UNITED STATES
DEPARTMENT OF THE INTERIOR
~~DEFENSE MINERALS EXPLORATION ADMINISTRATION~~
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado
December 1, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 5 1958

DATE	INITIALS	CODE
12/5	C	220
"	JH	110
12/5	JWC	700

Memorandum

To: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4047 (Uranium) Contract Idm-E943, Charles M. Coleman & Associates, (Clyde, Marsh, and Longport groups of claims) Fremont County, Wyoming-FINAL PAYMENT

Enclosed are two copies of a memorandum to T. A. Christensen, dated November 25, 1958, relative to final payment under the terms of the subject contract.

J. W. Townsend

J. W. Townsend

Enclosures

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 5 1958

DATE	INITIALS	CODE

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado
November 25, 1958

Memorandum

To: T. A. Christensen

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4047 (Uranium) Contract Idm-E943, Charles N. Coleman & Associates, (Clyde, Marsh, and Longport groups of claims) Fremont County, Wyoming - FINAL PAYMENT

Reference is made to our memorandum of September 4, 1958, whereby we forwarded the final Form MF-104, Operator's Monthly Report and Voucher, for June 1958, and requested that you withhold an amount of $500.00 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 November 10, 1958.

Basis for Final Payment

Total accepted cost		$20,290.22
Government participation:		
75 percent of $14,632.50	$10,974.37	
50 percent of $5,657.72	2,828.86	
Total		13,803.23
Total prior payments		13,303.23
Balance due the Operator		$ 500.00

Original signed by
W. TOWNSEND
J. W. Townsend

JDC:hsh

Paid $500.00
RRC
Randel R. Cooper
Authorized Certifying Officer
11-26-58 DMEA-59-65

cc: Chmn. Op. Comm. (2)
Harshman
Marshall, OME/DFC
Corres. File, Reg. III
Cooper
MF-104 file, Reg. III
Chron

FINAL DISTRIBUTION

MADE SEP 9 1958

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

Administrative Audit Difference Statement

Date: September 9, 1958
Payee's Reference: June 1958

DMEA 4047

Charles M. Coleman and Associates
139 North Clark St.
Chicago 2, Illinois

Gentlemen:

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

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 15 1958

DATE	INITIALS	CODE
9/15	C	220
"	Knowe	~~770~~ 700

Amount Claimed $ 5,783.62

Difference $ 125.90

Amount Approved $ 5,657.72

The reason for the difference was due to:

Disallowances

Drilling: Operator reports 4736 feet of drilling.
Drilling logs show 4716 feet of drilling.

Disallowed reported cost of 20 feet of drilling at $0.95 per foot ---------- $19.00

Disallowed Incidental Allowance for 20 feet of drilling at $0.22 per foot ------- 4.40

Disallowed Standby Time erroneously reported with drilling costs ---------- 90.00

(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

Bulldozer: Operator reports 5 hours bulldozer time at $12.50 per hour; however, the invoice indicates that 4 hours of bulldozing were performed at $17.50 per hour. Four hours of bulldozer time at $12.50 per hour is allowable.

Disallowed 1 hour of bulldozer time at $12.50 per hour ----------	$12.50
Total amount disallowed	$125.90

Reinstated the amount of $500.00 which was withheld in processing the August 1957 voucher.

Withheld an amount of $500.00 pending performance of additional work; or, if additional work is not approved by the Government and performed by the Operator, continue to withhold the amount of $500.00 pending resolution of matters prerequisite to closing the account.

224 New Customhouse
Denver 2, Colorado
September 4, 1958

Memorandum

To: T. A. Christensen

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

Subject: Docket No. DMEA 4047 (Uranium) Contract No. IAm-8943 Charles M. Coleman and Associates (Clyde, Marsh, and Longpert claims group) Fremont County, Wyoming - Progress Report for June 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.

The estimated units of Standby Time for Stage V have been exceeded. However, neither the unit cost for Standby Time nor the total cost for the category has been exceeded, therefore, the reported cost for Standby Time under Stage V is allowable. The examining engineer verbally concurred in the matter September 4, 1958.

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.

Disallowances

Drilling: Operator reports 4736 feet of drilling.
Drilling Logs show 4716 feet of drilling.
Disallow reported cost of 20 feet of drilling at $0.95 per foot ---------- $ 19.00

Disallow Incidental Allowance for 20 feet of drilling at $0.22 per foot ---------- 4.40

Disallow Standby Time erroneously reported with drilling costs ---------- 90.00

Bulldozer; Operator reports 5 hours bulldozer time at $18.50 per hour; however the invoice indicates that 4 hours of bulldozing were performed at $17.50 per hour. Four hours of bulldozer time at $18.50 per hour is allowable.

Disallow 1 hour of bulldozer time at $18.50 per hour ---------- 18.50

Total amount to be disallowed ----------$125.90

Reinstate the amount of $500.00 which was withheld in processing the August 1957 voucher.

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

Reconciliation with Amount Reported by the Operator on Form MF-104 for June 1958

Amount reported on Form MF-104 for June 1958 ---	$5,783.62
Amount to be disallowed ----------	125.90
Acceptable cost for June 1958 ----------	$5,657.72
Government participation at 50 percent ----------	$2,828.86
Amount to be reinstated -------> $500.00	
Amount to be withheld --------- $500.00	
0.00	
Balance due the Operator ----------	$2,828.86

Remarks:

Date of report ---------- July 15, 1958
Date received in field office ------ July 22, 1958
Date received in Regional Office --- September 4, 1958

Original signed by
J. W. TOWNSEND

J. W. Townsend

BSC:ds
cc: Chem. Op. Comm. 2
Bingham, BMRA/DPC
MF-104 file, Reg. III
Harshman)
Cooper) w/cy engr'r report
Chron.

DMEA
DEPARTMENT OF THE INTERIOR

SEP 4 - 1958
REGION III
DENVER, COLORADO

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
Sept. 3, 1958

Memorandum

To: Alternate Acting Executive Officer, DMEA Field Team, Reg. III

From: E. O. Binyon

Subject: Docket No. DMEA 4047 (Uranium) Contract Idm-R943, Chas. M. Coleman and Associates (Clyde, Marsh, and Longport claims group) Fremont County, Wyoming -- Progress report for June 1958

An inspection of the work completed during the period was made August 6, 1958. No work was in progress and no one was at the property when visited.

The location and depths of the holes were found to be as shown on the operator's map and as reported.

Eleven holes with a total depth of 4736 feet were drilled and a minor amount of dozer work was done during the month. A check of the cuttings from each hole with a counter gave considerably less count than reported, probably due to drilling with mud. The check was of no value. The logs were checked and only one hole -- Hole No. 2 -- had any appreciable count. The mineralization in this hole was from 166 to 180 feet and the 14 feet averaged .07 percent eU_3O_8. The operator shows 0.098 percent for 6 feet in this hole (172-178 feet). This however is incorrect. The log shows approximately 0.09 percent eU_3O_8 for a thickness of 1.25 feet (176.25-177.5).

Although the operator reported 4736 feet drilled and this footage is documented by the driller's invoice, the lithologic logs show a total footage of only 4716 feet. This is the footage allowed for payment and the amount for drilling should be $4480.20. The amount claimed for Incidental allowances is reduced to $1037.52 (4716 x $0.22), the amount allowed for payment. The MF-104 and 104A forms were checked and found to be in error. A tabulation of the amounts claimed and the amounts allowed for payment follows:

	Amount Claimed	Allowed for payment
Drilling 4736 feet at $0.95, including $90.00 for standby time (error)	4589.20	
Drilling 4716 feet at $0.95		4480.20
Bulldozer time 4 hrs. at $17.50, but claimed 5 hrs. at $12.50	62.50	
Bulldozer time 4 hrs. at $12.50		50.00
Standby time 9 hrs. at $10/hr. (also included with drilling amount)	90.00	
Standby time 5 hrs. at $10/hr.		50.00
Fixed Cost		
Incidental Allowances 4736 ft. at $0.22	1041.92	
Incidental Allowances 4716 ft. at $0.22		1037.52
Totals	$5783.62	$5617.72

The documentation for the bulldozer time shows only 4 hours, therefore, only 4 hours at the contract rate of $12.50/hr. are allowed. It is recommended that the operator be paid $2808.86 or the Government's share at 50 percent of $5617.72, the amount allowed for payment.

Inasmuch as the operator is to drill only 600 feet under Stage VI as offset drilling and this will probably be all the drilling that will be approved, it is suggested that $500.00 or at least a part of this amount be withheld pending completion of the 600 ft. and receipt of the final report. A copy of the map, logs and lithologic logs have been retained in this office. The contract expires Sept. 1, 1958.

E. O. Binyon
E. O. Binyon
Mining Engineer

EOB/mw
cc: 6
Idm-2943
chron

INVOICE

208 Boulder Bldg.
Tulsa, Oklahoma
PHONE Gibson 7-8847

B. C. Couch Drilling Co.

Teton Hotel
Riverton, Wyo.
PHONE UL6-2271

TO:

Charles M. Coleman and Associates
c/o Ford and Fox, Agents
Riverton, Wyoming

DATE: July 3, 1958

INVOICE NO: D #3

For Drilling on Clyde Claims for month of June, 1958

4,736' @ $0.95 per foot.	=$4,499.20
9 hrs. Standby @ $10.00 per hr.	90.00
Total:	$4,589.20

July 7, 1958

Charles M. Coleman and Associates
Ford and Fox, Agent
Box 420
Riverton, Wyoming

June 21, 4 hrs D8 dozer @ $17.50 $70.00

White Const' Co.
per Leon White
Box 686, Riverton, Wyo.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED SEP 15 1958

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1958 Docket No. DMEA 4047 Contract No. Idm-E 943
Operator's Name Charles M. Coleman and Associates Minerals Uranium
Address 139 North Clark Street, Chicago, Illinois
Contract Amount, $18,316.00 Government Participation: 75 % Amount, $13,737.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	4,589.20	9,484.00	14,073.20			
Bulldozing	62.50	775.00	837.50			
~~Crosscutting~~ Standby	90.00	100.00	190.00			
Incidental ~~Exploring~~ Allowance	1,041.92	1,672.00	2,713.92			
(2) Labor and Supervision:						
~~Exxxx~~ Sampling		717.00	717.00			
Supervision		1,100.00	1,100.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Sample Containers		6.00	6.00			
(4) Operating Equipment:						
Rental		140.00	140.00			
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
~~Sampling and~~ Analysis		110.50	110.50			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Radiometric logging		444.00	444.00			
Accounting		84.00	84.00			
TOTALS	5,783.62	14,632.50	20,416.12	2,828.86	14,632.50	17,461.36

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

Date 7-15-58 *Payee Charles M. Coleman and Associates

Per Charles M. Coleman Title Attorney-in-Fact

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

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

500.00 Prorated
500.00 Withheld

(Instructions on reverse)

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

$2828.86

Signature
(Authorized Certifying Officer)

Date 9/9/58 Vou. No. DMA 59-35

(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. DMA 6942 in accordance with the terms of the contract.

Signature E. O. Bunyan (Mining Engineer) Title Mining Engineer Date August 20, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: Checked for Engineering Allowability

Signature J. W. Townsend Title alternate Acting Executive Officer Date SEP 5 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

RECEIVED SEP 15 1958

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1958 Docket No. DMEA 4037 Contract No. 10-E 919
Operator's Name Charles A. Coleman and Associates Minerals Uranium
Address 137 N. Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage III								
Drilling-Core Drill	1 ft.	1,376.00	1720	3,696.00 ✓	4620	80¢		
Crosscutting-Chem. Assays	1 spl	10.00	3	10.00 ✓	3	3.33		
Raising-Incidental Allowance	1 ft.	378.40	1720	1,010.40 ✓	4620	22¢		
Stage IV								
Drilling-Core Drill	1 ft.	2,384.00	2980	2,384.00 ✓	2980	80¢		
Drilling-Core Standby	1 hr.	100.00	10	100.00 ✓	10	10.00		
Incidental Allowance	1 ft.	655.60	2980	655.60 ✓	2980	22¢		
Stage V								
Stripping-Core Drill	1 ft.	4,009.20	4736	4,009.20 ✓	4736	85¢		
Trenching-Bulldozing	hr.	62.50	5	62.50 ✓	5	12.50		
Test Pits-Standby	hr.	90.00	9	90.00	9	10.00		
Roadwork-Trails								
Incidental Allowance	ft.	1,041.92	4736	1,041.92 ✓	4736	22¢		
Total Distributed Costs		9,723.62		20,416.12				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 7-15-58 Operator Charles M. Coleman and Associates.

Per [signature] Title Attorney-in-Fact.

Remarks:

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

(Instructions on reverse)

(For Government use only)

C.P. Bunyon

Note
Drilling amount should be $4499.20
and the dozer time 4 hrs @ 12.50/hr
or $50.00 for a total of $5681.12

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED SEP 15 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

(Stage II Completed)

Month of June 1957 Docket No. DMEA 4047 Contract No. 10-C 943

Operator's Name Charles H. Coleman and Associates Minerals Uranium

Address 139 North Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage II								
Bulldozing	Hr.	0.00	0	0.00	0	0.00	92	13.00
Drilling	Ft.	2,032.00	2400	2,032.00	2400	.010	2500	1.00
Geologist	No.	600.00	5/6	600.00	5/6	600.00	5/6	600.00
Sampler	Hr.	325.00	"	325.00	"	"	"	" See Below
Containers	Lot	3.00	Lot	3.00	Lot	3.00	Lot	3.00
Truck Rental	Mi.	70.00	700	70.00	700	0.10	700	0.10
Logging	Ft.	240.00	2400	240.00	2400	0.10	2500	0.10
Payroll Taxes & Ins.		0.00	0	0.00	0	0.00	20% of	Payroll
Accounting Job		42.00	Job	42.00	1	42.00	1	42.00
Chemical Analysis	Each	16.00	4	16.00	4	4.00	16[illegible]	5.00
Total Distributed Costs		3,236.00		3,236.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 7-15-58 Operator Charles H. Coleman and Associates

Per [signature] Title Attorney-in-Fact.

Remarks: * 90 hours @ $1.75 plus 75 hours time over 40 hours per week @ 2.625

** $1.75 per hour plus time and one-half rate over 40 hours per week (maximum $325.00 for Stage II)

→ 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)

E. Johnson

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

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
(Stage I Completed)

Month of June 195 7 Docket No. DMEA 4047 Contract No. Ida-E 943

Operator's Name Charles H. Coleman and Associates Minerals Uranium

Address 139 North Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage I								
~~Trenching~~								
~~Ditching~~ xxxxx Bulldozing	Hr.			775.00	62	12.50	92	13.00
~~Crosscutting~~ xxxxxxxxx Drilling	Ft.			1,372.00	1960	.70	1960	1.00
~~Winzing~~ xxxxxxSuov. Geolog.	Mo.			600.00	1	600.00	1	600.00
~~Shafts~~ xxxxx Sampler	Hr.			392.00			*$1.75/hr plus time	
~~Winzes~~ xxxxx Containers	Lot			3.00	Lot	3.00	Lot	3.00
~~Drifting~~ xxxxxxxxxxxtructental	Ft.			70.00	700	0.10	700	0.10
~~Cross-cuts~~ xxxxxx								
~~Radial~~ xxxxxxxxxlogging	Ft.			196.00	1960	0.10	1960	0.10
~~Auger~~ xxxxxxPayroll taxes								
~~Stripping~~ xxxxxxx Ins.				0.00	0	0.00	55 of	Payroll
~~Trenching~~ xxxxxxx Accounting								
~~Test Pits~~ xxxxxxxxxxxxx Job				42.00	Job	42.00	1	42.00
~~Roads and Trails~~ Chemical Analysis	Sol.			84.00	24	3.50	100	5.00
Total Distributed Costs				3,534.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 7-15-58 Operator Charles H Coleman and Associates

Per [signature] Title Attorney-in-Fact

Remarks: *$1.75 per hour plus time and one-half rate over 40 hours per week (maximum for Stage I is $392.00)

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

(Instructions on reverse)

E O Bryson

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

ROBERT FORD
MINING GEOLOGIST

BLAKE FOX
PETROLEUM GEOLOGIST

FORD & FOX
Consulting Geologists
206 S. BROADWAY
RIVERTON, WYOMING

P.O. BOX 428

UL6-3468

July 9, 1958

REPORT ON WORK ACCOMPLISHED UNDER STAGE V
EXPLORATION PROJECT CONTRACT
CHARLES M. COLEMAN, ET. AL.
DOCKET NO. DMEA-4047
CONTRACT NO. Idm-E 1133

INTRODUCTION

All drilling under Stage V of the above named contract was completed on June 30, 1958. The drilling was restricted to the Clyde claim group located in Sections 22 and 23, T32N, R91W, and was as per instructed in Amendment No. 5 and No. 6 of the above named contract. Eleven rotary non-core holes were drilled totaling 4,736 feet or 1,314 feet less than the maximum allowed by the DMEA offices.

EXPLORATION DRILLING

Drilling under Stage V was started on June 13, 1958 with one Failing and one Mayhew drill. Samples were collected and stored from both air and water circulated mediums.

Drill hole locations were surveyed and are plotted on the accompanying map with reference to Government subdivisions and the Clyde claim survey. Accompanying plan map shows the location and designation of holes drilled.

Samples were logged lithologically and checked for radioactivity with a Model 111B Scintillation Counter. Samples were collected and saved. However, no samples were taken for chemical assays because all Stage V drill holes were drilled with heavy mud.

All holes were probed by Century Geophysical Corporation, Uranium Division, Grand Junction, Colorado. Probe records accompanying this report show Gamma, and resistivity curves. The accompanying chart of drill hole depths also gives information on mineralization encountered. The proper method of interpreting the %eU_3O_8 from the Century gamma logs is as follows:

1. Establish background count.
2. Take note of sand-shale horizons to select proper interval of anomalous thickness.

3. a) Using a planimeter:

$$\frac{2 \times \text{area} \times \text{scale (250 cps)}}{\text{Thickness}} = \text{Ave. cps}$$

b) Using engineers scale:

Average cps each 1' interval of anomaly then total average cps for anomaly and divide by total thickness = Ave. cps.

The above steps give average cps for the anomalus thickness. This average cps should be related to the attached correlation curve found very accurate in the Gas Hills area. The curve is related to dry holes. The Clyde claims were drilled with mud of approximately 70 lb. density. Hole size of 4½ inches and 70 lb. mud will decrease the cps 20%. Therefore, average cps x 120% = cps for interpretation on correlation curves.

Hole No.	Total Depth	Elevation	Mineralization Footage	Mineralization Counts per second
1	390	6630	109-115	38
2	360	6660	168-184 172-178 332-337 341-349	170 248 30 51
3	390	6680	220-245	15
4	390	6690	120-136	30
5	530	6750		
6	600	6740		
7	450	6630	106-110 115-118	77
8	360	6630		
9	400	6660		
10	360	6560		
11	506	6570	182-185	18

GEOLOGY AND MINERALIZATION

The Stage V drilling confirmed the presence of significant, wide spread mineralization. Such mineralization is confined to two zones, as indicated by hole No. 2 on the east end of the Clyde claim No. 10. The upper mineralized zone is in a well developed sandstone as indicated on the resistivity log of hole No. 2. This sandstone horizon is also mineralized in hole No's. 4, 7 and 8.

The sandstone without mineralization is apparent in holes 1 and 10, it is slightly developed with a shale parting in hole No. 5.

The Century Geophysical Corporation logs make for easy interpretation when sets of logs forming a cross section are viewed as such. The following cross sections should be observed as looking east (northern most hole on the left) and with the hole depths all adjusted to a horizontal plane with Hole No. 1 as the datum at 20 feet of depth.

Cross Section	Hole No.	Depth Equal to Datum of 20' on Hole No. 1
1	1	100'
	2	58'
	3	84'
2	4	55'
	5	98'
	6	77'
3	7	41'
	8	65'
	9	73'
4	10	57'
	11	64'

Drill centers are too distant to allow close interpretation of the structure, but apparently some generalizations can be made as to fault structure from the common datum listed above and elevations as listed.

1. A fault, trending north-south between holes No. 1, 2, 3 and 4, 5, 6, the east side is down thrown.

2. A fault, trending north-south between holes No. 7, 8, 9 and 10, 11; or a misinterpretation of the mineralized sandstone zone, thought to be easily followed on resistivity logs.

Ore grade material was found in hole No. 2 and significant mineralization in holes No. 4 and 7. Using the Century Geophysical Corporation's "Gas Hills" correlation curve, and allowing for mud cake and hole size as suggested by Century Geophysical Corporation, the following is the equivalent uranium assay

for Hole No. 2.

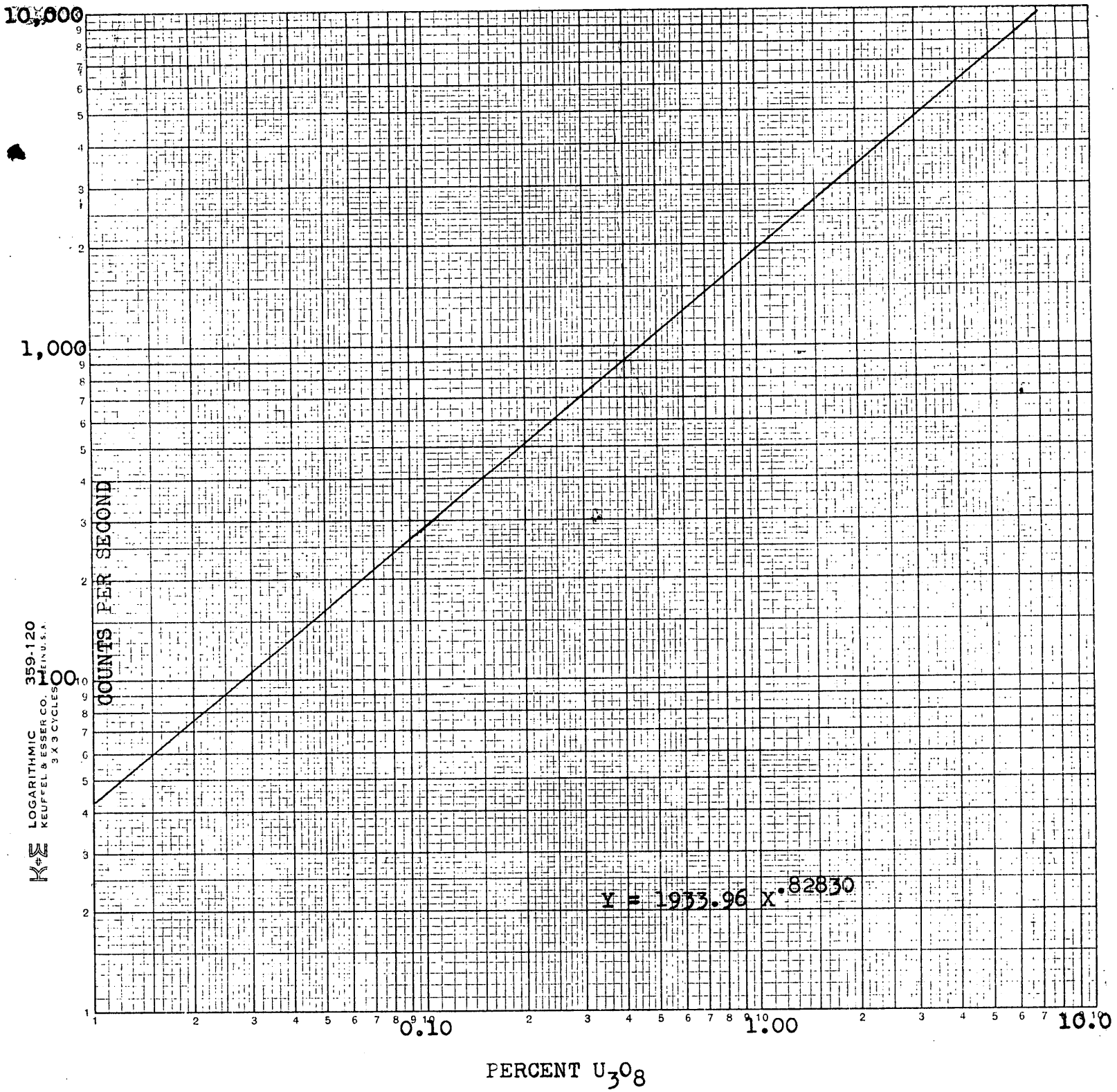
168' to 184'	16'=.08% eU_3O_8
172' to 178'	6'=.12% eU_3O_8

To date deep drilling on the Clyde claim group has been successful and additional work will be requested under terms of the contract.

Respectfully Submitted,

Robert Todd

July 8, 1950
Riverton, Wyoming


10,000
1,000
100
COUNTS PER SECOND
0.10
1.00
10.0
PERCENT U_3O_8
$Y = 1933.96\ X^{.82830}$
K&E LOGARITHMIC 359-120
KEUFFEL & ESSER CO. MADE IN U.S.A.
3 X 3 CYCLES

Hole Clyde #1

Bottomed June 20

T.D. 390'

0-8	Overburden. Brown sand. Poorly sorted.
8-24	Buff coarse-grained sandstone.
24-28	Buff clay.
28-48	Buff coarse-grained sandstone. Some pebbles.
48-58	Blue green clay.
58-70	Blue-green silt.
70-112	Green clay. Turns brown at 80 to 105.
112-132	Light blue coarse-grained sandstone. (Conglomerate).
132-154	Green siltstone and clay.
154-186	Light blue coarse-grained sandstone.
186-200	Green clay.
200-240	Matrix coarse-grained sandstone. Conglomerate. Fragments of chert.
240-254	Blue clay and silt.
254-312	Blue conglomerate sandstone. Fragments of chert.
312-318	Blue silt and clay.
318-350	Stringers of sandstone, clay and silt.
350-362	Dark brown carbonaceous shale.
362-390	Green-blue clay and silt.

Hole Clyde #2

Bottomed, June 21

T. D. 360'

0-10	Overburden. Brown sand.
10-22	Sandy clay. Brown to 12 then red.
22-96	Buff-green coarse-grained sandstone, lighter with depth. Went to water at 50.
96-122	Blue-green clay.
122-124	Buff coarse-grained sandstone.
124-164	Blue clay to 132 then red-brown. Hematite stain to 160.
164-190	Gray-blue coarse-grained sandstone. Some carbon.
190-230	Blue clay.
230-352	Blue-gray coarse-grained sandstone. Conglomerate. Stringers of blue clay throughout.
352-356	Brown shale. Carbonaceous.
356-360	Blue clay.

Hole Clyde #3

Bottomed, June 25

T.D. 390'

0-12	Overburden. Brown poorly sorted sand.
12-34	Buff coarse-grained sandstone.
34-52	Buff clay, turns blue at 40, turns red at 44, turns blue at 48. More sand with depth.
52-66	Buff very coarse-grained to pebbly sandstone, went to water at 60.
66-74	Blue clay.
74-118	Buff very-coarse-grained sandstone.
118-120	Blue clay.
120-134	Blue coarse-grained sandstone.
134-142	Blue clay. Hematite stain.
142-154	Blue coarse-grained sandstone.
154-230	Blue clay with trace of iron stain throughout. Much stain 148-176. No stain 202.
230-380	Blue coarse-grained sandstone. Stringers of blue clay from 286 on. Very little clay after 310.
380-390	Brown shale and coarse-grained blue sandstone.

Hole Clyde #4
Bottomed June 24

T.D. 360'

0-4	Overburden. Brown sand.
4-46	Buff coarse-grained sandstone. Trace clay at 12-20. Wint to water at 30.
46-56	Buff clay.
56-66	Buff coarse-grained sandstone.
66-80	Blue-green clay.
80-88	Blue coarse-grained sandstone.
88-132	Blue-green clay, stringers of sand at 106-108, hematite stain 114-118.
132-146	Blue coarse-grained sandstone with fragments of black chert.
146-148	Blue black clay.
148-154	Light gray coarse-grained sandstone and blue clay.
154-178	Blue-green clay.
178-194	Brown coarse-grained sandstone and blue clay.
194-196	Blue clay.
196-230	Blue green coarse-grained sandstone, with stringers of clay throughout.
230-242	Blue green clay.
242-352	Blue coarse-grained sandstone with traces of clay.
352-360	Blue coarse-grained sandstone with green clay and silt and brown shale.

Hole Clyde #5

Bottomed June 20

T.D. 520'

0-4	Overburden. Pink sand with pebbles.
4-16	Gray coarse-grained sandstone with pebbles.
16-40	Light brown sandy clay.
40-66	Light brown coarse-grained sandstone. Pebbles 50-66.
66-68	Blue clay.
68-72	Medium brown sandstone with clay.
72-80	Gray coarse-grained sandstone.
80-82	Brown sandy clay.
82-114	Gray very coarse-grained sandstone. Trace clay 104-106.
114-128	Blue medium-grained sandstone with clay.
128-170	Buff coarse-grained sandstone. Went to water at 135.
170-178	Blue clay.
178-190	Buff coarse-grained sandstone.
190-212	Blue clay.
212-216	Blue coarse-grained sandstone.
216-268	Blue clay and hematite stained red.
268-272	Blue coarse-grained sandstone.
272-278	Blue clay.
278-316	Blue fine-grained sandstone with clay.
316-324	Blue clay.
324-360	Light blue very coarse-grained sandstone.
360-376	Blue clay with brown fine-grained sandstone.
376-420	Blue fine-grained sandstone with mud and clay.
420-486	Blue very coarse-grained sandstone.
486-488	Blue very coarse-grained sandstone with fragments of black-brown carbonaceous shale.
488-520	Blue clay and siltstone. Fragments of black shale.

Hole Clyde #6

Bottomed June 18

T.D. 600'

0-6	Overburden. Light gray sand.
6-12	Light brown siltstone with pebbles.
12-16	Light brown very coarse-grained sandstone.
16-42	Light brown to pale green silt and clay.
42-76	Brown-green fine-grained sandstone. Blue with depth.
76-108	Blue very coarse-grained sandstone.
108-124	Light green-blue clay.
124-172	Light blue very coarse-grained sandstone. Stringers of clay 134-140. Color of sand, light brown at 150 to 172.
172-246	Blue clay. Iron stain 216-246.
246-268	Gray very coarse-grained sandstone.
268-318	Blue clay and silt.
318-330	Gray very coarse-grained sandstone.
330-336	Blue clay.
336-340	Gray-blue very coarse-grained sandstone.
340-374	Samples contain light brown and green clay, light blue silt and very fine grained sandstone, and coarse-grained gray sand in equal amounts. Trace of pyrite.
374-480	Blue clay and silt.
480-546	Gray coarse-grained sand, fragments of dark brown shale.
546-600	Samples contain about equal amounts of green clay and silt, medium-grained sand, some fragments of dark brown shale.

Hole Clyde #7

Bottomed June 17

T.D. 440'

0-32	Buff coarse-grained sandstone. Very coarse near bottom.
32-38	Brown and green clay.
38-52	Green very fine-grained sandstone. (silt). Red stained 44-50.
52-68	Gray coarse-grained sandstone. Went to water 62.
68-100	Green clay. Stringers of coarse sand 78-84.
100-110	Gray coarse-grained sandstone.
110-134	Blue gray very coarse-grained sandstone and clay. (Conglomerate).
134-162	Green-blue clay.
162-168	Gray-blue very coarse-grained sandstone.
168-174	Green clay and silt.
174-178	Green-gray very coarse-grained sandstone.
178-202	Green clay. Hematite stained 192-202.
202-228	Conglomerate. Fragments of quartz. Some pyrite. Matrix fine sandstone?
228-262	Green clay.
262-276	Gray very coarse-grained sandstone.
276-286	Green silt. Hematite stain.
286-316	Gray very coarse-grained sandstone.
316-362	Green silt and clay. Hematite stain.
362-400	Dark brown to black carbonaceous shale.
400-440	Green silt and clay and light tan clay.

Hole Clyde #8

Bottomed June 17

T. D. 390'

0-4	Overburden. Brown sand.
4-34	Light brown coarse-grained sandstone. Some clay 12-18.
34-48	Blue to 40 then brown silty and clay.
48-56	Buff coarse-grained sandstone.
56-72	Clay, blue to 62 then red to 70 then blue to 72.
72-86	Blue green coarse-grained sandstone and clay.
86-96	Blue-green clay.
96-102	Blue-green coarse-grained sandstone.
102-114	Blue-green clay.
114-140	Blue-green coarse-grained sandstone. Trace clay at 130-132.
140-176	Blue-green clay and silt. Trace Hematite stain.
176-180	Blue green coarse-grained sandstone and clay.
180-192	Blue-green clay.
192-224	Blue coarse-grained sandstone.
224-340	Conglomerate, chert pebbles and quartz pebbles, stringers of sand and mud matrix sandstone, little mud from 286-312.
340-362	Bright green siltstone.
362-380	Dark brown carbonaceous shale.
380-390	Bright green siltstone and mud.

Hole Clyde #9

Bottomed, June 25

T.D. 400'

0-12	Buff coarse-grained sandstone and clay.
12-16	Green clay.
16-24	Green coarse-grained sandstone and clay.
24-32	Green and brown clay.
32-44	Buff coarse-grained sandstone. Went to water at 40.
44-46	Blue clay.
46-74	Buff coarse-grained sandstone.
74-82	Blue clay. Trace iron stain.
82-84	Blue coarse-grained sandstone.
84-114	Blue clay. Very strong iron stain to 100.
114-128	Blue gray coarse-grained sandstone.
128-156	Blue clay. Trace iron stain throughout.
156-158	Blue coarse-grained sandstone.
158-166	Blue clay.
166-174	Blue-green coarse-grained sandstone.
174-190	Blue green clay.
190-194	Blue-green coarse-grained sandstone.
194-216	Blue clay. Very light blue clay 202-216.
216-272	Light gray coarse-grained sandstone. Green clay and silt throughout.
272-294	Green clay.
294-306	Blue coarse-grained sandstone.
306-334	Blue clay.
334-384	Gray very coarse-grained sandstone. (Conglomerate). Fragments of chert. Stringers of green silt.
384-400	Black-brown carbonaceous shale.

Hole Clyde #10

Bottomed June, 17

T.D. 360'

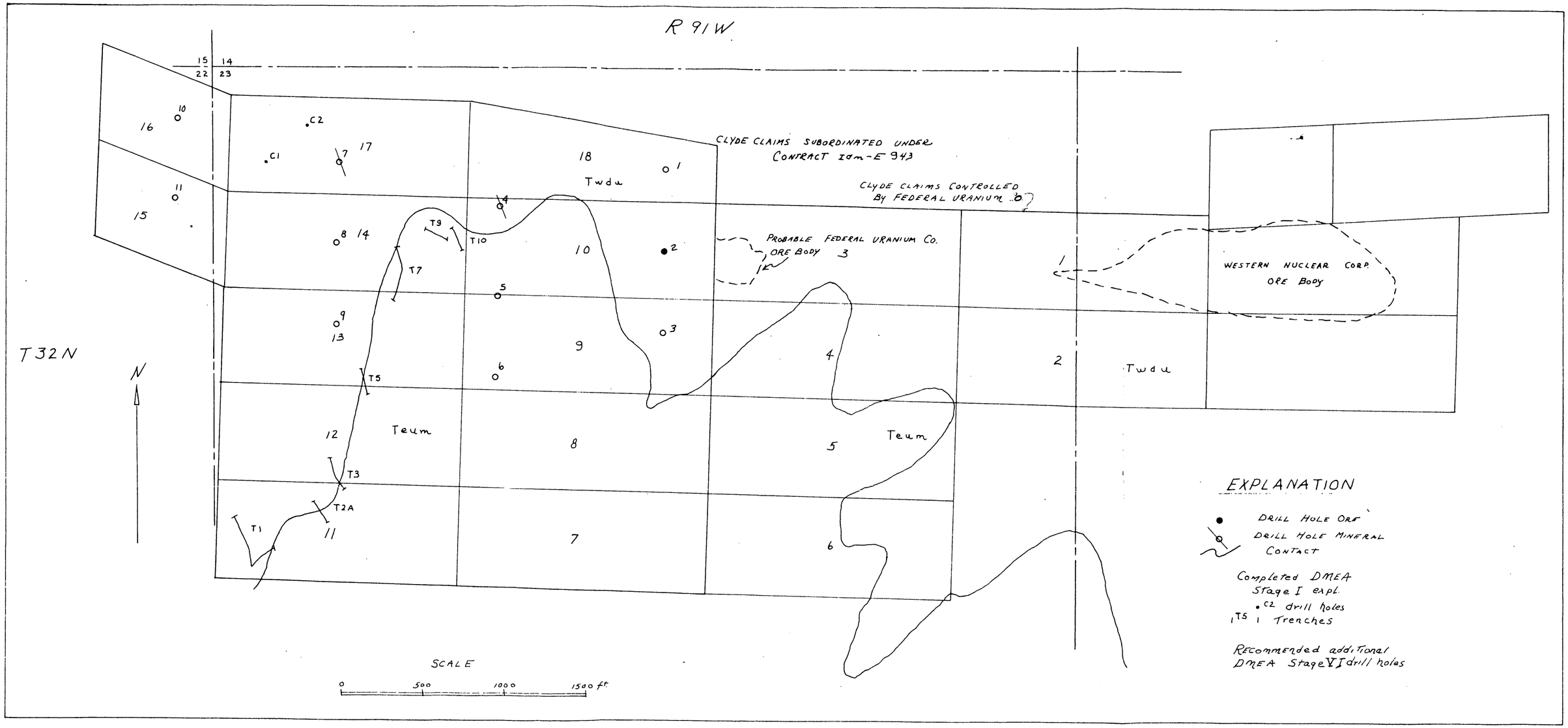
0-10	Overburden. Brown coarse grained sand.
10-14	Brown fine-grained sandstone.
14-20	Buff coarse-grained sandstone.
20-40	Brown fine to medium-grained sandstone with clay.
40-52	Green-brown fine-grained sandstone.
52-66	Blue coarse-grained sandstone.
66-82	Gray medium-grained sandstone with clay. Went to water at 76'.
82-92	Blue coarse-grained sandstone.
92-96	Blue-green clay.
96-116	Blue coarse-grained sandstone.
116-122	Blue clay.
122-144	Blue very coarse-grained sandstone.
144-150	Blue clay.
150-182	Blue very coarse-grained sandstone. Trace of clay 164-168.
182-202	Red to 194 then blue clay. Iron stained.
202-216	Blue very coarse-grained sandstone.
216-226	Blue clay and silt.
226-230	Blue very coarse-grained sandstone.
230-256	Blue clay and silt. Iron stain 242-248.
256-262	Blue very coarse-grained sandstone.
262-290	Blue clay.
290-292	Blue cosrse-grained sandstone.
292-302	Black carbonaceous shale.
302-360	Gray and green fine-grained sandstone. Trace of iron stain throughout. Chert fragments 330-346. Stringers of green shale throughout.

Hole Clyde #11

Bottomed, June 14

T.D. 506'

0-4	Overburden. Brown sand.
4-16	Brown coarse to medium-grained sandstone.
16-42	Pale green fine-grained sandstone and clay.
42-44	Blue very fine-grained sandstone.
44-46	Brown medium-grained sandstone.
46-52	Pale green medium-grained sandstone.
52-54	Brown medium to coarse-grained sandstone.
54-58	Pebble Conglomerate. Matrix fine-grained sandstone. Chert and gabble pebble.
58-62	Pale green fine-grained sandstone.
62-104	Blue gray very coarse-grained sandstone. Went to water at 88'. Much clay in the wet samples.
104-144	Pale blue very fine-grained sandstone. Contains pyrite.
144-174	Pale blue very coarse-grained sandstone.
174-184	Pale blue very fine-grained sandstone. Some pyrite.
184-188	Pale blue coarse-grained sandstone.
188-198	Pale blue very fine-grained sandstone with much blue clay, some pyite.
198-208	Pale blue coarse-grained sandstone. Some pyrite.
208-226	Pale blue fine-grained sandstone.
226-236	Pale blue coarse-grained sandstone.
236-268	Pale blue sandstone.
268-304	Pale blue silt and clay. Iron stain. Pyrite. Some coarse-grained sand at 296-300. Slightly finer grained at 268.
304-326	Black-brown shale. Carbonaceous.
326-404	Pale blue fine-grained sandstone. Green shale.
404-452	Green very fine-grained sandstone and blue clay.
452-502	Red clay and red fine-grained sandstone.
502-506	Gray fine-grained sandstone with chert fragments.



MAP OF CLYDE CLAIM GROUP — FREMONT COUNTY WYOMING

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 15 1958

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado
October 24, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket DMEA-4047 (Uranium) Contract Idm-E943
Charles M. Coleman & Associates, (Clyde, Marsh, and Longport groups of claims) - Fremont County, Wyoming, Operator's Monthly Progress Report and Voucher for the month of August, 1957

Enclosed is one complete copy of the Operator's Accounting Report for the month of August, 1957, plus one additional copy of Form MF-104, Operator's Monthly Report and Voucher.

One complete copy of the Operator's Accounting Report, except for Form MF-104, was forwarded to you by our letter of October 16, 1957, together with two copies of the Operator's final report and two copies of a joint memorandum pertaining to termination of the contract and issuing of a certification of discovery or development.

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

Enclosures

JDC:hmh

cc: Townsend
Corres. file, Reg. III
Chron

DATE 10/28/57 11 CODE 110 700

58-50

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

FINAL DISTRIBUTION MADE OCT 23 1957

Administrative Audit Difference Statement

Charles M. Coleman & Associates
119 N. Clark Street
Chicago 2, Illinois

Date: October 22, 1957
Payee's Reference: August 1957

Gentlemen:

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

Amount Claimed $ 3,139.60

Difference $

Amount Approved $ 3,139.60

The reason for the difference was due to:

Withhold: $500.00 pending resolution of matters prerequisite to closing the account.

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

Very sincerely yours,

RRC

[redacted]
[redacted]

Randal R. Cooper
Fiscal Officer, Region III

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

224 New Customhouse
Denver 2, Colorado
October 21, 1957

Memorandum

To: H. A. Christensen

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

Subject: DMEA Docket 4047 (Uranium) Contract Idm-1943, Charles M. Coleman and Associates (Clyde, Marsh and Longport claim groups) Fremont County, Wyoming - Operator's Monthly Progress Report for the month of August, 1957 (Includes July, 1957 progress)

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

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for August, 1957, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations, except for the following deduction:

Withhold an amount of $500.00 pending resolution of matters prerequisite to closing the account. All currently approved Stage IV drilling has been completed, and the Operator has requested that the contract be terminated in its present status.

Remarks:

Date of Report----------September 7, 1957
Date Received in Field Office---------September 23, 1957
Date Received in Region Office--------October 18, 1957

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

Enclosures

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

DMEA
DEPARTMENT OF THE INTERIOR

OCT 18 1957
REGION III
DENVER, COLORADO

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
October 17, 1957

Memorandum

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

From: E. O. Binyon

Subject: Docket DMEA 4047 (Uranium) Contract Idm-E943, Charles M. Coleman and Associates (Clyde, Marsh and Longport claims groups) Fremont County, Wyoming -- Progress report for August 1957

The property was visited on July 24 and again on September 4, 1957. No work was in progress on either visit, however, the progress and completed work was discussed with the company's geologist. On the first inspection the geologist stated that the drilling had been suspended temporarily after the completion of 5 of the 12 holes approved for Stage IV. On the second inspection, he reported that all of Stage III drilling had been completed. In both instances, a field check was made of the holes reported drilled.

As reported, 12 holes with a total footage of 2980 feet were drilled during July and August 1957. The holes were located and drilled to the depths as shown on the map accompanying the operator's report. Hole data is given below:

Claim	Hole No.	Depth Ft.	Depth of approx. ore grade mineralization	Probe U_3O_8	Depth Mineralized From To	Aver. Grade
Longport 1	3N	265	238-239	.102	237-244	.076
			241	.11		
			(238-241 = .094)			
Longport 1	3S	265	260.5-261	.16	259-262	.091
			260-262	.135		
Longport 1	3E	265	238-239	.097	236-240	.067
Longport 1	3W	265	252-254	.096	252-255	.084
			253	.12		
Longport 3	9N	235	212-213	.11	211-215	.088
			219-222	.129	219-222	.109
Longport 3	9S	235	-	-	-	-
Longport 3	9E	235	-	-	228-229	.07
Longport 3	9W	235	215.5-216	.08	215.5-216.5	.065
			223-225	.128	220-227	.148
			(220-227 = .148)			
Longport 5	13N	245	232-233	.152	228-229	.05
Longport 5	13S	245	-	-	-	-
Longport 5	13E	245	-	-	238-239	.04
Longport 5	13W	245	225-227	.221	224-228	.194
			(224-228 = .194)			

A check of the cuttings from holes 3N, E, S and W gave a reading between .05 and .08 percent eU_3O_8, holes 9N and 9W read .06 and about .10 percent eU_3O_8 respectively, and holes 13N and 13W both showed about .08 percent eU_3O_8.

The MF-104 and 104A forms except for an arithmetic error of $10.00 in the drilling cost under "Totals Previously Reported" were found to be correct. The drilling cost under Totals Previously Reported should be $7,100.00 and the amount under Totals to Date $9,484.00, thereby making the totals under each heading 11,492.90 and 14,632.50 respectively.

The work was done in conformance with the terms of the contract and is properly documented. It is recommended that the operator be paid $2,354.70, the Government's share at 75% participation of $3,139.60 the total amount claimed.

Only 4 copies of the MF-104A forms were received in this office.

E. O. Binyon
E. O. Binyon
Mining Engineer

EOB/mw cc: 6 Lam-E943 chron

W.O. Copy of MF-104

One complete copy of report except for Form MF-104 sent to W.O. as advance info. re trans. & final report

Form MF-105 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1957 Docket No. DMEA 4047 Contract No. Idm-E 943
Operator's Name Charles M. Coleman and Associates Minerals Uranium
Address 139 North Clark Street, Chicago, Illinois
Contract Amount, $18,316.00 Government Participation: 75 % Amount, $13,737.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:		0	8			
~~Exploration~~ Rotary Non-core	2,384.00	7,110.00	9,494.00		7,100.00	9,484.00
Bulldozing		775.00	775.00			
Crosscutting						
~~Exploration~~ Stand-by	100.00	2	100.00			
Incidental Allowance	655.60	1,016.40	1,672.00			
(2) Labor and Supervision:						
Labor Sampling		717.00	717.00			
Supervision		1,100.00	1,100.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Sample Containers		6.00	6.00			
(4) Operating Equipment:						
Rental		140.00	140.00			
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		110.50	110.50			
Payroll Taxes						
Liability Insurance						
Radiometric logging		444.00	444.00			
		84.00	84.00			
(8) Contingencies (specify):						
TOTALS	$3,139.60	$11,502.90	$14,642.50	3,139.60	11,492.90	14,632.50

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

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

Date Sept. 7 1957 *Payee Charles M. Coleman and Associates

Per Albert A. Selling Title Attorney-in-Fact

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

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

(Instructions on reverse)

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

$ 1854.70

Signature RRC
(Authorized Certifying Officer)

Date 10-22-57 Vou. No. DMA-58-50
(See other side)

Note: Withheld 500.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEA 943 in accordance with the terms of the contract.

Signature E. O. Simpson ($2354.70) Title Mining Engineer Date October 17, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. M. Hardman Title acting Executive Officer Date OCT 21 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

INVOICE

B. C. COUCH DRILLING CO.

Toton Hotel
Riverton, Wyoming

Toton Hotel
Riverton, Wyoming

DATE: August 26, 1957

INVOICE NO:

TO: Lawrence Urquhart
Attorney
Riverton, Wyoming

For Drilling on Longport claims

2,980'	@	$.80 per foot	$2,384.00

PHONE DIXON 7-0747

INVOICE

B. C. COUCH DRILLING CO.

Teton Hotel

Riverton, Wyoming

Teton Hotel
Riverton, Wyoming

TO: Riverton Uranium
Att.: Robert Ford
Riverton, Wyoming

DATE: August 26, 1957

INVOICE NO:

For stand-by time on Longport claims

10 hrs.	@	$10.00 per hour	$100.00

9-20-57

W.O.

One copy of August 1957 Monthly Report, complete except for Form MF-104, Operator's Monthly Report and Voucher

MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

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

RECEIVED
OCT 21 1957
D.M.E.A.

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

(Stage IV Completed)

Month of August 195 7 Docket No. DMEA 4047 Contract No. Idm-E 943

Operator's Name Charles M. Coleman and Associates Minerals Uranium

Address 139 North Clark Street, Chicago, Illinois

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~~ Non-core	1 ft	2,384.00	2,980	$2,384.00	2980	80¢		
Churn								
Auger								
Stripping								
Trenching								
~~Descrxxx~~Drill Stand-by	1 hr	100.00	10	100.00	10	10.00		
Roads and Trails								
Incidental Allow.	1 ft	655.60	2,980	655.60	2980	22¢		
Total Distributed Costs		$3,139.60		$3,139.60				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 Sept. 7, 1957 Operator Charles M. Coleman and Associates

Per [signature] Title Attorney-in-Fact.

Remarks: Above accounting is total for the month of August and completed Stage IV drilling.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

Stage III completed previously -

"Costs This Month" and "Units This Month" columns should have no entries. All Stage III costs have been reported on previous vouchers. No Stage III costs reported for August on Form MF-104, Operator's Monthly Report and Voucher

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
OCT 21 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT
(Stage III Completed)

Month of August 1957 Docket No. DMEA 4047 Contract No. Iam-E 943
Operator's Name Charles M. Coleman and Associates Minerals Uranium
Address 139 N. Clark Street Chicago, Illinois

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~~ non-core	1 ft	1376.00	1720	3,696.00	4620	80¢		
Churn								
Auger								
~~Stripping~~ Chem. Assays	1 spl	10.50	3	10.50	3	3.50		
Trenching								
Test Pits								
Roads and Trails								
Incidental Allow.	1 ft.	378.40	1720	1,016.40	4620	22¢		
TOTAL DISTRIBUTED COSTS		1764.90		4,722.90				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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.

Charles M. Coleman and Associates

Date Sept. 7, 1957 Operator

Per [signature] Title Attorney-in-Fact.

REMARKS: Above accounting is total for month of August and completed Stage III drilling

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

Stage II completed previously—
"Costs This Month" and "Units This Month"
columns should have no entries. All
Stage II costs have been reported on
previous vouchers. No Stage II costs
are reported for August on Form
MF-104, Operator's Monthly Report
and Voucher

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
OCT 21 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

(Stage II Completed)

Month of August 1957 Docket No. DMEA 4047 Contract No. Idm-E 943
Operator's Name Charles M. Coleman and Associates Minerals Uranium
Address 139 N. Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage II								
~~Drilling~~ Bulldozing	Hr.	0.00	0	0.00	0	0.00	92	13.00
~~Crosscutting~~ Drilling	Ft.	2032.00	2480	2032.00	2480	.010	2500	1.00
~~Raising~~ Geologist	Mo.	600.00	5/6	600.00	5/6	600.00	5/6	600.00
~~Shaft~~ Sampler	Hr.	325.00	*	325.00	*	**	** See below	
~~Winze~~ Containers	Lot	3.00	Lot	3.00	Lot	3.00	Lot	3.00
~~Drifting~~ Truck Rental	Mi.	70.00	700	70.00	700	0.10	700	0.10
~~Cross Cut~~ ~~Chamber~~ Radiometric ~~Auger~~ logging	Ft.	248.00	2480	248.00	2480	0.10	2500	0.10
~~Stoping~~ Payroll taxes ~~Trenching~~ & Ins.		0.00	0	0.00	0	0.00	5% of Payroll	
~~Test Pits~~ Accounting ~~Roads and Trails~~ Job		42.00	Job	42.00	1	42.00	1	42.00
Chemical Analysis (per spl)		16.00	4	16.00	4	4.00	100	5.00
Total Distributed Costs		3236.00		3236.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 Sept. 7, 1957 Operator Charles M. Coleman and Associates

Per Albert W. Dellwig Title Attorney-in-Fact

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

(Instructions on reverse)

Remarks: * 90 hours @ $1.75 plus 75 hours time over 40 hours per week @ 2.625
** $1.75 per hour plus time and one-half rate over 40 hours per week (maximum $325.00 for Stage II)

(For Government use only)

Orig. copy also contained with orig. of report

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

(Stage I Completed)

Month of August 1957 Docket No. DMEA 4047 Contract No. Idm-E 943

Operator's Name Charles M. Coleman and Associates Minerals Uranium

Address 139 N. Clark Street, Chicago, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Stage I (Trenching)								
~~Drifting~~ Bulldozing	Hr.			775.00	62	12.50	92	13.00
~~Crosscutting~~ Drilling	Ft.			1372.00	1960	0.70	1960	1.00
~~Raising~~ Supv. Geolog.	Mo.			600.00	1	600.00	1	600.00
~~Shaft~~ Sampler	Hr.			392.00		*$1.75	/hr plus overtime	
~~Winzes~~ Containers	Lot			3.00	Lot	3.00	Lot	3.00
~~Drilling~~ Truck Rental	Mi.			70.00	700	0.10	700	0.10
Radiometric logging	Ft.			196.00	1960	0.10	1960	0.10
~~Stripping~~ Payroll taxes ~~Trenching~~ & Ins.				0.00	0	0.00	5%	of Payroll
~~Test Pits~~ Accounting								
Roads and Trails Job				42.00	Job	42.00	1	42.00
Chemical Analysis	Spl			84.00	24	3.50	100	5.00
TOTAL DISTRIBUTED COSTS				3534.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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 Sept. 7, 1957 Operator Charles M. Coleman and Associates

Per [signature] Title Attorney-in-Fact.

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

(Instructions on reverse)

REMARKS: * $1.75 per hour plus time and one-half rate over 40 hours per week (maximum for Stage I is $392.00)

(For Government use only)

Orig. copy also contained with original of report

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

See Operator's Final Report with

FT memo October 16, 1957, for copy

of Operator's letter September 7, 1957,

and narrative, dated September 6, 1957,
and 5 maps,
which were also attached to this report.

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpoint #3	Riverton Uranium Corporation	3E

LOCATION	COUNTY	STATE
	Fremont	Wyoming

DATE	TOTAL DEPTH	ELEVATION
July 19, 1957	265'	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B. C. Couch Drilling Co.		

PROBE INSTR.	SURFACE INSTR.
Babbel 610	Precision 111B

REMARKS: Background surface count = .027 mr/hr

R. M. Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
.01			
	0-2		Buff surface sand
	2-4		Buff poorly sorted arkosic sand
	4-6		
	6-8		
	8-10		
	10-12		
	12-14		
	14-16		
	16-18		
	18-20		
	20-22		
	22-24		
	24-26		
	26-28		
	28-30		
	30-32		
	32-34		
	34-36		

	Log	Chem. Assay		Sample No.	Geologic Data Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
37	.01				
38		36-38			
39					
40		38-40			
41					
42		40-42			
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55					
56		54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63					
64		62-64			
65					
66		64-66			White to buff fine to medium-grained arkosic sand
67					
68		66-68			
69					
70		68-70			
71					
72		70-72			Brown to buff sandy clay
73					
74		72-74			
75					
76		74-76			
77					
78		76-78			
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

SHEET No. 2 SHEET No 2

Hole No. 3E Continued Claim No. [illegible] Date July 18, 1987

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
87	.01				
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119	.02				
120		118-120			
121					
122		120-122			
123					
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135	.01				
136		134-136			
137					
138		136-138			
139					
140		138-140			
141					
142		140-142			
143					
144		142-144			
145					
146		144-146			
147					
148		146-148			
149					
150		148-150			
151					
152		150-152			
153					
154		152-154			
155					
156		154-156			
157					
158		156-158			
159					
160		158-160			
161					
162		160-162			
163					
164		162-164			
165					
166		164-166			
167					
168		166-168			
169					
170		168-170			
171					
172		170-172			
173					light gray to white medium to coarse-grained
174		172-174			arkosic sand
175					
176		174-176			
177					
178		176-178			
179					
180		178-180			
181					
182		180-182			
183					
184		182-184			
185					
186		184-186			

Hole No. 3E Continued Claim No. [illegible] Date [illegible]

R. M. Log		Chem. Assay		Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87	.02				
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			Gray to brown fine grained sand
119					
120		118-120			
121					
122		120-122			
123					[illegible]
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134	.03	132-134			

Depth	Log	Chem.	Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
235					
236	.04	134-136			
237	.04				
238	.15	136-138			
239	.10				
240	.22	138-140			
241	.02				
242	.01	140-142			
243					
244		142-144			Gray fine-grained poorly sorted
245					
246		144-146			
247					
248		146-148			
249					
250		148-150			
251					
252		150-152			Carbon Zone
253					
254		152-154			
255					
256		154-156			
257					
258		156-158			
259					
260		158-160			Carbon Zone
261					
262		160-162			
263					
264		162-164			
265					
266		164-166			Total Depth 265'
267					
268		166-168			
269					
270		168-170			
271					
272		170-172			
273					
274		172-174			
275					
276		174-176			
277					
278		176-178			
279					
280		178-180			
281					
282		180-182			
283					
284		182-184			
285					
286		184-186			

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longport # 2	Kerr-McGee Corporation	3W

LOCATION	COUNTY	STATE
	Fremont	Wyoming

DATE	TOTAL DEPTH	ELEVATION
July 18, 1957	265	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Couch Drilling Co.		

PROBE INSTR.	SURFACE INSTR
Babbel 610	Precision [illegible] B

REMARKS: Surface Background count = .035 mr/hr

R. M. Log		Chem. Assay	Sample No.	Geologic Data (Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization)
1	.02			
2		0-2		Buff poorly sorted surface sand
3				
4		2-4		
5				
6		4-6		
7				
8		6-8		Buff fine-grained sand
9				
10		8-10		
11				
12		10-12		
13				
14		12-14		Buff medium to coarse poorly sorted sand
15				
16		14-16		
17				
18		16-18		
19				
20		18-20		
21				
22		20-22		
23				
24		22-24		
25				
26		24-26		
27				
28		26-28		
29				
30		28-30		
31				
32		30-32		
33	.03			
34	.05 .06	32-34		
35	.06			
36	.05 .04	34-36		

R. M. Log		Chem. Assay		Sample No.	Geologic Data Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
37	.03				
38	.02	36-38			
39					
40		38-40			
41					
42		40-42			Buff to Brown muddy sand
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55					
56		54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63					
64		62-64			
65					
66		64-66			
67					
68		66-68			
69					
70		68-70			
71					Tan to buff medium to coarse poorly
72		70-72			sorted arkosic sand
73					
74		72-74			
75					
76		74-76			
77					
78		76-78			
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

SHEET No. 2 SHEET No. 2

Hole No. 314 Continued Claim No. Date 1957

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87	.02				
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		95-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			
123					
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M.	LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135	.02			
136		134-136		
137				
138		136-138		
139				
140		138-140		
141	.03			
142		140-142		
143				
144		142-144		
145				
146		144-146		
147				
148		146-148		
149				
150		148-150		
151				
152		150-152		
153				
154		152-154		
155				
156		154-156		
157				
158		156-158		
159				
160		158-160		
161				
162		160-162		
163				
164		162-164		
165				
166		164-166		
167				
168		166-168		
169				
170		168-170		
171				
172		170-172		
173				
174		172-174		
175				
176	.02	174-176		lt gray to white poorly sorted arkosic sand
177				
178		176-178		
179				
180		178-180		
181				
182		180-182		
183				
184		182-184		
185				
186		184-186		

SHEET NO. 3 SHEET NO. 3

Hole No. _____ Continued Claim No. _____ Date _____

R. M. Log		Chem. Assay		Sample No.	Geologic Data Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87					
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			
123					
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

RAD. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135 .02			
136	134-136		
137			
138	136-138		
139			
140	138-140		
141			
142	140-142		
143			
144	142-144		
145			
146	144-146		
147			
148	146-148		
149			
150	148-150		
151			
152	150-152		
153			
154	152-154		
155			
156	154-156		
157			
158	156-158		
159			
160	158-160		
161			
162	160-162		
163			
164	162-164		
165			
166	164-166		
167			
168	166-168		
169			
170	168-170		
171			
172	170-172		
173			
174	172-174		
175			
176	174-176		
177			
178	176-178		
179			
180	178-180		
181			
182	180-182		
183			
184	182-184		
185			
186	184-186		

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longport #5	Kiverton Uranium Corp.	13-N

LOCATION	COUNTY	STATE
NE NW Sec. 34, T33N-R90W	Fremont	Wyoming

DATE	TOTAL DEPTH	ELEVATION
8/21/57		

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Cook Drlg Co.		

PROBE INSTR.	SURFACE INSTR.
Babbel 610	Precision IN-B

REMARKS: Surface Background = .075 MR/HR

R. M. Log	Chem. Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization	
.00				
	0-2		Surface soil & silt - brn	.06
	2-4		SS - yl-buff, fg-csc, ark	.06
	4-6		" w/occ. fn pebble congl.	.06
	6-8		" (lt yl-buff) " "	.055
	8-10		" " " "	.055
	10-12		" " " "	.05
	12-14		" " " "	.05
	14-16		" " " "	.05
	16-18		" " " "	.055
	18-20		SS lt. yl-buff, fg-csc, ark	.06
	20-22		"	.06
	22-24		" (bright yl-buff) " " w/scatt. pebbles	.055
	24-26		" (basal foot w/red, clayey siltstn)	.055
	26-28		Siltstn - clayey, red-maroon, w/intbdd ss as above	.05
	28-30		" " " (ochre) " (fg) "	.055
	30-32		Siltstn m. buff, ochre, sandy, clayey, w/intbdd fg ss	.055
	32-34		upper foot as above; lower foot SS - yl-buff, fg mg, poly std, ark	.05
	34-36		SS - yl-buff, fg-mg, poly std, ark	.05

R. Log	Chem. Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization	
37 .00				
38	36-38		"	.045
39				
40	38-40		"	.065
41				
42	40-42		(fg-csc) "	.055
43				
44	42-44		"	.055
45				
46	44-46		" (w/ interbdd, buff, silty clay stn)	.05
47				
48	46-48		Siltstn — buff, ochre, maroon, clayey	.055
49				
50	48-50		SS - orange, fg, clayey w/ interbdd gn clay	.055
51				
52	50-52		SS - med yl-buff, fg-mg, prly std., ark	.055
53				
54	52-54		"	.05
55				
56	54-56		" (fg)	.055
57				
58	56-58		" (yl-buff) " " "	.05
59				
60	58-60		" (w/ a little variabred siltstn)	.05
61				
62	60-62		SS - yl-buff, fg, prly std., ark	.05
63				
64	62-64		" (fg-mg)	.045
65				
66	64-66		"	.045
67				
68	66-68		(bright yl-buff) "	.05
69				
70	68-70		" "	.055
71				
72	70-72		" "	.055
73				
74	72-74		" "	.045
75			Table	
76	74-76		~~[illegible]~~ lower of 00 to 13 ~~[illegible]~~ yl-buff, fg-csc, prly std, ark, lsm. stn.	.055
77				
78	76-78		SS - yl-buff, fg-csc, prly std, ark, lsm. stn.	.055
79				
80	78-80		"	.06
81				
82	80-82		"	.055
83				
84	82-84		"	.05
85				
86	84-86		"	.05

SHEET No. 2 SHEET No. 2

Hole No. B-N Continued Claim No Longfellow 1 & 5 Date 8/21/57

R. M. Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87 .100			
88	86-88		" .05
89			
90	88-90		" .055
91			
92	90-92		" .05
93			
94	92-94		" .055
95			
96	94-96		" .06
97			
98	96-98		" (w/ much interbld. gn & chocolate-red clay) .055
99			
100	98-100		" " .05
101			
102	100-102		" " .055
103			
104	102-104		claystone — gn-brn f-brecc gn, rounded, silty .06
105			
106	104-106		ss — fg-cg, subangl, poor sort, w/ interbld gn & many clay .055
107			
108	106-108		" .055
109			
110	108-110		" .055
111			
112	110-112		" mudstone w/ a little gn clay .06
113			
114	112-114		" " .06
115			
116	114-116		" " .06
117			
118	116-118		" " .055
119			
120	118-120		" " .055
121			
122	120-122		" " .06
123			
124	122-124		" " .055
125			
126	124-126		" (w much gn clay) .05
127			
128	126-128		as above w/ a little gn clay .05
129			
130	128-130		" " .045
131			
132	130-132		" .06
133			
134	132-134		" .06

R. M. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION	
135				
136	134-136		SS - buff, ark, fg-csc, w/much gn clay, sl/pyr (to lt gy)	.06
137				
138	136-138		" "	.055
139				
140	138-140		"	.05
141				
142	140-142		"	.055
143				
144	142-144		"	.055
145			(w/ a little gn clay)	
146	144-146		SS - lt gy, sl/pyr, ark, fg-csc, poly std.	.055
147				
148	146-148		" sample on top of sage brush	.08
149				
150	148-150		" (w/ little clay below this point)	.065
151				
152	150-152		"	.06
153				
154	152-154		"	.05
155				
156	154-156		"	.055
157				
158	156-158		"	.055
159				
160	158-160		"	.05
161				
162	160-162		"	.05
163				
164	162-164		"	.05
165				
166	164-166		"	.055
167				
168	166-168		"	.05
169				
170	168-170		"	.05
171				
172	170-172		"	.06
173				
174	172-174		"	.055
175				
176	174-176		" samples on top of sage brush	.065
177				
178	176-178		"	.07
179				
180	178-180		"	.055
181				
182	180-182		"	.055
183				
184	182-184		"	.065
185				
186	184-186		" (w/ a little gn clay)	.05

Hole No. 13-N Continued Claim No. Lonyprt #5 Date 8/21/57

R. M. Log		Chem. Assay		Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
187	.00				
188		186-88			" (w/considerable gn. clay) .06
189					
190		188-90			" (w/some " ") .055
191					
192		190-92			" " .06
193					
194		192-94			" " .055
195					
196		194-96			" (w/a little gn. clay) .055
197					
198		196-98			" " .06
199					
200		198-200			" " .06
201					
202		200-202			" " .06
203					
204		202-204			" " .06
205					
206		204-206			" " .055
207					
208		206-208			" " .06
209					
210		208-210			" (w/consid. gn clay) .06
211					
212		210-212			" " .065
213					
214		212-214			" " .06
215					
216		214-216			" " .06
217					
218		216-218			" " .055
219					
220		218-220			" (w/ much gn. clay) .05
221					
222		220-222			" " .065
223					
224		222-224			SS as above but buff & w/ much gn clay .06
225					
226	.00	224-226			SS - as above (gy) " " .06
227	.12				
228	.09	226-228			" " " .065
229	.06				
230	.00	228-230			" .055
231	.00				
232	.13	230-232			" .06
233	.17				
234	.03	232-234			SS - as above but buff again w/ much gn clay .06

R. V. Log	Chem.	Assay	Sample No.	Geology Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
235 .00				.065
236 .01	234-236			SS – as above, gy sjam, w/ much gn clay & some coal
237 .02				
238 .01	236-238			as above only coal lacking .055
239 .00				
240 .00	238-240			SS – gy, pyr, csc, ark w/ much coal .06
241 .00				
242 .00	240-242			as above but w/ gn clay abdt .065
243 .00				
244	242-244			.06 clay stn – bright gn w/ intr-bdd gy. SS as above
145				
146	144-146			
147				
148	146-148			
149				
150	148-150			
151				
152	150-152			
153				
154	152-154			
155				
156	154-156			
157				
158	156-158			
159				
160	158-160			
161				
162	160-162			
163				
164	162-164			
165				
166	164-166			
167				
168	166-168			
169				
170	168-170			
171				
172	170-172			
173				
174	172-174			
175				
176	174-176			
177				
178	176-178			
179				
180	178-180			
181				
182	180-182			
183				
184	182-184			
185				
186	184-186			

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longport	[illegible]	13-F

LOCATION	COUNTY	STATE
NE, NW [illegible]		

DATE	TOTAL DEPTH	ELEVATION
8/21/57		

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Cook [illegible]		

PROBE INSTR.	SURFACE INSTR.
Bobbel [illegible]	

REMARKS: Surface [illegible]

R. M. Log	Chem. Assay	Sample No.	Geologic Data (Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization)	
1 100				
2	0-2		Surface [illegible]	.06
3			[illegible]	
4	2-4		SS – yl-buff, fg-mg, ark [illegible]	.05
5				
6	4-6		"	.055
7				
8	6-8		SS – yl-buff, fg, poly [illegible], ark	.05
9				
10	8-10		"	.05
11				
12	10-12		"	.05
13				
14	12-14		SS – lt buff, fg [illegible], ark, [illegible] (pebble)	.06
15				
16	14-16		"	.055
17				
18	16-18		"	.055
19				
20	18-20		"	.055
21				.05
22	20-22		" (w/ [illegible] yl-buff, clayey [illegible])	
23				
24	22-24		SS – yl-buff, fg-cse, ark, conglte. (pebble)	.05
25				
26	24-26		"	.055
27				
28	26-28		"	.06
29				.065
30	28-30		" (w/ interbed buff & brn, clayey [illegible])	
31				.05
32	30-32		clay [illegible] yl-buff [illegible], w/ interbed SS as above	
33				
34	32-34		" ([illegible] is fg)	.055
35				
36	34-36		[illegible]	.05

°R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization
37	.100				
38		36-38			
39					
40		38-40			
41					
42		40-42			.05
43					
44		42-44			.05
45					
46		44-46			.045
47					.055
48		46-48			
49					
50		48-50			.065
51					
52		50-52			.055
53					
54		52-54			.05
55					
56		54-56			.05
57					
58		56-58			.05
59					
60		58-60			.055
61					
62		60-62			.045
63					
64		62-64			.045
65					
66		64-66			.045
67					
68		66-68			.045
69					
70		68-70			.05
71					
72		70-72			.05
73					
74		72-74			.05
75					
76		74-76			.05
77					
78		76-78			SS - lt buff, fg - 3 v/cal, prky std, ank, sl/lm .055
79					
80		78-80			.05
81					
82		80-82			.055
83					
84		82-84			.055
85					
86		84-86			.065

SHEET No. 2 SHEET No.

Hole No. 13-E Continued Claim No. Date 8/2/67

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type – Color – Softness – Unsightly Mineral – Carbon – Mineralization
87	100				
88		86-88			.06
89					
90		88-90			.06
91					
92		90-92			.055
93					
94		92-94			.05
95					
96		94-96			.05
97					
98		96-98			.055
99					
100		98-100			.055
101					
102		100-102			.05
103					
104		102-104			.055
105					
106		104-106			.055
107					
108		106-108			.055
109					
110		108-110			.055
111					
112		110-112			.055
113					
114		112-114			.055
115					
116		114-116			.055
117					
118		116-118			.06
119					
120		118-120			.055
121					
122		120-122			.06
123					
124		122-124			.055
125					
126		124-126			.055
127					
128		126-128			.055
129					
130		128-130			.05
131					
132		130-132			.05
133					
134		132-134			.05

R. M. Log	Chem. Assay	Sample No.	Geologic Data: Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization
135 .100			
136	134-136		.05
137			
138	136-138		.055
139			
140	138-140		.05
141			
142	140-142		.05
143			
144	142-144		.055
145			
146	144-146		.055
147			
148	146-148		.06
149			
150	148-150		.06
151			
152	150-152		.06
153			
154	152-154		.05
155			
156	154-156		.05
157			
158	156-158		.05
159			
160	158-160		.055
161			
162	160-162		.055
163			
164	162-164		.06
165			
166	164-166		.055
167			
168	166-168		.055
169			
170	168-170		.055
171			
172	170-172		.055
173			
174	172-174		.055
175			
176	174-176		.06
177			
178	176-178		.055
179			
180	178-180		.06
181			
182	180-182		.055
183			
184	182-184		.055
185			
186	184-186		.05

SHEET No. 2 SHEET No. 2

Hole No. 13-E Continued Claim No. [illegible] Date 2/21/57

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type - Color - Sorting - Conspicuous Mineral - Carbon - Mineralization
187	.06				
188		186-188			.05
189					
190		188-190			.05
191					
192		190-192			.055
193					
194		192-194			.06
195					
196		194-196			.06
197					
198		196-198			.06
199					
200		198-200			.06
201					
202		200-202			.06
203					
204		202-204			.055
205					
206		204-206			.055
207					
208		206-208			.06
209					
210		208-210			.06
211					
212		210-212			.065
213					
214		212-214			.05
215					
216		214-216			.05
217					
218		216-218			.055
219					
220		218-220			.05
221					
222	.02	220-222			[illegible]
223	.03				
224	.01	222-224			[illegible]
225	.01				
226	.01	224-226			.06
227	.01				
228	.01	226-228			[illegible]
229	.00				
230	[illegible]	228-230			[illegible]
231	[illegible]				
232	[illegible]	230-232			[illegible]
233	[illegible]				
234	[illegible]	232-234			[illegible]

R. M. Log		Chem. Assay		Sample No.	Geolo[illegible] Data Rock Type — Color — Sorting — Conspic[illegible]us Mineral — Carbon — Mineralization
135	.00				
136	.01	134-136	X		
137	.00				
138	.00	136-138			
139	.00				
140	.01	138-140			
141	.00				
142	.00	140-142			
143	.00				
144		142-144			
145					
146		144-146			
147					
148		146-148			
149					
150		148-150			
151					
152		150-152			
153					
154		152-154			
155					
156		154-156			
157					
158		156-158			
159					
160		158-160			
161					
162		160-162			
163					
164		162-164			
165					
166		164-166			
167					
168		166-168			
169					
170		168-170			
171					
172		170-172			
173					
174		172-174			
175					
176		174-176			
177					
178		176-178			
179					
180		178-180			
181					
182		180-182			
183					
184		182-184			
185					
186		184-186			

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpect # 3	[illegible] Uranium Corp.	9N

LOCATION	COUNTY	STATE
C N½ Sec 34 [illegible]	[illegible]	[illegible]

DATE	TOTAL DEPTH	ELEVATION
8/20/57	-235	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
BC Const Dly. Co		

PROBE INSTR.	SURFACE INSTR.
Bobbel GR	[illegible]

REMARKS: Surface [illegible]

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization	
1	100					
2		0-2			[illegible]	.07
3						
4		2-4			"	.07
5						
6		4-6			[illegible] pebbles	.0[illegible]
7						
8		6-8			[illegible]	.06
9						
10		8-10			[illegible]	.055
11						
12		10-12			[illegible]	.05
13						
14		12-14			[illegible]	.06
15						
16		14-16			[illegible]	.0[illegible]
17						
18		16-18			[illegible]	.06[illegible]
19						
20		18-20			[illegible]	[illegible]
21						
22		20-22			[illegible] clay zones	.05
23						
24		22-24			SS - [illegible] buff, fg w/ scatt. lge grns, ark.	.055
25						
26		24-26			" "	.06
27						
28		26-28			SS - " fg-mg, ark	.07
29						
30		28-30			SS - " fg-[illegible] "	.07
31						
32		30-32			"	.07
33						
34		32-34			"	.05
35						
36		34-36			"	.055

R. M. Log	Chem. Assay	Sample No.	Geology Data: Rock Type · Color · Structure · Consistency · Material · Carbon · Mineralization
37			
38	36-38		
39			
40	38-40		
41			
42	40-42		
43			
44	42-44		
45			
46	44-46		
47			
48	46-48		
49			
50	48-50		
51			
52	50-52		
53			
54	52-54		
55			
56	54-56		
57			
58	56-58		
59			
60	58-60		
61			
62	60-62		
63			
64	62-64		
65			
66	64-66		
67			
68	66-68		
69			
70	68-70		
71			
72	70-72		
73			
74	72-74		
75			
76	74-76		
77			
78	76-78		
79			
80	78-80		
81			
82	80-82		
83			
84	82-84		
85			
86	84-86		

Hole No. 9-N Continued Claim No. [illegible] Date [illegible]/57

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization	
87	100					
88		86-88			" " "	.065
89						
90		88-90			SS [illegible]	.07
91						
92		90-92			SS — [illegible]	.065
93						
94		92-94			SS — [illegible]	.055
95						
96		94-96			" [illegible]	.06
97						
98		96-98			SS — lt buff, fg-cse, ark	.065
99						
100		98-100			SS " cse-v/cse, poly std, ark	.065
101						
102		100-102			(orange) "	.065
103						
104		102-104			" "	.065
105						
106		104-106			SS — orange, cse, poly std, ark	.065
107						
108		106-108			"	.065
109						
110		108-110			(mod. buff) "	.07
111						
112		110-112			(lt. buff) "	.06
113						
114		112-114			" "	.055
115						
116		114-116			" " w/ a little bl. clay	.06
117						
118		116-118			" " w/ mod. bl. clay	.07
119						
120		118-120			clay — bl-gy	.06
121						
122		120-122			SS — fg-cse, lt. buff, ark, w/ inter bdd. bl-gy clay	.06
123						
124		122-124			as above — mainly cse ss.	.055
125						.055
126		124-126			SS — lt. buff to lt. gy, fg-cse, ark, w/ thin bl. clay	
127						
128		126-128			"	.055
129						
130		128-130			SS lt gy, cse, poly std, ark, w/ [illegible] w/ thin bl clay	.055
131						
132		130-132			"	.06
133						
134		132-134			"	.06

R. M. LOG		CHEM. ASSAY		SAMPLE NO	GEOLOGIC DATA ROCK TYPE – COLOR – SORTING – CONSPICUOUS MINERAL – CARBON – MINERALIZATION	
35	.60					
36		134-136				
37						
38		136-138				
39						
40		138-140				
41						
42		140-142				
43						
44		142-144				
45						
46		144-146				
47						
48		146-148				
49						
50		148-150				
51						
52		150-152				
53						
54		152-154				
55						
56		154-156				
57						
58		156-158				.055
59						
60		158-160				
61						
62		160-162				.065
63						
64		162-164				
65						
66		164-166				.055
67						
68		166-168				
69						
70		168-170				
71						
72		170-172				.065
73						
74		172-174				.065
75						
76		174-176				.065
77						
78		176-178				
79						
80		178-180				.065
81						
82		180-182			(i.e. pebble)	
83						
84		182-184				
85						
86		184-186				

SHEET No. 2 SHEET No.

Hole No. 9-N Continued Claim No Date 7/26/82

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization	
187	.00					
188		186-188				.06
189						
190		188-190				.06
191						
192		190-192				.06
193						
194		192-194				.055
195						
196		194-196				.06
197						
198		196-198				.06
199						
200		198-200				.06
201						
202		200-202				.06
203						
204		202-204				.06
205						
206		204-206				.065
207						
208		206-208			[illegible]	.065
209	.01					
210	.01	208-210			clay [illegible]	.065
211	.04					
212	.11	210-212				.065
213	.19 .17					
214	.08 .07	212-214			[illegible]	.06
215	.06					
216	.02	214-216			[illegible]	.06
217	.02					
218	.02	216-218				.055
219	.06 .02					
220	.01 .01	218-220				.05
221	.06					
222	.09 .09	220-222			as above – becoming dker due to coaly matter	.06
223	.02 .00					
224	.01	222-224			SS – dK gy, fg-csc, ark, carb, pgc, w/carb sh &	.065
225	.00					
226		224-226			(w/ much coal)	.065
227						
228		226-228				.065
229						
230		228-230				.065
231						
232		230-232				.07
233						
234		232-234				.07

CLAIM NAME & NO.	OWNERS	HOLE NO.
[illegible]		

LOCATION	COUNTY	STATE
[illegible]		

DATE	TOTAL DEPTH	ELEVATION
8/22/[illegible]		

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
[illegible]		

PROBE INSTR.	SURFACE INSTR.
[illegible]	

REMARKS: [illegible]

ROBERT FORD — Mining Geologist — Riverton, Wyoming

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
1	[illegible]				
2		0-2			
3					
4		2-4			
5					
6		4-6			
7					
8		6-8			
9					
10		8-10			
11					
12		10-12			
13					
14		12-14			
15					
16		14-16			
17					
18		16-18			
19					
20		18-20			
21					
22		20-22			
23					
24		22-24			"
25					
26		24-26			"
27					
28		26-28			"
29					
30		28-30			.53 Use/go. cong pl buff
31					
32		30-32			
33					
34		32-34			
35					
36		34-36			

R. M.	Log	Chem.	Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
37	.00				
38		36-38			
39					
40		38-40			
41					
42		40-42			
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55					
56		54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63					
64		62-64			
65					
66		64-66			
67					
68		66-68			
69					
70		68-70			
71					
72		70-72			
73					
74		72-74			
75					
76		74-76			
77					
78		76-78			
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

SHEET No. 2 SHEET No. 2

Hole No. 13-C Continued Claim No. Date

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87					
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			
123					
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M. LOG		CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135	.00			
136	.00	134-136		
137				
138		136-138		
139				
140		138-140		
141				
142		140-142		
143				
144		142-144		
145				
146		144-146		
147				
148		146-148		
149				
150		148-150		
151				
152		150-152		
153				
154		152-154		
155				
156		154-156		
157				
158		156-158		
159				
160		158-160		
161				
162		160-162		
163				
164		162-164		
165				
166		164-166		
167				
168		166-168		
169				
170		168-170		
171				
172		170-172		
173				
174		172-174		
175				
176		174-176		
177				
178		176-178		
179				
180		178-180		
181				
182		180-182		
183				
184		182-184		
185				
186		184-186		

SHEET No. 3 SHEET No.

Hole No. _____ Continued Claim No. _____ Date _____

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type - Color - Sorting - Conspicuous Mineral - Carbon - Mineralization
87	.100				
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109	.102				
110	.101	108-110			
111	.100				
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			
123					
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135	.00				.071
136	.01	134-136			
137	.02				
138	.04	136-138			
139	.04				
140	.03	138-140			
141	[illegible]				
142	.02	140-142			
143					
144		142-144			
145					
146		144-146			
147					
148		146-148			
149					
150		148-150			
151					
152		150-152			
153					
154		152-154			
155					
156		154-156			
157	[illegible]				
158	[illegible]	156-158			
159					
160	↑	158-160			
161					
162		160-162			
163					
164		162-164			
165					
166		164-166			
167					
168		166-168			
169					
170		168-170			
171					
172		170-172			
173					
174		172-174			
175					
176		174-176			
177					
178		176-178			
179					
180		178-180			
181					
182		180-182			
183					
184		182-184			
185					
186		184-186			

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpost		

LOCATION	COUNTY	STATE
CN½ Sec		

DATE	TOTAL DEPTH	ELEVATION
8/2/85		

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
BC Cook Dr		

PROBE INSTR.	SURFACE INSTR.
None	

REMARKS:

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA: ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
1					
2		0-2			
3					
4		2-4			
5					
6		4-6			
7					
8		6-8			
9					
10		8-10			
11					
12		10-12			
13					
14		12-14			
15					
16		14-16			
17					
18		16-18			
19					
20		18-20			
21					
22		20-22			
23					
24		22-24			
25					
26		24-26			
27					
28		26-28			
29					
30		28-30			
31					
32		30-32			
33					
34		32-34			
35					
36		34-36			

R. M. Log		Chem. Assay		Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)	
37	.00					
38		36-38				
39						
40		38-40				
41						
42		40-42				
43						
44		42-44				
45						
46		44-46				
47						
48		46-48				
49						
50		48-50				
51						
52		50-52				
53						
54		52-54				
55						
56		54-56				
57						
58		56-58				
59						
60		58-60				.01
61						
62		60-62				
63						
64		62-64				.05
65						
66		64-66				.05
67						
68		66-68				.06
69						
70		68-70				.05
71						
72		70-72				
73						
74		72-74				.06
75						
76		74-76				
77					water table	
78		76-78			SS - It brn, f-ess, w/ a little brown	
79						
80		78-80			"	.07
81						
82		80-82			"	.06
83						
84		82-84				.05
85						
86		84-86				.05

SHEET No. 2

Hole No. 9-W Continued Claim No. [illegible] Date 5/22/57

R. M. LOG		CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
87	100			
88		86-88		.05
89				
90		88-90		.06
91				
92		90-92		.055
93				
94		92-94		.05
95				
96		94-96		.045
97				
98		96-98		.045
99				
100		98-100		.05
101				
102		100-102		.05
103				
104		102-104		.055
105				
106		104-106		.055
107				
108		106-108		as above, [illegible] clay .055
109				
110		108-110		" " [illegible] " " .05
111				
112		110-112		" " " " " .055
113				
114		112-114		" " " " .06
115				
116		114-116		" " " " .055
117				
118		116-118		as above [illegible] .055
119				
120		118-120		" (Si/pyr, clay decreasing) .06
121				
122		120-122		" " " .065
123				
124		122-124		" " (clay nearly gone) .055
125				
126		124-126		" " " .055
127				
128		126-128		" " " .055
129				
130		128-130		" " " .055
131				
132		130-132		" " " .06
133				
134		132-134		SS - lt gy, f grn [illegible] .065

R. M. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135 .00			
136	134-136		.055
137			
138	136-138		.05
139			
140	138-140		.05
141			
142	140-142		.06
143			
144	142-144		.06
145			
146	144-146		.06
147			
148	146-148		.06
149			
150	148-150		.06
151			
152	150-152		.06
153			
154	152-154		.06
155			
156	154-156		.06
157			
158	156-158		.06
159			
160	158-160		.06
161			
162	160-162		.055
163			
164	162-164		.05
165			
166	164-166		.055
167			
168	166-168		.055
169			
170	168-170		.055
171			
172	170-172		.055
173			
174	172-174		.055
175			
176	174-176		.06
177			
178	176-178		.06
179			
180	178-180		.06
181			
182	180-182		.06
183			
184	182-184		.06
185			
186	184-186		.06

Hole No. 9-W Continued Claim No. Lay-out #3 Date 8/20/57

R. M. Log		Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization	
187	.100				
188		186-88		"	.055
189					
190		188-90		"	.055
191					
192		190-92		"	.05
193					
194		192-94		"	.05
195					
196		194-96		"	.06
197					
198		196-98		"	.06
199					
200		198-200		"	.05
201					
202		200-202		"	.05
203					
204		202-204		"	.06
205					
206		204-206		" (w/ a little bl-gn clay)	.06
207					
208		206-208		" (w/ some " ")	.05
209					
210		208-210		" "	.06
211					
212		210-212		" "	.065
213	.01				
214	.02	212-214		" "	.055
215	.05				
216	.08 .01	214-216		" "	.06
217	.01				
218	.01	216-218		" "	.05
219	.02				
220	.07	218-220		" "	.05
221	.07				
222	.05	220-222		" "	.055
223	.17				
224	.38 .32	222-224		" (w/ v/ much bl-gn clay)	.06
225	.30 .22				
226	.07 .06	224-226		" "	.06
227	.05				
228	.03	226-228		As above — med-gy (carb. matter)	.06
229	.01				
230	.01	228-230		" " "	.065
231	.00				
232	.00	230-232		Clay stone — med gy, carb. [illegible] as above	.065
233	.00				
234		232-234		" [illegible] clay)	.065
236		236		" "	.07

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longfort #[illegible]	[illegible]	13-W

LOCATION	COUNTY	STATE
NE, NE, Sec [illegible]		

DATE	TOTAL DEPTH	ELEVATION
8/22/77		

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
BC Land Dr[illegible]		

PROBE INSTR	SURFACE INSTR
Bethel [illegible]	

REMARKS: [illegible]

ROBERT FORD — Mining Geologist — Riverton, Wyoming

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE -- COLOR - SORTING - CONSPICUOUS MINERAL - CARBON — MINERALIZATION
1	100				
2	100	0-2			[illegible]
3					
4		2-4			
5					
6		4-6			
7					
8		6-8			
9					
10		8-10			
11					
12		10-12			
13					
14		12-14			
15					
16		14-16			
17					
18		16-18			
19					
20		18-20			
21					
22		20-22			
23					
24		22-24			
25					
26		24-26			
27					
28		26-28			
29					
30		28-30			
31					
32		30-32			
33					
34		32-34			
35					
36		34-36			

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization
37	:00				
38		36-38			
39					
40		38-40			
41					
42		40-42			
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55					
56		54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63					
64		62-64			
65					
66		64-66			
67					
68		66-68			
69					
70		68-70			
71					
72		70-72			
73					
74		72-74			
75					
76		74-76			
77					
78		76-78			
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

SHEET No. 2

Hole No. [illegible] Continued Claim No [illegible] Date [illegible]

R. M. LOG		CHEM. ASSAY		SAMPLE NO	GEOLOGIC DATA ROCK TYPE – COLOR – SORTING – CONSPICUOUS MINERAL – CARBON – MINERALIZATION
87	[illegible]				[illegible]
88		86-88			[illegible]
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					[illegible]
98		96-98			
99					
100		98-100			
101					[illegible]
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			
123					
124		122-124			
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M. Log	Chem. Assay	Sample No.	Geological Data: Rock Type – Color – Sorting – Conspic[illegible] Mineral – Carbon – Mineralization
135 .00			
136	134-136		[illegible]
137			
138	136-138		
139			
140	138-140		
141			
142	140-142		
143			
144	142-144		
145			
146	144-146		
147			
148	146-148		
149			
150	148-150		
151			
152	150-152		
153			
154	152-154		
155			
156	154-156		[illegible]
157			
158	156-158		
159			
160	158-160		
161			
162	160-162		
163			
164	162-164		
165			
166	164-166		
167			
168	166-168		
169			
170	168-170		
171			
172	170-172		
173			
174	172-174		
175			
176	174-176		
177			
178	176-178		
179			
180	178-180		
181			
182	180-182		
183			
184	182-184		
185			
186	184-186		

Hole No. _____ Continued Claim No. _____ Date _____

R. M. LOG		CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA (ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION)
87	.106			
88		86-88		SS as above w/ clay balls present
89				
90		88-90		
91				
92		90-92		
93				
94		92-94		
95				
96		94-96		
97				
98		96-98		
99				
100		98-100		
101				
102		100-102		
103	.101			
104		102-104		
105				
106	.100	104-106		
107				
108		106-108		
109				
110		108-110		
111				
112		110-112		
113				
114		112-114		
115				
116		114-116		
117	.101			
118		116-118		
119				.054
120		118-120		
121				
122		120-122		S.S. as above w/ interbedded clay, blue
123	.102			.084
124	.107	122-124		
125	.104			
126	.106 .109	124-126		
127	.113			
128	.108 .108	126-128		.057
129	.104			
130	.101	128-130		.043
131				.031
132		130-132		
133				.027
134		132-134		

R. M. Log	Chem. Assay	Sample No.	Geologic Data Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135			
136	134-136		
137			
138	136-138		
139			
140	138-140		
141			
142	140-142		
143			
144	142-144		
145			
146	144-146		
147			
148	146-148		
149			
150	148-150		
151			
152	150-152		
153			
154	152-154		
155			
156	154-156		
157			
158	156-158		
159			
160	158-160		
161			
162	160-162		
163			
164	162-164		
165			
166	164-166		
167			
168	166-168		
169			
170	168-170		
171			
172	170-172		
173			
174	172-174		
175			
176	174-176		
177			
178	176-178		
179			
180	178-180		
181			
182	180-182		
183			
184	182-184		
185			
186	184-186		

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpoint #9	Rio Grande Uranium Corporation	9E

LOCATION	COUNTY	STATE
	Fremont	Wyoming

DATE	TOTAL DEPTH	ELEVATION
July 18, 1957	235	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Couch Drilling Co.		

PROBE INSTR.	SURFACE INSTR.
Babbel 610	[illegible]

REMARKS: Surface background count [illegible]

R. M. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
.01			
	0-2		Brown surface sand
	2-4		White to buff arkosic sand, poorly sorted with some quartz and [illegible] gravel
	4-6		
	6-8		
	8-10		
	10-12		
	12-14		
	14-16		
	16-18		
	18-20		Brown to buff very sandy clay. Feldspars present highly altered.
	20-22		
	22-24		
	24-26		[illegible]
	26-28		[illegible]
	28-30		[illegible]
	30-32		Buff medium-to fine sand
	32-34		
	34-36		

R. M. Log	Chem. Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
37 .01			
38	36-38		
39			
40	38-40		
41			
42	40-42		
43			
44	42-44		
45			
46	44-46		
47			
48	46-48		
49			
50	48-50		
51			
52	50-52		
53			
54	52-54		
55			
56	54-56		
57			
58	56-58		
59			
60	58-60		
61			
62	60-62		
63			
64	62-64		
65			
66	64-66		
67			
68	66-68		
69			
70	68-70		
71			
72	70-72		
73			
74	72-74		
75			
76	74-76		
77			
78	76-78		
79			
80	78-80		
81			
82	80-82		white to buff medium-grained arkosic sand
83			
84	82-84		
85			
86	84-86		

Hole No. 9E Continued Claim No. [illegible] Date July 18, 1957

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87	.01				
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			[illegible] poorly sorted arkosic sand
123					
124		122-124			Blue clay
125					
126		124-126			
127					
128		126-128			[illegible] to coarse arkosic sand
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M. Log	Chem. Assay	Sample No	Geol. Data: Rock Type	Color	Sorting	Conspicuous Mineral	Carbon	Mineralization
135								
136	134-136							
137								
138	136-138							
139								
140	138-140							
141								
142	140-142							
143								
144	142-144							
145								
146	144-146							
147								
148	146-148							
149								
150	148-150							
151								
152	150-152							
153								
154	152-154							
155								
156	154-156							
157								
158	156-158							
159								
160	158-160							
161								
162	160-162							
163								
164	162-164							
165								
166	164-166							
167								
168	166-168							
169								
170	168-170							
171								
172	170-172							
173								
174	172-174							
175								
176	174-176							
177								
178	176-178							
179								
180	178-180							
181								
182	180-182							
183								
184	182-184							
185								
186	184-186							

Hole No. 9E Continued Claim No. [illegible] Date [illegible] 1957

R. M. Log		Chem. Assay		Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
187	.01				
188		86-88			
189					
190		88-90			
191					
192		90-92			
193					
194		92-94			
195					
196		94-96			
197					
198		96-98			
199					
200		98-100			
201					
202		100-102			
203					
204		102-104			
205					
206		104-106			
207					
208		106-108			
209					
210		108-110			
211					
212		110-112			
213					
214		112-114			
215					
216		114-116			
217					
218		116-118			
219					
220		118-120			
221					
222		120-122			
223					
224	.02	122-124			
225					
226		124-126			
227	.03				
228		126-128			
229					
230		128-130			
231					
232		130-132			
233					
234		132-134			
	.01				

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longport #3	Riverton Uranium Corp.	#9-S

LOCATION	COUNTY	STATE
CN½ Sec 34, T33N-R10W	Fremont	Wyoming

DATE	TOTAL DEPTH	ELEVATION
8/19/57	235'	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Couch Drlg Co		

PROBE INSTR.	SURFACE INSTR.
Babbel 610	Precision III-B

REMARKS: Surface Background count = .085 MR/HR

R. M. Log	Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization	Count
1				
2	0-2		SS & slt. (on surface)	.09
3				
4	2-4		" "	.085
5				
6	4-6		SS & siltstone - brn., prly. std. ark., s/f congl. (pebble)	.09
7				
8	6-8		SS & congl. - lt. buff, prly. std., ark., pebbles	.095
9				
10	8-10		"	.085
11				
12	10-12		"	.09
13				
14	12-14		"	.095
15				
16	14-16		SS - yl., mg-csc w/ thin clay bed	.09
17				
18	16-18		SS & pebble congl. - gn-brn, clayey, prly std., ark.	.09
19				
20	18-20		clay - gn.	.10
21				
22	20-22		" " , sandy	.095
23				
24	22-24		" " "	.095
25				
26	24-26		SS - brn. w/ red & gn, fg-mg, ark, w/ gn clay	.095
27				
28	26-28		as above but becoming csc.	.10
29				
30	28-30		SS - lt buff, fg-csc, ark w/ occ. hem. spots	.10
31				
32	30-32		as above — w/ thin gn clay	.095
33				
34	32-34		SS - lt. gn-gy, fg-csc, ark clayey	.090
35				
36	34-36		"	.09

[redacted]	[redacted]OG	CHEM. ASSAY	SAMPLE NO.	GEOLOGI[redacted]ATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION	
37	.100				.09
38		36-38		"	
39					.09
40		38-40		"	
41					.09
42		40-42		"	
43					.095
44		42-44		" (silty)	
45					.09
46		44-46		" "	
47					.09
48		46-48		"	
49					.095
50		48-50		"	
51					.09
52		50-52		"	
53					.09
54		52-54		"	
55					.095
56		54-56		"	
57					.09
58		56-58		"	
59					.09
60		58-60		"	
61					.09
62		60-62		" (lt v/csa)	
63					.09
64		62-64		"	
65					.09
66		64-66		"	
67					.095
68		66-68		clay-siltstone - bl-gy w/ sandy	
69					.095
70		68-70		SS - lt buff, fg, ark.	
71					.085
72		70-72		"	
73					.085
74		72-74		" (fg-mg.)	
75					.09
76		74-76		" (fg- v/csa)	
77					.085
78		76-78		" "	
79					.085
80		78-80		" "	
81				Water table	
82		80-82		" (some hem.)	.09
83					
84		82-84			.09
85					
86		84-86		"	.09

SHEET No. 2 SHEET No. 2

Hole No. 9-S Continued Claim No. Longport #3 Date 8/19/57

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA: ROCK TYPE, COLOR, SORTING, CONCRETIONS, MINERAL, CARBON, MINERALIZATION	
87	.00					
88		86-88	.00		" " "	.105
89						
90		88-90			" " (much hem)	.09
91						
92		90-92			" " "	.10
93						
94		92-94			" " (some hem.)	.09
95						
96		94-96			" " "	.085
97						
98		96-98			" " "	.085
99						
100		98-100			" " "	.08
101						
102		100-102			" " "	.08
103						
104		102-104			" " "	.08
105						
106		104-106			" " "	.09
107						
108		106-108			" " "	.09
109						
110		108-110			(rusty red) " " (w/ much hem.)	.09
111						
112		110-112			" " " "	.09
113						
114		112-114			" " " "	.09
115						
116		114-116			clay - bl-gr & SS - csc., lt buff, ark.	.09
117						
118		116-118			as above - mostly clay	.08
119						
120		118-120			" "	.09
121						
122		120-122			SS - lt. buff, fg-csc, ark. w/ clay - blue-gn.	.085
123						
124		122-124			" " (w/ little clay)	.085
125						
126		124-126			SS - lt. gy., fg-csc, ark, clayey, sl/ pyritic	.085
127						
128		126-128			"	.085
129						
130		128-130			" (w/ thin bl-gn clay bds)	.085
131						
132		130-132			" "	.085
133						
134		132-134			" "	.095

F[redacted]OG		CHEM. ASSAY	SAMPLE NO.	GEOLOGI[redacted]DATA ROCK TYPE — COLOR — SORTING — CONSPICU[redacted] MINERAL — CARBON — MINERALIZATION		
135	[redacted]					.095
136	"	134-136		"	"	
137	"					.095
138	"	136-138			"	
139	"					.095
140	"	138-140			"	
141	"					.095
142	"	140-142			"	
143	"					.085
144	"	142-144			"	
145	"					.09
146	"	144-146		"	"	
147	"					.09
148	"	146-148		"	"	
149	"					.10
150	"	148-150		"	"	
151	"					.09
152	"	150-152			"	
153	"					.095
154	"	152-154		"	"	
155	"					.095
156	"	154-156		"	"	
157	"					.10
158	"	156-158		"	"	
159	"					.09
160	"	158-160		"	"	(much clay)
161	"					.085
162	"	160-162		"	"	
163	"					.105
164	"	162-164		"	"	
165	[redacted]					.09
166	"	164-166		"	"	(little clay below this point)
167	"					.09
168	"	166-168		"	"	
169	"					.095
170	"	168-170		"	"	
171	"					.09
172	"	170-172		"	"	
173	"					.10
174	"	172-174		"	"	
175	"					.09
176	"	174-176		"	"	
						.12
178	"	176-178		"	"	
179	"					.095
180	"	178-180		"	"	
181	"					.09
182	"	180-182		"	"	
183	"					.09
184	"	182-184		"	"	
185	"					.095
186	"	184-186		"	"	

Hole No. 9-5 Continued Claim No Longport #3 cte 8/12/57

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization	
187	.00					
188	"	186-188			" "	.095
189	"					
190	"	188-190			" "	.09
191	"					
192	"	190-192			" "	.095
193	"					
194	"	192-194			" "	.095
195	"					
196	"	194-196			" "	.09
197	"					
198	"	196-198			" "	.085
199	"					
200	"	198-200			" "	.09
201	"					
202	"	200-202			" "	.09
203	"					
204	"	202-204			" "	.09
205	"					
206	"	204-206			" "	.09
207	"					.115
208	"	206-208			" " (a little more bl. clay a little buff ss)	
209	"					
210	"	208-210			" " "	.10
211	"					
212	"	210-212			SS – lt. gy, fg-cse, ark, sl/pyr. w/ bl. clay	.095
213	"					
214	"	212-214			" ~~fine~~	.085
215	"					
216	"	214-216			" (much buff ss.)	.10
217	"					
218	"	216-218			" (some buff ss)	.095
219	"					
220	"	218-220			" "	.085
221	"					
222	"	220-222			" "	.085
223	"					
224	"	222-224			" "	.085
225	"					
226	"	224-226			" "	.095
227	"					
228	"	226-228			"	.095
229	caved					
230	"	228-230			"	.09
231	"					
232	"	230-232			"	.09
233	"					
234	"	232-234			"	.09

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpost		

LOCATION	COUNTY	STATE

DATE	TOTAL DEPTH	ELEVATION

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B		

PROBE INSTR.	SURFACE INSTR.

REMARKS:

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type – Color – Sorting – Consolidation – Mineral – Carbon – Mineralization
1	ok!				
2		0-2			
3					
4		2-4			
5					
6		4-6			
7					
8		6-8			
9					
10		8-10			
11					
12		10-12			
13					
14		12-14			
15					
16		14-16			
17					
18		16-18			
19					
20		18-20			
21					
22		20-22			
23					
24		22-24			
25					
26		24-26			Brf sandy clay
27					
28		26-28			
29					
30		28-30			
31					
32		30-32			
33					
34		32-34			
35					
36	Y	34-36			

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
37	.01				
38		36-38			
39					
40		38-40			
41					
42		40-42			
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55					
56		54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63					
64		62-64			
65					
66		64-66			
67					
68		66-68			
69					
70		68-70			
71					
72		70-72			
73					
74		72-74			
75					
76		74-76			
77					
78		76-78			
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

SHEET No. 2 SHEET No.

Hole No. 3 Continued Claim No. Date

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type - Color - Sorting - Conspicuous Mineral - Carbon - Mineralization
87					
88		86-88			
89					
90		88-90			
91					
92		90-92			
93					
94		92-94			
95					
96		94-96			
97					
98		96-98			
99					
100		98-100			
101					
102		100-102			
103					
104		102-104			
105					
106		104-106			
107					
108		106-108			
109					
110		108-110			
111					
112		110-112			
113					
114		112-114			
115					
116		114-116			
117					
118		116-118			
119					
120		118-120			
121					
122		120-122			
123					
124		122-124			Lt gray to white, medium-to-coarse sand
125					
126		124-126			
127					
128		126-128			
129					
130		128-130			
131					
132		130-132			
133					
134		132-134			

R. M. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135			
136	134-136		
137			
138	136-138		
139			
140	138-140		
141			
142	140-142		
143			
144	142-144		
145			
146	144-146		
147			
148	146-148		
149			
150	148-150		
151			
152	150-152		
153			
154	152-154		
155			
156	154-156		
157			
158	156-158		
159			
160	158-160		
161			
162	160-162		
163			
164	162-164		
165			
166	164-166		
167			
168	166-168		
169			
170	168-170		
171			
172	170-172		
173			
174	172-174		
175			
176	174-176		
177			
178	176-178		
179			
180	178-180		
181			
182	180-182		
183			
184	182-184		
185			
186	184-186		

SHEET No. 3 SHEET No. 3

Hole No. 3N Continued Claim No #3 Date July 18, 1957

R. M. Log		Chem. Assay		Sample No	Geologic Data: Rock Type -- Color -- Sorting -- Conspicuous Mineral -- Carbon -- Mineralization
187	.01				
188		86-88			
189					
190		88-90			
191					
192		90-92			
193					
194		92-94			[illegible]
195					
196		94-96			
197					
198		96-98			
199					
200		98-100			[illegible]
201					
202		100-102			
203					
204		102-104			
205					
206		104-106			
207					
208		106-108			
209					
210		108-110			
211					
212		110-112			
213					
214		112-114			
215					
216		114-116			
217					
218		116-118			
219					
220		118-120			[illegible]
221					
222		120-122			
223					
224		122-124			
225					
226		124-126			
227					
228		126-128			
229					
230		128-130			
231					
232		130-132			
233					
234		132-134			

R. M. Loc.		Chem. Assay		Sample No.	Geolo[illegible] Data Rock Type — Color — Sorting — Conspic[illegible]s Mineral — Carbon — Mineralization
135	.02				
136	.02	124-136			
137	.03				
138	.10 .12	136-138			
139	.13 [illegible]				
140	[illegible]	138-140			
141	.11				
142	[illegible]	140-142			
143	[illegible]				
144	[illegible]	142-144			
145	[illegible]				
146	[illegible]	144-146			
147	[illegible]				
148		146-148			
149					
150		148-150			
151					
152		150-152			
153					
154		152-154			
155					
156		154-156			
157					
158		156-158			
159					
160		158-160			
161					
162		160-162			
163					
164		162-164			
165					
166		164-166			
167					
168		166-168			
169					
170		168-170			
171					
172		170-172			
173					
174		172-174			
175					
176		174-176			
177					
178		176-178			
179					
180		178-180			
181					
182		180-182			
183					
184		182-184			
185					
186		184-186			

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpoint #3	Rocky Uranium Corporation	35

LOCATION	COUNTY	STATE

DATE	TOTAL DEPTH	ELEVATION
July 18, 1957		

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Cook Drilling		

PROBE INSTR.	SURFACE INSTR.
Babbel 6"	

REMARKS: Surface background [illegible]

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
1	.01				
2		0-2			[illegible]
3					
4		2-4			[illegible] Sand
5					
6		4-6			
7					
8		6-8			
9					
10		8-10			
11					
12		10-12			
13					
14		12-14			
15					
16		14-16			
17					
18		16-18			
19					
20		18-20			
21					
22		20-22			
23					
24		22-24			
25					
26		24-26			
27					
28		26-28			
29					
30		28-30			
31					
32		30-32			
33					
34		32-34			
35					
36		34-36			

R. M.	Log	Chem.	Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
37	.01				
38		36-38			
39					
40		38-40			
41					
42		40-42			
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55					
56		54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63					
64		62-64			
65					
66		64-66			
67					
68		66-68			
69					
70		68-70			
71					
72		70-72			
73					
74		72-74			
75					
76		74-76			
77					
78		76-78			
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

Hole No. 35 Continued Claim No. Gossport #3 Date July 18, 1957

R. M. Log		Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87	.01			
88		86-88		[illegible]
89				
90		88-90		
91				
92		90-92		[illegible] arkosic sand
93				
94		92-94		
95				
96		94-96		
97				
98		96-98		
99				
100		98-100		
101				
102		100-102		
103				
104		102-104		
105				
106		104-106		
107				
108		106-108		
109				
110		108-110		
111	.02			
112		110-112		
113				
114		112-114		[illegible]
115				
116		114-116		
117				
118		116-118		
119				
120		118-120		[illegible]
121				
122		120-122		
123				
124		122-124		
125				
126		124-126		
127				
128		126-128		[illegible] clay
129				
130		128-130		
131	.01			
132		130-132		
133				
134		132-134		

R. M. Log		Chem. Assay		Sample No.	Geolo[illegible] Data Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	.01				
136		134-136			[illegible]
137					
138		136-138			
139					
140		138-140			
141					
142		140-142			
143					
144		142-144			
145					
146		144-146			
147					
148		146-148			
149					
150		148-150			
151					[illegible] grained
152		150-152			[illegible]
153					
154		152-154			
155					
156		154-156			
157					
158		156-158			
159					
160		158-160			
161					
162		160-162			
163					
164		162-164			
165					
166		164-166			
167					
168		166-168			
169					
170		168-170			
171					
172		170-172			
173					
174		172-174			
175					
176		174-176			[illegible]
177					
178		176-178			
179					
180		178-180			[illegible]
181					
182		180-182			
183					
184		182-184			
185					
186		184-186			

SHEET No. 3 SHEET No. 3

Hole No. 35 Continued Claim No. Longport #3 Date July 18, 1957

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
187	.01				Gray to white medium to coarse-grained poorly sorted arkosic sand
188		86-88			
189					
190		88-90			
191					
192		90-92			
193					
194		92-94			
195					
196		94-96			
197					
198		96-98			
199					
200		98-100			
201					
202		100-102			
203					
204		102-104			
205					
206		104-106			
207					
208		106-108			
209					
210		108-110			
211					
212		110-112			
213					
214		112-114			
215					
216		114-116			
217					
218		116-118			
219					
220		118-120			
221					
222		120-122			
223					
224		122-124			
225					
226		124-126			
227					
228		126-128			
229					
230		128-130			
231					
232		130-132			
233					
234		132-134			

M. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135 .01			
136	134-136		Gray Sandy Clay
137			
138	136-138		
139			
140	138-140		
141			[illegible] Dark
142	140-142		[illegible]
143			
144	142-144		
145			
146	144-146		
147			
148	146-148		
149			
150	148-150		
151			
152	150-152		
153			
154	152-154		
155			
156 .02	154-156		
157 .02			
158 .02	156-158		
159 .03			
160 .04	158-160		
161 .05			
162 .03	160-162		Gray Sandy Clay
163 .01			Carbon Band
164	162-164		
165			
166	164-166		Total Depth 165'
167			
168	166-168		
169			
170	168-170		
171			
172	170-172		
173			
174	172-174		
175			
176	174-176		
177			
178	176-178		
179			
180	178-180		[illegible]
181			[illegible]
182	180-182		
183			
184	182-184		
185			
186	184-186		

FINAL DISTRIBUTION

MADE JUN 27 1957

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

Administrative Audit Difference Statement

Charles H. Coleman & Associates
139 N. Clark Street
Chicago 2, Illinois

Date: June 25, 1957
Payee's Reference: May 1957

DMEA-4047

Gentlemen:

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

Amount Claimed	$	3,003.00
Difference	$	45.00
Amount Approved	$	2,958.00

The reason for the difference was due to:

Disallowance:

Claimed Incidental allowance for 2900 ft at a total cost of - $683.00

Acceptable cost, 2900 ft @ .22 per ft.- $638.00

Amount to be disallowed $ 45.00

Reinstate: $100.00 which was withheld from the October 1956 voucher.

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

Very sincerely yours,

N. E. Stokes
Audit Section

EXTRA COPY
DATE
RECEIVED JUL 1 1957

DATE		
7/1/57	FEJ	110
7/2/57	FEJ	700

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

224 New Customhouse
Denver 2, Colorado

June 21, 1957

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket-4047, (Uranium) Contract Idm-E943, Charles M. Coleman and Associates (Clyde, Marsh and Longport claims), Fremont County, Wyoming - Operator's Monthly Progress Report for the month of May, 1957

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

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

Due to an arithmetical error, the Operator has reported excess cost under "Incidental Allowance" for the reported 2900 feet of drilling. The excess cost is to be disallowed as follows.

<u>Disallowance</u>

Amount reported, Incidental Allowance for 2900 feet at total cost of	$ 683.00
Acceptable cost, 2900 feet at $0.22 per foot	638.00
Amount to be disallowed	$ 45.00

<u>Reinstate</u> the amount of $400.00, which was withheld from the October 1956, voucher.

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

Amount Reported on Form MF-104 for May, 1957	$3,003.00
Amount to be disallowed	45.00
Total accepted cost for May, 1957	$2,958.00
Government Participation at 75 percent	$2,218.50
Amount to be reinstated	400.00
Balance due the Operator	$2,618.50

Note: The engineer's report recommends withholding an amount of $400.00 pending performance of additional work. It has now been determined that the balance of Stage III work has been completed, therefore any necessary amount can be withheld from the next or any subsequent voucher submitted by the Operator.

Remarks:

Date of Report	June 5, 1957
Date Received in Field Office	June 10, 1957
Date Received in Region Office	June 21, 1957

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

Enclosures

JDC:hmh
cc: Chmn. Op. Comm. (2)
BMBA, BFC
Harshman } w/copy of Engr's
Townsend } report
MF-104 file, Reg. III
Chron.

DMEA
EPARTMENT OF THE INTERIOR
JUN 21 1957
REGION III
DENVER, COLORADO

Building 20
Denver Federal Center
Denver 2, Colorado
June 20, 1957

REGION III

Memorandum

To: Executive Officer, DMEA field Team, Region III

From: R. O. Minyen

Subject: Docket DMEA 4047 (Uranium) Contract Idm-E943, Charles M. Coleman and Associates, (Clyde, Marsh and Longport claim groups) Fremont County, Wyoming--Progress report for May, 1957.

An inspection of the drilling completed was made June 18, 1957. There was no one at the property when the inspection was made, however, the work of the project was discussed with Robert Ford, geologist for the operator.

The eight holes - Hole Nos. 1, 2, 3, 4, 5, 6, 11, and 12 were checked and found to be drilled to the depths reported, a total aggregate footage of 2,900 feet. Hole No. 5 on the Longport No. 2 claim was drilled to 420 feet but only 400 feet is claimed for payment. All holes with the exception of Hole Nos. 6 and 12 are located as shown on the operator's map. Hole No. 6 and 12 are 150 feet from the south end lines of the Longport 2 and 4 claims and one incorrectly shown on the map. The distance from the claim boundaries is within the terms of the contract.

A check with a geiger counter of the cuttings from the holes indicated some mineralization of ore (.10%) or near ore grade in holes 3, 11, and 12, the count being lower than the reported probe results. It might be stated that the counter readings of the cuttings is unreliable. Readings slightly above background were obtained of cuttings from holes 2 and 6. From the probe results ore grade material was found in 3 holes. The grade ranging from .107 percent eU_3O_8 in Hole 11 over a thickness of 1.5 feet to 1/2 feet of .185 percent eU_3O_8 in Hole 3. Hole 12 had 3 feet of .111 percent material. The depths at which the ore was encountered are; 251.5-252 in Hole 3, 301.5-303 in Hole 11 and 306.5-309.5 in Hole 12.

The MF-104 and MF-104A were checked and are found to be in error in the Amount Claimed for Incidental Allowances. The operator has claimed $683.00 or $45.00 more than the correct amount of $638.00 ($.22 x 2,900 feet). The correct totals under "Monthly Total" on the MF-104 and "Cost this Month" on the MF-104A should be $2,958.00 and the total expenditures under "Totals to Date" and "Costs to Date" should be $9,728.00.

This error was mentioned to Mr. Ford and he stated he had informed the Denver office of the mistake.

Documentation of the drilling cost are included with the report and it is recommended that the operator be paid $2,218.50 or 75 percent of the corrected total expenditures of $2,958.00. It is further recommended that $400.00 be withheld pending completion of the project and receipt of a final report.

E. O. Binyon
E. O. Binyon
Mining Engineer

EOB:jg
Enclosure

cc: 6
Idm-E943
Chron.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4047 Contract No. Idm-E 943
Operator's Name Charles M. Coleman and Associates Minerals Uranium
Address 139 N. Clark Street, Chicago, Illinois
Contract Amount, $18,316.00 Government Participation: 75 % Amount, $13,737.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Rotary non-core	2320.00	3404.00	5724.00			
Bulldozing	none	775.00	775.00			
Crosscutting						
Drifting						
Incidental Allowance	683.00	-00-	683.00			
(2) Labor and Supervision:						
Labor Sampling		717.00	717.00			
Supervision		1100.00	1100.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Sample Containers		6.00	6.00			
(4) Operating Equipment:						
Rental		140.00	140.00			
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
~~Sampling and~~ Analysis		100.00	100.00			
Payroll Taxes						
Liability Insurance						
Radiometric logging		444.00	444.00			
Accounting		84.00	84.00			
(8) Contingencies (specify):						
TOTALS	$3003.00	$6770.00	$9773.00	2,958.00	6,770.00	9,728.00

RECEIVED JUL 1 1957 D.M.E.A.

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

Date June 5, 1957 *Payee Charles M Coleman and Associates

Per Albert W. Dilling Title Attorney-in-fact.

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

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

(Instructions on reverse)

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

$2618.50

Signature [illegible]
(Authorized Certifying Officer)

Date 6/25/57 Voucher DMA 57-139

(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. DM E 943 in accordance with the terms of the contract.

Signature E O Bunyon (#221850) Title Mining Engineer Date June 20, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W H King Title Executive Officer Date JUN 21 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1957 Docket No. DMEA 4047 Contract No. Idm-E-943
Operator's Name Charles M. Coleman and Associates Minerals Uranium
Address 139 N. Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage III								
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Cmx~~ non-core	1 ft	$2320.00	2900	2,320.00	2900			
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Incidental Allowance	1 ft	683.00	2900	683.00	2900			
Total Distributed Costs		$3003.00		3,003.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 June 5, 1957 Operator Charles M. Coleman & Associates
Per [signature] Title Attorney-in-fact

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

Remarks: Above accounting is total to date on Stage III under Amendment No. 3.

(Instructions on reverse)

(For Government use only)

RECEIVED JUN 1 1957 D.M.E.A.

DMEA
DEPARTMENT OF THE INTERIOR
JUN 7 - 1957
REGION III
DENVER, COLORADO

INSTRUCTIONS

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

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

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

GPO 872894

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
(Stage I Completed)

Month of Through May 7 195 7 Docket No. DMEA 4047 Contract No. Idm-E 943

Operator's Name Charles M. Coleman and Associates Minerals Uranium

Address 139 N. Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage I (Trenching)								
Bulldozing	Hr			775.00	62	12.50	62	13.00
Drilling	Ft.			1372.00	1960	0.70	1960	1.00
Supv. Geologist	Mo.			600.00	1	600.00	1	600.00
Sampler	Hr.			302.00				*1.75/hr plus overtime
Containers	Lot			3.00	Lot	3.00	Lot	3.00
Truck Rental	Mi.			70.00	700	0.10	700	0.10
Radiometric logging	Ft.			196.00	1960	0.10	1960	0.10
Payroll taxes & Ins.				0.00	0	0.00	5% of Payroll	
Accounting	Job			42.00	Job	42.00	1	42.00
Chemical Analysis	Spl.			84.00	24	3.50	100	5.00
Total Distributed Costs				3534.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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.

Remarks: *$1.75 per hour plus time and one-half rate over 40 hours per week (maximum for Stage I is $500.00)

Date June 5, 1957 Operator Charles M. Coleman and Associates

Per Allen W. Kelling Title Attorney-in-fact.

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

(Instructions on reverse)

E. O. Bangson

(For Government use only)

RECEIVED JUN 7 1957 DMEA

DMEA
DEPARTMENT OF THE INTERIOR
JUN 7 - 1957
REGION III
DENVER, COLORADO

INSTRUCTIONS

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

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

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

GPO 872894

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

(Stage II Completed)

Month of May 195 7 Docket No. DMEA 4047 Contract No. IOc-E 043

Operator's Name Charles H. Coleman and Associates Minerals Uranium

Address 139 N. Clark Street, Chicago, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage II								
Drifting: Bulkheading	Hr.	0.00	0	0.00	0	0.00	60	10.00
Crosscutting: Drilling	Ft.	2002.00	2002	2002.00	2002	.002	2000	1.00
Raising: Contract	Hr.	600.00	5/0	600.00	5/0	600.00	5/0	600.00
Shaft: Sampler	Hr.	200.00	*	200.00	*	**	**	***See Below
Winze: Contractors	Lot	0.00	Lot	0.00	Lot	0.00	Lot	0.00
Drifting: Truck Rental	Hr.	70.00	700	70.00	700	0.10	700	0.10
Raise: Barometric Survey								
Diamond Drill: Logging	Ft.	240.00	2400	240.00	2400	0.10	2400	0.10
Payroll: Taxes and Ins.		0.00	0	0.00	0	0.00	6%	of Payroll
Supplies: Accounting	Job	42.00	Job	42.00	1	42.00	1	42.00
Transportation								
Test Pits								
Roads and Trails								
Chemical Analysis	(Per Sp.)	10.00	4	10.00	4	2.00	100	5.00
Total Distributed Costs		3000.00		3000.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 June 5, 1957 Operator Charles H. Coleman and Associates

Per Albert H. Dilling Title Attorney-in-fact

Remarks: * 90 hours @ $1.75 plus 75 hours time over 40 hours per week @ 3.000

** $1.75 per hour plus time & one half rate over 40 hours per week (maximum $225.00 for Stage II)

→ 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)

E. A. Bergeron

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

STATEMENT

[illegible]

[illegible] 19[illegible]

Sold To Riverton [illegible]

Att. Bob Ford, Riverton, Wyo.

Terms [illegible] Rotary Drilling

[illegible]	1	- 300'				
	2	- 300'				
	3	- 300'				
	4	- 4[illegible]				
	5	- 400'				
	6	- 400'				
	7	- 400'				
	8	- 400'				
Total		2900 @ 80¢ p/f			2320	00

DMEA
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
REGION III

ROBERT FORD
MINING GEOLOGIST

BLAKE FOX
PETROLEUM GEOLOGIST

FORD & FOX
Consulting Geologists
206 S. BROADWAY
RIVERTON, WYOMING

P.O. BOX 428

UL6-3468

June 3, 1957

Contract No. Idm-8-943
Docket No. DMEA-4047
Charles M. Coleman and Associates

Progress Report for Period Ending May 31, 1957

Drilling under Amendment No. 3 of the above named contract, Stage III started on Monday, May 20, 1957. Of the sixteen (16) DMEA authorized holes consisting of 4,620 feet, eight (8) holes totaling 2,900 feet, were drilled during the month of May. Drill hole logs, both lithologic and radiometric, and location of the eight (8) holes completed are included in this Progress Report. To date there has been no chemical analyses returned from the assayer.

The drilling was performed with the standard truck-mounted rotary drill using both air and water as a circulating medium in all holes. Samples were taken with a Duclone-type dust collector when drilling with air, and collected in a mud box when drilling with water. Difficulty was encountered in keeping holes numbered 4, 5, and 6 open for radiometric probing. After sufficient washing holes 4 and 6 were kept open but #5 was probed through the drill stem from 296 feet to 400 feet.

All drill holes were logged lithologically and probed for radioactivity with a model 610 Babbel Counter, using a reel-mounted probe. Meter readings of the Babbel Counter are taken as direct 4th scale readings. Correct interpretation has been given the readings and in the writers opinion the R. M. Log readings are the true equivalent percent uranium. Samples taken at 2'

increments were checked for radioactivity with a model 111B scintilator and collected for government inspection.

Mineralization was encountered in all holes. Significant mineralization was found in holes number 3, 6, 11, and 12. The relationship of this mineralization to favorable stratigraphic horizons, structures, and facies changes will be shown when a report is given on the completed Stage III drilling.

The following is a tabulation of the drilling as authorized and completed. Forms MF-104 and MF-104A for April and May are attached for payment and made part of this Progress Report for May, 1957. Drill contractor statement is included showing a total footage drilled of 2,900 feet @ .80¢ per foot or $2,320.00.

Hole No.	Claim Name and No.	Authorized Depth	Depth Completed
1	Longport No. 1	300'	300'
2	Longport No. 1	300'	300'
3	Longport No. 1	300'	300'
4	Longport No. 2	400'	400'
5	Longport No. 2	400'	420'
6	Longport No. 2	400'	400'
11	Longport No. 4	400'	400'
12	Longport No. 4	400'	400'

Total Authorized 2,900 feet

Respectfully submitted,

Robert Ford

RBF:cjb
CC: Albert W. Dilling
Enclosures
Claim map showing drill holes
Drill hole logs
Drill Contractor statement
Forms MF-104 and MF-104A

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longpot #1	Riverton Uranium Corp	#3

LOCATION	COUNTY	STATE
	Fremont	Wyo

DATE	TOTAL DEPTH	ELEVATION
5/23/57	300	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B. C. Cook Drilling Co.	Failing	

HOLE INSTR.	SURFACE INSTR.
Bobbel	Pancakes 111B

REMARKS: Back ground count - .024 mr/hr

ROBERT FORD — *Mining Geologist* — *Riverton, Wyoming*

R. M. Log		Chem. Assay		Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
1	.00				
2		0-2			.024 Med to Crse gr, Calc ss - buff
3					
4		2-4			"
5					
6		4-6			"
7					
8		6-8			"
9					
10		8-10			"
11	.00				
12	.01	10-12			"
13					
14		12-14			"
15					
16		14-16			"
17					
18		16-18			"
19					
20		18-20			"
21					
22	.02	20-22			"
23					
24		22-24			"
25					
26		24-26			"
27					
28		26-28			.024 Fine gr ss - shaly - [illegible]
29					"
30		28-30			
31	.01				
32					
33					
34	.02	30-32 32-34			.024 Fine ss - orange - [illegible]
35					
36		34-36			"

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Depth	Assay	Chem.	Array	Sample No.	Geologist Data: Rock Type — Color — Sorting — Conspicuous Mineral — Garnet — Mineralization
37	.01				
38		36-38			.031 silty ss - pum gray - [illegible]
39					
40		38-40			.024 "
41					
42		40-42			"
43					
44		42-44			"
45					
46		44-46			"
47					
48		46-48			"
49	.00				
50		48-50			" [illegible]
51					
52		50-52			Tuff ge ss · pum gray · slightly arkosic
53					
54	.01	52-54			"
55					
56	.00	54-56			Tuff Cs ge, Arkosic ss - pum gray
57					
58		56-58			"
59					
60	.01	58-60			"
61	.01				
62		60-62			"
63					
64		62-64			"
65					
66		64-66			"
67					
68		66-68			Tuff ge ss · pum gray - slightly arkosic
69					
70		68-70			"
71	.01				
72		70-72			Cs ge, Ark ss · brown
73	.00				
74		72-74			"
75					
76		74-76			"
77	.01				
78	.00	76-78			"
79					
80		78-80			
81					
82		80-82			
83					
84		82-84			
85					
86		84-86			

Hole No. #3 Continued Claim No. Longport #1 Date 5/23/57

R. M. Log		Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87	.00			
88		86-88		"
89				
90		88-90		"
91				
92	.01	90-92		"
93	.00			
94		92-94		Med gr, Ash SS - brown
95				
96		94-96		"
97				
98		96-98		"
99				
100		98-100		Fine gr SS - brown
101				
102	.01	100-102		" wet to water
103	.00			
104	.01	102-104		"
105				
106		104-106		V cr gr, ash SS - lt brown
107				
108		106-108		"
109				
110		108-110		"
111				
112		110-112		"
113				
114		112-114		"
115				
116		114-116		"
117				
118		116-118		"
119				
120		118-120		"
121				
122		120-122		Sandy claystone - green gray - some cr sand
123				
124		122-124		"
125				
126		124-126		V cr, ash SS - lt. brown
127				
128		126-128		"
129				
130		128-130		"
131				
132		130-132		"
133	.04			
134		132-134		claystone - blue - little sand

EXTRA COPY
D M E A
RECEIVED
DATE INITIALS CODE
1957

Depth	Radios	Chem.	Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	.00				
136		134-136			V crs gr, ang SS - lt gray - some blue clay
137					
138		136-138			"
139					
140		138-140			"
141					
142	.01	140-142			"
143					
144		142-144			"
145					"
146		144-146			
147	.00				
148		146-148			Sandstone - blue - to blue - some crs sand
149					
150		148-150			V crs, ang, sandstone - lt gray - some blue clay
151					
152		150-152			" "
153					
154		152-154			" "
155					
156	.01	154-156			" "
157					
158		156-158			" "
159					
160		158-160			" "
161					
162		160-162			" "
163					
164		162-164			" "
165					
166		164-166			" "
167					
168		166-168			" "
169					
170		168-170			" "
171					
172		170-172			" "
173					
174		172-174			" "
175					
176		174-176			"
177					
178		176-178			"
179					
180		178-180			"
181					
182		180-182			"
183	.00				
184		182-184			"
185	.02				
186	.00	184-186			"

Hole No. #3 Continued Claim No Forgyport #1 Date 5/23/57

R. M. Log		Chem. Assay	Sample No.	Geologic Data: Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization
87	00			
88	01	86-88		
89				
90		88-90		
91				
92		90-92		
93				
94		92-94		
95				
96	00	94-96		
97				
98		96-98		
99				
100		98-100		
101				
102		100-102		
103				
104		102-104		
105				
106		104-106		
107				
108		106-108		
109				
110		108-110		
111				
112		110-112		
113				
114		112-114		
115				
116		114-116		
117				
118		116-118		
119				
120		118-120		
121	01			
122	00	120-122		
123				
124	02	122-124		
125				
126		124-126		
127				
128		126-128		
129				
130	00	128-130		Graphitic - Mica - some mineral
131	01			
132		130-132		
133				
134		132-134		

R.	LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135	00			
136		134-136		
137				
138		136-138		
139				
140		138-140		
141				
142		140-142		
143				
144		142-144		
145				
146		144-146		
147				
148		146-148		
149	.02 .08			
150	.06 .02	148-150		
151	.02 .3			
152	.27 .11	150-152		
153	.3 .02			
154	.02 .08	152-154		
155	.04 .05			
156	.04 .00	154-156		
157	.02 .01			
158	.02 .01	156-158		
159	.01 .01			
160	.02 .02	158-160		
161	.01			
162		160-162		
163				
164		162-164		
165				
166	.02	164-166		
167				
168	.03	166-168		
169	.02			
170		168-170		
171	.01			
172	.00	170-172		
173				
174		172-174		
175				
176		174-176		
177				
178	.01	176-178		
179				
180		178-180		
181	.00			
182		180-182		
183				
184		182-184		
185				
186		184-186		
	Block at [illegible]			

CLAIM NAME & NO	OWNERS	HOLE NO.
Lone [illegible]	[illegible]	#5

LOCATION	COUNTY	STATE
		[illegible]

DATE	TOTAL DEPTH	ELEVATION
5/25/57	18 ft	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
BC Coal Drilling Co	[illegible]	

PROBE INSTR.	SURFACE INSTR
Duffel	[illegible] 1115

REMARKS: [illegible]

Probed thru the drill stem

R. M. LOG		CHEM. ASSAY		SAMPLE NO.	GEOLOGIC DATA ROCK TYPE · COLOR · SORTING · CONSPICUOUS MINERALS · CARBON · MINERALIZATION
1	.01				
2		0-2			[illegible]
3					
4		2-4			[illegible] buff
5					
6		4-6			"
7					"
8		6-8			
9					"
10		8-10			
11					"
12		10-12			
13	.00				
14		12-14			" [illegible]
15					
16		14-16			[illegible]
17					
18		16-18			"
19					
20		18-20			"
21					
22		20-22			[illegible]
23					
24		22-24			[illegible] buff
25					
26		24-26			"
27					
28		26-28			"
29					
30		28-30			"
31					
32		30-32			"
33					
34		32-34			"
35					
36		34-36			"

R. M.-Log		Chem. Assay	Sample No	Geologic Data (Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization)
37	00			
38		36-38		
39				
40	↓	38-40		
41	01			
42	00	40-42		
43				
44		42-44		
45				
46		44-46		
47				
48		46-48		
49				
50		48-50		
51				
52		50-52		
53				
54		52-54		
55				
56		54-56		
57				
58		56-58		
59				
60		58-60		
61				
62		60-62		
63				
64		62-64		
65				
66		64-66		
67				
68		66-68		
69				
70		68-70		
71				
72		70-72		
73				
74		72-74		
75				
76		74-76		
77				
78		76-78		
79				
80		78-80		Siltstone – tuff – clay – to lime
81				
82		80-82		Very gr, dol ss – tuff – to clay (some [illegible])
83				
84		82-84		" "
85				
86	↓	84-86		"

SHEET No 2

Hole No # 5 Core Size [illegible] #2 5/25/57

R. M. LOG		CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA				
							CARBON	MINERALIZATION
87	00							
88		86-88		"				
89								
90		88-90		"				
91								
92		90-92		"				
93								
94		92-94		"				
95								
96		94-96		"				
97								
98		96-98		"				
99								
100		98-100		"				
101								
102		100-102		"				
103								
104		102-104		"				
105								
106		104-106		"				
107								
108		106-108		"				
109								
110		108-110		"				
111								
112		110-112		"				
113								
114		112-114		"				
115								
116	01	114-116		"				
117								
118		116-118		"				
119								
120		118-120		"				
121								
122		120-122		"				
123								
124		122-124		"				
125								
126		124-126		" Rounded slaughter & siltstone - buff				
127								
128		126-128		"		"		
129								
130		128-130		"		"		
131	00							
132	01	130-132		"		"		
133	00							
134		132-134		"		"		

R.	Log	Chem. Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	01			
136		134-136		"
137				
138		136-138		"
139				
140		138-140		claystone & siltstone - blue w/ some interbedded lt gray crs ss, arkosic ss
141				
142		140-142		.02 [illegible], Ark ss - lt gray to pale blue - some blue clay
143				
144		142-144		"
145				
146		144-146		"
147				
148		146-148		"
149				
150		148-150		claystone - blue green - clay, silt & fine sand
151				
152		150-152		"
153				
154		152-154		"
155				
156		154-156		"
157				
158		156-158		"
159				
160		158-160		"
161				
162		160-162		"
163	02			
164		162-164		Crs gry, Ark ss - blue gray - some blue clay, silt
165	00			
166	01	164-166		"
167				
168		166-168		"
169				
170		168-170		"
171				
172		170-172		"
173				
174		172-174		" no clay below 172
175				
176		174-176		"
177				
178		176-178		"
179				
180		178-180		"
181				
182		180-182		"
183				
184		182-184		
185				
186		184-186		"

R. Mag. Loc		Chem. Assay	Sample No.	Geology Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135				
136		134-136		"
137				
138		136-138		"
139				
140		138-140		"
141				
142		140-142		.026 Claystone - blue. Tongues of cr ark sand
143				
144		142-144		.025 cr ark ss - lt gray - w blue clay
145				
146		144-146		"
147				
148		146-148		"
149				
150	.02	148-150		"
151	.01			
152		150-152		"
153				
154		152-154		"
155				
156	.01	154-156		Sandy claystone - blue. w cr ark sand
157	.02			
158		156-158		"
159				
160		158-160		.027 "
161				
162	.02 .03	160-162		.026 "
163	.02 .02			
164	.03 .03	162-164		"
165	.02			
166		164-166		.030 "
167				
168		166-168		.032 "
169				
170		168-170		.028 Cr ark ss - w clay - gray
171	.01 .02			
172		170-172		
173				
174	.01	172-174		tr carbon
175	.04 .02			
176	.03	174-176		"
177				
178		176-178		.029 Claystone & siltstone - blue gray - " - lam str
179				
180		178-180		.026 "
181				
182		180-182		"
183				
184		182-184		.025 "
185				
186		184-186		"

Hole No. #5 Continued Claim No. Longport Date 5/25/57

R. M. Log		Chem. Assay	Sample No	Geologic Data: Rock Type, Color, Sorting, Consolidation, Mineral, Carbon, Mineralization
287	.01			
288		286-88		"
289				"
290		288-90		
291				"
292		290-92		
293				"
294		292-94		
295				"
296		294-96		
297				"
298		296-98		
299	.02			
300		298-100		Med to coarse and SS - lt gray - [illegible] clay & silt
301				"
302		300-102		
303				"
304		302-104		
305				"
306		304-106		
307				"
308		306-108		
309				"
310		308-110		.028
311	.02			"
312	.01	310-112		.027
313				"
314		312-114		
315				"
316		314-116		
317				"
318		316-118		
319	.02			
320		318-120		.025 "
321				
322		320-122		Siltstone blue gray - some fine to med sand
323				
324		322-124		
325				
326		324-126		
327				
328		326-128		
329				
330		328-130		
331				
332		330-132		
333				
334		332-134		

FT.	LOSS	CHEM.	ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
135	.02				
136		134-136			"
137					
138		136-138			"
139					
140		138-140			"
141					
142		140-142			"
143					
144		142-144			"
145					
146		144-146			"
147	.04				
148		146-148			" Lime stone
149					
150		148-150			" "
151					
152		150-152			" "
153					
154		152-154			" "
155					
156		154-156			" "
157	.02				
158		156-158			" "
159					
160		158-160			" "
161					
162		160-162			" "
163					
164		162-164			" "
165					
166		164-166			" "
167					
168		166-168			" "
169					
170		168-170			" "
171					
172		170-172			" "
173					
174		172-174			" "
175					
176		174-176			" "
177					
178		176-178			"
179					
180		178-180			"
181					
182		180-182			"
183	.04				
184		182-184			"
185					
186		184-186			" (same to bottom of the hole-420')

CLAIM NAME & NO.	OWNERS	HOLE NO
Le gpt #1		#2

LOCATION	COUNTY	STATE
	[illegible]	[illegible]

DATE	TOTAL DEPTH	ELEVATION
5/22/57	300'	

CONTRACTOR	RIG TYPE	STARTING TIME
B.C. Couch Drilling Co.	Failing	

PROBE INSTR	BOREHOLE INSTR
Babbel	Precision 111 [illegible]

REMARKS: Back ground count .021

ROBERT FORD --- Mining Geologist — Riverton, Wyoming

R. M. Log		Chem. Assay		Sample No.	Geologic Data (Rock Type — Color — Sorting — Consolidation — Chemical — Carbon — Mineralization)
1	.00				.021
2		0-2			Overburden - lt brown - [illegible]
3					.022
4		2-4			"
5					"
6		4-6			
7					
8		6-8			Cr ge. SS : Orange - vcs frag ftgty - lime stone slightly calcareous
9	.01				.024
10	.02	8-10			"
11	.01				.025
12	.01	10-12			Pebble congl. cyprus ge SS matrix - buff matrix calcareous pebbles - ftgty & granite
13	.01				.029
14	.01	12-14			"
15	.01				
16	.00	14-16			Cr ge SS : green brown - coarse siltstone thin
17					.024
18		16-18			"
19					
20		18-20			"
21					.025
22		20-22			Cr ge, Ark. SS - buff - lime stone 20-22
23					
24		22-24			"
25					
26		24-26			"
27					
28		26-28			"
29					
30		28-30			"
31					
32		30-32			"
33	.00				.028
34	.07	32-34			"
35	.00				"
36		34-36			"

R. M.	LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
37	.00			"
38		36-38		
39				"
40		38-40		
41				"
42		40-42		
43				"
44		42-44		
45				.030 "
46		44-46		
47				[illegible] "
48		46-48		
49				"
50		48-50		
51				.028 "
52	.01	50-52		
53				.025 "
54		52-54		
55	.00			
56	.01	54-56		[illegible] gr, Ark SS - [illegible]
57	.00			
58		56-58		[illegible] gr, Ark SS - buff
59				"
60		58-60		
61				"
62		60-62		
63				"
64		62-64		
65				"
66		64-66		
67	.01			"
68		66-68		
69				"
70		68-70		
71				.00
72	.00	70-72		Limestone - blue [illegible] gr, sand
73				.026
74		72-74		" Heavy stains
75				"
76		74-76		
77				
78	.01	76-78		[illegible] gr SS - brown - [illegible] of Metres - [illegible]
79	.00			.023
80		78-80		[illegible] gr, Ark SS - buff
81				"
82		80-82		
83				"
84		82-84		
85				"
86		84-86		

Hole No. #2 Continued Claim No. Lazy #1 Date 5/22/57

R. M. Log	Chem. Assay	Sample No.	Geologic Data (Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization)
87			
.00 88	86-88		" Fe lim
89			
90	88-90		"
91			
92	90-92		" wet to water
93 .01			.024
94	92-94		"
95			.125
96	94-96		"
97 .00			
98	96-98		"
99			
100	98-100		Sandy claystone - green brown - some sand - limestone
101			
102	100-102		"
103			
104 .01	102-104		claystone - blue - little sand
105 .00			
106	104-106		"
107 .01			
108 .00	106-108		"
109 .01			
110 .00	108-110		" 24 m stain
111			
112	110-112		" "
113			
114	112-114		"
115			.027
116	114-116		"
117			.025
118	116-118		"
119			
120	118-120		Cr gy, Ark 55 - lt. gray
121			.022
122	120-122		Sandy claystone - blue
123			
124	122-124		Cr gy, Ark 55 - lt gray - some clay throw out.
125 .01			
126 .00	124-126		"
127			
128	126-128		"
129			
130	128-130		"
131			
132	130-132		"
133			
134	132-134		"

R. M. Log		Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	00				
136		134-136			"
137					
138		136-138			"
139					
140		138-140			"
141					
142		140-142			"
143					
144		142-144			"
145					
146		144-146			"
147					
148		146-148			"
149					
150		148-150			"
151					
152		150-152			"
153					
154		152-154			"
155					
156		154-156			"
157					
158		156-158			"
159					
160		158-160			"
161					
162		160-162			"
163					
164		162-164			"
165					
166		164-166			"
167					
168		166-168			"
169					
170		168-170			"
171					
172		170-172			"
173					
174		172-174			"
175					.025
176		174-176			"
177					.022
178		176-178			"
179					
180		178-180			"
181					
182		180-182			"
183					
184		182-184			"
185					
186		184-186			"

Hole No. #2 Continued Claim No [illegible] #1 Date 5/22/57

R. M. Log		Chem. Assay	Sample No.	Geologic Data (Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization)
187	.00			"
188	↓	186-88		
189	.01			"
190	.02	188-90		
191	.01			"
192		190-92		
193				
194		192-94		Claystone – blue – w. microcrystalline · Hem stains
195				
196		194-96		"
197				"
198		195-98		
199				"
200		198-100		
201				"
202		200-102		Lim stain
203				"
204		202-104		reddish ss line
205	↓			"
206	.03	204-106		
207	.02			"
208	.01	206-108		
209				"
210		208-110		
211	↓			"
212	.02	210-112		
213				"
214		212-114		
215				
216		214-116		"
217				
218		216-118		"
219				
220		218-120		Crag, Ark ss – dark gray – by Hemant
221				"
222		220-122		
223				"
224		222-124		
225				"
226		224-126		
227	↓			
228	.04	226-128		"
229	.05			0.25
230	.02	228-130		"
231	.02			0.30
232	.03	230-132		Claystone – bedding
233	.01			
234	↓	232-134		"

R. M. Log	Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	.01	.028	"
136	134-136		
137		.05	"
138	136-138		Flash - due to carbon?
139		.022	" "
140	.00	138-140	
141			"
142	140-142		
143			"
144	142-144		
145			"
146	144-146		
147			"
148	146-148		
149			"
150	148-150		
151			"
152	150-152		
153			
154	152-154		Lt tg to fine gr ss - blue
155			
156	.01	154-156	"
157			
158	156-158		"
159			
160	158-160		"
161			
162	.00	160-162	"
163			
164	162-164		"
165			
166	164-166		"
167			
168	.01	166-168	" Some gray tuff ss
169	.00		
170	168-170		" "
171			
172	170-172		" "
173			
174	172-174		" "
175			
176	174-176		" " to Hem
177			
178	176-178		" " "
179			
180	178-180		" "
181			
182	180-182		" "
183			
184	182-184		" "
185			
186	184-186		" (same to bottom of the hole - 900')

CLAIM NAME & NO.	OWNERS	HOLE NO.
Longport #1	[illegible]	1

LOCATION	COUNTY	STATE
	Lincoln	Wyo.

DATE	TOTAL DEPTH	ELEVATION
5/20/57	300	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Cored Drilling Co.	Vibro	

PROBE INSTR.	SURFACE INSTR
Baffle	[illegible] 11B

REMARKS: Back ground count .0085 74H.C

R. M. Log		Chem. Assay	Sample No.	Geologic Data (Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization)
1	.00			.0085
2		0-2		Carbonaceous [illegible] buff [illegible]
3				"
4		2-4		
5				
6		4-6		[illegible] gr ss – buff – [illegible]
7				"
8		6-8		
9				"
10		8-10		
11				"
12		10-12		
13				"
14		12-14		[illegible] silt
15				
16		14-16		"
17				
18		16-18		Med gr ss – buff – [illegible]
19				
20		18-20		"
21	.01			
22		20-22		"
23				
24		22-24		"
25				
26	.00	24-26		Med gr ss – tan – [illegible] to fine gr sand
27				
28		26-28		"
29				.010
30		28-30		Med gr ss – brown – [illegible] silt & clay
31				
32		30-32		Lady Slaughter – [illegible] – [illegible]
33				.009
34	.01	32-34		"
35				.0085
36		34-36		Fine to med gr ss – red brown – [illegible]

RECEIVED
DATE
CODE
57

R. M. Log		Chem. Assay		Sample No	Geologic Data — Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization
37	.80				
38		36-38			[illegible]
39					
40		38-40			
41					
42		40-42			[illegible]
43					
44		42-44			[illegible] buff [illegible] pegmatitic granite
45					
46		44-46			
47					
48		46-48			"
49					
50		48-50			"
51					"
52		50-52			"
53					.005
54		52-54			
55					
56		54-56			" [illegible] clay
57					
58		56-58			"
59					
60		58-60			"
61					
62		60-62			[illegible] buff - pebbly
63					
64		62-64			"
65					
66		64-66			"
67					
68		66-68			[illegible] - buff - some pegmatitic granite
69					
70		68-70			"
71					"
72	.01	70-72			
73	.00				"
74		72-74			
75					"
76		74-76			
77					
78		76-78			[illegible] - blue gray - some clay
79					
80		78-80			[illegible] - gray blue - some clay - Tr lime
81					
82		80-82			" a little pegmatitic granite
83					
84		82-84			"
85					
86		84-86			"

Hole No. 1 Continued Claim No. August #1 Date 5/20/57

R. M. Log	Chem. Assay	Sample No	Geologic Data (Rock Type, Color, Texture, Constituents, Mineral, Carbon, Mineralization)
87			"
88	86-88		Tr of tan
89			"
90	88-90		
91			"
92	90-92		
93			"
94	92-94		
95			"
96	94-96		
97			"
98	95-98		
99			"
100	98-100		
101			
102	100-102		Med gr, black SS - blue green
103			.011 "
104	102-104		
105			
106	104-106		Sandy Siltstone - blue green - tr limestone
107			.009 "
108	106-108		
109			.000
110	108-110		Med gr, dk SS - blue green - weak [illegible]
111			
112	110-112		"
113			
114	112-114		"
115			
116	114-116		Coa gr, blk SS - blue green
117			
118	116-118		"
119			
120	118-120		" Hem stain
121			
122	120-122		Coa gr, blk SS - blue green - hem stain
123			" "
124	122-124		
125.			.011 "
126	124-126		"
127			
128	126-128		" "
129			
130	128-130		"
131			.000
132	130-132		"
133			
134	132-134		"

R. M. Log		Chem. Assay	Sample No.	Geological Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	.08			
136		134-136		"
137				
138		136-138		"
139				
140		138-140		"
141				
142		140-142		Cse. gr., Ark. SS - Blue gray
143				
144		142-144		"
145				
146		144-146		"
147				
148		146-148		"
149				
150		148-150		" — Wet water
151				
152		150-152		"
153				
154		152-154		"
155				
156		154-156		"
157				
158		156-158		"
159				
160		158-160		"
161				
162		160-162		"
163				
164		162-164		Silty SS - Blue
165				
166		164-166		"
167				
168		166-168		"
169				
170		168-170		"
171				
172		170-172		"
173				
174		172-174		" — some crs sand
175				
176		174-176		"
177				
178		176-178		"
179				
180	.04	178-180		"
181				
182		180-182		" — some crs sand - [illegible]
183				
184	.02 .01	182-184		" "
185				
186		184-186		Cse gr, Ark SS - Lt. blue gray - frag [illegible] & quartz

Hole No. 1 Continued Claim No. Agent #1 Date 5/20/57

R. M. LOG		CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
187	.01			
188		186-88		"
189				
190		188-90		"
191				
192		190-92		"
193				
194		192-94		"
195				
196		194-96		"
197				
198		196-98		"
199				
200		198-100		"
201				
202	.04	200-102		"
203				
204		202-104		"
205				
206		204-106		"
207	.01			
208		206-108		"
209				
210		208-110		"
211				
212		210-112		" lens of blue shale
213				
214		212-114		"
215				
216		214-116		"
217				
218		216-118		"
219				
220		218-120		"
221				
222		220-122		"
223				
224		222-124		"
225				
226		224-126		"
227				
228		226-128		"
229				
230		228-130		"
231				
232	.02	230-132		"
233				
234		232-134		"

R. M. Log		Chem. Assay	Sample No.	Geologic Data Rock Type – Color – Sorting – Conspicuous Mineral – Carbon – Mineralization
135	P2			
136		134-136		
137				
138		136-138		
139				
140		138-140		
141				
142		140-142		
143				
144		142-144		[illegible] SS - dk gray - [illegible] and clay
145				
146		144-146		
147				
148		146-148		
149				
150		148-150		
151				
152		150-152		
153				
154		152-154		[illegible] stain
155				
156		154-156		nevertheless material
157				
158		156-158		
159				
160		158-160		
161				
162		160-162		
163				
164		162-164		
165				
166		164-166		Coarse, dk SS - gray - numerous [illegible] clay
167				
168		166-168		
169				
170	.03	168-170		
171				
172		170-172		Sandy [illegible] - blue - numerous [illegible]
173				
174		172-174		
175				
176	.02	174-176		
177				
178		176-178		
179				
180		178-180		
181				
182		180-182		
183				
184		182-184		
185	.01			
186	.00	184-186		Chert [illegible] - gray - very strong
				(Lower wind [illegible] ?) (Some [illegible] bottom of the hole - 500')

PROJECT NAME & NO. 28-88	OWNERS		HOLE NO. #4
Lovejoy #2	Riverton Uranium Corp		
LOCATION	COUNTY Fremont	STATE Wyo	
DATE 5/24/57	TOTAL DEPTH 400	ELEVATION	
CONTRACTOR BG Quick Drilling Co	RIG TYPE Fairing	HOURS DRILL TIME	
DOWNHOLE INSTR. Babbel	SURFACE INSTR. Precision 1118		
REMARKS: Back ground count .025 MR/HR			

M. Log	Chem. Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
00	0-2		.025 Overburden - brown fine to c
	2-4		"
	4-6		Conglomerate buff - brown med gr sand
	6-8		"
	8-10		"
01	10-12		"
	12-14		"
	14-16		
.03	16-18		"
	18-20		"
	20-22		"
02	22-24		
	24-26		.027 Silt gray brown
	26-28		Conglomerate - buff - to lim.
01	28-30		.025 "
00	30-32		Mudstone - buff - to lim 30'-32'
	32-34		"
	34-36		Conglomerate - buff

FT.		CHECK	LIBRARY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
37	00	35-37			
38		36-38			
39					
40		38-40			
41					
42		40-42			
43					
44		42-44			
45					
46		44-46			
47					
48		46-48			
49					
50		48-50			
51					
52		50-52			
53					
54		52-54			
55	02				
56	01	54-56			
57					
58		56-58			
59					
60		58-60			
61					
62		60-62			
63	00				
64		62-64			
65					
66		64-66			
67					
68		66-68			
69	01				
70		68-70			
71					
72		70-72			
73					
74		72-74			
75					
76	02	74-76			
77					
78		76-78			
79					
80		78-80			
81					
82	01	80-82			
83					
84		82-84			
85					
86		84-86			

Hole No. #4 Continued Claim No. Longest #2 Date 5/24/57

R. M.	Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87	.01			
88		86-88		
89				
90		88-90		
91				
92		90-92		
93	.00			
94		92-94		
95				
96		94-96		
97				
98		96-98		
99				
100		98-100		Fine to med gr. sub ss - buff
101				
102		100-102		
103				
104	.01	102-104		
105				
106		104-106		
107				
108		106-108		Med to crse gr. sub ss - buff - some frag of qtz
109				
110		108-110		
111				
112	.00	110-112		
113				
114		112-114		
115	.01			
116	.00	114-116		
117				
118		116-118		Med gr. sub ss - buff
119				
120		118-120		
121				
122		120-122		Med gr sub ss buff w/ t Dustin
123				
124		122-124		
125				
126		124-126		
127				
128	.01	126-128		
129	.00			
130	.00	128-130		
131				
132		130-132		
133				
134		132-134		

FEET		ASSAY	SAMPLE NO.	GEOLOGIC DATA — ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
133	00			
134	134-136			"
135				
136	136-138			"
137				
138	138-140			"
139				
140	140-142			"
141	02			
142	142-144			Claystone - blue - [illegible]
143				
144	144-146			
145	01			
146	146-148			Vol. degrad. sh. - lt gray - some blue clay
147				
148	148-150			
149				
150	150-152			
151				
152	152-154			
153				
154	154-156			Claystone - [illegible] - [illegible]
155				
156	156-158			"
157				
158	158-160			"
159				
160	160-162			"
161				
162	162-164			"
163				
164	164-166			Vol. degrad. sh. - lt gray
165				
166	166-168			"
167				
168	168-170			"
169				
170	170-172			"
171				
172	172-174			"
173				
174	174-176			"
175				
176	176-178			"
177				
178	178-180			"
179				
180	180-182			"
181				
182	182-184			"
183				
184	184-186			"
185				
186				

SHEET No. 2 SHEET No. 2

Hole No. #4 Continued Claim No. [illegible] Date [illegible]

R. M. Log		Chem. Assay		Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
187	.01				
188		86-88			
189					
190		88-90			
191					
192		90-92			
193					
194		92-94			
195					
196		94-96			Clay [illegible]
197					
198		96-98			[illegible]
199					
200		98-100			
201					
202		100-102			
203					
204	.00	102-104			
205					
206		104-106			
207					
208		106-108			
209					
210		108-110			
211					
212		110-112			
213					
214		112-114			
215					
216		114-116			
217					
218		116-118			
219					
220		118-120			
221					
222		120-122			
223					
224		122-124			[illegible] stain
225					
226	.01	124-126			
227					
228		126-128			"
229					
230		128-130			" " "
231					
232		130-132			"
233					
234		132-134			

		134-136		"
		136-138		"
		138-140		"
		140-142		"
	02	142-144		"
	01	144-146		"
		146-148		"
		148-150		"
		150-152		" interbedded blue clay
		152-154		"
		154-156		"
		156-158		" interbedded blue clay
		158-160		"
		160-162		"
	00	162-164		"
	00	164-166		"
		166-168		"
		168-170		"
	00	170-172		"
	01	172-174		"
	01	174-176		"
		176-178		Claystone - blue to cocoa
		178-180		" chocolate cocoa
		180-182		Siltstone claystone - blue to blue green
	02	182-184		"
		184-186		"

Hole No. #4 Continued Claim No. Longpt #2 Date 5/24/57

Feet	Log	Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
187	.02			
188		286-88		"
189				
190		288-90		"
191				
192		290-92		"
193				
194		292-94		"
195				
196		294-96		"
197				
198		296-98		"
199				
200		298-100		"
201				
202		300-102		"
203				
204		302-104		"
205				
206	.00	304-106		"
207				
208		306-108		"
209				
210		308-110		"
211	.01			
212		310-112		"
213				
214		312-114		[illegible] [illegible] [illegible] def. 33
215				
216	.01	314-116		"
217				
218	.01	316-118		
219				
220	.00	318-120		"
221				
222		320-122		"
223				
224		322-124		" from 55 - [illegible] [illegible] blue - much [illegible] [illegible] [illegible] [illegible] [illegible]
225				
226		324-126		"
227				
228		326-128		"
229				
230		328-130		"
231				
232		330-132		"
233				
234		332-134		"

55						
56		134-136				"
57						
58		136-138				"
59						
60		138-140				"
61						
62		140-142				"
63						
64		142-144				"
65						
66		144-146				"
67						
68		146-148				"
69						
70		148-150				"
71						
72		150-152				"
73						
74		152-154				"
75						
76		154-156				"
77						
78		156-158				"
79						
80		158-160				"
81						
82		160-162				"
83						
84		162-164				"
85						
86		164-166				"
87						
88		166-168				"
89						
90		168-170				"
91						
92		170-172				"
93						
94		172-174				"
95						
96		174-176				"
97						
98		176-178				"
99						
100		178-180				"
101						
102		180-182				
103						
104		182-184				"
105						
106		184-186				"

GEOLOGIC DATA

TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION

Lies Chystalt

(same to bottom - 400')

MAIN NAME & NO.	OWNERS	HOLE NO.
Lagport #2	Rocator Uranium Corp	#6

LOCATION	COUNTY	STATE
	Uinta	Wyo

DATE	TOTAL DEPTH	ELEVATION
5/27/57	400	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.C. Cook Drilling Co.	Failing	

PROBE INSTR.	SURFACE INSTR.
Bethel	Precision 111B

REMARKS: Bak ground count - 026

M.	M. Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
1	00			.026
2		0-2		Overburden - dark brown - fine to crs
3				
4		2-4		"
5				
6		4-6		Fine to med gr ss - buff - slightly carbonaceous
7				
8	01	6-8		Silty ss - brown
9	06			
10		8-10		Crs arkl ss - buff - some pty
11				
12		10-12		"
13				
14		12-14		"
15				
16		14-16		"
17				
18		16-18		Med gr, arkl ss - buff - some crs
19				
20		18-20		Crs gr, arkl ss - buff
21				
22		20-22		"
23				
24		22-24		"
25				
26		24-26		"
27				
28		26-28		"
29	01			
30	02	28-30		"
31	01			
32		30-32		"
33				
34		32-34		"
35				
36		34-36		"

R. M. LOG	CHEM. ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
37			
38	36-38		" "
39			
40	38-40		"
41			
42	40-42		Med gr, Ark SS - buff
43			
44	42-44		" "
45			
46	44-46		Fine gr, Ark SS - buff
47			
48	46-48		Med to crs, Ark SS - buff
49			
50	48-50		" "
51			
52	50-52		"
53			
54	52-54		"
55			
56	54-56		"
57			
58	56-58		Crs gr, Ark SS - buff
59			
60	58-60		"
61			
62	60-62		"
63			
64	62-64		"
65			
66	64-66		"
67			
68	66-68		" "
69			
70	68-70		"
71			
72	70-72		"
73			
74	72-74		"
75			
76	74-76		Silty SS - blue - slightly calcareous
77			
78	76-78		"
79			
80	78-80		Med gr, Ark SS - green brown
81			
82	80-82		"
83			
84	82-84		
85			
86	84-86		

Hole No. #2 Continued Claim No. Longpot #8 Date 5/27/57

Ft. In.	Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87				
88		86-88		"
89				
90		88-90		"
91				
92		90-92		"
93				
94		92-94		"
95				
96		94-96		.028 Silty SS - blue - slightly arkosic
97				.024
98		96-98		"
99				.026
100		98-100		"
101				
102		100-102		Fine gry, ark SS - yellow brown
103				
104		102-104		"
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108		106-108		Crse gry, ark. SS - buff
109				
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114		112-114		Med gry, ark SS - buff
115				
116		114-116		"
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128		126-128		"
129				
130		128-130		Crse Sulf, ark SS - buff
131				
132		130-132		"
133				
134		132-134		Vrse gry, ark SS - [illegible]

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W. M. LOG	CHEM.	ASSAY	SAMPLE NO.	GEOLOGIC DATA — ROCK TYPE – COLOR – SORTING – CONSPICUOUS MINERAL – CARBON – MINERALIZATION
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136	134-136			"
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164	162-164			"
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166	164-166			
167				
168	166-168			"
169				
170	168-170			Sulfide & Clayston - Shale
171				
172	170-172			
173				
174	172-174			"
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176	174-176			✓ Dk gy sh 55 - lt gy shale
177				
178	176-178			"
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182	180-182			"
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184	182-184			
185				
186	184-186			"
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Hole No. 2 Continued Claim No. Longpost #2 Date 5/27/67

Hole No.	From	To	Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
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Continued Claim No. Longpet #2 Date 5/27/57

	ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
[illegible]			"
[illegible]			"
[illegible]			"
[illegible]			Clayston & siltstone - blue -
[illegible]			"
[illegible]			"
[illegible]			"
[illegible]			"
[illegible]			"

COMP. NAME & NO.	OWNERS	HOLE NO.
Longport #4	Kerr-McGee	#11

LOCATION	COUNTY	STATE
	Fremont	Wyo.

DATE	TOTAL DEPTH	ELEVATION
5/28/57	400	

CONTRACTOR	RIG TYPE	HOURS DRILL TIME
B.L. Cook Drilling Co.	[illegible]	

DOWN HOLE INSTR.	SURFACE INSTR.
Baked	[illegible]

REMARKS: Background count 22 [illegible]

Depth	Gamma Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
1	.01	0-2		.026 [illegible]
2		2-4		[illegible]
3		4-6		"
4		6-8		.028 [illegible]
5		8-10		.026 "
6		10-12		"
7		12-14		[illegible]
8	.02	14-16		"
9	.01	16-18		"
10		18-20		"
11		20-22		"
12		22-24		"
13		24-26		"
14		26-28		"
15		28-30		"
16		30-32		
17		32-34		
18		34-36		
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Depth	Chem.	Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
37 00				
38	36-38			grey [illegible] clay
39				
40	38-40			
41				
42	40-42			
43				
44	42-44			
45				
46	44-46			
47				
48	46-48			
49				
50	48-50			
51				
52	50-52			
53				
54	52-54			
55				
56	54-56			
57				
58	56-58			
59				
60	58-60			
61				
62	60-62			
63	00			
64	62-64			[illegible]
65				
66	64-66			Vesicular [illegible]
67				
68	66-68			
69				
70	68-70			
71				
72	70-72			
73				
74	72-74			
75				
76	74-76			[illegible]
77				
78	76-78			
79				
80	78-80			
81				
82	80-82			
83				
84	82-84			
85				
86	84-86			[illegible]

Hole No. #11 Continued Claim No. [illegible] Date 5/28/57

W. M. Log		Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87	00			026
88		86-88		
89				
90		88-90		
91				
92	01	90-92		
93				
94		92-94		
95				
96		94-96		
97				
98		96-98		
99				
100		98-100		
101				
102	00	100-102		
103				
104		102-104		
105				
106		104-106		
107				031
108		106-108		
109				
110		108-110		
111				028
112		110-112		
113				
114		112-114		
115				026
116		114-116		
117	02			
118	01	116-118		
119	00			
120		118-120		
121	01			
122	00	120-122		
123				
124		122-124		
125				029
126		124-126		
127				
128		126-128		
129				028
130		128-130		
131				[illegible]
132		130-132		
133				[illegible]
134		132-134		

FT.	IN.	CM.	CORE	ASSAY	SAMPLE NO.	GEOLOGIC DATA ROCK TYPE — COLOR — SORTING — CONSPICUOUS MINERAL — CARBON — MINERALIZATION
133	01					
134		134-136				
135						
136		136-138				
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138		138-140				
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140		140-142				
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142	01	142-144				
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148		148-150				
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150	00	150-152				
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152		152-154				
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154		154-156				
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156		156-158				
157						
158		158-160				
159						
160		160-162				
161						
162		162-164				
163						
164		164-166				
165						
166		166-168				
167	01					
168	62	168-170				
169	01					
170		170-172				
171						
172		172-174				
173						
174		174-176				
175						
176		176-178				
177						
178		178-180				
179						
180	00	180-182				
181	01					
182	00					
183						
184		184-186				
185						
186		186-188				

Hole No. #11 Continued Claim No. Longpost #4 Date 5/28/57

W. M. Loc	Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87			
88	186-88		"
89			
90	188-90		"
91			
92	190-92		"
93			
94	192-94		"
95			
96	194-96		Claystone - light grey & blue - [illegible]
97			
98	196-98		"
99	01		
100	198-100		"
101	00		
102	200-102		"
103			
104	202-104		"
105			
106	204-106		" some [illegible] Vcrsgraic SS
107			
108	206-108		"
109			
110	208-110		"
111			
112	210-112		"
113			
114	212-114		V crsgraic SS - buff grey
115			
116	214-116		"
117	02		
118	216-118		"
119			
120	218-120		"
121			
122	220-122		"
123	01		
124	222-124		"
125			
126	224-126		"
127			
128	226-128		"
129	01		
130	228-130		"
131	01		
132	230-132		"
133			
134	232-134		"

133	01				025
134		134-136			"
135					
136	00				028
137		136-138			"
138					
139					026
140		138-140			"
141					
142		140-142			"
143					
144		142-144			"
145					
146	01	144-146			"
147					
148	02	146-148			"
149					
150		148-150			"
151					
152	01	150-152			"
153					
154		152-154			"
155	00				
156		154-156			"
157					
158		156-158			"
159					
160		158-160			"
161					
162		160-162			
163					
164	01	162-164			"
165					
166		164-166			Blue clay [illegible]
167					
168		166-168			"
169					
170		168-170			"
171					
172		170-172			"
173					
174		172-174			"
175					
176		174-176			"
177	00				
178		176-178			"
179					
180		178-180			"
181					
182		180-182			"
183					
184	00	182-184			"
185					017
186		184-186			"

189 ✓ 184

Sheet No. 2 | Sheet No. 2

183-184

Hole No. #11 Continued Claim No. Langpat #4 Date 5/28/57

Ft.	In.	Lgth	Chem. Assay		Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87		00				
88			286-88			"
89						
90			288-90			"
91						028
92			290-92			"
93						029
94			292-94			Claystone - blue
95						"
96			294-96			dark stone
97		07				027
98			296-98			"
99						
100			298-100			"
101		02				026
102		01	300-102			
103		04				027
104		04	302-104			Vcrag, ash ss - brown - some blue clay throughout
105		03				Poor stained fossils
106		03	304-106			"
107		03				026
108		03	306-108			"
109		02				
110		02	308-110			"
111		03				027
112			310-112			" carbon
113						026
114			312-114			"
115		01				
116		02	314-116			"
117		03				
118		02	316-118			" green-brown
119		00				
120			318-120			" "
121						
122			320-122			" "
123						
124			322-124			" "
125						
126			324-126			" "
127						
128			326-128			" "
129						
130			328-130			"
131						
132			330-132			
133						
134			332-134			(same to bottom 400')

PROJECT NAME & NO. Leggett #4	OWNERS Rivette Uranium Co	HOLE NO. #12
LOCATION	COUNTY Fremont	STATE Wyo
DATE 5/28/57	TOTAL DEPTH	ELEVATION
CONTRACTOR BC Coal Drilling Co.	RIG TYPE	HOURS DRILL TIME
PROBE INSTR. Bethel	SURFACE INSTR.	
REMARKS:		

Ft.	M.	Log	Chem. Assay	Sample No.	Geologic Data — Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
1		00			
2			0-2		
3					
4			2-4		
5					
6			4-6		
7					
8			6-8		
9					
10			8-10		
11					
12			10-12		
13					
14			12-14		.029
15					
16			14-16		.025
17					
18			16-18		
19					
20			18-20		
21					
22			20-22		
23					
24			22-24		
25					
26			24-26		
27					.028
28					
29					
30					
31					.027
32					
33					.022
34					
35					
36			34-36		

	Interval	Assay	Sample No.	GEOLOGIC DATA: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
	36-38			.11 green brown
	38-40			"
42	40-42			0.29 [illegible] SS [illegible]
	42-44			[illegible]
	44-46			0.34
	46-48			0.29 [illegible]
	48-50			0.35
	50-52			0.25
	52-54			
	54-56			
	56-58			
	58-60			
	60-62			
	62-64			
	64-66			
	66-68			
	68-70			
	70-72			
	72-74			0.25 [illegible] SS - [illegible] some silt
	74-76			0.28 "
78	76-78			0.25 [illegible] SS - brown
79, 80	78-80			
81, 82	80-82			[illegible] gr [illegible] SS - green brown
83, 84	82-84			
85, 86	84-86			Med gr [illegible] SS - green brown

Hole No. #12 Continued Claim No. Longpost #1 Date 5/28/57

R. M. Log	Chem. Assay	Sample No.	Geologic Data (Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization)
87 01			
88	86-88		"
89			
90	88-90		Pebble conglom w/ss matrix - brown
91			
92	90-92		"
93			
94	92-94		"
95			
96	94-96		[illegible] - lt. [illegible] some qtz. pebbles
97			
98	96-98		
99			
100	98-100		
101			.022
102	100-102		"
103			.023
104	102-104		"
105			
106 00	104-106		"
107			.022
108	106-108		"
109			.030
110	108-110		Wedge, ark ss
111			.025
112	110-112		"
113			
114	112-114		"
115			
116	114-116		"
117			
118	116-118		"
119			
120	118-120		"
121			
122	120-122		"
123			
124	122-124		"
125			
126	124-126		"
127			
128	126-128		"
129			
130	128-130		" silty
131			
132	130-132		
133			
134	132-134		" went to water

Depth			Interval	Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135 136			134-136			v crs gr, ark ss - lt grey
137 138			136-138			"
139 140			138-140			"
141 142			140-142			"
143 144			142-144			"
145 146			144-146			"
147 148			146-148			"
149 150			148-150			Siltstone – blue – and blue clay
151 152			150-152			"
153 154			152-154			"
155 156			154-156			V crs gr, ark ss
157 158			156-158			
159 160			158-160			"
161 162			160-162			"
163 164			162-164			"
165 166			164-166			"
167 168			166-168			"
169 170			168-170			"
171 172			170-172			
173 174			172-174			"
175 176			174-176			"
177 178			176-178			"
179 180			178-180			"
181 182			180-182			"
183 184			182-184			"
185 186			184-186			"

SHEET No. 2

Hole No. #12 Continued Claim No. Lagget #4 Date 5/28/57

Ft.	Log	Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
87	01			
88		186-88		
89				
90		188-90		intbldd Ilmenite & Ly
91				
92		190-92		
93				
94		192-94		" "
95				
96		194-96		"
97				
98		196-98		"
99				
100		198-100		siltstone - Ilm - some cmpsd 55 intbldd
101				
102		200-102		
103				
104		202-104		.029
105				
106		204-106		.037
107				
108		206-108		.025
109				
110		208-110		
111				
112		210-112		v cmpsd 55 - Ilmy - lentiform
113				
114		212-114		"
115				
116		214-116		"
117				
118		216-118		"
119				
120	00	218-120		"
121				
122		220-122		"
123				
124		222-124		" - Ilmenite
125				
126		224-126		"
127				
128		226-128		" - Ilmenite
129				
130		228-130		" "
131				
132		230-132		" "
133				
134		232-134		"

Ft. In. Lbs	Chem. Assay	Sample No.	Geologic Data Rock Type — Color — Texture — Conspicuous Mineral — Garbon — Mineralization
135			
136	134-136		
137			
138	136-138		
139			
140	138-140		
141			
142	140-142		
143			
144	142-144		
145			
146	144-146		
147			
148	146-148		
149			
150	148-150		
151			
152	150-152		
153			
154	152-154		
155			
156	154-156		
157			
158	156-158		
159			
160	158-160		
161			
162	160-162		
163			
164	162-164		
165			
166	164-166		
167			
168	166-168		
169			
170	168-170		
171			
172	170-172		
173			
174	172-174		
175			
176	174-176		
177			
178	176-178		
179			
180	178-180		
181			
182	180-182		
183			
184	182-184		
185			
186	184-186		

Hole No. [illegible] Continued Claim No. [illegible] Date [illegible]

SEA-SOIL DATA

Depth	Log	Sample Number	Sample No.	Description – Classification, Color, Consistency, Moisture, Structure, Odor, Stratigraphy, Interpretation
81				
82		[illegible]		
83				
84		[illegible]		
85				
86		[illegible]		
87				
88		[illegible]		
89				
90		[illegible]		
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				
101				
102				
103				
104				
105				
106				
107				
108				
109				
110				
111				
112				
113				
114				
115				
116				
117				
118				
119				
120				
121				
122				
123				
124		[illegible]		
125				
126		[illegible]		
127				
128		[illegible]		
129				
130		[illegible]		
131				
132		[illegible]		"
133				
134		[illegible]		

Depth		Chem. Assay	Sample No.	Geologic Data: Rock Type — Color — Sorting — Conspicuous Mineral — Carbon — Mineralization
135	01			
136		134-136		
137				
138		136-138		
139				
140		138-140		
141				
142		140-142		
143				
144		142-144		
145	02			
146		144-146		
147				
148		146-148		
149				
150		148-150		
151				
152		150-152		
153	01			
154		152-154		
155				
156	02	154-156		
157				
158		156-158		
159				
160		158-160		
161				
162		160-162		
163				
164		162-164		
165				
166		164-166		
167				
168		166-168		
169				
170		168-170		
171				
172		170-172		
173				
174		172-174		
175				
176		174-176		
177				
178		176-178		
179				
180		178-180		
181				
182		180-182		
183				
184		182-184		
185	01			
186		184-186		

FINAL DISTRIBUTION
MADE DEC 21 1956

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

Administrative Audit Difference Statement

Charles M. Coleman & Associates
139 N. Clark Street
Chicago 2, Illinois

Date: December 20, 1956
Payee's Reference: October 1956

DMEA-4047

Gentlemen:

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

Amount Claimed	$	3,236.00
Difference	$	
Amount Approved	$	* 3,236.00

The reason for the difference was due to:

*Reinstated: The amount of $300.00 which was withheld from the May 1956 Voucher.

Withheld: The amount of $400.00 pending resolution of matters relative to closing the account.

RECEIVED
DEC 26 1956
D.M.E.A.

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

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

224 New Customhouse
Denver 2, Colorado

RECEIVED
DEC 26 1956
D.M.E.A.

December 6, 1956

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 4047 (Uranium) Contract Idm-E943, Charles M. Coleman and Associates (Clyde, Marsh and Longport groups) Fremont County, Wyoming. Operator's Monthly Progress Report for the month of October, 1956 (FINAL)

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.

It is deemed 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 October, 1956, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Reinstate the amount of $300.00 which was withheld from the May, 1956 voucher.

Withhold an amount of $400.00 pending resolution of matters relative to closing the account. The contract work has been completed.

Reconciliation with the amount Reported by the Operator on Form MF-104 for October, 1956

Amount reported on Form MF-104 for Oct., 1956 - - -		$3,236.00
Government participation at 75 percent - - - - - - - - -		2,427.00
Amount to be withheld - - - - - -	$400.00	
Amount to be reinstated - - - - -	300.00	
Net deduction		100.00
Recommended payment to Operator		$2,327.00

Note: Work approval of August 22, 1956 included four offset holes to be drilled 100 feet north, east, south and west from Hole M-3. The four holes were actually drilled northeast, northwest, southeast and southwest from Hole M-3. The variation is acceptable to the Government as the holes accomplished the objectives satisfactorily.

Attached is a copy of a memorandum dated November 30, 1956 from John F. Shaw and E. N. Harshman which confirms the acceptability of the holes.

Remarks

Date of Report- - - - - - - - - - - - - November 14, 1956
Date Received in Field Office - - - November 16, 1956
Date Received in Region Office - - November 27, 1956

Original signed by
W. M. TRAVER

W. M. Traver

Enclosures
JDC:jy
cc: MF-104 File E943
Chm. Op. Comm. (2)
Shaw (2)
Harshman)
Townsend) w/copy of engr's report
Chron.

RECEIVED
DEC 26 1956
D.M.E.A.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

November 30, 1956

DMEA
DEPARTMENT OF THE INTERIOR
DEC 3 1956
REGION III
DENVER, COLORADO

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA Docket 4047 (Uranium), Contract Idm-E 943, Charles M. Coleman and Others (Clyde, Marsh, and Longport claim groups), Fremont County, Wyoming

In a letter dated August 22, 1956, you gave the subject operator approval to perform certain work under Stage II of contract Idm-E 943 which included four offset holes respectively 100 feet north, south, east, and west of hole M-3.

The operator's MF-104 report for October 1956 indicates that the holes were drilled 100 feet northeast, northwest, southeast, and southwest of hole M-3.

Since there are no known ore trends in the area of hole M-3, we believe that the direction of offsetting is not important and that the holes as drilled accomplished the objectives fully as well as would have holes at the positions recommended in your letter.

RECEIVED
DEC 26 1956
D.M.E.A.

John F. Shaw
Supervising Mining Engineer

E. N. Harshman
Member, Field Team

ENHarshman:mp

REGION III

Memorandum

Building 20
Denver Federal Center
Denver 2, Colorado
November 27, 1956

DMEA
DEPARTMENT OF THE INTERIOR
NOV 27 1956
REGION III
DENVER, COLORADO

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shaw
Supervising Mining Engineer

From: E. O. Binyon

Subject: Docket DMEA 4047 (Uranium) Contract Idm-E943, Charles M. Coleman and associates (Clyde, Marsh, and Longport Claim Groups) Fremont County, Wyoming. --Progress report for October, 1956.

Two inspection trips were made to the property; one on October 4 and the other on November 8, 1956.

The holes numbered M-101 through M-110, as reported, were drilled to an aggregate total depth of 2,480 feet; holes numbered M-101 through M-104 each being 200 feet and the remaining 6 holes being 280 feet in depth. One hole, M-9, was lost at 140 feet and a new hole had to be drilled. As shown on the map accompanying the operator's reports, the location of the holes is approximately as designated by Amendment No. 1.

A check of the cuttings from holes M-101 through M-104 and M-106 through M-110 gave readings of background or at best only slightly above. The cuttings from hole 105 gave a slightly higher reading but did not approach ore-grade material.

A check of the MF-104 and MF-104A shows them to be in order, however, the operator has included two MF-104A forms. Mr. John Kopuster stated that he had been instructed to submit one form for stage I and one for stage II.

All expenditures are properly documented and it is recommended that the operator be paid $2,427.00 or 75 percent of $3,236.00 the total expenditures. It is further recommended that the $300.00 withheld pending action on stage II work continue to be withheld for a final report.

One copy of the geologist's report has been retained by this office.

E. O. Binyon
Mining Engineer

EOB:sh
Enc.
cc: 6
Idm-E943 Chron

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1956 Docket No. DMEA 4047 Contract No. Idm-E943
Operator's Name Charles M. Coleman & Associates Minerals Uranium
Address 139 North Clark St., Chicago, Illinois.
Contract Amount, $ 9,492.00 Government Participation: 75 % Amount, $ 7,119.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~[illegible]~~ Contracts:						
Drilling	2032.00	1372.00	3404.00			
Bulldozing (Trenching)	None	775.00	775.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	500.00	600.00	1100.00			
Technical Services Sampler	325.00	392.00	717.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Sample Containers	3.00	3.00	6.00			
(4) Operating Equipment:						
Rental	70.00	70.00	140.00			
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Chemical ~~[illegible]~~ Analysis	16.00	84.00	100.00			
Payroll Taxes	0.00	0.00	0.00			
Liability Insurance						
Radiometric Logging	248.00	196.00	444.00			
Accounting	42.00	42.00	84.00			
(8) Contingencies (specify):						
TOTALS	3236.00	3534.00	6770.00	3236.00	3534.00	6770.00

RECEIVED DEC 26 1956 D.M.E.A.

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

Date November 14, 1956 Payee Charles M. Coleman and Associates.

Per [signature] Title Attorney-in-fact.

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

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

(Instructions on reverse)

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

$ 3327.00

Signature [signature]
(Authorized Certifying Officer)

Date 12/20/56 Vou. No. DMA 57-70
(See other side)

Note: Withheld 400.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. TEM E 943 in accordance with the terms of the contract.

Signature E. O. Bangson ($242700) Title Mining Engineer Date Nov. 20, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. M. Lewis Title Executive Officer Date DEC 6 1956

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-R3151.2

RECEIVED
DEC 26 1956
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1956 Docket No. DMEA 4047 Contract No. 1943
Operator's Name Charles E. Coleman & Associates Minerals Uranium
Address 139 North Clark Street, Chicago, Ill.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
STAGE II								
Bulldozing	Hr.	0.00	0	0.00	0	0.00	22	13.00
Drilling	Ft.	2032.00	2480	2032.00	2480	.819	2500	1.00
Supervy. Geologist	Mo.	500.00	5/6	500.00	5/6	600.00	5/6	600.00
Sampler	Hr.	325.00	*	325.00	*	**	**	**See below
Sample Containers	Lot	3.00	Lot	3.00	Lot	3.00	Lot	3.00
Truck Rental	Mi.	70.00	700	70.00	700	0.10	700	0.10
Drilling: Core / Radiometric / Churn / Logging / Auger	Ft.	248.00	2480	248.00	2480	0.10	2500	0.10
F. R. Taxes / Stripping / & Ins. / Trenching		0.00	0	0.00	0	0.00	5% of Payroll.	
Accounting / Test Pits	Job	42.00	Job	42.00	1	42.00	1	42.00
Roads and Trails / Chem. Analysis	per Spl.	16.00	4	16.00	4	4.00	100	5.00
Total Distributed Costs		$3236.00		$3236.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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.

Charles E. Coleman & Associates.

Date November 14, 1956 Operator

Per Albert H. Gilling Title Attorney-in-fact

*90 Hours @ 1.75, Plus 75 hours time over 40 hours per week @ 2.625.

** @1.75 per hour plus time and one-half rate over 40 hours per week (Maximum amt. $325.00 for stage II)

→ 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)

E. A. Bunyon

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R115.2

RECEIVED DEC 26 1956 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Through 195 (Stage I completed) Contract No.
Operator's Name 6 Docket No. DMEA 4047 Minerals Idn-5943
Address Charles M. Coleman & Associates, Uranium
139 N. Clerk Street, Chicago 2, Illinois.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Stage I								
Drifting (Trenching)								
Bulldozing	hr.			775.00	62	12.50	92	13.00
Crosscutting: Drilling	ft.			1372.00	1960	0.70	1960	1.00
Raising Supervr. Geologist	No.			600.00	1	600.00	1	600.00
Shafts Sampler	hr.			392.00			* 1.75/hr. plus over time	
Winzes Sample Cont.	Lot			3.00	Lot	3.00	Lot	3.00
Drilling: Core Truck)								
Churn Rental)	Mi.			70.00	700	0.10	700	0.10
Auger RADIOMETRIC								
Stripping Logging)	ft.			196.00	1960	0.10	1960	0.10
Trenching Payroll	)							
Test Pits Taxes & Insu				0.00	0	0.00	5% of	Payroll
Roads and Trails Setting	Job.			42.00	Job	42.00	1	42.00
Chem. Analysis	Spl.			84.00	24	3.50	100	5.00
Total Distributed Costs				3534.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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 November 14, 1956 Operator Charles M. Coleman and Associates.
Per Martin W. Collins Title Attorney-in-fact.

Remarks: * $1.75 per hour plus time & one-half rate over 40 hours per week. (Maximum for stage I is $392.00)

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

(Instructions on reverse)

(For Government use only)

A V Bunyon

INSTRUCTIONS

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GPO 872894

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REPORT ON WORK PERFORMED

UNDER STAGE II

ON THE

MARSH CLAIM GROUP

UNDER

EXPLORATION PROJECT CONTRACT NO. Idm-E-943

DMEA DOCKET #4047

FOR

CHARLES M. COLEMAN AND ASSOCIATES

BY

ROBERT FORD
MINING GEOLOGIST

OCTOBER 1956

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REPORT ON WORK ACCOMPLISHED UNDER STAGE II

Exploration Project Contract
Charles M. Coleman and Associates
Docket No. DMEA - 4047

Marsh Claim Group

All drilling under Stage II of the above named DMEA contract was restricted to the Marsh claims 1 through 6 in sections 32 and 33, T. 33 N., R. 90 W., Gas Hills district, Fremont County, Wyoming. Previous to this, eighteen rotary non-core holes were drilled totaling ~~710~~ 1960 feet under DMEA contract Stage I. The attached map shows the location and depth of all holes completed under Stage I and Stage II.

Exploration Drilling

Stage II drill holes were drilled to the required depths and approximate locations as per the attached map. Drill hole locations were surveyed with plane table. Elevations were corrected to drill hole M-3 which had received an assumed elevation under the Stage I drilling of 6,582 feet.

Drilling under Stage II was started on October 2, 1956 and completed on October 10, 1956. The drilling was done with a Mayhew rotary drill. Dust samples were collected with a drilling medium of air, powered by a 600 c.f.m. air compressor. At depths averaging greater than 140 feet water was usually used as the drilling medium. Samples were then taken from the "mud box" by screen and shovel. All samples, air and water borne, were collected at two foot intervals.

Sampling and Drill Hole Probing

Samples were logged lithologically and checked for radioactivity with a La Roe Scintillation Counter, model FV-5V. Samples were collected and saved from each two foot interval, with duplicate samples taken for assay purposes from intervals that gave two or more times background count. It is always the case with continuous drilling that a lag in samples can be expected. Therefore, the highest radioactive samples do not always conform to the peak radioactivity as shown by the drill hole probe readings.

All holes were probed with a Model 610 Babbel Counter and deep hole probe. Readings as shown on the accompanying drill hole logs are in equivalent percent U_3O_8. The probe and counter have been calibrated and standardized on drill holes and ore barrels of known chemical uranium content and in ore similar to what would be expected to underlie the Marsh claim group. It is therefore believed that all drill hole probe readings reflect the true uranium content, especially in those unoxidized zones at or below the 120 to 140 foot deep water table.

Ore and Mineralization

General

The Stage I and Stage II drilling as well as drilling on adjacent property has indicated, in a general way, two zones of moderately continuous mineralization. These mineralized zones are contemporaneous with the common "blue clay" zones of medium grained sand and silt with a bentonitic montmorillonite type clay bonding that reflects a bluish

cast to the sediments. It is universal throughout the Gas Hills district that within such sediments the major portion of the producing uranium bodies lie.. Further, such sediments must be accompanied by a visible pyrite content or "pyritization" and disseminated carbon. The same sediments must also contain about a 50-50 ratio between the sand and clay phases of the sediments to allow for favorable permiability within the "blue clay" host rock.

From the above description, one can easily ascertain the genesis of uranium deposition. (1) The leaching and solution of uranium salts from arkosic sands or tuff beds. This need not be a single event phenomenon. (2) The traveling in solution of UO_2^{++} ions and forming compounds with $SO_4^{=}$ and silica. (3) Reduction of the UO_2SO_4 to black uranous compounds like uraninite or coffinite by the carbon bearing "blue clays." The end result is a mineralized or ore bearing "blue clay" with pyrite or FeS_2 formed from the reduced UO_2SO_4. The reduction is accomplished at or near the ground water table, preferably a fluctuating water table that may tend to concentrate the mineral in a supergene type or uranium enrichment. Ores in "blue clays" above the present water table reflect the perched type of water zone as well as the relative stability of uranium compounds once they have become associated with the montmorillonite type clays and carbon compounds.

In effect, then, the search for uranium ores is greatly encouraged by the following criteria:

A) Dark blue dusky clay with a medium grained quartz sand at a ratio of about 50-50. This "blue clay" should preferably be within an alternating series of medium to coarse grained sands and silts showing recementing by calcite and red to brown iron stains.

B) Pyritization. The occurrence of pyrite is important and often forms a halo of pyritization in and around the uranium mineralization because of the chemistry as above explained.

C) Uranium mineralization. This mineralization is often associated with thin "blue clay" layers at what is termed the "change of formation" contact. This mineralization is often 12 to 18 inches thick and reflects the above explained mode of supergene concentration on fluctuating or perched ground water tables. This type of "change of formation" mineralization is unimportant. However, with the advent of an undulating or irregular, porous "blue clay" horizon and pyritization, this low grade mineralization becomes important to the control of future drilling and projected trends of thickening "blue clay" ores.

The widespread association of visible or microscopic pyrite and the readily ascertainable uranium content of these sediments forgoes the necessity of testing for arsenic, molybdenum, or other trace elements which are proportionate to the uranium content.

Specific

The drill holes M-101 through M-110 were drilled as prescribed by the regional offices of DMEA and termed Stage II drilling. The accompanying map shows the location of both Stages I and II drill holes. The drill holes are also plotted on the accompanying CROSS SECTION MAP in a fashion to show the continuity and extent of the mineralized "blue clay."

The Stage II drilling confirmed the presence of two "blue clay" horizons. The horizons are shown best developed in cross sections A - A' and B - B'. The "blue clay" horizons are at depths approximating 100 and 200 feet deep. The cross sections show a gentle northeast dip of the sediments (5°) reflecting the Puddle Springs Anticline. In the CROSS SECTION MAP constructed the sedimentation is of such uniformity as to exclude the possibility of any faults of moderate size.

The upper "blue clay" zone is best developed in the northern portions of claims number 1 and 2. This horizon rapidly thins southward. The lower "blue clay" horizon thins southward and entirely disappears at cross section C - C', except for occasional mudballs in drill hole M-108. The cross sections also show the possible continuation and thickening of the lower "blue clay" zone to the northeast.

Calibrated probe readings indicate the following mineralized zones:

M-101	188' to 190'	.11% U_3O_8
M-102	189.5' to 190.5'	.14% "
M-103	173.5' to 174.5'	.06% "
M-104	174.5' to 180.5'	.08% "
M-105	201' to 206'	.18% "
M-106	191' to 192.5'	.08% "
M-109	214.5' to 217'	.11% "

Chemical assays from Uranium Center Laboratory on the indicated footages and drill hole numbers are attached to this report.

Before advancing recommendations for future work, the writer refers to the following hypothetical cases under the heading "Economic Considerations" as an instrument to better inform the reader on the validity and justification of the small amount of drilling recommended.

Economic Considerations

Average size ore bodies in the Gas Hills are difficult to define. A great many ore bodies of moderate size averaging 12,000 tons have been and are being mined. The following hypothetical case will clarify the practicability of continued drilling on the Marsh claim group.

Future drilling uncovers an ore body in the upper "blue clay" zone ten feet thick and averaging .20% U_3O_8. The total tonnage is about 12,000 tons and the depth 100 feet:

Expenditure	
Stripping cost (contract)	- $ 46,950
Ore loading (contract)	- 4,930
Engineering	- 2,200
Overhead (Supervisor, transportation, etc.)	- 7,500
Assay and control	- 500
Interest on capital expenditures	- 920
Total Cost	- $ 63,000.
Income	
12,000 tons .20% U_3O_8 @ $16.00	- $192,000
Production bonus, first 2500 tons @ $14.00	- 35,000
	- $227,000.
10% U_3O_8 dilution and mining loss	- -37,000
	- $190,000.
Royalty	- -19,000
State Tax, 3½%	- - 6,650
Mining Cost	- -63,000
Net Income*	- $101,350.

* Exclusive of corporate or income tax.

Future drilling uncovers a similar size ore body in the lowered "blue clay" zone, 12,000 tons and 200 feet deep:

Expenditure	
Stripping cost (contract)	- $131,460.
Ore loading cost (contract)	- 9,600
Engineering	- 4,750
Overhead (Supervisor, transportation, etc.)	- 17,500
Assay and control	- 500
Interest on capital expenditure	- 2,450
Total Cost	- $166,260.
Income	
12,000 tons .20% U_3O_8 @ $16.00	- $192,000
Production bonus, first 2500 tons @ $14.00	- 35,000
	$227,000.
10% U_3O_8 dilution and mining loss	- -37,000
	$190,000.
Royalty	- -19,000
State Tax	- [illegible],650
Mining Cost	-166,260
Deficit	- $ 1,910.

Thus it is shown that to double the stripping depth for an ore body, the mining cost increases (in this case) about three-fold.

The Marsh group of claims has had the lower "blue clay" horizon almost sufficiently tested to prevent there being an ore body of greatly larger areal extent than above referred to in the hypothetical case (190 by 100 feet).

The upper "blue clay" zone has been tested only in the same deep holes that penetrated the lower horizon. Only hole M-3 of the Stage I drilling was deep enough to even cut the upper "blue clay" horizon. However, because of the greater profit incentive, and the necessarily small areal extent of ore bearing material needed to be encouraging in the upper horizon, a greater amount of drilling is recommended.

Recommendations for Future Work

The CLAIM MAP shows a cross hatched area of the areal extent of the upper "blue clay" horizon which present drilling has indicated to be interesting. This area is of pyritic dusky "blue clay" five to ten feet thick. Drill holes M-101 through M-106 have already cut the horizon.

1. Deepen drill hole M-2 to 120 feet.
2. Drill one hole 120 feet deep between M-105 and M-106.
3. Drill one hole 120 feet deep 100 feet west of the 1/4 corner.
4. Drill two offset holes to M-11, 50 feet deep.

One hole should test the lower blue clay horizon offsetting the ore in drill hole M-105.

1. Deepen hole M-1 to 240 feet.

The drilling recommended totals 560 feet. The results of this recommended drilling will be conclusive enough to state whether there is any possibility of commercial ore deposits within the Marsh claim group to a depth of 240 feet.

Respectfully submitted,

Robert Ford

October 28, 1956

URANIUM CENTER LABORATORY

201 East Washington
Phone--543
Riverton, Wyoming

Chemical Analysis Report for:

Mr. Chas. M. Coleman & Associates.

Quantitative Analysis Date 10/15/1956.

Laboratory No.	Sample No.		% U_3O_8	Selenium
3051-1	M-103,	92-98	0.02	
3051-2	M-104,	88-92	0.01	
3051-3	M-105,	216-218	0.029	
3051-4	M-109,	222-224	0.03	

Assayer--John K. Schneider
A.E.C. Umpire Analyst

No. Assays 4 at 4.00 each $16.00

Total Amount $16.00

Paid by John Kopuster

Elevation of Collar of Holes in Stage I and Stage II Drilling.

STAGE I

Brunton and cloth tape survey.

Collar of hole M-3 assumed to be 6582 feet.

Hole No.	Collar Elevation
M-1	6601
M-2	6600
M-3	6582
M-4	6594
M-5	6598
M-6	6618
M-7	6635
M-8	6625
M-9	6628
M-10	6608
M-11	6631
M-12	6633
M-13	6641
M-14	6656
M-15	6655
M-16	6618
M-17	
M-18	

STAGE II

Plane table survey.

Connected to hole M-3 with assumed elevation 6582 feet.

Hole No.	Collar Elevation
M-101	6577.2
M-102	6580.4
M-103	6586.8
M-104	6586.5
M-105	6594.5
M-106	6588.5
M-107	6588.9
M-108	6617.0
M-109	6609.9
M-110	6634.5

DRILL HOLE LOG

Hole No. M-101 Date Drilled October 3, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY
Babbel Counter			
Feet	Reading 4 Scale		
0 - 73	.00%		0' - 6' Surface
74 - 76	.02	No Samples	6' - 24' Ss., buff, med. gr., some peb. cong.
76.5	.03		24' - 72' Ss., lt. grey, coarse gr.
77'	.02		72' - 84' Mudstone, blue, fine gr., no visible pyrite.
77.5	.04		84' - 104' Ss., white, med. gr.
78	.03		104' - 140' Ss. and alternating thin mudstone seams of grey to blue, fine gr.
79	.02		
80 - 187	.00		
187.5	.01		140' - 172' Ss., white, blue mds. balls.
188	.06		172' - 194' Ss., white, coarse gr. water bearing.
188.5	.14		
189	.17		
189.5	.11		T.D. 200'
190	.06		
190.5	.02		
191 - 208	.00		

Hole No. M-102 Date Drilled October 2, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY
Babbel Counter			
Feet	Reading 4 Scale		
0 - 188	.00%	No Samples	0' - 6' Surface
189	.02		6' - 78' Ss., buff, coarse gr., cong. 18' to 24'
189.5	.03		78' - 88' Ss., grey to white, med. gr.
190	.11		88' - 92' Mudstone, blue, fine gr., no visible pyrite.
190.5	.17		
191	.03		92' - 108' Ss., white to grey, med. gr.
192	.01		108' - 114' Siltstone, grey to blue, fine gr.
193	.00		
194-205	.00		114' - 198' Ss., white to grey, coarse gr.
			T.D. 200'

DRILL HOLE LOG

Hole No. M-103 Date Drilled October 2, 1956

PROBE DATA

Babbel Counter

Feet	Reading 4 Scale
0 - 89	.00%
90	.01
91	.02
92	.03
93	.04
94	.03
95	.02
96	.00
97 - 170	.00
171	.01
172	.02
173	.04
173.5	.06
174	.06
174.5	.05
175	.03
176	.02
177	.01
178 - 184.7	.00

SAMPLE DATA

86' - 88'

LITHOLOGY

0' - 4' Surface
4' - 84' Ss., buff, med. to coarse gr.
84' - 86' Mudstone, blue
86' - 92' Ss., grey, med. gr. with blue mds.
92' - 98' Mudstone, blue, no visible pyrite.
98' - 190' Ss., white, med. to coarse gr., water bearing.
190' - 200' Ss., blue mds., balls.

T.D. 200'

DRILL HOLE LOG

Hole No. M-104 Date Drilled October 3, 1956

PROBE DATA Babbel Counter Feet	Reading 4 Scale
0 - 83	.00%
84 - 86	.01
86.5	.02
87	.03
87.5	.04
88	.06
88.5	.06
89	.05
89.5	.03
90	.01
91 - 175	.00
176	.01
177	.02
177.5	.03
178	.05
178.5	.07
179	.16
179.5	.09
180	.07
180.5	.06
181	.02
181 - 194	.00
195	.02
196 - 202.3	.00

SAMPLE DATA

88' - 92'

LITHOLOGY

0' - 4' Surface
4' - 10' Ss., br., coarse gr.
10' - 18' Ss., wh., cong.
18' - 36' Ss., wh. to grey, med. gr.
36' - 74' Ss., br., med. to fine gr.
74' - 88' Ss. and mds., br. to bu[illegible] med. gr.
88' - 92' Mds., blue, fine gr., no visible pyrite.
92' - 124' Ss., wh. to grey, med. gr.
124' - 192' Ss., wh., blue mds. balls
192' - 200' Mds., blue, dense, med. gr.

T.D. 200'

DRILL HOLE LOG

Hole No. M-105 Date Drilled October 4, 1956

PROBE DATA

Babbel Counter

Feet	Reading 4 Scale
0 - 194	.00%
195	.02
196	.03
197	.03
198	.02
199	.02
200	.01
201	.04
201.5	.05
202	.09
202.5	.15
203	.28
203.5	.42
204	.37
204.5	.22
205	.14
205.5	.11
206	.05
207	.03
208	.03
209	.02
210	.01
241	.03
249	.02
255	.01
256 - 274.9	.00

SAMPLE DATA

216' - 218'

LITHOLOGY

0' - 6'	Surface
6' - 34'	Ss., grey to wh., med. gr.
34' - 38'	Siltstone, br., fine gr.
38' - 46'	Ss., wh., coarse gr., cong.
46' - 112'	Ss., buff, med. gr.
112' - 124'	Ss. and siltstone, grey.
124' - 136'	Siltstone, blue, med. gr., no visible pyrite.
136' - 212'	Ss. and siltstone, blue, with blue clay balls.
212' - 216'	Ss., med. gr., blue clay layers.
216' - 234'	Ss., coarse gr., blue clay mud balls.
234' - 280'	Mudstone, blue, dense, some pyrite.

T.D. 280'

DRILL HOLE LOG

Hole No. M-106 Date Drilled October 5, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY
Babbel Counter			
Feet	Reading 4 Scale		
0 - 94	.00%	No Samples	0' - 18' Ss., br., coarse gr., peb. cong.
95 - 96	.02		18' - 24' Siltstone, buff, fine gr.
130 - 133	.02		24' - 50' Ss., buff, med. gr.
187	.01		50' - 56' Siltstone, grey to buff, med. gr.
188	.02		56' - 130' Ss., white to grey, med. gr.
189	.02		130' - 136' Siltstone, blue, med. gr., no visible pyrite.
189.5	.03		136' - 194' Ss., grey to white, med. gr., calcite, water bearing.
190	.04		194' - 202' Ss., grey to white, med. gr., calcite, water bearing, clay balls.
190.5	.03		202' - 216' Ss. and silt, bluish sand and dusky blue clay, pyrite, purple shale cuttings probably contain selenium.
191	.05		216' - 280' Clay, dusky blue, pyrite, dense, no porosity or ss. layers.
191.5	.09		
192	.11		
192.5	.06		
193	.04		
193.5	.04		
194	.02		
195	.01		
196 - 274.8	.00		
			T.D. 280'

Hole No. M-107 Date Drilled October 5, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY
Babbel Counter			
Feet	Reading 4 Scale		
0 - 113	.00%	No Samples	0' - 4' Surface
114 - 117	.01		4' - 10' Ss., buff, med. gr.
117 - 200	.00		10' - 78' Ss., grey to buff, med. to coarse gr.
201	.01		78' - 128' Ss., med. to coarse gr., white to grey.
201.5	.02		128' - 218' Ss., white to grey, blue clay mud balls.
202	.04		218' - 234' Siltstone, sandy blue clay, some pyrite.
202.5	.05		234' - 280' Mudstone, blue dense fine gr., no pyrite.
203	.04		
203.5	.03		
204	.01		
205 - 275.4	.00		
			T.D. 280'

DRILL HOLE LOG

Hole No. M-108 Date Drilled October 10, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY	
Babbel Counter				
Feet	Reading 4 Scale			
0 - 170.5	.00% - .02%	No Samples	0' - 4'	Surface
			4' - 36'	Ss., br., coarse to med. gr.
			36' - 60'	Ss., buff to grey, arkosic, coarse gr.
			60' - 96'	Ss., br., med. gr., silty.
			96' - 134'	Ss. and siltstone, med. gr., with occ. blue clay streaks.
			134' - 208'	Ss., blue to wh., coarse gr., calcite, water bearing.
			208' - 280'	Mudstone, blue, some sand, no visible pyrite.
			T.D. 280'	

REMARKS: Hole was probed to depth of 170.5 feet where caved. Sample recovery was complete and no samples were higher than .027 MR/HR background count with LaRoe FV-50 Scintillator.

Hole No. M-109 Date Drilled October 9, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY	
Babbel Counter				
Feet	Reading 4 Scale			
0 - 206	.00%	222' - 224'	0' - 8'	Surface
207	.01		8' - 18'	Ss., wh. to grey, med. gr.,
208	.02		18' - 32'	Ss., wh. to grey, peb. cong.
209	.03		32' - 90'	Ss., buff and grey, med. to coarse gr.
210 - 213	.00		90' - 94'	Mudstone, blue, no pyrite.
214	.02		94' - 124'	Siltstone, br. to grey, fine gr.
214.5	.04		124' - 136'	Ss., wh. to grey, coarse gr.
215	.05		136' - 140'	Siltstone, blue, med. gr.
215.5	.07		140' - 220'	Ss., blue to wh., med. gr., water bearing.
216	.22		220' - 280'	Ss., mds., alt., grey to blue.
216.5	.14			
217	.05			
217.5	.04			
218	.02			
219 - 276.8	.00			
			T.D. 280'	

DRILL HOLE LOG

Hole No. M-110 Date Drilled October 7, 1956

PROBE DATA

Babbel Counter

Feet	Reading 4 Scale
0 - 92	.00%
92 - 98	.02
98 - 230	.00
230 - 241	.01
241 - 278.1	.00

SAMPLE DATA

No Samples

LITHOLOGY

0' - 4'	Surface
4' - 18'	Ss., buff to br., coarse gr.
18' - 56'	Siltstone, br. to grey, fine gr.
56' - 96'	Ss., wh. to grey, med. gr.
96' - 100'	Mudstone, blue, no pyrite.
100' - 112'	Siltstone, blue, fine gr.
112' - 254'	Ss., wh. to blue, coarse gr., water bearing.
254' - 280'	Ss. with blue clay layers, no pyrite.

T.D. 280'

RECEIVED
DEC 26 1956
D.M.E.A.

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

RECEIVED
AUG 13 1956

Administrative Audit Difference Statement

Charles H. Coleman & Associates
139 N. Clark Street,
Chicago 2, Illinois

Date: August 9, 1956
Payee's Reference: May 1956

FINAL DISTRIBUTION

Gentlemen:

MADE AUG 9 1956

DMEA-4047

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

Amount Claimed $ 3,534.00

Difference $

Amount Approved $ * 3,534.00

The reason for the difference was due to:

Withhold - $300.00 pending action on Stage II Work.

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

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

RECEIVED
AUG 13 1956

224 New Customhouse
Denver 2, Colorado

August 3, 1956

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 4047 (Uranium) Contract Idm-E943, Charles M. Coleman and Associates (Clyde, Marsh and Longport groups of claims) Fremont County, Wyoming - Operator's Monthly Progress Report for the month of May, 1956

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.

It is deemed that the Operator has complied with the intent of the contract, and the work for which payment is recommended was performed in conformance with the general provisions stipulated in Exhibit "A" to the contract. Payment is recommended for 75 percent of the amount as reported on Form MF-104, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations, except for the following deduction.

Withhold an amount of $300.00 pending action on the Operator's request for Stage II work and so inform the Operator by means of Administrative Audit Difference Statement. Stage I work was completed during May, 1956

Remarks

Date of Report- - - - - - - - - - - - - - - - - June 14, 1956
Date Received in Field Office- - - - - - - - July 23, 1956
Date Received in Region Office- - - - - - - July 27, 1956

W. M. Traver

Enclosures
JDC:jy
cc: MF-104 File E943
Sec. Op. Comm. (2)
Shaw (2)
Townsend w/copy oper's report Chron

DMEA
Date Rec'd.

JUL 27 1956

BUREAU OF MINES
Denver, Colorado

RECEIVED

AUG 1 6 1956

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
July 26, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: John F. Shear
Supervising Mining Engineer

From: Chas. R. Garrett, Jr.

Subject: DMEA 4047 (Uranium) Contract Idm-8943 - Charles M. Coleman and Associates, Riverton Uranium Corp., Fremont County, Wyoming -- Progress report for May 1956

Progress on this exploration project was inspected on June 12, 1956. Work started on May 8, 1956 and all of Stage I was completed by May 24, 1956. The work was carried out in accordance with terms of the contract and conducted in a good workman-like manner. During this period the company drilled 29 rotary drill holes, on the subject property, for a total of 2,565 feet. This was more footage than allowed by the contract, but the information gained by the additional drilling was considered to merit the extra cost to the company. Two holes were drilled to 270 and 280 feet depths respectively, in order to explore the lower portion of the Upper Wind River formation, which could not be reached by holes of less depth. One of these holes, M-3, penetrated a radioactive zone at 178 feet, which disclosed 2 mineralized strata, each about 2 feet thick with an indicated grade of 0.20% U_3O_8. This horizon in the lower portion of the Upper Wind River formation is productive on nearby properties and is the general target for exploration work. The Company used a 4½ inch rotary bit for drilling which was of sufficient size to disclose geologic information and to provide ample material for samples.

In conjunction with the drilling in Stage I, 7 trenches were excavated for a total of 1,780 feet on the Clyde group of claims. Each trench was excavated to sufficient depth to expose a fresh cut face 6-8 feet high over the anomalous rim and slope of the mesa on the Clyde group of claims. This is less trenching than allowed by the contract but the poor showings of mineralization and radioactivity disclosed by the trenches indicated that further trenching was not merited.

A coarse unconsolidated conglomerate was encountered in many of the drill holes and gave trouble by causing sluff from near its base into the lower portion of the hole. As a result of this condition, Hole M-7 was abandoned and Hole M-7A was drilled close-by. Also, Hole M-12, which lost its air due to sluffing of sand in the hole, was abandoned and Hole M-12A was drilled close-by.

The geologist in charge was approved by the Government and did the exemplary work on this project. All drill holes were probed radiometrically, and the data is included in the company report for May. Samples were collected of the drill cuttings when necessary, and were assayed. A portion of each sample was retained for Government purposes and the Company supplied the Government with a copy of the assay results obtained from samples analyzed for this project.

All expenditures made in connection with the contract have been satisfactorily documented and an audit could be deferred until the project is completed. It will be noted that the company has waived any claim to the cost of "Payroll Taxes and Insurance" for the reason the Company does not maintain any regular payroll and it is difficult to separate the allocable portion of the insurance carried by the Riverton Uranium Corporation, which was employed to cover the operations.

There appears to be an error in the Company's computation of "Unit Costs, Authorized by Contract" for the unit cost of drilling, the author arrives at $1.535 per foot instead of $1.550 per foot as reported by the Company on Form MF-104A. However, this difference may be due to a different distribution of incidental costs to drilling.

It is recommended that the company be paid $2,650.50, which is 75 percent of $3,534.00 and its allowable share of the cost of this stage of the exploration project.

The Company has submitted a proposal for further exploratory work, which at present, is being reviewed.

Charles R. Garrett, Jr.

Charles R. Garrett, Jr.
Mining Engineer

CRG/mr
cc: 6
Ism-2943
Chron

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED
AUG 13 1956

Month of May, 1956 Docket No. DME-4047 Contract No. Dem-E943
Operator's Name Charles M. Coleman & Associates Mine Uranium
Address 139 North Clark St., Chicago, Illinois.
Contract Amount 9,492.00 Government Participation: 75 % Amount 7,119.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors: [redacted] Form						
Drilling	1372.00	None	1372.00			
Bulldozing	775.00	None	775.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	600.00	None	600.00			
Technical Services	392.00	None	392.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Sample Containers	3.00	None	3.00			
(4) Operating Equipment:						
Rental	70.00	None	70.00			
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
[redacted]ng and Analysis	84.00	None	84.00			
Payroll Taxes						
Liability Insurance						
Radiometric Logging	196.00	None	196.00			
Accounting	42.00	None	42.00			
(8) Contingencies (specify):						
TOTALS	3534.00	None	3534.00	3,534.00	—	3,534.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date June 14, 1956 *Payee Charles M. Coleman and Associates.
Per Attorney-in-fact.

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

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

(Instructions on reverse)

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

$2350.50

Signature
(Authorized Certifying Officer)

Date 8/7/56 Vou. No. 57-16

(See other side)

Note: Withhold 300.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E-943 in accordance with the terms of the contract.

Signature Charles R. Garrett, Jr. Title Mining Eng. Date July 26, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. M. Davey Title Executive Officer Date AUG 3 1956

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

RECEIVED
AUG 13 1956

Month of May 1956 Docket No. DMEA 4047 Contract No. Idm-E943
Operator's Name Charles M. Coleman & Associates Minerals Uranium
Address 139 North Clark St., Chicago, Illinois.

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: Rotary	Feet	2421.50	** 1960	2421.50	1960	1.235*	1960	1.550*
Churn								
Auger								
Stripping								
Trenching	Hour	832.50	62	832.50	62	13.427*	92	13.625*
Radiometric Logging	Foot	196.00	1960	196.00	1960	.10	1960	.10
Roads and Trails								
Analysis	Each	84.00	24	84.00	24	3.50	100	5.00
TOTAL DISTRIBUTED COSTS		3534.00		$3534.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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 June 14, 1956 Operator Charles M. Coleman and Associates.

Per [signature] Title Attorney-in-fact.

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

(Instructions on reverse)

REMARKS: * Unit costs includes Supervision, Technical Services, Sample Containers, Rentals & Accounting.

** This amount does not include $35.00 washout time to reopen hole for probing.

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
AUG 13 1956

REPORT ON
WORK PERFORMED UNDER STAGE I
AND
PROPOSALS FOR FURTHER WORK
ON
THE CLYDE, LONGPORT, AND MARSH GROUPS OF CLAIMS
UNDER
EXPLORATION PROJECT CONTRACT No. Idm - E - 943
D M E A DOCKET #4047
FOR
CHARLES M. COLEMAN AND ASSOCIATES

by

Ralph H. Thurston

June - 1956

REPORT ON WORK ACCOMPLISHED UNDER STAGE I

PROPOSALS FOR WORK TO BE PERFORMED UNDER STAGES II AND III

D M E A CONTRACT No. Idm - E 943

WORK PERFORMED - STAGE I

Drilling under Stage I was started on May 8, 1956 and completed on May 17, 1956. A loss of time due to a breakdown of equipment caused the bulldozing to lag behind the drilling, and the bulldozing was not completed until May 24, 1956.

The drilling was done with a Mayhew rotary drill mounted on an International truck. Dust samples were collected with a cone collector of the Duclone type, and a 600 c.f.m. air compressor was used to furnish air with which to remove cuttings from the holes. Samples were taken at two-foot intervals. The cuttings were logged lithologically and screened with a LaRoe Scintilation Counter, Model FV-5U. Samples weighing about one-half pound were taken from each two-foot interval, with duplicate samples taken for assay purposes from those intervals that indicated significant radiometric count.

All holes were logged with a Babbel Counter, Model 610, and a reel-mounted probe with a depth recorder. The attached logs of the holes show lithologic, radiometric, and assay information.

No mineralization of any consequence was found in the drill holes on the Clyde and Longport groups. One shallow and one deep occurrence of ore-grade mineralization were encountered in the drilling on the Marsh group. This mineralization, particularly the deep (178.5 - 186.5') occurrence is encouraging and warrants further exploration.

Stratigraphic information derived during the work indicates that most of the drilling on the Marsh group and probably all of the drilling on the Clyde and Longport groups was too shallow to intersect the horizons known to be favorable for ore deposition. Stage II drilling should be done to deeper depths than previously planned in order that the favorable stratigraphic zone can be penetrated.

Clyde Group

Work performed on the Clyde group of claims constituted drilling two holes to a depth of 50 feet to explore a small anomalous area on claim # 17 (see attached map), and bulldozing seven tractor trenches to explore the stratigraphy around the west and northern sides of the anomalous area on claims nos. 11, 12, 13, and 14.

The two drill holes (C-1 and C-2) were put down through sandstone and siltstone of the upper Wind River formation without encountering significant mineralization. It is thought that further drilling on the Clyde group should be confined to the central portion of the claim group where minor faulting indicates possible favorable conditions at depth. It is believed that the most favorable beds will be near the base of the upper Wind River formation at a depth of probably not to exceed 200 feet below the surface.

The tractor trenches cut across the upper beds exposed on claims nos. 11, 12, 13, and 14, exposed conglomerate, sandstone, tuff and mudstone of the White River formation. Abnormally high count was found in the upper sandstones, siltstones, tuffs, and mudstones, but samples cut across the beds of highest radiometric count indicated a maximum content of 0.05 percent U_3O_8. The highest radiometric count and assay values were obtained from sandstone occurring with and beneath the cobble conglomerate that caps the hill, and in mudstone immediately beneath the sandstone.

The writer believes that additional tractor trenching would be of little value, and that drilling to the base of the upper Wind River formation is a preferable means of exploration. It is inferred that the base of the upper Wind River formation is probably not deeper than 200 feet beneath the surface. However, until more information on the area is available, it is believed that available money can be more usefully expended on the Marsh and Longport groups of claims.

Longport Group

Seven rotary non-core holes were drilled at locations designated on the map accompanying the Exploration Contract. They are shown on the attached map of the Longport group. All were drilled to a depth of 50 feet, except hole no. L-2, drilled to a depth of 270 feet (50 feet specified in the contract). No significant mineralization was encountered.

However, as the holes penetrated beds higher in the upper Wind River formation than those that have proven elsewhere to be more favorable, the results of the drilling are not conclusive. It is believed that drilling to the base of the upper Wind River formation may disclose ore-grade uranium mineralization. Proposals for additional drilling are made later in this report.

Marsh Group

Eighteen rotary non-core holes were drilled at locations designated on the map accompanying the Exploration Contract. The attached map shows the location and depth of these holes, as well as the location of holes proposed for Stage II. Hole M-3 was drilled to 280 feet (120 feet specified in the contract), hole M-7A was drilled to 140 feet (120 feet specified), and hole M-12A was drilled to 140 feet (120 feet specified). The remaining holes were drilled to depths specified; attached is a list of collar elevations of all holes drilled.

Two mineralized intercepts of believed ore grade were encountered in hole M-3. Depths and grade of the intercepts are as follows:

178.5' - 180.5' = 2.0 feet. Est. grade 0.20% U_3O_8
185.0' - 186.5' = 1.5 " " " 0.20%

Hole probed with Model 610 Babbel Counter in calibration

Unoxidized ore believed to be in calibration

Water encountered at 140 feet and hole was finished using water as a circulating medium. Count in samples was noted from 190 to 206 feet, the discrepancy in depth believed to be due to a mistake on depth made by the driller. Two samples taken for assay contained 0.01% U_3O_8 for interval 196 to 198 feet, and 0.02% U_3O_8 for interval 198 to 200 feet.

Of the other holes drilled on the Marsh group, only hole M-11 intersected significant mineralization. In that hole, a 1.5 foot thick chocolate brown siltstone 40 feet above the conglomerate (28 - 29.5 feet below the collar of the hole) assayed 0.137% U_3O_8, and a 2 inch thick streak of carbonaceous material in fine grained sandstone at 41.5 feet assayed 0.11% U_3O_8. Radiometric count but no commercial assay values were obtained in holes M-4, M-8, M-9, and M-13, all above the conglomerate.

Hole M-3 was drilled through the base of the upper Wind River formation to obtain stratigraphic information and test the lower horizons. That hole, together with the others, yielded information indicating that none of the holes except M-3 penetrated the horizons in which ore bodies have been found to the west and to the north of the Marsh group.

All of the ore in the Gas Hills District has been found in the upper Wind River formation, composed largely of coarse arkosic sandstone and conglomerate with relatively minor amounts of siltstone and mudstone. The lower Wind River formation consists preponderantly of siltstone and mudstone, and has few arkosic sandstone beds. Red siltstone beds mark the contact between upper and lower Wind River beds in the vicinity of the Marsh group. Nearby ore deposits are from 50 to 180 feet above red beds.

A conglomerate bed from fifteen to thirty feet thick crops out near the north end of the Marsh group, and goes beneath the surface to the south. It is believed to be the same conglomerate that occurs on the Ola group, and contains granite and quartzite cobbles to 6 inches in diameter and black chert. This conglomerate bed is of widespread occurrence in the vicinity of the Marsh group, and serves as a useful marker bed.

The Globe Mining Company has drilled out an ore deposit on the Ola group that occurs about 70 feet stratigraphically below the conglomerate bed. The base of the conglomerate is approximately 245 feet above the red beds in drill hole M-3. If the relationship between the conglomerate and red beds is the same on the Ola group as on the Marsh group, the ore deposit on the Ola group is approximately 175 feet above the red beds.

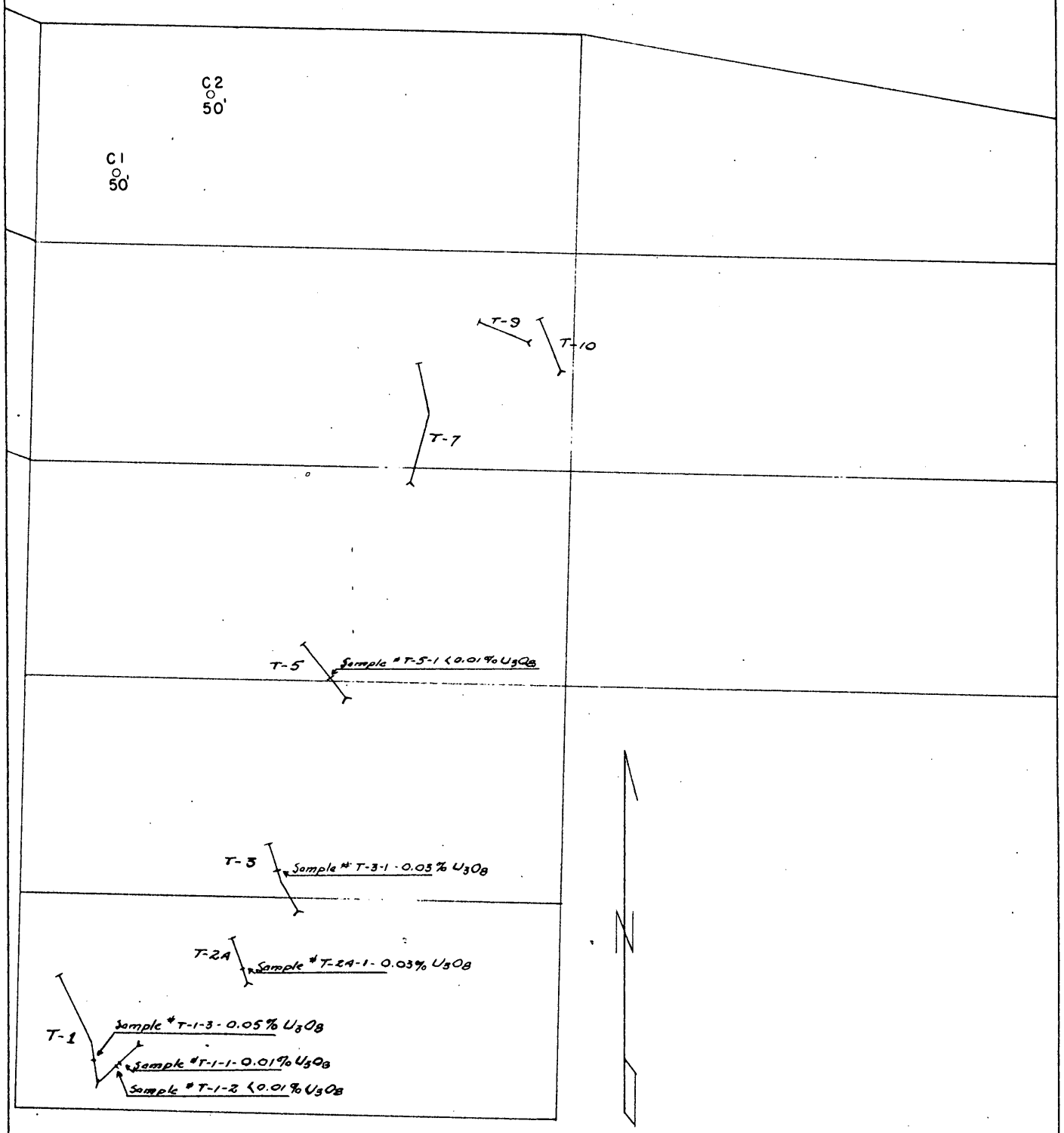
The Gas Hills Uranium Corporation is currently drilling an ore body on the Sagebrush group of claims about one-half mile northwest of the Marsh group. This ore body is 180 feet above the red beds. The ore deposits on the Bullrush group adjoining the Sagebrush group are known to occur at from 120 to 160 feet above the red beds. The Bridger Mining Company, in Sec. 30, T33N, R90W, is stripping to ore believed to occur at about 50 feet above the red beds.

Inasmuch as the significant ore deposits in the vicinity of the Marsh group occur from 50 to 180 feet stratigraphically above the base of the upper Wind River formation, it is to be expected that ore on the Marsh group will be found in the same general stratigraphic zone. Mineralization found in hole M-3, 76 feet and 83 feet above the red beds, bears out this viewpoint, and makes it almost mandatory that further exploration on the group be done at depths proven favorable on surrounding properties.

CLYDE GROUP

Sec. 22, T 32 N, R 91 W

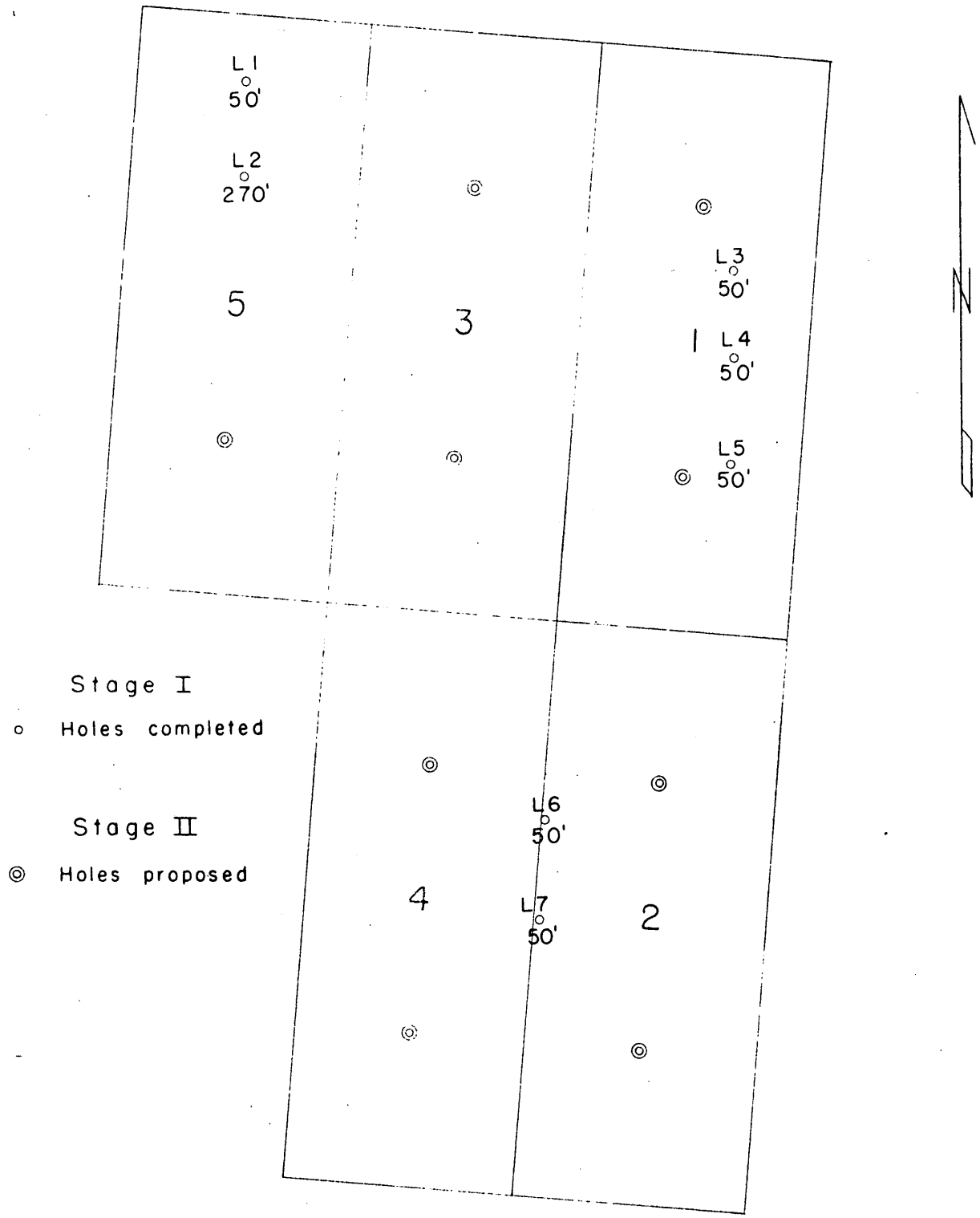
Fremont County, Wyoming



1" = 400'

6/9/56

CHARLES M. COLEMAN and ASSOCIATES by RALPH H. THURSTON



LONGPORT GROUP

Sec. 34, T33N, R90W

Fremont County, Wyoming

1" = 400'

6/9/56

CHARLES M. COLEMAN and ASSOCIATES by RALPH H. THURSTON

MARSH GROUP

Elevation of Collar of Holes and Top of Conglomerate

Brunton and cloth tape survey

Collar of hole M-3 assumed to be 6582 ft.

Hole No.	Collar elev.	Elev. of top of Conglomerate
M-1	6601	Not present
M-2	6600	Not present
M-3	6582	At surface
M-4	6594	6570
M-5	6598	6568
M-6	6618	6570
M-7	6635	6568
M-8	6625	6565
M-9	6628	6565
M-10	6608	6548
M-11	6631	6563
M-12	6633	6558
M-13	6641	6549
M-14	6656	Not reached
M-15	6655	Not reached
M-16	6618	6558
M-17		Not reached
M-18		Not reached

DRILL HOLE LOG

Hole No. C-1 Date Drilled May 17, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.02
1-50	.01-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-1'	Soil
1-3	Tan, coarse gr. congl. ss.
3-12	Lt. gray, med. gr. ss. few pebble congl. beds
12-13.5	Lt. gray, coarse gr. congl.ss.
13.5-16	Bright tan, coarse gr. ss.
16-18.5	Dull brown, coarse gr. ss. with minor clays.
18.5-20	Dark blue-gray siltstone.
20-26.5	Med. greenish gray siltstone grading into brown siltstone.
26.5-28.5	Blue gray siltstone
28.5-32	Dull brown, coarse gr. ss with minor clay.
32-36	Charcoal gray siltstone.
36-36.5	Tan siltstone.
36.5-38	Blue gray siltstone.
38-44	Greenish gray siltstone. 42-43'=Brownish gray siltstone.
44-48	Dark greenish gray siltstone.
48-50	Dark blue gray siltstone.

T.D. 50'

Hole No. C-2 Date Drilled May 17, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1-48.3	.02-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-2'	Soil
2-4	Buff, med. gr. ss.
4-6.5	White, med. gr. ss. Some qtz. & granite pebble
6.5-8	Bright, lit. brown, med. gr. ss.
8-16	Lt. gray to Lt. greenish gray muddy siltstone.
16-18	Lt. greenish gray sandy siltstone.
18-22	Greenish tan, silty ss.
22-27	Tan siltstone.
27-30	Lt. green silty ss.
30-36	Tan to greenish gray siltstone.
36-40	Dull, lt. greenish brown coarse gr.ss. with minor clay.
40-42.5	Dark green-gray coarse gr. ss. with clay.
42.5-44	Green siltstone.
44-46	Greenish brown siltstone.
46-48	Green siltstone.
48-50	Green gray med. to fine gr. ss.

T.D. 50'

DRILL HOLE LOG

Hole No. L-1

Date Drilled May 15, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale	Reading 4 Scale
0	.09	.07
1-5	.09-.10	.08
6-10	.10	.09
11	.10	.09
12-29	.10-.11	.10
30	.10	.11
31-33	.11-.13	.10
33.4	.11	.14
34	.13	
35-39	.12	.10
39-43	.11	.11
44	.12	.10
45	.11	
46	.11	.09
47	.11	.10
48	.12	.09
48.9	.12	.09

SAMPLE DATA

LITHOLOGY

0-2'	Soil
2-4	Dull earth brown clay mixed with ss.
4-14	Lt. gray to buff, coarse gr. ss. Well cemented
14-20	Dull, earth brown ss. mixed with clay
20-22	Buff, med. gr. ss.
22-28	Greenish, med. gray, coarse gr. ss.
28-34	Greenish gray siltstone.
34-36	Tan sandy siltstone.
36-37	Lt. gray sandy siltstone.
37-37.5	Blue gray siltstone.
37.5-39.5	Buff to tan sandy siltstone.
39.5-46	Tan silty ss.
46-50	Buff to lt. gray siltstone.

T.D. 50'

RECEIVED
AUG 13 1956

DRILL HOLE LOG

Hole No. L-2

Date Drilled May 15, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.04
1-134	.04-.06
135-137	.07
138-195	.04-.06
195-269	.02-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-2	Soil
2-12	Buff siltstone & clay-med. grained.
12-14	Tan to buff - fine grained siltstone.
14-18	Tan sandstone-very fine grained.
18-24	Buff med. grained ss.
24-26	White ss.-med. grain.
26-28	Buff ss.-med. grain.
28-30	White ss.-med. grain.
30-34	Buff ss.-med. grain & FeOx.
34-40	Greenish fine grained ss. Clay in matrix.
40-54	Greenish siltstone & clay.
54-58	Gray to green fine grained ss.
58-62	Lt. gray ss.-very fine grained FeOx.
62-64	White ss. - med. grained.
64-70	Buff to tan ss. - some green clay near 70'.
70-74	Tan ss. - fine grained--FeOx.
74-76	Tan ss. & green clay.
76-80	Buff med. grained ss.
80-86	Gray claystone.
86-90	White ss. - fine grained.
90-96	Gray claystone-some FeOx.
96-104	Gray ss. - med. grained.
104-114	Blue-gray ss.-very fine grained. Some claystone.
114-120	Blue shaley ss. - V.F.G. Red silt at 120'.
120-132	Greenish blue siltstone. (124-128 some brownish streaks.)
132-148	Lt. blue ss. - V.F.G.
148-150	Lt. blue ss. - V.F.G. & clay.
150-160	Lt. blue ss. - med. grained.
160-180	White to blue ss-med. to coarse.
180-190	Blue-green claystone.
190-198	Alternate green shale & white ss.
198-200	Blue and red claystone.
200-270	Green to red clays & white sand alternating.

T.D. 270'

DRILL HOLE LOG

Hole No. L-3 Date Drilled May 12, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1-47.8	.02-.05

SAMPLE DATA

No Samples

LITHOLOGY

0-1	Soil
1-9.5	Lt. gray pebble congl.
9.5-10.5	Green mudstone
10.5-15	Lt. gray coarse ss. and green mudstone interbedded.
15-16	Tan, coarse gr. ss.
16-27	Lt. greenish gray, coarse gr. ss.Few bands siltstone near bottom.
27-28	Brown siltstone.
28-30	Green & tan siltstone with greenish gray coarse gr. ss.
30-31	Brown siltstone.
31-32	Bright tan, med. gr. ss.
32-34	Med. gray, med. grain ss.
34-40	Lt. gray to buff, med. gr. ss.
40-50	Lt. gray to buff, coarse gr. congl. ss.

T.D. 50'

Hole No. L-4 Date Drilled May 12, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.02
1-9	.02-.04
10-13.5	.05-.06
14-48.5	.01-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-2	Soil
2-12.5	Lt. gray to buff pebble cong.
12.5-14.5	Green mudstone.
14.5-17.5	Lt. gray, coarse gr. ss.
17.5-18	Bright lt. brown siltstone.
18-20	Lt. gray, coarse gr. ss. and lt. gray and brown siltstone interbedded.
20-22	Lt. gray, med. gr. ss. & lt. gray silt interbedded.
22-24.5	Buff silstone.
24.5-28	Green, fine gr. silty ss.
28-32	Lt. brown coarse gr. ss.
32-34	Buff, coarse gr. ss.
34-36	Lt. gray fine gr. ss.
36-40	Lt. gray to tan, coarse gr. ss.
40-43.5	Lt. gray siltstone.
43.5-44.5	Dull purplish brown siltstone.
44.5-50	Lt. greenish gray, med. grain ss.

T. D. 50'

DRILL HOLE LOG

Hole No. L-5

Date Drilled May 12, 1956

PROBE DATA

Babble counter

ft.	Reading 5 Scale
0	.02
1-48.1	.01-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-3	Soil
3-8	Buff to earth brown, med. gr. ss.
8-17.5	Lt. gray pebble cong.
17.5-20	Lt. green-gray silty mudstone.
20-33	Tan siltstone
33-34	Lt. gray, fine gr. ss.
34-48.5	Lt. gray coarse gr. ss.
48.5-50	Blue gray siltstone.

T.D. 50'

Hole No. L-6

Date Drilled May 12, 1956

PBROBE DATA

ft.	Reading 5 Scale
0	.02
1-58.4	.01-.04

SAMPLE DATA

No Samples.

LITHOLOGY

0-3	Soil
3-12	Lt. gray, coarse gr. congl. ss.
12-16	Lt. greenish gray, fine gr. silty ss.
16-20.5	Lt. green sandy siltstone.
20.5-22	Lt. greenish gray , fine gr. ss.
22-46	Lt. gray, coarse gr. ss. conglomeratic in places.
46-49.5	Lt. gray, fine gr. ss.
49.5-50	Dull earthy brown, fine gr. ss.

T. D. 50'

Hole No. L-7

Date Drilled May 12, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1-48.2	.01-.04

SAMPLE DATA

No Samples.

LITHOLOGY

0-1	Soil
1-4	Lt. gray, fine gr. ss.
4-8	Lt. gray to buff, med. gr. ss.
8-14	Lt. gray to buff, coarse gr. ss.
14-17	Dull earth brown, coarse gr. ss.
17-22.5	Lt. gray-green, coarse gr. ss. Some silty beds.
22.5-24	Chocolate brown, fine gr. silty ss.
24-24.5	Red-brown, fine gr. ss.
24.5-32	Lt. greenish, fine gr. ss. Some silt beds.
32-32.5	Tan siltstone.
32.5-34	Lt. gray, med. gr. ss.
34-50	Lt. gray, coarse gr. ss.

T. D. 50'

DRILL HOLE LOG

Hole No. M-1 Date Drilled May 8, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.05
1-69'	.05 - .07

SAMPLE DATA

No Samples

LITHOLOGY

0'-10' Tan to lt. brown fine gr. silty ss. Strong FeOx stain.
10-18' Buff to tan fine gr. ss.
18-21' Buff to tan coarse gr. arkosic ss.
21-39' Tan Coarse gr. ss. and congl. pbls. to 1" dia.
39-46' Buff, coarse gr., congl. ss.
46-54' Lt. dull brown, coarse gr., ss. some large pbls.
54-57' Med. gray cobble congl. Black chert fragments with usual qtz., qtzite. & feldspar fragments.
57-70' Buff, coarse gr. congl. ss.

T.D. 70'

Hole No. M-2 Date Drilled May 8, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0 - 1	.05
1.5	.08
2.0	.10
3.0	.08
3.5	.06
4.0-67.5	.02-.06

SAMPLE DATA

No Samples

LITHOLOGY

0'- 4' Soil
4 - 6' Bright light brown, heavily FeOx stained, silty fine gr. ss.
6 -10' Buff, fine gr. ss.
10 -14' Med. gray congl.
14 -18' Buff to tan coarse gr. ss.
18 -23' Bright lt. brown, FeOx stained, coarse gr. ss.
23 -24' Tan Congl.
24 -30' Tan Med. grained ss.
30 -34' Buff coarse gr. ss.
34 -47' Buff to gray cobble congl. Some black chert pebbles.
47 -58' Buff coarse gr. congl. ss.
58 -70' Tan coarse gr. congl. ss.

T.D. 70'

DRILL HOLE LOG

Hole No. M-3 Date Drilled May 10, 1956

PROBE DATA

ft.	Reading 5 Scale	Reading 4 Scale
0	.03	
1-35	.03-.05	
36	.06	
36.5	.07	
37	.11	
37.5	.10	
38	.07	
39	.04	
40-175	.01-.03	
176	.08	.05
176.5	.10	.05
177	.13	.05
177.5	.16	.08
178	.29	.11
178.5	.56	.19
179	.74	.21
179.5	.85	.22
180	.79	.20
180.5	.50	.17
181	.27	111
181.5	.16	.06
182	.10	.04
182.5	.06	.05
183	.09	.05
183.5	.09	.06
184	.09	.06
184.5	.18	.08
185	.28	.12
185.5	.77	.22
186	.95	.26
186.5	.68	.18
187	.36	.11
187.5	.18	.07
188	.12	.06
188.5	.09	.04
189	.06	.03
190-193	.03-.05	
194-247	.01-.03	

Caved at 247'

SAMPLE DATA

ft.	$\%U_3O_8$
196-198=	.01
198-200=	.02

LITHOLOGY

0'-6' Soil
6 -17' Cobble conglomerate-buff.
17-30' Buff, coarse gr. ss.
30-70' Buff to tan, coarse gr. ss.
41'-46'-pebble congl.
70-76' Buff, coarse gr. ss.
76-80' Buff, coarse gr. congl. ss.
Some silt.
80-84' Buff, coarse gr. ss.
84-88 1/2 Blue gray siltstone
88 1/2 - 106' Light greenish gray
med. to coarse gr. ss.
106-132' Greenish-gray med. gr. silty ss.
132-136' Lt. gray coarse gr. ss.
136-140' Greenish gray silty ss.
140-164' White to lt. gray coarse gr. ss.
164-189' Lt. greenish gray coarse gr. ss.
189-205' Lt. greenish gray med. gr. ss.
205-246' Green siltstone.
246-262' Med. gray ss. with some dark
blue gray siltstone.
262-280' Intermixed red & gray silt-
stone-some coarse ss.

T.D. 280'

Bottom of upper Wind River formation believed to be at 262'.

Slight radiometric count in wet cuttings from 188' to 206'.

REMARKS: no cuttings 126' - 130', 138' - 140'. Water at 140'
Below 140' samples ore cuttings taken from water at hole collar in steel sump tank by shovel.

DRILL HOLE LOG

Hole No. M-4 Date Drilled May 8, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.04
1-15	.04-.06
16	.12
17	.18
18	.08
19	.04
20-76.5	.02-.05

SAMPLE DATA

19'-20'= .04% U_3O_8

20'-22'= .01% "

LITHOLOGY

0-1'	Soil
1-19'	Tan, coarse gr. congl. ss.
19-20'	Chocolate brown fine gr. silty ss. Last 1" or so white silty ss.
20-22'	Lt. brown, coarse gr., congl. ss.
22-31'	Lt. gray to buff cobble congl. Fragments black qtz.
31-38'	Buff coarse gr. congl. ss.
38-52'	Buff, coarse gr. ss., congl. in part.
52-62'	Tan, coarse gr. ss.
62-64'	Bright lt. brown, coarse gr. ss.
64-70'	Tan, coarse gr. ss.

T.D. 70'

Hole No. M-5 Date Drilled May 9, 1956

Babble Counter

ft.	Reading 5 Scale
0	.04
1-45	.04-.06
45-113.5	.03-.05

No Sample

0'-1'	Soil
1 -14'	Dull lt. brown fine gr. ss. conglomeratic
14- 16'	Tan, med. gr. ss.
16- 30'	Tan, coarse gr. congl. ss.
30- 50'	Cobble Congl.
50- 58'	No cuttings - drilled like soft ss.
58- 85'	Buff to tan coarse gr. ss.
85- 92'	Lt. gray-green coarse gr. ss.
92- 97'	Buff, coarse gr. ss.
97- 98'	Blue-gray siltstone
98-102'	Lt. gray coarse gr. ss.
102-105'	Blue-gray siltstone
105-120'	Blue-gray fine gr. ss.

T.D. 120'

DRILL HOLE LOG

Hole No. M-6 Date Drilled May 8, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY	
ft.	Reading 5 Scale			
0	.02	No Samples	0'-6'	Buff pebble congl.
1-67.8	.02-.04		6 -13.5	Tan coarse gr. congl. ss.
			13.5-15	Lt. gray med. gr. ss.
			15 -30'	Tan, Coarse gr. ss.
			30 -38'	Buff to tan coarse gr. ss.
			38 -54'	Cobble congl., buff to tan. Black chert fragments.
			54 -66'	Lt. gray cobble congl.
			66 -70'	Buff to tan coarse gr. ss.
			T.D. 70'	

REMARKS: Cobble congl. 38' - 66' very hard drilling. Much extra sand blown out. Must be large diameter hole in places.

Hole No. M-7 Date Drilled May 8, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY	
ft.	Reading 5 Scale			
0	.04	No Samples	0-1'	Soil
1-75.5	.02-.05		1-6 1/2'	Buff conglomerate
			6 1/2 -12	Buff to tan congl. and coarse gr. ss.
			12 - 20	Tan coarse gr. ss.
			20 - 30	Buff to tan congl. and coarse gr. ss.
			30 - 36	Siltstone - White to lt. gray spotted with FeOx stain. Probably stained in alternate beds.
			36 - 42	Tan, med. gray ss.
			42 - 67	Tan, coarse gr. ss. 3' med. grain. at 48'-51'.
			67 - 75	Buff to tan boulder congl.
			75 - 83	Med. gray boulder congl.
			T.D. = 83'	Hole caved

REMARKS: The conglomerate from 67' to 83' was very hard drilling and wore out two bits. Such a large amount of sand was blown from the hole during the slow drilling that it is believed no satisfactory samples could be obtained from greater depths even if the hole could be drilled deeper.

DRILL HOLE LOG

Hole No. M-7-A

Date Drilled May 16, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1-30	.02-.04
31	.07
32	.08
33	.09
34-35	.08
36	.07
37-55	.04
56	.07
57	.06
58	.04
59-71	.04-.06
72	.08
73	.08
74-75	.06
76-77	.05
78-84	.06
85-86	.04
87-88	.06
89-113	.04
114-115	.06
116-123	.04
124-126	.06
127-131	.04
132	.05
133-140	.03-.04

SAMPLE DATA

No Samples

LITHOLOGY

Log of M-7 satisfactory to 52'

54-56	Conglomerate-buff (cont. Qtz., Blk. chert.)
56-62	Tan to buff ss. med. gr.
62-64	Fine gr. tan ss. & FeOx.
64-70	Buff boulder cong.
70-72	Tan fine gr. ss.
72-86	Buff bldr. congl.
86-88	Buff ss. 6" blue clay. Parting 87.5 - 88'.
88-108	Buff ss. Med. to fine gr.
108-110	Gray boulder congl.
110-122	Buff & tan ss. med. gr. & FeOx & bl. clay partings.
122-124	Buff fine gr. ss. Blue green shale parting (* - 4")
124-140	White to tan ss. med. to fine gr.

T. D. 140'

DRILL HOLE LOG

Hole No. M-8

Date Drilled May 9, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.04
1-30	.03-.05
31	.07
32	.10
33-34	.09
35	.16
36	.20
37	.14
38	.11
39	.06
40-58	.04-.06

Caved at 58'

SAMPLE DATA

ft.	% U_3O_8
36'-38'	= .02

Chocolate & buff silt.

LITHOLOGY

0- 4'	Buff to tan siltstone
4-14'	Buff, coarse gr. ss.
14-33'	Buff to tan, coarse gr. congl. ss. Siltstone beds 20'-23'
33-39'	Siltstone-beds buff, tan, white, 36'-37.5' chocolate. Occasional carbon, most at 34'.
39-52'	Buff to tan coarse gr. ss.
52-60'	Tan, Med. gr. ss.
60-70'	Tan, cobble congl.

T.D. 70'

Hole No. M-9

Date Drilled May 11, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale	Reading 4 Scale
0-ft.	.03	
1-35	.02-.04	
36	.04	
36.5	.07	.01
37	.10	.03
37.5	.13	.03
38	.08	.03
38.5	.08	.03
39	.06	.02
39.5	.04	
40-66	.02-.04	

SAMPLE DATA

No Samples

LITHOLOGY

0-3'	Soil
3-9	Tan, coarse gr. ss. & congl.
9-22	Tan, coarse gr. ss. Few inches lt. gray siltstone at 10'. Much interbedded lt. gray silt 12'-14'.
22-23	Tan siltstone
23-25	Bright brown coarse gr. ss.
25-30	Light gray pebble congl.
30-30.5	Buff siltstone
30.5-32	Tan, coarse gr. ss.
32-34	Med. gray, fine gr. ss. some buff silt.
34-36	Lt. blue gray siltstone.
36-40	Interbedded med. gray ss. and blue gray silt.
40-43	Med. gray ss.
43-45	Blue gray siltstone
45-46.5	Tan sandy siltstone.
46.5-54	Tan to buff, med. gr. ss.
54-63	Tan, coarse gr. ss.
63-70	Cobble conglomerate

T.D. 70'

DRILL HOLE LOG

Hole M-10

Date Drilled May 9, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.04
1-69	.02-.05

SAMPLE DATA

No Samples

LITHOLOGY

0-2	Soil
2-6	Banded buff, tan, brown siltstone
6-8	Buff, fine gr. ss.
8-10	Tan, med. gr. ss.
10-12.5	Lt. gray, coarse gr. congl. ss.
12.5-18	Buff to tan, siltstone
18-22	Lt. gray fine gr. ss.
22-26	Tan, med. gr. ss.
26-32	Buff to tan coarse gr. ss.
32-34	Buff to tan siltstone
34-36	Tan, fine gr. ss.
36-60	Buff, coarse gr. ss.
60-70	Cobble conglomerate-buff

T.D. 70'

DRILL HOLE LOG

Hole No. M-11

Date Drilled May 9, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale	Reading 4 Scale
0	.05	
1-3	.05-.06	
3.5	.10	
4	.12	
5	.11	
6	.10	
7	.07	
8-25	.06-.07	
26	.10	.08
27	.20	.11
27.5		.14
28	.56	.20
29	.50	.17
29.5	.30	.11
30	.14	.08
31	.10	
32	.08	
33	.10	
34-35	.09	
36	.22	
37	.11	
38	.08	
39-50	.06-.08	
50-67.5	.05	

SAMPLE

ft.	% U_3O_8
4'-6'=	.08
28'-29.5=	.137
36'-38'=	.048
2" carbon at 41.5=	.11

LITHOLOGY

0-8'	Buff siltstone. Last 1' strong brown FeOx stain.
8-15	Buff coarse gr. ss.
15-16	Brown FeOx stained, coarse gr. ss.
16-19	Lt. gray coarse gr. ss.
19-26	Tan, coarse gr. ss. few inches buff siltstone at 24'.
26-28	Buff siltstone
28-29.5	Chocolate brown siltstone with considerable carbon.
29.5-33	Tan, coarse gr. congl. ss.
33-36	Buff, fine gr. silty ss.
36-37	Med gray silty ss.
37-40	Blue-gray siltstone
40-42	Tan, fine gr. ss. 2" carbon streak at 41.5'.
42-58	Buff to tan, fine gr. ss. 2" blue-gray siltstone at 43.5'. 1' coarse gr. sss at 50'.
58-68	Tan, coarse gr. ss.
68-70	Cobble congl. - tan.

T.D. 70'

DRILL HOLE LOG

Hole No. M-12 Date Drilled May 10, 1956

PROBE DATA		SAMPLE DATA	LITHOLOGY	
Babble ft.	Counter Reading 5 Scale	No Samples	0-3'	Soil
0	.04		3-8	Buff med. gr. ss.
1-92.7	.02-.05		8-15	Tan, coarse gr. congl. ss.
			15-19	Buff, coarse gr. ss. Few inches buff silt at 16'.
Caved at 92.7'			19-20	Buff siltstone
			20-40	Buff, coarse gr. ss. Congl. in places.
			40-44	Intermixed light blue-gray silt and tan, med. gr. ss.
			44-46	Tan, med. gr. ss.
			46-47.5	Lt. gray siltstone.
			47.5-64	Buff, to tan, fine gr. silty ss.
			64-72	Buff to tan, med. gr. ss.
			72-75	Tan, coarse gr. ss.
			75-102	Cobble conglomerate.
			T.D. 102'	

REMARKS: Lost air return at 102' and hole caved badly.

DRILL HOLE LOG

Hole No. M-12-A

Date Drilled May 16, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1-60	.02-.03
61-76	.02
77-79	.04
80-96	.00
100-102	.02
103-125	.00
126-131	.02
132	.04
132.5	.10
133	.06
134-139	.02
140	.00

SAMPLE DATA

130'-132'= .02 % U_3O_8

132'-134'= .02% U_3O_8

LITHOLOGY

0-2	Soil
2-6	Med. gr. ss. - buff.
6-8	Mixed buff ss. & cong.
8-16	Buff to tan cong. (Pbl.) & FeOx.
16-18	Brown to tan siltstone.
18-22	Lt. tan ss. med. gr.
22-26	Lt. tan ss. coarse gr.
26-42	Lt. tan to buff ss. med. to coarse.
42-44	Brown ss. Fine gr. blue silt at bottom (44').
44-75	Buff to tan ss. Blue clay parting at 48' (+ - 4").
75-90	Boulder cong. cont. wh. qtz. & blk. chert.
90-92	Tan ss. (med. gr.) & blue clay.
92-130	Lt. tan to buff ss. med. gr. Light color 122'-120'.
130-134	White ss. med. gr. blue clay parting.
134-140	Light gray ss. med. gr.

T.D. 140'

DRILL HOLE LOG

Hole No. M-13 Date Drilled May 9, 1956

PROBE DATA

Babble Counter

ft.	Reading 5Scale	4 Scale
0	.04	
1-63	.04-.07	
64	.07	.04
65	.12	.04
65.5	.18	
66	.22	.09
67	.16	.07
68	.11	.05
69	.10	
70	.08	
71	.06	
72-105	.04-.06	

Caved at 105'

SAMPLE DATA

66'-68'= .056 % U_3O_8

LITHOLOGY

0-4	Lt. gray, med. gr. ss.
4-8	Lt. gray & tan, coarse gr.ss.
8-17	Lt. gray, buff & tan siltstone.
17-30	Lt. gray to buff, coarse gr. ss.
30-33	Lt. gray congl.
33-44	Lt. gray, coarse gr., congl. ss.
44-58	Buff, coarse gr. ss. conglomeratic in places.
58-74	Blue-gray siltstone. 66-68=more dull gray.
74-92	Buff to tan, coarse gr. ss.
92-120	Cobble,conglomerate-buff to tan.

T.D. 120'

Hole No. M-14 Date Drilled May 11, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1	.02
2	.05
3	.05
4	.03
5-67	.01-.03

SAMPLE DATA

No Samples

LITHOLOGY

0-2'	Soil
2-5	Buff, coarse gr. congl. ss.
5-10	Lt. gray, fine gr. ss.
10-12	Buff to tan, sandy siltstone.
12-16	Buff to lt. gray Med. gr. ss.
16-34	Green-gray, coarse gr. ss. Tan streaks
34-42	Buff, coarse gr. ss.
42-51	Lt. green-gray coarse gr. ss.
51-53	Interbedded tan ss. & lt. gray siltstone.
53-60	Lt. gray, med. gr. ss. few coarse gr.
60-62	Tan, coarse gr. ss.
62-68	Lt. gray to buff, coarse gr. ss.
68-70	Tan, very coarse gr., congl. ss.

T.D. 70'

DRILL HOLE LOG

Hole No. M-15

Date Drilled May 11, 1956

PROBE DATA

Babble Counter

ft.	Reading 5 Scale
0	.03
1-69.8	.02-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-1'	Soil
1-4	Buff, fine gr. ss.
4-6	Buff, med. gr. ss.
6-10	Tan, coarse gr. ss.
10-16	Lt. gray to buff, coarse gr. ss.
16-20.5	Tan, coarse gr. ss. At 16' large piece black silicified wood.
20.5-22.5	Lt. gray, fine gr. ss.
22.5-24	Gray siltstone & fine gr. ss.
24-26	Dark green-gray, silty, coarse gr. ss.
26-28	Blue-gray siltstone.
28-34	Dull, green-brown, med. gr. ss.
34-45	Lt. gray, med. gr. ss.
45-52	Lt. gray, coarse gr. ss.
52-53	Banded lt. gray & brown, fine gr. ss.
53-60	Lt. gray, fine gr. ss.
60-70	Lt. gray to buff, coarse gr. ss.

T.D. 70'

RECEIVED
AUG 13 1956

Hole No. M-16

Date Drilled May 11, 1956

PROBE DATA

ft.	Reading 5 Scale
0	.03
1-67.8	.02-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-2.5	Soil
2.5-6	Lt. gray coarse gr. ss.
6-20	Tan, coarse gr. ss. 11'-12'=Lt. gray, med. gr. ss.
20-24	Tan & bright lt. brown, coarse gr. ss.
24-45	Lt. gray to buff, coarse gr. ss. Few beds pebble congl.
45-47	Tan, coarse gr. ss.
47-48	Lt. gray, med. gr. ss.
48-52	Buff to tan, coarse gr. ss.
52-54	Bright brown, coarse gr. ss.
54-55	Tan, coarse gr. ss.
55-60	Lt. gray to buff, coarse gr. ss.
60-70	Cobble conglomerate.

T.D. 70'

DRILL HOLE LOG

Hole No. M-17

Date Drilled May 11, 1956

PROBE DATA

Bable Counter

ft.	Reading 5 Scale
0	.02
1-68.6	.01-.04

SAMPLE DATA

No Samples

LITHOLOGY

0-2'	Soil
2-17	Buff to tan siltstone
17-20	Med. gray, fine gr. ss.
20-25	Buff siltstone
25-27	Lt. gray to tan, med. gr. ss.
27-28.5	Lt. gray & brown siltstone.
28.5-36	Lt. gray to buff, coarse gr. congl. ss.
36-38	Lt. greenish gray, fine gr. ss.
38-40	Bright tan, coarse gr. ss.
40-52	Lt. gray to buff, coarse gr. ss.
52-53	Tan siltstone.
53-55.5	Lt. gray, coarse gr. ss. 6" dark brown. stain at 55' FeOx & MnO
55.5-63	Blue-gray siltstone with iron & manganese stained pebbles
63-63.5	Tan siltstone.
63.5-70	Light gray to tan, fine gr. ss.

T.D. 70'

DRILL HOLE LOG

Hole No. M-18

Date Drilled May 11, 1956

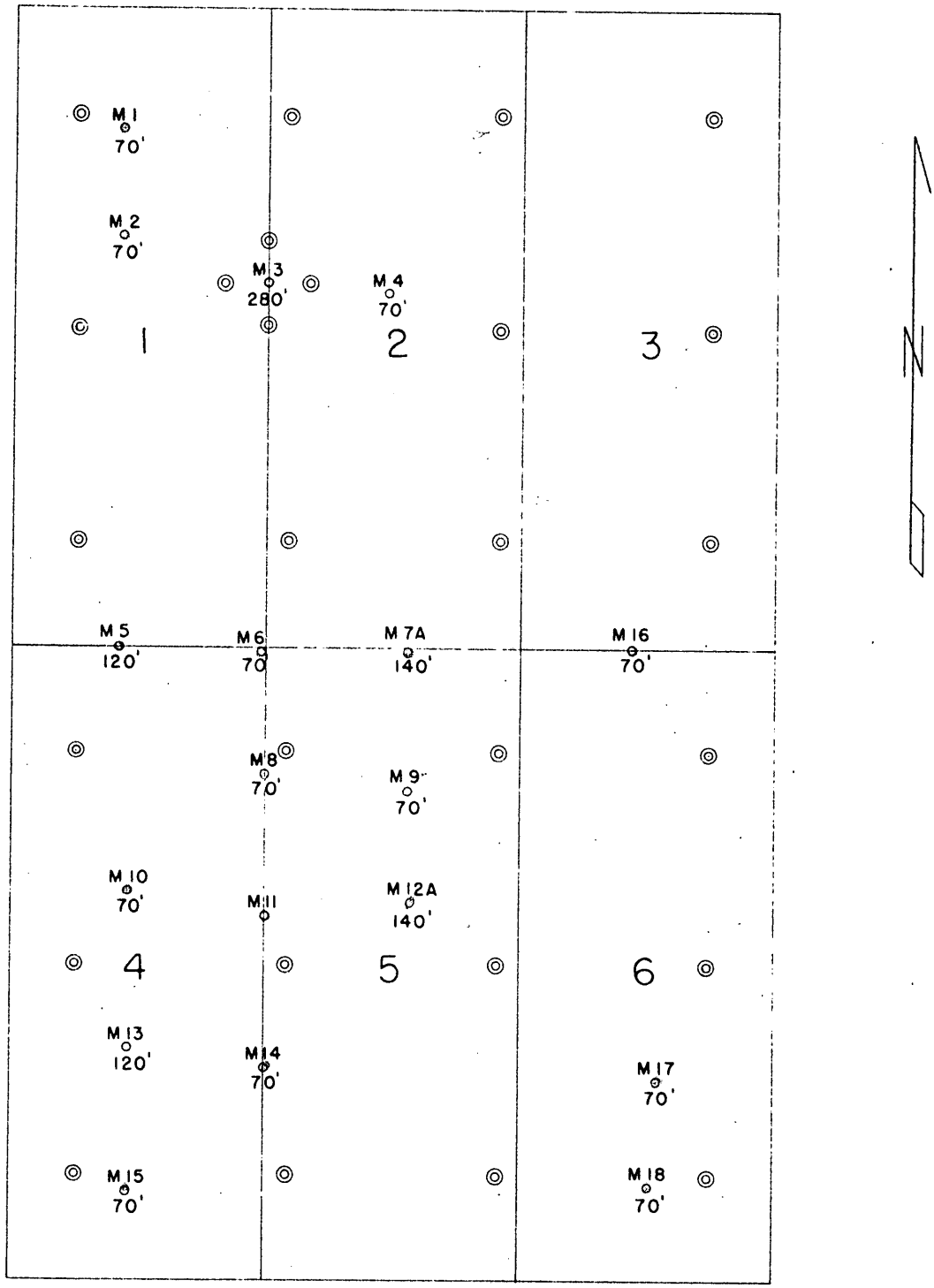
PROBE DATA		SAMPLE DATA	LITHOLOGY	
Babble Counter		No Samples	0-4'	Lt. brown, coarse gr. congl. ss.
ft.	Reading 5 Scale		4-12	Coarse gr. ss. 4-8'=Lt. gray 8-10=buff 10-12=brown
0	.03			
1-67.8	.01-.05		12-26	Blue-gray siltstone. 1st 2' duller gray.
			26-27	Dull gray siltstone.
			27-29	Brown, tan, lt. gray siltstone.
			29-32	Fine gr. ss. few inches lt. gray, then greenish
			32-54	Lt. gray to buff, coarse gr. ss. Greenish band at 41', tan ss. & gray silt 46' - 47'.
			54-55	Tan, coarse gr. ss.
			55-58	Med. gray, fine gr. ss.
			58-60	Blue gray siltstone.
			60-61	Med. gray ss.
			61-62	Bright brown, fine gr. ss.
			62-68	Lt. gray to buff, med. gr. ss.
			68-70	Lt. gray, coarse gr. ss.

T.D. 70'

MARSH GROUP

Secs. 32 & 33, T33N, R90W

Fremont County, Wyoming



Stage I holes drilled

- Ore grade mineralization
- Mineralization below ore grade
- Not mineralized

Stage II holes proposed

1" = 400'

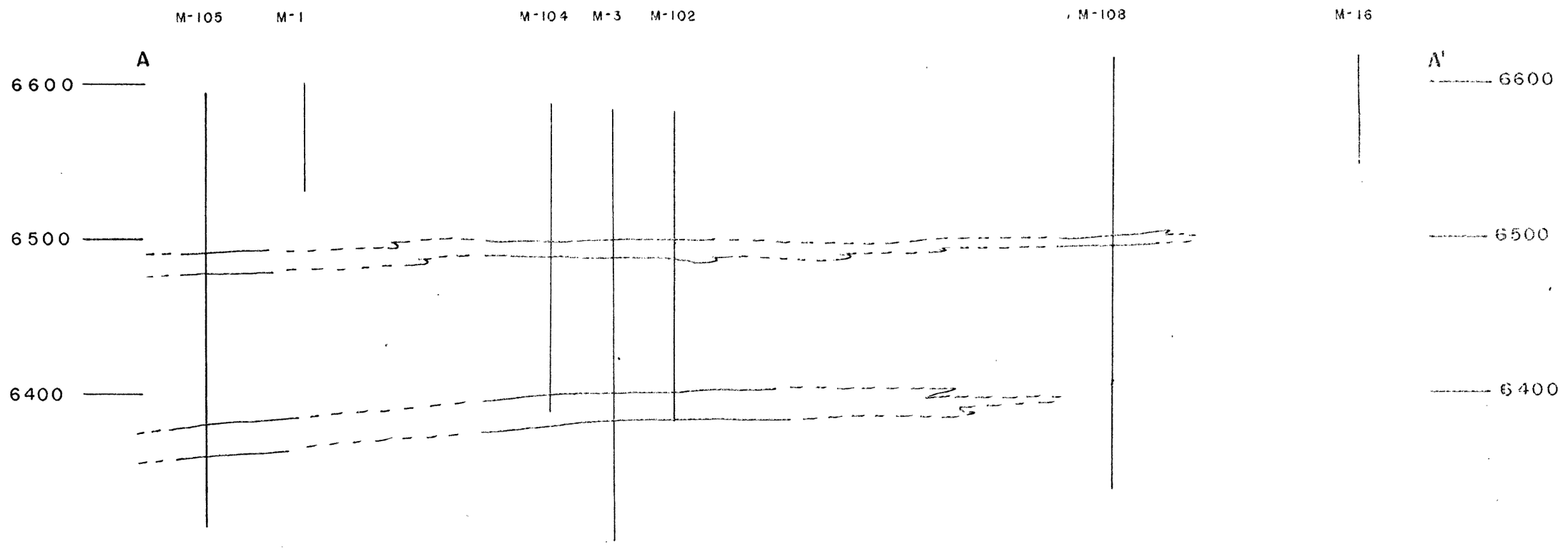
6/9/56

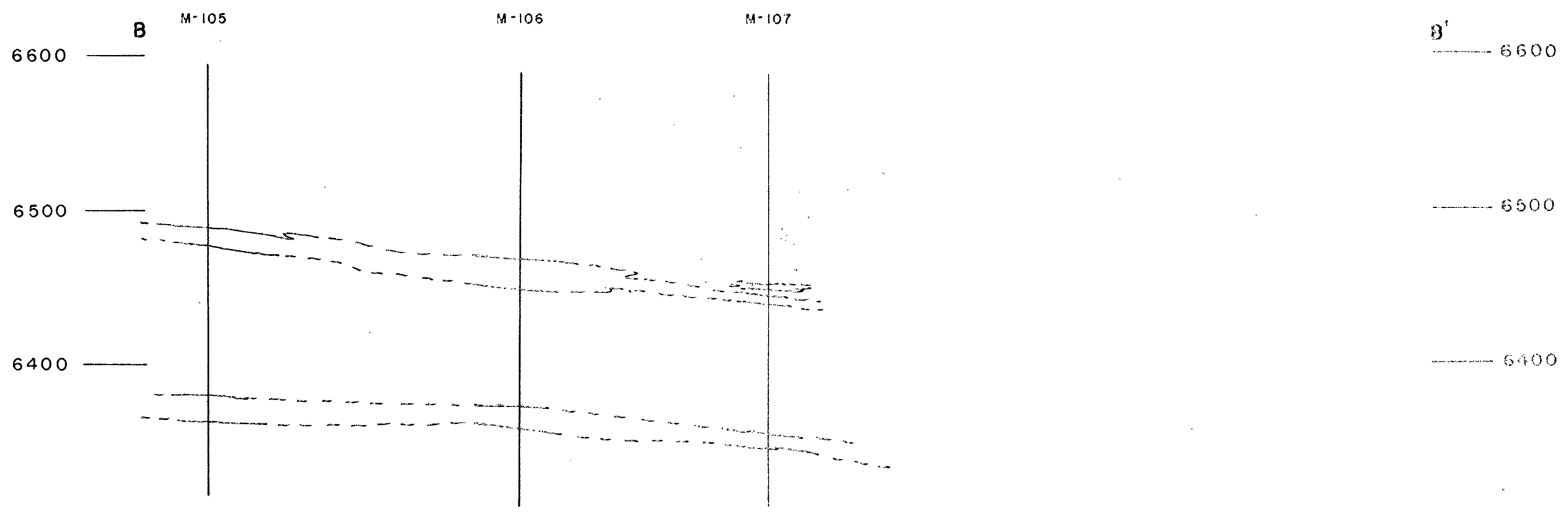
CHARLES M. COLEMAN and ASSOCIATES by RALPH H. THURSTON

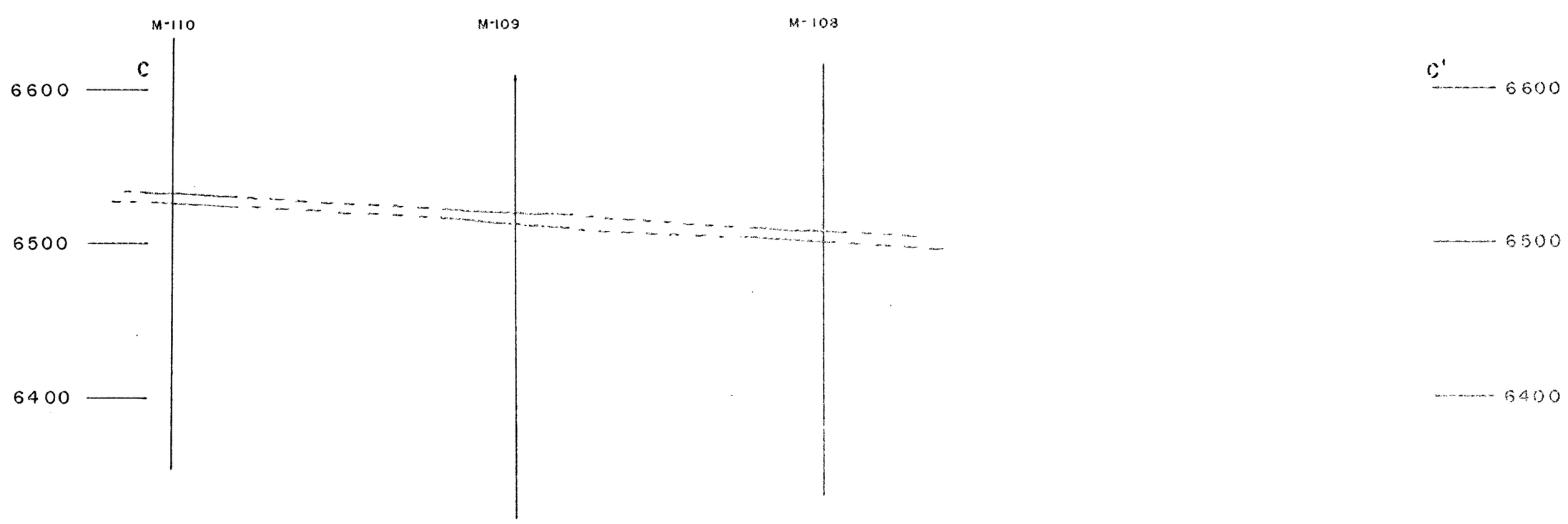
MARSH GROUP

CROSS SECTION MAP

SHOWING "BLUE CLAY" ZONES



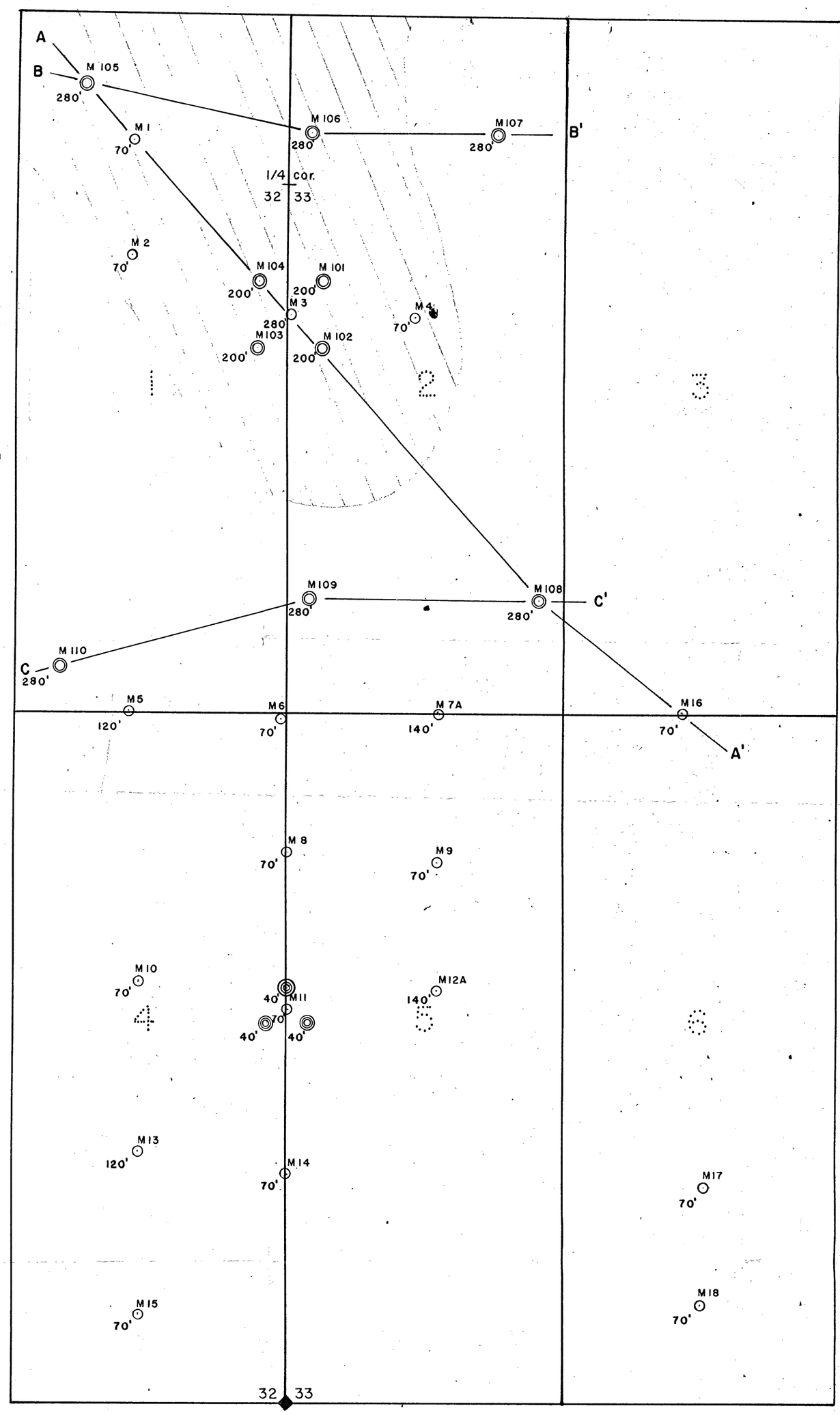




MARSH GROUP

SECS. 32 & 33, T 33N, R 90 W

FREMONT COUNTY, WYOMING



N

STAGE I. HOLES DRILLED ○

STAGE II HOLES DRILLED ◎

STAGE III HOLES DRILLED ◎

CROSS SECTIONS A ——— A'

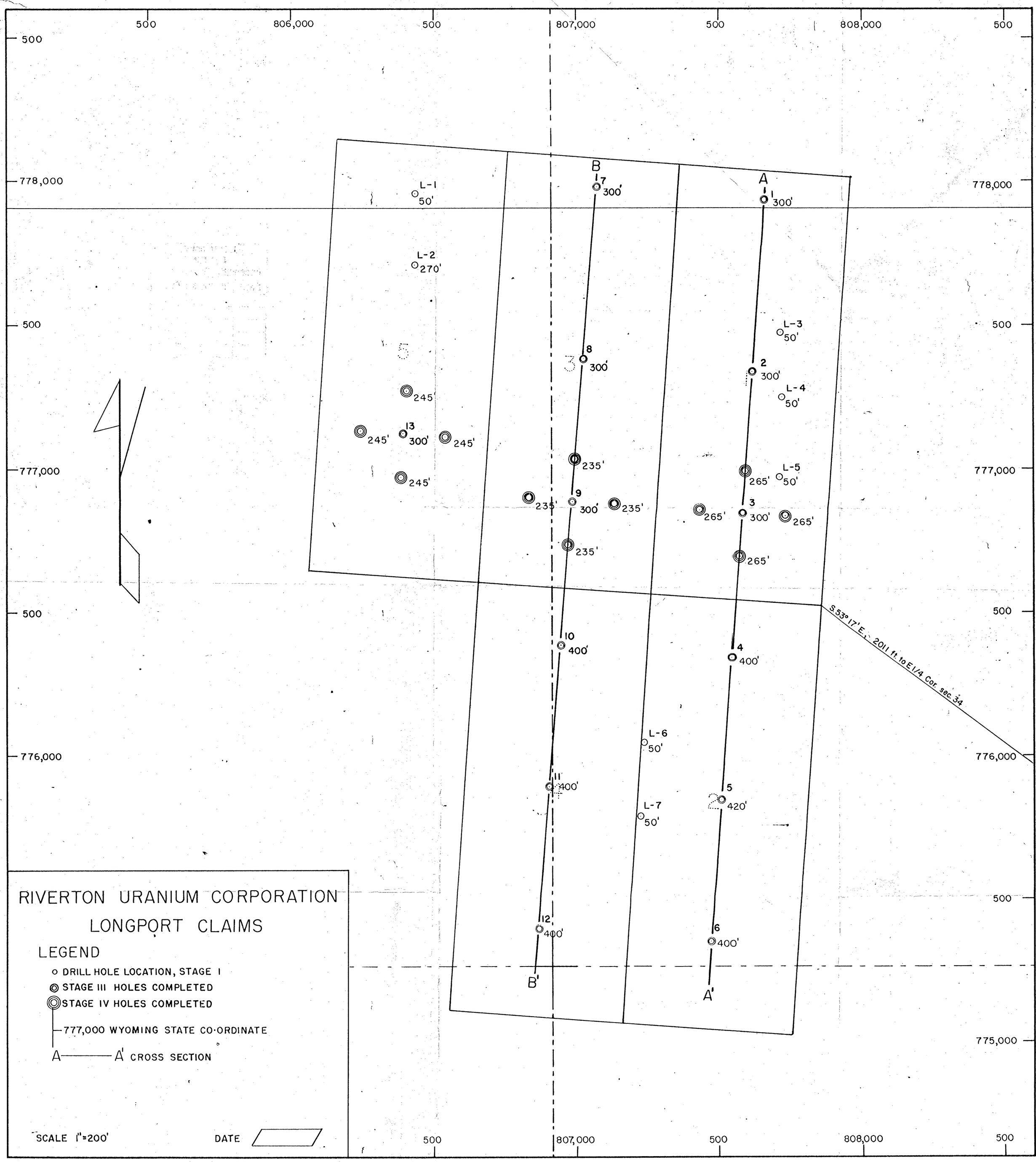
SCALE 1" = 200'

DATE 1/15/57

BY

FOR

CHARLES M. COLEMAN & ASSOCIATES


500
806,000
500
807,000
500
808,000
500
778,000
777,000
776,000
775,000
B
B'
A
A'
L-1
50'
L-2
270'
L-3
50'
L-4
50'
L-5
50'
L-6
50'
L-7
50'
1
300'
2
300'
3
300'
4
400'
5
420'
6
400'
7
300'
8
300'
9
300'
10
400'
11
400'
12
400'
13
300'
245'
235'
265'
S.53° 17' E., 2011 ft. to E1/4 Cor. sec. 34
RIVERTON URANIUM CORPORATION
LONGPORT CLAIMS
LEGEND
DRILL HOLE LOCATION, STAGE I
STAGE III HOLES COMPLETED
STAGE IV HOLES COMPLETED
777,000 WYOMING STATE CO-ORDINATE
A——A' CROSS SECTION
SCALE 1"=200'
DATE

LOGGING DATA

PROBE SIZE: 1 3/8" CALIBRATION: 400 CPS

DATE: June 14 '58 FIELD HDQTRS: Gas Hills

	INITIAL RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN
HOLE NO.	C-11					
HOLE DIA.	4 3/4 IN					
DRILLED DEPTH	506 FT					
LOGGED DEPTH	503 FT					
GAMMA SCALE	25 CPS					
TIME CONSTANT	8 SEC					
PAPER SPEED	10 FT/IN					
LOGGING SPEED	10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	100 Ω					
SELF POT SCALE	— MV/IN		SELF POT T.D.			
BORE HOLE MEDIUM	Water	WITH				
MUD	RESISTIVITY		TYPE BASE			
READINGS	VISCOSITY		SALINITY			
	WEIGHT	LBS/GAL	LBS/CU FT			
CALIPER SCALE	INCH	LEG SIZE	PAPER SCALE			
TIME IN	1515	CASED TO		I.D.	IN	
TIME OUT	1610	CORE INT.		DIAM	IN	

LOCATION	TIME
SEC. TWP. RGE.	OFFICE:
COUNTY: Fremont	DRIVE: 0.3
STATE: Wyoming	STANDBY: —
AREA: Gas Hills	FIELD: 0.9
CLIENT: Riverton Uranium	TOTAL: 1.2
Dr. Contractor: Couch	BREAKDOWN:
LOG REC'D BY:	OPERATOR: AC Mercer
John O'Leary	PARTY NO: U-10

Century

GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.
LOG MEAS. FROM ... FILE
DRLG. MEAS. FROM ... NO.

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO

LOCATION OF HOLE
ELEVATION KB GL
BKGRD. COUNT
SLUSH PIT CT.

REMARKS:

MINERALIZATION OR DIRECTIONAL DRIFT METER

COUNTS PER SEC. / Dist No.	BED THICKNESS / Depth	K KD / Drift	CORR. CPS. / Mag Brng	% U3O8 / True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

CALIPER INCHES

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE
OHMS

LOGGING DATA

PROBE SIZE: 1 3/8 CALIBRATION: 900
DATE: JUNE 17 1960 FIELD PROJECTS: Ed Hines

	INITIAL READ.	RE. OHMS	RE. OHMS	RE. OHMS	RE. OHMS	RE. OHMS
PROBE SIZE	1.0					
MUD WT.	8.75					
DRILLER'S DEPTH	360 m					
LOGGER'S DEPTH	358 m					
CASING DEPTH	52 m					
CURRENT	8 MEC					
SPEED	10 FT/MI.					
CURVE SCALE	10 FT/IN	FT/IN	FT/IN	FT/IN	FT/IN	FT/IN
MAGNETIC DECLINATION	10.0					
SELF POT. TO MUD	—MV/CM					
MAGNETIC	—	MV/CM				
MUD RESISTIVITY				MUD RESIST.		
MUD VISCOSITY				SPILLVILLE CALC.		
MUD WT.			LOST SOIL	SPILLVILLE CALC.		
CALIPER SCALE	INCH		LOST SOIL	SPILLVILLE CALC.		
TIME IN	1700		FINISH OUT		I. D.	IN
TIME OUT	1730		START IN			
LOG					DIAM.	IN

LOCATION: SEC. TWP. RGE.
COUNTY: Richmond
STATE: Virginia
AREA: Geo. H. Hall
CLIENT: Executive Mining Co.
LOG REC'D BY:

TIME
DRIVE: 0.5 hrs
FIELD: 0.2 hrs
STANDBY:
BREAKDOWN:
TOTAL: 1.2 hrs

OPERATOR: Phillips
PARTY NO: 6

Century
GEOPHYSICAL CORP.
TULSA, OKLA. U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.

LOG MEAS. FROM ..... FILE
DRLG. MEAS. FROM ..... NO.

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO

LOCATION OF HOLE

ELEVATION
KB
GL
SHARD COUNT
SLUSH PIT CT.

REMARKS:

INTERPRETATION

RADIO METRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

MINERALIZATION

COUNTS PER SEC.	ROD THICKNESS	K %	CORR. U%.	% U_3O_8

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

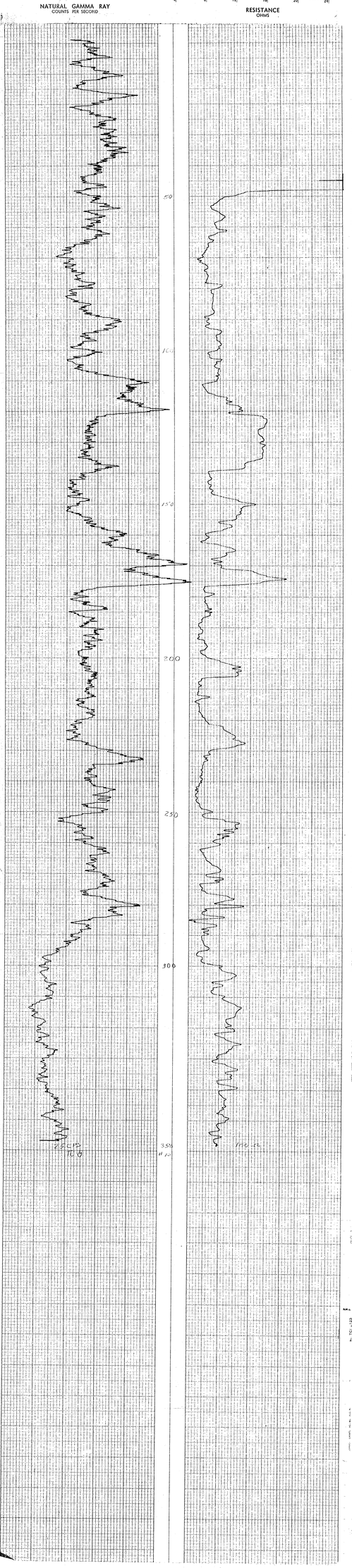
+ — 0 — −

CALIPER INCHES

4 5 6 7 8 9
4 6 8 10 12 14
4 8 12 16 20 24

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE
OHMS



LOGGING DATA

HOLE SIZE: 7 7/8 CALIBRATION: 400
DATE: 6-24-58 FIELD PROVED:

BLOCK DEPTH	0						
BLOCK DEPTH	470 FT						
BLOCK DEPTH	486 FT						
BLOCK DEPTH	393 FT						
SECS. CHG.	58 DIV						
SECS. CHG.	8 DIV						
BLOCK SPEED	10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
BLOCK SPEED	10 FT/M						
BLOCK SPEED	120 FT/M						
BLOCK DEPTH	120 FT	BITS		HOLE DIA. IN.			
BOR DENSITY							
BOR DENSITY	SENSITIVITY			RATIO			
	SENSITIVITY			RATIO			
	WEIGHT	LEG	LAST LEG	LAST SECS			
CALIPER CHG.	1630	SECS CHG.					
CALIPER CHG.	1715	SECS CHG.				I. D.	IN
						DIAM.	IN

LOCATION TIME
SEC. TWP. RGE. OFFICE:
COUNTY: Fremont DRIVE: 1.0
STATE: Ohio STANDBY: 0.5
AREA: Gas Hills FIELD: 2
CLIENT: Kerr-McGee ORIGINAL:
Dr. Cochrane BREAKDOWN:
LOG REC'D BY: OPERATOR: Appalone
PARTY NO. 1 1/0

Nesf

GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.

LOG MEAS. FROM FILE NO.
DRILL MEAS. FROM

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO

LOCATION OF HOLE

ELEVATION
KB
DF
GROUND
DEGREE COUNT
SILVER BR CK

REMARKS:

MINERALIZATION OR DIRECTIONAL DRIFT METER

COUNTS PER SEC.	MIN THICKNESS	%	CODE LTR.	% CODE
Gen. Min.	Anom.	Anom.	Max. Conc.	Conc. Anomaly

RADIOMETRIC (I) VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

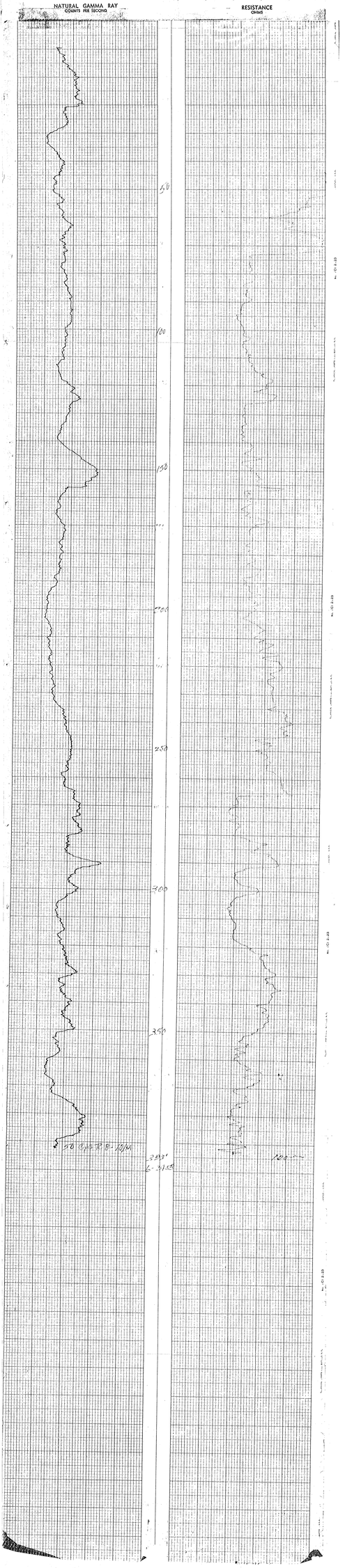
FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

NATURAL GAMMA RAY
COUNTS PER SECOND

CALIPER INCHES

RESISTANCE
OHMS



LOGGING DATA

PROBE SIZE: 1 3/4 CALIBRATION: 400

DATE: 6-23-58 FIELD SHOTS: BOB

	INITIAL	FS.	FS.	FS.	FS.	FS.
	FS.	FS.	FS.	FS.	FS.	FS.
HOLE DIAM.	8					
MUD WEIGHT	9.2					
MUD VISCOSITY	60					
MUD RESISTIVITY	2.58					
CASING SIZE	5 OD					
CASING WEIGHT	8 WG					
CASING DEPTH	10 FROM					
DRILL PIPE SIZE	10 OD					
DRILL PIPE DEPTH	10 FROM	FROM	FROM	FROM	FROM	FROM
DRILL PIPE WEIGHT	14.0					
MUD RESISTIVITY	2.58					
MUD SUSCEPTIBILITY						
MUD VISCOSITY	60					
MUD WEIGHT	9.2					
CALIBER SCALE	1 INCH					
TIME CONSTANT	1 SEC					
GAIN	400					
CURVE	21145					
CURVE	21145					

LOCATION
SEC. TWP. RGE.
COUNTY:
STATE:
AREA:
CLIENT:

TIME
DRIVE:
FIELD:
STANDBY:
BREAKDOWN:
TOTAL:

LOG REC'D BY:

OPERATOR: C. Pittman

PARTY NO. 48

Century

GEOPHYSICAL CORP.
TULSA, OKLA. U.S.A.

EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.
LOG MEAS. FROM PILE NO.
DRILL MEAS. FROM

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO

LOCATION OF HOLE

ELEVATION
GL
KB
DERRICK FLOOR
SLUSH PIT CT.

REMARKS:

INTERPRETATION

RADIO METRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

MINERALIZATION

COUNTER PER SEC.	RED THICKNESS	% U3O8	CORR. U%	% U3O8

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

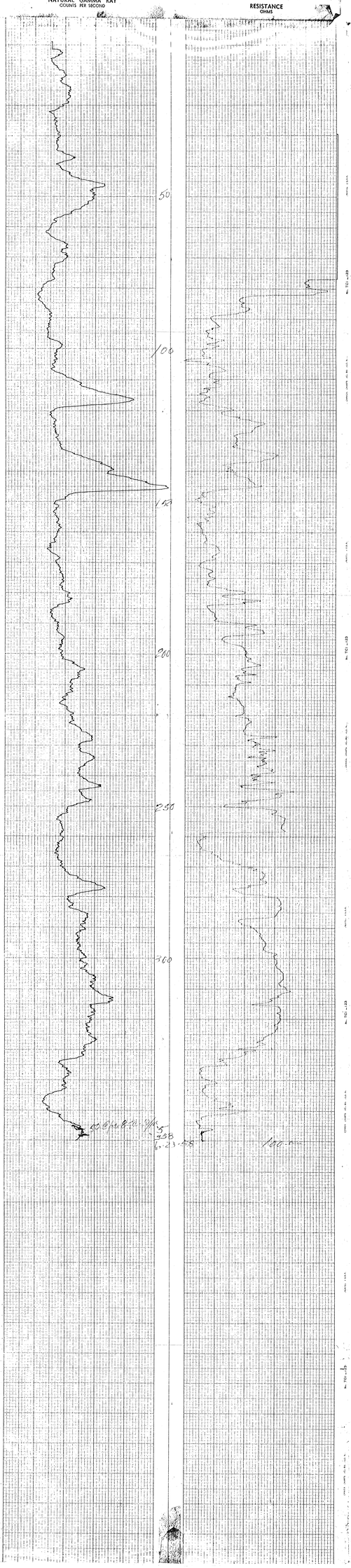
+ — 10 —

NATURAL GAMMA RAY
COUNTS PER SECOND

CALIPER INCHES

4 5 6 7 8 9
4 6 8 10 12 14
4 8 12 16 20 24

RESISTANCE
OHMS



LOGGING DATA

PROBE SIZE: 1 3/8				CALIBRATION: 400			
DATE: 6-17-58				FIELD HDQTRS: BJB			
	INITIAL RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN
HOLE NO.	7						
HOLE DIA.	4 1/2 IN						
DRILLED DEPTH	450 FT						
LOGGED DEPTH	402 FT 26						
GAMMA SCALE	25 CPS 250						
TIME CONSTANT	8 SEC 2						
PAPER SPEED	10 FT/IN 10						
LOGGING SPEED	10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	100~						
SELF POT SCALE	— MV/IN			SELF POT T.D.			
BORE HOLE MEDIUM	H2O	WITH					
MUD READINGS	RESISTIVITY			TYPE BASE			
	VISCOSITY			SALINITY			
	WEIGHT	LBS/GAL		LBS/CU FT			
CALIPER SCALE	INCH	LEG SIZE		PAPER SCALE			
TIME IN	10:30	CASED TO			I.D.	IN	
TIME OUT		CORE INT.			DIAM	IN	

A 7d

LOCATION	TIME
SEC. TWP. RGE.	OFFICE:
COUNTY: Fremont	DRIVE: 0.7
STATE Wyo	STANDBY:
AREA: Gas Hills	FIELD:
CLIENT: Riverton Uranium	TOTAL:
Dr. Contractor	BREAKDOWN:
LOG REC'D BY:	OPERATOR [illegible]
	PARTY NO. 48

Century GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.
LOG MEAS. FROM .... FILE
DRLG. MEAS. FROM .... NO.
DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO
LOCATION OF HOLE
ELEVATION
KB
GL
BKGRD. COUNT
SLUSH PIT CT.

REMARKS:
100 To 126 250 cps Tc-2-5/M

No SP

MINERALIZATION OR DIRECTIONAL DRIFT METER

COUNTS PER SEC. / Disc No.	BED THICKNESS / Depth	K KD / Dr.ft	CORR. CPS. / Mag Brng	% U3O8 / True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL
+ MV −

CALIPER INCHES
4 5 6 7 8 9
4 6 8 10 12 14
4 8 12 16 20 24

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE
OHMS

LOGGING DATA

PROBE SIZE: 1 3/8	CALIBRATION: 400
DATE: 6/19/58	FIELD HDQTRS: GAS HILLS

	INITIAL RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN
HOLE NO.	6						
HOLE DIA.	4.5 IN						
DRILLED DEPTH	600 FT						
LOGGED DEPTH	595 FT						
GAMMA SCALE	25 CPS						
TIME CONSTANT	8 SEC						
PAPER SPEED	10 FT/IN						
LOGGING SPEED	10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	100 Ω						
SELF POT SCALE	— MV/IN		SELF POT T.D.				
BORE HOLE MEDIUM	WATER	WITH					
MUD READINGS	RESISTIVITY		TYPE BASE				
	VISCOSITY		SALINITY				
	WEIGHT	LBS/GAL	LBS/CU FT				
CALIPER SCALE	— INCH	LEG SIZE	PAPER SCALE				
TIME IN	1215	CASED TO		I.D.	IN		
TIME OUT	1315	CORE INT.		DIAM	IN		

LOCATION	TIME
SEC. TWP. RGE.	OFFICE:
COUNTY: FREMONT	DRIVE: 0.5
STATE: WYOMING	STANDBY: 0.5
AREA: GAS HILLS	FIELD: 1.0
CLIENT: RIVERTON URAN	TOTAL: 2.0
Dr. Contractor: HARRIS	BREAKDOWN:
LOG REC'D BY:	OPERATOR: H. Mercier
	PARTY NO: U-10

Century GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.

LOG MEAS. FROM ... FILE
DRLG. MEAS. FROM ... NO.

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO

LOCATION OF HOLE
ELEVATION KB GL
BKGRD. COUNT
SLUSH PIT CT.

REMARKS:

MINERALIZATION OR DIRECTIONAL DRIFT METER

COUNTS PER SEC. / Dist No.	BED THICKNESS / Depth	K KD / Drift	CORR. CPS. / Mag Brng	% U3O8 / True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

CALIPER INCHES

4	5	6	7	8	9
4	6	8	10	12	14
4	8	12	16	20	24

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE
OHMS

LOGGING DATA

PROBE SIZE: 1 3/8 CALIBRATION: 400
DATE: 6-20-58 FIELD HDQTRS: B&B

	INITIAL RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN
HOLE NO.	5						
HOLE DIA.	4 1/2 IN						
DRILLED DEPTH	580 FT						
LOGGED DEPTH	517 FT						
GAMMA SCALE	50 CPS						
TIME CONSTANT	8 SEC						
PAPER SPEED	10 FT/IN						
LOGGING SPEED	10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	100 ~						
SELF POT SCALE	MV/IN						

(517)

SELF POT T.D.
CORE HOLE MEDIUM: H2O WITH
MUD READINGS: RESISTIVITY TYPE BASE
VISCOSITY SALINITY
WEIGHT LBS. CAL LBS. CU FT
CALIPER SCALE INCH LOG SIZE PAPER SCALE
TIME IN: 12 45 CASED TO I.D. IN
TIME OUT: 13 45 CORE INT. DIAM. IN

LOCATION	TIME
SEC. TWP. RGE.	DRIVE 1.0
COUNTY: Fremont	FIELD: 1.0
STATE: Wyo	STANDBY:
AREA: Gas Hills	BREAKDOWN:
CLIENT: Riverton U Rod	TOTAL: 2.0

LOG REC'D BY: J. O'Leary
OPERATOR: J.K. Palmer
PARTY NO: 48

Century
GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY:
CORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.
LOG MEAS. FROM / DRLG. MEAS. FROM — FILE NO.
LOCATION OF HOLE
DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO
ELEVATION KB GL
BKGRD. COUNT
SLUSH PIT CT.
REMARKS:

INTERPRETATION
RADIO METRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

MINERALIZATION

COUNTS PER SEC.	BED THICKNESS	K KD	CORR. CPS.	% U_3O_8

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

NO. S/P.

SELF POTENTIAL

NATURAL GAMMA RAY
COUNTS PER SECOND

CALIPER INCHES

4	5	6	7	8	9
4	6	8	10	12	14
4	8	12	16	20	24

RESISTANCE
OHMS

LOGGING DATA

PROBE SIZE: 1 3/8
CALIBRATION: 400
DATE: 6-18-58
FIELD HDQTRS: BSB

	INITIAL RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN	RE-RUN
HOLE NO.	4						
HOLE DIA.	4 1/2 IN						
DRILLED DEPTH	390 FT						
LOGGED DEPTH	374 FT						
GAMMA SCALE	50 CPS						
TIME CONSTANT	8 SEC						
PAPER SPEED	10 FT/IN						
LOGGING SPEED	10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	100 Ω						
SELF POT SCALE	— MV/IN			SELF POT T.D.			
BORE HOLE MEDIUM	H2O	WITH					

(374)

MUD READINGS: RESISTIVITY / TYPE BASE / VISCOSITY / SALINITY / WEIGHT / LBS/GAL / LBS/CU FT

CALIPER SCALE: LOG INCH. SIZE / PAPER SCALE

TIME IN: 1330 / CASED TO / T. D. IN

TIME OUT: 20.00 / CORE INT. / DIAM IN

LOCATION	TIME
SEC. TWP. RGE.	OFFICE:
COUNTY: Fremont	DRIVE: 1.0
STATE: Wyo	STANDBY: 1.5
AREA: Gas Hills	FIELD: 0.5
CLIENT: Riverton Uran	TOTAL: 3.0
Dr. Contractor	BREAKDOWN:
LOG REC'D BY:	OPERATOR: [signature]
	PARTY NO: 48

Nosp.

GEOPHYSICAL CORP.

TULSA, OKLA., U.S.A.

EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.

LOG MEAS. FROM ... FILE
DRLG. MEAS. FROM ... NO.

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO

LOCATION OF HOLE

ELEVATION KB GL

BKGRD. COUNT
SLUSH PIT CT.

REMARKS:

MINERALIZATION OR
DIRECTIONAL DRIFT METER

COUNTS PER SEC. / Disc No.	BED THICKNESS / Depth	K KD / Drift	CORR. CPS. / Mag Brng	% U3O8 / True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

+ MV −

NATURAL GAMMA RAY
COUNTS PER SECOND

CALIPER INCHES

4	5	6	7	8	9
4	6	8	10	12	14
4	8	12	16	20	24

RESISTANCE
OHMS

LOGGING DATA

FROM SIZE: 1.3a CALIBRATION: 400-Ω
DATE: 6/25/58 FIELD RECORD: 15-18

	HOLE SIZE	FT.	FT.	FT.	FT.	FT.	FT.
HOLE SIZE	8.3						
CASING SIZE	4.5 in						
CASING DEPTH	387 ft						
CASING WEIGHT	10.5						
CASING TYPE	8 rd						
CASING DEPTH	387						
CASING SIZE	8 in						
CASING WEIGHT	10						
CASING TYPE	8 rd						
CASING DEPTH	387						
MUD WEIGHT	10.0						
MUD VISCOSITY							
MUD PH							
FLUID LOSS							
MUD RESISTIVITY							
MUD SOURCE							
MAX. REC. TEMP.							
EQUIP. LOC.							
RECORDED BY							
WITNESSED BY							

LOCATION: TIME:
SEC: TWP: RGE: DRIVE: 0.7
COUNTY: Freemont FIELD: 0.6
STATE: Texas DRAINED:
AREA: Cross Hills BREAKDOWN:
CLIENT: Evanston TOTAL: 1.3
Evanston
LOG TECH: RT OPERATOR: Red J
PARTY NO.: 16

NO S.P.

Century

GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.

EXPLORATION LOG

COMPANY:
BORE HOLE NO.:
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.

SEE MAP, FROM
WELL, MAS, FROM
DATE
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASING TO

LOCATION OF HOLE
ELEVATION
KB
GL
GRIDDED COUNT
CLOSED PO CO

REMARKS:

INTERPRETATION

RADIO METRIC TO VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

MINERALIZATION

COUNTER FROM MUD	MUD THICKNESS	%	COUNTER FROM	%

INTERPRETATION BY:

GEOLOGIC TOPS

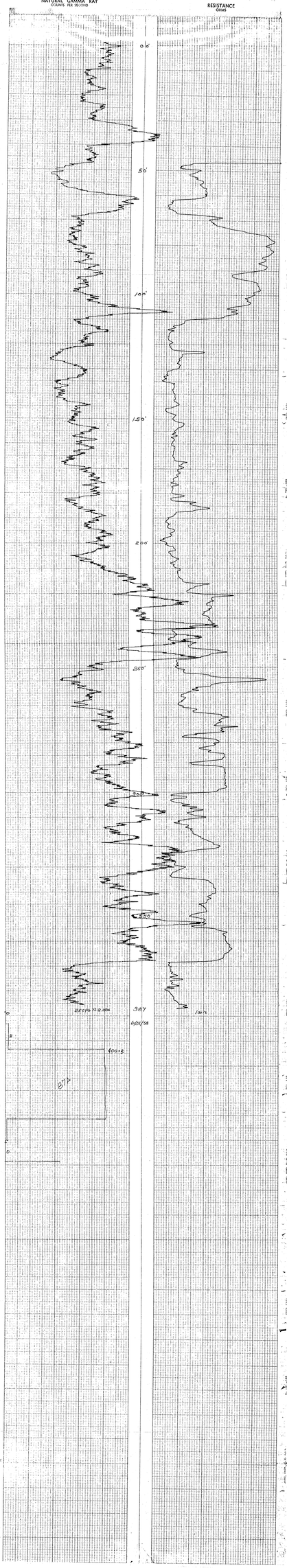
FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

NATURAL GAMMA RAY
COUNTS PER SECOND

CALIPER INCHES

RESISTANCE
OHMS



LOGGING DATA

FROSE SIZE: 1 3/4 CALIBRATION: 400 cps

DATE: 6/21/58 FIELD HOURS: 8 1/2

	PRIOR RUN	RU. 1	RU. 2	RU. 3	RU. 4	RU. 5
SUN RISE	8.25					
SUN SET	4:52 PM					
DISTANCE	360 M					
SOUTH LATITUDE	3.50 M	0.35 M				4.15
SOUTH WIDER	20 M	100 M	200			
SOUTH LONGITUDE	5 M	40 S				
SOUTH DEPTH	10 M	12 M	10			
SOUTH HEIGHT	10 M	14 M	18	17 M	17 M	17 M
SOUTH HEIGHT ABOVE	100					
SUN FOR ORIENTATION	6.62		MAG. DIST.	—		
WIND	DIRECTION		MEAN			
	VELOCITY					
CLOUDS	HEIGHT		LAY SEL	MIDDLE SEL	UPPER SEL	
SUN TIME	16.50		TIME			
SUN TIME	17.25		TIME			

LOCATION: TIME

SEC. TWP. RGE. OFFICE:
COUNTY: Fremont DRIVER:
STATE: Wyoming STANDBY: 0.7
AREA: Gas Hills FIELD: 0.7
CLIENT: Rosemarie TOTAL: 1.4
Dr. Contractor BREAKDOWN:
LOG REC'D BY: OPERATOR: Bob T

PARTY NO: 110

GEOPHYSICAL CORP.
TULSA, OKLA. U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.:
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.

LOG MEAS. FROM PILE
ERUR. MEAS. FROM

DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASE TO

LOCATION OF HOLE

ELEVATION
KB
DF
GROUND

SECONDS COUNT
SECOND PER CT.

REMARKS:
930 - 355 - 100 cps to 2
155 - 190 - 250 cps to 2

NO S.P.

MINERALIZATION OR DIRECTIONAL DRIFT METER

LENGTH PER REL.	MAX THICKNESS	% AD	LOSS STR.	% Sulfs
Dur. Pc.	Eqvd.	Dnd.	Pyr. Fnc.	Cpr. Pyrite

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

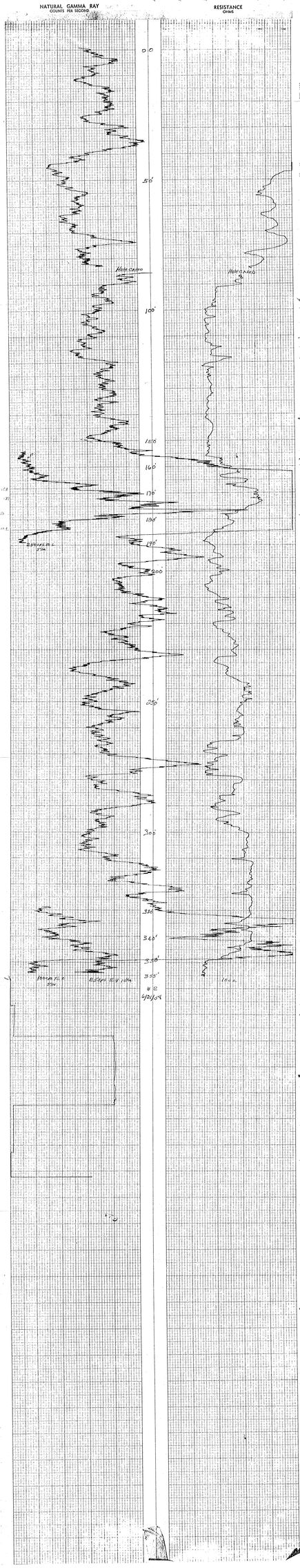
+ 0 - K -

CALIPER INCHES

4 5 6 7 8 9
4 6 8 10 12 14
4 8 12 16 20 24

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE
OHMS



LOGG IG DATA

PROBE SIZE: 1 3/8 CALIBRATION: 100
DATE: 6-20-58 FIELD RIDERS: B&B

LOG	1			
HOLE DIAMETER	4 1/2 IN			
CASING SIZE	3300 FT			
CASING SHOE	3304 FT			
TUBING SIZE	2 3/8 EUE			
TUBING DEPTH	8 SET			
PAKER DEPTH	10 FT			
SCREEN SIZE	10 STYLE			
SCREEN DEPTH	10 FROM	FROM	FROM	FROM
PERFORATION SIZE	100 IN			
PERFORATION DEPTH	3120 FROM			
HOLE FLUID	H2O WATER			
HOLE DEPTH	3300 FT			
SALINITY DETAIL	PPM			
TIME	1345			
DATE	10-15			

LOCATION: TIME
SEC. TWP. RGE. DRIVE
COUNTY: Fremont FIELD: 1.0
STATE: Wyo. STANDOFF:
AREA: East Hill BREAKDOWN:
SUBDIVISION: Riverton WYO TOTAL: 1.0

LOG FROM BY: OPERATOR: G. R. Palmer
J. Cheney PARTY NO. 46 No sp

SELF POTENTIAL

Century
GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY:
BORE HOLE NO.
FIELD
COUNTY
LOCATION: SEC. TWP. RGE.
LOG MEAS. FROM FEET
DRILL MEAS. FROM FEET
DATE:
FOOTAGE
TOTAL DEPTH (DR)
HOLE DIAM.
LOGGING SPEED
TIME CONSTANT
MUD TYPE
CASED TO
REMARKS:

LOCATION OF HOLE
ELEVATION KB GL ENGRG. ACCOUNT SLUSH PIT ETC.

INTERPRETATION

RADIO METRIC S. VALUES COMPUTED WITHOUT BENEFIT OF LOCAL CORE EQUILIBRIUM FACTOR

MINERALIZATION

COUNTS PER SEC.	RAD THICKNESS	K KD	CORR TYPE	U U/Th

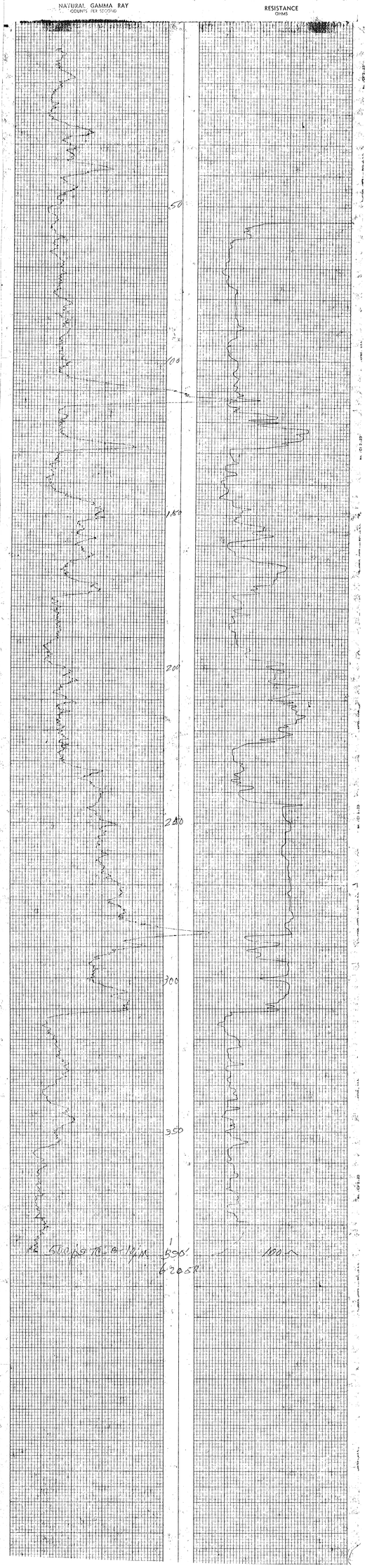
INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

NATURAL GAMMA RAY
COUNTS PER SECOND

CALIPER INCHES

4	5	6	7	8	9	
4	6	8	10	12	14	
4	8	12	16	20	24	

RESISTANCE
OHMS