGY AND URANIUM DEPOSITS

Uranium Enterprises property, the J. L. Mann lease, is on the prominent hogback 2 miles southeast of the small town of Morrison. The property is underlain by a series of consolidated sedimentary rocks ranging in age from Jurassic to Cretaceous. Unconsolidated alluvium covers the bedrock in Turkey Creek Canyon and on the eastern dip slope of the hogback (fig. 3).

The Dakota formation of Cretaceous age, which in this area consists of three distinct members, forms the hogback and is the principal rock formation exposed on the property. The Dakota formation unconformably overlies the Jurassic Morrison formation and is overlain by the Cretaceous Benton shale. The rock units and their thicknesses, compiled from sections measured by W. T. Lee _/ and

_/ W. T. Lee, U. S. G. S. Prof. Paper 149, 1927, pp. 27-28.

drill hole data supplied by E. Goldstein _/ are as follows:

_/ E. Goldstein, geologist, Uranium Enterprises.

	Feet
Cretaceous	
Benton formation	---
Dakota formation	
Upper sandstone - Tan medium-grained quartzose sandstone in part crossbedded. Asphaltic material and carbonized wood occurs along some of the bedding planes. Forms caprock of the hogback.	85
Shale - Dark-gray carbonaceous shale with numerous sandy beds. One 10-foot sandstone bed, which contained uranium mineralization at surface, is present 20 feet from base.	150
Lower sandstone - Tan medium-grained sandstone. Upper half is crossbedded and friable; lower half conglomeratic.	130
Jurassic	
Morrison formation	---

The sedimentary rocks have an average strike of N. 40° W. and dip between 25° and 36° to the northeast. The Damming fault, which strikes N. 40° to 45° W. (parallel to the bedding) and dips consistently 50° SW, is the only pronounced structural break on the property. Maximum vertical offset along the fault is only 4 feet; but horizontal slickensides on the fault plane indicate a much greater horizontal displacement. The fault is well exposed underground over a length of 260 feet at Uranium Enterprises workings and at the surface in the Turkey Creek water gap. This same fault is undoubtedly present at the Four Corners mine to the northwest giving it a total known length of about 1,000 feet. Thickness of the fault zone ranges from a thin gouge, less than 1 inch thick, to a fracture zone up to 2 feet wide. No mineralization, other than a clay alteration, has been noted in the fault.

Long, thin and discontinuous, deposits of uranium ore occur in the upper sandstone of the Dakota formation, immediately above the shale, along the footwall of the Damming fault (fig. 3). The ore bodies range in thickness from a maximum of 18 feet to an average of approximately 3 or 4 feet. The width of the bodies is also variable; minable ore, however, seldom occurs more than 20 feet down dip from the fault. Drilling by the applicant has established the length of the ore zone on Uranium Enterprises property to be at least 800 feet. No ore has been found in the upper sandstone along the hanging wall of the fault, and only one occurrence of ore, away from the fault,

is known. This deposit is in the thin sandstone unit of the shale member, where 6 tons of 0.21 percent U_3O_8 have been mined (fig. 3). The applicant's estimate of ore reserves in the upper Dakota sandstone is 12,000 tons of 0.30 percent U_3O_8. The Atomic Energy Commission, on the other hand, estimates a very conservative 1,500 tons of 0.52 percent U_3O_8, but admits that a resurvey of the deposit is needed. The writers have also estimated a conservative reserve for the deposit using a factor of 40 cubic feet of ore per linear foot of ore body. On this basis an ore body 800 feet long will contain approximately 2,200 tons. A value of 0.30 percent U_3O_8 is tentatively assigned to the ore.

Uraninite and uraniferous asphalt are the principal ore minerals in the deposit. Gangue minerals are pyrite and ilsemannite (?), a poorly defined hydrous molybdenum oxide. The uraninite, uraniferous asphalt, and ilsemannite (?) coat quartz grains, fill interstitial spaces in the sandstone, and in part are localized along fractures in the ore zones. The pyrite, on the other hand, usually occurs as small segregations in the ore commonly localized on crossbedding planes. Although some of the ore is relatively high grade (4.3 percent U_3O_8), the 900 tons that have been mined contained about 0.30 percent U_3O_8.

The uranium mineralization is in part very probably controlled by the favorable nature, either physical or chemical, of certain beds in the Dakota sandstone. It is also apparent that the Damming fault,

because of the close spatial relations between fault and ore, has in some manner effected the deposition of the uranium. Whether the fault zone acted as a channel for the mineralizing solutions or acted as an impermeable barrier to solutions moving along the upper sandstone, however, is at the present time a matter of conjecture. Whatever the case, both the lower Dakota sandstone and the sandstone in the Dakota shale, where cut by the Damming fault, are possible host rocks for uranium mineralization.

APPLICANT'S PROPOSAL AND COST ESTIMATES

The applicant proposes to drill 10 holes, spaced at 10-foot intervals along each of three rows, 100 feet apart. The holes are to be drilled with a plug bit and logged radiometrically. If ore is indicated in any one of the holes, the next hole is to be core-drilled through the indicated ore-bearing portion. The applicant's estimate of costs is as follows:

Item (Instruction 6)	Unit cost	Total cost
a. Independent Contracts:		
9,000 feet plug-bit rotary drilling	$1.75 a ft.	$15,750.00
300 feet core drilling	2.50 a ft.	750.00
(Previous drilling on the property cost the operator $3.00 and $2.00 a foot, respectively. With this amount drilling costs will be as shown)		
b. Geologist and expenses, 2 months	800.00 a mo.	1,600.00
c. Operating materials and supplies:		none
d. Operating equipment:		
Use of Mt. Sopiis Geiger counter. 500-ft. real and Esterline-Angus recorder (The operator previously paid $0.21 a ft. for the service)	0.10	930.00
e. Rehabilitation and repairs		none
f. New buildings, improvements, installations		none
g. Miscellaneous:		
Assays, accounting, etc.		100.00
h. Contingencies		none
Total		$19,130.00
Government participation at 75 percent		$14,247.50

The applicant proposes to furnish its share of the exploration expense as stated in answer to Instruction b, Form 102:

"1/4 portion of this loan will be spent by Uranium Enterprises in their providing a geologist for two months, their gamma-ray logging equipment, and the balance in cash."

RECOMMENDED EXPLORATION PROGRAM

The examining team recommends drilling 10 holes in two fences, no hole to exceed a depth of 450 feet or penetrate more than 10 feet into the Morrison formation, whichever is the lesser depth. Hole no. 3 and no. 8 (fig. 3) are to be non-core rotary-drilled through the upper part of the Dakota shale, and cored the remaining depth. From information obtained by drilling hole no. 3 and no. 8, the geologist can establish the location and attitude of the Damming fault and determine the most advantageous depth for the core drilling alloted to the remaining holes.

Estimated cost of exploration program

Estimated time for completion - 1 month

Estimated number of holes - 10

Estimated footage non core - 3,300

Estimated footage core - 1,200

1. Independent contracts:		
Bulldozing for drill sites 8 hrs at 12.50 an hr.		$ 100.00
Drilling, non-core, all ranges, 3,300 ft @ $2/ft.		6,600.00
Drilling, core minimum size BX, all ranges, 1,200 ft. @ $3/ft.		3,600.00
Total independent contracts		$10,300.00
2. Labor, supervision, technical services:		
Geologist's salary and expenses, 1 mo.		600.00
3. Operating supplies:		
120 core boxes @ $1.50 each		180.00
Sample containers 100 @ $0.10		10.00
Total operating supplies		190.00
4. Operating equipment		none
5. Miscellaneous:		
Probing holes, 4,500 feet @ $0.10		450.00
6. Analyses of samples		
40 samples @ $3.50 ea.		140.00
Total		$11,680.00
Cost a foot (Items 1-7)	$2.600	
Cost a foot, less analyses (Items 1-6)	$2.564	
Incidental allowance a foot (Items 2-5)	$0.276	

Summary of costs for contract use

Contract Item Actual costs	Unit	Maximum unit price	Units	Total cost
Bulldozing	1 hr.	12.50	8	$ 100.00
Non-core drilling	1 ft.	2.00	3,300	6,600.00
Core drilling	1 ft.	3.00	1,200	3,600.00
Assays	1	3.50	40	140.00
Incidental costs	1 ft.	0.28	4,500	1,240.00
Total				$11,680.00
Government participation at 75 percent				$ 8,760.00

Description of work

a. All holes shall be drilled with BX size, or larger bit.

b. The project will be supervised by a competent geologist. Geologic and radiometric logs shall be prepared for each hole.

c. Holes nos. 3 and 8 will be drilled first to obtain geologic information which will determine proper core intervals in subsequent holes.

d. A caterpillar D-7 dozer or equivalent shall be used to prepare drill sites.

e. Cores shall be retained in core boxes, logged, and where mineralization is evident the core shall be split with an approved type core-splitter. One-half of the split core shall be chemically assayed for U_3O_8, the other half retained for Government disposal.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the structural and stratigraphic conditions at the intersection of the Damming fault and the lower Dakota sandstone are similar to the conditions at the intersection of the fault and the upper sandstone where significant ore bodies have been discovered.

A program of exploration designed to explore this potential ore-bearing zone has been outlined above and is recommended for Government participation.

9/12/56 gla

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

RECEIVED
SEP 12 1956

September 7, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4389 (Uranium) Uranium Enterprises (Mann #1 Mine) Jefferson County, Colorado

Your letter dated August 7, 1956 on the subject docket requested clarification of the question of the joint ownership between the Applicant with Morrison Uranium Company.

The Applicant has submitted the following which are attached herewith:

1. Two copies of a letter dated August 30, 1956.

2. Two copies of an Operating Agreement dated April 6, 1955 between Morrison Uranium Company and Uranium Enterprises.

3. One copy of a list of Stockholders of Record of Morrison Uranium Company as of August 31, 1956.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

Geological Consultants, Inc.

HIllcrest 2-3640
2679 Arapahoe Street
Boulder, Colorado

August 30, 1956

RECEIVED
SEP 1 1956
Div. of Mineral Technology
BUREAU OF MINES
Denver Experiment Station
Denver, Colorado

Mr. John Shaw
Supervising Mining Engineer
Bureau of Mines, Building 20
Denver Federal Center
Denver, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Mann #1 Mine
Jefferson County, Colorado

Dear Mr. Shaw:

Reference is made to our telephone conversation of yesterday and your request for the Operating Agreement between Uranium Enterprises and Morrison Uranium Company. You will find enclosed four photocopies of this Agreement. The Lis Pendens referred to in this Agreement has been settled and is no longer of record.

Also, since the execution of this Agreement, the partners of Uranium Enterprises have purchased 71.97% of the outstanding stock of Morrison Uranium Company. A list of stockholders of record of Morrison Uranium Company as of August 31, 1956, signed by the Vice President and attested by the Secretary, is enclosed.

If any other documentation is needed by your office, please contact me, and I shall forward whatever you require.

I wish to express my appreciation for the prompt and efficient manner in which the property was inspected.

[illegible]

August 14, 1956

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg.III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4389 (Uranium) Uranium Enterprises (Mann #1 Mine), Jefferson County, Colorado

The application for Uranium Enterprises, DMEA 4389, in the amount of $19,130.00 was received in this office on August 14, 1956.

A field examination and suitable report will be prepared by an engineer from the Denver office.

WHK

JOHN F. SHAW

John F. Shaw

cc: W. M. Traver (2)
E. N. Harshman
J. F. Shaw
Sec. Op. Com. (2)

RECEIVED
AUG 17 1956

8/15/56

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

RECEIVED
AUG 15 1956

August 13, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With brochure)
E. N. Harshman

From: Field Team, Region III

Subject: Docket DMEA 4389 (Uranium) Uranium Enterprises (Mann #1 Mine), Jefferson County, Colorado

Enclosed is the subject application in the amount of $19,130.00. A field examination and suitable report are requested.

The Acting Chairman of the Operating Committee in his letter of August 7, 1956, copy of which is attached, calls attention to the unrealistic proposed drilling program of the Applicant. Also enclosed are memoranda of review of the application by N. E. Nelson and John E. Crawford.

Will you please return the brochure with the Report of Examination.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

HMC:ab

cc: Sec. Op. Comm. (2)
Docket 4389
Chron.

Surname copy

Docket

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

Murphy
Ellis
Martin
Hoffman

Mr. W. E. Traver
Executive Officer
DMEA Field Team, Region III
274 New Customhouse Building
Denver 2, Colorado

AUG - 7 1956

Re: Docket No. [illegible] (Uranium)
Uranium Enterprises
Mann #1 Mine
Jefferson County, Colorado

Dear Mr. Traver:

The captioned application is referred to Region III Field Team for investigation, a field examination if deemed advisable, and recommendation.

Enclosed are copies of memoranda, dated July 26 and August 1, 1956, by N. E. Nelson, USGS, and J. E. Crawford, USBM, respectively, relating to the application.

Also enclosed is an additional copy of the application consisting of: form MF-103 and answers (2 pages), a "Geologic Report - J. L. Mann Lease" (with 5 maps), and a copy of the lease dated November 10, 1955, relating to the subject property.

The drilling proposed by the Applicant (i.e., three fences of holes, the fences being 100 feet apart and each fence consisting of 10 holes drilled to 300 foot depths on 10-foot centers) does not appear to be economically realistic. Especially when experience in the mine indicates that the ore bodies are small. For example, if 300 tons of ore were found by the proposed work, the exploration costs would amount to about $64 per ton of ore. It is difficult to understand why the Applicant does not continue to explore the favorable areas from the existing underground adit and drift.

In the event the Field Team recommends a contract to explore the subject property, it should request the Applicant to clarify the question of their joint ownership with Morrison Uranium Company.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (SHB)

Enclosures

APPROVED:

FRANK D. LAMB (SHB)
Member, Bureau of Mines

N. E. Nelson (SHB)
Member, Geological Survey

Messrs. JECrawford, Rm. 3643
THKillsgaard, Rm. 5224
JOHosed, Rm. 3210, GSA

FMMurphy/ai 8-3-56
cc to: Docket
Admr.'s Reading File
Operating Committee
Code 700
Mr. Murphy

name copy
700

Murphy
Ellis
Nelson
Lamb
Martin
Hefner

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

AUG - 7 1956

Uranium Enterprises
2679 Arapahoe Street
Boulder, Colorado

Re: Docket No. DMEA-4389 (Uranium)
Mann #1 Mine
Jefferson County, Colorado

Gentlemen:

The application for assistance in exploring your property, 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. W. M. Traver
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,

G. O. Mittendorf

Administrator

FMMurphy/ai
8-3-56
cc to: Docket
Admr. Reading File
Code 700
Mr. Murphy
DMEA Field Team, Region III (2)

R.C.L.

8/2/56

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

August 1, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Application for Assistance, DMEA Docket 4389 (Uranium)
Uranium Enterprises, 2679 Arapahoe St., Boulder, Colorado

I have reviewed the attached application, DMEA Docket 4389, Uranium Enterprises, 2679 Arapahoe St., Boulder, Colorado, dated July 9 and received in this office on July 20, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant proposes that three fences of holes be drilled to test the property. The fences are to be 100 feet apart and each will consist of 10 holes drilled on 10-foot centers.

A review of the application indicates that it should be referred to the Field Team for appropriate action and that they consult with E. E. Thurlow, Manager, Denver Area office, Division of Raw Materials, AEC.

The spacing of the holes on 10-foot centers should not be given consideration for an exploration project.

John E. Crawford
John E. Crawford

Attachment

RECEIVED
AUG - 2 1956

7/27/56

IN REPLY REFER TO:

RECEIVED
JUL 27 1956

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

July 26, 1956

Re: DMEA 4389
Uranium Enterprises
Mann #1 Mine
Jefferson Co., Colo.
$19,130.00 - Uranium

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 prospecting by plug bit and core drilling lower Dakota sandstone beds which may be ore-bearing if postulated 'conduit' and 'damming' faults are present and localize mineralization as they appear to do in beds of the upper Dakota sandstone. A 600-foot long, 20-foot wide, and varying height orebody is indicated as occurring between the two faults in the sandstone at the base of the upper Dakota sandstone member. One fault is considered a dam, the other is interpreted and called a conduit or 'mineralizer'. Goldstein, E. H., Geologic Report, J. L. Mann Lease, Morrison, Colo., p. 4. Between Mar. 3, 1956 and May 14, 1956 307,502 dry tons of 0.293% U_3O_8 material was produced and shipped from the mine.

Based on the results obtained in the mine the applicant concludes that similar results may be obtained if a similar structure exists where the damming fault cuts the upper beds of the lower Dakota sandstone from a bed of which, at one place, 6 tons of 0.21% U_3O_8 material was mined.

As drawn the 2 faults will be over 100 feet apart at the top of the lower sandstone if both emerge from the 100 feet of shale beds that lie between the upper and lower sandstones, whereas in the mine the faults are about 20 feet apart. Another or other conduits similar to the conduit fault are not known but could be presumed.

The 10-foot center drilling is requested in order to thoroughly prospect for the damming fault at its projected intersection with the upper beds of the lower Dakota sandstone member. Immediately under the fault, it is hoped to find another or a series of narrow orebodies similar to that now being mined.

Obviously a number of hypothetical considerations are involved and the proposed work borders on prospecting, but work may be warranted.

Referral of the application to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

July 20, 1956

Uranium Enterprises
2679 Arapahoe Street
Boulder, Colorado

Subject: DMEA-4389
Re: Exploration Assistance
Mann #1 Mine

Gentlemen

The receipt of your application dated July 9, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4389 and referred to the Rare & Misc. Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

July 20, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

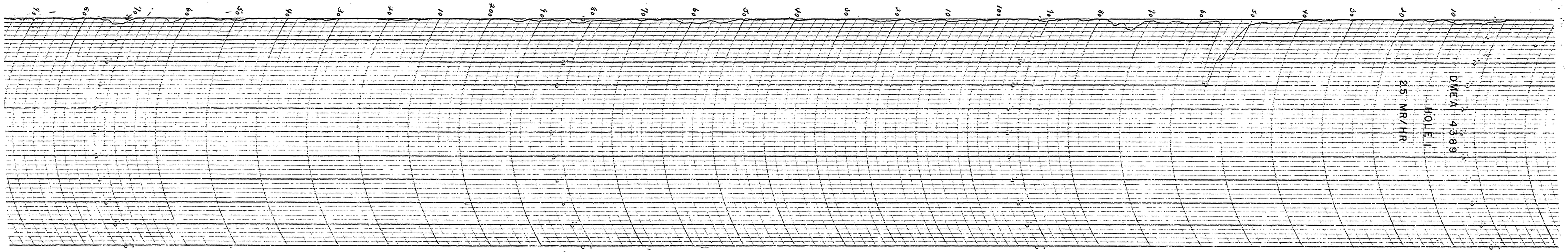
From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA -4389 Uranium Enterprises
Mann #1 Mine

Robert E. Adams
Chief, Operation's Control
and Statistics Division


DMEA 4389
HOLE 1
2.5 MR/HR
THE ESTERLINE-ANGUS CO., INC., INDIANAPOLIS, IND., U.S.A.
CHART NO. 4303-V

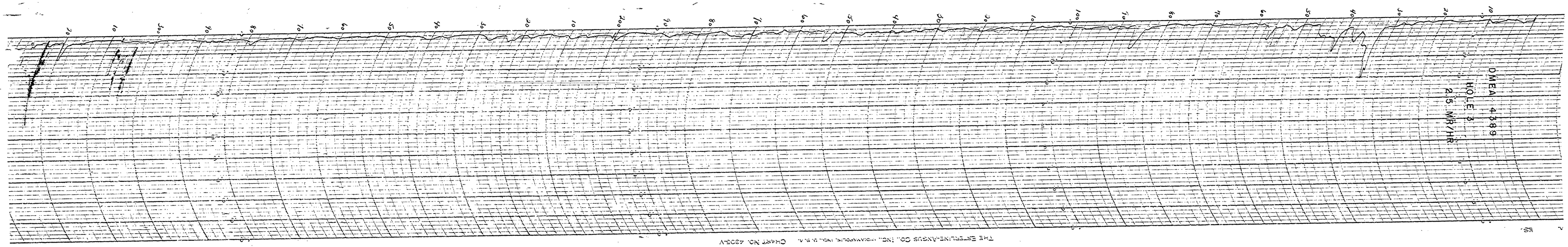

DMEA 4389
HOLE 3
2.5 MR/HR
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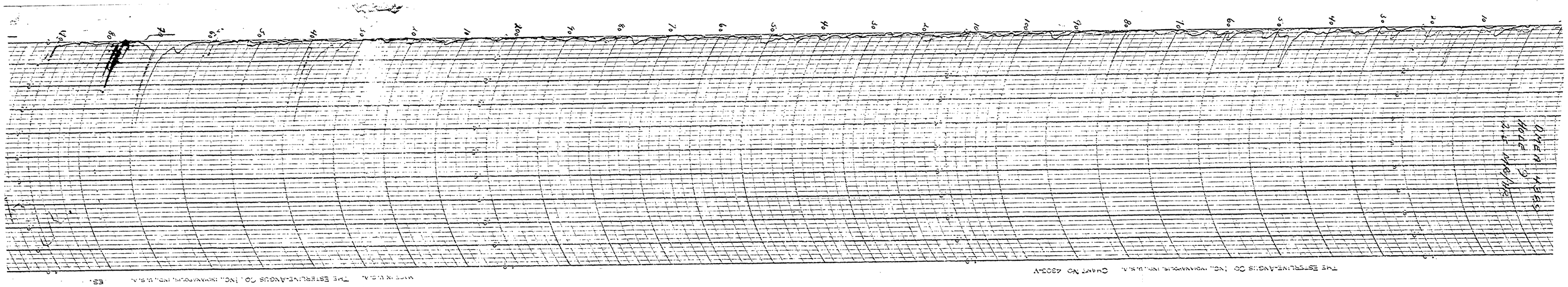
CHART NO. 4303-V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2.5 MR/HR
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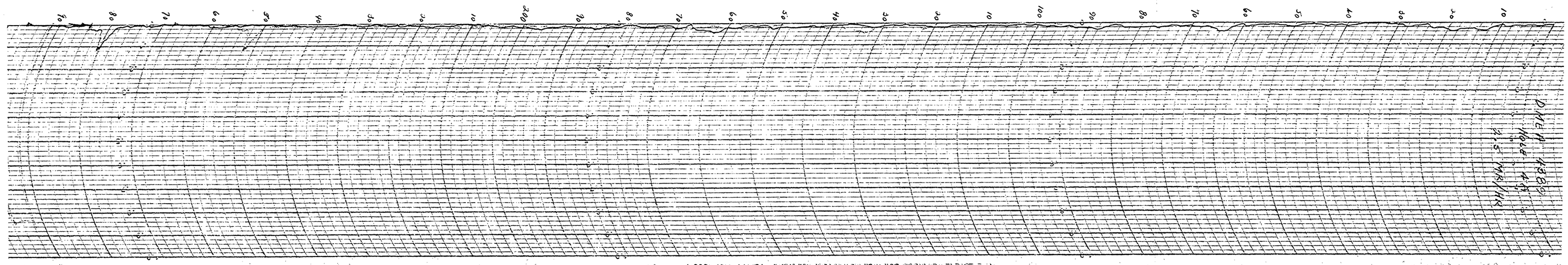
CHART NO. 4303-V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HOLE 4
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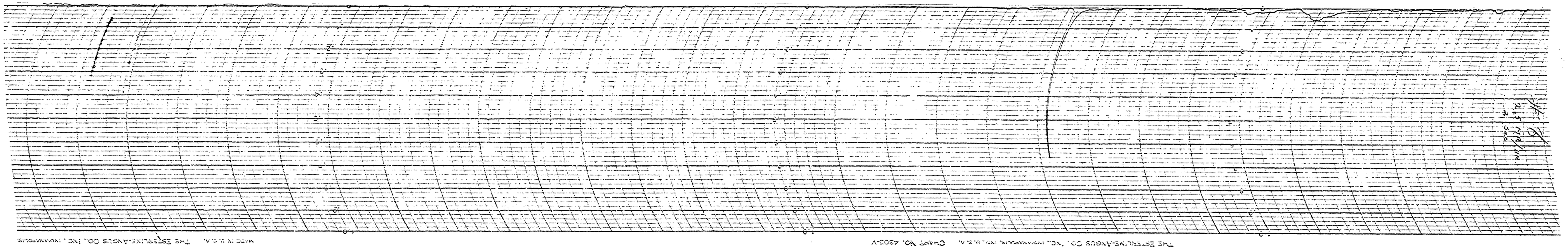
Hole 10
Scale 2
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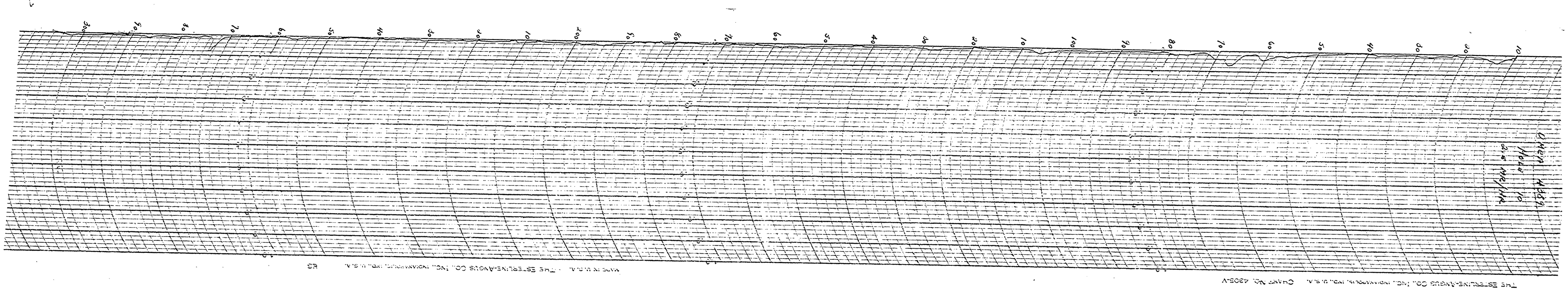
MADE IN U.S.A. THE ESTERLINE-ANGUS CO., INC., INDIANAPOLIS


DMEA 4389
Hole 10
2.5 MR/HR
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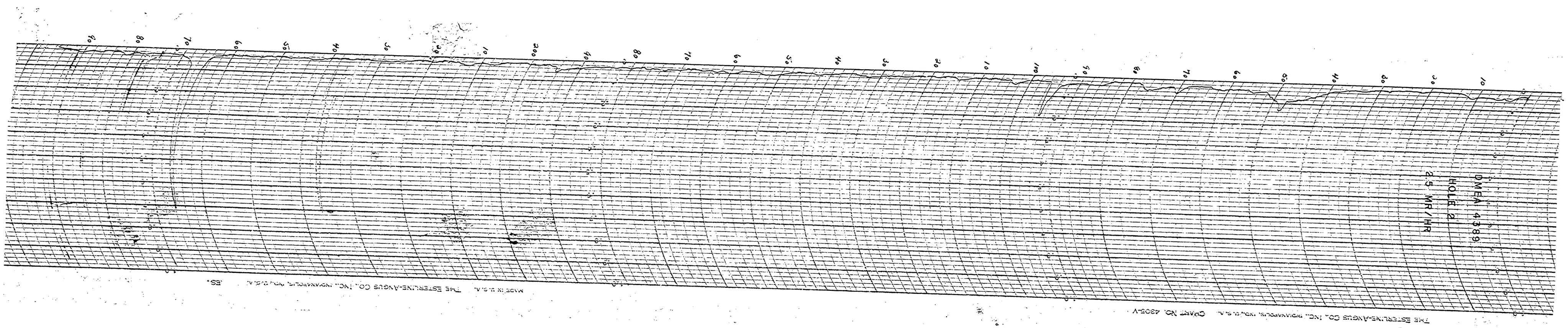
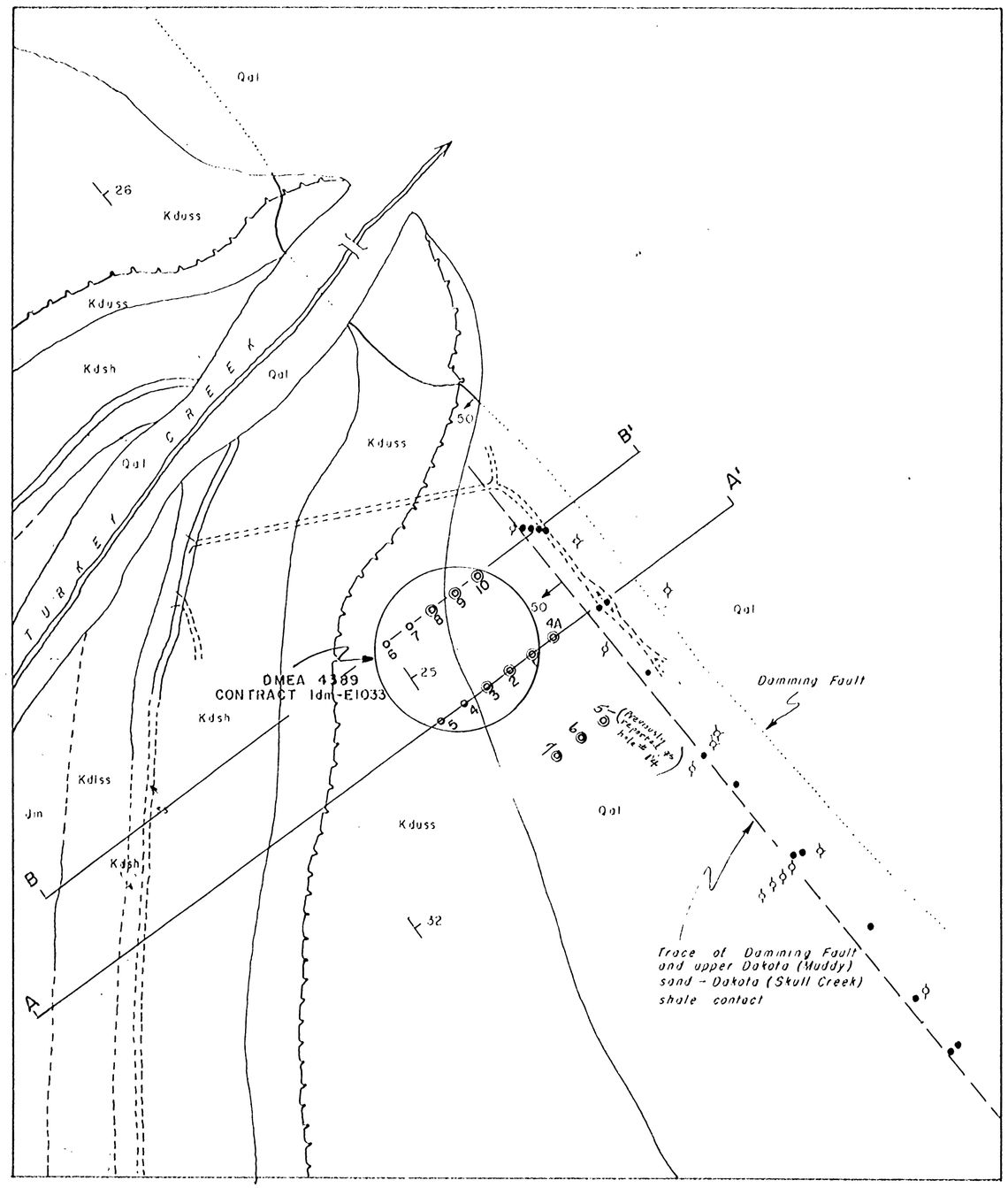
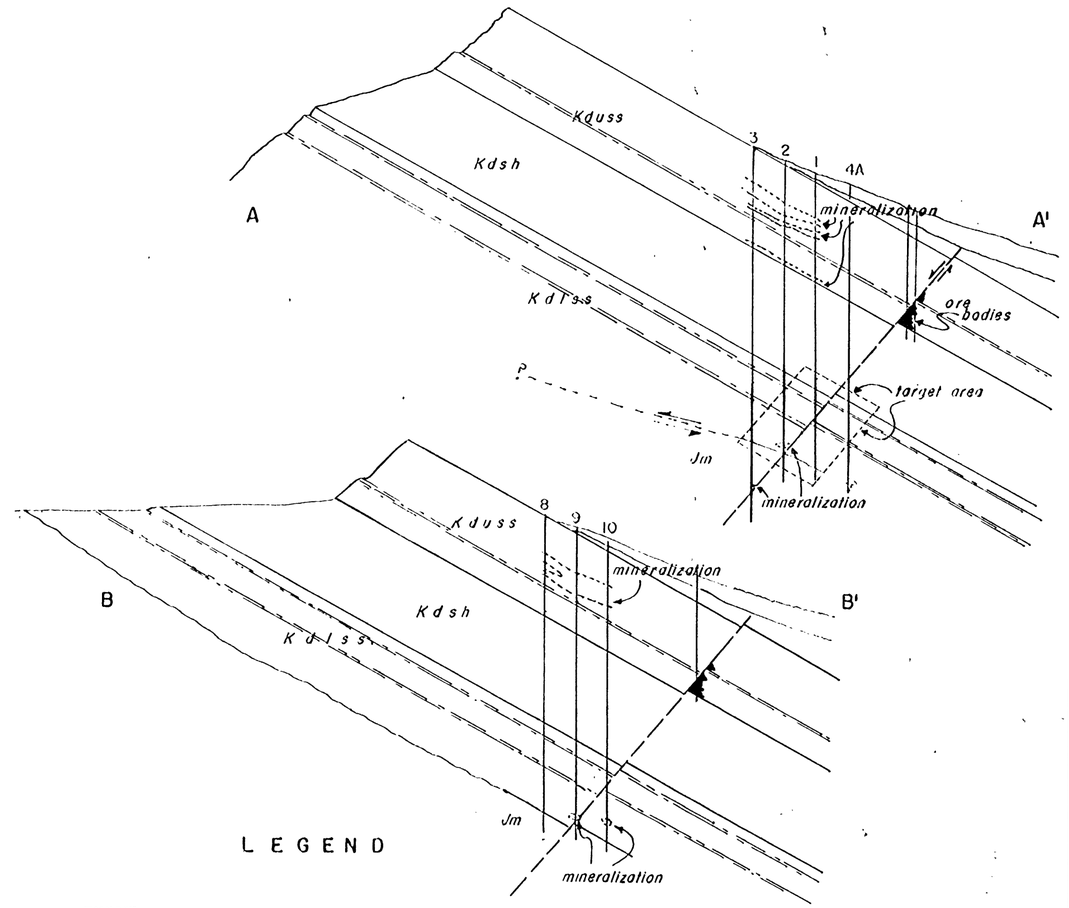

DMEA 4389
HOLE 2
2.5 MR/HR
THE ESTERLINE-ANGUS CO., INC., INDIANAPOLIS, IND., U.S.A. CHART NO. 4303-V
MADE IN U.S.A. THE ESTERLINE-ANGUS CO., INC., INDIANAPOLIS, IND., U.S.A.

DMEA DOCKET 4389, CONTRACT IDM-E1033, URANIUM ENTERPRISES, 2679 ARAPAHOE, BOULDER, COLORADO





LEGEND

- Qal — Alluvium
- Kb — Benton formation
- Kduss — upper (Muddy) sand
- Kdsh — shale
- Kdlss — lower sand
- Jm — Morrison formation

Dakota Formation

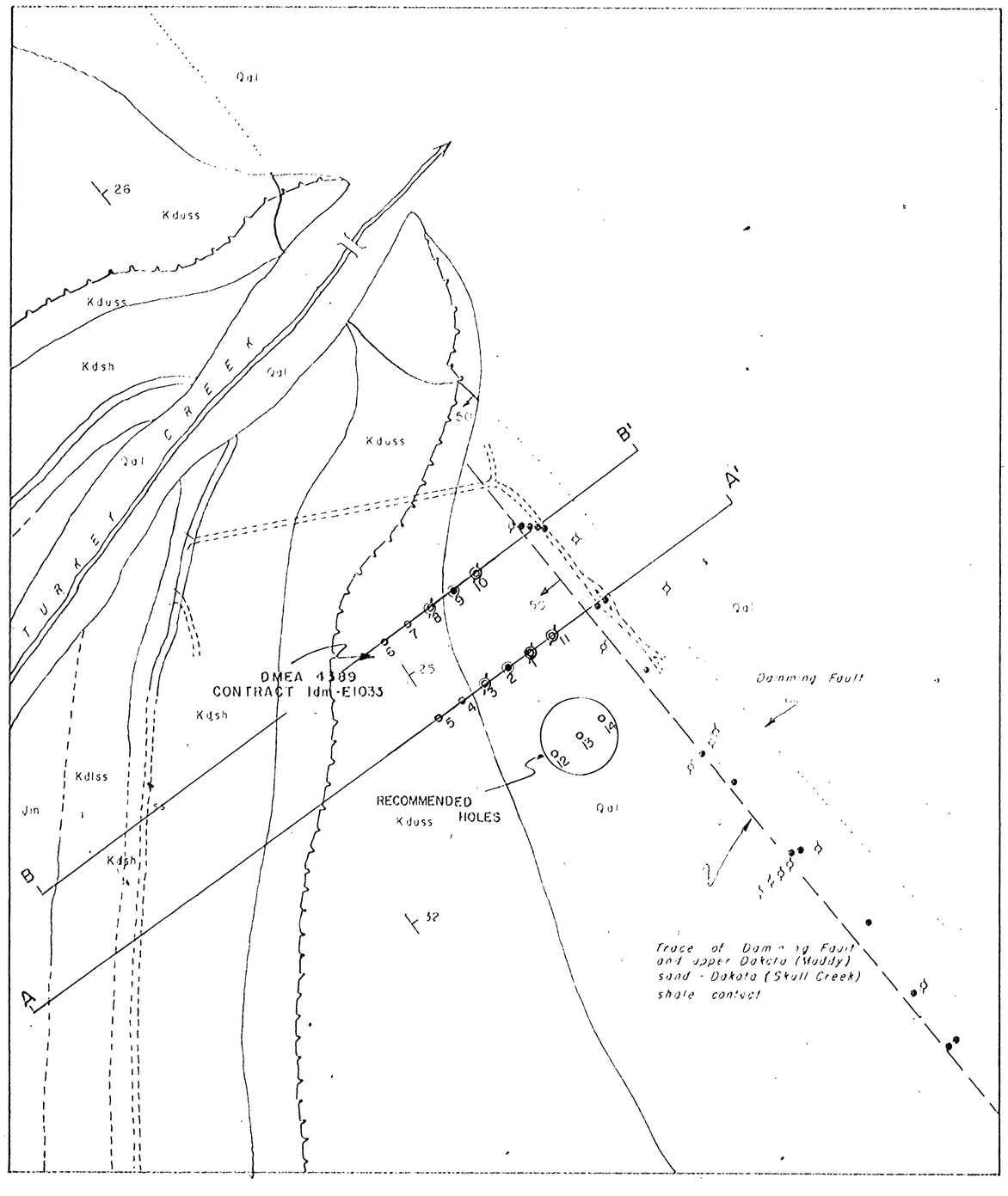
- contact
- rimrock
- underground workings
- strike & dip
- ore hole
- mineralized hole
- barren hole
- completed DMEA hole

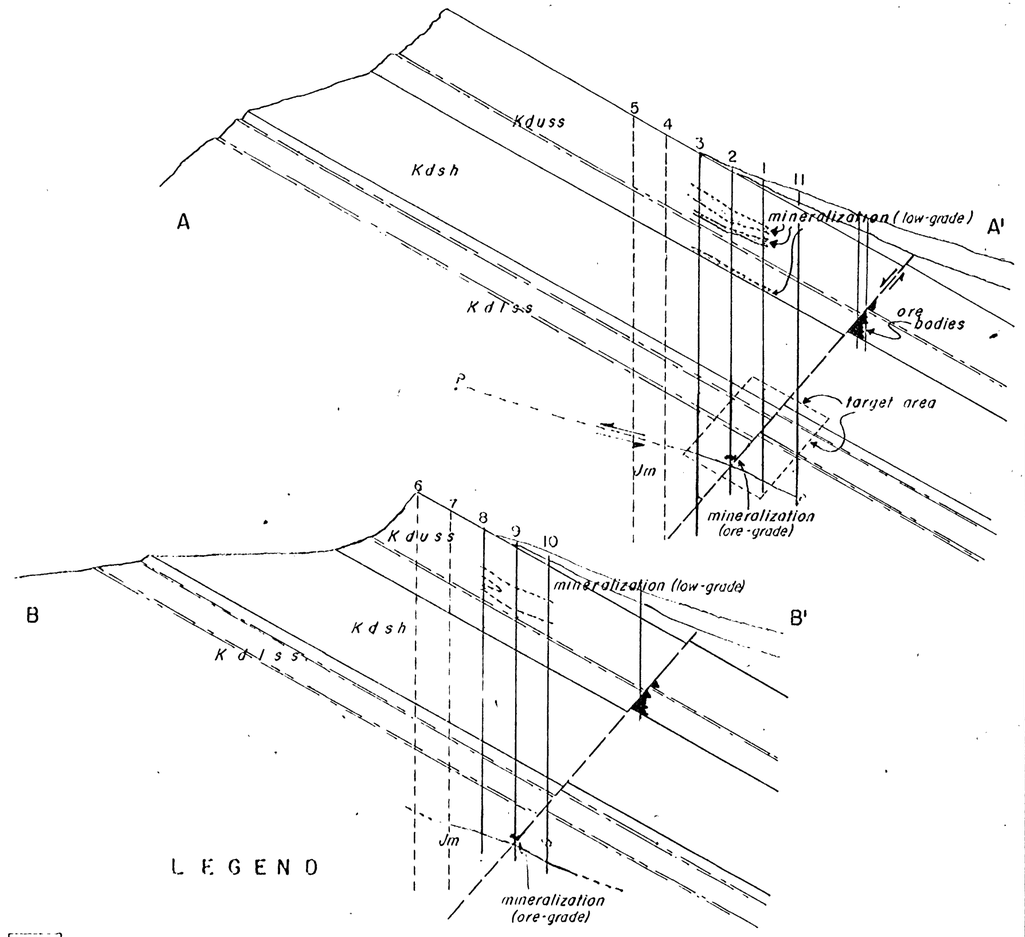
0 100 200 300 ft
SCALE

GEOLOGIC MAP AND SECTION OF MANN MINE

E H GOLDSTEIN

PLATE IV





LEGEND

- Qal — Alluvium
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Dakota Formation

- contact
- rimrock
- underground workings
- strike & dip
- ore hole
- mineralized hole
- barren hole
- completed DMEA hole

DMEA holes 4,5,6,7 not warranted

0 100 200 300 ft
SCALE

Map prepared from operator's data

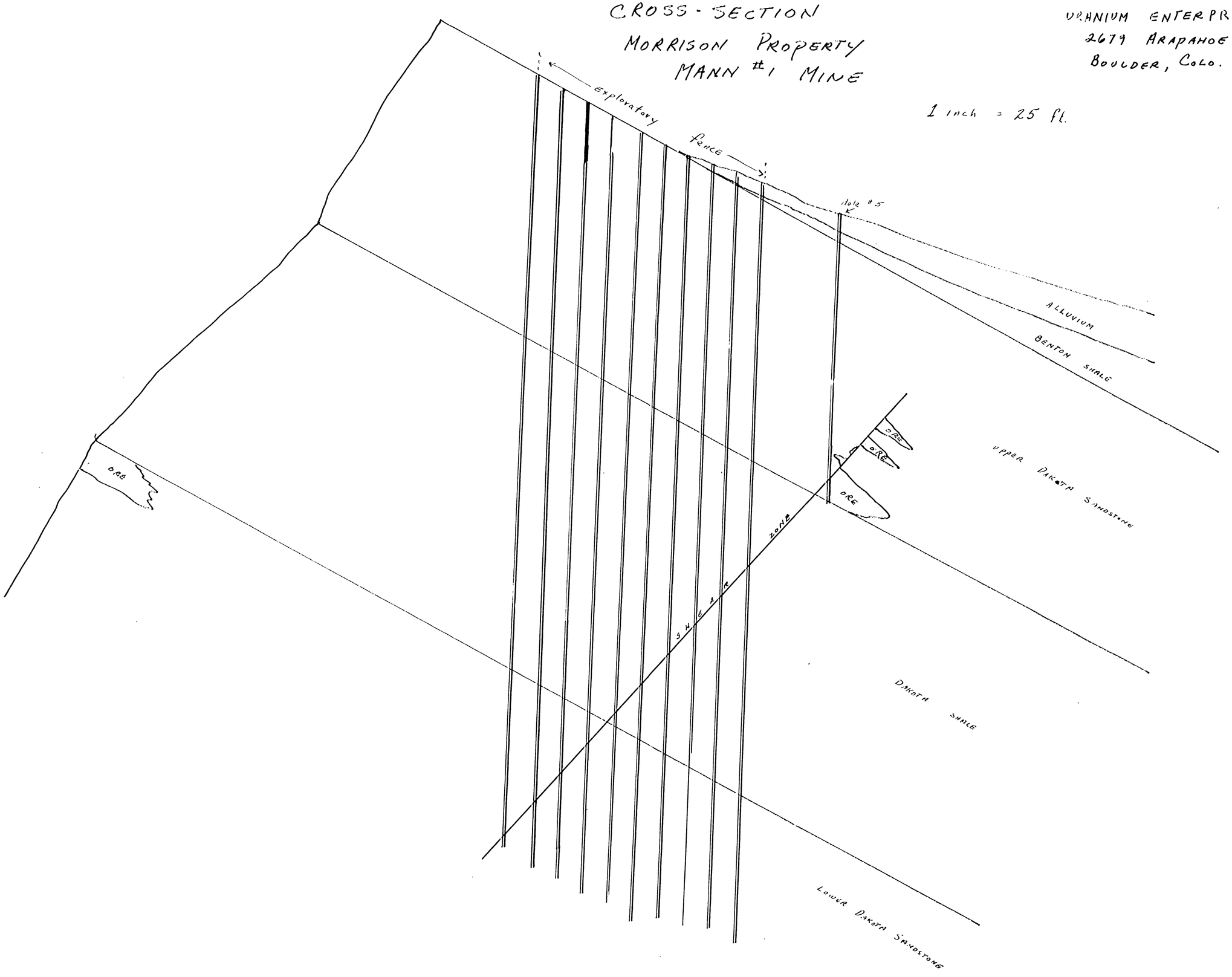
GEOLOGIC MAP AND SECTION OF MANN MINE

D. Richter, 4/57

CROSS-SECTION
MORRISON PROPERTY
MANN #1 MINE

URANIUM ENTERPRISES
2679 ARAPAHOE
BOULDER, COLO.

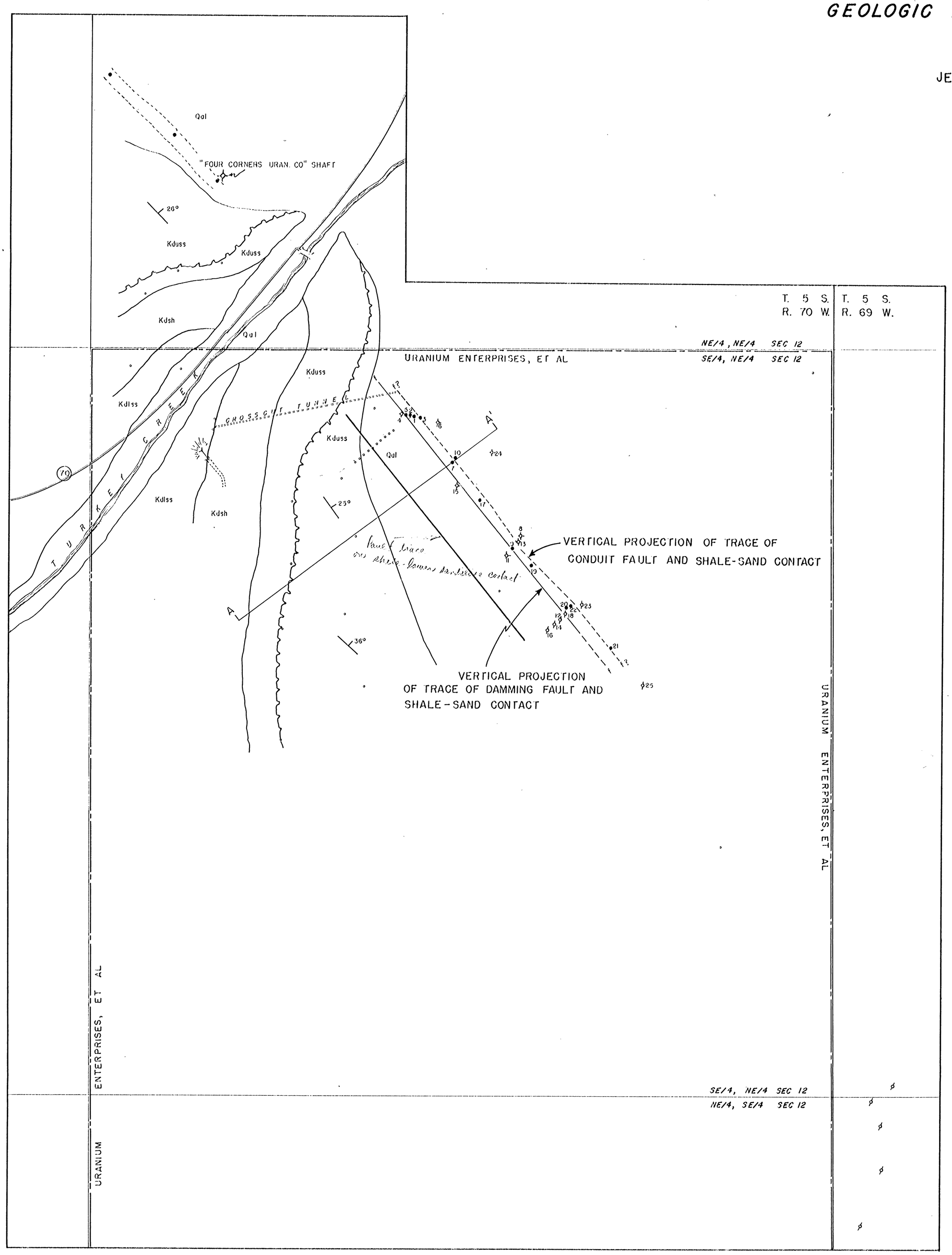
1 inch = 25 ft.

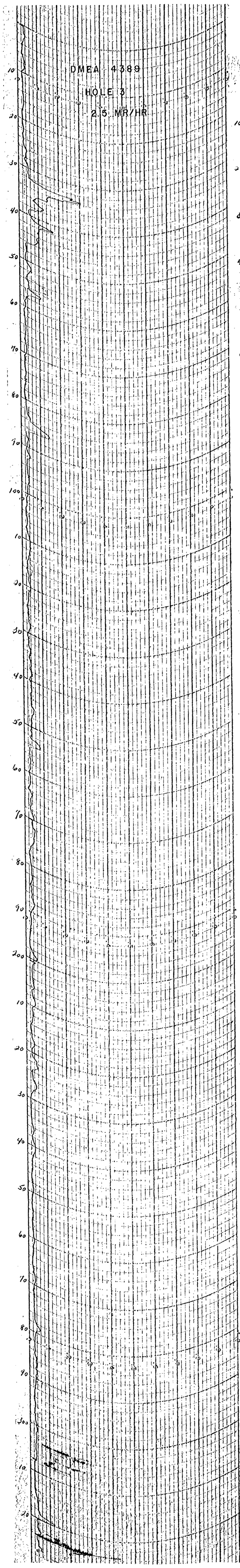


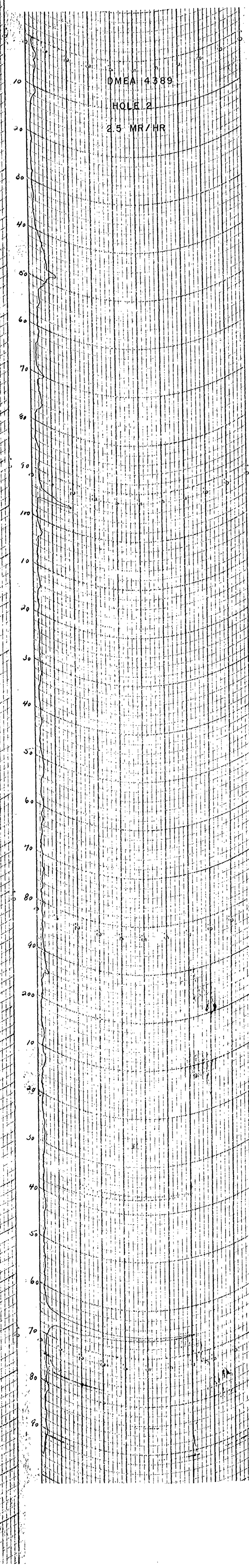
GEOLOGIC MAP AND

J. L. MANN I

JEFFERSON CO.,




DMEA 4389
HOLE 3
2.5 MR/HR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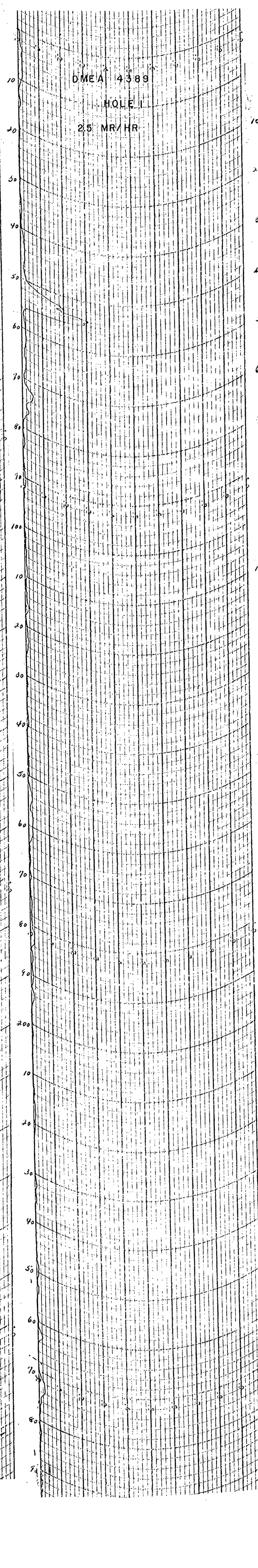
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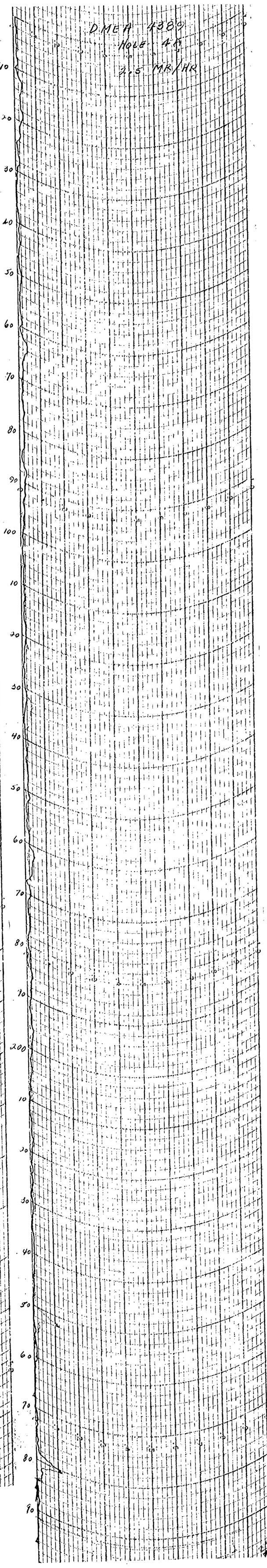
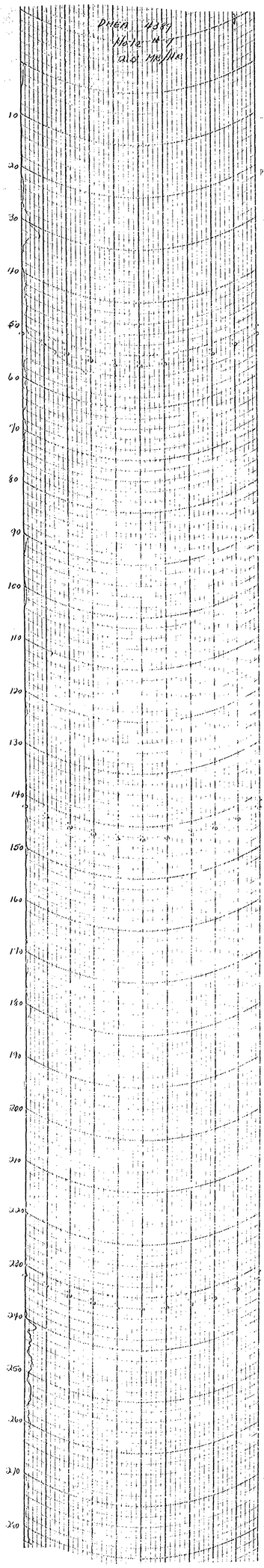

DMEA 4389
Hole 4A
2.5 MR/HR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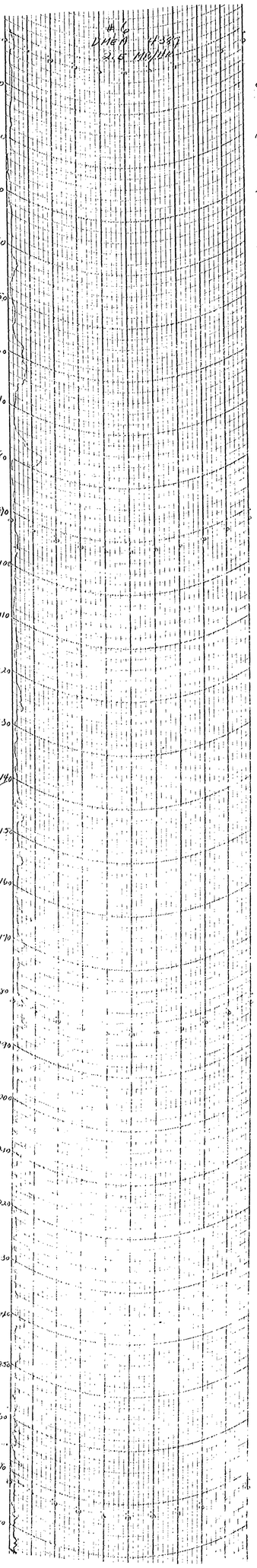
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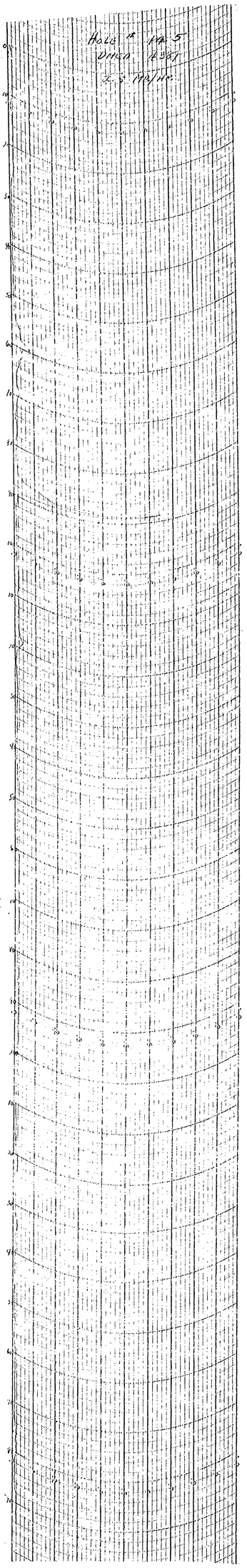
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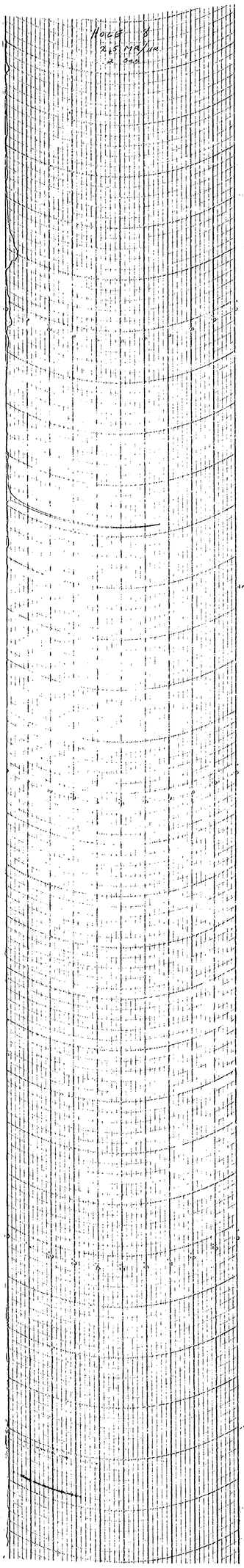
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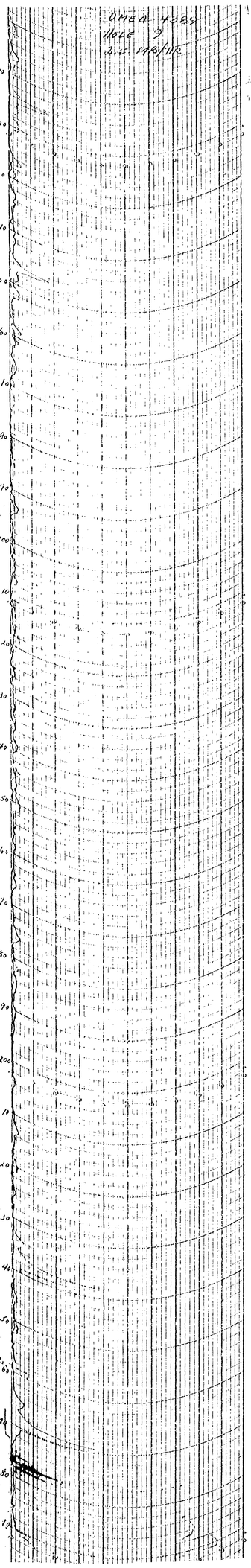
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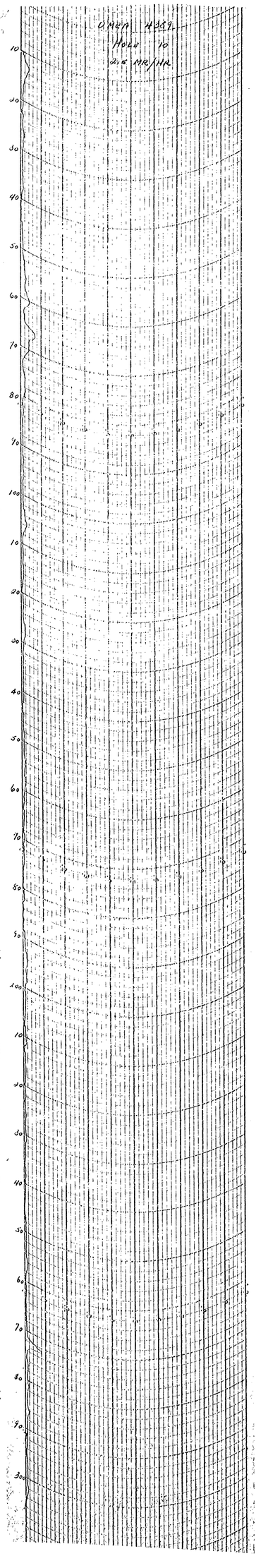
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Hole 10
2.5 mR/hr

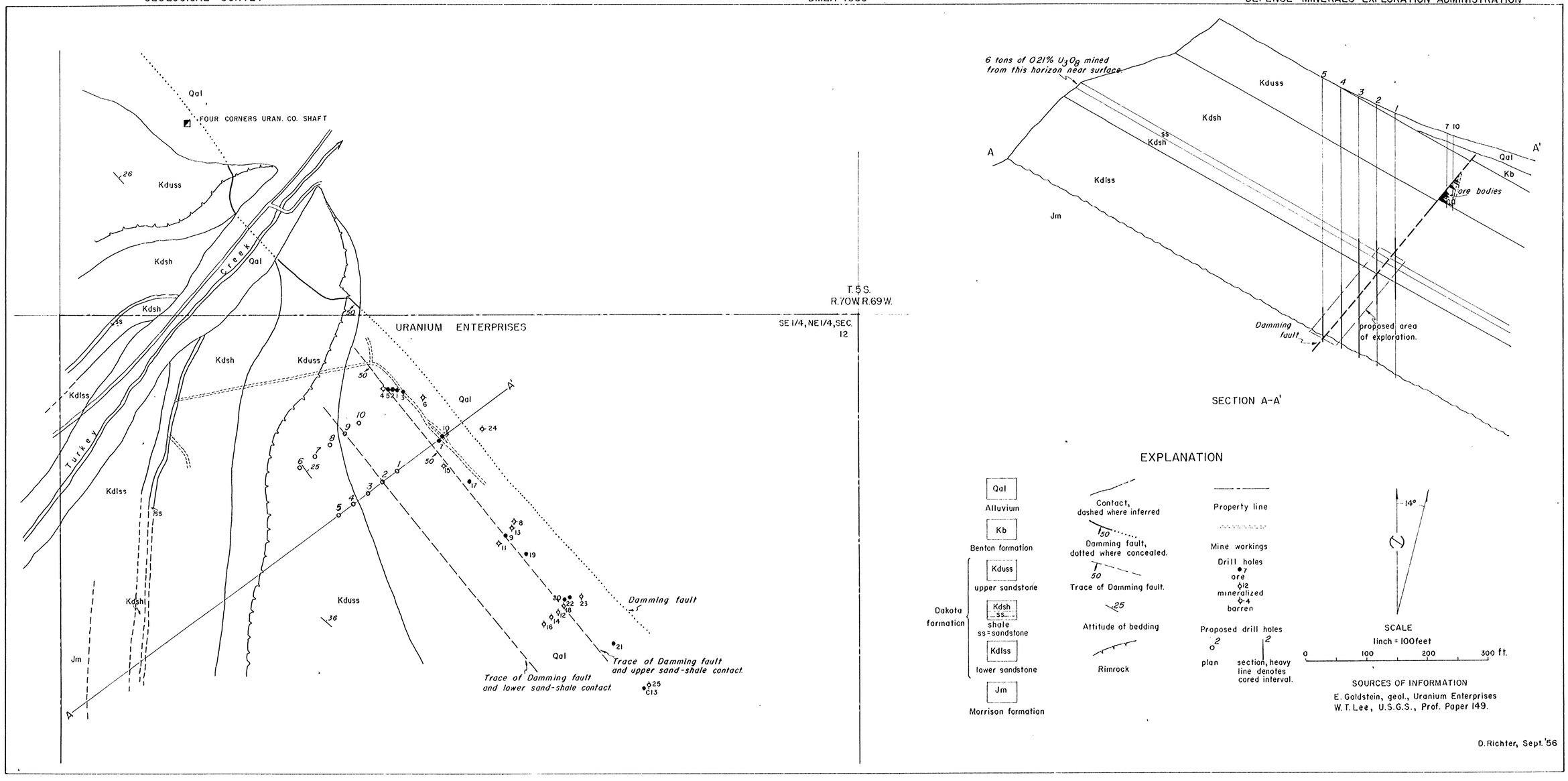
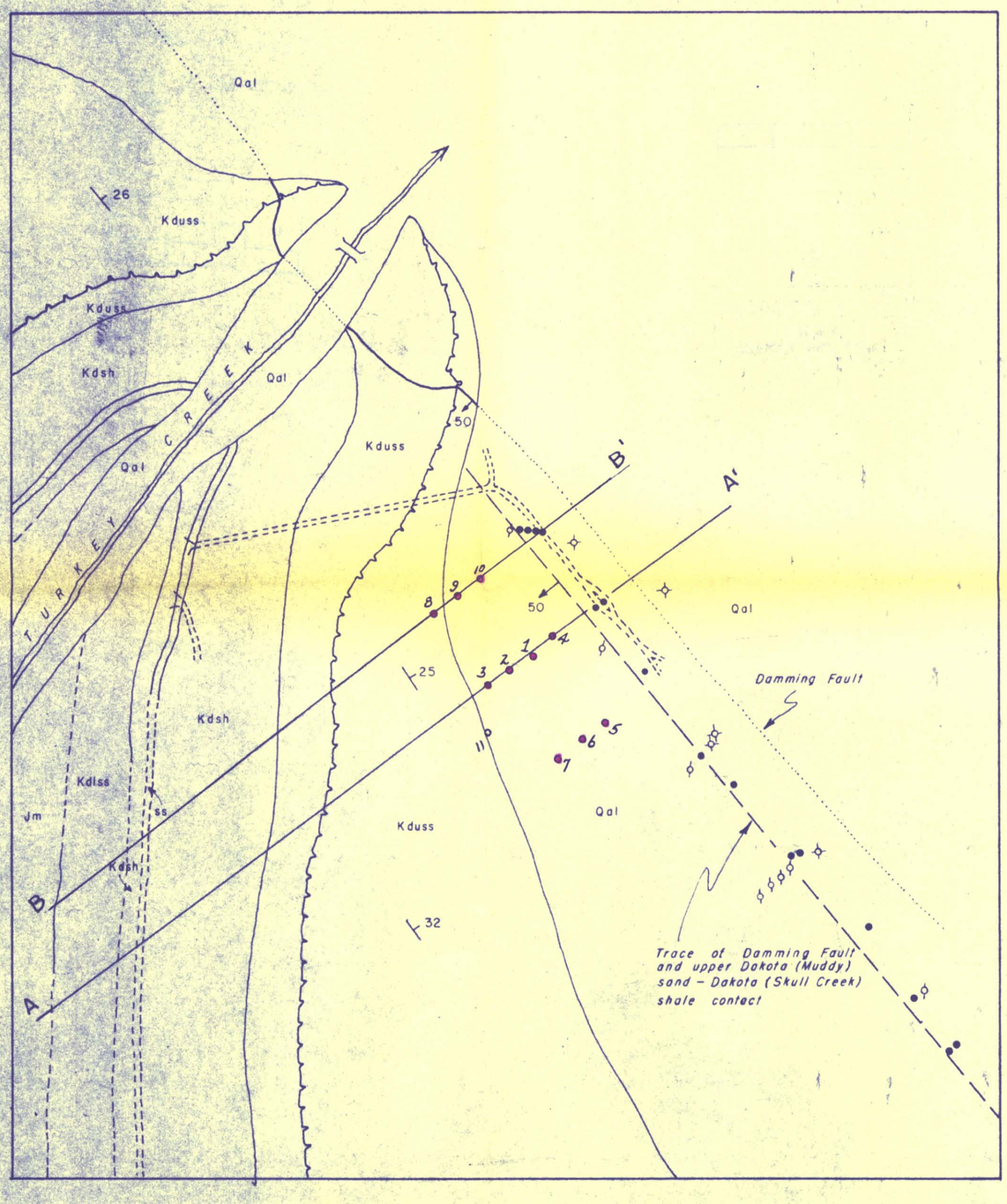
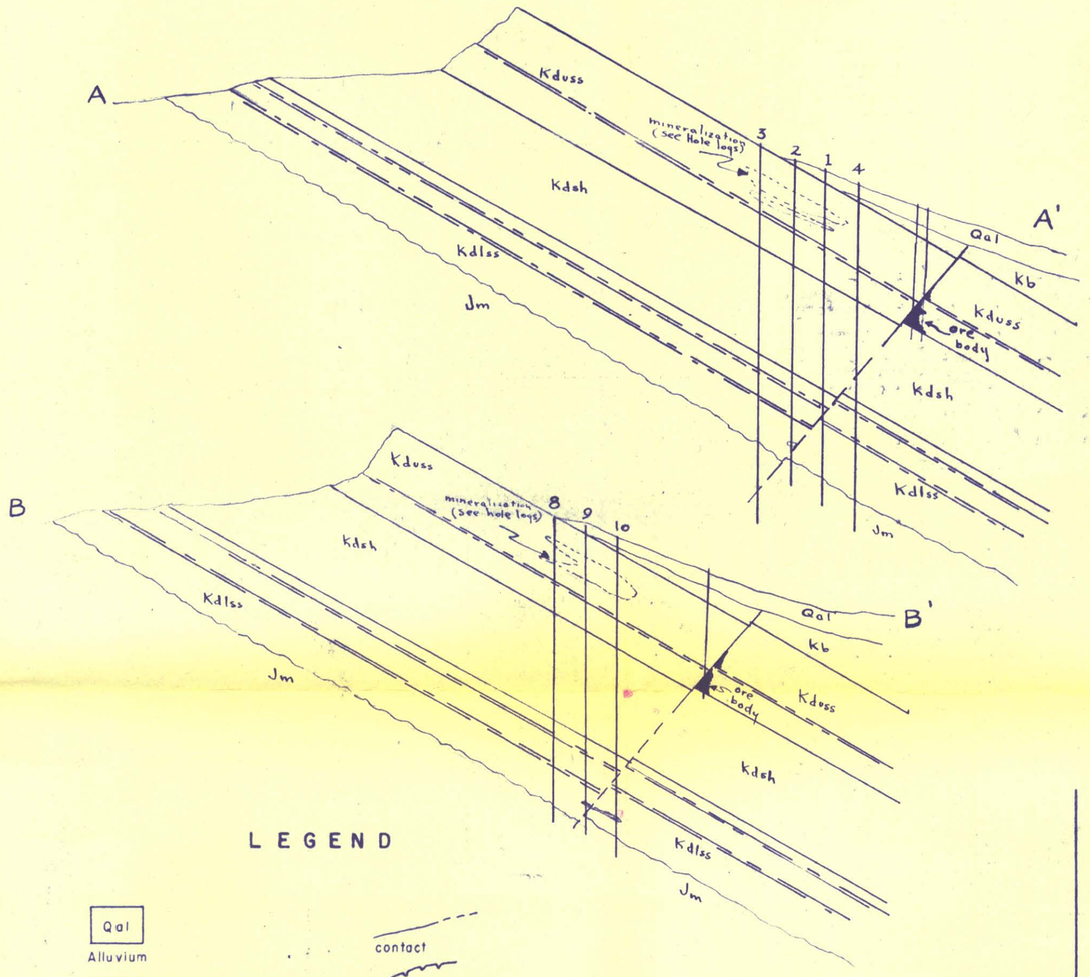


FIGURE 3. GEOLOGIC MAP AND SECTION OF THE J.L. MANN LEASE, URANIUM ENTERPRISES, JEFFERSON COUNTY, COLORADO. DMEA 4389.





LEGEND

- Qal — Alluvium
- Kb — Benton formation
- Kduss — upper (Muddy) sand
- Kdsh — shale
- ss
- Kdlss — lower sand
- Jm — Morrison formation

Dakota Formation

- contact
- rimrock
- underground workings
- strike & dip
- ore hole
- mineralized hole
- barren hole
- DMEA HOLE

0 100 200 300 ft
SCALE

GEOLOGIC MAP AND SECTION OF MANN MINE

E. H. GOLDSTEIN

PLATE IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF COLORADO
STATE HIGHWAY DEPARTMENT CITY AND COUNTY OF DENVER
DENVER BOARD OF WATER COMMISSIONERS

COLORADO
(JEFFERSON COUNTY)
MORRISON QUADRANGLE
7½-MINUTE SERIES

Topography by Cornell Meehan and
Donald G. Shrefler
Surveyed in 1938
Works Projects Administration Nos.
674-2552-3031-3687
Colorado State Highway Department,
City and County of Denver, Denver Board
of Water Commissioners, Sponsors
Fred Graff, Jr., Geological Survey, Supervisor

TRUE NORTH / MAGNETIC NORTH 14½°
APPROXIMATE MEAN DECLINATION, 1938

SCALE 1:24000
1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

Contour interval 10 feet
Datum is mean sea level

FOR SALE BY U. S. GEOLOGICAL SURVEY, FEDERAL CENTER, DENVER, COLORADO, OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.

1953

Polyconic projection. 1927 North American datum
5000 yard grid based on U. S. zone system, E
10000 foot grid based on Colorado (Central)
rectangular coordinate system

ROAD CLASSIFICATION
Heavy-duty 4 LANE | 6 LANE Light-duty
Medium-duty 4 LANE | 6 LANE Unimproved dirt
U. S. Route State Route

MORRISON, COLO.
N3937.5—W10507.5/7.5
1938

GENERALIZED BLOCK DIAGRAM

J.L. MANN MINE

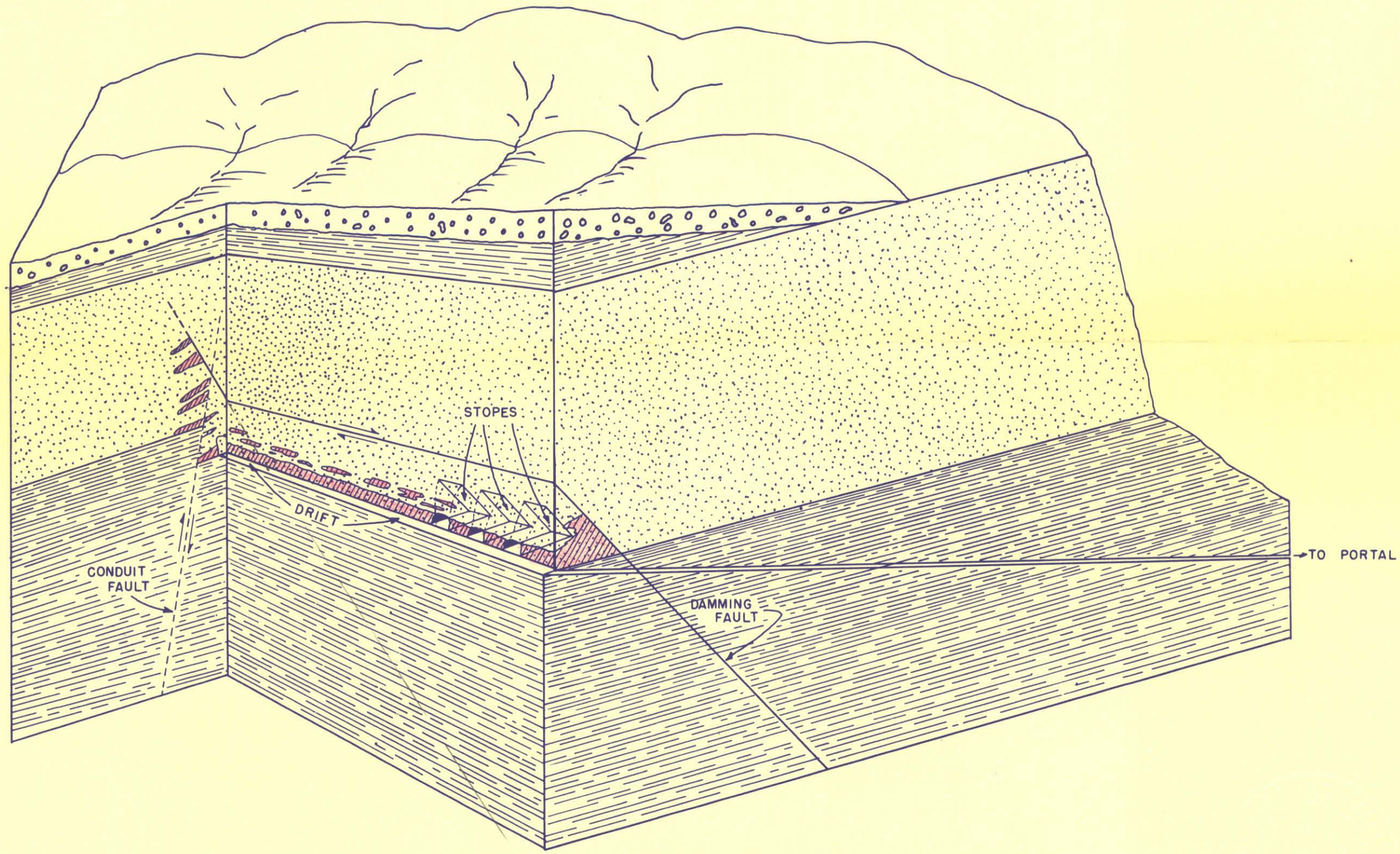


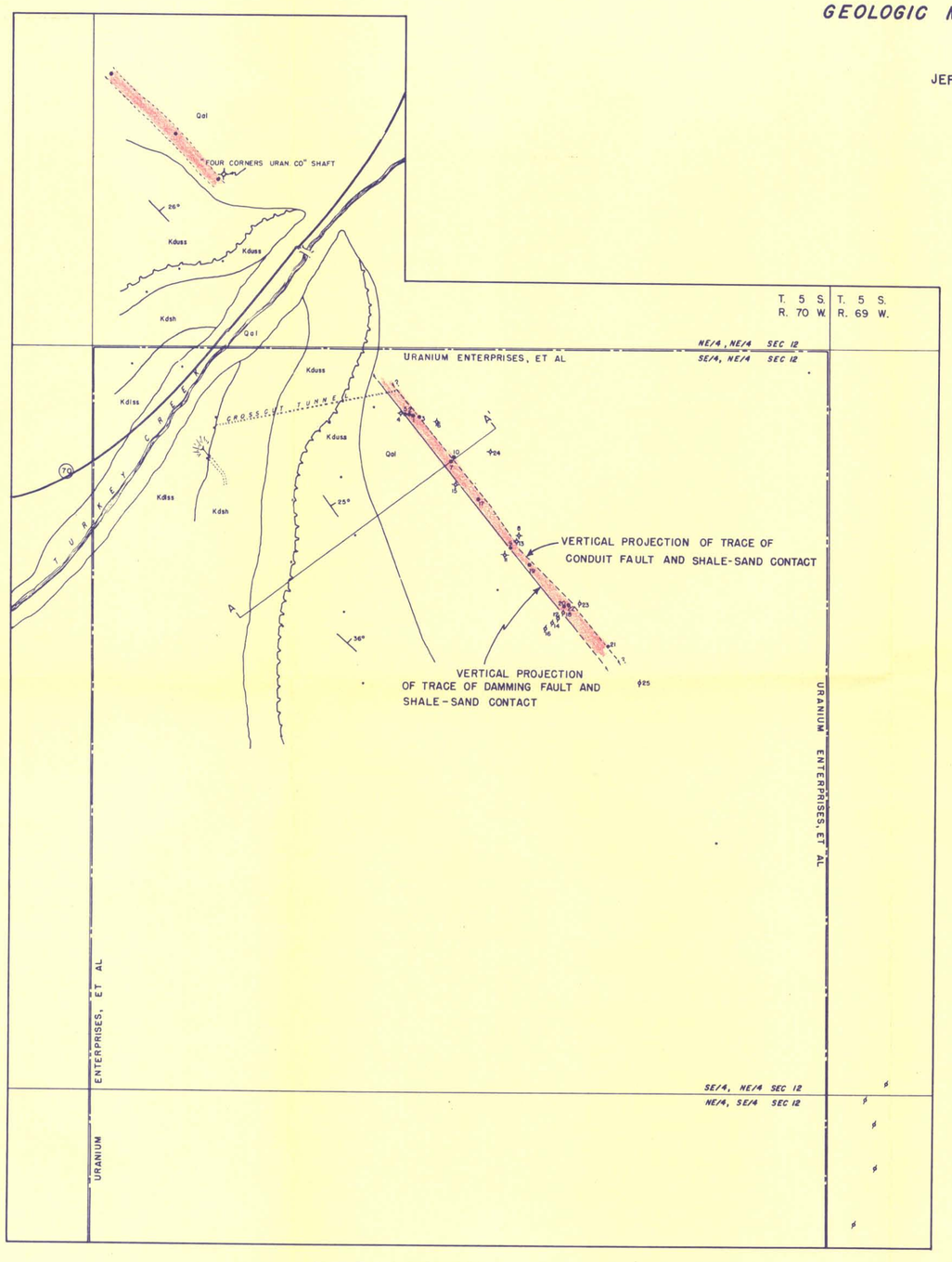
PLATE 2

RECEIVED
JUL 30 1956

GEOLOGIC MAP AND CROSS-SECTION

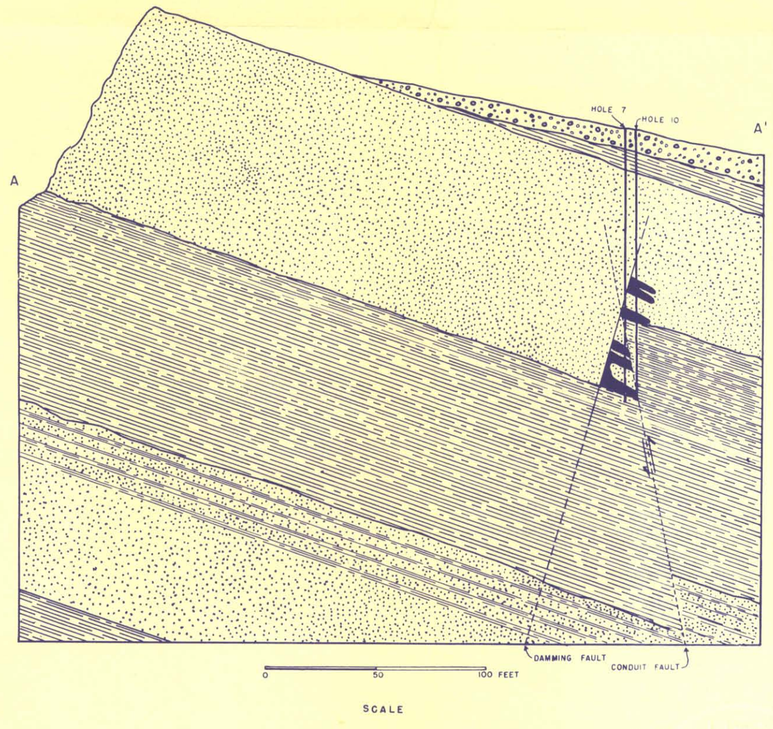
J. L. MANN LEASE

JEFFERSON CO., COLORADO



- LEGEND -

- Qal — RECENT SEDIMENTS
- Kduss — UPPER DAKOTA SANDSTONE
- Kdsh — DAKOTA SHALE
- Kdiss — LOWER DAKOTA SANDSTONE
- PROPERTY LINE
- RIMROCK
- ORE ZONE
- ORE HOLE
- MINERALIZED HOLE
- BARREN HOLE
- SURVEY STATION



GEOLOGICAL CONSULTANTS, INC.

PLATE I

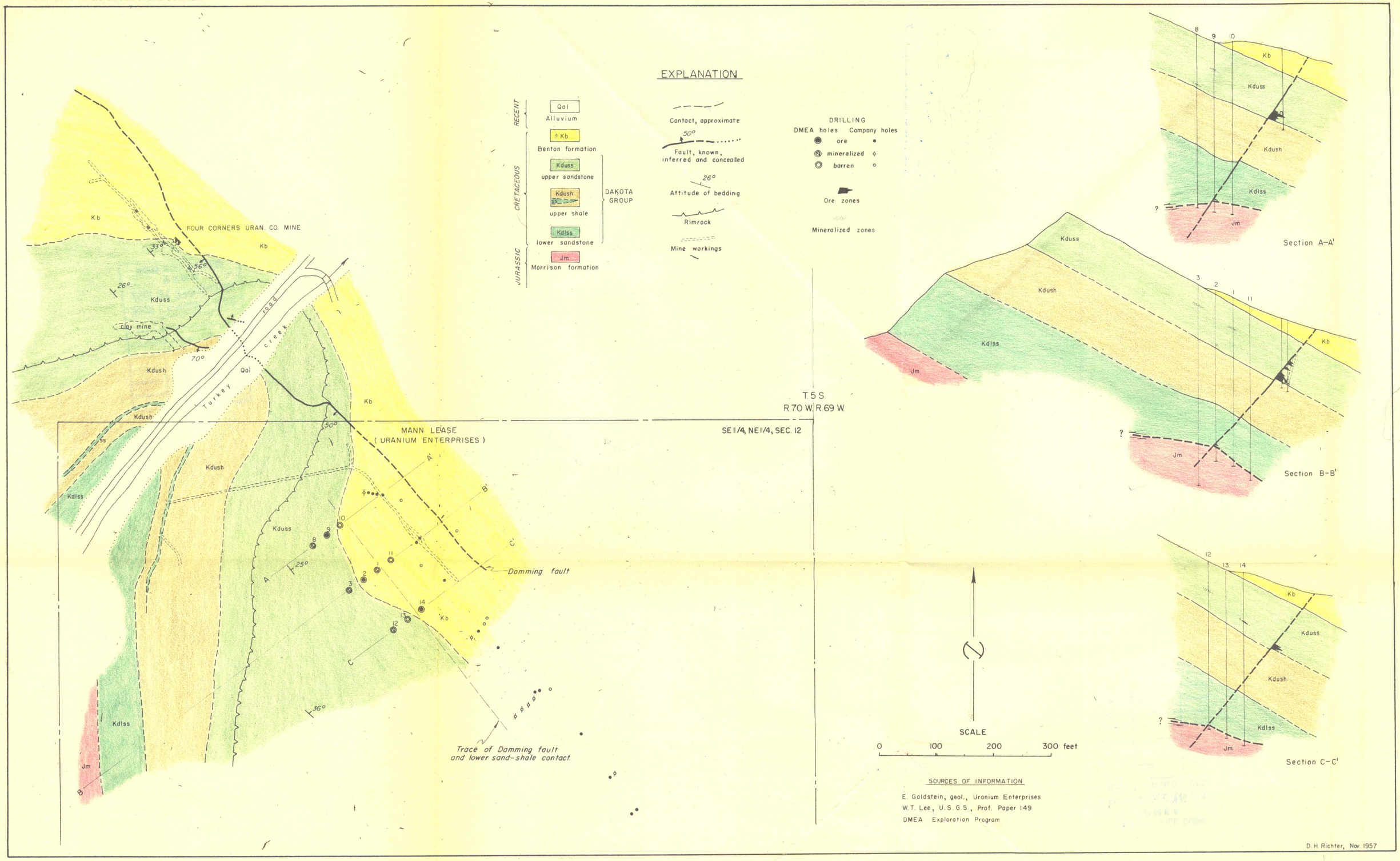
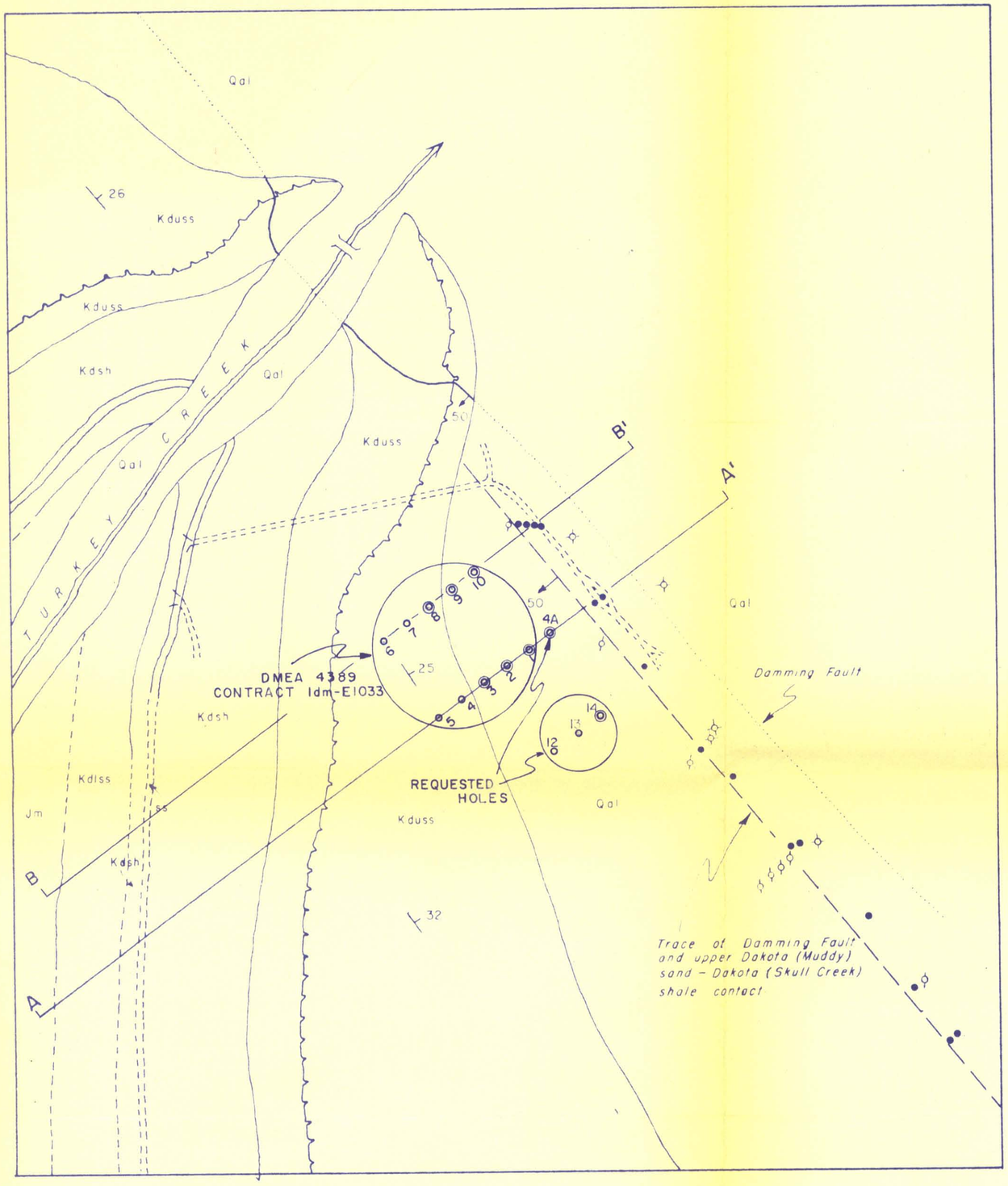
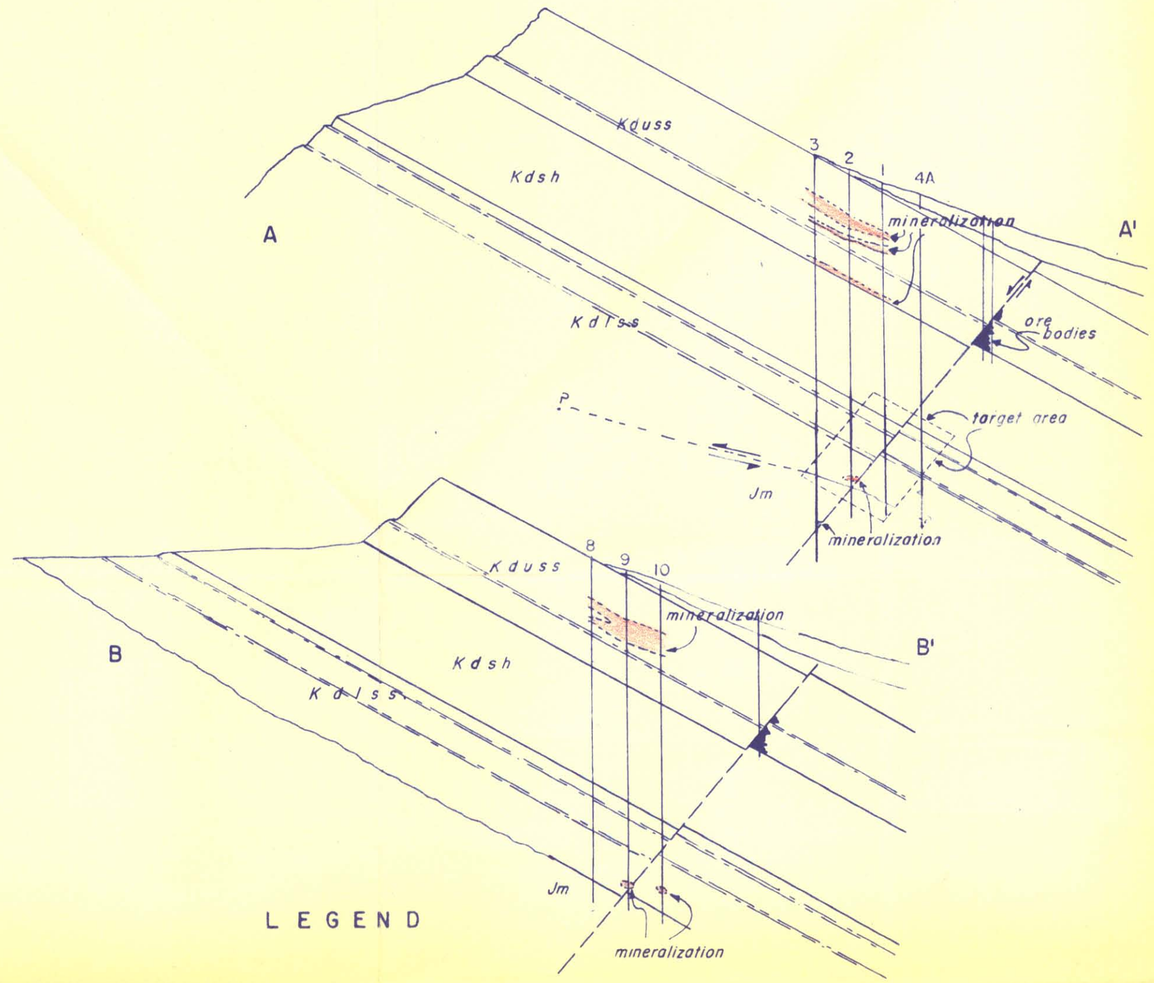


FIGURE 2. GEOLOGIC MAP AND SECTIONS OF THE MANN LEASE AND VICINITY, URANIUM ENTERPRISES, JEFFERSON COUNTY, COLORADO.

DMEA DOCKET 4389, CONTRACT IDM-E1033, URANIUM ENTERPRISES, 2679 ARAPAHOE, BOULDER, COLORADO





LEGEND

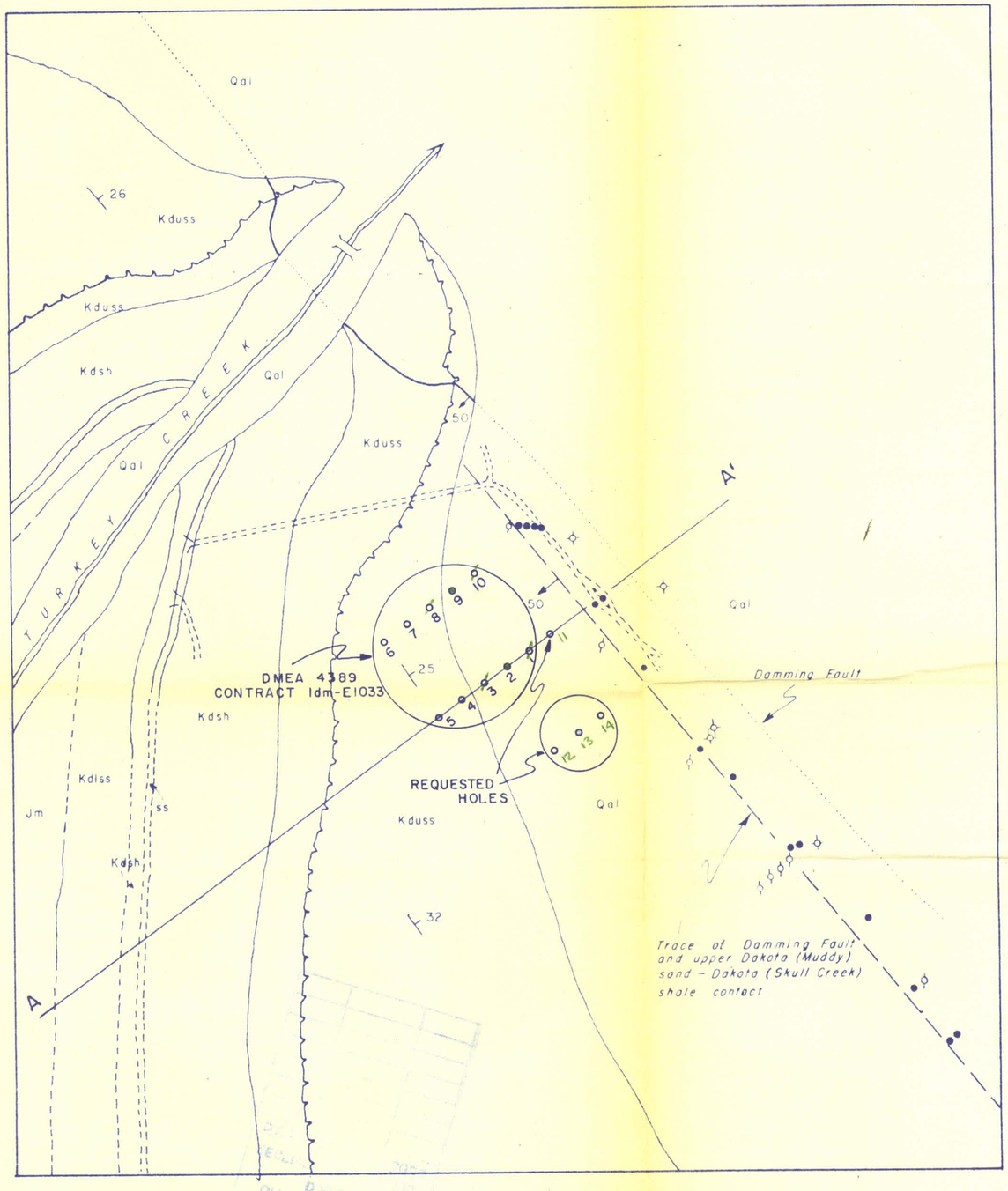
- Qal — Alluvium
- Kb — Benton formation
- Kduss — upper (Muddy) sand
- Kdsh — shale
- SS
- Kdlss — lower sand
- Dakota Formation
- Jm — Morrison formation
- contact
- rimrock
- underground workings
- strike & dip
- ore hole
- mineralized hole
- barren hole
- completed DMEA hole

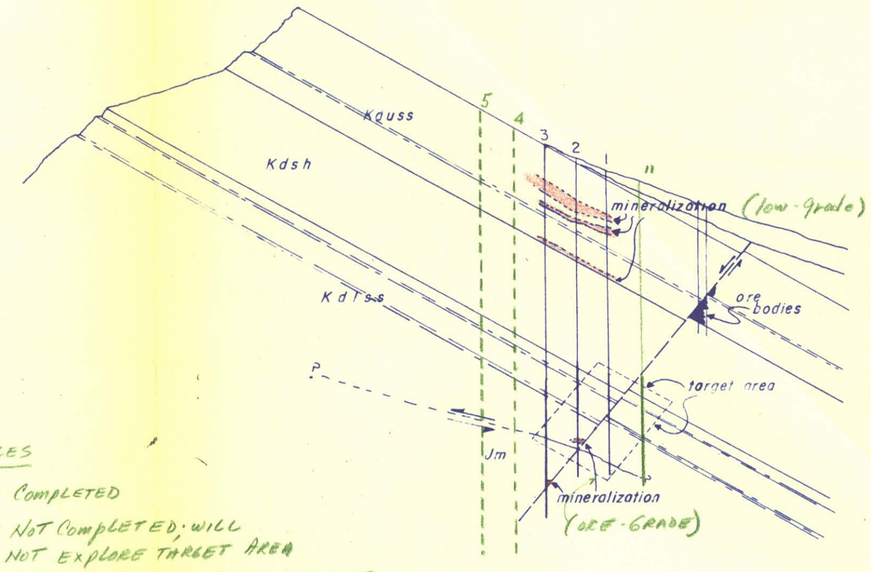
0 100 200 300 ft
SCALE

GEOLOGIC MAP AND SECTION OF MANN MINE

E H GOLDSTEIN

PLATE IV





DRILL HOLES

1,2,3,8,9,10 - COMPLETED

4,5,6,7 - NOT COMPLETED; WILL NOT EXPLORE TARGET AREA

11 - RECOMMENDED TO FULLY EXPLORE TARGET AREA. VERBAL PERMISSION GIVEN BY REGION III.

12,13,14 - RECOMMENDED TO EXPLORE LATERAL EXTENSION OF TARGET AREA AND TO POSSIBLY DELINEATE THE ORE ZONE DISCLOSED IN HOLES 2 & 9.

Donald H. Richter

LEGEND

- Qal — Alluvium
- Kb — Benton formation
- Kduss — upper (Muddy) sand
- Kdsh — shale
- Kdlss — lower sand
- Dakota Formation
- Jm — Morrison formation
- contact
- rimrock
- underground workings
- strike & dip
- ore hole
- mineralized hole
- barren hole

0 100 200 300 ft

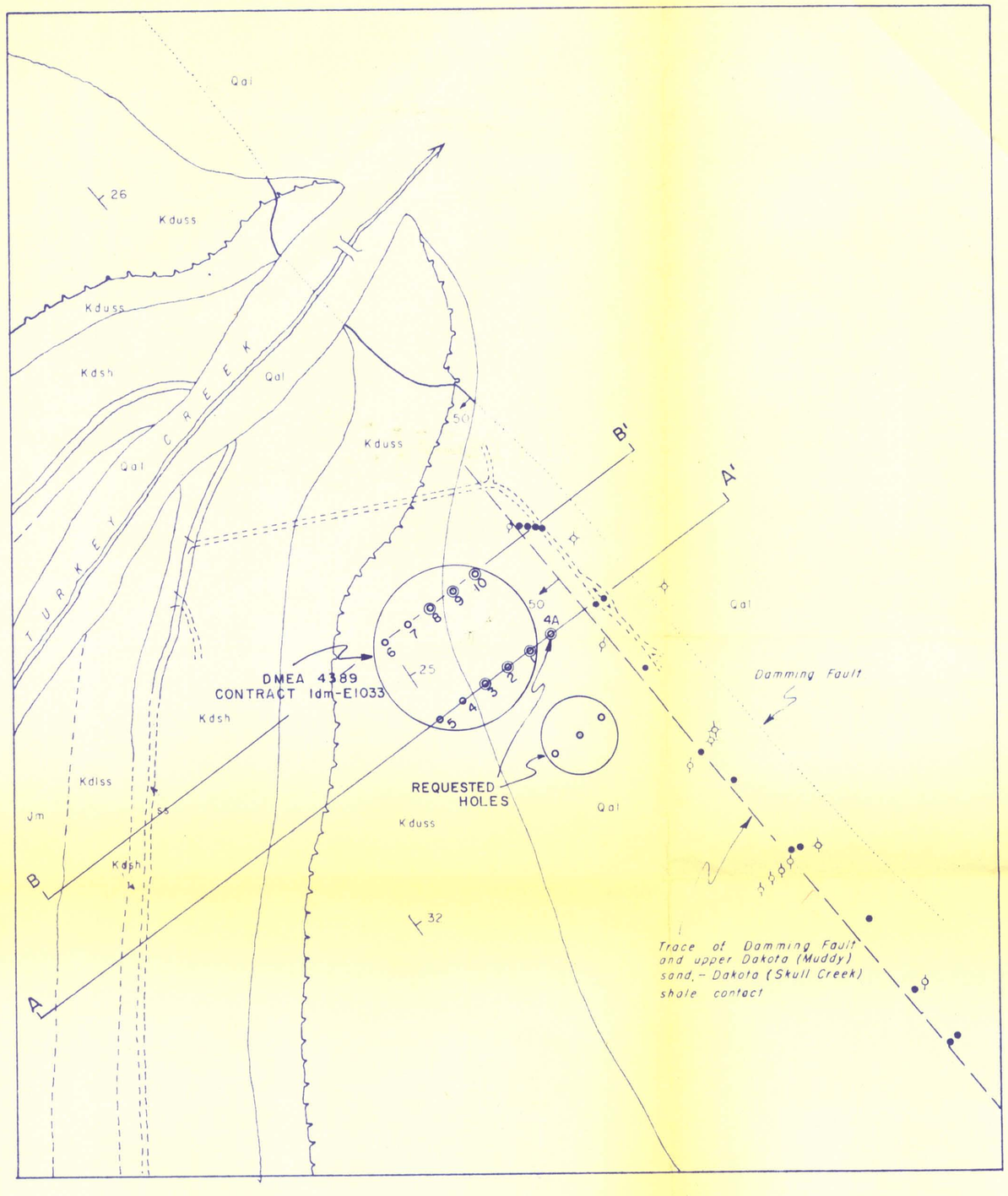
SCALE

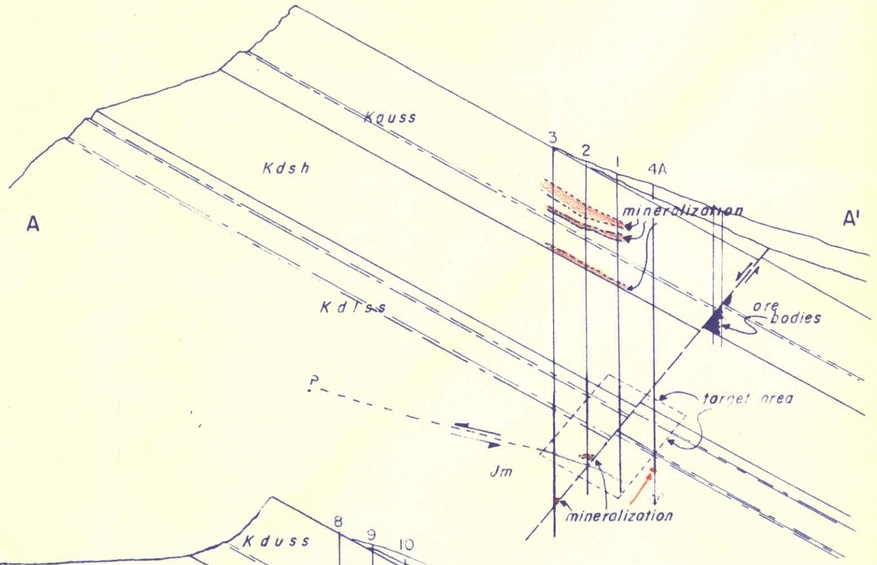
GEOLOGIC MAP AND SECTION OF MANN MINE

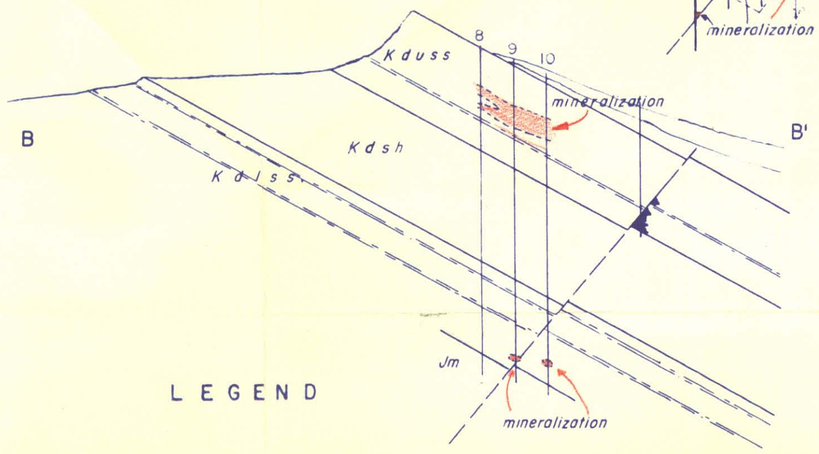
E H GOLDSTEIN

PLATE IV

DMEA DOCKET 4389, CONTRACT IDM-E1033, URANIUM ENTERPRISES, 2679 ARAPAHOE, BOULDER, COLORADO







LEGEND

- Qal — Alluvium
- Kb — Benton formation
- Kduss — upper (Muddy) sand
- Kdsh — shale
- Kdiss — lower sand
- Jm — Morrison formation

Dakota Formation

- contact
- rimrock
- underground workings
- strike & dip
- ore hole
- mineralized hole
- barren hole
- completed DMEA hole

0 100 200 300 ft
SCALE

GEOLOGIC MAP AND SECTION OF MANN MINE

E H GOLDSTEIN

PLATE IV

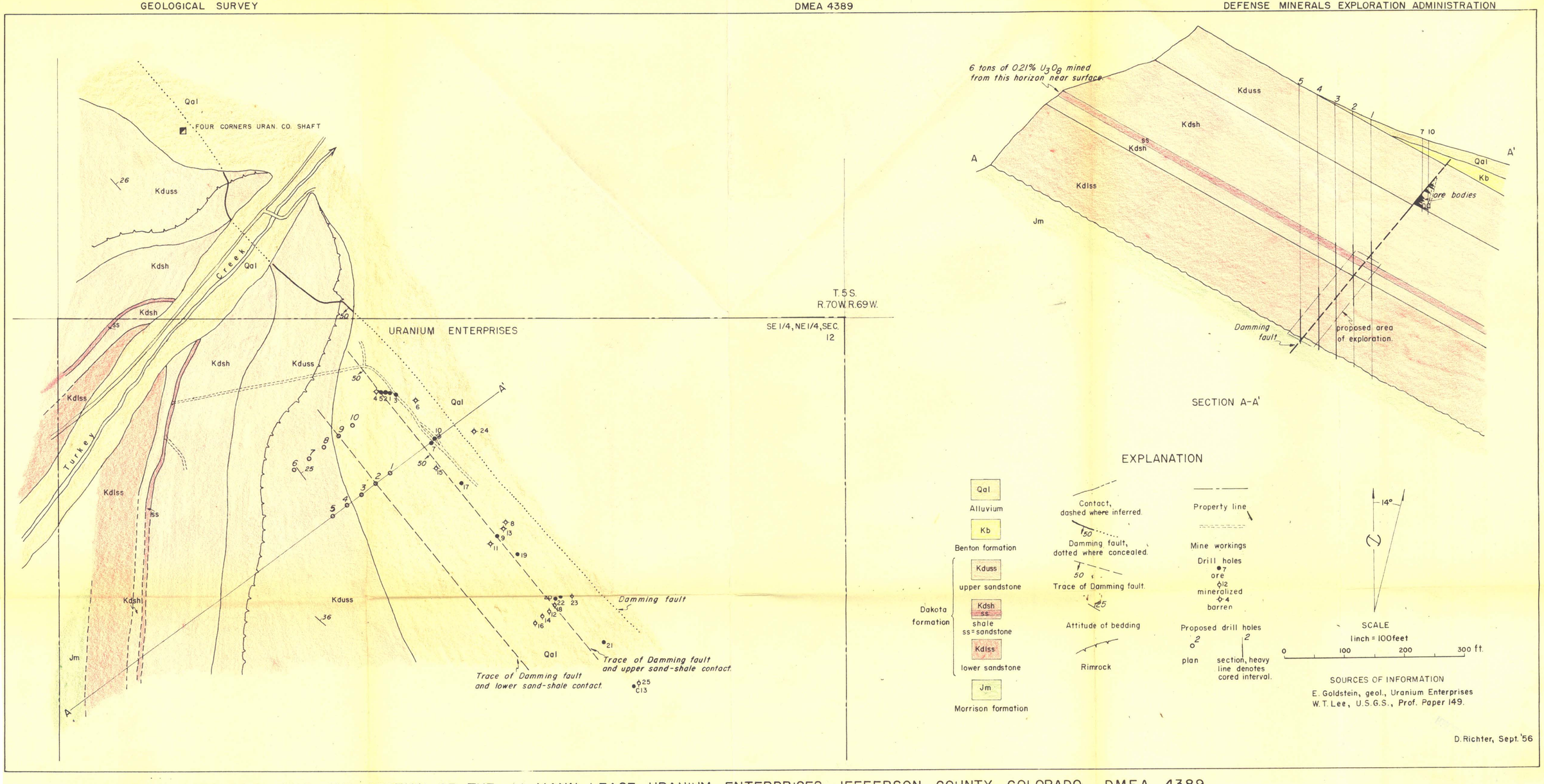


FIGURE 3. GEOLOGIC MAP AND SECTION OF THE J.L. MANN LEASE, URANIUM ENTERPRISES, JEFFERSON COUNTY, COLORADO. DMEA 4389.