OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

MAR 19 1959
O.M.E.

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Food Machinery and Chemical Corporation
Westvaco Mineral Products Division,
161 East 42nd Street,
New York 17, New York

pertaining to Exploration Project Contract No. Lam-11167, IMEA No. 4845, for the months of April, 1958 to July, 1958, inclusive, covering a project for the exploration of Uranium on property known as Sec. 17, 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, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

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

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

Total cost as billed by Contractor		$15,735.02
Exceptions: (Schedule attached)		
Prior to this review	$44.82	
Less: Reinstatement by review	0.00	
Herewith	0.00	44.82
Total Accepted Cost		$15,690.20

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 Eleven Thousand, Seven Hundred Sixty-Seven and 65/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Director, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$11,767.65
Amount reimbursed	11,267.65
Balance due Operator	$ 500.00

Donald T. Finch
Donald T. Finch
OME Auditor

March 12, 1959

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

FOOD MACHINERY AND CHEMICAL CORPORATION
"HERCULES MISSILE PROGRAM REVIEW"

Contract Xdm-X1167 Docket No. DMEA 4545

(a) The monthly reports were supported by documentary proof of that portion ($12,213.50) of the costs which covered work performed at unit rates under independent contract, and that portion ($94.50) which covered other costs for contribution by the Government on the basis of actual costs (per summary attached).

(b) The balance ($3,382.20) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and

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

SCHEDULE OF EXCEPTIONS

FOOD MACHINERY AND CHEMICAL CORPORATION
WESTVACO MINERAL PRODUCTS DIVISION

Contract Idm-E1167 Docket No. DMEA 4845

Prior Disallowances by the Field Team

The following excessive non-core drilling was disallowed by the Field Team.

Hole No.	Excess Footage	
2140 - 4040	6 Feet	
2740 - 1040	4	
2740 - 3440	6	
3340 - 1640	5	
3340 - 4040	2	
940 - 1040	5	
940 - 2240	7	
4540 - 2840	6	
4540 - 4040	2	
5140 - 1040	4	
5140 - 2240	4	
5140 - 3440	3	
Total Excess Footage at 65¢/Foot	54 Feet	$ 35.10
Incidental Allowance applicable to the foregoing excess footage at 18¢/Foot		9.72
Total Prior Disallowances		$ 44.82

SUMMARY OF DOCUMENTED COSTS

FOOD MACHINERY AND CHEMICAL CORPORATION
WEEVAS MINERAL PROGRAM REVIEW

Contract IAm-X1167 Docket No. DMEA 4045

Independent Contracts		
Non-core Drilling		
18,790 feet at 65¢/foot	$12,213.50	
Miscellaneous		
Chemical Analyses		
27 at $3.50 each	94.50	
Total Documented Costs		$12,308.00
Fixed Unit Costs		
Incidental Allowance		
18,790 feet of completed acceptable drilling at 18¢/foot		$ 3,382.20
Total Accepted Cost		$15,690.20

MAR 19 1959

Memorandum

To: Donald T. Finch, GS Auditor

From: Jay L. Chambers (Signed) J. L. Chambers
Contract Administration and Audit Division

Subject: Docket No. [illegible] (Remand)
Paul Machinery and Chemical Corporation
Contract No. [illegible]

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

GMcCarthy/GMcC
March 19, 1959

cc: Docket
Director's Reading File
Mr. Chambers

EXTRA COPY
O. R. E.
RECEIVED MAR 16 1959
DATE | CODE
8010

22d Ave Customhouse
Denver 2, Colorado
March 12, 1959

Memorandum

To: Donald T. Finch, GRE Auditor

From: Executive Officer, GRE Field Team, Region III

Subject: Docket No. RMEA 4845 (Uranium) Contract Ian-21167
Food Machinery and Chemical Corporation, (Westvaco Mineral Products Division) (Sec. 17, T 13 N, R 9 W)
McKinley County, New Mexico

The subject contract was considered completed on completion of the work provided for under Stage I, and the Operator was so notified by our letter of September 30, 1958. A copy of which is enclosed for your records.

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

Work or service completed on a fixed unit cost basis consisted of Incidental Allowance for 18,790 feet of drilling.

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

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosure

JWT:lmh

cc: Chem. Op. Comm. (2)
Hardman
Rennie, GRE/Tuc.
Emerick
Corres.file, Reg.III
Cooper
Chron

[illegible] New Customhouse
Denver 2, Colorado
March 25, 1959

Memorandum

To: T. A. Christensen

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. NMEA 4845 (Uranium) Contract Ism-[illegible]167, Food Machinery and Chemical Corporation, (Westvaco Mineral Products Division) (Sec. 17, T 13 N, R 9 W) McKinley County, New Mexico - FINAL PAYMENT

Reference is made to our memorandum of September 11, 1958, whereby we forwarded the final Form NF-104, Operator's Monthly Report and Voucher, for the month of July 1958, and requested you to withhold an amount of $500.00 from reimbursement to the Operator, pending resolution of matters prerequisite to closing the account.

The Operator's final report has been received, therefore final payment to the Operator is to be made on the following basis, which is in conformance with the Report of Review of reported project costs, by the Contract Administration and Audit Division, OME, dated March 12, 1959.

Basis for Final Payment

Total accepted costs----------	$15,690.80
Government participation at 75 percent--	11,767.65
Total prior payments----------	11,267.65
Balance due the Operator----------	$ 500.00

Original signed by
J. W. TOWNSEND

J. W. Townsend

JWT:kmh

cc: Chem. Op. Comm. (2)
Hardman
Emerick
Remale, OME/Tbs.
NF-104 file, Reg. III
Corres. file, Reg. III
Cooper
Chron

$500.00
3/25/59 OME 59-98

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED SEP 17 1958 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

July 8 4845 Idm E-1167

Month of July 28, 1958 Contract No. 4845 Idm E-1167

Operator's Name Westvaco Mineral Prods (FMC) (Fed Nat'l Mat'l Exp Corp) Uranium

Address Box 327, Grants, New Mexico Minerals

Contract Amount, $ 28,460 Government Participation: 75 % Amount, $ 21,345

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	4559.75	7688.85	12,248.60			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	---	94.50	94.50			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Incidental allowance at .18/ft	1262.70	2129.22	3391.92			
	5822.45	9912.57	15,735.02			
TOTALS				5822.45	9912.57	15690.20
					244.82	244.82

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

Date July 28, 1958 *Payee Westvaco Mineral Prods (FMC)

Per [signature] Title Mgr Exploration

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: 9,867.75 ~~84~~ ~~$4,366~~ 3866 84

Signature [signature]
(Authorized Certifying Officer)

Date 9/12/58 Vou. No. DMA 59-37

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E1167 in accordance with the terms of the contract.

Signature D M Romslo Title Mining Engineer Date 8/14/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE

Signature E. M. Hendrickson Title acting Executive Officer Date SEP 11 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED SEP 17 1958

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 8 Docket No. 4845 Contract No. Idm E-1167

Operator's Name Westvaco Mineral Products (FMC Mach & Chem Corp) Minerals Uranium

Address Box 327, Grants, New Mexico

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Cotex~~ Rotary	per/ft	4559.75	7015	12,248.60	18,844	0.65/ft	32,220	0.65/ft
Churn								
Auger								
Stripping allowance								
~~Trenching~~ Incidental/	per/ft	1262.70	7015	3,391.92	18,844	0.18/ft	32,220	0.18/ft
Test Pits								
Roads and Trails Assaying	per/sample	—		94.50	27	3.50	108	5.00/sample
Total Distributed Costs		5822.45		15,735.02				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5822.45		15,735.02				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 28, 1958 Operator Westvaco Mineral Prods (FMC)

Per W. S. Cavender Title Mgr. Exploration

Remarks:

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

(Instructions on reverse)

(For Government use only)

W. W. Cassels

INSTRUCTIONS

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

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

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

GPO 872894

FINAL DISTRIBUTION
MADE SEP 15 1958

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

Administrative Audit Difference Statement

Food Machinery and Chemical Corporation
161 East 42nd St.
New York 17, New York

Date: September 12, 1958
Payee's Reference: July 1958

Gentlemen:

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

Amount Claimed $ 5,822.45

Difference $ None

Amount Approved $ 5,822.45

The reason for the difference was due to:

Withheld an amount of $500.00 pending completion of additional Stage II work, or in event the anticipated proposal for Stage II drilling is denied pending resolution of matters prerequisite to closing the account.

EXTRA COPY
DMEA
RECEIVED SEP 17 1958

DATE	INITIALS	CODE
9/17	Com	100
		800

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

Very sincerely yours,

N. E. Stokes
Audit Section

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

224 New Customhouse
Denver 2, Colorado
Sept. 11, 1958

Memorandum

To: T. A. Christensen

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

Subject: Docket No. DMEA 4845 (Uranium) Contract IAm-E1167
Food Machinery and Chemical Corporation, (Westvaco Mineral Products Division) (Sec. 17, T 13 N, R 9 W), McKinley County, New Mexico - Operator's Monthly Progress Report for the month of July, 1958

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

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

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for July, 1958, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations, except for the following withholding:

<u>Withhold</u> an amount of $500.00 pending completion of additional Stage II work, or in event the anticipated proposal for Stage II drilling is denied pending resolution of matters prerequisite to closing the account.

Remarks:

Date of Report----------July 28, 1958
Date Received in Field Office----------July 29, 1958
Date Received in Region Office----------August 29, 1958

Enclosures
MEM:bah
CC: Chem. Op. Comm. (2)
Romalo, DMEA/Tuc.
MF-104 file, Reg. III
Emerick) w/copy of
Marshman) Engr's
Cooper) Report

Chron.

Original signed by
E. N. MARSHMAN

E. N. Marshman

DMEA
DEPARTMENT OF THE INTERIOR
AUG 29 1958
REGION III
DENVER, COLORADO

August 14, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Arizona

Subject: Progress Report for July 1958, Docket DMEA-4845 (Uranium) Contract Nm-E1167, Food Machinery and Chemical Corporation, (Westvaco Mineral Products Division), McKinley County, N. Mex.

Enclosed with the original and 8 copies of subject report is the Operator's report that comprises:

1. The original and 4 copies of each a narrative section with map, Forms MF-104 and 104A, and the drilling contractor's invoice.

2. Five copies of a geologic and a radiometric log for each of the 18 holes drilled.

I made a final inspection of the completed work of Stage 1 of captioned contract August 5, 1958 in the company of W. L. Emrick, geologist, U.S. Geological Survey and W. S. Cavender, the corporation's Manager of Exploration.

The inspection included a visit to the drilling sites and an inspection of drill hole cuttings at the drill sites and those stored at the corporation's nearby Faith mine. Information obtained indicated that the work performed and the findings are as described by Mr. Cavender in the Operator's narrative report.

CC Executive Officer (Orig. & 8)
DMEA-4845
DF

TMRomslo:fr

The July drilling consisted of deepening 28 holes of the 71 holes put down in April 1958. The 28 holes were extended through the Poison Canyon sandstone in which they had previously been bottomed. The total footage in the 28 holes is 7,015 feet which includes 889 feet drilled during the deepening operation. A review of the radiometric log and testing of drill cuttings indicated that no zones of significant uranium mineralization were penetrated.

Information obtained during the inspection also indicates that Mr. Cavender competently supervised the project on a full time basis.

ANALYSES OF THE OPERATOR'S REPORT

Form MF-104

Drilling - The $4,559.75 is for the approved 7,015 feet of drilling at the specified rate of 65 cents per foot. It is documented by the attached drilling contractor's invoice.

The footage drilled to date in completing Stage I work is 18,844 feet of 1,424 feet more than allotted 17,424 feet. Transfer of the 1,424 feet and deduction of necessary funds from Stage II is allowed by the contract, if required. It has been recommended for approval by Mr. Emerick and me as no excessive drilling appeared to have been done in completing the authorized 71 holes of Stage I. Furthermore, my inspection of the geologic logs indicates that our preliminary findings were correct.

Incidental Allowance - The $1,262.70 is the additional cost of drilling the 7,015 feet at the specified rate of 18 cents per foot. The costs to date for this item is $3,391.20 or $256.32 more than the maximum allowed for Stage I. However, the full amount of the voucher, $1,262.70 is approved on the basis that the required footage and funds for this item may also be transferred and deducted from Stage II.

Totals - The totals, $5,822.45, $9,912.57 and $15,735.02, appear to be correct.

Form MF-104-A

The form has been properly completed.

Narrative Report

The narrative report with map is considered adequate.

Recommendation

Withhold payment of the customary amount pending completion of additional work or pending resolution of matters prerequisite to closing the account in event the anticipated proposal for Stagell drilling is denied.

Original signed by
T. M. Romaie

T. M. Romaie

July 26, 1958

Mr. T. M. Romslo
U. S. Bureau of Mines
Box 4097, University Station
Tucson 5, Arizona

Re: Progress Report - July, 1958
Docket No. DMEA 4845
Contract Idm E-1167
Food Mach. & Chem. Corp.
Westvaco Mineral Products
NE¼, SE¼, NW¼, Sec. 17,
T. 13 N., R. 9 W.
McKinley County, New Mexico

DMEA
DEPARTMENT OF THE INTERIOR
AUG 29 1958
REGION III
DENVER, COLORADO

Dear Mr. Romslo:

During the review of the drilling results obtained in April, 1958, it was determined that all provisions of the contract had not been fulfilled, and that correcting adjustments should be made.

The contract states that all the drill holes will test the Poison Canyon sandstone but shall not extend to excessive depths below the basal contact, except when a hole is designated as a Westwater test hole. Inasmuch as the basal Poison Canyon contact is not easily determined in the field due to the irregular number and character of included shale lenses, it was found that certain holes had not penetrated the entire member. It was then necessary to reopen and deepen the shallow holes.

In all holes, it was deemed necessary to drill slightly deeper than the projected lower contact, in order to provide a sump for hole wall material loosened during the reopening. This was done for the purpose of insuring the descent of the hole probe past the critical contact. It is not felt that any of the holes were drilled to excessive depths.

In total, 28 holes were deepened for a sum of 889 feet. None of the deepened portions showed any promising sandstone mineralization; however, one foot of 0.02% U_3O_8 was found in Hole 1540-2840.

As required, 2 foot cutting samples were taken, logged, and stored. The newly drilled portion of each hole was logged by gamma ray and electrical resistance methods.

Completed holes are:

Hole No.	Total Depth	Thickness Poison Canyon	Mineralization
940-3140	230	58	Barren
940-3440	240	72.5	"
940-3740	240	70.5	"
940-4340	250	70	Weak
1540-2840	255	63	"
1540-3140	235	62	Barren
1540-3740	240	69	"
1540-4040	250	79	"
2140-3140	250	72	"
2140-3440	250	75.5	"
2140-3740	250	77.5	"
2140-4340	240	77	"
2740-2840	235	77	"
2740-3740	255	71	"
2740-4040	260	73	"
2740-4340	250	86.5	"
3340-1040	235	86	Weak
3340-3140	250	75	Barren
3340-3440	265	70	"
3340-3740	270	75.5	"
3340-4340	275	75	"
3940-2840	225	66	"
3940-3740	255	71	"
3940-4040	265	73	"
3940-4340	275	75	"
4540-1040	245	77.5	"
4540-2240	265	82	"
5140-2840	260	82.5	"
Total	7015		

The July drilling program completed Stage I, and the proposal for a limited Stage II program is being prepared.

Costs for the month include all those related to the deepened holes, even though portions of the holes were drilled in April, 1958.

Very truly yours,

W. S. Cavender

W. S. Cavender
Mgr. of Exploration
Food Mach. & Chem. Corp.
Box 327
Grants, New Mexico

WSC/ac

STATEMENT

DATE July 25, 1958

NAME Westvaco Mineral Products

ADDRESS Box 24, Star Route
Grants, New Mexico

In Account With

Stewart Bros. & Parker

Drilling Company

Phone AT 7-4416 P. O. Box 154

GRANTS, NEW MEXICO

	Amount
Drilling on Section 17, T13N, R9W, McKinley County, New Mexico during July, 1958, as follows:	
28 holes, 7,015 feet @ 65¢ per ft.	$4,559.75

THANKS

Hood Stewart

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED SEP 17 1958 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1958 Docket No. DMEA 1845 Contract No. Idm E-1167

Operator's Name Westvaco Mineral Prod. (Food Mach & Chem Corp) Minerals Uranium

Address Box 327, Grants, New Mexico

Contract Amount, $ 28,460 Government Participation: 75 % Amount, $ 21,345

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	7688.85	0	7688.85			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	94.50	0	94.50			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify): Incidental allowance at .18/ft	2129.22	0	2129.22			
TOTALS	~~9912.57~~	~~0.00~~	~~9912.57~~	9,867.75		9,867.75

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

Date July 28, 1958 *Payee Westvaco Mineral Products (FMC)

Per [signature] Title Mgr. Exploration

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 7400.81

Signature [signature]
(Authorized Certifying Officer)

Date 9/12/58 Vou. No. DMA 59-37

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 1167 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 8/13/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: Checked for Engineering Alternate No.

Signature [illegible] Title acting Executive Officer Date SEP 11 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 195 0 Docket No. DMEA 4045 Contract No. Idm E-1167
Operator's Name Westvaco Mineral Prods (Food Mach & Chem Corp) Minerals Uranium
Address Box 327, Grants, New Mexico

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
~~Chem~~ Rotary	per/ft	7680.05	11,829	7680.05	11,829	0.65/ft	32,220	0.65/ft
Auger								
Stripping								
Trenching allowance								
~~Expen~~ Incidental/	per/ft	2129.22	11,829	2129.22	11,829	0.18/ft	32,220	0.18/ft
Roads and Trails								
Assaying	per/sample	94.50	27	94.50	27	3.50	100	5.00/sample
Total Distributed Costs		9912.57		9912.57				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		9912.57		9912.57				28,400

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 28, 1953 Operator Westvaco Mineral Prod (FMC)

Per [signature] Title Mgr. Exploration

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

(Instructions on reverse)

Remarks:

(For Government use only)

[signature]

INSTRUCTIONS

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

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

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

GPO 872894

FINAL DISTRIBUTION

MADE SEP 15 1958

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

Administrative Audit Difference Statement

EXTRA COPY
DMEA
RECEIVED SEP 17 1958

DATE	INITIALS	CODE
9/17	[illegible]	100
		800

Peck Machinery & Chemical Corporation
161 East 42nd Street
New York 17, New York

Date: September 12, 1958

Payee's Reference: April 1958

Gentlemen:

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

Amount Claimed $ 9,912.57

Difference $ 44.82

Amount Approved $ 9,867.75

The reason for the difference was due to:

Disallowed, Excess Non-core Drilling

The contract specifies that holes designed to explore both the Folson Canyon and the Westwater Canyon sandstones shall not extend more than 10 feet into the underlying Recapture member. The following 12 holes were drilled in excess of the contract provision as follows, and the excess footage is disallowed:

(CONTINUED ON ATTACHED SHEET)

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

Very sincerely yours,

N. E. Stokes
Audit Section

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

Food Machinery & Chemical Corporation (April 1958)

Hole No.	Total Depth	Lower Contract Westmoter	Excess Footage
2140-4040	350	334	6
2740-1040	320	306	4
2740-3440	336	320	6
3340-1640	310	295	5
3340-4040	376	364	2
3940-1040	290	275	5
3940-2240	315	298	7
4540-2840	340	324	6
4540-4040	365	353	2
5140-1040	300	286	4
5140-2240	320	306	4
5140-3440	330	317	3

Total excess footage ..... 54 feet

Disallowed

Reported cost including Incidental Allowance, 54 feet of drilling $44.02

224 New Customhouse
Denver 2, Colorado
Sept. 11, 1958

Memorandum

To: T. A. Christensen

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

Subject: Docket No. DMEA 4845 (Uranium) Contract Iam-R1167
Food Machinery and Chemical Corporation (Westvaco
Mineral Products Division) (Sec. 17, T 13 N, R 9 W)
McKinley County, New Mexico - Operator's Monthly
Progress Report for the month of April, 1958

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

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

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

<u>Disallowance, Excess Core-core Drilling</u>

The contract specifies that holes designed to explore both the Poison Canyon and the Westwater Canyon sandstones shall not extend more than 10 feet into the underlying Recapture member. The following 12 holes were drilled in excess of the contract provision as follows, and the excess footage is to be disallowed:

Hole No.	Total Depth	Lower Contact Westwater	Excess Footage
2140-4040	350	334	6
2740-1040	320	306	4
2740-3440	336	320	6
3340-1640	310	295	5
3340-4040	376	364	2
3940-1040	290	275	5
3940-2240	315	298	7
4540-2840	340	324	6
4540-4040	365	353	2
5140-1040	308	286	4
5140-2240	320	306	4
5140-3440	330	317	3

Total excess footage---------- 54 feet

Disallowance

Reported cost including Incidental Allowance, 54 feet of drilling---------- $ ~~$44.82~~

Reconciliation with Amount Reported by the Operator on Form MF-104 for the month of April, 1958

Amount Reported on Form MF-104 for April, 1958----------$9,912.57
Amount to be disallowed---------- ~~44.82~~
Acceptable cost for April, 1958----------$9,867.75

Government participation at 75 percent----------$7,400.81

Remarks:

Date of Report----------July 28, 1958
Date Received in Field Office----------August 19, 1958*
Date Received in Region Office----------Sept. 29, 1958

* Processing voucher delayed pending receipt of additional information required from the Operator.

Enclosures
MHM:kmh

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

cc: ~~Chm.~~ Op. Comm. (2)
Romalo, BMEA/Tus.
MF-104 file, Reg. XII
Emerich
Harshman } w/copy of Engr's Report
Gooper
Garon

DMEA
DEPARTMENT OF THE INTERIOR
AUG 29 1958
REGION III
DENVER, COLORADO

August 13, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Arizona

Subject: Progress Report for April 1958, Docket DMEA-4845 (Uranium) Contract Idm-E1167, Food Machinery and Chemical Corporation (Westvaco Mineral Products Division) McKinley County, N. Mex.

Enclosed are the original and 8 copies of subject report and the Operator's report comprising:

1. The original and 4 copies of each the narrative section and Forms MF-104 and 104-A.

2. Five prints of a geologic and a radiometric log for each of 43 holes.

3. Five photo copies of an assay certificate.

4. Five copies of each the assayer's and driller's statement of costs.

A final inspection of all work completed under stage 1 of subject contract was made by me August 5, 1958. I was accompanied by W. L. Emerick and W. S. Cavender, the corporation's Manager of Exploration. The inspection included a visit to the sites of holes drilled and an examination of drilling hole cuttings at the drill sites and those stored at the corporation's nearby Faith mine.

CC Executive Officer (Orig. & 8)
DMEA-4845
DF

TMRomslo:frj

The inspection indicated that the work performed during April 1958 and the findings are as described by Mr. Cavender. The work performed included the non-core drilling of the authorized 71 holes of which 53 were designed to penetrate the Poison Canyon formation and the remaining 18 were to be drilled to the Recapture member of the Morrison formation. A review of the drill logs showed that 28 of the Poison Canyon test holes had been prematurely bottomed. These 28 holes were deepened during July 1958.

Radiometric logging of the holes followed by chemical assays of the 2-foot samples from mineralized intervals indicates that no zones of significant uranium mineralization were penetrated.

Information obtained during the inspection also indicated that Mr. Cavender supervised the project in a competent manner and devoted full time to the job.

ANALYSIS OF THE OPERATOR'S REPORT

The report, lacking logs and maps, was received at Tucson July 29. The logs were picked up by me at the property August 5 and the maps were received at Tucson 8/19/58.

Form MF-104

Drilling - The $7,688.85 is the cost of non-core drilling an authorized and approved 11,829 feet in the 48 completed holes at the specified rate of $0.65 per foot. An additional 54 feet of drilling at depths greater than 10 feet into the Recapture formation was disallowed by the operator in accordance with the contract.

The original and 4 copies of drilling contractor's invoice is included with 5 copies of each the geologic and radiometric logs.

Sampling and Analysis - The $94.50 is for the chemical assay of 27 samples for U_3O_8 at $3.50 a sample, or $1.50 less than the specified maximum of $5.00. Although none of the samples contained significant amounts of U_3O_8, the assaying was justified on the basis of hole probing records and Geiger counter testing of samples.

Grants Assay Office and Laboratories assayed the samples. The original and four copies of their Assay Certificate and Cost Statement are attached.

Totals - The total monthly and to date cost of $9,912.57 is correct.

Form MF-104-A

The form has been properly completed.

Narrative Report

The narrative report with map is considered acceptable.

Original signed by
T. M. Romslo

T. M. Romslo

July 26, 1958

Mr. T. M. Romslo
U. S. Bureau of Mines
Box 4097, University Station
Tucson 5, Arizona

Re: Progress Report - April, 1958
Docket No. DMEA 4845
Contract Idn P-1167
Food Mach. & Chem. Corp.
Westvaco Mineral Products
NE¼, SE¼, NW¼, Sec. 17,
T. 13 N., R. 9 W.
McKinley County, New Mexico

Dear Mr. Romslo:

On April 8, 1958, Westvaco Mineral Products began the Stage I exploration drilling program as authorized by the DMEA Contract.

The Stage I program consisted of 71 holes placed on a 300 by 600 foot grid spacing. Eighteen holes were to penetrate to the Recapture member of the Morrison formation, with the remainder penetrating only through the base of the Poison Canyon. Review of the drill logs after the completion of the drilling revealed 28 of the Poison Canyon test holes were stopped at too shallow a depth. These 28 holes will be deepened and completed at a later date and therefore are not included in this report.

All holes were drilled by rotary non-core methods, and 4½" bits were used. Two foot cutting samples were taken from the top of the Poison Canyon sandstone to the bottom of the hole. These samples were logged geologically and radiometrically, packaged, and labelled. In addition, Westvaco contracted to have all holes logged by gamma ray and electric resistance methods. This logging is done mechanically and recorded on graph paper. Prints of the written geologic logs and of the gamma-resistance logs are included with this report.

Geologic information gained from the exploration program shows the Poison Canyon sandstone to be a gray to green, fine to coarse grained, and averaging 75 feet in thickness. Shale lenses in the sand are very common, although some holes indicate that the rock is a sandstone but contains a high percentage of shale particles.

Mineralization was encountered in ten holes, but it was very minor. Chemical assays were made of samples from seven of the mineralized holes, but the results were low. Most mineralization is localized in the basal

Poison Canyon sand, while other mineralized zones occur in the Recapture shales and shales within the Poison Canyon. Both the Poison Canyon and Westwater sandstones show the favorable coarse texture and gray coloration.

Mineralized holes are:

940-4340	3940-1040
3340-1040	3940-1340
3340-1640	3940-1640
3340-1940	4540-2040
3340-2240	5140-2240

The 18 Westwater holes are limited by contract to a maximum depth of 10 feet below the Westwater - Recapture contact. A listing of these holes follows:

Hole No.	Total Depth	Lower Contact Westwater	Disallowed Footage
940-2840	320	310	0
1540-3140	304	303	0
2140-2840	345	338	0
2140-4040	350	334	6
2740-1040	320	306	4
2740-3140	336	320	6
3340-1640	310	295	5
3340-2840	303	293	0
3340-4040	376	364	2
3940-1040	290	275	5
3940-2240	315	298	7
3940-3140	347	337	0
4540-1640	320	311	0
4540-2840	340	324	6
4540-4040	365	353	2
5140-1040	300	286	4
5140-2240	320	306	4
5140-3140	330	317	3
Total	5891		54

Chargeable Footage - 5837

Other holes completed in addition to the Westwater holes are:

Hole No.	Total Depth	Hole No.	Total Depth
1540-4340	240	3340-2540	210
2740-1940	200	3940-1340	224
2740-3140	245	3940-1640	225
3340-1940	200	3940-1940	230
3340-2240	207	3940-2540	225

Hole No.	Total Depth	Hole No.	Total Depth
3940-3140	241	5140-1340	227
4540-1940	358	5140-1640	260
4540-2540	230	5140-1940	255
4540-3140	270	5140-2540	235
4540-3440	170	5140-3140	265
4540-3740	242	5140-3740	276
4540-4340	256	5140-4040	276
		5140-4340	281

Chargeable Footage - 5938

Total Chargeable Footage for All April Drilled Holes - 11,829

Very truly yours,

W. S. Cavender

W. S. Cavender
Mgr. of Exploration
Food Mach. & Chem. Corp.
Box 327
Grants, New Mexico

WSC/ac

STATEMENT

FROM Grants Assay Office

19

TO Westmaco

ADDRESS

CITY

TERMS

27	Chemical U3O8 Assays at $3.50 each			$ 94	50
	Total			$ 94	50

J. Gurney Jr

STATEMENT

DATE May 5, 19 58

NAME Westvaco Mineral Products

ADDRESS Box 24 Star Route

Grants, New Mexico

In Account With

Stewart Bros. & Parker

Drilling Company

Phone AT 7-4416 P. O. Box 154

GRANTS, NEW MEXICO

	Amount
Drilling on Section 17, T13N, R9W, McKinley County, N. M. during April, 1958 as follows:	
43 holes, 11,829 feet @ 65¢ per ft.	$7,688.85

THANKS

Thos Stewart

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

[illegible]

Mr. W. N. Williams
Vice President
Food Machinery and Chemical Corporation
161 East 42nd Street
New York 17, New York

Re: Docket No. [illegible] (Granite)
Food Machinery and Chemical Corporation
(Westvaco Mineral Products Division)
Sec. 17, T. 13 N., R. 9 W.
McKinley County, New Mexico
Contract No. [illegible]

Dear Mr. Williams:

Reference is made to your terminated exploration contract with the Government.

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

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

Sincerely yours,

George C. Selfridge

ACTING Director

cc: Federal Insurance Company

Contract Adm. & Audit Division

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 19 1959
DATE INITIALS
800

OME
DEPARTMENT OF THE INTERIOR
JAN 13 1959
REGION III
DENVER, COLORADO

1-9-58

Re: Docket No. D.M.E.A. 4845 (Uranium)
Contract Lim - E1167
Sec 17, T. 13N., R. 9W.
McKinley County, New Mexico

To: Executive Officer
D.M.E.A. Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Dear Sir:

Several changes have been made in out geologic personnel and in the resulting confusion the final report for Docket No. D.M.E.A. 4845 (uranium) has never been submitted. We are now in the process of finishing this report and as soon as the report is completed we will send it to you.

Very truly yours,

V. E. Larsen

C.C. to
Romslo
Emeriek
Harshman
Tonsend

RECEIVED OCT 3 1958
INITIALS CODE
800

224 New Customhouse
Denver 2, Colorado
September 30, 1958

Memorandum

To: Chairman, Operating Committee, OME

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

Subject: Docket No. DMEA-4845 (Uranium), Contract Idm-H1167
Food Machinery and Chemical Corporation (Westvaco Mineral Products Division, Sec. 17, T 13 N, R 9 W)
McKinley County, New Mexico

Enclosed are the following pertaining to operations under the subject contract:

(1) Three copies of Field Team, Region III, denial of the Operator's request for Government approval of drilling under Stage II, and notice that the contract is to be considered completed upon completion of the work under Stage I.

(2) Two copies of the Operator's letter of September 18, 1958, requesting the Government's approval for the drilling under Stage II.

(3) Three copies of a memorandum from W. L. Emerick, Geologist, Geological Survey, pertaining to the requested additional drilling.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Encls.
JWF:bh

cc: Harshman) w/copy of
Emerick) enclosures
Romslo, OME/TUC) Items 1,
Corres. File) 2, and 3
Cooper
Chron.

224 New Customhouse
Denver 2, Colorado
September 30, 1958

EXTRA COPY
O. M. E.
RECEIVED OCT 6 19
DATE INITIALS

Mr. W. S. Cavender
Westvaco Mineral Development
P. O. Box 327
Grants, New Mexico

Re: Docket No. DMEA-4843 (Uranium)
Contract No. Idm-X1167
Food Machinery and Chemical Corporation
(Westvaco Mineral Products Division)
(Sec. 17, T 13 N, R 9 W)
McKinley County, New Mexico

Dear Mr. Cavender:

Reference is made to your letter dated September 18, 1958, wherein you request the Government's approval for the drilling of 22 holes under the provisions of Stage II of the contract.

Review of the results of the drilling performed under Stage I and other data presently available to this office indicates that the possibility of discovering a significant quantity of minable ore is too remote to warrant Government participation in the cost of the additional drilling requested. Therefore, your request is denied.

Since the Government's approval for additional drilling will not be forthcoming, the contract is to be considered completed upon completion of the work provided for under Stage I.

In conjunction with closing the account, you are referred to the provision under Article 7(c) of the contract form, relative to the rendering by your Company of a final engineering and geologic report pertaining to the work completed under the contract.

A required final audit or report of review of contract expenditures by the Contract Administration and Audit Division, OME,

cannot be scheduled until the final report is received; therefore, as we are desirous of closing the account at an early date, we will appreciate your prompt attention to the matter of rendering five copies of the final report.

Very truly yours,

OMK Field Team, Region III

E. N. Marshman

J. W. Townsend

JWT:bh

cc: Chem. Op. Comm. (3)
Finance Office, Reg.III
Amendment File, Reg.III
OMK Auditor, Reg. III
Marshman
Emerick
Romalo, OMK/TUC
Corres. File
Cooper
Chron.

OME
DEPARTMENT OF THE INTERIOR

SEP 29 1958
REGION III
DENVER, COLORADO

SEP 29 1958 FILE COPY
O. M. E.
RECEIVED OCT 3 1958
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4135 University Station
Tucson, Arizona

September 29, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: W. L. Emerick Through: E. M. Humphreys

Subject: Docket No. DMEA-4149 (Uranium) Contract Ion-21167,
Fund Machinery and Chemical Corporation
(Westvaco Mineral Products Division)
(Section 17, T. 13 N., R. 9 W.), McKinley County, New Mexico

Enclosed are the original and 4 copies of the operator's proposed Stage II drilling program on the above subject docket, involving 28 holes that would penetrate the Poison Canyon sandstone and average 200 feet in depth. Footage would be approximately 4700 feet at $0.85 per foot ($0.65 for drilling plus $0.10 for incidentals) for an estimated total cost of $3900. Holes to be drilled on offsets on a grid approximately 100 X 200 feet. Coordinates mentioned by the operator in the proposal, but omitted from his maps, were added in pencil at the Tucson office.

The operator, in support of his proposal, offers three points, namely: (1) an elongated E-W structure along coordinate 1600 N (inset map) in the NW 1/4 of Section 17, representing a thinning of the Poison Canyon sandstone and suggesting the possible presence of an asphalt or oil trap in which uranium might be localized; (2) that the known size of Poison Canyon ore bodies is small, therefore the 300 X 600 foot grid pattern of Stage I possibly could have missed ore bodies; (3) a citation of discovered ore bodies in sections adjacent to Section 17.

Point (3) reiterates a point of justification introduced in the DMEA field examination report recommending Stage I drilling in Section 17. Point (2) appears to be a valid argument based on exploration of the Poison Canyon sandstone elsewhere in the district. The structure of Point (1) is, as the operator states, a feature of interest, but similar smaller structures of the same type also are present in Section 17, one in the NE 1/4 and 2 in the SE 1/4. One of the structures in the SE 1/4 contains two weakly mineralized holes with 3 additional weakly(?) mineralized holes lying about 500 feet south of the structure.

A review of the radiometric logs of all NMEA holes drilled in Section 17 indicates that no zones of significant uranium mineralization were penetrated in the Poison Canyon sandstone. Looking information on company-drilled holes in Section 17 it must be admitted that they also encountered no stronger mineralization than the NMEA holes. Assay results on the seven NMEA holes in the proposed Stage II area ranged from nil to a high of 0.03 percent U_3O_8. Drilling in the SW 1/4 of Section 17 by the operator, including development drilling around low-grade mineralization discovered from wide-spaced drilling indicated only a sub-ore grade deposit. The overall uranium mineralization in Section 17 appears to be generally very weak and the overall results of Stage I drilling are not impressive.

As a result of reviewing all of the data on the Stage I drilling and from a careful study of the operator's proposal for Stage II work, it is my opinion that the finding of significant amounts of minable grade ore appears remote in Section 17 and that Stage II drilling would not therefore be warranted. The results of the Stage I drilling were thoroughly discussed with Mr. Rapalo prior to his departure on annual leave. At that time the field examiners were mutually unimpressed with the results.

W L Emerick

W. L. Emerick
U. S. Geological Survey

WLEmmo

cc: Executive Officer (9)
Eastman
DMEA/FEC
Emerick

September 18, 1958

Re: Stage II Proposal
Contract Idm-E-1167
Docket No. 4845
Section 17, T. 13 N., R. 9 W.
McKinley County, New Mexico

OME
DEPARTMENT OF THE INTERIOR
SEP 29 1958
COLORADO

To: Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver, Colorado

Dear Sir:

Under provisions of the above contract, a Stage I exploration program of 71 holes was performed by Westvaco, being completed in July, 1958. Geologic and other details have been covered in past reports, but to review: eleven of the 71 holes recorded mineralization by hole probing. Cuttings which were chemically assayed indicated values up to 0.03% U_3O_8. Of the eleven holes, seven showed the mineralization to be in the basal Poison Canyon sandstone, and four showed it to be in Brushy Basin or Recapture shales.

The seven Poison Canyon holes are in the NW¼ of the section and are grouped along the 3340N and 3940N coordinates. Bordering the group are six mineralized holes drilled originally by Westvaco. It is with this mineralized area that this proposal is concerned.

Two maps of Section 17 have been prepared and are included with this report. The first, an isopach map of the Poison Canyon sandstone, shows the thickness to vary from 50 to 90 feet; however, no dominant patterns or structures are evident. The only feature of interest is the elongate zone of thinning extending north-south along the 1600E coordinate and passing through the mineralized area.

Structure contours on the base of the Poison Canyon sandstone are shown on the second map. Dipping to the northeast, the sandstone has no major folds or faults. A small fault with its west side upthrown is indicated in the SE¼. Along the 2500E coordinate the sandstone is folded into an anticline which strikes north-south and plunges to the north. To the southeast and west of the fold, the contours indicate a steepening of the dip or a gentle monocline. Updip from the monocline the beds flatten, and the dip angle decreases. Note that this flattened area coincides with the mineralized area.

Considering that the uranium deposits of Ambrosia Lake are localized by asphalt deposits, it follows that any structural condition suggesting possible asphalt or oil traps should warrant extra attention as a potential ore-bearing areas. In the Rocky Mountains gently dipping flattened areas bordered by monoclines have been found to be structural and stratigraphic oil traps. Therefore, as this structure might be an area for oil accumulation, further testing appears logical.

On a basis of the relative sizes of known Poison Canyon ore bodies, the area also warrants further investigation. The 300 by 600 ft. grid pattern of Stage I is of such size, that had any of the nearby Poison Canyon ore bodies been drilled on such centers, they could have easily been straddled. These ore bodies include the 60,000 ton Mesa Top, the 5,000 ton Beacon Hill, and the 7,000 ton Moe of Section 20; the 7,000 ton Moe of Section 18; and the Poison Canyon bodies of Section 19 which have yielded over 200,000 tons. Most of the 500,000 ton Calumet and Hecla body of Section 23 would fit inside the stated grid. Consequently, in a district where 25 foot center drilling is often required to trace commercial ore bodies, the Stage I grid has not proved that commercial ore bodies are not present.

It is proposed by Westvaco that the mineralized area be further tested by a Stage II program of 22 holes, as shown on the maps. These holes would penetrate through the Poison Canyon sandstone and would average 210 feet in depth. Footage would approximate 4700 at $0.83 per foot ($0.65 drilling plus $0.18 incidental) for an estimated total of $3900.

Yours very truly,

W. S. Cavender

W. S. Cavender
Westvaco Mineral Development
P. O. Box 327
Grants, New Mexico

WSC/ac

[illegible] Bay Customhouse
Denver 2, Colorado

AUG 20 1958

CCD
800

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Project No. DMEA 4045 (Uranium) Contract IGm-81167, Food Machinery and Chemical Corporation, (Westvaco Minerals Products Division), (Sec. 17, T 13 N, R 9 W) McKinley County, New Mexico

Enclosed are three copies of a project work approval issued by the DMEA Field Team, Region III, for the transfer of drilling footage and Incidental Allowance, together with incident funds, from Stage II to Stage I of the contract.

Also enclosed are three copies of a joint memorandum dated August 12, 1958, from T. M. Romslo, Mining Engineer, Bureau of Mines, and W. L. Emerick, Geologist, Geological Survey, pertaining to the matter.

Two copies of the Operator's request dated July 23, 1958, were forwarded to you with copies of our memorandum of July 29, 1958, to the field examiners, whereby we requested their recommendations in the matter.

Copies of the work approval have been distributed to the Operator, the Finance office, and to others concerned in Region III.

Original signed by
J. W. TOWNSEND

J. W. Townsend

JEC:bsh

Enclosures

cc: Finance Office, Reg. III
E. H. Harshman
W. L. Emerick (Tuc)
T. M. Romslo (Tuc)
Corres. file, Reg. III
Cooper
Chron.

} w/copy of work approval

25th Ave Customhouse
Denver 2, Colorado

AUG 20 1958

Mr. W. S. Gavender
Food Machinery and Chemical Corporation
Box 89, Star Route
Grants, New Mexico

Re: Contract No. EMI 4047 (Uranium)
Contract Ser-2167
Food Machinery and Chemical Corporation
(Westvaco Minerals Products Division)
(Sec. 17, T 13 N, R 9 W)
McKinley County, New Mexico

Dear Mr. Gavender:

In reference to your letter of July 23, 1958, and consistent with the provisions of the contract pertaining to the transfer of drill footage and funds from Stage II to Stage I, to permit completion of the Seventy-one (71) holes under Stage I to the contract objective, this constitutes the Government's approval for transfer of drill footage and funds from Stage II to Stage I, as follows:

Add to Stage I 1,424 feet of non-core drill footage at $0.65 per foot ---------- $925.60

Add to Stage I 1,424 feet of Incidental Allowance at $0.18 per foot ---------- 256.32

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, nor the fixed unit of any item of work, or any item of allowable cost which is expressly designated "maximum."

Very truly yours,

JDC:bmh

AEC Field Team, Region III

By S. W. Tarrant
S. W. Tarrant

By E. M. Hartshorn
E. M. Hartshorn

cc: Chem. Op. Comm. (3)
Finance Office, Reg. III
Accounts File, Reg. III
E. M. Hartshorn
W. L. Kendrick
T. M. Rosalo (Tucson)
Compir
Correst. file, Reg. III
Chron

MINERAL DEPOSITS
DMEA
RECEIVED
AUG 14 1958
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
DEPARTMENT OF THE INTERIOR
AUG 15 1958
REGION III
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

August 12, 1958

Memorandum

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

From: T. M. Romslo
W. L. Emerick

Through: E. N. Harshman

Subject: Docket No. DMEA 4045 (Uranium), Contract No. I4n-31167,
Food Machinery and Chemical Corporation,
Westvaco Mineral Products Division (Sec. 17, T. 13 N., R. 9 W.)
McKinley County, New Mexico

In reference to Albuquerque Acting Executive Officer's letter on the above subject property, dated July 29, 1958, and telephone communication from Grants, New Mexico, between T. M. Romslo and J. W. Townsend on August 6, 1958, it is the opinion of the field examiners that the operator exercised diligence during the drilling and that hole depths were not excessive. It is recommended that 1,424 feet of drilling be transferred from Stage II and applied to Stage I.

It is also the opinion of the field examiners that the contract should not be terminated until the operator has a chance to propose additional exploration under Stage II.

Original signed by
T. M. Romslo

T. M. Romslo
U. S. Bureau of Mines

W L Emerick

W. L. Emerick
U. S. Geological Survey

TMR:WLE:mm

cc: Acting Executive Officer (9)
Harshman
DMEA/WDC
Emerick

T-1
C

FOOD MACHINERY AND CHEMICAL CORPORATION

WESTVACO MINERAL PRODUCTS DIVISION

April 1, 1958

CHRYSLER BUILDING EAST
161 EAST 42ND STREET
NEW YORK 17, N. Y.
TELEPHONE MURRAY HILL 7-7400

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

Dear Mr. King: Re: Contract Idm-E1167

It is our understanding that we should name a representative to whom you may address notifications and other correspondence pertaining to subject contract.

We so designate Mr. W. S. Cavender, Box 24, Star Route, Grants, New Mexico, who has charge of our mineral development activities in that vicinity.

Very truly yours,

WESTVACO MINERAL PRODUCTS DIVISION

W. N. Williams

W. N. Williams

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

LBQ

APR 11 1958

Copies distributed to:
Chmn. Op. Comm. (2)
Harshman
Hosler
DMEA/Gr. Jct.
DMEA/DFC
Townsend

900

MME Form 14
Sept. 1958

Contract No. Idm-E) 14-23) ~~1167~~

Docket No. DMEA) MME) ~~4845~~

Date of Action ~~3/24/59~~
Terminated Contract

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OBLIGATION DOCUMENT

To: Chief, Accounts Section, Finance Branch, Bureau of Mines

From: Director, Division of Operations Control and Statistics

Please enter the amounts shown below on the accounts of the Office of Minerals Exploration.

Name and Address of Contractor:

Food Machinery & Chem. Corp.
(Westvaco Mineral Prod. Div.)
161 East 42nd Street
New York 17, N. Y.

Date of Contract	Region	State	Commodity
February 4, 1958	III	New Mexico	Uranium

	Reserve	Obligation
Prior Amount	0	21,345.00
Increase	0	0
Decrease	0	~~9,577.35~~
Revised Amount	0	11,767.65

Remarks:

cc: 800
210

43244

DMEA Form 14

Contr[illegible] No. Idm-E 1167

Docket No. 4845

DEPARTMENT OF THE INTERIOR

Executed contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

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

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

Date of Contract	Region	State	Commodity
February 4, 1958	**III**	**New Mexico**	**Uranium**

Name and Address of Operator: **Food Machinery & Chem. Corp.**
(Westvaco Mineral Prodl Div.)
161 East 42nd Street
New York 17, New York

	Reserve	Obligation
Prior Amount	21,345.00	0
Increase	0	21,345.00
Decrease	21,345.00	0
Revised Amount	0	21,345.00

Remarks:

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

Date delivered to Bureau of Mines, Washington 4/4/58

22848

Audit copy

DMEA
SERVE APR 2 1958

MF-200
(Revised June 1954)

Docket No. DMEA 4845

Commodity Uranium

Contract No. Idm-E 1167

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 4 FEB 1958 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] Food Machinery and Chemical Corporation, a Delaware corporation (Westvaco Mineral Products Division), whose mailing address is 161 East 42nd Street, New York 17, New York, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, ~~and~~ Annex II, 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 rights to uranium in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] Lease and Agreement [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: Interests of Lessor

(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: A performance bond is attached hereto in lieu of Consent to Lien and Subordination Agreement of Santa Fe Pacific Railroad Company, lessor.

(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 April 10, 1958 shall commence the work, and on or before July [illegible] 195[illegible] (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work ~~or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."~~, except as otherwise provided in Exhibit A with respect to stages of work. See Annex II.

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $ 28,460.00

The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $ 21,345.00 : *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

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

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

See Annex II.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mittendorf

Administrator, Defense Minerals Exploration Administration

FOOD MACHINERY AND CHEMICAL CORPORATION (Operator)

By W. N. Williams

Title Vice President

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

M E Gilbert

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
FOOD MACHINERY AND CHEMICAL CORPORATION
DOCKET NO. DMEA-4845

ANNEX I

The land referred to in Article 2 of the Contract consists of the NE¼, the SE¼ and the NW¼ of section 17, township 13 north, range 9 west, N.M.P.M.M., McKinley County, New Mexico.

The land is shown on the map entitled, "Figure 2 - Planimetric Map of Section 17, T. 13 N., R. 9 W., N.M.P.M. . . . Westvaco Minerals Division of Food Machinery and Chemical Corporation . . .," attached hereto and made a part hereof.

EXPLORATION PROJECT CONTRACT
FOOD MACHINERY AND CHEMICAL CORPORATION
DOCKET NO. DMEA-4345

ANNEX II

Article 13. Changes and added provisions.—

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

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

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

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

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

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

(g) In Article 8(b), the words "all minerals mined or produced" mean, for the purposes of this Contract, uranium-bearing ore and minerals or products associated therewith.

EXPLORATION PROJECT CONTRACT
FOOD MACHINERY AND CHEMICAL CORPORATION
DOCKET NO. ERDA-4045

Exhibit "A"

Description of the Work

General Provisions

The work consists of exploration by non-core drilling to test the Poison Canyon and Westwater Canyon sandstones of the Jurassic Morrison formation for uranium.

Drilling depths are estimated to average 200 feet to penetrate the Poison Canyon sandstone and 350 feet to penetrate the Westwater Canyon sandstone. Holes designed to explore both the Poison Canyon and the Westwater Canyon sandstones shall not extend more than 10 feet into the underlying Brushy Basin member. Because of the difficulty of recognizing the lower contact of the Poison Canyon sandstone an specific lower limit is placed on holes designed to explore that member only. However, the Operator shall exercise diligence to avoid excessive drilling depths.

Samples shall be taken at 5-foot intervals from the top of the Poison Canyon sandstone to the bottom of each hole. Cuttings shall be collected with a Dwelshaw sample collector or equivalent unit of another make, unless wet drilling is necessary, in which case provision shall be made for taking satisfactory sludge samples. All samples shall be checked for radioactivity and those indicating significant mineralization shall be split. One portion shall be analyzed chemically for uranium and the other portion shall be properly labeled and stored for the use of the Government. The non-mineralized samples also shall be labeled and stored for inspection by the Government. Any stored samples may be disposed of by the Operator upon approval by the Government.

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

No hole shall be drilled closer than 100 feet to the outer boundaries of the land described in Annex I.

The Government will not contribute to any costs of an incompleted drill hole.

Access roads and drill sites shall be prepared, when required, with a D-7 bulldozer, or an equivalent unit of another make.

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

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

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

Stage I

Prepare access roads and drill sites, as required, and drill approximately 71 holes, aggregating an estimated 17,420 feet, at the locations indicated on the map (Figure 2) referred to in Annex I. The holes shall be drilled in eight east-west rows spaced about 600 feet apart, with the holes in each row spaced about 300 feet apart. As indicated on the map, previously drilled areas are omitted from this pattern. Fifty-three holes shall penetrate through the Paisnon Canyon sandstone only, and 18 holes shall be extended through the Westwater Canyon sandstone. If more than 17,420 feet of drilling are required to reach the desired horizons,

the additional footage and funds required may, with the written approval of the Government, be transferred and deducted from Stage II.

Stage IV

Prepare access roads and drill sites, as required, and drill not more than 60 holes aggregating not more than 14,000 feet at offsets to previously drilled holes showing favorable mineralization. No hole shall extend through the Manhattan Canyon sandstone unless it is offsetting a hole that shows favorable mineralization at that horizon. Offset holes shall be drilled not closer than 100 feet to any previously drilled hole.

Estimated Cost of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

17,490 feet non-core drilling @ $0.65/ft. (See Annex II(f))		$11,338.00
35 hours drill crew standby time @ $10/hr.		350.00
24 hours bulldozing @ $12/hr.		288.00

Categories (2) through (6)

None

Category (7) Miscellaneous

Base except: 48 chemical analyses @ $5/each	240.00	$12,201.00

Fixed Unit Costs (See Annex II(g))

Incidental allowance 1/ for each foot of hole drilled, 17,490 feet @ $0.18/ft.	$3,135.60

Estimated Total Cost of Stage I		$15,336.60

Stage II

Actual Costs

Category (1) Independent Contracts

14,800 feet non-core drilling @ $0.65/ft. (See Annex II(f))	$9,620.00	
30 hours drill crew standby time @ $10/hr.	300.00	
20 hours bulldozing @ $12/hr.	240.00	

Categories (2) through (6)

None

Category (7) Miscellaneous

None, except: 60 chemical analyses @ $5/each	300.00	$10,460.00

Fixed Unit Costs (See Annex II(d))

Incidental allowance 1/ for each foot of hole drilled, 14,800 feet @ $0.18/ft.		2,664.00
Estimated Total Cost of Stage II		$13,124.00

S U M M A R Y

Estimated Total Cost of Stage I	$15,336.60	
Estimated Total Cost of Stage II	$13,124.00	
Estimated Total Cost of the Project (rounded)		$28,460.00
Government Participation @ 75%		$21,345.00

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

CODE
800

Denver 2, Colorado
March 31, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Contract No. DMEA 4043 (Uranium), Contract No. IAm-8167, Food Machinery and Chemical Corporation(Westvaco Mineral Products Division), Sec. 17, T 13 N, R 9 W), McKinley County, New Mexico

Enclosed are the Government's and Audit copies of executed Contract No. IAm-8167, which was forwarded by your letter of February 4, 1958 for signature by the Operator after obtaining the Performance Bond, and inception of a suitable starting date under Article 3 of the Contract.

Also enclosed are three copies of a letter from this office, dated March 31, 1958, whereby we forwarded the "Operator's Copy" of the contract and wherein we provided instructions relative to reporting on work performed under the contract and procedures to be followed in corresponding with this office on matters in connection with the contract.

The original of a Performance Bond on Standard Form 25, issued by the Federal Insurance Company, was forwarded to you by memorandum of March 18, 1958.

The Operator advised that work would be started by March 31, 1958. However, April 15, 1958 was inserted in Article 3, as the date on or before which work shall be commenced.

The contract, dated February 4, 1958, provides for exploration work estimated to cost $68,489.00, toward which the Government will contribute 75 percent, or an amount not in excess of $51,366.66.

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

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

JHE:pr2

cc: Manager
Finance Office, Region III
Harshman
DMEA/DPS(Baiser)
Keeler
Corres. file
Townsend
Chron.

w/copy of contract and letter to Operator.

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

MAR 31 1958

Food Machinery and Chemical Corporation
(Westvaco Mineral Products Division)
161 East 42nd Street
New York 17, N. Y.

Re: Docket No. DMEA 4845 (Uranium)
Contract No. Idm-E1167
Food Machinery and Chemical Corporation
(Westvaco Mineral Products Division)
(Sec. 17, T 13 N, R 5 W)
McKinley County, New Mexico

Gentlemen:

Enclosed is the "Operator's Copy" of Exploration Project Contract No. Idm-E1167, Docket No. DMEA 4845.

Also enclosed are six copies of Form MF-104, "Operator's Monthly Report and Voucher," and six copies of Form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to the

Executive Officer
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado.

The extra copy is for your records.

Forms MF-104 and MF-104A are to be combined into five sets of one of each form. Each set of the combined forms is to be accompanied by map or sketch, showing the location and extent of work performed, and a signed narrative report which describes the work performed, conditions encountered, and results of the work. The monthly accounting report will not be processed for reimbursement to you unless it is accompanied by a signed narrative report and other required or pertinent data. Additional copies of Forms MF-104 and MF-104A will be forwarded to you each month on receipt of your report for the prior month.

The U. S. Geological Survey maintains a field office in the A.E.C. Compound at Grand Junction, Colorado. The DMEA representative can be contacted as follows:

J. W. Hasler, Geologist, Geological Survey
P. O. Box 300, Grand Junction, Colorado
Telephone, Chapel 3-2110, Ext. 272 or 282.

For your information, and in reply to many questions that have been asked, after Forms MF-104 and MF-104A are received, an engineer will check progress on the project and review your accounts, after which the report forms will be forwarded to this office for administrative examination and vouchering. If the report is in order, a check will be issued by the Treasury Department for the Government's portion of the approved costs. If you have any difficulty in completing these forms and the reports, please call on either the field representative or this office for assistance.

In the matter of your claim for reimbursement of drilling costs under the terms of the contract, reimbursement to you will be on the basis of a hole or holes completed to the objective, which has, or have been, drilled in compliance with the conditions under the "General Provisions" section of Exhibit "A" of the contract and the special conditions pertaining to the drilling under each stage. Therefore, your monthly report should include only such holes which are completed to that extent and the required records made a part of your claim for reimbursement.

The contract is prepared on form MF-200, and under its provisions and as outlined in Exhibit "A" attached to the contract, the allowable costs are a combination of "Actual Costs" and "Fixed Unit Costs," with a maximum average unit cost established for the drilling under Category (1) and maximum unit costs established for the remaining items of work or service under Category (1) and other numbered categories. Under the provisions of the contract, the work outlined in Exhibit "A" under Category (1) is to be performed by an independent contractor. The unit cost established for each item of work for both Stages I and II is a maximum unit cost toward which the Government will contribute its appropriate share as provided for in the contract, except for drilling, which is handled in another manner, and as expressly provided for on a maximum average unit cost basis. The costs of work completed under Category (1) are to be recorded under item (1) of Form MF-104 and must be supported and documented by a signed or certified true copy of the billing from the subcontractor. The costs of sample analysis, under Category (7), are to be recorded under item (7) on Form MF-104 and must be supported by a copy of the assay return and a signed or certified true copy of the billing from the assayer. Amounts reported on the basis of "Fixed Unit Costs" require no documentation, as they are otherwise verified. However, costs on a "Fixed Unit Cost" basis are also to be recorded on Form MF-104 under item (1).

In reference to ANNEX II (f) of the contract, pertaining to the average unit cost of the drilling, if excess costs are suspended by reason of exceeding the maximum unit cost of the drilling described under Category (1), the excess costs will be held in suspense and be reinstated by this office, to the extent suspended funds are available, in the event the unit costs for any month should cause the average unit cost to fall below the maximum average unit cost established in the contract for the drilling.

In the event you desire to perform the work under Category (1) on company account instead of subcontracting it, as provided in the contract, it will be necessary that you request and obtain an appropriate amendment to the contract before reimbursement can be made to you for the Government's portion of the allowable incurred costs.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data. Each request for action by this office must pertain to one matter only. Such requests are not to be incorporated in your narrative report accompanying monthly progress report Forms MF-104 and MF-104A.

The locations of holes to be drilled under Stage I are indicated on the map, "Figure 2," attached to the contract. Should conditions encountered necessitate or make desirable a change in the location of any of the holes, approval of this office for the change must be obtained prior to performance of the drilling. Otherwise, the drilling may not be acceptable for reimbursement to you under the terms of the contract.

Your attention is directed to the provision that Stage II work is contingent on results obtained from Stage I, and performance of the work under Stage II is subject to the prior written approval of the Government.

When work under Stage I has been completed, or sufficiently so to permit evaluation of the results of the work, you must request approval from this office for the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, each copy complete with a map showing the location and extent of the work completed and the location of the additional work proposed. Also, your request must include an evaluation of the work completed and include assay returns and any other pertinent data which will be of value to the Government in appraising the results of the work.

If the work under Stage I is completed in its entirety before requesting approval for work under Stage II, you should anticipate a suspension of operations between stages of work, to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

To eliminate as much delay to operations as possible, if that is of serious consideration, you should expedite forwarding of the results of the work completed and your request for the Government's approval of the additional work you propose.

No oral statement of any person shall be construed to modify or change the terms of the contract. Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or by the DMEA Field Team, Region III.

It is a regulation that reimbursement to you for the cost of work accomplished prior to the date of the contract will not be allowed. It is a requirement and imperative that you notify this office in writing the date work actually commences under the contract.

Very truly yours,

Original signed by
E. N. HARSHMAN

Acting Executive Officer, DMEA
Field Team, Region III

Enclosures

JWT:prl

cc: Chmn. Op. Comm. (3)
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
DMEA/DFC (Belser)
Hasler
Corres. file
Townsend
Chron.

DMEA Form 14

Contract No. Idm-E 1167

Docket No. 4845

DEPARTMENT OF THE INTERIOR

Approved contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

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

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

Date of Contract	Region	State	Commodity
February 4, 1958	III	New Mexico	Uranium

Name and Address of Operator: Food Machinery & Chem. Corp.
(Westvaco Mineral Prod. Div.)
161 East 42nd Street
New York 17, New York

	Reserve	Obligation
Prior Amount	0	0
Increase	21,345.00	0
Decrease	0	0
Revised Amount	21,345.00	0

Remarks:

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

Date delivered to Bureau of Mines, Washington 2/4/58

22845

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DECEMBER 1957 DOCKET 4845

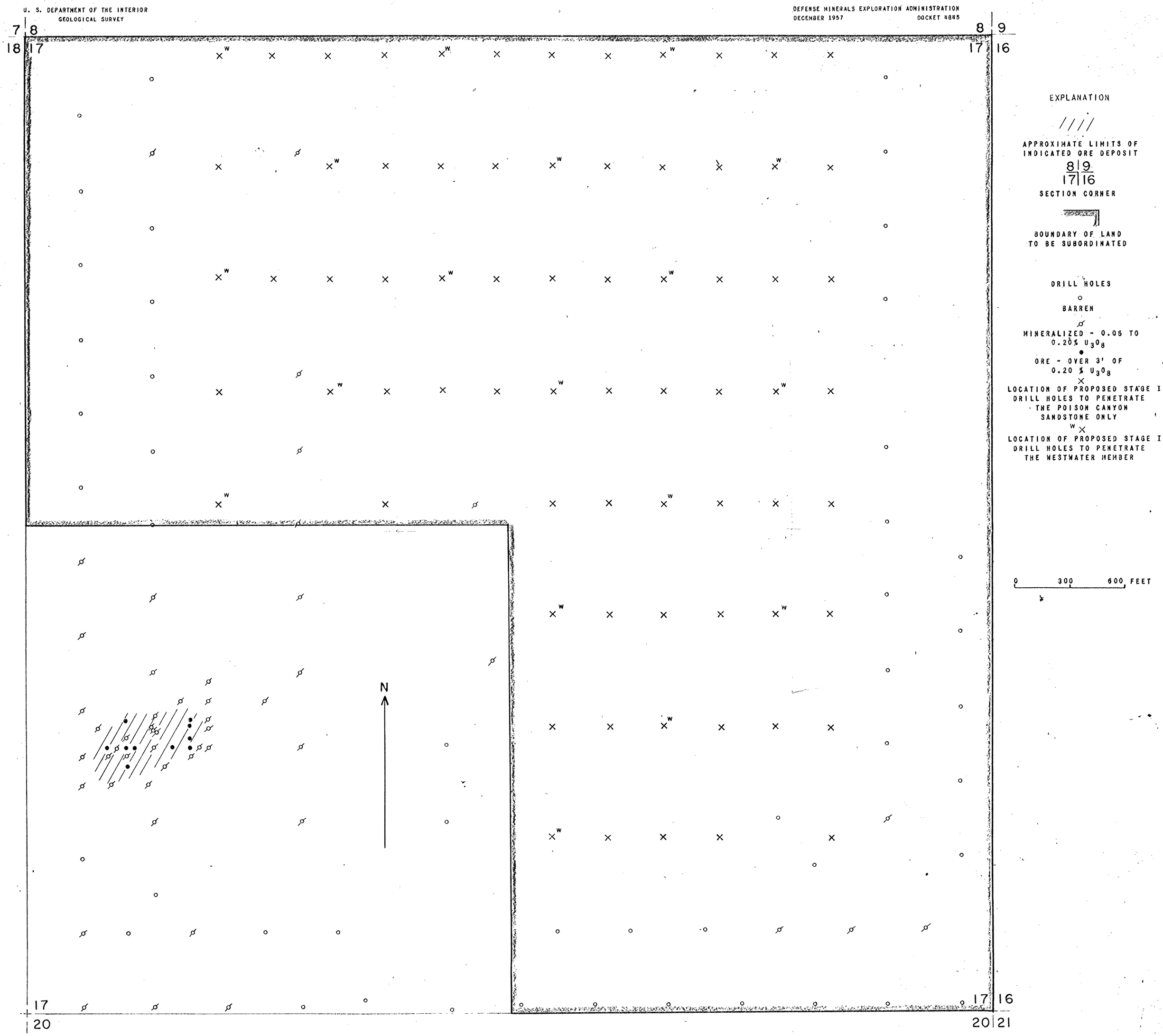

FIGURE 2.--PLANIMETRIC MAP OF SECTION 17, T.13 N., R.9 W., N.M.P.M. SHOWING LOCATION OF DRILL HOLES AND PROPOSED DRILL HOLES, WESTVACO MINERALS DIVISION OF FOOD MACHINERY AND CHEMICAL CORPORATION, McKINLEY COUNTY, NEW MEXICO.