DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE 1D11 - E 995 DMEA NO. 4136

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(Withdrawn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 Bios
(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

9779

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DMEA
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DATE	INITIALS	CODE
7/17	Comm	100
"	Fed	110
on vacation		120
7/18	MC	700

DOMESTIC MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Union Mines, Incorporated
433 North 7th Street,
Grand Junction, Colorado.

pertaining to Exploration Project Contract No. Idm-8935, DMEA 4136, including Amendments Nos. 1 through 6, for the period April 1957 to October, 1957, covering a project for the exploration of Uranium on property known as Ruth K and Sylvia Claims located in Montrose 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, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

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

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

Total cost as billed by Contractor		$11,379.73
Exceptions (Schedule attached)		
Prior to this review	$54.79	
Herewith	0.00	54.79
Total Accepted Cost		$11,324.94

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 Eight thousand, four hundred ninety-three and 71/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$ 8,493.71
Amount reimbursed	7,993.71
Balance due Operator	$ 500.00 pd. to Oper. 7/25/58

July 14, 1958

R H Braden
F. H. Bradley, Auditor

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

UNION MINES, INCORPORATED

CONTRACT NO. IBM-8975 DOCKET NO. ENSA 4136

(a) The Monthly Reports were supported by documentary proof of that portion ($9,303.70) of the costs which covered work performed at unit rates under independent contract (per summary attached);

(b) The balance ($2,681.24) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and

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

SCHEDULE OF EXCEPTIONS

UNION MINES, INCORPORATED

CONTRACT NO. IBM-E995 DOCKET NO. RMEA-4136

APRIL, 1957

Operator reported total footage of 260 feet of core drilling. Hole No. RK 17 was drilled 5.3 feet and Hole No. RK 19 was drilled 5.3 feet in excess of allowable depth into the red sandstone which underlies the Sale Wash member.

Disallow 10.8 feet of core drilling at $3.50 per foot	$37.80	
Disallow 10.8 feet incidental allowance at $0.47 per foot	5.08	$42.88

AUGUST-SEPTEMBER-OCTOBER, 1957

Hole No. RK 16 was drilled in excess of 3 feet of allowable depth as cited above; therefore, 3 feet of core drilling is disallowed.

Disallow 3 feet of core drilling at $3.50 per foot	$10.50	
Disallow 3 feet of incidental allowance at $0.47 per ft.	1.41	11.91
Total Amount Disallowed - - - - - -		$54.79

Disallowance made by Executive Officer; approved by Auditor.

SUMMARY OF DOCUMENTED COSTS

UNION MINES, INCORPORATED

Contract No. IGm-2995 | Docket No. IMBA 4136

Independent Contracts

551.7 feet of core drilling at $3.50 per foot	$1,930.95
3,685 feet of non-core drilling at $1.75 per foot	6,448.75
77 hours of bulldozing at $12.00 per hour	924.00
Total Documented Costs	$9,303.70

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Government's copy

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA-4136

AMENDMENT NO. 6

It is agreed this 4th day of September, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Incorporated, hereinafter called the "Operator," that Exploration Project Contract Idm-E995 (Docket No. DMEA-4136), dated August 21, 1956, as amended, hereinafter called the "Contract," is further amended as follows:

1. (a) Work under the Contract shall be suspended during the period beginning April 14, 1957, and ending not later than July 30, 1957.

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

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

2. Effective August 21, 1956:

(a) In Exhibit "A", Description of the Work:

(i) Under General Provisions, the sixth paragraph is deleted.

(ii) Stage I is revised to read as follows:

"Stage I

"Prepare access roads and drill sites with not to exceed 80 hours of work with a D-7 bulldozer or equivalent unit of another make, and drill not more than 10 holes aggregating approximately 5,590 feet at the locations indicated on the map (Figure 3). None of the holes shall be located closer than 370 feet to any previously drilled hole.

If the 10 holes require more than 5,590 feet to reach the desired horizon, the additional footage and funds required may be transferred and deducted from Stage II upon the written approval of the Government."

(iii) Stage II is revised to read as follows:

"Stage II

"Prepare access roads and drill sites with not to exceed 240 hours of work with a D-6 bulldozer or equivalent unit of another make; and drill not more than 30 holes aggregating not more than 16,800 feet as offsets to previously drilled holes that show significant mineralization. The offset holes shall not be drilled closer than 100 feet to any previously drilled hole."

(iv) The map "Figure 3," which is attached hereto and made a part hereof, is substituted for the map "Figure 2 Amended" which is attached to Amendment No. 2 of the Contract.

(v) The words "Figure 3" are substituted for the words "Figure 2 Amended" wherever found in Amendment No. 2.

(b) In Exhibit "A", Estimated Cost of the Project, Stage II is revised to read as follows:

"Stage II

Actual Costs

Category (1) Independent Contracts

3,000 feet core drilling @ $3.50/ft.[1/]	$10,500.00	
13,800 feet non-core drilling @ $1.75/ft.[1/]	24,150.00	$34,650.00

Categories (2) through (7) None

Fixed Unit Costs (See Article 13)

Incidental allowance[2/] for each foot of core and non-core drilling completed 16,800 feet @ $0.47/ft.	7,896.00

Long
Chung
Ellis
Chamberlain
Selfridge
Johnson

90 chemical sample analyses @ $5.00/sample	$ 450.00	
240 hours of bulldozing @ $10.00/hr.	2,400.00	$10,746.00
Estimated Total Cost of Stage II		$45,396.00"

* * * * * * *

This agreement 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 as a maximum.

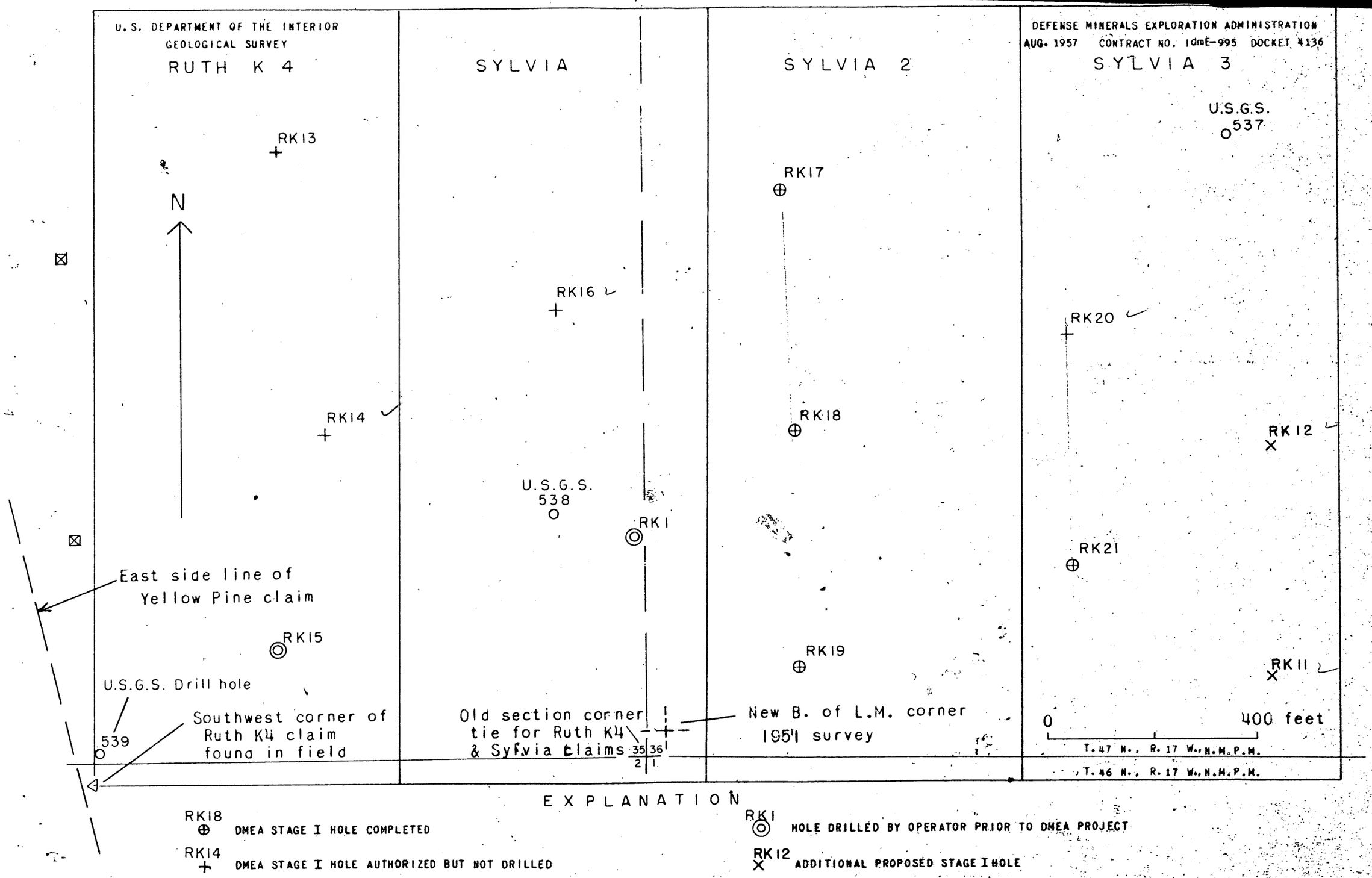
THE UNITED STATES OF AMERICA

By C J Mittendorf
Administrator, Defense Minerals
Exploration Administration

UNION MINES, INCORPORATED

By W R Newlon
President

(SEAL)



Note: CLAIM AREA SOUTH OF SOUTH BOUNDARY OF T.47 N. WAS IN CONFLICT WITH GROUND WITHDRAWN FROM MINERAL ENTRY UNDER P.L.O. 459, 3/30/48; RESTORED JULY 20, 1957. BASE FROM OPERATORS MAP.

Figure 3. REVISED MAP OF RUTH K NO.4 AND SYLVIA CLAIMS IN ACCORDANCE WITH AMENDED LOCATIONS FILED NOVEMBER 4, 1953, SHOWING DMEA AND OTHER HOLES DRILLED

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EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA 4136
CONTRACT NO. 14m-2995

AMENDMENT NO. 5

It is agreed this 21st day of March, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Incorporated, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. 14m-2995, Docket No. DMEA 4136, dated August 21, 1956, hereinafter called the "Contract," that the Contract is amended, effective August 21, 1956, as follows:

1. In Exhibit "A", heading "Description of the Work," subheading "General Provisions," the first sentence of the second paragraph is changed to read as follows:

> The holes shall be drilled non-core through the upper formations to within 10 feet of the top of the Salt Wash member of the Morrison formation and then core drilled through the ore-bearing sandstone, an estimated average distance of 100 feet, to a depth of not to exceed 10 feet into the underlying red mudstone.

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.

UNION MINES, INCORPORATED

By W. E. Bayless
W. E. Bayless, President

(SEAL)

UNITED STATES OF AMERICA

By E. M. Hardman
Acting Executive Officer
DMEA Field Team, Region III

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1-5	G.	225
AMENDMENT NO. 4		

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA 4136
CONTRACT NO. Idm-E995

It is agreed this 25th day of January, 1957, between the the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Incorporated, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E995, Docket No. DMEA 4136, dated August 21, 1956, hereinafter called the "Contract," that:

1. The date fixed in Article 3 of the Contract form, as amended by Amendment No. 3, on or before which work under the Contract is to be commenced, is extended from November 1, 1956 to May 1, 1957.

2. The date fixed in Article 3 of the Contract form, on or before which work is to be completed, is extended from August 1, 1957 to November 1, 1957.

3. The maximum period for payment of royalty and lien for payment thereof, provided for in the Contract, is increased to eleven 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.

UNITED MINES, INCORPORATED

By [signature]
H. E. Bewlove
President

(Seal)

UNITED STATES OF AMERICA

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

EXPLORATION PROJECT CONTRACT

UNION MINES, INCORPORATED

DOCKET NO. DMRA 4136

CONTRACT NO. 14n-2095

AMENDMENT NO. 3

It is agreed this 3rd day of November, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Incorporated, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. 14n-2095, Docket No. DMRA 4136, dated August 21, 1956, hereinafter called the "Contract," that:

1. The date, October 15, 1956, fixed in Article 5 of the Contract from or the date on or before which work under the contract is to be commenced, is extended to November 1, 1956.

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 octuplicate the day and year first above written.

UNION MINES, INCORPORATED

By K. E. Bullock
K. E. Bullock,
President

UNITED STATES OF AMERICA

By W. M. Tracy
Executive Officer, DMRA
Field Team, Region III

(Seal)

DMEA
DEPARTMENT OF THE INTERIOR
NOV 20 1956
REGION III
DENVER, COLORADO

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA 4136
CONTRACT NO. Idm-8995

AMENDMENT NO. 2

It is agreed this 16th day of Nov, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Incorporated, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-8995, Docket No. DMEA 4136, dated August 21, 1956, hereinafter called the "Contract," that the Contract is amended as follows, effective August 21, 1956:

1. The map, "Figure 2 Amended," which is attached hereto and made a part of this Amendment, is substituted for the map, "Figure 2," referred to in: (a) "Article 1." of the Contract form DP-800 (Revised June 1954); (b) Exhibit "A" attached to the Contract; (c) Annex I attached to the Contract and wherein by reference the map, "Figure 2", is made a part thereof.

2. The words, "Figure 2 Amended," are substituted for the words, "Figure 2," wherever found in above said "Article 1.", "Exhibit 'A'", and "Annex I."

3. In Exhibit "A", page "2", caption "Stage I," second line, substitute "10 holes" for "11 holes."

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.

UNION MINES, INCORPORATED

By [signature]
M. F. Sanford, President

(Seal)

UNITED STATES OF AMERICA

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

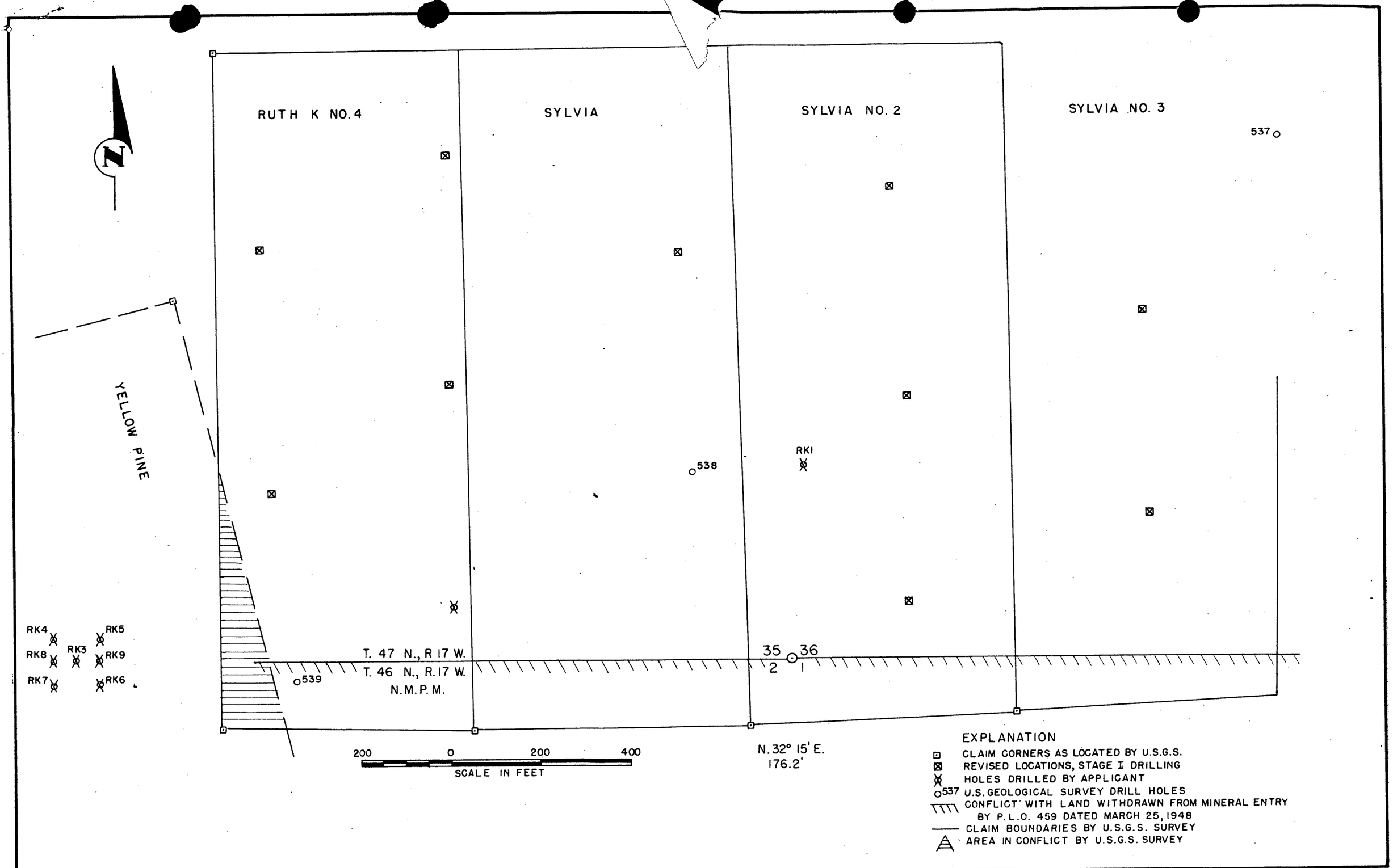

FIGURE 2 AMMENDED-SKETCH MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLO. DMEA 4136 OCTOBER 1956

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA 4136
CONTRACT NO. IDM-5995

AMENDMENT NO. 1

It is agreed this 3rd day of October, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Incorporated, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-5995, Docket No. DMEA 4136, dated August 21, 1956, hereinafter called the "Contract," that the Contract is amended as follows:

1. The date, "September 1, 1956," fixed in "Article 3" as the date on or before which work under the Contract is to be commenced, is extended to "October 15, 1956."

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.

UNITED STATES OF AMERICA

UNION MINES, INCORPORATED

By S. W. Lefewlove
President

By E. N. Hardman
for W. M. Traver
Executive Officer, DMEA
Field Team, Region III

(SEAL)

Per Reg. 3 memo of 7-31-57

CHANGE OF ADDRESS:

433 N. 7th St.
G. J. Colorado

Per FT Memo of 7-31-57.

Docket copy

MF-200
(Revised June 1954)

Docket No. DMEA - 4136

Commodity Uranium

Contract No. Idm-E 995

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this AUG 21 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] UNION MINES, INCORPORATED, a Delaware corporation,

whose mailing address is 304 Main Street
Grand Junction, 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 2.

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee-optionee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a n assignment, [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: Royalty rights of Worcester Mines

(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."

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of the land (lessor, seller, optionor, etc.), are attached, as follows: Consent to Lien of Engineers Associates, Inc., lessor, and Consent to Lien of Worcester Mines

(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 September 1, 1956 shall commence the work, and on or before August 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work [redacted] except as otherwise provided in Exhibit "A" with respect to stages of work. (See Article 13)

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $60,800.00 The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $45,600.00 : *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; ~~but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated total allowable cost of the work.~~ **See Article 13.**

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9. **See Article 13.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

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

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

(c) 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.

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

(e) In the last sentence of Article 6(e), the words "Article 5" are substituted for the words "Article 9."

(f) Notwithstanding any other provision of the contract, the allowable unit cost per foot of drilling is the average unit cost per foot computed on the basis of the actual unit costs of drilling incurred by the Operator, the average cost not to exceed the estimated unit cost set forth in the contract.

Public Lands
"Appd. Sol. Off."
Chief
Chambers
Martin
Johnson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitteecker
Administrator, Defense Minerals
Exploration Administration

UNION MINES, INCORPORATED
(Operator)

By Louis P. Faggini

Title Vice President

I, A. M. Eichternach, 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.

A. M. Eichternach
Secretary

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMSA-4136

ANNEX I

The land referred to in Article 2 of the contract consists of four mining claims located in secs. 35 and 36, T. 47 N., R. 17 W., N.M.P.M. & B., Montrose County, Colorado. The land is shown on the map entitled "Figure 2. Sketch Map Showing Part of the Ruth K and Sylvia Group of Claims, Proposed Hole Locations and Previous Drill Hole Locations, Urado Uranium Corporation, Montrose County, Colorado," attached hereto and made a part hereof. The ownership of the portions of these claims lying in sections 1 and 2, and shown on the map, appears to be in the Government; therefore, said portions of land are not included in the land referred to in Article 2.

The notices of locations of the claims are filed for record in the Office of the County Clerk and Recorder of Montrose County, Colorado, as follows:

Claim	Book	Page
Ruth K No. 4	343	228
Sylvia	343	433
Sylvia No. 2	343	433
Sylvia No. 3	343	434

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator [redacted]
Docket No. DMEA-[redacted]
Contract No. Idm-E 995
Contract Date AUG 2 1 1956
Operator - Union [redacted], Incorporated

RECEIVED
JUL 1 6 1956

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of [redacted], State of [redacted], described as follows:1/ [redacted]

Claim	Book	Page
[redacted]	[redacted]	228
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

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;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

[redacted]

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

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

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

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: None

Dated this 6 day of July, 1956.

Wanesler Mine [Seal]

(a partnership) [Seal]

[Seal]

I, John W. Hill certify that I am the Managing Partner (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]

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator [redacted]
Docket No. DMEA-[redacted]
Contract No. Idm-E 395
Contract Date AUG 21 1956

Operator - Union RECEIVED
[redacted]
Indexed 1956

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of [redacted], State of Colorado [redacted] described as follows:1/ [redacted]

[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	228
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

_____,

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;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

[redacted]

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

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

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

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: None

Dated this 2nd day of July, 1956.

Charles H. Yetter [Seal]

[Seal]

[Seal]

I, E. O. Adams certify that I am the Secretary (~~Secretary, etc.~~) of the corporation named herein; that Charles H. Yetter who signed this agreement was then President (~~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.

E. O. Adams

[Corporate Seal]

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMA-4136

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by core and non-core drilling to test the ore-bearing upper 100 feet of the Salt Wash member of the Morrison formation. The location of the work is indicated on the map (Figure 2) referred to in Annex I.

The holes shall be drilled non-core through the upper formations to the top of the Salt Wash member of the Morrison formation and core drilled for a distance of 100 feet thereafter. Drilling depths are expected to range from 410 feet to 600 feet and to average 546 feet. The minimum size of core shall be EX. All holes shall be reamed and cased or cemented and redrilled as necessary. No payment shall be made for any incompleted drill hole.

All core and cuttings from the cored section of drill holes shall be saved and checked for radioactivity. Sections indicating significant mineralization shall be split for samples, and such samples shall be analyzed chemically for uranium and vanadium. All the remaining core and cuttings saved shall be properly labeled and stored for inspection and disposition by the Government.

All drill holes shall be logged geologically and probed radiometrically, and the record of such logging and probing, together with certified copies of all assay certificates, shall be submitted with the Operator's monthly progress reports.

No hole shall be drilled closer than 100 feet to the boundary of the land referred to in Article 2.

Access roads and drill sites shall be prepared with a D-7 bulldozer or equivalent unit.

The project shall be supervised by a competent geologist or mining engineer, who shall devote full time to the project work.

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

The work shall be divided into two stages as hereinafter described. The Operator shall complete Stage I, and shall perform as much of the Stage II work as the Government approves in writing in advance.

Stage I

Prepare access roads and drill sites with not to exceed 80 hours of bulldozer work; and drill 11 holes aggregating approximately 3,590 feet as indicated on the map (Figure 2). The holes shall be drilled in north-south fences with the westernmost fence at least 100 feet from the western boundary and the distance between fences ranging from 450 feet to 550 feet. Holes in alternate fences are staggered with respect to each other and the distance between the holes in each fence varies from 450 feet to 600 feet. None of the holes shall be located closer than 380 feet to any previously drilled hole. If the 11 holes require more than 3,590 feet to reach the desired horizon, the additional footage and funds required may be transferred and deducted from Stage II upon the written approval of the Government.

Stage II

Prepare access roads and drill sites with not to exceed 200 hours of bulldozer work; and drill not more than 30 holes aggregating not more than 16,800 feet as offsets to previously drilled holes that show significant mineralization. The offset holes shall not be drilled closer than 100 feet to any previously drilled hole.

Estimated Cost of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

1,100 feet core drilling @ $3.50/ft. 1/	$3,850.00	
4,490 feet non-core drilling @ $1.75/ft. 1/	7,857.50	
80 hours bulldozing @ $12.00/hr.	960.00	
Categories (2) through (7) None	_____	$12,667.50

Fixed Unit Costs (See Article 13)

Incidental allowance 2/ for each foot of core and non-core drilling completed - 5,590 feet @ $0.47/ft.	$ 2,627.30	
22 chemical sample analyses @ $5.00/ sample	110.00	$ 2,737.30
Estimated Total Cost of Stage I		$15,404.80

Stage II

Actual Costs

Category (1) Independent Contracts

3,000 feet core drilling @ $3.50/ft. 1/	10,500.00	
13,800 feet non-core drilling @ $1.75/ft. 1/	24,150.00	
200 hours bulldozing @ $12.00/hr.	2,400.00	
Categories (2) through (7) None		37,050.00

Fixed Unit Costs (See Article 13)

Incidental allowance 2/ for each foot of core and non-core drilling completed - 16,800 feet @ $0.47/ft.	7,896.00	
90 chemical sample analyses @ $5.00/ sample	450.00	8,346.00
Estimated Total Cost of Stage II		$45,396.00

Summary of Costs

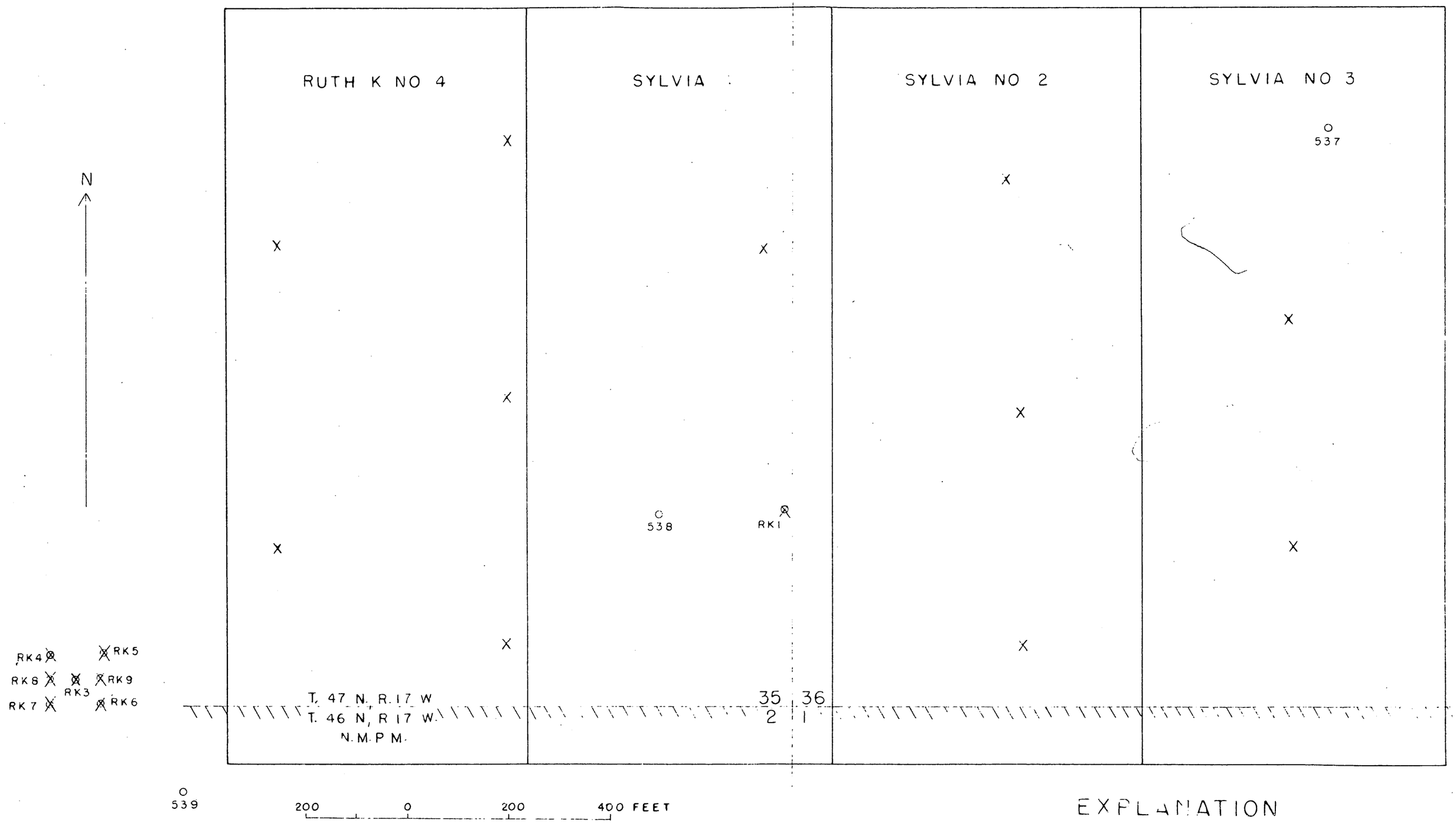
Estimated Total Cost of Stage I	$15,404.80	
Estimated Total Cost of Stage II	45,396.00	
Estimated Total Cost of Project (rounded)		$60,800.00
Government Participation @ 75%		$45,600.00

1/ See Article 13.

2/ Includes all costs that might otherwise have been allowable costs of the project under Categories (2) through (7) of Article 6(a), except for analyses.

U S DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 4136
APRIL 1956



NOTE: BASE TAKEN FROM APPLICANT'S MAP

EXPLANATION

X PROPOSED LOCATIONS, STAGE I DRILLING

⊗ HOLES DRILLED BY APPLICANT

o U. S. GEOLOGICAL SURVEY DRILL HOLES

\\\\ CONFLICT WITH LAND WITHDRAWN FROM MINERAL ENTRY BY P. L. O. 459 DATED MARCH 25, 1948.

FIGURE 2. SKETCH MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLORADO.

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. **See Article 13.**

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

ARTICLE 13. *Changes and added provisions.*— **(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work except as otherwise provided in Exhibit 'A' with respect to stages of work." (b) Categories (2) through (7) of Article 6(a) are deleted. (c) 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.** 16—70617-1 **Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the contract. (d) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted. (e) In the last sentence of Article 6(c), the words "Article 8" are substituted for the words "Article 9." (f) Notwithstanding any other provision of the contract, the allowable unit cost per foot of drilling is the average unit cost per foot computed on the basis of the actual unit cost of drilling incurred by the Operator, the average cost not to exceed the estimated unit cost set forth in the contract. (g) In Article 11, the words "registered mail" are changed to read "certified mail."**

Ching

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Administrator,
Defense Minerals Exploration Administration

UNION MINES, INCORPORATED
(Operator)

By

Title

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

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

RECEIVED
JAN 19 1956

January 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium), Urado Uranium Corporation, Ruth K. Group, Montrose County, Colorado

Enclosed are two copies of the subject application in the amount of $105,860.00.

The applicant states that this new application replaces DMEA Docket 3350 which was closed by the Administrator's letter dated October 7, 1954.

One copy of this application has been forwarded to the Grand Junction office and two copies are being retained in our file.

W. M. Traver

W. M. Traver

Enclosures

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

RECEIVED
JAN 19 1956

January 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. W. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium), Urado Uranium Corporation, Ruth K Group, Montrose County, Colorado

Enclosed is a copy of the subject application in the amount of $105,860.00.

The applicant states that the application is similar to DMEA Docket 3350 except that the area in conflict has been excluded from the new application.

Will you please discuss this application with the representative of the Bureau of Mines in the Grand Junction office and the Atomic Energy Commission and submit eight copies of your joint memorandum of review of the application and your recommendations regarding the necessity of a new field examination.

W. M. TRAVER,

W. M. Traver

HMC:ab

cc: Sec. Op. Comm. (2)
Harshman
Shaw (2)
Subject
Chron.

URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

January 11, 1956

RECEIVED
JAN 19 1956
BUREAU OF MINES
Denver, Colorado

DMEA
Date Rec'd JAN 16 1956

Is this still pending?
Refers 3350
DMEA 3350 closed by
Mitt's. letter 10-7-54.

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region IV
224 New Custom House
Denver 2, Colorado

Dear Mr. Traver:

Re: DMEA Docket No. 3350 (uranium)
Ruth K Group
Montrose County, Colorado

Five copies of a revised application under the above Docket Number is transmitted to Mr. Mittendorf's office through your office.

On the field examination under the above Docket Number, a conflict of claims was found. This new application has been revised to leave out the ground in conflict.

Respectfully submitted,

URADO URANIUM CORPORATION

By M. E. Newlove
M. E. Newlove
President

MEN/ep

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

DMEA
Date Rec'd.
JAN 16 1956

Not to be filled in by applicant

Docket No. DMEA-4136
Metal or Mineral Uranium
Date Received 1-19-56
Estimated Cost $105,860.00
Participation (Government %)

RECEIVED
BUREAU OF MINES
Denver, Colorado
JAN 19 1956

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: Urado Uranium Corporation
304 Main Street
Grand Junction, Colorado

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Ruth K No. 4, Sylvia, Sylvia No. 2 and 3, claims in the SE¼ of Section 35 and SW¼ of Section 36, T. 47 N., R. 17 W., and NW¼, Section 1 and NE¼, Section 2, T. 46 N., R. 17 W., N.M.P.M.

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

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

(*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. (see Exhibits 3 thru 7)

(*e*) If you own the land, describe any liens or encumbrances on it

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

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

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

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

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

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

16—66551-1

EXHIBIT 1

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

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

(*c*) The work will start within 30 days and be completed within 12 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated _____, 1955

URADO URANIUM CORPORATION
(Applicant)

By _____
President

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

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

RECEIVED
JAN 19 1956

APPLICATION FOR DMEA PROJECT

ON THE

RUTH K GROUP

January 11, 1956

Prepared by

URADO URANIUM CORPORATION

304 MAIN STREET

GRAND JUNCTION, COLORADO

RECEIVED
JAN 19 1956

APPLICATION FOR DMEA PROJECT OF THE RUTH K GROUP, PREPARED BY URADO URANIUM CORPORATION, 304 MAIN STREET, GRAND JUNCTION, COLORADO

LIST OF SCHEDULES

Title	Schedule No.
ESTIMATED DRILL HOLE DEPTHS AND DRILLIMG SUMMARY	1
ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS	2
ESTIMATED COSTS UNDER HEADINGS 6b, 6c, 6f and 6g (FORM MF-103)	3
SUMMARY OF COSTS	4

LIST OF FIGURES

Title	Figure No.
MAP SHOWING PROPOSED DRILL HOLES	1

LIST OF EXHIBITS

Title	Exhibit No.
COMPLETED DMEA FORM MF-103	1
TITLE OPINION ON RUTH K CLAIMS	2
ASSIGNMENT FROM GEO-ENGINEERING TO URADO URANIUM CORP.	3
SUPPLEMENTAL AGREEMENT OF WORCESTER MINES	4
MINING LEASE TO GEO-ENGINEERING FROM ENGINEERS ASSOCIATES	5
R. G. SULLIVAN'S REPORT	6
ESTIMATED DRILLING COSTS - MINERALS ENGINEERING CO.	7
ESTIMATED DRILLING COSTS - JOHNSON & YOUVAN	8
ESTIMATED DRILLING COSTS - SPRAGUE & HENWOOD	9

LIST OF PLATES

Title	Plate No.
MAP ACCOMPANYING TITLE OPINION	1
MAP ACCOMPANYING R. G. SULLIVAN'S REPORT	2

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

Dear Mr. Mittendorf:

Re: DMEA Docket No. 3350 (Uranium)
Ruth K Group
Montrose County, Colorado

Transmitted herewith are five copies of DMEA Form MF-103 (Exhibit 1) and supporting documents which constitute an amended application to the above Docket Number for a DMEA project of $105,860 to be advanced by the DMEA in the usual manner as the project proceeds. Urado Uranium Corporation, the new applicant, will pay 25% of the project or $26,465.

The amended application covers four (4) claims (Figure 1) of the six (6) claims which were contained in the original application filed by Worcester Mines and was granted your DMEA Docket Number 3350. The original application was on the Ruth K No. 2, 3 and 4, Sylvia and Sylvia No. 2 and 3 claims. During the DMEA field examination, conflicts were found on the Ruth K No. 2 and 3 claims. Worcester Mines did not elect to continue the project after the conflicts were discovered. With the exception of the conflicted area, the rest of the property seemed to appear favorable to the DMEA Field Team. The Team was composed of Mr. Robert Bordman of the United States Geological Survey of Grand Junction, Colorado, and Mr. Stansbury of the Bureau of Mines of Denver, Colorado.

A Title Opinion on the Ruth K property has been rendered to Urado Uranium Corporation by the law firm of Bryant, Petrie and Waldeck of Montrose, Colorado (see Exhibit No. 2 and Plate No. 1). The chain of title from Worcester Mines to Urado Uranium Corporation is shown in Exhibits No. 3 through No. 5. Exhibit No. 6 and Plate No. 2 are part of a geological report that was written by Mr. Ray G. Sullivan, Colorado Professional Engineer No. 948, Grand Junction, Colorado, on the properties of Urado Uranium Corporation. The following comments are taken from Mr. Sillivan's report.

"This group is composed of six unpatented claims as follows: Ruth K #2, Ruth K #3, Ruth K #4, the Sylvia and the Sylvia #2 and the Sylvia #3. They are located in Sections 35 and 36, Township 47 North, Range 17 West, N.M.P.M. For a better description, the claims are in an area between the east end of the Long Park District owned by U. S. Vanadium and Climax Uranium and the Bitter Creek Mine of the Vanadium Corporation of America.

They are centrally located in the area recently drilled by the United States Geological Survey where considerable new ore occurrences have been discovered. The claims are in the Dakota or upper Morrison member called the Brushy Basin and require 400 to 600 feet depth of holes to penetrate the ore horizons. Recent core drilling which started on the Ruth K No. 2 claim indicates this ore trend penetrates these claims from the west side. Previous holes drilled for the Government outside the property lines and to the east of the Sylvia No. 3 claim indicate a large ore body in that vicinity. (See map) Three holes out of nine drilled on the Ruth K No. 3 indicate mineralization and two holes show commercial ore. Hole No. RK-8 displays $4\frac{1}{2}$ feet of 0.3 U_3O_8; hole No. RK-3 indicates a thin band of ore of 0.18 U_3O_8 grade. Both holes hit the ore at horizons between 418 and 436 feet below the surface. The vanadium content in this area approximates 8 to 10 times the uranium content. Further drill sites are now layed out on both the above mentioned claims as well as the four intervening claims and indicate a total ore potential length of 3,600 feet. The trend in this area is approximately southeast running from the Long Park No. 1, Triangulation and Whitney claims on the northwest down to the Bitter Creek Mine.

From the history of this Long Park area and the drilling that has been done on both sides of the six claims, it would appear that the chances of finding good size commercial ore deposits are very high. As only nine holes have been drilled, it is not possible at this date to measure blocked-out tonnage. Should further drilling be successful, it is anticipated that 20,000 to 25,000 feet will be required to delineate sufficient ore before development and mining could properly proceed. The formations appear to be favorable for medium priced mining costs, ($15 to $20 per ton)."

Estimates on drilling costs for approximately 20,000 feet of exploratory drilling in the Long Park area were obtained from three competent drill companies (see Exhibits 7, 8 and 9). Estimated footages and costs for the project are shown in Schedules No. 1 through 4. 22,390 feet of drilling at $4.728 per foot have been estimated.

As the project has previously been examined, it may be that the application can now be processed without any further field examination. Since the 1954 examination, Urado Uranium Corporation has drilled some holes on the Ruth K No. 2 and 3 claims that penetrated some ore and mineralized material (see Plate No. 1 or 2). In the spring of 1955, Minerals Engineering Company completed a large drilling contract for the U.S.G.S. immediately to the south and southeast of the Ruth K group. From the close spacing of these U.S.G.S. drill holes, the writers believe that a large ore body must have been located.

The proposed drill holes for the amended project are shown on Figure 1. Hole locations have been changed from the map that Mr. Bordman submitted with his Ruth K Report. The change in the locations is necessary because the two west claims have been dropped from the application and because the U.S.G.S. drilling on the adjacent properties appears favorable. It is our opinion that the project is more worthwhile now than it was when previously submitted.

Respectfully submitted,

URADO URANIUM CORPORATION

By M. E. Newlove

M. E. Newlove, President

APPLICATION FOR DMEA PROJECT ON THE RUTH K GROUP, PREPARED BY
URADO URANIUM CORPORATION, 304 MAIN STREET, GRAND JUNCTION, COLORADO

SCHEDULE 1

ESTIMATED DRILL HOLE DEPTHS AND DRILLING SUMMARY

Hole No.	Approx. Collar Elev.	Approx. Bottoming Elev.	Est. Hole Depth	Est. Non-Coring 0-200	Est. Non-Coring 200-400	Est. Non-Coring 400-600	Est. Coring 300-400	Est. Coring 400-500	Est. Coring 500-600
11	6,580	5,990	590	200	200	90		10	90
12	6,500	6,030	470	200	170		30	70	
13	6,520	5,940	580	200	200	80		20	80
14	6,475	5,975	500	200	200			100	
15	6,415	6.005	410	200	110		90	10	
16	6,435	5,905	530	200	200	30		70	30
17	6,350	5,850	500	200	200			100	
18	6,390	5,880	510	200	200	10		90	10
19	6,450	5,910	540	200	200	40		60	40
20	6,305	5,825	480	200	180		20	80	
21	6,335	5,855	480	200	180		20	80	
TOTALS			5,590	2,200	2,040	250	160	690	250
				1.50	1.75	2.25	4.00	4.75	
Price Per Foot				$2.00	$2.50	$3.00	$3.50	$4.25	$4.50
				3,300	3,590	562	640	4465	
Costs				$4,400	$5,100	$750	$560	$2,932.50	$1,125
			12,537.00						
TOTAL COST, STAGE 1 ----			$14,867.50						

ESTIMATED DRILL HOLE DEPTHS AND DRILLING SUMMARY

SCHEDULE 1

APPLICATION FOR DMEA PROJECT OF THE RUTH K GROUP, PREPARED BY
URADO URANIUM CORPORATION, 304 MAIN STREET, GRAND JUNCTION, COLORADO

SCHEDULE 2

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS

Explanation	Units	No. of Units	Cost Per Unit	Total Cost Per Item	Grand Total
Drilling Contractors					
Stage I Drilling	Feet	5,590	$ 2.660		12 539,00 $14,867.50
State II Drilling				Sprague + Henwood	
30 Holes at 560 Feet					
Non-coring 0-200	Feet	6,620	2.00 1.50	$13,240.00	9,930.00
Non-coring 200-400	Feet	6,130	2.50 1.75	15,325.00	10,727.00
Non-coring 400-600	Feet	750	3.00 2.25	2,250.00	1,687.00
Core Drilling 300-400	Feet	490	3.50 4.00	1,715.00	1,960.00
Core Drilling 400-500	Feet	2,060	4.25 4.75	8,755.00	9,785.00
Core Drilling 500-600	Feet	750	4.50 4.75	3,375.00	3 562.00
					37,651.00
Total Stage II Drilling		16,800	2.658		44,660.00
Bulldozer Contractor					
Transportation	Day	6	100.00	600.00	
Drill Sites & Roads	Day	40	100.00	4,000.00	
Total					4,600.00
TOTAL ESTIMATED AMOUNTS TO BE PAID INDEPENDENT CONTRACTORS		22,390	2.864		$64,127.50

13500

22,344

54,188

ESTIMATE OF AMOUNTS TO BE PAID TO INDEPENDENT CONTRACTORS

SCHEDULE 2

APPLICATION FOR DMEA PROJECT ON THE RUTH K GROUP, PREPARED BY URADO URANIUM CORPORATION, 304 MAIN STREET, GRAND JUNCTION, COLORADO

SCHEDULE 3

ESTIMATED COSTS UNDER HEADINGS 6b, 6c, 6f AND 6g, (FORM MF-103)

Explanation	Cost Per Day	Cost Per Month	Cost For Project	Calculated Cost
6b Labor, Supervision and Consultants				
Consultants Fees		$1,000.00	$12,000.00	
Consultants Expenses	$10.00	250.00	3,000.00	
Draftsman		150.00	1,800.00	
Typist		60.00	720.00	
Sampler & Field Assistant		375.00	4,500.00	
Total for 22,390 Feet			$22,020.00	0.983
6c Operating Materials and Supplies				
Office supplies, map and drill log reproductions and other correspondence with DMEA		150.00	1,800.00	
Survey stakes and field supplies			100.00	
Total for 22,390 feet			$ 1,900.00	0.085
6f New Buildings, Installations				
Rental for trailer house		50.00	600.00	
Total for 22,390 Feet			$ 600.00	0.027
6g Miscellaneous				
Accounting and other office expenses		100.00	1,200.00	
Estimated Payroll Taxes			700.00	
Total for 22,390 Feet			$ 1,900.00	0.085

ESTIMATED COSTS UNDER HEADINGS 6b, 6c, 6f AND 6g, (FORM MF-103)

SCHEDULE 3

APPLICATION FOR DMEA PROJECT ON THE RUTH K GROUP, PREPARED BY
URADO URANIUM CORPORATION, 304 MAIN STREET, GRAND JUNCTION, COLORADO

SCHEDULE 4

SUMMARY OF COSTS

Explanation	Unit	No. of Units	Cost Per Unit	Total Cost Each Item	Grand Total
6a-Independent Contractors (Schedule 2)	Feet	22,390	$21864	$64,127.50	$64,127.50
6b-Labor, Supervision, etc. (Schedule 3)	Feet	22,390	0.983	22,020.00	
6c-Operating Material, etc. (Schedule 3)	Feet	22,390	0.085	1,900.00	
6d-Operating Equipment	None				
6e-Rehabilitation	None				
6f-New Buildings, etc. (Schedule 3)	Feet	22,390	0.027	600.00	
6g-Miscellaneous (Schedule 3)	Feet	22,390	0.085	1,900.00	
6h-Contingencies					
For 6a above - 15%				9,620.50	
For 6b above - 10%				2,202.00	
For 6c above - 20%				380.00	
For 6f above - 10%				60.00	
For 6g above - 50%				950.00	39,632.50
Calculated Unit Cost Per Foot	Feet	22,390	4.634		103,760.00
Calculated Cost of Project using Unit Cost Per Boot before Allowance for Analytical Work	Feet	22,390	4.634		103,760.00
Analytical Costs					
U_3O_8 Analysis	Sample	300	3.50	1,050.00	
V_2O_5 Analysis	Sample	300	1.50	450.00	
$CaCO_3$ Analysis	Sample	300	2.00	600.00	2,100.00
Grand Total	Feet	22,390	4.728		$105,860.00
Cost of Project During DMEA Participation					$105,860.00
Less 25% To Be Paid by Urado Uranium Corporation					26,465.00
AMOUNT OF DMEA LOAN REQUESTED					$ 79,395.00

SUMMARY OF COSTS

SCHEDULE 4

T I T L E O P I N I O N

Submitted To

Urado Uranium Corporation
304 Main Street
Grand Junction, Colorado

RECEIVED
JAN 19 1956

August 15, 1955

Pursuant to the request of Urado Uranium Corporation, we have made an office examination of certain evidence of title hereinafter specified, which we have been furnished, pertaining to the following described unpatented mining claims located in the Vixen Mining District of the County of Montrose and State of Colorado, the names of which claims, together with the book and page of recordation of the Location Certificates thereof in the office of the Recorder of said County and State are respectively as follows:

Name of Claim	Book	Page
Sylvia	343	433
Sylvia #2	343	433
Sylvia #3	343	434
Ruth K. #2	343	234
Ruth K. #3	343	235
Ruth K. #4	343	238

1. Materials Examined:

The following evidences of title have been examined:

(a) Abstract of title, containing photostatic copies of instruments appearing of record, consisting of 36 pages prepared and certified to August 18, 1955, at 8:00 o'clock A. M., by the Montrose County Abstract Company, Montrose, Colorado.

(b) Report of search of the records of the Bureau of Land Management in Denver, Colorado, prepared by James S. Holmberg, a photostatic copy of which report, designated as Exhibit "A", is attached to this opinion.

(c) Map prepared from a field survey by Louis P. Gaggini, Professional Engineer, a copy of which map, designated as Exhibit "B", is attached to this opinion.

2. Scope of Title Examination:

The validity of possessory title under the mining laws of the United States and State of Colorado depends upon certain factors which are not revealed

by examination of official records. All mining titles are, therefore, subject to certain hazards, which can be minimized nevertheless by independent field investigation. Such field investigation does not come within the scope of the within title opinion, but such opinion is necessarily based upon the assumption of a satisfactory determination of the non-record facts necessary to support the validity of mining titles. Among the factors which should be determined by independent field examination are the following:

(a) Was the land upon which the claims were located open to appropriation under the mining laws at the time of such location? In this connection, it becomes important to determine, first, that such land was not included within a reservation, withdrawal or classification by applicable law or administrative action such that the land was not open to entry under the general mining laws, and, second, that such land was not included within the boundaries of a prior valid mining claim or patent.

In order to determine the first of the above questions, a search of the records of the Bureau of Land Management in Denver, Colorado, has been made and a report prepared by James S. Holmberg, attorney at law, of Denver, Colorado, concerning the status of the land at the time the subject claims were located. This report, hereto attached as Exhibit "A" indicates that the said lands were open to appropriation at the time of the location of the claims, subject, however, to compliance with the provisions of Public Law 250 as hereinafter more fully discussed.

The second of the above stated questions, concerning the existence of prior conflicting claims, is more difficult to answer. Since the mining laws do not require that a mining claim be located with respect to particular public land survey divisions, it is usually impossible to determine from the records of the County in which the claims are located whether other claims have been located upon the particular lands. For this reason, Abstractors are usually unable to compile a tract index so that such abstract might contain all instruments filed of record affecting the specific land covered by the abstracted claims. The abstract which we have been furnished contains the following limitation in the certificate thereto:

> Montrose County Abstract Company, of Montrose, Colorado, hereby certifies that the foregoing -36- pages, numbered 1 to 36 inclusive, constitutes a true and correct Abstract of Title showing all instruments filed or recorded in the office of the Recorder of the County of Montrose, State of Colorado specifically containing the names of the claims described in the caption hereof to 8:00 A.M. August 18, 1955 affecting the title thereto.

In order to attempt to determine whether prior overlapping or conflicting claims exist, a careful field investigation and survey of the claims, and land immediately adjacent thereto should be conducted to determine the possible existence of any physical evidence of such overlapping claims. Should any such evidence be found, then a further search of the County Records should be made to determine the probable validity and priority of any such overlapping claim. The recommended field investigation, however, will not supply certain assurance of the non-existence of overlapping claims, since under the mining laws, a locator who has once properly located his claim is under no duty to maintain the corner posts or location monuments in position. Even if no such posts, monuments or notices appear upon the ground, still it is possible that such ground can be covered by a valid subsisting mining claim.

A map prepared from a field survey and investigation has been supplied to us for the purpose of our title examination and is hereto attached as Exhibit "B". Said Exhibit "B" discloses a possible overlap of two claims called the Jack Pine and Yellow Pine with a portion of Ruth K. #2 and Ruth K. #3 claims. Although the Yellow Pine and Jack Pine claims appear to have been first recorded, still there is a serious question as to the validity of such claims. Investigations which have been conducted on the ground and affidavits obtained from persons making such investigation, as appear in the abstract, indicate that no discovery shafts as required by law were excavated upon these conflicting claims at the time the same were located or subsequently. The failure to perform such required discovery work would render the land subject to location by other and the first party effecting a valid location would prevail.

(b) Was a discovery of mineral made upon each of such claims sufficient to initiate rights under the mining laws? Under the mining laws of the United States, in order to initiate the right to the possession and enjoyment of a mining claim, a discovery of mineral must be made such that a reasonable person would be justified in expending further time and money on the claim in the reasonable expectation of development of pay or commercial ore. Prior to actual discovery, however, a claimant actually in possession of his claim and diligently performing work and prospecting looking to a discovery will be protected under the law, at least for a reasonable length of time, while he is so engaged, against intruding third parties.

The Colorado law requires that a discovery shaft must be excavated upon each claim to a depth of 10 feet and must reveal a well defined "crevice". By this is meant that a discovery of mineral must be revealed in the discovery shaft. Recently the Colorado Legislature has enacted a law which provides that the filing of a map, prepared from a field survey, in the office of the Recorder of the County in which the claim is located, showing the said claim with reference to sections of public land survey or natural permanent monuments

in the case of a claim upon unsurveyed land, will serve as an alternative in lieu of the aforementioned discovery shaft. Should any doubt exist as to the sufficiency of any of the discovery shafts upon the subject claims, then it is recommended that the claimants comply with the provisions of such new law.

For the purpose of this opinion, we must assume the discovery requirements of the law have been met with respect to all of the claims.

(c) Were the claims actually posted with Notices of Location and staked upon the ground in accordance with applicable law? The Federal Law merely requires that a mining claim be marked upon the ground so that its boundaries can be readily traced. Colorado law implementing the federal statutes requires the posting of a Notice of Location upon the claim and the marking of the boundaries with six substantial posts which are hewn or marked on the side toward the claim. The posts must be placed at the four corners of the claim and one at the center of each side line. Whether the subject claims have, in fact, been so staked is a matter which must be determined from field investigation. After a claim has once been properly posted, staked and recorded, there is no continuing obligation of the claimant to maintain his notice or stakes in position. The filing of the location certificates for the claims creates prima facie evidence that the claims were, in fact, posted and staked in accordance with the representations contained in such certificates.

3. Title:

According to the materials examined, as of the date of certification of the abstract, possessory title under the mining laws to all of the above described mining claims was vested in ENGINEERS ASSOCIATES, INC., subject to a leasehold estate and option to purchase held by Urado Uranium Corporation. The said lease is for a term of 10 years with a privilege to renew for an additional term of 10 years. The lease reserves a 13% royalty to Lessor, Engineers Associates, Inc., and in addition provides for the payment of an over-riding royalty unto Worcester Mines of 3% upon the first 20,000 tons produced and a 5% upon the next 20,000 to 100,000 tons produced after which such override shall terminate.

The lease requires lessee to enter possession on or before May 15, 1955, and thereafter within one year to perform 7500 feet of rotary or diamond drilling upon the claims. After the first year Lessee is required to perform $100.00 worth of work each month or pay such sum to Lessors as advance royalty.

Lessee is granted an option to purchase the interest of Engineers Associates, Inc., in the claims for a total of $75,000.00 at any time during the life of the lease. In the event of the exercise of such option, all moneys received as a result of said 13% royalty shall be applied on the purchase price.

Such title is subject to the assumptions and determinations discussed in paragraph number 2 above and in addition to the exceptions and reservations specified below.

4. Reservations and Exceptions:

(a) It appears from the land status report Exhibit "A" that the lands covered by the above claims were at the time of location subject to outstanding leases or applications therefor made pursuant to the Minerals Leasing Act of 1920. The abstracts reveal that compliance has been had with respect to said claims with the provisions of Public Law 250 of the 83rd Congress. The said claims are, therefore, subject to the reservation of Minerals Leasing Act Minerals and to other reservations and conditions specified in said Public Law 250. Such reservations do not prevent or materially interfere with the utilization of the claims for the mining of minerals subject to the general mining laws.

Respectfully submitted,

BRYANT, PETRIE & WALDECK

By William G. Waldeck
William G. Waldeck
Attorneys at Law
Montrose, Colorado

WGW:wc

ASSIGNMENT

For and in consideration of the issuance of 2,000,000 shares of the common capital stock of Urado Uranium Corporation, a Colorado Corporation, the receipt whereof is hereby acknowledged, the undersigned Louis P. Gaggini and Geo-Engineering, a Limited Partnership composed of Louis P. Gaggini, Harold A. Culp and Lewis D. Anderson, having its principal office at Grand Junction, Colorado, have agreed and by these presents do hereby sell, assign and transfer unto Urado Uranium Corporation, its successors and assigns all the right, title, interest and estate in and to or in any manner arising from any and all of the following described instruments, all of which relate to the Sylvia, Sylvia No. 2 and No. 3, and Ruth K No. 2 to No.4, inclusive, claims located in the Vixen Mining District of Montrose County, Colorado, to wit:

1. Mining Lease dated March 1, 1954, between Engineers Associates, Incorporated, as Lessor and Louis P. Gaggini as Lessee.

2. Agreement dated March 15, 1954, between Louis P. Gaggini as Lessor and Worcester Mines as Lessee.

3. Mining Lease dated March 4, 1955, between Engineers Associates, Incorporated, as Lessor and Geo-Engineering as Lessee.

4. Supplemental Agreement dated March 4, 1955, between Geo-Engineering and Worcester Mines.

Copies of each of the above specified instruments are attached hereto and

IN WITNESS WHEREOF, The undersigned have executed the foregoing assignment this 5th day of March, 1955.

/s/ Louis P. Gaggini
Louis P. Gaggini

GEO-ENGINEERING

By /s/ Louis P. Gaggini
General Partner

STATE OF COLORADO)
) ss.
COUNTY OF MESA)

The foregoing instrument was acknowledged before me this 5th day of MARCH, 1955, by Louis P. Gaggini and Lewis D. Anderson as General Partner of Geo-Engineering.

Witness my hand and official seal.

My commission expires: JANUARY 16, 1956

/s/ LELA ROSS
Notary Public

(SEAL)

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

I, Lela Ross, a Notary Public in and for the County of Montrose and State of Colorado, certify that the within and foregoing instrument constitutes a true and correct copy of the duly executed original thereof; that I have compared the foregoing instrument with the said executed original thereof which is on file in the office of Urado Uranium Corporation, 304 Main, Grand Junction, Colorado, and that such foregoing copy conforms in all respects and particulars with the said executed original thereof.

WITNESS My hand and notarial seal this 16th day of August, 1955.

My commission expires January 16, 1956.

Lela Ross
Notary Public

Filed for Record June 29, 1955 at 1:04 P.M.
No. 316261 Ira C. Foster, Recorder

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENT, made and entered into this 4th day of March, 1955, between GEO-ENGINEERING, hereinafter referred to as "Lessee" and, WORCESTER MINES, hereinafter referred to as "WORCESTER MINES", WITNESSETH:

WHEREAS, ENGINEERING ASSOCIATES, INC. and Lessee on this date entered into a mining lease involving:

Sylvia	Ruth K. #2
Sylvia #2	Ruth K. #3
Sylvia #3	Ruth K. #4

mining claims in Vixon mining district in Montrose County, Colorado, and

WHEREAS, WORCESTER MINES, is interested in said mining claims, as Assignee, in lease and option dated March 1, 1954, involving said claims, which rights it is surrendering by the execution of the mining lease dated March 4, 1955 and this Supplemental Agreement, and

WHEREAS, the said WORCESTER MINES is desirous of being protected in the event the Lessee desires to surrender its lease or in the event it makes a default thereunder, and Lessee is willing to give it such protection as an inducement to securing a release of said assignment.

NOW THEREFORE in consideration of the premises, the Lessee and WORCESTER MINES agree as follows:

That if the Lessee receives a notice of forfetiure from the ENGINEERING ASSOCIATES, INC. under paragraph number 2 on page 3 of said lease dated March 4, 1955, it agrees to send a copy of such notice, immediately by registered mail to WORCESTER MINES, in care of John W. Hill at Grand Junction, Colorado.

In the event that Lessee fails to cure or correct failure to perform or has failed to commence in good faith, the correction of any default in performance as required by its lease, within 20 days from the date of the service of such notice upon it, by ENGINEERING ASSOCIATES,

then WORCESTER MINES shall have the right and privilege of curing or commencing to cure any default and shall thereafter have all of the right, title and interest of the Lessee in and under said Lease and Option and the Lessee agrees, in such event, to assign all its interest in said Lease and all rights thereunder to WORCESTER MINES, and Lessee shall thereafter have no further interest in said lease.

IT IS FURTHER AGREED that if the Lessee elects to surrender said lease to ENGINEERING ASSOCIATES, INC. it shall first give notice of intention to surrender to WORCESTER MINES by registered mail as above set forth. And if WORCESTER MINES desires to keep said lease in full force and effect it shall so notify Lessee, and Lessee thereupon agrees to assign all his right title and interest in said lease to WORCESTER MINES, and WORCESTER MINES shall agree to indemnify, protect and save Lessee harmless from any liability under said lease arising after such assignment. Any notice of surrender by Lessee to ENGINEERING ASSOCIATES shall certify that WORCESTER MINES has been given prior notice as provided for in this supplemental agreement.

IT IS FURTHER AGREED that in the event the Lessee does not choose to mine any ore discovered in the leased premises, then the WORCESTER MINES shall have the option and privilege to review all diamond drill information developed, geologic information and any and all other information so developed, and may at its own risk, mine the ore discovered and pay a royalty to ENGINEERING ASSOCIATES, INC. as specified in paragraph 2 of page 2 of said lease of March 4, 1955 and pay Lessee royalty from the proceeds of ore mined and sold, less development and haulage allowances in the same percentages and on the same basis as WORCESTER MINES would have received, being more particularly set forth in paragraph 8 on page 3 of said lease.

IT IS FURTHER AGREED that prior agreement between the parties hereto involving said claims, dated March 15, 1954 be terminated.

IT IS FURTHER AGREED that paragraph 8 on page 3 of said lease shall be amended by inserting the word "dry" before the word "tons" in said paragraph, wherever the word "tons" appears.

IT IS FURTHER MUTUALLY AGREED that Lessee shall furnish WORCESTER MINES, upon its request, copies of drilling logs, and drilling information, assays and other exploration data.

THIS AGREEMENT shall be binding upon and inure to the benefit of the heirs, personal representatives, successors and assigns of the respective parties, it being specifically understood and agreed that the provisions of this supplemental agreement shall be made a part of any assignment of said lease of March 4, 1955, that may be made by Lessee.

IN WITNESS WHEREOF the parties have executed this agreement the date above set forth.

GEO-ENGINEERING, a limited partnership,

By /s/ Louis P. Gaggini
General Partner

WORCESTER MINES, a general partnership,

By /s/ John W. Hill

By /s/ C. E. Poister

General Partners

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

I, Lela Ross, a Notary Public in and for the County of Montrose and State of Colorado, certify that the within and foregoing instrument constitutes a true and correct copy of the duly executed original thereof; that I have compared the foregoing instrument with the said executed original thereof which is on file in the office of Urado Uranium Corporation, 304 Main, Grand Junction, Colorado, and that such foregoing copy conforms in all respects and particulars with the said executed original thereof.

WITNESS My hand and notarial seal this 16th day of August, 1955.

My commission expires January 16, 1956.

Lela Ross
Notary Public

Filed for Record July 19, 1955 at 10:18 A. M.
No. 317192 Ira C. Foster, Recorder

MINING LEASE

THIS AGREEMENT, Made and entered into this 5th day of March, 1955, by and between ENGINEERS ASSOCIATES, INC., a Colorado Corporation, with principal office at Grand Junction, Colorado, (hereinafter referred to as "Lessor"), and GEO ENGINEERING, a Limited Partnership, with principal office at Grand Junction, Colorado, (hereinafter referred to as "Lessee"), and WORCESTER MINES, a Partnership, with principal office at Grand Junction, Colorado,

W I T N E S S E T H:

WHEREAS, on the 1st day of March, 1954, Lessor executed a mining lease to one Louis P. Caggini, of Norwood, Colorado, which mining lease covered the following described Mining Claims located in the Vixen Mining District in the County of Montrose, and State of Colorado, to-wit:

Name of Claim	Book	Page
Sylvia	343	433
Sylvia No. 2	343	433
Sylvia No. 3	343	434
Ruth K No. 2	343	234
Ruth K No. 3	343	235
Ruth K No. 4	343	228

WHEREAS, On the 15th day of March, 1954, the said Louis P. Caggini assigned the aforesaid lease unto Worcester Mines, and

WHEREAS, The parties hereto are mutually desirous of cancelling and terminating the aforementioned lease and executing a new lease unto the Lessee, Geo Engineering, according to the terms and conditions hereinafter set forth;

For and in consideration of the royalties, covenants and agreements hereinafter contained to be kept, paid and performed by Lessee, the Lessor agrees and by these presents does hereby let, lease and demise unto Lessee all of the unpatented mining claims as above described.

TO HAVE AND TO HOLD Unto Lessee for the term of 10 years from date hereof, together with the right to renew this lease for an additional term of 10 years upon the same terms and conditions, unless sooner forfeited for the violation of any covenant herein required to be paid, kept and performed by Lessee, and with the right in Lessee to surrender this lease at any time after set forth.

IN CONSIDERATION Of such lease, Lessee covenants and agrees with Lessor as follows:

1. To pay Lessor as advance royalty in addition to the $1,000.00 heretofore paid the sum of One Thousand and no/100 Dollars ($1,000.00) upon the execution of these presents.

2. To cause to be paid Lessor a royalty of 15% of the proceeds of ores mined and sold from any of said claims, including 15% of any bonus payments paid by the A. E. C., less, however, development and haulage allowances. Lessee shall be entitled to deduct from ore proceeds as above defined said 15% royalty until such deductions shall equal said advance royalty payment of $2,000.00.

3. On or before May 15, 1955, to enter upon said mining claims and to do and perform thereon, at such points and places as Lessee may be advised, a minimum of 7500 feet of rotary or diamond drilling and to complete the same within one year from the date of commencement thereof; provided that within 30 days from the date of these presents Lessee shall drill two exploratory holes, one of which shall be placed on the South Half of Ruth I No. 2 and the other of which shall be placed on the South Half of Ruth I No. 3 Claim, it being understood that such drilling shall be credited against the 7500 feet required in the first year as herein set forth.

4. To keep full and accurate records of all operations carried on hereunder, including drilling records, maps and assays open to the inspection of Lessor at all reasonable times, and to permit Lessor full and free access to said claims for the purpose of inspection.

5. In the event of the discovery of commercial ores, to mine the same with due and reasonable diligence so as to take out the greatest amount of ore possible; to carry on mining operations in strict conformity with all laws and regulations pertaining to such operations; to carry Workmen's Compensation Insurance; and to pay all State and Federal taxes and exactions under operations hereunder, including any production taxes; and to save and keep harmless Lessor from any and all liability of every kind and character arising out of his mining operations hereunder.

6. So long as this lease may be in effect to do and perform, within the time prescribed by law, the annual labor required for the retention of possessory rights upon said mining claims, and to make and file affidavits showing, beginning with the period ending June 30, 1955.

7. Lessee agrees that after the first year period of this lease, he will expend a minimum of $100.00 per month in operations hereunder, or, in lieu thereof, pay Lessor such sum monthly as advance royalty.

8. Lessee further agrees that from and of the interest which it has in ores which may be produced by it under the terms of this agreement, there shall be paid to Worcester Mines a royalty of 5% of ore proceeds as defined in paragraph 2 above upon the first 20,000 tons of ore produced thereafter 5% royalty on production from 20,000 to 100,000 tons. Such royalty shall terminate after production of 100,000 tons has been realized from the premises.

9. Lessor and Worcester Mines agree that in the event Lessee or its assigns make application for an exploratory loan from any government agency to explore for uranium upon said mining claims, they will sub-ordinate their respective royalty rights on any ores so discovered by such exploration work performed with funds from such loan to the extent of permitting Lessee or his assigns to repay such loan according to its terms; it being understood and agreed, however, that the provisions of this paragraph shall in no event reduce the royalty payments heretofore specified to be paid Lessor or Worcester Mines. Upon application for such loan, Lessor and Worcester Mines will promptly execute their consent to the same and the terms thereof when presented to it.

IT IS MUTUALLY AGREED Between the parties hereto:

1. That Lessee shall have the right to surrender this lease at any time upon giving Lessor at least 30 days written notice, sent by registered mail to it at Grand Junction, Colorado, and, upon such surrender or cancellation as hereinafter provided, Lessee shall have the right, within a reasonable time, to remove his machinery, equipment and personal property upon said claims, but Lessor shall keep and retain, as its sole property, all royalty payments theretofore made, and Lessee shall have no claim thereto.

2. In the event that Lessee shall fail to perform any of the covenants or duties incumbent upon it by the terms of this agreement, the Lessor shall have the privilege of serving written notice upon Lessee specifying in detail the covenants and duties which Lessee has failed to perform and the substantial facts constituting such failure. Such notice shall further provide that Lessee shall, within a period of thirty (30) days from service thereof, cure or correct such failure to perform. In the event that Lessee shall fail

or refuse within sa[illegible] thirty (30) day period to ento[illegible]n good faith upon the correction of such default in performance and to carry out such correction to completion thereafter with due diligence, then Lessor shall have the privilege, at its option, of declaring this agreement and said assignment forfeited and null and void.

3. Lessee shall have the right to transfer and assign this lease and the option in connection therewith and all of his right thereunder without the consent of Lessor.

4. In the event Lessee desires to extend the term of this lease as heretofore provided, he or his assigns shall give Lessor at least six months' written notice of such intention to renew prior to the expiration of the original term.

OPTION PROVISION

In consideration of the acceptance of the foregoing lease and the payment of said advance royalties and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, Lessee shall have the right to purchase the said mining claims for the total sum of 175,000.00 C.F.D.; all royalties paid unto Lessor under the above lease to be applied upon said purchase price. Upon its exercise and tender of payment during the period of said lease, Lessor shall make and deliver, at its cost and charges, a good and sufficient deed conveying said mining claims to Lessee, clear and free of any liens or encumbrances made or suffered by it. The forfeiture, surrender or termination of said lease shall render this option void.

It is understood and agreed between the parties that the within agreement supersedes all agreements heretofore made by the parties and relating to the subject matter hereof.

IN WITNESS WHEREOF, The parties hereto have executed the foregoing this 4th day of March, 1955.

ENGINEERS ASSOCIATES, INC.

By Charles H. Jetter
President

ATTEST:

E. O. Hansen
Secretary

Lessor

ENGINEERS ASSOCIATES INC. SEAL COLORADO

Lessee

WORCESTER MINES

By John M. Hill
Partner

S & Worcester

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

I, Lela Ross, a Notary Public in and for the County of Montrose and State of Colorado, certify that the within and foregoing instrument constitutes a true and correct copy of the duly executed original thereof; that I have compared the foregoing instrument with the said executed original thereof which is on file in the office of Urado Uranium Corporation, 304 Main, Grand Junction, Colorado, and that such foregoing copy conforms in all respects and particulars with the said executed original thereof.

WITNESS My hand and notarial seal this 16th day of August, 1955.

My commission expires January 16, 1956.

Lela Ross
Notary Public

May 21, 1955

Urado Uranium, Incorporated
304 Main Street
Grand Junction, Colorado

Gentlemen:

This report is being written at your request and covers most of your uranium properties located in western Colorado. I will first summarize some of the salient geological features or criteria which are common to the Morrison deposits of the Colorado Plateau region. Most of these have been proven by considerable experience in finding, development and mining these ores, and they are of primary importance in appraising deposits of this character. In the conclusion the geologic evaluation will be made of the properties of Urado Uranium.

The properties covered by this report are located in the northeast part of the Colorado Plateau region in the Counties of Mesa, Montrose, San Miguel and Dolores. They were located for potential deposits in the Morrison formation of the Jurassic Age.

The "Colorado Plateau" is a term given to the large area of approximately 160,000 square miles covering, in general, the Colorado River drainage and, in particular, the general flat-lying sedimentary formations of the Triassic and Jurassic Ages. Uranium and its related vanadium ores were first discovered in the Salt Wash member of the Morrison which is of Jurassic Age. Deposits in this formation have been commercially worked for their values since the early 1900's. In more recent years commercial uranium deposits have been rediscovered in the lower Triassic formation which as they normally do not contain commercial amounts of vanadium were passed over in previous periods. This section between the lowest formation and the highest upper members vary between 2,000 and 4,000 feet in vertical cross section, and in places throughout this distance, more than twenty different ore horizons have been found to occur.

The early deposits were originally discovered by the outcrops found along canyon walls. Initially, these surface deposits were held in small regard as containing minor amounts of metal. Subsequent work in the early days led to more extensive discoveries back of the rims of these outcrops, and it was found that the canyon exposures only marked the beginning of long ribbon-like groups or assemblages of ore lenses. By continued drilling and other means of exploration, it was found that these trends can be traced for many miles under the ever thickening caps of overlying rocks. In many cases, these trends were found to tie in with other known deposits which outcropped in far distant canyon walls.

As the pattern of ore occurrences became better understood, it was possible for the geologists and engineers in more recent years to predicate more accurately general ore trends. By the use of more efficient drills, the formations were penetrated under deeper and deeper rock cappings, and ore bodies have been found during the more recent years in areas between 400 and 800 feet below the surface.

As the properties of Urado Uranium with which this report deals are all located in areas where the Morrison formation is the immediate target, this report will be confined to a detailed description of Morrison ore occurrences. Several of the groups of claims owned by the company are located in areas adjacent to old producing areas where much of the geologic information is now available with regard to general depositional areas, and the opportunities to find ore may be comparatively easily assessed. The Morrison formation has up to this time been the leading and chief source of uranium and vanadium ores. Some of the areas in which these claims are located, such as Long Park, Gypsum Valley and the Slick Rock district, are old and famous producing areas. The habits of the ores in these areas are quite well understood, and predications can be made as to possible future ore occurrences when the past experience is available to the operator.

For ease of description, the properties of Urado Uranium have been divided into four divisions and a description of each follows.

A general statement can be made of each of the groups in that there is no mineable ore available for immediate production on any claims located in these groups. Most of the claims lie adjacent to or contiguous with old producing ore trends. One group has had recently discovered ore bodies on two sides of the claims. Other groups have ore that has been drilled but which is not opened for visible inspection other than the resulting cores or cuttings from the discovery holes.

I. LONG PARK DIVISION:

This group is composed of six unpatented claims as follows: Ruth K2, Ruth K3 and Ruth K4, the Sylvia and the Sylvias 2 and 3. They are located in Sections 35 and 36, T 47 N, R 17 W, N.M.P.M. For a better description, the claims are in an area between the east end of the Long Park District owned by U. S. Vanadium and Climax Uranium and the Bitter Creek Mine of the Vanadium Corporation of America.

They are centrally located in the area recently drilled by the U. S. Geological Survey where considerable new ore occurrences have been discovered. The claims are in the Dakota or upper Morrison member called the Brushy Basin and require 400 to 600 feet depth holes to penetrate the ore horizons. Recent core drilling which started on the Ruth K2 claim indicated this ore trend penetrates these claims from the west side. Previous holes drilled for the Government outside the property lines and to the east of the Sylvia 3 claim indicate a large ore body in that vicinity. (See map) Three holes out of nine drilled on the Ruth K2 indicate mineralization and two holes show commercial ore. Hole No. RK-8 displays 4-$\frac{1}{2}$ feet of 0.3 U_3O_8; hole No. RK-3 indicates a thin band of ore of 0.18 U_3O_8 grade. Both holes hit the ore at horizons between 418 and 436 feet below the surface. The vanadium content in this area approximates 8 to 10 times the uranium content. Further drill sites are now layed out on both the above-mentioned claims as well as the four intervening claims and indicate a total ore potential length of 3,600 feet. The trend in this area is approximately southeast running from the Long Park #1, Triangulation and Whitney claims on the northwest down to the Bitter Creek Mine.

From the history of this Long Park area and the drilling that has been done on both sides of the six claims, it would appear that the chances of finding good size commercial ore deposits are very high. As only nine holes have been drilled, it is not possible at this date to measure blocked-out tonnage. Should further drilling be successful, it is anticipated that 20,000 to 25,000 feet will be required to delineate sufficient ore before development and mining could properly proceed. The formations appear to be favorable for medium-priced mining costs, ($15.00 to $20.00 per ton).

II. BIG GYPSUM VALLEY DIVISION:

Gypsum Valley is a northwest-southeast anticlinal valley which on its western limits narrows down and is named Little Gypsum Valley. The valley is approximately 16 miles in length and near its western limits is transversed by the Dolores River. Of the five groups of claims that comprise this division, five are located on the southwest side of the valley. The anticlinal structure of the valley allows the northern rim to be very well exposed with some step faulting blocks being quite numerous on the northeast side. The southwest limit has had comparatively little exploration as the faulting in this locality has resulted in only exposing the upper or Brush Basin member of the Morrison. As a consequence, the early exploration and mining by-passed this area because no ore outcrops could be found.

In Gypsum Valley the general regional ore trends appear to cut through the center of the valley in a northeasterly-southwesterly direction normal to the direction of the valley. Thus claims lying on the southeast end would be less favorably located than those groups that would be located in the center.

Starting on the south side of the valley and going northwest, the first group of this area is the Truck claims consisting of 10 full claims plus a fraction claim. Previous lessees have shallow drilled a small section of these claims with a dry hole wagon drill, under D.M.E.A. loan. Most of this drilling was centralized around a small anticline at which point one narrow ore occurrence was reported to be found. This hole is reported to contain 10 inches .25 U_3O_8, .85 V_2O_5. From an examination of the structure at this locality, it appears the past work was performed without engineering or geologic controls, and that because of the presence of the above-mentioned anticlinal structure, most holes were bottomed short of the pay horizon. (See map) It is recommended that an initial 2,000 feet of shallow drilling be performed at this area to evaluate the zone taking into consideration the geologic structure.

The next four groups of claims in Big Gypsum Valley are located as follows:

A. The Ute Group - 5 claims located in Sections 19 and 20, T 44 N, R 17 W, N.M.P.M.

B. The Rose Group - 8 claims located in Sections 11 and 14, T 44 N, R 18 W, N.M.P.M.

C. Topaz Group - 8 claims in Sections 9, 10, 15 and 16, T 44 N, R 18 W, N.M.P.M.

D. The Ame Group - 9 claims in Sections 4, 9, 10, T 44 N, R 18 W, N.M.P.M.

All of the above claims are located in the lower San Miguel Mining District and the Ute claims begin about one-half mile west of the Truck group. Each assemblage is separated by intervening groups of claims of other ownerships. There are no known ore outcrops on any of these groups as the surface is covered with talus as well as barren Brushy Basin formation as described before. The U. S. Vanadium Company has work under way on claims adjacent to the Topaz group. A small high-grade ore body was drilled on these claims last year.

All the above four mentioned groups require considerable drilling to explore their potential. As the area is highly faulted, it is believed that very little core work will be successful. It is recommended that claims be drilled dry preferably and the cuttings be caught to ascertain if ore is penetrated. Drilling on most of the claims will be fairly deep, running on an average depth between 300 and 600 feet. All four groups have in the writer's opinion a very high potential and should be thoroughly drilled in order to fully exploit the area.

III. THE LITTLE GYPSUM VALLEY DIVISION:

In this division may be considered two groups of claims, those which are located adjacent to or in the vicinity of the Dolores River and those which are located on Island Mesa.

In the first group is included 630 acres of patented mineral rights leased from the Garbareno Ranch located partially in Sections 19, 20, 28, 29, 32 and 33, T45N, R18W, N.M.P.M. Also in this group is approximately 300 acres called the Ft. Knox group obtained as a sublease under an Atomic Energy Commission lease. The group is in Section 30, T 45 N, R18W, N.M.P.M.

The Crackerjack claims consist of six claims in the bottom of the Little Gypsum Valley, Sections 12 and 13, T45N, R19W.

All of the above land will require drilling in various forms. The Garbareno patented land has part of the 600 acres which are adjacent to old producers owned by U. S. Vanadium Company such as the River View claim. In this vicinity shallow, cheap drilling will only be necessary. Some small ore occurrences can be observed at depths not exceeding 18 to 20 feet. These ore occurrences will probably be small in size but should support a profitable operation. The cost of finding and mining new ore will be comparatively cheap.

The exploration of the Ft. Knox group will be very expensive; this applies also to the Crackerjack group. Both of these groups appear to be highly faulted and a study of Government drilling results will confirm that while this area has good potential for finding ore, the expense of drilling will be also high. It is recommended that these particular

claims be given very close, detailed geologic study and mapping. It is noted that there are many faulted segments and small anticlinal as well as synclinal structures in the area. Here again it is recommended that, if possible, the area be drilled with plug bit dry hole methods as core recovery in most areas would be very poor.

The claims located on Island Mesa are as follows:

A. The Buckskin Group - 20 claims
B. The Bulus Chung Group - 10 claims
C. The Aca Dacus Group - 10 claims

All the above claims lie in parts of Sections 5, 8, 16, 17 and 18, T45N, R19W.

The Island Mesa section has never produced ore of commercial grade although many small occurrences may be observed along the outcrops. It is recommended that no drilling be scheduled for this area at this time pending results from those more favorably located in the Big Gypsum Valley area.

IV. THE SLICK ROCK AND DISAPPOINTMENT VALLEY DIVISION:

On the south side of Disappointment Valley, Urado has leased approximately 1800 acres from the Garbareno Ranch. This is located in parts of Sections 26, 27, 34 and 35, T44N, R18W, N.M.P.M. All of this ground is situated where the Salt Wash formation is deeply buried. Drilling depths are estimated to average approximately 1,000 feet. The potential of this area can be considered as good, but the cost of drilling would prohibit its exploration. Because of the high cost, it is recommended that this area be combined with other ownerships adjacent to it and the larger area farmed out for drilling. In this manner Urado Uranium would retain an override royalty on a considerably larger acreage. Arrangements such as described above are now being implemented in other areas where deep drilling is required, and in order to interest people in expending these sums, large blocks of ground are being pooled.

The Horse Range Mesa and Cougar Canyon groups consist of approximately 50 claims located in parts of Sections 14, 15, 22 and 23, T44N, R19W, San Miguel County. This large group of claims will require moderately deep drilling to find ore. The Cougar Canyon group is adjacent to the San Juan Mine, and A.E.C. lease which has been in production for over two years. Drilling is recommended for the Cougar Canyon claims to be concurrent with the Big Gypsum exploration. The Horse Range Mesa group should have drilling deferred at this time.

As an appraisal of the above-mentioned group of claims, it is the writer's definite opinion that the Ruth K claims contain considerable potential ore. It is recommended that an extensive and thorough drilling program be initiated on these six claims at the earliest opportunity. Should the results of this drilling prove favorable, development and mining should begin at the earliest date. After these first steps have been made, it is further recommended that drilling commence in the Big Gypsum Valley division and Cougar Canyon claims with special reference to the Garbareno shallow ground and the claims lying on the

southwest side of Gypsum Valley. The potential of these claims is second greatest although they may subsequently prove to be the largest producers should the ore trends be pin-pointed and sufficient tonnage be blocked out to warrant the necessary expenditures for development. It is further recommended that work be held in abeyance on all the other groups and that, wherever possible, groups such as the Disappointment and the Garbareno patented land be combined with other ownerships in order that exploration would be desirable for other parties.

Yours very truly,

/s/ Raymond G. Sullivan

Raymond G. Sullivan
Colorado Professional Engineer
#948

RGS/K

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

September 20, 1955

Urado Uranium Corp.
204 Main
Room 15
Grand Junction, Colorado

RECEIVED
JAN 19 1956

Attention Mr. Lewis D. Anderson

Gentlemen:

Pursuant to your request of September 12, 1955, we wish to submit the following bid on 20,000 minimum feet of vertical core drilling in the Long Park Area, Montrose County, Colorado:

Depth	Price per Foot Plug	Price per Foot Core
0-200 feet	$2.15	$2.65
200-400 feet	2.45	3.15
400-600 feet	3.00	4.25
600-800 feet	4.50	5.75

Stand-by time is charged at the rate of $12.00 per hour.

We will anticipate starting this program within two weeks of notification of acceptance of our bid. This bid is for your consideration on the D.M.E.A. loan application for holes to depths of an average of 350 feet of which the bottom 200 feet will be cored.

It will be a pleasure to hear from you concerning this bid.

Very truly yours,

MINERALS ENGINEERING COMPANY

John B. Rigg
Drilling Division

JBR/k

Exhibit 7 Page

JOHNSON & YOUVAN

DIAMOND CORE DRILLING

NATURITA, COLORADO

September 14, 1955

Urado Uranium Corporation
304 Main Street
Grand Junction, Colorado

Gentlemen:

In response to your invitation of September 12 we are pleased to submit an estimate on your proposed drilling program in the Long Park area as follows:

Non-Core Drilling	0-200 feet	$2.00 per foot
	200-400 "	2.50 " "
	400-600 "	3.00 " "
Core Drilling	0-100 "	2.25 " "
	100-200 "	2.50 " "
	200-300 "	2.75 " "
	300-400 "	3.25 " "
	400-500 "	3.75 " "
	500-600 "	4.25 " "

This is for an estimated 20,000 feet. A change in footage may require a revision in these prices. This quotation is not to be construed as a contract and is subject to final approval by both parties embodying more complete details.

We appreciate the opportunity of quoting on this work and shall look forward to hearing further from you.

Very truly yours,

JOHNSON & YOUVAN

Jack R. Smith

Jack R. Smith
General Manager

JRS:dab

Exhibit 18 Page

MANUFACTURERS OF
DIAMOND DRILLS
DRILLING EQUIPMENT
DIAMOND BITS

BRANCH OFFICES
NEW YORK · PITTSBURGH
PHILADELPHIA
GRAND JUNCTION, COLO.

EXECUTIVE OFFICES & PLANT
221 W. OLIVE STREET
SCRANTON, PA

SPRAGUE & HENWOOD, INC.

SINCE 1883

CONTRACTORS FOR
DIAMOND DRILLING
SHOT DRILLING · SOIL SAMPLING · PRESSURE GROUTING
WATER WELLS & CHURN DRILLING

PLEASE REPLY TO
P. O. BOX 645
GRAND JUNCTION, COLO.
TELEPHONE 834

September 16, 1955

Urado Uranium Corporation
304 Main Street
Grand Junction, Colorado

Attn: Lewis D. Anderson

Gentlemen:

In reply to your letter of September 12, 1955, we herewith submit our quotation for drilling in Long Park area, Montrose County, Colorado. We understand that this drilling area is in Sections 35 and 36 T 47 N-R 17 W and Sections 1 and 2 T 46 N - R 17 W.

PROPOSAL:

Non-Core Drilling

Item 1.	From 0 to 200 ft.	$1.50 per ft.
Item 2.	From 200 to 400 ft.	$1.75 per ft.
Item 3.	From 400 to 600 ft.	$2.25 per ft.

Core drilling Minimum AX (1 1/8") Cores.

Item 4.	From 0 to 200 ft.	$3.25 per ft.
Item 5.	From 200 to 400 ft.	$4.00 per ft.
Item 6.	From 400 to 600 ft.	$4.75 per ft.
Item 7.	From 600 to 800 ft.	$6.00 per ft.

Delays

Item 8. For all delays for radiometric logging or for any reason required by the customer . . $12.00 per hr. per rig.

Transportation

Item 9. Transporation of crews and equipment to and from job. . Lump Sum. $1000.00

Note: The transportation charge does NOT apply if 10,000 feet of drilling is completed.

Grand Junction, Colorado
September 16, 1955

(Continued Page -2-)

This proposal is subject to the following provisions:

1. All drill hole locations and access roads to drill sites will be constructed and maintained to accommodate Sprague & Henwood, Inc. truck mounted drills and water trucks. Any bulldozer work required for preparation of sites and roads will be furnished by the customer at no cost to Sprague & Henwood, Inc.

2. Cores will be delivered at drill hole locations, and storage and preservation of cores will be the responsiblility of the customer.

3. Upon completion of a hole to the specified bottom depth and prior to moving the drill rig, if the drill and crew are required to stand by while the customer logs said hole with subsurface logging equipment, or if the drill and crew are required to perform additional work in the hole for use of subsurface logging equipment, Sprague & Henwood, Inc. will be paid at the rate per hour specified under Item 8. of proposed schedule above.

4. In the event the customer does not have logging equipment available at the time the hole is completed to specified depth, the customer may require that the casing be left in the hole and the drill moved to another site. Sprague & Henwood, Inc. shall be paid at the rate per hour under Item 8. for the time required to return, set up on hole, and pull the casing. If such casing should be impossible to recover after diligent effort on the part of Sprague & Henwood, Inc., using such equipment normally capable of performing the operation efficiently, then the casing left in the hole will be paid for by the Urado Uranium Corporation at the fair market value.

5. All work shall be performed in such a manner as to secure maximum core recovery from each hole drilled and to deliver as complete and accurate core samples as are consistent with good drilling practice.

6. All holes will be located in the field by the customer.

7. All rights of entry to and exit from the property will be obtained by the customer.

8. Prior to commencement of drilling of each hole, the non-core depth will be established by the Owner. This depth may be changed by the Owner at any time prior to commencement of coring. Once coring has begun, any drilling beyond the depth where coring commenced, will be paid for at coring prices.

SPRAGUE & HENWOOD, INC. Grand Junction, Colorado

Grand Junction, Colorado
September 16, 1955

(Continued Page -3-)

9. Non-core drilling will be accomplished by either wet or dry methods at the option of the constractor. Samples will be delivered at the hole location from non-core portions of the hole when available. If circulation is lost or moisture encountered so that samples are not obtainable and additional work such a s reaming and casing or any other measures required to obtain circulation for the purpose of obtaining samples, is required, this work will be a chargeable item under Item 8. of the schedule of prices.

10. Payments are to be made monthly based on completed holes, within 15 days after date of invoice. Should payments not be made within the specified period then Sprague & Henwood, Inc. reserves the right to terminate operations. Credit arrangements satisfactory to Sprague & Henwood, Inc. must be made prior to commencement of work.

We thank you for the opportunity of submitting this proposal and hope to be favored with your order.

Very truly yours,

SPRAGUE & HENWOOD, INC.

R. R. Carver
Western Manager

RRC:bc
CC Scranton

RECEIVED
JAN 19 1955

E P. COSTAS
927
EK CITY, UTAH

AIR MAIL 6¢ U.S. POSTAGE
AIR MAIL 6¢ U.S. POSTAGE

IN 1956 UTAH

1

AIR MAIL

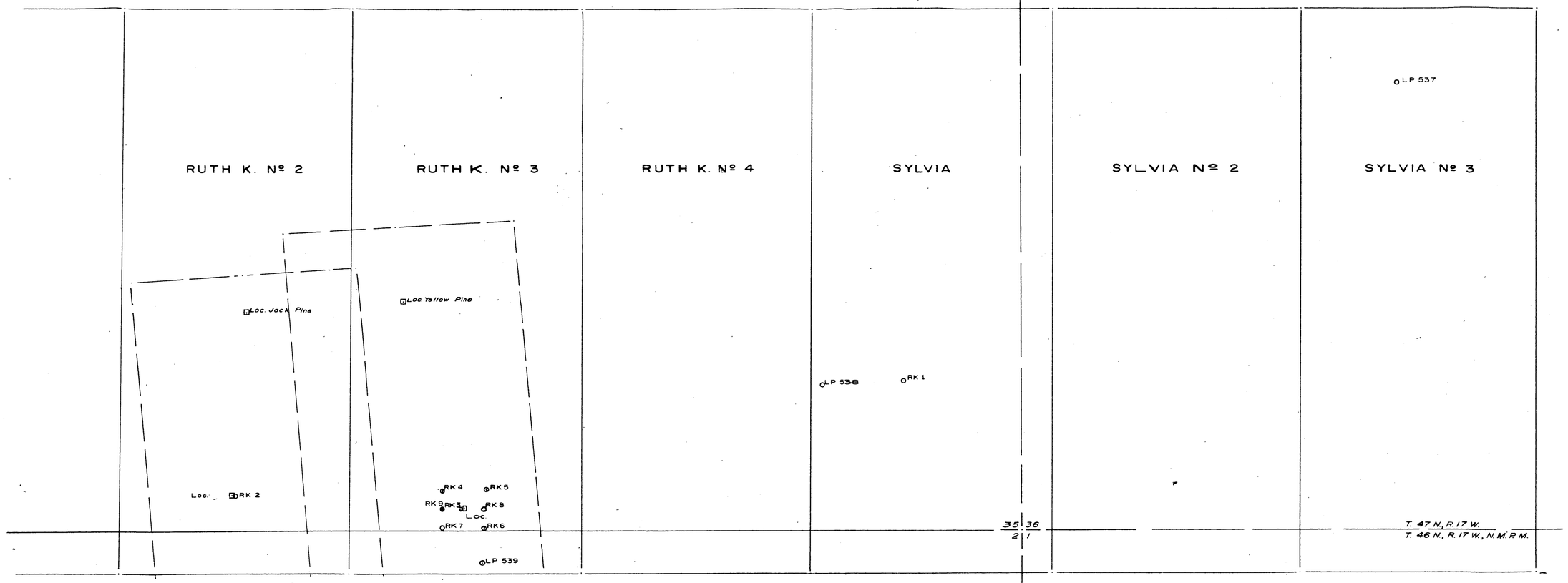
C. O. MITTENDORF, ADMINISTRATOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

U. S. DEPARTMENT OF INTERIOR

WASHINGTON, 25 D. C.

AIR MAIL



Map to accompany
R.G.SULLIVAN REPORT
on some
URADO URANIUM CORPORATION
in Colorado

RUTH K. GROUP

Plate 2

N

EXPLANATION

LP539 U.S.G.S. Drill Hole

Company Drill Holes

RK 9 Ore

1/4 Ore

+0.49 or +0.08

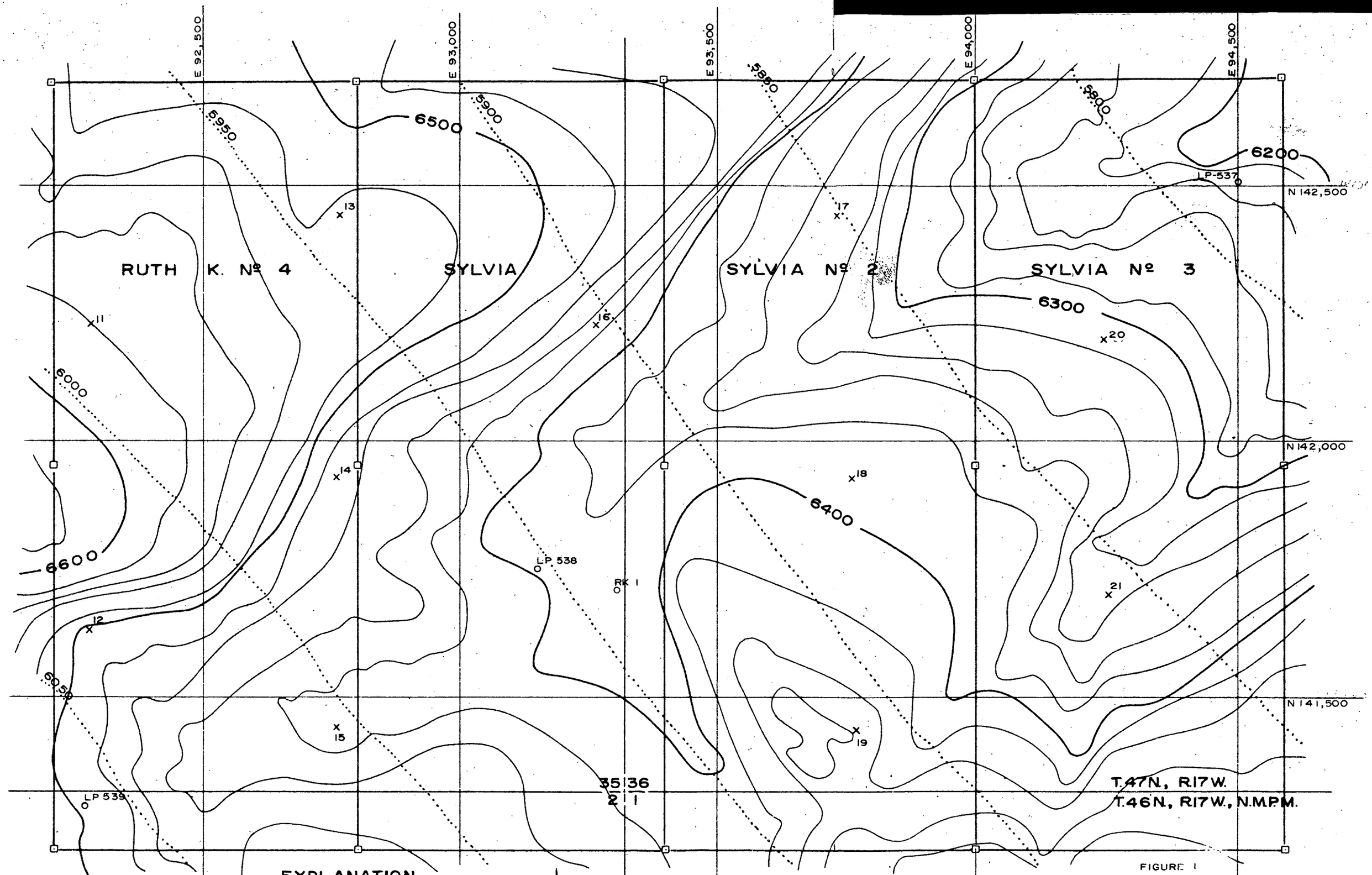
-0.49 or -0.08

Location Cut

SCALE: 1" = 200'

DRILL HOLE ANALYSIS

HOLE NO.	BASE	Thickness	PROBE ASSAY U_3O_8	CHEM ASSAY U_3O_8	CHEM ASSAY V_2O_5
RK 1	BARREN				
RK 2	BARREN				
RK 3	411.8	0.5		0.18	1.33
	412.3	0.5		0.06	1.00
RK 4	415.5	1.0	.03		
RK 5	BARREN				
RK 6	372.8	0.3	.03		
	382.3	1.6	.02		
RK 7	BARREN				
RK 8	411.0	0.5		0.04	1.48
	435.0	3.5	0.30		



EXPLANATION

- 15 — PROPOSED DRILL HOLES
- RK 1 — COMPLETED DRILL HOLES
- LP 537 — U.S.G.S. DRILL HOLES
- CLAIM POSTS
- ESTIMATED BOTTOMING ELEVATION

Scale 1" = 200'

FIGURE 1

GEO-ENGINEERING

TOPOGRAPHIC MAP

SHOWING

PROPOSED DRILL HOLES

D.M.E.A. APPLICATION

ON

RUTH K. GROUP

URADO URANIUM CORP.

Krause

Project Summary Report

By: Michael Ching November 28, 1958

1. Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995

Operator - Union Mines, Incorporated
433 North 7th Street
Grand Junction, Colorado

Property - Four unpatented lode mining claims, Ruth K No. 4, Sylvia, Sylvia No. 2, and Sylvia No. 3, situated in secs. 35 and 36, T. 47 N., R. 17 W., N.M.P.M.& B., Montrose County, Colorado. Those portions of these claims lying in secs. 1 and 2 are not included in the contract.

Operator's Property Rights -

Lessee-Optionee of the mineral rights. Consent to Liens signed by Engineers Associates, Inc., Lessor, and Worcester Mines, holder of royalty rights.

2. Contract (Long Form) dated August 21, 1956.

Final starting date - May 1, 1957
Actual starting date - March 20, 1957
Contract completion date - November 1, 1957
Actual completion date - October 9, 1957

Work Authorized (as amended)-

Test the ore-bearing upper 100 feet of the Salt Wash member of the Morrison formation for uranium by core and non-core drilling in two stages as follows:

Stage I (Not more than 10 holes)

1,100 ft. core drilling @ $3.50/ft.	$3,850.00
4,490 ft. non-core drilling @ $1.75/ft.	7,857.50
80 hrs. bulldozing @ $12.00/hr.	960.00
5,590 ft. @ $0.47/ft. incidental allowance	2,627.30
22 chem. sample analyses @ $5/sample	110.00
	$15,404.80

Carried forward		$15,404.80

Work authorized - continued

Stage II (Not more than 30 holes)

3,000 ft. core drilling @ $3.50/ft.	$10,500.00	
13,800 ft. non-core drilling @ $1.75/ft.	24,150.00	
16,800 ft. @ $0.47/ft. incidental allowance	7,896.00	
90 chem. sample analyses @ $5/sample	450.00	
240 hrs. bulldozing @ $10.00/hr.	2,400.00	45,396.00
Estimated total cost of the project (rounded)		$60,800.00
Government participation @ 75%		$45,600.00

Amendments -

No. 1 - dated October 3, 1956, extends final starting date from September 1, 1956, to October 15, 1956.

No. 2 - dated November 16, 1956, substitutes a map "Figure 2 Amended" for a map "Figure 2" wherever referred to and used in the contract. Also decreases number of holes allowable in Stage I from 11 to 10.

No. 3 - dated December 3, 1956, extends final starting date from October 15, 1956, to November 1, 1956.

No. 4 - dated January 25, 1957, extends final starting date from November 1, 1956, to May 1, 1957, extends completion date from August 1, 1957, to November 1, 1957, and increases the maximum royalty payment period from 10 years to 11 years.

No. 5 - Amends description of the work to provide for non-core drilling to within 10 feet of the top of the Salt Wash member, and core drilling through the ore-bearing sandstone but penetrating the underlying red mudstone a distance not to exceed 10 feet.

No. 6 - Dated September 4, 1957, provides for a suspension of work from April 14 through July 30, 1957. Deletes general requirement that a D-7 bulldozer or equivalent unit be used on roads and drill sites, substituting a D-7 for Stage I and a D-6 or equivalent unit, at a fixed unit

cost, for Stage II. Substitutes a map "Figure 3" for the map "Figure 2 Amended" attached to Amendment No. 2.

Work Completed - (Work was confined to Stage I.)

Stage I (9 holes)

3,685 ft. non-core drilling @ $1.75/ft.	$6,448.75	
551.7 ft. core drilling @ $3.50/ft.	1,930.95	
77 hrs. bulldozing @ $12/hr.	924.00	
6 chem. sample analyses @ $5/sample	30.00	
4,236.7 ft. @ $0.47/ft. incidental allowance	1,991.24	
Total cost of the project		$11,324.94
Government participation @ 75%		$ 8,493.71

Final Reports Received

Operator - Submitted July 7, 1958.
Received July 14, 1958.

Field Team - Dated November, 1958.
Received November 17, 1958.

3. Auditor's Report of Review - dated July 14, 1958.

Total cost as billed by Operator	$11,379.73
Exceptions	54.79
Total accepted cost	$11,324.94
Government participation @ 75%	$ 8,493.71

4. Certification of discovery - None.

5. Results and Comments -

The project was designed to test the upper sandstone units of the Salt Wash member of the Morrison formation for uranium. None of the 9 holes completed in Stage I penetrated ore-grade material; 2 holes were weakly mineralized (0.02 to 0.04% U_3O_8) and 7 holes were barren. The results did not justify further work as provided for in Stage II.

The average depth of the holes drilled was 470 feet. They were spaced 400 feet or more apart. No unusual difficulties were encountered in the actual drilling of the 9 holes, but there were many delays in starting the work, and once started, the work was done sporadically. Planning and execution of the work by the Operator was poor, as evidenced by the elapsed time of over 13 months between the date of the contract and the completion of the small amount of approved work. The Operator claims that the drilling prices allowed under the contract were lower than the going prices in the area; consequently, difficulty was experienced in engaging and keeping a drilling contractor.

The results do not justify a certification of discovery nor any future exploration on the property by the Government.

Michael Ching

Michael Ching

C

EA Form 17
b. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WORK COMPLETED ANALYSIS

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

Operator **Union Mines, Incorporated**		Actual Cost	X
State **Colorado**		Agreed Unit Cost	
Final Report of Audit		Commodity **Uranium**	Docket No. DMEA-4136
Final Report of Review			Contract No. Idm-E995

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) D.D. Core	4,100.?	16,277.00	551.7	2,190.24	2,190.24
D.D. Non-Core	18,290	40,603.00	3685.0	8,180.70	8,180.70
Surface Excavation					
Underground Excavation					
Roads and Trails		3,360.00		924.00	924.00
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Chem. Analyses		560.00		30.00	30.00
Totals (Round ?)		$ 60,800.00		11,324.94	* 11,324.94

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

Complete
(~~Incomplete~~)

Prepared by Michael Ching Date 11-10-58

31398

DMEA Form 7
(12-56)

12/12/58

Hold until 1/11/59

JAN 13 1959

OFFICIAL FILE COPY

Date	Surname	Code
	Ching	700
12/15	Kuerner	700
1/13	Jaffert	800
1/13	Schnaz	120
		110
		~~100~~
1/13	C	220
		700

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
433 North 7th Street
Grand Junction, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Gaggini:

Reference is made to your terminated 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.

We appreciate your interest and participation in the DMEA exploration program which has now been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

(signed) FRANK E. JOHNSON
ACTING Director

cc to: John W. Hill, Managing Partner, Worcester Mines,
Grand Junction, Colorado
Charles W. Yetter, President, Engineers Associates, Inc.
Grand Junction, Colorado

MChing/gla
12-12-58
cc to: Director's Reading file
Mr. Ching
Division of Contract Adm. & Audit
OME Field Team, Region III (2)

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/12/58	Ching	700
12/15	Kuenzle	700
1/13	Talbert	800
1/13	Jeffrey	120
		110
		~~100~~
		220
		700

Hold until 1/11/59

JAN 13 1959

Mr. John W. Hill
Managing Partner
Worcester Mines
Grand Junction, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Hill:

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 signed by you on July 6, 1956, under the DMEA program which has now been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

(signed) FRANK E. JOHNSON (ph)
ACTING Director

Enclosure

MChing/gla
12-22-58
cc to: Director's Reading File
Mr. Ching
OME Field Team, Region III (2)

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/12/58	Ching	700
12/18	Kesure	700
1/13	Jaffrey	800
1/13	Selfridge	120
		110
		~~100~~
		220
		700

12/12/58

Hold until 1/11/59

JAN 13 1959

Mr. Charles W. Yetter, President
Engineers Associates, Inc.
Grand Junction, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Yetter:

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 signed by you on July 2, 1956, under the DMEA program which has now been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

(signed) FRANK E. JOHNSON

ACTING Director

Enclosure

MChing/gla
12-12-58
cc to: Director's Reading File
Mr. Ching
OME Field Team, Region III (2)

8623

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 20 1958

DATE	INITIALS	CODE
11/21	C	220
		700

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

Date November 20, 1958
DMEA Docket No. 4136
DMEA Contract No.
Commodity Uranium
Name of Applicant Union Mines, Inc.
Location of property Montrose County, Colorado
Estimated cost of project $60,800

Memorandum

To: Frederick L. Knouse, Acting Director, OME
Rare and Misc. Minerals Division

From: James Paone, Bureau of Mines Member JP
Uranium Commodity Committee

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

1. Date of subject document: 11/13/58 2. Date received by reviewer: 11/19/58

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 meeting special consideration:

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

9. Action advised:

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

10. Remarks: (Use back of page if necessary). Recommend that no certification of discovery be made.

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. 110		11/21
2. ~~800~~		11/24
3. 700		
4.		
5.		
FROM:		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

INT.-DUP. SEC., WASH., D.C. M8278

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

November 13, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 17 1958

DATE	INITIALS	CODE
11-17	C	220
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11/21	CD	220
		700

Memorandum

TO: Chairman, Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket No. DMEA 4136 (Uranium) Contract No. Idm-E995 Union Mines, Inc., (Ruth K. claims group) Montrose County, Colorado - FINAL SUMMARY REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report, dated November, 1958, by J. William Hasler, Geologist, Geological Survey, and H. F. Robertson, Mining Engineer, Bureau of Mines. The original and one copy of the Operator's final report were forwarded by our memorandum of July 11, 1958.

The contract was considered completed on completion of the work under Stage I, and the Operator was so notified by our letter of May 19, 1958.

Final payment to the Operator was processed by this office July 24, 1958, in conformance with the Report of Review of reported project costs by the Contract Administration and Audit Divison, dated July 14, 1958.

Exploration work completed consisted of the drilling of 9 holes, aggregating 3,865 ft. of non-core drilling, and 551.7 ft. of core drilling. Additional work or service incidental to the drilling consisted of 77 hours of bulldozing, chemical analysis of 6 samples for U_3O_8 content, and Incidental Allowance for 4,236 ft. of drilling.

FINAL F.T. REPORT

Reviewed by
OME OPERATING COMMITTEE
11/21/58
(date)

The exploration work did not result in the discovery or development of a significant quantity of Uranium ore; therefore, the field examiners recommend that no Certification of Discovery or Development be issued, in which this office concurs.

By J. W. Townsend

By E. N. Harshman

Enclosures

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

OME
DEPARTMENT OF THE INTERIOR
NOV 12 1958
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
RECEIVED NOV 17 1958

DATE	INITIALS	CODE

November 5, 1958

MEMORANDUM

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

Through: E. N. Hershman

From: J. William Hasler

Subject: Docket No. DMEA 4136 (Uranium), Contract Idm-E 995, Union Mines, Inc., Ruth K. Group, Montrose County, Colorado. Transmittal of final report.

Enclosed are 11 copies of a joint final engineering and geologic report on the above mentioned contract, prepared by H. F. Robertson, U. S. Bureau of Mines, and J. W. Hasler, U. S. Geological Survey.

Figures 1, 2, and 3 are being sent under separate cover.

J. William Hasler

J. William Hasler
Geologist

Reviewed by
OME OPERATING COMMITTEE
11/21/58
(date)

WO

Rec 11-12-58

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 17 1958

DATE	INITIALS	CODE

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINAL REPORT BY EXAMINING TEAM
REGION III

OME
DEPARTMENT OF THE INTERIOR
NOV 12 1958
REGION III
DENVER, COLORADO

DMEA 4136

Contract Idm-E 995

Union Mines, Incorporated

Ruth K. group

Montrose County, Colorado

Uranium

Joint final Geologic and Engineering Report

by

J. William Hasler
U. S. Geological Survey

H. F. Robertson
U. S. Bureau of Mines

November 1958

Rev
OME OPER
11/21/58

DMEA 4136
CONTRACT Idm-E 995
UNION MINES, INCORPORATED
RUTH K. GROUP
MONTROSE COUNTY, COLORADO

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Joint final geologic and engineering report

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DMEA 4136
CONTRACT Idm-E 995
UNION MINES, INCORPORATED
RUTH K. GROUP
MONTROSE COUNTY, COLORADO

INTRODUCTION

Summary and Recommendations

In February 1956, Union Mines, Incorporated (previously, Urado Uranium Corporation), 433 North 7th Street, Grand Junction, Colorado, applied for DMEA participation in an exploration project on four unpatented lode mining claims in the Long Park area of the Uravan mining district, Montrose County, Colorado. The application was referred to the field and an examination was made on March 26, 1956, by Carl Belser, U. S. Bureau of Mines and W. B. Gazdik, U. S. Geological Survey, accompanied by Harold L. Culp, representative of the applicant.

The principal uranium deposits in the Long Park area are found in sandstone units restricted largely to the upper 100 feet of the Salt Wash member of the Morrison formation of Jurassic age. The mineralized rock consists principally of sandstone impregnated with uranium and vanadium minerals in a ratio of 1:6. Ore bodies, lying essentially parallel to the sandstone beds, range from small irregular masses containing a few tons to large tabular masses containing thousands of tons of ore-grade material. In some deposits the highest grade of ore occurs in sharply bounded elongate concretionary structures or "rolls" which cross bedding planes.

The applicant proposed utilizing 22,390 feet of diamond drilling at an estimated cost of $105,860.00 to explore for uranium deposits of the above types on the subject property. The four claims lie almost entirely in ground classed as favorable for uranium deposition and are near sizeable known ore bodies. Consequently, it was considered feasible to conduct an exploratory drilling program in a search for similar ore bodies on the four claims comprising the project area.

The field examiners recommended approval of a program essentially the same--with respect to number and location of drill holes--as that proposed by the applicant but at a substantially reduced estimated overall cost. Contract Idm-E 995, prepared and signed on August 21, 1956, authorized a two-stage exploratory drilling project consisting of a maximum of 18,290 feet of noncore drilling and 4,100 feet of core drilling at an estimated total cost of $60,800.00. Maximum Government participation at 75 percent was limited to $45,600.00.

Drilling under the subject contract did not start until March 20, 1957, and continued intermittently until October 9, 1957. During the period, a total of nine Stage I holes, comprising 3,685 feet of noncore drilling and 565.5 feet of core drilling, were completed at an accepted overall cost of $11,324.94. No further work was requested or authorized.

The drill holes, which tested the uppermost sandstone "rim" of the Salt Wash member of the Morrison formation, penetrated only traces of mineralized material. Because of the essentially negative results, the examining team recommends that no certification of discovery or development be issued. Government participation in additional exploration of the subject claims is not warranted.

LOCATION AND ACCESSIBILITY

The subordinated property consists of four unpatented lode mining claims located in secs. 35 and 36, T. 47 N., R. 17 W., N.M.P.M. & B., Long Park area of the Uravan mining district, Montrose County, Colorado (figs. 1 and 2). The claims cover a deep northeast-trending canyon, eroded through Burro Canyon and Brushy Basin sediments and rimmed by vertical Burro Canyon cliffs. A dirt access road about one-half mile in length, connects the property with the main Long Park road which is graveled and maintained by Montrose County. About 5-1/2 miles southeast from its junction with the access road, the Long Park road enters paved State Highway 90 in Paradox Valley. From this point it is about 9 miles to Naturita, Colorado, and about 112 miles to Grand Junction, Colorado, via State Highways 90 and 141, and U. S. Highway 50.

The area is typical Colorado Plateau mesa land with altitudes on the claims ranging from 6,620 feet, atop the Burro Canyon rims, to 6,100 feet, the low point at which an intermittent stream crosses the north end line of the Sylvia No. 3 claim. The Long Park area, as a whole, lies on the northeast flank of the northwesterly trending Paradox anticline and is from 500 to 1,000 feet higher than the valley and rivers bounding it on the southwest, northwest, and northeast. The surface of Long Park is cut by many steepwalled northeast-trending canyons similar to the one partially covered by the claims comprising the project area.

The normally semiarid climate permits year-round operations, although surface exploration may be interrupted as a result of infrequent storms in late winter and early spring. Water for mining, exploration, and domestic purposes can usually be obtained from nearby reservoirs and springs. Vegetation on Long Park consists of a moderate growth of juniper and pinyon on rocky terrain and abundant sagebrush in the open "parks" where soils are thick. Cacti and sparse stands of grass are widely distributed.

Lumber and some mining supplies are obtainable at Naturita, Nucla, or Uravan, but most items must come from Grand Junction, Colorado, the nearest major supply center, a distance of 103 miles from Naturita over State Highway 141 and U. S. Highway 50. The nearest railroad is the D. and R. G. W. at Ridgeway, Colorado, about 70 miles east of the operator's claims.

Most uranium ore produced on Long Park is hauled to the Union Carbide Nuclear mill located at Uravan, Colorado. The Vanadium Corporation of American also accepts custom ores at a buying station in Naturita for processing at their mill in Durango, Colorado.

PROPERTY

The property included in the contract consists of four contiguous unpatented lode mining claims which are recorded in the records of the County Clerk and Recorder of Montrose County, Colorado, as follows:

Claim	Book	Page	Date	Recorded by
Ruth K No. 4	343	228	8-22-50	H. D. Clark
Sylvia	343	433	2-11-51	H. D. Clark and S. W. Jones
Sylvia No. 2	343	433	2-11-51	H. D. Clark and S. W. Jones
Sylvia No. 3	343	434	2-11-51	H. D. Clark and S. W. Jones

The transfer of the four claims from the locators to Engineers Associates, Inc., was not noted in the county records but was assumed to be legally proper since supported by the opinion given by Bryant, Petrie, and Waldeck, a law firm in Montrose, Colorado.

On March 1, 1954, Engineers Associates, Inc., granted a 10-year lease on the claims to Louis P. Gaggini, who, on March 15, 1954, subleased the property to a partnership named "Worcester Mines." On March 4, 1955, Worcester Mines surrendered its rights to the mining lease and control of the property reverted to the owners, Engineers Associates, Inc. A new 10-year lease was granted by the owners to Louis P. Gaggini and Geo-Engineering. On March 5, 1955, the lessees assigned their interests in the lease to Urado Uranium Corporation. Prior to July 10, 1956, Urado Uranium Corporation merged with Union Mines, Inc., and the surviving corporation, Union Mines, assumed all the liabilities and assets of Urado. A Consent to Lien was obtained from all interested parties and DMEA Contract No. Idm-E 995 executed with Union Mines, Inc., as the

"Operator." Those portions of the four claims lying in secs. 1 and 2, T. 46 N., R. 17 W., N.M.P.M. (fig. 2) were excluded from the project area since the sections were withdrawn from public domain prior to location of the claims leased to the operator.

In early October 1956, records of U. S. Geological Survey field work in the project area indicated a possible conflict existed which involved ground subordinated under the contract. A field check, by DMEA personnel, of the pertinent claim corners, section corners, and U. S. Geological Survey drill holes together with additional data submitted by the operator upheld his assertion that the claims were shown correctly on the original contract map and that the alleged conflict did not exist. The apparent error resulted from an erroneous survey made by the operator during the time that the U. S. Geological Survey surveyor was working in the area.

HISTORY AND PRODUCTION

The northwest end of the Long Park area has been an active producer of uranium-vanadium ores for many years. Ore was first produced in 1911 when the Standard Chemical Company began mining and milling for radium. These operations continued until 1923 when a drop in the market price of radium caused a general shutdown of mines on the Colorado Plateau. Mining and milling were renewed in 1936 for the production of vanadium. By 1944 mining tapered off because of the decreasing demand for ferro-vanadium alloys, and very little ore was produced until 1948. The intensive search for uranium deposits commenced during 1948 and the Long Park area became active again. During the winter of 1949-50, the mill at Uravan was renovated by Union Carbide Nuclear Company and since that time has been in operation for the recovery of both uranium and vanadium.

Between April 21, 1949, and August 20, 1955, the U. S. Geological Survey explored the southern part of the Uravan district for uranium-vanadium deposits with 1,400 diamond-drill holes that totaled 489,567 feet. With the exception of 29 holes totaling about 9,000 feet, the exploration drilling was confined to the Long Park area. During this period of active exploration, the four claims concerned by Contract Idm-E 995 were located by H. D. Clark and S. W. Jones. Two of the holes drilled by the U. S. Geological Survey and one hole drilled by the operator prior to DMEA participation are within the boundaries of the project area.

Known production of uranium-vanadium ore through June 1958 from the Long Park area totals about 650,000 tons averaging 0.32 percent U_3O_8 and 1.82 percent V_2O_5. There has been no production from the operator's property included in the project area.

GEOLOGY

The rocks exposed in the Long Park area of the Uravan district are marine and terrestrial formations ranging in age from late Paleozoic to late Mesozoic. Quaternary alluvium and landslide material are present locally (fig. 3).

All known uranium-vanadium deposits in the area are in the Morrison formation of late Jurassic age except for one small prospect in a conglomeratic bed in the overlying Burro Canyon formation of Cretaceous age. The Morrison formation is divided into two members, the Salt Wash member, and the overlying Brushy Basin member. This report is concerned with exploration for ore deposits in the sandstone units of the Salt Wash member of the Morrison formation. A generalized stratigraphic section for the area in the vicinity of the claims is given in table 1 and a detailed description of individual formations is presented below.

The ore-bearing Salt Wash member of the Morrison formation averages about 300 feet in thickness and is made up of terrestrial sandstone, siltstone, and mudstone beds. About 50 percent of the Salt Wash is made up of sandstone units, although the ratio of sandstone to siltstone and mudstone varies considerably within short distances. Generally 3 to 5 sandstone units, each 20 or more feet thick, are present along the outcrop of the Salt Wash. Such sandstone units are a few hundred feet to several thousand feet in horizontal extent.

Most uranium-vanadium deposits in the Long Park area are contained in the upper 100 feet of the Salt Wash member. The sandstone units in this stratigraphic zone are crossbedded and medium to medium fine grained. Locally they are quartzitic and are brown, light gray, light red, or white and contain varying amounts of limonite, disseminated pyrite and carbonaceous material. Cut-and-fill structures, ripple marks, current lineations and rill marks suggest that the Salt Wash was deposited under fluvial conditions. Mudstone and siltstone in contact with upper sandstone units of the Salt Wash are generally red, reddish brown, green, and gray. Interstitial clay, clay pellets, and thin seams of mudstone are included in the sandstone units. Disseminated pyrite and carbonaceous material are found in some mudstone and siltstone beds. The contact of the Salt Wash member with the overlying Brushy Basin member is gradational, although there is a marked contrast in the overall appearance of the two members.

The Brushy Basin member, which is about 400 feet thick in the Long Park area, is made up of variegated shale, claystone, and mudstone beds, that range in color from pure white to pastel shades of red, blue, and green. These fine-grained rocks are interbedded with sandstone and conglomeratic units. A few thin layers of quartzitic sandstone and siliceous limestone are also present. The shale and mudstone beds are bentonitic and form smooth rounded slopes covered with a loose, fluffy layer of material caused by swelling of the bentonite.

The Burro Canyon formation is a heterogeneous sequence of lower Cretaceous conglomerate, sandstone shale, and thin lenses of limestone that overlies the Brushy Basin member of the Morrison formation. Cross-bedding and festoon structures indicate a fluvial origin. The lower contact is indistinct and the formation appears to interfinger with the upper part of the Morrison formation. The upper contact is an erosional surface of regional extent. In the vicinity of the subject property the Burro Canyon averages from 50 to 125 feet in thickness.

The Long Park area lies on the northeast flank of the Paradox salt anticline which trends in a northwesterly direction. The beds dip from 2° to 9° but high on the flank of the Paradox anticline, the dip steepens to as much as 15°. The strike of the bed is generally N. 45° W. High-angle faults and intensely jointed strata are common along the sides of Paradox Valley. The best developed joint system in the Long Park area parallel the strike of the northwest-trending Paradox anticline, and another set of joints strikes essentially normal to the trend of the major structure.

The ore-bearing Salt Wash member of the Morrison formation is not exposed on the subject property. The claims lie partly on the Burro Canyon formation and partly on the Brushy Basin member of the Morrison formation. A thin cover of Quaternary alluvium and blowsand is present in some places. The local dip of the beds is from 6° to 8° and the strike is generally northwest. The depth to the ore-bearing sandstone ranges from about 385 feet on the central part of the property to as much as 600 feet on the northwest and southeast parts of the property.

ORE DEPOSITS

Most of the uranium-vanadium deposits in the Long Park area are found in sandstone units in the upper 100 feet of the Salt Wash member of the Morrison formation. Mineralized rock consists principally of sandstone impregnated with uranium and vanadium minerals in a ratio of 1:6. Small amounts of uranium and vanadium are contained in mudstone pebbles and seams or replace carbonaceous material. Ore bodies range from small irregular masses containing a few tons of ore to large tabular masses containing thousands of tons of ore. Mineralized rock lies essentially parallel to the sandstone beds but does not follow the beds in detail. In some deposits the highest grade of ore occurs in sharply bounded, elongate concretionary structures or "rolls" which cross bedding planes.

Mineralized rock at or near the surface is sandstone impregnated with carnotite and its calcium analogue tyuyamunite. Metatyuyamunite, rauvite, pascoite, hewettite, and hummerite have also been identified in the oxidized ores. Less oxidized minerals including uraninite, coffinite, corvusite, and montroseite are found at greater depths. Copper minerals are rare in the upper sandstone units of the Salt Wash. A few small but high-grade deposits, present in lower sandstone units of the Salt Wash member, contain substantial amounts of secondary copper minerals associated with uranium-vanadium minerals.

The origin of the ore and factors that controlled its localization are little understood. Primary sedimentary structures in the ore-bearing sandstone units apparently are closely related to localization of ore. Trends of sedimentary structures are generally easterly to southeasterly. The strike of mineralized logs and the long axes of ore bodies are nearly parallel to the strike of primary sedimentary structures. En echelon arrangement of ore bodies is probably caused by en echelon arrangement of these structures.

It does not appear that origin and localization of uranium and vanadium deposits are related to fractures. Apparently fractures served as avenues for secondary migration of small amounts of uranium-vanadium leached from early ore minerals by ground water solutions. Known faults that cross ore deposits in the area displace ore layers and some faults contain breccia derived from ore layers.

Geologic features and habits of ore bodies useful in exploring for uranium and vanadium deposits have been recognized through drilling experience and geologic studies. The following geologic guides (Weir, 1952) were used by the U. S. Geological Survey in exploring for ore deposits in the Long Park area:

1. The ore-bearing sandstones are 25 feet or more thick in the vicinity of ore deposits.

2. The ore-bearing sandstones are dominantly light brown or light gray and have no reddish cast in the vicinity of ore deposits.

3. Mudstone and siltstone in contact with ore-bearing sandstone is green or gray near ore deposits instead of red or reddish brown.

4. The ore-bearing sandstone commonly contains abundant limonite stains or disseminated pyrite near ore deposits.

5. Carbonized plant remains are abundant in or near ore deposits. No single one of the foregoing guides is persistent enough to be used alone in appraising favorable ground.

Some of the ore deposits found by the U. S. Geological Survey and by private industry in the Long Park area are shown on figure 3 in order to illustrate their geometric configuration and their areal distribution in relation to the applicant's claim. In section 27 the long axes of the ore deposits trend easterly and northeasterly and range in width from about 200 feet to 400 feet and are as much as 2,200 feet long. The ore deposits in the vicinity of the subject claims are elongate in a northeasterly direction and average about 300 feet in width and as much as 1,800 feet long. These dimensions suggest that possible ore deposits underlying the subject claims could range from 200 feet to 300 feet in width and 500 to 900 feet in length with an average thickness of 3 to 4 feet.

ORE RESERVES

There are no known ore reserves on the property.

By U. S. Geological Survey standards indicated and inferred reserves of Class I material found by U. S. Geological Survey drilling in the Long Park area total about 250,800 short tons averaging 0.31 percent U_3O_8 and 2.04 percent V_2O_5.

Class I reserves are 1 foot or more thick and contain 0.10 percent U_3O_8 or 1.0 percent V_2O_5 in accordance with the U. S. Atomic Energy Commission purchase price and the mill cutoff for vanadium.

In the vicinity of the operator's claims three ore deposits designated as K, L, and X were found by Government drilling. The tonnage, grade, and average thickness of these deposits are shown on table 4 of the report of examination dated June 22, 1956.

THE PROJECT

The purpose of the project was to explore, by means of surface drilling, possible ore-bearing sandstone units in the upper part of the Salt Wash member of the Morrison formation. The program was designed to test the entire upper unit for the presence of possible ore deposits at differing stratigraphic positions, with the holes bottoming in the red mudstone underlying the upper sandstone unit and altered mudstone. Known ore bodies in the upper part of the Salt Wash range from small irregular masses containing a few tons of ore to large tabular or lens-shaped masses containing several thousands of tons of ore. Evaluation of the results of Government drilling in the vicinity of the project area indicated that the claims were located in a geologically favorable area. On this basis it was concluded that the possible existence of sizeable ore bodies on the property, averaging 10,000 tons with a grade of 0.27 percent U_3O_8 and 1.70 percent V_2O_5, justified Government participation in an exploration project.

SUMMARY OF FACTUAL DATA

Work under the subject contract was accomplished between March 20, and October 9, 1957. All holes were noncore drilled to a point near the top of the uppermost sandstone unit in the Salt Wash member of the Morrison formation, then core drilled through the ore-bearing sandstone and bottomed in the underlying red mudstone. The total footage drilled during the exploration program amounted to 3,685.0 feet of noncore drilling and 565.5 feet of core drilling. The total cost of drilling only, as accepted by the Government was $8,379.70. The accepted overall cost of the project was $11,324.94 (table 2). The total amount contributed by theGovernment, at 75 percent of the overall amount, was $8,493.71.

There has been no production from the subordinated property to date, consequently, no repayment of the Government's participating share. No measurable reserves of uranium ore were discovered by the exploration program.

No equipment was purchased for use on the project since the contract was written on the MF-200 form. All exploration drilling was done by an independent contractor who furnished all necessary equipment and supplies for the actual drilling operation. All other operating equipment and supplies were either expendable on a depreciation basis, thereby leaving no salvage or disposal problems. The incidental allowance item included in the fixed unit costs covered all costs except the actual costs of drilling, bulldozing, and chemical assaying.

CONCLUSIONS

No unusual difficulties were encountered in the actual drilling of the nine holes completed during the active periods. Administrative performance during the life of the contract was very poor as evidenced by the many delays in starting and continuing the approved work.

The work completed adequately tested the subject property for uranium ore bodies of significant size. All of the core from the holes has been examined by DMEA representatives. The DMEA gamma-ray logging unit succeeded in probing 4 of the 9 holes completed and the results obtained essentially verified those reported by the operator.

The completed exploration program did not discover any uranium ore reserves on the subordinated property, thus,it is recommended that no certification of discovery or development be issued. Government participation in additional exploration of the subject claims can not be justified by the exploration completed to date.

Original Program and Modifications

The operator originally proposed to explore the four claims with a total of 41 holes requiring an estimated 22,390 feet of drilling costing $2.864 per foot or a total of $105,860.00. The proposed drilling was laid out as a more or less regular grid pattern with the holes on about 400-foot centers. The two-stage program would first explore for evidence of ore deposits in favorable ground delineated by U. S. Geological Survey drilling and then attempt to roughly delineate discovered ore bodies by means of offset holes. The drilling plan submitted by the operator was considered feasible by the examining team and was accepted without modifications. The examiner's estimated cost of the proposed project, $60,800.80, was substantially less than the operator's estimate of $105,860.00.

The recommended program was incorporated in a contract (Idm-E 995), effective August 21, 1956, which specified a two-stage drilling program consisting of 11 holes in the first stage and a maximum of 30 holes in the second stage at an estimated overall cost of $60,800.00. The stipulated maximum amount of Government participation at 75 percent was $45,600.00. The contract was amended six times during the period that the project was active and are as follows:

Amendment No. 1, effective October 3, 1956, extended the date fixed for commencing the exploration program from September 1, 1956, to October 15, 1956.

Amendment No. 2, effective August 21, 1956, substituted an amended contract map and decreased the Stage I holes from 11 to 10.

Amendment No. 3, effective December 3, 1956, extended the date fixed for commencing the authorized project from October 15, 1956, to November 1, 1956.

Amendment No. 4, effective January 25, 1957, extended the date fixed for commencing the exploration program from November 1, 1956, to May 1, 1957; extended the completion date to November 1, 1957; and extended the royalty payment period to eleven years from the date of the contract.

Amendment No. 5, effective August 21, 1956, was executed to change the cored interval specifications.

Amendment No. 6, effective September 4, 1957, provided for an adjustment in the bulldozing rates and authorized a work suspension from April 14, 1957, to July 30, 1957.

Description of Work Completed

Exploration under Contract Idm-E 995 started on March 20, 1957, and continued intermittently until October 9, 1957. During this period, nine of the 10 authorized Stage I holes were completed--hole RK-13 was in an inaccessible site and not justified by the results of the other first stage holes. None of the nine holes completed under the contract penetrated ore-grade material; two holes were weakly mineralized (0.02 to 0.04 percent U_3O_8); and seven holes were barren.

After completion of the nine Stage I holes, the operator did not request further drilling and, on May 19, 1958, the DMEA Field Team notified the operator that a review of the results of the work completed under Stage I indicated that further work under the contract was not warranted and the project was considered completed upon completion of the first stage work. The official termination agreement had not yet been signed by the operator at the time of this report.

Table 1.--Generalized stratigraphic section for the area in the vicinity of the Ruth K. and Sylvia group of claims.

Age	Formational unit	Average thickness (feet)
Quaternary	Alluvium	0 - 3
----------UNCONFORMITY----------		
Cretaceous	Burro Canyon formation	50 - 110
Jurassic	Morrison formation	
	Brushy Basin member	400
	Salt Wash member	300

Table 2.--Summary of project costs, Union Mines, Inc.
DMEA 4136 Contract Idm-E 995

Item	Unit	Unit price	Stage I Claimed Units	Stage I Claimed Cost	Stage I Approved Units	Stage I Approved Cost	Contract maximums[1] Units	Contract maximums[1] Cost
Actual Cost								
Noncore drilling	foot	$ 1.75	3,685.0	$ 6,448.75	3,685.0	$ 6,448.75	4,490	$ 7,857.50
Core drilling	foot	3.50	565.5	1,979.25	551.7	1,930.95	1,100	3,850.00
Bulldozing	hour	12.00	77	924.00	77	924.00	80	960.00
Fixed Unit Cost								
Chem. assays	each	5.00	6	30.00	6	30.00	22	110.00
Incid. allowance	foot	0.47	4,250.5	1,997.73	4,236.7	1,991.24	5,590	2,627.30
Totals				$11,379.73		$11,324.94[2]		$15,404.80

1/ Stage I maximums only since the contract was terminated without performing any Stage II work.

2/ Verified by Auditor's Report of Review dated July 14, 1958.

Government participation in approved costs at 75 percent $ 8,493.71

Average overall cost of drilling per foot $ 2.67

Table 3.--Summary of drilling results, Union Mines, Inc.
DMEA 4136 Contract Idm-E 995

Hole No.	Drilling footages			Mineralization				
				Radiometric		Chemical		
	Core	Noncore	Total	Interval	$\%eU_3O_8$	Interval	$\%U_3O_8$	$\%V_2O_5$
RK-11	74.5	490.0	564.5	Barren		--	--	--
RK-12	53.0	420.0	473.0	Barren		--	--	--
RK-14	94.0	430.0	524.0	Barren		--	--	--
RK-16	50.0	400.0	450.0	Barren		--	--	--
RK-17	29.0	387.0	416.0	396.7-398.1	0.02	396.7-397.2	0.03	0.23
						397.2-397.4	0.03	0.13
						397.4-397.9	0.02	0.07
RK-18	60.0	377.0	437.0	Barren		--	--	--
RK-19	55.0	426.0	481.0	Barren		--	--	--
RK-20	34.0	400.0	434.0	Barren		--	--	--
RK-21	116.0	355.0	471.0	454.2-454.8	0.17	454.2-454.6	Trace	0.03
						454.6-455.0	0.02	0.08
						455.0-455.2	0.04	0.13
Totals	565.5	3,685.0	4,250.5					

Average depth of hole drilled on project - 472.0 feet

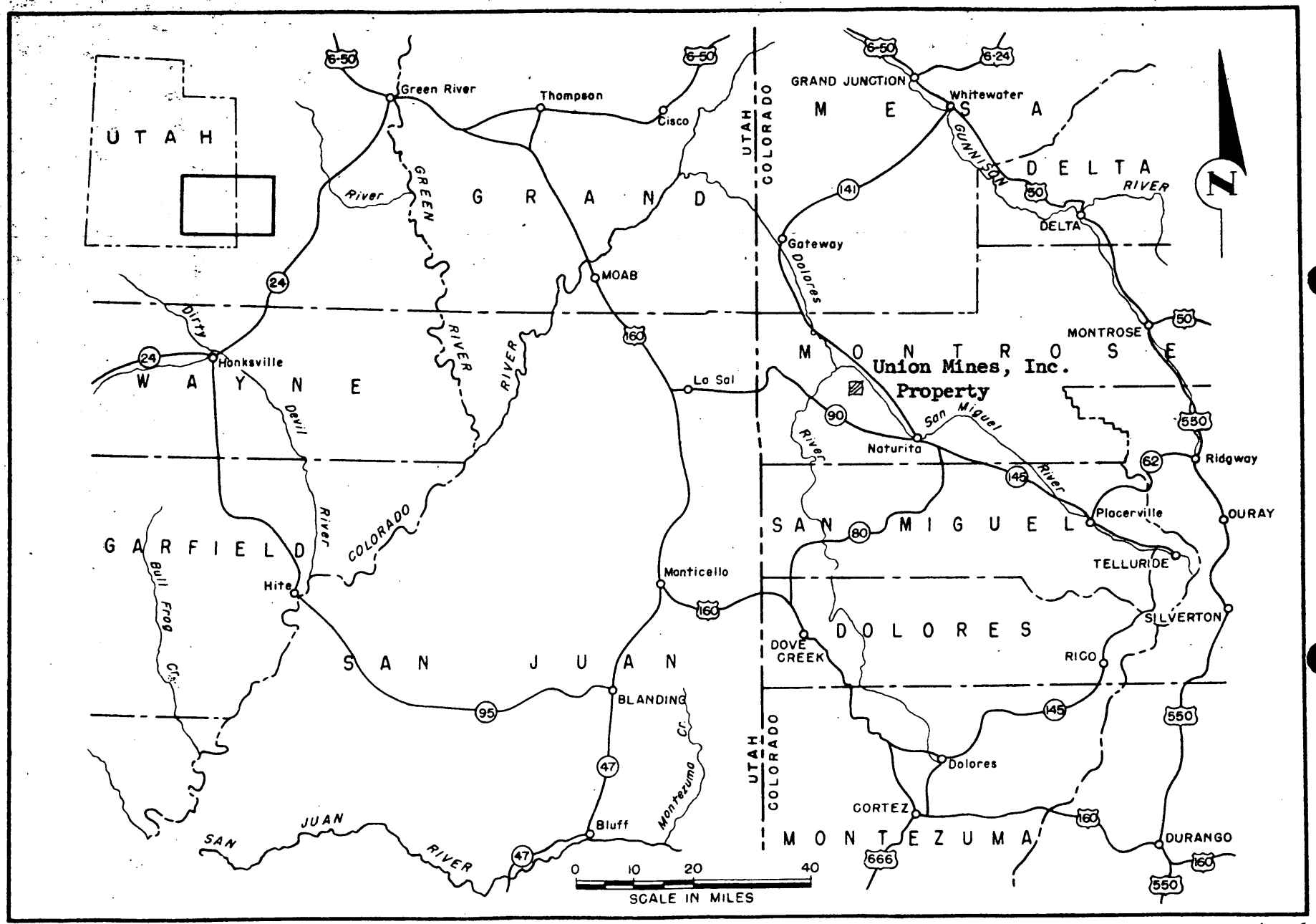

FIGURE 1.--LOCATION MAP, SILVIA AND RUTH K. CLAIMS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLO. DMEA 4136

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 17 1958

DATE	INITIALS	CODE

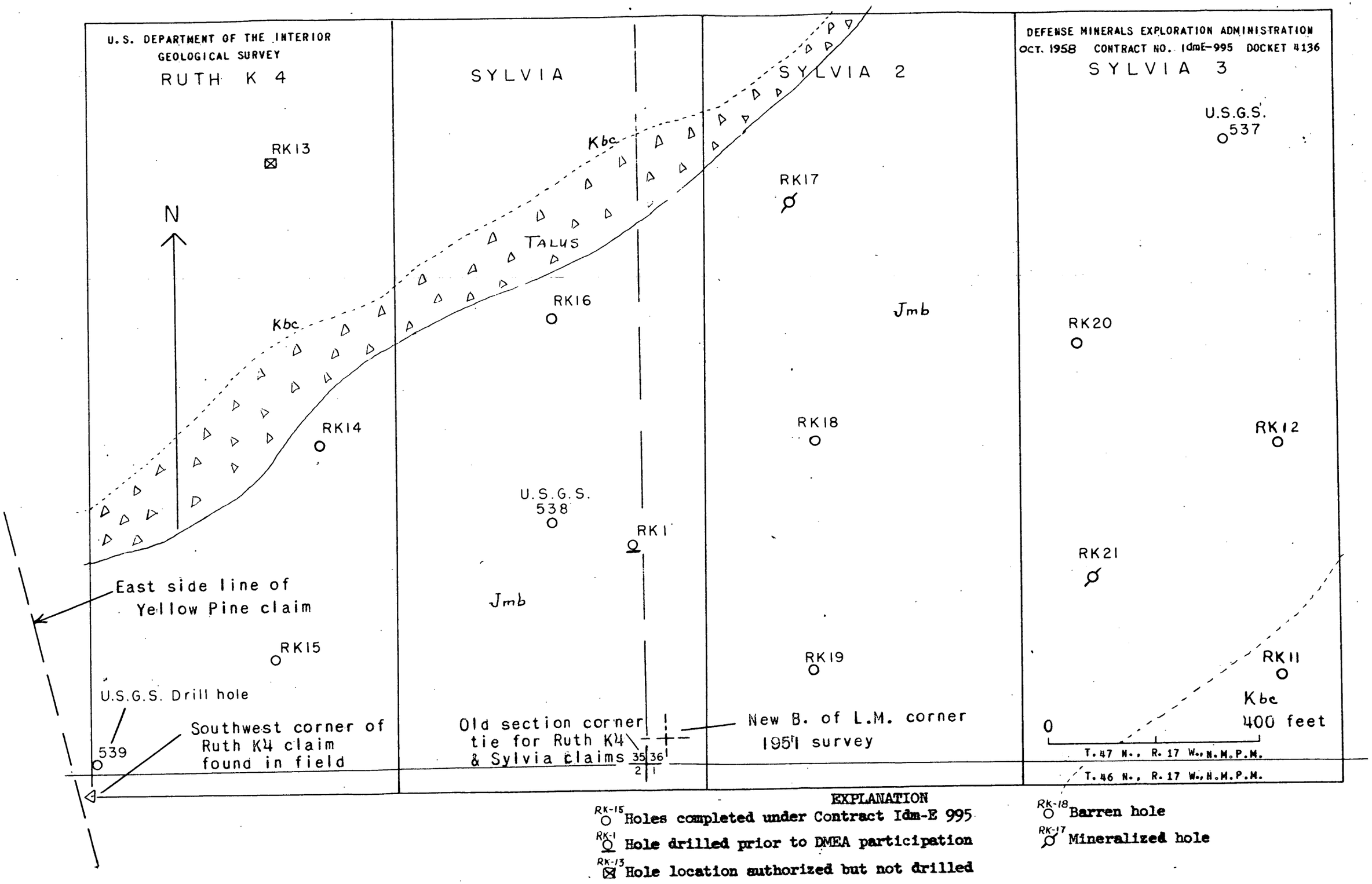

Figure 2.--Map showing location and results of holes completed during project.

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DATE	INITIALS	CODE

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 17 1958

DATE	INITIALS	CODE

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

November 10, 1958

Memorandum

To: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III
Subject: Status of final reports on Completed Projects

In reference to your letter of November 5, the status of forwarding final reports by the field examiners is as follows:

DMEA-3809 Idm-E890 Silver Pick Uranium, Inc. - Forwarded November 7
DMEA-4136 Idm-E995 Union Mines, Incorporated - Will be forwarded by Nov. 17
DMEA-4420 Idm-E1056 Hilary Minerals Company, Inc. - Being typed; expected to be forwarded this week.
DMEA-4564 Idm-E1095 Modern Mines Development Co. - Available about Nov. 24.
DMEA-4835 Idm-E1169 Stocks-Gramlich - Available by December 1.

J. E. Townsend

rm 7

OFFICIAL FILE COPY

Date	Surname	Code
11/4/58	Murphy	700
	Ching	700
	Knouse	700
11/4	Selfridge	130
"	Johnson	110
		~~100~~
11/5	C	220
		700

NOV 5 1958

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

Re: Status of Final Reports on Completed Projects

Dear Mr. Townsend:

Your memorandum, dated September 15, 1958, gave us an estimate of the transmittal dates for final Field Team reports on all projects completed on or before September 1, 1958. Estimated dates for the following project reports that have not been received were included on the list:

DMEA-3809	Idm-E890	Silver Pick Uranium, Inc.	October 1
~~DMEA-4136~~	~~Idm-E995~~	~~Union Mines, Incorporated~~	~~October 15~~
DMEA-4420	Idm-E1056	Hilary Minerals Company, Inc.	" "
DMEA-4564	Idm-E1095	Modern Mines Development Co.	" "
DMEA-4835	Idm-E1169	Stocks-Gramlich	" "

Please re-check the status of these reports and advise us the estimated dates they will be completed and forwarded.

Sincerely yours,

George C. Selfridge

ACTING Chairman, Operating Committee

APPROVED:

Richard H. Moe

Member, Bureau of Mines

N. E. Nelson

Member, Geological Survey

GLAult/FEJohnson/gla
11-4--58

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

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/17	G McCarthy	800
7/17	Talbot	800
7/18	Ching	700
7/18	Cusack	700
		700
7/18	C	225

JUL 18 1958

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

Re: Idm-E-995, DMEA-4136 (Uranium)
Union Mines, Incorporated

Dear Mr. Brading:

Your report of review on the above referenced contract is acceptable and normal distribution is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

GMcCarthy/GMcC
July 17, 1958

cc: Docket
Admr. Reading File
Mr. Chambers

8627

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
July 11, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose 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.

J. W. Townsend

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 14 1958

DATE	INITIALS	CODE
7/14	C	220
7/14	[illegible]	800
~~7/15~~	~~[illegible]~~	~~700~~

W-O

DMEA
DEPARTMENT OF THE INTERIOR

JUL 11 1958
REGION III
DENVER, COLORADO

433 North 7th Street
Grand Junction, Colo.
July 7, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 14 1958

DATE	INITIALS	CODE

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

Re: Docket No. DMEA 4136
(Uranium)
Contract Idm-E995
Union Mines Incorporated
(Ruth K and Sylvia Claims)
Montrose, County, Colorado

Dear Mr. Townsend;

Transmitted herewith are five copies of the final report covering work completed under Contract Idm-E995.

This report should complete all matters prerequisite to closing of the account and should enable you to release the $500.00 withheld by the government pending the resolution of such matters. If this is not the case, please inform me of any additional information which you may require and I will attempt to transmit it to you as soon as possible.

You will note that the check for $500.00 is to be made payable directly to Louis P. Gaggini.

Yours very truly,
Union Mines Incorporated

Louis P. Gaggini

Louis P. Gaggini
VVice President

OPR'S FINAL REPORT

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

OPERATORS FINAL REPORT ON DMEA DOCKET NO. 4136
CONTRACT NO. Idm-E 995 (URANIUM)
Submitted by Louis P. Gaggini for
UNION MINES INCORPORATED
433NORTH SEVENTH STREET
GRAND JUNCTION, COLORADO

OUTLINE OF WORK AUTHORIZED AND WORK COMPLETED

Contract No. Idm-E995 authorized the following work as a first stage in the exploration of the Ruth K and Sylvia claims in the Bitter Creek District of Montrose County, Colorado:

Description	Units	Unit Costs	Total Costs	Loaned by DMEA 75%	Contributed by Operator 25%
Core drilling	1,100'	$ 3.50	$3,850.00	$2,887.50	$ 962.50
Non-core drilling	4,490'	.75	7,857.50	5,893.12	1964.38
Bulldozing	80 hrs.	12.00	960.00	720.00	240.00
Incidental allowance	5,590'	.47	2,627.30	1,970.45	656.82
Assaying	22 samples	5.00	110.00	82.50	27.50
Totals			$15,404.80	$11,553.60	$3,851.20

Stage 11 of the contract authorized an additional $45,395.00 worth of work which was never started. Through mutual agreement between the operator and the government the Stage I work was reduced to nine holes. Figures above contemplated 11 holes, but one of these (RK-15)(see map) was drilled prior to government participation, another, RK-13 was not drilled because the site was inaccessable. Table I summerizes the work completed by periods.

RESULTS

Prior to DMEA participation the USGS had drilled three holes on the claims which are the subject of Idm-E995 and two holes had been drilled by the company or its predicessor, thus making a total of 14 holes none of which penetrated ore. Three of the nine holes drilled under the DMEA program did, however, penetrate mineralization. In addition to the three mineralized holes, six of the 14 holes were drilled in areas where the geology appears favorable for ore deposits; two were in semifavorable areas and three in unfavorable areas (see table II). In the opinion of the DMEA field team these results were not encouraging enough to initiate Stage II drilling.

BRIEF DISCUSSION OF OPERATIONS

All of the holes drilled to date on the claims covered by the contract are shown on the attached map. RK-1 was drilled by Worester Mines and RK-15 by Union Mines prior to DMEA participation. Holes numbered RK-2 through RK-10 were drilled by Union Mines on the adjacent Ruth K two and three claims which were not covered by the contract and are therefore not shown on the map.

The contract was approved in August of 1956 and the work of trail building and the clearing of drill sites begun shortly thereafter. The latter work was continued until practically all of the funds allocated for this purpose were expended.

During the fall and winter of 1956 and 1957 the company was unable to find a drilling contractor willing to perform the drilling for the maximum unit costs allowed by the contract. In March of 1957 all of the work to be performed under the contract was subcontracted to the writer and drilling commenced, after a D6 Caterpillar was moved on the property to complete trail building and site preparation for the locations approved and accessable at that time. Later in July it was necessary to again have this Caterpillar hauled on to the property to prepare the site for RK-12.

Because of the difficulties outlined above the cost of the work to the company or its subcontractor greatly exceeded the allowable costs and it appears at this time that the total cost of the work performed will be closer to $15,000.00 than the $11,000.00 shown on Table I.

UNION MINES INCORPORATED

Louis P. Gaggini

LOUIS P. GAGGINI
Vice President

BRUNING COPYFLEX 289-5

TABLE I

SUMMARY OF WORK COMPLETED AND ALLOWABLE COSTS

Docket No OMEA-4136 (Uranium) Contract No. Iden-E995

Operation	UNIT	Unit Units	Unit Costs	Total Allowable Costs	Costs Aug 1 to April 31 Units	Costs Aug 1 to April 31 Cost	Costs April 32 to Feb '57 Units	Costs April 32 to Feb '57 Cost	Costs Disallowed Units	Costs Disallowed Cost
Core Drilling	ft	5655	3.50	1979.25	260	910 —	305.5	1069.25	138	48.30
Plug Bit Drilling	ft	3685	1.75	6448.75	1545	2703.75	2140	3745 —		
Incidental Allowance	ft	42505	.47	1997.73	1805	848.36	2445.5	1149.38	13.8	6.49
Bulldozing	hrs	77	12 —	924 —	77	924 —	—	—		
Chemical Analysis	samples		5 —	30 —	—	—	6	30 —		
Totals				11379.73		5356.10		6993.63		
Disallowances				54.79		42.88		11.91		54.79
Balance				11324.94		5313.22		6981.72		
75% Gov Participation				8493.71		4007.42		4456.29		
Amt Received				7993.71		4007.42		3986.29		
Bal Due Louis P. Gaggioni Contractor for Uranium Mines, Inc.				500 —				500 —		

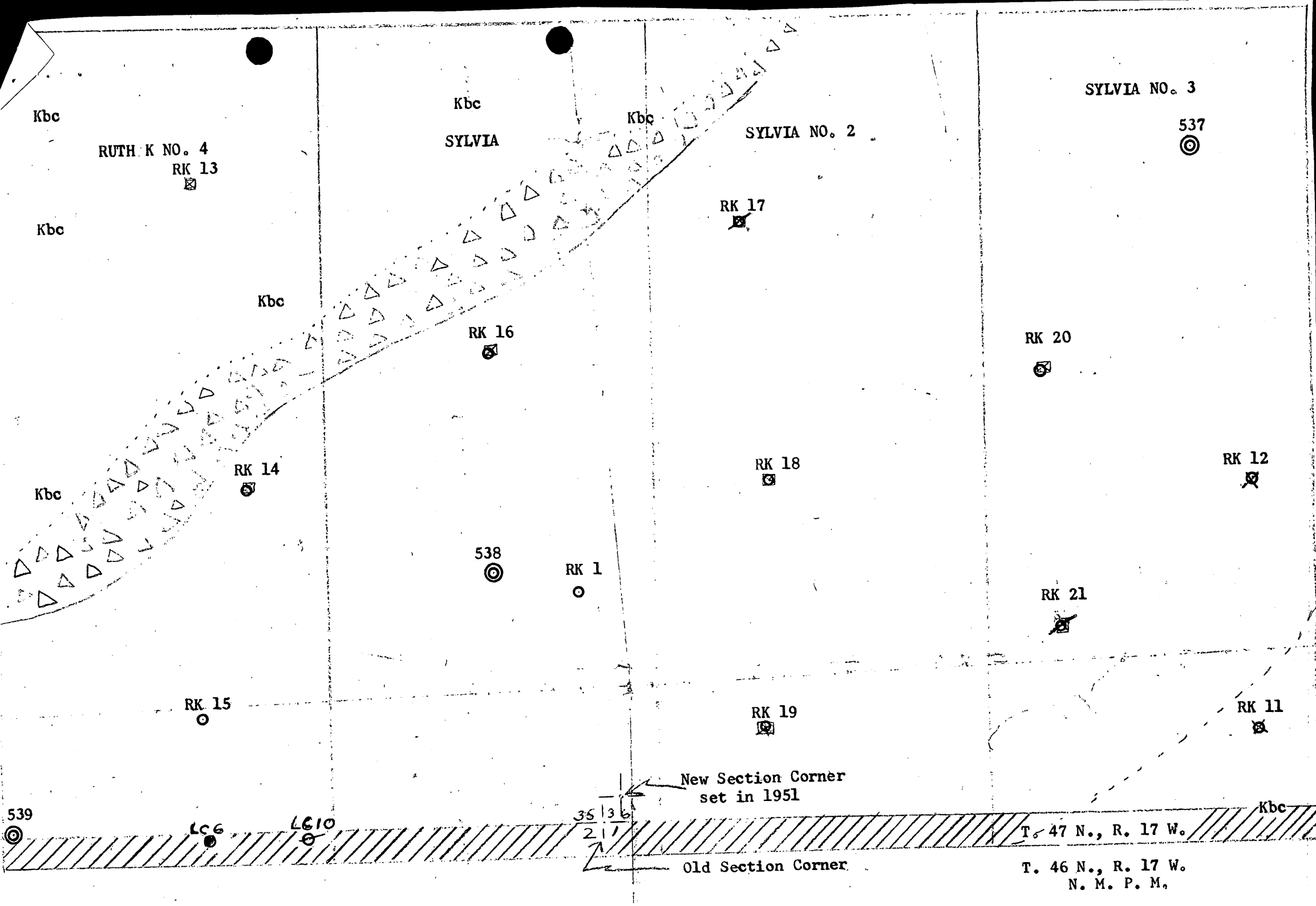
TABLE II

Docket No. DN-A-4136 (Uranium) Contract No. IDM-E995

Tabular Summary of Drilling Completed as of February 15, 1958

Hole No. or Prop. Fix omd.	Date Drilled	Favorability	Depth Drilled Feet To-Date Total	Plug	Core	This Period Total	Plug	Core	OBSS From	To	Thk	Probe Depth Feet	@ cv/y	Chemical Assays Sampled Base	Thk	U_3O_8	V_2O_5
11	10-7-57	Fav	564.5	490	74.5	664.5	590	74.5	505	555	50	Barren					
12	9-23-57	Un-Fav	473	420	53	473	420	53	424	456	36	Barren					
13	Undrilled	Hole	Site	Inaccessible													
14		Fav	524	430	94	524	430	94	435	505	67	Barren					
15	Drilled by Co. before program was approved																
16		Un-Fav	450	400	50	450	400	50	420	437	17						
17		Min	416	387	29				396.7	404.5	3.8	397.5	0.05	397.2	0.5	0.03	0.23
														397.4	0.2	0.03	0.13
														397.9	0.5	0.02	0.07
18		Semi-Fav	437	377	60				415	432	17						
19		Fav	481	426	55				431	446	35	319.0	0.02				
20		Un-Fav	434	400	34	434	400	34	None		0'						
21		Min	471	355	116				410	462	52	276.5	0.02				
												279.2	0.02				
												454.8	0.17	454.6	0.4	Tr	0.33
														455.0	0.4	0.02	0.08
														455.2	0.2	0.04	0.13
Totals			4250.5	3685	565.5	2445.5	2140	305.5									

@ Depths given are at point of maximum radioactivity. eU_3O_8 given is maximum reading



EXPLANATION

Approved locations

Holes drilled by applicant

U. S. Geological Survey drill holes

Conflict with Land withdrawn from Mineral Entry by P. L. O. 459, dated March 25, 1948

Holes completed to date under DMEA 4136

Proposed locations

Kbc Burro Canyon Formation

Boulder strewn slope

Mineralized Holes

FIGURE 1

MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, UNION MINES, INCORPORATED, MONTROSE COUNTY, COLORADO DMEA 4136. TO ACCOMPANY OPERATORS FINAL REPORT

Scale 1" = 200'

RECEIVED
JUL 14 1958
D.M.E.A.

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

OPERATORS FINAL REPORT ON DMEA DOCKET NO. 4138
CONTRACT NO. Idm-E 995 (URANIUM)
Submitted by Louis P. Gaggini for
UNION MINES INCORPORATED
433NORTH SEVENTH STREET
GRAND JUNCTION, COLORADO

OUTLINE OF WORK AUTHORIZED AND WORK COMPLETED

Contract No. Idm-E995 authorized the following work as a first stage in the exploration of the Ruth K and Sylvia claims in the Bitter Creek District of Montrose County, Colorado:

Description	Units	Unit Costs	Total Costs	Loaned by DMEA 75%	Contributed by Operator 25%
Core drilling	1,100'	$ 3.50	$3,850.00	$2,887.50	$ 962.50
Non-core drilling	4,490'	.75	7,857.50	5,893.12	1964.38
Bulldozing	80 hrs.	12.00	960.00	720.00	240.00
Incidental allowance	5,590'	.47	2,627.30	1,970.45	656.82
Assaying	22 samples	5.00	110.00	82.50	27.50
Totals			$15,404.80	$11,553.60	$3,851.20

Stage 11 of the contract authorized an additional $45,395.00 worth of work which was never started. Through mutual agreement between the operator and the government the Stage I work was reduced to nine holes. Figures above contemplated 11 holes, but one of these (RK-15)(see map) was drilled prior to government participation, another, RK-13 was not drilled because the site was inaccessable. Table I summerizes the work completed by periods.

RESULTS

Prior to DMEA participation the USGS had drilled three holes on the claims which are the subject of Idm-E995 and two holes had been drilled by the company or its predicessor, thus making a total of 14 holes none of which penetrated ore. Three of the nine holes drilled under the DMEA program did, however, penetrate mineralization. In addition to the three mineralized holes, six of the 14 holes were drilled in areas where the geology appears favorable for ore deposits; two were in semifavorable areas and three in unfavorable areas (see table II). In the opinion of the DMEA field team these results were not encouraging enough to initiate Stage II drilling.

BRIEF DISCUSSION OF OPERATIONS

All of the holes drilled to date on the claims covered by the contract are shown on the attached map. RK-1 was drilled by Worester Mines and RK-15 by Union Mines prior to DMEA participation. Holes numbered RK-2 through RK-10 were drilled by Union Mines on the adjacent Ruth K two and three claims which were not covered by the contract and are therefore not shown on the map.

The contract was approved in August of 1956 and the work of trail building and the clearing of drill sites begun shortly thereafter. The latter work was continued until practically all of the funds allocated for this purpose were expended.

During the fall and winter of 1956 and 1957 the company was unable to find a drilling contractor willing to perform the drilling for the maximum unit costs allowed by the contract. In March of 1957 all of the work to be performed under the contract was subcontracted to the writer and drilling commenced, after a D6 Caterpillar was moved on the property to complete trail building and site preparation for the locations approved and accessable at that time. Later in July it was necessary to again have this Caterpillar hauled on to the property to prepare the site for RK-12.

Because of the difficulties outlined above the cost of the work to the company or its subcontractor greatly exceeded the allowable costs and it appears at this time that the total cost of the work performed will be closer to $15,000.00 than the $11,000.00 shown on Table I.

UNION MINES INCORPORATED

Louis P. Gaggini

LOUIS P. GAGGINI
Vice President

NO COPYFLEX 289-5

TABLE I

SUMMARY OF WORK COMPLETED AND ALLOWABLE COSTS

Docket No OMEA-4136 (Uranium) Contract No. Idm-E 295

Operation	UNIT	Unit Units	Unit Costs	Total Allowable Costs	Costs Aug '56 to April '57 Units	Costs Aug '56 to April '57 Cost	Costs April '57 to Feb '58 Units	Costs April '57 to Feb '58 Cost	Costs Disallowed Units	Costs Disallowed Cost
Core Drilling	ft	5655.5	3.50	19779.25	260	910 —	205.5	1069.25	13.8	48.30
Plug Bit Drilling	ft	3685	1.75	6445.75	1548	2703.75	2140	3745 —		
Incidental Allowance	ft	42505	.47	19977.35	1805	848.35	2445.5	1149.38	13.8	6.49
Bulldozing	hrs	77	12 —	924 —	77	924 —	—	—		
Chemical Analysis	samples		5 —	30 —	—	—	6	30 —		
Totals				113793.33		5856.10		5993.63		
Disallowances				54.79		42.88		11.91		54.79
Balance				113249.94		5343.22		5781.72		
75% Gov. Participation				84937.71		4007.42		4336.29		
Amt Received				79937.71		4007.42		3986.29		
Bal Due Louis P. Gaggini Contractor for Union Mines, Inc.				500 —				350 —		

BRUNING COPYFLEX 289-8

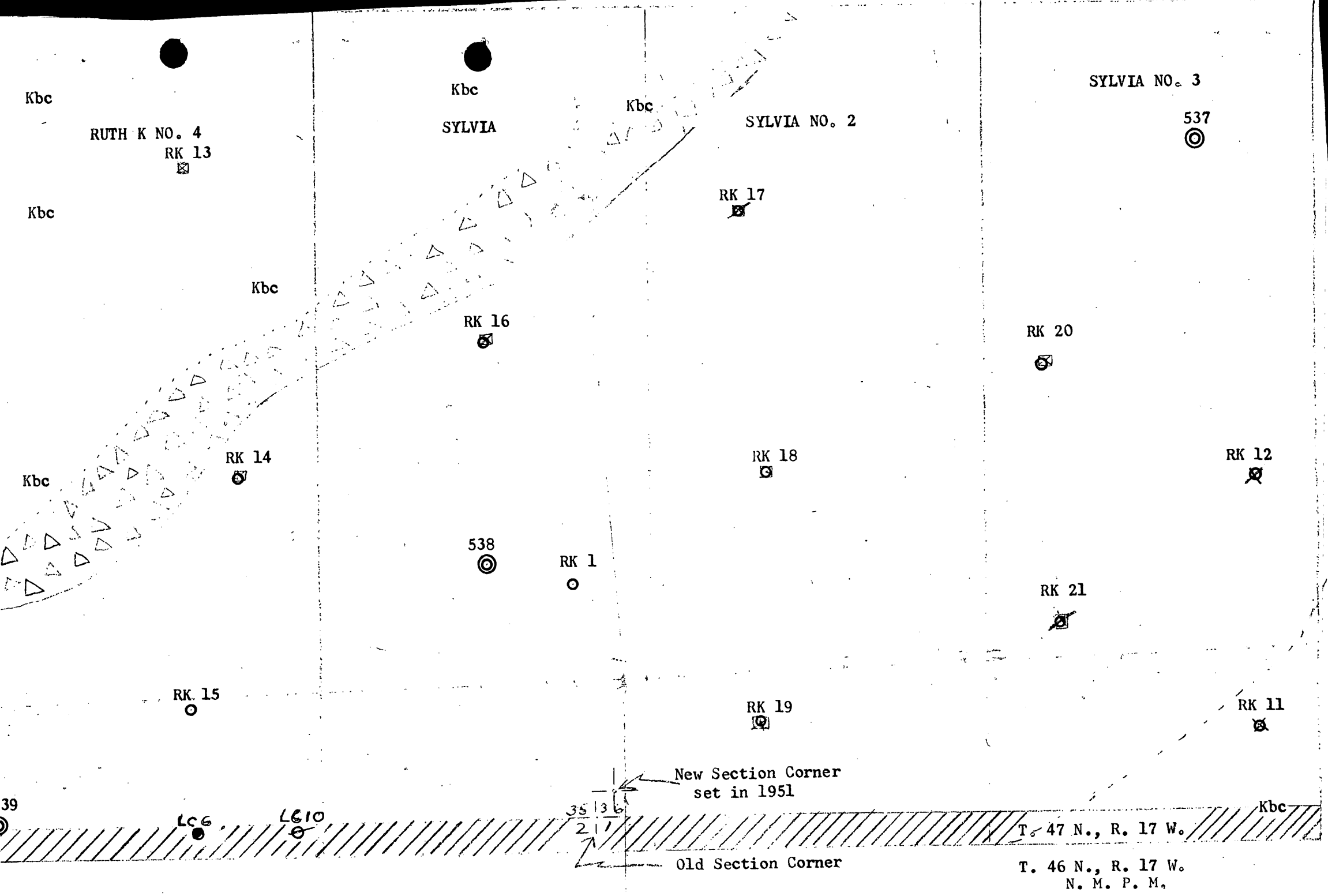
TABLE II

Docket No. DNEA-4136 (Wanowa) Contract No. IDM-E 995

Tabular Summary of Drilling Completed as of February 15, 1958

Hole No. Prefix omitted	Date	Furorability	Depth Drilled Feet To-Date Total	Plug	Core	This Period Total	Plug	Core	OBSS From	To	Thk	Probe Depth Feet	(a) CU_3O_4	Chemical Assays Sampled Base	Thk	U_3O_8	V_2O_5
11	10-7-57	Fav	564.5	490	74.5	664.5	590	74.5	505	555	50	Barren					
12	9-23-57	Un-Fav	473	420	53	473	420	53	424	456	36	Barren					
13	Undrilled		Hole	Site	inaccessible												
14		Fav	524	430	94	524	430	94	438	505	67'	Barren					
15	Drilled by Co. before program was approved																
16		Un-Fav	450	400	50	450	400	50	420	437	17						
17		Min	416	387	29				376.7	400.5	38	397.5	0.05	394.2	0.5	0.03	0.23
														397.4	0.2	0.03	0.13
														397.9	0.5	0.02	0.07
18		Semi-Fav	437	377	60				415	432	17						
19		Fav	481	426	55				434	469	35	318.0	0.02				
20		Un-Fav	434	400	34	434	400	34	None		0'						
21		Min	471	355	116				410	462	52	276.8	0.02				
												279.2	0.02				
												454.8	0.17	454.6	0.4	Tr	0.23
														455.0	0.4	0.02	0.08
														455.2	0.2	0.04	0.13
Totals			4250.5	3685	565.5	2445.5	3140	305.5									

(a) Depth is given as at point of maximum reading & U_3O_8 given is maximum reading



EXPLANATION

- Approved locations
- Holes drilled by applicant
- U. S. Geological Survey drill holes
- Conflict with Land withdrawn from Mineral Entry by P. L. O. 459, dated March 25, 1948
- Holes completed to date under DMEA 4136
- Proposed locations
- Kbc Burro Canyon Formation
- Boulder strewn slope
- Mineralized Holes

FIGURE 1

MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, UNION MINES, INCORPORATED, MONTROSE COUNTY, COLORADO DMEA 4136. TO ACCOMPANY OPERATORS FINAL REPORT

Scale 1" = 200'

ORIGINAL FILE COPY
DMEA
RECEIVED JUL 14 1958
DATE | INITIALS | CODE
7/14 | C | 220
| | 700

[illegible] Mar Construction
Denver 2, Colorado
July 11, 1958

Gentlemen:

To: E. E. Bruning - w/enclosure

From: Albuquerque Acting Executive Officer, DMEA FIELD TEAM, Region III

Subject: Project No. DMEA 6135 (Uranium), Contract No. [illegible], Indian Mines, Incorporated (Frank K. and Sylvia Clodfelter), Montrose County, Colorado

The subject contract was considered completed upon completion of work provided for under Stage 2, and the Operator was so notified by letter of May 19, 1958, a copy of which is enclosed for your records.

The Operator has submitted a final engineering and geologic report and 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 Report of Review of reported project costs, whichever the case indicates.

Acceptable units of work or service completed on a Final Unit Cost basis consisted of additional allowance on 4,136.7 feet of drilling and chemical analysis of 8 samples for V_2O_5 content.

The sum of $200.00 was withheld from reimbursement to the Operator in preparing the final accounting report, which was for the period covering the months of August, September, and October, 1957.

Original signed by
J. W. TOWNSEND
J. W. Townsend

JWT:pel

cc: Chem. Op. Supv. (2)
Hardman
Dwyer
Contrib. File
Chron.

ORIGINAL FILE COPY
DMEA
RECEIVED JUL 14 1958

7/14 C 220
7/14 800
7/15 700

224 New Customhouse
Denver 2, Colorado
July 10, 1958

Mr. Louis F. Gaggini
Union Mines, Incorporated
433 North 7th Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium),
Contract No. Nbr-2995,
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Reference is made to your letter of June 4, 1958, wherein you advised that you would attempt to complete the final report on the referenced contract within the next thirty days. Since more than the thirty-day period has expired and the required final report has not been received, we will appreciate advice by return mail as to the date on or before which we can expect to receive the report.

It appears that you have had adequate time within which to prepare the required report. Therefore, if it is not forthcoming at an early date, it will be necessary that we 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

JWT:yrl

cc: Gen. Op. Comm. (2)
Harshman
DMEA/GJ
Hasler
DMEA/RFC
Corres. File
Cooper
Chron.

ORIGINAL FILE COPY
DMEA
RECEIVED JUN 12 1958

6/12	C	220
6/14		800
		700
	(Chrg)	

224 New Customhouse
Denver 2, Colorado
June 6, 1958

Mr. Louis P. Saggini, Vice President
Union Mines Inc.
433 North 7th Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Saggini:

Reference is made to your letter of June 4, 1958, concerning your final report covering work completed under Contract Idm-E995.

Because of the uncertainty as to the continuation of DMEA after June 30, 1958, it is necessary that all completed or terminated contracts be closed out as soon as possible, therefore we will appreciate your efforts toward rendering the final report at as early a date as possible.

Yours very truly,
Original signed by
J. W. TOWNSEND

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

JWT:hmh

cc: Comm. Op. Comm. (2))
Harshman) w/copy
DMEA/G.Jct.) of
Hazler) Operator's
DMEA/DFC) letter of 6/4/58
Corres.file, Reg. III)
Townsend
Chron

DMEA
DEPARTMENT OF THE INTERIOR

JUN 6 - 1958
REGION III
DENVER COLORADO

433 North 7th Street
Grand Junction, Colo.
June 4, 1958

Mr. E. M. Harshman
DMEA Field Team, Region LII
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm6E995
Union Mines, Incorporated
(Ruth K, and Sylvia claims)
Montrose County, Colorado

Gentlemen:

This is in reply to your letter of May 19, 1958.

I will attempt to complete the final report on the subject contract within the next 30 days.

Please let me know if this will be satisfactory.

Very truly yours,

Louis P Gaggini

Louis P Gaggini

6-6-58 - Dist. to:
Chmn, Op. Comm. (2)
Harshman
Dmea/G. Jck.
Hasler
Dmea/Dfc
Tornsend
Corres. file

224 New Customhouse
Denver 2, Colorado
May 19, 1958

CERTIFIED MAIL

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
433 North 7th Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. I4m-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

A review of the results of the work completed under Stage I indicates that further work under the contract is not warranted. Therefore, as the Government's approval for work under Stage II of the contract will not be forthcoming, the contract is considered completed upon completion of the work under Stage I.

Since the contract is to be considered completed upon completion of the work under Stage I, your attention is directed to the provision under Article 7 (e) of the contract form relative to the rendering by your company of a final engineering and geologic report pertaining to the work performed under the contract.

As we are desirous of closing this account at an early date, we will appreciate advice by return mail as to the date on or before which we can expect to receive the required final report.

Very truly yours,

DMEA Field Team, Region III

By E. N. Harshman
E. N. Harshman

By J. W. Townsend
J. W. Townsend
Acting Member

JWT:prl
cc: Chmn. Op. Comm. (2)
Harshman } w/copy of
Hasler } Chairman's
DMEA/Gr.Jct. } teletype of
DMEA/DFC } May 16, 1958.
Corres.file }
DMEA Auditor
Townsend
Chron.
Finance Office, Reg. III
Amendment file, Reg. III

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/16	Ching	700
5/16	[illegible]	700
5/16	[illegible]	130
"	Johnson	110
"	[illegible]	100
5/16	Lamb	130
5/16	Kiilsgaard	130
5/14	[illegible]	220
		700

MAY 16 1958

Dept. of the Interior

DMEA

14X1401(01) Revolving Fund
Defense Production Act, Interior
(Transfer to Office of Secretary)

T E L E T Y P E

E. N. HARSHMAN
ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION 3
224 NEW CUSTOMHOUSE BUILDING
DENVER, COLORADO

REURMEMO May 12 UNION MINES INCORPORATED DOCKET 4136 CONTRACT E995. IF YOU CONCUR AND ARE NOT OTHERWISE COMMITTED SUGGEST YOU NOTIFY OPERATOR THAT RESULTS OF STAGE 1 DO NOT WARRANT FURTHER WORK UNDER THE CONTRACT; THEREFORE APPROVAL OF ANY WORK UNDER STAGE 2 WILL NOT BE FORTHCOMING AND CLOSING PROCEDURES SHOULD BE INITIATED.

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE (GCS)

MChing/izm 5-16-58 (5-15-58)
cc: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

Mr. Selfridge -

No analysis here. L. P. Gaggini has not been too cooperative in his projects. We have no recommendation from Field Team. Possibly we should consider a mutual termination with a Pseudo-Certification. If he will not sign then demand immediate refund of the Government's contribution.

If we are satisfied that work to date indicates unlikelihood of making a discovery then telegram is okey; but file does not support this position.

FEJohnson

Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/15	Ching	700
5/15	Ellis	700
5/15	[illegible]	130
		110
		100
		[illegible]
		220
		700

Dept. of the Interior

DMEA

14X4401(01) Revolving Fund
Defense Production Act, Interior
(Transfer to Office of Secretary)

TELETYPE

L. N. HARSHMAN
ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION 3
224 NEW CUSTOMHOUSE BUILDING
DENVER, COLORADO

REURMEM MAY 12 UNION MINES INCORPORATED DOCKET 4136 CONTRACT E995. UNLESS YOU ARE OTHERWISE COMMITTED SUGGEST YOU NOTIFY OPERATOR THAT RESULTS OF STAGE 1 DO NOT WARRANT FURTHER WORK UNDER THE CONTRACT; THEREFORE APPROVAL OF ANY WORK UNDER STAGE 2 WILL NOT BE FORTHCOMING AND CLOSING PROCEDURES SHOULD BE INITIATED.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE (GCS)

MChing/izm 5-15-58
cc: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/16	Ellis	700

May 16, 1958

Memorandum

To: The File

From: Michael Ching, Mining Engineer
Division of Rare and Miscellaneous Metals

Subject: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Inc.
Ruth K and Sylvia Claims
Montrose County, Colorado

The subject contract, dated August 21, 1956, was originally scheduled to be completed by August 1, 1957. The amended completion date is November 1, 1957.

The Operator has been quite lax in carrying out the terms of the contract and has often ignored letters from the Field Team. It has been in default since November 1, 1957.

Stage I of the contract, consisting of 9 drill holes, has been completed. The Government has waited over 3 months for a promised request and justification by the Operator for Stage II drilling, but such request has not been submitted.

Results of Stage I drilling have not been encouraging and do not justify work under Stage II. Following is a summary of USGS gamma ray log interpretations of the holes and other results:

Hole No.	Probe Results	Other Results
RK 11	Barren	-
RK 12	Barren	-
RK 14	Not probed	No mineralization reported
RK 16	2.1 ft. 0.005% eU_3O_8	-
RK 17	1.4 ft. 0.02% eU_3O_8	1.2 ft. 0.03 chem.
RK 18	Not probed	Reported barren
RK 19	Barren	1.2 ft. 0.02 in Brushy Basin
RK 20	Barren	-
RK 21	Not probed	1.1 ft. 0.02 chem.

Mr. Harshman reported on May 12 that only very weak mineralization has been encountered and it appears that certification cannot be made as a result of Stage I work.

Under these circumstances the attached teletype to the Field Team is recommended as a practical and efficient method of closing out this unsatisfactory project.

Michael Ching
Michael Ching

MChing/izm
cc: Mr. Ching

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
May 12, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 14 1958

DATE	INITIALS	CODE
5/14	C	220
"	Chism	700
	J	

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Reference is made to your letter of February 19, 1958 and prior correspondence relative to lack of interest by the Operator in pursuing operations under the contract.

The Operator has rendered an accounting report for the last work performed under the contract, which was processed by this office February 27, 1958. However, the Operator has not submitted a request for drilling under Stage II, which was mentioned in its letter of February 10, 1958.

It is recommended that the Operator be contacted by your office in an effort to resolve the matter at an early date.

Only very weak mineralization has been encountered. Therefore, it appears that the project cannot be certified as a result of the exploration work performed under Stage I.

E. N. Harshman

E. N. Harshman

RECEIVED

3/3		220
3/7		800
3/4		700

204 New Customhouse
Denver 2, Colorado
February 27, 1958

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
433 North 7th Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract Lam-8995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Form MF-104, Operator's Monthly Report and Voucher, for the period August, September and October, 1957, has been received in this office and is being processed for payment. The following deductions have been made:

Core Drilling

Hole No. RK-16 penetrated 13 feet into the red mudstone of the Salt Wash member of the Morrison formation. The contract allows a maximum penetration of 10 feet into the red mudstone; therefore the reported cost including Incidental Allowance for three feet core drilling is disallowed.

Amount Withheld

In your narrative report you state that you have completed all the Stage I work currently planned; therefore, an amount of $500.00 is withheld from reimbursement to Union Mines, Incorporated, pending performance of additional project work. If additional work is not approved by the Government and performed by Union Mines, Incorporated, the amount of $500.00 will continue to be withheld, pending resolution of matters prerequisite to closing the account of which you will be informed at the appropriate time.

You will be further advised of the above deductions by means of an Administrative Audit Difference Statement, which will be forwarded to you by the Finance Office, Region III.

Yours very truly,

Original signed by
W. H. KING

W. H. King,
Executive Officer, DMEA
Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm (2)
DMEA/DFC
Harshman
Hasler
DMEA/G Jct.
Townsend
Corres. file, Reg III
Chron

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/19/58	Ching	700
2/19	[illegible]	130
"	Johnson	110
"	Chamberlain	100
		220
		700

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

FEB 19 1958

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Inc.
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. King:

We have reviewed [redacted] your teletype of February [redacted] of February 3 and 10, 19[redacted]

As you know, the Operator has been rather lax in the past in carrying out the terms of the contract. The results of the work to date and the possibilities of Stage II work being approved are still unclear to us. It is possible that when all the available information is at hand the Field Team will recommend termination of the contract in its present status. Or, if the contract is extended, it may be advisable to include provisions for automatic termination and pseudo certification in case the work is not completed in the time specified.

Under these circumstances, it is suggested that action on the proposed amendment be deferred until the Operator's progress report, request for Stage II work, and supporting information is at hand. The Field Team's appraisal of the situation will then enable us to take the most appropriate action. No time will be lost since operations will be suspended until April 1, in any event.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

W. P. Williams

Member, Geological Survey

MChing/gla 2-19-58
cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Mr. Ching

8623

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

February 5, 1958

VIA AIR MAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

In conformance with advice to you in our teletype of this date, enclosed are two copies of the Operator's letter of February 3, 1958 and two copies of our reply, dated February 5, 1958.

W. H. King

W. H. King

Enclosures

No action required.
mc.

2-7 C 220 100

COPY

433 North 7th Street
Grand Junction, Colorado

February 3, 1958

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
U. S. Department of the Interior
224 New Customhouse Building
Denver 2, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
FEB 5 1958
REGION III
DENVER COLORADO

Re: Docket No. DMEA 4136 (Uranium)
Contract No. IDM E995
Union Mines, Incorporated
(Ruth K and Sylvia Claims)
Montrose County, Colorado

Dear Mr. King:

This letter is to confirm past telephone conversations regarding the contract referred to, and to formally request a recess of this project dating from November 15., 1957 to April 1, 1958.

All of the drilling which it seems advisable to do under Stage I of the contract was completed November 7th and by the 15th all of the surveying and logging was completed, including a check of the logs and hole locations by personel of your Grand Junction office.

As soon as time permits the Operator's Progress Report including forms MF104 and MF104A will be completed and delivered to your Grand Junction office.

Immediately following completion of the progress report, we will, as soon as time permits, prepare recommendations for Stage II drilling. Included with these recommendations will be results of holes drilled south of the Ruth K claims by a group with which I was associated. One of these holes which lies just a few feet south of the end line of the Ruth K No.4 was an ore hole.

Very truly yours,

Louis P. Gaggini

Louis P. Gaggini,
Project Supervisor for
Union Mines Incorporated

cc: Mr. M. H. Salsbury

224 New Customhouse
Denver 2, Colorado

February 5, 1958

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
433 North 7th Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Receipt is acknowledged of your letter of February 3, 1958 requesting approval for a recess of operations under the Contract from November 15, 1957 to April 1, 1958.

Our letters of October 17, November 29, and December 19, 1957 clearly outlined the procedure to be followed immediately in conjunction with extending the completion date if the Contract is to be maintained in force.

Since the Contract expired November 1, 1957, reimbursement for the Government's portion of the otherwise allowable costs of work performed subsequent to November 1, 1957 cannot be accomplished until the completion date is extended.

The matter of forwarding your request for an extension of the completion date for such additional time as you deem will be necessary to enable you to complete the work as provided for by the Contract should be attended to without further delay.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

JWT:prl

cc: Chmn. Op. Comm. (2)
Harshman)
DMEA/DFC)
DMEA/Gr.Jct)
Hasler)
Corres.file)
Townsend
Chron.

w/copy of Operator's letter of February 3, 1958.

Mr. G. H. Selfridge

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 14 1958

DATE	INITIALS	CODE
2/14	C	220
"	Ching	700

DN 235 BUR MINES 2-13-58 1-25

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 4136, CONTRACT IDM-E995, UNION MINES, INC. OPERATOR REQUESTS AN AMENDMENT TO EXTEND COMPLETION DATE TO DECEMBER 36,1958, AND PROVIDE FOR SUSPENSION OF OPERATIONS FROM OCTOBER 15,1957 TO APRIL 1,1958. COPY OF HIS REQUEST LETTER OF FEB. 10,1958 FORWARDED DIRECT TO MR MITTENDORF. RECOMMEND THAT SUITABLE AMENDMENT BE PREPARED. PLEASE TLETYPE ADVICE AS T XX TO ACTION TAKEN.

W H KING

EN 2ND LINE DATE IS DEC 31

Denver, Colo.

433 North 7th Street
Grand Junction, Colorado
February 10, 1958

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
U. S. Department of the Interior
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. IDM 2995
Union Mines, Incorporated
(Ruth K and Sylvia Claims)
Montrose County, Colorado

FEB 13 1958
220
700

Dear Mr. King:

Thank you for your prompt reply to my letter of February 3, 1958 a copy of which is attached to this letter and to each of the five copies enclosed.

It would appear that the information lacking in my letter was a specific date of completion. This letter is to request that the termination date under the contract be extended to December 31, 1958 and that the recess requested in the attached letter (i.e. October 15, to April 1, 1958) be allowed.

Mr. Harshman's letter of November 29th, 1957 requests monthly accounts. In accordance with this request, I have attached hereto MF104 and MF104A forms for the work completed after July 31, 1957. Members of your staff in Grand Junction have agreed with me that it would be best to cover all of the work completed in one report. Additional copies of Forms 104 and 104A will be procured, filled out and attached to the Operator's Progress Report which I hope to complete this next week.

Because Mr. Mittenforf wrote me on February 3rd regarding a formal request for extension, I am sending a copy of this letter direct to Washington.

My request for stage II drilling which will include results obtained by drilling in adjacent areas will, I think, convince everyone that the government has not been injured by the delay in completeing the project.

Very truly yours,

Louis F. Gaggini
Vice President
Union Mines Incorporated

cc: Mr. N. H. Salsbury
Mr. C. O. Mittendorf

Chairman

OFFICIAL DMEA COPY
DMEA
RECEIVED FEB 6 1958

DATE		CODE
2/6	C	220
11	~~Oking~~	700

DN 235 BUR MINES 1-5-58 10-54

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 4136, CONTRACT IDM-E995, UNION MINES, INC., MATTER DISCUSSED IN OUR MEMORANDUM JANUARY 27,1958. FORWARDING AIRMAIL COPIES OF OPERATOR S LETTER OF 2-3 AND OUR REPLY OF 2-5. SUGGEST WITHHOLDING ACTION BY YOUR OFFICE IF NOT ALREADY INITIATED.

W H KING

Denver, Colorado.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2-3	Ching	700
2-3	Kuehne	700
2/4	Johnson	110
"	Mittendorf	700
2/4	C	220
		700

FEB 4 1958

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
433 North Seventh Street
Grand Junction, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-4995
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Gaggini:

Our Executive Officer at Denver has written you three letters in recent months relative to taking the necessary steps to maintain the subject contract in force. No reply has been received from you.

The completion date of the contract, November 1, 1957, is now long past. The monthly progress reports, called for by the contract, have not been submitted by you since July 30, 1957; consequently, we do not have all the necessary information to appraise the results of the work to date.

If you believe that further work under the contract is warranted, you should immediately take the steps outlined in the Acting Executive Officer's letter of November 29, 1957. If you believe that further work is not justified and the contract should be terminated, you should so state, and at the same time supply all the available information on the work accomplished to date and your justification for termination.

Since the contract is already in default, it is requested that prompt attention be given to the above-mentioned matters. If we do not receive your reply by March 1, 1958, we shall take whatever action is necessary to protect the Government's interests.

Sincerely yours,

E. O. Mittendorf (for)

Administrator

MChing/izm 2-3-58
cc: Mr. Ching
Admr.'s Reading File
DMEA FT Reg 3 (2)

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado
January 27, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 30 1958

DATE		CODE
1/30	C	220
"	Chung	~~[illegible]~~ 700

Memorandum

To: Chairman, Operating Committee, DMEA

Subject: Docket No. DMEA 4136 (Uranium) Contract Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims) Montrose County, Colorado

The subject Operator is in default under the terms of the contract and numerous attempts by this office to persuade the Operator to remedy the default have been unsuccessful to date.

We were informed by telephone that Mr. Louis P. Gaggini, Vice President, Union Mines, Incorporated, visited the DMEA office at Grand Junction on December 26, 1957, at which time he indicated that the contract work would be completed during January and February 1958. It is not known what work is involved unless the Operator plans to complete Stage I hole RK-13 which was previously reported to be at an inaccessible location. Stage II work requires prior written approval by the Government.

Information available in this office concerning the project status is as follows:

1. The contract completion date expired as of the close of business November 1, 1957, as provided in Amendment No. 4. No request has been received from the Operator for extension of the completion date or for termination of the contract in its present status.

2. The Operator has not submitted monthly progress reports covering work performed subsequent to July 30, 1957. Information obtained from the U. S. Geological Survey Gamma-ray log interpretation sheets indicate that Stage I has been completed, except possibly for hole RK-13.

For prior correspondence in the matter please refer to our letters to the Operator, dated October 17, 1957, November 29, 1957, and December 19, 1957. Copies of the above referred to Gamma-ray log interpretation sheets were forwarded to your office by memorandum of October 4, 1957, and November 21, 1957.

We recommend that the Operator be contacted by your office in an attempt to resolve the matter to the satisfaction of the Government.

W. H. King

W. H. King

ORIGINAL FILE COPY
DMEA
RECEIVED DEC 23 1957

DATE		
12/23	C	220
12/27	EEF	800
"		700

224 New Customhouse
Denver 2, Colorado
December 19, 1957

CERTIFIED MAIL

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
433 North Seventh Street
Grand Junction, Colorado

Re: Docket DMEA 4136 (Uranium)
Contract Idm-E999
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Reference is made to our letter of November 29, 1957, whereby we outlined certain procedures which must be followed if the contract is to be maintained in force. Since we have had no reply from you in the matter, you are hereby notified that if the matter is not resolved to the Government's satisfaction within 30 days from the date of this letter, the matter will be referred to the Washington office, for such action as is indicated to protect the Government's interests.

Yours very truly,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm. (2)
DMEA, DFC
DMEA, G.Jct.
Harshman
Hasler
Townsend
Corres.file,Reg.III
Chron

224 New Customhouse
Denver 2, Colorado
November 29, 1957

RECEIVED
DATE

DATE		
12/4	C	220
12/4		800
11	Closing	700

ouis P. Gaggini, Vice President
n Mines, Incorporated
North Seventh Street
and Junction, Colorado

Re: Docket DMEA-4136 (Uranium)
Contract Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Reference is made to our letter of October 17, 1957, whereby we informed you of the action necessary on your part, if the date fixed for completion of work provided for under Contract Idm-E995 was to be extended beyond November 1, 1957. We have not received a reply from you and the contract expired as of the close of business on November 1, 1957.

It appears that you may be in default under the terms of the contract, in which case you should immediately take the following necessary steps to cure the default:

1. Inform this office of the present status of the project work and of your plans for completion of the balance of work provided for.

2. Submit to this office a reply to our letter of October 17, 1957, if an extension of the project completion date is necessary.

3. Submit to this office monthly accounting reports and vouchers on the forms supplied to you, covering all work performed subsequent to July 30, 1957.

Your immediate attention to the above matters is imperative.

Yours very truly,

Original signed by
J. W. TOWNSEND
for E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm. (2)
DMEA/DFC
DMEA/G.Jct.
Harshman
Hasler
Townsend
Corres.file, Reg.III

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

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957
DATE
11/25 700

November 21, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Gamma-ray log interpretations

Enclosed are four copies each of gamma-ray log interpretations for the following DMEA contracts:

Docket DMEA-4136 (Uranium) Contract Idm-E995, Union Mines, Inc., (Ruth K. and Sylvia claims) Montrose County, Colorado

Union Mines, Inc.
Urado-U-Corp.
Long Park, Colorado
DMEA Docket No. 4136

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From*	Depth Logged To	Anomaly Detected From*	Anomaly Detected To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
RK-11	545.0	none	434.5	536.5	Barren hole - not finished, also not on bottom							
					First Stage completed							
RK-12	473.0		207.0	457.0	Barren							

* From top to bottom depths

10/21 GB 220
10/21 800
10/22 700

224 New Customhouse
Denver 2, Colorado
October 17, 1957

Mr. Louis F. Gaggini, Vice President
Union Mines, Incorporated
433 North Seventh Street
Grand Junction, Colorado

Re: Docket DMEA-4136 (Uranium)
Contract Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

The date fixed for completion of the work provided for under Contract Idm-E995, is November 1, 1957. If, for reasons beyond your control, it will not be possible to complete the work November 1, 1957, you should submit to this office for consideration by the Government, the original and five copies of a request for extension of the completion date for such specific additional time as you anticipate will be required.

Yours very truly,

Original signed by
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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
October 4, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 7 1957

DATE	INITIALS	CODE
10/7	C	220
	Chrig	700

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Gamma-ray log interpretations

Enclosed are four copies each of gamma-ray log interpretations for the following DMEA contracts:

Chrig

Docket DMEA-4136 (Uranium) Contract Idm-E995, ~~Union Mines, Inc.~~ (Ruth K. and Sylvia claims) Montrose County, Colorado

Docket DMEA-4363 (Uranium) Contract Idm-E1065, Lisbon Uranium Corporation (John Brown claim group) Mesa County, Colorado

Docket DMEA-4494 (Uranium) Contract Idm-E1074, New Idria Mining and Chemical Company (Johnnie Mae claim group) Mesa County, Colorado

Docket DMEA-3854 (Uranium) Contract Idm-E967, Four Corners Uranium Corporation (Red Rock claims, Sec. 24, T 13 N, R 10 W, NMPM) McKinley County, New Mexico

Docket DMEA-4597 (Uranium) Contract Idm-E1096, Strategic Minerals Exploration Company (Ella claims), San Juan County, Utah and Montrose County, Colorado

Docket DMEA-4631 (Uranium) Contract Idm-E1092, Vanadium Queen Uranium Corporation (Vanadium Queen claims) San Juan County, Utah

E. N. Harshman

E. N. Harshman

Union Mines, Inc.
Ruth K. claim, Long Park
Montrose County, Colorado
DMEA Docket No. 4136

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From*	Depth Logged To	Anomaly Detected From*	Anomaly Detected To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
RK-16	524.0		301.0	443.0	395.6	397.7	2.1	300			.005	did not reach bottom
RK-14	Plugged											
RK-20	434.0		329.8	430.0	Barren							

* From top to bottom depths

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

September 24, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the Government's and Audit copies of Amendment No. 6 to Contract No. Idm-E995, which was forwarded by your letter of September 5, 1957 for signature by the Operator.

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

J. W. Townsend

J. W. Townsend

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 27 1957

DATE	INITIALS	CODE
9/27	C	220
"	Chg	700

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/29	Ching	700
8/29	Ellis	700
8-30	Chambers	800
9/4	[illegible]	130
"	[illegible]	110
"	Mettenson	100
		~~310~~
9/5	[illegible]	220
		700

SEP 5 1957

Mr. William H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Inc.
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. King:

In accordance with our teletype of August 12, and that from Mr. Harshman, dated August 13, we are enclosing the original and four copies of a proposed Amendment No. 6 to the subject contract, signed by the Administrator. Also enclosed are two extra copies of the amendment for the use of the Field Team.

If you and the Operator find the amendment in order, please have it executed as indicated and make the usual distribution thereafter.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

A. D. McMahon

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

MChing/izm 8-29-57
cc to: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/29	Ching	700
8/30	Ellis	700

August 29, 1957

Memorandum

To: The Files

From: Michael Ching, Mining Engineer
Division of Rare & Misc. Metals

Subject: Justification for Amendment No. 6
Docket No. DMEA-4136
Contract No. Idm-E995
Union Mines, Inc.
Ruth K and Sylvia Claims
Montrose County, Colorado

Based on field work by the USGS, the field examiners were convinced that the map (Figure 2) which was attached to the contract was incorrect and failed to show a conflict between the Ruth K No. 4 and the Yellow Pine claims. Consequently, by Amendment No. 2 a new map (Figure 2 Amended), showing the purportedly correct position of the subject claims, was substituted for the original map (Figure 2).

It has now been determined that a new map (Figure 3) more correctly reflects the position of the claims. Since the old positions of Stage I holes are affected by the new position of the claims, and one hole was drilled by the Operator before contract work was started, and work completed to date calls for new locations for some of the holes, the subject amendment is required to clarify these various developments. In addition, a recess of operations must be provided for to cover a period of inactivity by the Operator.

Placing Stage II bulldozing under Fixed Unit Costs is in accordance with our teletype of April 24, 1957 to the Executive Officer, Region III. Bulldozing was done under an independent contract in Stage I, but the Operator has now acquired a smaller bulldozer and wishes to do the work itself under Stage II.

Michael Ching
Michael Ching

MChing/izm 8-29-57
cc to: Mr. Ching

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/16	Ching	700
"	Knouse	700
		140

August 16, 1957

Memorandum

INTERIOR DEPT.
AUG 19 1957
SOLICITOR

To: Associate Solicitor,
Division of Mineral Resources

From: F. L. Knouse, Acting Director,
Division of Rare and Miscellaneous Metals

Subject: Proposed Amendment No. 6
Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Inc.
Ruth K and Sylvia Claims
Montrose County, Colorado

Will you kindly prepare an Amendment No. 6 to the subject contract in accordance with the attached draft.

Eight copies of the map (Figure 3) are attached for use with the amendment.

/s/ F. L. Knouse

F. L. Knouse

Attachments

MChing/gla
cc to: Mr. Ching

RECEIVED
AUG 19 1957
ASS... MINERAL RESOURCES

8623

RAFT
6/57
ng/gla

DOCKET COPY

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA-4136
CONTRACT NO. Idm-E995

It is agreed this _____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Union Mines, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E995, Docket No. DMEA-4136, dated August 21, 1956, hereinafter called the "Contract," that effective August 21, 1956, the Contract, as amended, is further amended as follows:

1.(a) Work under the Contract shall be suspended during the period beginning April 14, 1957, and ending not later than July 30, 1957.

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

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

2. (a) The map (Figure 3), which is attached hereto and made a part hereof, is substituted for the map (Figure 2 Amended) which is attached to Amendment No. 2 of the Contract.

(b) The words "Figure 3" are substituted for the words "Figure 2 Amended" wherever found in Amendment No. 2.

3. In Exhibit "A,", Description of the Work:

(a) Under General Provisions, the sixth paragraph is deleted.

(b) Under Stage I, everything is deleted and the following substituted:

"Prepare access roads and drill sites with not to exceed 80 hours of work with a D-7 bulldozer or equivalent unit of another make, and drill not more than 10 holes aggregating approximately 5,590 feet at the locations indicated on the map (Figure 3). None of the holes shall be located closer than 370 feet to any previously drilled hole. If the 10 holes require more than 5,590 feet to reach the desired horizon, the additional footage and funds required may be transferred and deducted from Stage II upon the written approval of the Government."

(c) Under Stage II, the words preceding the semicolon in the first sentence are deleted and the following substituted:

"Prepare access roads and drill sites with not to exceed 240 hours of work with a D-6 bulldozer or equivalent unit of another make";

4. In Exhibit "A," Estimated Cost of the Project:

(a) Under Stage II, Actual Costs, Category (1) Independent Contracts, the third item is deleted and the following substituted:

"240 hours bulldozing @ $10.00/hr. $2,400.00"

5. This agreement 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 as a maximum.

UNION MINES, INCORPORATED

By _____
President

(SEAL)

UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals Exploration Administration

Revise Item 4 on Page 3 as follows:

4 In Exhibit "A", Estimated Cost of the Project, Stage II

(a) Under Actual Costs, Category (1) Independent Contracts the third item (covering bulldozing) is deleted, and the figure 34,650.00 is substituted for the figure 37,050.00

(b) Under Fixed Unit Costs a third item is added as follows:

"240 hours bulldozing @ 10.00/hr. — 2,400.00",

and the figure 10,746.00 is substituted for the figure 8,346.00.

Mr. G. Selfridge

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 14 1957

DATE	INITIALS	CODE
8/14	G	220
		700

DN 235 BUR MINES 8-13-57 11-38

CHAIRMAN OPERATING COMMITTEE, DMEA

REURTEL 8-12-57 DOCKET DMEA 4136, CONTRACT IDM-E995, UNION MINES,888XXXX INC. RECOMMEND THAT ANNEX I NOT BE AMENDED TO INCLUDE PORTIONS OF CLAIMS PREVIOUSLY EXCLUDED BECAUSE PROPERTY RIGHT S TO FRACTIONS MAY BE IN QUESTION, AS FRACTIONS WERE FILED ON BY BTXXXX BOTH UNION MINES AND UNION CARBIDE NUCLEAR CO. ALSO FRACTIONS OF RELATIVELY SMALL IMPORTANCE TO PROJECT AREA.

E N HARSHMAN ACTING EXECUTIVE OFFICER

Denver Colo.

OFFICIAL FILE COPY

Date	Surname	Code
8/12	Ching	700
"	Knowles	700
8/12	GCS	130
"	Johnson	110
"	Chatterday	100
8/13	G.	220
		700

AUG 12 1957

Department of the Interior
8/12 Gopes 130
DMEA
8/12 Kilsgaard 130
14X4401(01) Revolving
Fund, Defense Production Act,
Interior, (Transfer to Office of
Secretary)

T E L E T Y P E

WILLIAM H. KING, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURMEM AUGUST 7, UNION MINES, INCORPORATED, DOCKET 4136. WE WILL PREPARE AMENDMENT NO. 6 INCORPORATING YOUR RECOMMENDATIONS. PLEASE ADVISE WHETHER WE SHOULD AMEND ANNEX I TO INCLUDE PORTIONS OF SUBJECT CLAIMS IN T. 46 N. RESTORED TO MINERAL ENTRY JULY 20, 1957.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE (46)

MCHING/GLA
8-12-57
cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, Rm. 5224
Code 700, Mr. Ching
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 AUG 9 1957

DATE	INITIALS	CODE
8/9	O.K.	220
		130
"	Chung	700

VIA AIR MAIL

August 7, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed is the following material pertaining to a proposed amendment to the subject contract:

1. The original and two copies of a joint memorandum, dated April 18, 1957, from M. H. Salsbury and W. B. Gazdik.

2. The original and two copies each of three letters from the Operator, dated July 29, 1957.

3. The original and two copies of a memorandum, dated July 31, 1957, from M. H. Salsbury.

4. The original and two copies of a joint memorandum, dated August 5, 1957, from D. P. Elston and H. F. Robertson.

5. Eight extra copies of a map entitled, "Revised Map of Ruth K. No. 4 and Sylvia Claims in Accordance with Amended Locations Filed November 4, 1953, Showing DMEA and Other Holes Drilled."

Involved in the proposed Amendment are the following, with notation for reference to prior communications pertaining thereto:

(a) Substitute a new map for the map, "Figure 2 Amended," which was substituted for the map attached to the contract by Amendment No. 2. In the matter, please refer to your teletype of 6/20/57.

(b) Revise the location of two holes to be drilled under Stage I. Also referred to in your teletype of 6/20/57.

(c) Provide for a recess of operations under the contract.

(d) Change the bulldozer hours and rate. In the matter please refer to your teletype of 4/24/57.

The field examiners have indicated that they will recommend further work under Stage II. Therefore, recommendations are as follows pertaining to the proposed Amendment:

A. Delete the map, "Figure 2 Amended," attached to and made a part of Amendment No. 2 and in lieu thereof substitute the enclosed map entitled, "Revised Map of Ruth K. No. 4 and Sylvia Claims in Accordance with Amended Locations Filed November 4, 1953, Showing DMEA and Other Holes Drilled."

B. Delete the two most westerly holes originally planned for drilling on the Ruth K. No. 4 claim, which now fall outside of the revised westerly claim boundary, and in lieu thereof substitute holes RK-11 and RK-12 at the locations indicated on the Sylvia No. 3 claim.

C. Provide for a recess of operations, beginning April 14, 1957 and ending not later than July 30, 1957.

D. Under Stage II, subheading "Actual Costs, Category (1)," delete "200 hours bulldozing at $12.00/hour...$2,400.00," and in lieu thereof include under Stage II, subheading "Fixed Unit Costs," "240 hours bulldozing at $10.00/hour ...$2,400.00." Appropriate change should also be made in the third from last paragraph on the first page of Exhibit "A" pertaining to the size of a bulldozer to be used.

When you have reviewed the material, we will appreciate advance advice as to your decision, so that the Operator can be advised accordingly.

E. N. Harshman

E. N. Harshman

EMK
7

IN REPLY REFER TO:
DMEA
RECEIVED
APR 22 1957
U.S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
DEPARTMENT OF THE INTERIOR
APR 22 1957
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

April 18, 1957

Memorandum

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

Through: J. William Hasler JWH
John F. Shaw JFS

From: M. H. Salsbury
W. B. Gazdik

Subject: Docket ~~No. DMEA 4136 (Uranium)~~, Contract No. Idm-E 995, Union Mines Inc. (Ruth K and Sylvia claims), Montrose County, Colorado. Recommendations on change in specifications for bulldozing.

The Operator under the subject contract has requested in a letter to the DMEA Field Team dated April 18, 1957 that the contract be amended to permit use of a D-6 tractor-dozer at $10.00 per hour in lieu of the D-7 tractor-dozer specified in the contract at $12.00 per hour.

The justification for the proposed change is that the operator now owns, with Camoose Uranium Mines of America, Inc., a D-6 tractor-dozer which he wishes to use. The 80 hours maximum bulldozing authorized under the contract in Stage I has been exceeded. A D-7 tractor-dozer was used for 77 hours and the Operator will submit a claim for this supported by an invoice from a sub-contractor. The company owned D-6 tractor-dozer was used for 18 hours but the Operator planned to claim only 3.6 hours which would have kept the total claim for Stage I under the maximum funds for bulldozing allowed. To avoid possible delay in processing the claims for project work in March 1957, the Operator was advised not to report the D-6 tractor use with this claim, but to make it later if a contract amendment to permit a change is authorized. It appears at this point that some drilling in Stage II will be authorized, and a change in specifications to permit use of a D-6 tractor will affect more than the remaining 3 hours in Stage I.

It is recommended that an amendment be authorized to permit use of a D-6 tractor-dozer at the rate of $10.00 per hour in lieu of a D-7 tractor-dozer, up to the maximum funds allowed by the contract for bulldozing.

Inasmuch as bulldozing with the D-6 machine would not be done by an independent contractor, the Operator will need instructions on the documentation required to support claims for bulldozing under the proposed arrangement.

The Operator has requested a change in location of two Stage I holes which has been approved by the DMEA Field Team, and is going to request a change in location of three more Stage I holes which will require Washington approval. Authorization of two of the three holes will be dependent on approval of the new locations in relation to a shift of the position of the block of claims 190 feet to the east of that shown in figure 2 amended accompanying Amendment No. 2.

It is therefore suggested that the proposals on bulldozing be held until requests for the additional changes in hole locations are received so that all can be forwarded to Washington at one time.

M. H. Salsbury
M. H. Salsbury,
Mining Engineer

W. B. Gazdik
W. B. Gazdik,
Geologist

MHS/bh

UNION MINES, INC.

433 North Seventh Street

Grand Junction, Colorado

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

July 29, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

Mr. W. H. King, Executive Officer
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia Claims)
Montrose County, Colorado

This letter is to request permission to drill the holes designated as RK-11 and -12 on the attached map. The correction of the map included with Amendment No. II to conform with the map as submitted with the original contract resulted in two of the proposed sites falling to the west of the western boundary of the property. It is as a substitute for the two holes thus eliminated that the new sites are proposed.

From the drilling to date, it appears that the most favorable ground on the property lies at the southeast corner such that holes drilled at these locations, if approved, should penetrate what, at this time, appears to be the most favorable ground available for Stage I drilling.

The Company is willing to build roads and drill sites for these holes at no cost to the government. It would, however, like to request that the government permit the commencement of Stage II drilling as soon as these two holes are completed. RK-14, -16 and -20 will be completed prior to the drilling of these two holes, making a total of nine holes completed under Stage I of the contract. The Company would like to hold in abeyance the drilling of RK-13, the tenth hole allocated to Stage I, until all Stage II drilling which might be allowed around these nine holes is completed.

In the monthly report dated June 1, 1957, we recommended that the Company request another hole, which was designated as RK-22 under the Stage I phase of the contract. It is no longer important that this hole be

drilled, since the writer will have the information on a hole drilled approximately 200 feet southeast of the site shown for RK-22. Preliminary information from this hole indicates that it was an ore hole; and it might be that, on the strength of this information, the Company will want to request Stage II drilling near the location designated as RK-22 in the map accompanying the June 1 report.

The completion of RK-14, -16 and -20 will require approximately one week. It would be desirable to have approval for RK-11 and -12 prior to the completion of these three holes so that continuity of the project will be insured.

As soon as we have word that we are permitted to commence Stage II drilling, the writer intends to recommend offsets to RK-21 and -17 for approval so as to avoid, if possible, any interruption in drilling between stages.

Very truly yours,

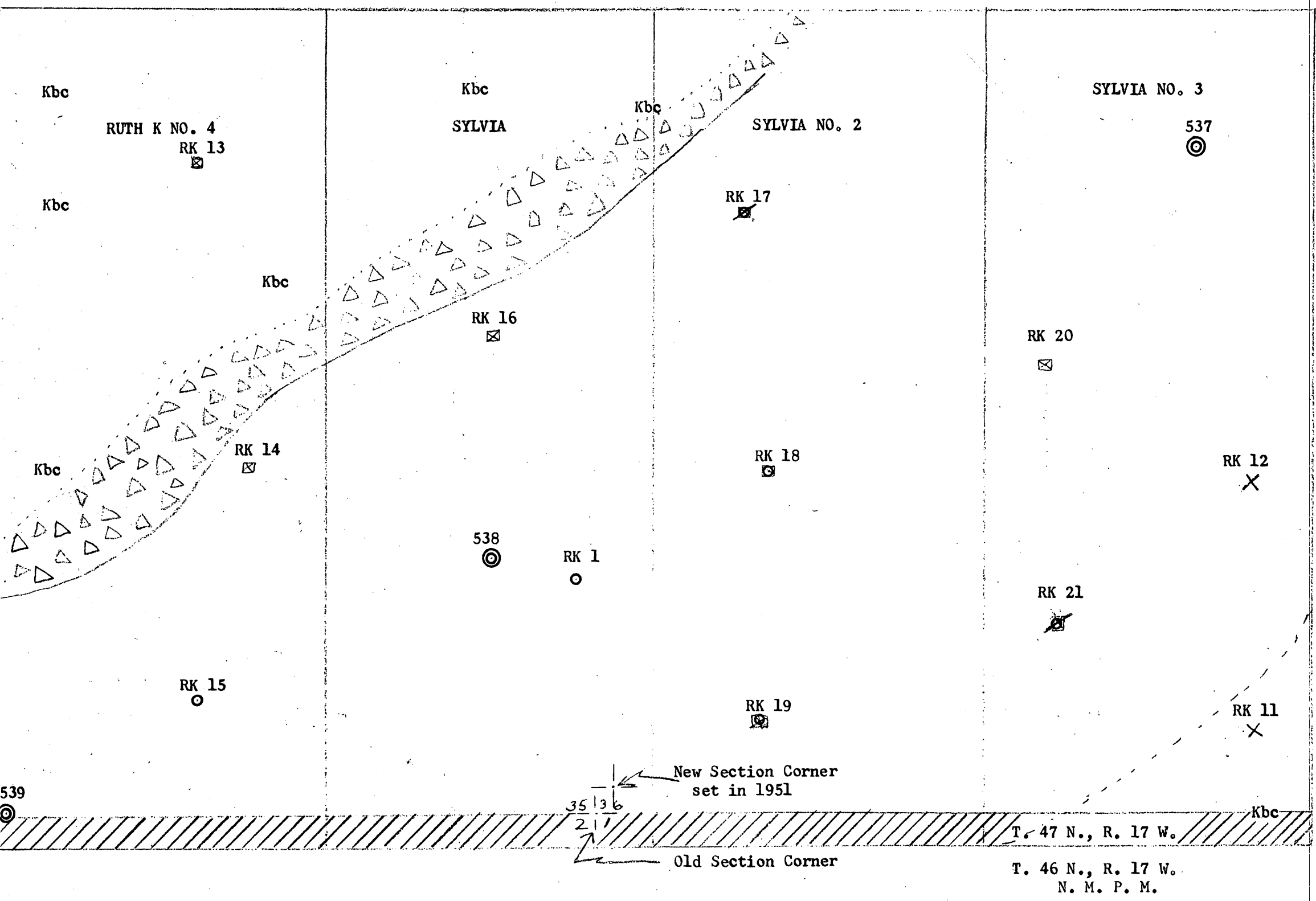
UNION MINES, INC.

Louis P. Gaggini

Louis P. Gaggini,
Vice-President

LPG/hjl

cc: Mr. M. H. Salsbury



EXPLANATION

- Approved locations
- Holes drilled by applicant
- U. S. Geological Survey drill holes
- Conflict with Land withdrawn from Mineral Entry by P. L. O. 459, dated March 25, 1948
- Holes completed to date under DMEA 4136
- Proposed locations
- Kbc — Burro Canyon Formation
- Boulder strewn slope
- Mineralized Holes

FIGURE 1

MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, UNION MINES, INCORPORATED, MONTROSE COUNTY, COLORADO DMEA 4136. TO ACCOMPANY LETTER DATED JULY 29, 1957.

Scale 1" = 200'

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

UNION MINES, INC.

433 North Seventh Street

Grand Junction, Colorado

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

July 29, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

Mr. W. H. King, Executive Officer
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia Claims)

Thank you for your letter of July 26, 1957.

As we mentioned in the monthly report dated June 1, the drilling contractor removed his equipment from the Ruth K. claims because of inclement weather. The project to which he moved the equipment required much more work than he had originally anticipated; and he was, therefore, greatly delayed in returning to the Ruth K. and Sylvia claims.

He has, however, just completed the other project; and will resume operations on the Ruth K. and Sylvia claims tomorrow, Tuesday, July 30.

This letter is to request approval for the suspension of operations just terminated. We feel that it was caused by conditions beyond our control. As you know, the unit cost figure allowed under the contract is somewhat lower than the going prices in the field. For this reason, we are not able to freely select our drilling contractors.

Very truly yours,

UNION MINES, INC.

Louis P. Gaggini

Louis P. Gaggini,
Vice-President

LPG/hjl

cc: Mr. M. H. Salsbury

UNION MINES, INC.

433 North Seventh Street

Grand Junction, Colorado

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

July 29, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

Mr. W. H. King, Executive Officer
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia Claims)
Montrose County, Colorado

Please refer to letter from Mr. E. N. Harshman dated July 3, 1957.

This letter is to request that the subject contract be amended to allow the substitution of a D-6 caterpillar for the D-7 caterpillar in Stage 2 of the Contract.

If this is satisfactory, will you please amend the contract by changing the 200 hours bulldozing at $12 a hour for a total cost of $2,400 to 240 hours of bulldozing at $10 a hour for the same total cost.

Very truly yours,

UNION MINES, INC.

Louis P. Gaggini

Louis P. Gaggini,
Vice-President

LPG/hjl

cc: Mr. M. H. Salsbury

5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
P. O. Box 360
Grand Junction, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
AUG 1 - 1957
REGION III
DENVER, COLORADO

July 31, 1957

Memorandum

To: W. H. King

From: M. H. Salsbury

Subject: Docket No. DMEA 4136 (Uranium), contract No. Idm-E 995
Union Mines, Inc., Ruth K group, Montrose County, Colorado

Referring to the Executive Officer's letter to the operator dated July 26, 1957, and the operator's reply dated July 29, 1957, relating to authorization for the suspension of operations during the extremely bad weather this past spring but continuing to yesterday because the driller wasn't available, Louis P. Gaggini informed me by phone this morning that the date the last work was done prior to suspension was April 13, 1957, and that the drilling contractor entered on the property and commenced work on July 30, 1957.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

M. H. Salsbury,
Mining Engineer

MHS/mlr

IN REPLY REFER TO:

DMEA
DEPARTMENT OF THE INTERIOR
AUG 6 - 1957
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

MINERAL DEPOSITS
DMEA
RECEIVED
AUG 6 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

August 5, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman EMH
J. William Hasler JWH

From: D. P. Elston
H. F. Robertson

Subject: DMEA docket No. 4136 (Uranium), contract Idm-E 995, Union Mines, Inc., (Ruth K. and Sylvia claims) Montrose County, Colorado

The operator, in a letter dated July 29, 1957, has requested permission to drill two holes, Stage I of the subject contract, designated RK-11 and -12, in the eastern and southeastern part of the subject claims to take the place of two holes deleted from the western part of the claims.

The results of the hole RK-21, as compared to previously drilled holes suggest that the southeastern part of the claims is the most favorable area on the claims for ore.

The following is the examining team's geological evaluation of the DMEA drill holes completed to date.

Hole No.	Thickness of OBSS (feet)	Classification and remarks
RK-17	3.8	Unfavorable; operator reports weakly mineralized in Salt Wash.
RK-18	17	Semi-favorable; barren; 0.1' green mudstone at base of sandstone
RK-19	35	Favorable color, texture and thickness; green mudstone 2.9' thick at base; barren in Salt Wash.
RK-21	52	Favorable color, texture, and thickness; 0.5' green mudstone at base; weakly mineralized near base of sandstone.

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DATE	INITIALS	CODE

Holes RK-19 and -21 indicate that favorable ground is present in the southeast part of the claims, the extensions of which contain ore deposits 500 and 1,000 feet east and southeast of the claims (see fig. 3, report of examination).

For the above reason it is recommended that the operator's request to drill holes Rk-11 and -12 at positions shown on the accompanying map be approved. The number of holes and drilling footages stipulated in stage I of the contract will not be exceeded. The proposed holes are about 400 and 435 feet southeast and northeast of hole RK-21, more than the minimum stipulated distance for Stage I holes, and the holes are 100 feet from the eastern property boundary of the claims. However, the fence described by the proposed holes is only 355 feet east of the fence described by holes RK-20 and -21, less than the 450-foot minimum stipulated in Stage I of the contract. ?

The results of drilling to date suggest that some Stage II drilling may be warranted. The amendment or amendments to provide changes in bulldozing specifications for probable Stage II work and changes in Stage I work recommended by the Grand Junction DMEA office should include the following:

(1) Authorization of recess from April 13, 1957 to July 30, 1957.
(2) Authorization of new hole sites for holes Nos. RK-11 and RK-12 as shown on the map accompanying this memorandum. It will be necessary to authorize a 350-foot spacing between fences to keep the proposed holes the required distance from the boundary line.
(3) Authorization for use of a D-6 bulldozer for a maximum of 24 hours at $10.00 per hour in lieu of use of a D-7 bulldozer for 200 hours at $12.00 per hour. This authorization should definitely be subject to reservation that Stage II drilling must be authorized first. It might, therefore, be best incorporated in a separate amendment.

Sufficient unused drilling footages in Stage I remain to provide for remaining Stage I drilling.

D. P. Elston
D. P. Elston,
Geological Survey

W. R. Salsbury
for H. F. Robertson
Bureau of Mines

DPE/mlr

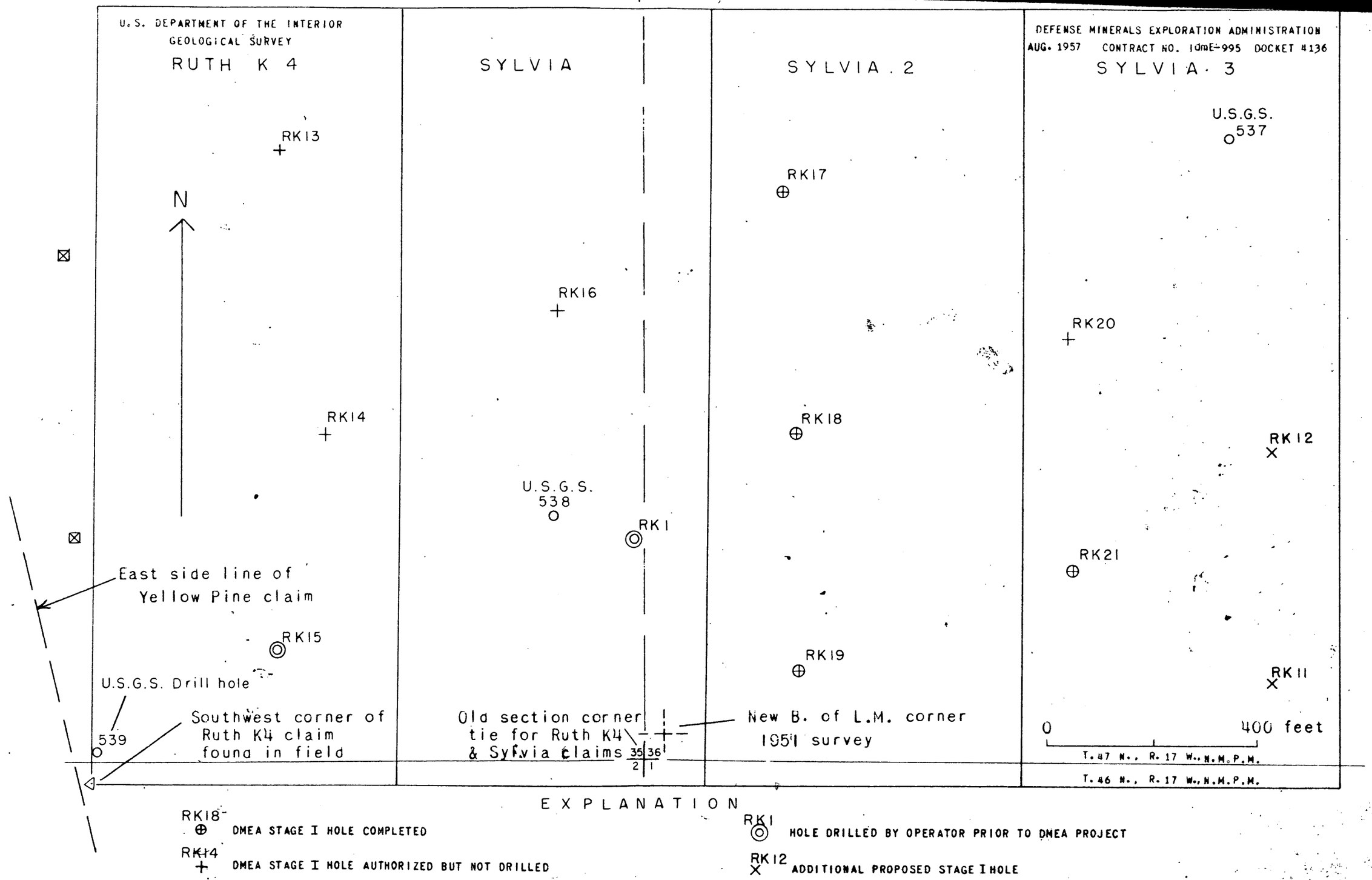
Enclosure
Table
Map

Table of radiometric evaluations from
Geological Survey gamma-ray hole probe instrument
Ruth K. and Sylvia claims, Union Mines, Inc.,
Montrose County, Colorado

Hole No.	Base (feet)	Thickness	Grade eU_3O_8	Mineralized in
RK-17	398.1	1.4	0.019	Salt Wash
RK-18	hole caved-not probed			
RK-19	321.0	1.2	0.024	Brushy Basin
RK-21	hole caved above ore-zone			

The following results of chemical assays were transmitted to the Grand Junction DMEA office on August 1, 1957:

Hole No.	Interval	Percent U_3O_8	Percent V_2O_5
RK-17	396.7-397.2	0.03	0.23
	397.2-397.4	0.03	0.13
	397.4-397.9	0.02	0.07
RK-21	454.2-454.6	trace	0.03
	454.6-455.0	0.02	0.08
	455.0-455.3	0.04	0.13



Note: CLAIM AREA SOUTH OF SOUTH BOUNDARY OF T.47 N. WAS IN CONFLICT WITH GROUND WITHDRAWN FROM MINERAL ENTRY UNDER P.L.O. 459, 3/30/48; RESTORED JULY 20, 1957. BASE FROM OPERATORS MAP.

REVISED MAP OF RUTH K NO.4 AND SYLVIA CLAIMS IN ACCORDANCE WITH AMENDED LOCATIONS FILED NOVEMBER 4, 1953, SHOWING DMEA AND OTHER HOLES DRILLED

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D M E A
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

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DMEA
RECEIVED 1957

DATE	INITIALS	CODE
8/5	P.K.	220
8/5	[illegible]	800
"	[illegible]	700

224 New Customhouse
Denver 2, Colorado

July 31, 1957

Memorandum

To: T. A. Christensen

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. IAM-2995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed is a copy of the Operator's letter of July 29, 1957, requesting that all future correspondence pertaining to the subject contract be addressed as follows:

Mr. Louis P. Gaggini,
Vice President
Union Mines, Inc.
433 North Seventh Street
Grand Junction, Colorado.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosure

JWT:prl

cc: Chmn. Op. Comm.-2) w/copy of
Harshman) Operator's
DMEA/DFC) letter of
Hasler) July 29.
Corres. file)
DMEA/Gr.Jct.
Townsend
Chron.

UNION MINES, INC.

433 North Seventh Street

Grand Junction, Colorado

July 29, 1957

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

Mr. W. H. King, Executive Officer
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Field Team, Region III
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

Dear Mr. King:

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Ida-E995
Union Mines, Incorporated
(Ruth K. and Sylvia Claims)
Montrose County, Colorado

Please address all future correspondence pertaining to the subject contract to me at the following address:

Mr. Louis P. Gaggini,
Vice-President
Union Mines, Inc.
433 North Seventh Street
Grand Junction, Colorado

Yours very truly,

UNION MINES, INC.

Louis P. Gaggini

Louis P. Gaggini,
Vice-President

LPG/hj.

Mr. M. R. Salsbury

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 29 1957

DATE	INITIALS	CODE
7/29	C	220
7/29	[illegible]	800
	~~Chong~~	700

224 New Customhouse
Denver 2, Colorado

July 26, 1957

CERTIFIED MAIL

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-2995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)

Dear Mr. Gaggini:

Information has come to this office that operations under Contract No. Idm-2995 have been suspended since the work performed as reported on Form MF-104, Operator's Monthly Report and Voucher, for the month of April, 1957.

Amendment No. 4 extended the date fixed for completion of the project work from August 1, 1957 to November 1, 1957. An unauthorized suspension of operations which will necessitate an extension of the date fixed on or before which the work provided for in the Contract shall be completed would place you in default of the Contract and subject to such penalties as might be imposed for that reason.

If conditions beyond your control have forced the suspension of operations, you should protect yourself by requesting the Government's approval for a suspension of operations, furnishing a justification for the suspension. Also, please advise the date the last work was performed under the Contract and state the date on or before which operations will be resumed.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JWT:prl

cc: Chmn. Op. Comm. - 2
Harshman
DMEA/DFC
DMEA/Gr.Jct.
Hasler
Townsend
Corres. file
Chron.

DMEA- 58-6

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III
204 New Custom House, Denver 2, Colorado

FINAL DISTRIBUTION
MADE JUL 19 1957

Administrative Audit Difference Statement

Mr. Louis P. Cagnini, Vice President,
Union Mines, Inc.
314 Main Street,
Grand Junction, Colorado

Date: July 18, 1957
Payee's Reference: April 1957

DMEA-4136

Gentlemen:

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

Amount Claimed	$	5,356.30
Difference	$	12.88
Amount Approved	$	5,343.82

EXTRA COPY
DMEA
RECEIVED 1957

DATE	INITIALS	CODE
7/22		110
7/23		700

The reason for the difference was due to:

Disallowance:

10.8 ft core drilling @ $3.50 per ft. $37.80

10.8 ft Incidental Allowance @ $0.47 per ft. 5.08

Total Amount to be disallowed. $42.88

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

Very sincerely yours,

N. E. Stokes
Audit Section

Randel R. Cooper
Fiscal Officer, Region III

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

224 New Customhouse
Denver 2, Colorado
July 17, 1957

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4136, (Uranium) Contract Idm-R995, Union Mines, Incorporated, (Ruth K. and Sylvia claims) Montrose 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.

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.

In two of the holes completed during April, 1957, coring started more than 10 feet above the top of the Salt Wash member of the Morrison formation. As a result of consultation with a DMEA geologist who is familiar with the area, the inspecting engineer recommends that no disallowance be made for coring above the Salt Wash member for the following reasons:

1. The Salt Wash-Brushy Basin contact is gradational, and is not easily recognized.

2. The thickness of ore bearing sandstone varies abruptly in the project area.

3. Sandstone similar to the Salt Wash member appear above the Salt Wash.

Under the circumstances we consider that the Operator has complied as closely as possible to the intent of the contract in regard to drilling above the Salt Wash, therefore no exception is taken for coring in the upper sections of the holes.

The contract specifies that the holes shall be drilled to a depth not to exceed 10 feet into the red sandstone which underlies the Salt Wash member. During April, 1957, two holes were drilled more than 10 feet into the red sandstone. The reported cost for the excess drilling is to be disallowed as follows:

Hole No.	Excess core drilling
RK-17	5.5 ft.
RK-19	5.3 ft.
Total excess coring	10.8 ft.

Disallowances

Disallow the reported cost of 10.8 feet of core drilling at $3.50 per foot	$ 37.80
Disallow Incidental Allowance for 10.8 feet at 0.47 per foot	5.08
Total amount to be disallowed	$ 42.88

Reconciliation with Amount reported by the Operator on Form MF-104 for April, 1957

Amount reported on Form MF-104 for April, 1957	$5,386.10
Amount to be disallowed	42.88
Total accepted cost for April, 1957	$5,343.22
Government participation at 75 percent	$4,007.42

Remarks

Date of Report	June 1, 1957
Date Received in Field Office	June 6, 1957
Date Received in Region Office	July 10, 1957

Original signed by
W. H. KING

W. H. King

Enclosures

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

DMEA
DEPARTMENT OF THE INTERIOR
JUL 10 1957
REGION III
DENVER, COLORADO

P. O. Box 360
Grand Junction, Colorado

July 9, 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: H. F. Robertson

Subject: Docket DMEA 4136 (Uranium), Contract Idm-E 995, Union Mines, Inc. (Ruth K and Sylvia claims), Montrose County, Colorado. Progress report for April 1957.

Work under the subject contract was inspected by a DMEA engineer on May 1, 1957. The engineer was accompanied by Louis F. Gaggini, project supervisor for the operator. Four Stage I holes had been completed and operations were recessed due to inclement weather. Payment is claimed as follows:

Item	Units	Unit Cost	Total Costs
Actual Costs			
Core drilling	260 feet	$3.50	$ 910.00
Non-core drilling	1,545 feet	1.75	2,703.75
Bulldozing	77 hours	12.00	924.00
Fixed Unit Costs			
Incidental allowance	1,805 feet	0.47	848.35
Total claimed			$5,386.10

The claims for the above costs are supported by invoices from the respective contractors.

The operator submitted geologic and radiometric logs of the four holes completed. The DMEA gamma-ray logging unit was unable to completely probe any of the holes due to caving conditions in the non-cored portions. However, the completed hole depths are verified by the geologic logs, driller's reports, and physical inspection of the core.

It is noted that coring commenced more than 10 feet above the ore-bearing sandstone in two of the holes (RK-18 and RK-21). It should be pointed out that the top of the ore-bearing sandstone is not necessarily the contact between the Brushy Basin and Salt Wash members of the Morrison formation. It is unfortunate that Amendment No. 5, specifies

that coring should start within ten feet of the top of the Salt Wash member of the Morrison formation. Consultation with DMEA geologist, W. B. Gazdik, developed the following points concerning the subject:

1. The contact between the Salt Wash and the Brushy Basin is a gradational one with interfingering sandstones and mudstones of variable thickness. Rarely is the contact an abrupt one which could be easily recognized.

2. The thickness of the ore-bearing sandstone varies abruptly in the vicinity of the claims, consequently it is rather difficult to predict the amount of coring required for any specific hole. In this respect it is noted that coring in the two questionable holes commenced in sandstones 12 and 15 feet thick and very similar lithologically to the ore-bearing sandstone. The presence of varicolored chert grains (see operator's geologic logs) in a coarse-grained sandstone marks the Salt Wash-Brushy Basin contact for some stratigraphic mapping. However, when this characteristic is not present, the contact again becomes gradational and very difficult to determine.

On consideration of the above, it is recommended by both the DMEA geologist and the inspecting engineer that the coring above the ore-bearing sandstone be allowed since the intent of the contract is to explore the uppermost portion of the Salt Wash member. In their opinion the Salt Wash-Brushy Basin contact was picked by the operator within resonable limits.

The excess coring below the Salt Wash member is recommended for disallowance. This coring amounts to 5.5 feet in RK-17 and 5.3 feet in RK-19 or a total of 10.8 feet. At $3.50 per foot the total amount recommended for disallowance is $37.80 (see Table I).

A map showing the locations of the holes drilled to date was submitted with the narrative report. The hole locations were verified by use of a Brunton compass and stadia readings taken with an alidade.

The operator submitted in quintuplicate for April 1957, a narrative report with map, lithologic and radiometric logs, Forms MF-104 and MF-104A, and one copy each of the invoices for drilling and bulldozing. One copy of the driller's report was included with the documents. Other documentation to support this claim is not required by the contract.

An error on the MF-104 is noted in the claim for drilling. This item should be $3,613.75 instead of $3,640.00. The operator apparently failed to change the above item only, as the total amount claimed is correct.

Payment of $4,011.23 or 75 percent of the amount claimed, $5,386.10 less $37.80 for excess core drilling below the ore-bearing sandstone, is recommended by the inspecting engineer.

H. F. Robertson

H. F. Robertson,
Mining Engineer

HFR/bh

Table I - Drill hole footage claimed and recommended for April 1957. DMEA 4136, Contract Idm-E 995, Union Mines, Inc.

Hole No.	Plug Bit	Core above OBSS	Core OBSS	Core below OBSS	Totals Core feet	Totals Depth Hole	Coring recommended for payment above OBSS	Coring recommended for payment OBSS	Coring recommended for payment Below OBSS	Coring recommended for payment Total
RK-17	387.0	9.7	3.8	15.5	29.0	416.0	9.7	3.8	10.0	23.5
RK-18	377.0	36.0	17.0	7.0	60.0	437.0	36.0	17.0	7.0	60.0
RK-19	426.0	5.2	34.5	15.3	55.0	481.0	5.2	34.5	10.0	49.7
RK-21	355.0	54.5	52.3	9.2	116.0	471.0	54.5	52.3	9.2	116.0
Totals	1,545.0	105.4	107.6	47.0	260.0	1,805.0	105.4	107.6	36.2	249.2

Recommended for disallowance:

Coring claimed -- 260.0
Coring approved -- 249.2

Disallowance 10.8 feet of coring

10.8 feet at $3.50 per foot = $37.80

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 April, 1957 Docket No. DMEA 4136 Contract No. Idm-E 995
Operator's Name UNION MINES, INCORPORATED Minerals Uranium
Address 304 Main Street, Grand Junction, Colorado
Contract Amount, $60,800.00 Government Participation: 75 % Amount, $ 45,600.00

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
Stage I						
(1) Independent Short Form Contracts:						
Drilling	3640.00	-	3640.00			
Bulldozing	924.00		924.00			
Crosscutting						
Drifting						
Incidental Allowance	848.35		848.35			
(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						
(8) Contingencies (specify):						
	5386.10		5386.10			
TOTALS	~~5410.35~~		~~5410.35~~	5,343.22	—	5,343.22

RECEIVED JUL 22 1957 DMEA

DMEA
DEPARTMENT OF THE INTERIOR
JUN 5 - 1957
REGION III
DENVER, COLORADO

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 1, 1957 *Payee Louis P. Gaggini
Lodis P. Gaggini
Per _____ Title Project Chief

*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:

$ 4,607.42

Signature RRC
(Authorized Certifying Officer)

Date 7-18-57 Vou. No. DMA-58-6
(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. Idm-E995 in accordance with the terms of the contract.

Signature H. J. Robertson # 4,011.23 HR. [redacted] Title Mining Engr. Date 6/24/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. H. King Title Executive Officer Date JUL 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.

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 April 1957 Docket No. DMEA 4136 Contract No. Idm-E 995
Operator's Name UNION MINES, INCORPORATED Minerals Uranium
Address 304 Main Street, Grand Junction, Colorado

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
Stage I								
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	910.00	260	910.00	260	3.50	1,100	3.50
~~Core~~ Plug bit	"	2703.75	1545	2703.75	1545	1.75	4,490	1.75
Incidental Allowance	"	848.35	1805	848.35	1905	.47	5,590	.47
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Bulldozing D-7	hrs.	924.00	77	924.00	77	12.00	80	12.00
Total Distributed Costs		5386.10		5386.10				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5386.10		5386.10				

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 ..... Operator UNION MINES, INCORPORATED
Louis P. Gaggini
Louis P. Gaggini

Per ..... Title Project Chief

Remarks: H. T. Robertson

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)

RECEIVED JUL 22 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

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DMEA FIRST MONTHLY NARRATIVE REPORT

STAGE I

Docket 4136, Idm-E995
Union Mines, Incorporated
(Ruth K and Sylvia Claims)
Montrose County, Colorado

Introduction

Although this report is for the month ending April 30, 1957, it includes also some discussion of preliminary work performed last fall. A section captioned "Recommendation" is included in addition to the usual material required in the narrative report. This is not to be construed a request for amendments or approval of hole sites. These will be made by formal letters, with a separate letter for each request.

Results

Out of the four holes drilled to date, three were mineralized; and one, RK-18, is considered, with some reservations, to be semi-favorable. Mineralization cut by RK-19 was in the Brushy Basin, and therefore of little significance. The Salt Wash sandstone at RK-19 was, however, favorable. RK-21 penetrated radioactive material in the Brushy Basin member as well as in the top sandstone of the Salt Wash, 0.6 feet of which appears to average slightly over 0.10 per cent U_3O_8. Although the ore sand penetrated by RK-17 was only 3.8 feet thick, it contains over 0.6 feet of material which appears to contain over 0.02 per cent U_3O_8. A table correlating thickness, depth and grade for samples taken from RK-17 and RK-18 will be presented next month when assay returns are available.

Surveying and Hole Locations

In the original application, the company assigned, in its drill hole records, numbers RK-11 to -21 for Stage I drilling. Prior to the time that the project was approved, however, the company drilled RK-15 at the site of the proposed location. A copy of the geologist's log for RK-15 has been submitted to Mr. Gazdik of the Grand Jundtion office of DMEA.

The project was approved on August 23, 1956, and surveying began to locate holes at sites approved by DMEA. At the outset, the project was under the supervision of Philip S. Wein, who tied his survey to the southwest corner of Ruth K No. 4, this corner, having been identified by a pile of rock in which a paper was found containing a description of the corner written in the handwriting of the original locater, H. D. Clark. Later, Mr. Wein made a more careful investigation, and found other corners marked by 4 x 4 stakes, which had evidently been moved to the locations shown on the map which was submitted by the government as Amendment No. 2. By this time, some of the drill sites had been prepared; and Mr. Wein began the job of offsetting them so the drill sites would conform with the claim boundaries as they were shown on the map mentioned above. Later, a check with the original claim surveys revealed that the corners used originally by Mr. Wein were the correct corners and that the others had evidently been moved.

When this writer took over supervision of the project, he decided to tie all surveys and all drill hole locations to the locations of U.S.G.S. Drill Holes LP-537, -538, -539, which were plotted by co-ordinates provided by the Grand Junction DMEA office and which were checked

by plotting Mr. Wein's survey between the holes and by the writer's independent survey.

On April 16, a letter was written requesting permission to move Holes RK-14 and RK-16; and at that time, the company's views on the location of its claims was discussed. Another discrepancy which was shown on the map attached to the letter above-mentioned is the location of the northern boundary, T46N, R17W, which was also the northern boundary of land withdrawn from public entry by PLO-459, dated March 25, 1948, which was senior to the claims involved in the project, these claims having been staked in 1950 and early in 1951. Later, a new section corner was set in 1951 by the Bureau of Land Management, which, according to the new plat dated May 5, 1954, was to establish corners in their original position according to best available evidence. A tall 6 x 6 stake, clearly marked as northwest corner of Section No. 1, according to Mineral Land Survey No. 016328, together with appropriate bearing tree is still in existence in the field and is, according to the writer's preliminary survey, located approximately 60 feet southwest of the corner set in 1951. The company, therefore, maintains that this northern boundary of the above-mentioned withdrawal, and hence the southerly boundary of this property, is approximately 50 feet south of the boundary indicated by the new section corner. This is important because the company plans to recommend for DMEA approval a hole shown on Figure I as RK No. 22, to be drilled as a substitute for RK-15 which was drilled before the project commenced.

Trail Building and Site Preparation

Last October, 77 hours were expended with a D-7 bulldozer, at

$12.00 per hour, in the building of trails and in the preparation of drill sites. Before drilling could commence in March, however, some of the trails had to be improved. A D-6 caterpillar was used for this purpose and kept on the project until the end of April. Having this tractor on the project proved very helpful in towing the water truck and drill rig over the muddy roads caused by the bad weather, which persisted throughout most of the period. Although the tractor was on the project from the 19th of March to the end of April, the charge made to the company will be limited to payment at $10.00 per hour for the 18 hours that the tractor was actually in use and the payment of moving charges totaling $100.00.

On April 18, 1957, a letter was written to the DMEA requesting that the company be allowed to charge 3.6 hours of the bulldozer time to the project at $10.00 per hour, thus utilizing the full amount presently allocated for bulldozing under the Stage I phase of the project. Since no reply has been received to this letter, the 3.6 hours is not included on the Form MF-104 and 104-A attached hereto.

As is shown in the tabular Summary of Stage I drilling given below, there remains to be drilled, if RK-22 is allowed, seven holes to complete the Stage I of the project; so far sites are available for only three of these. The company intends to request the allocation of additional funds for the preparation of the four hole sites and connecting trails which are as yet unprepared. For a further discussion of this problem, see "Recommendations" below.

Tabular Summary of Stage I Drilling

The table below, with accompanying footnotes, summarizes the

information for the drilled and undrilled holes to be included in Stage I, if Hole RK-22 is allowed. The probe information given is the maximum reading for any particular radioactive zone and the depth to the maximum reading:

Hole No.	Remarks	Favorability	Total Depth Feet	Plug	Core Ft.	O.B.S.S. From	O.B.S.S. To	Thick Feet	Probe Depth Feet	Probe EU308
RK-11	Undrilled /1									
RK-12	Undrilled /1									
RK-13	Undrilled /2									
RK-14	Undrilled /3									
RK-15	Drilled by Co. before program was approved									
RK-16	Undrilled /3									
RK-17		~~Fav.~~-Min.	416	487	29	396.7	400.5	3.8	397.5	0.05
RK-18		Semi-Fav.	437	377	60	413	430	17		
RK-19		Fav.	481	426	55	431.2	465.7	34.5	319.0	0.02
RK-20	Undrilled /4									
RK-21		Fav.-Min.	471	355	116	409.5	461.8	52.3	276.8	0.02
									279.2	0.02
									454.8	0.17
RK-22	Undrilled /5									
	Total Feet		1,805	1,545	260					

/1 Holes to be drilled at sites for which approval has not yet been requested.

/2 Hole site, as approved, is inaccessible.

/3 Hole sites prepared last October, approved by letter of April 25, 1957.

/4 Hole site, as approved in original contract, is accessible.

/5 Company plans to recommend a location to replace RK-15 drilled before project was approved.

Drilling

Drilling commenced on March 20, 1957; continued throughout month of March and part of April. The inclement weather greatly hampered the

drilling contractor and increased his costs. During much of the time, the roads were impassable to the water truck, drill and the two-wheel drive pickup used to service the rig. It was for this reason that drilling was suspended on April 13, 1957, to be started again as soon as the squally weather, which has continued throughout May, had definitely abated. The daily drill reports and drilling contractor's invoice, which are attached to the original of this report, as submitted by the contractor, show 1,500 feet of plug bit drilling and 260 feet of core drilling. A correlation between probe results and results of radiometric core scanning, however, reveal that some of the rods used are not a full 10 feet in length. For this reason, the daily drill logs and invoices have been corrected to conform with the probing. In the case of holes which are not mineralized, an estimated correction has been applied.

Recommendations, Stage I Drilling

It is most important the Company apply immediately for permission to drill holes at the sites designated on Figure I as RK-11 and RK-12. Since RK-11 falls on the Burro Canyon capped area in the southeast portion of the property and close to the presently existing road, there should be no difficulty about drilling this hole at the location shown on the map. In the case of RK-12, however, the site will fall on the steep talus-covered Brushy Basin slope such that one will not be able to determine the exact location until after the site has been prepared. For this reason, it might be well for the company to request permission to locate the hole within 100 feet of the location shown on the map provided, however, it is not located closer than 380 feet from any previously drilled hole or closer than 100 feet from the eastern boundary of the property.

As a separate request, lest it delay the approval for RK-11 and RK-12, a request should be made for additional funds to be allocated for the preparation of drill sites and trails to RK-11 and RK-12. In the case of RK-11, the amount of work required will be negligible. In the case of RK-12, however, it is estimated a minimum of 8 hours will be required, with a possible maximum of 24 hours, depending upon the number and size of boulders encountered in the trail building operation. It should be requested that the funds so allocated be for the use of a D-6 caterpillar, so that the same tractor which was used in March and April might be used for this work. It is the writer's opinion that the D-6 tractor is adequate for the job and that it will result, if anything, in lower over-all costs.

In another request, the company should petition for funds to be allocated for a compressor, drill and powder at the all-inclusive price of $8.00 an hour to facilitate the rock work which will be necessary to prepare a trail to the site for RK-13. It might be well, in this instance, for the company to request a 200-foot leeway in the location of the hole so long as the hole is not located closer than, say, 400 feet to any previously drilled hole and no closer than 100 feet from the western boundary of the property. It is estimated that the rock work necessary to prepare the trail to RK-13 will be a minimum of 20 hours and a possible maximum of 50 hours and that 16 hours' bulldozer work should be adequate.

In another request to DMEA, the Company should ask that Amendment No. 2 be changed to increase Stage I to the original 11 holes and that, if this request be allowed, a hole be permitted at the location

designated on Figure I as RK-22. Whether or not the government will approve this location depends on whether or not the old Section Corner set by Mineral Land Survey 016328 is recognized as marking the southern boundary of the property. It may well be that the DMEA will, out of an abundance of caution, designate that the hole may not be drilled at this location because it will fall within 100 feet of an east-west line passing through new Section Corner set in 1951. The writer has discussed this problem with counsel, who feels certain that the old Section Corner would mark the southern boundary recognized by the courts. It is obvious, however, that the matter cannot be adjudicated for the sake of obtaining approval of a hole location. The company should, however, plan on defending its title to the 50-feet strip between the two Section Corners in the event there are, in the future, any trespasses committed by persons operating mines on adjoining tracts or against any quiet title action which may be instituted for the purpose of obtaining clear title to the strip.

In the event the government will not approve the site for RK-22 as designated, the company should request that an additional hole, designated as RK-22, be allowed on the Burro Canyon capped area at the northwest corner of the property. If this site is allowed, it will reduce the cost per foot for the rock work which will be necessary to reach RK-13, since this cost will then be allocated to two holes rather than one. It is estimated that no more than 8 hours' additional rock work and 4 hours' additional bulldozer work will be necessary to prepare this site and connecting trail.

Recommendations, Stage II

Because there may be a possibility the government will deny the re-allocation of funds to permit the rock work necessary to reach RK-13 and possibly RK-22, it might be well for the company to request, as soon as possible, permission to do offset drilling around RK-21 at the location shown on Figure I and designated as RK-23 and RK-24.

UNION MINES, INCORPORATED

By_____
Louis P. Gaggini

LPG/hjl

Recommendations, Stage II

Because there may be a possibility the government will deny the reallocation of funds to permit the rock work necessary to reach RK-13 and possibly RK-22, it might be well for the company to request, as soon as possible, permission to do offset drilling around RK-21 at the location shown on Figure I and designated as RK-23, RK-24, and RK-25. Since this would be Stage II drilling, there is the possibility that these three holes will not be allowed until Stage I has been definitely completed. If, however, these three sites are approved when requested, the drilling contractor might be induced to put two rigs on the project, thus reducing the over-all cost of the project, which, at present, is greatly in excess of the unit costs allowed by the contract.

UNION MINES, INCORPORATED

BY Louis P. Gaggini
Louis P. Gaggini

LPG/hjl

DRILL HOLE LOG

GEO ENGINEERING

Type of Drill: Franks

Logged For: Union Mines, Inc.

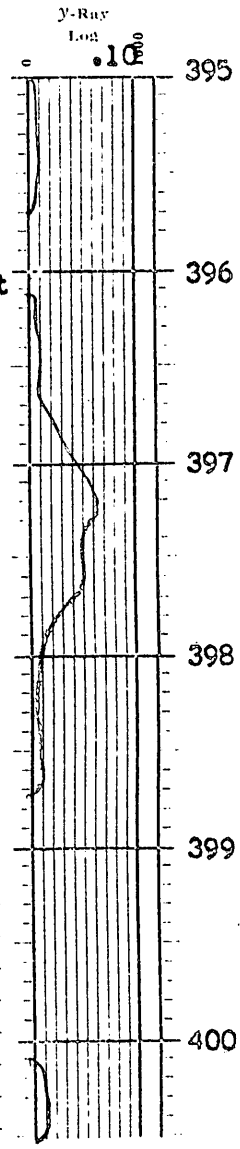
Drill-hole No. RK 17
Total depth 416
Collar elev. 6336 T ..... P
Area Long Park

COORDINATES
North ..... East .....
Tie N 5° W; 460' From RK 18

Claim Sylvia No. 2
Date started 3/31/57
Date completed 4/2/57
Logged by Louis P. Gaggini

Summary of log Fav. -- Min ; OBSS 396.7-400.5 Thick 3.8 ; SS color R Br Gy MS under OBSS R Br ; Cbn. S-N

	DEPTH From	DEPTH To	Rock	Color	Grain	Carbon	REMARKS
	0	330				)	Plug bit: R & Gn Sh & Hard Ribs
	330	355	From Drillers Log			(	" " : SS
	355	387				)	" " : R Sh & Hard Ribs
	387	396.7	MS/STS	R-Br		N	Gn Mot.
(	396.7	397.2	SS	R-Br	F-VF	S-N	Mn Impregnated except for Gy-Gn
)							streak along edge of core; Count
)							.011 Mr/hr with B.G at .007
OBSS (	397.2	397.4	SS	Dark Gy	F-VF	N?	Vanadiferous Count: .015 Mr/hr
)	397.4	397.9	SS	Gy	F-VF	N	Some V?
(	397.9	400.5	SS	Gy	F-VF	S-N	
	400.5	416	MS/STS	R-Br			



SAMPLE BASE	SAMPLE THICK	LAB ASSAY (%) U_3O_8	LAB ASSAY (%) V_2O_5	FIELD EST. (%) U_3O_8	FIELD EST. (%) V_2O_5
397.2	0.5			.04	Tr
397.4	0.2			.06	.50
397.9	0.5			Tr?	Tr

Abbreviations

Wh—white	CG—conglomerate
Br—brown	SS—sandstone
R—red	MS—mudstone
Gy—gray	ST—siltstone
Bl—blue	F—fine
Gn—green	M—medium
Yw—yellow	C—coarse
Bk—black	N—none
Pp—purple	S—sparse
Cbn—carbon	A—abundant
OBSS—ore bearing sandstone	

Hole no. RK 17

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COLORADO PRINTING CO., GRAND JUNCTION

DRILL HOLE LOG

GEO ENGINEERING

Type of Drill: Franks

Logged For: Union Mines, Incorporated

Drill-hole No. RK 18
Total depth 437
Collar elev. 6398 T. P
Area Long Park

COORDINATES
North East
Tie N 60°E; 400' from RK 1

Claim Sylvia No. 2
Date started 3/20/57
Date completed 3/25/57
Logged by Louis P. Gaggini

Summary of log Semi-Favorable OBSS 413-430 Thick 17'; SS color L Gy; MS under OBSS 0.1' Gn; Cbn. S-A

	DEPTH From	DEPTH To	Rock	Color	Grain	Carbon	REMARKS
	0	80				(	Plug Bit: Gn Sh
	80	100	From Driller's Log			(	" " : SS
	100	367				)	" " : R & Gn Sh & Hd Ribs
	367	377				(	" " : SS
	377	392.5	SS	L Gy	C-M	N	A Varicolored chert near base
	392.5	397.5	MS	R Bn			
	397.5	403	SS	L Gy	M	N	
	403	405	MS	R Bn			
	405	407	SS	L Gy	VF-F	N	
	407	413	MS	R Bn			
OBSS	413	430	SS	L Gy	MF-M	S-A	Cbn A. locally along bedding
	430	430.1	MS	Gy			
	430.1	437	MS	R Bn			
							4½' core loss 417 - 437
							Possible V Min. 414 to 420

γ-Ray Log 0 1000

SAMPLE BASE	SAMPLE THICK	LAB ASSAY (%) U_3O_8	LAB ASSAY (%) V_2O_5	FIELD EST. (%) U_3O_8	FIELD EST. (%) V_2O_5

Abbreviations

Wh—white	CG—conglomerate
Br—brown	SS—sandstone
R—red	MS—mudstone
Gy—gray	ST—siltstone
Bl—blue	F—fine
Gn—green	M—medium
Yw—yellow	C—coarse
Bk—black	N—none
Pp—purple	S—sparse
Cbn—carbon	A—abundant
OBSS—ore bearing sandstone	

Hole No. RK 18

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DRILL HOLE LOG

GEO ENGINEERING

Type of Drill: Franks

Logged For: Union Mines, Incorporated

Drill-hole No. RK 18
Total depth: 437
Collar elev. 6398 T. P
Area: Long Park

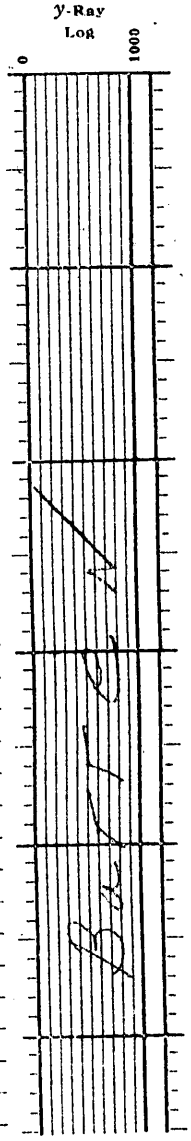
COORDINATES
North: East:
Tie: N 55°E; 400' from RK 1

Claim: Sylvia No. 2
Date started: 3/20/57
Date completed: 3/25/57
Logged by: Louis P. Gaggini

Summary of log: Semi-Favorable BSS 413-430 Thick 17'; SS color L Gy; MS under OBSS 0.1' Gn; Cbn S-A

	DEPTH From	DEPTH To	Rock	Color	Grain	Carbon	REMARKS
	0	80					(Plug Bit: Gn Sh
	80	100	From Driller's Log				(" " : SS
	100	367					) " " : R & Gn Sh & Hd Ribs
	367	377					(" " : SS
	377	392.5	SS	L Gy	C-M	N	A Varicolored chert near base
	392.5	397.5	MS	R Bn			
	397.5	403	SS	L Gy	M	N	
	403	405	MS	R Bn			
	405	407	SS	L Gy	VF-F	N	
	407	413	MS	R Bn			
OBSS	413	430	SS	L Gy	MF-M	S-A	Cbn A. locally along bedding
	430	430.1	MS	Gy			
	430.1	437	MS	R Bn			
							4½' core loss 417 - 437
							Possible V Min. 414 to 420.

γ-Ray Log



SAMPLE BASE	SAMPLE THICK	LAB ASSAY (%) U_3O_8	LAB ASSAY (%) V_2O_5	FIELD EST. (%) U_3O_8	FIELD EST. (%) V_2O_5

Abbreviations

Wh—white	CG—conglomerate
Br—brown	SS—sandstone
R—red	MS—mudstone
Gy—gray	ST—siltstone
Bl—blue	F—fine
Gn—green	M—medium
Yw—yellow	C—coarse
Bk—black	N—none
Pp—purple	S—sparse
Cbn—carbon	A—abundant

OBSS—ore bearing sandstone

Hole No. RK 18

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COLORADO PRINTING CO., GRAND JUNCTION

DRILL HOLE LOG

GEO ENGINEERING

Type of Drill: Franks

Logged For: Union Mines, Incorporated

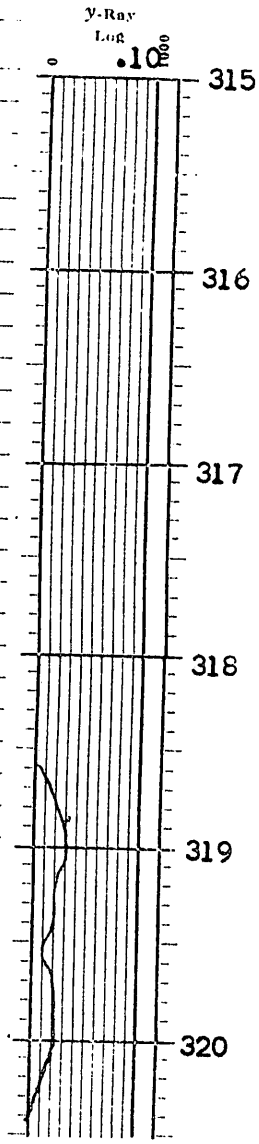
Drill-hole No. RK 19
Total depth 481
Collar elev. 6437 T. ..... P
Area Long Park

COORDINATES
North ..... East .....
Tie N 65° E; 300' from Brass Cap Marking SW Cor. Sec. 36

Claim Sylvia No. 2
Date started 3/26/57
Date completed 3/30/57
Logged by .....

Summary of log Favorable; OBSS 431.2-465.7 Thick 34.5; SS color L. Gy; MS under OBSS 2.9' Gn; Cbn. S-A

DEPTH From	DEPTH To	Rock	Color	Grain	Carbon	REMARKS
0	426					Plug Bit; R & Gn Sh & Hd Ribs
426	429.7	MS	R Br			
429.7	431.2	MS	Gn Gy			
431.2	465.7	SS	L Gy	M	S-A	Pyr Disseminated locally
465.7	468.6	MS/STS/SS	Gy Gn			Interstitial Gn MS Flks
						A - Locally
468.6	481.0	MS	R Br			



SAMPLE BASE	SAMPLE THICK	LAB ASSAY (%) U_3O_8	LAB ASSAY (%) V_2O_5	FIELD EST. (%) U_3O_8	FIELD EST. (%) V_2O_5

Abbreviations

Wh—white	CG—conglomerate
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Gy—gray	ST—siltstone
Bl—blue	F—fine
Gn—green	M—medium
Yw—yellow	C—coarse
Bk—black	N—none
Pp—purple	S—sparse
Cbn—carbon	A—abundant
OBSS—ore bearing sandstone	

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DRILL HOLE LOG

GEO ENGINEERING

Type of Drill: Franks

Logged For: Union Mines, Incorporated

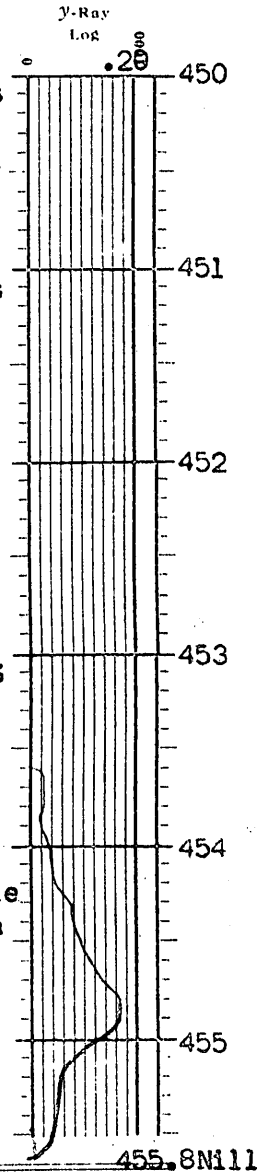
Drill-hole No. RK 21
Total depth 471
Collar elev. 6363 T P
Area Long Park

COORDINATES
North East
Tie N 70° E; 570' from RK 19

Claim Sylvia No. 3
Date started 4/9/57
Date completed 4/13/57
Logged by Louis P. Gaggini

Summary of log Fav. Min; OBSS 409.5-411.8 Thick 52.3; SS color L Br D Gy; MS under OBSS 0.5 Gy; Cbn. S-A

	DEPTH From	DEPTH To	Rock	Color	Grain	Carbon	REMARKS
	0	282					Plug bit: Described by Driller as R & Gn Shale; .02 to .03 C U_3O_8 276.5 to 277.9; .02 C U_3O_8 279.1 to 279.5
	282	305	SS				Plug bit: Observation of dry cuttings
	305	355					Plug bit: Described by Driller as R & Gn Shale with Hard Ribs
	355	367	SS	R-R Gy	C-M	N	Some varicolored chert grains
	367	379.2	MS	R Br			Some Gn Mottels
	379.2	381	SS	Gn R	M	N	A R Br & Gy MS Galls
	381	385.4	SS	Gn	M-F	S	
	385.4	388.6	MS	R Br			
	388.6	388.7	MS	Gy Gn			
	388.7	398.5	SS	Gy L Br	M-F	S	
	398.5	399.0	MS	Gy Gn			
	399.0	401.5	MS	R Br			
	401.5	409.5	MS/STS	Gy			
(	409.5	418.6	SS	L Br Gy	M	S	S Pyr; Lim V sparse; S Gy Gn MS G
(	418.6	418.7	MS	Gy			
(	418.7	440.5	SS	L Br Gy	M	S-A	S Pyr; Some Gy Gn & Br MS Flks
(	440.5	440.6	MS	Gy			
(	440.6	454.2	Sy	L Br Gy	M	S-A	Pyr S-A; S Gy Gn MS Flks
(	454.2	454.6	SS	D Gy	M		Min: .0070 Mr/hr BG .0055
OBSS(	454.6	455.0	SS	D Gy	M		Min: .0095 Mr/hr
(	455.0	455.2	SS	D Gy	M		Min: .0145 Mr/hr Rec questionable core was pushed from barrel with water pres.
(	455.2	461.8	SS	Gy	M	S-A	Pyr S-N
(	461.8	462.3	MS	Gy			
	462.3	471.0	MS	R Br			



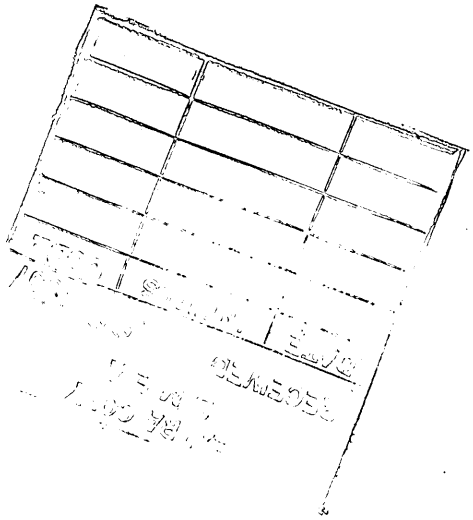
SAMPLE BASE	SAMPLE THICK	LAB ASSAY (%) U_3O_8	LAB ASSAY (%) V_2O_5	FIELD EST. (%) U_3O_8	FIELD EST. (%) V_2O_5
454.6	0.4'			.02	.20
455.0	0.4'			.04	.50
455.2	0.2'			.10	.50

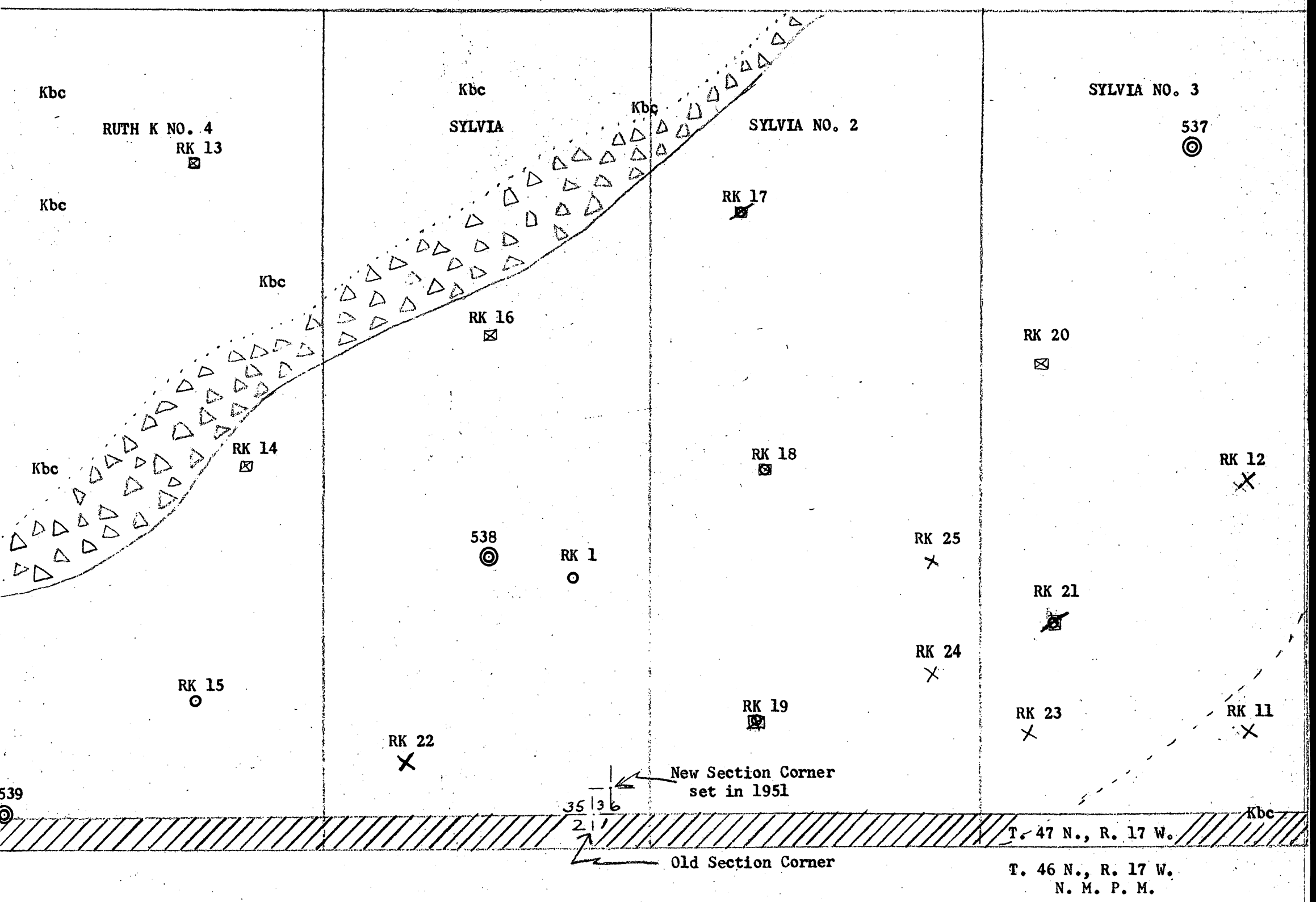
Abbreviations

Wh—white	CG—conglomerate
Br—brown	SS—sandstone
R—red	MS—mudstone
Gy—gray	ST—siltstone
Bl—blue	F—fine
Gn—green	M—medium
Yw—yellow	C—coarse
Bk—black	N—none
Pp—purple	S—sparse
Cbn—carbon	A—abundant
OBSS—ore bearing sandstone	

RK 21

Copyrighted 1954 by SIMPSON & WOODARD CO.





EXPLANATION

- Approved locations
- Holes drilled by applicant
- U. S. Geological Survey drill holes
- Conflict with Land withdrawn from Mineral Entry by P. L. O. 459, dated March 25, 1948
- Holes completed to date under DMEA 4136
- Proposed locations (Holes with numbers higher than 22 are to be drilled under Stage II.)
- Kbc Burro Canyon Formation
- Boulder strewn slope
- Mineralized Holes

FIGURE 1

MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, UNION MINES, INCORPORATED, MONTROSE COUNTY, COLORADO DMEA 4136. TO ACCOMPANY MONTHLY REPORT DATED JUNE 1, 1957.

Scale 1" = 200'

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 19 1957

DATE	INITIALS	CODE
7/19	O.K.	700

224 New Customhouse
Denver 2, Colorado

July 17, 1957

Mr. Louis F. Gaggini,
Vice President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket DMEA-4136 (Uranium)
Contract Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

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

The contract specifies that the holes shall be drilled to a depth not to exceed 10 feet into the red sandstone which underlies the Salt Wash member of the Morrison formation. Two of the holes completed during April, 1957, penetrated more than 10 feet into the red sandstone, therefore the reported cost including incidental allowance for the following excess core drilling is to be disallowed.

Hole No.	Excess core drilling
RK-17	5.5 ft.
RK-19	5.3 ft.
Total excess coring	10.8 ft.

You will be further advised of the amount disallowed by means of an Administrative Audit Difference Statement, which will be forwarded to you by the Finance Office, Region III. Please make the necessary adjustment of footage and cost on your next reports submitted on Voucher and Accounting Forms MF-104 and MF-104A.

Yours very truly,

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

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

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/18	Ching	700
6/19	Ellis	700
6/19	GCS	130
6/19	Lamb	130
6/19	Nelson	130
"	Johnson	110
20	Martenson	100
6/20	C	220
		700

JUN 20 1957

Department of the Interior

DMEA

14X4401(01) Revolving Fund, Interior (Transfer to Office of Secretary)

T E L E T Y P E

WILLIAM H. KING, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURMEM JUNE 11 UNION MINES, INC. DOCKET 4136

WILL DEFER PREPARATION AMENDMENT NO. 6 SO THAT NEW

LOCATION 3 DRILL HOLES MAY BE INCLUDED.

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE (GCS)

MChing/gla
6-18-57
cc to: Admr.'s Reading File
Operating Committee
Code 700, Mr. Ching
THKiilsgaard, Rm. 5224
DMEA Field Team, Region III - confirmation

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

June 11, 1957

DMEA
RECEIVED JUN 13 1957

DATE	INITIALS	CODE
6/13	C	220
		130
6/17	Cheng	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-4136 (Uranium), Contract No. Idm-E995
Union Mines, Inc. (Ruth K. and Sylvia claims)
San Juan County, Utah

Reference is made to matter discussed in the first two paragraphs of our memorandum of April 25, 1957, the last paragraph of which you replied to by letter of May 7, 1957. In conjunction therewith, enclosed are the following:

1. Original and three copies of a joint memorandum dated May 31, 1957, from M. H. Salsbury, Mining Engineer, Bureau of Mines, and W. B. Gazdik, Geologist, Geological Survey.

2. Nine extra copies of map, Figure 2c.

It is recommended that an appropriate amendment be prepared to substitute the revised map "Figure 2c" in the Contract in lieu of the map "Figure 2 Amended" which was substituted for "Figure 2" by Amendment No. 2.

Data relative to the moving of three drill holes will be forwarded at a later date.

W H King
W. H. King

Encls.

1 set to USGS

DMEA
DEPARTMENT OF THE INTERIOR
JUN 5 - 1957
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

IN REPLY REFER TO:

JUN 4 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 13 1957

DATE	INITIALS	CODE

May 31, 1957

Memorandum

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

Through: J. William Hasler
A. S. Konselman
E. N. Harshman

From: M. H. Salsbury
W. B. Gazdik

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E 995, Union Mines, Inc., Ruth K. and Sylvia claims, San Juan County, Utah. Revised figure 2c to replace previous contract maps.

The attached figure 2c is recommended for use as a contract map and is forwarded in 24 copies for attachment to the subject contract. It replaces the figure 2, amended, which was substituted in accordance with Amendment No. 2, for the original figure 2 with the subject contract.

Figure 2c shows the Ruth K. No. 4, Sylvia, Sylvia No. 2, and Sylvia No. 3 claims according to a survey made by Engineer's Associates, Inc. in connection with amended locations filed by them on November 4, 1953. The claims are tied to the old southwest corner of sec. 35, T. 47 N., R. 17 W., which is a 4 x 4 post with the notation cut into the wood. They are in the position shown by the operator originally as incorporated in the original figure 2. However, at the time the project was under consideration; in fact, prior to 1957, the operator had not furnished DMEA with the information contained in the amended locations filed on November 4, 1953. Consequently, when a discrepancy between the applicant's map and Geological Survey maps was discovered last year, DMEA examiners accepted Geological Survey data in lieu of other evidence. The operator's personnel in charge at the time, was apparently not aware of the amended locations. Geological Survey data was used for figure 2, amended. The Government surveyor tied in corners which he found in the field and assumed to be corners of the claims in question. However, there are other corners in the same general area which the operator states are the true corners and these correspond to the data in the amended locations of November 4, 1953. One of these, the southwest corner of the Ruth K. No. 4 claim, had an identifying paper in a pile of rocks used as a monument, according to the operator's representative, L. P. Gaggini.

The old section corner was not found in 1951 when the Bureau of Land Management set a new corner. This month, a Bureau of Mines inspector verified in the field the position of both section corners as well as that of the southwest corner of the Ruth K. No. 4 claim.

DMEA 4136 5/21/57

The positions of all drill holes shown on figure 2c, attached, including Geological Survey holes, are in accordance with surveys made recently by the operator. It will be noted that, using figure 2c, all DMEA holes which have been drilled, or are authorized but not drilled, will comply with contract provisions as to distances from boundaries and other holes, with the exception of two authorized holes which now fall west of the west side line of the Ruth K. No. 4 claim. It is not now intended to drill either of these two holes, or another authorized hole, RK 13, at the north end of the Ruth K. No. 4 claim. The operator has stated that new locations for them will be proposed: probably 2 along the east side line of the Sylvia No. 3 claim at 100 feet or more from the boundary, and one near the south end of the Sylvia claim. It appears that these sites could be approved by DMEA on the basis of the claim boundaries as shown in figure 2c. The operator has also discussed asking for a Stage I hole in place of Hole No. RK 15 which was originally authorized but was drilled prior to the date of the contract. This would probably constitute additional work not contemplated when the contract was drawn up.

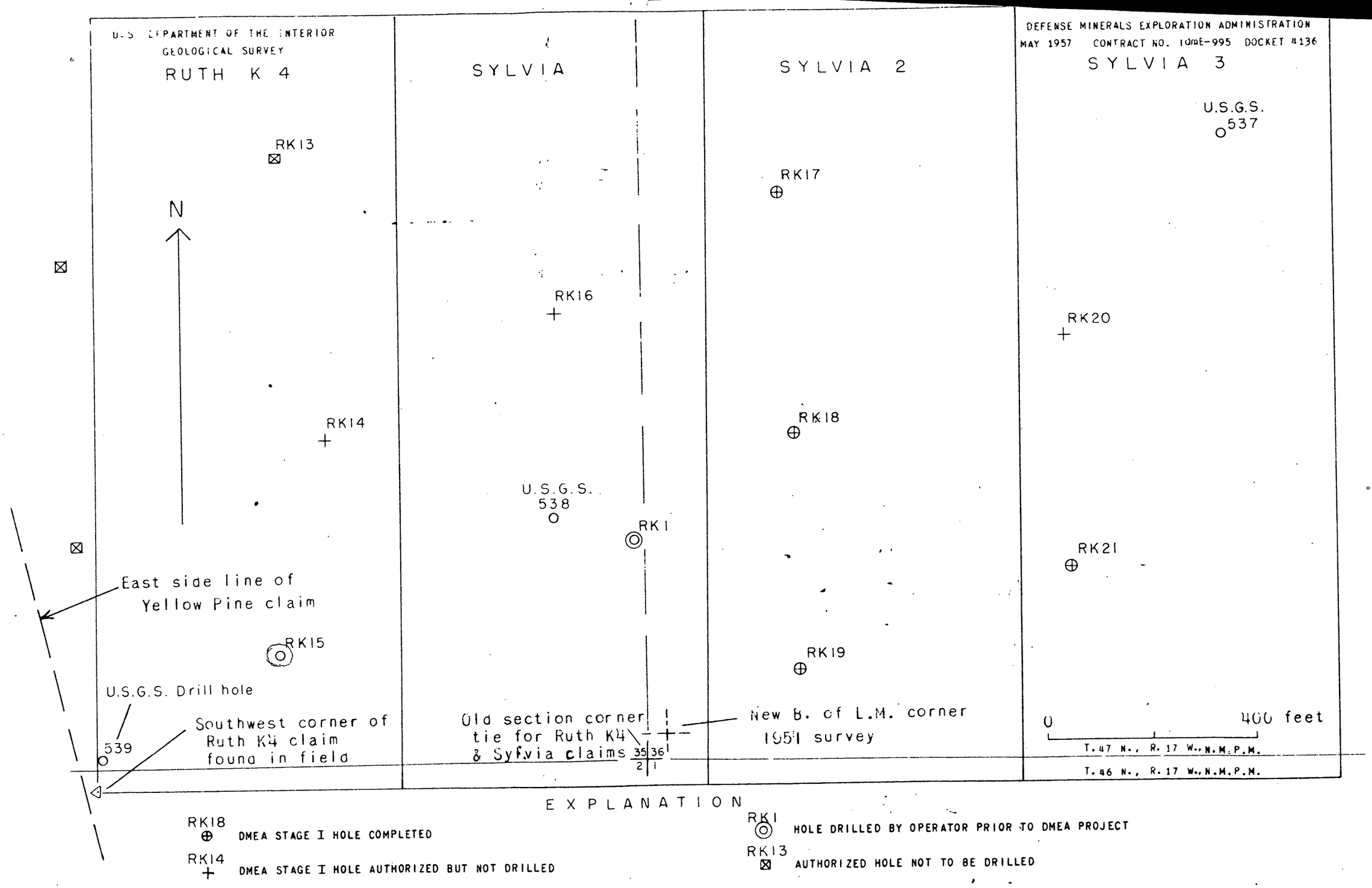
The question of which section corner determines the section boundaries does not appear to affect materially any proposed or completed DMEA holes, because no holes are likely to be located too near the strip of ground where the south end of the claims overlap withdrawn ground in sec. 1 and 2, T. 46 N., R. 17 W. It should be noted that section 2 is in land to be restored to the public domain on July 20, 1957.

M. H. Salsbury,
Bureau of Mines

W. B. Gazdik,
Geological Survey

MHS/mlr

Enclosures
Fig. 2c (24 copies)



Note: CLAIM AREA SOUTH OF SOUTH BOUNDARY OF T.47 N. IS IN CONFLICT WITH GROUND WITHDRAWN FROM MINERAL ENTRY UNDER P.L.O. 459 - 3/30/48. BASE FROM OPERATORS MAP.

FIGURE 2c.--REVISED MAP OF RUTH K NO.4 AND SYLVIA CLAIMS IN ACCORDANCE WITH AMENDED LOCATIONS FILED NOVEMBER 4, 1953, SHOWING DMEA AND OTHER HOLES DRILLED AND LOCATION OF AUTHORIZED HOLES NOT DRILLED

224 New Customhouse
Denver 2, Colorado

June 3, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 7 1957

DATE	INITIALS	CODE
6/10	C	220
6/10	[illegible]	800
6-11	[illegible]	700

Mr. Louis P. Gaggini
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

With reference to your letter of June 1, 1957, in which you inquired regarding the use of a D-6 caterpillar in lieu of the D-7 or equivalent, specified in your exploration Contract, we have been informed that the 3.6 hours of work performed by the D-6 under Stage I will be disallowed.

Substitution of the D-6 caterpillar for the D-7 in Stage II is contingent on approval of Stage II work by the Government.

?
Mr. Reg.
let this piece of 4-22-57 and 4-24-57 mc.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

ENH:prl

cc: Chmn.Op.Comm-2
Harshman
Konselman-2
Hasler
Townsend
Corres. file
Chron.

AMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4-30	Ching	700
4-31	Ely	700
5/1	Selfridge	130
	Bohr	140
	Hoffland	
5/7	Johnson	110
"	Weatherson	100
5-7	C	280

700

MAY - 7 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Harshman:

This is with reference to the last paragraph of your memorandum of April 25 regarding the subject project.

From the material submitted, we can see no new developments affecting the property rights. The amended locations referred to were filed for record on November 9, 1953, and existed long before the subject contract was executed. However, no reference was made in the Mining Lease, dated March 4, 1955; in the Title Opinion by William G. Waldeck, dated August 15, 1955; and in the field examiner's joint engineering and geologic report, to any book and page numbers of recordation other than those listed in Annex I of the contract and in the two Consents to Lien executed by Engineers Associates, Inc., and Worcester Mines.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

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

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

RECEIVED
MAY - 2 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

MChing/izm 4-30-57
cc to: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

Union Mines
Urado-U Corp.
Long Park, Colorado
DMEA Docket No. 4136

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
RK-17	419.0	none	288.2-409.3	396.7-398.1	1.4	760			.019	
				399.5-400.7	1.2	380			<.010	
RK-18	Plugged									
RK-19	485.0	none	269.6-370.8	319.8-321.0	1.2	1100	(Brushy Basin)		.024	
RK-21	390.0	none	180.9-281.4	275.0-276.3	1.3	320			<.010	
				276.3-277.8	1.5	300			<.010	
				277.8-279.1	1.3	460			<.010	
				280.1-281.0	0.9	420			.011	

* From top to bottom depths

Mr. Ellis (Okin)
File DMEA-4136

Discussed with Haverkamp
memo 5/7/57

DOCKET COPY

May 3, 1957

dum

Hazel Berry, Operating Committee

Grace L. Ault, Rare and Miscellaneous Metals Division

ject: Amendment to contract

Mr. Ching has reviewed Amendment No. 5, dated April 3, 1957, to Contract No. Idm-E995, Docket No. DMEA-4136, Union Mines, Incorporated, and has indicated that no further review by the Legal Division is required.

/s/ Grace L. Ault

Grace L. Ault

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
	esf	130
5-2	CHD	700

April 3, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and two copies of Amendment No. 5 to Contract No. Idm-E995, which has been executed to modify the provision relative to the cored and non-cored portions of each hole.

Also enclosed are four sets of data relative to the Amendment.

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

J. W. Townsend

J. W. Townsend

Enclosures

IN REPLY REFER TO:

MINERAL DEPOSITS
DMEA
RECEIVED
MAR 20 1957
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA

DEPARTMENT OF THE INTERIOR

MAR 21 1957
REGION III
DENVER, COLORADO

P. O. Box 300
Grand Junction, Colorado

March 19, 1957

Memorandum

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

Through: J. F. Shaw

From: J. William Hasler,
M. H. Salsbury

EXTRA COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE

Subject: Docket No. DMEA 4136 (Uranium), contract Idm-E 995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado.

Mr. L. F. Caggini, representing the subject operator, visited this office on March 15, 1957 and discussed a change in definition of the coring interval described in the second paragraph under "General Provisions" of "Description of the work", Exhibit "A" of the subject contract. The operator's request for a change is incorporated in a letter to M. H. Harshman dated March 15, 1957.

The wording in the contract is definite in regard to the amount of coring in each hole but no specific bottoming horizon is given. This contract provision is worded differently than in other contracts presently in effect covering projects on Salt Wash deposits. Inasmuch as the 100 feet of coring per hole in the subject contract appears to be an inflexible item, it is not suitable where the actual Salt Wash sandstone member to be cored is likely to vary in thickness. From previous drilling results in the area it is known that the upper ore bearing Salt Wash sandstone member is not likely to exceed 100 feet in thickness and is probably less.

Unless we are in error in assuming that the contract as written has requirements as to coring interval which cannot be varied without amendment, the following amendment, patterned in part after the provision in the third paragraph, General Provisions Exhibit "A" Description of the work, contract Idm-E 987, Docket No. DMEA 4073, Simpson Mining Company et al, is recommended for the subject contract:

"The following wording shall be substituted for the second paragraph, General Provisions, Exhibit "A", Description of the work: All holes shall be drilled non-core to the inferred Brushy Basin-Salt Wash contact. On entering the Salt Wash member the holes shall be cored through the uppermost ore-bearing sandstone beds ranging up

to 100 feet in thickness and the underlying gray green mudstone, if present, and shall bottom in the red mudstone which marks the base of the upper ore-bearing sandstone beds of the Salt Wash member of the Morrison formation. Holes shall be drilled not less than 3 feet and not more than 10 feet into the red mudstone. The minimum size of core shall be BX. All holes shall be reamed and cased, or cemented and redrilled as necessary. No payment shall be made for any incompleted hole.

"Nothing in this amendment shall be construed to increase the estimated total cost of the project, the aggregate amount of which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of cost expressly designated 'maximum'".

If the Field Team feels that the subject contract as it stands can be interpreted to permit the proposed change in coring requirements, no amendment is of course necessary.

Mr. Gaggini is planning to submit other requests:

(1) To substitute a D-6 tractor-dozer for the D-7 specified in the subject contract at a lesser cost per hour.

(2) To transfer bulldozing from stage II to stage I.

(3) To authorize use of drilling and blasting on irregularly weathered but solid Burro Canyon outcrops which will be necessary to reach the two northerly holes on the Ruth K. No. 4 claim.

(4) To move several hole locations which the operator states could require too much site preparation in the present locations.

We are in agreement with the first three items in principle, but not necessarily the fourth. Recommendations will be made when the written requests are reviewed. Mr. Gaggini did not incorporate all of the requests in one letter because he wanted to get authorization on coring intervals as soon as possible and thought that consideration of all items might delay action. If the Field Team believes that the amendment recommended in this memorandum is necessary, it is suggested that the operator might be given verbal authority to proceed with the suggested coring specifications and these can be incorporated in a formal amendment covering the other requests also, if they are approved.

W.B. Gazdik
for J. William Hasler,
Geological Survey

M. H. Salsbury
M. H. Salsbury,
Bureau of Mines

MHS/mlr

March 15, 1957

DMEA
DEPARTMENT OF THE INTERIOR
MAR 19 1957
REGION III
DENVER, COLORADO

Mr. E. N. Harshman
Acting Executive Officer,
DMEA Field Team
Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-5995
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Sir:

In accordance with discussion with Mr. Hassler and Mr. Salisbury of this date, we would like to request that subject contract be amended as follows:

First sentence of second paragraph in Exhibit A changed to read "The holes shall be drilled non-core through the upper formations to the top of the first ore bearing sandstone of the salt wash member of the Morrison formation, and core drilled thereafter through the ore bearing sandstone and into the red mudstone underlying said ore bearing sandstone for a distance of not less than three feet and not more than ten feet".

Very truly yours,

UNION MINES, INCORPORATED

By Louis P. Gaggini/m
Louis P. Gaggini

EXTRA COPY
D M E A
RECEIVED APR 5 1957

DATE	INITIALS	CODE

LPG/m

cc: Mr. Salisbury

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
4/29	C	220
"	Ching	700

April 25, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Reference is made to the Operator's letter of April 16, 1957, forwarded to you by memorandum of April 25, 1957, in support of confirmation of approval issued by the DMEA Field Team, Region III, to move two Stage I holes to escape a boulder talus area.

In reference to that portion of the Operator's letter pertaining to the amended location of the four claims, the field examiners are checking on the matter and additional data will be forwarded when available, for action in incorporating a new map in the Contract, if indicated as necessary.

Because of the complicated nature of the succession of property rights as indicated by the numerous assignments of the lease, we will appreciate review of the matter by your Legal Section to determine whether or not new Consents to Lien or other instruments are necessary, inasmuch as the amended locations have been filed in the name of Engineers Associates, Inc. by Charles W. Yetter.

E. N. Harshman

E. N. Harshman

copy to users 4/30/57

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
4/29	C	220
"	Chang	700

April 25, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are four copies of confirmation of approval issued by the DMEA Field Team, Region III, to move two Stage I holes to escape a boulder talus area.

Also enclosed is the following material:

1. Original and three copies of the Operator's letter of April 16, 1957, two incomplete as to attachment of map and Amended Notice of Location pertaining to the Sylvia, Sylvia No. 2, Sylvia No. 3, and Ruth K. No. 4 claims.

2. Four copies of a joint memorandum report, dated April 19, 1957, from M. H. Salsbury, Mining Engineer, Bureau of Mines, and W. B. Gazdik, Geologist, Geological Survey, pertaining to the moving of the holes.

Copies of the confirmation of approval for moving the holes have been distributed to the Finance Office, Region III, and to others concerned.

E. N. Harshman

E. N. Harshman

copy to USGS 4/30/57 without map + amended notice of location

OFFICIAL FILE COPY
DMEA
RECEIVED APR 29 1957
DATE | INITIALS | CODE

[illegible] New Customhouse
Denver 2, Colorado

April 25, 1957

[illegible] Gaggini
[illegible], Incorporated
[illegible] Street
[illegible]rtion, Colorado

Re: Docket No. DMEA 4156 (Uranium)
Contract No. [illegible]
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Mr. Gaggini:

In reference to your request, dated April 16, 1957, and confirming verbal approval issued by the Government on April 18, 1957, Stage I holes MK-14 and MK-16 will be moved outside of a heavy boulder talus area as follows:

1. Hole MK-14 to be moved from original location on a bearing of about S. 63° E. approximately 100 feet;

2. Hole MK-16 to be moved from original location on a bearing of about S. 30° E. approximately 100 feet.

Nothing in this confirmation of approval to move the two holes shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

By E. M. Harshman

E. M. Harshman
Acting Executive Officer

JWT:prl

cc: Chairman, Op. Comm. (4)
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

UNION MINES, INCORPORATED
URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

April 16, 1957

DMEA
DEPARTMENT OF THE INTERIOR
APR 17 1957
REGION III
DENVER, COLORADO

E. M. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract #Idm-E995
Union Mines, Inc.
(Ruth K & Sylvia Claims)
Montrose County, Colo.

see further memo of Harshman 4/25/57

Dear Mr. Harshman:

Attached hereto is copy of the map which should be substituted for the map attached to Amendment No. 2 of the subject contract. It is the purpose of this letter to request a change in location for the Holes numbered RK 14 and 16. We have added to the map the Burro Canyon - Brushy Basin contact and a line showing the approximate position of the toe of the boulder talus slope.

The revised locations for RK 14 and 16, as shown on the amended map, fall in the heavy boulder talus area and it has been necessary to move RK 14 100 feet S 60° E and RK 16 100 feet S 20° E. Sites were prepared at these revised locations during the time Mr. Wein was in charge of the project and it is requested that the contract be amended to allow the drilling of these holes at the sites as they are now prepared.

The two westerly most holes proposed for Stage I drilling will not be drilled since they do no fall on the claims that are subject of the DMEA project. The correct location for these claims are those shown on the map attached to the original contract, as is evidenced by the attached location certificates.

The correctness of this original survey is confirmed by certain piles of rock which have been found in the field which were evidently used to support the original corners placed at the time of the original location or at the time of the amendment. One of these, the southwest corner of Ruth K No. 4 has been tied in by three independent surveys and Mr. Wein was able

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DMEA
RECEIVED APR 22

to find, by digging into the rock pile, a paper upon which Mr. Clark, the original locator, had identified the corner.

In a subsequent request, the company intends to recommend substitute locations for the two westerly most holes and for RK 15 which was drilled prior to DMEA participation.

Very truly yours,

UNION MINES, INCORPORATED

By Louis P. Gaggini
Louis P. Gaggini

LPG/m

cc: M. H. Salsbury
Grand Junction

ed for record the 9th day of Nov. 1953 at 8:06 o'clock A M #284282

AMENDED NOTICE OF LOCATION

TATE OF COLORADO
of Montrose } ss.

Know All Men By These Presents:

That ENGINEERS ASSOCIATES, INC.

the undersigned, have this 4th day of November, 19 53, amended, located and claimed, and by these presents do amend, locate and claim, by right of discovery and this amended location certificate 1500 linear feet and horizontal measurement on the Sylvia lode, vein, ledge or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with 300 feet on the west side, and 300 feet on the east side of the middle of said vein at the surface, so far as can be determined from present developments; and all veins, lodes, ledges or deposits and surface ground within the lines of said claim, 200 feet running south from center of discovery cut and 1300 feet running north from center of discovery cut said discovery cut being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim in Vixen Mining District, County of Montrose and State of Colorado described by metes and bounds as follows, to-wit:

Beginning at Corner No. 1 the southwest Corner whence the southeast Corner of Section 35, T 47 N., R 17 W., N.M.P.M. lies approximately 540 feet east and 100 feet north,
thence 750 feet north to the west side center,
thence north 750 feet to the northwest Corner No. 2,
thence 600 feet east to the northeast Corner No. 3,
thence 750 feet south to the east side center,
thence 750 feet south to the southeast Corner No. 4,
thence 600 feet west to the southwest Corner No. 1, the point of beginning.

Notice is hereby given that, pursuant to the provisions thereof and for the purpose of securing the benefits of the Act of Congress approved August 12, 1953, known as Public Law 250, we did on the 7th day of November, 1953, at the point of discovery of said claim securely and prominently post a true copy of this Amended Notice of Location and have, on this _____ day of _____, 1953, caused said notice to be filed for record, all pursuant to said act.

This being the same lode originally located on the 11th day of February, 1951, and recorded on the 7th day of May, 1951, in Book 343, Page 433, in the office of the Recorder of Montrose County,

This further and amended certificate of location is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description or record, or validity.

This Amended Notice of Location is posted and filed pursuant to the provisions of Public Law 250—83rd Congress, Chapter 405—1st Session, S. 1397, and for the purpose of obtaining the benefits thereof.

Said lode was discovered the 11th day of February, A. D. 1951

ATTEST: _____

Date of Posting Amended Notice of Location, _____, A. D. 19____

Date of Recording Amended Notice of Location, November 4th, A. D. 19 53

ENGINEERS ASSOCIATES, INC. (Seal)

By /s/ Charles W. Yetter (Seal)

(Seal)

(Seal)

(Seal)

(Seal)

AMENDED
NOTICE OF LOCATION

ON THE .....

MINING CLAIM OF .....

.....

IN .....

..... MINING DISTRICT

..... COUNTY,

STATE OF .....

STATE OF .....
County of ..... } ss.

I hereby certify that this Amended Notice of Location was filed for record in my office at ..... o'clock ..... M., ..., 19....., and is duly recorded in Book ..... Page ..... .

.....
RECORDER.

By .....
DEPUTY.

Fee, $ .....

Montrose Daily Press 10-53-2m

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D M E A
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DATE | INITIALS | CODE

Filed for record the 9th day of Nov. 1953 at 8:08 o'clock A M #284283

AMENDED NOTICE OF LOCATION

STATE OF COLORADO
County of Montrose } ss.

Know All Men By These Presents:

That ENGINEERS ASSOCIATES, INC.

the undersigned, have this 4th day of November, 1953, amended, located and claimed, and by these presents do amend, locate and claim, by right of discovery and this amended location certificate 1500 linear feet and horizontal measurement on the Sylvia No. 2 lode, vein, ledge or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with 300 feet on the west side, and 300 feet on the east side of the middle of said vein at the surface, so far as can be determined from present developments; and all veins, lodes, ledges or deposits and surface ground within the lines of said claim, 200 feet running south from center of discovery cut and 1300 feet running north from center of discovery cut said discovery cut being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim in Vixen Mining District, County of Montrose and State of Colorado described by metes and bounds as follows, to-wit:

Beginning at Corner No. 1 the southwest Corner, whence the southwest Corner of Section 36, T 47 N., R 17 W., N.M.P.M. lies approximately 60 feet west and 100 feet north,
thence 750 feet north to the west side center,
thence north 750 feet to the northwest Corner No. 2,
thence 600 feet east to the northeast Corner No. 3,
thence 750 feet south to the east side center,
thence 750 feet south to the southeast Corner No. 4,
thence 600 feet west to the southwest Corner No. 1, the point of beginning.

Notice is hereby given that pursuant to the provisions thereof and for the purpose of securing the benefits of the Act of Congress approved August 12, 1953, known as Public Law 250, we did on the 7th day of November, 1953, at the point of discovery of said claim securely and prominently post a true copy of this Amended Notice of Location and have, on this _____ day of _____, 1953, caused said notice to be filed for record, all pursuant to said act.

This being the same lode originally located on the 11th day of February, 1951, and recorded on the 7th day of May, 1951, in Book 343, Page 433, in the office of the Recorder of Montrose County,

This further and amended certificate of location is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description or record, or validity.

This Amended Notice of Location is posted and filed pursuant to the provisions of Public Law 250—83rd Congress, Chapter 405—1st Session, S. 1397, and for the purpose of obtaining the benefits thereof.

Said lode was discovered the 11th day of February, A. D. 1951

ATTEST: _____

Date of Posting Amended Notice of Location, _____, A. D. 19____

Date of Recording Amended Notice of Location, November 4th, A. D. 1953

ENGINEERS ASSOCIATES, INC. (Seal)

By /s/ Charles W. Yetter (Seal)

_____ (Seal)

_____ (Seal)

_____ (Seal)

_____ (Seal)

AMENDED
NOTICE OF LOCATION

ON THE .....

MINING CLAIM OF .....

.....

IN .....

..... MINING DISTRICT

..... COUNTY,

STATE OF .....

STATE OF .....
County of ..... } ss.

I hereby certify that this Amended Notice of Location was filed for record in my office at ..... o'clock ..... M., ..., 19....., and is duly recorded in Book .....

Page .....

.....
RECORDER.

By .....
DEPUTY.

Fee, $ .....

Montrose Daily Press 10-53-2m

EXTRA COPY
D M E A
RECEIVED APR 29 1957
DATE | INITIALS | CODE

Filed for record the 9th day of Nov. 1953 at 8:10 o'clock A M #284284

AMENDED NOTICE OF LOCATION

STATE OF COLORADO
County of Montrose } ss.

Know All Men By These Presents:

That ENGINEERS ASSOCIATES, INC.

the undersigned, have this 4th day of November, 1953, amended, located and claimed, and by these presents do amend, locate and claim, by right of discovery and this amended location certificate 1500 linear feet and horizontal measurement on the Sylvia No. 3 lode, vein, ledge or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with 300 feet on the west side, and 300 feet on the east side of the middle of said vein at the surface, so far as can be determined from present developments; and all veins, lodes, ledges or deposits and surface ground within the lines of said claim, 200 feet running south from center of discovery cut and 1300 feet running north from center of discovery cut said discovery cut being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim in Vixen Mining District, County of Montrose and State of Colorado described by metes and bounds as follows, to-wit:

Beginning at Corner No. 1 the southwest Corner, whence the southwest Corner of Section 36, T 47 N., R 17 W., of the N.M.P.M. lies approximately 660 feet west and 100 feet north,
thence 750 feet north to the west side center,
thence north 750 feet to the northwest Corner No. 2,
thence 600 feet east to the northeast Corner No. 3,
thence 750 feet south to the east side center,
thence 750 feet south to the southeast Corner No. 4,
thence 600 feet west to the southwest Corner No. 1, the point of beginning.

Notice is hereby given that pursuant to the provisions thereof and for the purpose of securing the benefits of the Act of Congress approved August 12, 1953, known as Public Law 250, we did on the 7th day of November, 1953, at the point of discovery of said claim securely and prominently post a true copy of this Amended Notice of Location and have, on this ____ day of _____, 1953, caused said notice to be filed for record, all pursuant to said act.

This being the same lode originally located on the 11th day of February, 1951, and recorded on the 7th day of May, 1951, in Book 4343, Page 434, in the office of the Recorder of Montrose County,

This further and amended certificate of location is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description or record, or validity.

This Amended Notice of Location is posted and filed pursuant to the provisions of Public Law 250—83rd Congress, Chapter 405—1st Session, S. 1397, and for the purpose of obtaining the benefits thereof.

Said lode was discovered the 11th day of February, A. D. 1951

ATTEST: _____

Date of Posting Amended Notice of Location, _____, A. D. 19____

Date of Recording Amended Notice of Location, November 4, A. D. 1953

ENGINEERS ASSOCIATES, INC. (Seal)

By /s/ Charles W. Yetter (Seal)

_____ (Seal)

_____ (Seal)

_____ (Seal)

_____ (Seal)

AMENDED
NOTICE OF LOCATION

ON THE .....

MINING CLAIM OF .....

.....

IN .....

..... MINING DISTRICT

..... COUNTY,

STATE OF .....

STATE OF .....
ss.
County of .....

I hereby certify that this Amended Notice of Location was filed for record in my office at ..... o'clock ..... M., ..., 19....., and is duly recorded in Book ..... Page .....

.....
RECORDER.

By .....
DEPUTY.

Fee, $ .....

Montrose Daily Press 10-53-2m

EXTRA COPY
D M E A
RECEIVED APR 29 1955
DATE INITIALS CODE

Filed for record the 9th day of Nov. 1953 at 8:04 o'clock A M #284281

AMENDED NOTICE OF LOCATION

STATE OF COLORADO
County of Montrose } ss.

Know All Men By These Presents:

That ENGINEERS ASSOCIATES, INC.

the undersigned, have this 4th day of November, 1953, amended, located and claimed, and by these presents do amend, locate and claim, by right of discovery and this amended location certificate 1500 linear feet and horizontal measurement on the Ruth K No. 4 lode, vein, ledge or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with 300 feet on the west side, and 300 feet on the east side of the middle of said vein at the surface, so far as can be determined from present developments; and all veins, lodes, ledges or deposits and surface ground within the lines of said claim, 175 feet running south from center of discovery cut and 1325 feet running north from center of discovery cut said discovery cut being situate upon said lode, vein, ledge, or deposit, and within the lines of said claim in Vixen Mining District, County of Montrose and State of Colorado described by metes and bounds as follows, to-wit:

Beginning at Corner No. 1 the southwest Corner, whence the South ¼ corner of Section 35, T 47 N., R 17 W., of the N.M.P.M. lies approximately 1500 feet west and 100 feet north,
thence 750 feet north to the west side center,
thence north 750 feet to the northwest corner No. 2,
thence 600 feet east to the northeast Corner No. 3,
thence 750 feet south to the east side center,
thence 750 feet south to the southeast Corner No. 4,
thence 600 feet west to the southwest Corner No. 1, the point of beginning.

Notice is hereby given that, pursuant to the provisions thereof and for the purpose of securing the benefits of the Act of Congress approved August 12, 1953, known as Public Law 250, we did on the 7th day of November, 1953, at the point of discovery of said claim securely and prominently post a true copy of this Amended Notice of Location and have, on this ____ day of _____, 1953, caused said notice to be filed for record, all pursuant to said act.

This being the same lode originally located on the 22nd day of August, 1950, and recorded on the 28th day of November, 1950, in Book 343, Page 228, in the office of the Recorder of Montrose County,

This further and amended certificate of location is made without waiver of any previously acquired rights, but for the purpose of correcting any errors in the original location, description or record, or validity.

This Amended Notice of Location is posted and filed pursuant to the provisions of Public Law 250—83rd Congress, Chapter 405—1st Session, S. 1397, and for the purpose of obtaining the benefits thereof.

Said lode was discovered the 22nd
day of August, A. D. 1950

ATTEST:

Date of Posting Amended Notice
of Location, _____, A. D. 19____

Date of Recording Amended Notice
of Location, November 4, A. D. 19 53

ENGINEERS ASSOCIATES, INC. (Seal)

By /s/ Charles W. Yetter (Seal)

(Seal)

(Seal)

(Seal)

(Seal)

AMENDED
NOTICE OF LOCATION

ON THE .....

MINING CLAIM OF .....

.....

IN .....

..... MINING DISTRICT

..... COUNTY,

STATE OF .....

STATE OF .....
County of ..... } ss.

I hereby certify that this Amended Notice of Location was filed for record in my office at ..... o'clock ..... M., ..., 19....., and is duly recorded in Book ..... Page ..... .

.....
RECORDER.

By .....
DEPUTY.

Fee, $ .....

Montrose Daily Press 10-53-2m

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RECEIVED APR 29 1957
DATE INITIALS CODE

MINERAL DEPOSITS
DMEA
RECEIVED
APR 22 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

IN REPLY REFER TO:

DMEA
APR 22 1957
OFFICIAL FILE COPY
REGION III
DENVER, COLORADO
RECEIVED APR 29 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

April 19, 1957

DATE	INITIALS	CODE

Memorandum

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

Through: J. William Haeler JWH
J. F. Shaw JFSh

From: M. H. Salsbury
W. B. Gardik

Subject: Docket No. DMEA 4136 (Uranium), contract No. Idm-E 995, Union Mines, Inc., (Ruth K and Sylvia claims), Montrose County, Colorado. Recommendations on request of operator for changes in contract work.

The operator under the subject contract requested in a letter to the Acting Executive Officer, dated April 16, 1957, that two holes, which he has designated RK 14 and RK 15 on a map, figure 2 amended, accompanying the request, be moved to new sites each approximately 100 feet southeast and down hill from the sites as originally designated.

Proposed hole no. RK 14 will be on the Sylvia claim approximately 560 feet north of the south boundary of section 35, T. 15 N., R. 17 W., and 60 east of the west side line of the Sylvia claim, as shown on the map entitled "figure 2 amended" accompanying amendment No. 2. Hole No. RK 16 will be approximately 810 feet north of the south boundary of section 35 and 85 feet west of the east side line of the Sylvia claim. These holes will replace the two designated holes 100 feet to the northwest.

It will be noted that the map furnished by the operator does not conform to the one with amendment No. 2. The operator's map is based on a survey made in 1953 in connection with amended locations on the claims filed on November 4, 1953, and shows the claims about 190 feet east of the position shown on the map with amendment No. 2. Moving the holes as proposed is not affected by the question of which is the correct location. The justification for moving the holes is that the original sites are on a steep boulder-strewn slope and would require expensive preparation, and bulldozing permitted in stage I has been exhausted. The proposed sites were prepared by the operator's previous supervisor last fall before the project was recessed. The present supervisor realized that the sites were not at the designated points according to the contract and, hence, the present request.

The proposed locations are not less than 380 feet from any previously drilled hole or 100 feet from any property boundary as specified in the contract. In the opinion of the examining team moving the holes does not

materially affect the drilling pattern designated by the contract and approval of the request is recommended.

In a telephone conversation with J. W. Townsend of the DMEA Field Team office on Thursday morning, April 18, 1957, verbal permission to move the holes was given and the operator was notified to this effect the same day.

The holes at the new sites should result in lower costs because the depth to the ore horizon will be less than at the original sites.

M. H. Salsbury,
U. S. Bureau of Mines

W. B. Gazdik,
U. S. Geological Survey

MHS/mlr

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/24	Ching	900
4/24	Ellis	700
4/24	Selfridge	130
"	Johnson	110
"	Mutterday	100
		700
4/25	C	220

APR 24 1957

Department of the Interior

DMEA
1X44.01(01) Revolving Fund
Defense Production Act,

Interior, (Transfer to Office of Secy.)

Lamb
Kilsgaard

T E L E T Y P E

E. H. [illegible]
ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION 3
224 [illegible] BUILDING
DENVER, COLORADO

REQUEST AND RECORANDUM APRIL 22 [illegible] REF. REQUEST 4136.

ALLOTMENT OF SPACE 1 DEVELOPMENT NOT WARRANTED BECAUSE OF COMPLEXITIES INVOLVED. REQUIRES 3.6 HOURS AT $10.00 IN LATEST VOUCHER. UTILIZE ALLOTTED SPACE 2 BY ALLOCATING 240 HOURS WITH D 6 UNDER FIXED UNIT COSTS IN LIEU OF 200 HOURS WITH D 7 UNDER INDEPENDENT CONTRACTS PROVIDED ADVICE RECEIVED THAT SPACE 2 WORK WILL BE APPROVED.

MChing/izm 4-24-57
cc to: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Confirmation copy to Reg. 3

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE (GCS)

8623

DMEA

OFFICIAL FILE COPY
DMEA
RECEIVED APR 23 1957

DATE	INITIALS	CODE
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		700

DN 235 BUR MINES 4-22-57 4-12

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA-4136, CONTRACT IDM-E995, ~~UNION MINES, INC.,~~ OUR AIRMAIL LETTER OF APRIL 22 RELATIVE TO PROPOSED AMENDMENT TO PROVIDE USE OF D-6 TRACTOR. TRACTOR COMPANY OWNED, THEREFORE PROPOSED AMENDMENT SHOULD PROVIDE FOR ITS USE OTHER THAN BE INDEPENDENT CONTRACT AS PRESENTLY PROVIDED FOR D-7 TRACTOR.

E N HARSHMAN, ACTING EXEUTIVE OFFICER

Denver, Colorado

APR 23 8 00 AM '57

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED APR 23 1957

DATE	INITIALS	CODE
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April 22, 1957

VIA AIR MAIL

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and three copies of the Operator's letter of April 18, 1957, requesting an amendment to the subject contract to provide for the use of a D-6 caterpillar at $10.00 an hour.

It is recommended that an amendment be prepared similar to Amendment No. 2 on Contract No. Idm-E1011, Antelope Mines, to provide for use of a smaller tractor without changing the hours involved.

Preparation of an amendment of the nature involved is deemed not within the authority delegated to this office. Therefore, we will appreciate advice as to your decision by teletype for our guidance in processing the current Form MF-104 report.

J. W. Townsend

J. W. Townsend

Enclosures

W.O.

Sub OK

T

UNION MINES, INCORPORATED
URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

April 18, 1957

DMEA
DEPARTMENT OF THE INTERIOR
APR 19 1957
REGION III
DENVER, COLORADO

E. M. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract #Idm-E995
Union Mines, Inc.
(Ruth K & Sylvia Claims)
Montrose County, Colo.

Dear Mr. Harshman:

The 80 hours of bulldozer work allowed for Stage I drilling on the subject contract was inadequate. Last October, under Mr. Wein's supervision, 77 hours were expended with a D 7 caterpillar. Last month a D 6 cat belonging jointly to Camoose Uranium Mines of America and Union Mines, Incorporated was moved onto the project. It is requested that the contract be amended to allow the use of a D 6 caterpillar at $10.00 an hour as a substitute for the D 7 caterpillar at $12.00.

In anticipation that this request will be allowed, Form MF 104A to be submitted with the monthly report for the month ending April 13th will show 77 hours at $12.00 and 3.6 hours at $10.00. The additional bulldozer work necessary will be absorbed by the Company.

Very truly yours,

UNION MINES, INCORPORATED

By Louis P. Gaggioni
Louis P. Gaggioni

OFFICIAL FILE COPY
DMEA
RECEIVED APR 23 1957

DATE	INITIALS	CODE

LPG/m

cc: M. H. Salsbury
Grand Junction

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957

DATE	[illegible]	CODE
4/17	C	220
4/17	[illegible]	800
"	~~Chang~~	700

224 New Customhouse
Denver 2, Colorado

April 15, 1957

Memorandum

To: T. A. Christensen

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

Subject: Docket MEA-4136 (Uranium) Contract Idm-8995, Union Mines, Incorporated (Ruth K and Sylvia claims), Montrose County, Colorado

Enclosed is a copy of a letter from the subject Operator to the Administrator, MEA, and a copy of a letter from the Chairman, Operating Committee, MEA, to this office concerning reimbursement to the Operator.

As stated in the Chairman's letter, checks are to be made payable to:

Louis P. Gaggini, Vice President
Union Mines, Incorporated.

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

Enclosures
JDC:hh
cc: Chmn. Op. Comm. (2)
Harshman)
Hasler)
Shaw (2))w/copy of above
Townsend)letters
Contract File, Reg.)
III)
Corres. File, Reg.)
III)
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4-9	Ching	700
4-9	Ellis	700
4-9	Chambers	800
4/10	Selfridge	130
"	Johnson	110
"	Shuttleworth	100
4/11	C. F.	220
		700

APR 10 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Harshman:

Enclosed are two copies of a letter, dated April 4, 1957, from M. E. Newlove, President, Union Mines, Incorporated, explaining the company's arrangement with Louis P. Gaggini.

Since Mr. Gaggini is a vice president of the company and executed the subject contract, checks may be directed to the Operator's Grand Junction office and made payable to:

Louis P. Gaggini, Vice President
Union Mines, Incorporated.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED

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

N. E. Nelson (GCS)
Member, Geological Survey

MChing/dlm 4-9-57
cc to: Mr. Ching
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

UNION MINES, INCORPORATED
URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE
4/8	C	220
"	Ching	700

April 4, 1957

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

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Mittendorf:

This is in response to your letter of March 20, 1957, inquiring further into the arrangements we have made to subcontract all work under subject contract to Louis P. Gaggini. It is our desire that checks for government share of the cost be made payable directly to Mr. Gaggini because both Mr. Echternach and myself will be spending very little time on the affairs of Union Mines which, at this time, are limited to the present drilling contract and our venture with Climax and Camoose.

We have no formal contract with Mr. Gaggini except we have agreed that if he undertakes the completion of the contract, we will reimburse him for all his expenses plus an additional charge of $175.00 a week for his services during the time that the drills are actually operating on the property. Time spent in surveying and winding up before and after the drills operated is to be compensated for at the rate of $60.00 per day. All amounts Mr. Gaggini receives from the government will, of course, be credited by Mr. Gaggini and the company will assume the liability for the difference.

You are correct in assuming that it is not our intent to sign the exploration contract to Mr. Gaggini.

Very truly yours,

UNION MINES, INCORPORATED

By M. E. Newlove
M. E. Newlove, President

MEN/m

cc: M. H. Salsbury
Grand Junction, Colo.

EXTRA COPY DMEA RECEIVED		
DATE	INI.	CODE
4-8-57	Ching	700

224 New Customhouse
Denver 2, Colorado

April 3, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and two copies of Amendment No. 5 to Contract No. Idm-E995, which has been executed to modify the provision relative to the cored and non-cored portions of each hole.

Also enclosed are four sets of data relative to the Amendment.

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

Original signed by
TOWNSEND

J. W. Townsend

Enclosures

JWT:prl

cc: Finance Office, Reg. III - w/copy of Amendment.
Harshman) w/copy of Amendment and supporting
Shaw) data.
Hasler)
Corres. file)
Townsend
Chron.

IN REPLY REFER TO:

MINERAL DEPOSITS
DMEA
RECEIVED
MAR 20 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA
DEPARTMENT OF THE INTERIOR
MAR 21 1957
REGION III
DENVER, COLORADO

GEOLOGICAL SURVEY
DENVER, COLORADO

P. O. Box 300
Grand Junction, Colorado

March 19, 1957

Memorandum

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

Through: J. F. Shaw

From: J. William Hasler,
M. H. Salsbury

Subject: Docket No. DMEA 4130 (Uranium), contract Idm-s 3[illegible], Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado.

EXTRA COPY
DMEA
RECEIVED

DATE	INITIALS	CODE

Mr. L. P. Gaggini, representing the subject operator, visited this office on March 15, 1957 and discussed a change in definition of the coring interval described in the second paragraph under "General Provisions" of "Description of the work", Exhibit "A" of the subject contract. The operator's request for a change is incorporated in a letter to L. H. Harshman dated March 15, 1957.

The wording in the contract is definite in regard to the amount of coring in each hole but no specific bottoming horizon is given. This contract provision is worded differently than in other contracts presently in effect covering projects on Salt Wash deposits. Inasmuch as the 100 feet of coring per hole in the subject contract appears to be an inflexible item, it is not suitable where the actual Salt Wash sandstone member to be cored is likely to vary in thickness. From previous drilling results in the area it is known that the upper ore bearing Salt Wash sandstone member is not likely to exceed 100 feet in thickness and is probably less.

Unless we are in error in assuming that the contract as written has requirements as to coring interval which cannot be varied without amendment, the following amendment, patterned in part after the provision in the third paragraph, General Provisions Exhibit "A" Description of the work, contract Idm-s 307, Docket No. DMEA 4073, Simpson Mining Company et al, is recommended for the subject contract:

"The following wording shall be substituted for the second paragraph, General Provisions, Exhibit "A", Description of the work: All holes shall be drilled non-core to the inferred Brushy Basin-Salt Wash contact. On entering the Salt Wash member the holes shall be cored through the uppermost ore-bearing sandstone beds ranging up

to 100 feet in thickness and the underlying gray green mudstone, if present, and shall bottom in the red mudstone which marks the base of the upper ore-bearing sandstone beds of the Salt Wash member of the Morrison formation. Holes shall be drilled not less than 3 feet and not more than 10 feet into the red mudstone. The minimum size of core shall be BX. All holes shall be reamed and cased, or cemented and redrilled as necessary. No payment shall be made for any incompleted hole.

"Nothing in this amendment shall be construed to increase the estimated total cost of the project, the aggregate amount of which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of cost expressly designated 'maximum'".

If the Field Team feels that the subject contract as it stands can be interpreted to permit the proposed change in coring requirements, no amendment is of course necessary.

Mr. Gaggini is planning to submit other requests:

(1) To substitute a D-6 tractor-dozer for the D-7 specified in the subject contract at a lesser cost per hour.

(2) To transfer bulldozing from stage II to stage I.

(3) To authorize use of drilling and blasting on irregularly weathered but solid Burro Canyon outcrops which will be necessary to reach the two northerly holes on the Ruth K. No. 4 claim.

(4) To move several hole locations which the operator states could require too much site preparation in the present locations.

We are in agreement with the first three items in principle, but not necessarily the fourth. Recommendations will be made when the written requests are reviewed. Mr. Gaggini did not incorporate all of the requests in one letter because he wanted to get authorization on coring intervals as soon as possible and thought that consideration of all items might delay action. If the Field Team believes that the amendment recommended in this memorandum is necessary, it is suggested that the operator might be given verbal authority to proceed with the suggested coring specifications and these can be incorporated in a formal amendment covering the other requests also, if they are approved.

for W. B. Gazdik
J. William Hasler,
Geological Survey

M. H. Salsbury
M. H. Salsbury,
Bureau of Mines

MHS/mlr

UNION MINES, INCORPORATED
~~GRADO URANIUM CORPORATION~~
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

March 15, 1957

DMEA
DEPARTMENT OF THE INTERIOR
MAR 19 1957
REGION III
DENVER, COLORADO

Mr. E. N. Harshman
Acting Executive Officer,
DMEA Field Team
Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Sir:

In accordance with discussion with Mr. Hassler and Mr. Salisbury of this date, we would like to request that subject contract be amended as follows:

First sentence of second paragraph in Exhibit A changed to read "The holes shall be drilled non-core through the upper formations to the top of the first ore bearing sandstone of the salt wash member of the Morrison formation, and core drilled thereafter through the ore bearing sandstone and into the red mudstone underlying said ore bearing sandstone for a distance of not less than three feet and not more than ten feet".

EXTRA COPY
DMEA
RECEIVED APR

DATE	INITIALS	CODE

Very truly yours,

UNION MINES, INCORPORATED

By Louis P. Gaggini
Louis P. Gaggini

LPG/m

cc: Mr. Salisbury

DMEA
DEPARTMENT OF THE INTERIOR
MAR 21 1957
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 300
Grand Junction, Colorado

IN REPLY REFER TO:

DMEA
RECEIVED
MAR 20 1957
GEOLOGICAL SURVEY
DENVER, COLORADO

March 19, 1957

Memorandum

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

Through: J. F. Shaw

From: J. William Hasler,
M. N. Salsbury

Subject: Docket No. DMEA 4130 (Uranium), contract Idm-2 945, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado.

EXTRA COPY
DMEA
RECEIVED

DATE		CODE

Mr. L. F. Gaggini, representing the subject operator, visited this office on March 15, 1957 and discussed a change in definition of the coring interval described in the second paragraph under "General Provisions" of "Description of the work", Exhibit "A" of the subject contract. The operator's request for a change is incorporated in a letter to L. N. Harshman dated March 15, 1957.

The wording in the contract is definite in regard to the amount of coring in each hole but no specific bottoming horizon is given. This contract provision is worded differently than in other contracts presently in effect covering projects on Salt Wash deposits. Inasmuch as the 100 feet of coring per hole in the subject contract appears to be an inflexible item, it is not suitable where the actual Salt Wash sandstone member to be cored is likely to vary in thickness. From previous drilling results in the area it is known that the upper ore bearing Salt Wash sandstone member is not likely to exceed 100 feet in thickness and is probably less.

Unless we are in error in assuming that the contract as written has requirements as to coring interval which cannot be varied without amendment, the following amendment, patterned in part after the provision in the third paragraph, General Provisions Exhibit "A" Description of the work, contract Idm-2 907, Docket No. DMEA 4073, Simpson Mining Company et al, is recommended for the subject contract:

"The following wording shall be substituted for the second paragraph, General Provisions, Exhibit "A", Description of the work: All holes shall be drilled non-core to the inferred Brushy Basin-Salt Wash contact. On entering the Salt Wash member the holes shall be cored through the uppermost ore-bearing sandstone beds ranging up

to 100 feet in thickness and the underlying gray green mudstone, if present, and shall bottom in the red mudstone which marks the base of the upper ore-bearing sandstone beds of the Salt Wash member of the Morrison formation. Holes shall be drilled not less than 3 feet and not more than 10 feet into the red mudstone. The minimum size of core shall be BX. All holes shall be reamed and cased, or cemented and redrilled as necessary. No payment shall be made for any incompleted hole.

"Nothing in this amendment shall be construed to increase the estimated total cost of the project, the aggregate amount of which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of cost expressly designated 'maximum'".

If the Field Team feels that the subject contract as it stands can be interpreted to permit the proposed change in coring requirements, no amendment is of course necessary.

Mr. Gaggini is planning to submit other requests:

(1) To substitute a D-6 tractor-dozer for the D-7 specified in the subject contract at a lesser cost per hour.

(2) To transfer bulldozing from stage II to stage I.

(3) To authorize use of drilling and blasting on irregularly weathered but solid Burro Canyon outcrops which will be necessary to reach the two northerly holes on the Ruth K. No. 4 claim.

(4) To move several hole locations which the operator states could require too much site preparation in the present locations.

We are in agreement with the first three items in principle, but not necessarily the fourth. Recommendations will be made when the written requests are reviewed. Mr. Gaggini did not incorporate all of the requests in one letter because he wanted to get authorization on coring intervals as soon as possible and thought that consideration of all items might delay action. If the Field Team believes that the amendment recommended in this memorandum is necessary, it is suggested that the operator might be given verbal authority to proceed with the suggested coring specifications and those can be incorporated in a formal amendment covering the other requests also, if they are approved.

W. B. Lazdik
for J. William Hasler,
Geological Survey

M. E. Salsbury
M. E. Salsbury,
Bureau of Mines

MES/mlr

UNION MINES, INCORPORATED
COLORADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

March 15, 1957

DMEA
DEPARTMENT OF THE INTERIOR
MAR 19 1957
REGION III
DENVER, COLORADO

Mr. E. N. Harshman
Acting Executive Officer,
DMEA Field Team
Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Sir:

In accordance with discussion with Mr. Hassler and Mr. Salisbury of this date, we would like to request that subject contract be amended as follows:

First sentence of second paragraph in Exhibit A changed to read "The holes shall be drilled non-core through the upper formations to the top of the first ore bearing sandstone of the salt wash member of the Morrison formation, and core drilled thereafter through the ore bearing sandstone and into the red mudstone underlying said ore bearing sandstone for a distance of not less than three feet and not more than ten feet".

EXTRA COPY
DMEA
RECEIVED 1957

DATE	INITIALS	

Very truly yours,

UNION MINES, INCORPORATED

By Louis P. Gaggini Inc
Louis P. Gaggini

LPG/m

cc: Mr. Salisbury

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
3-20	Ching	700
3-20	Ellis	700
3-20	Chambers	800
"	Johnson	110
"	Mittendorf	100
4/21	C	225

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street, Room 15
Grand Junction, Colorado

MAR 20 1957

Re: Docket No. DMEA-4136 (Uranium)
Contract No. Idm-E995
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Newlove:

This is in response to your letter of March 15, 1957, advising that you have made arrangements to subcontract all of the work under the subject contract to Louis P. Gaggini and requesting that checks for the Government's share of the costs be made payable directly to him.

Your request is rather unusual in that Mr. Gaggini is a vice president of your corporation. Therefore, it is requested that you give us an explanation for the arrangement, and furnish us with a copy of the subcontracting document, if that is possible. We assume that it is not your intent to assign the exploration contract to Mr. Gaggini.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

MChing/izm 3-20-57
cc to: Mr. Ching
Code 700
Admr.'s Reading File
DMEA FT Reg. 3 (2) w/2cc of incoming letter
THKiilsgaard, 5224
JKratchman, AEC

8623

UNION MINES, INCORPORATED
URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

March 15, 1957

FILE COPY
DMEA
MAR 18 1957
DATE | MINES | CODE
3/18 | C | 220
| | 225

C. O. Mittendorf, Administrator
U. S. Dept of Interior
Defense Minerals Exploration Admin.
Washington 25, D. C.

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Mr. Mittendorf:

We have made arrangements to subcontract all of the work on Contract No. Idm-E995 to Louis P. Gaggini, and it is our desire that checks for the governments share of the cost be made payable direct to him and sent to the above listed address.

Very truly yours,

UNION MINES, INCORPORATED

By M. E. Newlove
M. E. Newlove, President

By A M Echternach
A. M. Echternach, Sec.-Treas.

cc: Mr. Salisbury

February 1, 1957

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare & Misc.Metals Division

Subject: Amendment to contract

Mr. Ching has reviewed and approved Amendment No. 4, dated January 25, 1957, to Contract Idm-E995, Docket No. DMEA-4136, Union Mines, Incorporated, and has indicated that no further review is necessary by the Legal Division.

/s/ Grace L. Ault

Grace L. Ault

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

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 1 1957

DATE	INITIALS	CODE
2/1	C	220
	257	130
2-5		225

224 New Customhouse
Denver 2, Colorado

January 30, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and two copies of Amendment No. 4 to Contract No. Idm-E995, which has been executed to extend the dates fixed for commencement and completion of the work, and increases the maximum period for payment of royalty and lien for payment thereof.

Also enclosed are four copies of the Operator's letter requesting the time extensions.

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

W. M. Traver

W. M. Traver

Enclosures

DMEA
DEPARTMENT OF THE INTERIOR
JAN 23 1957
REGION III
DENVER, COLORADO

January 21, 1957

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

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E 995
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Mr. Traver:

The subject DMEA project has been delayed mainly because we have had trouble finding a reliable drilling contractor who would take the job at the unit cost allowed in the contract.

You will note, if you check the original brochure, that we submitted 3 independent bids any one of which would have resulted in unit costs greater than those allowed. This comes about because the unit costs allowed were calculated on the basis of the lowest item for each individual bid making it such that none of the contractors, which submitted the original bids would be interested in the project at the present cost. When these facts are considered along with the disadvantages of winter time operation it appears to us that it would be best to recess the project from the November 1, 1956 date, which we had indicated as a starting date, till May 1, 1957. In view of the delay in starting, we would like to request that the date for completion be extended to October 31, 1957.

We are still making every effort to find a reliable contractor who will take the job at the unit figure allowed and there is a possibility that we may be able to start prior to May 1st. If this is the case, we will let you know, prior to commencing, the exact starting date.

Very truly yours,

UNION MINES, INCORPORATED

Louis P. Cagnini

Louis P. Cagnini

EXTRA COPY
DMEA
RECEIVED FEB 1 1957

DATE	INITIALS	CODE

Encl. 5 copies

cc: J. A. Hassler

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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 28 1957

DATE	INITIALS	CODE
1-28	cw	220
1/28	[illegible]	800
		225

224 New Customhouse
Denver 2, Colorado

January 25, 1957

Mr. Louis P. Gaggini
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Enclosed are the original and five copies of proposed Amendment No. 4 to Contract No. Idm-E995, which we have prepared in reference to your letter of January 21, 1957, to extend the starting date of work under the Contract to May 1, 1957, and extend the date fixed for completion of the project work to November 1, 1957. In addition, the Amendment increases the maximum period for payment of royalties and lien for payment thereof to eleven years from the date of the Contract.

If the Amendment is satisfactory, all copies are to be signed by the President, Union Mines, Incorporated, as indicated, the corporate seal affixed, and all copies promptly returned to this office. Upon return of the properly signed copies of the Amendment, and after signature by the Executive Officer, DMEA Field Team, Region III, for the Government, an executed copy of the Amendment will be returned to you.

The enclosed proposed Amendment is the second extension of the date fixed for start of the work; therefore we would not consider favorably a further extension of that date, and every effort should be made to commence the work on or before the date of May 1, 1957.

In your letter of January 21, 1957, you justify the further extension of the starting date and completion date by reason of your

inability to obtain a drilling contractor to drill the holes within the low rate per foot established in the Contract. Apparently, you were aware of the maximum allowable unit costs established in the Contract when it was executed. Under the circumstances, the unit prices established are a firm commitment and cannot be increased.

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)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

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

December 11, 1956

Memorandum

To: Hazel Berry, Operating Committee

From: Irene Z. Mainster, Rare & Miscellaneous Metals Div.

Subject: Amendment to Contract

Mr. Ching has reviewed and approved Amendment No. 3 to Contract No. Idm-E995, dated December 3, 1956, Docket No. DMEA-4336, Union Mines, Inc., and has indicated that no further review is required by the Legal Division.

Irene Z. Mainster

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

224 New Customhouse
Denver 2, Colorado

December 7, 1956

RECEIVED DEC 10 1956 D.M.E.A.

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and two copies of Amendment No. 3 to Contract No. Idm-E995, which has been executed to extend the date fixed on or before which work is to be commenced to November 1, 1956.

Also enclosed are four copies of the Operator's letter of November 30, 1956, pertaining to the matter.

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

W. M. Traver

W. M. Traver

Enclosures

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

224 New Customhouse
Denver 2, Colorado

December 5, 1956

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Newlove:

In reference to Mr. Wein's letter of November 30, 1956 and consistent with advice to you in our letter of October 16, 1956, enclosed are the original and five copies of proposed Amendment No. 3 to Contract No. Idm-E995, which we have prepared to extend the date fixed on or before which work is to be commenced from October 15, 1956, to November 1, 1956.

All copies of the Amendment are to be signed by you as indicated, the corporate seal affixed, and promptly returned to this office. After signature by the Executive Officer, DMEA Field Team, Region III, for the Government, an executed copy of the Amendment will be returned to you.

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)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

November 30, 1956

RECEIVED
DEC 10 1956
DMEA

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

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Mr. Traver:

This is to confirm our letter of October 10, 1956 stating that we would commence work on the Ruth K DMEA Contract No. Idm-E995, on October 22, 1956.

Survey work was completed during the week of October 22nd, and road work commenced during the week of October 29th.

Very truly yours,

UNION MINES, INCORPORATED

By Philip S. Wein
Philip S. Wein
Project Chief

PSW/m

November 20, 1956

RECEIVED DEC 10 1956

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

Re: Docket No. DMEA 4130 (Uranium)
Contract No. Idm-8995
Union Mines, Incorporated
(Ruth # and Sylvia claims)
Montrose County, Colorado

Dear Mr. Traver:

This is to confirm our letter of October 10, 1956 stating that we would commence work on the Ruth # DMEA Contract No. Idm-8995, on October 22, 1956.

Survey work was completed during the week of October 22nd, and road work commenced during the week of October 29th.

Very truly yours,

UNION MINES, INCORPORATED

By Philip S. Wein
Philip S. Wein
Project Chief

PSW/m

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

November 26, 1956

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare and Miscellaneous Metals Division

Subject: Amendment to Contract

Mr. Ching has reviewed and approved Amendment No. 2 to Contract No. Idm-E995, dated November 16, 1956, Docket No. DMEA-4136, Union Mines, Inc.

Grace L. Ault

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

RECEIVED NOV 26 1956 D.M.E.A.

224 New Customhouse
Denver 2, Colorado

November 21, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and two copies of Amendment No. 2 to Contract No. Idm-E995, which has been executed in conformance with your teletype of October 26, 1956, to substitute the map, "Figure 2 Amended," for the map, "Figure 2," attached to the subject Contract.

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

W. M. Traver

W. M. Traver

Enclosures

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

224 New Customhouse
Denver 2, Colorado

November 15, 1956

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Newlove:

Enclosed are the original and five copies of proposed Amendment No. 2 to Contract No. Idm-E995, which has been prepared to substitute map, "Figure 2 Amended," for the map, "Figure 2", presently attached to the Contract. The Amendment also reduces the holes to be drilled under Stage I from eleven (11) holes to ten (10) holes.

All copies of the Amendment are to be signed by you as indicated, the corporate seal affixed, and all copies promptly returned to this office. After the Amendment is dated and signed by the Executive Officer, DMEA Field Team, Region III, for the Government, an executed copy will be returned to you.

To eliminate unnecessary bulk in the process of having the Amendment executed, only the original of the Amendment has a copy of the map attached at present. However, all copies will have the map attached when final distribution is made.

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)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

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, (Allocated Working Fund to the Office of the Secy.)

T E L E T Y P E

OCT 26

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION XII
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURMAND OCTOBER 22 UNION MINES INCORPORATED DOCKET 4136 LABEL NEW MAP "FIGURE 2 AMENDED" AND AMEND CONTRACT BY SUBSTITUTING MAP FIGURE 2 AMENDED FOR FIGURE 2, AND SUBSTITUTING WORDS "FIGURE 2 AMENDED" FOR WORDS "FIGURE 2" WHEREVER FOUND, IN ARTICLE 1, ANNEX 1, AND EXHIBIT A. IN STAGE 1 OF DESCRIPTION OF THE WORK SUBSTITUTE 10 HOLES FOR 11 HOLES.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE

MChing/izm 10-25-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
Operating Committee
Confirmation copy to Region III
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Ching
Ellis
Burton
Dwyer
Lamb
Kiilsgaard
Selfridge
Mittendorf

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

RECEIVED
OCT 24 1956

224 New Customhouse
Denver 2, Colorado

October 22, 1956

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4136 (Uranium), Contract Idm-E995, Union Mines, Inc., (Ruth K and Sylvia claims), Montrose County, Colorado

Reference is made to the matter discussed in our memorandum to you of October 15, 1956 and in the letter from this office to Mr. M. E. Newlove, President, Union Mines, Inc., dated October 16, 1956, two copies of which were forwarded to you at the time of writing. Both letters pertained to a possible conflict between the Ruth K No. 4 claim and the Yellow Pine claim which is not included with ground subordinated under the contract.

In conjunction with the foregoing, we are enclosing the original of the Operator's letter of October 16, 1956 with map attached and the original and three copies of a joint memorandum, dated October 16, 1956 from M. H. Salsbury, Mining Engineer, Bureau of Mines and J. W. Hasler, Geologist, Geological Survey. It has been resolved that the conflict is not of a serious nature and will involve only the moving of one drill hole as outlined in our letter to Mr. Newlove of October 16, 1956.

Under the circumstances, we are in doubt as to whether or not an amendment to the contract is desirable or necessary to substitute the map attached to the enclosed joint memorandum report in lieu of the map presently attached to the contract.

We will appreciate a review of the matter as promptly as possible and advice to us as to how we should proceed.

W. M. Traver

W. M. Traver

Enclosures

open lete. 10/16
sent to Geo.

IN REPLY REFER TO:
DMEA
DEPARTMENT OF THE INTERIOR
OCT 18 1956
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

October 16, 1956

RECEIVED
OCT 24 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
E. N. Harshman

From: M. H. Salsbury
J. William Hasler

Subject: Docket DMEA 4136 (Uranium), contract Idm-E 995, Union Mines, Inc., (Ruth K and Sylvia claims), Montrose County, Colorado. Status of conflict with Jack Pine and Yellow Pine claims.

We find on referring to a working map received October 15 from the Uravan field office of the Geological Survey, that the conflict between the Ruth K No. 4 claim and the Jack Pine and Yellow Pine claims appears to be of less extent than shown on an earlier map in the Survey files which caused us to question the status of the Ruth K No. 4 claim.

Based on the latest field work by Survey personnel, there is only a small conflict between the Yellow Pine claim and the operator's Ruth K No. 4 claim as shown on the attached map. The major conflict is on the Ruth K Nos. 2 and 3 claims, which were not included in the DMEA project for that reason. Government surveyors have tied in all the claim corners they could find to the common corner of sections 35 and 36, T. 47 N., R. 17 W., and sections 1 and 2, T. 46 N., R. 17 W., and the relation of the claims according to this survey is shown on the attached map in dotted lines. The solid lines represent the position of the Ruth K No. 4 and Sylvia claims as furnished by the operator and incorporated in the contract. It will be noted that the operator placed the claims about 190 feet east of the position shown by the Geological Survey. According to the operator's representative, Mr. Harold Culp, there is no conflict with the Yellow Pine claim regardless of whether the Ruth K No. 4 claim is located according to Geological Survey data or according to the operator's data. Mr. Culp made a field check and found that the location of the Ruth K and Sylvia claims is as shown by the Geological Survey. He places the Yellow Pine claim by the position of the discovery pit on the claim because he could not find any corners for this claim.

Assuming that there is a conflict as shown by Geological Survey data, the proposed southwesterly DMEA hole on the Ruth K No. 4 claim can be moved to the northeast as shown and it will be more than 100 feet from the

east sideline of the Yellow Pine claim, according to Geological Survey data, and thus in compliance with the requirement in the contract. The operator has already drilled a hole near the position of the proposed southeasterly hole on the Ruth K No. 4 claim and this eliminates a DMEA hole at this location.

It is recommended that the operator be notified that, with the suggested adjustment of the southwesterly hole on the Ruth K No. 4 claim, work under the contract will be in accordance with specification as to location of holes, provided all holes sites are adjusted to be in proper relation to the true position of the claims.

M. H. Salsbury
U. S. Bureau of Mines

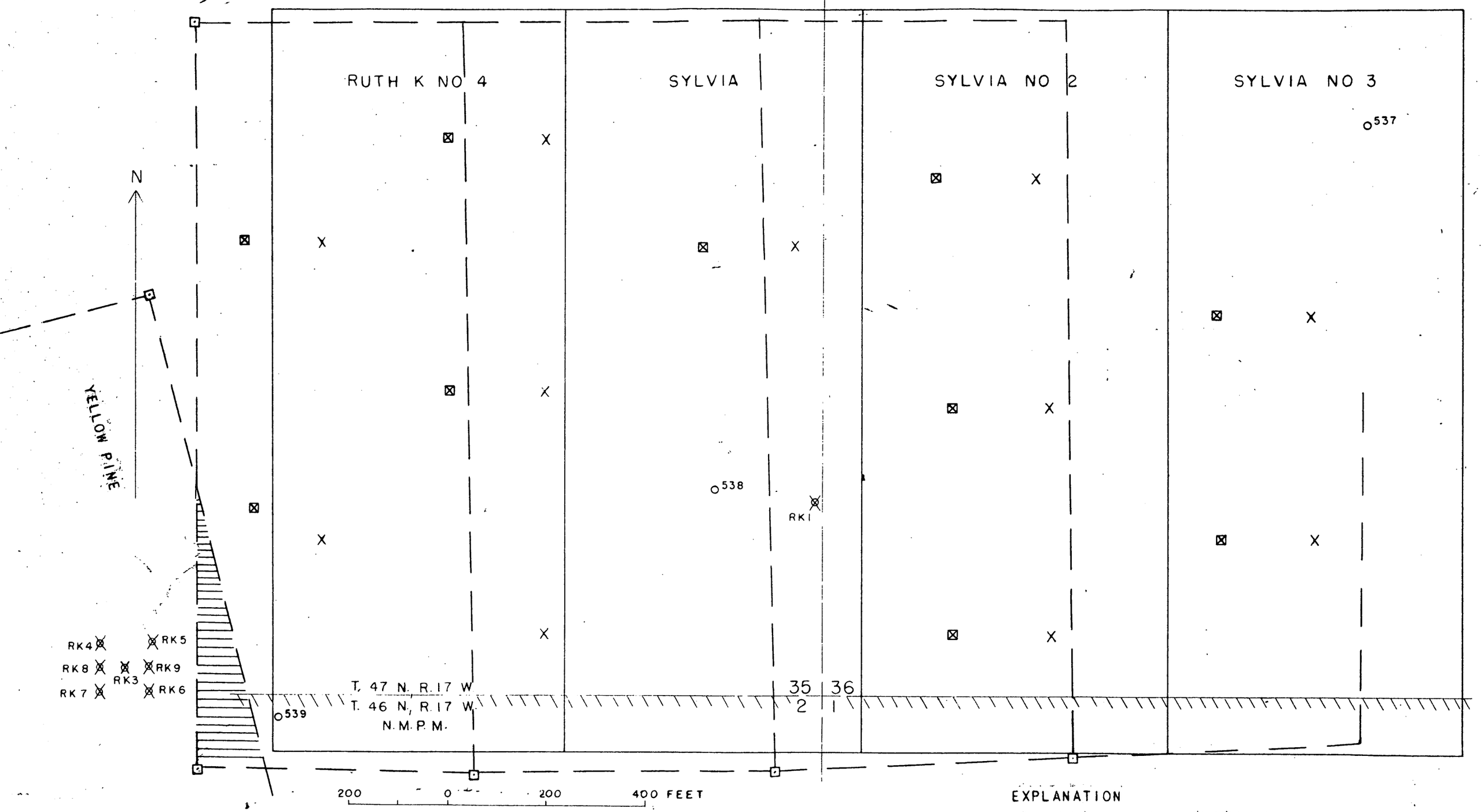
(for) J. William Hasler,
Geological Survey

MHS/mlr

Enclosure (map)

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 4136
OCTOBER 1956



NOTE: BASE TAKEN FROM APPLICANT'S MAP

SKETCH MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLORADO.

EXPLANATION

- CLAIM CORNERS AS LOCATED BY U.S.G.S.
- PROPOSED LOCATIONS, STAGE I DRILLING
- REVISED LOCATIONS, STAGE I DRILLING
- HOLES DRILLED BY APPLICANT
- 537 U.S. GEOLOGICAL SURVEY DRILL HOLES
- CONFLICT WITH LAND WITHDRAWN FROM MINERAL ENTRY BY P.L.O. 459 DATED MARCH 25, 1948
- CLAIM BOUNDARIES BY U.S.G.S. SURVEY
- CLAIM BOUNDARIES BY APPLICANT
- AREA IN CONFLICT BY U.S.G.S. SURVEY

UNION MINES, INCORPORATED
URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

October 16, 1956

DMEA
DEPARTMENT OF THE INTERIOR
OCT 17 1956
REGION III
DENVER, COLORADO

RECEIVED
OCT 24 1956

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

Re: Docket No. DMEA 4436 (Uranium)
Contract No. Idm - E995
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Mr. Harshman:

In reference to your letter of October 9 indicating the possibility of a conflict between the Ruth K #4 and the Jack Pine and Yellow Pine claims, we sent a party to the field to check our previous findings and found our original survey on the conflicting claims to be essentially correct.

The results of this check survey are shown on the accompanying map. The location of the Jack Pine and Yellow Pine claims, as shown, is based on the location cuts and one corner of the Jack Pine (JP / 1) as found in the field. These claims were sketched as nearly north and south as possible, as the amended notices found in the field, describe the claims as north, south, east and west with the north end line on the Jack Pine lying 100' north and the north end line on the Yellow Pine lying 200' north of the respective discovery cuts. The Jack Pine and Yellow Pine were tied to the Ruth K 2 and 3 in this survey.

Our check survey also retied the section corner to the southeast corner of the Sylvia claim (see map) and this shows the original tie made when the claims were first surveyed in 1950-51 and which has been used since then is evidently in error. However, this change shifts the position of the entire group of claims, on the map submitted, including the Jack Pine and Yellow Pine because they are tied to Ruth K claim corners.

The holes drilled will be tied to claim corners of the Ruth K and Sylvia group so the change will not affect their spacing or relative position. The position of the USGS LP holes have changed as these holes were plotted by coordinates. Care will be exercised to prevent any conflict between old holes and the new ones.

Union Mines drilled hole #15 (see enclosed map) for assessment work for 1955. This will save some of the footage granted in Stage I of the contract.

Please advise us if this clears up the matter and if there still remains the necessity for the shifting of any of our Stage I holes to prevent any possible conflict.

Very truly yours,
UNION MINES, INCORPORATED
BY M. E. Newlove
M. E. Newlove

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 16, 1956

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Newlove:

Reference is made to the letter from this office, dated October 9, 1956, and subsequent correspondence relative to a possible conflict between the Ruth K. No. 4 claim and the Jack Pine and Yellow Pine claims.

Our field examiners have advised that a review of the matter indicates the correctness of the conflict between the Ruth K. No. 4 and the Jack Pine and Yellow Pine claims. However, the conflict is not serious and involves only the most Southwesterly hole planned for drilling on the Ruth K. No. 4 claim as shown on the map, "Figure 2," attached to the contract.

To permit you to commence operations under the contract without further delay, the drilling deferment order in the second paragraph of our letter of October 9, 1956, is hereby rescinded and you may commence work at your convenience; provided, that the most Southwesterly hole planned for drilling on the Ruth K. No. 4 claim as shown on the map, "Figure 2," attached to the contract, is moved approximately N. 45° E. a distance of 100 feet, or to a point at least 100 feet from the boundary of the Yellow Pine claim where it overlies the Ruth K. No. 4 claim.

This approval to commence work under the provisions outlined will be further confirmed by an amendment to the contract which we will prepare to extend the date fixed for start of the work as you requested in your letter of October 10, and to authorize the moving of the Southwesterly hole as herein outlined.

The amendment will be prepared and forwarded to you for signature as soon as we receive the revised claim map from you showing the correct position of the Jack Pine and Yellow Pine claims in relation to the Ruth K. No. 4 claim.

Very truly yours,

J. W. Townsend

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

JWT:prl

cc: Chairman, Op. Comm. (2)
Marshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

October 16, 1956

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare and Miscellaneous Metals Division

Subject: Amendment to contract

Mr. Ching has reviewed and approved Amendment No. 1, dated October 3, 1956, to Contract No. Idm-8995, Docket No. DMEA-4136, Union Mines, Inc., and has indicated that no further review is required by the Legal Division.

/s/ Grace L. Ault

Grace L. Ault

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

RECEIVED
OCT 17

224 New Customhouse
Denver 2, Colorado

October 15, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

In conjunction with the matter discussed in our letter to the Operator, dated October 9, 1956, two copies of which were forwarded to you, we are enclosing for your information four copies of the Operator's letter of October 10, 1956, in reply to our letter of October 9, and four copies of a memorandum report relative to the matter, dated October 11, 1956, from J. William Hasler, Geologist, Geological Survey, and M. H. Salsbury, Mining Engineer, Bureau of Mines.

J. W. Townsend

J. W. Townsend

Enclosures

DMEA 4136 10/11/56

The material furnished by the applicant under docket DMEA 4136, on which the DMEA project is based, does not show any conflict between the Yellow Pine and the Ruth K. No. 4 claims.

Possibly two holes in the DMEA project in the southern part of the Ruth K. No. 4 claims fall within or very close to the area in conflict. The holes are shown on the map accompanying the contract. Inasmuch as claims for drilling these holes would not be allowed if they are on ground not controlled by the operator, it is believed advisable to notify them not to perform DMEA project work on the Ruth K. No. 4 claim until the question is settled.

In the meantime, R. L. Boardman, in charge of the Geological Survey project, is having Government data checked. Mr. Culp called our office this morning and said he would consult Boardman and show him the data on which the operator contends there is no conflict on the Ruth K. No 4 claim. In the meantime, if he can not get the matter straightened out before October 15, 1956, he wishes to ask for further time to begin work because, if all bulldozing for drill sites cannot be done on one trip, a second trip would involve extra expense not provided for in the contract.

M. H. Salsbury
M. H. Salsbury,
Bureau of Mines

J. William Hasler
J. William Hasler
Geological Survey

MHS/mlr

RECEIVED
OCT 17 1956
DMEA
DEPARTMENT OF THE INTERIOR
OCT 11 1956
REGION III
DENVER, COLORADO

October 10, 1956

Mr. E. H. Harshman
Acting Executive Officer
D.M.E. Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. 10m-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Harshman:

At hand is your letter of October 9th stating that it has come to your attention that a conflict exists between the Ruth K No. 4 claim and the Jack Pine and Yellow Pine claims.

You will note that the map submitted with our application shows no conflict on the Ruth K No. 4 claim. Our survey shows that the conflict occurs on the Ruth K No. 2 and No. 3 claims, and no application was made for these two claims.

We are immediately sending a survey party to the property to check the survey, and will contact the government men in the area and offer them any assistance possible in clarifying the situation.

It has been our intention to do all of the road and drill-site preparation for Stage I while the bulldozer is on the property. If we postpone this work on the Ruth K No. 4 it will involve added expense to move the equipment back to the property again.

For this reason we request that the starting date be postponed for one week, to October 22, to enable us to resolve this matter. We trust that it will be possible for you to inform us of your decision on this request before the end of this week, so that we can plan accordingly.

Very truly yours,

UNION MINES, INCORPORATED

By W. E. Lowlove
W. E. Lowlove, President

WEL/m

UNION MINES, INCORPORATED
URANIUM PRODUCTION
304 MAIN STREET • ROOM 15 • PHONE 2443
GRAND JUNCTION, COLORADO

October 10, 1956

RECEIVED
OCT 11 1956
DMEA
DEPARTMENT OF THE INTERIOR
OCT 11 1956
REGION III
DENVER, COLORADO

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

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Harshman:

At hand is your letter of October 9th stating that it has come to your attention that a conflict exists between the Ruth K No. 4 claim and the Jack Pine and Yellow Pine claims.

You will note that the map submitted with our application shows no conflict on the Ruth K No. 4 claim. Our survey shows that the conflict occurs on the Ruth K No. 2 and No. 3 claims, and no application was made for these two claims.

We are immediately sending a survey party to the property to check the survey, and will contact the government men in the area and offer them any assistance possible in clarifying the situation.

It has been our intention to do all of the road and drill-site preparation for Stage I while the bulldozer is on the property. If we postpone this work on the Ruth K No. 4 it will involve added expense to move the equipment back to the property again.

For this reason we request that the starting date be postponed for one week, to October 22, to enable us to resolve this matter. We trust that it will be possible for you to inform us of your decision on this request before the end of this week, so that we can plan accordingly.

Very truly yours,

UNION MINES, INCORPORATED

By M. E. Newlove, President

MEN/m

224 New Customhouse
Denver 2, Colorado

VIA AIR MAIL

October 12, 1956

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Newlove:

In reference to your letter of October 10, 1956, our reply of October 11, and the telephone call from Harold A. Culp this morning, concerning an extension of the date fixed for the start of the project work, we will defer preparation of the amendment to extend the date fixed for start of the project work until the matter of the controversy involving the Ruth K. claim has been resolved and we are further advised and assured of the date on or before which work will be commenced.

Very truly yours,

E. N. Harshman

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

JWT:prl

cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

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

RECEIVED
OCT 1 2 1956

224 New Customhouse
Denver 2, Colorado

October 9, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4136 (Uranium), Contract No. Idm-E995, Union Mines, Incorporated (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the original and two copies of Amendment No. 1 to Contract No. Idm-E995, which has been executed to extend the date for start of the project work from September 1, 1956 to on or before October 15, 1956.

Also enclosed are three copies each of the Operator's letters of August 30, 1956, and October 1, 1956, pertaining to the extension of the date fixed for start of the project work.

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

Enclosures

COPY

UNION MINES, INCORPORATED
304 Main Street, Room 15.
GRAND JUNCTION, COLORADO

August 30, 1956

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

Re: Docket DMEA 4136 (Uranium)
Union Mines, Incorporated
(Ruth K and Sylvia claims)
Montrose County, Colorado

Dear Mr. Traver:

This is to inform you we have appointed Philip S. Wein Project Chief for contract No. Idm-E995.

We would also like to request an extension on starting time till the 15th of September as we have not received answers to all our drilling bids on the project.

Very truly yours,

UNION MINES, INCORPORATED

By /S/ Louis P. Gaggini
Louis P. Gaggini

LPG/m

October 1, 1956

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

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm - E995
Union Mines, Incorporated
(Ruth K and Sylvia Claims)
Montrose County, Colorado

Dear Mr. Traver:

At hand is your letter of September 28th addressed to Mr. Louis P. Caggini.

As of today, three or four more days should complete the surveying for roads and drill sites on the Ruth K claims. We intend to start bulldozing work on October 8th, and drilling immediately thereafter.

We regret the delay in sending this information to you.

Very truly yours,

UNION MINES, INCORPORATED

By W. E. Newloye
W. E. Newloye, President

WEN/m

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

RECEIVED
OCT 1 2 1956

224 New Customhouse
Denver 2, Colorado

REGISTERED MAIL

October 9, 1956

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Newlove:

It has come to our attention that a conflict exists between the Ruth K. No. 4 claim and the Jack Pine and Yellow Pine claims.

Since the conflict involves ground subordinated under Contract No. Idm-E995, and in turn involves a part at least of the drill holes planned on the Ruth K. No. 4 claim, please defer all drilling on that claim until the matter has been satisfactorily resolved.

The map attached to your application indicates that the Jack Pine and Yellow Pine claims are in conflict with the Ruth K. Nos. 2 and 3 claims, leaving the Ruth K. No. 4 claim free of any conflict with other claims.

Please submit the original and five copies of a letter explaining the matter, each copy accompanied by a copy of an accurate map showing the Ruth K. No. 4, Sylvia, Sylvia No. 2 and Sylvia No. 3 claims, and any conflict therewith with other mining claims.

To eliminate delay to project operations, your prompt attention should be given the matter.

Very truly yours,

E. N. Harshman

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

JWT:prl
cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

10/1/56 gla

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

RECEIVED
OCT - 1 1956

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

September 28, 1956

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

Reference is made to your letter of August 30, 1956 wherein you requested an extension of the starting date fixed in Article 3 of the Contract from September 1, 1956 to September 15, 1956.

In reply, we advised by letter of August 31, 1956 to the effect that we would defer preparation of the necessary amendment to the Contract until we were sure that the extension requested would give you sufficient time to obtain drilling bids.

Our deferring preparation of the amendment is not to be construed as concurrence in postponing start of work for an indefinite time. Therefore, as considerable time has elapsed and as we have not been advised by you of the start of work as requested in our letter of August 31, we will appreciate advice by return mail as to the date work was or will be started.

Very truly yours,

W. M. TRAVER

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

JWT:prl

cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

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

RECEIVED
SEP - 4 1956

224 New Customhouse
Denver 2, Colorado

August 31, 1956

Mr. Louis P. Gaggini, Vice President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket DMEA 4136 (Uranium)
Contract Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Gaggini:

In reference to your request of August 30, 1956, for a fifteen-day extension of the date on or before which work is to be started, we will defer preparation of the necessary amendment to the contract until we are sure that the fifteen days you now request will be sufficient. Please advise us immediately the date when you start work under the contract.

For your guidance in future matters relative to administration of the contract, please refer to the requirement outlined in the last paragraph on page 2 of our letter to you of August 23, 1956.

Very truly yours,

W. M. TRAVER

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

JWT:prl

cc: Chairman, Oper. Comm. (2)
Harshman) w/copy of Operator's letter.
Shaw (2))
Hasler)
Townsend)
Corres.file)
Chron.

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

August 23, 1956

Mr. Louis P. Goggini, Vice President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket DMEA 4136 (Uranium)
Contract Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Goggini:

Enclosed herewith is the "Operator's Copy" of Exploration Project Contract Idm-E995, Docket No. DMEA 4082, prepared by the Washington Office, DMEA, in conformance with your application, on Form MF-200 (Revised June 1954).

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, U. S. Bureau of Mines, 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.

The U. S. Geological Survey and the U. S. Bureau of Mines maintain a field office in the A.E.C. Compound at Grand Junction, Colorado. DMEA representatives of the two Services can be contacted as follows:

RECEIVED

J. W. Hasler, U. S. Geological Survey
Telephone, Grand Junction 3000, Ext. 282;

M. H. Salsbury, U. S. Bureau of Mines
Telephone, Grand Junction 3000, Ext. 274.

Both men can be reached by mail at

Post Office Box 360
Grand Junction, Colorado.

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 auditing and vouchering. If the report is in order, a check will be issued by the Treasury Department for the Government's portion of the costs. If you have any difficulty in completing these forms and the reports, please call on either the field representatives, 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 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 contain 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 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.

The locations of holes to be drilled under Stage I are indicated on the map, "Figure 2", attached to the contract. Should conditions encountered necessitate or make desirable a change in the location of any of the holes, approval of this office for the change must be obtained prior to the performance of the drilling. Otherwise, the drilling may not be acceptable for reimbursement to you under the terms of the contract.

Your attention is directed to the provision that Stage II work is contingent on the results obtained from Stage I, and performance of the work under Stage II is subject to the prior written approval of the Government.

When work under Stage I has been completed, you must request approval from this office for the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, each copy complete with a map showing the location and extent of the work completed and the location of the additional work proposed; also, your request must include an analysis of the work completed, including assay returns and any other pertinent data which will be of value to the Government in appraising results of the work.

You should anticipate a suspension of operation between stages of work to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

To eliminate as much delay to operations as possible, if that is of serious consideration, you should expedite forwarding of the results of the work completed and your request for the Government's approval of the additional work you propose.

No oral statement of any person shall be construed to modify or change the terms of the contract. Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, BMSA, or by the BMSA 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,

W. M. Traver

W. M. Traver
Executive Officer, [redacted]
Field Team, Region III

Enclosures

WMT:prl

cc: Chairman, Oper. Comm. (2)
Finance Office, Reg. III
Amendment File, #995
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

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

RECEIVED
OCT 10 1956

224 New Customhouse
Denver 2, Colorado

October 5, 1956

Mr. M. E. Newlove, President
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Idm-E995
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Newlove:

Enclosed are the original and five copies of proposed Amendment No. 1 to Contract No. Idm-E995, which we have prepared to extend the date fixed for start of the project work from September 1, 1956 to on or before October 15, 1956.

If the Amendment is satisfactory to you, all copies are to be signed by an official of Union Mines, Incorporated, authorized to sign such instruments, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office.

Upon return, and after signature by the Executive Officer, DMEA Field Team, Region III, for the Government, an executed copy of the Amendment will be returned to you.

Very truly yours,

W. M. TRAVER

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

Enclosures

JWT:prl

cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. BOX 300
Grand Junction, Colorado

IN REPLY REFER TO:
MINERAL DEPOSITS
DMEA
RECEIVED
OCT 12 1956

RECEIVED
OCT 17 1956
U.S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
DEPARTMENT OF THE INTERIOR
OCT 12 1956
REGION III
DENVER, COLORADO

October 11, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
E. N. Harshman

From: J. William Bailey
M. H. Salsbury

Subject: Docket DMEA 4135 (Uranium), Contract Idm-6 995, Union Mines, Incorporated (Ruth K. and Sylvia claims) Montrose County, Colorado. Possible conflict on Ruth K. No. 4 claim.

Confirming a telephone conference with J. W. Townsend on October 9, 1956, it is recommended that the operator under the subject contract be notified that no drilling should be done on the Ruth K. No. 4 claim until a question of a prior conflicting claim has been clarified.

When the Ruth K. and Sylvia claims were first examined in 1954, in connection with a DMEA application by Worchester Mines, under docket DMEA 3350, evidence of a conflict with two claims, the Jack Pine and Yellow Pine, prior locations, was found in the field, and was further indicated by preliminary Geological Survey maps. The applicant's claims involved were the Ruth K. Nos. 2 and 3. Worchester Mines withdrew the application for Government assistance when the probable conflict was disclosed. When the property was re-examined in March 1955, under docket DMEA 4136, the Ruth K. No. 2 and No. 3 claims were not included because the conflicts were still in question.

The applicant's representative, Harold A. Culp, visited the Grand Junction DMEA office on October 8 to discuss provisions of the contract and stated that operations would be started this week. He later consulted Geological Survey personnel in an attempt to get drilling data on a Geological Survey drill hole which was on the south end of the Ruth K. No. 4 claim. On investigation it proved to be in the invalidated portion of the claim which overlaps ground withdrawn from entry by the Atomic Energy Commission. During the investigation, the final maps on the Geological Survey project in the area on which a report is in preparation, were consulted. Based on the latest Government survey work, during which all claim corners in the area were tied in, a conflict with the Yellow Pine claim is now shown as extending into the southwestern part of the Ruth K. No. 4 claim as well as the Ruth K. Nos. 2 and 3.

Surname copy
Ching (Ouz)
Ellis
Selfridge
Jefferson
Mattendorf

700

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

Re: Docket No. DMEA-4136 (Uranium)
Union Mines, Incorporated
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Traver:

Reference is made to your memorandum of August 16, 1956, returning the original and five copies of the proposed exploration contract under the captioned application, signed by the Operator.

Returned herewith are the Operator's, Field Team's, and Finance Office copies of the executed contract. In accordance with the second paragraph of your memorandum, we have inserted September 1, 1956, in the appropriate space under Article 3 as the starting date. Also, in accordance with the Operator's corporate seal on the copies of the contract, we have inserted "Delaware" in the first paragraph of page one of the contract.

Kindly distribute the enclosed contract copies in the usual manner.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

FRANK D. LAMB (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

EWEllis/gla 8-20-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JCHosted, Rm. 3210, GSA
Code 700
Mr. Ching

8/20/56

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

224 New Customhouse
Denver 2, Colorado

August 16, 1956

Memorandum

RECEIVED
AUG 20 1956

To: Chairman of the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4136 (Uranium) Union Mines, Inc., (previously Urado Uranium Corporation), (Ruth K. and Sylvia claims), Montrose County, Colorado

Enclosed are the Government's, Division, Docket, Operator's, Finance Office and Field Team copies of a proposed exploration contract Docket DMEA-4136 which were forwarded by your letter of August 6, 1956 for signature by the Operator.

All copies of the contract have been signed by the Operator and we were advised that they will be prepared to start work on or before September 1, 1956 if an executed copy of the contract is returned to them prior to that date.

We have not inserted the starting date in Article 3 as we are uncertain as to when the contract will be returned.

W. M. Traver

W. M. Traver

Enclosures

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

RECEIVED
AUG 13 1956

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

August 10, 1956

Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

Re: Docket DMEA 4136 (Uranium)
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Gentlemen:

Enclosed are the Government's, Division, Docket, Operator's, Finance Office, and Field Team copies of a proposed Exploration Project Contract which has been prepared pursuant to your application, docketed DMEA No. 4136, for Government assistance in exploration work under the Defense Minerals Exploration Administration program.

If the contract is satisfactory, all copies are to be signed by an official authorized to do so, the signer's title inserted, the signature attested to by the Secretary, the corporate seal affixed, and all copies of the contract promptly returned to this office.

If the contract is not satisfactory to you, please return all copies of the contract to this office immediately with your comments relative to the points that are not satisfactory.

Upon return to this office of the properly executed copies of the contract, they will then be forwarded to the Washington Office, DMEA, for numbering, dating, and signature by the Administrator, DMEA, for the Government.

When you return the copies of the contract, please advise the date on or before which work will be commenced, for our insertion under Article 3 of the contract.

Very truly yours,

W. M. TREVER

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

JWT:prl
cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Docket file
Chron.

700

FILE COPY
Surname:
Ching
Wilson
Chambers
Martin
Nelson
Wolfendorf

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

AUG - 6 1956

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

Re: Docket No. DMEA-4136 (Uranium)
Union Mines, Incorporated
(Grade Uranium Corporation)
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed long-form contract between the Government and Union Mines, Incorporated, unsigned, undated and unnumbered. The contract consists of Form MF-200, Annex I, Exhibit "A" and map (Figure 2). Also enclosed are two extra copies each of Annex I, Exhibit "A" and map (Figure 2) for the use of the Field Team.

If you and the Operator find the contract satisfactory, it is ready for the signature of the Operator, provided that a suitable final starting date is inserted under Article 3 and the place of the Operator's incorporation is inserted in the space provided in Article 1.

Please secure the signature of the Operator but do not date the contract. Return all copies to this office for final execution by the Administrator.

The program and costs recommended by the examiners are reasonable and have been incorporated into the contract without change.

Two copies of a letter, dated July 20, 1956, from M. E. Newlove, President of Grade Uranium Corporation, are enclosed for your files. The letter is in reply to the Administrator's letter of July 17. It is suggested that you adjust your records to show Union Mines, Incorporated as the Applicant and Operator under the subject docket.

Sincerely yours,

W. S. Worth
by def
ACTING Chairman, Operating Committee

Enclosures

APPROVED:

Robert W. Peoples
by def
Member, Bureau of Mines

N. E. Nelson
by def
Member, Geological Survey

Operating Committee
Messrs. JECrawford, Rm. 3643
THKillsgeard, Rm. 5224
JOHosted, Rm. 3210, GSA

Docket 7-27-56
Code 700
Mr. Ching
Admr.'s Reading File

/izm

R.G.

DRAFT
MChing/ai
7-12-56

DOCKET COPY

MF-200
(Revised June 1954)

Docket No. DMEA #136

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] Urado Uranium Corporation, a Colorado Corporation, whose mailing address is 304 Main Street, Grand Junction, 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 2

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of an [6] Assignment, [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: Royalty claim of Worcester Mines

(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 of Engineers Associates, Inc.
Consent to Lien of Worcester Mines

(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 August 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." 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 $ 60,800.00 The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $ 45,600.00 : *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work. **See Article 13.**

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9. **See Article 13.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

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

(b) (Subject to Legal provision.)

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

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

16—70617-1

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

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

DRAFT
7/11/56
MChing/gla

EXPLORATION PROJECT CONTRACT
URADO URANIUM CORPORATION
DOCKET NO. DMEA-4136

ANNEX I

The land referred to in Article 2 of the contract consists of four mining claims in secs. 35 and 36, T. 47 N., R. 17 W., and secs. 1 and 2, T. 46 N., R. 17 W., N.M.P.M. & B., Montrose County, Colorado. The land is shown on the map entitled "Figure 2. Sketch Map Showing Part of the Ruth K and Sylvia Group of Claims, Proposed Hole Locations and Previous Drill Hole Locations, Urado Uranium Corporation, Montrose County, Colorado," attached hereto and made a part hereof.

The notices of location of the claims are filed for record in the Office of the County Clerk and Recorder of Montrose County, Colorado, as follows:

Claim	Book	Page
Ruth K No. 4	343	238
Sylvia	"	433
Sylvia No. 2	"	433
Sylvia No. 3	"	434

DRAFT
7/11/56
MChing/izm

EXPLORATION PROJECT CONTRACT
URADO URANIUM CORPORATION
DOCKET NO. IMEA-4136

Exhibit "A"

General Provisions

The work consists of exploration by core and non-core drilling to test the ore-bearing upper 100 feet of the Salt Wash member of the Morrison formation. The location of the work is indicated on the map (Figure 2) referred to in Annex I.

The holes shall be drilled non-corethrough the upper formations to the top of the Salt Wash member of the Morrison formation and core drilled for a distance of 100 feet thereafter. Drilling depths are expected to range from 410 feet to 600 feet and to average ~~645~~ 546 feet. The minimum size of core shall be BX. All holes shall be reamed and cased as necessary. No payment shall be made for any uncompleted drill hole.

All core and cuttings from the cored section of drill holes shall be saved and checked for radioactivity. Sections indicating significant mineralization shall be split for samples, and such samples shall be analyzed chemically for uranium and vanadium. All the remaining core and cuttings saved shall be properly labeled and stored for inspection and disposition by the Government.

All drill holes shall be logged geologically and probed radiometrically, and the record of such logging and probing, together with certified copies of all assay certificates, shall be submitted with the Operator's monthly progress reports.

Access roads and drill sites shall be prepared with a D-7 bulldozer or equivalent unit.

The project shall be supervised by a competent geologist or mining engineer, who shall devote full time to the project work.

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

The work shall be divided into two stages as hereinafter described. The Operator shall complete Stage I and perform as much of Stage II as the Government approves in writing in advance.

Stage I

Prepare access roads and drill sites and drill 11 holes aggregating approximately 5,590 feet as indicated on the map (Figure 2). The holes are in north-south fences with the westernmost fence at least 100 feet from the western boundary and the distance between fences ranging from 450 feet to 550 feet. Holes in alternate fences are staggered with respect to each other and the distance between the holes in each fence varies from 450 feet to 600 feet. None of the holes shall be located less than 380 feet from any previously drilled hole. If the 11 holes require more than 5,590 feet to reach the desired horizon, the additional footage and funds required may be transferred and deducted from Stage II upon the written approval of the Government.

Stage II

Prepare access roads and drill sites and drill not more than 30 holes aggregating not more than 16,800 feet as offsets to previously drilled holes that show significant mineralization. The offset holes shall not be drilled closer than 100 feet to any previously drilled hole nor closer than 100 feet to the property boundaries or to the boundaries of areas under conflict.

Estimated Cost of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

1,100 ft. core drilling @ $3.50/ft.*	$3,850.00	
4,490 ft. non-core drilling @ $1.75/ft.*	7,857.50	
80 hrs. bulldozing @ $12/hr.	960.00	
Categories (2) through (7) None	-	
TOTAL		$12,667.50

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed - 5,590 ft @ $0.47/ft.	$2,627.30	
22 chemical sample analyses @ $5.00/sample	110.00	
TOTAL		$2,737.30

Estimated Total Cost of Stage I $15,404.80

Stage II

Actual Costs

Category (1) Independent Contracts

3,000 ft. core drilling @ $3.50/ft.*	$10,500.00	
13,800 ft. non-core drilling @ $1.75/ft.*	24,150.00	
200 hrs. bulldozing @ $12/hr.	2,400.00	
Categories (2) through (7) None	-	
TOTAL		$37,050.00

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed - 16,800 ft. @ $0.47/ft.	$7,896.00	
90 chemical sample analyses @ $5.00/sample	450.00	
TOTAL		$8,346.00

Estimated Total Cost of Stage II $45,396.00

Summary of Costs

Estimated Total Cost of Stage I	$15,404.80
Estimated Total Cost of Stage II	$45,396.00
Estimated Total Cost of the Project (rounded)	$60,800.00
Government Participation @ 75%	$45,600.00

*. Represents the maximum average price allowable notwithstanding Article 6(a).

700

FILE COPY
Surname: Ching
Nelson

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

July 27, 1956

Memorandum

To: Robert E. Adams, Chief
Operations Control & Statistics Division

From: F. L. Knouse, Acting Chief
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4136 (Uranium)
Union Mines, Incorporated
(Urado Uranium Corporation)
Ruth K and Sylvia Claims
Montrose County, Colorado

Please refer to the Administrator's letter of July 17, 1956, to Mr. M. E. Newlove, President of Urado Uranium Corporation and the latter's reply of July 20, 1956.

We are now considering the application as having been made by Union Mines, Incorporated and have drawn up a contract in the latter's name. Will you kindly adjust your records accordingly.

F. L. Knouse

MChing/izm 7-27-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File

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

JUL 25 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Rare and Miscellaneous Metals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4136, Union Mines, Incorporated (Grado Uranium Corporation), Uranium

As requested in memoranda dated July 11 and 17 from Mr. Ellis, we have prepared the attached contract.

The Operator is named as Union Mines, Incorporated, as requested in the July 17 memorandum. The place of the Operator's incorporation is not known, and this should be filled in in the blank space provided in Article 1.

The name of the Operator should be changed in both Consent-to-Lien forms in the space provided "For Government's Use Only." As the Government makes the insertions in this space, it may make the change of name.

Robert P. Dwyer

Attachments

HCRubin/emd
Copy to: Solicitor's Docket (2)
DMEA Docket
E. W. Ellis
R. P. Dwyer
H. C. Rubin
chron.

7/23/56

URADO URANIUM CORPORATION
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

July 20, 1956

RECEIVED
JUL 23 1956

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

Re: Docket No. DMEA-4136 (Uranium)
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Mittendorf:

This is to confirm that Urado Uranium Corporation has merged with Union Mines, Incorporated, and Union Mines has assumed all of the liabilities and assets of Urado.

Please consider our original application, dated January 11, 1956, for aid in an exploration project, as if it had been made by Union Mines, Incorporated, and any contract resulting from the application should be drawn in the name of Union Mines, Incorporated. The officers of Union Mines are the same as were formerly officers of Urado, and the address of the head office is 304 Main Street, Grand Junction, Colorado.

Very truly yours,

URADO URANIUM CORPORATION

By M. E. Newlove
M. E. Newlove, President

MEN/m

700

FILE COPY
Surname:
Ching

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

JUL 17 1956

Mr. M. E. Newlove, President
Urado Uranium Corporation
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Newlove:

We have received a letter, dated July 10, 1956, from Union Mines, Incorporated, in which we were advised that Urado Uranium Corporation has merged with Union Mines, Incorporated, and Union Mines has assumed all of the liabilities and assets of Urado.

Will you kindly give us your written confirmation of the foregoing transaction and submit a formal request that we consider your original application, dated January 11, 1956, for aid in an exploration project, as if it had been made by Union Mines, Incorporated; and that any contract resulting from the application be drawn in the name of Union Mines, Incorporated.

We shall continue to process the application in the name of Union Mines, Incorporated, upon receipt of the above-described communication.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

MChing/izm 7-17-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5 224
JOHosted, Rm. 3210, GSA
DMEA Field Team, Reg. III (2)

P.S.

700

FILE COPY
Surname: Ching

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

July 17, 1956

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4136 (Uranium)
Urado Uranium Corporation
Ruth K and Sylvia Claims
Montrose County, Colorado

Attached is a letter dated July 12, from W. M. Traver, enclosing two Consents to Lien and a letter dated July 10, 1956, from Union Mines, Incorporated, which are self-explanatory.

We are writing to Mr. M. E. Newlove, President of Urado Uranium Corporation, requesting him to confirm the merger referred to and to submit a formal request that the application be considered as if it had been made by Union Mines, Incorporated, and that any contract resulting from the application be drawn in the name of Union Mines, Incorporated.

In the meantime please continue to prepare the contract requested in my memorandum of July 11, 1956, making the necessary changes in the name of the contractor wherever indicated.

Ernest Wm. Ellis

Ernest Wm. Ellis

Enclosures

MChing/izm 7-17-56
cc to: Docket
Code 700
Mr. Ching
~~Admr.'s Reading File~~

7-16-56

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

RECEIVED
JUL 16 1956

July 12, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4136 (Uranium) Urado Uranium Corporation (Ruth K and Sylvia claims), Montrose County, Colorado

Enclosed are the following:

1. The original and two copies of a letter dated July 10, 1956 from Union Mines, Inc. signed by M. Anderson, Secretary. This letter advises that Urado Uranium Corporation has merged with Union Mines, Inc. and Union Mines has assumed all the liabilities and assets of Urado.

2. The original and five copies of Owner's Consent to Lien signed by John W. Hill, Managing Partner of Worcester Mines, a Partnership.

3. The original and five copies of Owner's Consent to Lien signed by Charles W. Yetter whose signature was acknowledged by C. A. Adams. It is noted that Engineers Associates, Inc. of which we presume Charles W. Yetter is President, is only shown on the affixed seal.

4. Two copies of our letter to the Applicant dated July 12, 1956.

Both sets of Owner's Consent to Lien were prepared in this office and forwarded the Applicant for signature June 28, 1956, and we typed Urado Uranium Corporation as Operator.

Will you please advise this office what legal documents will be required from Union Mines, Inc. Will a new application from Union Mines be required? Will new Owner's Consent to Lien be required?

DMEA Field Team, Region III

W. M. Traver

W. M. Traver
Executive Officer

Enclosures

UNION MINES, INCORPORATED
~~URADO URANIUM CORPORATION~~
304 MAIN STREET • ROOM 15 • PHONE 3663
GRAND JUNCTION, COLORADO

July 10, 1956

DMEA
Date Rec'd.
JUL 11 1956
BUREAU OF MINES
Denver, Colorado

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

Re: Docket DMEA 4136 (Uranium) Ruth K and Sylvia claims, Montrose County, Colorado

Dear Mr. Traver:

As requested in your letter of June 28, 1956, we have had the two sets of Owner's Consent to Lien on the Ruth K No. 4, Sylvia, Sylvia No. 2, and Sylvia No. 3 signed by Engineers Associates, Inc. and Worcester Mines, and are enclosed herewith.

We have checked the page number on the Ruth K No. 4. According to our abstract prepared by the Montrose County Abstract Company of Montrose, Colorado, which has a photostat of the original Location Certificate included, the page number is 228.

Please be advised that Urado Uranium Corporation has merged with Union Mines, Incorporated, and Union Mines has assumed all of the liabilities and assets of Urado.

Very truly yours,

UNION MINES, INCORPORATED

By M. Anderson
M. Anderson, Sec.

Enclosures

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

RECEIVED
JUL 1 3 1956

July 12, 1956

224 New Customhouse
Denver 2, Colorado

Mr. M. Anderson, Secretary
Union Mines, Inc.
304 Main Street
Grand Junction, Colorado

Re: Docket DMEA 4136 (Uranium) Ruth K and Sylvia claims) Montrose County, Colorado

Dear Mr. Anderson:

This will acknowledge receipt of your letter dated July 10, 1956. Copies of your letter and the executed copies of the Owner's Consent to Lien have been forwarded the Washington Office, DMEA, for further action, and in the event that additional information is needed, we will advise you.

Very truly yours,

W. M. TRAVER,

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

HMC:ab

cc: Chair. Op. Comm. (2)
Docket 4136
Harshman
Shaw (2)
Hasler
Chron.

7-17-56

IN REPLY REFER TO:

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

July 13, 1956

RECEIVED
JUL 16 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 4136, Urado Uranium Corporation, Ruth K. and Sylvia claims, Long Park district, Montrose County, Colorado.

The subject property was submitted previously to DMEA under DMEA 3350. Application 3350 was withdrawn because claim notices and county recordation showed that original locators predated the applicant's locations by a considerable period. In the present application an Opinion of Title by Bryant, Petrie, and Waldeck, Montrose, Colo., has been submitted which shows title in favor of Engineers Associates, Inc., who leased the claims to L. P. Gaggini. No instrument of transfer is in evidence for the transfer from the original locators to Engineers Associates, Inc. L. P. Gaggini has retained Mr. Waldeck's services for a long period in return for partial interests in uranium properties. Title to the subject property should be carefully searched to protect the Government's interest.

Best discovery of ore to date on the applicant's property appears to be on the Ruth K. No. 3 claim - not included in the application. If the applicant has solved all claim conflicts then the Ruth K. No. 3 claim should also be subordinated because, since the claim is adjacent to those in the application, it will definitely benefit from the proposed exploration.

The property, in itself, warrants further exploration. The claims are located close to large ore deposits, and within a zone of favorable ground established by U.S.G.S. drilling. I concur with the examining team's recommendation for approval of a DMEA contract to provide for the proposed work.

W P Williams

W. P. Williams

700

FILE COPY
Surname:
Ching
Ellis

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

July 11, 1956

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4136 (Uranium)
Urado Uranium Corporation
Ruth K and Sylvia Claims
Montrose County, Colorado

Will you kindly prepare a long-form contract between the Government and Urado Uranium Corporation in accordance with the attached draft.

The required number of copies of the map (Figure 2) are attached.

The Consents to Lien, referred to in Article 2(c), are being secured by the Field Team, but have not yet been received by this office.

Ernest Wm. Ell

Ernest Wm. Ellis

Enclosures

MChing/izm 7-11-56
cc to: Docket
Code 700
Mr. Ching

7-10-56

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

July 9, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee

Subject: Report of Examination, DMEA Docket 4136 (Uranium)
Urado Uranium Corporation, Ruth K. group of claims,
Montrose County, Colorado

I have reviewed the report of examination, DMEA Docket 4136, Urado Uranium Corporation, Ruth K. group of claims, Montrose County, Colorado, dated June 22 and received in this office July 3, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The examining team recommend the approval of a two-stage exploration project consisting of 22,390 feet of drilling in 41 holes at a total estimated cost of $60,800.80, inasmuch as the possibility of finding ore bodies ranging in size from 550 tons to 20,000 tons is good.

We concur in the recommendation of the field examiners.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

James Paone

James Paone

RECEIVED
JUL 9 - 1956

7/3/56
RECEIVED
JUL 2 - 1956

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

June 28, 1956

224 New Customhouse
Denver 2, Colorado

Grade Uranium Corporation
304 Main Street
Grand Junction, Colorado

Re: Docket DMEA 4136 (Uranium) Ruth K and Sylvia claims, Montrose County, Colorado

Gentlemen:

Enclosed are two sets, original and five copies, of Owner's Consent to Lien on the Ruth K No. 4, Sylvia, Sylvia No. 2, and Sylvia No. 3 mining claims. Please have the original and all copies of one set of forms signed by Engineers Associates, Inc. and the original and all copies of the second set of forms signed by Worcester Mines.

Please note that the page of recording of the Ruth K No. 4 claim is left blank on all copies. The Mining Lease dated March 4, 1955 by and between Engineers Associates, Inc. and Geo Engineering and Worcester Mines shows the recording of the Ruth K No. 4 claim on page 288. We have reason to believe that this page number is in error. Will you please check the records in the County Clerk and Recorder's Office at Montrose to ascertain the correct page of recording of the Ruth K No. 4 claim. Please insert the correct page number on all copies of the Owner's Consent to Lien forms before forwarding them for signature.

When all signatures have been obtained, please forward all copies to this office so that we may continue to process your application.

Very truly yours,

W. M. TRAVER

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

Enclosures

HMC:ab

cc: Chair. Op. Comm. (2)
Docket 4136
Harshman
Shaw (2)
Casler
Chron.

7-9-56

RECEIVED
JUL 2 - 1956

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

June 28, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4136 (Uranium), Urado Uranium Corporation (Ruth K Group of Claims), Montrose County, Colorado

Enclosed are the original and three copies of a joint engineering and geologic report on the subject property.

The field examiners recommend a two-stage exploration project at a total estimated cost of $60,800.80, Government participation $45,600.60. We concur in this recommendation.

As suggested in your letter of February 13, 1956, separate Owner's Consent to Lien will be forwarded for the signatures of Engineers Associates, Inc., and Worcester Mines. A discrepancy is noted in the page of recording of the Ruth K No. 4 Claim. The engineer's report shows page 238. The Mining Lease dated March 4, 1955 between Engineers Associates, Inc. and Geo Engineering and Worcester Mines shows the page of recording of the Ruth K No. 4 Claim to be page 228. On the Owner's Consent to Lien which we are forwarding to the Applicant to obtain the owners' signatures, we will leave the page of recording of the Ruth K No. 4 blank and ask the Applicant to ascertain the correct page of recording and enter it on each copy of the Owner's Consent to Lien.

Enclosed for possible use in the contract are nine extra copies of Figures 2 and 3.

DMEA Field Team, Region III

Reviewed by
DMEA OPERATING COMMITTEE
7-6-56
(date)

By W. M. Traver
W. M. Traver
Executive Officer

Enclosures

ON-SITE EXAM. REPORT

MINERAL DEPOSITS
IN REPLY REFER TO:
DMEA
RECEIVED
JUN 1 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
JUL 2 - 1956

DMEA
Date Rec'd.
JUN 26 1956

P. O. Box 360
Grand Junction, Colorado

BUREAU OF MINES
Denver, Colorado

May 28, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

TRANSMITTED
JUN 28 1956

Through: E. N. Harshman EMH
J. F. Shaw JFS

From: J. William Hasler

Subject: Transmittal of report of examination
DMEA docket 4136 (Uranium), Urado Uranium Corporation,
Ruth K. group of claims, Montrose County, Colorado

Enclosed is a joint engineering and geologic report on the Ruth K. group of claims in the Long Park area, Uravan Mining District, Montrose County, Colorado, prepared by W. B. Gazdik, U. S. Geological Survey, and Carl Belser, U. S. Bureau of Mines.

The Urado Uranium Corporation applied for Government assistance; however, the subject property was previously examined on July 8, 1954, under DMEA docket 3350, Western Mines. At that time it was found that a conflict existed on the Ruth K. No. 2 and Ruth K. No. 3 claims; the application was, accordingly, denied. The Urado Uranium Company reapplied for assistance under docket 4136, excluding those claims on which conflict existed. The present application covers the Ruth K. No. 4, Sylvia No. 2, and Sylvia No. 3 claims. Presumably no conflict exists on these four claims, except for a narrow strip of public land about 100 feet wide on the south end of the property which was withdrawn by the Government prior to the time the subject claims were filed.

The second field examination was made on March 26, 1956 by an examining team consisting of W. B. Gazdik and R. L. B ardman, U. S. Geological Survey; Carl Belser, U. S. Bureau of Mines; and Harold L. Culp, representing the applicant.

The applicant proposes to drill 22,390 feet of diamond drilling at an estimated cost of $105,860.00 to explore for uranium deposits in favorable ground that has been outlined by the U. S. Geological Survey. The principal uranium deposits in the Long Park area, Uravan Minerals District, are found in sandstone units restricted to the upper 100 feet of the Salt Wash member of the Jurassic Morrison formation.

Reviewed by
DMEA OPERATING COMMITTEE
7-6-56
(date)

The deposits in the vicinity of the applicant's claims are as much as 300 feet wide, 1800 feet long, and average from 3 to 4 feet in thickness. The chances appear good of finding ore bodies that may range in size from 550 tons to 20,000 tons and that may average 10,000 tons having an average grade of 0.27 percent U_3O_8 and 1.70 percent V_2O_5. The examining team concurs essentially with the company's proposed exploration project with the exception of a few changes that have been discussed with the applicant with which he also concurs. It is therefore recommended that the DMEA enter into a contract with the applicant to do the work herein outlined. I concur with the conclusions and recommendations of the examining team.

The Atomic Energy Commission has been consulted relative to the subject property.

Enclosed are the required number of maps for inclusion in a joint geologic and engineering report, as well as the applicant's brochure.

J. William Hasler
J. William Hasler,
Geologist

JWH/mlr

Enclosures

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

RECEIVED
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DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

TRANSMITTED
JUN 28 1956

DMEA 4136

Sylvia and Ruth K. Claims

Urado Uranium Corporation

Montrose County, Colorado

Uranium

Joint Engineering and Geological Report

by

William B. Gazdik, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

June 22, 1956

Reviewed by
DMEA OPERATING COMMITTEE
7-6-56
(date)

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DMEA 4136

SYLVIA AND RUTH K. CLAIMS
URADO URANIUM CORPORATION
MONTROSE COUNTY, COLORADO

RECEIVED
JUL 2 - 1956

INTRODUCTION AND SUMMARY

Urado Uranium Corporation, 304 Main Street, Grand Junction, Colorado, has applied for aid in an exploration project for uranium on the Sylvia and Ruth K. claims in the Long Park area of the Uravan district. The application proposed a two-stage exploration project consisting of 22,390 feet of core and non-core drilling in 41 holes at a total estimated cost of $105,860.00.

The claims were examined on March 26, 1956, by an examining team from the Geological Survey and the Bureau of Mines.

The property consists of four claims in secs. 35 and 36, T. 47 N., R. 17 W., and secs. 1 and 2, T. 46 N., R. 17 W., N. M. P. M., Montrose County, Colorado. The altitudes range from about 6,250 feet near the north line of the claims to about 6,600 feet near the southeast corner. Two holes were drilled on the property by the Geological Survey and one by the applicant.

The principal uranium deposits in the Long Park area are found in sandstone units restricted to the upper 100 feet of the Salt Wash member of the Jurassic Morrison formation. Primary sedimentary structures in the ore-bearing sandstone units apparently are closely associated with localization of ore. En echelon arrangement of ore

deposits in the Long Park region is probably caused by an en echelon arrangement of sedimentary structures which trend easterly. However, in the immediate vicinity of the claims the long axes of ore bodies generally strike northeast.

Ore deposits in the vicinity are as much as 300 feet wide and 1,800 feet long and average 3 to 4 feet thick. The possibility of finding ore bodies ranging in size from 550 tons to 20,000 tons is considered good.

A two-stage project consisting of drilling 22,390 feet in 41 holes at a total estimated cost of $60,800.80 is recommended.

ACKNOWLEDGMENTS

The examining team was accompanied by Robert L. Boardman of the Geological Survey and by H. A. Culp, representing the applicant. A large amount of the information used in appraising the proposed project was furnished by district geologist, Boardman.

The Atomic Energy Commission was consulted regarding the project before the examination was made.

Suggestions of John E. Crawford, W. P. Williams, and George C. Selfridge, of DMEA were carefully considered.

LOCATION, TOPOGRAPHY, AND CLIMATE

The property consists of four unpatented claims in the Long Park area of the Uravan mining district, secs. 35 and 36,

ILLUSTRATIONS

Figure		Follows page
1.	Location map, Sylvia and Ruth K. claims, Urado Uranium Corporation, Montrose County, Colorado. DMEA 4136	3
2.	Sketch map showing part of the Ruth K. and Sylvia group of claims, proposed hole locations and previous drill hole locations, Urado Uranium Corporation, Montrose County, Colorado. DMEA 4136	22
3.	Geologic map showing part of Ruth K. and Sylvia group of claims, Urado Uranium Corporation, Montrose County, Colorado. DMEA 4136	22

TABLES

Table		Page
1.	Summary of data from holes drilled by the USGS on and near the Ruth K. and Sylvia claims. DMEA 4136	19
2.	Generalized stratigraphic section for the area in the vicinity of the Ruth K. and Sylvia group of claims. DMEA 4136	20
3.	Summary of indicated and inferred reserves found by the Geological Survey drilling in the Long Park area. DMEA 4136	21
4.	Tonnage grade and average thickness of reserve blocks L, K, and X near the Ruth K. and Sylvia claims. DMEA 4136	22

T. 47 N., R. 17 W., and secs. 1 and 2, T. 46 N., R. 17 W., N. M. P. M., Montrose County, Colorado (figs. 1 and 2). The claims are at the head of a small draw which runs northeast. Rainfall is light and work can be carried on throughout the year.

A 1,000-foot access road connects the property with an all-weather county road from whence it is 12 miles north to State Highway 141 at Uravan and 110 miles northeast to Grand Junction, Colorado.

Labor, supplies and light equipment can be obtained at Uravan and heavy equipment can be purchased at Grand Junction. The nearest railroad is the Denver and Rio Grande Western at Grand Junction. Ore-buying depots are maintained at Uravan and Grand Junction. Water for drilling purposes can be obtained from small reservoirs in Long Park.

HISTORY AND PRODUCTION

Long Park contains many uranium-vanadium mines from which ore has been mined for many years. The four claims comprising the property were located by H. D. Clark and S. W. Jones in 1950 and 1951. No ore has been produced from the property. Two holes that encountered ore were drilled on the Ruth K. No. 3 claim, and an ore body was discovered by Geological Survey drilling to the east of the property. An application which included the subject claim

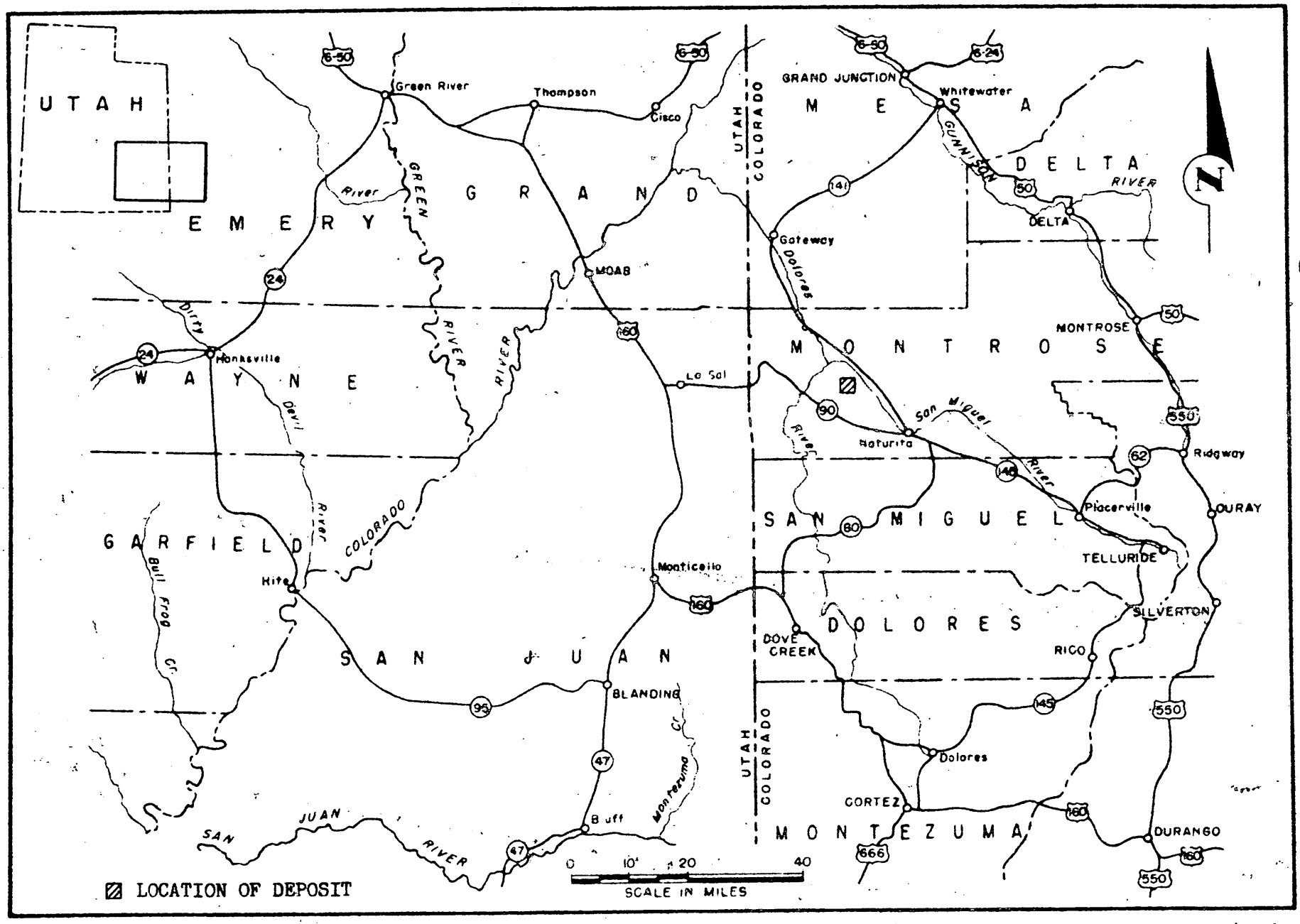

FIGURE 1 - LOCATION MAP, SILVIA AND RUTH K. CLAIMS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLO. DMEA 4136

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was submitted previously under DMEA Docket 3350 but was denied because of conflicts on the Ruth K. No. 2 and No. 3 claims.

The total production of the Long Park district through 1955 was about 445,000 tons averaging 0.33 percent U_3O_8 and 1.93 percent V_2O_5.

OWNERSHIP AND EXTENT

The four claims listed in the application are recorded in the records of the County Clerk and Recorder of Montrose County, Colorado, as follows:

Claim	Book	Page	Discovery Date	Recorded by
Ruth K. No. 4	343	238	Not stated (8/22/50)	H. D. Clark
Sylvia	343	433	2/11/51	H. D. Clark & S. W. Jones
Sylvia No. 2	343	433	2/11/51	" " " " "
Sylvia No. 3	343	434	2/11/51	" " " " "

The transfer of the above claims by the locators to Engineers Associates, Inc., was not noticed in the records but is presumed to be correct as of the opinion given by Bryant, Petrie, and Waldeck, law firm of Montrose, Colorado.

On March 1, 1954, Engineers Associates, Inc., leased the claims to Louis P. Gaggini for a period of ten years. On March 15, 1954, Gaggini granted a sublease on the property to Worcester Mines. A lease and supplemental agreement whereby Worcester Mines surrendered its rights to the mining lease was dated March 4, 1954. A new ten year lease on the claims was granted by Engineers Associates, Inc.,

to Louis P. Gaggini and Geo-Engineering. On March 5, 1955, Louis P. Gaggini and the Geo-Engineering assigned their interests in the lease to Urado Uranium Corporation.

PRESENT STATUS

Exploration and development

Exploration on the property consists of location pits and one hole drilled by the applicant and two holes drilled by the Geological Survey (fig. 2 and table 1). Eight holes were drilled on the adjoining Ruth K. No. 3 claim, which is excluded from this application because of existing conflicts, and another barren hole not shown on figure 2 was drilled on the Ruth K. No. 2 which is also excluded from the subject application. Two company holes, RK 3 and RK 8 cut ore-grade material according to company data and two holes, RK 4 and RK 6, were in weakly mineralized ground (fig. 2).

Mining and milling equipment and other facilities

There is no mining or milling equipment on the property. Facilities consist of two access roads.

GEOLOGY

The rocks exposed in the Long Park area of the Uravan district are marine and terrestrial formations ranging in age from late Paleozoic to late Mesozoic. Quaternary alluvium and landslide material are present locally (fig. 3).

All known uranium-vanadium deposits in the area are in the Morrison formation of late Jurassic age except for one small prospect in a conglomeratic bed in the overlying Burro Canyon formation of Cretaceous age. The Morrison formation is divided into two two members, the Salt Wash member, and the overlying Brushy Basin member. This report is concerned with proposed exploration for ore deposits in the sandstone units of the Salt Wash member of the Morrison formation. A generalized stratigraphic section for the area in the vicinity of the claims is given in table 2 and a detailed description of individual formations is presented below.

The ore-bearing Salt Wash member of the Morrison formation averages about 300 feet in thickness and is made up of terrestrial sandstone, siltstone, and mudstone beds. About 50 percent of the Salt Wash is made up of sandstone units, although the ratio of sandstone to siltstone and mudstone varies considerably within short distances. Generally three to five sandstone units, each 20 or more feet thick, are present along the outcrop of the Salt Wash. Such sandstone units are a few hundred feet to several thousand feet in horizontal extent.

Most uranium-vanadium deposits in the Long Park area are contained in the upper 100 feet of the Salt Wash member. The sandstone units in this stratigraphic zone are crossbedded and medium- to medium-fine-grained. Locally they are quartzitic and are brown, light gray, light red or white and contain varying

amounts of limonite, disseminated pyrite and carbonaceous material. Cut and fill structures, ripple marks, current lineations and rill marks suggest that the Salt Wash was deposited under fluvial conditions. Mudstone and siltstone in contact with upper sandstone units of the Salt Wash are generally red, reddish brown, green and gray. Interstitial clay, clay pellets and thin seams of mudstone are included in the sandstone units. Disseminated pyrite and carbonaceous material are found in some mudstone and siltstone beds. The contact of the Salt Wash member with the overlying Brushy Basin member is gradational, although there is a marked contrast in the overall appearance of the two members.

The Brushy Basin member, which is about 400 feet thick in the Long Park area, is made up of variegated shale, claystone and mudstone beds, that range in color from pure white to pastel shades of red, blue, and green. These fine-grained rocks are interbedded with sandstone and conglomeratic units. A few thin layers of quartzitic sandstone and siliceous limestone are also present. The shale and mudstone beds are bentonitic and form smooth rounded slopes covered with a loose, fluffy layer of material caused by swelling of the bentonite.

The Burro Canyon formation is a hetergeneous sequence of lower Cretaceous conglomerate, sandstone, shale and thin lenses of limestone that overlies the Brushy Basin member of the Morrison formation. Crossbedding and festoon structures indicate a fluvial

origin. The lower contact is indistinct and the formation appears to interfinger with the upper part of the Morrison formation. The upper contact is an erosional surface of regional extent. In the vicinity of the subject property the Burro Canyon averages from 50 to 125 feet in thickness.

The Long Park area lies on the northeast flank of the Paradox salt anticline which trends in a northwesterly direction. The beds dip from 2° to 9° but high on the flank of the Paradox anticline, the dip steepens to as much as 15°. The strike of the bed is generally N 45° W. High angle faults and intensely jointed strata are common along the sides of Paradox valley. The best developed joint system in the Long Park area parallel the strike of the northwest trending Paradox anticline, and another set of joints strikes essentially normal to the trend of the major structure.

The ore-bearing Salt Wash member of the Morrison formation is not exposed on the subject property. The claims lie partly on the Burro Canyon formation and partly on the Brushy Basin member of the Morrison formation. A thin cover of Quaternary alluvium and blowsand is present in some places. The local dip of the beds is from 6° to 8° and the strike is generally northwest. The depth to the ore-bearing sandstone ranges from about 385 feet on the central part of the property to as much as 600 feet on the northwest and southeast parts of the property.

ORE DEPOSITS

Most of the uranium-vanadium deposits in the Long Park area are found in sandstone units in the upper 100 feet of the Salt Wash member of the Morrison formation. Mineralized rock consists principally of sandstone impregnated with uranium and vanadium minerals in a ratio of 1 to 6. Small amounts of uranium and vanadium are contained in mudstone pebbles and seams or replace carbonaceous material. Ore bodies range from small irregular masses containing a few tons of ore to large tubular masses containing thousands of tons of ore. Mineralized rock lies essentially parallel to the sandstone beds but does not follow the beds in detail. In some deposits the highest grade of ore occurs in sharply bounded elongate concretionary structures or "rolls" which cross bedding planes.

Mineralized rock at or near the surface is sandstone impregnated with carnotite and its calcium analogue tyuyamunite. Metatyuyamunite, rauvite, pascoite, hewettite and hummerite have also been identified in the oxidized ores. Less oxidized minerals including uraninite, coffinite, corvusite, and montroseite are found at greater depths. Copper minerals are rare in the upper sandstone units of the Salt Wash. A few small but high-grade deposits, present in lower sandstone units of the Salt Wash member, contain substantial amounts of secondary copper minerals associated with uranium-vanadium minerals.

The origin of the ore and factors that controlled its localization are little understood. Primary sedimentary structures in the ore-bearing sandstone units apparently are closely related to localization of ore. Trends of sedimentary structures are generally easterly to southeasterly. The strike of mineralized logs and the long axes of ore bodies are nearly parallel to the strike of primary sedimentary structures. En echelon arrangement of ore bodies is probably caused by en echelon arrangement of these structures.

It does not appear that origin and localization of uranium and vanadium deposits are related to fractures. Apparently fractures served as avenues for secondary migration of small amounts of uranium-vanadium leached from early ore minerals by ground water solutions. Known faults that cross ore deposits in the area displace ore layers and some faults contain breccia derived from ore layers.

Geologic features and habits of ore bodies useful in exploring for uranium and vanadium deposits have been recognized through drilling experience and geologic studies. The following geologic guides (Weir 1952) were used by the Geological Survey in exploring for ore deposits in the Long Park area:

1. The ore-bearing sandstones are 25 feet or more thick in the vicinity of ore deposits.

2. The ore-bearing sandstones are dominantly light brown or light gray and have no reddish cast in the vicinity of ore deposits.

3. Mudstone and siltstone in contact with ore-bearing sandstone is green or gray near ore deposits instead of red or reddish brown.

4. The ore-bearing sandstone commonly contains abundant limonite stains or disseminated pyrite near ore deposits.

5. Carbonized plant remains are abundant in or near ore deposits. No single one of the foregoing guides is persistent enough to be used alone in appraising favorable ground.

Some of the ore deposits found by the Geological Survey and by private industry in the Long Park area are shown on figure 3 in order to illustrate their geometric configuration and their areal distribution in relation to the applicant's claim. In section 27 the long axes of the ore deposits trend easterly and northeasterly and range in width from about 200 feet to 400 feet and are as much as 2,200 feet long. The ore deposits in the vicinity of the subject claims are elongate in a northeasterly direction and average about 300 feet in width and as much as 1,800 feet long. These dimensions suggest that probable ore deposits underlying the subject claims could range from 200 feet to 300 feet in width and 500 to 900 feet in length with an average thickness of 3 to 4 feet.

ORE RESERVES

There are no known ore reserves on the property.

By U. S. G. S. standards indicated and inferred reserves of class I material found by Geological Survey drilling in the Long

Park area total about 250,800 short tons averaging 0.31 percent U_3O_8 and 2.04 percent V_2O_5 (table 3).

Class I reserves are 1-foot or more thick and contain 0.10 percent U_3O_8 or 1.0 percent V_2O_5 in accordance with the Atomic Energy Commission purchase price and the mill cutoff for vanadium.

In the vicinity of the applicant's claims three ore deposits designated as K, L, and X were found by Government drilling (fig. 3). Table 4 gives the tonnage, grade, and average thickness of these deposits.

PROPOSED EXPLORATION AND COSTS

The applicant's proposed DMEA project consists of 41 holes requiring an estimated 22,390 feet of drilling costing $2.864 per foot. Costs were calculated on the basis of three bids obtained from independent drilling contractors. The cost of the project was estimated at $105,860.00. 546 ft/hole

The program is set up in two stages. Stage I, consisting of 5,590 feet in 11 holes, would explore for ore deposits in favorable ground delineated by Geological Survey drilling. An estimated 4,490 feet of non-core footage and 1,100 feet of core-bit footage are proposed. Stage I holes would be located on north trending fences and would be at least 400 feet apart and about 400 feet away from any previously drilled holes. The positions of the holes on one fence would be staggered in relation to the holes on another fence (fig. 2). 508 ft/hole

Stage II drilling would consist of an estimated 30 holes totaling 16,800 feet to offset mineralized holes found by Stage I drilling. Although the applicant does not propose a minimum spacing for Stage II holes, the substantial size of ore bodies in this area and the depth to the ore-bearing sandstone preclude drilling offset holes closer than 100 feet to mineralized holes. 560 ft/hole

The applicant's estimated costs follow:

Independent contracts		
5,590 feet of core and non-core drilling at $2.66/ft.	$14,867.50	
16,800 feet of core and non-core drilling at $2.658/ft.	44,660.00	
Bulldozing 46 days at $100/day	4,600.00	
Total independent contracts		$64,127.50
Labor and supervision		
Typist 12 months at $60/mo.	$ 720.00	
Draftsman 12 months at $150/mo.	1,800.00	
Sampler and field assistant at $375/mo. (12 months)	4,500.00	
Consultant 12 months at $1,250/mo.	15,000.00	
Total labor and supervision		$22,020.00
Operating materials and supplies		
Office supplies 12 months at $150/mo.	$ 1,800.00	
Survey stakes and field supplies	100.00	
Total operating material and supplies		$ 1,900.00

Operating equipment

None

Rehabilitation and repairs

None

New buildings, improvements, installations

Rental on trailer house 12 months at $50/mo.	$ 600.00		
Miscellaneous			
Accounting and office 12 months at $100/mo.	$ 1,200.00		
Payroll taxes	700.00		
Total miscellaneous		$ 1,900.00	
Contingencies		$13,212.50	
Analytical costs			
300 chemical analyses at $7 each		$ 2,100.00	
Total estimated costs for 22,390 feet of drilling			$105,860.00
Estimated cost per foot			$ 4.73
Time for completion			12 months

Engineer's estimate of costs

The drilling plan, as submitted by the applicant, appears to be suitable. Two proposed holes were located too close to the west boundary of the Ruth K. No. 4 claim. These two holes were moved to locations at least 100 feet from the outer perimeter of the claim with the applicant's consent.

The engineer's estimated costs follow:

Stage I

Independent contracts

1,100 feet of core drilling at $3.50/ft.	$ 3,850.00	
4,490 feet of non-core drilling at $1.75/ft.	7,857.50	
Bulldozing 80 hours at $12/hr.	960.00	
Total independent contracts		$12,667.50

Labor and supervision

Engineer-geologist 3 months at $600/mo.	$ 1,800.00	
Total labor and supervision		$ 1,800.00

Operating materials and supplies

100 core boxes at $1.10 each	$ 110.00	
Total operating materials and supplies		$ 110.00

Operating equipment (rental)

Jeep for engineer 3,000 miles at $0.10/mile	$ 300.00	
Total operating equipment		$ 300.00

Rehabilitation and repairs

None

New buildings, improvements, installations, etc.

None

Miscellaneous

Bookkeeping and typing 3 months at $60/mo.	$ 180.00	
Workmen's compensation, liability insurance, & payroll taxes 6 percent of $1,980	118.80	

Stakes, sacks, paper, etc.	$ 100.00		
Total miscellaneous		$ 398.80	
Total estimated cost of Stage I drilling			$15,276.30
Estimated cost per foot (5,590 feet of drilling)			$ 2.73
Estimated incidental allowance to cover everything except individual contracts and assaying ($2,608.40 ÷ 5,590) per foot			$ 0.47

Stage II

Stage I and Stage II drilling are under similar conditions and costs will be about the same.

Summary of costs

Stage I

1,100 feet of core drilling at $3.50/ft.	$ 3,850.00	
4,490 feet of non-core drilling at $1.75/ft.	7,857.50	
Bulldozing 80 hours at $12/hr.	960.00	
Incidental allowance 5,590 feet at $0.47/ft.	2,627.30	
	$15,294.80	
22 chemical analyses at $5 each	110.00	
Total estimated cost of Stage I		$15,404.80

Stage II

3,000 feet of core drilling at $3.50/ft.	$10,500.00
13,800 feet of non-core drilling at $1.75/ft.	24,150.00

Bulldozing 200 hours at $12/hr.	$ 2,400.00		
Incidental allownace 16,800 feet at $0.47/ft.	7,896.00		
	$44,946.00		
90 chemical analyses at $5 each	450.00		
Total estimated cost of Stage II drilling		$45,396.00	
Total estimated cost of project			$60,800.80
Government participation 75 percent, or			$45,600.60
Length of time for completion			1 year

Drilling contract costs on similar projects recently completed show that the estimated costs are in order:

Uranium Prospectors - Non-core $1.70/ft. Core $3.40/ft. Incid. $0.48/ft.

Norbute - Non-core $1.41/ft. Core $2.05/ft. Incid. $0.30/ft.

In general Stage I holes (fig. 2) would be drilled at least 400 feet apart and 400 feet away from any previous holes and no hole should be drilled closer that 100 feet from the outer boundary of the claim block. Approval of Stage II drilling is to be dependent on the results of Stage I drilling.

No Stage II hole should be drilled closer than 100 feet from any previously drilled hole. All holes to be cored "BX" size through the upper 100 feet of the Salt Wash member of the Morrison formation.

Maximum drilling allowable is as follows:

Stage	No. of holes	Feet non-core	Feet core	Total drilling	No. of assays	Hours bulldozing
I	11	4,490	1,100	5,590	22	80
II	30	13,800	3,000	16,800	90	200
Total	41	18,290	4,100	22,390	112	280

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the subject claims are located in a geologically favorable area based on results of extensive geologic studies and diamond drilling that was carried out in the area by the Geological Survey. Chances are good of finding ore bodies on the property that may range in size from 550 tons to 20,000 tons, averaging 10,000 tons with a grade of 0.27 percent U_3O_8 and 1.70 percent V_2O_5. It is recommended, therefore, that the project herein outlined be completed under a DMEA contract. It should be required that Stage II holes have prior approval of the field team before they are drilled. Chemical assays should be made on all samples showing significant radioactivity.

Table 1 - Summary of data from holes drilled by the USGS on and near the Ruth K. and Sylvia claims

Hole No.	Collar Elev. (feet)	Depth to top of ore-bearing sandstone (feet)	Thickness of ore-bearing sandstone (feet)	Thickness of mineralized zone (feet)	Chemical Assay $\%U_3O_8$	Chemical Assay $\%V_2O_5$	U.S.G.S. Classification
537	6249.8	385.7	12.1	none	---	---	Unfavorable
538	6392.0	384.5	48.0	none	---	---	Favorable
539	6494.5	355.8	47.8	none	---	---	Favorable
1254	6502.4	525.0	45.0	0.9	0.033	0.13	Mineralized
1256	6746.0	501.0	56.0	0.3	0.055	0.12	Ore hole
				0.5	0.11	0.12	
				0.2	0.26	0.57	
				0.4	0.45	0.26	

Table 2 - Generalized stratigraphic section for the area in the vicinity of the Ruth K. and Sylvia group of claims.

Age	Formational Unit	Average thickness (feet)
Quaternary	Alluvium	0 - 3
----------	Unconformity	----------
Cretaceous	Burro Canyon formation	50 - 110
Jurassic	Morison formation	
	Brushy Basin member	400
	Salt Wash member	300

Table 3 - Summary of indicated and inferred reserves found by the Geological Survey drilling in the Long Park area.

Reserves	Grade Cutoff	Short Tons	Percent U_3O_8	Percent V_2O_5	Pounds U_3O_8	Pounds V_2O_5
(Indicated)	0.10% U_3O_8 or 1.00% V_2O_5	168,300	0.31	2.13	1,043,500	7,169,600
	0.05% U_3O_8 or 0.50% V_2O_5	294,500	0.23	1.60	1,354,700	9,424,000
(Inferred)	0.10% U_3O_8 or 1.00% V_2O_5	82,500	0.30	1.85	495,000	3,052,500
	0.05% U_3O_8 or 0.50% V_2O_5	121,100	0.21	1.35	508,600	3,269,700

Table 4 - Tonnage grade and average thickness of reserve blocks L, K, and X near the Ruth K and Sylvia Claims.

Reserve Block	Short Tons	Average Thickness	Grade $\%U_3O_8$	Grade $\%V_2O_5$
		Indicated Class I		
K	21,800	3.2 feet	0.20	0.91
L	600	4.2 feet	0.30	2.21
X	550	4.0 feet	0.29	1.00
		Inferred Class I		
K	5,700	2.5 feet	0.34	0.50
L	4,700	2.3 feet	0.29	2.18
X	550	4.0 feet		
		Indicated Class II		
K	39,800	2.9 feet	0.14	0.77
L	4,600	2.7 feet	0.24	1.95
X	---	---	---	---
		Inferred Class II		
K	10,300	2.8 feet	0.25	0.57
L	3,100	2.6 feet	0.23	1.90
X	550	4.0 feet	0.29	1.00

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 4136
APRIL 1956

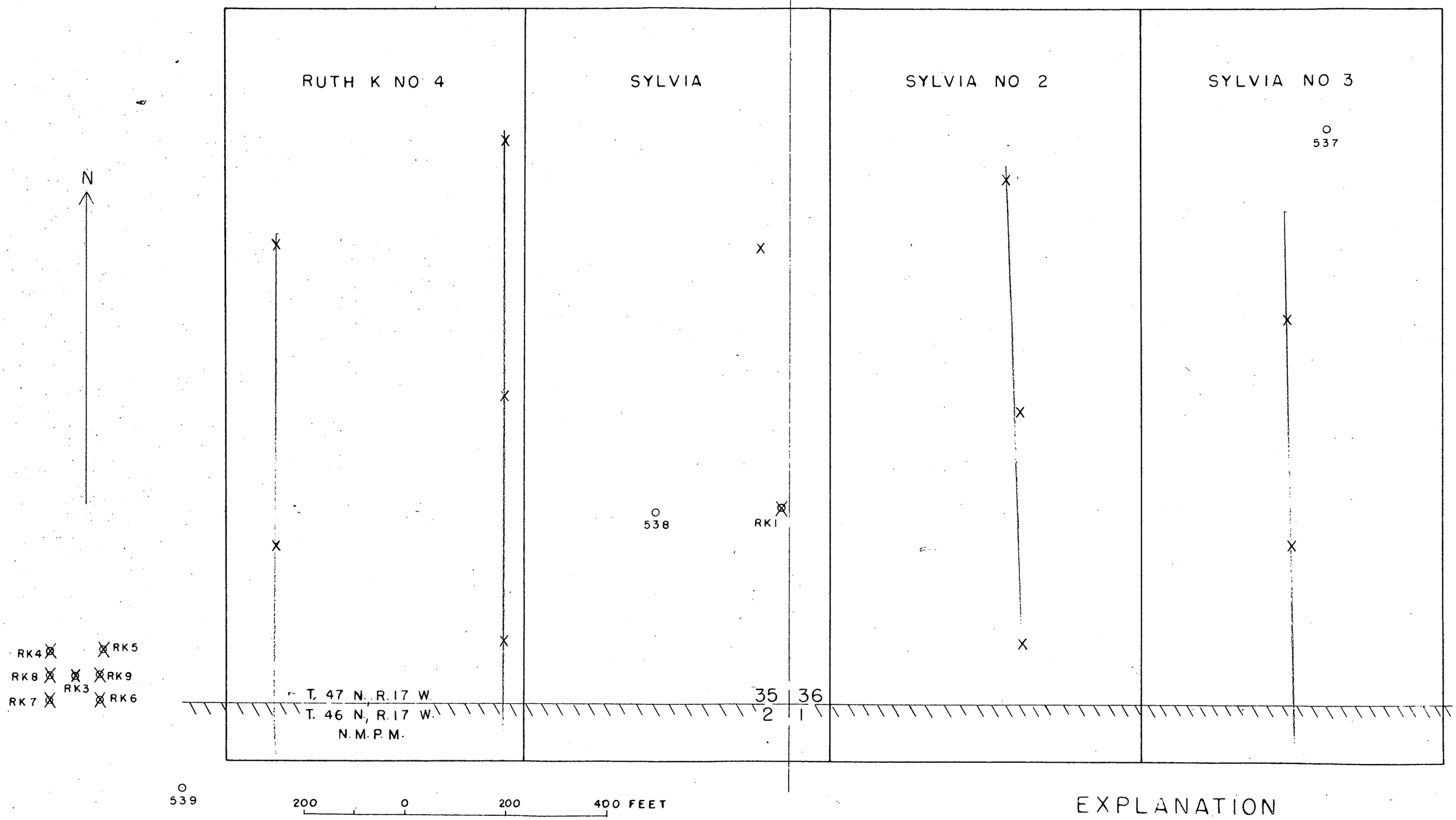


FIGURE 2. SKETCH MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLORADO.

2-24-56 [illegible]

RECEIVED
FEB 23 1956

February 20, 1956

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4136 (Uranium), Urado Uranium Corporation, Ruth K and Sylvia claims, Montrose County, Colorado

The subject application in the amount of $105,860.00 was received in this office on February 20, 1956.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

JOHN F. SHAW

John F. Shaw

cc: W. M. Traver (2)
E. H. Marshman
J. W. Mesler
M. H. Salsbury
J. F. Shaw
Sec. Op. Com (2)

2-23-56 dgm

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

February 17, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With brochure)
J. W. Hasler

From: Field Team, Region III

Subject: Docket DMEA 4136 (Uranium), Urado Uranium Corporation, Ruth K and Sylvia Claims, Montrose County, Colorado

Enclosed is the subject application in the amount of $105,860.00. A field examination and suitable report are requested.

Your attention is directed to the attached copy of a letter from the Chairman of the Operating Committee and the memoranda of review by members of the Uranium Commodity Committee.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

HMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket 4136
Chron.

700

FILE COPY

Surname:
Ching
Ell
~~Kilgore~~
~~Selbridge~~
Yates
Heffman

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

FEB 13 1956

Brado Uranium Corporation
304 Main Street
Grand Junction, Colorado

Re: Docket No. DMEA-4136 (Uranium)
Ruth K and Sylvia Claims
Montrose County, Colorado

Gentlemen:

The application for assistance in exploring the subject land, 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 for a field examination to the Executive Officer of Region III at the following address:

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

Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

G. O. Mittendorf (for)

Administrator

MChing/izm 2-10-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
DMEA Field Team, Region III (2)

R.C.G.

700

FILE COPY

Surname: Ching

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
22d New Customhouse Building
Denver 2, Colorado

FEB 13 1956

Re: Docket No. DMEA-4136 (Uranium)
Uranio Uranium Corporation
Ruth K and Sylvia Claims
Montrose County, Colorado

Dear Mr. Traver:

The subject application is being referred to you for investigation, a field examination, and recommendation. Copies of the application were retained by your office for the use of the Field Team.

Enclosed are two copies each of memoranda, dated January 31 and February 7, 1956, from W. P. Williams, USGS, and John E. Crawford, USBM, respectively.

Your attention is called to the fact that the present application covers only the Ruth K No. 1, Sylvia, Sylvia No. 2, and Sylvia No. 3 claims, and does not include the Ruth K Nos. 2 and 3 claims on which conflicts may still exist.

In the event a contract is recommended by the Field Team, separate Consents to Lien will be required of Engineers Associates, Incorporated, and Worcester Mines.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (2/13)

Enclosures

MChing/izm 2-10-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JCHosted, Rm. 3210, GSA

APPROVED:

P. F. Yopes (2/13)
Member, Bureau of Mines

Thor H. Kiilsgaard (2/13)
Member, Geological Survey

P.S.Y.

2/7/56 gla

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

February 7, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Application for assistance, DMEA Docket 4136, Urado Uranium Corporation, Ruth K group, Montrose County, Colorado

I have reviewed the attached application, DMEA Docket 4136, Urado Uranium Corporation, Ruth K group, Montrose County, Colo., dated January 26, 1956, and received in this office January 30. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Urado Uranium Corporation previously applied for assistance on the Ruth K group of claims under DMEA Docket 3350, Worcester Mines, but it was determined that a claim conflict existed and the application was denied. NO.

A new application, assigned Docket 4136, indicates that the conflicting claim controversy has been clarified in favor of the Urado Uranium Corporation.

The organization has drilled some holes in the Ruth K Nos. 2 and 3 claims which apparently have penetrated material containing amounts of uranium mineralization. It is reported by the Field Team that the U. S. Geological Survey also drilled the Ruth K and Sylvia claims recently and that the results were favorable.

We therefore agree with the preliminary recommendation of the Field Team that a field examination be made of this property to review the results of their current exploration work and to make further appraisal of the property and the applicant's proposal.

The Field Team should consult with Mr. E. R. Gordon, Atomic Energy Commission, Grand Junction, Colorado.

RECEIVED
FEB - 7 1956

John E. Crawford

Attachment

21-56 Agm

IN REPLY REFER TO:

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

RECEIVED
FEB - 1 1956

January 31, 1956

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4136, Urado Uranium Corporation, Ruth K. group, Montrose County, Colorado.

The property involved in this application is the same as that submitted in May 1954 (Docket No. DMEA 3350) under the name of Worcester Mines. DMEA 3350 was withdrawn by the applicant when an examining team discovered, in the field, that prior existing claims overlapped a large part of the area under consideration.

U. S. Geological Survey drilling has shown the property to be favorable and semi-favorable for uranium ore deposits. According to the applicant's statements one hole out of nine drilled on one of the claims penetrated material of ore grade and thickness. Since the first field examination was made the Government has done more drilling on the property.

Geologically, the property probably warrants further exploration. In spite of the title opinion by his attorney, however, the applicant does not seem to have completely solved the claim conflict on the Ruth K Nos. 2 and 3 claims. An exploration project could be limited to the four eastern claims on which there does not appear to be any conflict; but the most favorable drilling completed so far, of which I have record, appears to be on Ruth K No. 3 which is in conflict.

I recommend that the ownership problems of the property be carefully reviewed by the Legal Division. The Field Team should be asked to evaluate the latest drilling on and near the property and to make recommendations concerning DMEA participation in exploration on the property.

W P Williams

W. P. Williams

1/30/56 gla

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

RECEIVED
JAN 30 1956

January 26, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4136 (Uranium), Urado Uranium Corporation, Ruth K Group, Montrose County, Colorado

Enclosed are the original and three copies of a joint memorandum of review on the subject property by members of the Grand Junction office.

We recommend a field examination on this property to review their current exploration work and make a further appraisal.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

IN REPLY REFER TO:
DMEA
Date Rec'd.
JAN 26 1956
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. BOX 360
Grand Junction, Colorado

January 24, 1956

Memorandum

RECEIVED
JAN 30 1956

To: Executive Officer, DMEA Field Team, REGION III

From: J. William Hasler
M. H. Salsbury

Through: J. F. Shaw JFS
E. N. Harshman E.N.H.

Subject: DMEA 4136, Urado Uranium Corporation,
Ruth K. Group, Montrose County, Colo.

The Urado Uranium Corporation, Grand Junction, Colorado, has applied for aid to explore the Ruth K. group of claims in the Long Park area, Montrose County, Colorado. The property was previously examined under DMEA docket 3350, Worcester Mines. During the field examination of the Ruth K. group of claims, it was discovered that there was a conflict on the Ruth K. No. 2 and No. 3 claims. The Jack Pine and Yellow Pine claims appeared to have prior rights. Since the date of the field examination, the conflict has been essentially nullified, in that they have received a title opinion by William G. Waldeck, Attorney at Law, Montrose, Colorado.

U. S. Geological Survey has done diamond drilling on the Ruth K. and Sylvia claims since the date of the original field examination. It is concluded that the Ruth K. claim has merit insofar as further exploration is concerned, and a review of the current exploration work will be made and further appraisal will be completed. Should the results of this work warrant an additional field examination, it will also be scheduled, if requested by the Washington office.

J. William Hasler by M.H.S.
J. William Hasler
U. S. Geological Survey

M. H. Salsbury
M. H. Salsbury
U. S. Bureau of Mines

JWH/mlr

January 20, 1956
Subject DMEA-4136
Re: Exploration Assistance
Sylvia # 2 & 3
Ruth K. # 2,3,4

Urado Uranium Corporation
304 Main Street
Grand Junction, Colorado

Gentlemen:

The receipt of your application dated (Undated) for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4136 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

60932

January 20, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

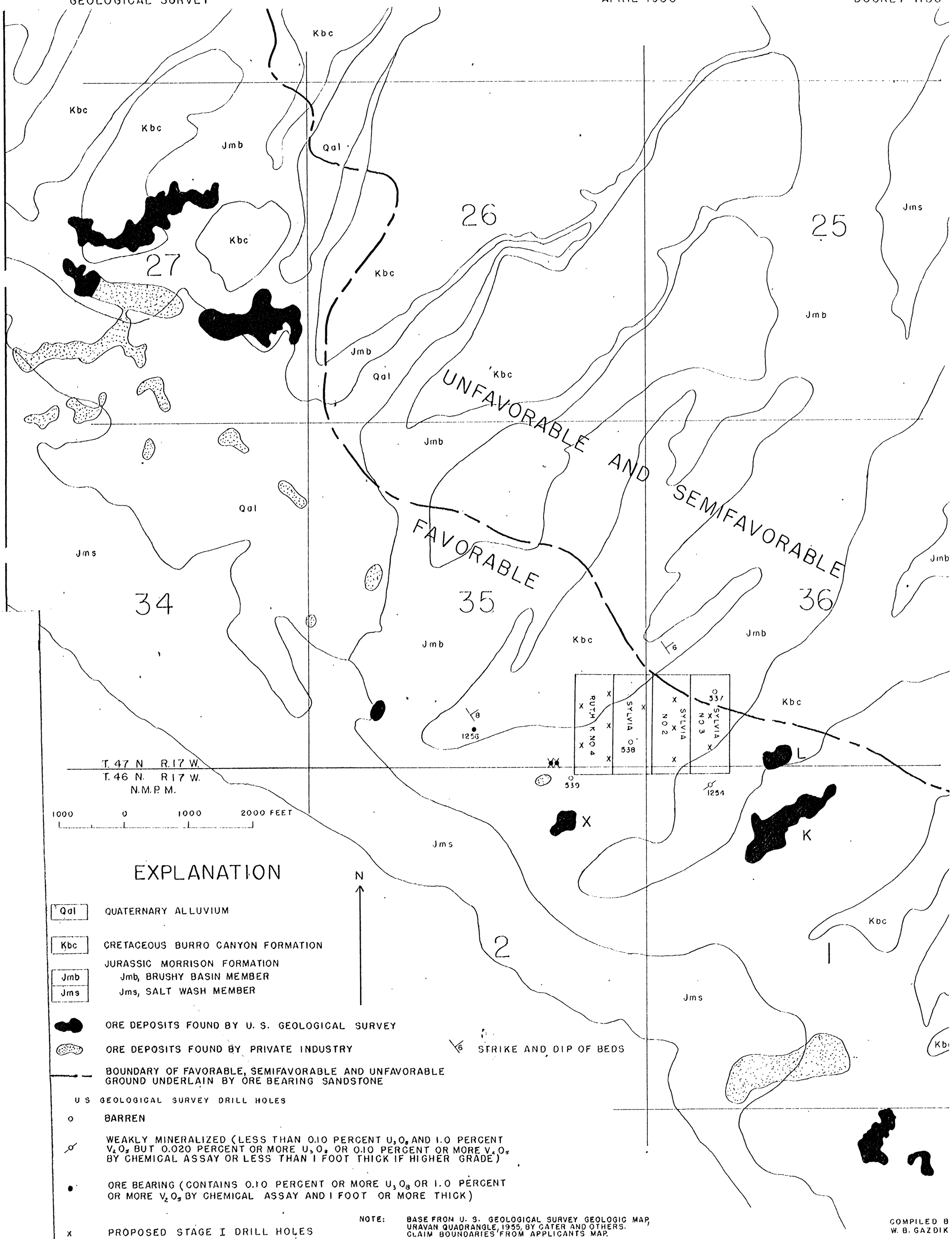
There is listed below the assigned docket number to an application recently received from Region III.

DMEA - 4136 Urado Uranium Corporation

Robert E. Adams
Chief, Operation's Control
and Statistics Division

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
APRIL 1956
DOCKET 4136



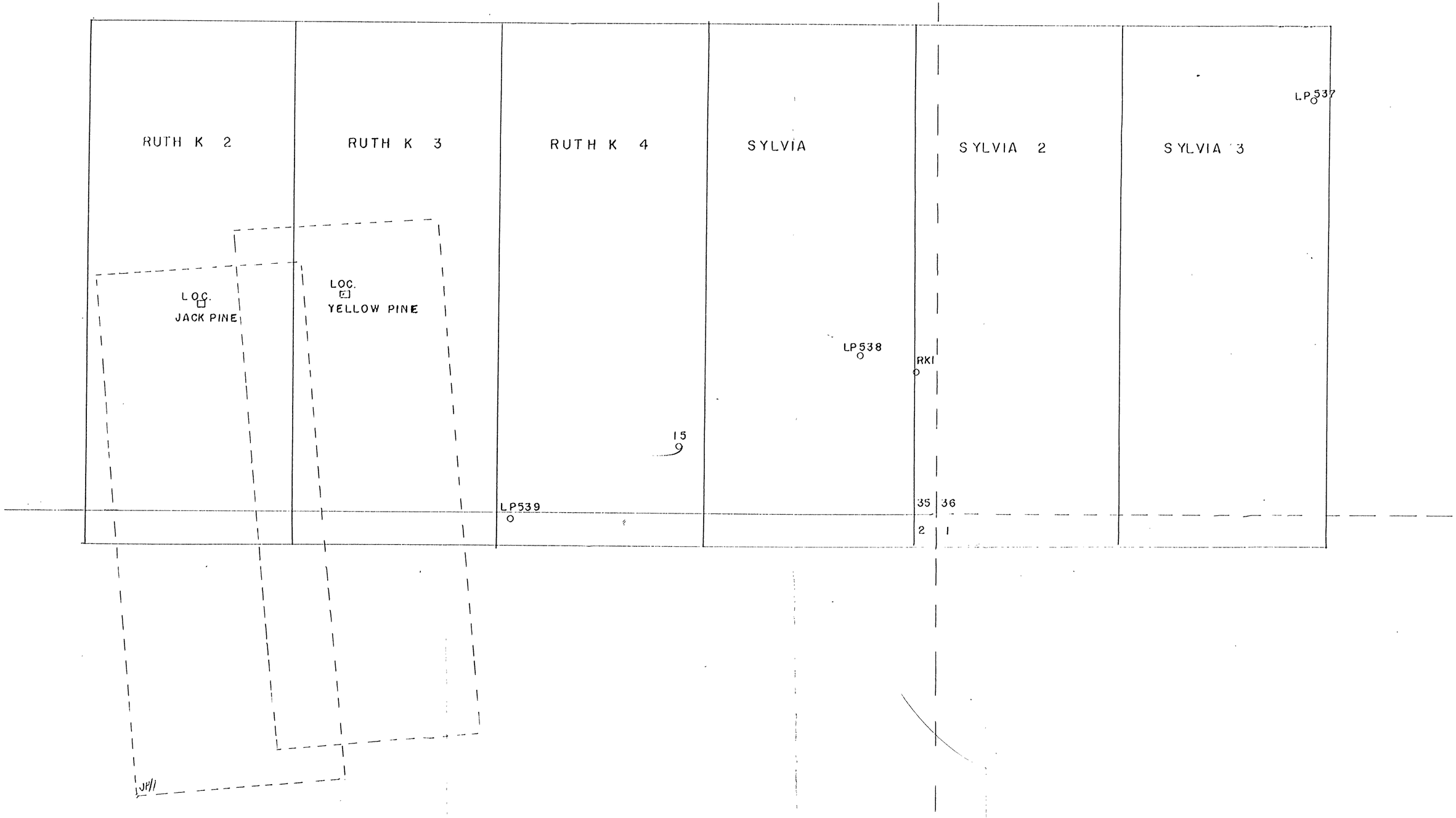
NOTE: BASE FROM U. S. GEOLOGICAL SURVEY GEOLOGIC MAP, URAVAN QUADRANGLE, 1955, BY CATER AND OTHERS. CLAIM BOUNDARIES FROM APPLICANTS MAP.

COMPILED B
W. B. GAZDIK

FIGURE 3. GEOLOGIC MAP SHOWING PART OF RUTH K AND SYLVIA GROUP OF CLAIMS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLORADO.

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 4136

UNION MINES, INCORPORATED



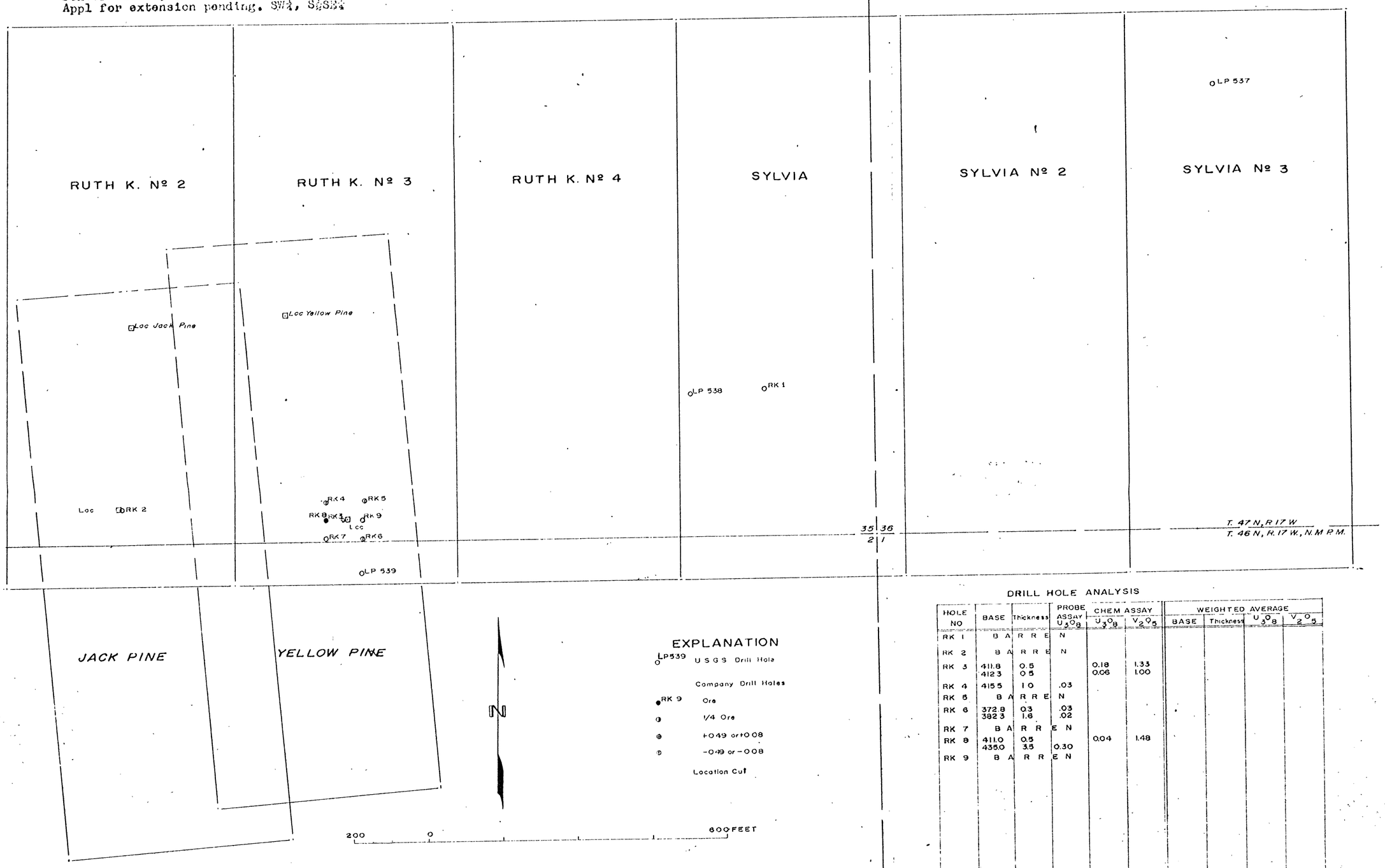
REVISED SKETCH MAP SHOWING CONFLICT, PREVIOUSLY DRILLED HOLES, AND SECTION CORNER.

1" = 200'

200' 0 400'

Section 35:
Withdrawn from mineral entry by P.L.O.
459, dtd 3-25-48; Federal Register 3-31-48, W½
Withdrawn from mineral entry by P.L.O.
698, dtd 2-12-51, E½
Right of way Affects SW¼: transmission line
San Miguel Power Assn., Inc. Colo.01263,
Approved 4-2-54
Mineral Survey No. 20194 dtd 3-4-26, SW¼
Dan Patch & Tipperary Lodes
Potassium & Sodium filings:
Colo.08640, filed 6-9-54, All
Oil and Gas Leases:
Denver 054790, filed 11-28-46, dtd 4-1-50,
Appl for extension pending. SW¼, S½SE¼

Section 36:
Withdrawn from mineral entry by P.L.O.
698, dtd 2-12-51, All
Potassium & Sodium filings:
Colo. 08640, filed 6-9-54, All
Oil and Gas Leases:
Denver 055491, filed 6-2-47, Lease dtd 11-1-43,
extended to 11-1-58, W½



DRILL HOLE ANALYSIS

HOLE NO	BASE	Thickness	PROBE ASSAY U_3O_8	CHEM ASSAY U_3O_8	CHEM ASSAY V_2O_5	WEIGHTED AVERAGE BASE	WEIGHTED AVERAGE Thickness	WEIGHTED AVERAGE U_3O_8	WEIGHTED AVERAGE V_2O_5
RK 1	B A	R R E	N						
RK 2	B A	R R E	N						
RK 3	411.8 412.3	0.5 0.5		0.18 0.06	1.33 1.00				
RK 4	415.5	1.0	.03						
RK 5	B A	R R E	N						
RK 6	372.8 382.3	0.3 1.6	.03 .02						
RK 7	B A	R R	E N						
RK 8	411.0 435.0	0.5 3.5	0.30	0.04	1.48				
RK 9	B A	R R	E N						

Section 2:
Withdrawn from mineral entry by P.L.O.
459, dtd 3-25-48; Federal Register 3-31-48
Potassium & Sodium filings:
Colo. 08730, filed 6-9-54, N½NE¼

Section 1:
Withdrawn from mineral entry by P.L.O.
459, dtd 3-25-48; Federal Register 3-31-48
Potassium & Sodium filings:
Colo. 08730, filed 6-9-54, NW¼
Oil and Gas Leases:
Colo. 07814, filed 2-1-54, lease dtd
4-1-54, NW¼

I, Louis P. Gaggini, Professional Engineer, Do hereby certify that the above Map has been prepared from actual field notes and that all corners are shown as they were in the field and that all evidence of conflicting claims found during this survey are shown on this map.

Louis P. Gaggini
Colo. Lic. 1927

Plate 1