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TERMINATION AGREEMENT

It is agreed this 8th day of February, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Colamer Corporation, hereinafter called the "Operator," parties to Exploration Project Contract Idm-2940 (Docket No. DMEA-4017), dated April 9, 1956, as amended, hereinafter called the "Contract," that:

1. Effective as of the close of business on September 3, 1956, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

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

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

4. All rights of the Government provided for in the Contract with respect to certification of discovery or development, percentage royalty and liens for its payment, records, audit, and recovery of any overpayment, are preserved.

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

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

THE UNITED STATES OF AMERICA

By C O Mathews Jr
Administrator, Defense Minerals
Exploration Administration

COLAMER CORPORATION

By Wm. B. Lewis

Title Secretary

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Indritz 2/5/57
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EXPLORATION PROJECT CONTRACT
COLAMER CORPORATION
DOCKET NO. DMEA-4017

Amendment No. 1

It is agreed this 28th day of June, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Colamer Corporation, parties to that certain Exploration Project Contract No. Idm-2940, Docket No. DMEA-4017, dated April 9, 1956, hereinafter called the "Contract," that effective April 9, 1956, the Contract is amended as follows:

Under Exhibit "A," Description of the Work, General Provisions, the first two paragraphs are deleted and the following substituted in lieu thereof:

"The work consists of exploration by core and non-core drilling to test the Poison Canyon sandstone of the Brushy Basin member and the Westwater Canyon member of the Morrison formation. The location of the work is indicated on the attached map (Figure 2).

"Each hole shall be non-core drilled through the upper formations to a point approximately five feet above the upper contact of the Poison Canyon sandstone, and then core drilled to a point approximately five feet below the lower contact of the Poison Canyon sandstone. To this point drilling depths are expected to average 450 feet, and the cored sections of the holes are expected to average 100 feet in length. Upon the prior written approval of the Government any hole may be extended through the Westwater Canyon sandstone by means of core or non-core drilling. The additional footage required is expected to average 120 feet per hole extended, and shall be charged against the footage authorized in the stage in which the work occurs. The minimum size of core shall be NX. All holes shall be reamed and cased as necessary."

This agreement shall not be construed to increase the estimated total cost of the project nor the aggregate total amount which the Government may be required to contribute under the provisions of the contract.

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

THE UNITED STATES OF AMERICA

By O Mitchudorf
Administrator, Defense Minerals
Exploration Administration

COLAMER CORPORATION

By Frank Boyle

Title Pres

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DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE IDM-E 940 DMEA NO. 4017

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

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

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

Left Side

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

Right Side

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

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

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

Left Side

✓Folder No. 2: (In chron. order) ~~Interim Summary Reports by W. O. Engineers~~ MF 104's & MAPS & some drill logs

Right Side

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

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

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

RECEIVED		
DATE		CODE
11-19	Chamber	800
22	Comm	100
11	74	110
		120
		700

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Colamer Corporation
Fidel and Rouse Building
Grants, New Mexico

pertaining to Exploration Project Contract No. Idm-E940, Docket No. DMEA-4017 (Uranium), including Amendment No. 1 and Termination Agreement, February 8, 1957, for the months April, 1956 to September, 1956, inclusive, covering a project for exploration of uranium on property known as Sec. 10, T. 13 N., R. 9 W., located in McKinley County, New Mexico.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Acting Executive Officer of the DMEA Field Team, and a determination of the reasonableness and propriety of the costs.

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

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

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

(c) a major portion ($48,648.97) of the costs incurred covered work performed at unit rates under an independent contract; and

(d) the balance ($10,808.76) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs for work actually performed.

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

Total cost as billed by the Contractor		$58,612.84
Add: Additional allowable items not claimed by the Contractor (Schedule attached)		1,140.61
Subtotal		$59,753.45
Exceptions: (Schedule attached)		
By DMEA Finance Officer	$1,194.59	
Less: Reinstatements	906.57	
	$ 288.02	
Herewith	7.70	295.72
Total Accepted Cost		$59,457.73

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 Forty-four thousand, five hundred ninety-three and 30/100ths Dollars

** 44,593.30 **

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

November 7, 1957

Donald T. Finch

Donald T. Finch, Auditor

Contract Idm-E940 | COLAMER CORPORATION | Docket IMEA-4017

SCHEDULE OF ADDITIONS AND EXCEPTIONS

Additional items not claimed by Operator which are allowable under the terms of Contract:-

Allowable Standby Time, invoiced by Subcontractor			
May, 1956	$214.29		
June, 1956	184.47		
July, 1956	252.07		
August, 1956	37.66	$688.49	
Allowable New Mexico School Tax at rate of 2% invoiced by Subcontractor			
July, 1956	$232.27		
August, 1956	118.40		
September, 1956	42.75	$393.42	
√ 80 Ft. non-core drilling @ 70¢, invoiced May, 1956. Claimed as core drilling. (See disallowance of core drilling below)		$ 56.00	
√ 5/10ths Ft. core drilling Hole No. 114 @ $3.50 per ft., invoiced May, 1956		$ 1.75	
√ 1 Ft. non-core drilling Hole No. 180, invoiced August. Claimed as core drilling; should be (See audit disallowance)		$ .95	
Total additional items			$1,140.61

None of the additional allowances shown above increased the applicable unit costs above the allowable maximum unit costs provided in the Exploration Contract.

The Executive Officer of the IMEA Field Team, Region III, concurs with the Auditor concerning all of the foregoing additional items.

Prior Disallowances			
May, 1956 MF-104			
√ (1) 80 Ft. Core Drilling Hole No. 104 @ $3.50/ft. Log and Subcontractor's invoice dated 6/16/56 reflected 98 ft. core drilling instead of 178 ft. as claimed	$280.00		
(2) Incidental allowance 80 ft. @ 27¢/ft. Disallowance of Incidental Allowance based on 80 ft. of core drilling disallowed	21.60 R		
Total Prior Disallowances May, 1956		$301.60	
June, 1956 MF-104			
(2) Cost of Non-Core Drilling Considered as being in excess of actual cost		$189.62 R	
August, 1956 MF-104			
(2) Hole No. 184			
55 Ft. Core Drilling @ $3.50/ft	$192.50		
400 Ft. Non-Core Drilling @ 95¢/ft.	380.00		
Incidental Allowance 455 ft. @ 27¢/ft. Disallowed on theory hole was not completed because 10 ft. from 455 ft. to 465 ft. lost	122.85	$695.35 R	
September 1 to 3, 1956			
(1) Prorata portion of standby time applicable to core drilling on Holes Nos. 194 and 207 were in excess of allowable maximum unit cost of $3.50 per foot		$ 8.02	
Total Prior Disallowances			$1,194.59

Schedule of Additions and Exceptions (Cont.)

Note No. (1) indicates the Acting Executive Officer of the IMEA Field Team, Region III, and the Auditor concur in the disallowances so flagged.

Note No. (2) indicates the disallowances so flagged are reinstated with the concurrence of the Acting Executive Officer, IMEA Field Team, and the Auditor for the reasons indicated below.

Reinstatements

May, 1956

Incidental allowance for 80 ft. @ 27¢ disallowed above is reinstated because invoice from the subcontractor dated 6/16/56 disclosed the 80 ft. should have been claimed by the Operator as non-core drilling instead of core drilling. See above for the additional allowance for the non-core drilling item. $ 21.60

June, 1956

Cost of non-core drilling disallowed because amount considered as being in excess of subcontract and amendment. 189.62

The subcontract was amended as follows: -

"The following prices will become effective June 15, 1956:

(a)	Core	$ 3.50 per foot
(b)	Non-core	0.95 per foot
(c)	Standby time	12.00 per hour "

Prior to the June 15,1956 amendment, the subcontract rate for non-core drilling was 70¢ per foot. The subcontractor's invoices dated July 6, and July 17, 1956, reflect that the amended rate applied to the total footage of all holes completed subsequent to June 15, 1956, and the prorata basis assumed by the examining engineer to arrive at the recommended disallowance was in error. Inasmuch as the Operator claimed invoice cost incurred, which was below the allowable maximum per unit, the disallowance is reinstated.

August, 1956

Hole No. 184

55 ft. core drilling @ $3.50	$192.50	
400 ft. non-core drilling @ 95¢	380.00	
Incidental allowance 455 ft. @ 27¢	122.85	695.35

This disallowance is reinstated pursuant to memorandum from Acting Executive Officer, IMEA Field Team, Region III, who reviewed the matter at the request of the Auditor. He stated in part in a memo 11/6/57 as follows: -

"It is my opinion that Hole No. 184 reached the principal objective and was drilled according to the terms of the contract. Acceptance of costs incurred in drilling this hole is recommended."

Total Reinstatements $906.57

COLAMER CORPORATION

Contract Idm-E940 | Docket DMEA-4017

Schedule of Additions and Exceptions (Cont.)

Audit Disallowances

May, 1956

Non-core drilling claimed for Hole No. 114 exceeded the invoiced footage 1 ft. @ 70¢. Disallowed by audit.	$0.70	
June, 1956		
Core drilling claimed for Hole No. 162 exceeded the invoiced footage 1 ft. @ $3.50. Disallowed by audit.	3.50	
August, 1956		
Core drilling claimed for Hole No. 180 exceeded the invoiced footage 1 ft. @ $3.50. Disallowed by audit.	3.50	
Total Disallowed by Audit		$7.70

The Acting Executive Officer, DMEA Field Team, Region III, concurs with the Auditor concerning all of the foregoing audit disallowances.

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MF-200
(Revised June 1954)

Docket No. DMEA 4017

Commodity Uranium

Contract No. Idm–E

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this ..... day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Colamer Corporation, a Delaware corporation

Reduced costs

whose mailing address is Fidel and Rouse Building
Grants, New Mexico
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 New Mexico, County of McKinley, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] Assignment of Leases, [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 claims of Jean Reynolds, Ira N. Sprecher, Fannie A. Sprecher, Thomas C. King and Joe Cahill.

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Subordination Agreements of the foregoing 5 claimants. Consent to Lien of Thomas C. King, Phyllis J. King, J. V. Reynolds and Jean Reynolds.

(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 May 1, 1956 shall commence the work, and on or before October 31, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $108,120.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $81,090.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

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

(b) To the extent that costs are set forth in Exhibit "A" as "Fixed Unit Costs" they are in lieu of the actual costs that otherwise would be allowable costs of the project under Article 6 of the contract. The Government will contribute to the Fixed Unit Costs as they accrue, on the basis of units of work actually performed. The fixed unit costs include all costs of the work necessary to complete the work.

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By .....

.....
(Operator)

By .....

.....

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

.....

[CORPORATE SEAL]

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

DRAFT
2/1/56
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EXPLORATION PROJECT CONTRACT
COLAMER CORPORATION
DOCKET NO. DMEA-4017

ANNEX I

The land referred to in Article 2 of the Contract consists of 36 mining claims covering all of sec. 10, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico.

The claims are shown on the map entitled "Figure 2. Sketch Map of Section 10, T. 13 N., R. 9 W., - - - -," attached hereto and made a part hereof. The locations of the claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, as follows:

Claims	Book	Page
Phyllis No. 2	4-MCR	494
" " 6	"	496
" " 10	"	498
" " 14	"	500
" " 18	"	502
" " 22	"	504
" " 26	"	506
" " 30	"	510
" " 34	"	512
Fannie No. 4	"	495
" " 8	"	497
" " 12	"	499
" " 16	"	501
" " 20	"	503

Claims	Book	Page
Fannie No. 24	4-MCR	505
" " 28	"	507
" " 32	"	511
" " 36	"	513
Jean No. 1	"	493
" " 5	"	495
" " 9	"	497
" " 13	"	499
" " 17	"	501
" " 21	"	503
" " 25	"	505
" " 29	"	507
" " 33	"	511
Doeta No. 3	"	494
" " 7	"	496
" " 11	"	498
" " 15	"	500
" " 19	"	502
" " 23	"	504
" " 27	"	506
" " 31	"	510
" " 35	"	512

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McKing/ism

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by core and non-core drilling to test the Poison Canyon sandstone of the Brushy Basin member of the Morrison formation. The location of the work is indicated on the attached map (Figure 2).

Each hole shall be drilled non-core through the upper formations to a point approximately five feet above the upper contact of the Poison Canyon sandstone. Core drilling shall follow until the hole is bottomed in the underlying claystone at a point approximately five feet below the lower contact of the Poison Canyon sandstone. Drilling depths are expected to average 450 feet and the cored sections of the holes are expected to average 100 feet in length. The minimum size of core shall be BX. All holes shall be reamed and cased as necessary.

All core and cuttings from the cored section of drill holes shall be saved and checked radiometrically for uranium. Sections indicating significant mineralization shall be split for samples, and such samples shall be analyzed chemically for uranium. All the remaining core and cuttings saved shall be properly 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.

The project work shall be supervised at all times by competent engineers or geologists.

The location, direction inclination, and extent of all project work are subject to the approval of the Government, but under no circumstances is any hole to be drilled closer than 100 feet from the boundaries of the property.

The work is divided into three successive stages as described hereafter. The Operator shall complete Stage I, and shall perform as much of the work under Stages II and III as the Government approves in writing in advance.

Stage I

The locations of Stage I holes are indicated on the attached map (Figure 2). Drill 22 holes aggregating not more than 9,900 feet in two north-south rows as shown. The row to the west is composed of two segments of 5 holes each, located approximately 200 feet from the western boundary of sec. 10, and the row to the east is a continuous line of 12 holes, located approximately 1,100 feet from the eastern boundary. The holes in each row or segment shall be spaced approximately 400 feet apart. The northernmost and southernmost holes of the two western segments shall be located approximately 280 and 200 feet, respectively, from the northern and southern boundaries. The corresponding holes of the eastern row shall be located approximately 480 and 400 feet, respectively, from the northern and southern boundaries. If the 22 holes require more than 9,900 feet to reach the desired horizon, the additional footage required may be transferred and deducted from Stage III footage upon the written approval of the Government.

Stage II

Fifty-nine tentative locations of Stage II holes are shown on the attached map (Figure 2). Drill only 45 holes aggregating not more than 20,250 feet, possibly in five staggered north-south rows approximately 800 feet apart as indicated. However, the pattern and locations of these holes are not fixed and may be changed in accordance with favorable indications resulting from Stage I drilling, upon the written approval of the Government. Holes in this stage shall be drilled at least 400 feet from any previously drilled hole. If the 45, or a lesser number of holes, are drilled, and require more than 20,250 feet to reach the desired horizon, the additional footage required may be transferred and deducted from Stage III footage upon the written approval of the Government.

Stage III

Drill not more than 45 holes aggregating not more than 20,250 feet to offset previously drilled holes that show significant mineralization. These holes shall be drilled at least 100 feet from any previously drilled hole.

Estimated Cost of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

7,700 ft. non-core drilling @ $1.25/ft.		$9,625.00
2,200 ft. core drilling @ $3.50/ft.		7,700.00
Categories (2) through (7)	None	-
	Total	$17,325.00

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed, 9,900 ft. @ $0.38/ft.	$3,762.00	
40 chemical sample analyses @ $3.50/each	140.00	
Total		$3,902.00
Estimated Total Cost of Stage I		$21,227.00

Stage II

Actual Costs

Category (1) Independent Contracts		
15,750 ft. non-core drilling @ $1.25/ft.	$19,687.50	
4,500 ft. core drilling @ $3.50/ft.	15,750.00	
Categories (2) through (7) None	-	
Total		$35,437.50

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed, 20,250 ft. @ $0.38/ft.	$7,695.00	
80 chemical sample analyses @ $3.50/each	280.00	
Total		$7,975.00
Estimated Total Cost of Stage II		$43,412.50

Stage III

Actual Costs

Category (1) Independent Contracts		
15,750 ft. non-core drilling @ $1.25/ft.	$19,687.50	
4,500 ft. core drilling @ $3.50/ft.	15,750.00	
Categories (2) through (7) None	-	
Total		$35,437.50

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed, 20,250 ft. @ $0.38/ft.	$7,695.00	
100 chemical sample analyses @ $3.50/each	350.00	
Total		$8,045.00
Estimated Total Cost of Stage III		$43,482.50

SUMMARY

Estimated Total Cost of Stage I	$21,227.00
Estimated Total Cost of Stage II	$43,412.50
Estimated Total Cost of Stage III	$43,482.50
Estimated Total Cost of the Project (rounded)	$108,120.00 102,580
Government Participation @ 75%	$81,090.00

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

RECEIVED
OCT 12 1955

224 New Customhouse
Denver 2, Colorado

October 7, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Colamer Corporation; Jean, Phyllis, Deetta and Fannie claims, McKinley County, New Mexico

Enclosed are two copies of the subject application in the amount of $151,056.00. One copy has been forwarded to the Grand Junction Survey Office for joint study and recommendation regarding a field examination, and one copy is retained in our files.

W. M. Traver

Enclosures

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

224 New Customhouse
Denver 2, Colorado

October 7, 1955

RECEIVED
OCT 12 1955

Memorandum

To: J. W. Mauler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), Colanner Corporation: Jean, Phyllis, Dretta and Fannie Claims, McKinley County, New Mexico

Enclosed is a copy of the subject application in the amount of $151,054.00. Please study and discuss this application with the AEC and Bureau of Mines representatives at Grand Junction, and promptly forward to this office eight copies of your recommendation regarding a field examination of the property.

W. M. Traver

W. M. Traver

Enclosures

JDC:jy
cc: Sec. Op. Comm. (4)
Docket
Harshman
Shaw (2)
Chron.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
OCT 12 1955

DMEA
Date Rec'd
OCT 7 1955
BUREAU OF MINES
DENVER

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

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

Not to be filled in by applicant

Docket No. DMEA 4017
Metal or Mineral Uranium
Date Received 10-12-55
Estimated Cost $151,056.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: COLAMER CORPORATION (A Delaware Corporation)
FIDEL & ROUSE BLDG.
GRANTS, NEW MEXICO

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract All of Section 10, T 13 N, R 9 W, NMPM
MCKINLEY COUNTY, NEW MEXICO

(*b*) State any mine name by which the property is known. NONE

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

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

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

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

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

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

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

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

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

5. *The exploration project.*—(a) State the mineral or minerals for which you [illegible]n to explore URANIUM

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

(*c*) The work will start within 30 days and be completed within 18 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

NOT APPLICABLE

CERTIFICATION

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

Dated _____, 195__

Columbia Corp.
(Applicant)

By Frank Baylin
Pres.

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

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

COLAMER CORPORATION
Fidel & Rouse Bldg.
GRANTS, NEW MEXICO

RECEIVED
OCT 12 1955

ATTACHMENT TO DMEA FORM MF-103

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1. (b) Corporation incorporated in the State of Delaware

(c)

President	Frank Boylin	Grants, New Mexico
Vice President	Robert Six	Continental Air Lines Denver, Colorado
Treasurer	Lowell M. Birrell	545 Fifth Avenue New York, New York
Secretary	Miss Mary Prior	545 Fifth Avenue New York, New York

3. (d) & (f) Photostatic copies of the leases on the claims covering the subject area held by Colamer Corporation are enclosed in the envelope at the end of this report.

4. (a) At the present time there are no mining operations being conducted on this property. Three core drill holes have been drilled for assessment work. Results of these holes are described in 4(c).

(b) There has been no production from this property.

(c) The subject area is located 15 miles north of Grants, New Mexico, on the top of the mesa on which most of the major uranium mines of the Grants District are located. The mesa is on the north east flank of the Zuni Uplift and dips shallow to the northeast. The objective horizon in this area is the Poison Canyon unit of the Brushy Basin (Fig. 1) which is the producing zone of the large Poison Canyon Mine, Mesa Top and Garcia Mines (Fig. 2). This unit may be technically considered a part of the Westwater Canyon member which is the producing horizon at Anaconda Company's Jackpile mine and major discoveries in the adjacent Ambrosia area (Fig. 2).

ORE CONTROLS

In the Poison Canyon area the ore is localized in the thickened sand zones (generally greater than 60' thick) which lies in a fractured area. This fracturing is related to the San Mateo Fault and accompanying folding. It is also apparent that a favorable area can be more accurately delineated by tracing the "bleached" zones of the Westwater sandstone. The applicant's geological

ATTACHMENT TO DMEA FORM MF-103

ORE CONTROLS-cont'd.

department has compiled enough data from the AEC, USGS and various mining companies to determine the approximate boundaries of these bleached Westwater zones (Fig. 2). The Todilto ore deposits also are located in this zone. The applicant has drilled three core holes in the subject area to the bottom of the Westwater which shows the presence of this "bleached" zone. Four hundred feet north of the south quarter corner of Section 10, 4 feet of 0.04% U_3O_8 was encountered in the Westwater at a depth of 371 feet. The subject area is easily accessible by improved dirt road one mile from surfaced State Highway No. 53. The Anaconda mill at Bluewater, New Mexico, is located approximately 16 miles from the property. Adequate water supplies and residence are obtainable in Grants and the surrounding area.

5. (b) It is proposed here to drill on the pattern as shown in (Fig. 3) for the first stage. There are 85 holes 400 feet apart north-south and 800 feet apart east-west, and are identified by co-ordinates, the southwest corner of Section 10 as 0' north and 0' east. Holes 200N-200E, 5000N-200E, 5000N-5000E and 2400N-2600E will be plugged to the base of the Dakota formation and cored from that point through the Westwater member to the top of the Recapture Creek member. This will more accurately determine the favorable zones and give better stratigraphic control. The remaining 81 holes of the first stage will then be plugged to approximately 60 feet below the top of the Brushy Basin the point at which the Poison Canyon unit appears. The holes will then be cored from that point to 5 feet below the base of the Poison Canyon unit. It is suggested here that if the formations are dry and good samples are being recovered, the Poison Canyon unit can be plugged and air blown samples be recovered in place of coring. Previous drilling has indicated that approximately 40% of the holes will be dry.

This should cut contract cost considerably. The second and third stages will have the same procedure as the second phase of stage #1, with a spacing of 200' NS and 400' EW for stage #2 and 100' NS and 200' EW for stage #3.

Stage	Holes	Footage Plus Bit	Core
#1	85	31,875	3,600
2	70	26,250	2,800
3	77	28,875	3,055
TOTAL:	232 Holes	87,000 Plug	9,455 Core

unit costs: plug bit, 1.40/ft.; core, 3.20/ft.

ATTACHMENT TO DMEA FORM MF-103

5. (b)(cont'd.)

Unit costs based on average contract prices in the district and adding $0.20/ft. for engineering, supervision, assays and core boxes.

TOTAL COST: Plug, $121,800.00; Core, $29,256.00 = $151,056.00.

5. (d) The applicant has a geological and engineering staff the personnel of which has had many years experience in the search for and production of uranium ores.

ATTACHMENT TO DMEA FORM MF-103

CLAIMS TO BE INCLUDED IN THE EXPLORATION CONTRACT

JEAN NOS. 1, 5, 9, 13, 17, 21, 25, 29 and 33

PHYLLIS NOS. 2, 6, 10, 14, 18, 22, 26, 30 and 34

DEETA NOS. 3, 7, 11, 15, 19, 23, 27, 31, and 35

FANNIE NOS. 4, 8, 12, 16, 20, 24, 28, 32 and 36

FIG. 1

Dakota SS 90'		Gray to lt. br., fn to med., massaive; lower 25 feet very carbonaceous, coal in some places unerlain by med. to cs sand. This carbonaceous member is often radioactive in some areas.
Brushy Basin Shale 60'-80'		light greenish gray often mottled with brownished gray, many fine sandstone lenses, zones of many limestone nodules. Often gypsiferous and calc-careous. Bottom unit is often called the Poison Canyon sandstone: brownish gray, light greenish gray in mineralized areas, med to cs, very poorly sorted, contains zones of mudstone galls, many pink and light gray feldspar grains, abundant pyrite crystals near mineralized areas, stream cross bedding.
Westwater sandstone 80'-100'		light brown to light gray, medium to course, subround, poorly cemented with greenish gray clay, contains zones of clay galls, chert pebbles and silicified logs and other corbon trash which have formed small but rich carnotite deposits.
Recapture Creek shale 80'-100'		Intercolated reddish brown, light greenish gray and light gray fine sands and siltstones.

This is the stratigraphic column with which this project will be concerned.

The subject area is generally overlain with varying amounts of Mancos Shale directly above the Dakota Sandstone.

RECEIVED
OCT 12 1955

MINING LEASE

THIS INDENTURE, entered into in duplicate this 17th day of August, 1954, by and between TOM KING, also known as THOMAS KING, also known as THOMAS C. KING, and PHYLLIS J. KING, his wife, their successors or assigns, PARTY OF THE FIRST PART, hereinafter called LESSOR, and JACK R. PARSLEY, a single man, his successors or assigns, PARTY OF THE SECOND PART, hereinafter called LESSEE:

WITNESSETH:

That the parties hereto for the consideration hereinafter expressed covenant and agree as follows:

I.

Lessor for the sum of TEN DOLLARS ($10.00, and other good and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, and upon the terms and conditions and subject to the reservations hereinafter set forth, hereby grants to Lessee the exclusive right and privilege for a period of ten (10) years, beginning with the date hereof, to search and explore for valuable minerals and ores, including the ores of uranium and to conduct mining operations for the development and extraction of same upon and in the following described lands or lode mining claims:

STATE Number One (1), Nine (9), Ten (10), Eighteen (18), Nineteen (19), Twenty-Six (26), and Twenty-Seven (27);

all in Section 8, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County

Clerk of McKinley County, New Mexico, in Book 4-MCR, at pages 452, 491, 456, 460, 436, 464, and 493, respectively; and

> PHYLLIS Number Two (2), Six (6), Ten (10), Fourteen (14), Eighteen (18), Twenty-Two (22), Twenty-Six (26), Thirty (30), and Thirty-Four (34);

all in Section 10, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at pages 494, 496, 498, 500, 502, 504, 506, 510, and 512, respectively; and

> FANNIE Number Four (4) Eight (8), Twelve (12), Sixteen (16), Twenty (20), Twenty-four (24), Twenty-eight (28), Thirty-Two (32), and Thirty-Six (36);

all in Section 10, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at pages 495, 497, 499, 501, 503, 505, 507, 511, and 513, respectively; which claims are sometimes hereinafter referred to as said lands; together with the right to make excavations, to construct and maintain thereon roads, works, facilities, and utilities necessary in the conduct of development or mining operations on said lands free of additional compensation other than the royalties as provided herein.

II.

Lessee agrees to enter on to said lands and to commence development and/or mining operations in compliance with the mining and safety laws of the State of New Mexico and the United States of America. It is understood and agreed, however, that by the payment of the yearly minimum royalty due

hereunder the Lessee shall satisfy, and said payment shall be in lieu of, any and all actual exploration or mining operations called for by this paragraph, with the exception of necessary assessment work.

III.

Lessee agrees to keep books and accounts covering Lessee's operations hereunder and such books and accounts will be open to Lessor's inspection at all reasonable times. Lessor reserves the right to enter upon said lands to survey, to take samples, and to inspect same. Lessee agrees to furnish Lessor a true copy of the logs of all recorded drilling on said lands and agrees to furnish Lessor on demand a blueprint from time to time of the latest map of the premises.

IV.

For each shipment of all ore or valuable mineral mined and removed from said lands, Lessee agrees to pay Lessor a royalty on the "Mine Value Per Net Dry Ton" on or before the twentieth day of the month next following receipt by Lessee of payment for the products sold or disposed of a total of ten per cent (10%) on FANNIE NUMBER 4, 8, 12, 16, 20, 24, 28, 32, and 36; a total of seven and one-half per cent (7½%) on STATE NUMBER 9, 18, 26, and 27; and a total of five per cent (5%) on all the remaining claims, payable to the following persons, in accordance with the percentages appearing after their respective names and only on the claims appearing after their names, to-wit:

Name and Address	Percentage	Claims
Thomas C. King c/o Fidel & Rouse Building Grants, New Mexico	2½%	On all claims
Jean Reynolds 903 South Madison Webb City, Missouri	2½%	On all claims
Ira N. Sprecher and Fannie A. Sprecher, his wife, c/o Mid-Valley Title Co. 306 South Second Street Gallup, New Mexico	5 %	FANNIE 4, 8, 12, 16, 20, 24, 28, 32, 36
Howard Deeds c/o Tom King Fidel & Rouse Building Grants, New Mexico	2½%	STATE 9, 18, 26, 27

said payments to be mailed to said parties at the addresses given above.

It is understood and agreed that the cash payments referred to in numbered paragraph I hereof shall be paid direct to the Lessor, THOMAS C. KING and PHYLLIS J. KING, his wife, and that the persons above named are merely to participate in production royalties only.

IT IS UNDERSTOOD AND AGREED that the above royalties are to satisfy all royalties due and payable to any person or persons connected with or having an interest in the properties covered by the Lease, which the Lessor hereby guarantees.

Lessee guarantees to advance yearly minimum royalties of ONE HUNDRED DOLLARS ($100.00) per year per claim during the term of this Lease, beginning August 23, 1955, payable one-half to THOMAS C. KING and one-half to JEAN REYNOLDS, which said minimum royalties shall be applied against their respective percentage of production royalties set out in this paragraph. Any such

minimum yearly royalties paid by Lessee can be applied against earned production royalties accruing at any time during the term of this Lease.

None of the other persons named hereinabove is to participate in minimum royalties provided for by this paragraph.

"Mine Value Per Net Dry Ton" as used herein is defined as the dollar value per dry ton of 2,000 pounds of crude ore at the mine as determined by the price schedules at the available markets; or as determined by the price schedules established by the Atomic Energy Commission or its successor; the value to include bonus and premium payments but not to include allowances for development, exploration, haulage, or transportation.

V.

Lessee agrees to indemnify, defend, and save harmless the Lessor from all liabilities arising from the entering into and complying with the within agreement.

VI.

At the expiration of this Lease, or upon its earlier termination as herein provided, Lessee shall surrender the said lands and shall have four (4) months in which to remove therefrom all machinery, tools, and other improvements, providing Lessee is not indebted to Lessor under the obligations of this Lease. Lessee may sell or retain equity in ores in transit, in bins, dumps, or stockpiles provided that such ores are removed from the said lands within thirty (30) days after this Lease is terminated, and that royalty is paid on the market value of such ores in the manner provided in paragraph IV herein.

VII.

Lessee shall enter upon and fully perform any assessment work required on said lands in time to keep said lands in good standing, and shall file required proofs of labor by June first each year. Lessee agrees to pay any additional taxes levied against said lands as a result of complying with the within agreement, or taxes levied against ores sold from said lands.

VIII.

Lessor agrees that, if at the expiration of this Lease Lessee is producing in commercial quantities valuable minerals or ores from said lands, then he will upon written request from Lessee renew this Lease upon the same terms and conditions as herein set forth; provided, however, that the payment provided for in paragraph numbered I herein shall be eliminated.

IX.

If at any time Lessor believes that Lessee is in default under the terms and provisions of this Lease, Lessor may notify Lessee in writing of the particular default claimed, and if such default shall not be removed within thirty (30) days after the receipt by Lessee of such notice, then Lessor may terminate this Lease at his option by serving written notice on Lessee, providing that such default is not caused by casualties, strikes, storms, or other unforeseen difficulties beyond the control of the Lessee.

If Lessee desires to terminate this Lease, Lessee may give Lessor thirty (30) days written notice of intent to terminate, and upon paying all production or minimum royalties earned

in accordance with the terms of this Lease at the time of returning the properties to the Lessor, may surrender this Lease and be relieved of all obligations and responsibilities hereunder. Any request or notice which either party hereto may desire to give to the other party shall be properly served only when reduced to writing, placed in an envelope, sealed, stamped, registered, and deposited in the United States Post Office addressed as follows:

Lessor:

Thomas C. King and Phyllis J. King
c/o Fidel & Rouse Building
Grants, New Mexico

Lessee:

Jack R. Parsley
40 Central Park, South
New York, New York

The parties hereto may change the address to which notices may be sent by written notice to the other in the manner provided above.

X.

All or any portion of the claims covered by this Lease may be assigned, transferred, or subleased providing that Lessor is furnished a copy of such transactions by registered mail within thirty (30) days of the date thereof. It is mutually agreed that the covenants, grants, stipulations, and conditions herein expressly shall run with the said lands, and apply to and bind the heirs, legatees, devisees, executors, sublessors, or assigns of the parties hereto respectively.

XI.

Lessors warrant that they have created no liens or

encumbrances against the claims herein described; that there are no liens or mortgage of record in the County Clerk's Office, of McKinley County, New Mexico; that they have taken all necessary legal steps to perfect said claims; and that there are no other royalty reservations other than those provided for and taken care of in paragraph numbered IV hereof.

IN WITNESS WHEREOF, this Lease has been executed by the parties thereunto duly authorized the day and year first above written.

Thomas C. King
THOMAS C. KING

Phyllis J. King
PHYLLIS J. KING

LESSOR

Jack R. Parsley
JACK R. PARSLEY

LESSEE

STATE OF NEW MEXICO
COUNTY OF McKINLEY } ss.
32862
Filed for record in the Clerk's office
27th day of August
A.D. 1954 at 9:01 o'clock A M
and recorded in Book 7
of Mortgages on page 178
Esther C. Garcia
B. A. Herrera
County Clerk
Indexed
COMPARED

STATE OF NEW MEXICO)
) ss.
County of Bernalillo)

On this 17 day of August, 1954, before me personally appeared THOMAS C. KING, also known as TOM KING, also known as THOMAS KING, and PHYLLIS J. KING, his wife; and JACK R. PARSLEY, a single man, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

Witness my hand and seal the day and year last above written.

J. G. Whitehouse
Notary Public

J. G. WHITEHOUSE NOTARY PUBLIC BERNALILLO COUNTY, N. M.

My Commission Expires: 9/18/56

MINING LEASE

THIS INDENTURE, entered into in duplicate this 17th day of August, 1954, by and between J. V. REYNOLDS and JEAN REYNOLDS, his wife, their successors or assigns, PARTY OF THE FIRST PART, hereinafter called LESSOR, and JACK R. PARSLEY, a single man, his successors or assigns, PARTY OF THE SECOND PART, hereinafter called LESSEE;

WITNESSETH:

That the parties hereto for the consideration hereinafter expressed covenant and agree as follows:

I.

Lessor for the sum of TEN DOLLARS ($10.00), and other good and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, and upon the terms and conditions and subject to the reservations hereinafter set forth, hereby grants to Lessee the exclusive right and privilege for a period of ten (10) years, beginning with the date hereof, to search and explore for valuable minerals and ores, including the ores of uranium and to conduct mining operations for the development and extraction of same upon and in the following described lands or lode mining claims:

JEAN Number One (1), Five (5), Nine (9), Thirteen (13), Seventeen (17), Twenty-one (21), Twenty-five (25), Twenty-nine (29), and Thirty-Three (33); (4)

all in Section 10, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at pages

493, 495, 497, 499, 501, 503, 505, 507, and 511, respectively; and

DEETTA Number Three (3), Seven (7), Eleven (11), Fifteen (15), Nineteen (19), Twenty-Three (23), Twenty-Seven (27), Thirty-one (31), and Thirty-Five (35); (9)

all in Section 10, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at pages 494, 496, 498, 500, 502, 504, 506, 510, and 512, respectively; and

STATE Number Twenty-two (22) and Twenty-three (23);

all in Section 8, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at page 462; which claims are sometimes hereinafter referred to as said lands; together with the right to make excavations, to construct and maintain thereon roads, works, facilities, and utilities necessary in the conduct of development or mining operations on said lands free of additional compensation other than the royalties as provided herein.

II.

Lessee agrees to enter on to said lands and to commence development and/or mining operations in compliance with the mining and safety laws of the State of New Mexico and the United States of America. It is understood and agreed, however, that by the payment of the yearly minimum royalty due hereunder the Lessee shall satisfy, and said payment shall be in lieu of, any and all actual exploration or mining operations

called for by this paragraph, with the exception of necessary assessment work.

III.

Lessee agrees to keep books and accounts covering Lessee's operations hereunder and such books and accounts will be open to Lessor's inspection at all reasonable times. Lessor reserves the right to enter upon said lands to survey, to take samples, and to inspect same. Lessee agrees to furnish Lessor a true copy of the logs of all recorded drilling on said lands and agrees to furnish Lessor on demand a blueprint from time to time of the latest map of the premises.

IV.

For each shipment of all ore or valuable mineral mined and removed from said lands, Lessee agrees to pay Lessor a royalty on the "Mine Value Per Net Dry Ton" on or before the twentieth day of the month next following receipt by Lessee of payment for the products sold or disposed of a total of seven and one-half per cent (7½%) on DEETA NUMBER 3, 7, 11, 15, 19, 23, 27, 31, and 35; and a total of five per cent (5%) on all the remaining claims, payable to the following persons, in accordance with the percentages appearing after their respective names and only on the claims appearing after their names, to-wit:

Name and Address	Percentage	Claims
Thomas C. King c/o Fidel & Rouse Building Grants, New Mexico	2½%	On all claims

Name and Address	Percentage	Claims
Jean Reynolds 903 South Madison Webb City, Missouri	2½%	On all claims
Joe Cahill North Roane Street Webb City, Missouri	2½%	DEETTA Number 3, 7, 11, 15, 19, 23, 27, 31, 35

said payments to be mailed to said parties at the addresses given above.

It is understood and agreed that the cash payments referred to in numbered paragraph I hereof shall be paid direct to the Lessor, J. V. REYNOLDS and JEAN REYNOLDS, his wife, and that the persons above named are merely to participate in production royalties only.

It is understood and agreed that the above royalties are to satisfy all royalties due and payable to any person or persons connected with or having an interest in the properties covered by the Lease, which the Lessor hereby guarantees.

Lessee guarantees to advance yearly minimum royalties of ONE HUNDRED DOLLARS ($100.00) per year per claim during the term of this Lease, beginning August 23, 1955, payable one-half to ~~J. V. REYNOLDS~~ THOMAS C. KING and one-half to JEAN REYNOLDS, which said minimum royalties shall be applied against their respective percentage of production royalties set out in this paragraph. Any such minimum yearly royalties paid by Lessee can be applied against earned production royalties accruing at any time during the term of this Lease. None of the other persons named hereinabove is to participate in minimum royalties provided for by this paragraph.

J.S.R. J.R.P. JVR

"Mine Value Per Net Dry Ton" as used herein is defined

as the dollar value per dry ton of 2,000 pounds of crude ore at the mine as determined by the price schedules at the available markets; or as determined by the price schedules established by the Atomic Energy Commission or its successor; the value to include bonus and premium payments but not to include allowances for development, exploration, haulage, or transportation.

V.

Lessee agrees to indemnify, defend, and save harmless the Lessor from all liabilities arising from the entering into and complying with the within agreement.

VI.

At the expiration of this Lease, or upon its earlier termination as herein provided, Lessee shall surrender the said lands and shall have four (4) months in which to remove therefrom all machinery, tools, and other improvements, providing Lessee is not indebted to Lessor under the obligations of this Lease. Lessee may sell or retain equity in ores in transit, in bins, dumps, or stockpiles provided that such ores are removed from the said lands within thirty (30) days after this Lease is terminated, and that royalty is paid on the market value of such ores in the manner provided in paragraph IV herein.

VII.

Lessee shall enter upon and fully perform any assessment work required on said lands in time to keep said lands in good standing, and shall file required proofs of labor by June first of each year. Lessee agrees to pay any additional taxes

levied against said lands as a result of complying with the within agreement, or taxes levied against ores sold from said lands.

VIII.

Lessor agrees that, if at the expiration of this Lease Lessee is producing in commercial quantities valuable minerals or ores from said lands, then he will upon written request from Lessee renew this Lease upon the same terms and conditions as herein set forth; provided, however, that the payment provided for in paragraph numbered I herein shall be eliminated.

IX.

If at any time Lessor believes that Lessee is in default under the terms and provisions of this Lease, Lessor may notify Lessee in writing of the particular default claimed, and if such default shall not be removed within thirty (30) days after the receipt by Lessee of such notice, then Lessor may terminate this Lease at his option by serving written notice on Lessee, providing that such default is not caused by casualties, strikes, storms, or other unforeseen difficulties beyond the control of the Lessee.

If Lessee desires to terminate this Lease, Lessee may give Lessor thirty (30) days written notice of intent to terminate, and upon paying all production or minimum royalties earned in accordance with the terms of this Lease at the time of returning the properties to the Lessor, may surrender this Lease and be relieved of all obligations and responsibilities hereunder. Any request or notice which either party hereto may desire to give

to the other party shall be properly served only when reduced to writing, placed in an envelope, sealed, stamped, registered, and deposited in the United States Post Office addressed as follows:

Lessor:

J. V. Reynolds and
Jean Reynolds, his wife,
903 South Madison
Webb City, Missouri

Lessee:

Jack R. Parsley
40 Central Park, South
New York, New York

The parties hereto may change the address to which notices may be sent by written notice to the other in the manner provided above.

X.

All or any portion of the claims covered by this Lease may be assigned, transferred, or subleased providing that Lessor is furnished a copy of such transactions by registered mail within thirty (30) days of the date thereof. It is mutually agreed that the covenants, grants, stipulations, and conditions herein expressly shall run with the said lands, and apply to and bind the heirs, legatees, devisees, executors, sublessors, or assigns of the parties hereto respectively.

XI.

Lessors warrant that they have created no liens or encumbrances against the claims herein described; that there are no liens or mortgage of record in the CountyClerk's Office, of McKinley County, New Mexico; that they have taken al necessary

legal steps to perfect said claims; and that there are no other royalty reservations other than those provided for and taken care of in paragraph numbered IV hereof.

IN WITNESS WHEREOF, this Lease has been executed by the parties thereunto on the day and year first above written.

Jean Reynolds
J. V. REYNOLDS

J V Reynolds
JEAN REYNOLDS, his wife

LESSOR

Jack R. Parsley
JACK R. PARSLEY

LESSEE

STATE OF Missouri)
County of Jasper) ss.

On this 17th day of August, 1954, before me personally appeared J. V. REYNOLDS and JEAN REYNOLDS, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

Witness my hand and seal the day and year last above written.

Josephine Ferris
Notary Public

My Commission Expires:
My Commission Expires May 21, 1956

JOSEPHINE FERRIS NOTARY PUBLIC JASPER COUNTY, MISSOURI

STATE OF NEW MEXICO)
) ss.
County of Bernalillo)

On this 17 day of August, 1954, before me personally appeared JACK R. PARSLEY, a single man, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal the day and year last above written.

Jack D. Whitehouse
Notary Public

J. D. WHITEHOUSE NOTARY PUBLIC BERNALILLO COUNTY, N. M.

My Commission Expires: 9/18/56

STATE OF NEW MEXICO
COUNTY OF McKINLEY } ss.

#32861

Filed for record in the Clerk's office
the 27th day of August
A. D. 1954 at 9:00 o'clock A M.,
and recorded in Book 7
of Leases on page 176
Ernest C. Garcia
By: J. B. Herrera County Clerk

McKINLEY COUNTY CLERK

COMPARED

ASSIGNMENT OF LEASES

THIS AGREEMENT, made and entered into on this 11th day of December, 1954, by and between JACK R. PARSLEY, a single man, hereinafter called ASSIGNOR, and COLAMER CORP., a Delaware corporation organized under the laws of the State of Delaware, hereinafter called ASSIGNEE;

WITNESSETH:

WHEREAS, The Assignor is the owner of the following described Mining Leases, wither by direct lease from the owner of the mining claims involved or by assignment of existing leases, to-wit:

I. Assignment of Leases by and between THOMAS KING, also known as TOM KING, also THOMAS C. KING, and PHYLLIS J. KING, husband and wife, as Assignors, and JACK R. PARSLEY, a single man, as Assignee, which said Assignment is recorded in Book 7 of Leases, page 181 of the Records of the County Clerk of McKinley County, State of New Mexico, and covering the following described lode mining claims:

STATE Number Three (3),
STATE Number Four (4),
STATE Number Twelve (12),
STATE Number Thirteen (13), and
STATE Number Twenty-One (21),

said claims being located in Sec. 8, Twp. 13 N, R 9W, N.M.P.M., and being recorded in Book MCR-4 at pages 453, 453, 492, 458, and 461, respectively, of the Official Records in the office of the County Clerk of McKinley County, State of New Mexico; and

the mining lease assigned being dated April 5, 1954 in which said mining lease VILATIE W. HYDE and ARTHUR W. HYDE, her husband, are designated as Lessors, and THOMAS KING, as Lessee, said mining lease being duly recorded in the Records of the County Clerk of McKinley County, State of New Mexico; and

STATE Number Two (2),
STATE Number Eleven (11), and
STATE Number Twenty (20),

said claims being located in Sec. 8, Twp. 13 N, R 9W, N.M.P.M., and being recorded in Book MCR-4 at pages 452, 491, 461, respectively, of the Official Records in the office of the County Clerk of McKinley County, State of New Mexico; and,

The mining lease assigned being dated April 5, 1954 in which said mining lease VILATIE W. HYDE and ARTHUR

of the County Clerk of Valencia County, State of New Mexico, and covers the following described lode mining claims, to-wit:

JEAN Number One (1),
JEAN Number Five (5),
JEAN Number Nine (9),
JEAN Number Thirteen (13),
JEAN Number Seventeen (17),
JEAN Number Twenty-One (21),
JEAN Number Twenty-five (25),
JEAN Number Twenty-nine (29), and
JEAN Number Thirty-Three (33),

all in Section 10, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at pages 493, 495, 497, 499, 501, 503, 505, 507, and 511, respectively; and

DEETTA Number Three (3),
DEETTA Number Seven (7),
DEETTA Number Eleven (11),
DEETTA Number Fifteen (15),
DEETTA Number Nineteen (19,
DEETTA Number Twenty-Three (23),
DEETTA Number Twenty-Seven (27),
DEETTA Number Thirty-One (31), and
DEETTA Number Thirty-Five (35);

all in Section 10, Township 13 North, Range 9 West, N.M.P.M., which claims are filed for record in the Office of the County Clerk of McKinely County, New Mexico, in Book 4-MCR, at pages 494, 496, 498, 500, 502, 504, 506, 510, and 512, respectively; and

STATE Number Twenty-two (22) and
STATE Number Twenty-three (23);

all in Section 8, Township 13 North, Range 9 West, N.M.P.M. which claims are filed for record in the Office of the County Clerk of McKinley County, New Mexico, in Book 4-MCR, at page 462.

WHEREAS, the said Assignor is desirous of assigning to the said Assignee the aforementioned Mining Leases, Assignments of Mining Leases, and Option to Purchase and Agreement to Lease covering the hereinabove described premises; and

WHEREAS, the said Assignee is desirous of purchasing the said Mining Leases, Assignments of Mining Leases, and Option to Purchase and Agreement to Lease;

NOW, THEREFORE, for and in consideration of the sum of TEN DOLLARS ($10.00), and other good and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, the said Assignor does hereby set over, assign, transfer, and sell to the said Assignee the hereinabove mentioned and described Mining Leases, Assignments of Mining Leases, and Option to Purchase and Agreement to Lease, subject to all of the terms, agreements, and stipulations therein contained.

IT IS UNDERSTOOD AND AGREED by and between the parties hereto that the Assignee hereunder will fulfill all of the terms of the Mining Leases, Assignments of Mining Leases, and Option to Purchase and Agreement to Lease set out above and save the Assignor harmless from any failure so to do.

IN WITNESS WHEREOF the parties hereto have set their hands and seals on the day and year first above written.

Jack R. Parsley
JACK R. PARSLEY
ASSIGNOR

Frank Boyle
President,
COLAMER CORP., a Delaware corporation.
ASSIGNEE

COLAMER CORP. CORPORATE SEAL 1954 DELAWARE

STATE OF NEW MEXICO)
) ss.
County of Bernalillo)

On this 11th day of December, 1954, before me personally appeared JACK R. PARSLEY, a single person, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal the day and year last above written.

J. G. Whitehouse
Notary Public

My Commission Expires: 9/18/56.

STATE OF NEW YORK)
County of New York) ss.

On this 15th day of December, 1954, before me personally appeared FRANK BOYLIN, to me personally known, who being by me duly sworn did say that he is President of COLAMER CORP., a corporation organized under the laws of the State of Delaware, and that the seal affixed to said instrument is the corporate seal of said Corporation, and that said instrument was signed and sealed on behalf of said corporation, by authority of it's Board of Directors, and said FRANK BOYLIN acknowledged said instrument to be the free act and deed of said corporation.

Witness my hand and seal the day and year last above written.

Irene S. Zahler
Notary Public

My commission expires: March 30, 1956

IRENE S. ZAHLER
Notary Public, State of New York
No. 03-9784700
Qualified in Bronx County
Certificate filed in New York County
Commission Expires March 30, 1956

DOCKET COPY

Project Summary Report

By: Michael Ching November 26, 1957

1. Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940

Operator - Colamer Corporation, a Delaware corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

Property -36 mining claims comprising all of sec. 10, T. 13 N., R. 9 W., N.M.P.M. & B., McKinley County, New Mexico. There are 9 Phyllis, 9 Fannie, 9 Jean, and 9 Deetta claims.

Operator's Property Rights - Lessee. Consents to Lien, dated March 14, 1956, signed by J. V. Reynolds, Jean Reynolds, Thomas C. King and Phyllis J. King; Subordination Agreements, dated March 14, 1956, signed by Jean Reynolds, James V. Reynolds, Ira N. Sprecher, Fannie A. Sprecher, Thomas C. King, Phyllis J. King, Joe Cahill and De Etta Cahill.

2. Contract (Long Form), dated April 9, 1956

Final starting date - May 1, 1956
Actual starting date - April 24, 1956
Contract completion date - October 31, 1957
Termination Agreement - dated February 8, 1957, effective Sept. 3, 1956.

Work Authorized (as amended)

Test the Poison Canyon sandstone of the Brushy Basin member, and the Westwater Canyon member, of the Morrison formation by core and non-core drilling in three stages as follows:

Stage I - 22 holes spaced 400 feet apart in two fences, aggregating an estimated 9,900 feet.

Stage II - 45 holes, aggregating an estimated 20,250 feet drilled on minimum spacing of 400 feet.

Stage III - 45 holes, aggregating not more than 20,250 feet, as offsets to mineralized holes previously drilled. Minimum spacing 100 feet.

Estimated Costs

Independent Contracts

39,200 feet non-core drilling @ $1.25/ft.	$49,000.00	
11,200 feet core drilling @ $3.50/ft.	39,200.00	$88,200.00

Fixed Unit Costs

Incidental allowance, 50,400 feet @ $0.27/ft.	$13,608.00	
220 chemical analyses @ $3.50 each	770.00	14,378.00

Estimated total cost of project (rounded)	$102,580.00
Government participation @ 75%	$76,935.00

Amendments

No. 1, dated June 28, 1956. Changes description of the work to allow extension of any hole through the Westwater Canyon sandstone upon approval of the Government.

Work Completed

Stage I - 22 holes, with 9,249 feet of non-core drilling and 2,079.5 feet of core drilling, or a total of 11,328.5 feet.

Stage II - 36 holes, with 18,222.5 feet of non-core drilling and 3,018 feet of core drilling, or a total of 21,240.50 feet.

Stage III- 17 holes, with 6,703 feet of non-core drilling and 733 feet of core drilling, or a total of 7,436 feet.

Total 3 stages - 75 holes, 34,174.5 feet non-core, 5,830.5 feet core, or a total of 40,005 feet of drilling.

Costs	Total	Per Ft.
Actual cost of non-core drilling	$29,738.03	$0.870
Actual cost of core drilling	17,829.03	3.058
Stand-by cost allowable	688.49	
School tax allowable	393.42	
Incidental allowance	10,801.76	0.270
Chemical analyses	7.00	
Total Cost of the Project	$59,457.73	
Government Participation @ 75%	$44,593.30	

Final Reports Received

Operator - undated. Received April 24, 1957
Field Team - dated July, 1957. Received Aug. 5, 1957

3. Auditor's Report of Review, dated November 7, 1957

Total cost as billed by the Contractor		$58,612.84
Add: Additional allowable items not claimed by the Contractor (Schedule attached)		1,140.61
Subtotal		$59,753.45
Exceptions:		
By DMEA Finance Officer	$1,194.59	
Less: Reinstatements	906.57	
	$ 288.02	
Herewith	7.70	295.72
Total Accepted Cost		$59,457.73

4. Certification of discovery - None

5. Results and Comments:

The potential ore-bearing units of interest on the subject property are the Westwater Canyon member and the Poison Canyon sandstone unit of the Brushy Basin member of the Morrison formation.

The 58 Stage I and Stage II holes were drilled through both the Poison Canyon and Westwater Canyon sandstones. While a number of these holes showed slight mineralization, only 5 were considered encouraging enough to warrant offset drilling under Stage III. Seventeen offset holes were drilled, through the Poison Canyon sandstone only. Results of these offset holes were largely negative and further Stage III work was denied. The contract was then terminated by mutual agreement. No certification of discovery is warranted.

The Operator notes in its final report that the most pronounced feature on the property is an anticlinal structure in the southwest quarter of the section and that DMEA participation was halted before this structure could be adequately explored. However, three holes were allowed in this area and the results did not encourage additional drilling.

The Operator appears to have done the work efficiently, having completed 40,005 feet of drilling, including 5,830.5 feet of coring, in less than 5 months. Apparently three drills were used.

Michael Ching

Michael Ching

[X] Audited

WORK ANALYSIS SHEET - DMEA PROJECT

[X] Actual Cost

[ ] Certified

Analysis as of Nov. 22, 1957
Incl. Voucher for _____

[ ] Agreed Unit Costs

Name Colamer Corporation

Docket No. 4017

State New Mexico

Commodity Uranium

Idm-E No. 940

OPERATION	AUTHORIZED Units Feet	AUTHORIZED Cost	COMPLETED Units Feet	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Non-core	39,200	$59,584.00	34,174.5	39,889.72	39,889.72
Core	11,200	42,224.00	5,830.5	19,561.01	19,561.01
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Chem. Analyses		790.00		7.00	7.00
Totals		$102,580.00 (Rounded)		$59,457.73	$59,457.73

Prepared by Michael Ching

71626

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/16	Murphy	500
		500
8/16	Talbert	800
8/16	Lathrop on leave	120
"	Johnson	110
8/16	gal	220
		500

AUG 16 1960

Mr. Thomas F. McKenna, Sr.
Nason Building
302 E. Palace Avenue
Santa Fe, New Mexico

Re: DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico
Contract Idm-E940

Dear Mr. McKenna:

This is in response to your letter of August 12, 1960, requesting a copy of the above-referenced contract.

It would take us some time to make copies of the contract and, since you urgently need the data, we are enclosing our "Docket copy" of the contract, together with copies of Amendment No. 1 and Termination Agreement, for your convenience. Kindly return these copies as soon as they have served your purpose.

Sincerely yours,

Frank E. Johnson (for)

Acting Director

Enclosures

FMMurphy/gla
8-16-60
cc to: Director's Reading File
Region III (2) w/2 cys Mr. McKenna's letter
Docket
Chron

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 15 1960

DATE	INITIALS	CODE
8-15	gad	VVO
8/15	[illegible]	800
"	Murphy	500
		22.1

LAW OFFICES
McKENNA & SOMMER
NASON BUILDING
302 E. PALACE AVENUE
SANTA FE, NEW MEXICO

THOMAS F. McKENNA, SR.
JOSEPH A. SOMMER

TELEPHONE YUCCA 2-1898

August 12, 1960

Mr. Frank E. Johnson
Acting Director
Office of Minerals Exploration
United States Department of the Interior
Washington 25, D. C.

Re: DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico
Contract Idm-E940

Dear Mr. Johnson:

Mr. E. B. White, vice president of United Western Minerals Company, has directed to us your letter of August 11 in answer to our telegram of August 8. We are general counsel for United Western Minerals Corporation and engaged at this point in tracing down all matters relating to title to mining claims in Section 10, being the Fannie, Deeta, Phyllis and Jean claims.

For your information, Colamer Corporation transferred to us a lease on the above mining claims in August of 1957. We have been aware of the communication of December 2, 1957 wherein the Government indicated that no claim or lien against the property (Section 10) was retained.

There is a question as to whether or not some additional third parties may have some additional royalty interest, and in order to make a determination on this point we necessarily will have to take a look at the contract between Colamer and the United States of America. We assume that the contract contained the owner's consent to lien and that the contract contained the usual provision granting the Government a lien upon the land and the production. However, we cannot rely on that assumption and necessarily will have to have a copy of the actual contract as it is signed.

Mr. Frank E. Johnson
Office of Minerals Exploration

August 12, 1960

Therefore it would be appreciated if you might send us at your earliest convenience a copy of the above referenced exploration contract and we would be glad to remit any sum necessary for copying purposes.

Since the examination is somewhat urgent, we would appreciate hearing from you at your very earliest convenience.

Respectfully

McKenna & Sommer

By Thomas F. McKenna

Thomas F. McKenna

TFMcK:b

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/11	Murphy	500
	Moraine	500
8/11	Talbot	800
"	Johnson	120
		~~110~~
8/11	gad	220
		225

AUG 11 1960

AIR MAIL

Mr. E. B. White, Jr.
Vice President
United Western Minerals Company
302 East Palace Avenue
Santa Fe, New Mexico

Re: IMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico
Contract Idm-E940

Dear Mr. White:

This is to acknowledge your telegram of August 8, 1960, requesting copies of the above-referenced exploration contract.

Enclosed is a copy of a self-explanatory letter, dated December 2, 1957, to the Colamer Corporation, which should serve your purpose in a title examination.

The lands listed in the contract are nine Phyllis, nine Fannie, nine Jean, and nine Deetta claims comprising all of section 10.

Sincerely yours,

Frank E. Johnson (for)

Acting Director

Enclosure

FMMurphy/gla
8-11-60
cc to: Director's Reading File
Region III (2) w/2 cys incoming telegram
Docket
Chron
Code 500

43683

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

SF-1201 (6-60)

SYMBOLS

DL = Day Letter

NL = Night Letter

LT = International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LLF356 OB222 LH398

1960 AUG 8 PM 6 38

L SNA151 LONG NL PD SANTA FE NMEX 8

OFFICE OF MINERALS EXPLORATION DEPT OF THE INTERIOR

WASHDC

UNITED WESTERN MINERALS COMPANY PURCHASED ALL OF COLAMER CORPORATION'S URANIUM MINING INTERESTS IN SEC. 10, T13N, R9W, MCKINLEY COUNTY, NEW MEXICO, BY CONTRACT OF AUGUST 1, 1957. RECORDS SHOW THAT COLAMER HAD EXPLORATION CONTRACT COVERING SECTION 10. CONTRACT AND DOCKET NUMBERS MAY BE IDM-E802, DMEA-3621, OR DMEA-4017. UNITED WESTERN NEEDS COPY OF CONTRACT WITH EXHIBITS FOR TITLE EXAMINATION. PLEASE SEND COPY AT VERY EARLIEST CONVENICNE. URGENT

E B WHITE JR VICE PRES UNITED WESTERN MINERALS COMPANY 302 E PALACE AVE SANTA FE N M

COLAMER SEC 10 T13N R9W 1 1957 COLAMER 10 IDM-E802 DMEA-3621

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

SF-1201 (4-60)

8

SYMBOLS

DL = Day Letter

NL = Night Letter

LT = International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

L SNA151/2

1960 AUG 8 PM 6 38

DMEA-4017 302 E.

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 9 1960

DATE	INITIALS	CODE
8-9	gad	VVO
8/9	[illegible]	800
		500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
June 12, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 16 1958

DATE		SOL
6/16	C	220
"	Chrin	700
		225

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4017 (Uranium), Contract No. Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico - SUPPLEMENTAL FINAL SUMMARY REPORT

The time interval prescribed in the Minutes, Operating Committee, No. 907, dated December 16, 1957, has elapsed and the Operator has failed to submit a claim for the additional allowable amount as certified by the Report of Review, dated November 7, 1957, by the Contract Administration and Audit Division, DMEA. Therefore, the records of this office pertaining to the account were closed June 10, 1958.

The tentative final payment to the Operator, dated January 10, 1958, in the amount of $43,959.63, now constitutes the total reimbursement to the Operator under the provisions of the contract, which is 75 percent of the total accepted cost of $58,612.84.

Units of work or service completed consist of the drilling of 75 holes, aggregating 5830.5 feet of core drilling, 34,174.5 feet of non-core drilling, incidental allowance on a total of 40,005 feet of drilling, and chemical analysis of 2 samples.

The exploration work completed under the contract did not result in the discovery or development of a significant quantity of ore. Therefore, the Government retains no claim or lien against the property subject to the contract or any future production therefrom, and the Operator was so advised by a letter from the Administrator, DMEA, dated December 2, 1957.

J. W. Townsend
Alternate Acting Executive Officer

DMEA COPY
RECEIVED JUN 19 1958
6/12 C 226
a 700

284 New Customhouse
Denver 2, Colorado
June 10, 1958

Memorandum

To: MF-104 File, Region III

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

Subject: Docket No. DMEA 4017 (Uranium) Contract Idm-8940, Colamer Corporation, (Section 10, T 13 N, R 9 W), McKinley County, New Mexico

By teletype dated May 13, 1958, from the Chairman, Operating Committee, DMEA, copy of which is attached, we were advised that the subject contract could be closed upon receipt of an Obligation Document. The Obligation Document (dated May 19, 1958) has been received by the Finance Office, Region III; therefore, the account is considered to be closed.

Reconciliation

Total amount reported on Form MF-104, Operator's Monthly Report and Voucher		$58,612.84
Additional costs which would have been applicable if subsequently reported by Operator, per RR dated November 7, 1957		844.89
Total accepted cost per RR dated November 7, 1957		59,457.73
Government participation at 75 percent	44,593.30	
Reduction per Obligation Document (dated May 19, 1958)	633.67	
Adjusted balance payable to the Operator		43,959.63
Total prior payments		43,959.63
Balance due the Operator		$ 0.00

JDC:hmh

cc: Chmn. Op. Comm. (2)
Harshman
Corres.file,Reg. III
Ensler
DMEA/DFC
DMEA/G.Jet.
Finance Off.
Townsend
Chron

} w/copy of teletype of of 5/13/58

Original signed by
J. W. TOWNSEND

J. W. Townsend

Form 7
(2-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/13	Talbert	800
		~~800~~
5/13	Selfridge	130
"	Wilbur	110
"	Matthews	100
		~~240~~
5/14	C	220
		700

MAY 13 1958

Dallas E. Talbert/hb Rm. 4446, Ext. 3719

DMEA - Contr. Admr. & Audit Div.

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

[redacted]

TELETYPE

E. N. HARSHMAN, ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURTEL MAY 12, DMEA 4017, IDM-E 940, COLAMER CORP. ACCOUNT MAY BE CLOSED ON RECEIPT OF OBLIGATION DOCUMENT NOW BEING PROCESSED THROUGH BUDGET AND FINANCE BRANCH, BUREAU OF MINES.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE (GCS)

DETalbert/hb (5/13/58)
Copy to: Admr's. R.File
Operating Committee
T. H. Kiilsgaard
Mr. Chambers
Confirmation (Region III)

8623

Chairman, Operating Comm.
DMEA.

DN 235 BUR MINES 5-12-58 10-09

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE SPECIAL NOTICE, MINUTES OF OPERATING COMMITTEE NO. 907, DATED 12-16-57.

120-DAY WAITING PERIOD PERTAINING TO SUPPLEMENTAL PAYMENT UNDER CONTRACT IDM-E940, DOCKET DMEA 4017, COLAMER CORP., GASXX HAS EXPIRED. REQUEST PERMISSION TO CLOSE OU XX OUT THE ACCOUNT. PLEASE ADVICE.

E N HARSHMAN, ACTING EXEC. OFFICER

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 12 1958

DATE	INIT.	
5/12	C	220
5/13	C Cling	700

Denver, Colo.

Mr Chambers office has cy. to answer.

MAY 12 1 46 PM '58

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/26	Ching	700
11/29	Ellis	700
12-2	Chambers	800
12/2	Selfridge	120
		~~110~~
		~~100~~
12/3	gb	220
		700

Mr. Frank Boylin, President
Calamer Corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

DEC 2 1957

Re: Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Boylin:

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.

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

Sincerely yours,

Frank E. Johnson (for)

ACTING Administrator

MChing/gla
11-26-57
cc to: J. V. Reynolds and
Jean Reynolds
Thomas C. King and
Phyllis J. King
Ira N. Sprecher and
Fannie A. Sprecher
Joe Cahill and De Etta Cahill
Admr.'s Reading File
Mr. Ching
DMEA Field Team, Region III (2)
Contract Adm. & Audit Division

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/26	Ching	700
11/29	[illegible]	700
12-2	Chamka	800
12/2	Selfridge	120
		~~110~~
		~~100~~
12/3	glb	220
		700

Mr. Ira M. Sprecher
and
Mrs. Fannie A. Sprecher
c/o Mid-Valley Title Co.
306 South Second Street
Gallup, New Mexico

DEC 2 1957

Re: Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. and Mrs. Sprecher:

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

This correspondence relates to the Subordination Agreement signed by you on March 14, 1956.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

Enclosure

Same letter to:

Mr. Joe Cahill and
Mrs. De Etta Cahill
North Roane Street
Webb City, Missouri

MChing/gla 11-26-57
cc to: Admr.'s Reading File
Mr. Ching
DMEA Field Team, Region III (2)

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/26	Ching	700
11/29	Ellis	700
12-2	Chamber	800
12/2	Selfridge	120
		~~110~~
		~~100~~
12/3	gb	220
		700

Mr. J. V. Reynolds
and
Mrs. Jean Reynolds
903 South Madison
Webb City, Missouri

DEC 2 1957

Re: Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. and Mrs. Reynolds:

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

This correspondence relates to the Consents to Lien and the Subordination Agreements signed by you on March 14, 1956.

Sincerely yours,

Frank E. Johnson (fwo)

ACTING Administrator

Enclosure

Same letter sent to:

Mr. Thomas C. King and
Mrs. Phyllis J. King
c/o ~~Fidelity & Rouse Building~~ Commerce Building
Grants, New Mexico

MChing/gla 11-26-57
cc to: Admr.'s Reading File
Mr. Ching
DMEA Field Team, Region III (2)

8623

EA Form 7
2-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/19	Talbert	800
11/21	gb	220
		700

NOV 21 1957

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

Re: Report of Review
Idm-E940, DMEA-4017
Colemer Corporation

Dear Mr. Finch:

The Report of Review, in lieu of a final audit of the referenced project, as submitted with your letter of November 13, 1957, is acceptable and distribution is authorized.

It should be noted for your future guidance in similar cases that the term "exceptions" includes not only disallowances and reinstatements of disallowances but also additional allowances. Therefore, the factual portion of your report properly should have been stated as follows:

Total cost as billed by the Contractor			$58,612.84
Exceptions (schedule attached):			
By DMEA Finance Officer	$1,194.59		
Less: Reinstatements	906.57	$ 288.02	
Herewith		(1,132.91)	(844.89)
Total Accepted Cost			$59,457.73

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/wb
November 19, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

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

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 15 1957

DATE	INITIALS	CODE
8/15	P	220
"	Chung	700

August 14, 1957
Re: DMEA 4017 Idm-E940
Colamer Corporation
Sec. 10 Tract
McKinley County, New Mexico
Uranium

Memorandum

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

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

Subject: Review of Field Team Final Report

The contract awarded April 9, 1956 approved the expenditure of $102,580.00 on core and non-core drilling of a section of land underlain by members of the Morrison formation. The specific objective was the testing of the 'Poison Canyon' member, which in neighboring areas has been proven susceptive of uranium mineralization.

In the property of the same applicant in Sec. 8, one mile to the west, an orebody 8 feet thick estimated to contain 80,000 tons of 0.22% U_3O_8 was discovered in 1956 by DMEA assisted drilling. The drilling, under the referenced contract, failed to find ore, and the orebody in Section 8 is the only known orebody in the tier of four sections, 7,8,9 and 10, explored with DMEA assistance.

Good orebodies have been found to the south in sections 18, 19, 20, and 23 of Township 13 North, Range 9 West. Probably no structural control has been suggested that points to likely areas.

A termination agreement dated February 8, 1957, but effective as of September 5, 1956, finished the contract, expenditures amounting to $57,418.25 having been made. (Government's share $43,063.68) Certification was not recommended, no discovery having been made.

N. E. Nelson

N. E. Nelson

AL FILE COPY
DMEA
IVED AUG 12 1957

TE	INITIALS	CODE
8/12	G.	220
"	[illegible]	700
Memorandum		

[illegible]
[illegible]
[illegible]
Washington 25, D. C.

Date August 9, 1957

DMA Docket No. 4017
DMA Contract No. Idm-E940
Commodity Uranium
Name of applicant Colamer Corp.
Name of property Sec. 10,T 13,N, R 9 W
Location of property McKinley County, N. Mex.
Estimated cost of project $102,580.00

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

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

1. Date of subject document: 7/31/57. 2. Date received by reviewer: 8/8/57

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

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

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

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

7. Explain items marked yes above:

8. Matters needing special consideration:
a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs ☐
h. [illegible] ☐

9. Action advised:
a. Obtain information from applicant ☐
b. Refer to Field Team ☐
c. Denial ☐
d. Agree with Field Team ☒
e. Disagree with Field Team ☐
f. Suggest alternate plan ☐
g. Request another examiner ☐
h. Approval ☐
i. Consult with Mr. [illegible] at [illegible] AEC office.

10. Remarks: (Use back of page if necessary) Certification not recommended.

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

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DATE	INITIALS	CODE
8/5	O.K.	220
"	[illegible]	180
		130
8/9	O.K.	220
"	[illegible]	100
8/13	[illegible]	700

July 31, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4017 (Uranium), Contract No. Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico - FINAL REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report, dated July 1957, by W. D. McMillan, Mining Engineer, Bureau of Mines, and W. B. Gazdik, Geologist, Geological Survey; and transmittal thereof, dated July 26, 1957, from J. William Hasler, pertaining to work completed under the subject contract.

The original and one copy of the Operator's final report were forwarded by memorandum of April 22, 1957.

The contract was terminated before completion of all work provided for, by a TERMINATION AGREEMENT, dated February 8, 1957, which was made effective as of the close of business September 3, 1956.

Final payment to the Operator is deferred pending release of an Audit Certificate and Report of Audit of project costs by the Contract Administration and Audit Division, DMEA. Completion of the audit is deferred pending receipt of a decision from Washington relative to the allowability of certain project expenses.

Tentatively accepted work completed under the contract, subject to final audit, consists of the drilling of 74 holes aggregating 5,777 feet of core drilling, 33,694.5 feet of non-core drilling, incidental allowance on a total of 39,471.5 feet of drilling, and chemical analysis of 2 samples.

The exploration work completed did not result in the Discovery or Development of a significant quantity of uranium ore; therefore Certification of the project under the provisions of the contract is not recommended.

E. N. Harshman

E. N. Harshman
Acting Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
8-9-57
(date)

IN REPLY REFER TO:
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA
DEPARTMENT OF THE INTERIOR
JUL 29 1957
REGION III
DENVER, COLORADO

P. O. Box 360
Grand Junction, Colorado

July 26, 1957

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DATE	INITIALS	CODE
	EMH	130
		220

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman

From: J. William Hasler

Subject: DMEA docket No. 4017 (Uranium), Colamer Corporation (contract Idm-E 940), Phyllis, Fannie, Jean and Deetta claim groups, Sec. 10, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico

Transmitted herewith are 10 copies of the above-referenced joint final engineering and geologic report, prepared by W. D. McMillan and W. B. Gazdik.

Figures 1, 2, and 3 are attached to the reports.

J. William Hasler
J. William Hasler,
Geologist

JWH/mlr

Enclosures (10 reports)

Reviewed by
DMEA OPERATING COMMITTEE
8-9-57
(date)

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

DMEA
DEPARTMENT OF THE INTERIOR
JUL 29 1957
REGION III
DENVER, COLORADO

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT FINAL REPORT BY EXAMINING TEAM
REGION III

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DATE	INITIALS	CODE
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DMEA 4017
CONTRACT Idm-E 940

COLAMER CORPORATION

Phyllis, Fannie, Jean and Deetta Claim groups
Sec. 10, T. 13 N., R. 9 W., N.M.P.M.
McKinley County, New Mexico

Uranium

Joint Final Engineering and Geologic Report

By

W. D. McMillan,
Bureau of Mines

W. B. Gazdik,
Geological Survey

July 1957

Reviewed by
DMEA OPERATING COMMITTEE
8-9-57
(date)

DMEA 4017
CONTRACT Idm-E 940
COLAMER CORPORATION
PHYLLIS, FANNIE, JEAN AND DEETA CLAIM GROUPS
SEC. 10, T. 13 N., R. 9 W., N.M.P.M.
McKINLEY COUNTY, NEW MEXICO

CONTENTS

Joint Final Engineering and Geologic Report

	Page
Summary and Introduction	1
Location, Topography, and Physical Features	3
History, Production, and Ownership	3
Geology	4
Ore Deposits	7
Work Completed Under Contract	9
Expenditures under Contract	9
Conclusions and Recommendations	10

ILLUSTRATIONS

Figures	Follows page
1. Location map, Colamer Corporation, McKinley County, New Mexico	10
2. Sketch map of sec. 10, T. 13 N., R. 9 W., NMPM, showing completed DMEA holes, Colamer Corp., McKinley County, New Mexico	10
3. Map of Ambrosia Lake area showing known mineralized areas in Jurassic Morrison formation, Colamer Corp., McKinley County, New Mexico	10

TABLES

1. Summary of drilling (driller's logs, radiometric logs, chemical assays)	10
2. Summary of exploration and approved costs	10

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DMEA 4017

SUMMARY AND INTRODUCTION

The Colamer Corporation of Grants, New Mexico, applied for DMEA assistance in exploring for uranium on all of sec. 10, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico. The proposed work consisted of a combination of non-core and core drilling to be done in three stages. The applicant proposed to drill 96,455 feet in 232 holes at an estimated cost of $151,056.00. The object of this work was to test the Poison Canyon sandstone of the Brushy Basin member of the Jurassic Morrison formation.

The property was examined by a Region III examining team on December 6, 1955, and it was concluded that the property warranted further exploration. A revised program consisting of 50,400 feet of drilling in 112 non-core and core drilled holes at a total estimated cost of $101,425.00 was recommended.

A contract was entered into April 9, 1956, in which the recommended program was covered, but certain unit costs were changed and the total estimated costs allowed were $102,580.00.

Stage I of the contract consisted of drilling 22 non-core and core-drill holes aggregating an estimated 9,900 feet, at a total cost of $20,138.00.

Stage II of the contract consisted of 45 non-core and core-drill holes aggregating an estimated 20,250 feet, at a total cost of $41,185.00.

Stage III of the contract consisted of not more than 45 holes, aggregating 20,250 feet; but more chemical assays were allowed and the total cost

was estimated at $41,255.00. The total contract cost of the project was $102,580.00.

Not so. M.C.

Contract Idm-E 940 was amended to permit drilling through the West-water Canyon formation, and to drill additional stage I holes, with footage and funds to be transferred from stage II of the contract.

The contract was signed on April 9, and the work commenced April 24, 1956. Stage I was completed on July 26, 1956. The approved work consisted of 25,689.5 feet of non-core and 4,654 feet of core-drilling in 54 holes at a total cost of $43,377.46.

Stage II and stage III were started on August 12, 1956 and completed on September 3, 1956.

Work approved under stage II consisted of 1,702 feet of non-core and 445 feet of core drilling in 4 holes, at a total cost of $3,767.44.

Work approved under stage III consisted of 6,303 feet of non-core and 678 feet of core-drilling in 16 holes, at a total cost of $10,273.35.

Total approved work for the project consisted of 33,694.5 feet of non-core and 5,777 feet of core drilling, at a total cost of $57,418.25. Government participation at 75 percent amounted to $43,063.68.

Details of the work approved are given in Tables 1 and 2.

No uranium ore was found in the formations explored, and on December 31, 1956 recommendations were made to terminate the contract without a certification of discovery.

On February 8, 1957 a termination agreement, effective as of the close of business on September 3, 1956, was signed.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

Sec. 10, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico, is readily accessible from Grants, New Mexico, (a station on the Atchison, Topeka & Santa Fe Railway) by travelling west on U. S. Highway 66 three miles to New Mexico State Highway 53; thence northerly 11 miles to the Ambrosia Lake road fork; thence northwest about 1-1/2 miles to the property (fig. 1).

The surface is gently rolling and drains to the southwest. The Cretaceous Mancos shale forms small bluffs in the northern part of the section. Vegetation is limited to sagebrush, cacti, and native grasses, with occasional small cedars.

The climate is arid, with wide variations in temperature and precipitation. Most of the 6 to 8 inches of annual precipitation occurs as violent storms during the summer and winter months.

HISTORY, PRODUCTION AND OWNERSHIP

Uranium minerals were first found in the district in the fall of 1949 by a group of student geologists from the University of California. In the spring of 1951, a sheep herder found uranium mineralization along an outcrop of the Jurassic Todilto limestone, which lead to the development and exploitation of the Haystack Butte mine of the Atchison, Topeka & Santa Fe Railroad Company. Since these early discoveries, the outcrops of formation ranging from the Cretaceous Dakota to the Jurassic Morrison

Recapture formations have also been prospected. Production to date has come from the Poison Canyon sandstone lens of the Jurassic Morrison Brushy Basin member and from the Jurassic Todilto limestone, although large uranium-ore deposits have been indicated in the Westwater Canyon sandstone of the Morrison formation.

There has been no production from the subject property and the nearest mining operation is about 2-1/2 miles to the southwest.

A search of the McKinley County records at Gallup, New Mexico, show that the applicant has a valid claim to the property.

GEOLOGY

The Grants Mining District lies on the southern fringe of the San Juan Basin. The rocks in the area consist of marine and terrestrial formations ranging in age from Permian to Upper Cretaceous. A late Tertiary sequence of acidic pyroclastics and basic flows are present locally. Pre-Cambrian rocks crop out on the Zuni Uplift to the south. This broad asymetrical dome trends in a northwesterly direction and extends a distance of 60 miles from Grants, New Mexico on the east to Gallup, New Mexico on the west. The beds in the district dip generally northward into the San Juan Basin but in the vicinity of the operator's property, the dip is about 3° NE. The rocks are folded broadly and high-angle north- and northeast trending faults with minor displacement are common. A well developed joint set trends north and another joint set trends generally east.

Significant uranium deposits in the Grants district are contained in a sequence of sedimentary rocks of Jurassic and Cretaceous age (Fig. 3). These sediments in ascending order are the Todilto limestone, Summerville formation, Bluff sandstone and Morrison formation of Jurassic age, and the Dakota sandstone, Mancos shale and Mesa Verde group of Cretaceous age. Productive uranium deposits occur in the Todilto, Morrison, and Dakota formations. This report is concerned only with deposits in the Jurassic Morrison formation. No exploration was planned specifically for Dakota sandstone deposits since such deposits are small and scattered and not considered significant. Excessive drilling depths and the small targets offered by Todilto deposits make drilling for these deposits on the applicant's property prohibitive.

The Jurassic Morrison formation in the Grants district is composed of three members. From bottom to top these are the Recapture, Westwater Canyon, and Brushy Basin. The Recapture member is mostly a fine- to medium-grained friable sandstone that contains some beds of claystone. It is about 100 feet thick and is distinguished by altrnating light-gray and reddish-brown units.

The Westwater Canyon member, which overlies the Recapture member, consists predominantly of medium- to coarse-grained fluvial sandstone locally interbedded with gray, greenish-gray and reddish-brown mudstone. In places the sandstone is arkosic and friable and ranges in color from light gray to yellowish orange or red. Locally, the sandstone contains carbonaceous material, asphaltite and mudstone pebbles. The thickness

of the Westwater Canyon member in the vicinity of the operator's property averages about 110 feet. It interfingers with the underlying Recapture member and the overlying Brushy Basin member; consequently the top and bottom contacts are indefinite. In the Ambrosia Lake area the Westwater Canyon member is the major ore-bearing horizon.

The Brushy Basin member is composed principally of mudstone and claystone containing varying amounts of siltstone and sandstone. Impure bentonitic clay forms most of the Brushy Basin member. It ranges in thickness from about 140 to 160 feet and averages about 150 feet. This variation in thickness is partly the result of pre-Dakota erosion following broad folding.

Significant uranium deposits in the vicinity of sec. 10 occur in a sandstone unit of the Brushy Basin member commonly referred to as the "Poison Canyon" sandstone. This medium- to coarse-grained sandstone lies about 20 feet stratigraphically above the base of the Brushy Basin and ranges in thickness from 25 to 110 feet on sec. 10. The color ranges from white to reddish brown but near ore deposits the color is yellowish gray. Crossbedding and scour and fill features suggest a fluvial origin. Carbonaceous debris, mostly silicified logs and reeds together with claystone pebbles and seams are present locally. Drill hole data and observations on the outcrop indicate that the "Poison Canyon" sandstone is a tongue of the underlying Westwater Canyon member. It loses its identity and locally cannot be distinguished from other lenticular Brushy Basin sandstone beds in the vicinity.

ORE DEPOSITS

All of the known significant Morrison deposits in the immediate vicinity of sec. 10 occur in the Brushy Basin member. Thus far exploratory drilling has failed to disclose commercial deposits in the Westwater member. However, several miles to the north, large ore deposits are found in the Westwater Canyon member as well as smaller ones in the Brushy Basin member (Fig. 3).

The "Poison Canyon" sandstone deposits are tabular elongate masses that lie essentially parallel to the sandstone beds. They range in thickness from a knife edge to 10 or more feet in thickness, vary from a few feet to 300 feet in width and may be as much as 3,000 feet in length. A deposit tends to occur as a cluster of ore bodies that contain from a few tons to as much as 100,000 tons each and range in grade from 0.10 to 0.50 percent U_3O_8.

The origin of the ore and factors that controlled its localization are not clearly understood. Primary sedimentary structures apparently played an important part in the localization of ore bodies. The relationship of fractures and folds to ore deposition has not been clearly established. However, the following geologic features and habits of ore bodies are useful in exploring for Brushy Basin deposits in the Grants district:

1. In the vicinity of ore deposits the ore-bearing sandstones are 50 feet or more thick.

2. The ore-bearing sandstones are altered from a yellow brown or orange to a light gray color near ore deposits.

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

4. Carbonaceous material, asphaltite, limonite, and claystone pebbles and seams are more abundant in the vicinity of ore deposits.

DMEA drilling disclosed an ore body in the northwest corner of Sec. 8 in the poison Canyon sandstone unit of the Morrison formation by the Colamer Corporation on the State group of claims in Sec. 8, T. 13 N., R. 9 W., N.M.P.M., DMEA docket 3632, contract Idm-E 797.

The most pronounced structural feature on Sec. 8 is a north-trending normal fault zone lying in the west half of the section. Considerable minor folding has occurred on Sec. 8 and shows that small anticlines coincide with the axes of the thick sandstone zones thus suggesting that these small folds are a result of differential compaction rather than of original process. The ore deposit contains an estimated reserve of about 80,000 tons of uranium ore that will average 0.22 percent U_3O_8 and 8 feet in thickness. The ore deposit appears to be about 1,000 feet long and averages about 150 feet wide with the long axis trending southeasterly. The depth to the ore body, from the surface, will be about 250 feet.

Sec. 10, T. 13 N., R. 9 W., N.M.P.M. was explored by DMEA under docket No. 4017, contract Idm-E 940. Both the Poison Canyon sandstone unit and the Westwater Canyon member of the Morrison formation were tested on the Phyllis, Fannie, Jean and Deetta claim groups in the same section with essentially negative results. This contract was completed and terminated without a certification of discovery.

DMEA 4017

WORK COMPLETED UNDER CONTRACT

The total amount of work completed by the operator, according to driller's logs, consisted of 33,487.5 feet of non-core drilling and 5,575 feet of core drilling in three stages as summarized below (Fig. 2).

Stage	No. Holes	Non-core - feet	Core - feet	Total-feet
I	54	25,877.5	4,837.0	30,714.5
II	4	1,702.0	445.0	2,147.0
III	16	6,703.0	733.0	7,436.0
Total	74	34,282.5	6,015.0	40,297.5

Details of holes with the results of radiometric probing are given in Table 1, and figure 2 shows the locations of all holes.

EXPENDITURES UNDER CONTRACT Idm-E 940

A summary of approved monthly expenditures by stages is presented in table No. 2. The totals of stages I, II and III are 33,694.5 feet of plug-bit drilling at an average unit cost of $0.964 per foot, amounting to $29,104.14; 5,777 feet of core-bit drilling at $3.055 per foot or $17,649.80; incidental costs 39,471.5 feet at $0.27 per foot or $10,657.31. Stand-by time amounting to $165.96 is included in drilling costs. Two samples were chemically analyzed (Stage II) at a cost of $7.00. The total cost of the project was $57,418.25. Government participation at 75 percent amounted to $43,063.68.

CONCLUSIONS AND RECOMMENDATIONS

Significant uranium mineralization was not found.

No further work with Government assistance is justified. The contract was terminated, effective September 3, 1956. No certificate of discovery was issued.

TABLE 1. Docket DMEA 4017, Contract Idm-E940, Colamer Corporation, Phyllis, Fannie, Jean and Deetta claim groups, Sec. 10, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico.

Summary of Drilling (Driller's Logs, Radiometric Logs, Chemical Assays)

Stage I	Hole No.	Plug Bit feet	Core Bit feet	Total feet	Radioactivity ft.	% U_3O_8
April 1956	101	385	180	565	2.0	0.020 at 316 ft.
	102	410	211	621	4.0	0.023 at 447 ft.
	103	450	130	580	5.0	0.03 to 0.08
	104	495	98	593	2.0	0.02 to 0.03
	105	497	100	597	few inches	0.03
	106	465	80	545	No radiometric anom.	
	107	491	54	545	No radiometric anom.	
	108	414	84	498	few inches	0.03
	109	340	121	461	No radiometric anom.	
	110	302	123	425	No radiometric anom.	
	111	526	29	555	No radiometric anom.	
	112	470	99	569		<0.01
	113	358	206	564	4.0	0.025 to 0.06 P. Canyon
					7.0	0.03 to 0.12 WW Canyon
	114	488	62	550	5.0	0.03
	115	495	45	540	4.0	0.035
	116	482	53	535	1.5	0.025 WW Canyon
	117	414	111	525	6.0	0.030 P Canyon
					6.5	0.070 WW Canyon
	118	402	110	512	No radiometric anom.	
	119	433	72	505	No radiometric anom.	
	120	375	100	475	Slight radio. anom.	
	121	371	74	445	Slight radio. anom.	
	122	295	120	415		<0.02
	148	480	120	600	3.0	0.03
	149	474	126	600		<0.013
	159	470	132	602	1.0	0.073
	160	510	105	615		<0.023
	161	499	118	617	3.0	0.04
	162	508	92	600	2.5	0.113
	163	485	98	583	No radiometric anom.	
	164	462	123	585	No radiometric anom.	
	165	428.5	111	539.5	1.5	0.043
	166	417.5	97.5	515	1.5	0.033
	172	549	91	640		<0.023
	175	458	127	585	1.0	0.09
	123	499	96	595	1.5	0.06
	124	554	27	581		<0.016
	125	600	20	620	1.0	0.050

TABLE 1. (cont.)

Stage I (cont.)	Hole No.	Plug Bit feet	Core Bit feet	Total feet	Radioactivity ft.	% U_3O_8
	126	568	40	608		<0.013
	135	483	127	610	1.0	0.033
	136	553	54	607	1.0	0.040
	137	552	45	597	1.0	0.030
	138	471	136	607		<0.030
	139	599	28	627	1.0	0.040
	140	489	126	615		<0.023
	150	576	29	605	1.0	0.026
	151	601	19	620		<0.023
	152	609	13	622		<0.026
	153	560	28	588		<0.030
	173	497.5	109.5	607		<0.023
	174	478	120	598		<0.023
	176	485	125	610		<0.033
	177	503	42	545	1.0	0.033
	178	566	10	576	1.5	0.040
	179	535	40	575	3.5	0.051
Total drilled	54	25,877.5	4,837	30,714.5		
Operator's errors		Apr.	- 183			
		May-188.0	+ 80			
Disallowed	May		80			
	54 holes	25,689.5	4,654	30,343.5		
Stage II						
	180	552	23	575	1.0	0.010 0.020< at 393 ft.
	201	398	187	585	No radiometric anom.	
	206	338	127	465	1.	0.015 at 378.5
	207	414	108	522	0.5	0.02
Drilled and allowed Stage II	4	1,702	445	2,147		

TABLE 1. (cont.)

Stage III	Hole No.	Plug Bit feet	Core Bit feet	Total feet	Radioactivity ft.	% U_3O_8
	182	410	53	463	0.7	0.010 0.02c at 429 ft.
	183	400	75	475	No radiometric anom.	
	184	400	55	455	No radiometric anom.	
	185	420	75	495	0.7	0.010 0.02c at 376 ft.
	186	440	25	465	1.0	0.010 at 444.5
	187	440	35	475	No radiometric anom.	
	188	430	37	467	No radiometric anom.	
	189	445	31	476	0.7	0.010 at 452 ft.
	190	395	15	410	No radiometric anom.	
	191	376	30	406	No radiometric anom.	
	192	385	31	416	2.0	0.150 0.020c at 280 ft.
	193	362	43	405	0.5	0.010 at 341.5
					0.5	0.030 0.040c at 370.5
	194	355	37	392	No radiometric anom.	
	195	370	25	395	No radiometric anom.	
	196	360	40	400	No radiometric anom.	
	197	345	75	420	1.0	0.020
	198	370	51	421	2.0	0.020
Total drilled	17	6,703	733	7,436		
Disallow hole 184	1	400	55	455		
Allowed Stage III	16	6,303	678	6,981		
Total 3 Stages						
Drilled	75	34,282.5	6,015	40,297.5		
allowed	74	33,694.5	5,777	39,471.5		

Reinstated ✓ No.184 +400.0 34,094.5 | +55 No.184 ✓ 5,832.0

Exceptions ✓ No.104 +80.0 | +0.5 Hole No.114 ✓
✓ No.180 +1.0 | −1.0 " " 162 ✓
✓ No.114 −1.0 34,174.5 | −1.0 " " 180 ✓ 5,830.5

TABLE 2. Docket DMEA 4017, (Uranium) Contract Idm-E 940, Colamer Corporation, Phyllis, Jean, and Deetta claim groups, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico.

Summary of Exploration and Approved Costs

Month 1956	No. Holes	Non-core feet	Unit cost per foot	Amount	Core feet	Unit cost per foot	Amount	Incidental Costs at 0.27/ft. feet	cost	Chemical analysis No.samples	cost
April	2	795		$ 556.50	208		$ 728.00	1,003	$ 270.81	--	--
May	17	7,334	.70	5,133.80	1,577		5,130.30	8,911	2,405.97	--	--
June	15	6,782		5,535.53	1,634.5		4,292.75	8,416.5	2,272.46	--	--
July	20	10,778.5	.95	10,239.58	1,234.5		3,568.25	12,013	3,243.51	--	--
Total Stage I	54	25,689.5		$21,465.41	4,654		$13,719.30	30,343.5	$ 8,192.75	--	--
August	3	1,288		1,223.60	337		1,179.50	1,625	438.75	2	$7.00
September	1	414		399.65	108		378.00	522	140.94	--	--
Total Stage II	4	1,702		$ 1,623.25	445		$ 1,557.50	2,147	$ 579.69	2	$7.00
August	11	4,503		4,277.85	450		1,575.00	4,953	1,337.31	--	--
September	5	1,800		1,737.63	228		798.00	2,028	547.56	--	--
Total Stage III	16	6,303		$ 6,015.48	678		$ 2,373.00	6,981	$ 1,884.87	--	---
Grand Total Stages I, II, III	74	33,694.5	$0.864	$29,104.14	5,777	$3.055	$17,649.80	39,471.5	$10,657.31	2	$7.00

	Total Cost	Government at 75%
April	$ 1,555.31	$ 1,166.48
May	12,670.07	9,502.55
June	12,100.74	9,075.55
July	17,051.34	12,788.51
Total Stage I	$ 43,377.46	$32,533.09
August	2,848.85	2,136.64
September	918.59	688.94
Total Stage II	$ 3,767.44	$ 2,825.58
August	7,190.16	5,392.62
September	3,083.19	2,312.39
Total Stage III	$ 10,273.35	$ 7,705.01
Grand Total Stages I,II,III	$ 57,418.25	$43,063.68

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
JULY 1957 CONTRACT Idm-E-940 DOCKET 4017

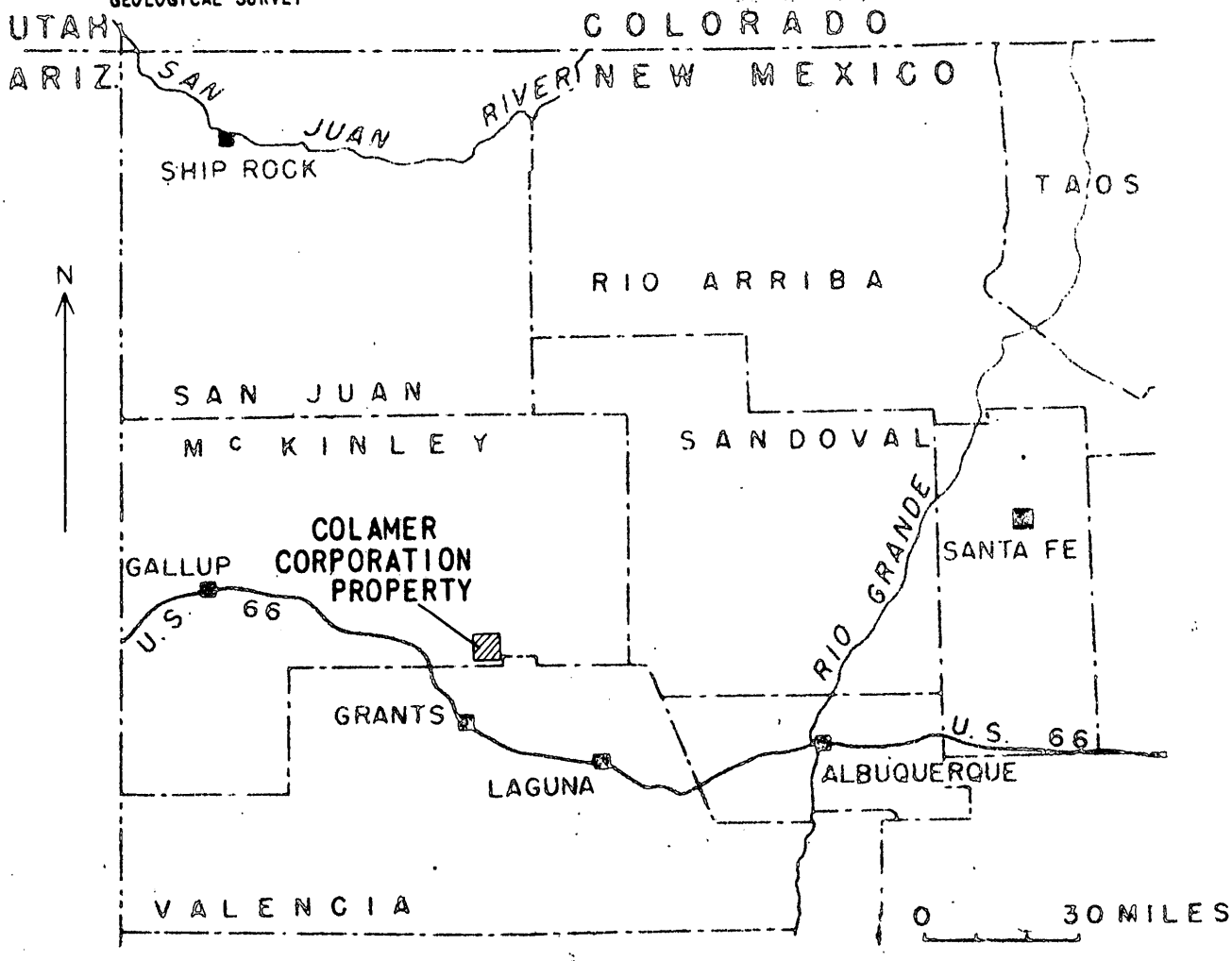
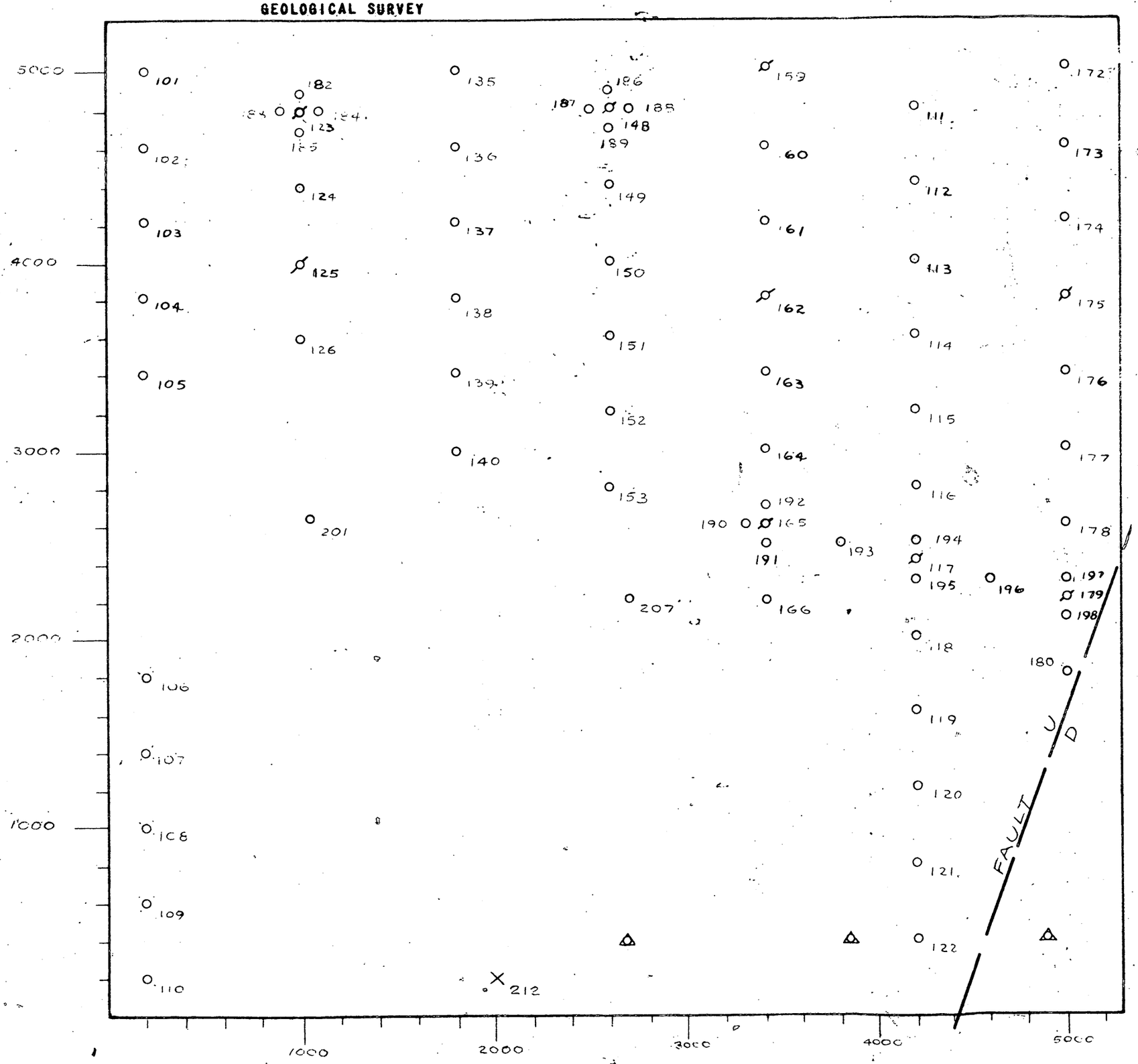


FIGURE 1.—LOCATION MAP, COLAMER CORPORATION, McKINLEY COUNTY, NEW MEXICO.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
JULY 1957 DOCKET 4017



EXPLANATION

DRILL HOLES

○ BARREN

ø WEAKLY MINERALIZED

△ COMPANY HOLE

Note: HOLE LOCATIONS FROM APPLICANTS MAP.

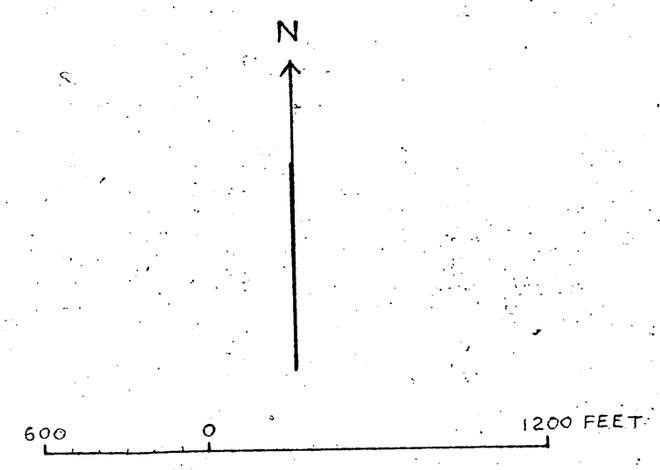


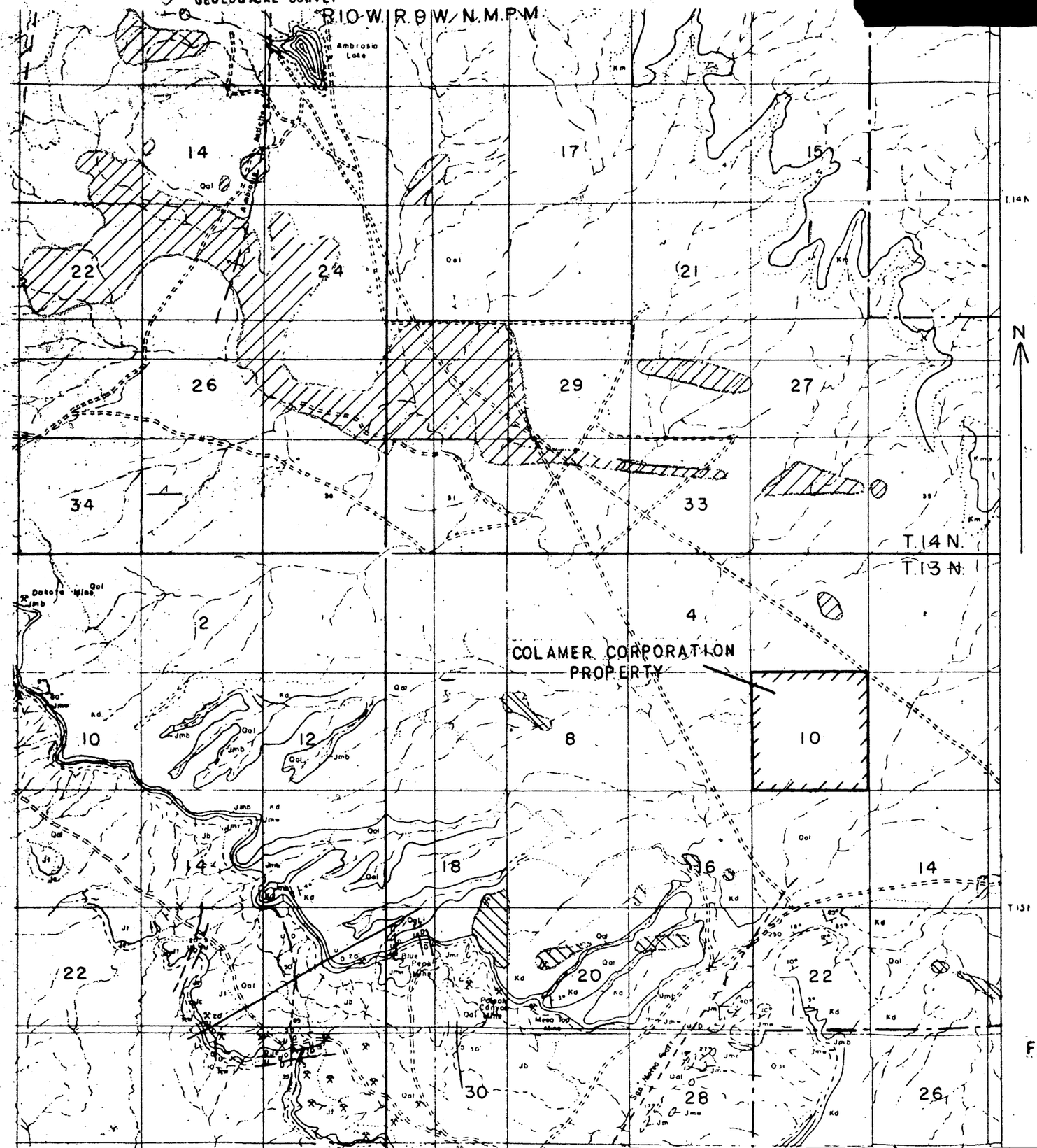
FIGURE 2.--SKETCH MAP OF SECTION 10, T.13 N., R.9 W., N.M.P.M., SHOWING COMPLETED DMEA HOLES, COLAMER CORPORATION, McKINLEY COUNTY, NEW MEXICO.

FILE COPY
OFFICIAL FILE COPY
D M E A
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
JULY 1957 DOCKET 4017



EXPLANATION

QUATERNARY — Pleistocene-Recent
- Qal — Alluvium

ANGULAR UNCONFORMITY

CRETACEOUS — UPPER
- Kmv — Mesa Verde Group
- Km — Mancos Shale
- Kd — Dakota Sandstone

ANGULAR UNCONFORMITY

JURASSIC — UPPER — Morrison Formation
- Jmb — Brushy Basin Member
- Jmw — Westwater Canyon Member
- Jmr — Recapture Member
- Jm — Morrison Formation undifferentiated

JURASSIC — UPPER — San Rafael Group
- Jb — Bluff Sandstone
- Js — Summerville Formation
- Jt — Todilto Limestone
- Je — Entrada Sandstone

TRIASSIC — UPPER — Glen Canyon Group
- Jc — Carmel Formation
- Jw — Wingate Sandstone

DISCONFORMITY

- TRc — Chinle Formation

GEOLOGIC CONTACT, DASHED WHERE INFERRED

FAULT SHOWING RELATIVE DISPLACEMENT, DASHED WHERE INFERRED

ANTICLINAL AXIS

STRIKE AND DIP OF BEDS

APPROXIMATE BOUNDARY OF MINERALIZED GROUND IN THE WESTWATER CANYON MEMBER

APPROXIMATE BOUNDARY OF MINERALIZED GROUND IN THE BRUSHY BASIN MEMBER OF AMBROSIA LAKE AREA

Note: BASE FROM ATOMIC ENERGY COMMISSION PRELIMINARY MAP NO. 2.

1 0 3 MILES

FIGURE 3.--MAP OF AMBROSIA LAKE AREA SHOWING KNOWN MINERALIZED AREAS IN THE JURASSIC MORRISON FORMATION IN RELATION TO THE OPERATORS PROPERTY, COLAMER CORPORATION, McKINLEY COUNTY, NEW MEXICO.

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DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 16 1957

DATE	INITIAL	CODE
5/16	C	220
5/17	~~[illegible]~~	700

224 New Customhouse
Denver 2, Colorado

May 13, 1957

Memorandum

To: T. A. Christensen

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

Subject: Docket DMEA-4617 (Uranium) Contract Idm-E940, Gulsmer Corporation, (Sec. 10, T 13 N, R 9 W) McKinley County, New Mexico

Enclosed are copies of the Drilling Subcontractor's monthly invoices for drilling performed under the subject contract during the months of April, May, June, July and August, 1956. Please attach the invoices to your copies of Form MF-104, Operator's Monthly Report and Voucher for the above months.

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

Enclosures

JDC:bh
cc: Chmn. Op. Comm. (2)
Harshman
Kenselman (2)
Fisch
Townsend
Gerres, Reg. III
MF-104 file, Reg. III
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1957

DATE	[illegible]	CODE
5/2	C	220
5/2	[illegible]	800
5/3	[illegible]	700

224 New Customhouse
Denver 2, Colorado

April 30, 1957

Mr. Kelsey Boltz
Calamar Corporation
1016 W. Santa Fe
Grants, New Mexico

Re: Docket DMEA-4017 (Uranium)
Contract Idm-E940
Calamar Corporation
(Section 10, T. 13 N., R. 9 W)
McKinley County, New Mexico

Dear Mr. Boltz:

The reported project costs for Contract Idm-E940 are presently being reviewed by the Contract Administration and Audit Division, DMEA. In order to facilitate this work, the DMEA Auditor has requested copies of the drilling subcontractor's monthly invoices for the months of April, May, June, July and August, 1956, with supplemental hole detail data similar to that which you included with the September 1956 report.

Final payment under the contract cannot be processed until the Report of Review of reported project costs is released to this office by the Contract Administration and Audit Division, therefore we request that you submit the above invoices to this office as soon as possible.

Yours very truly,

Original signed by
E. N. HARSHMAN

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

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 24 1957

DATE	INITIALS	CODE
4/24	C	220
4/25	[illegible]	800
4-26	[illegible]	700

224 New Customhouse
Denver 2, Colorado

April 22, 1957

Memorandum

To: T. H. Brading

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

Subject: Docket No. DMEA 4017 (Uranium), Contract No. Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico

The subject Contract was terminated before completion of all work provided for, by an Agreement dated February 8, 1957, which was made effective as of the close of business September 3, 1956. Enclosed for your records is a copy of the "TERMINATION AGREEMENT."

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 account is in order, contingent on release to this office of a Certificate and Report of Audit, or Report of Review of reported project costs, whichever the case indicates.

All work was performed on an Actual Cost Basis except for Incidental Allowance of 39,471.5 feet of drilling and chemical analysis of two samples.

The sum of $500.00 was withheld from reimbursement to the Operator in processing his final accounting report, which was for the month of September, 1956.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosure

JWT:prl

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

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

OFFICIAL FILE COPY
DMEA
RECEIVED APR 24 1957

DATE	INITIALS	CODE
4/24	C	220
4/25	[illegible]	800
4/26	[illegible]	700

April 22, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4017 (Uranium), Contract No. Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico

Enclosed are two copies of a final report submitted by the Operator pertaining to work completed under the subject Contract.

E. N. Harshman

E. N. Harshman

Enclosures

OPR'S. FINAL REP.

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

FINAL GEOLOGICAL ENGINEERING REPORT

ON

DMEA DOCKET 4017 CONTRACT Idm-940

OFFICIAL FILE COPY
D M E A
RECEIVED APR 24 1957

DATE	INITIALS	CODE

COLAMER CORPORATION

KELSEY L. BOLTZ,
CHIEF GEOLOGIST

OFFICIAL FILE COPY
DMEA
RECEIVED APR 24 1957

DATE	INITIALS	CODE

CONTENTS

1. Written Summary

2. Wide Space Drill Hole Map

3. Structural Contour

4. Isopach Map

GEOLOGY

General

This exploration contract covered all of Section 10, Township 13 North, Range 9 West which is located on a mesa capped mostly by the first and second Tres Hermanas members of the Mancos Formation. The bottom contact of the objective horizon, the Westwater canyon member of the Morrison Formation, averages approximately 550 feet in depth. The exploration holes were drilled by plug bit to the Poison Canyon unit of the Westwater Member then cored through the Westwater.

Structure

The general dip of the formations is approximately 3° northeast. The most pronounced feature is an anticlinal structure in the Southwest quarter of the section. DMEA participation was halted before this structure could be adequately explored. (See Map A). Drilling has shown the presence of a part of the San Mateo Fault Zone in the southeast corner of the section. The east side is down, thrown approximately 200 feet vertically.

Stratigraphy

The stratigraphy of interest here is the thicknesses and composition of the units of the Westwater Member. The thick zones of these units lie in the southwest quarter of the section and have an East-south-east trend. (See Map B). The area covered by this thick zone generally coincides with the area of the above mentioned anticline. In the so-called "bleached" areas (North one half, Southwest one fourth, and part of Southeast one fourth) the Westwater sands have the following general description:

Light gray to light greenish gray, medium to course grained, round to sub-round, poorly sorted, fair to poorly cemented with green clay (some white clays-altered calcic feldspars),well cemented with calcite near bottom contacts, common to abundant pyrite, occasional to common pebbles of black chert, occasional to common spots of petroliferous residue near contacts.

In "unbleached" areas the iron is contained in hematite rather than pyrite.

Surface Anomaly

A geophysical company was engaged to survey the surface radiometrically. An extremely sensitive ionization chamber was used. A radiometric high was detected having the same trend and overlying the thick sand zone.

Mineralization

The various holes on the section which encountered mineralization have at least two conditions in common:

1. Mineralization occurs in bleached sandstone.
2. Mineralization occurs in or very near thick sandstone sections.

The mineralization around holes numbers 165, 117, and 179 appears to lie around a northeast trending tounge of thick sand which branches off the large aforementioned thick zone in the Southwest one fourth of the section. The mineralization around holes numbers 123 and 148 occurs on the periphery of a thick Poison Canyon sandstone zone, the main part of which appears to be on Section 3 to the north.

DRILLING TOTALS:

Month	Plug(ft)	Plug ($)	Core(ft)	Core($)	($) IncAllow	($) Standby	($) Assays	Totals ($)
April	795.0	556.50	208.0	728.00	270.81			1,555.31
May	7,334.0	5,133.80	1,577.0	5,130.30	2,405.97			12,670.07
June	6,782.0	5,403.53	1,634.5	4,292.75	2,272.46	132.00		12,100.74
July	10,778.5	10,239.58	1,234.5	3,568.25	3,243.51			17,051.34
Aug	5,791.0	5,501.45	787.0	2,754.50	1,776.06		7.00	10,039.01
Sept	2,214.0	2,145.30	336.0	1,176.00	688.50			4,009.80
TOTALS	33,694.5	28,980.16	5,777.0	17,649.80	10,657.31	132.00	7.00	57,426.27

Government Participation: 0.75 X 57,426.27 = $43,069.97

Kelsey T. Gly

ENGINEERING AND ACCOUNTING

OFFICIAL FILE COPY
RECEIVED
DATE
COPY

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS
DL = Day Letter
NL = Night Letter
(57). al ram

The filing time shown in the date line on domestic telegrams is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

LA332

L AYA554 PD=GRANTS NMEX 17 346PMM=

1957 APR 17 PM 4 10

:E N HARSHMAN=

:224 NEW CUSTOMHOUSE DVR=

=FINAL REPORT ON DOCKET 4017 MAILED TODAY=

=COLAMER CORP KELSEY BOLTZ=

4017=

Encl
T
C

4/18/57
Copies distributed to:
Chairman, Of Comm (2)
Hargrave
Shaw (2)
Hoeler
Toronsend

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957

DATE	INITIALS	CODE
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"	~~chin~~	700

224 New Customhouse
Denver 2, Colorado

April 15, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED APR 17 1957
CODE
220
800
700

Mr. Kelsey Holtz
Colsmer Corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

Re: Docket No. DMEA 4017 (Uranium)
Contract No. Idm-E940
Colsmer Corporation
(Sec. 10, T 13 N, R 9 W)
McKinley County, New Mexico

Dear Mr. Holtz:

Your attention is directed to the provision under Article 7(c) of the Contract and item 3 of the "TERMINATION AGREEMENT", dated February 8, 1957, relative to the rendering by your Company of a final engineering and geologic report pertaining to work completed under Contract No. Idm-E940.

We are desirous of closing this account at an early date. Therefore, we will appreciate your prompt attention to the matter of rendering the required final report. In addition, we will appreciate advice by return mail as to the date on or before which we can expect to receive the final report.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

JWT:prl

cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

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

224 New Customhouse
Denver 2, Colorado

February 26, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 28 1957

DATE	INITIALS	CODE

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4017 (Uranium), Contract No. Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico

Enclosed are the Government's, Division, and Docket copies of the TERMINATION AGREEMENT which was forwarded by your letter of February 11, 1957 for signature by the Operator.

Also enclosed are four copies of the Operator's letter of January 14, 1957, advising that the Company would sign the Termination Agreement.

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

E. N. Harshman

E. N. Harshman

Enclosures

COLAMER CORPORATION

GRANTS DIVISION
COMMERCE BUILDING
1016 WEST SANTA FE
GRANTS, NEW MEXICO

January 14, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JAN 16 1957
REGION III
DENVER, COLORADO

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

Re: Docket No. DMEA 4017 (Uranium)
Contract No. IDM-E940
Colamer Corporation
(Sec. 10, T 13 N, R 9 W, N.M. P.M.)
McKinley County, New Mexico

Dear Mr. Harshman:

Concerning the termination of this contract, our company will sign such an agreement. The date of performance of the last work under this contract was during the month of September, 1956.

Very truly yours,

COLAMER CORPORATION

Kelsey L. Boltz

Kelsey L. Boltz

KLB/vp

EXTRA COPY
DMEA
RECEIVED FEB 28 1957

DATE	INITIALS	CODE

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 18 1957

DATE	INITIALS	CODE
2/18	C	226
2/18		800
		225

224 New Customhouse
Denver 2, Colorado

February 15, 1957

Mr. Kelsey Boltz
Colamer Corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

Re: Docket No. DMEA 4017 (Uranium)
Contract No. Idm-E940
Colamer Corporation
(Sec. 10, T 13 N, R 9 W)
McKinley County, New Mexico

Dear Mr. Boltz:

Enclosed are the Government's, Division, Docket, Finance Office, and Field Team copies of a proposed "TERMINATION AGREEMENT," which has been prepared pursuant to concurrence in your letter of January 14, 1957, to terminate Contract No. Idm-E940, effective as of the close of business on September 5, 1956.

If the Termination Agreement is satisfactory, all copies are to be signed by an official of Colamer Corporation authorized to sign such an instrument, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office.

Upon return of the properly signed copies of the Termination Agreement, the "Operator's Copy" will be forwarded to you.

Very truly yours,

Original signed by
W. M. TRAVER

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

Enclosures

JWT:prl

cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

AEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
2/6/57	Ching	700
2-7	Ellis	700
2-8	Chamber	800
2/8	Selfridge	130
"	Johnson	110
"	Matheudog	100
2/12	C	220
		225

FEB 11 1957

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

Re: Docket No. DMEA-4017 (Uranium)
Contract No. Idm-3940
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Traver:

In accordance with our teletype of January 31, 1957, we are enclosing the original and five copies of a Termination Agreement between the Government and Colamer Corporation, signed by the Administrator. Also enclosed are two extra copies of the agreement for the use of the Field Team.

If you and the Operator find the agreement in order, please have it executed as indicated and make the usual distribution thereafter.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2/8)

Enclosures

MChing/gla
2-6-57
cc to: Admr.'s Reading File
Operating Committee
T. H. Kiilsgaard, 5224
AEC - Jack Kratchman
Code 700
Mr. Ching

APPROVED:

Frank D. Lamb (2/8)
Member, Bureau of Mines

Thor H. Kiilsgaard (2/8)
Member, Geological Survey

R.C.J.

8623

Docket

700

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

February 4, 1957

Memorandum

To: The Files

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

Subject: Justification for Termination Agreement
Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Under Stage I of the subject contract, 22 holes were drilled through the Westwater Canyon member of the Morrison formation. One hole cut low-grade ore material and the remainder were weakly mineralized or barren.

On the basis of information secured under Stage I, 36 holes were authorized and drilled through the Westwater Canyon member under Stage II. Four of these holes and one Stage I hole were sufficiently mineralized at the Poison Canyon horizon to warrant the drilling of offset holes under Stage III.

Seventeen holes were authorized by the Field Team for Stage III, but only twelve were drilled. Because the results were negative the field examiners recommended that the contract be terminated without a certification of discovery.

Michael Ching
Michael Ching

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
2-4	Ching	700
		220

February 4, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Termination Agreement
Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940
Colomer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Will you kindly prepare a Termination Agreement between the Government and the subject Operator in accordance with the attached draft. It should be prepared for the signature of the Administrator.

All authorized work was completed prior to the proposed effective date of termination.

/s/ Ernest Wm. Ellis

Ernest Wm. Ellis

MChing/izm 2-4-57

cc to: Code 700
Mr. Ching

RECEIVED
FEB - 4 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1-30	Ching	700
1-30	[illegible]	700
1/31	Selfridge	130
"	Johnson	110
"	Rhetenday	100
1-31	[illegible]	220

JAN 31 1957

Department of the Interior

DMEA
14X4401(01) Revolving Fund,
Defense Production Act
Interior (Allocated Working Fund to the
Office of the Secy.)

T E L E T Y P E

W. M. TRAVER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER, COLORADO

REURTTS JANUARY 16 AND 30 COLAMER CORPORATION DOCKET 4017.

WE WILL PREPARE TERMINATION AGREEMENT. SORRY JANUARY 16 TELETYPE TEMPORARILY MISPLACED.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE

MChing/izm 1-30-57
cc to: Code 700
Mr. Ching
Admr.'s Reading File
Operating Committee
Confirmation Copy Reg. 3
Messrs. JECrawford, 3643
THKiilsgaard, 5224 JKratchman, AEC

8623

Mr. G. Selfridge

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 30 1957
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| | 221

DN 235 BUR MINES 1-30-57 8-45

CHAIRMAN, OPERATING COMMITTEE, DMEA

RE DOCKET DMEA 4017, CONTRACT IDM-E940, COLAMER CORP. WILL APPRECIATE RECEIVING ADVICE REQUESTED IN OUR TELETYPE OF JANUARY 16,1957.

W M TRAVER

Denver, Colo.

JAN 30 1 23 PM '57

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

Chairman Operating Committee.
W.M. EA.

DN 235 BUR MINES 1-16-57 2-05

CHAIRMAN OPERATING COMMOXX COMMITTEE, DMEA

REURTT 10-8-56, DOCKET 4017, CONTRACT IDM- E940, COLAMER CORPORATION. OPERRXX OPERATOR ADVISES THAT THEY WILL SIGN A TERMINATION AGREEMENT. PLEASE TELETYPE ADVICE AS TO WHETEXX WHETHER YOU WILL PREPARE THE TERMINATION AGREEMENT OR IF IT SHOULD BE PRP XX PREPARED IN THIS OFFICE. DRILLER S LOGS ON FILE INDICATE THAT THE LAST HOLE WAS COMPLETED SEPTEBEXX SEPTEMBER 3, 1956.

W M TRAVER

END PLS ACK 2 08 PWMSG RECD OK AH

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 17 1957

DATE	INITIALS	CODE
1-17	cw	220
		225

Recd. 1-30-57

Denver Colo.

1/28/57

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

204 New Customhouse
Denver 2, Colorado

January 24, 1957

JAN 28 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Gamma-ray log interpretations

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

DMEA Docket No. 4617, Contract Idm-E940, Colsmer Corp., McKinley County, New Mexico

DMEA Docket No. 4294, Contract Idm-E1010, LaSal Mining and Development Co., San Juan County, Utah

Private Hole - Food Machinery and Chemical Corp., Westvaco Minerals Products Division, McKinley County, New Mexico

Original signed by
W. M. TRAVER

W. M. Traver

Enclosures
JDC:jy
cc: Corresp. E940, E1010, Subject
Harshman
Shaw (2)
Caron.

Colamer Corporation
McKinley County, N. Mex.
Sec. 10; T. 13 N.; R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
182	463.0	None	310.0-460.0	408.0 - 409.0	1.0	230			<0.005	
				423.6 - 424.3	0.7	310			<0.010	
				426.4 - 428.3	1.9	260			<0.005	
				428.3 - 429.5	1.2	500			0.012	
				458.1 - 459.3	1.2	230			<0.005	
183	475.0	None	322.0-472.0	409.6 - 410.4	0.8	340			<0.010	
				411.3 - 412.2	0.9	240			0.005	
				419.5 - 422.0	2.5	300			0.005	
				470.2 - 471.5	1.3	240			<0.005	
185	495.0	None	342.0-492.0	375.4 - 376.5	1.1	440			0.011	
				377.6 - 379.3	1.7	280			<0.005	
				413.6 - 416.8	3.2	230			<0.005	
				426.3 - 427.5	1.2	230			<0.005	
				478.6 - 479.4	0.8	280			<0.010	
				481.2 - 482.4	1.2	270			<0.010	
186	465.0	None	312.0-462.0	381.6 - 382.6	1.0	260			<0.010	
				436.3 - 437.3	1.0	300			<0.010	
				437.3 - 438.4	1.1	230			<0.005	
				444.2 - 445.4	1.2	430			<0.010	
187	475.0	None	320.0-470.0	343.3 - 344.2	0.9	280			<0.010	
				446.7 - 447.8	1.1	400			<0.010	
188	467.0	None	314.0-464.0	375.9 - 376.8	0.9	240			<0.005	
				453.5 - 454.9	1.4	220			<0.005	
				461.0 - 462.2	1.2	240			<0.005	
189	479.0	None	308.0-458.0	378.1 - 379.3	1.2	260			<0.005	
				422.6 - 425.2	2.6	220			<0.005	
				449.3 - 451.2	1.9	310			<0.010	
				451.2 - 452.1	0.9	420			0.011	

* From top to bottom depths

Colamer Corporation
McKinley County, N. Mex.
Sec. 10; T. 13 N.; R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
190	410.0	None	258.0-408.0	274.9 - 277.0	2.1	280			<0.005	
				371.6 - 372.5	0.9	270			<0.010	
				405.3 - 406.9	1.6	210			<0.005	
191	406.0	None	254.0-404.0	269.6 - 270.4	0.8	410			0.011	
				271.3 - 272.3	1.0	350			<0.010	
				362.6 - 363.5	0.9	240			<0.005	
				401.0 - 402.2	1.2	360			<0.010	
				402.2 - 403.0	0.8	260			<0.010	
192	416.0	None	264.0-414.0	278.3 - 279.3	1.0	620			0.018	
				279.3 - 281.2	1.9	400			<0.010	
				342.9 - 344.6	1.7	250			<0.005	
				372.9 - 373.6	0.7	280			<0.010	
193	405.0	None	244.0-404.0	253.6 - 254.7	1.1	210			<0.005	
				254.7 - 255.5	0.8	370			<0.010	
				255.5 - 256.1	0.6	240			<0.010	
				257.8 - 259.1	1.3	280			<0.010	
				332.4 - 333.2	0.8	240			<0.010	
				341.5 - 342.2	0.7	420			0.013	
				369.2 - 370.5	1.3	300			<0.010	
				370.5 - 371.5	1.0	960			0.033	
				395.4 - 396.3	0.9	400			0.010	
				396.3 - 397.5	1.2	290			<0.010	
				398.7 - 399.5	0.8	320			<0.010	
				400.3 - 401.3	1.0	280			<0.010	
				402.4 - 403.1	0.7	230			<0.010	
206	465.0	None	182.0-462.0	272.6 - 274.1	1.5	320			<0.010	
				338.2 - 339.3	1.1	360			<0.010	
				355.7 - 357.1	1.4	360			<0.010	
				357.4 - 359.2	1.5	360			<0.010	
				368.2 - 368.8	0.6	300			<0.010	
				375.7 - 377.2	1.5	300			<0.010	
				378.1 - 379.1	1.0	540			0.015	

* From top to bottom depths

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

RECEIVED JAN 18 1957

DATE	INITIALS	CODE
1-18	C	220
1/24		800
		225

20th New Customhouse
Denver 2, Colorado

January 15, 1957

Mr. Rainey Beltz
Calumet Corporation
Commerce Building
1616 West Santa Fe
Grants, New Mexico

Re: Docket DMEA-4017 (Uranium)
Contract IDm-2940
Calumet Corporation
(Sec. 10, T. 13 N., R. 9 W.)
McKinley County, New Mexico

Dear Mr. Beltz:

In response to your letter of January 10, 1957, there follows a breakdown of the reported costs, disallowance, amount withheld and amount of reimbursement to Calumet Corporation under Contract IDm-2940 for the month of September, 1956.

Amount reported on Form MF-104 for Sept., 1956 -------	$4,009.80
Amount disallowed (standby time reported for non-case drilling which should have been pro-rated to case drilling on the basis of total footage drilled in the holes involved)----------	8.02
Total accepted cost for September, 1956	$4,001.78
Government participation at 75 percent ----------	$3,001.34
Amount withheld pending resolution of matters relative to closing the account ----------	500.00
Amount of reimbursement to Calumet Corporation for September, 1956	$2,501.34

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

JDC:jy

cc: Chm.Op.Comm.(2))
Harshman)w/copy of
Shaw (2))Operator's ltr.
Townsend)
Corresp.E940)
Chron.

Very truly yours,

Original signed by
W. M. TRAVER

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

COLAMER CORPORATION
GRANTS DIVISION
COMMERCE BUILDING
1018 WEST SANTA FE
GRANTS, NEW MEXICO

January 10, 1957

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

RECEIVED JAN 18 1957

DATE	INITIALS	CODE

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

Re: Concerning the monthly payments made to Colamer Corp. under this contract.

Dear Mr. Traver:

My calculations on the September reimbursement does not coincide with the government's figures.

I would appreciate it if you would send me a cost breakdown of the totals. Thank you.

Sincerely yours,

COLAMER CORPORATION

Kelsey L. Betts

KLB/vp

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

224 New Customhouse
Denver 2, Colorado

January 11, 1957

RECEIVED JAN 14 1957 D.M.E.A.

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4017 (Uranium), Contract No. Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W, N.M. P.M.), McKinley County, New Mexico

Enclosed are four copies of a letter from this office to the Operator, dated January 11, 1957; two copies of the Operator's undated request for approval of Stage III drilling, received in this office September 19, 1956; and four copies of various data pertaining to denial of the requested work and termination of the Contract.

Two copies of the letter to the Operator, dated October 8, 1956, referred to in our letter to the Operator of this date, were forwarded to you at the time of writing.

E. N. Harshman

E. N. Harshman

Enclosures

OFFICIAL FILE COPY
D M E A
RECEIVED JAN 14 1957

DATE	INITIALS	CODE
1-14	C.G.	220
	L.	225

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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE
January 11, 1957		

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

Mr. Kelsey L. Boltz
Colsmer Corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

Re: Docket No. DMEA 4017 (Uranium)
Contract No. Idm-E940
Colsmer Corporation
(Sec. 10, T 13 N, R 9 W, N.M. P.M.)
McKinley County, New Mexico

Dear Mr. Boltz:

Reference is made to your letter of January 4, 1957, inquiring as to the status of the Government's decision on your protest of October 18, 1956 of the denial from this office, dated October 8, 1956, pertaining to additional drilling under Stage III of the Contract.

A thorough review of data available to this office has not disclosed evidence of a nature to cause a reversal of our decision of October 8, 1956. Therefore, the matter of terminating the Contract in its present status stands as indicated in the letter to you of October 8, 1956.

Under the circumstances, please advise by return mail as to whether or not your company will sign an agreement to terminate the Contract in its present status. If so, for the purpose of preparing a suitable termination agreement, please advise the date the last work was performed under the Contract.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

JWT:prl

cc: Chairman, Op. Comm. (4)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

IN REPLY REFER TO:

MINERAL RESOURCES
DMEA
RECEIVED
JAN 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA
DEPARTMENT OF THE INTERIOR

JAN 11 1957

REGION III
DENVER, COLORADO

P. O. BOX 360
Grand Junction, Colorado

GEOLOGICAL SURVEY
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: J. William Hasler
E. N. Harshman
J. F. Shaw

From: William B. Gazdik

Subject: Docket DMEA 4017 (Uranium), contract No. Idm-R 940, Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., NMPM McKinley County, New Mexico

In a letter to your office dated October 18, 1956, the Operator protested the Government's decision to deny additional drilling and to terminate the subject contract in its present status.

The reasons given by the operator for protesting the decision were based on the presence of what was termed significant mineralization on Sec. 10, geologically favorable areas in the north half and southwest parts of the section, and the results of a radiometric survey made on the surface of the ground in Sec. 10 by the Empire Logging Company which supposedly outlined favorable areas.

According to records in this office a total of 70 holes, consisting of 22 stage I holes, 36 stage II holes, and 12 stage III holes have been completed (fig. 1). None of the holes penetrated ore-bearing material, although a few holes were drilled in weakly mineralized ground. On the basis of these negative drilling results it is not clearly understood what the operator's geologist means by the term "significant mineralization", mentioned in his letter of protest, since none of the drill holes penetrated what could be considered significantly mineralized ground. Stage III offset holes drilled around weakly mineralized holes (nos. 117, 123, 148, 165, 193) were essentially barren and apparently indicate that weakly mineralized rock in Sec. 10 is not necessarily indicative of nearby potential ore bodies.

A reappraisal of drilling data from completed holes does not alter the conclusions reached in the memorandum from this office dated October 2, 1956, that Sec. 10 had been sufficiently explored with negative results and that additional exploratory drilling consequently is not warranted. Past experience has indicated that Colamer Corporation geologists in the Grants area place a great deal of emphasis on unproven theoretical geological and geophysical concepts to guide their exploration work. Their idea that subtle anticlinal folds and noses locally controlled emplacement of ore bodies in

the Brushy Basin and Westwater Canyon members is uncertain and should be viewed with caution. Tectonic structures may have controlled mineralized trends on a regional scale but no conclusive evidence relating anticlinal folds to sandstone type deposits is apparent in the Grants District.

Proposed drill hole locations were also based on a rather expensive radiometric survey made on the surface of the ground in Sec. 10 by the Empire Logging Company. Such a survey conducted on the surface may be of academic interest but its practical value as a prospecting tool is highly questionable. The results, based on valuable and unknown factors, are meaningless. An attempt was made to point out some of the shortcomings and limitations of such a survey in the aforementioned memorandum from this office. Some of the unfavorable aspects of a radiometric ground survey are summarized below:

1. In areas where uranium minerals are being mined or where exploration projects are in progress radioactive material is scattered by ore trucks and high winds; consequently, a radiometric surface survey would indicate a distribution ~~is~~ pattern of radioactive material radically different from its original pattern.

2. In view of the very short range of gamma rays in rock reported discoveries by nuclear radiation devices of ore deposits covered by 400 or more feet of overburden are highly questionable.

3. The migration of decay products from parent radioactive minerals may offer a method of detecting concealed uranium deposits under some conditions; however, it is very doubtful that Radon 222 with a relatively short half life of 3.825 days could permeate upward from ore deposits through 400 feet or more of predominantly impervious mudstone and siltstone and be detected by a radiometric surface survey.

4. A direct relationship exists between the radon accumulation of soil air and a combination of meteorological factors. Sustained high wind velocities reduce the radon content in the upper foot or two of soil and a falling barometer causes the radon content to fall or vice versa. Frozen soil accumulates radon and high concentrations have been noted under snow cover. Such a variation in gamma ray activity sets a limit on the useful sensitivity of detection devices used in surface prospecting.

In summary, the operator in his letter of protest did not submit additional data to warrant a change in the Government's decision to deny additional drilling and to terminate the contract. The negative results of exploratory drilling completed to date indicate the probability of finding significant minable uranium ore on Sec. 10 is very poor. Therefore, it is again recommended that the operator's request for additional drilling be denied and the subject contract be terminated without a certification of discovery.

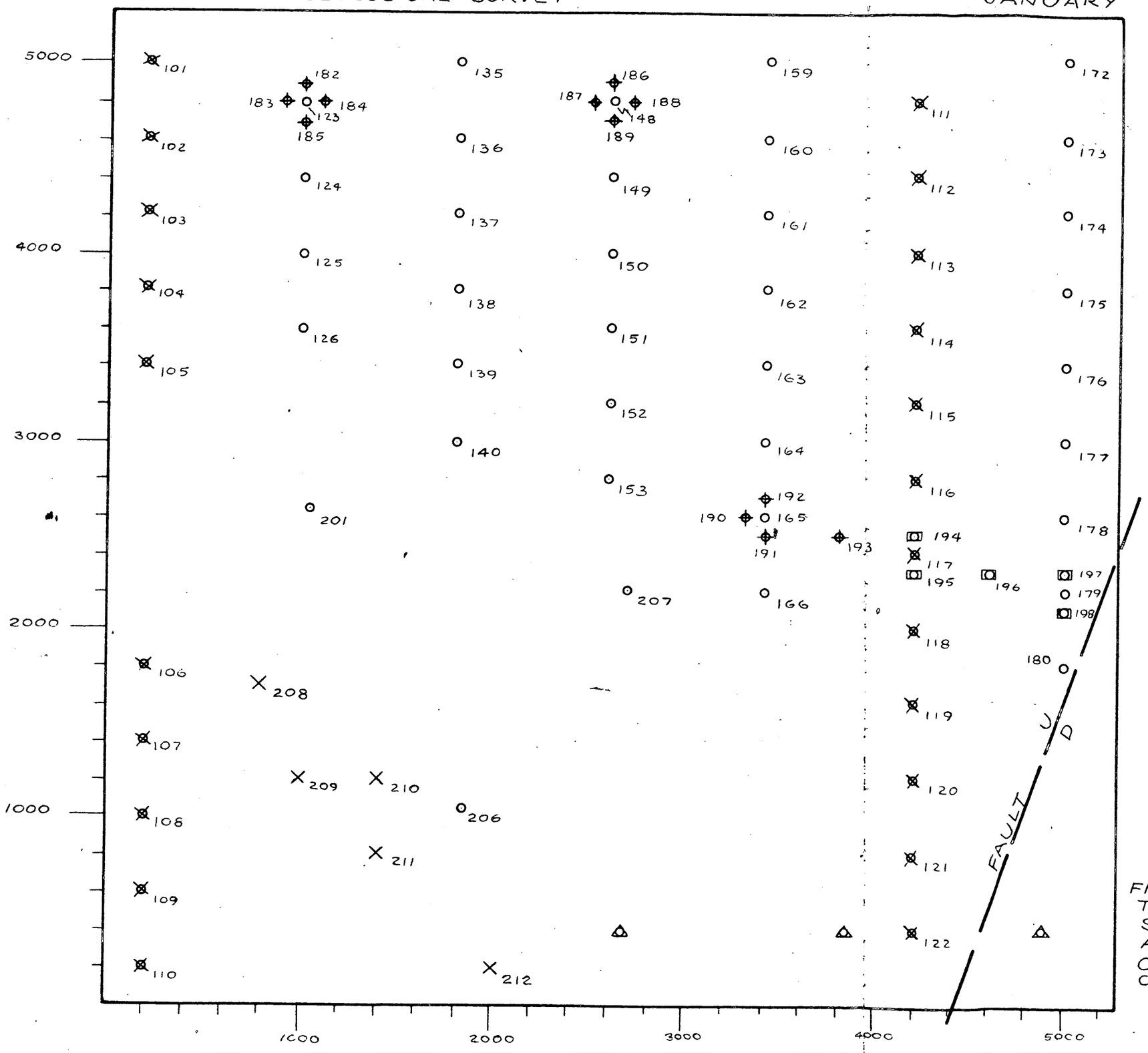
William B. Gazdik

William B. Gazdik,
Geologist

WBG/mlr
Enclosure

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
JANUARY 1957
DOCKET 4017



EXPLANATION

- ⊗ COMPLETED STAGE I HOLES
- o COMPLETED STAGE II HOLES
- ⌖ COMPLETED STAGE III HOLES
- X PROPOSED STAGE II HOLES
- ▣ APPROVED STAGE III HOLES NOT DRILLED
- △ COMPANY HOLES

NOTE: HOLE LOCATIONS FROM APPLICANT'S MAP

N

600 0 1200 FEET

FIGURE 1. SKETCH MAP OF SECTION 10, T. 12 N., R. 9 W., N.M.P.M., SHOWING COMPLETED STAGE I, STAGE II AND STAGE III HOLES, AND PROPOSED STAGE II HOLES, COLAMER CORPORATION, McKINLEY COUNTY, NEW MEXICO.

RECEIVED
JAN 14 1957
D.M.E.A.

COLAMER CORPORATION
GRANTS DIVISION
COMMERCE BUILDING
1010 WEST SANTA FE
GRANTS, NEW MEXICO

January 4, 1957

DMEA
DEPARTMENT OF THE INTERIOR

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DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE

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

Re: [illegible]
Contract [illegible]
Colamer Corporation
[illegible]

Dear Mr. Traver:

Reference is made to my letter of [illegible] government reconsider its denial [illegible] drilling. Since this request [illegible] no notice of action for or against [illegible].

I would appreciate any [illegible].

Very truly yours,

COLAMER CORPORATION

Kelsey L. [illegible]

KLB/vp

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Building 20
Denver Federal Center
Denver 2, Colorado

December 31, 1956

DMEA
DEPARTMENT OF THE INTERIOR
JAN 2 1957
REGION III
DENVER, COLORADO

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RECEIVED JAN 14 1957

DATE	INITIALS	CODE

REGION III

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: W. D. McMillan

Subject: DMEA Docket 4017 (Uranium), Contract Ion-2940, Colamer Corporation, (Phillis, Fannie, Jean and Deeta claims), Section 10, T. 13 N., R. 9 W., New Mexico Principal Meridian, McKinley County, New Mexico - Request for remaining Stage III drilling

Colamer Corporation, in a letter dated October 13, 1956, requested reconsideration of the denial of the operator's request for additional Stage III drilling, dated October 8, 1956. This denial was based on memoranda written by W. D. McMillan dated September 25, 1956, and by William B. Gasdick dated October 2, 1956. In the narrative report for September work, the operator stated that "further drilling in this zone is unwarranted".

In view of the above we reaffirm our previous recommendation that no additional drilling be done, and that the project be terminated by unilateral action if necessary.

W D McMillan
W. D. McMillan
Mining Engineer

WDM:ph

cc 9

October 18, 1956

EXTRA COPY
DMEA
RECEIVED JAN 14 '57

DATE	INITIALS	CODE

DMEA
DEPARTMENT OF THE INTERIOR
OCT 22 1956
REGION III
DENVER, COLORADO

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

Dear Mr. Traver:

Re: Docket DMEA 4017 (Uranium),
Contract Idm-E940
Colamer Corporation,
McKinley County, New Mexico

Reference is made to your denial of October 8, 1956, of our "Request for Remaining Third Stage Drilling" received by you September 19, 1956.

Stage I drilling on this section disclosed several facts:

1. Significant uranium mineralization in the area.

2. Widespread bleaching in the north half and southwest quarter of the section.

3. Extremely large thickness of Westwater and Poison Canyon sandstones in the southwest quarter of the section.

The three stage II holes in the southwest quarter authorized August 24, 1956 were to confirm the presence or absence of the thick sands and bleached conditions. As seen from the logs of the holes at coordinates 1050E 2650N, 2700E 2250N and 1850E 1050N, these very favorable conditions exist over the entire southwest quarter. To further pinpoint areas of possible mineralization, Colamer Corporation engaged at no small expense the use of an ionization chamber to detect anomalous surface radioactivity. Such an anomalous area was found in the southwest quarter of the section. Therefore, with all the above conditions existing in the area in which Colamer Corporation reauested to drill September 18, 1956, it would certainly appear that to stop the drilling at this point would be to leave the job uncompleted. Also, for the amount of expense involved in drilling the requested five holes to investigate this area, it would certainly seem worth the investment.

Mr. W. M. Traver

Therefore, Colamer Corporation is requesting that the Government reconsider its decision to terminate the contract.

Very truly yours,

COLAMER CORPORATION

KELSEY L. BOLTZ

KLB:lj

cc: Mr. William Gasdick

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DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE

MINERAL DEPOSITS
IN REPLY REFER TO:
RECEIVED
OCT 3 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 360
Grand Junction, Colorado

October 2, 1956

DMEA
DEPARTMENT OF THE INTERIOR
OCT 4 1956
REGION III
DENVER, COLORADO

Memorandum

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

Through: J. William Hasler JWH
E. N. Harshman ENH
J. F. Shaw JFS

From: William B. Gazdik

Subject: DMEA docket 4017 (Uranium) contract Idm-E 940, Colamer Corporation (Sec. 10, T. 13 N., R. 9 W., NMPM), McKinley County, New Mexico

Mr. G. Daly, Colamer Corporation geologist, submitted a copy of an undated report entitled "Request for Remaining Third Stage Drilling" wherein he requested approval to drill 5 stage II holes (fig. 1).

Drilling under the subject contract has not been very encouraging. According to records in this office, a total of 70 holes consisting of 22 stage I holes, 36 stage II holes, and 12 stage III holes have been drilled thus far. Some of the holes were weakly mineralized, but the majority penetrated barren ground. Stage I and stage II holes explored the Brushy Basin and Westwater Canyon members of the Morrison. The 12 stage III holes completed thus far were bottomed at the base of the Brushy member because weakly mineralized rock was encountered in that member in drill holes 123, 148 and 165 (fig. 1). The 12 stage III offset holes were drilled in barren ground according to USGS gamma logs.

Mr. Daly bases his proposed stage II drill hole locations on a somewhat theoretical method of geophysical prospecting which apparently utilizes a sensitive type of radiation detecting device. Colamer Corporation hired the Empire Logging Company to make a so-called "Relative Incremental Gamma Radiation Intensity Survey" on a large part of section 10, T. 13 N., R. 9 W. The radiometric surface survey was made on a 200-foot grid and readings were expressed in microroentgons per hour. An isorad map was constructed by drawing contour lines along points of equal radioactivity. Areas with an indicated radioactivity of 0.5 microroentgons or more were classified as favorable for uranium deposits by the Empire Logging Company.

Mr. Daly suggested that a correlation exists between weakly mineralized ground penetrated by drill holes 117, 165 and 179 and favorable areas delineated on the surface by the radiometric survey. He also states

that similar radiometric ground surveys conducted by the Empire Logging Company located ore deposits on section 11, T. 14 N., R. 10 W., and section 17 T., 14 N., R. 10 W. owned by Rio De Oro and Food Machinery and Chemical Corporation, respectively. Mr. Ealy failed to point out that these radiometric ground surveys were carried out after ore deposits were discovered by exploratory drilling and the surface around drill holes was undoubtedly contaminated by mineralized drill cuttings and radon gas. On windy days the area of contamination is appreciably increased when a rotary drill, using air as a circulating medium, is drilling through mineralized ground. A surface radiometric survey, therefore, indicates anomalous radioactivity around mineralized holes and consequently has no value.

Significant uranium deposits in the Ambrosia Lake area are relatively deep. The Brushy Basin ore-bearing sandstone beds in section 10, for example, are covered by an average thickness of 400 feet of shale, mudstone, siltstone and sandstone beds. In view of the very short range of gamma rays in rocks, reported discoveries by nuclear radiation methods, such as the one described above, at distances of more than a few feet in rock and soil are highly questionable.

The migration of decay products from parent radioactive minerals may offer a method of detecting concealed uranium deposits under certain conditions. Radon 222, one of the three radioactive isotopes of radon gas, is included in the decay series of uranium 238. It is the longest lived isotope of radon with a half life of 3.825 days and is the only one that can be used conveniently for radioactive measurements. The migration of radon 222 and deposition of its solid daughter products along fissures or other preamble passages makes it possible to detect such features where the soil cover is not too thick. A radioactive anomaly therefore may be observed on some faults that are otherwise concealed. It may also be carried down dip by ground water along impermeable mudstone lenses in the ore-bearing sandstone for short distances and become evident where the ore-bearing sandstone outcrops or it may form a halo around an ore deposit where it is detected by exploratory drilling. However, it is very doubtful that radon 222 with a relatively short half life of 3.825 days could permeate upward from buried ore bodies through an average thickness of 400 feet of predominantly impervious mudstone and siltstone and be detected on the surface by a radiometric surface survey.

An area may become so contaminated with radioactive material that sensitive radiometric surveys on the surface of the ground are impracticable. The principal causes of such contamination are radon accumulation, mining and drilling operations and fission products from nuclear tests. There is a direct relation between the radon content of soil air and a combination of meteorological factors. A falling barometer generally causes the radon content to rise and vice versa. Sustained high wind velocities reduce the radon content in the upper foot or two of soil. Frozen soil accumulates radon and very high concentrations have been observed under snow cover. (Kovoch, Norinder, et al, 1954). This rapid and capricious variation in gamma ray activity sets a limit on the useful sensitivity of detection devices used for surface prospecting.

In areas where uranium is being mined or where exploration projects are in progress, radioactive material is scattered by ore trucks and drills. High winds may carry "fines" for considerable distances. A surface radiometric survey in a mining area would, therefore, indicate a distribution pattern of radioactive material radically different from its original pattern.

The testing of nuclear weapons presents another source of radioactive contamination that complicates geophysical surface prospecting for uranium deposits. When a nuclear device is exploded a cloud of fission products and neutron activated material is released into the atmosphere and may reach areas thousands of miles distant within a few days (Halter and Glasscock 1952). The distribution and fall out pattern are governed by meterological conditions. Sensitive radiometric geophysical prospecting is impossible since the background of detection instruments may be increased 20 to 50 times.

In summary, a sensitive radiometric survey conducted on the surface of the ground to explore for relatively deep buried uranium deposits may be of academic interest but its practical value is highly questionable. The results of such a survey, based on variable and unknown factors, are meaningless. It is recommended therefore that the request for 5 additional stage II holes be denied. Furthermore, it is concluded that section 10 has been sufficiently explored with negative results and it is recommended that drilling under the subject DMEA contract be terminated without a certification of discovery.

William B. Gazdik

William B. Gazdik,
Geologist

WBG/mlr

REGION III

Memorandum

Building 20
Denver Federal Center
Denver 2, Colorado
September 25, 1956

OFFICIAL FILE COPY
D M E A
RECEIVED JAN 14 1957

DATE	INITIALS	CODE

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: W. D. McMillan

Subject: Docket DMEA 4017 (Uranium) Contract Idm-E940, Colamar Corporation (Sec. 10, T. 13 N., R. 9 W., N.M.P.M.), McKinley County, New Mexico--Request for stage III holes.

On September 19, 1956, Colamar Corporation submitted one copy of a request for remaining stage III drilling of 6 holes, including hole No. 203, which had been tentatively approved subject to results from other stage III holes.

This request was based on relative incremental Gamma-Ray intensities indicated by an ionization-chamber survey, made by Empire Engineering Company.

While the applicant presents some evidence that the use of ionization-chambers was successful as a guide to prospecting in other areas, this does not appear to be a proper reason for Government assistance, particularly on the subject section, where intensive drilling has not discovered any uranium ore.

It is recommended that the application be denied and that the contract be terminated without a certificate of discovery.

W. D. McMillan
Mining Engineer

WDM:sh

cc: 9
Idm-E940
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
SEP 19 1956
REGION III
DENVER, COLORADO

REQUEST FOR REMAINING THIRD STAGE DRILLING

Although sand thicknesses and bleaching are very favorable in holes 201, 206 and 207, as is shown on the lithologic logs, mineralization is not favorable.

Colamer Corporation engaged Empire Logging Company to make a relative incremental gamma radiation intensity survey of the surface of a portion of Section 10, T13N, R9W. An ionization chamber was used.

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DMEA
RECEIVED JAN 14 1957

DATE	INITIALS	CODE

Colamer does not believe emphatically in the results of this and other surveys. However, some degree of success has been achieved with this type of survey in the Grants area. Namely, Rio de Oro deposit was originally located by ionization chamber survey and Westvaco located one ore body and at least one mineralized zone through use of Empire's ionization chamber survey.

Enclosed please find a copy of the map showing the results of the survey on Section 10. The large yellow areas are the favorable areas to drill according to Empire.

When Empire conducted the survey they did not know the results of drilling in the area of holes 117, 165 and 179. This area shows as favorable for mineralization on the map. As you know these three holes were three of our best mineralized holes and chemical assays of holes 117 and 179 show they contained 0.07% U_3O_8. Contrarily holes 201, 206 and 207 are located in a designated unfavorable zone and these holes when drilled show no mineralization.

In light of past results in the Ambrosia Lake area and reported results of like surveys done by Empire in Wyoming and other areas where a degree of success as high 80% in locating favorable mineralized areas was achieved, we would like to locate the five remaining second stage holes in the favorable zones shown on this map.

To repeat, we know from the drilling of 206 that the Poison Canyon and Westwater Canyon sandstones have great thicknessess in this area. Furthermore, the bleached nature of the sands is favorable.

Since only one of the formerly requested second stage holes falls within the favorable zone, ie. hole #203, we request that the holes be located at the following coordinates and be drilled through the Westwater Canyon:

208	1000N	800E
209	1200N	1000E
210	1200N	1400E
211	800N	1400E
212	200N	2000E

In the light of the controversy from geologic circles as to why surface radiation survey should or should not be detectable when eminating from excessive depths, this would seem an excellent opportunity to scientifically examine its validity. If surface geophysics can be employed to locate favorable areas for concentrated drilling, blind drilling on an orbitrary grid could be outmoded and drilling costs lessened considerably.

Respectfully,

COLAMER CORPORATION

Gene K. Ealy

GENE K. EALY,
GEOLOGIST

GKE:lj

RECAP OF MINERALIZATION

HOLE NO.	INTERVAL	U_3O_8 EQUIVALENT	REMARKS
201			No count
206	378.5 - 379.5	0.02%	Jmwc SH
207	417 - 418	0.01 - 0.15%	Poison Canyon SS

HOLE NO. 207 AREA Sec. 10, 13-9

	FROM	TO	DESCRIPTION
	0	55	Blow Sand
Km	55	180	SH
Kd	180	275	SS; lt gr, fn - m, all qtz
Jmbb	275	318	SH; lt gr gy, @ 306 → mod arena; @ 312 → w/ br gy; @ 315 → lt gr, gy no arena
	318	327	SS; m gy m
	327	366	SH; lt gr gy w/ br gy, mod arena, @ 342 → no arena
PC	366	418	SS; m gy, fn - m, BEGIN CORE @ 369, SS, m gy, m - c A kaol; @ 385 → fn, mod arg; @ 390 → m c & cg, v ark, A blk cht; @ 394.5 → fn, A fn diss py; @ 399 → m - c, v arg; @ 400 → lt br by, c - vc w/ s cg, s hem sta; @ 405.5, 6" ls, lt gr w/ rd br spks → m gy, c - cg, w cem w/ A calc; @ 417 → siltstone
	418	450	SH; lt gr gy, no arena END CORE @ 420 go to wet samples - SH to BEGIN CORE @ 465
Jmwc	450	517	SS; v fn - fn, m gy; @ 469.5 → m - c & vc w/ gr cly spks, 470 - 475, 9" recov. SS, m gy, fn - m, A calc, 475 - 485, 0' recov. 485 - 490, 6" recov. SS, m - c, m by, w cem w/ A calc, 490 - 495, o' recov.; @ 505 → m - c & vc, v arg; @ 509 → m, no arg; @ 510.5 → fn - m, lt gy; @ 514 → m - c, m gy; @ 516 → w cem w/ A calc
	517	522	SH; rd br w/ lt gr gy Bottom at 522

HOLE NO. 201 AREA Sec. 10, 13-9

	FROM	TO	DESCRIPTION
	0	10	Blow Sand
Km	10	35	SH; SS intbdd
	35	65	SH;dk gy, v arena
	65	105	SS; lt gy, fn, all qtz; @ 90 -> w/ dk gy sh
	105	245	SH; dk gy, arena
Kd	245	322	SS; lt gy, m, all qtz
Jmbb	322	356	SH; lt gr gy, no arena; @ 340 -> mod arena; @ 347 -> br gy, v arena; @ 353 -> rd br
	356	365	SS; lt gr, fn - m & c, ark, s cht & py @ 362 -> v arg w/ gr sh
	365	395	SH; lt gr gy, no arena; @ 374 -> w/ br gy; @ 377 -> ex arena, lt gr gy; @ 380 -> v arena; @ 392 -> w/ br gy
PC	395	474	SS; lt gr gy, fn - m w/ s c ark, s py BEGIN CORE @ 398, SS, m gy, fn - m, w/ gr c cly gls; @ 404, 6" ex arg -> fn -m, A fn diss py; @ 408 -> fn - c; @ 413, 4" gy sh -> v fn - fn, A fn diss py, m mx gy; @ 416 -> m - c & vc, v ark, w/ stks gy cly; @ 431 -> fn, A fn diss py; @ 433 -> v arg& w/ stks gr sh, m - c & cg; @ 435, 1' gr sh; @ 436 -> lt gy, m, c & cg, v arg, A py; @ 438 -> sli arg, m c & cg; @ 440 -> m gy, mc & cg, v ark; @ 457 m - c & v c v ark; @ 467.5 -> fn - fn, A fn diss py @ 469 -> m - c, lt gy w cem w/ A calc; @ 471 -> fn - m, w cem w/ A calc; @ 473 stks Pet Res
	474	485	SH; lt gr gy; @ 475 -> rd br; @ 477 -> lt gr gy, mod - v arena; @ 479 -> rd br, mod arena; @ 484 -> lt gr gy, v arena
Jmwc	485	502	SS; m gy, fn - m, c & cg, v ark, v calc; @ 487 -> fn - m, v calc s fn diss py; @ 495 -> w/ rd br; @ 498, 1' rd br sh -> lt gr fn w cem w/ A calc
	502	509	SH; rd br v arena; @ 506 -> lt gr, v arena; @ 508 -> lt gr gy, no arena
	509	582	SS; m gy, fn - m; @ 513 -> m - c w/ s cly gls, mod arg; @ 519 -> fn no arg, A blk cht, A calc; @ 526 -> mod arg, A py; @ 530 -> sli arg; @ 533.5, 6" gy sh -> m, lt gy, po cem, mod arg, A kaol; @ 555 -> v fn , fn no arg, s fn diss py; @ 565 -> m - c, v ark, mod arg; @ 567 -> no arg, fn -m; @ 570 -> m, v arg; @ 571 m - c, no arg; @ 580 -> w cem w/ A calc
Jmrc	582	585	SH; lt gr gy, mod arena; @ 583 -> no arena; @ 584 -> rd br mod arena

Bottom at585

HOLE NO. 206 AREA Sec. 10, 13-2

	FROM	TO	DESCRIPTION
	0	30	Blow Sand
Km	30	145	SH
Kd	145	205	SS; lt gy, fn - m, all qtz
Jmbb	205	234	SH; lt gr gy; @ 222.5 -> w/ br gy
	234	249	SS, m gy, fn - m; @ 240 -> m - c
	249	291	SH; lt gy gy w/ br gy BEGIN CORE @ 272, SH, m gy, mod arena END CORE @ 277
P C	291	337	SS; m gy, fn - m BEGIN CORE @ 295, SS m gy, vc - cg, v ark; @ 298 -> m - c, w/ stks (6") of fn - m; @ 300 -> ex arg w/ A py, m c & cg; @ 304 -> fn -m, w cem w/ A calc; @ 305 -> fn - m f cem, A fn diss py; @ 309 -> m, c & cg; @ 311 -> fn - m, po cem; @ 313 -> m - c & v c w/ stks gr cly & A py; @ 320.5 1.5' ex arg, v fn - fn; @ 322 -> fn, no arg, A calc; @ 325 -> w/ stks of v - ex arg, fn - m & c; @ 327 -> fn - m, po cem; @ 332 -> m - c, f cem, lt gy; @ 335 -> m gy, m - c; @ 336 -> fn - m, v arg w/ A py
	337	345	SH; lt gr gy, mod arena w/ stks of A py & s Pet Res
Jmwc	345	357	SS; fn -vc, v arg, lt gy; @ 347 -> v fn - fn; 353 -> w cem w/ A calc
	357	387	SH; lt gr gy, END CORE @ 359 go to wet samples, SS & SH, intbdd to 387
	387	458	SS; m gy, fn - m BEGIN CORE @ 407, SS, lt gy, m w/ stks of A py; @ 411 -> po cem m, m gy; @ 412 -> w/ gr cly gls, A py & s Pet Res; @ 414 -> m - c, w cem w/ A calc; @ 415 -> fn - vc, po cem; @ 419 -> w/ stks of gr sh, mc & cg; @ 423 -> @ 426 -> fn - mod arg; @ 445 -> fn - m, w/ gr cly gls; @ 452 -> w cem w/ A calc, lt gy
Jmrc	458	465	SH; gr gy, mottled w/ rd br, no arena @ 460 -> lt gy, sli arena Bottom at 465

[illegible] No. [illegible] [illegible] No. [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
324	2	362	7
↓		341.5	8
		331	2
425	7	↓	
444	4	336	2
453	3	↓	
↓		333	6
475	2	332	7
474	4	331	5
473	2	330	3
↓		↓	
371	4	Surface	
320	8		
315	2	Total Depth 585	
233	5		
307	3		
↓			
363	4		

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

OFFICIAL FILE COPY DMEA RECEIVED JAN 14 1957		
DATE	INITIALS	CODE
1/14	C.	220
1-14	[illegible]	700
January 11, 1957		

224 New Customhouse
Denver 2, Colorado

Memorandum

To: T. A. Christensen

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

Subject: Docket DMEA 4017 (Uranium) Contract Idm-E940, Colamer Corporation, (Sec. 10, T 13 N, R 9 W) McKinley County, New Mexico - CHANGE OF MAILING ADDRESS

Enclosed is a copy of a letter from the subject Operator dated January 9, 1957, requesting a change of mailing address as follows:

Colamer Corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

Please mail all checks and other correspondence to the new address.

E. N. Harshman

E. N. Harshman

Enclosure
JDC:ewa
cc: Chm. Op. Comm. (3))
Harshman)
Shaw (2)) w/copy of
Hasler) Oper. letter
Townsend)
Corresp. E940)
Chron.

COLAMER CORPORATION
Grants Division
Commerce Building
1016 West Santa Fe
Grants, New Mexico

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 14 1957
DATE INITIALS CODE
COPY

January 9, 1957

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

Dear Mr. Traver:

In regard to the change of address of our office, this letter is to explain that the office has not been moved. The name of the building has been changed to the Commerce Building and the address has been changed to 1016 West Santa Fe although the location is the same.

Very sincerely yours,

COLAMER CORPORATION

s/ Kelsey L. Boltz
Kelsey L. Boltz

KLB/vp

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

1/14 800 225

224 New Customhouse
Denver 2, Colorado

January 8, 1957

Mr. Kelsey L. Bolts
Colsmar Corporation
1016 West Santa Fe
Grants, New Mexico

Re: Docket DMEA-4017 (Uranium)
Contract No. Idm-E940
Colsmar Corporation
(Section 10, T.13 N., R.9 W.)
McKinley County, New Mexico

Dear Mr. Bolts:

In response to your letter dated January 4, 1957, we are listing below all monthly payments made to Colsmar Corporation under Contract Idm-E940:

Month	Amount of Payment
April, 1956	$ 1,166.48
May, 1956	9,502.55
June, 1956	9,075.55
July, 1956	12,788.51
August, 1956	7,529.26
Sept., 1956	2,501.34

Very truly yours,

Original signed by
W. M. TRAVER

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

JDC:bh
cc-Chm. Op. Comm.(2))w/copy
Harshman)Operator's
Shaw(2))letter
Townsend)
Corres. File E-940
Chron.

COPY

COLAMER CORPORATION
Grants Division
Commerce Building
1016 West Santa Fe

GRANTS, NEW MEXICO

January 4, 1957.

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

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Colamer Corporation
McKinley County, New Mexico

Dear Mr. Traver:

In compiling the annual report for Colamer Corporation I must include a list of the amounts of the monthly reimbursement checks for drilling performed under contract Number - Docket DMEA 4017, Idm-E940.

I would appreciate it very much if you would send this information to me.

Very truly yours,

COLAMER CORPORATION

/S/ Kelsey L. Boltz
Kelsey L. Boltz

KLB/vp

224 New Customhouse
Denver 2, Colorado

December 18, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Gamma-ray log interpretations

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

Docket DMEA 3854, Contract Idm-E967, Four Corners Exploration Co., McKinley County, New Mexico
Docket DMEA 3928, Contract Idm-E926, Pacific Uranium, Green River, Utah, (Private holes - Pacific Uranium)
Docket DMEA 3939, Contract Idm-E934, Westvaco Mineral Products, McKinley County, New Mexico
Docket DMEA 3943, Contract Idm-E932, Westvaco Mineral Products, McKinley County, New Mexico
Docket DMEA 3989, Contract Idm-E933, Westvaco Mineral Products, McKinley County, New Mexico
Docket DMEA 4041, Contract Idm-E969, America Leduc Uranium, Outlaw Mesa, Colorado
4017 mr. ching Docket DMEA ~~4071~~, Contract Idm-E940, Colmer Corporation, McKinley County, New Mexico 1 copy sent.
Docket DMEA 4073, Contract Idm-E987, Simpson Mining Co., Beaver Mesa, Colorado - Utah
Docket DMEA 4222, Contract Idm-E1003, Radium King, La Sal Creek, Utah
Private holes, Barker Graham, Beaver Mesa, Utah

/s/ W. M. Traver

W. M. Traver

c
o
p
y

Colamer Corporation
McKinley County, New Mexico
Sec. 10; T. 13 N.; R. 9 W.
DMEA DOCKET NO. 4071

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	GPM Corrected for Casing	GPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
180	575.0	None	232.0-432.0	390.7 - 391.8	1.1	660			0.017	

* From top to bottom depths

RECEIVED
DEC 28 1956
D.M.E.A.

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

224 New Customhouse
Denver 2, Colorado

November 15, 1956

Mr. Kelsey Boltz
Colamer Corporation
Commerce Building
1016 West Santa Fe
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Colamer Corporation
(Sec. 10, T. 13 N., R. 9 W.)
McKinley County, New Mexico

Dear Mr. Boltz:

Reference is made to your letter of November 12, 1956 requesting clarification of check No. 21,416,935 in the amount of $2,501.34.

We are enclosing copies of our correspondence to you relative to deductions from the September, 1956 voucher for Docket DMEA 4017, Contract Idm-E940, (not Idm-E797). The items of correspondence are listed below.

1. letter of November 1, 1956

2. Administrative Audit Difference Statement dated November 2, 1956

3. letter of November 9, 1956

We note that your letter of November 12, 1956 lists an address which is different from the address we have on record.

It appears that you have moved your offices; in which case, you should immediately request a change of address for Contract Idm-E940 as well as your other DMEA contracts, in order that future correspondence will reach you with a minimum of delay.

Very truly yours,

Original signed by
W. M. TRAVER

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

Enclosures

JDC:jy
cc: Corresp. E940)
Chm. Op. Comm. (2)) w/copy Oper. let.
Shaw (2))
Townsend)
Chron.

COLAMER CORPORATION
GRANTS DIVISION
COMMERCE BUILDING
1016 WEST SANTA FE
GRANTS, NEW MEXICO

November 12, 1956

DMEA
DEPARTMENT OF THE INTERIOR
NOV 14 1956
REGION III
DENVER, COLORADO

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

Re: DMEA Docket 4017
Contr Idm-E797
Month of September

Dear Mr. Traver:

The Government's check No. 21,416,935 in the amount of $2,501.34 for reimbursement for drilling under this contract during the month of September has been received. Our records show that the amount requested for this month was $4,009.80, seventyfive percent of which is $3,007.35; also, we have no record of receiving a notice of disallowance for this month. I would appreciate your clarification of this difference.

Thank you.

Very truly yours,
COLAMER CORPORATION

KELSEY BOLTZ
KB/lj

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

224 New Customhouse
Denver 2, Colorado

November 9, 1956

RECEIVED NOV 13 1956 D.M.E.A.

Mr. Kelsey Boltz
Colamer Corporation
Fidel and Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Colamer Corporation
(Phyllis, Fannie, Jean and Deeta claims)
McKinley County, New Mexico

Dear Mr. Boltz:

Reference is made to our letter dated November 1, 1956 informing you that Form MF-104, Operator's Monthly Report and Voucher, had been processed for payment.

As you are no doubt aware, the letter was written in conjunction with the September voucher for Contract Idm-E940 rather than for Contract Idm-E797 as is indicated in the reference block of the letter.

Very truly yours,

Original signed by
W. M. TRAVER

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

JDC:jy
cc: Corresp. E940
Chm. Op. Comm. (2)
Shaw (2)
Harshman
Townsend
Chron.

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

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

October 8, 1956

Mr. Kelsey Boltz
Colamer Corporation
Fidel & Rouse Building
Grants, New Mexico

Re: Docket No. DMEA 4017 (Uranium)
Contract No. Idm-E940
Colamer Corporation
(Sec. 10, T 13 N, R 9 W)
McKinley County, New Mexico

Dear Mr. Boltz:

Reference is made to the "Request for Remaining Third Stage Drilling" received in this office September 19, 1956, pertaining to work to be performed under Contract No. Idm-E940.

Project work approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade and in quantities that would significantly improve the mineral supply position for the National Defense program.

A careful study of the data you submitted, results of the work completed under Stages I, II, and III of the Contract, and other data available to this office, indicate that the probability of disclosing significant minable reserves of uranium ore by the additional work you propose under Stage III is not sufficiently favorable to warrant Government contribution to the costs of the work as provided in Contract No. Idm-E940. Therefore, your request for the Government's approval of the additional drilling under Stage III of the Contract is denied.

Under the circumstances, the Government prefers to terminate the Contract by mutual agreement upon completion of the drilling approved by the Field Team's letter to you of August 24, 1956. For the purpose of preparing a suitable Termination Agreement, please advise the date all the drilling approved by our letter of August 24, 1956, was completed.

Very truly yours,

DMEA Field Team, Region III

By E. N. Harshman
E. N. Harshman
Acting Executive Officer

JWT:prl
cc: Chairman, Op. Comm. (2)
Harshman
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

Surname copy

Department of the Interior

UNITED STATES DMEA

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WASHINGTON 25, D. C.

14X1401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

T E L E T Y P E

OCT - 8 1956

Ching
F Kusch
Chambers
Selfridge
Mathewson

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

(Uranium)

Re: Contract October 4 Calumet Corporation Docket 4017.

Concur with your recommendation that contract be terminated, mutually if possible, otherwise unilaterally.

George C. Selfridge
Chairman, Operating Committee

MChing/gla
10-5-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, 3643
THKiilsgaard, 5224
JOHosted, 3210, GSA
Code 700
Mr. Ching
Confirmation to Region III

cw

Mr. George Selfridge

RECEIVED
OCT - 5 1956

DN 235 BUR MINES 10-4-56 3-58

CHAIRMAN, OPERATING COMMITTE, DMEA

RE DOCKET DMEA-4017, CONTRACT IDM-E940, COLAMER COPR. WE ARE DENYING OPERATOR,S REQUEST FOR ADDITIONAL STAGE 11 DRILLING AND DESIRE TO TERMINATE CONTRACT IN PRESENT STATUS. RESULTS OF WORK TO DATE UNFAVORABLE AND NO CERTIFICATION IS TO BE RECOMMENDED. HAVE NOT ADVISED OPERATOR OF DENIAL OF DRILLING REQUEST AND TO FORESTALL FURTHER WORK REQUEST WE PREFER AT SAME TIME TO ADVISE HIM OF GOVENERXX GOVERNMENT,S DESIRE TO TERMINATE CONTRACT. PLEASE TELETYPE CONCURRENCE OR ADVICE AS TO HOW WE SHOULD PROCEED.

W M TRAVER

Denver, Colo

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

RECEIVED
OCT - 1 1956

224 New Customhouse
Denver 2, Colorado

September 28, 1956

Mr. Halsey Boltz
Colamer Corporation
Fidal and Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Sec. 10, T13N, R9W
McKinley County, New Mexico

Dear Mr. Boltz:

Form MP-104, Operator's Monthly Report and Voucher, for August, 1956 has been received in this office and is being processed for payment.

A study of the driller's logs for hole No. 184 indicates that the hole was not completed to its objective, therefore the cost of this hole is disallowed.

If you have any question regarding the disallowance, please feel free to contact this office.

Very truly yours,

W. M. TRAVER

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

JDC:jy
cc: Corresp. E940
Sec. Op. Comm. (2)
Shaw (2)
Harshman
Townsend
Chron.

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

RECEIVED
SEP 14 1956

224 New Customhouse
Denver 2, Colorado

September 12, 1956

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4017 (Uranium) Contract Idm-E940, Colamer Corporation (Sec. 18, T13N, R9W) McKinley County, New Mexico

Enclosed herewith is a photo copy of Amendment No. 2 to the drilling subcontract between the subject Operator and Minerals Engineering Company. The effective date of the Amendment is July 18, 1956.

W. M. TRAVER

W. M. Traver

Enclosures

JDC:jy
cc: Corresp. E940)
Contract File)
Sec. Op. Comm. (3))
Shaw (2)) w/copy of Amendment
Harshman)
Hasler)
Townsend)
Chron.

AMENDMENT NO. 2

[redacted] to contract between Colamer [redacted]ration and Minerals Engineering Co. dated April 23, 1956.

12. If it is necessary to open for probing any completed hole, Colamer Corporation will pay standby for this work. If tools become stuck, standby for freeing them.

13. In the event that upon completion of a hole Colamer Corporation is unable to probe after every effort has been made to maintain an open hole, then casing will be set to enable hole to be probed and Colamer Corporation will pay standby time for setting and pulling casing.

14. Re: 2 (b)
Commencing July 18, 1956, core recovery specifications will be as follows:

If core recovery falls below 80% for any run the succeeding core runs will be no more than five feet in length until such time as the recovery of any succeeding core run increases to more than 80%. If core recovery is not sufficiently increased by the foregoing described procedure Colamer Corporation has the right at its option to delete Article 14 of this contract by giving verbal notice representatives of Minerals Engineering Company.

The foregoing amendment No. 2 is agreed to by the under signed:

MINERALS ENGINEERING COMPANY

BY [signature]

COLAMER CORPORATION

BY [signature]

August 6, 1956

ACKNOWLEDGMENT
(INDIVIDUAL)

STATE OF NEW MEXICO, } ss.
County of Valencia

On this 4th day of September, 1956 before me personally appeared Kelsey Bailey to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal on this the day and year first above written.

Minnie L. Luschitz Notary Public
Valencia County, New Mexico

My commission expires June 18, 1958

FOR SALE BY VALLIANT PRINTING CO., ALBUQUERQUE, N. M.

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

RECEIVED
SEP - 4 1956

224 New Customhouse
Denver 2, Colorado

August 30, 1956

Mr. Kelsey Boltz
Colamer Corporation
Fidal and Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Colamer Corporation
Sec. 10, T13N, R9W
McKinley County, New Mexico

Dear Mr. Boltz:

Form MF-104, Operator's Monthly Report and Voucher, for the month of June, 1956 has been received in this office and is being processed for payment.

An amount of $189.62 has been disallowed from the reported cost of non-core drilling. A review of the driller's logs indicates the following allowable costs for non-core drilling

4157.5 feet at $0.70 per foot - - - - - - - -	$2,910.25
2624.5 feet at $0.95 per foot- - - - - - - -	2,493.28
11 hours stand-by time at $12.00 per hour- -	132.00
Total	$5,535.53

An amount of $5,725.15 was reported on Form MF-104 for non-core drilling in June, 1956. This is $189.62 in excess of the allowable costs as determined from the driller's logs.

If you have any question regarding the disallowance, please feel free to contact this office.

Very truly yours,

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

JDC:jy
cc: Corresp. E940
Sec. Op. Comm. (2)
Shaw (2)
Townsend Chron.

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

RECEIVED
SEP - 4 1956

224 New Customhouse
Denver 2, Colorado

August 30, 1956

Mr. Kelsey Boltz
Colamer Corporation
Fidel and Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Colamer Corporation
Sec. 10, T13N, R9W
McKinley County, New Mexico

Dear Mr. Boltz:

We note that your drilling subcontract with Minerals Engineering Company has been amended effective July 18, 1956. Before the July voucher can be processed for payment, we must have six certified copies of the amendment for our files or six photo copies of the signed amendment.

Very truly yours,

W. M. TRAVER

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

JDC:jy
cc: Corresp. E940
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Cooper
Chron.

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

224 New Customhouse
Denver 2, Colorado

August 24, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4017 (Uranium), Contract Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico

Enclosed are four copies of project work approval issued by the DMEA Field Team, Region III.

Also enclosed are two sets of data submitted by the Operator in requesting the work approval and four copies of memoranda from the examining engineer and geologist.

W. M. Traver

W. M. Traver

Enclosures

Maps in map folder

RECEIVED
AUG 30 1956

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

294 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

August 24, 1956

Mr. Kelsey Bolts
Calumet Corporation
Fidel & Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-8940
Calumet Corporation
(Sec. 10, T. 13 N., R. 9 W.)
McKinley County, New Mexico

Dear Mr. Bolts:

Reference is made to your undated request received in this office August 6, 1956 relative to certain proposed drilling under Stages II and III of the Contract.

Confirming verbal approval by the Government on August 14 and August 21, 1956 the following holes are approved for drilling:

Stage II

Three holes are approved located at coordinates, 1050 E.- 2650 N.; 2700 E. - 2250 N.; and 1850 E. - 1050 N. These three holes are to be drilled through the Westwater Canyon member.

Stage III (Offsetting Stage II holes)

Four holes around Hole No. 123,
Four holes around Hole No. 148,
Three holes around Hole No. 165,
One hole midway and in line between Holes Nos. 165 and 117,
Two holes, one north and one south of Hole No. 117,
One hole midway and in line between Holes Nos. 117 and 179,
Two holes, one north and one south of Hole No. 179.

The foregoing Stage III holes are to be drilled through the Poison Canyon Unit only and none shall be drilled closer than 100 feet to any other hole.

The locations of the approved Stage II and Stage III holes are shown on the map entitled, "Figure 1. - Sketch Map of Section 16, T. 13 N., R. 9 W. Showing Completed Stage I and Stage II Holes and Proposed Stage III Holes, Coleman Corporation, McKinley County, New Mexico," which is attached hereto and made a part of this work approval.

Nothing in this work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any amount expressly designated as "maximum."

Very truly yours,

IBWA Field Team, Region III

W. M. Traver

W. M. Traver

E. W. Harshman

E. W. Harshman

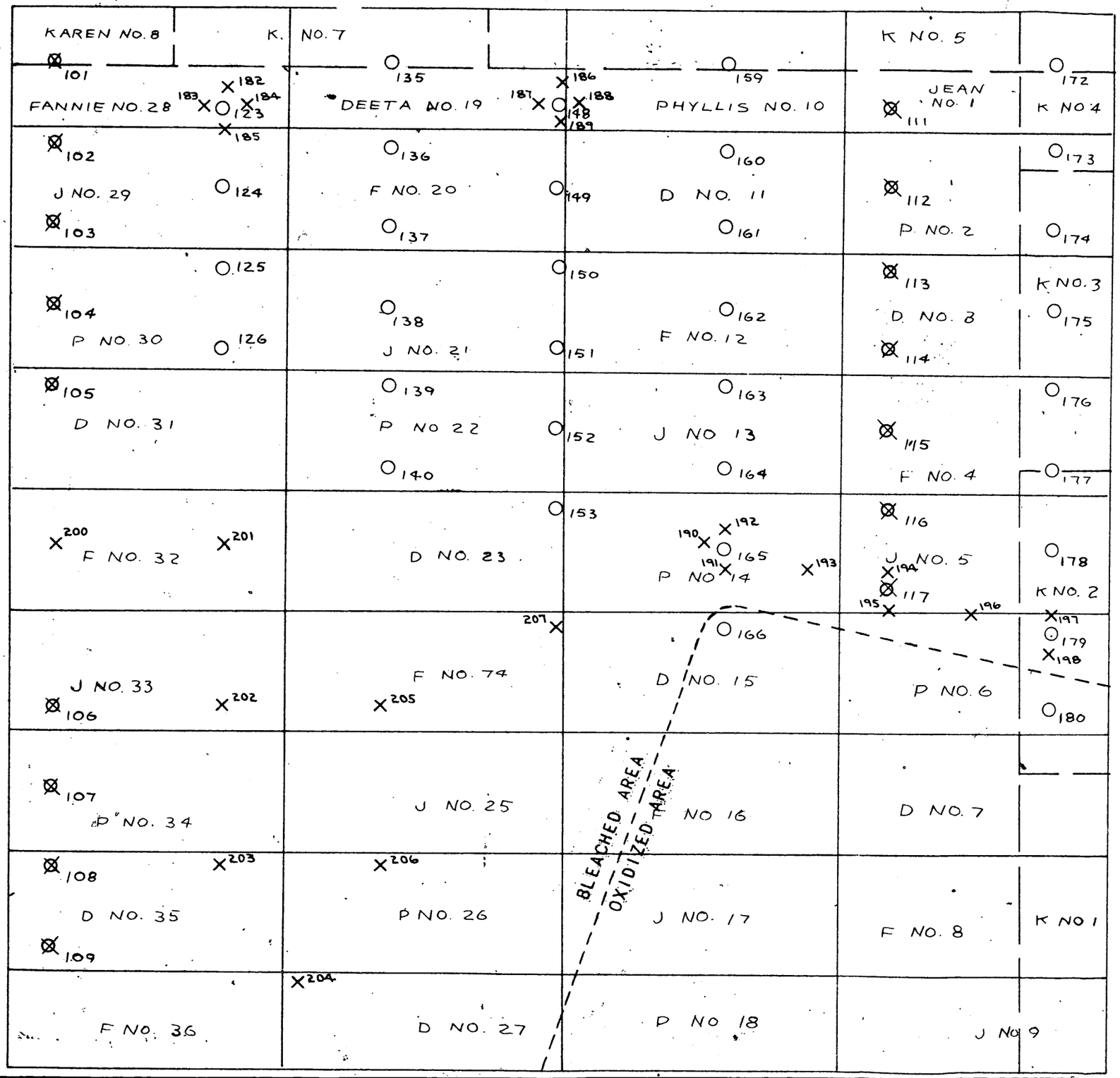
Enclosures

JWT:pri

cc: Chairman, Op. Comm. (4)
Finance Office, Reg. III
Amendment file
Harshman
Shaw (2)
Meeler
Townsend
Corres. file
Chron.

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
AUGUST 1956 DOCKET 4017



EXPLANATION

- ⊠ COMPLETED STAGE I HOLES
- O COMPLETED STAGE II HOLES
- X PROPOSED STAGE III HOLES

NOTE: CLAIM BOUNDARIES AND HOLE LOCATIONS MODIFIED FROM APPLICANTS MAP.

N

600 0 1200 FEET

Figure 1.--SKETCH MAP OF SECTION 10, T.13 N., R.9 W. SHOWING COMPLETED STAGE I AND STAGE II HOLES AND PROPOSED STAGE III HOLES, COLAMER CORPORATION, McKINLEY COUNTY, NEW MEXICO.

DMEA
Date Rec'd.

AUG 23 1956

BUREAU OF MINES
Denver, Colorado

REGION III

Building 80
Denver Federal Center
Denver 2, Colorado
August 22, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: W. D. McMillan

Subject: DMEA Docket 4017, (Uranium) Contract Idm-E940, Colamer Corporation, (Phillis, Fannie, Jean and Deeta claims) Sec. 10, T. 13 N., R. 9 W., NMPM, McKinley County, New Mexico -- Request for Stage III

An inspection of progress on stage II drilling was made on August 8, 1956 accompanied by Charte Cardwell, superintendent of the applicant. A total of 20 holes were completed during July, which completes Stage II drilling.

Colamer Corporation requested 18 holes as offsets of prevously drilled holes and 8 holes in the southwest quarter of Sec. 10, T. 13 N., R. 9 W., NMPM.

The 8 holes in the southwest quarter of Sec. 10 are to be considered stage II. The other 18 holes consisted of 4 offsets each around Hole Nos. 123 and 148, 2 offsets around Hole Nos. 165, 117, and 179 and 2 offsets each between Holes 165 and 117 and between Hole 117 and 179.

The examining team concludes that a third offset hole should be drilled to the west of Hole 165, but only one hole between Holes 165 and 117 and between Holes 117 and 179, a total of 17 holes, with drilling only through the Poison Canyon.

Holes Nos. 200 to 207 inclusive in the southwest quarter of section 10 will require an amendment to transfer footage from stage III to stage II. Drilling would be to the base of the Westwater Canyon member with provision that only Holes Nos. 201, 206, and 207 be drilled at present.

W. D. McMillan
Mining Engineer

WDM/mw
cc: 9
Idm-E940
Chron

MINERAL DEPOSITS
DMEA
RECEIVED
AUG 20 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO
DMEA
Date Rec'd
AUG 22 1956
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

[illegible] U. [illegible]
Grand Junction, Colorado

[illegible], 1956

Dear Sir:

To: Executive Officer, DMEA Field Staff, Section III

From: Edward [illegible] Albee

[illegible] J. [illegible]
[illegible]
J. [illegible]

J. a. B. for J. W. H.
E H A
JB

Subject: DMEA Docket 4017 (Uranium), Contract Ion-[illegible] 94[illegible], Colamer Corporation, (Sec. 1[illegible], T. 13 N., R. 9 W., NMPM) McKinley County, New Mexico.

The Colamer Corporation has requested, through Mr. Kelsey Holtz, approval to drill 20 stage III drill holes (fig. 1) 13 of the drill holes are offsets of previously drilled holes. The remaining 8 drill holes are located in the southwest quarter of section 10 and if drilled would perform mostly the function of stage II holes.

Four offsets each are requested for stage II holes 123 and 148. Hole No. 123 shows by gamma-ray log that one foot of 0.06 percent eU_3O_8 was penetrated near the middle of the Poison Canyon unit of the Brushy Basin. The unit is thick and the sandstone is bleached. Pyrite, clay galls, and clay seams are abundant. The gamma-ray log of hole No. 148 shows that about four feet of from 0.08 to 0.09 percent eU_3O_8 were penetrated. The core was lost through this interval and the geologic log, based on the drillers report, shows this as shale. The applicant reports, however, that the gamma-ray log indicates sandstone instead of shale. Above and below the lost core the sandstone, from the geologic log, shows favorable criteria, and except for thickness, is similar to that of hole No. 123. The proposed offsets around these holes appear to be justified.

Proposed drill holes 190 through 199 are offsets around the 3 mineralized holes 165, 117, and 179. Holes 165 and 179 show from 0.04 percent to 0.06 percent eU_3O_8 by gamma-ray logs. Hole 117 shows 0.11 percent eU_3O_8 by gamma-ray but at a depth of 385 feet it cannot be called ore. Holes 165, 117, and 179 are aligned in a northwesterly direction. The sandstone is bleached and is lithologically favorable although relatively thin. The sandstone has thickened from the northeast to the southwest and the holes to be offset are in this area of thickening sandstone. Offsets around the three mineralized holes seem justified. The same results, however, can be attained with one less hole than is proposed. The pattern of offsets recommended is shown on figure 1.

Proposed drill holes 200 through 207 are located in the southwest quarter of the section. Hole No. 200 is in line with holes drilled under stage I, holes 201, 202, 203, 205, 206, and 207 are in alignment with stage II drilling, and hole 204 is located between southerly projections of stage II fences.

The southwest quarter was originally recommended for drilling as were all other parts of the section. However, when the stage I holes were drilled the only mineralization found was in the north half of the section. At that time discoveries were made in the Westwater Canyon sandstone in sections north of the property. On the basis of the discoveries the Colamer Corporation requested an amendment to allow them to drill through the Westwater. All of section 10 could not be drilled to the base of the Westwater with the footage originally allowed. Because the north half had the mineralized holes and was closer to sections where the Westwater was found to be mineralized the drilling was confined to the north half. The isopachous map made from records of this drilling shows a definite thinning of the Poison Canyon sandstone trending easterly through the center of the north half of the section.

Mr. Boltz believes that the southern half of the section contains the largest area of thick Poison Canyon and Westwater sandstones. He suggests that the two sandstones merge to the south and cites the geologic logs of holes 101 through 110 as evidence. After close inspection of these logs I cannot agree that the two units merge. They do appear to converge, however, in holes 106 and 107 and each sandstone is relatively thick and lithologically favorable as uranium host rocks. From records of holes drilled southerly from the property and from holes on the property it has been determined that the southwest quarter is in a bleached area and the southeast quarter is in an unbleached area. For these reasons Colamer requests an amendment of the contract to allow footage from stage III to be used to drill 8 holes in the southwest quarter of the section.

The following recommendations are made:

1. Four offsets each are recommended around drill holes 123 and 148. The spacing should be not less than 100 feet from previously drilled holes and holes should be drilled through only the Poison Canyon unit.

2. Ten holes are requested to offset holes 165, 117, and 179. Nine offset holes are recommended (fig. 1) as follows: Three offset holes, one north, one west, and one south 100 feet from hole 165. One offset hole halfway between and in line with holes 165 and 117. Two offset holes, one north and one south 100 feet from hole 117. One offset hole halfway between and in line with holes 117 and 179. Two offset holes, one north and one south 100 feet from hole 179. These holes are to be drilled through only the Poison Canyon unit.

3. An amendment appears to be necessary to permit further drilling through the Westwater sandstone unit in stage II because such drilling is specifically limited by Amendment No. 1 and footage available within the stage.

The operator has called proposed holes Nos. 200 through 207 third stage holes although they apparently perform the function of second stage drilling. Unused footage in stage III, 13510.5 feet of non-core, and 6,466 feet of core drilling, would be ample to complete all holes requested. Inasmuch as drilling holes Nos. 200 through 207 in the third stage would appear to circumvent the intent of the contract as written, it is recommended that an amendment to permit transfer of footage from stage III to stage II for the purpose of drilling requested holes through the Westwater Canyon sandstone be authorized, with the stipulation that only proposed drill holes numbered 201, 206, and 207 be drilled at this time. If the results of these holes show that the Poison Canyon unit and the Westwater sandstone are thick, bleached, and lithologically favorable as uranium ore host rocks, and agreed upon as such by both the company and representatives of DMEA, then the remaining 5 proposed holes (200, 202, 203, 204, and 205) could be recommended.

(for) Frank M. Byers, Jr.
Howard F. Albee,
Geologist

HFA/dm

BUREAU OF MINES
Denver, Colorado

Grants, New Mexico

August 13, 1956

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

Dear Mr. Traver:

Hole No. 180, Section 10, T13N, R9W, contained 1.5' of .03% - .04% U_3O_8, (Radiometric) in the interval from 393.5 to 395. This lies in a very sandy horizon in the Jmbb shale first above the Poison Canyon sandstone and due to differences in the method by which the drillers zero out their drill rods and slight inaccuracies in my probing of the hole, could actually be the top of the Poison Canyon sandstone.

Mineralization in this hole verifies our convictions that in the area of hole 179, 165 and 117 third stage holes offsetting this mineralization should be drilled.

Very truly yours,

COLAMER CORPORATION

Gene K. Ealy

GENE K. EALY,
Geologist

GKE:lj

HOLE NO. 180 AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	85	Blow Sand
85	225	SH; lt br gy - dk gy, sli - v arena
225	300	SS; lt gy, fn - m, all qtz; @ 295 -- dk gy, ex arg w/ A carb
300	398.5	SH; lt gr gy; @ 357 -- mod arena; @ 369 -- no arena; @ 396 -- mod arena
398.5	417.5	SS; m gy, v fn, mod arg, BEGIN CORE @ 399, SS, m gy, v fn, mod arg w/ A fn diss py; @ 400 -- fn, so blk cht A fldspr; @ 406 -- fn - m, po cem; @ 411 -- lt rd br, v fn; @ 417, fault
417.5	466	SH; lt gr gy w/ s rd br, v arena, END CORE (go to wet samples) @ 421, @ 430 -- gr gy w/ rd br; @ 456 1' SS, br gy, fn - m; @ 457 -- dk rd br, mod - v arena
466	570	SS; m br gy (lim sta) fn - m; @ 471 -- rd br, m, po cem A hem sta; @ 512 -- w cem lt or br; @ 516 -- m gy w/ rd br, fn -m; @ 565 -- w cem w/ A calc
570	575	Siltstone, rd br, v arg Bottom at 575

HOLE NO. 180 AREA Sec. 10, 13-2

DEPTH	READING SCALE 5	READING SCALE 4
573.5	2	
↓		
546	4	
545	4	
↓		
429	4	
528	7	
527	4	
526	2	
↓		
394.5	8	
394	12	
393.5	12	
393	10	
↓		
Surface		
Total Depth	575	

RECAPITULATION OF DRILLING FOOTAGE USED TO DATE ON CONTRACT Idm-E940

DMEA
Date Rec'd.
AUG 6 1956
BUREAU OF MINES
Denver, Colorado

	PLUG BIT (ft)	CORE (ft)
First Stage	9,170	2,159
Second Stage	16,519.5	2,575
Totals	25,689.5	4,734
Total authorized for contract	39,200	11,200
Remaining for third stage	13,510.5	6,466

Supplemental page to:
GEOLOGICAL REPORT AND DRILLING REQUEST FOR CONTRACT Idm-E940

of August 3, 1956.

DMEA
Date Rec'd.

AUG 6 1956

BUREAU OF MINES
Denver, Colorado

CONTENTS

1. Written Report

2. Isopach Map with Bleached Zone and Proposed Locations

3. Structural Contour Map

4. Cross Section

5. Recapitulation of Mineralization

6. Lithologic Logs of Holes to be Offset

GEOLOGICAL REPORT AND DRILLING REQUEST FOR IDM CONTRACT 940

GENERAL

In recent months West Vaco, National Lead and Colamer Corporation have compiled and studied drilling data obtained from sections 7, 8, 17, 20 and 21, T13N, R9W. Analysis of this data indicates that certian geological conditions are common to each mineralized zone. These conditions are:

1. Bleached or reduced state of iron in the host rock.
2. Abnormally thick section of host rock in or near mineralized zone.
3. Clay lenses, galls and tongues interbedded with the sand host rock.

Bleached zones are indentified by the marked absence of any ferric oxides and the obvious presence of iron sulfides. To date in this and adjacent areas all known orebodies exist in bleached sandstone.

All orebodies and well mineralized zones studied in this area occur in sandstones of abnormal thickness. It is evident that "clean" sands, uniform in character are poor host rocks. In mineralized areas the sandstones contain abundant clay galls, lenses and tongues of shale.

SECTION 10,T13N, R9W

On section 10 first and second stage drilling along with previous drilling have outlined the boundary of the bleached zone, (Map A), and the areas of thick Poison Canyon sandstones. The isopach

contours on Map A disclose a thin sandstone trend bordered on the north and south by thick sandstone trends. This thin sand trend, about eight hundred feet wide, extends generally east-west through the north half of the section. Therefore, the south half of section 10 contains the largest area of thick Poison Canyon sandstone. Careful examination of the lithologic logs of the holes adjacent to this area has further disclosed that the southwest quarter of this section lies within the bleached zone and that the sandstone contains an abundance of clay splits and galls. A north-south cross section of holes 101 through 110 shows that the Poison Canyon and Westwater Canyon sandstone, merge into one unit. In these areas of sand mergers the Westwater Canyon has characteristics similar to the Poison Canyon sandstone and appears to be an equally favorable host rock.

On the basis of the above information, Colamer Corporation hereby requests that an amendment be added to contract Idm-E940 (Docket 4017), to the effect that third stage drilling may be used to investigate the unexplored portion of the southwest quarter of the subject area. Eight proposed locations for this drilling are shown on Map A. These holes are requested to be drilled to the Recapture Creek member of the Morrison Formation.

Second stage drilling on section 10, T13N, R9W, disclosed significant uranium mineralization in nine holes (See Map A). Since

the only significant mineralization shown on the map occurs in the Poison Canyon sandstone and as the Poison Canyon ore bodies in this area discovered to date have all been narrow and more or less sinuous, to be sure no ore body has been overlooked some of these mineralized holes should be offset. Therefore, it is hereby requested that holes number 179, 117, 165, 148 and 123 be offset. Holes number 179, 117 and 165 lie in a northwest-southeast trend which may indicate continuity of mineralization. It is therefore requested that these holes be offset with locations as shown on Map A and drilled through the Poison Canyon sandstone to investigate the possibilities of the existance of a continuous mineralized zone.

Holes 148 and 123 show interesting significant mineralization in the middle of the Poison Canyon sandstone. These holes are proposed to be offset with four locations, each as shown on Map A.

Proposed Locations

HOLE NO.	ESTIMATED DEPTHS	
182	475	To bottom of Poison Canyon
183	475	" "
184	475	" "
185	475	" "
186	485	" "
187	485	" "
188	485	" "
189	485	" "
190	420	" "
191	420	" "
192	410	" "
193	410	" "

194		400	To bottom of Poison Canyon
195		400	" "
196		410	" "
197		410	" "
198		430	" "
199		430	" "
200		575	To Recapture Creek
201		575	" "
202		550	" "
203		510	" "
204		550	" "
205		510	" "
206		430	" "
207		570	" "
	TOTAL	12,250	

NUMBERS AND COORDINATES OF PROPOSED THIRD STAGE DRILLING LOCATIONS AS SHOWN ON MAP A

NUMBER	NORTHING	EASTING
182	4900	1000
183	4800	900
184	4800	1100
185	4700	1000
186	4900	2600
187	4800	2500
188	4800	2700
189	4700	2600
190	2700	3400
191	2500	3400
192	2600	3800
193	2400	3800
194	2500	4200
195	2300	4200
196	2400	4600
197	2200	4600
198	2300	5000
199	2100	5000
200	2600	200
201	2600	1000
202	1800	1000
203	1000	1000
204	400	1400
205	1800	1800
206	1000	1800
207	2200	2600

HOLE NO. 117 AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	15	Blow sand
15	42½	SS; lt or br to lt br gy, mod - ex arg
42½	121	SH; dk gy, carb, mod - v arena
121	252½	SS; lt gy, fn - m, all qtz; @ 242½ → m gy, s carb
252½	360	SH; lt gr gy, ex arena; @ 257½ → mod - sli arena; @ 282½ → br gy; @ 300 → lt gr gy - mod arena; @ 350 → v arena
360	389	SS; lt gr gy, v fn, mod arg Begin Core;@ 360 @ 360½ → m - c, v ark, no cl; @ 364 → fn - m, w/stks gr cl, r py, & stks cg, v arg; @ 365½ → m gy, fn - m, w stks c & cg, fn diss py, p - w cem; @ 371 → p cem; @ 372½ → w cem; @ 377 → m, c & cg w/gr & rd cl gls; @ 378½ 6" v c & cg intbdd w/gr cl; @ 379 6" gr cl, v arena; @ 379½ → c - cg, v ark; @ 380 → m gy w/rd br, c & v c, v ark, A hem stn; @ 382½ 6" c - cg, w cem w/A calc; @ 383 → intbdd fn - m w/c & cg, v ark; @ 386½ — w/ gr gy & rd br, cl gls; @ 388 → lt gr gy, fn - m - c & vc, w cem w/A calc
389	446	SH; lt gr gy, mod arena; @ 390 → no arena; end core @ 391 go to wet samples; @ 406 → mod arena; @ 411 → sli arena; @ 421 → v arena; @ 445 rd br w/lt gr gy; Begin core at 445
446	506	SS; lt gr gy w/rd br, fn w cem w/A calc; @ 447 → no calc; @ 451 → rd br, fn - m; @ 456 → m - c; @ 459 → fn - m; @ 462 → mod arg w/gr gy; @ 463½ 8" SH, gr gy w/rd br, v arena; @ 464 → rd br, m - c, v arg; @ 466 → fn - m, sli arg; @ 470½ 6" lt gr gy w/rd br, m - c, w cem w/A calc; @ 471 → dk gy w/rd br, fn - m, A pet res; @ 471½ → lt rd br w/lt gr gy, stks pet res; @ 473½ → p cem; @ 477½ 6" lt or br w/m gy, w cem w/A calc, fn - m; @ 485½ 1' lt gr gy w/rd br, v arg; @ 488 → int bdd SS, lt gr gy, m - c, w/rd br SH; @ 493 → lt gr gy, fn - m, ex arg w/rd br SH; @ 497 → lt gr gy w/rd br, fn - m, no cl; @ 500 6" w cem w/A calc
506	517	SH; lt gr gy w/rd br, sli arena; @ 509 → lt gy, w calc w/ls nods; @ 515 → rd br w/ lt gr gy, ex arena
517	525	SS; lt gr gy, m, no cl; @ 518 → rd br, fn - m, no SH; 521½ → lt or br (lim stn) @ 522 → rd br, c - v c, no cl; @ 524 → lt or br w/m gy, v w cem Bottom at 525

HOLE NO. 8 123 AREA Sec. 10 - 13-9

FROM	TO	DESCRIPTION
0	25	Blow Sand
25	255	SH; m dk gy, sli - v arena
255	340	SS; lt gy, fn -m, all qtz; @ 290 -> m gy w/ s carb; @ 295 -> all qtz; @ 330 -> dk gy, w/ s carb
340	369	SH; lt gr gy; @ 363 -> ex arena
369	378	SS; m gy, fn - m
378	392	SH; lt gx br gy; @ 381 -> lt ol gy mod arena
392	465	SS; lt gr gy, fn - m; @ 396 -> m gy, m - c; @ 405 -- fn - m; @ 423 -> v arg; @ 429 -- sli arg BEGIN CORE @ 430 SS; m gy, m, v ark, A fn py, A spks gr cl; @ 435 -> m, c, cg, p cem; @ 441½ -> w cem; @ 445 -> m - c, sli arg, A blk cht w/ stks A py; @ 454 1' m, c, cg, v arg; @ 455 -> fn - m; @ 456 -> m - c, v ark, stks gr cl, p cem; @ 459 -> m, c, cg, no arg, v ark; @ 464 -> w cem w/ A calc
465	491	SH; gr gy w/ ls nods A py, A pet res; @ 466 -> all gr gy, no arena END CORE @ 471, no samples 471 - 495; driller reports SS @ 491; BEGIN CORE @ 495
491	595	SS: lt - m gy, m, v c, v ark, A py; @ 497 -> fn - m; @ 501 -> v arg w/ gr cl, A py, A calc, m - c, v c; @ 505 -- c, vc, p cem; @ 507 -> fn - m; @ 510 -> m - c, vc w/ stks gr cl; @ 513 -> f cem; @ 516 -> no arg; @ 520 -> fn - m, f cem; @ 525 -> po cem, mod arg, m - c - vc; @ 526 -> f cem; @ 530.5 -> w cem w/ A calc; @ 531 -> fn - m, po cem END CORE @ 535 - go blind Driller reports SS to BEGIN CORE # 580 SS, lt gr gy m - sli arg; @ 585 -> m - c; @ 586 -> v fm, mod arg Bottom at 595

HOLE NO. 148 AREA Sec. 10k 13-9

FROM	TO	DESCRIPTION
0	25	Blow Sand
25	255	SH; lt gy, mod arena --> dk gy, sli arena
255	347	SS; lt gy, fn - m; @ 265 --> m gy w/ s carb; @ 270 --> lt gy, all qtz; @ 335 --> dk gy w/ carb
347	387	SH; lt gr gy; @ 366 --> mod arena; @ 375 --> w/ br gy
387	424	SS; lt gr gy, m, BEGIN CORE @ 400 --> m gy, m - c, v ark, A calc; @ 401 --> w/ gr cl gls; @ 404 6" gr SH; @ 404½ --> lt gr gy, v fn - fn, no cl; @ 406 --> m gy, m - c, mod arg, v ark, A fn diss py, occ blk spks; @ 419½ --> lt gy m - c & cg, no cem; @ 421 --> dk gr gy, w cem w/ A calc A Pet Res
424	482	SH; lt gr gy, no arena, END CORE @ 425 (lost all samples, driller tryed for 3 hrs. to get water back - reports - SH to 482)
482	570½	SS; BEGIN CORE @ 490, m gy, c & cg, po cem, v ark, A py, com spks gr cl, s kaol, com blk cht; @ 502 --> w cem w/ A calc; @ 508 --> m & c; @ 510 --> f cem, no calc, m, fn diss py; @ 517 --> m & c; @ 523 --> c & ct, v arg, lt gr gy, A py; @ 524 --> mod arg, m gy, po cem; @ 543 --> m occ gr cl; @ 567 --> fn - m, w/ stks c - cg, sli arg, fn diss py
570½	584	SH; lt gr gy, v arena, v calc; @ 578 --> lt gr gy, w/ rd br mod arg; @ 591 --> lt gr gy, v arena
584	600	SS; c - v c, v arg, END CORE @ 585 Driller reports SS to 600 Bottom at 600

HOLE NO. 165 AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	20	Blow sand
20	50	SS; lt br, fn - m
50	175	SH; dk gy, sli - mod arena; @ 115 -> ex arena
175	275	SS; lt gy, fn - m, all qtz
275	323	SH; lt gr gy; @ 290 -> ex arena; @ 296 mo arena, w/br gy; @ 317 -> ex arena
323	332	SS; m, lt gy, mod arg; @ 326 -> m - c
332	374	SH; lt gr gy w/br gy, no arena; @ 347 -> mod arena
374	410	SS; begin Core; @ 375 SS; lt gr gy, fn - sli arg; @ 375½, 1½ gr gy, SH; @ 377 -> mod arg, fn diss py; @ 379 -> w/stks gr cl, fn - m, A py; @ 381 -> m - c, v arg, po cem, A py; @ 385 -> m, mod arg, A py, f cem; @ 389 -> m gy, fn, nO cl, fn diss py; @ 393 -> m - v c, sli arg, A py, A bk spks; @ 396 -> fn - m, fn diss py; @ 399½ -> m - c, A py; @ 402 -> fn - m; @ 403 6" w cem w/A calc @ 405 -> w/A gr cl gls; @ 406 -> ex arg, A py, sli pet res, A calc, End Core @ 406½
410	440	SH (Driller reports)
440	535	SS; v arg; @ 448 -> sli arg, Begin Core @ 460 SS, m gy, m - c, v ark; @ 462 -> fn - m,; @ 465 -> w cem w/A calc @ 466 -> fn - m, A py, A bk spks, po cem w/stks of w cem w/A calc; @ 467½ 2' SH rd br, w/gr gy, mod arena; @ 471 -> lt gr gy, fn, fn diss py; @ 479 -> fn - m @ 490 -> w/stks gr cl; @ 491 -> v fn, no cl; @ 496½ -> fn - m; @ 498 1' w cem w/A calc; @ 500 -> m gy, m; @ 506 -> lt gr gy, fn, mod arg, fn diss py; @ 511 -> m, mod arg; @ 516 -> fn, sli arg; @ 519½ -> m - c, mod arg, A py; @ 523 3' w cem w/A calc lt gy; @ 526 -> fn - m, sli arg, fn diss py; @ 531 -> w/stks w cem w/ A calc, @ 533 1' w cem w/A calc; @ 534 -> c, v arg
535	539½	SH; lt gr gy w/rd br, v arena Bottom at 539½

HOLE NO. 179 AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	80	Blow Sand
80	185	SH; m gy - dk gy - sli - v arena
185	275	SS; lt gy, fn - m all qtz; @ 270 -> dk gy, v arg w/ A carb.
275	314	SH; lt gr gy; @ 308 -> v arena
314	332	SS; m gy, m - c
332	374	SH; lt ol gy; @ 344 -> ex arena; @ 347 -> mod arena; @ 350 -> no arena; @ 369 -> v arena
374	418	SS; m gy, fn - m, BEGIN CORE @ 380 SS, m gy, fn, A fn py; @ 381 -> m - c, v arg; @ 382 -> v fn - fn; @ 385 -> m, c, cg, v ark; @ 387 -> v fn - fn, mod arg; @ 391 -> fn - m, A calc; @ 393 18" gr SH w/ br SH, & SS stks A pet res, A py; @ 394 -> m rd br, m gn, A hem; @ 395 -> w/ lt or gy; @396 -> or gy; @ 400 -> rd br; @ 405 -> m, c, cg; @ 411 -> w/ or gy; @ 413 -> fn -m, or gy; @ 415 -> fn - vc w cem w/ A calc, lt gy
418	435	SH; lt gr gy w/ br gy, v arena END CORE @ 420
435	445	SS; m gy, fn - m
445	470	SH; lt gr gy w/ rd br
470	565	SS; rd br @ 500 -> or gy;@ 525 5' w cem w/ A calc; @ 530 -> rd br; fn m; @ 563 -> w cem w/ A calc
565	575	SH Bottom at 575

HOLE NO.	INTERVAL & EQUIVALENT CHEM. %U3O8		REMARKS
101	550 - 550.5	(.02%)	Bottom Jmwc, SS
102	449 - 450	(.02%)	Jmbb, SH
103	422.5 - 423.5	(.04%)	Poison Canyon SS
	398 - 399	(.045%)	Poison Canyon SS
	366.5 - 367.5	(.08%)	Ex arena Jmbb SH
	317 - 318	(.03%)	Jmbb SH
	309 - 310	(.07%)	Kd
104	554.5 - 555.5	(.03 -.04%)	Jmwc
	549.5 - 550.5	(.02 - .03%)	Jmwc
105	335, several inches	(.03%)	Jmbb SH
106			No count
107			No count
108	419.5 several inches	(.03%)	Poison Canyon SS
109			No count
110			No count
111	500 - 500.5	(.03%)	Jmwc SS
	487.5 - 488	(.08%)	Jmwc SS & SH?
	488 - 488.5	(.12%)	Jmwc SS & SH?
	488.5 - 489	(.06%)	Jmwc SS & SH?
	489 - 489.5	(.04%)	Jmwc SS & SH?
	475.5 - 477.5	(.03%)	Jmwc SS
	437.5 several inches	(.025%)	Poison Canyon SS
	406 - 407	(.03%)	Poison Canyon SS
	407 - 407.5	(.06%)	Poison Canyon SS
	407.5 - 408.5	(.04%)	Poison Canyon SS
112	445 - 446.5	(.025%)	Poison Canyon SS
	382 - 383	(.03%)	Jmbb SS
	350 - 354	(.03%)	Jmbb SS
113	557 - 558	(.03%)	Jmrc SH
114	399 - 400	(.04%)	Jmbb SH
	441 - 442	(.02%)	Jmwc SH
	445 - 446	(.03%)	Jmwc SH
115	337.5 - 378.5	(.035%)	Jmbb SH
	370 - 373	(.04%)	Jmbb SH
	342 - 343	(.045%)	Jmbb SH
116	324.5 - 326	(.025%)	Jmbb SH
117	517 - 519	(.04%)	Jmwc SS
	519 - 523	(.03%)	Jmwc SS
	385 - 387.5	(.11%)	Poison Canyon SS
	379 - 384	(.045%)	Poison Canyon SS
118			No count
119			No count
120	346 - 347	(.025%)	Bottom Poison Canyon SS
121	375.5 - 376.5	(.04%)	Jmbb SH
122			No count

HOLE NO.	INTERVAL & EQUIVALENT CHEM. %U308		REMARKS
123	426 - 426.5	(.03%)	Poison Canyon
	425 - 426	(.06%)	SS
124			No count
125	466.5 - 467	(.05%)	Poison Canyon SS
126			No count
135	414 - 416	(.02%)	Top of Poison Canyon
	457 - 458	(.02%)	Bottom of Poison Canyon
136	485 - 486	(.02%)	Top of Jmwc
137	460 - 462	(.02%)	Bottom of Poison Canyon
138			No count
139	399 - 400	(.02%)	Top of Jmbb SS
140			No count
148	463 - 464	(03%)	Jmbb SS (Poison Canyon)
	456 - 460	(.08 - .09%)	Jmbb SS (Lithologic log of this hole, based on driller's report due to lost circulation, states SH in this interval, However, gamma ray log indicates SS instead of SH
149			No count
150			No count
151			No count
152			No count
153	582.5 - 583.5	(.03%)	Jmrc SH
159	470 - 471	(.03%)	Poison Canyon SS
160	425 - 426	(.025%)	Bottom of Poison Canyon SS
161	494 - 495	(.04%)	Jmbb SH
	462 - 463	(.05%)	Jmbb SH
	466 - 467	(.04%)	Jmbb SH
	345 - 355	(.03 - .04%)	Jmbb SH
162	516 - 517	(.04 - .05%)	Jmwc SS
	466.5 - 467.5	(.06%)	Jmbb SH?
	467.5 - 468.5	(.035%)	Jmbb SH?
163			No count
164	516 - 518	(.03%)	Jmwc
	566 - 568	(.03%)	Jmrc
165	405.5 - 407	(.04 - .05%)	Poison Canyon SS
166	463.5 - 465	(.03%)	Top Jmwc
172			No count
173	403 - 404	(.03%)	Jmbb SS
174			No count
175	466 - 467.5	(.09%)	Bottom of Poison Canyon SS
176			No count
177	393 - 394	(.03%)	Jmbb SS
178	382.5 - 383.5	(.04%)	Jmbb Sandy SH
179	384 - 385	(.04%)	Poison Canyon
	339 - 340.5	(.06%)	Jmbb SS

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

224 New Customhouse
Denver 2, Colorado

August 22, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Gamma-ray log interpretations

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

Docket DMEA 3514, Contract Idm-E823, Climax Uranium Company, Mesa County, Colorado and Grand County, Utah
Docket DMEA 3632, Contract Idm-E797, Colamer Corp., McKinnly County, New Mexico
Docket DMEA 3660, Contract Idm-E850, Mid-Continent Uranium Corp., Grand County, Utah
Docket DMEA 3896, Contract Idm-E910, Heela Mining Co., San Juan County, Utah (Private holes - Apex Uranium Mines, Inc.)
Docket DMEA 3928, Contract Idm-E926, Pacific Uranium Mines Co., Emery County, Utah
Docket DMEA 3966, Contract Idm-E927, Parador Mining Co., Inc., McKinley County, New Mexico
Docket DMEA 3989, Contract Idm-E933, Food Machinery and Chemical Corp., McKinley County, New Mexico
Docket DMEA 4017, Contract Idm-E940, Colamer Corp., McKinley County, New Mexico
Docket DMEA 4070, Contract Idm-E939, San Jacinto Petroleum Corp., McKinley County, New Mexico
Private holes, Barkley Mining Co. (Troy Wade Lease) Club Mesa, Colorado

/s/ W. M. Traver

Enclosures

Colamer Corporation
McKinley County, N. Mex.
Sec. 10, T. 13 N., R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
110	425	None	222.0-422.0	314.3 - 315.1	0.8	380			0.010	
				419.4 - 421.3	1.9	230			<0.005	
118	512.0	None	305.0-405.0	343.6 - 344.6	1.0	260			<0.010	
				388.2 - 389.2	1.0	260			<0.010	
				404.7 - 405.0+	--	>380				
119	505.0	None	285.0-485.0	365.7 - 366.7	1.0	310			<0.010	
				402.0 - 403.5	1.5	240			<0.005	
				475.4 - 478.5	3.1	240			<0.005	
				483.3 - 485.0+	>2.3	380			<0.010	
120	475.0	None	201.0-443.0	206.3 - 208.3	2.0	340			<0.010	
				344.2 - 345.7	1.7	280			<0.005	
121	445.0	None	228.0-438.0	279.8 - 281.0	1.2	350			<0.010	
				373.3 - 374.9	1.6	530			0.011	
122	415.0	None	89.0-389.0	235.4 - 236.8	1.4	300			< 0.010	
				344.6 - 345.8	1.2	210			<0.005	
123	595.0	None	318.0-468.0	377.7 - 379.1	1.4	540			0.012	
				423.2 - 424.2	1.0	1,300			0.032	
				424.2 - 425.2	1.0	300			<0.010	
				465.3 - 465.9	0.6	350			0.010	
124	581.0	None	324.0-474.0	335.8 - 336.8	1.0	220			<0.005	
				415.2 - 417.5	2.3	310			<0.010	
				423.4 - 424.5	1.1	360			<0.010	
				461.5 - 463.0	1.5	220			<0.005	

* top to bottom depths

Colamer Corporation
McKinley County, N. Mexico
sec. 10, T. 13 N., R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From*	Depth Logged To	Anomaly Detected From*	Anomaly Detected To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_eU_3O_8$	Remarks
125	620.0	None	330.0	510.0	424.6	425.6	1.0	270			<0.010	
					427.3	428.9	1.6	680			0.015	
					461.2	463.4	1.2	300			<0.010	
					463.4	464.8	1.4	760			0.020	
					481.3	482.7	1.4	560			0.013	
					482.7	483.8	1.1	400			<0.010	
					483.8	485.2	1.4	310			<0.010	
135	610.0	None	320.0	580.0	339.2	340.2	1.0	300			<0.010	
					366.5	367.5	1.0	350			<0.010	
					402.5	403.3	0.8	360			<0.010	
					403.3	405.0	1.7	230			<0.005	
					413.9	414.6	0.7	400			0.012	
					415.0	416.1	1.1	500			0.013	
					457.0	458.0	1.0	400			<0.010	
					458.0	458.9	0.9	280			<0.010	
136	607.0	None	330.0	600.0	361.7	363.1	1.4	280			<0.010	
					455.8	457.2	1.4	200			<0.005	
					463.6	464.8	1.2	260			<0.005	
					485.6	486.6	1.0	670			0.02	
					486.6	487.5	0.9	220			<0.005	
					592.1	593.8	1.7	380			<0.010	
					593.8	597.0	3.2	240			<0.005	
137	607.0	None	324.0	594.0	364.4	366.3	1.9	300			<0.010	
					460.3	461.9	1.6	900			0.019	
					461.9	462.8	0.9	420			0.011	
					485.3	486.9	1.6	240			<0.005	
					489.7	490.7	1.0	500			0.017	
149	600.0	None	328.0	598.0	343.4	344.3	0.9	240			0.005	
					346.8	347.6	0.8	240			<0.010	
					427.8	428.8	1.0	240			<0.010	

* From top to bottom depths

Colamer Corporation
McKinley County, N. Mex.
sec. 10, T. 13 N., R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
138	607.0	None	342.0-552.0	404.1 - 405.3	1.2	430			0.010	
				422.1 - 423.0	0.9	320			<0.010	
				424.2 - 425.1	0.9	300			<0.010	
				485.2 - 486.1	0.9	280			<0.010	
[illegible]9	627.0	None	344.0-624.0	396.4 - 398.3	1.9	220			<0.005	
				398.3 - 399.3	1.0	520			0.074	
				400.6 - 401.8	1.2	360			<0.010	
				427.0 - 428.0	1.0	280			<0.010	
				603.3 - 606.6	3.3	340			<0.010	
151	620.0	None	330.0-550.0	346.5 - 347.9	1.4	320			<0.010	
				389.2 - 390.5	1.3	280			<0.010	
				418.6 - 419.4	0.8	290			<0.010	
				505.9 - 507.1	1.2	280			<0.010	
152	622.0	None	330.0-480.0	351.5 - 352.5	1.0	460			0.012	
				599.1 - 400.1	1.0	260			<0.010	
153	588.0	None	336.0-586.0	455.3 - 455.9	0.6	260			<0.010	
				528.4 - 529.4	1.0	340			<0.001	
				575.7 - 576.5	0.8	260			<0.010	
				583.7 - 584.7	1.0	700			0.022	
159	602.0	None	336.0-600.0	341.2 - 342.7	1.5	240			<0.005	
				342.7 - 343.7	1.0	470			0.013	
				345.7 - 344.8	1.1	220			<0.005	
				390.3 - 391.6	1.3	280			<0.010	
				422.3 - 423.4	1.1	500			0.013	
				423.4 - 424.2	0.8	260			<0.010	
				443.3 - 445.0	1.7	220			<0.005	
				445.0 - 445.8	0.8	420			0.011	
				445.8 - 447.8	2.0	230			<0.005	
				469.7 - 471.0	1.3	620			0.016	
				471.0 - 472.8	1.8	280			<0.005	
				487.7 - 489.0	1.3	400			<0.010	

* From top to bottom depths

Colamer Corporation
McKinley County, N. Mex.
Sec. 10, T. 13 N., R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
160	615.0	None	312.0-612.0	340.0 - 341.3	1.3	240			<0.005	
				424.0 - 425.8	1.8	240			<0.005	
				425.8 - 426.6	0.8	460			0.013	
				426.6 - 427.7	1.1	260			<0.010	
				466.2 - 467.4	1.2	260			<0.010	
				493.0 - 495.5	2.2	320			<0.010	
				605.2 - 605.7	0.5	260			<0.010	
				379.3 - 380.3	1.0	320			<0.010	
				454.4 - 456.7	2.3	300			0.010	
				456.7 - 459.5	2.2	3,300			0.083	
				463.2 - 464.3	1.1	620			0.017	
				475.8 - 477.0	1.2	340			<0.010	
161	617	None	298.0-598.0	335.0 - 335.8	0.8	330			<0.010	
				338.2 - 339.7	1.5	270			<0.005	
				340.2 - 342.3	2.1	340			<0.010	
				343.6 - 344.5	0.9	460			0.012	
				344.5 - 345.4	0.9	360			<0.010	
				346.6 - 347.9	1.3	260			<0.005	
				428.1 - 429.1	1.0	240			<0.005	
				453.5 - 454.3	0.8	580			0.018	
				457.2 - 458.1	0.9	480			0.013	
				485.0 - 486.3	1.3	380			<0.010	
163	584.9	None	292.0-442.0	324.8 - 325.8	1.0	350			<0.010	
				328.0 - 329.2	0.8	220			<0.005	
				430.5 - 431.8	1.3	300			<0.010	
				432.4 - 433.1	0.7	260			<0.010	
166	515.0	None	242.0-510.0	400.4 - 401.4	1.0	280			<0.010	
				401.4 - 402.1	0.7	220			<0.005	
				428.2 - 429.2	1.0	240			<0.005	
				463.2 - 464.4	1.2	550			0.014	
				464.4 - 466.8	2.4	300			0.005	
				499.9 - 501.2	1.3	280			<0.010	

* From top to bottom depths

Colamer Corporation
McKinley County, N. Mex.
sec. 10, T. 13 N., R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From* To	Anomaly Detected From* To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_e U_3O_8$	Remarks
172	640.0	None	366.0-638.0	452.5 - 454.7	2.2	270			<0.005	
				465.9 - 467.2	1.3	270			<0.010	
				513.6 - 514.6	1.0	270			<0.010	
				514.6 - 516.0	1.4	200			<0.005	
				516.0 - 517.2	1.2	240			<0.005	
				587.2 - 590.1	2.9	320			<0.010	
				596.4 - 597.5	1.1	280			<0.010	
				623.3 - 625.2	1.9	280			0.005	
				625.2 - 626.4	1.2	380			<0.010	
176	610.0	None	354.0-604.0	407.1 - 408.3	1.2	280			<0.010	
				408.3 - 409.2	0.9	220			<0.005	
				435.1 - 437.3	2.2	230			<0.005	
				437.3 - 438.3	1.0	540			0.015	
				574.1 - 575.2	1.1	330			<0.010	
				581.5 - 582.5	1.0	240			<0.005	
177	545.0	None	271.0-531.0	334.0 - 334.9	0.9	480			0.013	
				334.9 - 336.2	1.3	310			<0.010	
				393.1 - 394.0	0.9	500			0.013	
				420.7 - 421.8	1.1	410			<0.010	
				421.8 - 423.3	1.5	240			<0.005	
				435.1 - 436.6	1.5	400			<0.010	
				450.3 - 452.4	2.1	220			<0.005	
178	576.0	None	264.0-574.0	306.9 - 308.1	1.2	260			<0.005	
				373.3 - 374.3	1.0	280			<0.010	
				380.3 - 382.5	2.2	220			<0.005	
				382.5 - 383.5	1.0	800			0.026	
				402.2 - 404.4	2.2	260			<0.005	
				406.8 - 408.0	1.2	300			<0.010	
				446.0 - 446.9	0.9	260			<0.010	

* From top to bottom depths

Colamer Corporation
McKinley County, N. Mex.
sec. 10, T. 13 N., R. 9 W.
DMEA DOCKET NO. 4017

GAMMA-RAY LOG INTERPRETATION

Hole No.	Depth Drilled	Depth Cased	Depth Logged From*	Depth Logged To	Anomaly Detected From*	Anomaly Detected To	Anomaly Thickness	Counts per minute	CPM Corrected for Casing	CPM Corrected for G-M Tube	Grade $\%_eU_3O_8$	Remarks
179	575.0	None	256.0	556.0	327.9	329.0	1.1	240			<0.005	
					339.3	340.3	1.0	1,500			0.039	
					344.1	345.1	1.0	320			<0.010	
					361.6	363.3	1.7	400			<0.010	
					363.3	364.0	0.7	240			<0.010	
					377.0	379.1	2.1	340			<0.010	
					379.1	384.1	5.0	260			<0.005	
					384.1	385.4	1.3	820			0.022	
					385.4	387.0	1.6	240			<0.005	
					387.0	388.0	1.0	540			0.015	
					392.5	394.0	1.5	230			<0.005	
					525.4	527.4	2.0	300			0.005	

* From top to bottom depths

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

224 New Customhouse
Denver 2, Colorado

August 8, 1956

Mr. Kelsey Boltz
Colsmer Corporation
Fidel and Reuse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
(Section 10, T13N, R9W)
McKinley County, New Mexico

Dear Mr. Boltz:

Form MF-104, Operator's Monthly Report and Voucher, for the month of May, 1956 is being processed for payment. The cost of 80 feet of core drilling in hole No. 104 is disallowed inasmuch as the driller's log for this hole indicates that only 98 feet was cored, whereas 178 feet of core was claimed. Incidental Allowance for this 80 feet of drilling is also disallowed.

If reclaim is made for these costs, the reclaim must be accompanied by the Administrative Audit Difference Statement, which will be mailed to you by the Region III Finance Office.

Very truly yours,

W. M. TRAVER

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

JDC:jy
cc: Corresp. File E940
MF-104 File E940
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Chron.

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

RECEIVED
JUL 18 1956

224 New Customhouse
Denver 2, Colorado

July 16, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4017 (Uranium), Contract Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico

Enclosed are the Government's, Division, and Docket copies of Amendment No. 1 to Contract Idm-E940, which were forwarded by your letter of June 28, 1956, for signature by the Operator.

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

W. M. Traver

W. M. Traver

Enclosures

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

RECEIVED
JUL 12 1956

124 New Customhouse
Denver 2, Colorado

July 10, 1956

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4017 (Uranium) Contract Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W) McKinley County, New Mexico

Enclosed herewith is one copy of a drilling subcontract between the subject Operator and Minerals Engineering Company. Minerals Engineering Company is performing the drilling under Contract Idm-E940. Also attached is a relative letter from the Operator.

The above drilling subcontract will constitute documentation of costs for drilling performed under Contract Idm-E940.

W. M. TRAVER

W. M. Traver

Enclosures
JDG:jy
cc: Corresp. E940 w/copy Oper. letter
Contract E940 w/copy subcontract
Sec. Op. Comm. (3))
Shaw (2))
Harshman) w/copy of Oper. letter
Hosler) and subcontract
Townsend)
Chron.

COLAMER CORPORATION

GRANTS DIVISION

FIDEL & ROUSE BLDG.

GRANTS, NEW MEXICO

July 6, 1956

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

RECEIVED
JUL 12 1956

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

Re: DMEA Docket 4017
Contract Idm-E940

Dear Mr. Traver:

Enclosed is a certified copy of our Company's sub-contract with Minerals Engineering Company, in which are specified prices and conditions. According to your instructions this should be adequate for substantiation for reimbursement under this contract.

Please note that if core recovery drops below 80% only that portion of core recovered is paid for. Therefore, occasionally the monthly unit core costs will be lower than $3.50 per foot.

Very truly yours,

COLAMER CORPORATION

KELSEY BOLTZ

KB/pb

RECEIVED
JUL 12 1956

April 23, 1956

Minerals Engineering Co.
P.O. Box 1951
Grand Junction, Colorado

Gentlemen:

Following is a list of the terms of our drilling agreement:

1. It is estimated that the drilling will involve a total footage of approximately 50,000 feet proportioned as follows: 39,000 feet plug bit, 11,000 feet core. This is not to be contstrued as a guaranteed footage and Colamer Corp. will not be obligated to provide this amount of drilling although total footage will probably exceed this amount depending on the results.

2. Core specifications:
   (a) Size BX minimum
   (b) If core recovery exceds 80%, Colamer will pay for total cored footage per hole. If core recovery is less than 80%, Colamer will pay for only the recovered core per hole.

3. Plug bit specifications:
)a) Wherever possible plug bit drilling will be done with air.
   (b) Whether with air or water, samples will be collected at five foot intervals maximum.
   (c) Where circulation is lost, the contractor using all reasonable methods to maintain access to the bottom of the hole for radiometeric probing. It will be the responsibility of Colamer to probe the hole immediately upon completion of same or pay standby time until the probe and operator arrive.

4. The contractor will provide all materials necessary for the drilling of the hole including water where needed.

April 23, 1956

5. Colamer Corp. will provide access to all drill sites. The sites will be provided sufficiently in advance that no delay will be suffered by the contractor. In the event that sites are not available standby time will be paid by Colamer. Standby time will not be paid between successive stages of drilling as per DMEA contract Idm-8040.

6. Other delays:
   A recess of the contract will be called in the event of the occurrence of
   (a) Acts of God, strikes, unavailability of material or court injunctions.

7. Locations of drill sites, depths of holes and amount of core per hole will be governed solely by the decision of engineers of Colamer Corp.

8. Core boxes and sample bags will be provided at the drill site by Colamer Corp.

9. A minimum of three drill rigs will be provided by the Contractor.

10. Price:

(a)	Core	$3.50 per foot
(b)	Non core	.70 per foot
(c)	Standby time	12.00 per hour

AMENDMENT

The following prices will be come effective June 15, 1956.

(a)	Core	$ 3.50 per foot
(b)	Non core	.95 per foot
(c)	Standby time	12.00 per hour

11. Terms:
   Net cash paid monthly.

The foregoing specifications are agreed to by the undersigned:

MINERALS ENGINEERING COMPANY

BY [signature]

COLAMER CORPORATION

BY [signature]

[illegible] notary public

[illegible] 10-1-58

CW

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

RECEIVED
JUL 12 1956

224 New Customhouse
Denver 2, Colorado

July 10, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4017 (Uranium), Contract Idm-E940, Colamer Corporation (Sec. 10, T 13 N, R 9 W), McKinley County, New Mexico

Enclosed are four copies of project work approval issued by the DMEA Field Team, Region III.

Also enclosed is the following material relative to the work approval:

1. Two sets of data provided by the Operator.

2. Four copies of a memorandum, dated June 19, 1956 from W. B. Gazdik, Geologist, Geological Survey.

3. Four copies of a memorandum, dated June 27, 1956 from W. D. McMillan, Mining Engineer, Bureau of Mines.

Other data relative to the matter was forwarded to you by our memorandum of May 10, 1956.

Copies of the project work approval have been distributed to the Finance Office, Region III, and other offices concerned.

W. M. Traver

W. M. Traver

Enclosures

drill logs & maps submitted with this are in map folder

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

RECEIVED
JUL 12 1956

[illegible] New Customhouse
Denver 2, Colorado

July 9, 1956

Mr. Kelsey Kelly
Calumet Corporation
Grants Division
Fidel & Bunce Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract IdM-8940
Calumet Corporation
(Sec. 10, T. 13 N., R. 9 W.)
McKinley County, New Mexico

Dear Mr. Kelly:

Reference is made to your request of May 1, 1956, for the Government's approval to drill twenty-two (22) Stage I holes through the Westwater Canyon Sandstone; and to your request of June 6, 1956, for approval to drill thirty-three (33) Stage II holes through the same Westwater Canyon Sandstone instead of only through the Poison Canyon Sandstone.

This constitutes confirmation of verbal approval from the Government for you to drill the following Stage I and Stage II holes through the Westwater Canyon Sandstone member of the Morrison Formation:

STAGE I

Hole No.	Hole No.	Hole No.
103	109	117
104	110	118
105	113	119
106	114	120
107	115	121
108	116	122.

STAGE II

Hole No.	Hole No.	Hole No.
133	149	165
134	150	166
135	151	172
136	152	173
137	153	174
138	159	175
139	160	176
140	161	177
141	162	178
142	163	179
148	164	180.

The locations of the above listed holes are shown by numbered symbols on the map entitled, "Figure 1, Sketch Map of Section 10, T 13 N, R 9 W, Showing Completed Stage I Holes and Proposed Stage II Holes, Coleman Corporation, McKinley County, New Mexico," which is attached hereto and made a part of this work approval.

Non-core and core footage and funds in both Stages I and II will be supplemented by transferring footage and funds from Stage III to permit the deeper drilling authorized above under Stages I and II.

Nothing in this work approval shall be construed to increase the total estimated cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Very truly yours,

BIA Field Team, Region III

W. M. Praver

W. M. Praver

E. W. Hawkinson

W. W. Hawkinson

Enclosure

JWT:prl

cc: Chairman, Oper. Comm. (4)
Finance Office, Reg. III
Amendment file, Reg. III
Hawkinson
Shaw (2)
Hasler
Townsend
Corres. file
Chron.

DMEA
Date Rec'd.

JUL 3 1956

BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
June 27, 1956

Memorandum

RECEIVED
JUL 12 1956

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: W. D. McMillan

Subject: Docket DMEA 4017 (Uranium) Contract Idm-E940, Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., N.M.P.M., McKinley County, New Mexico. Geologic Summary of Stage I drilling and Stage II recommendations.

Uranium ore in the Ambrosia Lake Uranium district occurs in both the Poison Canyon sandstone member and the Westwater Canyon member of the Jurassic Morrison formation. Contract Idm-E940 only provided for exploration through the Poison Canyon sandstone member. Colamer Corporation on Stage I is drilling through the Westwater Canyon member at their own expense.

In subject report the applicant requests that 33 of the 45 Stage II holes be drilled through the Westwater Canyon member. These being Nos. 123, 124, 125, 126, 135, 136, 137, 138, 139, 140, 148, 149, 150, 151, 152, 153, 159, 160, 161, 162, 163, 164, 165, 166, 172, 173, 174, 175, 176, 177, 178, 179, and 180 as shown on map of Sec. 10, T. 13, N., R. 9 W. with the proposed location of Stage II holes submitted by the operator.

The additional drilling for these 33 holes was not given in the geologic summary submitted by K. Boltz and G. Baly, but over the telephone on June 7, 1956, Mr. Boltz stated that he estimated that an additional 100 feet of plug drilling and 20 feet of core drilling per hole would be required to drill through the Westwater member in Stage II drilling.

This would necessitate the transfer from Stage III to Stage II of 660 feet of coring and 3300 feet of plugging or a total of 3960 feet of drilling.

It is concluded that drilling through the Westwater Canyon member will benefit the Government, and it is recommended that an amendment be made to Contract Idm-E940 providing for the transfer to Stage II of 3300 feet of plug drilling and 660 feet of core drilling from Stage III.

W. D. McMillan
Mining Engineer

WDM/mv
Idm-E940
Chron

MINERAL DEPOSITS
DMEA
RECEIVED
JUN 21 1956
JUL 12 1956
GEOLOGICAL SURVEY
DENVER, COLORADO

P. O. Box 360
Grand Junction, Colorado

June 19, 1956

DMEA
Date Rec'd.
JUN 25 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, DMEA Field Team Region III

From: W. B. Gazdik

Through: J. W. Hasler
E. N. Harshman
J. F. Shaw

Subject: DMEA Docket 4017 (Uranium), Contract Idm-E 946, Colamer Corporation, (Sec. 10, T. 13 N., R. 9 W., NMPM) McKinley County, New Mexico

Mr. K. Boltz and Mr. G. Daly, geologists of the Colamer Corporation requested approval of 33 Stage II drill holes to test what they consider favorable areas found by Stage I drilling. The request for Stage II holes was included in an undated analysis of part of Stage II drilling received in this office June 1, 1956. Up to that time 16 Stage I holes totaling 8791.5 feet had been completed through the Westwater member. An unknown amount of this footage was drilled on company funds.

The contract was originally set up to test the so called Poison Canyon sandstone of the Brushy member of the Jurassic Morrison formation. On the basis of discoveries made in the underlying Westwater member of the Morrison formation in Section 2 and Section 34, T. 14 N., R. 9 W. one half mile northeast and one mile north, respectively, of the subject property the operator requested that the contract be amended to test the Westwater member. The transfer of approximately 2,160 feet from Stage III drilling to Stage I drilling was approved to permit extending 18 Stage I holes through the Westwater member. In their request for Stage II drilling the company geologists failed to mention the desirability of exploring the Westwater member. Mr. Boltz was contacted by telephone on June 7, 1956 and at that time stated that the request for permission to continue exploration of the Westwater member with Stage II holes was inadvertently omitted. He estimated an additional 100 feet of plug drilling and 20 feet of core drilling per hole would be required to drill through the Westwater member during the Stage II phase. This would necessitate the transfer from Stage III to Stage II drilling of 330 feet of coring and 3,300 feet of plugging or a total of 3,960 feet of drilling.

Geologic data obtained from stage I drilling through the Brushy Basin sandstone member is summarized in table I, and table II summarizes drilling for the Westwater member of the Morrison formation. An appraisal of lithologic logs, cross sections and gamma-ray logs submitted with the operator's report suggest the following mineralized relations about the ore-bearing members in section 10:

1. Sandstone and mudstone beds in the Brushy Basin member interfinger with those in the underlying Westwater member. The contact between the two members is obscure.

2. The so-called Poison Canyon sandstone unit of the Brushy Basin member loses its identity as such and should be referred to as a Brushy Basin sandstone unit.

3. The Brushy Basin member and the Westwater member generally appear to be more favorable for ore deposits in the north half of section 10.

Of the 16 Stage I drill holes completed, one hole (117) cut ore-grade material, 3 holes were drilled through weakly mineralized rock, and 12 holes were drilled in barren ground. Data pertinent to mineralized holes is presented below.

Hole No.	Member	Mineralized interval	Thickness in feet	Grade % U_3O_8
103	Brushy Basin	309.0 - 310.0	1.0	0.07
		366.5 - 367.5	1.0	0.08
104	Westwater	554.5 - 555.5	1.0	0.03
		406.0 - 408.0	2.0	0.04
111	Brushy Basin	475.5 - 477.5	2.0	0.08
	Westwater	487.5 - 489.0	2.5	0.08
117	Brushy Basin	385.3 - 386.3	2.0	0.11
		509.0 - 510.0	1.0	0.03
	Westwater	517.0 - 518.5	1.3	0.04

The above-listed holes were classified by using a grade cutoff of 0.10 percent U_3O_8 one foot or more thick for ore holes and 0.02 percent U_3O_8 or a higher grade less than a foot thick for mineralized holes. Grade of mineralized rock was based on results of radiometric logs. Most of the holes were probed with a Babbel counter by the operator. Drill holes 103, 112 and 117 were logged by an AEC logging unit. The AEC was consulted regarding the interpretation of these logs. It is believed that the operator was too optimistic in his interpretation of radiometric logs.

He stated in his reports that drill holes 101, 102, and 108 contained significant mineralization, but the gamma logs for these holes do not support this interpretation.

Based on the increased average thickness of sandstone host rock, the alteration in color of sandstone and included mudstone from red to green-gray or gray and the presence of asphaltic material and pyrite, it is concluded that both the Westwater member and the Brushy Basin member of the Morrison formation are favorable for ore deposits in the north half of section 10. It is, therefore, recommended that the 33 stage II holes requested by the operator be approved and it is further recommended that the additional footage required to explore the Westwater member be transferred from Stage III drilling to Stage II drilling as requested.

W. B. Gazdik
W. B. Gazdik,
Geologist

WBG/mlr

Enclosures

Table 1. Summary of drill-hole data from Brushy Basin Sandstone Units

Hole No.	Total depth	Thickness OBSS	Color OBSS	Color of mudstone	Carbon and Asphaltite	Pyrite	Classification	Remarks
101	565.0	90	lt.gray	gray-green	sparse	sparse	barren	
102	621.0	110	lt.gray	gray-green	sparse	none	barren	JMB intertongues with JMW
103	580.0	100	lt.gray	gray-green	none	sparse	mineralized	
104	582.5	35	lt.gray	gray-green	none	sparse	barren	
105	583.0	26	lt.gray	gray-green	none	none	barren	JMB intertongues with JMW
106	539.5	50	lt.gray	gray-green	none	abundant	barren	
107	538.0	57	lt.gray	gray-green	abundant	sparse	barren	
108	498.0	60	lt.gray	gray-green	abundant	abundant	barren	
109	461.0	76	lt.gray	gray-green	abundant	abundant	barren	
111	555.0	52	lt.gray	gray-green	abundant	abundant	mineralized	
112	569.0	80	lt.gray	gray-green	none	none	barren	
113	553.0	50	lt.gray	gray-green	abundant	abundant	barren	
114	543.5	47	lt.gray	gray-green	sparse	sparse	barren	
115	538.0	100	lt.gray	gray-green-brown	abundant	abundant	barren	Interbedded MS and SS
116	535.0	80	lt.gray	gray-green-brown	sparse	sparse	barren	Interbedded MS and SS
117	525.0	30	lt.gray	gray-green-brown	none	abundant	core	

Table II. Summary of drill hole data from Westwater sandstone units

Hole No.	Total depth	Thickness OBSS	Color OBSS	Color of Mudstone	Carbon Asphaltite	Pyrite	Classification.	Remarks
101	565.0	75	light gray	gray-green	abundant	abundant	barren	
102	621.0	103	light gray	gray-green	sparse	sparse	barren	
103	580.0	140	light gray	gray-green	sparse	abundant	barren	Interfingers with JMB
104	582.5	180	light gray	gray-green	abundant	abundant	mineralized	
105	583.0	183	light gray	gray-green	abundant	abundant	barren	
106	539.5	100	light gray	gray-green	--	--	barren	
107	538.0	110	light gray	--	--	sparse	barren	
108	498.0	65	light gray	gray-green	--	--	barren	
109	461.0	65	light gray	gray-green	none	sparse	barren	
111	555.0	91	light gray	gray-green	abundant	abundant	mineralized	
112	569	137	light gray	gray-green	sparse	sparse	barren	
113	553.0	85	light gray	gray-green	abundant	abundant	barren	
114	548.5	47	light gray	gray-green	sparse	none	barren	Interfingers with JMB
115	538.0	90	light gray	gray-green	none	none	barren	
116	535.0	92	red	gray-green-red	none	none	barren	
117	525.0	60	light gray-brown	gray-brown	none	none	weakly mineralized	Weakly mineralized in basal JMB

JUN 7 1956
BUREAU OF MINES
Denver, Colorado

June 6, 1956

RECEIVED
JUL 12 1956

REQUEST TO ACCOMPANY REPORT OF GEOLOGIC SUMMARY
OF 1stSTAGE DRILLING DOCKET 4017, CONTRACT Idm-E94

As can readily be seen from the radiometeric and Gamma Ray logs the mineralization encountered in the 1st stage drilling of this contract occurred both in the Poison Canyon Sandstone and in the Westwater Sandstone. In hole nO. 117 the Poison Canyon was mineralized from 379 to 389 and the Westwater Sandstone was mineralized from 509 to 519. Most of the mineralized holes show mineralization in both horizons.

Moreover the cross sections show that in the area of the north half of Section 10 the Westwater Sandstone attains a very great thickness and in places actually merges with the Poison Canyon Sandstone. Therefore, it is reasonable to assume that ore could possibly occur in either or both horizons.

For the above reasons we are requesting that the 33 requested 2nd stage holes comprising a footage of 11,550 feet plug and 3300 feet core be deepened by using an additional 100 feet of plug footage and 20 feet of core footage per hole. This would make a total plug footage of 14,850 feet and 3960 feet core. These totals remain within the total footage allowed for 2nd stage.

Respectfully,

COLAMER CORPORATION

Kelsey Boltz

KELSEY BOLTZ

KB/pb

COLAMER CORPORATION

GRANTS, NEW MEXICO

June 6, 1956

RECEIVED
JUL 12 1956

DMEA
Denver

JUN 8 1956

BUREAU OF MINES
Denver, Colorado

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

Dear Mr. Traver:

Am enclosing the interpretation data for the AEC Gamma Ray logging units and our Babel counting units which are being used on DMEA Contract Idm-E940. This data is to accompany the Geologic Summary Of 1st Stage Drilling sent to you May 29th, 1956.

Very truly yours,

COLAMER CORPORATION

KESLEY BOLTZ

KB/pb

CALIBRATION AND INTERPRETATION
OF BABEL PROBE READINGS

RECEIVED
JUL 1 2 1956

To obtain %eU308,

on 5 Scale:

$$\frac{\text{Reading} - 2}{3} = \%\text{eU308}$$

on 4 Scale:

$$\text{Reading} - \quad = \%\text{eU308}$$

COLAMER CORPORATION

GRANTS DIVISION

FIDEL & ROUSE BLDG.

GRANTS, NEW MEXICO

May 10, 1956

RECEIVED
JUL 12 1956

DMEA
Date Rec'd.
MAY 14 1956
BUREAU OF MINES
Denver, Colorado

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

Dear Mr. Traver:

Am forwarding to you copies of the material which apparently was not included with my request of May 2. Also included herein are copies of lithologic logs that have been completed since that time.

Gamma ray logs for holes 103 and 112 were probed by the AEC and we have not yet received copies of these logs.

Very truly yours,

COLAMER CORPORATION

Kelsey Boltz

KELSEY BOLTZ

KB/pb

DMEA
Date Rec'd.
MAY 31 1956
BUREAU OF MINES
Denver, Colorado

GEOLOGIC SUMMARY OF 1st STAGE DRILLING DOCKET 4017
CONTRACT Idm-E940 AND 2nd STAGE RECOMMENDATIONS

RECEIVED
JUN 12 1956

In a professional paper entitled Ambrosia Lake, New Mexico's Newest Uranium Bonanza, J. W. Gabelman, PhD, Robert C. Young, and the writer of this request, all formerly of the Atomic Energy Commission, endeavored to point out the ore controls in the Ambrosia Lake area. Two of the most important controls, as mentioned in the paper, are structure and bleaching of sandstones.

Drilling to date in section 10, T13N, R9W, has not given enough information to construct a structure contour map, however, Figure 1, a map compiled by National Lead Company, and the AEC structure contour map of the Ambrosia Lake area disclose that section 10 is on the flanks of a domal structure. Before drilling was begun on the section this in itself was the most important reason for drilling the section.

Having almost finished the first stage of drilling on DMEA 4017, a great deal more is known and analysis of the information indicates the following.

Holes 101 through 109 have been bleached throughout the Poison Canyon sandstone and the Westwater sandstone. Hole 110 has not yet been bottomed. Holes 101, 102, 103, and 108 contained significant mineralization in the Brushy Basin sandstones and shales. This is an indication that the mineralizing solutions have passed through the area. On the east side of the section all holes drilled to date have contained mineralization in more than one horizon. Hole 111 contained 0.12% U_3O_8 (radiometeric assay), in the Westwater sandstone and 0.07% U_3O_8 (radiometeric assay), in the Poison Canyon. Hole 117 contains 0.05% U_3O_8in the Westwater and has a ten foot zone of mineralization with about 2 feet of 0.11% U_3O_8 (radiometeric assay), in the Poison

Canyon. The holes on the east side of the section have been bleached throughout the Poison Canyon and Westwater sandstones from hole 111 through hole 115. Hole 116 showed slight red, i.e. unbleached color in the Westwater and hole 117 was bleached throughout the Poison Canyon but unbleached or red in the Westwater except in the Mineralized horizon. It should be pointed out here that in most Poison Canyon sandstone depOsits in the Poison Canyon area the Poison Canyon sandstone is bleached either entirely or in part while the underlying Westwater is red. i.e. unbleached. In the Ambrosia Lake area many large ore bodies in the Westwater lie in bleached portions of the formation and either overly or lie under unbleached portions. Therefore, it can be safely said that unless the Westwater is unbleached throughout, it still is a favorable formation for uranium mineralization. To date this is precisely the case on section 10 with the best mineralization to date in bleached Poison Canyon sandstone overlying red Westwater. And, in the same hole, hole 117, the Westwater itself is mineralized in the one bleached horizon in a section consisting of nearly 100% unbleached sandstone.

Another indication of favorable solutions haveing passed through an area is the presence of iron pyrites which are not normal to the Morrison sandstones. It is believed by the above mentioned authors that the solutions carrying pyrites could also have been the uraniferous solutions. Every hole drilled to date on section 10 has shown pyrites in most of the sandstones in copious amounts as can be seen by examining the enclosed lithologic logs.

With these favorable indications of uraniferous solutions having passed through the area, the presence of large amounts of a suitable

precipitating agent should locate mineralization of sizable quantities. In this region petroleum residue serves as the precipitating agent and structural traps containing petroleum residue are the sites of the large ore bodies in the Ambrosia Lake area.

Every hole drilled to date on section 10 has disclosed the presence of petroleum residue in small quantities and the portions of the hole containing petroleum residue have been the mineralized horizons.

As the structure indicated in figure 1 is quite suitable for the trapping of petroleum; since iron pyrites are present in copious quantities and are believed to indicate the passage of uraniferous solutions; as the pinchouts of Brush Basin sandstones indicated on the enclosed cross sections afford excellent traps; sinceknown ore bodies roughly conform to structure contour lines and the contour lines on section 10 run NW-SE; and, since holes 101, 102, and 103 on the west side of the section and holes 111 through 117 on the east side or mineralized, the following holes are requested at this time.

123, 124, 125, 126, 135, 136, 137, 138, 139, 140, 148, 149, 150, 151, 152, 153,159, 160, 161, 162, 163, 164, 165, 166, 172, 173, 174, 175, 176, 177, 178, 179, 180.

COLAMER CORPORATION

Gene Ealy

KELSEY BOLTZ, Geologist
GENE EALY, Geologist

May 1, 1956

RECEIVED
JUL 12 1956

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

Re: DMEA Docket 4017
Contract Idm-E940

Dear Mr. Traver:

During the period of the compilation of data prior to our application for this contract it appeared as though the best possibilities for the discovery of an ore body in this area lay in the so called Poison Canyon Sandstone. This evidence was due mostly to the results of the drilling preformed by National Lead Co. on section 15, T13N, R9W, directly to the south of Section 10, subject area of this contract.

However, recent discoveries in Section 2, one half mile NE of Section 10 and in Section 34, T14N, R9W, one mile to the north, all in the Westwater Sandstone below the Poison Canyon indicate the very good possibilities of the discovery of ore in this Westwater member in this area of Section 10.

Work under this contract was begun April 24 to comply with the terms of our Contract. Two holes have been completed in the NW¼ of this section and two more holes have been partially drilled in the NE¼ of this section. All these holes were carried through the Westwater Canyon Member at our Company's expense. The Westwater in this area exibits very favorable conditions i.e., greater than 100 feet in thickness, abundance in pyrite, no traces of iron oxide. Also in a number of partings in this member there are present many spots of petroliferous residue which indicates, of course, the presence of hydrocarbons. Enclosed with this letter are copies of these lithologic logs.

Therefore, because of the above reasons we are requesting that ample footage be transferred from the 3rd stage of this contract to the 1st stage in order to properly investigate this promising horizon. This method will in no way increase the total cost of the contract. It is herein estimated that approximately 120 feet more per hole would have to be drilled to allow for the thorough investigation of this Westwater Canyon member.

It is also very evident from the results of the completed holes that this additional footage need not be cored. We have seen that water recovered samples in this horizon will yield all of the information necessary for a proper investigation. In the event that ore is discovered in this horizon we would propose to change immediately to the recovery of core for proper chemical analysis. It is estimated herein that the footage required to investigate the Westwater sandstone on the 22 holes of the 1st stage would be approximately 2640 feet.

Very truly yours,

COLAMER CORPORATION

KELSEY BOLTZ

KB/pb

Surname copy

Ching
Ellis
Talbert
Selfridge
Fleischman

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

JUN 28 1956

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

Re: Docket No. DMEA-4017 (Uranium)
Contract No. Idm-8940
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico.

Dear Mr. Traver:

Pursuant to our teletype of June 8, we are enclosing the original and five copies of a proposed Amendment No. 1 to the subject contract, signed by the Administrator. Also enclosed are two extra copies of the amendment for the use of the Field Team.

If you and the Operator find the amendment satisfactory please have the latter sign all six copies and make the usual distribution thereafter. If the amendment is not satisfactory and cannot be amended within your delegated authority please have all copies returned to this office.

You will note that the existing provisions in the contract for transferring drill footages and funds from Stage III to Stages I and II are retained under the amendment, that transfers already authorized for deeper drilling are covered thereby, that some further transfers may be approved by the Field Team for deeper drilling if desired, and that the footage remaining to Stage III may be used to drill through the Westwater Canyon member upon the prior written approval of the Field Team.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (WB)

Enclosures

MChing:ai 6-26-56

cc to: Admr. Reading File
Docket
Oper. Comm.
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700 Mr. Ching

APPROVED:

P. F. Yopes (WB)
Member, Bureau of Mines

Thor H. Kiilsgaard (WB)
Member, Geological Survey

Docket Surname copy

Ellis

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

June 26, 1956

Memorandum

To: The Files

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

Subject: Justification for Amendment No. 1
Docket No. DMEA-4017 (Uranium)
Contract No. Idm-E940
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

The contract, as executed, provided for drilling to test the Poison Canyon sandstone of the Morrison formation.

Subsequent to execution of the contract the Operator advised by letter to W. M. Traver, dated May 1, 1956, that recent discoveries had been made in sec. 2, one half mile northeast of sec. 10, and in sec. 34, T. 14 N., R. 9 W., one mile to the north, all in the Westwater Canyon sandstone below the Poison Canyon sandstone. These discoveries indicate the very good possibility of similar discoveries in the Westwater Canyon member in sec. 10. Furthermore, two holes drilled by the Operator through the Westwater Canyon member for its own account exhibited very favorable conditions, i. e., greater than 100 feet in thickness, abundance of pyrite, no traces of iron oxide, and the presence of hydrocarbons.

In a memorandum, dated May 8, 1956, W. D. McMillan, USBM, stated that it appeared advisable to continue the exploration through the Westwater Canyon member on the basis of results obtained by National Lead Company in sec. 15, directly south of sec. 10 and by San Jacinto Petroleum Corporation in sec. 32, T. 14 N., R. 9 W., two miles northwest of sec. 10.

In view of the foregoing advices, and the favorable results of such deeper drilling in Stage I, extension of the drilling through the Westwater Canyon member wherever approved in writing beforehand by the Government, appears to be desirable. It is recommended that the contract be amended accordingly. The desired results may be obtained in Stages I and II by transferring the required footages and funds from

Stage III. In the event the footage and funds remaining to Stage III are insufficient to attain the objectives desired consideration may then be given to increasing the total footage and funds allowed by the contract through further amendment.

Michael Ching

Michael Ching

rname copy

Ching
Ellis

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

June 14, 1956

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis

Subject: Docket No. DMEA-4017 (Uranium)
Contract No. Ida-E940
Colamer Corporation
Sec. 10, T. 13N., R. 9W.
McKinley County, New Mexico

Will you kindly prepare an Amendment No. 1 to the subject contract in accordance with the attached draft.

The contract, as executed, provided for drilling to test the poison Canyon sandstone of the Morrison formation. Later developments on adjoining properties brought out the desirability of extending the depths of some, if not all, of the holes through the lower Westwater Canyon member of the Morrison formation. Because of the time factor involved, in providing for uninterrupted drilling on the part of the Operator, the Field Team was authorized by teletype to transfer immediately the required footages from Stage III to Stages I and II. It is presumed that such transfers were authorized by the Field Team in writing.

The attached draft is designed to cover the transfers already made and to allow sufficient flexibility in the contract to enable the Field Team to authorize some further transfer of drilling footage from Stage III, if required.

EWE

Ernest Wm. Ellis

MChing/ai
6/14/56
cc to: Docket
Code 700
Mr. Ching

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

700
FILE COPY
Surname:
Chang
Kiilsgaard
Lichelt
Mottendorf

DEPARTMENT OF THE INTERIOR

JUN - 8 1956 DMEA

14X4401(01) Revolving Fund,
Defense Production Act,
Interior (Allocated Working Fund to the
Office of the Secy.)

T E L E T Y P E

W. M. TRAVER
EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURTT JUNE 7 COLAMER CORPORATION DOCKET 4017. AUTHORIZE OPERATOR TRANSFER 660 FEET CORE AND 3,300 FEET NONCORE DRILLING FROM STAGE 3 TO EXTEND 33 STAGE 2 HOLES THROUGH WESTWATER CANYON SANDSTONE AS SUGGESTED. AMENDMENT REFERRED TO IN OUR MAY 16 TELETYPE WILL BE COMBINED WITH PRESENT AMENDMENT.

W. S. Martin
ACTING CHAIRMAN, OPERATING COMMITTEE

MChing/izm 6-8-56
cc to: Docket
Code 700
Admr.'s Reading File
Operating Committee
Confirmation to Region III
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Acting Chairman, D.M.E.A.
Operating Committee

DN 235 BUR MINES 6-7-56 10-44

ACTING CHAIRMAN, OPERATING COMMITTEE, DMEA

RE CHAIRMAN S TT 5-16-56 DOCKET DMEA 4017, CONTRACT IDM-E940, COLAMER CORP., RELATIVE TRANSFER OF DRILL FOOTAGE FROM STAGE III TO STAGE I. THE AMENDMENT REFERRED TO HAS NOT BEEN RECEIVED. OPERATOR HAS COMPLETED ALL 22 HOLES UNDER STAGE I AND HAS REQUESTED APPROVAL FOR DRILLING OF 33 STAGE II HOLES AS SHOWN ON FIGURE 2 ATTACHED TO THE CONTRACT NORTHEASTSOF A LINE DRAWN FROM THE NORTHWEST CORNER OF D NO. 31 CLAIM TO THE NORTHEAST CORNER OF D NO. 7 CLAIM. BECAUSE OF FAVORABLE RESULTS OBTAINED FROM DRILLIGXX DRILLING THE STAGE I HOLES THROUGH THE WESTWATER CANYON SANDSTONE MEMBER, FIELD EXAMINERS RECOMMEND THAT THE 33 HOLES REQUESTED ALSO BE DRILLED THROUGH THE WESTWATER SANDSTONE WHICH TILL NECESSITATE TRANSFER OF 660 FEET OF CORING FOOTAGE AND 3300 FEET OF NONCORE FOOTAGE FROM STAGE III TO STAGE II. PLEASE TELETYPE RESULTS OF YOUR DECISION AS PROMPT ADVICE TO OPERATOR IS NECESSARY TO ENABLE CONTINUITY OF OPERATIONS.

W M TRAVER

RECEIVED
JUN - 7 1956

Denver, Colorado

JUN 7 2 20 PM '56
BUREAU OF MINES
MAIL ROOM
WASHINGTON D.C.

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

RECEIVED
MAY 18 1956

224 New Customhouse
Denver 2, Colorado

May 16, 1956

Mr. Kelsey Bolts
Colamer Corporation
Fidel and Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium)
Contract Idm-E940
Phyllis, Fannie, Jean and Deeta
claim groups
McKinley County, New Mexico

Dear Mr. Bolts:

We have received your Monthly Progress Report and Voucher for the month of April, 1956. No maps showing the location of the work were submitted with the report, therefore, the voucher will not be processed for payment until the necessary maps are received in this office. Five copies of the map are required, one for each copy of the monthly report. Please submit the maps to this office as soon as possible.

Future monthly progress reports will not be processed for payment unless all copies of the reports are accompanied by the required map or maps.

Very truly yours,

W. M. TRAVER

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

JDC:jy
cc: Corresp. E940
Sec. Op. Comm. (2)
Shaw (2)
Townsend
Chron.

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

FILE C
Surname:
Ching
700 Selfridge
Stewart
Wattendorf

DEPARTMENT OF THE INTERIOR

DMEA

MAY 18 1956

14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

T E L E T Y P E

W. M. TRAVER
EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
234 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REURMEM MAY 10 COLAMER CORPORATION DOCKET 4017. AUTHORIZE OPERATOR TRANSFER APPROXIMATELY 480 FEET CORE AND APPROXIMATELY 1680 FEET NONCORE DRILLING FROM STAGE 3 TO EXTEND 18 UNDRILLED STAGE I HOLES THROUGH WESTWATER CANYON SANDSTONE. AMENDMENT BEING PREPARED WASHINGTON EFFECTIVE MAY 1.

George C. Selfridge

GEORGE C. SELFRIDGE (245)
CHAIRMAN, OPERATING COMMITTEE

MChing/izm 5-16-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
Operating Committee
Confirmation to Region III
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.S.

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

RECEIVED
MAY 14 1956

224 New Customhouse
Denver 2, Colorado

VIA AIR MAIL

May 10, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4017 (Uranium), Contract Idm-E940, Colamer Corporation (Sec. 10, T. 13 N., R. 9 W., N.M. P.M.), McKinley County, New Mexico

Enclosed are two copies of the Operator's letter of May 1, 1956, with attached lithologic log, pertaining to drill holes Nos. 101, 102, 111, and 112; and two copies of a memorandum from W. D. McMillan, dated May 8, 1956.

The Operator requests the transfer of 2640 feet of core footage from Stage III to Stage I, to permit an average of 120 feet per hole deeper drilling to the Westwater Canyon Sandstone member. Referring to Figure 2 attached to the contract, the holes drilled to the deeper horizon at Company expense are located as follows:

Hole No.	Claim
101	Karen No. 8
102	Northernmost hole on J-29
111	Jean No. 1
112	P No. 2

The contract stipulates the objective of the drilling to be the Poison Canyon member of the Morrison Formation. As exploration of the deeper horizon is not the intent of the contract, approval of the Operator's request is deemed not to be within the authority delegated to this office.

The deeper drilling appears to be warranted. However, it would also involve an increase in the offset drilling footage under

Stages II and III. Therefore it appears to us that the matter should be handled as an increase of drilling footage and funds under all three stages, rather than a transfer of footage from Stage III to Stage I, as requested by the Operator.

If you are of a similar opinion, it will be necessary that we refer the matter back to the Operator for an estimate of the additional drilling costs, and also refer the matter to our field examiners for their recommendations on that basis.

In the event additional funds are provided for the deeper exploration drilling, the authority for the increase should be retroactive to the date of the contract, so that each hole can be completed in one continuous operation.

We will appreciate advice by teletype from you as soon as possible.

W. M. Traver

W. M. Traver

Enclosures

DMEA
Date Rec'd.

REGION III

MAY 9 1956

BUREAU OF MINES
Denver, Colorado

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

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: W. D. McMillan

Subject: DMEA Docket 4017, Contract Idm-E940, Colamer Corporation, Phillys, Fannie, Jean and Deetta Claim Group (36), Sec. 10, T. 13 N., R. 9 W., N. M. P. M., McKinley County, New Mexico

The subject contract was examined on May 3, accompanied by Jean Ealey, geologist for the applicant. This contract specifies exploration for uranium ore in the Poison Canyon sandstone of the Brushy Basin member of the Jurassic Morrison formation.

On May 1, 1956, Colamer Corporation had drilled through the Westwater Canyon member at their own expense with favorable results, and requested an amendment to the contract transferring footage from Stage III of the contract for the additional footage.

It appears advisable to continue the exploration through the Westwater Canyon member, on the basis of results obtained by National Lead Company in Section 15, T. 13 N., R. 9 W., N. M. P. M., directly South of Section 9 and by San Jacinto Petroleum Corporation in Section 32, T. 14 N., R. 9 W., N. M. P. M., 2 miles northwest of Section 9.

However, such an amendment cannot be approved by the Field Team.

It is recommended that the applicant be requested to submit 5 copies of an estimate of the additional footage required and cost estimates for the proposed amendment for consideration by DMEA.

W. D. McMillan
Mining Engineer

WDM/mw

COLAMER CORPORATION

GRANTS DIVISION

FIDEL & ROUSE BLDG.

GRANTS, NEW MEXICO

May 1, 1956

DMEA
Date Rec'd.

MAY 4 1956

BUREAU OF MINES
Denver, Colorado

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

Re: DMEA Docket 4017
Contract 1dm-E940

Dear Mr. Traver:

During the period of the compilation of data prior to our application for this contract it appeared as though the best possibilities for the discovery of an ore body in this area lay in the so called Poison Canyon Sandstone. This evidence was due mostly to the results of the drilling preformed by National Lead Co. on section 15, T13N, R9W, directly to the south of Section 10, subject area of this contract.

However, recent discoveries in Section 2, one half mile NE of Section 10 and in Section 34, T14N, R9W, one mile to the north, all in the Westwater Sandstone below the Poison Canyon indicate the very good possibilities of the discovery of ore in this Westwater member in this area of Section 10.

Work under this contract was begun April 24 to comply with the terms of our Contract. Two holes have been completed in the NW¼ of this section and two more holes have been partially drilled in the NE¼ of this section. All these holes were carried through the Westwater Canyon Member at our Company's expense. The Westwater in this area exibits very favorable conditions i.e., greater than 100 feet in thickness, abundance in pyrite, no traces of iron oxide. Also in a number of partings in this member there are present many spots of petroliferous residue which indicates, of course, the presence of hydrocarbons. Enclosed with this letter are copies of these lithologic logs.

Therefore, because of the above reasons we are requesting that ample footage be transferred from the 3rd stage of this contract to the 1st stage in order to properly investigate this promising horizon. This method will in no way increase the total cost of the contract. It is herein estimated that approximately 120 feet more per hole would have to be drilled to allow for the thorough investigation of this Westwater Canyon member.

It is also very evident from the results of the completed holes that this additional footage need not be cored. We have seen that water recovered samples in this horizon will yield all of the information necessary for a proper investigation. In the event that ore is discovered in this horizon we would propose to change immediately to the recovery of core for proper chemical analysis. It is estimated herein that the footage required to investigate the Westwater sandstone on the 22 holes of the 1st stage would be approximately 2640 feet.

Very truly yours,

COLAMER CORPORATION

KELSEY BOLTZ

KB/pb

HOLE NO. 101 AREA SEC. 10, T13N, R9W

FROM	TO	DESCRIPTION
0	20	Blow sand
20	30	SS; lt br, gy, f - m, v arg
30	37½	SH; lt br, gy
37½	57½	SS; lt br, gy, f; @ 50 → lt gy
57½	127½	SH; dk gy, v arena, v carb; @ 70 → dk br, gy; @ 112½ — lt br, gy, v arena
127½	145	SS; dk gy, f, v carb
145	170	SH; dk br, gy, v arena
170	180	SS; dk br gy, f - m, carb
180	202½	SH; dk br gy, v arena
202½	302½	SS; m gy, f - m, all qtz. @ 205 → lt gy; @ 255 → m gy w/carb; @ 257½ → lt gy, all qtz; @ 295 → dk br gy, w/carb
302½	337½	SH; lt gr gy, arena; @ 312½ → v arena
337½	385	SS; lt gr gy, f-m, Lost circulation @ 347½. driller believes SH starts @ 380 Begin core at 385
385	397	SH; lt gr gy; @ 392 rd; @ 395½ → ex arena
397	427	SS; med, gy, f-m, ark; @ 407 → m - c; @ 415 → m gy, c, ark, some py; @ 420 → c - cg, w/gr cl stks; @ 424 → m gr gy w/gr cl stks; @ 426 — w cem w/A calc
427	437	SH; lt gr gy, v arena; @ 427 A pet res w/py; @ 429 .5' br gy; @ 430 → mod arena; @ 434 → v arena; @ 435 stk Pet res; @ 436 → ex arena
437	441	SS; lt gr gy, m, occ py, ark; @ 439½ → m & c
441	463½	SH; lt gr gy w/br gy stks; @ 441 stk pet res; @ 443 → mod arena; @ 444½ → v arena; @ 446 → no arena; @ 452½ → mod arena; @ 455 → br gy w/bl gy stks; @ 461 → lt gr gy, v arena; @ 463 → ex arena
463½	538½	SS; lt gr gy, m, w/gr cl stks; @ 468 → f-m; @ 473½ — m - c; @ 475 → f; @ 476½ → f-m, w cem; @ 483½ → m & c w/py; @ 486½ → m - c & cg; @ 492½ — m & c; @ 495, 3" w cem w/A calc, A pet res & py Coff 2" gr cl stk ex arena; @ 495½ → m & c; @ 505 → m, c, & cg; @ 511 → 4" gr cl w/A py; @ 511½ → w cem w/A calc @ 512 → f-m; @ 516 → m -c, v arg; @ 530 → f - m; @ 534½ → w cem w/A calc
538½	SH	SH; lt gr gy, v arena; @ 539 → sli arena w/A pet res & sli py; @ 541 → no pet res, v arena; @ 543 ? "(2)" f. SS; @ 547½, 2" SS, w cem w/A calc, stk pet res; @ 548, 2' SS; lt gr gy, f-m po cem; @ 549½ → SH-SS intbdd gr gy & rd br w/ stks of ex arena; @ 555 → rd br w/no lt gr gy

HOLE NO. 102 82% recov. AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	5	Blow sand
5	45	SH; lt br; @ 27½ w/ gyp; @ 37½ → dk br, gy w/gyp
45	52½	SS; lt gr, f - m; @ 47½ → lt br gy
52½	217½	SH; lt gy; @ 70 → dk gy; @ 105 → dk br gy, arena; @ 152½ → dk br gy
217½	312½	SS; lt gy, all qtz; @ 280 w/ carb; @ 287½ all qtz; @ 290 → m gy w/ carb
312½	335	SH; lt gr gy; @ 325 → arena; @ 332½ → v arena
335	390	SS; lt gr gy, f - m, py ark; @ 350 lost circulation, driller states that S° was drilled to 385: @ 385 wet samples begin → SS, lt gr gy ? f - m ?
390	397	SH; lt gr gy (wet sample & driller report)
397	442	SS; med gy, f - m, ark; Begin core at 410; @ 410 → lt gy, m - c; @ 416 → lt gr gy, m-c w/ gr cl stks; @ 417½ → c - cg; @ 424 → f - m; @ 430 → m gr gy, m - c, w/stks cg; @ 435 → c - cg; @ 440 → m & c
442	456	SH; lt gr gy, mod arena; @ 442½ Pet res; @ 443½ 6" br gy; @ 444 stk pet res → no arena; @ 447½ → mod arena; @ 451½, 6" br gy; @ 453 → v arena; @ 456 → ex arena
456	561	SS; lt gr gy, f - m, w sorted, w cem, occ py, occ carb; @ 463½ 5" of lt gy w/gr cl stks, @ 464½ → lt gy w/ lt gr gy; @ 472½ → m gy, m -c w/ gr cl stks; @ 480 lt gr gy, m - c; @ 483½ → m w/gr cl gl & stks c; @ 486 → m - c; @ 494 → m c - cg w/ stks gr cl & calc; @ 498 → m - c; @ 508 → c - cg; @ 514 → w cem w/A calc; @ 515 → m - c; @ 517½ 6" w cem w/A calc; @ 521 → m c & cg w/gr cl stks; @ 526 → f - m; @ 533 → m; @ 541 → m, c & cg; @ 544½ → f - m; @ 546 → m - c; @ 549 → f - m; @ 553 → m; @ 557 → m p c; @ 558 → w cem w/A calc
516	573	SH; lt gr gy, v arena (ex); @ 567 → rd br; @ 568½ → gr gy, ex arena
573		SS; lt gr gy, fn m, v arg; @ 574 → mod arg, calc m - c; @ 575 → m, c, cg, A gr cl gls; @ 575-595, 2' core rec; has bds of m, w so & bds of c, v calc, A gr cl; @ 594½ small ls nod, cl gls, w/ A pet res; @ 595 → lt gr gy, m, mod arg; @ 598 → m - c, all arg; @ 601 — w cem w/A calc; @ 603, 2" gr cl; @ 603 → v arg; @ 605 → mod arg; @ 609½ 4" w cem w/A calc; @ 610 → f - m, mod arg; @ 612 → m & m - c, mod arg; @ 614 2" cg w/gr cl & c SS matrix; @ 614½ → f ; @ 617 6" w cem; @ 618½ → w cem w/A calc; @ [illegible] → SS - SH, br gy, f Bottom 621

HOLE NO. 111 AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	20	Blow sand
20	37½	SS; lt br gy, f - m (dm) v arg
37½	191	SH; dk br gy, v arena w/carb; @ 85 → m gy, w/mica; @ 95 → ltgy, v arena; @ 125 → dk br gy, v arena;
191	203	SS; med gy, f; @ 203 → dk br gy w/carb
203	257	SH; lt br gy, arena; @ 242 → dk br gy
257	272	SS; m br gy, f - m, all qtz; @ 260 → lt br gy
272	302	SH; lt br gy, v arena; @ 299 → ex arena
302	338	SS; lt gy, f - m, all qtz
338	386	SH; lt gr gy, arena,; @ 383 → v arena
386		SS; lt gr gy, f - m, ark; @ 489 → m - c; @ 404 → m, c, & cg w/stks of gr cl; @ 413 → m - c

Drilling not completed

HOLE NO. 112 AREA Sec. 10, 13-9

FROM	TO	DESCRIPTION
0	15	Blow sand
15	30	SS; lt br gy, f - m, arg gyp
30	159	SH; dk br gy, v arena; @ 48 → dk gy; @ 60 → lt br gy, ex arena; @ 72 → lt gy; @ 93 → dk gy; @ 156 → lt gy
159	168	SS; m gy f gyp; @ 165 → v arg
168	243	SH; m gy, mod arena; @ 201 → v arena; @ 234 → ex arena
243	309	SS; lt gy f, all qtz; @ 261 → m gy mod arg; @ 264 → lt gy, all qtz; @ 303 -- m gy w/carb; @ 306 → dk gy w/carb
309	336	SH; lt gr gy, v arena; @ 330 → br gy
336	417	SS; lt gr gy, f - m; @ 378 m c & cg; @ 384 → f - m; @ 405 → m - c
417	427	SH; lt gr gy; @ 426 → v arena; lost samples
427	470	@ 427 driller reports SS to 470
470		Begin core at 470
	SS: lt gr gy, m	, v arg, w cem; @ 472 1' gr cl, v arena w/pet res; @ 473 → sli arg, lt gy; @ 484 → m - c, lt gr gy; @ 487½ 6" SH, lt gr gy; @ 488 → f - m; @ 489 → m - c & cg; @ 491 → f - m, mod arg; @ 496 → v arg; @ 496½ → sli arg; @ 499½ → m gr, c - cg, arky; @ 502½ → c; @ 503 → m; @ 507½ → m gr, c; @ 520 → m, p cem; @ 524½ → m - c

Drilling not completed

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

RECEIVED
APR 26 1956

224 New Customhouse
Denver 2, Colorado

April 24, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4017 (Uranium), Contract Idm-E940, Colamer Corporation (Section 10, T. 13 N., R. 9 W.), McKinley County, New Mexico

Enclosed are the Government's, Division, and Docket copies of Exploration Project Contract Idm-E940, which were forwarded by your letter of April 9, 1956, for signature by the Applicant.

Also enclosed are two copies of a letter from this office, dated April 24, by which we forwarded the Operator's copy of the contract, MF-104 forms, and instructions relative to reporting on the work performed under the contract.

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

W. M. Traver

Enclosures

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

RECEIVED
APR 2 3 1956

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

April 24, 1956

Mr. Kelsey Baltz
Calumet Corporation
Fidel and Romne Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium),
Contract Idm-2940,
Calumet Corporation,
McKinley County, New Mexico

Dear Mr. Baltz:

Enclosed herewith is your copy of Exploration Project Contract Idm-2940, Docket DMEA 4017.

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

Form MF-104, "Operator's Progress Report and Voucher," must be accompanied by maps or sketches showing the location and extent of work performed and a narrative report describing the work performed and conditions encountered. The monthly accounting report will not be processed for payment unless it is accompanied by a signed narrative report and other pertinent data. Additional copies of forms MF-104 and MF-104a will be forwarded to you each month on receipt of your report for the prior month.

The U. S. Geological Survey and the U. S. Bureau of Mines maintain a field office in the A.E.C. Compound at Grand Junction, Colorado. DMEA representatives of the two Services can be contacted as follows:

J. W. Beeler, U. S. Geological Survey,
Telephone, Grand Junction 3000, Extension 268;

M. H. Salisbury, U. S. Bureau of Mines,
Telephone, Grand Junction 3000, Extension 274.

Both men can be reached by mail at

Post Office Box 360,
Grand Junction, Colorado.

For your information and in reply to many questions that have been asked, after forms MF-104 and MF-104A are received, an engineer will check progress and approve your accounts, after which they will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 234 New Customhouse, Denver 2, Colorado, for auditing and vouchering. If the report is in order, a check will be issued by the Treasury Department for the Government's portion of the costs. If you have any difficulty in completing these forms and the reports, please call on either the field representatives, Mr. Shaw, or this office for assistance.

In the matter of your claim for reimbursement of drilling costs under the terms of the contract, reimbursement to you will be on the basis of a hole or holes completed to the objective which has or have been drilled in compliance with conditions under the "General Provisions" section of Exhibit "A" of the contract and the special conditions pertaining to the drilling under each Stage. Therefore, your monthly report should include only such holes which are completed to that extent, and the required records made a part of your claim for reimbursement.

The contract is prepared on form MF-200 and under its provisions and as outlined in Exhibit "A" of the contract, the allowable costs are a combination of actual costs with a maximum unit cost established for work under "Category (1)" and fixed unit costs for performing the remaining items of work or services. Under the provisions of Exhibit "A", the work under "Category (1)" is to be performed by subcontract. The costs recorded under item "(1)" on form MF-104 for such work must be supported each month by a signed copy of the billing from the subcontractor, or submit for our records a certified copy of the subcontract agreement. Amounts reported on the basis of the "Fixed Unit Costs" require no documentation as they are otherwise verified.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data.

The locations of the holes to be drilled under Stage I are indicated on the map, Figure 2, attached to the contract. Should terrain or other conditions necessitate a change in the location of any of the holes, approval of this office for the change must be obtained prior to performance of the drilling. Otherwise, the drilling may not be acceptable for reimbursement to you under the terms of the contract.

Your attention is directed to the provision that work under both Stages II and III is contingent upon results of the work completed under the prior Stage and the performance of the work is subject to the prior written approval of the Government.

When the work under a stage has been completed, you must request approval from this office for the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, each copy complete with a map showing the locations of holes previously drilled and the locations of the holes you propose to drill under the next stage. Your request should be complete with drill logs, results of radiometric probing, chemical analyses, and any other pertinent data concerned with the prior work which will be of value to the Government in appraising the work performed under the prior stage.

You should anticipate a suspension of operation between stages of work to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

To eliminate as much delay to operations as possible if that is of serious consideration, you should expedite forwarding of the results of the work completed and your request for the Government's approval of the additional work you propose.

No oral statement of any person shall be construed to modify or change the terms of the contract. Field representatives of the Government are not authorized to approve any change in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or by the DMEA Field Team, Region III.

It is a regulation that reimbursement for the cost of work accomplished prior to the date of the contract will not be allowed. It is a requirement and imperative that you notify this office in writing the date work actually commences under the contract, with a copy of your letter to Mr. Shaw.

Very truly yours,

W. M. Traver

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

Enclosures

JWT:prl
cc: Chairman, Oper. Comm. (2)
Finance Office, Region III
Amendment file
Harshman
Shaw (2)
Hasler
Townsend

Corres. file
Chron.

700

FILE COPY

Surname:
Ching
Ellis
Chambers
Selfridge
Jeffrey
Nelson
Selfridge

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

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
7th New Customhouse Building
Denver 2, Colorado

APR 9 1956

Re: Docket No. DMEA-4017 (Uranium)
Colamer Corporation
Sec. 20, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed long-form contract between the Government and Colamer Corporation, signed by the Administrator. The contract consists of Form MF-580, Annex I, Exhibit "A", and map (Figure 2). Also enclosed are two extra copies each of Annex I, Exhibit "A", and map (Figure 2) for the use of the Field Team.

Four Consents to Lien and four Subordination Agreements are attached to each copy of the contract.

If you find the contract in order, it is ready for forwarding to the Operator for signature and the usual distribution thereafter.

The costs suggested in the Report of Examination have been generally followed. The allowance per sample for chemical analyses was reduced from $5.00 to $3.50 since the latter figure has usually been used in the past for uranium determination alone. ~~Labor and supervision costs per month were increased from $500.00 to $800.00 in order to be consistent with similar Food Machinery contracts and with a number of other exploration contracts.~~

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (245)

Enclosures

APPROVED:

P. F. Yopes (245)
Member, Bureau of Mines

N. E. Nelson (245)
Member, Geological Survey

MChing/gla/izm 3-21-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

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

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

Re: Docket No. DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Traver:

Enclosed are the original and five copies of a proposed long-form contract between the Government and Colamer Corporation, signed by the Administrator. The contract consists of Form MF-200, Annex I, Exhibit "A", and map (Figure 2). Also enclosed are two extra copies each of Annex I, Exhibit "A", and map (Figure 2) for the use of the Field Team.

Four Consents to Lien and four Subordination Agreements are attached to each copy of the contract.

If you find the contract in order, it is ready for forwarding to the Operator for signature and the usual distribution thereafter.

The costs suggested in the Report of Examination have been generally followed. The allowance per sample for chemical analyses was reduced from $5.00 to $3.50 since the latter figure has usually been used in the past for uranium determination alone. ~~Labor and supervision costs per month were increased from $500.00 to $800.00 in order to be consistent with similar Food Machinery contracts and with a number of other exploration contracts.~~

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

Member, Bureau of Mines

W. E. Nelson

Member, Geological Survey

Estimated Costs of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

7,700 feet non-core drilling	@ $1.25/ft.	$ 9,625.00	
2,200 feet core drilling	@ $3.50/ft.	7,700.00	
Categories (2) through (7)			
None			$17,325.00

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed 9,900 feet	@ $0.38/ft.	3,762.00	
40 chemical sample analyses @ $3.50/each sample		140.00	3,902.00
Estimated Total Cost of Stage I			$21,227.00

Stage II

Actual Costs

Category (1) Independent Contracts

15,750 feet non-core drilling	@ $1.25/ft.	$19,687.50	
4,500 feet core drilling	@ $3.50/ft.	15,750.00	
Categories (2) through (7)			
None			$35,437.50

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed 20,250 feet	@ $0.38/ft.	7,695.00	
80 chemical sample analyses @ $3.50/each sample		280.00	$ 7,975.00
Estimated Total Cost of Stage II			$43,412.50

Stage III

Actual Costs

Category (1) Independent Contracts

15,750 feet non-core drilling	@ $1.25/ft.	$19,687.50	
4,500 feet core drilling	@ $3.50/ft.	15,750.00	
Categories (2) through (7)			
None			$35,437.50

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of core and non-core drilling completed 20,250 feet	@ $0.38/ft.	7,695.00	
100 chemical sample analyses @ $3.50/each sample		350.00	8,045.00
Estimated Total Cost of Stage III			$43,482.50

SUMMARY

Estimated Total Cost of Stage I	$21,227.00	
Estimated Total Cost of Stage II	43,412.50	
Estimated Total Cost of Stage III	43,482.50	
Total Estimated Cost of the Project (rounded)		$108,120.00
Government Participation @ 75%		$ 81,090.00

Mr. George Selfridge

DI—17

SPECIAL

GPO 10—41803-1

RECEIVED

APR 4 - 1956

DN 235 BUR MINES 4-4-56 8-21

CHAIRMAN, OPERATING COMMITTEE RUSH RUSH

REURTEL CALL APRIL 2 COST ESTIMATES DOCKET DMEA-4017 COLAMER CORP. USING $500 PER MONTH FOR SUPERVISION INCIDENTAL COSTS CALCULATE 27 CENTS AND USING $800 THEY CACXX CALCULATE 37 CENTS. CONSIDER 27 CENTS OR LESS ADVISABLE BECAUSE APPLICANT STATES ON PAGE 3 OF THE APPLICATION THAT 20 CENTS PER FOOT IS SUFFICIENT TO COVER ALL ITEMS WE INCLUDE UNDER THAT CATEGORY.

W M TRAVER

Denver, Colo.

APR 4 11 27 AM '56
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

Ellis

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

March 28, 1956

Memorandum

To: The Administrator

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

Subject: Labor and Supervision Costs
Docket No. DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Some question has arisen as to the justification for raising the allowance for Labor and Supervision under the proposed contract from $500.00 to $800.00 per month. See my memorandum of March 14, 1956.

The contract as drawn is of the combination actual cost-fixed unit cost type. The only actual costs provided for are the direct drilling costs under Independent Contracts. Aside from provision for chemical analyses, all other costs are included in an Incidental Allowance amounting to $0.38 per foot of core and non-core drilling. The $800.00 per month allowed for Labor and Supervision represents $0.28 of the $0.38. The other $0.10 per foot represents the cost of operating materials and supplies, depreciation on equipment, insurance, taxes, accounting, etc.

The proposed contract makes certain specific demands on the Operator to insure satisfactory results. These demands include the requirements that the project work shall be supervised at all times by competent engineers or geologists, that all drill holes shall be logged geologically and probed radiometrically, that all core shall be saved and analyzed or checked radiometrically, that sections indicating mineralization shall be split for samples and the samples analyzed chemically for uranium, that the remaining core shall be properly stored for inspection and disposition by the Government, that monthly progress reports, including adequate maps, shall be submitted to the Government, that a comprehensive final report evaluating the results of the work be also submitted, and that the project drilling itself shall follow certain well-defined specifications.

Satisfaction of the foregoing demands entail a considerable amount of surveying, mapping, interpretation of probe results and their coordination with surface readings and chemical analyses, planning for the work within each successive stage, etc.

Since all costs outside of direct drilling costs and chemical analyses must be met from the $0.38 per foot Incidental Allowance and since equipment depreciation, supplies, etc. will require close to $0.10 per foot, the remaining $0.28 per foot must cover not only Labor and Supervision, but any number of unforeseen and unprovided-for expenses? For instance, since no provisions were made for driller's stand-by time, — In drilling costs such costs may well have to come out of the $800.00 per month allowance for Labor and Supervision. Furthermore, since no allowance was made for drill site preparation, any such expense may also have to come out In drilling costs of this allowance. In the event the required radiometric probing cannot be done adequately by the Operator's personnel, such probing by a commercial outfit might cost as much as 15 or 20 cents per foot and this, too, would have to come out of the $800.00 per month allowance. Also, any contingent expenses and costs arising from delays in the drilling program (which would not be unusual) would have to be met from this source. It would appear, therefore, that the term Labor and Supervision really is of much broader scope than the words imply, under this type of contract.

Judging from our experience with an impressive list of recent uranium contracts and considering the numerous services required, the $800.00 per month allowance for Labor and Supervision under the proposed contract is quite reasonable. Following is a list of such recent contracts showing the amounts requested by the applicants per month for such services, the amounts recommended by the Field Examiners and the amounts allowed in the contracts. The three figures opposite each contract are on the same comparable basis.

Docket	Operator	Applicant	Field Examiners	In Contract
3555	W. A. Greer	$1,447.00	$ 956.00	$ 676.00
3612	Marble Canyon Uranium	1,718.00	1,422.00	910.00
3688	Gaddis Mining Co.	1,326.00	825.00	825.00
3695	Yankee Uranium	1,595.00	950.00	950.00
3660	Mid-Continent Uranium	1,988.00	955.00	955.00
3786	Josey and Roper	1,217.00	1,473.00	1,000.00
3939	Food Machinery	1,950.75	800.00	800.00
3989	" "	4,450.75	800.00	800.00
3943	" "	2,028.75	500.00	800.00
4070	San Jacinto	7,332.00	3,369.00	1,433.00
3632	Colamer Corp.	1,615.00	800.00	800.00
4017	Colamer Corp.	965.00 ?	500.00	800.00

The $965.00 per month shown as requested by the Applicant under the subject Docket 4017 was arrived at as follows: Applicant requested $0.20 per foot for Labor, Supervision, Assaying and Core Boxes. The last two items would amount to approximately $0.02 per foot, leaving $0.18 per foot for Labor and Supervision. This covers the drilling of 96,455 feet of holes in 18 months. Labor and Supervision would therefore total $17,362.00, equivalent to $965.00 per month.

Any comparison between the $0.28 per foot allowed in the contract and the implied $0.18 per foot in the application would not be valid since the former is based on drilling 50,400 feet in 18 months, while the latter is based on drilling 96,455 feet in the same time. It is assumed that the rate of drilling as recommended in the Report of Examination has been mutually agreed upon between the examiners and the Operator. Such rate, of course, is the big factor in determining the cost per foot for Labor, Supervision and related services.

Michael Ching

Michael Ching

Supplement attached

SUPPLEMENT

Comparison of Programs and Proposed Costs For Labor and Supervision

	Applicant	Examiners	Ching
Time element (months)	18	17.8	17.8
Total footage	96,455	50,400	50,400
Footage to be cored	9,455	11,200	11,200
% of total footage to be cored	10%	22%	22%
Total number of holes	232	112	112
Number of non-core holes	93	0	0
% of holes non-core throughout	40%	0	0
Total amount of contract	$151,056	$101,425	$108,120
Total labor and supervision	$17,362	$8,900	$14,240
Labor and supervision per month	$965	$500	$800
Labor and supervision per foot	$0.18	$0.18	$0.28

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

March 21, 1956

Memorandum

To: Mr. George C. Selfridge
Chairman, Operating Committee

From: Jay L. Chambers, Chief
Contract Administration and Audit Division

Subject: Docket No. DMEA-4017 (Uranium), Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico

I have surnamed Docket No. DMEA-4017 but I wish to call your attention to the following figures.

At the rate of $1.25 for noncore and $3.50 for core drilling, the total cost of drilling would be $88,200.00. The Field Team allowed $98,000.00 in their estimate but part of the drilling cost was separated by the engineer here in Washington. Nevertheless, at the rate of $88,200.00 total for drilling the Field Team must have recommended $13,225.00 for miscellaneous expenses, including depreciation, salaries, etc. The engineer must have allowed $19,920.00 for these same items, since his total for the project was $108,120.00, while the Field Team recommended $101,425.00.

The engineer, in his calculation, allowed $1,008.00 for Depreciation, $2,016.00 for Supplies and Materials, and $1,504.00 for Miscellaneous. These figures seem to account for most of the difference. ?

Please note also that expenses for drilling are on an independent contract basis which makes our figures for drilling only maximums, while the other costs of the project are placed on a unit cost contract basis.

Attachment

DOCKET COPY

Ching
Ellis

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

March 21, 1956

Memorandum

To: The Files

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

Subject: Docket No. DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Re Mr. Chambers' memorandum of March 21, 1956, the difference of $6,695.00 is accounted for roughly as follows:

Examiners by rounding out unit cost for non-core drilling from $1.42 to $1.40, underestimated by $0.02 per foot, and by rounding out unit cost for core drilling from $4.11 to $4.10 underestimated by $0.01 per foot.

$0.02 x 39,200 ft. (non core)	$ 784.00
$0.01 x 11,200 ft. (core)	112.00
17.8 mos. @ $300/mo. (Labor and supervision added)	5,340.00
Insurance and taxes @ 5% (additional)	267.00
Extra cost of analyses (220 samples instead of 125)	145.00
Total	$6,648.00

No Co. adds 0.14/

In Error.
adds 10.6¢

Michael Ching
Michael Ching

DMEA-4017 - COLAMER CORPORATION

Cost Estimates

	Applicant	Field Team	Contract
Time	18 mo.	17½ mo.	17½ mo.
Field Team	96,455	50,400	50,400
% core	10.0%	22%	22%
No. holes	232	112	112
Average depth	416'	450'	450'
Holes per month	13	6.4	6.4
" " work day	2(832')	¼(113')	¼(113')
Costs - ~~drilling~~ plug	$1.20/ft	$1.25/ft	$1.25/ft
Core	3.00	3.50	3.50
Incidentals	.20*	plug .15) average core .60) .25	.38**

* Assaying included — $5.00 per sample — $3.50 per sample

** Added extra man

Average cost drill.	$1.366 +	$1.75 *	$1.75 -
" " incdls.	.200	.25	.38
Average cost per ft.	$1.566*	$2.00*	$2.13*

* Includes assaying — * Assay. $625.00 (not included) — * Assay. $770.00 (not included)

Based upon considerable more footage in about the same time (18 months).

Total cost	$151,056.00	$101,425.00	$108,120.00

Reducing contract estimate by $0.08 per ft., (Should be $0.10)
(Cost of helper) leaves cost at $2.06 per ft., (Should be $2.03)
which is still above Field Team estimate.
Extra $.03 caused by more analyses allowed, rounding in calculation by Examiner, and extra incidentals and labor.

No drilling bids submitted. Applicant states that it has experienced geological and engineering staff. It does not set up any separate costs for logging cores and probing holes, preparing samples, provisions for stand-by time, drill site preparations, etc. Since its staff has had years of experience, obviously costs of these items are included in its estimate.

The Field Team gives no reason for its increase in the estimated costs. However, the Field Team states that all holes should be logged radiometrically and this log along with the geologic log should be included with monthly reports. Obviously, the Field Team considered

40% or more of the holes originally to be plugged thereafter, eliminating changeover to coring in these holes. Percent of footage cored originally only 45% of F.T. estimate. Total footage originally nearly twice that of F.T. estimate.

its estimate for incidental costs to include these two items. Since the Field Team did not specifically set forth costs for stand-by time, drill site preparations, etc., it evidently considered the estimated drilling costs as being ample to cover these items. Usually separate items

An analysis of the engineering and geological work to be performed does not justify increasing the cost of such work. On the basis of the time allowed, one hole of average depth would be completed every 4th day. One geologist and helper would be more than enough to keep up the surveying, mapping, and reporting, preparing samples, probing the hole, and logging the core in 8 hours time.

1 geologist @ $20.00 per 8 hours	-	$20.00
1 helper @ $10.00 per 8 hours	-	$10.00
Insurance and taxes @ 15%		$ 4.50
	450)	$34.50
Cost of above - - - -		$ 0.08 per ft.

If this reasoning were used most labor & supervision costs of past contracts would be excessive. Salaries are usually based by the month and go on whether personnel are busy or idle.

Only 99 feet out of the 450 feet would be cored. Of this only a small fraction would be logged and only that part of the fraction showing mineralization or radioactivity would be split and sampled for assaying.

We demand supervision at all times. Total 450' must be logged geologically and probed radiometrically

The surface is gentle, rolling, mostly grass covered, so brush clearing, bulldozing, etc., would be negligible.

The cost of any additional help seems adequately taken care of in the increased cost estimate of the Field Team, although based on less footage than applicant's estimates. Consequently, the increase in costs for a helper, or to care for items not mentioned by the Operator or Field Team, is not justified. Therefore, the added provision for a helper at $300 a month, which increases the cost of the contract by $5,250.00 should be eliminated from the contract.

Cost estimate of F.T. for labor & supervision was not increased. It remained same as Applicants', per foot, despite complete change in program.

Ellis

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

March 14, 1956

Memorandum

To: The Files

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

Subject: Proposed Contract Costs
Docket No. DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

The Report of Examination, dated February 17, 1956, contains detailed estimated costs for the proposed core and non-core drilling. The estimated costs for drilling under Independent Contracts are $3.50 per foot for core drilling and $1.25 per foot for non-core drilling. These costs are reasonable for the type of work contemplated and have been incorporated without change under Actual Costs in the contract.

Under Fixed Unit Costs the unit cost for chemical sample analyses was reduced from $5.00 to $3.50 per sample inasmuch as uranium is the only element in which the Government has an immediate interest, and the $3.50 price has generally been used in the past for uranium alone.

The unit cost for incidental expenses per foot of drilling was arrived at by using the same time element (3½ months) and the same basic rates suggested for Stage I in the Report of Examination, except that a field assistant, sampler and general handy man at $300.00 per month was added, making the total cost for labor and supervision amount to $800.00 per month instead of $500.00 per month. This is a reasonable figure for an operation of this size and is consistent with several proposed Food Machinery contracts and with a number of other exploration contracts. Details of the incidental allowance, applicable to Stage I only, but representative of all three stages, are as follows:

	Total Cost	Cost per Foot
Labor and supervision (@ $800.00/mo.)	$2,800.00	$0.28
Operating materials and supplies	417.50	0.04
Depreciation on equipment	210.00	0.02
Miscellaneous	315.00	0.03
Total	$3,742.50	$0.38

Michael Ching
Michael Ching

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

MAR 12 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Rare and Miscellaneous Metals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4017 (Uranium)
Colamer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

As requested in Mr. Ellis' memorandum dated March 1, 1956, we have prepared the attached contract.

The Subordination Agreements and Consents to Lien, which the applicant is in the process of securing, and the map listed in the contract should be attached thereto prior to execution.

Robert P. Dwyer

3/9/56

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

RECEIVED
MAR - 8 1956

March 7, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Report of Examination, DMEA Docket 4017, Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico

I have reviewed the report of examination, Colamer Corporation, DMEA Docket 4017, dated February 23 and received in this office February 28. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant drilled three holes on Section 10, of which only two reach the potential ore-bearing horizon known locally as the "Poison Canyon sandstone." Although no mineralization was found in the holes, the Field Team bases the justification of the $101,425.00 exploration project on the favorability of the "Poison Canyon sandstone" found in the preliminary holes.

Additional information relative to the favorability of the entire section would have been desirable, in view of the magnitude of the exploration program presented. Results obtained from three holes in the southeastern corner of a section can hardly be considered as being representative of the entire 640 acres.

The examining team proposes that the section be explored by a three-stage drilling program consisting of 50,400 feet of core and non-core drilling at a total cost of $101,425.00, with Government participation at 75 percent, or $76,068.75.

Inasmuch as most of Section 10 has not been thoroughly prospected, perhaps the Stage I holes could be located in such a manner that geologic data could be obtained from the entire section rather than from the east and west boundary lines, as will be the case if the proposed Stage I holes are drilled as presented.

Mr. Hosted concurs in the recommendation of the field examiners.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E. Crawford

John E. Crawford

Surname copy

700

Ching
Ellis

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

March 1, 1956

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-6027 (Uranium)
Colmar Corporation
Sec.10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Will you kindly prepare a long-form contract between the Government and Colmar Corporation in accordance with the attached draft.

The required Consents to Lien and Subordination Agreements are being secured by the Applicant's Washington representative, but have not as yet been received.

The required copies of the map (Figure 2) will be made available by the Field Team shortly.

Ernest Wm. Ellis

Ernest Wm. Ellis

MChing/gla
cc to: Docket
Code 700
Mr. Ching

3/2/56 [illegible]

IN REPLY REFER TO:

RECEIVED
MAR - 1 1956

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

March 1, 1956

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of field examination report, DMEA 4017, Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico.

The applicant drilled three holes on the subject property in order to obtain information about the buried ore zones in the Poison Canyon and Westwater Canyon sandstones in the Morrison formation. All three holes are in the southeast corner of section 10.

On the basis of results from the three preliminary drill holes the examining team concludes that the Poison Canyon sandstone is favorable and warrants further exploration but that the Westwater Canyon sandstone is too thin and, therefore, unfavorable.

The examining team proposes a staged drilling project in which Stage I consists of two north-south lines of holes along the east and west sides of the tract. Stage II is proposed as essentially a grid pattern of holes across the intervening ground--a distance of 4,000 feet. The examining team does not make clear their reasons for choosing that particular drilling pattern. A grid drilling pattern is inflexible in that it does not allow holes to be concentrated in the favorable areas. An alternative plan in this particular case might be to drill out the section on an 800-foot grid in Stage I and offset four ways on 400-foot centers a probable 20 percent of the Stage I holes that are likely to be favorable, for Stage II. The total number of holes would be about the same for both plans, but the alternative plan would allow concentration of holes in favorable areas.

In view of recent developments at least some of the holes should penetrate the whole Westwater Canyon zone. The three holes drilled by the applicant in the far southeast corner of the section will tell nothing about the characteristics of the Westwater in, for instance, the northwest corner of the section--over a mile away. If the examining team has any information about the Westwater in the northern part of the section they do not disclose it.

I agree with the examining team that additional exploration on the property is warranted. I recommend that a DMEA contract be prepared to provide for participation in the work.

W P Williams

W. P. Williams

3/1/56

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

RECEIVED
FEB 27 1956

February 23, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4017 (Uranium), Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico

Enclosed are the original and three copies of a Joint Engineering and Geologic Report on the subject property.

The field examiners recommend a three-stage exploration project at a total estimated cost of $101,425.00, Government's participation $76,068.75. We concur in this recommendation.

Your letter of November 14, 1955 stated that the necessary Consents to Lien and Subordination Agreements would be secured through the applicant's Washington representative.

Nine extra copies of Figure 2 have been ordered for possible use in the contract and will be forwarded you as soon as they are received by this office.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

ON-SITE EXAM.

Reviewed by
DMEA OPERATING COMMITTEE
2-29-56
(date)

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FEB 27 1956

DMEA
Date Rec'd.
FEB 21 1956
BUREAU OF MINES
Denver, Colorado

Region III

Building 20
Denver Federal Center
Denver 2, Colorado
February 20, 1956

TRANSMITTED
FEB 23 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman
John F. Shaw

Subject: Joint Engineering and Geologic Report, Docket DMEA 4017, Colamer Corporation, McKinley County, New Mexico

Enclosed are the original and 9 copies of a Joint Engineering and Geologic Report by D. D. Haynes, Geologist and Glen Walker, Mining Engineer covering Docket DMEA 4017.

The Colamer Corp. requested DMEA assistance to explore for uranium ore on Sec. 10, T. 13 N., R. 9 W., New Mexico principal meridian, McKinley County, New Mexico. The proposed exploration consisted of 3 stages of plug-bit and core drilling totaling 232 holes or 96,455 feet at an estimated cost of $151,056.00.

The property was examined on 12/6/55 by D. D. Haynes and Glen Walker. The examining team concluded that the property warrants further exploration. It is recommended that a contract be prepared in 3 stages -- the first stage should consist of 22 plug-bit and core holes spaced 400 feet apart as shown on figure 2 in two north-south rows along the east and west sides of the property. The bottom 100 feet of each hole should be cored EX size or larger. Stages II and III each should consist of 45 plug-bit and core holes. In Stage II the holes should be spaced 400 feet apart and in rows 800 feet apart east-west, as shown on figure 2. Stage III holes should be drilled not closer than 100 feet from any previously drilled mineralized hole. Each stage should be dependent upon the preceeding stages and require prior written approval of the DMEA Field Team. The estimated cost of plug-bit drilling is $1.40 per ft. and the estimated cost of core drilling is $4.10 per ft.

A short-form contract should be prepared in the amount of $101,425.00. The amount of Government participation would be $76,068.75.

E. N. Harshman

E. N. Harshman
Member Field Team

Reviewed by
DMEA OPERATING COMMITTEE
2-29-56
(date)

John F. Shaw

John F. Shaw
Supervising Mining Engineer

Enclosures
JFS/ch
cc 9
EN Harshman
DMEA 4017 Chron.

MINERAL DEPOSITS
DMEA
RECEIVED
FEB 6 1956

DMEA
Date Rec'd.
FEB 21 1956

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
GRAND JUNCTION, COLORADO

RECEIVED
FEB 27 1956
DENVER, COLORADO

BUREAU OF MINES
Denver, Colorado

February 1, 1956

Memorandum

TRANSMITTED
FEB 23 1956

To: E. N. Harshman, DMEA Field Team, Region III

From: J. William Hasler

Subject: DMEA 4017 (Uranium) Colamer Corporation, Grants, New Mexico, Sec. 10, T. 13 N., R. 9 W., McKinley County.

The Colamer Corporation applied for Government assistance to explore for uranium ore in the Poison Canyon sandstone unit of the Jurassic Morrison formation in Section 10. The application was referred to the field and a field examination was made December 6, 1955, by D. D. Haynes, U. S. Geological Survey, and Glen Walker, U. S. Bureau of Mines. Transmitted herewith is a joint geologic and engineering report covering the work done during the field examination.

The Grants Uranium Mining District lies on the northeast flank of the Zuni uplift, a broad, elongated, asymmetrical dome in northwestern New Mexico. The productive deposits occur in the Jurassic and Cretaceous sedimentary rocks that form a rather continuous outcrop from east of Grants, New Mexico, westward to Gallup. The productive uranium deposits in the district occur in the Todilto limestone formation and the Morrison formation, both of Jurassic age, and the Dakota sandstone of Cretaceous age.

The known commercial deposits in Section 10 are found in the Poison Canyon sandstone unit of the Brushy Basin member of the Morrison formation. The Poison Canyon sandstone unit is a predominantly fine to medium-grained, white to light-gray sandstone. Usually shale lenses are

Reviewed by
DMEA OPERATING COMMITTEE
2-29-56
(Date)

present in the sandstone that may attain a combined thickness of about 30 feet, but normally they are less than 10 feet thick. Three holes were drilled by the applicant and the results in two of them disclosed that the Poison Canyon sandstone unit has a thickness, color and grain size favorable for the occurrence of ore. The sandstone unit normally ranges from 35 to 45 feet thick, but where known deposits occur, the sandstone ranges from 50 to 90 feet thick. The ore deposits in the sandstone unit are generally tabular and more or less follow along the bedding. The mineralized masses have a southeasterly or easterly trend, and the ore bodies range from a few tons to about 100,000 tons. In the Ambrosia Lake area, northwest of Section 10, the ore bodies may average 100,000 tons each. It is reasonable to expect ore bodies that may contain approximately 50,000 tons in Section 10.

It is concluded that the chances of discovering uranium ore bodies in the Poison Canyon sandstone unit of the Brushy Basin member of the Morrison formation on Section 10 are good and it is recommended that the application be approved and a contract be prepared to do the work outlined in the accompanying report. I concur with the conclusions and recommendations of the examining team.

The Atomic Energy Commission was consulted relative to the appraisal of the DMEA work proposed in Section 10.

Enclosed are the required number of maps, as well as the applicant's brochure.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr
Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
FEB 2 7 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM

TRANSMITTED
FEB 23 1956

DMEA 4017

COLAMER CORPORATION

Sec. 10, T. 13 N., R. 9 W., N.M.P.M.

McKinley County, New Mexico

Uranium

Joint Engineering and Geologic Report

By

D. D. Haynes, Geologist
Geological Survey

Glen Walker, Mining Engineer
Bureau of Mines

February 17, 1956

Reviewed by
DMEA OPERATING COMMITTEE
2-29-56
(date)

DMEA 4017

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FEB 27 1956

COLAMER CORPORATION
Sec. 10, T. 13 N., R. 9 W., N.M.P.M.
McKINLEY COUNTY, NEW MEXICO

CONTENTS

Joint Engineering and Geologic Report — Page

Summary and Introduction 1
Acknowledgments 1
Location, Topography and Physical Features 2
History, Production, and Ownership 3
Geology 3
Regional geology 3
Local geology 5
The "Poison Canyon sandstone" 5
Favorability criteria of the "Poison Canyon sandstone" 6
Uranium Deposits 7
Ore bodies 7
Present Status 8
Project Proposals and Costs 8
Project Costs 9
Stage I 9
Division of project costs 10
Summary of costs 10
Stage I 10
Stage II 11
Stage III 11
Conclusions and Recommendations 11

ILLUSTRATIONS

Figure — Follows Page

1. Location Map, Colamer Corp., McKinley County, New Mexico - DMEA 4017 2
2. Sketch Map of Sec. 10, T. 13 N., R. 9 W., Showing Existing Drill Holes, Location of Proposed Stage I Drill Holes, and Probable Location of Stage II Drill Holes, Colamer Corporation, McKinley County, New Mexico 6

TABLES

No. — Page

I. Stratigraphic section for the area in the immediate vicinity of Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico 4

DMEA 4017

COLAMER CORPORATION
Sec. 10, T. 13 N., R. 9 W., N.M.P.M.
McKinley County, New Mexico

RECEIVED
FEB 27 1956

SUMMARY AND INTRODUCTION

The Colamer Corporation of Grants, New Mexico, requested DMEA aid in the exploration for uranium ore on all of Sec. 10, T. 13 N., R. 9 W., New Mexico Principal Meridian, McKinley County, New Mexico.

The applicant proposed a combination core and plug drilling project set up in 3 stages totaling 232 holes or 96,455 feet and estimated to cost $151,056.00. The objective of this work was to test the "Poison Canyon sandstone" unit of the Jurassic Morrison Brushy Basin formation.

The property was examined by a Region III DMEA examining team on December 6, 1955, and it was concluded the property warrants further exploration. A program of drilling consisting of 50,400 feet of hole in 112 core and plug drilled holes is proposed by the examining team at a total cost of $101,425.00.

It is recommended that the DMEA participate in the cost of the project to the extent of 75 percent, or $76,068.75.

ACKNOWLEDGMENTS

Kelsey Boltz, general manager and chief geologist for Colamer Corporation, accompanied the examining team and provided information concerning the subject and adjacent properties. James N. Watts, of the Grants AEC office, was contacted with regard to recent activities in the vicinity of the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

Sec. 10, T. 13 N., R. 9 W., is readily accessible from Grants, New Mexico, a rail point on the Santa Fe Railroad, by travelling west on Highway U.S. 66 about 3 miles to New Mexico Highway No. 53 (the San Mateo Road); thence north, or right, about 11 miles to the Ambrosia Lake road fork; thence northwest about 1-1/2 miles to the property (figure 1). The Anaconda Company's Bluewater, New Mexico uranium mill is about 16 miles southwest of Sec. 10 and can be reached on a graveled road.

The surface is mainly gently rolling and drains to the southwest, but the Cretaceous Mancos formation forms some small bluffs in the north part of the section. Vegetation is limited to short native grasses and to a very occasional small cedar. There is no timber on the land, and timber for an underground mining operation can be obtained within a few miles on the flanks of Mt. Taylor.

The climate is typical of the arid southwest with wide variations in both temperature and precipitation. Most of the 6-8 inches of annual precipitation occurs as violent storms during both summer and winter. Outside winter work is only occasionally hampered by low temperatures or blizzards.

Water is not available on the property, but it can be had from livestock wells and ponds in the immediate neighborhood for drilling purposes.

Experienced underground labor in the district is by no means plentiful; however, a number of supervisors state that the the local Navajo Indian has proven satisfactory after a short apprenticeship.

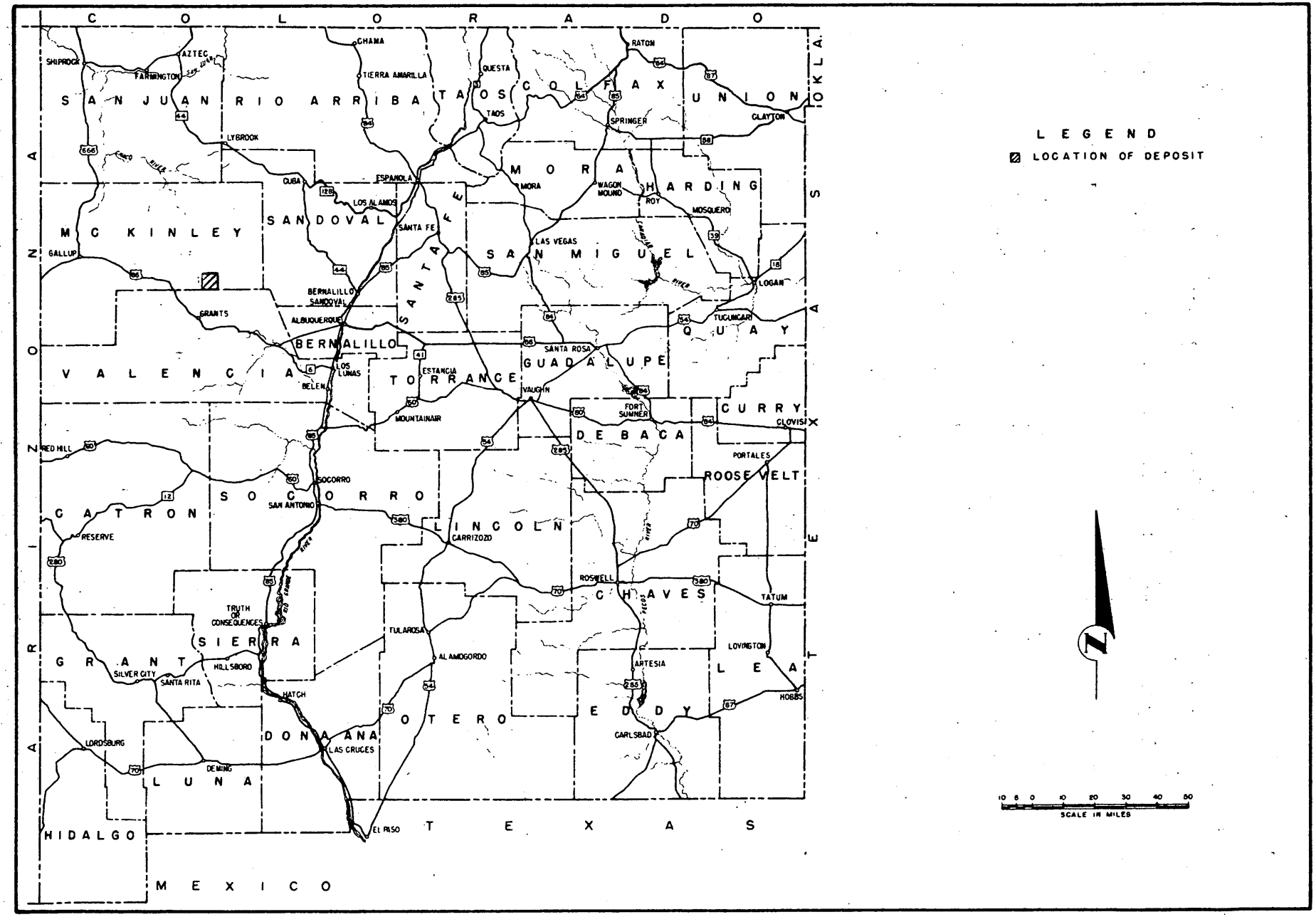


FIGURE 1 - LOCATION MAP, COLAMER CORPORATION, MCKINLEY COUNTY, NEW MEXICO. DMEA 4017

Power for any operation is most practically supplied by internal combustion engines and power-generating units.

HISTORY, PRODUCTION, AND OWNERSHIP

Uranium minerals were first noted in the district in the fall of 1949 by a group of student geologists from the University of California. In the spring of 1951 a sheepherder found mineralization along the Jurassic Todilto limestone outcrop which lead to the development of the Haystack Butte mine of the Santa Fe Railroad Company. Since these early discoveries, the outcrops of various geologic formations have been prospected with the result that ore deposits have been found in rocks from the Cretaceous Dakota to the Jurassic Morrison Recapture Creek formations, as well as the Todilto limestone. Currently most of the production is from the "Poison Canyon sandstone" lens in the Jurassic Morrison Brushy Basin member and the Todilto limestone formation also of Jurassic age. Recently, however, some very large deposits have been found near Ambrosia Lake in the Westwater Canyon sandstone of the Morrison formation.

There has been no production from the subject property and the nearest mining operation is about 2-1/2 miles to the southwest.

A search of the McKinley County records indicates the applicant has a valid claim to Section 10.

GEOLOGY

Regional Geology

The Grants Uranium Mining District lies on the northeast flank of the Zuni uplift, a broad, elongated, asymmetrical dome. The Zuni uplift, believed to be of early Tertiary age, is about 65 miles long and 40 miles wide, and has a northwest trend.

The productive deposits occur in Jurassic and Cretaceous sedimentary rocks that forms a rather continuous outcrop from east of Grants westward to Gallup. There are numerous faults and folds in the area and two dominant sets of joints.

The productive uranium deposits in the Grants district occur in the Todilto limestone and Morrison formation of Jurassic age and the Dakota sandstone of Cretaceous age. This report will be concerned only with those deposits in the Morrison formation.

Following is a general stratigraphic section in the area of Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico:

Table I. -- Stratigraphic section for the area in the immediate vicinity of Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico

Age	Formational units	Average Thickness (ft.)
Recent	Alluvium	30
- - - - - - - -	Unconformity - - - - - - - - - - - - - -	
	Mancos shale and Mesa Verde, undifferentiated	40
Cretaceous	Dakota sandstone	85
- - - - - - - -	Unconformity - - - - - - - - - - - - - -	
	Morrison formation:	
	Brushy Basin member (contains the "Poison Canyon sandstone")	185
Jurassic	Westwater Canyon member	100
	Recapture member	100
	Bluff sandstone	250
	Summerville formation	160
	Todilto limestone	20

Local Geology

In the vicinity of the subject property the Morrison formation is comprised of three members. In ascending order these are: the Recapture, Westwater Canyon, and Brushy Basin members. The Recapture member is mostly a fine- to medium-grained red and brown sandstone with occasional beds of red and gray shale and siltstone. It is about 100 feet thick.

Overlying the Recapture is the Westwater Canyon member, which ranges in thickness from 45 to 75 feet in holes drilled on section 10. It is predominantly a fine- to medium-grained, in places arkosic, sandstone that contains occasional shale and siltstone beds up to 20 feet thick. The sandstone color may be yellowish-gray, greenish-gray, red, buff or brown. The shale and siltstone may be gray, gray-green, or red. The Westwater interfingers with the underlying Recapture and the overlying Brushy Basin members.

The Westwater Canyon member is the major ore producing horizon in the Ambrosia Lake area, but in the immediate vicinity of Section 10, very little mineralized material has been found in it, even though it has been explored rather extensively.

The Brushy Basin member overlies the Westwater Canyon and is predominantly a greenish-gray shale with minor sandstone lenses. It ranges in thickness from 150 to 200 feet.

The "Poison Canyon sandstone"

The known commercial deposits in the vicinity of Sec. 10 are found in a sandstone unit of the Brushy Basin member of the Morrison formation. This unit, called the "Poison Canyon sandstone", attains a thickness of about 85 feet in the southern part of Section 10. The

base of the "Poison Canyon sandstone" lies between 20 and 30 feet stratigraphically above the base of the Brushy Basin. The "Poison Canyon sandstone" may be a tongue of the Westwater Canyon. The thicker parts of the sandstone usually have an east-west trend.

The "Poison Canyon" is predominantly a fine- to medium-grained, white, to light-gray, or brown sandstone. Usually shale lenses are present in the sandstone that may attain a combined thickness of about 30 feet, but normally they are less than 10 feet thick.

Of the three holes drilled by the applicant, (fig. 2) only two reached the potential ore-bearing horizon. The westernmost hole cut about 88 feet of "Poison Canyon sandstone" and 44 feet of Westwater Canyon sandstone. The middle hole cut about 110 feet of "Poison Canyon sandstone" and 72 feet of Westwater Canyon sandstone. The westernmost hole had 4 feet of 0.04 percent U_3O_8 in the Westwater Canyon sandstone. In both holes the "Poison Canyon sandstone" has a thickness, color, and grain size favorable for the occurrence of uranium ore deposits. The Westwater Canyon sandstone is less than 100 feet thick and thus appears too thin to be considered a favorable ore-bearing horizon.

Favorability criteria of the "Poison Canyon sandstone"

Usually this sandstone unit is from 35 to 45 feet thick, but where known deposits occur, the sandstone ranges from 50 to 90 feet in thickness.

Normally the sandstone is yellowish-orange to medium-brown, but in the areas of the known deposits the sandstone is predominantly yellowish-gray or gray. These relations suggest that the ore deposits

are related to zones which have been altered in color, and that exploration should be confined to these altered zones.

In the altered sandstone zones, the claystone lenses, seams and pebbles are also altered from red to greenish-gray or gray. In the vicinity of ore deposits the carbonaceous material and claystone pebbles and lenses are more abundant. Also, limonite staining is very abundant in the immediate area of mineralized material.

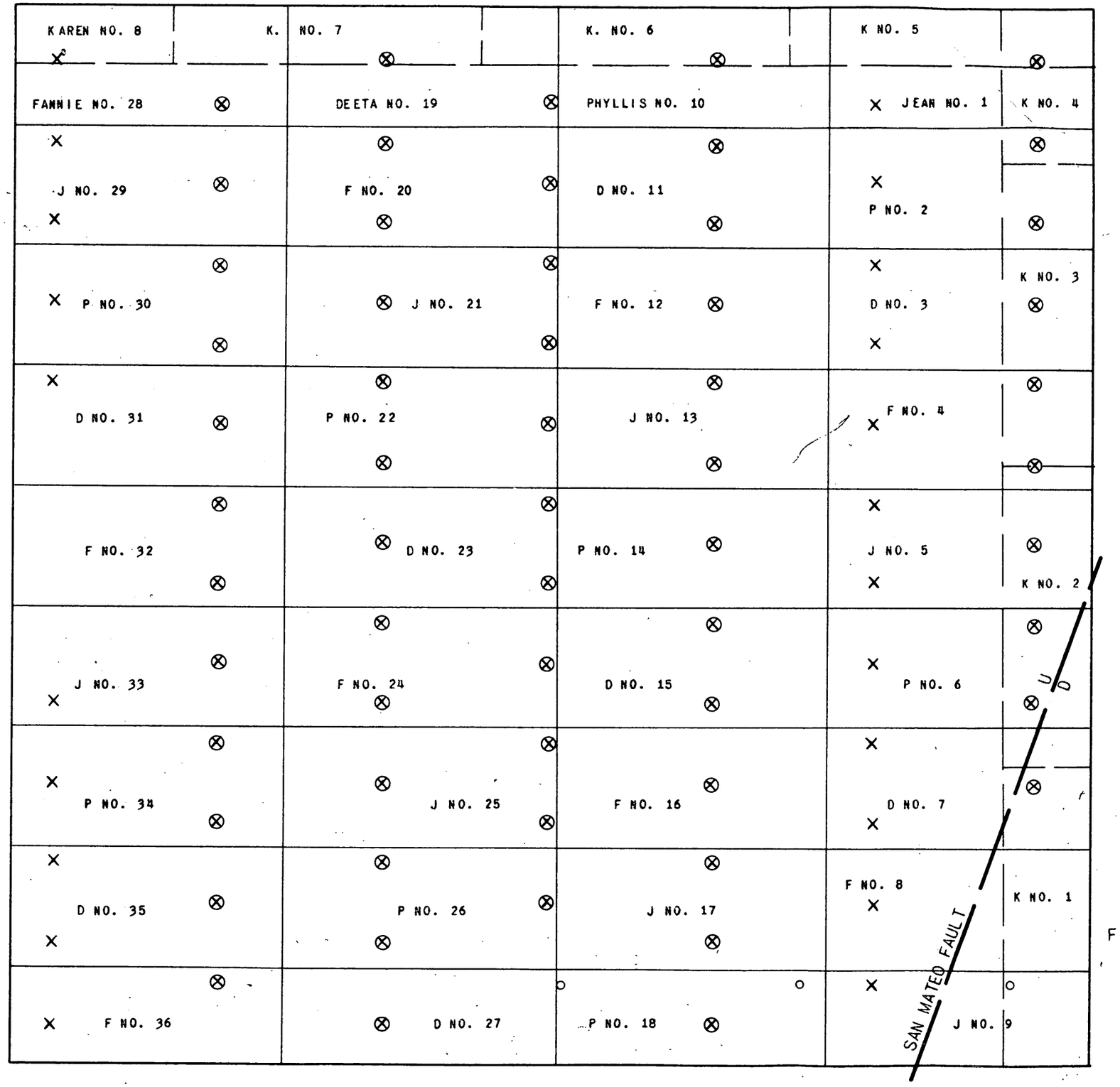
URANIUM DEPOSITS

At the present time there are no productive deposits within 2-1/2 miles of section 10, although mineralized material of ore grade and thickness has been found in Sec. 8 (DMEA docket 3632, contract Idm E-797) and on Sec. 32, T. 14 N., R. 9 W. The known deposits are tabular concentrations that generally follow the bedding. They range in thickness from a knife edge to more than 20 feet and are generally elongate masses that range from a few feet to several hundred feet in width and from a few feet to 3000 feet or more in length. These mineralized masses locally contain material of ore grade and thickness. These large mineralized masses appear to have a southeasterly or easterly trend.

Ore Bodies

The ore bodies range from a few tons to about 100,000 tons, using a grade cutoff of 0.10 percent U_3O_8 one foot or more thick. In the Ambrosia Lake area the ore bodies may average 100,000 tons each, but in other areas they usually average about 10,000 tons each.

On Sec. 10 it might be reasonable to expect ore bodies that would contain 50,000 tons each and be from 100 to 200 feet wide and from 300 to 500 feet long. These ore bodies usually occur in clusters that may be mined from one shaft or incline.



EXPLANATION

o HOLE DRILLED BY APPLICANT

× LOCATION OF PROPOSED STAGE I DRILL HOLE

⊗ PROBABLE LOCATION OF STAGE II DRILL HOLE

Note: CLAIM BOUNDARIES AND HOLE LOCATIONS FROM APPLICANTS MAP.

N

600 0 1200 FEET

FIGURE 2. SKETCH MAP OF SECTION 10, T. 13 N., R. 9 W., SHOWING EXISTING DRILL HOLES, LOCATION OF PROPOSED STAGE I DRILL HOLES, AND PROBABLE LOCATION OF STAGE II DRILL HOLES, COLAMER CORPORATION, McKINLEY COUNTY, NEW MEXICO.

PRESENT STATUS

The applicant has drilled 3 widely-spaced core holes along the south side of Sec. 10 (fig. 2). The easternmost hole is thought to have encountered the San Mateo fault zone.

PROJECT PROPOSALS AND COSTS

The applicant proposed a three-stage plug and core drilling program to test the "Poison Canyon sandstone" unit of the Jurassic Morrison Brushy Basin formation. He estimated it would require 232 holes totaling 96,455 feet and costing $151,056.00.

The examining team proposes to confine the exploration to testing the "Poison Canyon sandstone" unit of the Jurassic Morrison Brushy Basin formation. The project is proposed in three stages totaling 112 core and plug-drilled holes averaging 450 feet in depth and estimated to cost $101,425.00.

Stage I consists of 22 plug and core drilled holes spaced 400 feet apart, as shown on figure 2, in two north-south rows along the east and west sides of the property. Three holes are omitted from the west line of holes in an area thought to be unfavorable for ore. It is estimated the bottom 100 feet of each hole will be cored BX or larger.

Stages II and III each consist of 45 plug and core drilled holes. In Stage II the holes would be spaced 400 feet apart north-south and in rows 800 feet apart east-west (fig. 2). Stage III holes are to be no closer than 100 feet to any previously drilled mineralized or ore hole. Like Stage I, all holes are to be cored BX or larger in the bottom 100 feet.

All holes should be cored from 5 feet above the upper "Poison Canyon sandstone" contact to 5 feet below the lower contact. Core should be placed in core boxes marked with the corresponding depths.

Any mineralized core should be split and analyzed chemically, the remaining split should be stored for Government use. All holes should be logged radiometrically and this log along with the geologic log should be included with the monthly reports. A Plan map should be prepared by the operator, showing the location of all holes drilled along with the elevations of the collars and tops and bottoms of the Poison Canyon sandstone.

PROJECT COSTS

Stage I

Independent Contracts:

22 holes/7,700 feet plug drilling at $1.25/ft.	$9,625.00	
22 holes/2,200 feet core drilling at 3.50/ft.	7,700.00	
Total 9,900 feet		$17,325.00

Labor and Supervision:

1 geologist at $500.00 per mo. for 3-1/2 mos.	$1,750.00	
Total		$1,750.00

Operating Supplies:

Fuel for pickup truck at $30.00/mo. for 3-1/2 mos.	$ 105.00	
250 paper core boxes at $1.25	312.50	
Total		$ 417.50

Operating Equipment:

Depreciation on Geiger at $10.00/mo. for 3-1/2 mos.	$ 35.00	
Depreciation on pickup truck at $50/mo. 3-1/2 mos.	175.00	
Total		$210.00

Rehabilitation and repairs:	None
New bldgs. and improvements:	None

Miscellaneous:

25 chemical analyses at $5.00	$ 125.00	
Accounting at $ 50.00/mo. for 3-1/2 mos.	175.00	
Insurance and taxes 5% of $1750.00	87.50	
Total		$387.50

Total Stage I		$20,090.00

Division of Project Costs

	Total	Plug-Bit	Core Drilling
Independent Contracts			
7,700 ft. of plug-bit at $1.25	$9,625.00	$9,625.00	
2,200 ft. of core drilling at $3.50	7,700.00		$7,700.00
Labor and Supervision			
1 geologist at $500/mo. for 3-1/2 mos.	$1,750.00	$1,000.00	750.00
Operating Supplies			
Fuel for pickup truck at $30/mo. for 3-1/2 mos.	$ 105.00	$ 55.00	$ 50.00
250 paper core boxes at $1.25/ea.	$ 312.50		$ 312.50
Operating Equipment			
Depreciation on Geiger probe at $10.00/mo. for 3-1/2 mos.	$ 35.00		$ 35.00
Depreciation on pickup truck at $50.00/mo. for 3-1/2 mos.	175.00	$ 100.00	$ 75.00
Miscellaneous			
Accounting at $50.00/mo. for 3-1/2 mos.	$ 175.00	$ 100.00	$ 75.00
Insurance and taxes	87.50	47.50	40.00
		1302.50	1337.50
Total Stage I (less analyses)	$19,965.00	$10,927.50	$9,037.50
Cost per foot		$ 1.42	$ 4.11
Recommend rounding of cost per foot to		1.40	4.10
25 chemical analyses at $5.00 each	$125.00		

Total estimated cost $20,090.00

Summary of Costs

22 drill holes — Stage I

7700 feet of plug-bit drilling at $1.40 per foot	$10,780.00
2200 feet of core drilling at $4.10 per foot	9,020.00
25 chemical analyses at $5.00 each	125.00
Total Stage I (22 drill holes)	$19,925.00
Amount of Government Participation	$14,943.75

Stage II

45 drill holes

15,750 feet of plug-bit drilling at $1.40 per ft.	$22,050.00
4,500 feet of core drilling at $4.10 per ft.	18,450.00
50 chemical analyses at $5.00 ea.	250.00
Total Stage II (45 drill holes)	$40,750.00
Amount of Government Participation	$30,562.50

Stage III

45 drill holes - same footage as Stage II

15,750 feet of plug-bit drilling at $1.40 per ft.	$22,050.00
4,500 feet of core drilling at $4.10 per ft.	18,450.00
50 chemical analyses at $5.00 each	250.00
Total Stage III (45 drill holes)	$40,750.00
Amount of Government Participation	$30,562.50
Total Cost of Contract	$101,425.00
Total Amount of Government Participation	$76,068.75

CONCLUSIONS AND RECOMMENDATIONS

The available geologic information indicates the potential ore-bearing horizon, the "Poison Canyon sandstone", has, on Sec. 10, a thickness, color and grain-size favorable for the occurrence of uranium ore deposits. On the western part of Sec. 10 the areas most favorable for exploration appear to be in the northern part and the southern part of the section.

It is recommended that DMEA participate in the cost ($101,425.00) of the proposed exploration to the extent of 75 percent or $76,068.75.

FEB 27 1956

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FEB 27 1956

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

February 23, 1956

224 New Customhouse
Denver 2, Colorado

Mr. Kelsey Boltz
Colamer Corporation
Fidel and Rouse Building
Grants, New Mexico

Re: Docket DMEA 4017 (Uranium), Jean, Phyllis, Deetta, and Fannie claims, McKinley County, New Mexico

Dear Mr. Boltz:

In accordance with your request that you be notified when the Field Team's Report of Examination was forwarded the DMEA Washington office, this is to advise that the Report of Examination on the subject property is being forwarded this date.

Very truly yours,

W. M. TRAVER,

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

HMC:ab

cc: Sec. Op. Comm. (2).
Docket 4017
Chron.

NOV 22 1955
BUREAU OF MINES
Denver, Colorado

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
November 22, 1955

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg. III

From: Acting Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4017 (Uranium), Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico

The above brochure was received in this office on November 21, 1955.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

John F. Shaw

John F. Shaw

cc 2 w/orig.
E. N. Harshman
J. W. Hasler

RECEIVED
NOV 23 1955

NOV 12 1955

11-21-55 rjm

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

RECEIVED
NOV 21 1955

November 17, 1955

[redacted] New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (With brochure)
J. W. Mosler

From: Executive Officer, DMEA Field Team, Region III

Subject: Project DMEA 4027 (Uranium), Calumet Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico

Enclosed is the subject application in the amount of $151,056.00. Also enclosed is a copy of a letter from the Chairman of the Operating Committee dated November 14, 1955 and attached memorandum from the members of the Uranium Committee.

The field examiners should see the logs of the three holes drilled on the property by the applicant and the results of this drilling should be covered in the Report of Examination.

W. M. Trever

By W. M. Trever

Enclosures

HMC:ab

cc: Sec. Op. Comm. (2)

Surname copy 700

Ching
Ellis
Geehan
Kilgaard
Martin
Bjorn

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

NOV 14 1955

Mr. Frank Baylin, President
Salamar Corporation
Fidel and Rouse Building
Grants, New Mexico

Re: Docket No. DMEA-4017 (Uranium)
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Baylin:

The application for assistance in exploring the subject properties under the captioned docket number has been reviewed by the Rare and Miscellaneous Metals Division.

The DMEA Field Team, Region III, Mr. W. M. Trawer, Executive Officer, 2[illegible] New Customhouse Building, Denver 2, Colorado, will schedule a field examination of your property, if it has not already done so.

Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

MChing/gla
11-10-55
cc to: Admr.'s Reading File
Docket
Code 700
Mr. Ching
DMEA Field Team, Region III (2)

rname copy

700

Ching
Ellis
Martin
Johnson

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

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

NOV 14 1955

Re: Docket No. DMEA-4017 (Uranium)
Colmaer Corporation
Sec. 10, T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Traver:

This is with reference to your memoranda of October 7 and October 20, 1955, and enclosures, relating to the subject application. We agree that an examination should be scheduled without undue delay.

Enclosed are two copies each of memoranda from W. P. Williams, USGS, and John E.Crawford, USBM, dated October 31 and November 7, 1955, respectively.

In the event a contract is recommended, the necessary Consents to Lien and Subordination Agreements will be secured through the Applicant's Washington representative.

Sincerely yours,

W. S. Martin
by ES7
ACTING Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Albert W. Johnson by ES7
Member, Bureau of Mines

Thor H. Kiilsgaard by ES7
Member, Geological Survey

MChing/gla
11-10-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Ching

11-8-55 [illegible]

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

RECEIVED
NOV 7 1955

November 7, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Application for assistance, DMEA Docket 4017, Colamer Corporation, Jean, Phyllis, Deetta and Fannie claims, McKinley County, New Mexico

I have reviewed the attached application, DMEA Docket 4017, dated October 12, 1955, and received in this office October 26. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The Colamer Corporation drilled three holes on the property for assessment work, which apparently constitutes the whole of their prospecting efforts. The results of the drilling were not described in sufficient detail. Indications are that one hole penetrated four feet of strata containing 0.04 percent U_3O_8 at a depth of 371 feet. The applicant did not mention what was found in core from the other two holes.

The request for assistance is based on the fact that the subject claims are located in the same area as some of the producing mines of the Grants district, New Mexico, and one hole out of three penetrated favorable ground. The organization is desirous of drilling 232 holes consisting of 87,000 feet of plug and 9,455 feet of core drilling. Of this total, 85 holes are to be drilled in stage I, 70 in stage II, and 77 in stage III. The total cost of the proposed project is estimated at $151,056.

The adequacy of the application is questionable. If it is expected that results may be obtained in the very near future on DMEA applications and contracts relative to adjacent or nearby properties, I would suggest that action on this application be held in abeyance. However, the applicant should not be forced to wait for a decision for an indeterminate period.

Mr. Hosted would prefer to see the logs of the three holes drilled on the property by the applicant, after which he suggests that the application be referred to the Field Team for further consideration and discussion with E. R. Gordon, Atomic Energy Commission, Grand Junction, Colorado.

John E. Crawford

John E. Crawford

Attachment

11/1/55 gla

IN REPLY REFER TO:

RECEIVED

NOV - 1 1955

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

October 31, 1955

Memorandum

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

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4017, Colamer Corporation, Sec. 10, T. 13 N., R. 9 W., McKinley County, New Mexico.

The applicant proposes an extensive drilling project in an area where at least five other applications have been submitted and where an active project, DMEA 3632, is now under way.

The subject area is located in an area where large ore bodies are known. An exploration project on the property might, therefore, be justified.

The applicant cites a "bleached" zone in the Westwater sandstone as an important ore guide. While color of sandstones and mudstones is an accepted uranium ore guide it is probable that the thickness of the ore-host sandstones is a better criterion. Stage I drilling would then be intended to seek for the thicker portions of the Poison Canyon and Jackpile sandstones of the Brushy Basin member of the Morrison formation. The applicant's drilling proposals with regard to hole spacing and drilling methods appear reasonable.

I recommend that the Field Team be asked to make a field examination and report. The applicant should not be held in abeyance until work is completed on other applications in the same vicinity. The property should be evaluated with whatever data are available at the time of the field examination. ?

W P Williams

W. P. Williams

10/24/55 gla

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

RECEIVED
OCT 24 1955

224 New Customhouse
Denver 2, Colorado

October 20, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA-4017 (Uranium), Colamer Corporation, Jean, Phyllis, Deetta and Fannie claims, McKinley County, New Mexico

Enclosed is a joint memorandum by Don D. Hayes (U. S. Geological Survey) and M. H. Salsbury (U. S. Bureau of Mines) relative to a field examination of the subject property.

Also enclosed is a memorandum from E. N. Harshman to the Executive Officer regarding the above joint memorandum.

We agree that a field examination is required, but we do not concur with the Grand Junction Office in the belief that the examination should be deferred pending the outcome of exploration on nearby or adjacent ground.

We therefore recommend that an examination be scheduled taking the application in its proper turn and utilizing any supplementary information currently available.

W. M. Traver
W. M. Traver

E. N. Harshman
E. N. Harshman

Enclosures

IN REPLY REFER TO:
DMEA
Date Rec'd.
OCT 19 1955
BUREAU OF MINES
Denver, Colorado

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

October 18, 1955

RECEIVED
OCT 24 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: Application for DMEA aid (Uranium), Colamer Corporation; Jean, Phyllis, Deetta, and Fannie claims, McKinley County, New Mexico

I do not concur with the recommendations made in the Haynes-Salsbury memorandum of October 11, 1955, subject as above. The policy of holding applications in abeyance, pending the outcome of nearby projects, is unfair to the applicant and undoubtedly will lead to a large backlog of unprocessed applications.

It is my opinion that the recommendations on DMEA applications should be based on current field data or information that obviously should have been included in the application and can be obtained from the applicant without undue delay.

In this particular case, exploration under Contract Idm-E797 (DMEA 3632) is now underway, but examination reports have yet to be prepared on DMEA Dockets 3939, 3943, and 3966.

It is my opinion that the property should be examined and that recommendations be made on the basis of that examination and any other data <u>now</u> available.

E. N. Harshman

E. N. Harshman
Member, Field Team

Enclosures

ENHarshman:arh

IN REPLY REF

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
DMEA
Date OCT 24 1955

OCT 17 1955

October 11, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: D. D. Haynes for J. William Hasler

Subject: Application for DMEA aid (Uranium), Colamer Corporation; Jean, Phyllis, Duetta and Fannie claims, McKinley County, New Mexico

The subject claims lie in an area which is considered favorable for the occurrence of uranium ore deposits. It will, therefore, be necessary to examine the property and possibly modify the proposed program, if Government aid is recommended.

However, we believe the application should be held in abeyance pending the results of surrounding DMEA applications and contracts now in force (DMEA 3632 active, DMEA 3939, DMEA 3943, DMEA 3966), at which time more information will be available.

D. Haynes
Don D. Haynes, Geologist

M. H. Salsbury
M. H. Salsbury, Engineer

DDH/mlr

Enclosures 3

October 12, 1955

Subject: DMEA-4017
Re: Exploration Assistance
Jean, Phyllis, Deetta and
Fannie Claims

Colamer Corporation
Fidel & Rouse Building
Grants, New Mexico

Gentlemen:

The receipt of your application dated Undated for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4017 and referred to the Rare & Miscellaneous Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

October 12, 1955

Memorandum

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

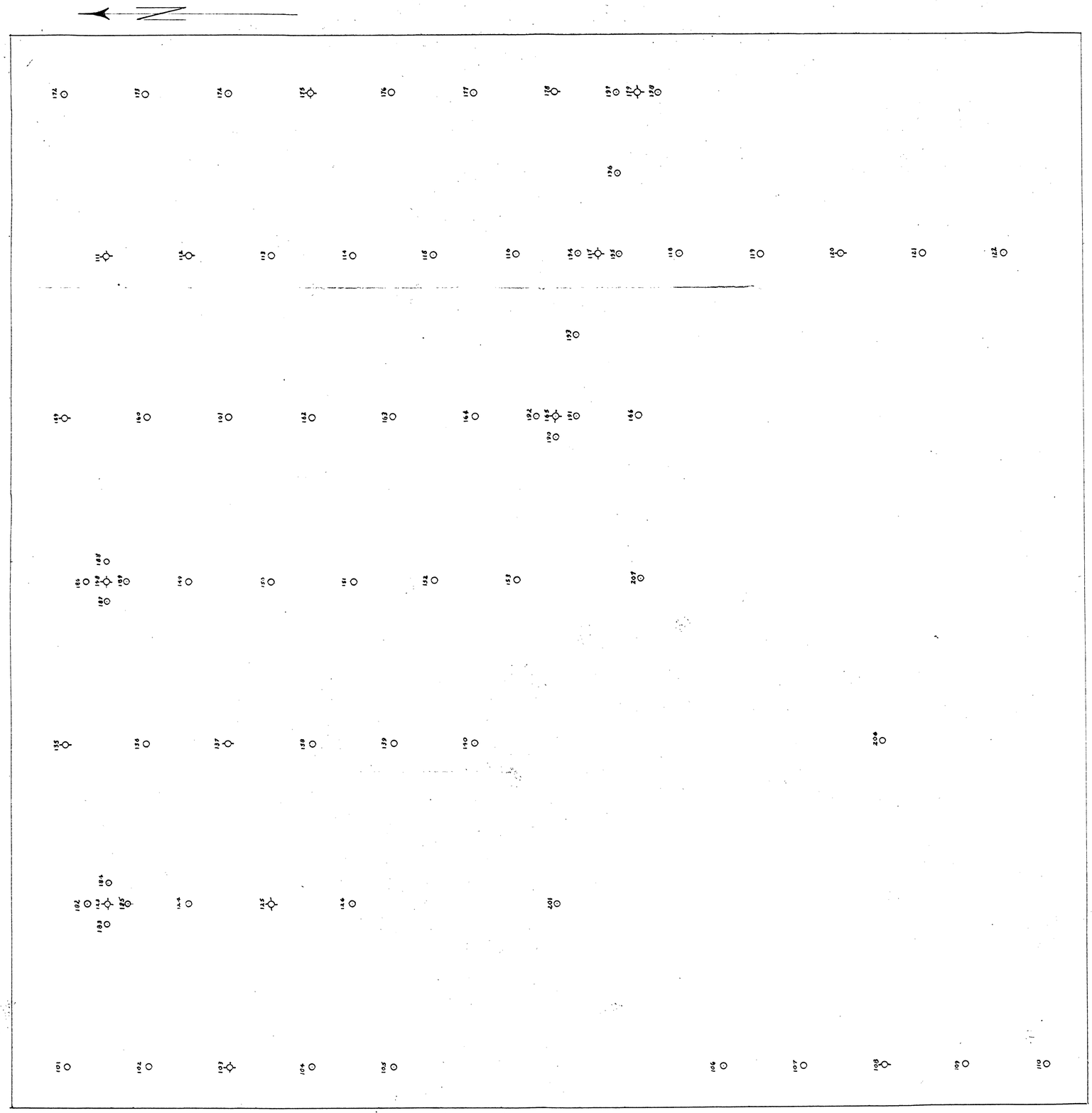
From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

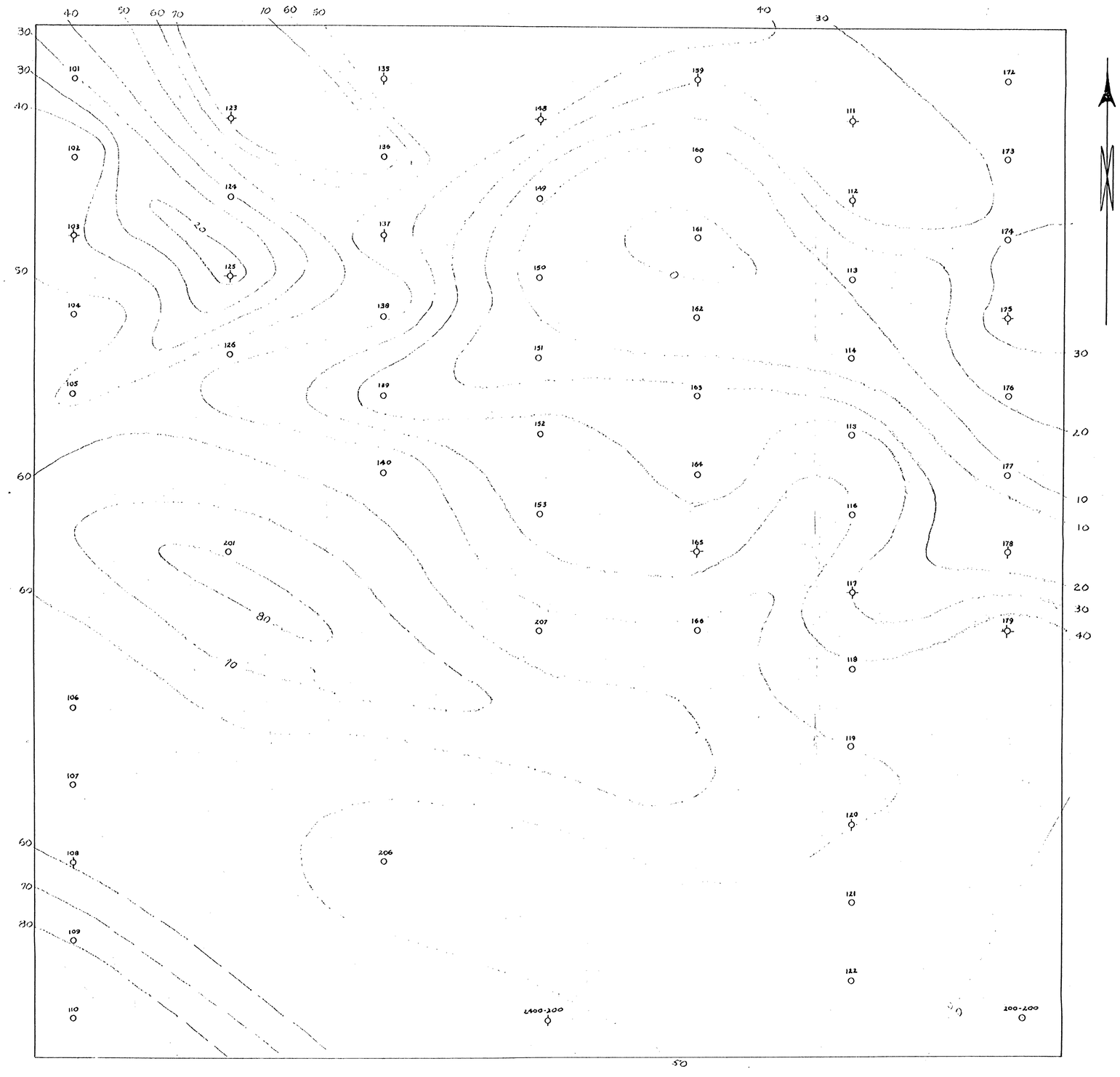
There is listed below the assigned docket number to an application recently received from Region III.

DMEA - 4017 Colamer Corporation

Robert E. Adams
Chief, Operation's Control
and Statistics Division


DMEA DOCKET 4017 SECTION 10, T13N, R9W
COLAMER CORP
HOLES SHOWING FROM 0.02% - 0.05% U_3O_8
MINERALIZED HOLES GREATER THAN 0.05% U_3O_8
HOLES WITH LESS THAN 0.02% U_3O_8
SCALE: 1" = 300'

B

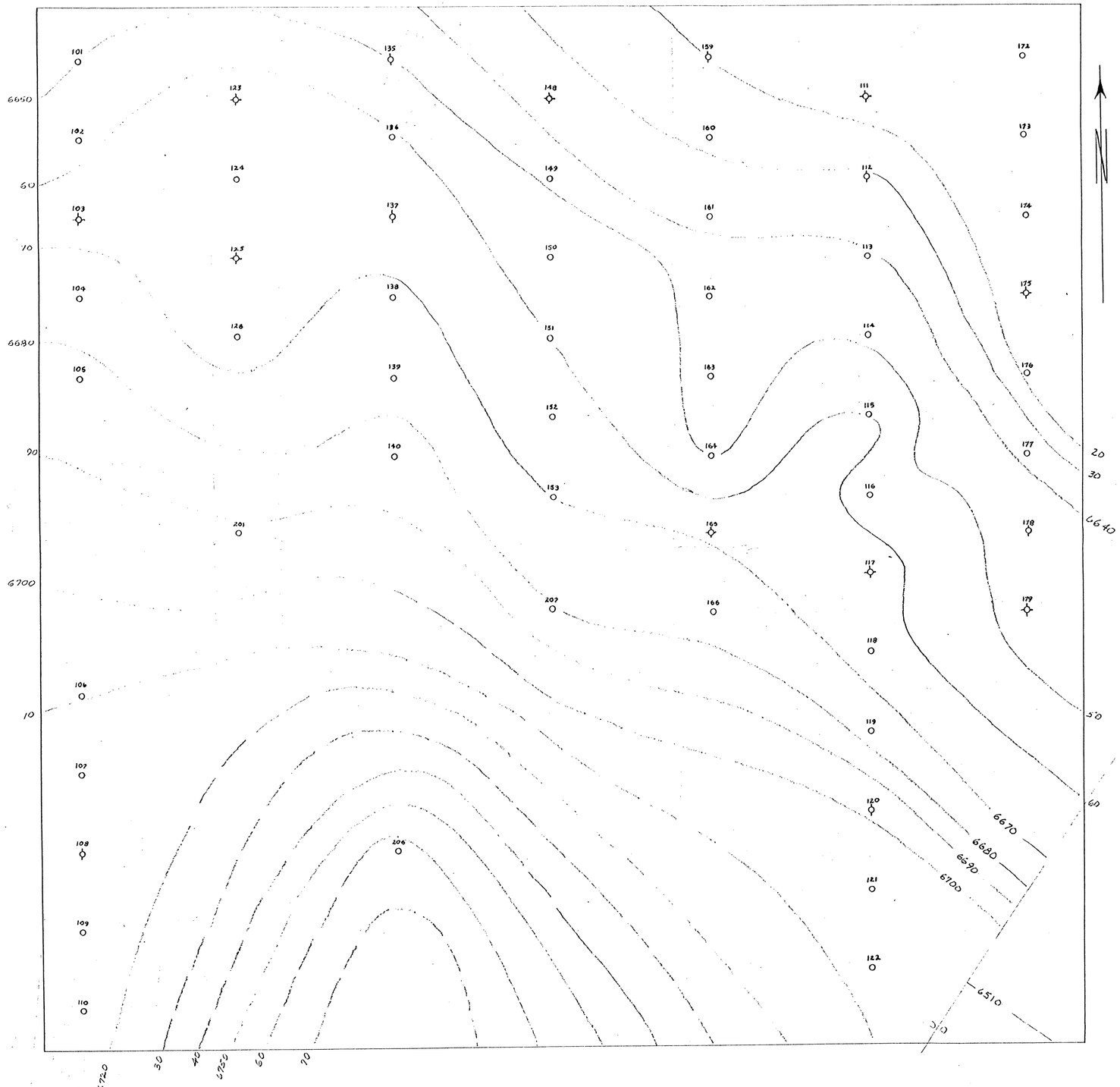


DMEA DOCKET 4017 SECTION 10, T13N, R9W, NMPM
COLAMER CORP

HOLES SHOWING FROM 0.02% - 0.05% U_3O_8
MINERALIZED HOLES GREATER THAN 0.05% U_3O_8
HOLES WITH LESS THAN 0.02% U_3O_8

SCALE: 1" = 300'

ISOPACH OF POISON CANYON SANDSTONE



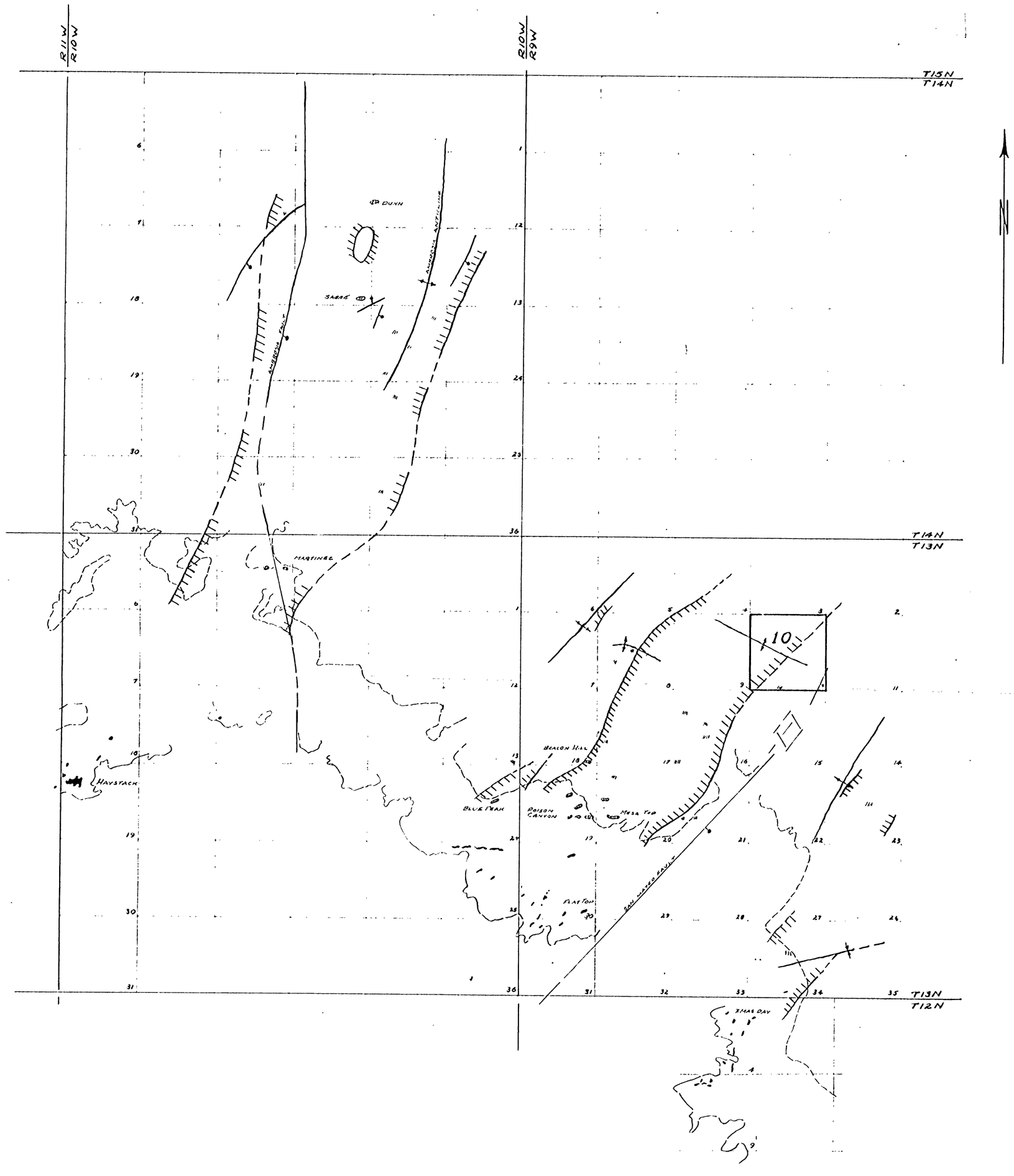
DMEA DOCKET 4017 SECTION 10, T13N, R9W
COLAMER CORP

HOLES SHOWING FROM 0.02% - 0.05% U_3O_8
MINERALIZED HOLES GREATER THAN 0.05% U_3O_8
HOLES WITH LESS THAN 0.02% U_3O_8

SCALE: 1" = 300'

STRUCTURAL CONTOUR
TOP OF BRUSHY BASIN

FIG. 2



PART OF

GRANTS URANIUM DIST.,

McKINLEY AND VALENCIA COUNTIES, NEW MEXICO

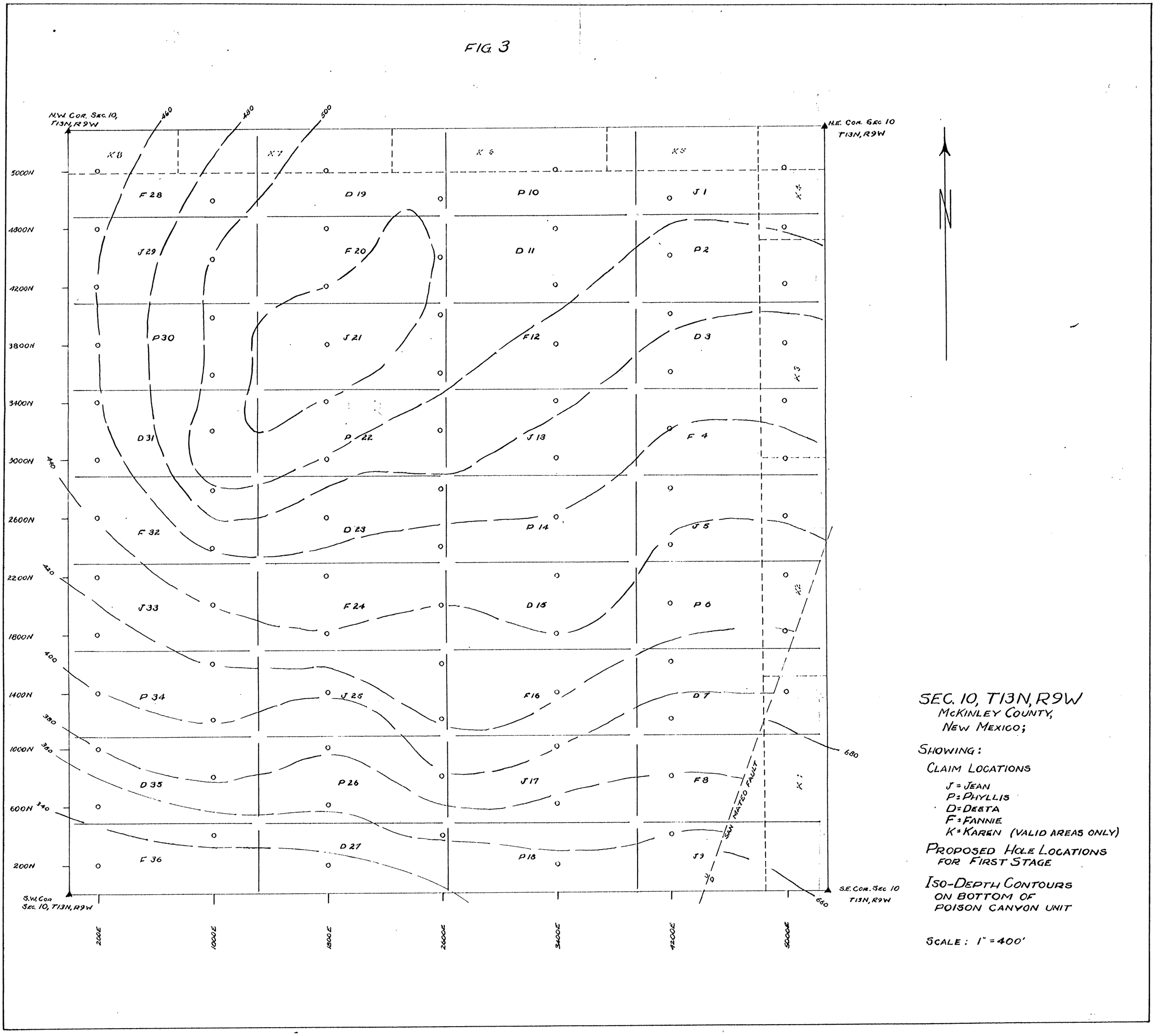
MAP SHOWING APPARENT RELATIONSHIP BETWEEN BLEACHED WESTWATER ZONES AND MINERALIZED AREAS AND FAULT ZONES

TODILTO RIM
DAKOTA RIM
TODILTO OREBODIES
MORRISON OREBODIES
MINERALIZED AREAS
FAULTS
FOLD AXES
BOUNDARIES OF BLEACHED ZONES

SCALE: 1" = 1 MILE

KB

FIG. 3



SEC. 10, T13N, R9W
McKINLEY COUNTY,
NEW MEXICO;

SHOWING:

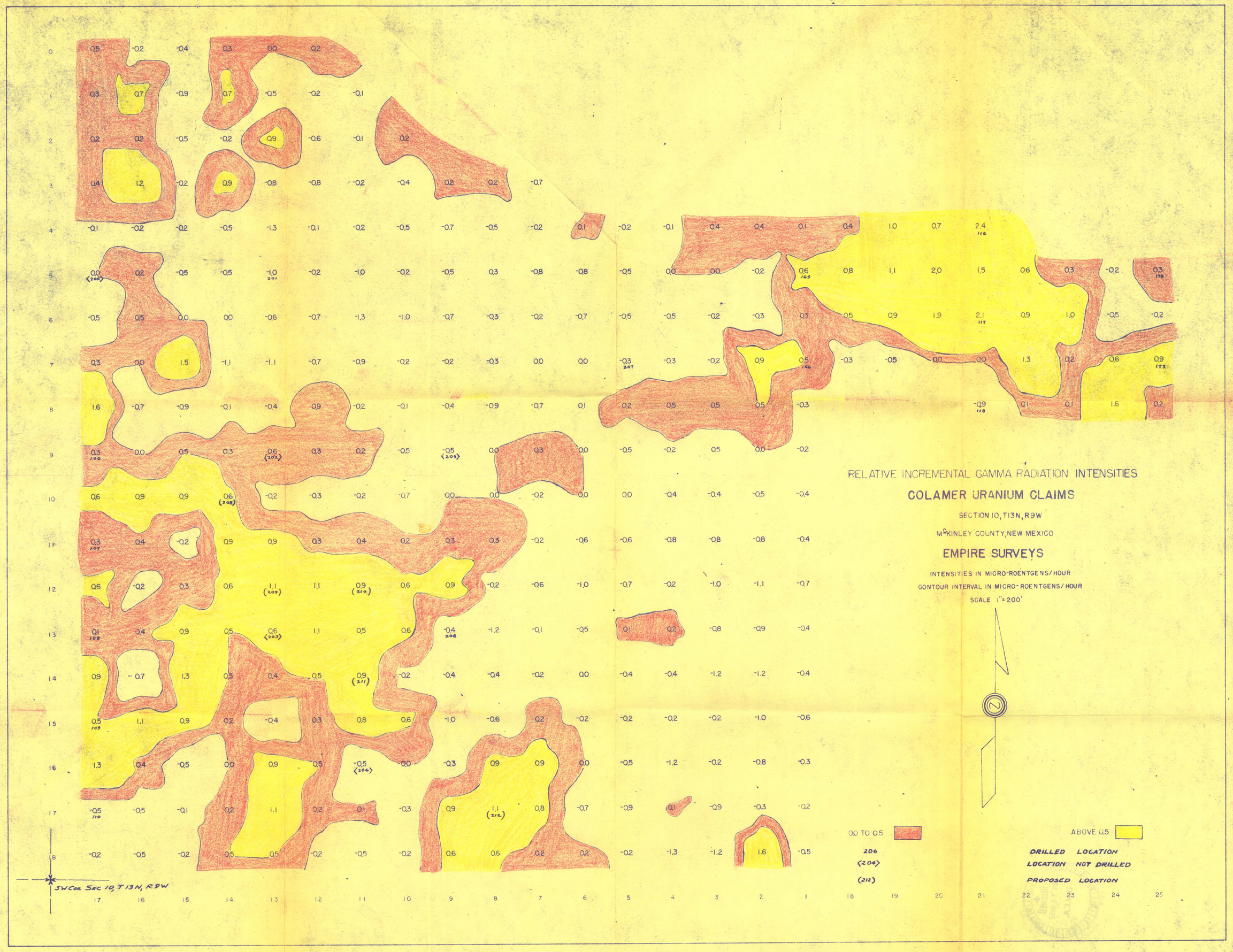
CLAIM LOCATIONS

J = JEAN
P = PHYLLIS
D = DEETA
F = FANNIE
K = KAREN (VALID AREAS ONLY)

PROPOSED HOLE LOCATIONS FOR FIRST STAGE

ISO-DEPTH CONTOURS ON BOTTOM OF POISON CANYON UNIT

SCALE: 1" = 400'


RELATIVE INCREMENTAL GAMMA RADIATION INTENSITIES
COLAMER URANIUM CLAIMS
SECTION 10, T13N, R9W
McKINLEY COUNTY, NEW MEXICO
EMPIRE SURVEYS
INTENSITIES IN MICRO-ROENTGENS/HOUR
CONTOUR INTERVAL IN MICRO-ROENTGENS/HOUR
SCALE 1" = 200'
0.0 TO 0.5
ABOVE 0.5
206
(204)
(212)
DRILLED LOCATION
LOCATION NOT DRILLED
PROPOSED LOCATION
SW COR SEC 10, T13N, R9W