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DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

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

pertaining to Exploration Project Contract No. Idm-8995, 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 Bath 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

July 14, 1958

T. H. Brading, Auditor

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

UNION MINES, INCORPORATED

CONTRACT NO. IDM-E995 DOCKET NO. DMEA 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 ($2,021.24) 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.

JUL 18 1958

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

Re: Adm-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

224 New Customhouse
Denver 2, Colorado
July 25, 1958

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800

Memorandum

To: Chairman, Operating Committee, DMEA

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

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

Enclosed are two copies of a memorandum to T. A. Christensen, dated July 24, 1958, relative to final payment under the terms of the subject contract.

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosures

hmh

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

224 New Customhouse
Denver 2, Colorado
July 24, 1958

Memorandum

To: T. A. Christensen

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

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

Reference is made to our memorandum of February 27, 1958, whereby we transmitted final Form MF-104, Operator's Monthly Report and Voucher, for the period August, September, and October, 1957, and requested that you withhold the amount of $500.00 from reimbursement to the Operator, pending resolution of matters prerequisite to closing the account.

The Operator's final report has been received, therefore we recommend that final payment to the Operator be made on the following basis, which is in conformance with the Report of Review of reported project costs by the Contract Administration and Audit Division, DMEA, dated July 14, 1958.

Basis for Final Payment

Total accepted cost----------	$11,324.94
Government participation at 75 percent----	8,493.71
Total prior payments----------	7,993.71
Balance due the Operator----------	$ 500.00

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

JDC:hsh

cc; Chem. Op. Comm. (2)
Harshman
DMEA/DFC
Hasler
DMEA/GJCT
MF-104 file, Reg. III
Corres.file, Reg. III
Cooper
Chron

$500.00
7/25/58 DMEA 59-7

[illegible] Bar Customhouse
Denver 2, Colorado
July 11, 1958

Memorandum

To: T. E. Bunting - w/enclosure

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

Subject: Contract No. DMEA A136 (Amendment), Contract No. Ma-1957, Union Mines, Incorporated (Beth K. and Sylvia claims), Montrose County, Colorado

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

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

Acceptable units of work or service completed on a Fixed Unit Cost basis consisted of additional allowances on 4,236.7 feet of drilling and chemical analysis of 6 samples for V_2O_5 content.

The sum of $800.00 was withheld from reimbursement to the Operator in processing 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. Comm. (2)
Bangham
Cooper
Corres. file
Chron.

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224 New Customhouse
Denver 2, Colorado
July 10, 1958

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

Re: Docket No. DMEA 4156 (Uranium),
Contract No. EMc-2995,
Union Mines, Incorporated
(Ruth E. 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:pml

cc: Chron. Cy. Chron. ✓ (2)
Harshman
DMEA/GJ
Hasler
DMEA/DFC
Corres. file
Cooper
Chron.

Form MF-10a (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

(July 20 incl)

Month of Jan. Feb. Mar., 1957 Docket No. DMEA 1236 Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible] 7th St., Grand Junction, Colorado
Contract Amount, $ [illegible] Government Participation: 75 % Amount, $ 15,000.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	[illegible]	3639.75	[illegible]			
Bulldozing	—	924.00	924.00			
Crosscutting						
Drifting						
Incidental Expense	1319.35	678.38	1997.73			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Incidental Expense	38.00	—	38.00			
(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):						
					5343.22	11,324.94 ame
TOTALS	[illegible]	[illegible]	[illegible]	598.72	5386.10	11,367.82

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee Louis P. Daigneau
[illegible]

Per _____ Title _____

*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:

$ 3986.29

Signature [illegible]
(Authorized Certifying Officer)

Date 3/3/58 Vou. No. DMA 58-94

(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. F. Robertson #4486.29 Title Mining Engr. Date 2/20/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Checked for Engineering Allowability

Signature W H King Title Executive Officer Date FEB 27 1958

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.

SUMMARY OF DOCUMENTED COSTS

UNION MINES, INCORPORATED

Contract No. Idm-8995 | Docket No. IMEA 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

224 New Customhouse
Denver 2, Colorado
February 27, 1958

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4136 (Uranium) Contract Idm-2995, Union Mines, Inc., (Ruth K. and Sylvia claims) Montrose County, Colorado - Operator's Monthly Progress Report for the months of August, September, and October, 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.

The work is being performed partly under independent subcontract, and partly at fixed unit costs. The drilling rates are as low or lower than the rates contained in the lowest and best bid submitted with the application. Under the circumstances, the rates for the work performed under independent subcontract are considered to be reasonable.

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.

<u>Disallowance, Core Drilling</u>

Amendment No. 5 stipulates that the holes be drilled not to exceed 10 feet into the red mudstone underlying the Salt Wash member of the Morrison formation. Hole No. RK-16, which was drilled during the period, penetrated 13 feet into the red mudstone, therefore the reported cost, including Incidental Allowance for three feet of core drilling is to be disallowed as follows:

Disallow reported cost of 3 feet of core drilling at $3.50 per foot ---------- $ 10.50
Disallow Incidental Allowance for 3 feet of core drilling at $0.47 per foot ---------- 1.41

Total amount to be disallowed ---------- $ 11.91

Withhold an amount of $500.00, pending performance of additional work; or, if additional work is not approved by the Government and performed by the Operator, continue to withhold the amount of $500.00, pending resolution of matters prerequisite to closing the account. A recess of operations has been requested by the Operator

Reconciliation with Amount Reported by the Operator on Form MF-104 for August, September and October, 1957

Amount reported on Form MF-104 for August, September, and October, 1957 ---------- $5,993.63
Amount to be disallowed ---------- 11.91
Acceptable cost for August, September, and October 1957 ---------- $5,981.72

Government participation at 75 percent ---------- 4,486.29
Amount to be withheld ---------- 500.00

Balance due the Operator ---------- $3,986.29

Remarks:

Date of Report ---------- February 17, 1958
Date Received in Field Office ---------- February 18, 1958
Date Received in Region Office ---------- February 21, 1958

Original signed by
W. H. KING
W. H. King

Enclosures

JDC:hmh

CC: Chmn. Op. Comm. (2)
DMEA/BPC
MF-104 file, Reg. XXI
Harshman)
Hmaler) w/copy of Engr/s report
DMEA/G.Jet)
Townsend)
Chron

DMEA
DEPARTMENT OF THE INTERIOR

FEB 21 1958
REGION III
DENVER, COLORADO

P. O. Box 360
Grand Junction, Colorado

February 20, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: H. F. Robertson

Subject: Docket No. DMEA 4136 (Uranium), Contract Idm-E 995, Union Mines, Inc. (Ruth K. and Sylvia claims), Montrose County, Colorado. Progress report for August, September, and October 1957.

The subject property was visited by a DMEA engineer on August 5, September 4, and October 9, 1957. Mr. Louis P. Gaggini, project supervisor for the operator, accompanied the engineer on each of the progress inspections. As of the October 9 inspection, five Stage I holes had been completed and the drilling contractor's equipment moved elsewhere. The operator claims payment for costs incurred during the period from July 30 through October 15, 1957 as follows:

Item	Units	Unit cost	Total costs
Actual Costs			
Core drilling	305.5 feet	$3.50	$1,069.25
Non-core drilling	2,140.0 feet	1.75	3,745.00
Fixed Unit Costs			
Incidental allowance	2,445.5 feet	0.47	1,149.38
Chemical analyses	6 each	5.00	30.00
Total claimed			$5,993.63

The claims for the above costs are supported by the drilling contractor's invoice and assay certificates.

The operator submitted geologic and radiometric logs of the five holes completed during the reporting period. The DMEA gamma-ray logging unit was able to probe the ore-bearing sandstone in only three of the five holes completed. However, the completed hole depths are verified by the geologic logs, driller's reports, and physical inspection of the core.

DMEA geologist, Donald P. Elston, was consulted concerning coring intervals with respect to the top of the Salt Wash member of the Morrison formation and penetration of red mudstone underlying the ore-bearing sandstone. The core from the subject holes was logged by Mr. Elston during October 1957. In the opinion of the geologist and the inspecting engineer, the Salt Wash-Brushy Basin contact was picked by the operator within reasonable limits. With respect to penetration of red mudstone underlying the ore-bearing sandstone (based on the maximum penetration specified by Amendment No. 5), a disallowance of 3.0 feet of coring is recommended in hole no. RK-16 as inspection of the core reveals that 13.0 feet of red mudstone was penetrated below the ore-bearing sandstone.

Hole locations were checked during the inspections and are in accordance with the approved locations shown on the map.

The five holes completed during the subject period were barren of uranium mineralization. DMEA radiometric logging results verified those obtained by the operator in holes RK-12, RK-16, and RK-20. The other two holes, RK-11 and RK-14, were not probed by the Barnaby unit. However, the core was checked with a Geiger counter and no radiometric anomalies were noted.

Stage I of the subject contract is now essentially completed. One more hole, RK-13, is authorized but will probably never be drilled due to being at an inaccessible site and not justified by results obtained by the rest of the first stage drilling. The operator has requested a suspension of operations extending from October 15, 1957 to April 1, 1958. It is advisable, therefore, to withhold the usual amount pending resumption of operations.

The operator submitted in quintuplicate for the reporting period, a signed narrative report with map, lithologic and radiometric logs, Forms MF-104 and MF-104A, assay certificates, and one copy of the invoice for drilling. One copy of the driller's daily report was included with the documents. Other documentation to support this claim is not required by the contract.

Payment of $4,486.29 or 75 percent of the amount claimed, $5,993.63 less $11.91 for excess core drilling of the red mudstone underlying the ore-bearing sandstone, is recommended by the inspecting engineer.

H. F. Robertson

H. F. Robertson,
Mining Engineer

HFR/bh
Enclosure (table)

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 Aug. Sep. Oct. 7 195 Docket No. DMEA 1136 Contract No. [illegible] 995
Operator's Name Union Mines, Incorporated Minerals Uranium
Address 833 North 7th St., Grand Junction, Colorado

OPERATION Stage I	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	1[illegible].25	305.5	1[illegible].25	305.5	3.50	1,100	3.50
Churn Bit	ft.	3745.00	2140	4140.75	3005	1.50	4,400	1.75
Incidental Allowance	ft.	1117.30	2415.5	1997.73	4250.5	.47	5,500	.47
Auger								
Stripping								
Trenching								
Test Pits								
Drilling [illegible]	hrs.	—	—	924.00	77	12.00	00	12.00
Roads and Trails								
Geological Analysis	sample	30.00	6	30.00	6	5.00	22	5.00
Total Distributed Costs		5993.63		11,379.73				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5993.63		11,379.73				

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 Feb. 17, 1950 Operator Union Mines, Incorporated

Per [signature] Title Vice President

Remarks: H.F.P. Costs to date include the following disallowances:
10.0 ft. Core Drilling $37.00
10.0 ft. Incidental Allowance 5.00
$42.00

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

FINAL DISTRIBUTION
MADE MAR 7 1958

Administrative Audit Difference Statement

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

Date: March 6, 1958
Payee's Reference: August, September and October

Dear Mr. Gaggini:

EXTRA COPY

RECEIVED 10 MAR

DATE		CORR.
3/10	Com	100
		800

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

Amount Claimed $ 5,993.63

Difference $ 11.91

Amount Approved $ 5,981.72

The reason for the difference was due to:

Disallowance, Core Drilling

Amendment No. 5 stipulates that the holes be drilled not to exceed 10 feet into the red mudstone underlying the Salt Wash member of the Morrison formation. Hole No. KE-16, which was drilled during the period, penetrated 13 feet into the red mudstone, therefore the reported cost, including Incidental Allowance for three feet of core drilling is disallowed as follows:

Disallowed reported cost of 3 feet of core drilling at $3.50 per foot	$10.50
Disallowed Incidental Allowance for 3 feet of core drilling at $0.47 per foot	1.41
Total amount disallowed	$11.91

Withhold an amount of $500.00, pending performance of additional work; or, if additional work is not approved by the Government and (continued below *)

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

Very sincerely yours,

N. E. Stokes
Audit Section

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

* performed by the Operator, the amount of $500.00 will continue to be withheld pending resolution of matters prerequisite to closing the account. A recess of operations has been requested by the Operator.

Table I.--Drill hole footage claimed and recommended for August-September-October 1957, Contract Idm-E 995, Union Mines, Inc.

Hole No.	Plug bit	Core above OBSS	Core OBSS*	Core below OBSS	Total Core feet	Total Depth hole	Coring recommended for payment above OBSS	OBSS*	below OBSS	Total
RK-11	490.0	15.0	57.0	2.5	74.5	564.5	15.0	57.0	2.5	74.5
RK-12	420.0	0.0	49.0	4.0	53.0	473.0	0.0	49.0	4.0	53.0
RK-14	430.0	8.0	78.8	7.2	94.0	524.0	8.0	78.8	7.2	94.0
RK-16	400.0	20.0	17.0	13.0	50.0	450.0	20.0	17.0	10.0	47.0
RK-20**	400.0	0.0	34.0	0.0	34.0	434.0	0.0	34.0	0.0	34.0
Totals	2,140.0	43.0	235.8	26.7	305.5	2,445.5	43.0	235.8	23.7	302.5

* Note: OBSS in this instance includes underlying gray or green mudstone.

** Note: The OBSS in this hole was unrecognizable so the entire coring interval is lumped under the OBSS heading.

Recommended for disallowance:

Coring claimed - 305.5 feet
Coring approved- 302.5 feet
Disallowance 3.0 feet of coring

3.0 feet at $3.50 per foot = $10.50
3.0 feet at $0.47 per foot = $ 1.41 (incidental allowance)

Total disallowance $11.91

SECOND NARRATIVE REPORT
STAGE I

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

Introduction

This report covers drilling and other work performed during the months of August, September and October, and since all of the drilling which it seems advisible to do under Stage I of the contract was completed by October 15th, it can be considered a final report for this stage. General plans for Stage II drilling are discussed herein under "Recommendations". This is not, however, to be construed as a formal request for Stage II drilling. At the present time it seems advisable to defer such a request until pending litigation involving lands south of the Ruth K and Sylvia Claims is resolved.

Results

Two of the five holes drilled last month penetrated favorable host rocks but none were mineralized. One of the unfavorable holes, RK 20, did not penetrate any sandstone; another, RK 12 penetrated 34 feet of sandstone but is considered to be in an unfavorable area because of the lack of basal alteration. Chemical assays for the two holes which penetrated significant mineralization last period are given in the Tabular Summary of Drilling attached to this report and on the assay certificates. The 0.17% U_3O_8 material indicated by probing in hole RK 21 must have been lost. This material should have been at the bit face on a run which was "blocked", and might have for this reason been crushed and washed away.

Hole Locations

All numbers between RK 11 and RK 21 originally assigned to Stage I drilling in the company's drill hole records have been accounted for with the exception of RK 13 which is at an inaccessable site. In the last progress report an additional hole, RK 22 was suggested, but is no longer necessary since the company has at it's disposal information on LC 6 and LC 10 drilled by the North Continent Company just south of Ruth K No. 4 (see map).

Drilling on Adjacent Land

North Continent's LC 6 penetrated 0.5 ft. of material containing 0.17% U_3O_8 and 0.61% V_2O_5. LC 10 penetrated weak vanadium mineralization.

Trail Building and Site Preparation

The trail to and preparation of the site for RK 12 consumed another 18 hours of bulldozer time. A request made April 18th that the company be allowed to charge 3.6 hours at $10.00 per hour against $36.00 appropiated, but unused funds allocated for Stage I bulldozer work resulted in the $36.00 being disallowed. The additional 18 hours work done this period was therefore paid for by the company without any government participation. Costs for bulldozer work thus absorbed now amount to $510.00, including moving charges.

Drilling

Drilling was resumed on July 31, 1957 but due to a continuation of wet weather and other problems confronting the contractor, progress was very slow. By September 6th, however, all holes but RK 11 and RK 12 had been drilled. Because the new locations for these holes had not yet been approved, the contractor moved his rig to another project and did not return until September 21st. By October 15th drilling and all other field work had been completed.

Recommendations

The company intends to recommend that the Stage I phase of the project be closed with the nine holes completed to date and that Stage II drilling be allowed as offsets to RK 17, RK 21 and North Continent's LC 6. A factor in delaying the request for approval of Stage II drilling is the legal status of the claim on which LC 6 is located. North Continent is presently in the process of concluding a quiet title action on its claims and it is anticipated that a favorable ruling will be handed down shortly. When this occurs the ground close to LC 6 will probably be conveyed to Union Mines, thus making it possible to drill offsets within 100 feet of that hole. The locations for these offsets as well as the offsets to RK 17 and 21 will be shown on the map attached to the request for Stage II drilling.

Consideration should also be given to the possibility of ammending the contract so as to permit more drilling in favorable areas where mineralized material has not as yet been encountered.

Union Mines Incorporated

By Louis P. Gaggini

Louis P. Gaggini

Date 8/1/57

Minerals Assay Laboratory

54[illegible]land Avenue -:- Grand Junction, Colorad[illegible]

Phone CH 2-8021

L#4729

NAME Louie Gaggini

ADDRESS 433 North 7th St. Grand Jct. Colo.

SAMPLE RECEIVED 731/57

LAB No.				PERCENT URANIUM % U_3O_8	PERCENT VANADIUM % V_2O_5	PERCENT LIME % $CaCO_3$	PERCENT TUNGSTEN OXIDE % WO_3	PERCENT MOLY % MO
3178	Ruth K. Project	RK-17	396.7-397.2	0.03	0.23			
3179	" " "	RK-17	397.2-397.4	0.03	0.13			
3180	" " "	RK-17	397.4-397.9	0.02	0.07			
3181	" " "	RK-21	454.2-454.6	Trace	0.03			
3182	" " "	RK-21	454.6-455.0	0.02	0.08			
3183	" " "	RK-21	455.0-455.2	0.04	0.13			

TOTAL CHARGES $ $30.00 Paid

R. E. Morris

Form MF-164 (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):						
TOTALS	5386.10 ~~5412.35~~		5386.10 ~~5412.35~~	5,343.22	—	5,343.22

RECEIVED JUL 22 1957 D.M.E.A.

DMEA DEPARTMENT OF THE INTERIOR JUN 26 1957 REGION III DENVER, COLORADO

DMEA DEPARTMENT OF THE INTERIOR JUL 10 1957 REGION III DENVER, COLORADO

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
Louis 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:

$ 4,007.42

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 [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 Stage I	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	910.00	260	910.00	260	3.50	1,100	3.50
~~Churn~~ 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 ~~4462.10~~		5386.10 ~~4462.10~~				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5386.10 ~~4462.10~~		5386.10 ~~4462.10~~				

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.

UNION MINES, INCORPORATED

Date ..... Operator 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.

DMEA DEPARTMENT OF THE INTERIOR JUL 10 1957 REGION III DENVER, COLORADO

DMEA DEPARTMENT OF THE INTERIOR JUN 26 1957 REGION III DENVER, COLORADO

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

DMEH! 58-6

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III
224 New Custom House, Denver 2, Colorado

FINAL DISTRIBUTION
MADE JUL 19 1957

Administrative Audit Difference Statement

Mr. Louis P. Caggini, Vice President,
Union Mines, Inc.
304 Main Street,
Grand Junction, Colorado

Date: July 18, 1957
Payee's Reference: April 1957

Gentlemen:

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 22 1957

DATE	INITIALS	CODE
7/22	P.K.	220
22	CON	100
		800

Amount Claimed $ 5,386.10

Difference $ 42.88

Amount Approved $ 5,343.22

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,

Randal R. Cooper
Fiscal Officer, Region III

~~Audit Section~~

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

ORIGINAL FILE COPY
DMEA
RECEIVED
DATE

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-8995, 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:hmk
cc: Chmn. Op. Comm. (2)
IMEA, DFC
Harshman) w/copy of Engr's
Townsend) report
MF-104 file, Reg. III
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 22 1957
DATE INITIALS CODE

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 P. 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

June 3, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JUN 5 - 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 #Dem-1598
Union Mines, Inc.
(Ruth K & Sylvia Claims)
Montrose County, Colo.

Dear Mr. Harshman:

Transmitted herewith are the following documents pertaining to subject contract:

1. First Narrative Report together with Map and Drill Logs (5 copies)

2. Daily Drill Logs (1 each)

3. Drilling Contractors Invoice (1 each)

4. Bulldozer Operators Invoice (1 each)

5. Operators Monthly Report and Voucher (5 copies)

6. Operators Unit Cost & Progress Report (5 copies)

Very truly yours,

UNION MINES, INCORPORATED

By Louis P. Gaggini
Louis P. Gaggini

cc: M. H. Salsbury, USBM,
P. O. Box 300, Grand Junction, Colo.

FILE COPY
DMEA
JUL 22 1957

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. Gandik of the Grand Junction 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 1,560 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-foot 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
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

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DMRA
JUL 1957

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

JAN 13 1959

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-[illegible]
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

RECORDS MAY 21 1958

DATE	INITIALS	CODE
		800

224 New Customhouse
Denver 2, Colorado
May 19, 1958

CERTIFIED MAIL

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

Re: Docket No. DMEA 4156 (Uranium)
Contract No. Idm-8395
Union Mines, Incorporated
(Ruth K. and Sylvia claims)
Montrose County, Colorado

Dear Mr. Caggini:

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 (d) 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. Harkman
E. N. Harkman

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

JWT:prl
cc: Chmn. Op. Comm. (2)
Harkman } 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

Official

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Audit 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-2895 (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 ninth 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 18 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 16,000 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 3 Amended" which is attached to Amendment No. 2 of the Contract.

(v) The words "Figure 3" are substituted for the words "Figure 3 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	
13,000 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 allowance2/ for each foot of core and non-core drilling completed 16,000 feet @ $0.47/ft.	7,520.00

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		$43,396.00"

* * * * * * *

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.

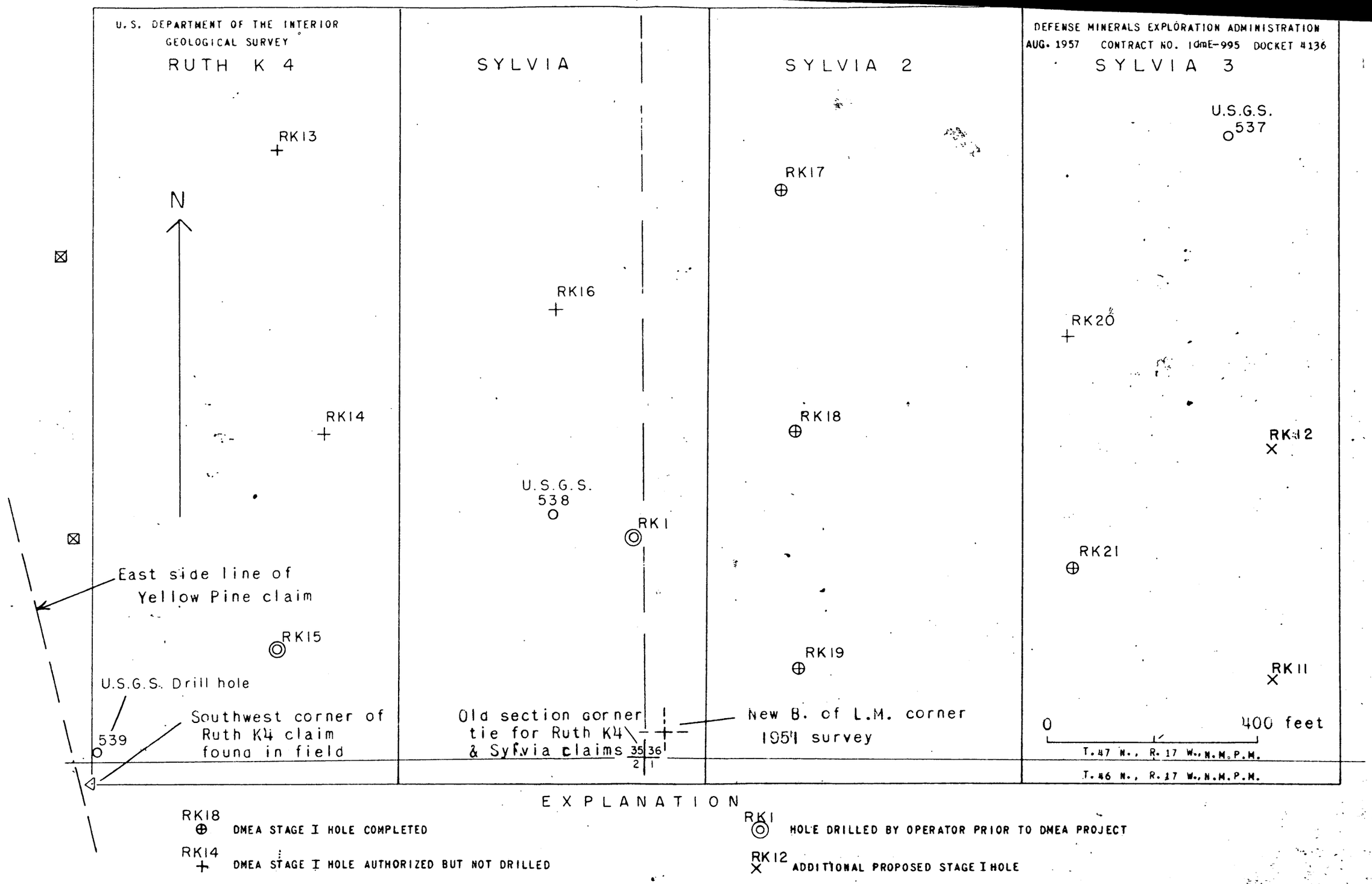
THE UNITED STATES OF AMERICA

By C. J. Mitchenor
Administrator, Defense Minerals
Exploration Administration

UNION MINES, INCORPORATED

By W. R. Jewlove
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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DATE	INITIALS	CODE
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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. I4m-8995, 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. Saggini,
Vice President
Union Mines, Inc.
435 North Seventh Street
Grand Junction, Colorado.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosure

JWT:prl

cc: Chem. Op. Comm.-2) w/copy of
Harshman) Operator's
DMEA/DFC) letter of
Healer) July 29.
Geneva. file)
DMEA/Gr.Jct.
Townsend
Chron.

Official

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DATE	INITIALS	CODE
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224 New Customhouse
Denver 2, Colorado

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. 18m-1995, 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. K. Salsbury, Mining Engineer, Bureau of Mines, and W. B. Gaskill, 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.

Original signed by
E. N. HARSHMAN

JWT:pri

E. N. Harshman

cc: Finance Office,
Region III - w/copy of confirmation of approval.
Harshman } w/copy of confirmation of approval
Shaw (2) } and joint memorandum by field
Hasler } examiners.
Townsend }
Corres. file }
Chron.

204 New Customhouse
Denver 2, Colorado

April 25, 1957

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1957

Mr. Louis P. Gaggini
Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

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

Dear 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. 65° E. approximately 100 feet;

2. Hole MK-16 to be moved from original location on a bearing of about S. 80° 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.

MINERAL DEPOSITS
DMEA
IN REPLY REFER TO:

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

April 19, 1957

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Memorandum

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

Through: J. William Hasler
J. F. Shaw

From: M. H. Salsbury
W. B. Gazdik

Subject: Docket No. DMEA 4136 (Uranium), contract No. Dm-[illegible] 939, 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 500 feet north of the south boundary of section 35, T. 13 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 15 will be approximately 810 feet north of the south boundary of section 35 and 35 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 300 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

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.

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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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

Filed for record the 9th day of Nov. 1953 at 8:06 o'clock A M #284282

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 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. 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
DATE
INITIALS
CODE
1957

Filed for record the 9th day of Nov. 1953 at 8:03 o'clock A M #204203

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. 19 53

ENGINEERS ASSOCIATES, INC. (Seal)

By /s/ Charles W. Yotter (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
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 290, 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 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 .....
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

DATE
RECEIVED
DMEA
COMMENTS

Filed for record the 9th day of Nov. 1953 at 8:04 o'clock A M #204201

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 E 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

EXTRA COPY
B M E A
RECEIVED APR 28
DATE INITIALS CODE

EXTRA COPY
DMEA
RECEIVED

DATE		INIT.
		800

224 New Customhouse
Denver 2, Colorado

April 15, 1957

Memorandum

To: T. A. Christensen

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

Subject: Docket DMEA-4136 (Uranium) Contract Idm-[illegible], 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, DMEA, and a copy of a letter from the Chairman, Operating Committee, DMEA, to this office concerning reimbursement to the Operator.

As stated in the Chairman's letter, checks are to be made payable to:

Louis P. Caggiani, Vice President
Union Mines, Incorporated.

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

Enclosures
JDC:bh
cc: Chmn. Op. Comm. (2)
Harshman)
Hasler)
Shaw (2))w/copy of above
Townsend)letters
Contract File, Reg. III)
Corres. File, Reg. III)
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE
		800
AMENDMENT NO.		5

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

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. Idm-E995, 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 M. E. Newlove
M. E. Newlove, President

(SEAL)

UNITED STATES OF AMERICA

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

IN REPLY REFER TO:

UNITED STATES
DMEA DEPARTMENT OF THE INTERIOR
DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

MINERALS DIVISION RECEIVED MAR 20 1957

MAR 21 1957

REGION III
DENVER, COLORADO

P. O. Box 300
Grand Junction, Colorado

19th March 1957

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE
	EMH	

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 4136 (Uranium), contract Idm-E 995, Union Mines, Incorporated (Ruth K. and Sylvia Chaine), Montrose County, Colorado.

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 E. 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-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. R. Salsbury
M. R. Salsbury,
Bureau of Mines

MRS/mlr

March 15, 1957

DMEA
DEPARTMENT OF THE INTERIOR
MAR 19 1957
REGION III
DENVER, COLORADO

Mr. E. H. 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".

Very truly yours,

UNION MINES, INCORPORATED

By Louis P Gaggini /m
Louis P. Gaggini

LPG/m

cc: Mr. Salisbury

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE

March 15, 1957

3/18 C ~~800~~ 220

I have orig. + sent 700 other copies

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

W.O.

OFFICIAL FILE COPY DMEA RECEIVED FEB 1 1957		
DATE	INITIALS	CODE
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		800
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.

UNION MINES, INCORPORATED

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

(Seal)

UNITED STATES OF AMERICA

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

January 21, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JAN 23 1957
REGION III
DENVER, COLORADO

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

Re: Docket No. DMEA 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

By Louis P. Gaggini
Louis P. Gaggini

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 1 1957

DATE	INITIALS	CODE

Encl. 5 copies

cc: J. W. Hassler

EXPLORATION PROJECT CONTRACT

UNION MINES, INCORPORATED

DOCKET NO. DMEA 4136

CONTRACT NO. Idm-E995

RECEIVED DEC 10 1956

AMENDMENT NO. 3

It is agreed this 3rd day of December, 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-E995, Docket No. DMEA 4136, dated August 21, 1956, hereinafter called the "Contract," that:

1. The date, October 15, 1956, fixed in Article 3 of the Contract form as 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 sextuplicate the day and year first above written.

UNION MINES, INCORPORATED

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

(Seal)

UNITED STATES OF AMERICA

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

November 30, 1956

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-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

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

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-E995, 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 MF-200 (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 M. E. Newlove
M. E. Newlove, President

(Seal)

UNITED STATES OF AMERICA

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

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

M. H. Salsbury,
U. S. Bureau of Mines

W. B. Gazdik

W. B. Gazdik,
U. S. Geological Survey

MHS/mlr

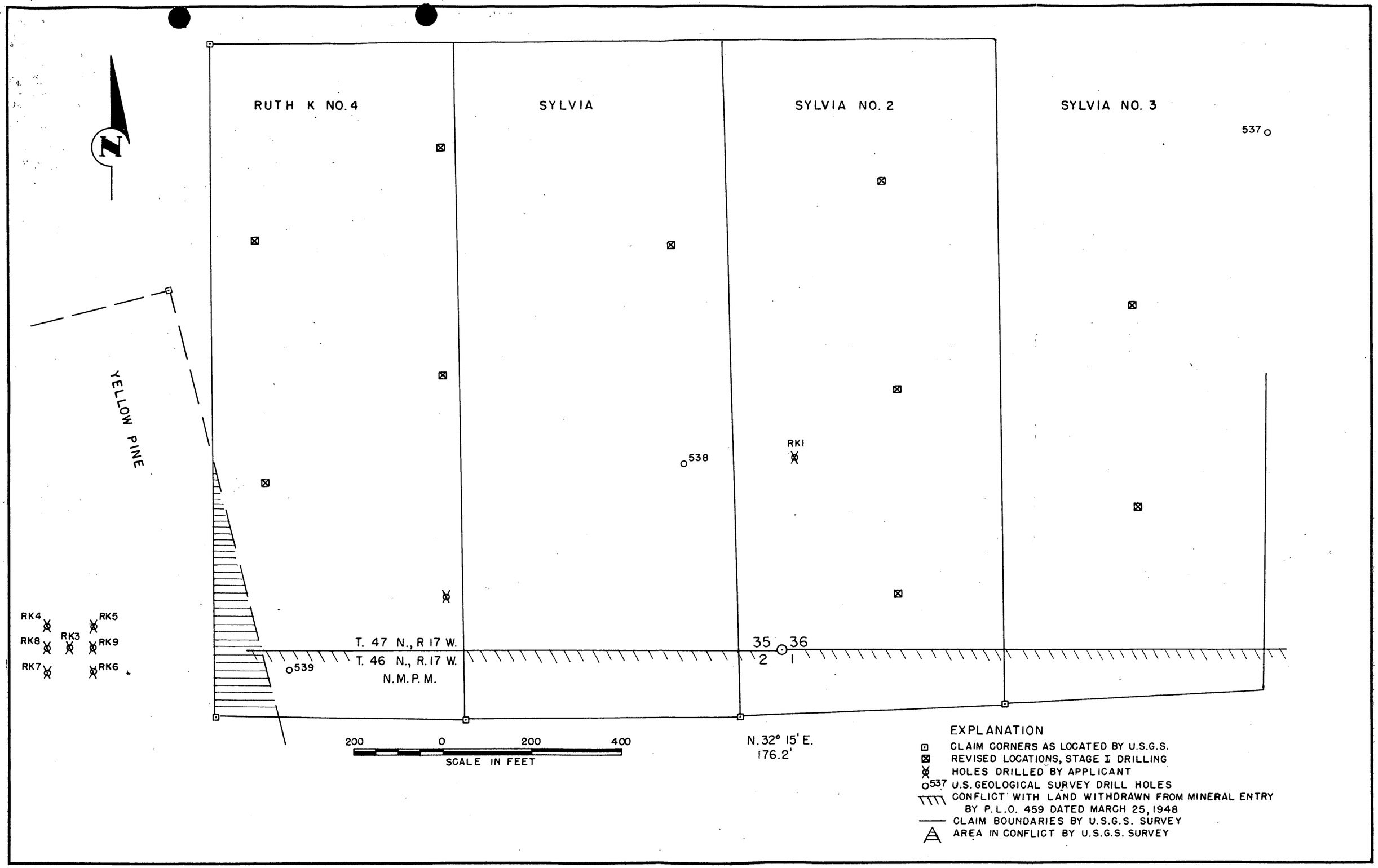

FIGURE 2 AMMENDED-SKETCH MAP SHOWING PART OF THE RUTH K AND SYLVIA GROUP OF CLAIMS, PROPOSED HOLE LOCATIONS AND PREVIOUS DRILL HOLE LOCATIONS, URADO URANIUM CORPORATION, MONTROSE COUNTY, COLO. DMEA 4136 OCTOBER 1956

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

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-E995, 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 [signature]
President

By [signature] for
W. M. Traver
Executive Officer, DMEA
Field Team, Region III

(SEAL)

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. V. Traver
Executive Officer, DMEA
Field Team, Region III
224 New Custom House
Denver 2, Colorado

Re: Docket No. DMEA 4136 (Uranium)
Contract No. Ida - 8995
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 F. Magnini.

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. Newlove
W. E. Newlove, President

E:/m

DMEA Form 14

Contract No. Idm-E 595

Docket No. 4136

Terminated contract

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
August 21, 1956	III	Colorado	Uranium

Name and Address of Operator:

Union Mines, Incorporated
304 Main Street
Grand Junction, Colorado

	Reserve	Obligation
Prior Amount	0	45,600.00
Increase	0	0
Decrease	~~0~~	~~37,106.29~~
Revised Amount	0	8,493.71

Remarks:

(Name)

Allen D. Baken, Chief
Operations Control and
~~Statistics Division~~
(Title)

Date delivered to Bureau of Mines, Washington 7/28/58

22845

Contract No. Idm-E 995

Docket No. 4136

DEPARTMENT OF THE INTERIOR

Executed contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
August 21, 1956	**III**	**Colorado**	**Uranium**

Name and Address of Operator: **Union Mines, Incorporated**
304 Main Street
Grand Junction, Colorado

	Reserve	Obligation
Prior Amount	0	0
Increase	0	$45,600.00
Decrease	0	0
Revised Amount	0	$45,600.00

Remarks:

(Name)
Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 8/21/56

98963

Government's 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 [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 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 ~~exclusive of allowable costs (see Article 8) in a sum not less than the estimated total allowable costs set forth in Exhibit "A" (see Article 12)~~ **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 thereof, the Operator is not obligated to incur costs in excess of 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(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 costs of drilling incurred by the Operator, the average cost not to exceed the estimated unit cost set forth in the contract.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O Mitterdorf
Administrator, Defense Minerals
Exploration Administration

UNION MINES, INCORPORATED
(Operator)

By Louis P. Gaggini

Title Vice-President

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

A M Eichternach
Secretary

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA-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
Docket No. DMEA- 4136
Contract No. Idm-E 995
Contract Date AUG 21 1956

Operator - Union Mines, Incorporated

RECEIVED AUG 10 1956

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Montrose, State of Colorado, described as follows:1/ Unpatented lode mining claims recorded in the County Clerk and Recorder's Office of Montrose County as follows:

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

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/

None

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, C. 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.

C. O. Adams

[Corporate Seal]

MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
~~Operation Mineral Exploration Contract~~
Docket No. DMEA- 4136
Contract No. Idm-E 995
Contract Date AUG 21 1956

Operator - Union Mines, Incorporated

RECEIVED
JUL 16 1956

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Montrose, State of Colorado, described as follows:1/ Unpatented lode mining claims recorded in the County Clerk and Recorder's Office of Montrose County as follows:

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

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/

None

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

Worcester Mines [Seal]

(a partnership) [Seal]

[Seal]

I, John M. Steel 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]

EXPLORATION PROJECT CONTRACT
UNION MINES, INCORPORATED
DOCKET NO. DMEA-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 BX. 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 5,590 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 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 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

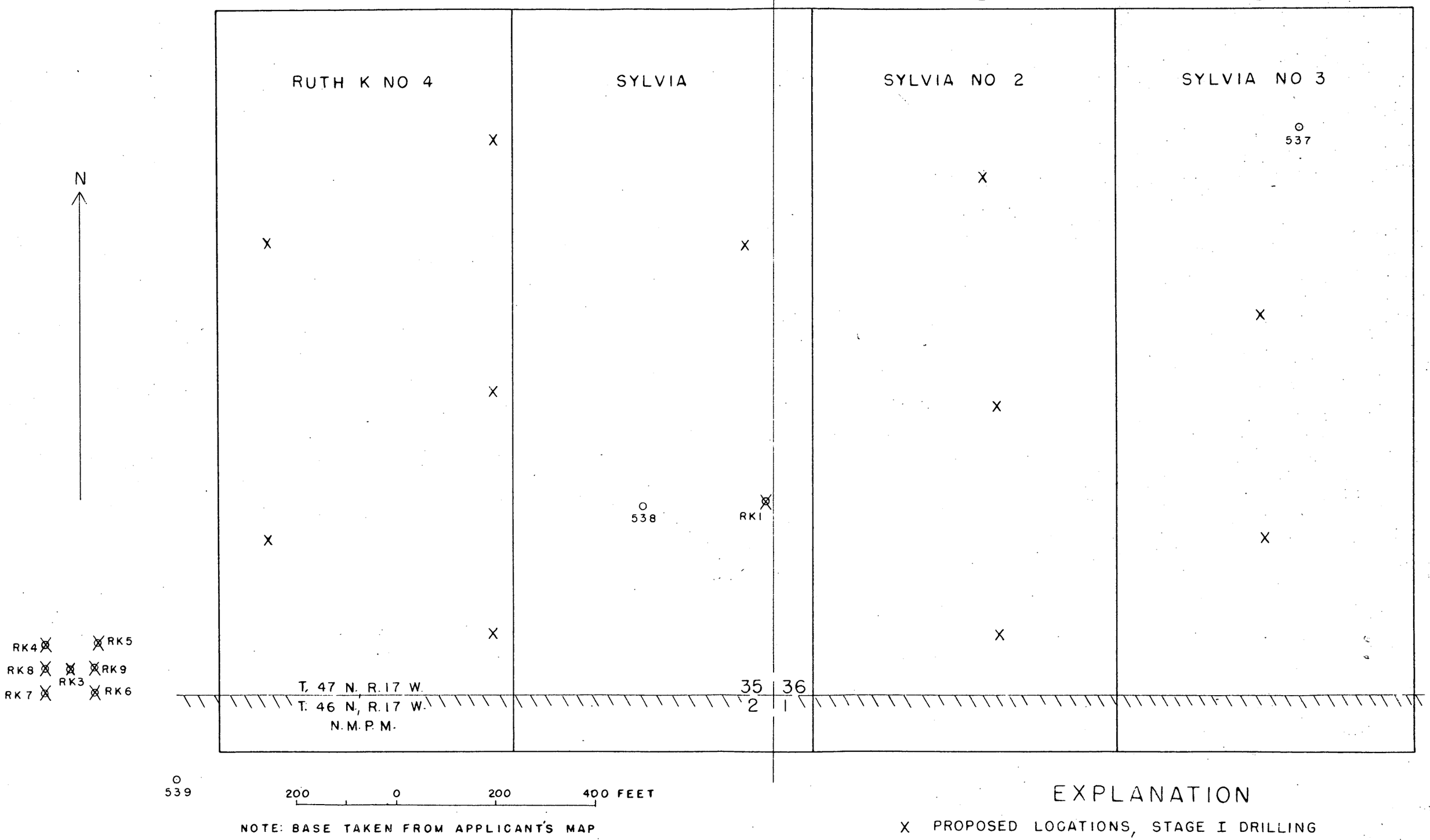
Estimated Total Cost of Stage I	$15,404.80	
Estimated Total Cost of Stage II	45,396.00	
Estimated Total Cost of Project (rounded)		$60,800.00
Government Participation @ 75%		$45,600.00

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

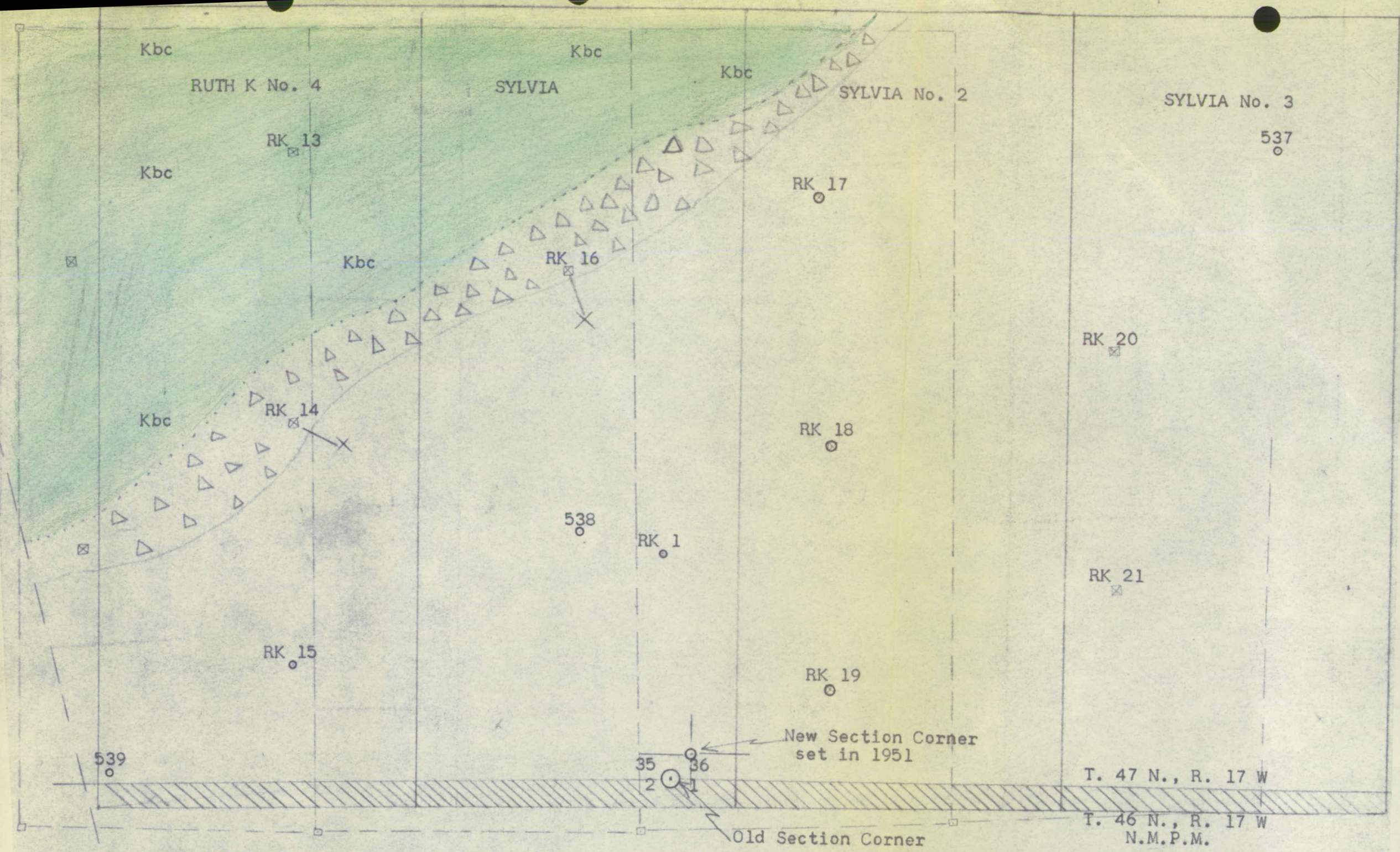
X PROPOSED LOCATIONS, STAGE I DRILLING

⊠ 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.



EXPLANATION

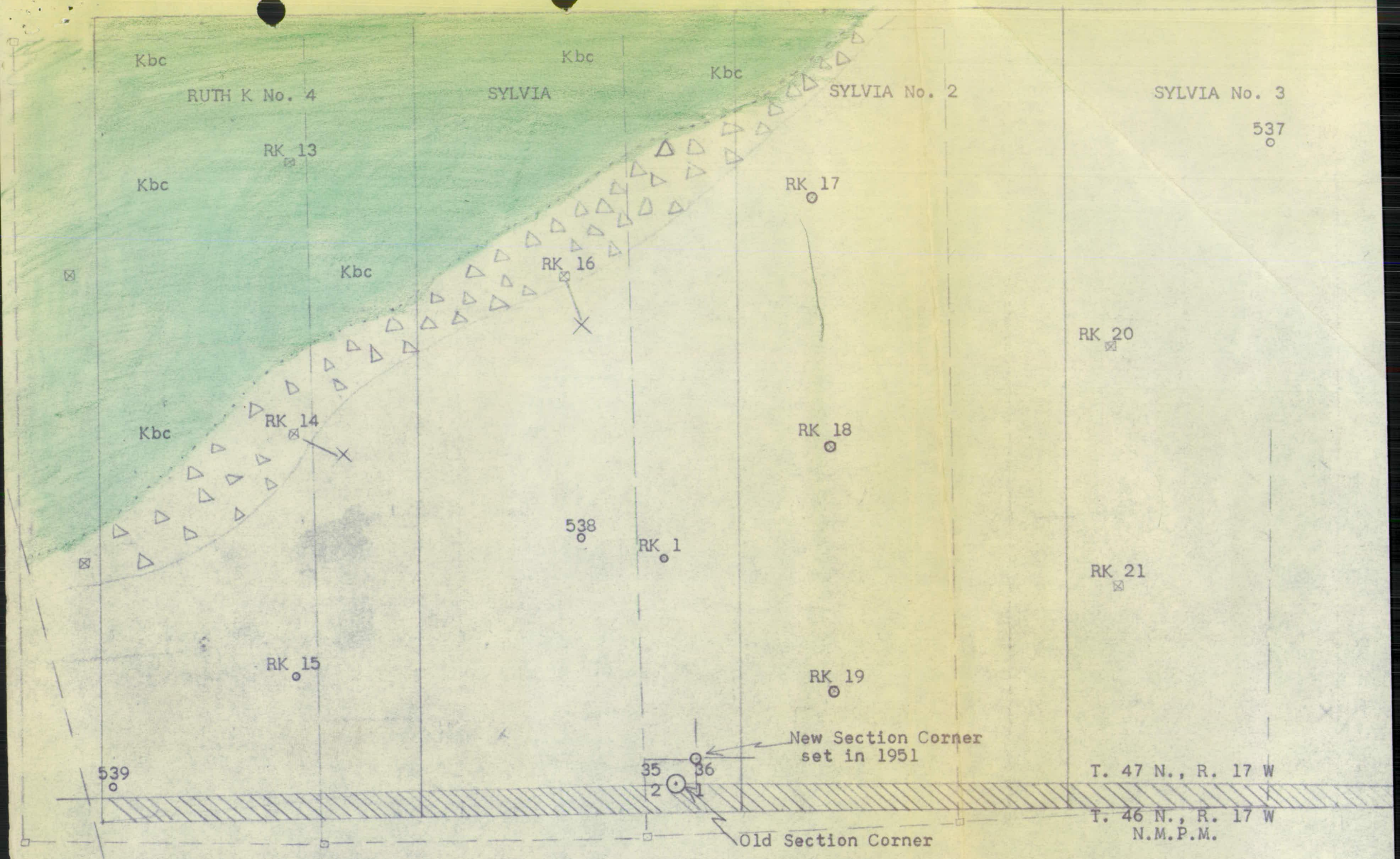
- Claim corners as located by U.S.G.S
- Revised locations, Stage I drilling as per October map
- Holes drilled by applicant
- 539 U.S. Geological Survey drill holes
- Conflict with Land Withdrawn from Mineral Entry by P.L.O. 459 dated March 25, 1948
- Claim boundaries by U.S.G.S. Survey
- Claim boundaries according to Company and original locators survey
- Holes completed to date under DMEA 4136

Scale 1" = 200'

FIGURE 2 AMENDED - SKETCH 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, COLO. DMEA 4136 MARCH 1957

EXPLANATION (Con.)

- × Proposed revised locations
- Kbc Burro Canyon Formation
- Boulder Strewn Slope



EXPLANATION

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